

# **HILLCLIMB AND SPRINT CLASS STRUCTURE STUDY**

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# 1. EXECUTIVE SUMMARY

A study of classes run throughout the country in speed events has been undertaken. The study is limited to common classes. Its aim is to establish what classes are being run and propose a list of classes that all clubs should consider running to provide a common set of classes nationally.

The results of the study show there are a variety of different approaches to generating competitive classes throughout the country. A set of classes are proposed in section 5 that could be used, or as a minimum a starting point for discussion between clubs.

The conclusion is that simply by having a common set of classes at the majority of clubs and events it will mean fewer classes, meaning less confusion and more competitors in each class. It will provide a basis from where we can grow the sport as one, benefitting both clubs and competitors

## 2. INTRODUCTION

Hillclimbing and sprinting events and championships run throughout the country. All events and championship classes are compliant with the current MSA year book categories. However, since the MSA do not define classes, the class structure varies between clubs and championships. The MSA are correct not to define class structure and the diversity of classes around the country justifies this approach. Diversity of classes is generally good for the sport and allows niche cars to compete at events and in championships on an even playing field. However, different class structures for the most popular class types does cause issues for competitors competing nationally and can also be very confusing for people coming into the sport.

To understand the differences in class structure around the country I have conducted a study of all the main clubs who ran events and/or championships in 2015. A list of all the clubs in the study can be found in Appendix A. This report details the results of the study and puts forward a proposal for a more standardised class structure. The proposal is primarily focused on car type (category), capacity cut off and the naming convention used for each class. I believe if we can find common ground nationally then it will make it an easier (i.e. less confusing), more accessible and a more competitive sport.

It should be noted that there are limitations to the study, these are as follows

- Not all clubs that organise events have been included
- Some class structures were so far removed from the generally seen classes that they were not considered further
- Although great effort has been given to identifying all relevant clubs, it is likely that some clubs have been overlooked during the study.
- Only the more common classes have been considered for 'standardisation'. Club specific classes have been ignored as these tend to be one-make or historic.

While reading this report, please keep an open mind. I don't think that there is one club that will not have to consider changing at least one class if they want to run the proposed structures. The biggest change will probably be the naming convention used. This proposal is not dictating the classes you should run. However, if you do want to (or do already) run a class that fits within the proposed class structure then you are encouraged to use this proposal. If your club decides not to run a particular class that's fine. An example of this is the standard series production class. Many clubs don't run a standard class and it is their decision to run it or not.

In this version of the report the 2015 season has been fully reviewed. It has slightly fewer clubs in the study due to availability of rules and regulations. A total of 35 clubs have been included and these are listed in Appendix A – List of Clubs in the study.

## 3. STUDY RESULTS

The following sections look at each MSA defined category and the classes that run within those categories.

### 3.1 RACING CARS

Racing cars have the most similarities of all the class structures. There is very little to decide here. The naming of the classes is the only issue up for debate.

Some clubs separate cars with motorcycle engines and car engines. These clubs are a very small minority.

#### 3.1.1 Racing Cars up to 600cc

40% of clubs ran this class. Most notably, Loton Park, Shelsley Walsh, Prescott and Gurston Down all run the class.

Most commonly this is called class H.

#### 3.1.2 Racing Cars 600c to 1100cc

94% of clubs run an up to 1100c or 600cc to 1100cc eligible class.

Class name: 5A is the most common name with I and E1 next most common.

#### 3.1.3 Racing Cars 1100cc to 1600cc

80% of clubs run an up to 1600c or 1100cc to 1600cc eligible class. 5 (14%) clubs run this as an over 1100cc class with no upper limit.

Class name: 5C is the most commonly used name with J the next most common.

#### 3.1.4 Racing Cars 1600cc to 2000cc

85% of clubs run an up to 2000c or 1600cc to 2000cc eligible class. 1 club run this as an over 1600cc class.

Class name: 5D is the most commonly used name, E3 and K are the next most common.

#### 3.1.5 Racing Cars over 2000cc

68% of clubs run an over 2000c eligible class.

Class name: 5E is the most commonly used name, E4 and L are the next most common.

#### 3.1.6 Formula Ford Cars

Formula Fords are commonly run in the racing cars as their own class. Different clubs have slightly different rules, but the overwhelming number of clubs running the class have a manufactured before 1<sup>st</sup> January 1994 rule and less than 1600cc.

Of the 35 clubs, 20 run a formula Ford class. Of those, 17 clubs dictate pre-1994 cars, 2 dictate pre-1996 cars, 1 does not stipulate a year, but some do specify 1600 or Kent engines. 1994 is a logical cut off for this class. However, I feel it is outside of the scope of this study to try to make a standard class for this type of car.

### 3.2 ROAD-GOING SERIES PRODUCTION CARS

Road-going classes have a wide variety of structures around the country. Due to historic reasons different cars are allowed or disallowed in different areas. One of the big differences

around the country is the split between list 1A and 1B tyres. This causes a lot of issues when national championships go to events where the allowed tyres are different to the championship rules. A consensus on this topic alone would be a big advantage for everyone. Ref Section 0.

The first thing to consider is the MSA categories. S11 defines two categories, in this section only series production cars are considered. That is saloon and sports cars produced in not less than 1000 per annum.

### 3.2.1 Separation of Sports and saloon cars.

Capacity / Class	Clubs that Separate Saloon & Sports	Clubs that Amalgamate Saloon & Sports
Upto 1400	7%	<b>93%</b>
1400 – 2000	28%	<b>72%</b>
>2000	17%	<b>83%</b>
Other	0	<b>100%</b>

As can be seen the majority of clubs do not separate saloon and sports cars. Some rules are quite specific about ruling out space frame, Kit, replica and non-ferrous cars. In most cases these are ruled out by the 1000 cars a year rule. There are some notable exceptions and therefore to remove any doubt I propose to keep this extra condition. Note also that most clubs that split the sports and saloon do not run a <1400cc class for sports.

### 3.2.2 Splitting of 2WD & 4WD

Some clubs separate 2wd and 4wd cars. These are in the minority. Around 10% of clubs separate the class. When they do split the class they either run a parallel capacity class or run the 2wd as the prime class a catch all 4wd class for any capacity. From the study it makes sense to keep all cars regardless of driven wheels in the same class. As this is by far and away the most common. After all there is no thought of splitting FWD and RWD or front engine, rear engine and mid engine.

### 3.2.3 1600cc Turbo Hot Hatches

Since the original study a discussion between clubs regarding the capacity split in roadgoing series production cars has considered the current wave of hot hatches using 1600cc turbo engines. It has been proposed that the capacity split could be <1600cc, 1600-2400 and >2400. This was met by mixed responses. Although it accommodates the new cars it also leaves currently competitive cars isolated, particularly the 2000cc NA cars.

Another option is to leave the 1400cc and 2000cc split and then add a further split at 2600cc. Further discussion and agreement around this topic is required. Ref 2.2.4.

### 3.2.4 Capacity Class

Capacity class is probably the most diverse within this category. As you can see above I have used a capacity structure there which gives you a clue to where this is going.

Capacity / Class	Percentage Of clubs	Comments
<b>Upto 1400</b>	<b>77%</b>	
Upto 1700	5%	
<b>1400 – 2000</b>	<b>62%</b>	
1400-1700	5%	
1400-1800	5%	
<b>&gt;2000</b>	<b>85%</b>	
<2000	37%	
1800 - 2600	14%	
>1700	6%	Only used in sports car classes
>2600	14%	

As can be seen the most common classes have been highlighted (bold). There is an argument to add another class.

- Considering the 1.4 multiplier for forced induction the class structure could be 2000cc – 2800cc and >2800cc.
- Considering 1600cc Turbo cars the class structure could be 2000cc – 2600cc and >2600cc. This also keeps the 600cc between classes standard (i.e 1400cc-2000cc)

Further discussion is required around the capacity split.

### 3.2.5 Additional Rules to the MSA

The final consideration is the extra rules stipulated by some clubs. From the initial study, most of the extra rules are in fact already included in the MSA rules and they just serve as clarifications. An example of typical additional rules in SRs can be seen in Appendix B.

### 3.2.6 Class Names

Up to 1400 – The majority of clubs use 1A or A1.  
 1400 - 2000 - The majority of clubs use 1B or A2.  
 > 2000 - The majority of clubs use 1C or A3.

## 3.3 MODIFIED SERIES PRODUCTION CARS (COMMONLY REFERRED TO AS MOD PROD)

Modified classes again have a wide variety of structures around the country. Due to historic reasons different cars are allowed or disallowed in different areas.

The first thing to consider is the MSA categories. S12 defines two categories, in this section only series production cars are considered. That is saloon and sports cars produced in not less than 1000 per annum. There is some confusion about the naming of the class.

### 3.3.1 Separation of Sports and saloon cars.

Capacity / Class	Clubs that Separate Saloon & Sports	Clubs that Amalgamate Saloon & Sports

Upto 1400	30%	<b>70%</b>
1400 – 2000	30%	<b>70%</b>
>2000	30%	<b>70%</b>

As can be seen the majority of clubs do not separate saloon and sports cars. Some rules are quite specific about ruling out space frame, Kit, replica and non-ferrous cars and some specifically rule out motorcycle engines. In most cases these are ruled out by the 1000 cars a year rule. There are some notable exceptions and therefore to remove any doubt I propose to keep this extra condition. Note also that most clubs that split the sports and saloon do not run a <1400cc class for sports.

Some clubs amalgamate Series production and specialist production (4%). Most clubs (96%) separate the series and specialist classes and as noted above are particular about not allowing space frame, Kit, replica and non-ferrous cars and some specifically rule out motorcycle engines.

### 3.3.2 Capacity Class

Capacity class is probably the most diverse within this category. As you can see above I have used a capacity structure there which gives you a clue to where this is going.

Capacity / Class	Percentage Of clubs	Comments
<b>Upto 1400</b>	<b>100%</b>	
<b>1400 – 2000</b>	<b>85%</b>	
1400-1800	14%	
<b>&gt;2000</b>	<b>85%</b>	
1800 - 2600	5%	
> 1700	5%	Only used in sports car classes
> 1800	9%	
> 2600	3%	

As can be seen the most common classes have been highlighted (bold). There is an argument to add another class.

- Considering the 1.4 multiplier for forced induction the class structure could be 2000cc – 2800cc and >2800cc.
- Considering 1600cc Turbo cars the class structure could be 2000cc – 2600cc and >2600cc. This also keeps the 600cc between classes standard (i.e 1400cc-2000cc)

Further discussion is required around the capacity split.

### 3.3.3 Class Names

Up to 1400 – The majority of clubs use 3A or C1.

1400 - 2000 - The majority of clubs use 3B or C2.

> 2000 - The majority of clubs use 3C or C3.

### 3.3.4 Rally Cars

In general rally cars will fit into other classes and do not require a specific class. Some clubs do run special classes for rally cars and because of this they exclude rally cars from classes they would otherwise be eligible for. It is only very specialised rally cars that cause issues

and in general they will only be eligible for 'specialist' production classes or sports libre. They are currently outside the scope of this study.

### 3.4 ROAD-GOING SPECIALIST PRODUCTION CARS

Defined by the year book as 'Cars with a minimum annual production of 20 chassis which do not qualify as road-going series production cars.' These are typically small volume cars, Locaterfields, kit cars and sports cars. There is a lot of history with this class and it is dominated by the Locaterfield type vehicle. There are two main issues with this class.

1. The long standing 1700cc class split (based on Ford engine capacity very seldom used these days by competitive cars).
2. The modern (or not so modern) increase in the use of motorcycle engines.

Clubs have tried to address the issues in different ways. To try and keep the class competitive and fair. The result is a varied split of capacity class, engine derivation and a mixture of both splits in some cases.

From the survey it is difficult to group similar classes together. They basically fall into the following groups:

Ref	Class Description	Percent of Clubs Using	Comment
1.	Any Engine < 1700cc	31%	
2.	Any Engine > 1700cc	31%	
3.	Any Motorbike Engine	20%	
4.	Any Engine, Any Size	31%	Mainly run as a catch all with other capacity splits
5.	<1400cc Car Engine	17%	
6.	1400 – 1800cc Car Engine	14%	
7.	> 1800cc Car Engine	14%	
8.	> 1800cc & Any bike Engine	14%	
9.	Any Engine < 2000cc	3%	
10.	Any Engine > 2000cc	6%	
11.	Any Engine < 1400cc	3%	
12.	Any Engine 1400 – 2000cc	3%	
13.	Any Engine > 1400cc	3%	
14.	< 1700cc Car Engine	6%	
15.	> 1700cc Car Engine	6%	
16.	Any cc Car Engine	6%	

Note: Three clubs also specify single engines only.

As can be seen in an attempt to make the classes work, with the variety of cars, different clubs have taken different approaches. Unfortunately this study does not have enough data to make an informed decision about the best way to structure the classes. From the data that this study provides there are a few approaches that can be taken:

1. Remain with the most common single split approach, updating the capacity cut off to represent more modern engine sizes.
  - a. Up to 1800cc / 2000cc
  - b. Over 1800cc / 2000cc
2. Follow the most common and historical split of up to 1700cc and over 1700cc allowing any engine type.

3. Try to even out the performance of engine types and follow the:
  - a. Car engine up to 1400
  - b. Car engine 1400-1800
  - c. Car engine > 1800, Any Bike engine
4. Follow the other categories, allow any engine type and split capacity:
  - a. Up to 1400cc
  - b. 1400cc – 2000cc
  - c. Over 2000cc

A further study of competing cars in these classes is required to support any decision.

### 3.4.1 Additional Rules to the MSA

The final consideration is the extra rules stipulated by some clubs. A further study of this will be needed. From the initial study most of the extra rules are in fact already included in the MSA rules and they just serve as clarifications. An example of additional rules in SRs can be seen in Appendix B.

### 3.4.2 Class Names

Most commonly known as Class 2A, 2B, 2C or B1, B2, etc.

## 3.5 MODIFIED SPECIALIST PRODUCTION CARS

These cars are the same type of car as the road-going versions (ref section 3.4 for a full description) except they are full modified versions. The classes have the same issues as the roadgoing classes do.

1. The long standing 1700cc class split (based on Ford engine capacity very seldom used these days by competitive cars).
2. The modern (or not so modern) increase in the use of motorcycle engines

As above, clubs have tried to level the competitiveness of the cars in various different ways:

Ref	Class Description	Percent of Clubs Using	Comment
1.	Car Engine < 1700cc	14%	
2.	Car Engine > 1700cc	14%	
3.	Any Bike Engine	14%	
4.	Any Engine Any Size	45%	Mainly run as a catch all with other capacity splits
5.	Any Engine < 2000cc	14%	
6.	Any Engine > 2000cc	17%	
7.	Any Engine < 1800cc	14%	
8.	Any Engine > 1800cc	14%	
9.	Any Engine < 1400cc	3%	
10.	Any Engine 1400 – 2000cc	3%	

Note: Some clubs specify single engine cars and one club specifies 2wd cars only.

There are some signs of consensus in this class. Not many clubs are now separating Car and Motorbike derived engines. Around 45% of clubs are having a single capacity split. Note

that only 26 clubs in the study run a class for these cars and of the clubs running classes, nearly 60% have a single capacity split.

1. Follow the most common single capacity split, choosing an agreed capacity for the split from the ones below. No distinction between car and bike derived engines.
  - a. Up to 1700/1800/2000cc
  - b. Above 1700/1800/2000cc
2. Try to even out the performance of engine types and follow the:
  - a. Car engine up to 1400
  - b. Car engine 1400-1800
  - c. Car engine > 1800, Bike engine
3. Follow the other categories, allow any engine type and split capacity:
  - a. Up to 1400cc
  - b. 1400cc – 2000cc
  - c. Over 2000cc

A further study of competing cars in these classes is required to justify and decision.

### 3.6 STANDARD CARS

Around 11 clubs (of the 35 in the study) run standard car classes. These classes are strictly regulated and most clubs running these classes include extra rules and regulations to define a standard car. In general the clubs interpretation of a standard car is very similar and allowed modifications are extremely limited. In appendix B a typical example of the extra rules is shown.

#### 3.6.1 Capacity Class

Capacity / Class	Percentage Of clubs
Up to 1400	20%
Up to 1600cc (2wd only)	20%
1400cc to 2000cc	11%
Over 1600cc (2wd Only)	9%
> 2000cc	9%
1500-2000	9%

This class is to try and introduce new competitors to the sport. The nature of the class is that a wide variety are cars are used with a wide performance difference. As the performance can't be levelled with modifications there is always going to be a standard car that is potentially the fastest in the capacity class. As manufacturers continue to update and bring out new cars they are likely to get faster over time. Competitors in this class in general use their everyday road car to experience the sport. If they like it they will often move out of the standard classes and into classes where modifications to the cars are allow.

As only 32% of the clubs run these classes then I don't feel standardising these classes is necessary. Competitors experiencing the sport tend to compete in a local area and moving around the country and competing in odd classes will probably not be an issue to many. I have included them in the final list only as guidance if a club does run a similar class.

#### 3.6.2 Additional Rules to the MSA

The final consideration is the extra rules stipulated by some clubs. A further study of this will be done. From initial study most of the extra rules are in fact already included in the MSA rules and they just serve as clarifications. An example of additional rules in SRs can be seen in Appendix B.

### 3.7 HILLCLIMB SUPERSPORTS CARS & SPORTS LIBRE

From the data the majority of clubs amalgamate hillclimb supersports cars and sports libre cars. Some clubs do split the two types of car and run specific classes and some clubs also split racing cars and saloon libre cars. The below only considers clubs running amalgamated classes (around 80% of clubs).

This group of classes has the same issues as the specialist production cars. Lots of different class structures around the country trying to make the class competitive.

Ref	Class Description	Percent Clubs Using
1.	Sports Libre < 1700cc	23%
2.	Sports Libre > 1700cc	20%
3.	Sports Libre < 2000cc	37%
4.	Sports Libre > 2000cc	43%
5.	Sports Libre < 1800cc (Bike Engine < 1100cc)	8.5%
6.	Sports Libre > 1800cc (Bike Engine > 1100cc)	8.5%
7.	Sports Libre < 1800cc	14%
8.	Sports Libre > 1800cc	20%
9.	Sports Libre < 1400cc	14%
10.	Sports Libre 1400 – 1800cc	14%
11.	Sports Libre Any Engine	3%
12.	Saloon Libre < 1400cc	6%
13.	Saloon Libre 1400 – 2000cc	6%
14.	Saloon Libre > 2000cc	6%
15.	Saloon Libre Any Engine	6%

As can be seen there is little consensus on how to make the class competitive. This has been compounded by the use of motorcycle engines. However, as this is primarily a racing car class by another name it seems that an engine is an engine and the use of motorcycle engines is so common that not splitting the engine derivatives may be the right decision at this time.

There is clearly a history of supersport cars and the use of the Ford crossflow engine. Looking at the data most clubs are running a single capacity split, 1700cc, 1800cc or 2000cc.

The Saloon Libre class is also worth considering. There seems to be some appetite for a Saloon class allowing engine swapped cars to compete on a level playing field. Unfortunately if they are forced to run in a current Libre category then the safety requirements can be prohibitive on roadgoing cars. This really needs to be addressed by the MSA as clubs can currently only run these specific cars in the current Libre category.

#### Class Name

The sports libre classes tend to be at the end of the list. There is very little commonality between clubs names for these classes.

## 4. TYRES (LIST 1A & 1B)

For 2016 the MSA have overhauled the List 1a and 1b tyres. Because the data in this report is based on the 2015 season it is not possible to use the data to represent the current tyre situation. If this report does manage to bring some clubs thinking together then the tyres will also need to be agreed on.

For complete ness I have included the basic data for tyres in 2015.

Class	List 1A	List 1B
Standard Road-going Cars	100%	0%
Modified Road-going	13%	87%

## 5. CLASS STRUCTURE PROPOSAL

The following is the proposed class structure and naming convention based on the study above.

The proposed class structure is purely based on the most common classes run around the country. It is appreciated that some clubs have spent much time debating ways to try and even out cars in classes. In some cases this has become the norm and in other cases it has not. Inevitably, the success of a class will be dictated by supply and demand. There is a history within the sport of classes becoming popular and then numbers dwindling only for another class to take its place. This is due to a number of factors that can only be speculated upon, cars on sale, car types, engine types available, etc. If this structure can be adopted and continue to be reviewed to ensure it is relevant then it will have achieved what it set out to do.

### Standard Series Production Cars (With clarification rules)

- Class SA: Up to 1400cc
- Class SB: 1400cc to 2000cc
- Class SC: Over 2000cc

### Road-going Series Production Cars (With clarification rules)

- Class 1A: Up to 1400cc
  - Class 1B: 1400cc to 2000cc
  - Class 1C: Over 2000cc
- Or additional classes
- Class 1C: 2000cc to 2600/2800cc
  - Class 1D: Over 2600/2800cc

### Road-going specialist production Cars (With clarification rules, any engine derivative)

- Class 2A: Up to 1700/1800/2000cc
- Class 2B: Over 1700/1800/2000cc

### Modified Series Production Cars

**Class 3A:** Up to 1400cc  
**Class 3B:** 1400cc to 2000cc  
**Class 3C:** Over 2000cc  
Or additional classes  
**Class 3C:** 2000cc to 2600/2800cc  
**Class 3D:** Over 2600/2800cc

**Modified specialist production Cars (Any engine derivative)**

**Class 4A:** Up to 1700/1800/2000cc  
**Class 4B:** Over 1700/1800/2000cc

**Racing Cars**

**Class 5A:** Racing Cars up to 600cc  
**Class 5B:** Racing Cars 600cc to 1100cc  
**Class 5C:** Racing Cars 1100cc to 1600cc  
**Class 5D:** Racing Cars 1600 to 2000cc  
**Class 5E:** Racing Cars Over 2000cc

**Hillclimb Supersports Cars & Sports Libre Cars**

**Class 6A:** Up to 1700/1800/2000cc  
**Class 6B:** Over 1700/1800/2000cc

## 6. CONCLUSIONS / WHAT NEXT

As can be seen there are a variety of different approaches to generating competitive classes throughout the country. What this study does not provide is how many competitors compete in each class, which classes are most commonly merged and what cc cars compete in each class.

I hope that this report encourages a wider exchange of opinion and information regarding class structure and that it can be the starting point to get our sport into shape and have parity country wide. I appreciate that we are never going to get 100% agreement and that any changes are always likely to mean some cars/competitors become uncompetitive in their new class. Hopefully this will be kept to a minimum and if as a sport we can have commonality it will benefit the sport and the vast majority of competitors overall. Simply by having a common set of classes at the majority of clubs and events it will mean fewer classes meaning less confusion and more competitors in each class. It will provide a basis from where we can grow the sport as one, benefitting both clubs and competitors

Following the publication of this report it would be nice to have a forum where clubs can discuss the issues further and the sport can work towards a common system. The format of this forum is yet to be decided and the initial response to this report will guide the best approach to future discussions.

If you would like to contact me to discuss the above topics further please feel free to email me [secretary@hillclimbandsprint.co.uk](mailto:secretary@hillclimbandsprint.co.uk)

## **APPENDIX A – LIST OF CLUBS IN THE STUDY**

**ANWCC Championship  
Auto 66  
BARC Midlands  
BARC Gurston  
ACSMC Champ  
Borough 19  
Bristol MC  
British Hillclimb Champ  
Chester MC  
Cornish Speed  
Hagley & District  
HSA  
Liverpool MC Nat A  
Liverpool MC Nat B  
Llys y Fran  
Longton  
MAC Mira  
Midland Hillclimb Champ  
Nottingham SCC  
Owen MC  
Plymoth MC  
BOC Prescott  
Service Hydraulics Champ  
Shelsley  
Woolbridge  
WSCC Blyton  
BARC Wales  
Harewood  
AEMC Championship  
East Ayrshire Car Club  
Highland Speed Champ  
Jersey Motorcycle club  
Lothian CC  
Wiscombe Park Champ  
XBorder Champ**

If you would like to see the raw data that fed into this report I will be happy to share it with you. Please contact me on [secretary@hillclimbandsprint.co.uk](mailto:secretary@hillclimbandsprint.co.uk).

## **APPENDIX B – ADDITIONAL RULES EXAMPLE ONLY**

These rules are an example only at this stage and should be read for interest only. They are what I considered a good example of clarification rules and are taken from the Midland Speed Championship in 2013 (now Speed Hydraulics). Other clubs have similar clarification rules in their regulations. I call them clarification rules as for the most part they mirror the MSA rules, but do make clear what is expected in each category.

A clear set of rules of this type will be developed in due course.

### **TECHNICAL REGULATIONS**

#### **Eligible Vehicles**

Competing Cars must comply with MSA regulations Section S as applicable including all safety requirements. To be eligible for marking in the Championship all competitors' vehicles must carry Championship decals which will be supplied by the Championship organizers. Forced induction equivalence is 1.4. Rotary engine equivalence is 1.5. Forced induction rotary engine equivalence is  $1.4 \times 1.5 = 2.1$ . Within these regulations, the term "silhouette" shall be interpreted as defined in the 2013 MSA regulations Section B - "The outline of the original body shape, in the side and plan view, of the vehicle above a line drawn through the front and rear hubs." Some of the venues used by the Championship have more stringent silencing requirements than those specified by MSA regulation J5.18. Cars competing at any event must meet the silencing requirements as specified in the Supplementary Regulations for that event.

#### **Standard production car classes.**

These classes are intended for near-standard cars with very few modifications (as listed), to encourage low-cost entry into the sport. All cars must have current VED & insurance in the name of the main driver, with a current MOT if age requires it, Note. Trade plates and traders or company group insurance policies will not be accepted. Documents must be available for inspection at scrutineering. Cars running in Standard classes SA to SC inclusive must conform to the regulations for Road-Going Series Production Cars defined in the 2013 MSA Technical Regulations S11 NO modifications (optional or otherwise) are permitted which are likely to improve the performance and handling of the car with the following exceptions: The standard wheel rim width may be increased by a maximum of one inch and fitted with tyres to suit. Electronic ignition and heavy duty dampers may be fitted. The air cleaner and exhaust system must remain as production or pattern replacement including catalyst if fitted. In the interests of safety the front seats may be replaced by a competition version which must be fully trimmed, not just a bare shell. Pyrotechnic safety devices such as airbags and seatbelt pre-tensioners may be disconnected or removed. The steering wheel may be replaced by a nonstandard item. Original equipment seatbelts may be removed if a competition harness is fitted. No other modifications, except the fitting of a roll cage, are allowed in classes SA, SB and SC. The only permitted tyres within these classes are those defined in the MSA Technical Regulations 2013 L4 List 1A. All cars running in the above classes must remain in totally road legal form at all times. Kit cars, limited production cars, space framed or non-ferrous chassis construction road cars and one-off road-going cars are not permitted in Classes SA, SB and SC. In the event of an unresolved eligibility problem, the driver of the car concerned may be asked to produce within four weeks of the event in question a manufacturer's catalogue to substantiate any

queried modifications / specifications and allow championship points to stand.

### **Road-going modified production car classes.**

Cars running in Road Modified classes 1A to 1C inclusive must conform to the regulations for Road-Going Series Production Cars defined in the 2013 MSA Technical Regulations S11. Limited edition models produced in volumes of less than 1000 per annum will be eligible if they are based on a standard model that was produced in volumes of greater than 1000 per annum, and the differences between the car as presented at an event and the eligible standard car are permitted as modifications in these classes. Cars must be taxed (no trade plates), insured, MOT'd where applicable with documents available for inspection. A full sized glass windscreen (a single windscreen the full width of the car and with a minimum glass measurement of 235mm between the top and bottom frames of the windscreen) must be fitted in the standard position. Cars supplied without full sized windscreens are not permitted in these classes. With the exception of the bonnet and boot-lid, all bodywork must remain in the original material. Wheel arch extensions may be added but the original wheel arch may not be modified. Pyrotechnic safety devices such as airbags and seatbelt pretensioners may be disconnected or removed. The steering wheel may be replaced by a non-standard item. Original equipment seatbelts may be removed if a competition harness is fitted. The only permitted tyres within these classes are those defined in the MSA Technical Regulations 2013 L4 List 1A. Tyres must be in a road legal condition. Exhaust systems must include a working catalytic converter on all cars manufactured after 31st December 1999. Brake calipers, discs, master cylinder & pads can be modified. Carbon discs are not permitted. Modification of the brake pedal is permitted. Brake bias adjustment is allowed. The fitting of pedal assemblies is not permitted. Anti-Lock braking systems can be removed but cannot be added to a vehicle that did not have one as a manufacturer specified option. The suspension type and mountings must remain the same as that fitted by the vehicle manufacturer. The shock absorbers may be of any make and may be uprated from standard. Adjustable spring platform struts are permitted. The mounting method and position must remain as specified by the vehicle manufacturer. Springs are free but must retain their original location. Bushes may be changed for similar polymer materials, but rosejoints or similar metal joints are prohibited unless fitted as the vehicle manufacturer's specified option. The fitting of spherical type joints is not permitted, except as the top mounting of a suspension strut. Strut Braces across the top of the front suspension turrets are allowed but these must be removable and not welded in place. Kit, Replica, Space-framed and non-ferrous chassis construction cars are not permitted in Classes 1A, 1B and 1C. In the event of an unresolved eligibility problem, the driver of the car concerned may be asked to produce a manufacturer's catalogue within four weeks of the event in question to substantiate any queried modifications / specification and allow the championship points to stand.

### **Road-going Specialist Production Cars**

Cars running in Road Modified classes 2A and 2B must conform to the regulations for Road-Going Specialist Production Cars defined in the 2013 MSA Technical Regulations S11. Cars must be taxed (no trade plates), insured, MOT'd where applicable with documents available for inspection. A full sized glass windscreen (a single windscreen the full width of the car and with a minimum glass measurement of 235mm between the top and bottom frames of the windscreen) must be fitted in the standard position. Cars supplied without full sized windscreens are not permitted in these classes. With the exception of the bonnet and boot-lid, all bodywork must remain in the original material. Wheel arch extensions may be added but the original wheel arch may not be modified. The air intake filter may protrude above the

silhouette of the car to a maximum of 75mm. When the filter is removed, the silhouette must remain as standard. Exhaust systems are not considered to be part of the silhouette of the car. Pyrotechnic safety devices such as airbags and seatbelt pre-tensioners may be disconnected or removed. The steering wheel may be replaced by a non-standard item. Original equipment seatbelts may be removed if a competition harness is fitted. The only permitted tyres within these classes are radial-ply tyres defined in the MSA Technical Regulations 2013 L4 List 1A or L5 List 1B. Tyres must be in a road legal condition. Exhaust systems must include a working catalytic converter on all cars manufactured after 31st December 1999. All cars must have an operational reverse gear (S10.8.1).

## Version History

Version	Release Details	Date
A.1	Initial version for discussion within HSA	21/10/13
B.1	After feedback changes made: <ul style="list-style-type: none"><li>• Racing cars classes changed to be 'to from' not upto.</li><li>• Additional cc cut off added to specialist classes 1800cc</li><li>• Appendix B additional comments added.</li><li>•</li></ul>	
C1.1	Updated with new data.	
C2.0	Updated with 2015 data and reworked based on data.	Jan 16
C2.1	Added executive summary	Feb 16