

Lotus on Track Elise Trophy

Series Regulations 2009

Introduction

The Lotus on Track Elise Trophy aims to provide a friendly, safe and financially viable series for those wishing to progress from attending Lotus on Track track days into racing. The series is open by invitation to likeminded owners of Elise and Elise variants (e.g. Exige, 340R, 2-Eleven etc.). All participants must be members of both Lotus on Track (LoT) and the Lotus on Track Racing Drivers Club (LoTRDC).

There are three classes within the Elise Trophy series;

Production – With factory specification engines and limited modifications permitted, some cars being driven to and from the circuit.

2-Eleven – Specifically aimed at the Toyota supercharged Lotus 2-Eleven circuit car, limited modifications permitted keeping cars very close to the original showroom specification.

Modified – Aimed at moderately tuned vehicles, including vehicles with aftermarket engine conversions. Normally aspirated engines only, unless engine has been supplied by Lotus with forced induction such as S2 Toyota Exige/Elise. Forced Induction after market engines may be permitted with an exemption being granted on individual basis to drivers who have registered by 31/12/08.

A typical race meeting will involve a 20 minute practice session, followed by two 20 minute races. The second 20 minute race may be held in a "reverse top 10" format. At most rounds the Production class will be split from classes 2-Eleven & Modified giving a total of four Elise Trophy races during the race meeting.

1. SPORTING REGULATIONS – GENERAL

1.1 Title & Jurisdiction:

1.1.1 The Lotus on Track Elise Trophy is a series of trophy races organised and administered by LoTRDC Ltd [LoTRDC] in conjunction with Motorsport Vision Racing [MSVR] in accordance with the General Prescriptions of the Motor Sports Association [MSA] and these Regulations.

1.2 Officials:

1.2.1 Series Coordinator:

Paul Golding, LoTRDC Ltd, PO Box 1217, Maidstone, ME14 9JR
Email: paul@lotrdc.com
Phone: 0033 950 277 787
Fax: 0033 359 350 142

1.2.2 Series Scrutineer:

Chris Mount

1.2.3 Series Eligibility Scrutineers & Club Stewards:

Jez Braker
Mark Anderson
Andrew Blacklock
Nigel Goater

1.2.4 Driving Standards Officer

TBC

1.3 Competitor Eligibility:

1.3.1 To be eligible for 2009 Lotus on Track Elise Trophy all drivers must be current members of the LoTRDC Ltd.

1.3.2 The Drivers must be in possession of valid 2009 MSA Competition (Racing) National B License or above. A professional driver in possession of a valid License (featuring an E.U. flag) and medical, issued by the ASN of a member country of the European Union.

1.3.3 All Drivers must fill in the official MSA/LoTRDC Entry Forms in full, to the satisfaction of the Secretary of the Meeting, in advance of the race event; this must be an original and not a photocopy. Failure to do so will result in exclusion from the race.

1.3.4 European rounds require a 2009 MSA Competition (Racing) National A license or above. The Events are inscribed on the FIA National Event Authorised Foreign Participation (NEAFP) Calendar, a valid License and Medical. (A6).

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

1.4 Registration:

1.4.1 The registration for the 2009 Lotus on Track Elise Trophy is £100 per driver. All members must send payment with their registration form to the series coordinator before any entries will be accepted.

1.4.2 Registrations will be accepted from 1st September 2008 until the closing date for entries to the final round.

- 1.4.3 If deemed necessary LoTRDC will give all registered drivers who competed in 2008, the option to pay a season deposits to guarantee entry for each 2009 round.
- 1.4.4 Registration numbers will be the permanent competition numbers for the Series and will be allocated by the series coordinator.
- 1.4.5 Drivers may also enter the relevant class at the following Lotus Cup Europe rounds: Zandvoort, Hockenheim, Dijon and Le Mans. A modified class will also be incorporated at these rounds.

1.5 Rounds:

- 1.5.1 The 2009 Lotus on Track Elise Trophy will consist of 22 rounds over 11 race meetings as follows:

Round:	Date:	Circuit:
1 & 2	18 th -19 th April	Donington Park National
3 & 4	1 st -3 rd May	Brands Hatch Grand Prix
5 & 6	16 th May	Anglesey International
7 & 8	13 th -14 th June	Snetterton
9 & 10	17 th -19 th July	Brands Hatch Grand Prix
11 & 12	25 th July	Oulton Park International
13 & 14	15 th -16 th August	Donington Park Grand Prix
15 & 16	12 th September	Cadwell Park
17 & 18	2 nd -4 th October	Spa Francorchamps
19 & 20	10 th October	Silverstone International
21 & 22	14 th November	Brands Hatch Indy

In addition Lotus on Track Elise Trophy classes will also be run at the following Lotus Cup Europe rounds and all LoTRDC members may enter:-

Zandvoort – 23-24 May
Hockenheim – 20-21 June
Dijon Prenois – 4-6 September
Le Mans Bugatti – 24-25 October

- 1.5.2 In accordance with MSA regulation A29 the Organisers reserve the right to amend the published list of dates and rounds, in which case, all registered competitors will be informed of the amendments by Official Bulletins posted to the address specified on the Official Registration Form.

1.6 Scoring:

- 1.6.1 The Lotus on Track Elise Trophy is a non-championship race series.

1.7 Awards:

- 1.7.1 All awards are to be provided by LoTRDC.
- 1.7.2 Per Round: Trophy will be presented to race class winner. A Trophy for second place will be presented where 3 or more cars are entered within that class. A trophy for Third place will be presented if 6 or more cars are entered within that class.

1.8 Championship: None

1.9 Bonuses: None

- 1.10 Presentations:** Trophies are to be provided for presentation at the end of each race or at an end of the meeting presentation ceremony.

1.11 Entertainment Tax Liability: Not Applicable.

1.12 Title to all Trophies:

1.12.1 In the event of any Provisional Results or Series Tables being revised after any provisional presentations and such revisions affect the distribution of any awards the Competitors concerned must return such awards to the LoTRDC in good condition within 7 days.

2. SPORTING REGULATIONS -JUDICIAL PROCEDURES

2.1 Rounds:

2.1.1 In accordance with Section C(d) of the 2009 MSA Yearbook and these regulations.

3. SPORTING REGULATIONS -SERIES RACE MEETINGS & RACE PROCEDURES

3.1 Entries:

3.1.1 Competitors are responsible for submitting the correct and fully completed entry forms, along with the correct entry fees prior to the event closing date. An entry will only be confirmed once full payment and a fully completed entry form has been received.

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. The date of receipt for acceptance of entry purposes shall be the date on which the Secretary of the Meeting receives the missing or corrected information or fee.

3.1.3 THERE WILL BE NO REFUNDS OR CREDITS GIVEN TO A COMPETITOR WITHDRAWING AFTER THE CLOSING DATE – UNDER ANY CIRCUMSTANCES.

3.1.4 Changes made to an entry after the closing date or late entries must apply for approval of acceptance by the stewards of the meeting before signing on.

3.1.5 The Maximum entry fee for every round shall be as stipulated in the Supplementary Regulations plus any late entry surcharge imposed by the club.

3.1.6 In the event of any rounds being oversubscribed the Organising Clubs in liaison with the coordinator / organiser may at their discretion run Qualification Races.

3.1.7 Reserves are to be nominated on the final list of entries published with Final Instructions or Amendment Sheet Bulletins. A number of reserves equivalent to the number of starters plus 20% will practice and replace withdrawn or retired entries. Reserve Number order is irrespective of class. 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 Areas" they will be placed at the rear of the Grid and be started without any time delay. Otherwise, they will be held in the pit lane 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 start line or pit lane exit, whichever is the later. Such approval to start MUST be obtained from the Clerk of the Course.

3.2 Briefings:

3.2.1 Organisers will notify competitors of the times and locations for all Driver Briefings in the Final Instructions.

- 3.2.2 It is mandatory that all Competitors must attend all briefings.
- 3.2.3 Should they not be able to attend they must notify the Series Coordinator beforehand. Failure to do so could result in a £135.00 fine at the discretion of the Clerk of the Course.
- 3.2.4 First Time Drivers Briefings will be advised in the Final Instructions for each event.

3.3 Practice:

- 3.3.1 The minimum period of practice to be as specified in the MSA Regulations in respect of circuit lengths.
- 3.3.2 Should any practice session be disrupted the Clerk of the Course shall not be obliged to resume the session or re-run sessions to achieve the series criteria and the decision of the Clerk of the Course shall be final.
- 3.3.3 Should the need arise to stop any practice, RED LIGHTS will be switched on at the Start Line and RED FLAGS will be displayed at the start line and at all other Marshal Signalling Points around the circuit.
- 3.3.4 This is the signal for all drivers to cease circulating at racing speeds, to slow to a safe and reasonable pace and return to the pit lane unless directed by officials not to do so.
- 3.3.5 Practice times set will count towards the starting grid position for a Class Race.
- 3.3.6 In the event of a double header meeting practice time will dictate grid start position for Race 1 while Race 2 will be a reverse of the top 10 from qualifying.
- 3.3.7 In the event of a single race meeting race start positions will be defined using practice times set alone.
- 3.3.8 Competitors will be notified of their grid standing by means of a bulletin posted on the official notice board.

3.4 Qualification:

- 3.4.1 Each driver should complete a minimum of 3 laps practice in the car to be raced and in the correct session, in order to qualify for selection and order of precedence as set out in MSA 2009 Competitors Year Book Section G15.
- 3.4.2 The Clerk of the Course shall have the right to exclude any driver whose practice times or racing are considered unsatisfactory as per MSA Regulation G15

3.5 Races:

- 3.5.1 The organisers reserve the right to change the programme outlined in the final instructions according to operational requirements.

3.6 Starts:

- 3.6.1 All race start countdowns are to have a minimum elapsed period of 3 minutes from the time all cars are released to form up the grid to the start of the Green Flag lap(s) in the formation as specified on the Track License for the Circuit.
- 3.6.2 The minimum countdown procedures/audible warning sequence shall be: Standing Starts:
- 3.6.3 1 minute to start of Green Flag lap -Start Engines/Clear Grid. 30 Seconds -Visible and audible warnings for the start of Green Flag lap.

- 3.6.4 The use of tyre heating/heat retention devices, tyre treatments and compounds is prohibited.
- 3.6.5 Any cars removed from the grid after the 1-minute stage or driven into the pits on Green Flag shall be held in the Pit Lane. They may start the race after the last car to take the start from the grid has passed the start line or pit lane exit, whichever is the later.
- 3.6.6 Any drivers unable to start the Green Flag lap or Start are required to indicate their situation as per MSA Regulation G53. Any drivers unable to maintain grid positions on the Green Flag to the extent that all other cars are ahead of them may complete the Green Flag Lap. They MUST remain at the rear of the last row of the grid but ahead of any cars to be started with a time delay.
- 3.6.7 Excessive weaving to warm-up tyres using more than 50% of the track width and falling back in order to accelerate and practice starts, is prohibited.
- 3.6.8 A 5 Second Board will be shown to indicate that the Grid is complete. The red lights will be switched on five seconds after the board is withdrawn.
- 3.6.9 In the event that the starting lights fail the Starter will revert to using the National Flag.
- 3.6.10 The National Flag may also be used to start driver(s) for the handicap races.

3.7 Race Stops:

- 3.7.1 Should the need arise to stop any race, RED LIGHTS will be switched on at the Start Line and RED FLAGS will be displayed at the start line 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 return to the starting grid area, which will automatically become a Parc Fermé area.
- 3.7.2 Cars may not enter the pits unless directed to do so. Work on cars already in the pits must cease when a race is stopped.
- 3.7.3 Case A – Less than two laps completed by the race leader.
- 3.7.4 The Race will be declared a “no contest”. Available cars will reform the grid in their original grid positions for the race to restart. (G23 (a)).
- 3.7.5 Case B – More than two laps completed by the race leader but less than 75% of the race completed by the leader.
 - 3.7.5.1 The race will be considered as the first part of a two part race. Cars will be restarted from a grid set out in the finishing order, which shall be based upon the order of crossing the finish line at one lap less than at the time of first showing the Red Flag. Only cars which are under their own power at the showing of the Red Flag will be classified. The result will be the order of finishing at the end of the restarted race.
- 3.7.6 If the race had to be stopped after the leader had completed more than 75% of the race distance, it shall not be restarted and the results will be declared in accordance with MSA Regulation G23.

3.8 Re-Scrutiny:

- 3.8.1 All vehicles reported involved in contact incidents during races or practice must be represented to the Scrutineers before continuing in the races or practice.

3.9 Pits and pit lane safety:

- 3.9.1 Pits: Entrants must ensure that the MSA, Circuit Management and Organising Club Safety Regulations are complied with at all times.
- 3.9.2 Pit Lane: The outer lane or lanes are to be kept unobstructed to allow safe passage of cars at all times. The onus shall be on all Drivers to take due care and observe a 60kph speed limit in the pit lane.
- 3.9.3 Refuelling: No refuelling at any time during the running of practice or races.
- 3.9.4 Not more than 5 gallons of fuel per race car should be stored in the pit or paddock area. If fuel is stored the Entrant using the pit or paddock area shall ensure that an effective fire extinguisher is kept adjacent to such fuel in accordance with MSA regulation G69.

3.10 Race Finishes:

- 3.10.1 After taking the Chequered Flag drivers are required to progressively and safely slow down. Remain behind any competitors ahead of them, return to the Pit Lane entrance as instructed, comply with any directions given by marshals or officials and to keep the helmets on and harnesses done up while on the circuit or Pit Lane.

3.11 Results:

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

3.12 Timing Modules:

- 3.12.1 All competitors will be required to fit Electronic Self Identification Modules to their cars for the purposes of accurate timing. Holders for these and detailed fitting instructions will be issued with the transponders and it will be the responsibility of the competitor to fit these in the car in the position and manner specified. The Modules must be in place and functioning correctly for all series qualifying practice sessions and races. The setting and servicing of these items must only be carried out by properly authorised MSA licensed Timekeepers.
- 3.12.2 Competitors may not place electronic timing equipment within five metres of the official Start, Finish or any other official timing lines at any event or test session/day. Any such equipment placed within these zones will be removed.

3.13 Qualification Races:

- 3.13.1 In the event of the need for any qualification races, the procedures will be as published in the Final Instructions for the events concerned.

4. SERIES RACE PENALTIES:

4.1 Infringements of Technical Regulations:

- 4.1.1 Arising from post practice Scrutineering or Judicial Action:
Minimum Penalty: The provisions of MSA REGULATION C(d) 36
- 4.1.2 Arising from post race Scrutineering or Judicial Action:
Minimum Penalty: The provisions of MSA Regulations: C(d) 39 (a) & (b).
- 4.1.3 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 C(d) 39 (c).

4.2 Infringements of non-technical MSA Regulations and the Sporting Regulations issued for the Challenge:

4.2.1 As per 2009 MSA Judicial Procedure Regulations.

5. TECHNICAL REGULATIONS

5.1 Introduction:

5.1.1 All 2009 MSA GENERAL REGULATIONS & Technical Regulations C(b) and C(c). APPLY as per the 2009 MSA Year Book and the additional technical regulations as set out below in accordance with the MSA specified format.

5.1.2 Advisory Note: 2009 MSA Year Book regulation change - C(b) 22: Exhaust catalytic converters must be fitted to all petrol engined production based saloon, touring and sports cars, including specialist production and kit cars, manufactured after 31/12/99. They may be specified for certain other formulae. Competitors are reminded of their obligation to maintain such equipment on a vehicle used on the highway where government legislation requires it. - If your car was registered around 31/12/99 and you wish to run without a catalytic converter we suggest you obtain a certificate of conformity for your car from Lotus and bring it with you to scrutineering at every round.

5.1.3 **It should be clearly understood that unless a modification or removal/change of an item is specifically permitted by these regulations, that any modification or removal/change or repositioning of an item is prohibited.**

5.1.4 The provision of evidence to determine eligibility is the responsibility of the entrant/driver at all times.

5.2 General Description:

5.2.1 All competing vehicles shall be road legal and have a valid MOT test certificate (if required), although insurance for road use and road fund licence are not required, (allowances will be made for non-road going cars complying with the spirit of this rule, however, these will need to be agreed in writing at point of application).

5.3 Classes:

5.3.1 There will be three classes for Lotus Elise vehicles and variants. Classes are defined based on the level of modification from the standard production car. The basic principal of this is as follows:

Class Production – Standard and slightly modified cars

For Series 1 and 2 Elises with a maximum hub power of 151bhp and a minimum combined weight of driver and car of 825kg. Also open to standard series 2 Exige and 111r Toyota engined cars with a maximum hub power of 169bhp.

Class 2-Eleven - Standard and slightly modified 2-Eleven cars

For 2-Eleven cars up to a maximum of **227bhp** at the hubs with a minimum car and driver weight of **815kg**.

Class Modified – Modified cars

For normally aspirated modified cars and cars which have been supplied by Lotus with forced induction such as S2 Toyota Exige/Elise. The maximum power at the hubs is **250bhp** with a maximum power to weight ratio of **301bhp per tonne** excluding the driver. Forced Induction after market engines may be permitted with an exemption being granted on an individual basis to drivers who have registered by 31/12/08.

5.3.2 Vehicles do not have to reach the maximum power, the minimum weight, or the maximum power to weight figures defined within these regulations. They are MAXIMUM and MINIMUM values only.

- 5.3.3 All drivers must submit their car to Torque Developments International PLC (TDI) for a power test. The power test will provide the cars power "at the hubs" which will be adjusted by LoTRDC applying DIN correction and a percentage for driveline losses. Competitors are entirely responsible for any damage caused by the power testing. If any modifications are made that may effect the cars power the car must be retested at TDI at the drivers expense. Drivers who submitted cars to TDI in 2008 do not have to resubmit them in 2009 but must accept that it is their responsibility for their car to be under the required maximum power limits which are only measured at TDI.

TORQUE DEVELOPMENTS INTERNATIONAL PLC.

Unit 5, The I.O. Centre
Motherwell Way
Thurrock
Essex
RM20 3LE
United Kingdom
[Http://www.tdi-plc.com](http://www.tdi-plc.com)

- 5.3.4 LoTRDC will provide new entrants with a choice of at least two dates to power test their vehicle at Torque Developments International (TDI) prior to the first event as part of the years registration. Further power runs will be carried out at various events during the year. Entrants should contact TDI directly for additional power runs if required (e.g. mid season engine modifications) during the season which will cost £40+vat.
- 5.3.5 Power limits on the classes must be strictly adhered too – LoTRDC advise all drivers that their cars MUST be under this maximum as there will be no excuses should they be found to exceed them.
- 5.3.6 Vehicles may have individual weights set dependent on there specification. Weight penalties may also be applied for exempted items which fall outside of individual class regulations.
- 5.3.7 LoTRDC strongly advise drivers to check with the committee before making any modifications as the committee decision will be final.
- 5.3.8 Toyota engined cars should remain unmodified in standard factory specification for acceptance into class Production. As a general rule the car should be as it left the showroom with only the addition of safety equipment.

5.4 Safety Requirements:

- 5.4.1 All MSA Safety Criteria Regulations C(c) apply as relevant, and in particular C(c) 30, C(c) 45 [four point], C(c) 56 Table 56 in appendix 1 and in particular C(c) 30 for cars over 2 litres.
- 5.4.2 A suitable harness of, at minimum, four-point design and carrying an in-date FIA approved label must be fitted according to regulations C(c) 44.
- 5.4.3 A plumbed-in fire extinguisher is required as detailed in regulation C(c) Table 56 b of minimum capacity 2.25 litres if foam. (It is recommended that a system with 3.5/4L is used). Alternatively FX G-TEC gas may be used with a minimum capacity of 1.8kg under FIA homologation EX021.05 other gas systems would be a minimum of 2kg.

5.5 General Technical Requirements and Exceptions:

- 5.5.1 As a general principle, unless it specifically says you can change from Original Equipment Manufacturers (OEM) spec in these regulations, then you should assume that you cannot. If you have any doubts about any item, it is the responsibility of the competitor to seek guidance from the series technical scrutineers, and if necessary, have a written waiver for anything that falls outside these regulations.

- 5.5.2 Prior to the first round entered, all cars will be weighed as part of the acceptance procedure; this weight will then be used as the basis of any specific limits for that car throughout the year.
- 5.5.3 LoTRDC retain the right to adjust the minimum weight of a specific car if it's considered that it's too far adrift from the class it's entered in.

5.6 Class Production

5.6.1 Chassis: PRODUCTION

- 5.6.1.1 The construction type, design and material must remain as standard. This includes the sub frame.
- 5.6.1.2 No additional bracing/supports can be added with exception that Toyota engine cars are permitted to additionally fit the rear chassis brace kit (LOTAC05377).

5.6.2 Bodywork: PRODUCTION

- 5.6.2.1 All cars must retain the standard road car's profile, and be maintained to a high standard of finish, whilst it's understandable that damage may occur during a weekend, it's important that this is rectified before the next meeting. This is important to keep the image and profile of the series.
- 5.6.2.2 LoTRDC reserves the right to overrule any part that is felt to be outside the spirit of the series. If in any doubt about what is/is not acceptable, the onus is on the entrant to ask first.
- 5.6.2.3 All body panels must remain as standard production in size, shape, profile and material (i.e. Pre-preg GRP, Kevlar and Carbon fibre are not permitted).
- 5.6.2.4 Permitted body modifications (excluding S2 111R and Exige Toyota engined cars) are:
- 5.6.2.4.1 Side scoops may be fitted, but must not protrude further than the side profile of the car. Only series 1 style side scoops are permitted on s1 cars and material is free.
- 5.6.2.4.2 Side scoop inner vents may be removed but the external holes in the clam must be standard size and profile. No clam material may be removed.
- 5.6.2.4.3 S1 Elise 'Sport 160' style rear wing may be fitted and material is free.
- 5.6.2.4.4 A small Front Spoiler/splitter that's within the profile of the car as shown in section 6.4 may be fitted and material is free
- 5.6.2.4.5 Under trays must not exceed overall dimensions of the standard part. Ducts and holes within the tray may be relocated and material is free.
- 5.6.2.4.6 Rear diffuser may be extended rewards protruding no more that 50mm from the rear bodywork (measured from the rear clam where the diffuser is attached at the rear) and complying with the ground clearance rules in 5.6.5 and material is free.
- 5.6.2.4.7 The clam under rear grills (fog and reverse lights) may be removed however the grill must remain
- 5.6.2.4.8 The body behind the number plate can be removed to an area no larger than a standard number plate (520mm x 130mm). If a hole is created it should be covered in mesh.

- 5.6.2.4.9 Wheel arch liners may be removed and the inner lip of the wheel arch reduced to allow tyre clearance
- 5.6.2.4.10 Heater matrix, blower fan and ducting to distribution flap may be removed
- 5.6.2.5 Exige and 111R S2 must remain as standard including, but not limited to, all body panels.
- 5.6.2.6 Interior must remain as standard with the exception of seats and seat mounts which may be replaced with alternatives if they meet MSA requirements.
- 5.6.2.7 Glass must remain as E marked glass with the exception of the rear screen which may be replaced with a polycarbonate version.
- 5.6.2.8 An appropriate red warning light must be fitted to comply with MSA regulation C69.
- 5.6.2.9 Supplementary gauges may be added such as oil temperature and pressure.
- 5.6.2.10 There should be substantial towing eyes securely fixed to the main structure of the vehicle, front and rear, within the confines of the body to enable the vehicle to be moved. Towing eyes should have a minimum internal diameter of 60mm. Towing eyes/towing points should be painted a contrasting bright colour (dayglo red, orange or yellow). (G99)
- 5.6.2.11 Please check with the series technical team that the exact part you intend to fit is permitted if you are in any doubt over any of the above.

5.6.3 **Engine:** **PRODUCTION**

- 5.6.3.1 Must not exceed a maximum power output of 151bhp at the hubs for Rover engined vehicles and 169bhp at the hubs for Toyota engined vehicles.
- 5.6.3.2 All drivers in all classes must enter their power output when submitting their technical document to the LoTRDC and provide a dyno printout from Torque Developments International PLC to support this figure. Any modifications made to the vehicle will require a new dyno plot from TDI at the driver's expense.
- 5.6.3.3 The power limit must be strictly adhered too – LoTRDC advise all drivers that their cars MUST be under this maximum as there will be no excuses should they be found to exceed them.
- 5.6.3.4 As per MSA regulations including C(b)10 (engines), C(b)16 (cooling), C(b)18 (oil systems),C(b)19 (fuel systems).
- 5.6.3.5 Rover K series engines must retain the standard inlet plenum (either plastic or VVC style alloy versions).
- 5.6.3.6 Rover K series engines must retain the standard single throttle body in un-modified form (MGF TF 52mm is permitted) – Multiple throttle bodies are not permitted within class A.
- 5.6.3.7 Rover K series engines must retain a standard pattern exhaust manifold – (i.e. the standard Elise or Sport 160 "Janspeed big bore" version – not aftermarket 421 i.e. EBD etc).
- 5.6.3.8 Compression ratio must remain standard.
- 5.6.3.9 Rover K series engines rods, pistons and crankshaft may be balanced -however no materials may be added (e.g. no heavy metal crank inserts) or removed (beyond balancing) and the components themselves must be standard parts as fitted to either the VVC, sport 160 or standard Elise K engines. If, in renewing the bottom end, any

5.6.5.3 Ground clearance - no part of the car (excluding mud flaps) should be below 80mm.

5.6.6 **Transmission:** **PRODUCTION**

5.6.6.1 Standard Rover box, ratios are free, but must be standard production item (after-market gear kits are not permitted).

5.6.6.2 LSDs are permitted on Rover engined cars.

5.6.6.3 S2 111R and Exige Toyota engined cars - no transmission modifications permitted including but not limited to gearbox (including gear ratios) and differential.

5.6.7 **Electrics:** **PRODUCTION**

5.6.7.1 As per MSA regulation C(b)20 (electrical systems).

5.6.7.2 Aftermarket and reprogrammed Engine Control Units (ECU) are permitted with the exception Toyota engines.

5.6.7.3 Vehicles fitted with ECU's that are capable of holding multiple engine map configurations must;

5.6.7.3.1 Have no map switching device connected to the ECU.

5.6.7.3.2 Have the ECU mounted in such a way that series eligibility scrutineers can observe that no switching device is connected to the ECU.

5.6.7.3.3 Have no engine maps stored on the ECU that would increase the engines power above that of the ECU map used in the vehicles series eligibility power testing.

5.6.7.4 Battery size & type is free but must remain in the standard location and be capable of starting the car multiple times without external assistance.

5.6.8 **Brakes:** **PRODUCTION**

5.6.8.1 Discs are free (steel or iron only – bells are free)

5.6.8.2 Pads are free.

5.6.8.3 Calipers must remain standard (AP two pot fronts and Brembo sliding caliper rear).

5.6.8.4 Master cylinder must remain standard (single dual circuit item).

5.6.8.5 Brake flexible hoses are free (stainless steel braided recommended).

5.6.8.6 Fluid must be DOT 4 or 5.1.

5.6.9 **Wheels:** **PRODUCTION**

5.6.9.1 Elise S1 max rim size front 7J15 min ET10 and rear 8J16 min ET10.

5.6.9.2 Elise S2 (K series) max rim size front 7J16 min ET18 and rear 8J17 min ET18.

5.6.9.3 Elise/Exige S2 (Toyota) max rim size front 7J16 min ET30 and rear 8J17 min ET35.

5.6.9.4 All Wheels must be of metal construction. Multi-piece wheels are not permitted.

5.6.10 **Tyres:** **PRODUCTION**

5.6.10.1 As supplied control tyre:

Yokohama A048R (M compound)
195/50R15
225/45R16
195/50R16
225/45R17

- 5.6.10.2 No modifications to the tyres in any way, (any tyres suspected of being treated/modified will be excluded from the meeting).
- 5.6.10.3 Tyres must be sourced from the series approved supplier and be marked with the correct batch numbers.
- 5.6.10.4 It is not permitted to fill tyres with nitrogen
- 5.6.11 **Weights:** **PRODUCTION**
- 5.6.11.1 Minimum weight of the vehicle including the driver is **825kg**.
- As an example;
- If a driver weighs 75kg the vehicle alone should weigh at least 750kg.
 - If a driver weighs 95kg the vehicle alone should weigh at least 730kg.
- 5.6.11.2 This weight is the minimum the car and driver combined must be in race trim after either a race or qualifying session as defined in C(b)21 (weight/ballast).
- 5.6.11.3 It is forbidden to use ballast to make up the weight (as in no lightening of the car then ballasting them back up).
- 5.6.11.4 Ballast may only be applied under direction from LoTRDC and where required shall be securely fixed in accordance with C(b)21.
- 5.6.11.5 Cars will have additional weight added to their minimum weights depending on vehicle specification. Current penalties are detailed in section 6.1.1.
- 5.6.11.6 **Success Ballast:** **PRODUCTION**
- 5.6.11.6.1 Under certain circumstances the Organisers MAY require 'success' ballast to be applied to certain vehicles.
- 5.6.11.6.2 Following a vehicle's win a 30kg ballast will be automatically applied to the vehicle. If a further win is gained, an additional 30kg of ballast will be applied until a maximum total of 60kg of ballast is applied. Ballast may also be added to 2nd (20kg) & 3rd (10kg) place cars. The subsequent removal of increments of ballast will be at the Organisers' discretion.
- 5.6.11.6.3 Ballast will be supplied by LoTRDC in the form of a Lotus supplied case that will fix to the passenger seat mounting points. Ballast is in addition to class minimum weight requirements.
- 5.6.12 **Fuel Tank/Fuel:** **PRODUCTION**
- 5.6.12.1 As per MSA regulation C(b) 19 where appropriate. Only pump fuel as defined by the 2009 MSA Year Book is permitted.
- 5.6.12.2 The standard fuel tank (in both dimensions and material) should be used unless replaced with a bag tank as described in MSA regulation C(c) 67/68 (safety fuel cells).
- 5.6.12.3 Additional fuel collector pot is allowed with an additional fuel pump, it must, however, be of no more than 0.5L capacity and be securely attached in the engine bay (no fuel lines must be in the cockpit).

- 5.6.12.4 All cars must have a minimum of 3L of fuel remaining in the tank at race finish.
- 5.6.12.5 Charcoal canister may be removed but a one way or rollover valve, venting to a safe area, must be fitted.
- 5.6.13 **Numbers/Decals:** **PRODUCTION**
- 5.6.13.1 MSA Regulation G 40-43 applies regarding competition numbers and backgrounds which must be displayed to the satisfaction of the Timekeepers.
- 5.6.13.2 MSA Regulation size competition number backgrounds and numerals must be displayed to the satisfaction of the timekeepers and as per C(b) 6.
- 5.6.13.3 Series livery will be provided by the LoTRDC for display on all cars for;
- Sill panel series sponsor logos (both sides)
 - Door cards (both sides) with one set of numbers
 - LoTRDC decals (both sides)
 - MSVR decals (both sides)
 - Windscreen sun visor
 - Front number panel
 - Rear number plate (currently free but may be required for certain rounds)
- 5.6.13.4 Other MSVR decals as from time to time may be required.
- 5.6.13.5 Series livery will be positioned as numbered and defined in 6.3.
- 5.6.13.6 Drivers will be required to display two series sponsor logos on race suits.
- 5.6.13.7 LoTRDC will supply one set of series livery. Replacement vinyl can be purchased from the LoTRDC shop.

5.7 Class 2-Eleven

- 5.7.1 **Chassis:** **2-Eleven**
- 5.7.1.1 The construction type, design and material must remain as standard. This includes the sub frame.
- 5.7.1.2 No additional bracing/supports can be added.
- 5.7.2 **Bodywork:** **2-Eleven**
- 5.7.2.1 Vehicles in both classes must be fitted with standard Lotus supplied bodywork or OEM bodywork of the same internal and external dimensions and material of the lotus supplied part.
- 5.7.2.2 Interior must remain as standard with the exception of seats and seat mounts which may be replaced with alternatives if they meet MSA requirements.
- 5.7.2.3 Lotus removable steering wheel may be fitted.
- 5.7.2.4 The passenger seat, mounts and seatbelts may be removed.
- 5.7.2.5 The windscreen may be removed and replaced with the standard Lotus supplied rigid tonneau and screen or an OEM tonneau cover and screen of the same internal and external dimensions and material of the lotus supplied part.
- 5.7.2.6 There should be substantial towing eyes securely fixed to the main structure of the vehicle, front and rear, within the confines of the body to enable the vehicle to be

moved. Towing eyes should have a minimum internal diameter of 60mm. Towing eyes/towing points should be painted a contrasting bright colour (dayglo red, orange or yellow). (G99)

- 5.7.2.7 Carbon fibre body panels are not permitted (including carbon rigid tonneau cover)
- 5.7.2.8 Plastic arch liners may be added for protection to inner wheel arch.
- 5.7.2.9 Lotus Aero Pack comprising adjustable carbon fibre single element rear wing, wing end plates for which material is free but must remain to the original dimensions and extended front splitter is permitted.
- 5.7.2.10 All vehicles must be fitted with rear view side mirrors.
- 5.7.2.11 All vehicles must be fitted with Lotus 2-Eleven brake lights and rear fog lights (the latter complying with MSA regulation C71).
- 5.7.2.12 Headlamps, front direction indicators and side repeaters including associated mountings are optional.

5.7.3 **Engine:** **2-Eleven**

- 5.7.3.1 No engine modifications permitted including, but not limited to, engine control unit mapping, engine internal components and exhaust system with the exception of the exhaust silencer. The 260 upgrade is permitted on the condition that the maximum power specified in 5.7.3.2 is not exceeded.
- 5.7.3.2 Vehicle power is limited to **227bhp at the hubs.**
- 5.7.3.3 All drivers in all classes must enter their power output when submitting their technical document to the LoTRDC and provide a dyno printout from Torque Developments International PLC to support this figure. Any modifications made to the vehicle will require a new dyno plot from TDI at the driver's expense.
- 5.7.3.4 The power limit must be strictly adhered too – LoTRDC advise all drivers that their cars **MUST** be under this maximum as there will be no excuses should they be found to exceed them.
- 5.7.3.5 Vehicles may be fitted with an additional oil temperature and pressure gauge.
- 5.7.3.6 Air filters/induction is free up to the single throttle body.
- 5.7.3.7 Vehicles may be fitted with the Lotus supplied Twin Air/Oil Coolers.
- 5.7.3.8 Mesh may be added to front and rear of Air/Oil cooler.
- 5.7.3.9 Lotus engine mount upgrade is permitted, part numbers:
 - ALS3E0264F Engine Mount, Front, Bush, Upgrade
 - ALS3E0265F Engine Mount, Rear, Bush, Upgrade

5.7.4 **Suspensions:** **2-Eleven**

- 5.7.4.1 Damper make is free but may only be a maximum of two way adjustable.
- 5.7.4.2 Front damper brackets to the chassis may be replaced by the Lotus motorsport adjustable mount to raise or lower the upper damper mounting point.
- 5.7.4.3 Springs are free including the use of helper springs.
- 5.7.4.4 Vehicles may be fitted with polyurethane or nylatron suspension bushes.

5.7.4.5 Up rated inner rear toe links may be fitted however mounting points must be the same as standard.

5.7.5 **Ride Height and Ground Clearance:** **2-Eleven**

5.7.5.1 See diagram 6.4 in appendices showing illustration of where ride height should be observed on the vehicle.

5.7.5.2 No part of the car between all 4 wheel centres (excluding mud flaps) may be below 85mm.

5.7.5.3 No part of the car (excluding mud flaps) should be below 65mm.

5.7.6 **Transmission:** **2-Eleven**

5.7.6.1 Any modification is prohibited including LSD options, with the exception of fitment of the Lotus motorsport clutch.

5.7.7 **Electrics:** **2-Eleven**

5.7.7.1 Any modification is prohibited with the exception of modifications required for fitment of a battery isolation switch and lotus supplied Anderson Plug External Connector and Cables.

5.7.8 **Brakes:** **2-Eleven**

5.7.8.1 Discs are free (steel or iron only – bells are free).

5.7.8.2 Pads are free.

5.7.8.3 Fluid must be DOT 4 or 5.1.

5.7.8.4 Callipers must remain standard (AP two pot fronts and Brembo sliding calliper rear).

5.7.9 **Wheels:** **2-Eleven**

5.7.9.1 Permitted wheels are;

5.7.9.1.1 Lotus 2-Eleven Y type 8 spoke Cast Wheels

5.7.9.1.2 Lotus 2-Eleven forged 5 Spoke (7x16 & 8x17)

5.7.9.1.3 Lotus 2-Eleven 7 Twin Spoke Ultra Lightweight Forged Alloy Wheels

5.7.10 **Tyres:** **2-Eleven**

5.7.10.1 As supplied control tyre:

Yokohama A048R (M compound)
195/50R16
225/45R17

5.7.10.2 No modifications to the tyres in any way, (any tyres suspected of being treated/modified will be excluded from the meeting).

5.7.10.3 Tyres must be sourced from the series approved supplier and be marked with the correct batch numbers.

5.7.10.4 It is not permitted to fill tyres with nitrogen

- 5.7.11 **Weights:** **2-Eleven**
- 5.7.11.1 Minimum weight of the vehicle including the driver is **815kg**.
- As an example;
- If a driver weighs 75kg the vehicle alone should weigh at least 740kg.
 - If a driver weighs 95kg the vehicle alone should weigh at least 720kg.
- 5.7.11.2 This weight is the minimum the car and driver combined must be in race trim after either a race or qualifying session as defined in C(b)21.
- 5.7.11.3 It is forbidden to use ballast to make up the weight (as in no lightening of the car then ballasting them back up).
- 5.7.11.4 Ballast may only be applied under direction from LoTRDC and where required shall be securely fixed in accordance with C(b)21.
- 5.7.11.5 Individual cars will have additional weight added to their minimum weights depending on vehicle specification. Current penalties are detailed in section 6.1.2.
- 5.7.11.6 **Success Ballast:** **2-Eleven**
- 5.7.11.6.1 Under certain circumstances the Organisers MAY require 'success' ballast to be applied to certain vehicles.
- 5.7.11.6.2 Following a vehicle's win a 30kg ballast will be automatically applied to the vehicle. If a further win is gained, an additional 30kg of ballast will be applied until a maximum total of 60kg of ballast is applied. Ballast may also be added to 2nd (20kg) & 3rd (10kg) place cars. The subsequent removal of increments of ballast will be at the Organisers' discretion.
- 5.7.11.6.3 Ballast will be supplied by LoTRDC in the form of a Lotus supplied case that will fix to the passenger seat mounting points. Ballast is in addition to class minimum weight requirements.
- 5.7.12 **Fuel Tank/Fuel:** **2-Eleven**
- 5.7.12.1 As per MSA regulation C(b) 19 where appropriate. Only pump fuel as defined by the 2009 MSA Year Book is permitted.
- 5.7.12.2 The standard fuel tank (in both dimensions and material) should be used unless replaced with the Lotus 70 litre FIA FT3 bag fuel tank as described in MSA regulation C(c) 67/68.
- 5.7.12.3 All cars must have a minimum of 3L of fuel remaining in the tank at race finish.
- 5.7.13 **Numbers/Decals:** **2-Eleven**
- 5.7.13.1 MSA Regulation G 40-43 applies regarding competition numbers and backgrounds, which must be displayed to the satisfaction of the Timekeepers.
- 5.7.13.2 MSA Regulation size competition number backgrounds and numerals must be displayed to the satisfaction of the timekeepers and as per C(b) 6.
- 5.7.13.3 Series livery will be provided by the LoTRDC for display on all cars for;
- Sill panel series sponsor logos (both sides)
 - Door cards (both sides) with one set of numbers
 - LoTRDC decals (both sides)

- MSVR decals (both sides)
 - Front number panel
 - Rear number plate (currently free but may be required for certain rounds)
- 5.7.13.4 Other MSVR decals as from time to time may be required.
- 5.7.13.5 Series livery will be positioned as numbered and defined in 6.3.
- 5.7.13.6 Drivers will be required to display two series sponsor logos on race suits.
- 5.7.13.7 LoTRDC will supply one set of series livery. Replacement vinyl can be purchased from the LoT RDC shop.

5.8 Class Modified

- 5.8.1 **Chassis:** **MODIFIED**
- 5.8.1.1 The construction type, design and material must remain as standard. This includes the subframe.
- 5.8.1.2 No additional bracing/supports can be added with exception that Toyota engine series 2 cars are permitted to additionally fit the rear chassis brace kit (LOTAC05377).
- 5.8.2 **Bodywork:** **MODIFIED**
- 5.8.2.1 All cars must retain the standard road car's profile, and be maintained to a high standard of finish, whilst it's understandable that damage may occur during a weekend, it's important that this is rectified before the next meeting. This is important to keep the image and profile of the series.
- 5.8.2.2 LoTRDC reserves the right to overrule any part that is felt to be outside the spirit of the series. If in any doubt about what is/is not acceptable, the onus is on the entrant to ask first.
- 5.8.2.3 All body panels must remain as standard production in size, shape, profile and material (i.e. Pre-preg GRP, Kevlar and Carbon fibre are not permitted); however, they may be made up from different parts (e.g. the Motorsport Elise panel set).
- 5.8.2.4 Permitted body modifications are:
- 5.8.2.4.1 Front splitters may be fitted within the width of the bodywork, (excluding wing mirrors) and may project a maximum of 30mm beyond the body work measured by a plum line from the front of clam. An additional front spoiler as shown in section 6.5 may also be fitted but both must comply with ground clearance rules in 5.8.5. Material is free.
- 5.8.2.4.2 Under trays must not exceed overall dimensions of the standard part however ducts and holes within the tray may be relocated and material is free.
- 5.8.2.4.3 Rear diffuser may be extended rearwards protruding no more than 50mm from the rear bodywork (measured from the rear clam where the diffuser is attached at the rear) and complying with the ground clearance rules in 5.8.5 are permitted. Material is free.
- 5.8.2.4.4 S1 Elise 'Sport 160' style rear wing or a single element rear wing may be fitted to the maximum width of 1245mm (Lotus Motorsport) and have a maximum rear dimension not exceeding the original length of the car excluding any diffuser. All parts of the wing, excluding end plates, must be below 1100mm from the floor and have a maximum cord length of 300mm. End plates are allowed (one each end) but must be no larger than 320x200mm with rounded corners. Material is free.

- 5.8.2.4.5 Standard side scoops may be fitted, but must not protrude further than the side profile of the car. Material is free.
- 5.8.2.4.6 Side scoop inner vents may be removed but the external holes in the clam must be standard size and profile.
- 5.8.2.4.7 A “boost tube” is permitted on 340r cars. Material is free.
- 5.8.2.4.8 A “motorsport roof scoop” is permitted on Exiges. Material is free.
- 5.8.2.4.9 The clam under rear grills (fog and reverse lights) may be removed however the grill must remain.
- 5.8.2.4.10 The body behind the number plate can be removed to an area no larger than a standard number plate (520mm x 130mm). If a hole is created it should be covered in mesh and allow fitment of number plate.
- 5.8.2.4.11 Wheel arch liners may be removed and the inner lip of the wheel arch reduced to allow tyre clearance
- 5.8.2.4.12 The boot/engine bay divider may be removed or modified
- 5.8.2.4.13 Rear Bulkhead may be removed and replaced with a solid metallic sheet (ala.Lotus Motorsport). It is essential that this is carried out in such a way that the passenger cabin is sealed from the engine compartment.
- 5.8.2.4.14 The front 'ducts' on an Exige/Motor Sport clam can be opened up for cooling ducts but only to the extent of the standard moulding (i.e. they cannot be made larger)
* Material for these items is free.
- 5.8.2.5 Interior items may be removed if the vehicle remains greater than its minimum weight (e.g. passenger seat).
- 5.8.2.6 Seats and seat mounts may be replaced with alternatives if they meet MSA requirements.
- 5.8.2.7 Glass must remain as E marked glass with the exception of the rear screen which may be replaced with a polycarbonate version.
- 5.8.2.8 Heater matrix, blower fan and ducting to distribution flap may be removed.
- 5.8.2.9 The reversing and number plate lights may be removed.
- 5.8.2.10 An appropriate red warning light must be fitted to comply with MSA regulation C(c)69/71.
- 5.8.2.11 Instrument binnacle is free however the standard instrument surround should be retained.
- 5.8.2.12 There should be substantial towing eyes securely fixed to the main structure of the vehicle, front and rear, within the confines of the body to enable the vehicle to be moved. Towing eyes should have a minimum internal diameter of 60mm. Towing eyes/towing points should be painted a contrasting bright colour (dayglo red, orange or yellow). (G99)
- 5.8.2.13 Please check with the series technical team that the exact part you intend to fit is permitted if you are in any doubt over any of the above.
- 5.8.3 **Engine:** **MODIFIED**

- 5.8.3.1 Maximum Power of the vehicle is defined based on the vehicles power to weight of 301bhp at the hubs per tonne.
- 5.8.3.2 Power must not exceed a maximum power output of 250bhp at the hubs.
- 5.8.3.3 No forced induction with the exception of OEM fitted engines with the Lotus factory option of forced induction. Forced Induction after market engines may be permitted with an exemption being granted on an individual basis to drivers who have registered by 31/12/08.
- 5.8.3.4 All drivers in all classes must enter their power output when submitting their technical document to the LoTRDC and provide a dyno printout from Torque Developments International PLC to support this figure. Any modifications made to the vehicle will require a new dyno plot from TDI at the driver's expense.
- 5.8.3.5 The power limit must be strictly adhered too – LoTRDC advice all drivers that their cars MUST be under this maximum as there will be no excuses should they be found to exceed them.
- 5.8.4 **Suspensions:** **MODIFIED**
- 5.8.4.1 It is strongly recommended that all cars have upgraded rear toe link kits (A111D0127S or equivalent). It is recommended that Toyota engine cars are additionally fitted with rear chassis brace kit (LOTAC05377).
- 5.8.4.2 Wishbones may be changed but must retain the original geometry and dimensions (e.g. all mounting points must be the same relative distance and angles apart). Spherical joints are allowed, but adjustable mounting points are not allowed.
- 5.8.4.3 Rear toe link inner joint may be re-located to the lower wishbone; however, it must remain in the same horizontal plane as the wishbone.
- 5.8.4.4 Suspension uprights (sometimes known as Hubs) can be changed for alternatives (i.e. Lotus motorsport) but must retain original geometry and mounting point locations (e.g. wheel centre must be in same position relative to upper and lower wishbone mounting points).
- 5.8.4.5 Wishbone bushes may be replaced from OEM for solid.
- 5.8.4.6 Uprights and steering arms may be modified to achieve more camber.
- 5.8.4.7 Dampers are free, as are the damper brackets to the chassis.
- 5.8.4.8 Springs are free including use of helper springs.
- 5.8.4.9 Front anti roll bar may be replaced by an up rated one using the same design and mounts to original. No additional anti roll bars can be added (i.e. rears etc).
- 5.8.4.10 Steering racks are free.
- 5.8.4.11 Steering arms may be changed from OEM but must retain standard ackerman and upright/wishbone mountings both physically and geometrically.
- 5.8.5 **Ride Height and Ground Clearance:** **MODIFIED**
- 5.8.5.1 See diagram 6.4 in appendices showing illustration of where ride height should be observed on the vehicle.
- 5.8.5.2 Ride height - no part of the car between all 4 wheel centres (excluding mud flaps) may be below 85mm.

- 5.8.5.3 Ground clearance - no part of the car (excluding mud flaps) should be below 65mm.
- 5.8.6 **Transmission:** **MODIFIED**
- 5.8.6.1 Free (although cars equipped with sequential or dog gear boxes may incur weight penalties).
- 5.8.6.2 LSDs are permitted.
- 5.8.7 **Electrics:** **MODIFIED**
- 5.8.7.1 As per MSA regulation C(b)20.
- 5.8.7.2 Aftermarket and reprogrammed Engine Control Units (ECU) are permitted.
- 5.8.7.3 Vehicles fitted with ECU that are capable of holding multiple engine map configurations must;
- 5.8.7.3.1 Have no map switching device connected to the ECU.
- 5.8.7.3.2 Have the ECU mounted in such a way that series eligibility scrutineers can observe that no switching device is connected to the ECU.
- 5.8.7.3.3 Have no engine maps stored on the ECU that would increase the engines power above that of the ECU map used in the vehicles series eligibility power testing.
- 5.8.7.4 Battery size & type is free but must remain in the standard location and be capable of starting the car multiple times without external assistance.
- 5.8.8 **Brakes:** **MODIFIED**
- 5.8.8.1 Pads are free.
- 5.8.8.2 Discs are free (steel or iron only – bells are free).
- 5.8.8.3 Carbon discs are not permitted.
- 5.8.8.4 Callipers are free.
- 5.8.8.5 Master cylinder may be changed (but must be a single dual-circuit type).
- 5.8.8.6 Brake flexible hoses are free – (stainless steel braided recommended).
- 5.8.8.7 Fluid must be DOT 4 or 5.1.
- 5.8.8.8 Bias restrictors/valves are permitted.
- 5.8.8.9 Handbrake may be removed.
- 5.8.9 **Wheels:** **MODIFIED**
- 5.8.9.1 Elise/340r S1 max rim size front 7J15 min ET10 and rear 8J16 min ET10.
- 5.8.9.2 Elise S2 (K series) max rim size front 7J16 min ET18 and rear 8J17 min ET18.
- 5.8.9.3 Elise/Exige S2 (Toyota) max rim size front 7J16 min ET30 and rear 8J17 min ET35.
- 5.8.9.4 Exige S1 max rim size front 7J16 min ET7 and rear 8.5J17 min ET5.
- 5.8.9.5 All Wheels must be of metal construction. Multi-piece wheels are not permitted.

- 5.8.10 **Tyres:** **MODIFIED**
- 5.8.10.1 As supplied control tyre:
- Yokohama A048R (M compound)
 - 195/50R15
 - 225/45R16
 - 195/50R16
 - 225/45R17
- 5.8.10.2 No modifications to the tyres in any way, (any tyres suspected of being treated/modified will be excluded from the meeting).
- 5.8.10.3 Tyres must be sourced from the series approved supplier and be marked with the correct batch numbers.
- 5.8.10.4 It is not permitted to fill tyres with nitrogen.
- 5.8.11 **Weights:** **MODIFIED**
- 5.8.11.1 Minimum weight of the vehicle is defined based on the vehicles power to weight of 301bhp at the hubs per tonne. Driver weight is then added with the assumption of 85kg.
- For Example;
- A car producing 230bhp at the hubs***
- 230bhp at hubs * (1000 / 301) = 764kg min car weight
- 764kg min car weight + 85kg driver = 849kg min car & driver weight
- If the driver weighs 75kg the min car weight would need to be at least 774kg.
- If the driver weighs 95kg the min car weight would need to be at least 754kg.
- A car producing 250bhp at the hubs***
- 250bhp at hubs * (1000 / 301) = 831kg min car weight
- 831kg min car weight + 85kg driver = 916kg min car & driver weight
- If the driver weighs 75kg the min car weight would need to be at least 841kg.
- If the driver weighs 95kg the min car weight would need to be at least 821kg.
- 5.8.11.2 This weight is the minimum the car and driver combined must be in race trim after either a race or qualifying session as defined in C(b)21.
- 5.8.11.3 It is forbidden to use ballast to make up the weight (as in no lightening of the car then ballasting them back up).
- 5.8.11.4 Ballast may only be applied under direction from LoTRDC and where required shall be securely fixed in accordance with C(b)21.
- 5.8.11.5 Individual cars will have additional weight added to their minimum weights depending on vehicle specification. Current penalties are detailed in section 6.1.3.
- 5.8.11.6 Success Ballast:
- 5.8.11.6.1 Under certain circumstances the Organisers MAY require 'success' ballast to be applied to certain vehicles.

5.8.11.6.2 Following a vehicle's win a 30kg ballast will be automatically applied to the vehicle. If a further win is gained, an additional 30kg of ballast will be applied until a maximum total of 60kg of ballast is applied. Ballast may also be added to 2nd (20kg) & 3rd (10kg) place cars. The subsequent removal of increments of ballast will be at the Organisers' discretion.

5.8.11.6.3 Ballast will be supplied by LoTRDC in the form of a Lotus supplied case that will fix to the passenger seat mounting points. Ballast is in addition to class minimum weight requirements.

5.8.12 **Fuel Tank/Fuel:** **MODIFIED**

5.8.12.1 As per MSA regulation C(b)19 where appropriate. Only pump fuel as defined by the 2009 MSA Year Book is permitted.

5.8.12.2 The standard fuel tank (in both dimensions and material) should be used unless replaced with a bag tank as described in MSA regulation C(c)67/68.

5.8.12.3 Additional fuel collector pot is allowed with an additional fuel pump, it must, however, be of no more than 0.5L capacity and be securely attached in the engine bay (no fuel lines must be in the cockpit).

5.8.12.4 All cars must have a minimum of 3L of fuel remaining in the tank at race finish.

5.8.12.5 Charcoal canister may be removed but a one way or rollover valve, venting to a safe area, must be fitted.

5.8.13 **Numbers/Decals:** **MODIFIED**

5.8.13.1 MSA Regulation G40/42 applies regarding competition numbers and backgrounds which must be displayed to the satisfaction of the Timekeepers.

5.8.13.2 MSA Regulation size competition number backgrounds and numerals must be displayed to the satisfaction of the timekeepers and as per MSA C(b)6.

5.8.13.3 Series livery will be provided by the LoTRDC for display on all cars for;

- Sill panel series sponsor logos (both sides)
- Door cards (both sides) with one set of numbers
- LoTRDC decals (both sides)
- MSVR decals (both sides)
- Windscreen sun visor
- Front number panel
- Rear number plate (currently free but may be required for certain rounds)

5.8.13.4 Other MSVR decals as from time to time may be required.

5.8.13.5 Series livery will be positioned as numbered and defined in 6.3.

5.8.13.6 Drivers will be required to display two series sponsor logos on race suits.

5.8.13.7 LoTRDC will supply one set of series livery. Replacement vinyl can be purchased from the LoT RDC shop.

5.8.14 **Lotus Europa additions to Modified Regulations** **MODIFIED**

The following additional regulations apply to Lotus Europa vehicles entered into the Modified class – all other applicable Modified class regulations apply. It is clearly understood that the Lotus Europa is permitted on a trial during 2009 and the specific Europa regulations may change during the season.

- 5.8.14.1 Europa may be fitted with an undertray but dimensions must not exceed that of the original VX220 part.
- 5.8.14.2 Europa rear window may be replaced.
- 5.8.14.3 Europa may be fitted with a motorsport rear wing to same dimensions of elise/exige - the rear boot lid may be modified to accommodate mounting of the wing.
- 5.8.14.4 Europa may be fitted with Elise S2 hub/bearing assemblies.
- 5.8.14.5 Europa wheel track should not exceed that of an Elise S2.

6. APPENDICIES

6.1 Weight Penalties

6.1.1 Class Production

6.1.1.1 S2 Toyota Engined Elise 111r Minimum Weight = 945kg*

6.1.1.2 S2 Toyota Engined Elise Exige Minimum Weight = 960kg*

* This weight includes the standard 85kg driver allowance

6.1.2 Class 2-Eleven

6.1.2.1 2-Eleven Traction/Launch Control Minimum Weight + 10kg

6.1.2.2 Sequential Gearbox Minimum Weight + 20kg

For Example;

A 2-Eleven with Traction/Launch Control

730kg min car weight

730kg min car weight + 85kg driver = 815kg min car & driver weight

Penalties for Traction/Launch Control (10kg) = **825kg min car & driver weight**

If the driver weighs 75kg the min car weight would need to be at least 750kg.

If the driver weighs 95kg the min car weight would need to be at least 730kg.

6.1.3 Class Modified

6.1.3.1 S1/S2 Exige Minimum Weight + 10kg

6.1.3.2 S1/S2 Exige Wheels Minimum Weight + 10kg

6.1.3.3 Sequential Gearbox Minimum Weight + 20kg

6.1.3.4 ABS Minimum Weight + 10kg

6.1.3.5 Traction/Launch Control System Minimum Weight + 10kg

For Example;

An Exige car with Exige wheels producing 230bhp at the hubs

230bhp at hubs * (1000 / 301) = 764kg min car weight

764kg min car weight + 85kg driver = 849kg min car & driver weight

Penalties for Exige Body (10kg) and Exige Wheels (10kg) = **869kg min car & driver weight**

If the driver weighs 75kg the min car weight would need to be at least 794kg.

If the driver weighs 95kg the min car weight would need to be at least 774kg.

6.2 Driving Standards

In order to maintain standards of conduct, the Series Coordinator will monitor all

Officials/Observers reports of adverse behaviour at race meetings. If any individual is included on two such reports during one racing season They will receive written warning from the Series Coordinator that his driving/behaviour is to be specifically observed at future race meetings. Any adverse reports during this period of observation could result in official MSA action & will result in a Series Stewards' enquiry, with possible refusal of further race entries.

Additional Specific Series Penalties:

A) Single Qualifying Session, Single Race:

At any official qualifying, where any competitor shall be found guilty of an offence below, they will move back 10 places on the grid and will be reported to the Series Stewards.

B) Multiple Qualifying/Multiple Races:

In the case of double header races or multi-races, where an offence below is committed during any qualifying session(s) then the competitor concerned will move back 10 places on the grid for the first race.

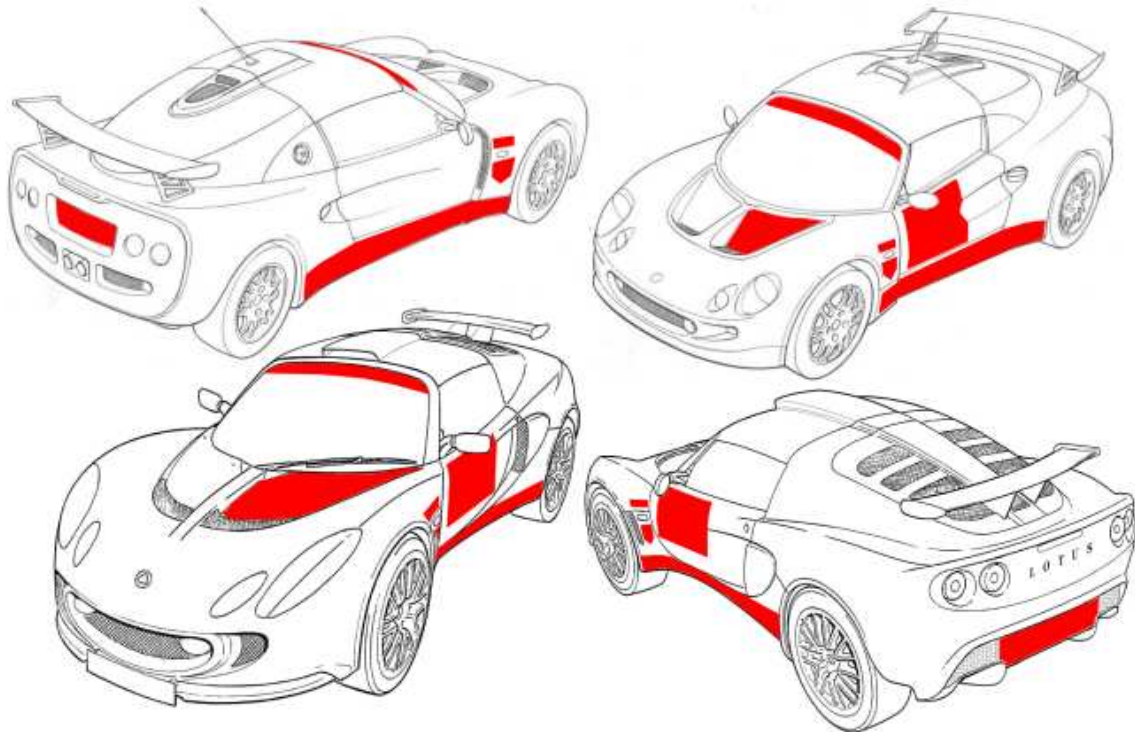
Where an offence occurs during the first race then the competitor will start from the back of the grid for the second race and behind any cars that are the subject of any handicap.

Where an offence occurs during the second race, the competitor will move back 10 places on the grid at the first race of the next event.

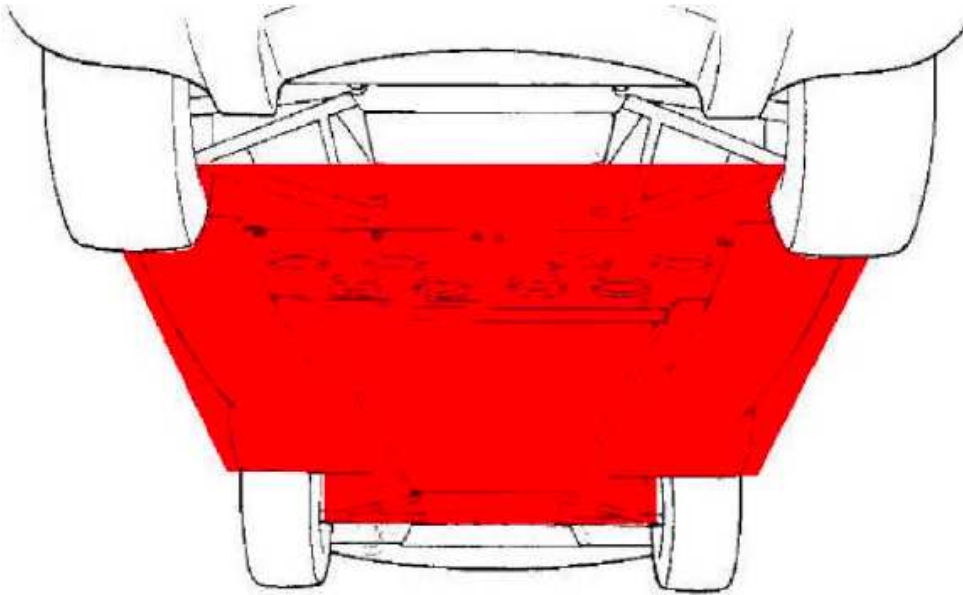
If a competitor does not compete in a race during which a penalty (above) is to be imposed, the penalty will be imposed at the next event in which the competitor competes.

[LoTRDC are intending to include a more detailed driving standards section of this appendices - 14/11/2008]

6.3 Series Livery Placement



6.4 Ride Height Measurement Area



6.5 Permitted Front Spoilers Examples

