

# 2018 TOYO TIRES MSA BRITISH RALLYCROSS CHAMPIONSHIP

## SPORTING & TECHNICAL REGULATIONS

### 1. SPORTING REGULATIONS - GENERAL

#### 1.1 Title & Jurisdiction:

The Toyo Tires MSA British Rallycross Championship is organised and administered by the British Automobile Racing Club (BARC) and Lydden Hill Motorsport Club (LHMC) in accordance with the General Regulations of the Royal Automobile Club Motor Sports Association (incorporating the provisions of the International Sporting Code of the FIA) and these Championship Regulations.

MSA Championship Permit No.: CH2018/S004

Status: National A

MSA Championship Grade: A

#### 1.2 Officials:

1.2.1 Coordinator: Tim Whittington, [Whittington@me.com](mailto:Whittington@me.com) 07973 215449

1.2.2 Eligibility Scrutineers: Dave Newton, [daveynewton@msn.com](mailto:daveynewton@msn.com), 07814 595132

Deputy Eligibility Scrutineer: Keith Marchment, [keith.marchment@hotmail.co.uk](mailto:keith.marchment@hotmail.co.uk), 01264 356400

#### 1.2.3 Championship Stewards:

Any three of the Championship Stewards may sit to make a decision. In accordance with (G) 2.7, Championship Stewards may only adjudicate on any disputes, irregularities or appeals arising from the approved Championship regulations. Under (G) 2.7.1, Championship Stewards are also empowered to consider any request from the Championship Coordinator to penalise any Competitor for any breach of Championship regulations after holding a formal hearing to impose a penalty in accordance with C.2.1.1 (subject to the rights of appeal provided for in Section C). Under (W) 2.2.1, the Championship Stewards can only adjudicate upon any disputes, irregularities or appeals arising from the approved Championship Regulations. They are also empowered to consider any request from the Championship Coordinator to penalise any Competitor for breach of Championship Regulations and after holding a formal hearing, to impose a penalty in accordance with C.2.1, subject to the rights of appeal to the MSC provided in Section C.

The Championship Stewards are: Dennis Carter, Rod Parkin, Steve Stringwell, David Walton, Terry Wright.

#### 1.3 Competitor Eligibility:

1.3.1 Entrants must be fully paid up valid membership card holding members of the BARC or LHMC and be in possession of a current MSA Entrants Licences.

1.3.2 Drivers and Entrant/Drivers must be fully paid up valid membership card holding members of the BARC or LHMC, be Registered for the Championship and be in possession of a current Speed National A Licence, as a minimum.

Or, be a professional driver in possession of a valid Licence (featuring an E.U. flag) and medical, issued by the ASN of a member country of the European Union.

A competitor shall not take time off school to participate in motor sport without the prior written approval of their school. If participation in the Championship requires absence from school, Drivers in full time school education are required to have the approval of their head teacher and a letter stating such approval from his/her school in order to fulfil registration for the Championship.

Acceptance of registration is entirely at the discretion of the Championship Organisers.

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

#### **1.4 Registration:**

1.4.1 Applications to register for the Championship must be completed using the **registration form available from RallycrossBRX.com, BARC.net or the Championship Coordinator.** ~~Online form available at the link below (a paper form is available by request)~~ **Login credentials for the online entry form will be provided by email upon receipt of a fully completed registration form and the appropriate fee.** Where a car is entered for the Championship, by someone other than the Driver, it will be necessary for that Entrant (who must be in possession of a valid MSA Entrants Licence) to complete the Registration Form along with, and nominating, their Driver. By applying for registration the Entrant and Driver agree to be bound by these regulations, the technical regulations and supplementary regulations for the Championship as well as the regulations of the MSA and any commercial regulations issued by the Championship Organisers. Acceptance of applications is entirely at the discretion of the Championship Organisers.

1.4.2 The registration fee is £100 for the full Championship or £25 per round on a round-by-round basis.

1.4.3 Applications for registration open with the publication of these regulations and close at the closing date for entries of the final round.

#### **1.5 Championship Rounds:**

1.5.1 The Championship will consist of nine events:

1	17 March	Silverstone
2	2 April	Lydden Hill
3	6 May	Croft
4	23 June	Pembrey
5	24 June	Pembrey
6	29 July	Croft
7	27 August	Lydden Hill
8	23 September	Pembrey
9	3 November	Silverstone

The Organisers reserve the right, in accordance with MSA Yearbook D11.1.3, to cancel, postpone, change or substitute events if necessary due to exceptional unforeseeable conditions, and are not liable for any damages so incurred as a result.

1.5.2 Entry secretary: David Wheadon, [dwheadon@barc.net](mailto:dwheadon@barc.net) 01264 882209  
BARC, Thruxton Circuit, Andover, SP11 8PN

#### **1.6 Scoring:**

1.6.1 In order to score points, collect trophies and awards, all cars and Drivers competing in the Championship will be required to display and wear Championship Sponsors' branding in the nominated position on clothing and vehicle. Non compliance will result in loss of points, trophies and awards for that event. The position of branding to be carried on cars and clothing will be specified the Championship Branding Guide (7, Commercial).

1.6.2 The Championship Organisers reserve the right to enter a guest car(s) into any Championship event. Such entries will not be registered for the Championship and will not score points.

1.6.3 The allocation of Championship points will be determined as follows:

First to eighth positions will be the classification of the final.

Ninth to 16th positions will be the semi-finalists who did not start in the final ranked by their classification in their semi-final. Drivers finishing in the same position in the two semi-finals will be classified according to their position in the Intermediate Classification (ie of the two fifth placed semi-finalists, the one placed higher in the Intermediate Classification will take precedence, etc.).

17th position onwards will be as per the Intermediate Classification.

In any event where the semi-finals, and/or the final is not run, competitors will score full championship points based on positions at the Intermediate Classification or the qualifying order for the final and the Intermediate Classification as appropriate.

1st	30pts	13th	12pts
2nd	27pts	14th	11pts
3rd	25pts	15th	10pts
4th	23pts	16th	9pts
5th	21pts	17th	8pts
6th	19pts	18th	7pts
7th	18pts	19th	6pts
8th	17pts	20th	5pts
9th	16pts	21th	4pts
10th	15pts	22th	3pts
11th	14pts	23th	2pts
12th	13pts	24th	1pt

In the Championship a competitor will count a maximum number of scores equal to the number of Championship events organised less two. The final round of the Championship must be one of those counted.

Where events run combined with other championships, only those registered in the Championship will be awarded points.

All Championship events will score maximum points regardless of distance.

1.6.4 If a dead heat is declared in any race, semi-final or final, all the Drivers concerned will score full points for that place.

In the event of a tie between two or more Competitors in the Championship, the greater number of first place finishes achieved by the Competitors involved in the tie will be used to determine the overall final standing.

Should a tie still exist, it will be resolved by taking into account the greater number of second places achieved; then third places etc.

Should a tie still exist, it will be resolved by taking into account the number of competitors (i.e. points scorers) beaten during the season by each Competitor.

1.6.5 Championship Points Appeal C6.5.

1.6.6 Event Penalties

Where a competitor is disqualified from a qualifying race, semi-final or final, or from the event, that event must be one of those counted towards the end of year score.

## 1.7 Awards:

1.7.1 All trophies will be presented to the drivers as soon after the last race as is practical. To receive event trophies, the driver must attend the prize-giving in race-wear with branding correctly displayed.

1.7.2 Trophies will be presented at each event to drivers as follows:

1st, 2nd and 3rd: A trophy

1.7.3 End of season awards are Trophies and will be presented as follows

The MSA British Rallycross Champion, a trophy

Second place, a trophy

Third place, a trophy

The British Rallycross Champion is required to attend the MSA Annual British Championship Awards presentation.

#### 1.7.4 Bonuses:

The Championship Organisers will endeavour to obtain sponsored awards or bonuses during the series and reserve the right to introduce same at any time without any obligation to distribute such awards retrospectively.

In the event of any Provisional Results or Championship Points Tables being revised after any provisional awards presentations and such revisions affecting the distribution of any awards, the Competitors concerned must return such awards to BARC in good condition within seven days.

#### 1.7.5 Entertainment Tax liability

In accordance with current government legislation, the organiser is legally obliged to withhold tax at the basic rate on all payments to non-UK resident sportsmen/women and account to HMRC using form FEU1, the quarterly return of payments made to non-resident entertainers and sportsmen/women.

That is, those persons who do not have a normal permanent residence in the UK. The UK does not include the Isle of Man, Channel Islands or Eire. This means that, as the organiser, LHMC is required to deduct tax at the current rate applicable from any such payments they may make to non-UK residents.

Under certain circumstances, it may be possible for competitors to enter into an agreement with HMRC to limit the tax withheld. Any application for such an arrangement must be made in writing and not later than 30 days before the payment is due.

For further information contact:

HMRC Personal Tax International  
Foreign Entertainers Unit, SO708  
PO Box 203  
Bootle  
L69 9AP  
Tel: 03000 547 395  
Fax: 0151 472 6483

## **2. SPORTING REGULATIONS - JUDICIAL PROCEDURES**

2.1 **Rounds:** In accordance with Section C of the current MSA Yearbook these regulations and any Supplementary regulations for the event.

2.2 **Championship:** In accordance with Section C of the current MSA Yearbook and these regulations.

2.3 Any Regulation clarifications necessary during the year will be notified in writing to all registered Competitors in an Official Bulletin (MSA Yearbook D11.1.3).

2.4 Any competitor who is disqualified from an event will lose all championship points for that event and must count the result of that/those events, among those contributing to his/her championship score.

### **2.5. TECHNICAL DISPUTES**

2.5.1. The Organisers and the Championship Eligibility Scrutineer reserve the right to check, seal and/or remove any suspect part for more detailed examination.

2.5.2 The Organisers and the Championship Eligibility Scrutineer also reserve the right to impound individual parts or the whole car without prior notification.

All costs will be borne by the Competitor.

### **3. CHAMPIONSHIP MEETINGS & PROCEDURES**

#### **3.1 Entries:**

3.1.1 Competitors are responsible for ~~sending in~~ placing correct and complete entries with the correct entry fee prior to the closing date for entries before each Event.

3.1.2 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 ~~Meeting Organiser~~ Entry Secretary receives the missing or corrected information or fee.

3.1.3 Any withdrawal of Entry or Driver/Car changes made after acceptance of any entry must be notified to the ~~Meeting Organiser~~ Entry Secretary in writing. MSA Yearbook D25.1.12 applies.

3.1.4 The Entry Fee for each event shall be specified in the Supplementary Regulations and on the entry form.

3.1.5 Reserves will be listed in the Final List of Entries published with Final Instructions or in a Bulletin.

#### **3.2 Briefings:**

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

#### **3.3 Practice:**

3.3.1. 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.

3.3.2. Each driver shall complete a minimum of 3 laps in the car to be raced and in the correct session.

#### **3.4 Races:**

3.4.1 Each event will consist of practice, up to three rounds of Qualifying races, semi-finals and final.

3.4.2 A joker lap will be used where the circuit track licence allows. This will be advised in final instructions or official bulletin. In each qualifying heat, one of the laps must be the Joker Lap. In the Qualifying races any driver who does not take the joker lap will receive a penalty of 30 seconds. In a semi-final or final any driver who does not take the joker lap will be classified last in that race. Two judges of fact will be appointed to note the numbers of the cars passing through (one judge of fact where there is a timing loop in the Joker Lap). At the exit of the joker lap, the cars on the main track have priority. (see MSA Yearbook N5.1.4).

3.4.3 All categories will start Qualifying Races in 3-2-3 format up to the maximum allowed by the track licence, ~~but will not normally exceed 8 cars~~. In all cases the decision of the Clerk of the Course is final. Grids for semi-finals and finals will have a maximum of eight starters in 3-2-3 format.

3.4.4 The grids for the first Qualifying races will be pre-determined. The grids for the second Qualifying races will be based on the result of the first Qualifying and the grids for the third Qualifying races will be based on the result of the second Qualifying. (i.e. the fastest driver in Qualifying one will be on pole for the last race for the second Qualifying. The second fastest will be in second grid slot in the last race, etc). ~~Where there are two or more races per Qualifier, the number of starters will be split as equally as possible over the races run. If it is not possible form grids of equal size, the last race (for the fastest drivers) will be have the greatest number of starters.~~

3.4.5 Qualifying heats will be run over 4 laps, semi-finals and finals will be run over six laps. Race length may be changed at the discretion of the Clerk of the Course.

~~3.4.6 Some Qualifying races may be amalgamated.~~

If there are fewer than 8 10 entries in a Championship or class, the Clerk of the Course may run combined races in qualifying and finals for those cars.

Championships and classes may be amalgamated for the duration of the events at the discretion

of the Clerk of the Course. Any such amalgamation will be detailed in final instructions or other bulletins.

3.4.7 Should any race be disrupted the Clerk of the Course shall not be obliged to resume or re-run the race.

### 3.5 Qualifying points

3.5.1 Qualifying points will be allocated as follows: Fastest 1 pt; 2nd Fastest 2 pts and so on

3.5.2 Competitors who do not record a total race time for any Qualifying race (DNF) will be allocated points equal to the number of starters in their class plus 2 points

Those who did not start (DNS) will be allocated points equal to the number of starters in their class plus 3 points

Those who are disqualified from a Qualifying race will be allocated points equal to the number of starters in their class plus 5 points.

3.5.3 At the conclusion of the Qualifying races there will be an Intermediate Classification which will determine the grids for the semi-finals or final and the final classification for any competitors who do not qualify for the semi-finals or final.

3.5.4 Semi-finals will only be run if there are a minimum of 10 qualifiers able to participate. A driver who has qualified for the semi-finals or final but is unable to take the start and does not inform the organisers of this may be penalised with the loss of Championship points.

3.5.5 To be classified as a finisher, and qualify for the semi-finals or final a competitor must have completed at least one heat Qualifying race.

3.5.6 The results of all qualifying races will count in the Intermediate Classification.

3.5.7 Where competitors have equal points in the Intermediate Classification, precedence will be given to the driver(s) who were fastest in the third Qualifying races. Should that fail to resolve the tie, the fastest time in the second Qualifying races will be considered, and then the fastest time in the first Qualifying races.

### 3.6 Finals

3.6.1 The 16 top scoring drivers in the intermediate classification will qualify for the semi-finals. The winner, second, third and fourth place driver in each semi-final will qualify for the final. The semi-finals will only be run if there are at least 10 cars able to participate (a minimum of five cars per semi-final; if the semi-finals are not run, the eight top-scoring drivers in the intermediate classification will progress directly to the final.

3.6.2 Semi-finals and finals will be run over six laps and have not more than eight starters. From the Intermediate classification, drivers placed in positions 1,3,5,7,9,11,13 & 15 will start in semi-final one. Drivers placed in positions 2,4,6,8,10,12,14 & 16 will start in semi-final two.

3.6.3 Of the two semi-final winners, the one placed higher in the Intermediate Classification will start the final from pole, with the other starting second. The remaining grid places will be taken by the two second placed finishers, the two third placed finishers and the two fourth placed finishers (in each case the position in the Intermediate Classification which will determine which of each pair starts ahead of the other).

3.6.4 Reserves – Should any of the semi-final or final qualifiers be unable to take their place on the grid, the other starters in the race will move up and the last place on the grid will be taken by the next qualifier able to start. In the semi-finals, that means those from seventeenth down in the Intermediate Classification. In the final that means the highest placed in the intermediate classification of the two fifth-placed finishers from the semi-finals, then the other of the fifth-placed finishers. If neither of the fifth-placed finishers are able to start, the same method between the two sixth-placed finishers, etc.

3.6.5 Final Classification – First to eighth positions will be the classification of the Final.

Ninth to 16th positions will be the semi-finalists who did not start in the final ranked by their classification in their semi-final. Drivers finishing in the same position in the two semi-finals will be classified according to their position in the Intermediate Classification (ie of the two fifth placed semi-finalists, the one placed higher in the Intermediate Classification will take precedence, etc.). 17th position onwards will be as per the Intermediate Classification.

3.6.6 To compete in the semi-finals or final, all competitors and their cars must be at the pre-grid area before the previous race has started. Should a competitor not be present and ready to race when the race is ready to be released from pre-grid, then the next placed qualifier may be allowed to start.

### 3.7 Starts:

3.7.1 Competitors will miss their qualifying race/final if they are not ready in the pre-grid when cars are released and will not be placed in a later race.

3.7.2 The pre-grid marshals shall have the right to ask excessive support crew to leave the pre-grid.

3.7.3 Only event officials and drivers will be permitted in the start area, unless otherwise instructed by the Clerk of Course.

3.7.4 Competitors must take their starting position safely as directed by the start line official without delay. Any competitor who causes a delay may be refused a start.

3.7.5 Competitors must be within 120mm of the grid line at the start of the race.

3.7.6 Any drivers unable to start a race or final must inform the Organisers at the Paddock Office in good time before that race.

3.7.7 All cars will be released from the pre-grid to form up on the grid prior to the start in formation as specified on the grid sheet.

3.7.8 The start will be via a Standing start. Competitors will be shown a "Ready to Race" sign to indicate that the start is imminent. The signal for the race start will be the green lights coming on. In the event of a false start there will be flashing red light and the start procedure will be undertaken again

3.7.9 In the event of any starting lights failure the Starter will revert to use of the National Flag once all competitors have been advised of the fact

3.7.10 The Organisers reserve the right to amend this start procedure via a bulletin issued to all competitors. This may involve changing the method of starting and/or the countdown procedure leading up to the start signal being given.

3.7.11 Electronic beams, or similar devices, will be used in conjunction with starting lights to detect false starts. These will be monitored by a judge of fact. When a false start occurs in a qualifying race, a semi-final or final, all competitors will return to their original starting position and the starting procedure will begin again. The competitor(s) who caused the false start must pass through the joker lap section twice in the race concerned. If any competitor commits a second false start they will be removed from the grid and not permitted to start.

3.7.12 The Clerk of Course may order a complete restart if he considers there to have been a faulty start.

3.7.13 In the event of the electronic equipment failing, a judge of fact, who will be named, will adjudicate on all starts. This may include instances where the lights do not lock, but a jump-start is evident.

### 3.8 Session Red Flag

3.8.1 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 Marshals 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 drive to the parc ferme or the starting grid area, as directed by officials. No work may be



carried out on any car unless authorised by the Clerk of the Course or Scrutineer. Any car that returns to the paddock will be considered to have retired from the race.

**3.8.2 MSA Yearbook regulations N5.3.2 to N5.3.2.8 inclusive shall apply.**

### **3.9 Race Finishes:**

After taking the Chequered Flag drivers are required to:

- progressively and safely slow down
- remain behind any competitors ahead of them,
- return to the paddock entrance as instructed,
- comply with any directions given by marshals or officials
- keep their helmets on and harnesses done up while on the circuit
- if so directed, place their car into the parc ferme where it must remain until released by the Championship Eligibility Scrutineer or his deputy

### **3.10 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. (MSA regulation D26.3)

### **3.11 Timing transponders:**

It is the Competitors responsibility to ensure that a working transponder of one of the types listed below is fitted to the vehicle.

- AMB260
- Mylaps car\bike (red)
- Mylaps X2 car\bike with active subscription

**Cars fitted with other makes or types of transponder will not be included in any practice or race results.**

**It is, therefore, the responsibility of each competitor to:**

- Fit an appropriate Transponder in the location approved for the type/class of car.
- Provide the unique 7 digit Identification Number of the Transponder being used on the Entry Form for each event
- Ensure the transponder is secure and in good working condition for every practice, heat and final
- Notify the Secretary of the Meeting of any change of transponder being used.
- Replace any transponder damaged, lost or inoperative.

**Any competitor starting a practice, heat or final with an inoperative transponder will not be timed until the defect has been rectified or a replacement transponder has been fitted.**

**Any competitor starting a practice, heat or final using a transponder registered to another competitor will not be timed until the Secretary of the Meeting has been informed of all changes relating to the use of that transponder.**

**3.11.1** No electronic equipment may be placed within five metres of any official timing line and any breach of this may result in the confiscation of the equipment concerned.

### **3.12 Paddock**

**3.12.1** Competitors must ensure that the MSA, Circuit Management and Organising Club Safety Regulations are complied with at all times. In addition any paddock plan issued by the Organisers must be complied with and the minimum amount of space should be used when setting up.

#### **3.12.2 Refuelling:**

A refuelling area will be provided and all competitors must purchase their fuel from and be refuelled in this area. Race and super unleaded fuel will be available at all rounds. The fuel supplier will operate the refuelling zone and will also carry out fuel checks. The penalty for non-compliance will be exclusion from the event.

#### **4. PENALTIES:**

**4.1** Technical infringements arising from post-practice Scrutineering or Judicial Action: Minimum Penalty; The provisions of MSA Regulations: C3.3.

**4.2** Arising from post event Scrutineering or Judicial Action: Minimum Penalty; The provisions of MSA Regulations: C3.5.1. (a) and (b).

For infringements deemed to be of a more serious nature the Clerk of the Course and/or Stewards of the Meeting are to invoke the provisions of Regulation C3.5.1. (c).

**4.3** Repeated Technical Infringements will be referred to the Championship Stewards for consideration of exclusion from the Championship of the Car, Driver or Entrant.

**4.4** Infringements of non-technical MSA Regulations and the Sporting Regulations issued for the Championship in accordance with the 2018 MSA Yearbook section C; any such penalties may affect a competitor's eligibility for Championship points and awards.

**4.5** If it appears from any evidence that there may have been actions by a competitor or a member of his team considered to have bought the championship into disrepute the Championship Co-Ordinator will be entitled to request that the championship Stewards consider the inception of an inquiry into the matter. Penalties may include individual event bans, loss of event awards and or end of season awards, loss of championship points or exclusion from the championship. The Championship stewards' judgement will be subject only to the right of appeal to the MSA.

## 5. TECHNICAL REGULATIONS - GENERAL

### 5.1 Eligible vehicles

~~The Championship is open to drivers of Supercars detailed below, and complying with MSA Rallycross Regulations N6 or N8, except where amended. Supercars: As defined in the 2017 LHMC/BARC Technical Regulations published by LHMC/BARC and attached as Appendix 2 and cars complying with the FIA technical regulations for Rallycross Supercars as specified in article 279 of FIA Appendix J. As defined in 6.~~

### 5.2 Fuel

Vital Equipment has been appointed as the single fuel supplier. All fuel must be purchased onsite from the supplier which will operate a refuelling zone in which all refuelling must take place. Either Carless Superplus or Carless Turbo Ultimate Dev may be used.

5.2.1 Fuel sampling and testing; MSA Yearbook J5.13.7 and D34 apply.

5.2.2 Comparison testing may take place at any stage of any event in the Championship. Fuel must be equal to or better than 99.90% to be deemed compliant in comparison testing.

### 5.3 Telemetry / Voice Communications

5.3.1 Any form of wireless data transmission between the vehicle and any person and/or equipment is prohibited while the car is on the track.

This definition does not include :

- Voice radio communications between the driver and his/her team
- Transponder from the official timekeeping, and
- Automatic timing recording.

None of the previously mentioned transmission data may in any way be connected with any other system of the car (except for an independent cable to the battery only).

On-board data recorders are allowed.

The transmission of data by radio and/or telemetry is prohibited.

On-board TV Cameras are not included in the above definitions.

Data transmission through a temporary physical connection is allowed in the paddock only.

5.3.2 The use of radio between the driver and his/her team is authorised.

### 5.4. Judicial Cameras

5.4.1. All cars must carry a forward facing camera, positioned to show the driver's feet, hands and the view through the front windscreen. Cameras must record in HD quality and have a removable SD memory card. Systems with multiple cameras must be set to display images so that any 'inset' views do not obscure the view through the front windscreen or of the driver's hands and feet. Cameras must be mounted before scrutineering. Suction mounts are not permitted.

5.4.2. It is the driver's responsibility to ensure that that camera is recording during practice, heats qualifying and finals.

5.4.3. It is the driver's responsibility to ensure that the battery life and memory card space is adequate to record the entire race and until the car is parked in the paddock or parc ferme. The memory card must contain only the current event.

5.4.4. ~~Footage~~ Video must be made available to the clerk of the course on request. **The driver must present any video requested by the Clerk of the Course on his own laptop/tablet, cued and ready to play.**

The penalty for non-compliance with any of the above will be exclusion from the race.

5.4.5. **The Clerk of the Course may request memory cards be left with him.** Drivers must record the serial numbers of their memory card(s) to avoid any confusion when the card(s) are returned. **It is the driver's responsibility to ensure they have a spare memory card available.**

5.4.6. ~~The footage~~ **Judicial camera video** can be used only by the officials and the Championship organiser. With the exception of cameras installed by the Championship TV contractor no other oncar/incar video, still or motion picture cameras will be permitted without the written authority of the Championship Coordinator. For the avoidance of doubt, Competitors may not allow footage from the judicial camera to be published in any way without the written authority of the Championship Coordinator.

## **5.5. Numbers & Championship Identification**

**5.5.1** Competition numbers will be supplied by the Championship organiser. Only the numbers supplied can be used. Numbers must be positioned as detailed in the Championship Branding Guide. Where the car has no rear side window, positioning of the numbers will be by agreement with the Championship Organisers.

**5.5.2** The driver's surname must be displayed on the rear side window. The driver is responsible for providing this decal which must be as specified in the Championship Branding Guide. Where the car has no rear side window, positioning of the driver's name will be by agreement with the Championship Organisers.

## **5.6 Safety Requirements**

**5.6.1.** Each competitor is required to carry at least one fire extinguisher and have it available for use at their service area/garage (for the avoidance of doubt, where more than one car shares a paddock space, this means at least one extinguisher per car).

**5.6.2** Each team shall provide a ground sheet which the competition vehicle must be parked on throughout servicing.

Any competitor who does not comply with 5.6.1 or 5.6.2 will be refused permission to start until they comply.

**5.6.3** Waste oil, tyres and other consumables must only be disposed of in the specifically provided waste receptacles at the venues (NOT general waste bins), or if not provided be taken home.

**5.6.4** If the engine is run with the gears engaged whilst the vehicle has any driving wheels not in direct contact with the ground the car must be supported stands (not jacks), a competent person must be in the driver's seat while the engine is running and there must be a safe zone around the car with only essential personnel admitted while the engine is running. Each driver/entrant is responsible for controlling and managing this within their own paddock space and for briefing their own personnel on all matters of safe working.

**5.6.5** The use of tyre heating/heat retention devices in the paddock, on the pre-grid or start line is prohibited.

## 6 SPECIFIC SUPERCAR TECHNICAL REGULATIONS

### 6.1 Introduction

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

**6.1.1** A Supercar is a rigidly-closed non-convertible model, that either is, or has been, homologated in Group A/N (Kit Car and World Rally Car disqualified) or in Supertouring and conforming to Appendix J Group A (Articles 251 to 255). Cars not homologated with the FIA but produced in series and regularly on sale through a recognised commercial network are also eligible. **Cars complying with the FIA technical regulations for Rallycross Supercars as specified in article 279 of FIA Appendix J in their entirety are also eligible.**

### 6.2 General Technical Regulations and Requirements

**6.2.1** Cars must comply with the Technical Regulations published by the Organisers for The Championship throughout official practice, qualifying heats and finals.

**6.2.2** All cars must comply fully with the current MSA Yearbook J Common Regulations for Competitors: Vehicles and Rallycross Technical Regulations N6 **or N8** and these supplementary regulations.

**6.2.3** No approved modification may give rise to an unapproved one.

**6.2.4** The use of magnesium alloy sheet is not permitted. Titanium sheet may only be used for heat shields

### 6.3 Safety Requirements

**6.3.1** Minimum, Comply with current MSA Yearbook regulation **N 6.11 to 6.12.6.** inclusive.

In addition:

**6.3.2** Currently FIA Homologated competition seat and mountings are mandatory

**6.3.3** Currently FIA Homologated Seat Belts are mandatory (minimum 6 point attachment).

**6.3.4** All cars must be fitted with a FIA homologated extinguisher system plumbed to the engine bay and the cockpit.

~~Window nets must be fitted on the driver's side of the vehicle.~~

**6.3.5** In addition to the minimum apparel standards set out in MSA General Regulations ~~N9~~ **K9** the following are mandatory:

- **flame resistant racesuit homologated to FIA 8856-2000 standard**
- flame resistant gloves and shoes
- **flame resistant** underwear
- **flame resistant** balaclava
- **Frontal Head Restraint (FHR)**

~~The following are highly recommended:-~~

~~FHR/HANS devices~~

**6.3.6** **The side windows on the driver's side of the car must remain closed. A sliding window in the side windows of the driver's and passenger's doors may be fitted. The opening must be a minimum of 130mm x 130mm and a maximum of 150mm x 150mm. The sliding windows must be closed at the start of the race.**

### 6.4 Chassis & Bodywork

**6.4.1** The original bodywork must be retained, other than as detailed below.

The series-production bodyshell and chassis must be retained but the original basic structure may be reinforced in accordance with current FIA Appendix J Article 255.5.7.1.

**6.4.2** The bodywork may be modified in accordance with current FIA Appendix J Article 279. All the measurements will be taken in relation to the middle of the front and rear axles of the homologated bodywork. The materials added must be ferrous and must be welded to the bodywork.

**6.4.3** In order to install the catalytic converter, it is allowed to make a hollowing out in the central tunnel as described in current FIA Appendix J Article 279.

**6.4.4** Except for the driver's door, the material is free, provided that the original outside shape is retained.

**6.4.5** Door hinges and outside door handles are free. The original locks may be replaced but the new ones must be efficient.

**6.4.6** The original driver's door must be retained, trim may be removed.

**6.4.7** Trim strips, mouldings, etc., may be removed.

**6.4.8** Under no circumstances can any part of the bodywork or the suspended parts of the car be below a horizontal plane passing 40mm above the ground, the car being in normal race trim with the driver strapped into his/her seat.

**6.4.9** Windscreen wipers are free, but there must be at least one in working order.

**6.4.10** All cars will be equipped with front and rear towing eyes strong enough for a recovery vehicle to tow the car.

The towing eye must have a hole of minimum dimension 25mm x 40mm situated 25mm forward of the adjacent bodywork. The area 100mm above and below the towing eye must allow clearance to enable the rescue crews to attach straps and shackles. The surrounding bodywork must be flexible or deformable in order to access to the towing eye. They must be clearly marked, visible and painted yellow, red or orange in contrast to the colour of the car.

**6.4.11** At the start of each heat or race the car must be fitted with mud-flaps behind all four wheels extending to a minimum of 38mm either side of the tyre tread and to a maximum of 76mm above the ground, or in compliance with current FIA App J Article 279.

**6.4.12** At least one mirror of a minimum surface area of 500mm<sup>2</sup> must be securely mounted and positioned to give a clear view to the rear. The edges of the mirror must be protected by a suitable cover to reduce the possibility of injury in event of an accident.

**6.4.13** The rear doors may be sealed shut by welding.

**6.4.14** The locking devices on the bonnet and boot lid, as well as the hinges, are free, but each lid must be fixed at four points, and opening from the outside must be possible. The original closing systems must be removed.

**6.4.15** Openings may be made in the bonnet for ventilation, provided that they do not allow mechanical components to be seen.

**6.4.16** In all circumstances, the bonnets and boot lids must be interchangeable with the original homologated ones.

**6.4.17** It is permitted to remove the window opening mechanisms from all four doors or replace electric winders with manual winders.

**6.4.18** It is permitted to install one or two ventilation flaps in the roof of the car, in the following conditions:

**a:** maximum height 10 cm

**b:** displacement contained within the front third of the roof

**c:** hinges on the rear edge total maximum width of the openings : 500 mm

**6.4.19** Front aerodynamic device

The material and shape are of free design, limited by:

**a:** The vertical plane passing through the axis of the front wheels and the horizontal plane passing through the lowest point of the door opening (FIA Appendix J Article 279 drawing 279-3);

**b:** The overall length of the homologated car;

**c:** To the front, by the vertical projection of the bumper of the homologated car.

**d:** The material of the bumper must remain unchanged (plastic remaining plastic, including composite materials). Aftermarket bumpers are permitted provided they are to the same pattern as the original equipment bumpers.

**e:** The safety elements allowing the absorption of impacts between the bumper and the chassis must be kept.

**f:** Modification of the lateral part of the front bumper: according to the definition of the fender (FIA App J, Article 251-2.5.7).

**g:** One or more openings may be made in the bumper (the part situated above the plane passing through the lowest point of the door opening), but the total surface of openings in the front shield must be no more than 2500 square cm.

**h:** These openings must not affect the structural integrity of the bumper.

**i:** The thickness of the front aerodynamic devices must be 2mm minimum and 5mm maximum.

**6.4.20** Rear aerodynamic device:

**a:** It must have the maximum dimensions defined in current FIA Appendix J Drawing 279-4.

**b:** Even if the vehicle has original dimensions bigger than those maximum dimensions, it must comply with this drawing.

**c:** At its extremities, this device must join the bodywork, and it must be entirely contained within the frontal projection of the car without its rear-view mirrors, and within the projection of the car seen from above.

**d:** The base of the box including the drawing must be the one with the largest dimensions. It must be positioned horizontally.

**e:** Further, this volume may be extended section by section, which means that at any point of the rear aerodynamic device, each section must not exceed the section 450mm x 290mm x 190mm, supports included.

**f:** The thickness must be 2mm minimum and 5mm maximum.

**6.4.21** Under body protections are only permitted as defined in FIA Art 279 Appendix J ~~3.2.5~~ 10.3.15.

## **6.5 Engine.**

**6.5.1** The engine is free, but the engine block must be from a model of car of the same original registered trademark as the car's original bodywork. Custom engines complying fully with FIA Appendix J, Article 279, 5.4 are eligible.

**6.5.2** The engine must be located in the original engine compartment.

### Permitted

- Carbon or composite materials (for clutches and non-stressed covers or ducts only).

### Prohibited

- Twin-engine configurations (unless homologated in that form)
- Variable valve timing
- Variable length inlet trumpets
- Titanium (except in connecting rods, valves, valve retainers and heat shields)
- Magnesium (in moving parts)
- Ceramic components
- Internal and/or external spraying or injection of water or any substance whatsoever (other than fuel for the normal purpose of combustion in the engine).
- Variable diameter inlets and adjustable internal vanes on turbochargers
- Water injection (even if it originally exists on the homologated block)
- Spraying of the intercooler

**6.5.3** Throttle as defined in FIA Appendix J, Article 279, 5.4.2.2 h.

**6.5.4** All supercharged cars must be fitted with a restrictor as defined in FIA Appendix J, Article 279, 5.2.3.

**6.5.5** The exhaust gases from the waste-gate must exit into the vehicle's exhaust system and must not be recycled in anyway. Furthermore, there must be no connection between the intake and exhaust systems

**6.5.6** Supercharged cars must not be equipped with any device which allows the boost pressure, or the electronic management system controlling the boost pressure, to be adjusted by the driver while the car is in motion (except the throttle pedal).

**6.5.6** Cars with forced induction will be subject to a coefficient of 1.7:1 as per current MSA Yearbook Regulation J 5.4.1

## **6.6 Transmission**

**6.6.1** The operating method and the design of the system are free except as below.

**6.6.2** Traction control is prohibited.

**6.6.3** Conversion to four-wheel drive is permitted.

**6.6.4** Front and rear limited slip differentials must be mechanical. Active differentials are not permitted. Mechanical limited slip differential means any system, which works purely mechanically, i.e. without the help of a hydraulic or electric system. A viscous clutch is not considered to be a mechanical system.

**6.6.5** In the case of a four-wheel drive vehicle, the addition of a hydraulic system or a viscous clutch to the central differential is allowed; in order to limit the slip, but this system must not be adjustable when the vehicle is in motion.

**6.6.6** Any sensor, contact switch or electric wire on the four wheels, gearbox or front, middle or rear differentials are forbidden. Only one sensor for displaying the ratio engaged is authorised on the

gearbox, on condition that the sensor/electric wire/display assembly is completely independent of the engine control system.

**6.6.7** A maximum of two wires are permitted to the centre differential to power an electric oil pressure pump, provided that the wires serve no other purpose, and the differential is standard equipment for the make and model of vehicle. The system must not be adjustable when the car is in motion.

## **6.7 Suspension & Steering**

**6.7.1** Cars must be fitted with a sprung suspension.

**6.7.2** The operating method and the design of the suspension system are free.

**6.7.3** Front axle - Modifications to the shell (or chassis) are limited to:

**a:** the reinforcement of the existing anchorage points,

**b:** the addition of material for the creation of new anchorage points,

**c:** the modifications necessary to provide clearance for suspension components, drive shafts, and wheel and tyre.

The reinforcements and addition of material must not extend further than 100 mm from the anchorage point.

**6.7.4** With the exception of subframes connecting the front to the rear, the front subframe is free as regards the material and the shape, provided that:

**a:** it is interchangeable with the original part and that the original number of anchorage points remains unchanged.

**b:** it can be dismantled (no welding).

**6.7.5** Moving the anchorage points of the subframe is allowed provided that they are situated inside the new tunnel (see current FIA Appendix J article 279 8).

**6.7.6** Rear axle -Modifications to the shell (or chassis), to accommodate the changed position of pivot and mounting points, are limited to those in FIA drawing 279-1.

**6.7.7** The springing medium must not consist solely of bolts located through flexible bushes or mountings but may be of fluid type.

**6.7.8** There must be movement of the wheels to give suspension travel in excess of any flexibility in the attachments.

**6.7.9** The use of active suspension is forbidden.

**6.7.10** Chromium plating of steel suspension members is forbidden.

**6.7.11** All suspension members must be made from a homogeneous metallic material.

**6.7.12** Hydro-pneumatic suspension systems are permitted, on condition that they do not have active control.

**6.7.13** Quick release steering wheels are mandatory. The quick release device must be coloured yellow. ~~They must also carry a yellow "Q" of at least 80mm diameter on a red background, located at the centre of the base of the windscreen, adjacent to the electrical circuit breaker and fire extinguisher triggering points.~~

## **6.8 Brakes**

**6.8.1** The operating method and the design of the system are free except as below.

**6.8.2** There must be a double circuit operated by the same pedal and complying with following:

**6.8.3** The pedal shall normally control all the wheels.

**6.8.4** In case of a leakage at any point of the brake system pipes or of any kind of failure in the brake transmission system, the pedal shall still control at least two wheels.

**6.8.5** Anti-lock brake systems are not permitted.

**6.8.6** The brake discs must be made from ferrous material.

**6.8.7** A handbrake is mandatory it must be efficient and simultaneously control the two front wheels or the two rear wheels.

**6.8.8** Fluid tanks are forbidden inside the cockpit.

## **6.9 Wheels**

**6.9.1** The complete wheel (flange + rim + inflated tyre) must always fit inside a U-shaped gauge of which the extremities are 250 mm apart, the measurement to be made on an unloaded part of the tyre.

**6.9.2** The diameter of the rim is free but may not exceed 18".

## **6.10 Tyres**

**6.10.1** Tyres are free provided they comply with Championship regulations.



6.10.2 Hand-cutting is permitted but only for the purpose of introducing additional grooves no deeper than those moulded into a new tyre. Hand cutting in order to increase the depth of existing moulded grooves is prohibited.

### 6.11 Electrics

6.11.1 The nominal voltage of the electrical system including that of the supply to the ignition of the "original" car must be retained.

6.11.2 Relays, circuit breakers, fuses and cables are free.

6.11.3 A red rear warning light complying with current MSA Yearbook regulation K5 must be fitted

6.11.4 The make, number and capacity of the batteries are free

6.11.5 Have any wet batteries in the drive/passenger compartment enclosed in a securely located leak-proof container capable of retaining any leaked acid and protecting the terminals from short circuiting and producing sparks.

6.11.6 All lights may be removed but all cars must be equipped with two rear lights of the anti-crash type as used in fog with the minimum of 15 watts each and illuminating an area of 60 sq. cm. These must work with or replace the car brake light system at all times and must be between 115cm and 150 cm above the ground and must be clearly visible from behind.

6.11.7 Generators are optional but the self-starter system must be operable at all times

6.11.8 Starting the car: Cars must be equipped with an electrical energy source to enable the driver to start the engine when normally seated with seat belts fastened.

6.11.9 Be equipped with an ignition cut-off switch having positive ON-OFF position clearly marked, and which must be operable by the driver when normally seated with seat belts secured. It must also isolate electric fuel pumps.

### 6.12 Weight

At all times the minimum weight of the car with driver (wearing full racing apparel) will be 1300kg.

### 6.13 Fuel Tank & Fuel

6.13.1 If a non-original tank is fitted, it must be a safety tank homologated by the FIA in accordance with the specifications of current FIA Appendix J Article 253 Article 14.

6.13.2 The tank, the catch tank (buffer box), the pumps and all component of the fuel feed system shall be located at least 30 cm from the bodyshell in both lateral and longitudinal directions, outside the driver's compartment.

6.13.3 In all cases, the tank, including the filler pipe must be isolated by a firewall or by a container, both of which shall be flameproof and fire-resistant, preventing any fuel from infiltrating the cockpit and any contact with the exhaust pipes.

6.13.4 Should the fuel tank be installed in the boot and the rear seats removed, a fireproof and liquid-proof bulkhead must separate the cockpit from the fuel tank.

6.13.5 In the case of twin-volume cars, it will be possible to use a nonstructural partition wall in transparent, non-flammable plastic between the cockpit and the tank arrangement.

6.13.6 The tanks must be protected effectively and securely attached to the shell or the chassis of the car.

6.13.7 The use of safety foam in tanks is recommended.

6.13.8 All the fuel pumps must operate only when the engine is running, or during the starting process.

6.13.9 not used

6.13.10 The requirements of J5.13.7. must be complied with.

6.13.11 Have sufficient fuel for a fuel test present at any time during the meeting to comply with the fuel sampling requirements as laid down in the MSA year book D34 Procedure for fuel testing.

### 6.14 Exhaust & Silencing

6.14.1 Exhausts systems must comply with the current MSA Yearbook regulations J5.16 and J5.17 and circuit restrictions.

6.14.2 All exhaust gasses including wastegate outlet must pass through the main exhaust system.

### ~~6.1.15 Telemetry / Voice Communications~~

~~6.1.15a Any form of wireless data transmission between the vehicle and any person and/or equipment (other than that required by the time keepers) is prohibited while the car is on the track. Data transmission through a temporary physical connection is allowed in the paddock only.~~

~~6.1.15b Radio is authorised. (FIA Appendix J, Art 279, 3.6)~~

## **7 Commercial**

**7.1.** Championship Sponsors' branding must also be carried on each car. The position of branding to be carried on cars and clothing will be specified the Championship Branding Guide which may be varied from time to time.

**7.2.** Two sets of Championship sponsors decals will be provided for the season. Any additional decals required may need to be purchased.

**7.3.** The organisers reserve the right to refuse the start of any competitor not carrying the correctly positioned decals.