2009 RACE CHAMPIONSHIP & TECHNICAL REGULATIONS

POWER TORQUE MORGAN MOTOR COMPANY CHALLENGE

1 SPORTING REGULATIONS – GENERAL

1.1 Title and Jurisdiction:

The Power Torque Morgan Motor Company Challenge Championship is organised and administered by the Morgan Sports Car Club 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.

Race Status: National B MSA Championship Grade: D

1.2 Officials:

- 1.2.1 Co-ordinator: Kate Orebi Gann Little Court Belmont Lane Hassocks BN6 9EP Tel: 01273 842969
- 1.2.2 Licensed Eligibility Scrutineer: Dallas Smith 268 Lea Road, Gainsborough Lincs DN21 1AP Tel: 01427 611734
- 1.2.3 Championship Stewards:

Andrew Downes	Mark Aston	D Bradley
21 Meadow Close	Goodwood House	3 Brimstone Meadows
Tring	Llangrove	Highnam
Hertfordshire	Ross-on-Wye	Glos
Tel: 01442 827257	Tel: 01989 770643	Tel: 01242 680462

1.3 Competitor Eligibility:

- 1.3.1 Entrants must be fully paid up valid membership card holding members of the Morgan Sports Car Club and in possession of a valid 2009 MSA Entrants Licence.
- 1.3.2 Drivers and Entrant/Drivers must be fully paid up membership card holding members of The Morgan Sports Car Club, be registered for the Championship and be in possession of a valid MSA Competition (Racing) National B Licence minimum.
- 1.3.3 All necessary documentation must be presented for checking at all rounds when signing-on.

1.4 Registration:

- 1.4.1 All drivers must register as competitors for the championship by returning the Registration Form with the Registration Fee and a copy of vehicle registration document or equivalent to the Co-ordinator prior to the Final Closing date for the first round being entered.
- 1.4.2 The Registration Fee is £85 made payable to:- Morgan Challenge Race Series.
- 1.4.3 Registrations will be accepted from 1st January 2009 until 4th October 2009.
- 1.4.4 Registration numbers will be the permanent Competition numbers for the Championship.

1.5 Championship Rounds:

The Power Torque Morgan Motor Company Challenge will be contested over 10 rounds as follows:-*Date Circuit Organising Club*

Dule	Circuit Organi	sing Ciud
4 th April	Donington	MGCC
12 th April	Thruxton	BARC
9 th May	Oulton Park	MGCC
25 th May	Castle Combe	CCRC
21 st June	Brands Hatch	750 MC
5 th July	Mallory	MSCC
12 th July	Silverstone Int	MGCC
8 th Aug	Silverstone	BDC
5 th Sept	Cadwell Park	MGCC
3 rd Oct	Snetterton	MGCC

1.6 Scoring:

1.6.1 Points will be awarded to Competitors listed as classified finishers in the Final Results as follows:-

1 st in Class	10 points	2 nd in Class	8 points
3 rd in Class	6 points	4 th in Class	5 points
5 th in Class	4 points	6 th in Class	3 points
7 th in Class	2 points	Finisher	1 point
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Fastest lap in Class - during race - 1 point

In the event of only two cars competing in a Class, 1^{st} place will receive 8 points and 2^{nd} 6 points. If only 1 competitor in class 1^{st} place will be awarded 6 points. No point will be awarded for fastest lap. Class I will score points as above but these will count towards the invitation cup only and not the overall Championship.

- 1.6.2 The totals from all qualifying rounds less 2 will determine final championship points and positions.
- 1.6.3 Ties will be resolved in favour of the competitor who has scored the most championship points over the whole series.

1.7 Awards:

- 1.7.1 All awards are to be provided by the Morgan Sports Car Club
- 1.7.2 Per Round:

A trophy for first past the flag A trophy for first in Class An award for second in Class if there are more than 3 starters An award for third in Class if there are more than 7 starters

1.7.3 Championship:

Peter Collins Tray – Winner of the 2009 Race Series. Other end of season awards may be provided.

1.7.4 Bonuses:

Per Round: None

Championship: None

1.7.5 Presentations:

Garlands and Trophies are to be provided for presentation at the end of each race or at the end of meeting presentation ceremony.

1.7.6 Entertainment Tax Liability:

In accordance with current government legislation, the Morgan Sports Car Club is legally obliged to withhold tax at basic rate on all payments to non-UK resident 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, the Morgan Sports Car Club 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 the Inland Revenue 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: The Inland Revenue, Foreign Entertainers Unit, Centre for Non-Residents, St John's House, Merton Road, Merseyside L69 9BB. T: 0151 472 6488 F 0151 472 6438.

1.7.7 Title to all Trophies:

In the event of any Provisional Results or Championship 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 Morgan Sports Car Club in good condition within 7 days.

2 SPORTING REGULATIONS – JUDICIAL PROCEDURES

2.1 Rounds:

In accordance with Appendix 2 of the 2009 MSA Yearbook and the Morgan Sports Car Club procedures

2.2 Championship:

In accordance with Appendix 2 of the 2009 MSA Yearbook and the Morgan Sports Car Club procedures and Classes.

3 SPORTING REGULATIONS – CHAMPIONSHIP RACE MEETINGS & RACE PROCEDURES

3.1 Entries:

- 3.1.1 Competitors are responsible for sending in correct and complete entries with the correct entry fees prior to the entry closing dates which shall be as stated in the organising Club's supplementary regulations.
- 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 Secretary of the Meeting 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 Secretary of the Meeting in writing. If Driver/Vehicle changes are made after publication of Entry Lists with Final Instructions the Competitor concerned must apply for approval of acceptance by the Stewards of the Meeting BEFORE Signing-On.
- 3.1.4 The Maximum Entry Fee for each round shall be: As per organising Clubs' entry forms.
- 3.1.5 In the event of any rounds being oversubscribed the Organising Clubs, in liaison with the Morgan Sports Car Club, may at their discretion run Qualification Races. For Qualification race Procedures see 3.13 of these Regulations.
- 3.1.6 Reserves are to be nominated on the Final List of Entries published with Final Instructions or Amendment Sheet Bulletins. All Reserves will practise and replace withdrawn or retired entries in Reserve Number order regardless 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 Pitlane and be released to start the race after the last car to start the GREEN FLAG LAP or last car to take the start has past the startline or pitlane exit, whichever is the later. Such approval to start MUST be obtained from the Clerk of the Course.

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:

The minimum period of practice to be provided is to be as specified in the MSA Regulations in respect of circuit lengths. Should any practice be disrupted the Clerk of the Course shall not be obliged to resume the session or re-run sessions to achieve the Championship criteria and the decision of the Clerk of the Course shall be final.

3.4 Qualification:

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 the MSA Regulations G15. The Clerk of the Course and/or Stewards of the Meeting shall have the right to exclude any driver whose practice times or driving are considered to be unsatisfactory – as per MSA Regulation G15.

3.5 Races:

The standard minimum scheduled distance shall be 10 miles wherever practicable but should any race distance be reduced at the discretion of the Clerk of the Course or Stewards of the Meeting it shall still count as a full points scoring round. (The procedure for qualification races is specified in 3.13).

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 on the grid to the start of the Green Flag Lap(s) in the formation as specified on the Track Licence for each circuit.
- 3.6.2 The minimum countdown procedures/audible warnings sequence shall be: 1 minute to start of Green Flag/Pace Lap Start Engines/Clear Grid.
 30 seconds Visible and audible warning for start of Green Flag/Pace Lap.
- 3.6.3 The use of tyre heating/heat retention devices, tyre treatments and compounds is prohibited.
- 3.6.4 Any cars removed from the grid after the <u>1 minute</u> stage or driven into pits on Green Flag lap shall be held in the pitlane and may start the race after the last car to take the start from the grid has passed the startline or pitlane exit, whichever is the later.
- 3.6.5 Any drivers unable to start the Green Flag/Pace Lap or Start are required to indicate their situation as per MSA Regulation G53 and any drivers unable to maintain grid positions on the Green Flag Lap to the extent that ALL other cars are ahead of them, may complete the Green Flag Lap but MUST remain at the rear of the last row of the grid but ahead of any cars to be started with a time delay.
- 3.6.6 Excessive weaving to warm up tyres using more than 50% of the track width, and falling back in order to accelerate and practise starts, is prohibited.
- 3.6.7 A five second board will be used to indicate that the grid is complete. The red lights will be switched on five seconds after the board is withdrawn. In the event of any starting lights failure the Starter will revert to the use of the National Flag.

3.7 Race Stops:

- 3.7.1 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 return to the starting grid area which will automatically become a Parc Ferme area. 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.
- 3.7.2 Case A less than two laps completed by Race Leader.

The race will be null and void. The race will restart from the original grid positions. Competitors unable to take the restart may be replaced by reserves who will start from the back of the grid in reserve order. Gaps on the grid should not be closed up. The length of the restarted race will be determined by the Clerk of the Course.

- 3.7.3 Case B More than two laps completed by Race leader but less than 50%. The Race will restart from a grid set out by the finishing order of part one, (as per G23). The result of the race will be the finishing order at the end of part 2. The length of the restarted race will be determined by the Clerk of the Course.
- 3.7.4 If the leader has completed more than 50% of the race distance or duration it shall not be restarted and the results will be declared in accordance with MSA Regulation G23.

3.8 Re-Scrutiny:

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

3.9 Pits & Pitlane 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 Pitlane:

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 all due care and drive at minimum speeds.

3.9.3 Refuelling:

May only be carried out in accordance with the MSA Regulations G67-70, Circuit Management Regulations and the SRs or Final Instructions issued for each Circuit/Meeting.

3.9.4 Speed Limit:

Pit Lane Speed Limit will be as per Organising Club final regulations.

3.10 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 Pit Lane Entrance/Paddock Entrance as instructed, comply with any directions given by Marshals or Officials and to keep their helmets on and harnesses done up while on the circuit or in the pitlane.

3.11 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.

3.12 Timing Modules:

To be used in accordance with the requirements of the Organising Club.

3.13 Qualification Races:

If required, Qualification Races will be run in accordance with the requirements of the Organising Club.

4 CHAMPIONSHIP 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 Regulations 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) 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 C(d) 39(c).
- 4.1.3 Additional Specific Championship Penalties: None.

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

As per 2009 MSA Judicial Procedure Regulations.

5 TECHNIAL REGULATIONS

5.1 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 do it you should work on the principle that you cannot.

5.2 General Description:

The Power Torque Morgan Motor Company Challenge Championship is for competitors participating in all road-going four wheeled Morgan Production and Modified sports cars with current MOT and Conforming to UK Construction and Use Regulations.

The Championship will be divided into classes as follows:-

Class A	Morgan Plus 8 – Modified up to maximum capacity 4.6 litre and maximum engine rpm 7500.
	Morgan Aero 8 - Standard production with N62 engines.
	MOT not required.
Class B	Morgan Plus 8 – Modified up to maximum capacity 3999cc.
	Morgan Plus 8 – Standard production 4.6 litre.
	Morgan V6 Roadster – Modified up to maximum capacity 2999cc.
	Morgan Plus 4 and $4/4$ – modified up to a maximum 2350cc.
	Morgan Aero 8 - Standard production with M62 engines.
	MOT not required.
Class C	Morgan Plus 8 – Standard production up to maximum capacity 3999cc.
Class D	Morgan Plus 8 – Standard production carburettored up to maximum 3612cc.
Class E	Morgan 4 cylinder cars $(4/4)$ and Plus 4 and original Morgan SLR).
	MOT not required.
Class F	Morgan Plus 8 'Roadsports' – Cars produced between 1968 – 1979 up to maximum 3612cc.

Class R Morgan V6 Roadster – Standard production up to maximum 2999cc.

Class I Morgan Invitation – Morgan cars not eligible for the Championship which have been individually approved by the Technical Committee of the Power Torque Morgan Motor Company Challenge.

5.3 Safety Requirements:

Competitors are referred to the 2009 MSA Blue Book sections G124. MSA Safety Criteria Regulations C(c) apply specifically including 4-17, 23, 25-33, 39-66, 69-71, 75-116.

5.4 General Technical Requirements and Exceptions:

Competitors are referred to 2009 MSA Blue Book Sections C(b)7-26, G96-136 with the following amendments:

5.5 Chassis:

5.5.1 Permitted Modifications:

Classes A, B 4 cylinder: Reinforcing of the chassis. Class I - Invitation: Specification to be agreed and accepted by the Technical Committee.

5.5.2 Prohibited Modifications:

The use of a chassis which does not match in all respects a standard production Morgan Chassis in material and all dimensions.

The use of other than simple metal floors (maximum 3mm thickness except under seat) as direct replacement of the standard boards.

The extension of roll bars/cages behind the rear axle cut away or welding of the bar/cage to the chassis. **Classes A, B 4 cylinder:** The positioning of the engine in the chassis so that the bottom of the sump mounting face of the block is less than 200mm above level ground.

Classes A Aero 8, B Aero 8 & 6 cylinder & 8 cylinder, C, D, F, R: Modifications of any description.

5.6 Bodywork:

- 5.6.1 *Permitted Modifications:*
 - 1. General Spare wheel and tools may be removed, alternative steering wheel is permitted, fitting of non-standard seat for driver, removal of bumpers, modified valances class a and B 4 cylinder.
 - 2. Exterior Spare wheel aperture cover. Standard Morgan hardtop. GRP wings of road weight, conforming to the thickness of samples held by the Judge of Fact.
 - 3. Removal of windscreens and use of aero screens. (Except Class D +8 and Aero 8).
 - 4. Removal of trim.
 - 5. Original Morgan SLR.
 - 6. The use of bumper mounted front air dams in Classes A and B.
 - 7. Air cleaners maximum 130mm above bonnet line. Additional vents Class A only.
 - 8. Invitation Class Specification to be agreed and accepted by the Technical Committee.

5.6.2 Prohibited Modifications:

- 1. Interior The use of other than a full Morgan wooden body frame.
- 2. Exterior The use of one-piece front wings/bonnet/cowls/body assembly or any combination thereof.
- 3. Silhouette any.
- 4. Ground Clearance Lowering the car so that the bottom of the Z section of the chassis (the lowest point of the chassis on Aero 8), measured at a point midway between the front and rear wheel centres (at the toeboard on traditional models) is less than:

Classes A, B 4 cylinder, E - 102mm.

Classes A Aero 8, B Aero 8 - 127mm,

Classes B 6 cylinder & 8 cylinder, C, D, F, R - 130mm.

- 5. The use of other than a complete standard windscreen in Class D +8 and Aero 8.
- 6. Use of a radiator grill of an appearance not similar to a Morgan production unit.

5.7 Engine:

Location – front in-line.

- 5.7.1 Permitted Modification all classes:
 - Any except those prohibited below in 5.7.2.

Additionally the following systems may be modified from original:

- 1. Oil/Water/Cooling Systems Free except where stated in 5.7.2 and 5.7.3
- 2. Induction Systems Free except where stated in 5.7.2 and 5.7.3

- 3. Exhaust Systems Free except where stated in 5.7.2 and 5.7.3 (NB vehicles manufactured after 31st December 1999must be fitted with Catalytic Converter)
- 4. Ignition Systems Free except where stated in 5.7.2 and 5.7.3
- 5. Fuel Delivery Systems Free except where stated in 5.7.2 and 5.7.3

Class A, B, C, F: Cross-bolted blocks. Oil sump baffles and modified oil pick-ups.

Use of COSCAST Rover V8 cylinder blocks/heads as a non-performance replacement for the (hard to obtain) Rover items.

The use of rev limiters, timing systems and shift lights.

Class E: Dry sump systems permitted on Kent engine only.

Class B Roadster & Class R Roadster: fitting a modified reduced-height sump (to avoid impact with kerbs), max reduction 20mm, Class R must retain original oil pick up and configuration, must not increase oil capacity, chassis ground clearance regulations must be observed (5.6.2). This must be a non-performance enhancing modification.

5.7.2 Prohibited Modifications:

- 1. Change of engine to a type which has never been catalogued by the Morgan Motor Company (exceptions may be made on historical grounds)
- 2. The use of any form of traction control or electronic driver aid for engine or transmissions.
- 3. The use of other than original engine manufacturers' castings/forgings for cylinder heads or blocks.
- 4. The use of camshaft, valve and head configurations not used in production by the Morgan Motor Company Ltd. The use of other than single cam, 2 valve, pushrod Morgan production type V8 engine in 8 cylinder cars, except Aero 8. Aero 8 modifications of any kind.
- 5. The use of communication systems, other than for lap timing.

5.7.3 General Specifications by Class

Class A

Plus 8 Maximum Capacity 4600cc and maximum engine rpm 7500. The adding of material to cylinder heads to allow major shape changes to combustion ports of chambers prohibited.

Aero 8 maximum capacity 4400cc. Use of other than Morgan factory supplied ECU prohibited. Forced induction 4/4 maximum capacity 2000cc.

Class B

Plus 8 maximum capacity 3999cc modified, 4600cc production. Standard rocker arms only must be used, steel pillars permitted. Standard Morgan production ignition system only, maximum 6500 rpm. Camshaft – Crane H218 or JED H218, timing chain assembly free. No dry sump lubrication allowed, baffling permitted. **3999cc engine:** Standard bore and stroke. 94mm x 71.12mm. Pistons must not protrude above face of cylinder block at TDC. Pistons free. Modified cylinder heads permitted, but only standard Morgan production valve size must be used. Maximum compression ratio – 10.5:1.

If over 3612cc and fuel injection, only standard specification 14 CUX injection system. Only modification allowed Challenge Series fuel chip.

If over 3612cc and carburettored, only original number of S.U. or Stromberg carburettors up to maximum 2 in. Only standard production inlet manifolds and carburettor trumpet bases permitted.

4600cc engine: Morgan standard production specification without any engine or injection modifications except Challenge Series fuel chip.

4 cylinder modified: Maximum capacity 2350cc

Aero 8: Maximum capacity 4400cc. Use of other than Morgan standard M62 engine and Morgan factory supplied ECU prohibited.

Roadster: Maximum capacity 2999cc. Challenge Series ECU Software. Standard cams reprofiled; standard valve sizes, uprated springs, max 7000rpm, max compression 10:1.

Class C

Plus 8 standard production. Maximum capacity 3999cc.

Carburettored: To run standard 1.75 in SU/Stromberg carburettors. Carb needles and air cleaner – Free. Exhaust System – Free.

Fuel Injection: To run standard without any modifications with totally unmodified fuel injection/engine management system. Challenge Series fuel chip must be used. Exhaust system – Free. Air Cleaner – Free. The ECU is liable to be changed by the organisers for another standard one supplied by the organisers and chosen at random. Maximum compression Ratio - 9.75:1.

All Class C cars must run standard original engine components for capacity without modification of any kind. NO OTHER PERFORMANCE ENHANCING MODIFICATION ALLOWED.

Class D

Plus 8 Standard production carburettor cars – Maximum capacity 3612cc (+.040" rebore) Engine Specification:

	4 Speed	5 Speed
Block/heads	P6 or SD1	SD1
Crank	Std Rover	Std Rover
Rods	Standard	Standard
Pistons	Standard	Standard
Comp. ratio	10.5	9.35
Cam Shaft	Std P6	Std SD1
Valve Lifters	Free	Free
Valve Size	in. 38.3	in. 40.1
(Max.mm)	ex. 33.5	ex. 34.5

All engine components must be standard production specification

Only modifications allowed:

Carb needles and air cleaner - Free. Exhaust System - Free.

Electronic ignition – not programmable systems.

NO OTHER PERFORMANCE ENHANCING MODIFICATION ALLOWED

Class E

4 cylinder

All engine internals free, provided original Morgan production specification of cylinder block, cylinder head, number of valves and valve operation are used except as specified below.

Plus 4 (except TR engine) and 4/4 Duratec: Only standard Morgan production engines permitted, no internal modifications permitted.

Fuel System: Maximum 2 twin choke carburettors with 48mm cokes or Morgan standard production fuel injection system. M/T16 allowed fuel regulator. Exhaust System – Free. Air Cleaner – Free.

4/4 Kent Pre Xflow – maximum capacity 1598cc

4/4 Kent Xflow– maximum capacity 1700cc

4/4 CVH - maximum capacity 1700cc

4/4 Zetec 1800 – maximum capacity 1850cc

4/4 Sigma – maximum capacity 1600cc

4/4 Fiat – maximum capacity 1650cc

Plus 4 TR – maximum capacity 2350cc

Plus 4 Fiat, M/T16 and Duratec - Maximum capacity 2100cc

Class F

Plus 8 – maximum capacity 3612cc (+.040" rebore).

Must use standard Rover connecting rods and crankshaft - maximum stroke 71.12mm.

Must run standard production inlet manifold with standard 1.75" SU or Stromberg carburettors – needles and air cleaners free.

Must use 9.5" clutch.

No restrictions on pistons, valve size, camshaft, compression ratio. Dry sump oil systems prohibited.

Class R

Roadster: only standard Morgan production engines and fuel system permitted. Maximum capacity 2999cc. All Class R cars must run standard original engine components for capacity without modification of any kind. NO OTHER PERFORMANCE ENHANCING MODIFICATION ALLOWED.

Class I Invitation - Maximum capacity 4600cc. Specification to be agreed and accepted by the Technical Committee.

5.8 Suspensions:

5.8.1 *Permitted modifications:*

Classes A, B 4 cylinder Shock absorbers – Free Castor/Camber - Free (using Fixed Bottom Plates) Position of frame front – Free Spring rates – Free

Reinforcing of Frame Front, without removal of material, other than closing loop of bottom lug. Frame front top lug stays permitted.

Class I Invitation - Modifications to be agreed and accepted by the Technical Committee.

Classes B 6 & 8 cylinder, C, D, E, F, R.

Shock absorbers – Free. Frame front top lug stays. Panhard rod. Front camber maximum 1 degree negative. Castor maximum 6 degrees. Frame front – maximum distance between bottom of lower tube and bottom of lower flange of chassis Z section – 22mm. Class B & R rear anti-tramp bars – maximum 2. Class B, C, E, F, R Replacement of damper blades with Roller Bearing assembly.

5.8.2 *Prohibited modifications:*

The use of other than a complete, standard Morgan frame front.

The use of other than a complete, standard Morgan king pin and stub axles.

The use of other than the original, Morgan front spring mountings and positions.

The use of other than the original, Morgan front shock absorber mounting positions.

The use of other than the original, Morgan standard rear spring mountings and positions.

The use of other than direct positive axle to spring mounting using U-Bolts.

The use of other than standard Morgan production components and position for Aero 8.

Classes B 6 & 8 cylinder, C, D, E, F, R.

The use of other than standard, unmodified Morgan rear semi-elliptical 5, 6, or 7 leaf springs.

Classes A, B 4 cylinder

The use of less than 3 standard unmodified Morgan spring leafs per side.

5.8.3 Wheel base/track – Free (Class A, B 4 cylinder only). Class F – For clarity, the maximum track is equal to that applicable for Class C.

5.9 Transmissions:

5.9.1 Permitted Modifications:

Production gearbox with synchromesh - Up to 5 forward gears

Live rear axle with Salisbury or BTR production differential

Class B Roadster & R Roadster: may use Plus 8 axle ratios.

Class B Roadster & R Roadster: may use a solid replacement for the Dual mass flywheel (weighing at least 75% of the standard item) but must use standard diameter clutch.

Class B 8 cylinder: may use T5 or T55 box.

Class B 6 cylinder: internals free.

Class D Plus 8 4speed: may use production 7HA 3.73 or 3.31 axle ratio.

Class E: Gearbox – Standard production 4 cylinder cars may use all-synchromesh gearboxes. Axle – may use BTR with coned LSD or Salisbury with plated LSD or Quaife torque biased differential. Axle ratio Free. Class F: Gearbox – Rover 4 speed, Rover 5 speed, Moss ratios free. Axle – may use BTR with coned LSD or Salisbury with plated LSD or Quaife torque biased differential. Axle ratio Free.

Class I Invitation: Modifications to be agreed and accepted by the Technical Committee.

5.9.2 Prohibited Modifications
The use of any form of sequential transmission
Aero 8, Class B 8 cylinder, C, D: Change from an original final drive ratio for model.
Classes C, D, R: Change to a non-standard gearbox for model.

Use of other than metal propshafts.

5.9.3 Transmission and drive ratios – Free (Class A, B 4cylinder, E, F).

5.10 Electrics:

- 5.10.1 Exterior lighting Must meet Road Traffic Act and work.
- 5.10.2 Rear fog light Must meet Road Traffic Act and work
- 5.10.3 Batteries position and type Free.
- 5.10.4 Generators Free

5.11 Brakes

5.11.1 Permitted Modifications

Classes A, B, E – Any

Classes C, D, F, R: Lining material – Free. Racing brake fluid. Aeroquip type hoses.

Classes C, R: Provision of additional cooling to brakes via ducts not to be visible when normally viewing the car, specifically no additional holes in the bodywork.

Class C: Fitting of an in-line, pressure limiting valve (to reduce action of rear brakes), safety issue only to minimise likelihood of overheating brakes/boiling brake fluid – non-adjustable by driver when seated in car.. Class F: Fitting of twin brake master cylinders and balance bar – non adjustable by driver when seated in car. Class I Invitation: Modifications to be agreed and accepted by the Technical Committee.

5.11.2 Prohibited Modifications

The use of any form of ABS system.

The use of a braking system without a mechanical handbrake operating on both rear discs/drums. Aero 8: modifications of any kind except linings.

Class A: The use of front brake pads of greater than 57.5cm² and rear brake pads of greater than 42.8cm² The use of brake discs greater than 315mm dia front and 290mm dia rear.

Class B 6 & 8 cylinder: The use of more than 4 pot callipers front and 2 pot callipers rear.

The use of front brake pads of greater than 50.5 cm² area per pad

The use of greater than 300mm dia front discs.

Aero 8: Use of other than Morgan production brakes for M62 engined Aero. Classes C, D, F, R: The fitting of non-standard braking system components.

Class D: The use of other than original specification brakes for model.

5.12 Wheels/ Steering:

- 5.12.1 Permitted options
 - Class A, B 4cylinder Any.

Class E: Use of non-Morgan rims. Use of alloy rims.

Class F: Use of non-Morgan rims.

Class I Invitation: Modifications to be agreed and accepted by the Technical Committee.

5.12.2 Prohibited options

Class A, B 4 cylinder – The use of greater than 9" width front, 10" width rear. Aero 8 – The use of other than standard Morgan wheels Class B 6 & 8 cylinder – The use of greater than 7 x 16in rims. Classes C, D, R – Use of non-Morgan rims. Classes C, D 5 speed, F, R - Use of greater than 6.5 x 15in Alloy wheels or 7 x 16 Wire wheels. Class D 4 Speed – Use of greater than 5.5 x 15in rims. Class E – Use of greater than 6 x 15in rims

- 5.12.3 Construction and Materials Free (Class A, B 4 cylinder)
- 5.12.4 Dimensions Aero 8 use of other than standard Morgan production size

5.13 Tyres:

Only one type of wheel/tyre may be used throughout any single race meeting.
5.13.1 Specifications:
Class A
Dunlop Formula R – Maximum size 16" front 17" rear
Max width front – 245 Max width rear – 275
Aero 8 Dunlop Formula R – Maximum size 18"
Class B - 4 cylinder
Yokohama A032R or A048R - Maximum 16" front 17" rear
Max width front – 245 Max width rear - 275
Dunlop Formula R – Maximum size 16" front 17" rear
Max width front – 245 Max width rear - 275
Dunlop Formula R – Maximum size 16" front 17" rear
Max width front – 245 Max width rear - 275
Class B - 8 cylinder
Yokohama A032R or A048R – Maximum size 16" Max width – 225 Min profile – 50%
Dunlop Formula R – Maximum size 16" Max width – 225 Min profile – 50%
Dunlop Formula R – Maximum size 16" Max width – 225 Min profile – 50%
Aero 8 Yokohama A048 or Dunlop Formula R – Maximum size 18"

Class C

Yokohama A032R or A048R - Maximum size 15" Max width - 205 Min profile - 55% Class D - 4 Speed +8 Yokohama A032R or A048R - Maximum size 15" Max width - 185 Min profile - 70% Avon CR6ZZ - Maximum size 15" Max width - 185 Min profile - 70% Class D - 5 Speed +8 Yokohama A032R or A048R - Maximum size 15" Max width – 205 Min profile - 60% Class E A032R or A048R – maximum size 15" Max width – 195 Min profile – 50% CR6ZZ. **Class F** Yokohama A032R or A048R – Maximum size 15" Max width – 205 Min profile – 60% Avon CR6ZZ – Maximum size 15" Max width – 205 Min profile – 60% Class R A032R or A048R – Maximum size 15" Max width – 205 Min profile – 55% Class I As agreed by Technical Committee

- 5.13.2 Nominated Manufacturers:
 - Class A Dunlop Class B – Yokohama or Dunlop Class C – Yokohama Class D – Yokohama or Avon Class E – Yokohama or Avon Class F – Yokohama or Avon Class R – Yokohama

Class I – As agreed by Technical Committee

5.14 Weights:

5.14.1 Definition – race trim with driver and helmet.

Table of Minima:

Class A	+8	950kg	Aero 8	3 1100kg				
Class B	+8	950kg	4/4	780kg	+4	780kg	Roadster	950kg
Class C	+8	980kg						
Class D	+8 Moss Box	935kg	+8 Ro	ver 4/5 speed		980kg		
Class E	4/4	800kg	+4	800kg				
Class F	+8	935kg						
Class R	Roadster	935kg						
Class I	A 1 1 7							

Class I As agreed by Technical Committee

During the season cars will be selected at random and will be weighed. Drivers' co-operation will be appreciated. Tickets from public weighbridges will not be accepted as proof of weight.

5.15 Fuel Tank/Fuel;

- 5.15.1 Types Free
- 5.15.2 Locations Standard
- 5.15.3 Fuel Pump quality
- 5.15.4 Prohibited modifications

Class R – Fuel delivery: the use of other than the standard in-tank pump and regulator.

5.16 Silencing:

5.16.1 Specification – As per section C(b) of the 2009 MSA Yearbook.

5.17 Numbers and Championship Decals:

5.17.1 Positions – all numbers to be displayed in accordance with the 2009 MSA Blue Book.

Competition numbers must be displayed on a white background.

Class letters are to be displayed adjacent to the competition number on both sides of the car.

Race numbers for the 2009 series will be allocated by the Series Co-ordinator. Number 1 will be allocated to the winner of the 2008 series.

All competing Morgans will be required to carry the Series Sponsor's decals, one on each side of the car positioned along the side of the bonnet and on the rear wings.

5.17.2 Suppliers- Race Numbers, Class Letters and backgrounds to be supplied by Entrants. Sponsor's Decal will be supplied by the series co-ordinator.

6 **APPENDICES:**

The following Commercial Undertakings are not subject to the Judicial Procedures of either the Championship Stewards and/or the MSA/MSC.

6.1 Race Organising Clubs and Contacts:

Bentley Drivers Club Mrs A Barnes W O Bentley Memorial Building Ironstones Lane Wroxton, Banbury Oxfordshire, OX15 6ED Tel: 01295 738886

BARC

Mr Dale Wells Thruxton Circuit Andover Hampshire SP11 8PN Tel: 01264 882200 MG Car Club Mr Steve Carr Kimber House PO Box 251 Abingdon, Oxon, OX14 1FF Tel: 01235 555552

750 Motor Club

Mr Robin Knight Rose Farm Upper Street Oakley, Diss Norfolk IP21 4AX Tel: 01379 741641

Castle Combe Racing Club

Mr S Burns Castle Combe Circuit Castle Combe Chippenham Wiltshire SN14 7EY Tel: 01249 783139

Morgan Sports Car Club

Mr Tony Oliver East Moor Trimdon Station Co Durham TS29 6DU Tel: 01429 880340 Power Torque Engineering Ltd

Mr Andrew Varney Herald Way Binley Coventry, CV3 2RQ Tel: 02476 635757

 6.2 Commercial Undertakings: None Trade Support Vehicle Decals & Overall patches – Free Promotional Activities – Free.