

AIRPORTCARS.IE FORMULA SHEANE CHAMPIONSHIP



2022 SPORTING & TECHNICAL REGULATIONS



1. SPORTING REGULATIONS

1.1 TITLE AND JURISDICTION

The AirportCars.ie Formula Sheane Championship is administered and organised by the Mondello Park Sports Club (MPSC), promoted by the Formula Sheane Committee in accordance with the General Competition Rules and Appendices (GCR) of Motorsport Ireland (MI) incorporating the provisions of the International Sporting Code of the FIA and these Championship Regulations

Championship Permit No: P.024/22

MPSC reserves the right to amend or vary the Sporting and Technical Regulations in accordance with MI GCR Appendix 41 Art 1.1 at any time before or during the Championship and further issue additional statements concerning the Regulations from time to time, subject to MI approval, and all such statements will be issued by the use of Form RC1 to MI and to all registered competitors by email or by post to the address detailed on the Registration Form, or by delivery to the competitor by hand. It is a condition of entry into the championship that all competitors, teams, team members and persons associated with any of the above agree to be bound by the Regulations including any amendments, variations or statements relating thereto.

1.2 OFFICIALS

1.2.1 Championship Principal: John Linnane

1.2.3 Championship Representative: TBC

1.2.5 Championship Eligibility Scrutineer: MI Panel

1.2.6 Championship Stewards

Championship Stewards will be appointed in accordance with MI GCR 182 and may only adjudicate on any disputes, irregularities or appeals arising from a decision of the Class Registrar on the approved Championship regulations.

1.3 COMPETITOR ELIGIBILITY

1.3.1 Entrants must be:

- a) a fully paid up valid members of MPSC or any MI affiliated Club,
- b) registered for the Championship, and
- c) in possession of a valid Motorsport Ireland Entrants Licence

1.3.2 Drivers and Entrant/Drivers must be:

- a) a fully paid up valid member of MPSC or any MI affiliated Club,
- b) registered for the Championship, and
- c) in possession of a valid MI Race National B Licence or Motorsport UK equivalent, as a minimum.

1.3.3 All necessary documentation must be presented for checking at all rounds when signing-on.

1.4 REGISTRATION

1.4.1 All competitors must register for the championship by returning the Registration Form with the Registration Fee to the Championship Registrar prior to 12 noon on Monday before the first round being entered. Registration after this date will only be at the discretion of the Organisers. Registrations will be accepted once Championship Regulations have been published and are accepted on a "first come, first served" basis.

1.4.2 The Registration fee is €250. Once a driver has taken part in an official qualifying session, there will be no refund of the registration fee under any circumstances.

1.4.3 Acceptance or rejection of a Championship Registration will be at the total discretion of the Championship Organisers. The Championship Organisers reserve the right to revoke a competitor's Registration at any point during the season.

1.4.4 Competitors may choose their competition number, which will be allocated on a first come first served basis with priority given to competitors who competed in the previous year's championship wishing to retain their championship numbers. After 28 February numbers will be allocated by the Championship Registrar and will be the permanent competition number for the championship. Where no number is chosen, it will be allocated by the Championship Registrar. The Number "1" is reserved for the previous year's Champion.

1.4.5 Championship points will not be backdated and will only apply from the date the registration fee is paid

1.4.6 The Organisers reserve the right to enter a 'Celebrity/Guest' driver in any event. They will not score points but will be eligible for a trophy should their race result merit an award.

1.5 CHAMPIONSHIP ROUNDS

1.5.1 The Championship rounds will be contested at the following venues:

Rounds	Date	Venue	Club
1 & 2	9/10 April	Mondello Park	MPSC
3 & 4	7/8 May	Bishopscourt	BARC
5 & 6	28 May	Kirkistown	500 MRCI
7 & 8	11/12 June	Mondello Park	MPSC
9 & 10	30 July	Kirkistown	500 MRCI
11 & 12	10/11 September	Mondello Park	MPSC

1.5.2 MI reserves the right to amend the composition of the Championship rounds at any stage of the season in accordance with MI GCR Appendix 41 Art 1.3.2

1.6 POINTS

1.6.1 Points will be awarded to Competitors listed as classified finishers in the Final Results in accordance with MI GCR Appendix 15 Art 6.1.3.1. An additional point will be awarded to classified finishers for pole position and fastest lap in the race.

1.6.2 The totals from all qualifying rounds run less 2 if more than 10 rounds, or 1 if 9 or 10 rounds, will determine final championship points and positions.

1.6.3 For a race to qualify as a championship scoring round, a minimum of 7 starters is required.

1.6.4 Drivers excluded from results for a breach of MI GCR Art 139.6 (improper driving) or for a breach of the technical regulations may not use that event as discarded rounds for the purpose of overall championship placing.

1.6.5 Ties will be resolved in accordance with MI GCR Appendix 15 Art 6.10.

1.6.6 The championship will incorporate a 'Scholarship' Championship running concurrently. The drivers excluded from participation in the Scholarship Championship are any driver who finished in the top 6 in last year's Formula Sheane Championship or was a previous champion in any Racing Championship or have finished in the top 3 in any other Motorsport Ireland Championship. All other drivers would be considered for the Scholarship Championship including newcomers and novices. The qualification for the Scholarship Championship status will be at the discretion of the Formula Sheane Committee and any final decision would be on the basis of majority only or where no majority exists the Chairman's casting vote.

1.7 AWARDS

1.7.1 All awards are to be provided by the Formula Sheane Committee

1.7.2 Per Event

Trophies will be awarded to 1st, 2nd and 3rd and Scholarship winner.

1.7.3 Championship

Trophies will be awarded to 1st, 2nd and 3rd and the winner of the Scholarship class.

1.7.4 Bonuses

The Organisers reserve the right to provide additional awards for and during the Championship.

1.7.5 In the event of any provisional results or revision of championship tables being amended after any provisional presentations and such revisions affect the distribution of any awards and prize money (if applicable) the competitors concerned must return any such awards and prize money to the Class Championship co-ordinator in good condition within 14 days.

2 EVENT AND RACE PROCEDURES

2.1 ENTRIES

- 2.1.1 Competitors are responsible for sending to the Race Organisers correct and complete entries and entry fees prior to the closing dates for each competing round.
- 2.1.2 Incorrect or incomplete entries (including Driver to be Nominated Entries) are to be held in abeyance until they are complete and correct and the date of receipt for acceptance of entry purposes shall be the date on which the Secretary of the Event receives missing or corrected information or fee.
- 2.1.3 Any withdrawal of Entry or Driver/Car changes made after acceptance of any entry must be notified to the Secretary of the Event in writing. If Driver/Vehicle changes are made after publication of Entry lists with Final Instructions, the Competitor concerned will be accepted in accordance with Motorsport Ireland GCR 113.
- 2.1.4 Reserves will to be nominated on the final list of entries published with Final Instructions or Amendment Sheet Bulletins. All Reserves will practice and replace withdrawn or retired entries in Reserve Number order. If Reserves are given Grid Places prior to issue of the first Grid Sheets for any round the times set in Practice shall determine their grid positions. If Reserves are given places after publication of the grid sheet and prior to cars being collected in the official Assembly Area, they will be placed at the rear of the Grid and be started without any time delay. Otherwise, they will be held in the Pitlane and be released to start the race after the last car to start the green flag lap or last car to take the start has passed the startline or pitlane exit, whichever is the later.

2.2 BRIEFINGS

Organisers will notify Competitors of the times and locations for all briefings in the Final Instructions for the meetings.

2.3 QUALIFYING/PRACTICE

- 2.3.1 Should any Practice session be disrupted, the Clerk of the Course shall not be obliged to resume or re-run the session; the decision of the Clerk of the Course shall be final.
- 2.3.2 Each driver may be required to complete a minimum of 2 laps in the car to be raced, and in the correct session, in order to qualify.
- 2.3.3 The grid for the first race will be set by the fastest lap time in qualifying. The grid for the second race will be set by the second fastest lap time in qualifying.

2.4 RACES

Should any race be disrupted the Clerk of the Course shall not be obliged to resume or rerun the race.

2.5 START PROCEDURES

- 2.5.1 All cars will be released to form up on the grid prior to the start in formation as specified on the grid sheet.
- 2.5.2 The start will be via Standing Start.
The minimum countdown procedures/audible warnings sequence shall be:

Signal	Instruction
1 minute	Start engines/Clear Grid
30 seconds	Be prepared for the start of the Green Flag/Pace lap
Green Flag	Compete one Green Flag/Pace Lap and return to grid position

5 Seconds	Grid is complete, prepare for start. The red lights will be switched on five seconds after the 5 second board is withdrawn and will be extinguished between 2 and 6 seconds later
Red Lights Off	Race start

2.5.3 Any car removed from the grid after the 1-minute stage or driven into the pits on the Green Flag lap shall be held in the pitlane and may start the race after the last car has passed the startline or pitlane exit, whichever is the later to take the start from the grid.

2.5.4 Any car which fails to start, or falls to the back of the field behind the last car during the formation lap, and does not enter the pit road, must start the race behind the last line of the grid, must be stationary when the 5 second board is displayed, and must not retake their original grid position

2.5.5 In the event of any starting lights failure the Starter will revert to use of the National Flag.

2.6 SESSION RED FLAG

2.6.1 Should the need arise to stop any race or practice, red lights will be switched on at the Startline and red flags will be displayed at the Startline and at all marshal signalling points around the circuit.

This is the signal for all drivers to cease circulating at racing speeds, to slow to a safe and reasonable pace and to return to the pit lane, during practice, and to the starting grid area, during a race, unless otherwise directed by officials.

Cars should not enter the Pits unless directed to do so and all cars in the pit lane during a red flag period must take any restart from the pit exit.

2.6.2 Case A

Less than 2 laps completed by race leader. The race will be null and void. The race will restart from the original grid positions. Competitors unable to take the restart will be replaced by reserves that will start from the back in reserve order. Gaps on the grid should not be closed up. The length of the restarted race shall be determined by the Clerk of the Course but under normal circumstances the race distance will be reduced by at least two laps.

2.6.3 Case B

More than 2 laps completed by the race leader but less than 75% of the total distance or duration. The race will restart from a grid set out by the finishing order of part 1. The result of the race will be the finishing order of part 2. The final result will not be aggregated. The length of the restarted race will be determined by the Clerk of the Course but under normal circumstances the remaining race distance will be the original distance, less the first part, less at least two laps.

2.6.4 Case C

If the race leader has completed more than 75% of the race distance or duration at the time of the stoppage, the race may not be restarted unless the Clerk of the Course deems it appropriate to restart the race. If the race is not restarted the results will be declared in accordance with MI GCR Appendix 40 Art 14.5.

2.6 RACE FINISHES

2.6.1 After taking the Chequered Flag drivers are required to:

- a) progressively and safely slow down,
- b) remain behind any competitors ahead of them,
- c) return to the Pit Lane Entrance/Paddock Entrance as instructed,
- d) comply with any directions given by Marshals or Officials,
- e) keep their helmets on and harnesses done up while on the circuit or in the pit lane,
- f) place their car into the Parc Fermé where it must remain until released by the Championship Eligibility Scrutineer or his deputy.

g) Attend any podium presentation that may be required.

2.6.2 Parc Fermé conditions apply from the moment of taking the chequered flag until the time that the cars are released from Parc Fermé. Cars must not stop at the pit garage/paddock on the way to Parc Fermé. Team members are not permitted in the Parc Fermé area unless authorised by the Scrutineer or other Official.

2.6 RESULTS

All Practice Timesheets, Grids, Race Results are to be deemed Provisional until all vehicles are released by Scrutineers after Post Practice/Race Scrutineering and/or after completion of any Judicial or Technical Procedures.

2.7 TIMING MODULES

All competitors must provide timing transponders to enable each competing vehicle to be timed. They should ensure that it is securely fitted in the approved bracket fitted in the designated place as indicated by the Chief Scrutineer or the Class Technical Liaison. This must be done prior to any practice or race. Transponder should be of the following type AMB260 and may be direct or battery powered.

2.8 CAMERAS

2.8.1 It is mandatory for all competitors to have video recording equipment fitted in their cars and operating during qualifying and racing. This must consist of at least one forward facing camera providing a reasonable view of circuit ahead (incorporating the steering wheel of the car) as would be expected to provide a representative driver's eye view.

2.8.2 All cameras must be in situ at the time the car is presented for pre-event scrutineering.

2.8.3 The choice of system is free, provided that playback is possible at the circuit by regular means, such as via a laptop PC, or by using equipment designed for the purpose provided by the competitor. Competitors must ensure that this equipment is recording during races and make the recorded footage available on request by the Clerk of the Course or his representatives. Failure to do so may lead to disciplinary measures by the Clerk of the Course and may prejudice their defence in the case of an incident. This request is not restricted to the single forward-facing camera mandated, but any additional video recording equipment utilised on the car.

2.8.4 Failure to comply with this regulation may result in a penalty being applied by the Clerk of the Course.

2.9 OPERATION OF THE SAFETY CAR

The Safety Car will be brought into operation and run in accordance with MI GCR Appendix 40 Art 12.

2.10 NUMBERS AND DECALS

2.10.1 All cars must be identified in accordance with MI GRC Appendix 6. Failure to comply shall incur a penalty.

2.10.2 Championship Sponsors' decals must be carried on each car in the position indicated in the Decal Plan or in accordance with the instructions issued by the Organisers.

2.10.3 Where a Championship sponsor clashes with a competitor's personal sponsor, the requirement to display the Championship Sponsor's decal may be removed but only with prior written permission of the Organisers.

3 JUDICIAL PROCEDURES

3.1 Rounds

In accordance with current General Competition Rules and Appendices of Motorsport Ireland

3.2 Championship

In accordance with current General Competition Rules and Appendices of Motorsport Ireland

3.3 Additional Specific Championship Penalties

3.3.1 For an offence in a race where the offending driver is not classified, the Clerk of the Course or the Event Stewards are entitled to impose a penalty of a grid position penalty in the next race/event.

3.3.2 In the event of any breach of the Regulations, The Championship Stewards, on referral of the matter by the Class Principal, shall be entitled to impose additional penalties, including:

- a) refusal of part or all further race entries, or
- b) removal of all or any championship points scored by the competitor, or
- c) exclusion of the competitor from the championship

3.3.3 In order to maintain standards of conduct, the Organisers will monitor all Officials/Observers reports of adverse behaviour at race meetings. If any individual is included on such reports, they will receive written warning from the Organisers that his driving/behaviour is to be specifically observed at future race meetings. Any adverse reports during this period of observation may result in a referral to the Championship Stewards who shall be entitled to impose a penalty as defined in 3.3.2.

4 TECHNICAL REGULATIONS

4.1 INTRODUCTION

4.1.1 The following Technical Regulations are set out in accordance with the Motorsport Ireland specified format and it should be clearly understood that if the following texts do not clearly specify that you can do it you should work on the principle that you cannot.

4.1.2 It is the competitor's responsibility to ensure that their car complies with these Technical Regulations, as published by the Organisers, throughout official practice, qualifying, and races at all times.

4.2 GENERAL DESCRIPTION

4.2.1 The AirportCars.ie Formula Sheane Championship is for competitors participating in single seater space framed Formula Sheane cars built by Sheane Cars Limited powered by an 1800cc Rover K-Series engine coupled to a 5 speed Audi gearbox.

The term 'supplied by Sheane Cars Limited.' means that the part can only be supplied by Sheane Cars Limited and are unmodified in any way. The term 'as supplied by Sheane Cars Limited.' means that the part can be sourced elsewhere but must meet the same specification as the original supplied by Sheane Cars Limited.

4.2.2 Examination of Vehicles

4.2.2.1 The organisers (in addition to any other powers they may have under these Regulations) reserve the right before or after any race in the Championship to designate any one or more of the competing cars for special eligibility scrutineering. Upon such election being made, the competitor shall immediately place the car under the control of the Organisers and be deemed to have permitted all such scrutineering, examination and testing as the organisers may responsibly require to undertake. The organisers have the right to:

- a) Examine the car at the circuit for such period as they may reasonably require and take fuel and/or other samples and/or
- b) Retain the car for detailed examination at premises chosen by the organisers. If the organisers elect to retain the car, they shall make it available for collection by the competitor at least seven days prior to the qualification session for the next race in the Championship unless the car is found to be in breach of these regulations and/or
- c) Seal the car and its components in such a manner as they may choose and require the competitor at their own expense to present the car at any other premises chosen by the Organisers for detailed examination within a specified period and/or remove the car by transporter at no expense to the competitor to an appointed location. The competitor will be advised in writing of the time, date and location of the subsequent testing or eligibility examination.

4.2.2.2 The stripping of the engine or any required component will be undertaken by the competitor and/or mechanic/technician nominated by the competitor at the premises designated and overseen by a Motorsport Ireland licenced Scrutineer.

4.2.2.3 Competitors will be personally and solely responsible for ensuring that their cars comply with their registration details and with these regulations for each event at which they are entered. Failure to comply in either respect will be a breach of these regulations. Queries concerning eligibility should be referred in writing to the Organisers or the Eligibility Scrutineer at least seven days prior to an event entered, to permit a ruling in advance of any meeting at which it is intended to compete.

4.3 SAFETY REQUIREMENTS

Motorsport Ireland Yearbook Appendix 2 will apply.

- 4.3.1 A suitable Frontal Head Restraint compatible harness of five-point design must be fitted in accordance with MI Appendix 2 Article 7.2.
- 4.3.2 The use of an FIA approved Frontal Head Restraint device is mandatory in accordance with MI Appendix 2 Article 17.3.
- 4.3.3 All drivers must wear current FIA homologated overalls as well as gloves, long underwear, a balaclava, socks and boots in accordance with MI Appendix 2 Article 23.
- 4.3.4 Driver seating position must be in accordance with MI Appendix 2 Article 16.5.
- 4.3.5 Cars must have a rearward facing rain light of 21 watts minimum or FIA approved LED equivalent fitted in accordance with MI Appendix 2 Article 2.2
- 4.3.6 It is mandatory to use a plumbed in 1.75 minimum AFFF or FIA approved equivalent fire extinguisher in accordance with MI Regulation Appendix 2 Art. 6.1.

4.4 GENERAL TECHNICAL REQUIREMENTS & EXCEPTIONS

- 4.4.1 All vehicles must be of sound construction and mechanical condition and be well maintained.
- 4.4.2 Parts, original or replacement, must not be modified, nor must their method of installation be changed unless the alteration is specifically stipulated by the Formula Sheane Committee or any Technical Bulletins appended to them.
- 4.4.3 Components such as bodywork, wiring looms, pipes, hoses and other mechanical parts may be protected from heat, abrasion or ballistic damage by wrapping in a suitable material provided such protection does not alter the function of the primary component in any way. Any protection shall be easily removable to allow inspection of the component. Cable tie saddles may be bonded to the inside of the bodywork or to the chassis as required to manage the routing of hoses and cables.
- 4.4.4 Protections for driver comfort (e.g., fire retardant foam padding) may be added, provided that their sole function is for protection.
- 4.4.5 The Championship Eligibility Scrutineer has the right to remove any part or assembly or assemblies for examination of technical compliance at any time during the event. In this eventuality the competitor will be provided with a substitute standard specification component or components for the duration of the examination.

4.5 CHASSIS

- 4.5.1 The chassis will be a steel spaceframe manufactured supplied by Sheane Cars Limited incorporating a roll over hoop.
- 4.5.2 No modifications to the chassis are allowed.
- 4.5.2 Non-performance enhancing minor repairs using original materials may be made by an individual during events providing that the original shape and dimensions are maintained and are subject to the specific approval of the Championship Eligibility Scrutineer. Short term repairs at an event must be made good by the following event to re-achieve the original shape of the component, its surface finish and a high standard of aesthetic appearance.
- 4.5.3 Structural repairs or changes including altering moving points are not permitted unless by a supplier approved by the Formula Sheane Committee.
- 4.5.4 Only the chassis alterations depicted below are allowed. The alterations are discretionary

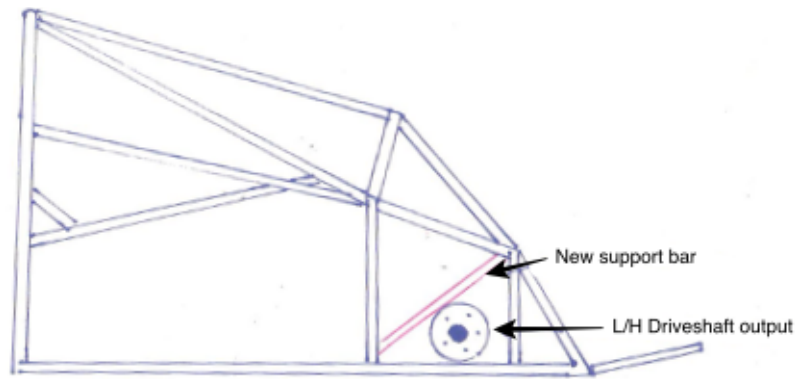


Fig Chassis 1 - L/H view of Rear of Chassis

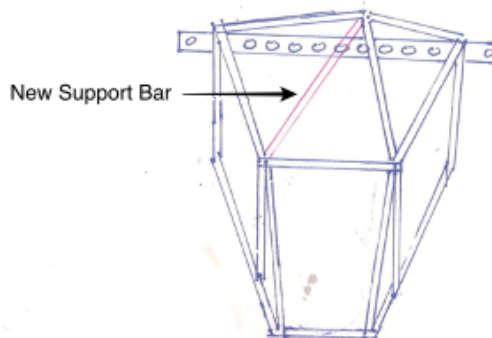


Fig Chassis 2 - Rear View of Chassis

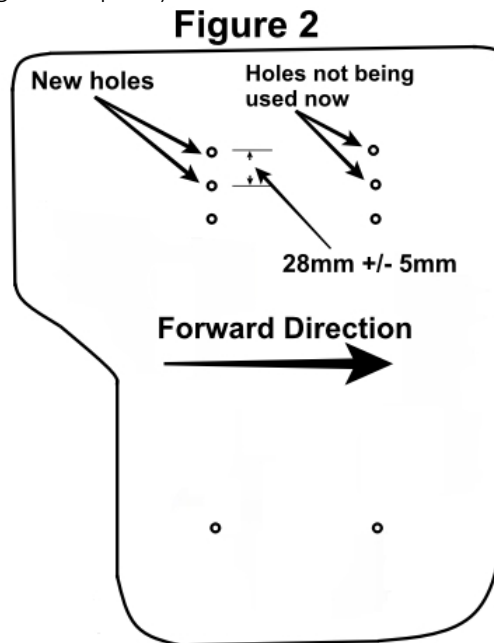
4.6 BODYWORK

- 4.6.1 Bodywork must remain standard as supplied by Sheane Cars Limited or Formula Sheane Committee
- 4.6.2 The bodywork comprises of the nosecone, top cover, engine cover and sidepod covers, all constructed of fibreglass.
- 4.6.3 No changes may be made to bodywork with the exception of holes etc. to accommodate mounting fasteners.
- 4.6.4 It is each competitor's responsibility to maintain the body work in a safe and presentable manner and may be required to replace items if found not to meet these criteria by the final judge of fact.
- 4.6.5 The floor comprises of the steel section contained in the main chassis and two panels either side. These panels must be as supplied by Sheane Cars Limited. No extra aerodynamic devices are allowed including extended floors/undertrays.
- 4.6.6
- | | |
|--|--------|
| Max Height at front of cockpit | 740mm |
| Max height of side pod in line with front of cockpit | 450mm |
| Max height of bodywork over rollbar | 1050mm |
- 4.6.7 **Wings**
Two wings are fitted to the car one single at the front and a double wing on the rear. These can only be supplied by Sheane Cars Limited or the Formula Sheane Committee. All wing sections and endplates must be unchanged from original dimensions.
- 4.6.7.1 **Rear Wing**
Overall width 920mm.
Depth of plane 220mm.
Distance between planes 215mm.

Bottom plane must be horizontal.
End plate 280 x 330mm.

The only permitted rear wing plate is one supplied by the Formula Sheane Committee and of the design as shown in Figure 2.

Rear wing End Plate First view (righthand plate)



Distance from rear suspension cross member to rear of bottom plane 555mm or 705mm

It is permitted to strengthen the rear wing mounting using either of the rear wing mounting brackets supplied by Sheane Cars Limited.

4.6.7.2 Front Wing Plane

Horizontal: Height max 145mm.

Depth 160mm.

Overall width 1030mm.

Endplate length 255mm.

Depth 110 x 90mm.

Distance from chassis front to rear of wing plane 360mm.

4.6.7.3 All measurements max tolerance of plus/minus 10mm excepting accident damage. Top plane max angle 25mm from horizontal in slot, tolerance plus/minus 5mm.

4.7 ENGINE

4.7.1 The engine must be the 1800 cc K Series engine sealed and as supplied by Sheane Cars Limited or Rover 1.8 K16 series (non VVC) Production Engine using standard lubrication, injection and ignition systems.

4.7.2 Sump baffles, reinforced bottom ladder can be used

4.7.3 The opening of cylinder head water galleries and oil pump drilling to allow for better flow is permitted.

4.7.4 Engine Block

Must be standard 18K 4F Unit fitted with wet liners and either standard or Omega forged pistons.

Bore 80m.

Stroke 89.5mm.

Standard crankshaft and connecting rods (unbalanced)

1.8 conrod length 133.1mm.

1.6 conrod length 139.9mm

4.7.5 Cylinder Head

Unmodified, apart from machining necessary in reconditioning same and/or machining out the cast aluminium Firing Ring and inserting a machined 4x4mm 6061 T6 aluminium ring. Ports as cast inlet max DIA 34.50

Standard inlet valves DIA 28mm seat angle 45°.

Standard exhaust valves DIA 24mm seat angle 45°.

Heads with triple angle seat are permitted with:

Angles 15°

Angles 45°

Angles 60°

Minimum seat face width is: 1.25mm inlet. 1.40mm exhaust.

Max valve spring length uncompressed is 51.5mm.

Kent steel spring retainers, part no ST69 may be used.

4.7.6 Camshaft

Kent RK 1811 cams driven by C67 Vernier Pullies.

Lift 425" Duration 258.

Timing inlet 110.00° ATDC +/- 0.5°

Exhaust 105.00° BTDC +/- 0.5°

4.7.7 Engine Output

Maximum BHP at wheels to be 153BHP with no tolerance, as measured by Track-Day Performance. Engines must be sealed before rolling road test. All cars must be tested and sealed in order to qualify for points. All rolling road/power test costs will be at the competitor's expense.

4.7.7.1 To facilitate a competitor who experiences mechanical difficulties (e.g. a blown head gasket) during a race meeting, that competitor will be permitted to complete that race meeting (see definition of race meeting in 4.7.7.2) provided that the repaired engine is resealed after repair and the seal numbers are recorded by the Eligibility Scrutineer and the engine is rolling roaded prior to competing again. Should a competitor have further mechanical difficulties during a race weekend, and the car is undyno'd, no seal may be broken prior to inspection by the judge of fact at the drivers expense.

4.7.7.2 A race meeting for the purposes of 4.7.7.1 is defined as starting one week prior to the date of the race in question.

4.7.7.3 Any competitor who wishes to break any seal for any reason, must inform the Eligibility Scrutineer, prior to breaking that seal. Where a competitor is found to have broken a seal without informing the Eligibility Scrutineer that competitor will be subject to a 5 place grid penalty at the first available opportunity.

4.7.8 Fuel Injection System

Standard 1800 cc K Series system as supplied by Sheane Cars Limited.

Standard Rover injector no. 0280 155 884 Standard plastic inlet manifold with alloy or plastic throttle body DIA 48mm. Standard 3 bar pressure valve.

4.7.9 Air Filter

K+N RU 3120 as supplied by Sheane Cars Limited

4.7.10 Cooling System

Two radiators to be used as supplied by Sheane Cars Limited.

The use of an electric water pump can be used in conjunction with the original mechanical one.

Electric radiator cooling fan is permitted.

Plumbing such as flexible and rigid piping is free

4.7.11 Lubrication System

Standard 'Rover Wet Sump'.

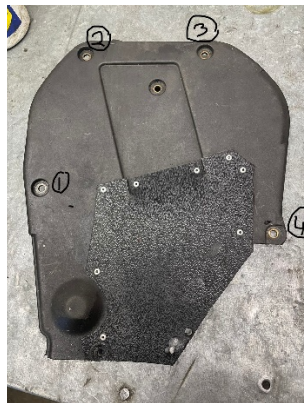
4.7.12 Seals

Every time a seal is broken on an engine the car must be returned to the rolling road for testing. Rolling Road test sheets must record the engine number and engine seal numbers and such other data as may be required at the discretion of the Eligibility Scrutineer. Copies of all dyno results to be held by the Formula Sheane Committee

4.7.13 The following seals are required

4.7.13.1 Timing Cover

2 diagonal seals either 1 & 3 or 2 & 4 as shown in the diagram



4.7.13.2 Gearbox cluster: 1 seal

4.8 SUSPENSION

4.8.1 Front Suspension

Front suspension is dual inboard shock absorber configuration and comprises of the following components:

- a) Hub Assembly
- b) Wishbones
- c) Pushrods
- d) Bell crank
- e) Shock Absorber (bump stops may be fitted or removed) Only Protech or Avo permitted
- f) Springs
- g) Rod ends
- h) Anti roll bar

All above supplied by Sheane Cars Limited or the Formula Sheane Committee and must be assembled in the same configuration as Sheane Cars Limited.

Front roll bar diameter 12mm.

Front roll bar maximum length including sliders 165mm.

Spring poundage free but must be 1.9DIA and 6" uncompressed length.

Front track width max 1470mm.

Rear roll bar diameter 16mm.
Rear roll bar length 220mm
Spring poundage free but must be 2.25DIA x 9" uncompressed length.
Rear track width max 1425mm.

4.8.2 Rear Suspension

Rear suspension is dual outboard shock absorber configuration and comprises of the following components:

- a) Hub Assembly
- b) Wishbones
- c) Trailing arms
- d) Tie Rod
- e) Shock Absorber (bump stops may be fitted or removed) Only Protech or Avo permitted
- f) Springs
- g) Rod ends
- h) Anti roll bar

All above supplied by Sheane Cars Limited or Formula Sheane Committee and must be assembled in the same configuration as Sheane Cars Limited

4.8.3 The minimum ride height from the lowest part of the car excluding the wheels is 40mm.

4.9 TRANSMISSIONS

4.9.1 Audi 3M unit sealed and as supplied by Sheane Cars Limited.

4.9.2 The following gear ratios must be used and gears must be original parts.

- 1st Gear 3.45:1
- 2nd Gear 1.94:1
- 3rd Gear 1.28:1
- 4th Gear 0.90:1
- 5th Gear 0.73:1
- Final Drive 4.11:1

4.9.3 The following ratios can be used in checking gear ratios. This ratio is the number of engine revolutions to driven wheel rotations.

- 1st Gear 14.18:1
- 2nd Gear 7.97:1
- 3rd Gear 5.26:1
- 4th Gear 3.70:1
- 5th Gear 3.00:1

4.9.4 Driveshafts and CV joints are free

4.9.5 Gearbox mounting points are permitted to be modified to allow for easier removal

4.9.6 Gearbox Adaptor

Gearbox adaptor and flywheel supplied by Sheane Cars Limited or the Formula Sheane Committee.

4.9.7 Clutch

As supplied by Sheane Cars Limited or equivalent

4.10 ELECTRICS

- 4.10.1** The electrical system shall be as supplied by Sheane Cars Limited including operational starter and alternator which are free. Alternator must be connected and charging over 12V at all times.
- 4.10.2** Battery is free.
- 4.10.3** A master reflash map, provided by Formula Sheane will be held by the Eligibility Scrutineer. This is the only ECU map approved for use by the Championship.
- 4.10.4** ECUs will be sealed by The Formula Sheane Committee
- 4.10.5** The Eligibility Scrutineer can swap or change any ECU at any time to facilitate random checking of a competitor's ECU. The ECU of the winning car at each event will be swapped with a master unit for the following race weekend.
- 4.10.6** All electronic driver aids such as launch control, abs, traction control, power shift units etc. are not permitted.
- 4.10.7** An on board lap timing system and data logging is allowed.

4.11 BRAKES

Disc brakes are fitted front and rear and are operated by two independent fluid systems. Callipers and discs are as supplied by Sheane Cars Limited and must remain unchanged in any way. Brake pad type is free. Brake fluid type is free. Brake lines must be of either steel or kunifer tubing or flexible braided hosing. Pedal box assembly is free

4.12 WHEELS/STEERING

- 4.12.1** The only wheel types permitted are supplied by Sheane Cars Limited and manufactured by Compomotive Limited to Sheane Cars Limited specifications.
Front rim size 8" x 13"
Rear rim size 9" x 13"
- 4.12.2** Steering is rack and pinion type. Steering rack and track rods as supplied by Sheane Cars Limited. Spacers are permitted on tie rod ends to eliminate bump steer and must be assembled in the same configuration as Sheane Cars Limited. Racks must be mounted externally.

4.13 TYRES

The only tyre permitted is tyres are as follows:

Front - AVON ACB 10 7.0/210-13 78V
Rear - AVON ACB 10 8.0/220-13 89V

4.14 WEIGHTS

- 4.14.1** The minimum weight for the car in race trim, i.e. including all fluids at normal levels, except fuel is 460kgs.
- 4.14.2** The minimum weight for the car as above including driver is 550kgs.
- 4.14.3** Race trim weight includes nose and front wing. Nose and front wing nominal weight is 5KG.

4.15 FUEL TANK/FUEL

- 4.15.1** Tank and pump (Part No. Bosch 058025964 or equivalent) as supplied by Sheane Cars Limited. A firewall consisting of an aluminium sheet must be fitted between the fuel tank and the driver's seat. The fuel pressure regulator is free but must not exceed a maximum of 3 Bar (Part No MKW10016).
- 4.15.2** Only unleaded petrol in accordance with MI Appendix 2 Art 28.2 may be used. All fuel must be of a type available on the major retail forecourts on sale to the public.
- 4.15.3** To assist in engine reliability, the use of a fuel additive is permitted.
- 4.15.4** The organisers reserved the right to introduce a control fuel/supplier and competitors will be notified by a Championship Bulletin.

4.16 SILENCING

4.16.1 Exhaust

Complete exhaust system manufactured and supplied by Sheane Cars Limited or stainless steel version supplied by Formula Sheane Committee.

- 4.16.2** Partial Asbestos wrapping of the primary pipes only is permitted within 4" of the coupling. No wrapping of the coupling or collector box is permitted