Para	MSA Blue Book Regulations apply to all appendices	AR Motorsport Morgan Technical Regulations 2019														
	Appendix 1	**Classes A - G - J - R - S - H**														
5.2		**Class A**				**Glass G**			**Class J**				**Class R**		**Class S**	**Class H**
5.2	**Permitted - Only If it shows "√"** **Prohibited - If it shows "X"**	**8Cyl**	**6Cyl**	**4Cyl**	**4 Cyl**	**ARV6**	**6Cyl**	**6Cyl**	**Aero**	**8 Cyl**	**Baby Doll, +4 SS, & Class D (9)**	**4Cyl. Class from D (2-8)**	**6Cyl**	**+4 SS**	**+4 Club Sport**	**8 Cyl HSCC**
5.2	Maximum engine capacities	**4600**	**3726**	**2500**	**2000**	**3726**	**3726**	**3000**	**4600**	**3999 / 4600**	**2000**	**2000**	**2999**	**2000**	**2000**	**3612**
5.4	**Mot**															
5.4	MOT if required by law												√	√		
5.5	**General**															
5.5	**Chassis**															
5.5	Steel Z section ladder chassis with cross member box sections of a type produced by MMC and matching its dimensions	√	√	√	√	√	√	√		√	√	√	√	√	√	√
5.5	Aluminium bonded & riveted chassis of a type produced by MMC and matching its dimensions								√							
5.5	Galvanising of Chassis	√	√	√	√		√	√		√	√	√	√	√	√	√
5.5	Reinforcing of the chassis	√	√	√	√											
5.5	Localised modifications to rear spring front hanger cross member to facilitate fitment of a race seat	√	√	√	√	√	√	√		√	√	√	√	√	√	√
5.5	Front leg gusset maximum size - 18.5" Length x 7.5" Width					√	√	√		√	√	√	√	√	√	√
5.5	Front leg gusset - Free	√	√	√	√											
5.3	Scuttle hoop	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.3	Single door bars	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.3	Twin door bars	√	√	√	√	√	√	√		√	√	√				
5.3	ROPS may be extended forward to front frame & strengthen bulkhead	√	√	√	√											
5.3	ROPS may be extended behind rear axle cut away	√	√	√	√											√
5.3	ROPS welded to chassis	√	√	√	√											
5.5	Engine support cradle / frame 25mm (1") box section, inc engine brackets welded to chassis	√	√	√	√											
5.5	Engine mounting brackets welded, bolted or bonded to chassis	√	√	√	√				√							
5.5	Position and design of engine mounting brackets free	√	√	√	√											
5.6.1.1	Cross member linking - engine mounting brackets - either 1off 50mm (2") x 25mm (1") or 2 off x 25mm (1") x 25mm (1") box section - Welded or bolted to chassis	√	√	√	√											
5.6.1.1	Engine mounting rubber bushes - Free	√	√	√	√											
5.6.1.1	Engine and or gearbox torque reaction steady bar	√	√	√	√											
5.6.1.1	Composite Material for floors under chassis for reinforcement Maximum 14 mm thickness - (Addition of 14mm composite floors is only permitted on cars constructed prior to the 2014 season) - (Slot to be provided so as to allow minimum ride height measurement to be taken from chassis)	√	√	√	√											
5.6.1.1	solid material (max thickness 3mm) one piece panel under chassis (min ride height applies)	√	√	√	√											
5.6.1.1	Simple Metal Floor as a direct replacement of standard boards max 3mm thickness	√	√	√	√	√	√	√		√	√	√	√	√	√	√
5.6.1.1	Simple Metal Floor panel under seat (3mm steel or 6mm Ali) to facilitate seat mounting	√	√	√	√	√	√	√		√	√	√	√	√	√	√
5.6.1.1	Addition of a full width Ali panel under axle	√	√	√	√	√	√	√		√	√	√				

Published Copy

Para	Appendix 1	Classes A - G - J - R - S - H														
5.2		Class A				Glass G			Class J				Class R		Class S	Class H
5.2	**Permitted - Only If it shows "√"** **Prohibited - If it shows "X"**	8Cyl	6Cyl	4Cyl	4 Cyl	ARV6	6Cyl	6Cyl	Aero	8 Cyl	Baby Doll, +4 SS, & Class D (9)	4Cyl. Class from D (2-8)	6Cyl	+4 SS	+4 Club Sport	8 Cyl HSCC
5.2	Maximum engine capacities	4600	3726	2500	2000	3726	3726	3000	4600	3999 / 4600	2000	2000	2999	2000	2000	3612
5.6.1.1	Addition of a full width Ali or plywood panel under engine	√	√	√	√	√	√	√		√	√	√				
5.6.1.3	Repositioning of engine longitudinally	√	√	√	√											
5.6.1.1	Repositioning of engine in the chassis so that the bottom of the sump mounting face of the block is a minimum of 200mm above level ground	√	√	√	√											
5.6.1.1	Non standard repairs, localised reinforcing of exhaust exits - Tec Com to approve.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.6.1.1	**Bodywork**															
5.6.1.1	General															
5.6.1.3	Optional Removal of Windscreens & Fitment of Aero Screen	√	√	√	√	√	√	√		√	√	√	√	√	√	√
5.6.1.1	Removal of Spare Wheels, Tools & toolboxes	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.6.1.3	Removal of bumpers	√	√	√	√	√	√	√		√	√	√	√	√	√	√
5.6.1.2	Removal of Trim	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.6.1.2	Internal trim panels - Ali, Ply or Carbon fibre	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.6.1.2	Replacement of rear parcel shelf & bulkhead with Ali panels - Std configuration	√	√	√	√	√	√	√		√	√	√	√	√	√	√
5.6.1.2	Replacement of rear parcel shelf & bulkhead with Ali panels - design and configuration free	√	√	√	√	√	√	√		√	√	√				√
5.6.1.2	Non standard seat for driver	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.6.1.2	Extensions to throttle, brake & clutch pedals (to aid foot control)	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.6.1.1	Ali or steel Engine Bulkhead fabricated to replicate design of a Std Morgan item	√	√	√	√											
5.6.1.1	Ali or steel access panels in bulkhead - Free	√	√	√	√	√	√	√				√				
5.6.1.1	Ali access panels in bulkhead - gearbox removal Class A, B, (D & E +4 & SLR)	√	√	√	√	√	√	√		√	√	√				√
5.6.1.2	Gearbox & prop shaft tunnels - Free	√	√	√	√	√	√	√		√	√	√	√	√	√	√
5.6.1.1	Removal of inner wing valances	√	√	√	√											
5.6.1.1	Modify inner wing valance for Exhaust manifold exit	√	√	√	√			√	√	√		√				√
5.6.1.1	Cooling ducts to Inner wing valances	√	√	√	√			√		√			√	√	√	
5.6.1.3	Additional cooling hole in front face of front wing	√	√	√	√		√	√	√	√						
5.6.1.3	Additional cooling duct in top of front wing	√	√	√	√				√							
5.6.1.3	Additional cooling duct in inner half of top of front wing	√	√	√	√				√							
5.6.1.3	Additional cooling hole in front face of rear wing	√	√	√	√											
5.6.1.3	Additional vents in bonnet	√	√	√	√											
5.6.1.4	Additional bonnet side scoop		√	√	√						√	√		√	√	
5.6.1.4	Spare wheel aperture cover	√	√	√	√	√	√	√		√	√	√	√	√	√	√
5.6.1.4	Hardtop	√	√	√	√		√	√	√	√	√	√	√	√	√	√
5.6.1.1	Alloy or steel wings	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.6.1.1	GRP Wings (min 2mm thickness)	√	√	√	√	√	√	√	√	√	√	√	√	√	√	
5.6.1.4	No door body frame (production cars only)		√			√										
5.6.1.3	Original Morgan front cowl only (Steel or Superform Ali)					√	√	√	√	√	√	√	√	√	√	√
5.6.1.3	Morgan style front cowl Superform Ali, Steel or Fibre glass with strengthening	√	√	√	√					√		√				

Published Copy

Para	Appendix 1	Classes A - G - J - R - S - H														
5.2		Class A				Glass G			Class J				Class R		Class S	Class H
5.2	**Permitted - Only If it shows "√"** **Prohibited - If it shows "X"**	8Cyl	6Cyl	4Cyl	4 Cyl	ARV6	6Cyl	6Cyl	Aero	8 Cyl	Baby Doll, +4 SS, & Class D (9)	4Cyl. Class from D (2-8)	6Cyl	+4 SS	+4 Club Sport	8 Cyl HSCC
5.2	Maximum engine capacities	4600	3726	2500	2000	3726	3726	3000	4600	3999 / 4600	2000	2000	2999	2000	2000	3612
5.6.1.4	Front Bumper mounted front air dams or spoiler - Material Free - Drawing 1 Appendix 3	√	√	√	√		√	√	√	√						
5.6.1.4	Max protrusion of splitter 7.5cm following contours of air dam, or spoiler except Aero 8 / GTN	√	√	√	√		√	√	√	√						
5.6.1.4	Plus 4 Super Sports style front valance (to protect oil cooler) - Drawing 2, Appendix 3	√	√	√	√	√	√	√		√	√	√	√	√	√	
5.6.1.4	Plus 4 Super Sports style front valance with additional brake cooling holes - Drawing 2, Appendix 3	√	√	√	√	√	√	√		√	√	√	√	√	√	
5.6.1.4	Front Wing mounted spoiler - Material Free - see Drawing 3, Appendix 3	√	√	√	√	√	√	√		√	√	√	√	√	√	
5.6.1.4	Diffuser behind the rear axle line - must not protrude beyond rear bodywork								√							
5.6.1.4	Air Cleaners Max 10 mm above bonnet line	√														
5.6.1.5	Minimum ground clearance (under bottom of Z section at immediately behind cross member toe board (not U) on traditional cars, and mid point between front and rear wheels on Aero)															
5.6.1.5	102mm	√	√	√	√						√	√				
5.6.1.5	127mm								√						√	
5.6.1.5	130 mm					√	√	√		√			√	√		√
5.6.2	**Bodywork Prohibited**															
5.6.2.4	Rear mounted aerofoils or spoilers	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5.8.1	**Suspensions**															
5.8.1	Match a Std Morgan Front frame in material & dimensions	√	√	√	√	√	√	√		√	√	√	√	√	√	√
5.8.1	Match the Std Rocker arm & inboard damper arrangements in material & dimensions								√							
5.8.1	Front Frame position Free	√	√	√	√											
5.8.1	Front Frame lower tube position (max 22mm to bottom of Z section)					√	√	√		√	√	√	√	√	√	√
5.8.1	Reinforcing of Frame Front without removal of material	√	√	√	√											
5.8.1	To open the loop of bottom lug to facilitate camber adjustment	√	√	√	√	√	√	√		√	√	√	√	√	√	√
5.8.1	Frame front top stays	√	√	√	√	√	√	√		√	√	√	√	√	√	√
5.8.1	Morgan king pins & stub axles	√	√	√	√	√	√	√		√	√	√	√	√	√	√
5.8.1	Hard chrome king pins	√	√	√	√	√	√	√		√	√	√	√	√	√	√
5.8.1	Morgan stub axles & wishbones								√							
5.8.1	Strengthening of wishbones								√							
5.8.1	Replacement of damper blades with Roller Bearings	√	√	√	√	√	√	√		√	√	√	√	√	√	
5.8.1	Adjustable camber plates	√	√	√	√	√	√	√		√	√	√	√	√	√	
5.8.1	Front Wheel Castor & Camber - Free	√	√	√	√				√							√
5.8.1	Front Wheel - Max Camber 2 Degree & Castor 6 degrees (+ or - 1/4)										√	√			√	
5.8.1	Front Wheel - Max Camber 1 Degree & Castor 6 degrees (+ or - 1/4)					√	√	√		√			√	√		
5.8.1	Rear wheel camber - Max 1° (Max 59mm Dia Axle Tubes)	√	√	√	√											
5.8.1	Shock absorbers - Free	√	√	√	√											

Published Copy

Para	Appendix 1	Classes A - G - J - R - S - H														
5.2		Class A				Glass G			Class J				Class R		Class S	Class H
5.2	**Permitted - Only If it shows "√"** **Prohibited - If it shows "X"**	8Cyl	6Cyl	4Cyl	4 Cyl	ARV6	6Cyl	6Cyl	Aero	8 Cyl	Baby Doll, +4 SS, & Class D (9)	4Cyl. Class from D (2-8)	6Cyl	+4 SS	+4 Club Sport	8 Cyl HSCC
5.2	Maximum engine capacities	4600	3726	2500	2000	3726	3726	3000	4600	3999 / 4600	2000	2000	2999	2000	2000	3612
5.8.1	Shock absorbers - Single or Double action adjustable damping i.e. bump & rebound (No remote reservoirs)					√	√	√	√	√	√	√	√	√	√	√
5.8.1	Front spring rates - Free	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.8.1	Front spring lengths - Free	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.8.1	Front 1.8" SUPLEX 'Race coils' kit with adjustable platform	√	√	√	√	√	√	√		√	√	√	√	√	√	
5.8.1	2.25" Dia Adjustable platform front springs	√	√	√	√				√							
5.8.1	Front & Rear spring lengths free (Coil only)	√	√	√	√											
5.8.1	Front Anti Roll Bar (SLR Only D6)	√	√	√	√				√							
5.8.1	Rear anti Roll Bar	√	√	√	√				√							
5.8.1	Rear damper mountings free	√	√	√	√											
5.8.1	Rutherford rear damper mounting brackets									√		√				√
5.8.1	Std Morgan Rear damper mounting hoop					√	√	√		√	√	√	√	√	√	
5.8.1	Lateral axle location free	√	√	√	√											
5.8.1	Panhard Rod	√	√	√	√	√	√	√		√	√	√	√	√	√	√
5.8.1	Rear anti-tramp bars - max 2	√	√	√	√	√	√	√		√	√	√	√	√		
5.8.1	Axle Top or bottom Links	√	√	√	√											
5.8.1	Use min of 3 Std Morgan rear semi-elliptical Leaf Springs	√	√	√	√											
5.8.1	Use of min 4 Std Morgan semi-elliptical Leaf Springs					√	√	√		√	√	√	√	√	√	√
5.8.1	Rear Spring Rates Free - Coil	√	√	√	√	√	√		√							
5.8.1	Use of axle Lowering blocks and or centralising block	√	√	√	√	√	√	√		√	√	√	√	√		√
5.8.1	Use of H/Duty U-Bolts	√	√	√	√	√	√	√		√	√	√	√	√	√	√
5.8.1	Adjustable coil over dampers on Rear	√	√	√	√											
5.8.1	Independent rear suspension								√							
5.8.1	Morgan production 5 link rear suspension consisting of Trailing arms, live axle, coil overs & panhard rod		√			√	√									
5.8.3	**Max Wheelbase**															
5.8.3	Wheelbase Free	√	√	√	√											
5.8.3	245cm + or - 10mm											√				
5.8.3	250cm + or - 10mm					√	√	√		√	√		√	√	√	√
5.8.3	253cm + or - 10mm								√							
5.8.3	**Max Front Track (Centre of Tyre to Centre of Tyre)**															
5.8.3	Track - Free	√	√	√	√											
5.8.3	130cm + or - 10mm										√	√				
5.8.3	134.5cm + or - 10mm												√	√	√	
5.8.3	137.5 cm + or - 10mm															√
5.8.3	143 cm + or - 10mm					√	√	√		√						
5.8.3	**Max Rear Track (Centre of Tyre to Centre of Tyre)**															
5.8.3	Track - Free	√	√	√	√											
5.8.3	138cm + or - 10mm												√			
5.8.3	139.5cm + or - 10mm										√	√				
5.8.3	143.5cm + or - 10mm					√	√	√		√	√			√	√	
5.8.3	148.5 cm + or - 10mm								√							
5.9.1	**Transmission**															

Published Copy

Para	Appendix 1	Classes A - G - J - R - S - H														
5.2		Class A				Glass G			Class J				Class R		Class S	Class H
5.2	**Permitted - Only If it shows "√"** **Prohibited - If it shows "X"**	8Cyl	6Cyl	4Cyl	4 Cyl	ARV6	6Cyl	6Cyl	Aero	8 Cyl	Baby Doll, +4 SS, & Class D (9)	4Cyl. Class from D (2-8)	6Cyl	+4 SS	+4 Club Sport	8 Cyl HSCC
5.2	Maximum engine capacities	4600	3726	2500	2000	3726	3726	3000	4600	3999 / 4600	2000	2000	2999	2000	2000	3612
5.9.1	Live rear axle - Salisbury BTR or Quaiffe with LSD or TBD	√	√	√	√	√	√	√		√	√	√	√	√	√	√
5.9.1	Fixed diff unit BTR, Quaiffe or Hydrotrack								√							
5.9.3	Axle Ratio's - Free	√	√	√	√	√	√	√	√	√						√
5.9.3	Std production Axle ratios										√	√	√	√	√	
5.9.3	May use 3.73 or 4.1 Ratio													√		
5.9.1	Semi floating rear hubs - Steel - BTR axle	√	√	√	√	√	√	√		√	√	√				
5.9.1	Semi floating rear hubs - Steel - Salisbury			√	√					√		√				√
5.9.3	Std Morgan production H Pattern 4 Spd synchromesh gearbox, Synchromesh gearsets - Free (Class D 4cyl. 2, 4, 6 & E1, 2, 4, 6)															√
5.9.3	Std Morgan production H pattern max 5 Spd synchromesh gearbox												√	√	√	
5.9.3	Std Morgan production H pattern max 5 Spd synchromesh gearbox, Synchromesh gearsets - Free			√	√					√	√	√				√
5.9.3	Std Morgan production H pattern Max 6 Spd synchromesh gearbox		~~√~~			√	√		√							
5.9.3	Use of any production H Pattern 5 Spd synchromesh gearbox, Synchromesh gearsets - Free							√		√						
5.9.3	Gearbox oil cooler & pump	√	√	√	√											
5.9.3	Use of any production H Pattern 5 or 6 Spd gearbox, Gear sets - Free	√	√	√	√											
5.9.2	**Transmission Prohibited**															
5.9.2	No Aluminium or Carbon Fibre prop shafts	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5.9.2	Differentials may not be electronicaly controlled	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5.9.2	The use of any-electronic traction control device	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5.9.2	Fully sequential gearboxes are not permitted	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5.11	**Brakes**															
5.11.1	Linings free	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.11.1	Racing brake fluid	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.11.1	Aeroquip type hoses	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.11.1	Non Production brakes	√	√	√	√	√	√	√		√						
5.11.1	Repositioning & modifying of handbrake lever to enable operation when seated in car	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.11.1	Fitting of twin brake master cylinders & balance bar - adjustable by driver when seated in car	√	√	√	√	√	√	√	√	√	√	√				
5.11.1	Fitting of dual circuit or twin brake master cylinders & balance bar - non adjustable by driver when seated in car	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.11.1	Fitting in-line pressure limiting valve - non adjustable by driver	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.11.1	Mechanical or hydraulic handbrake	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.11.1	Additional cooling (see bodywork)	√	√	√	√	√	√	√	√	√	√	√	√	√	√	
5.11.1	Additional cooling via ducts - not to be visible when normally viewing car or holes in bodywork												√	√	√	
5.11.1	**Front Brakes**															

Published Copy

Para	Appendix 1	Classes A - G - J - R - S - H														
5.2		Class A				Glass G			Class J				Class R		Class S	Class H
5.2	**Permitted - Only If it shows "√"** **Prohibited - If it shows "X"**	8Cyl	6Cyl	4Cyl	4 Cyl	ARV6	6Cyl	6Cyl	Aero	8 Cyl	Baby Doll, +4 SS, & Class D (9)	4Cyl. Class from D (2-8)	6Cyl	+4 SS	+4 Club Sport	8 Cyl HSCC
5.2	Maximum engine capacities	4600	3726	2500	2000	3726	3726	3000	4600	3999 / 4600	2000	2000	2999	2000	2000	3612
5.11.1	Front Hubs - Free	√	√	√	√											
5.11.1	Brake discs - Max 330mm x 32mm - Solid or Vented - Cast Iron								√							
5.11.1	Brake discs - Max 315mm - Solid or Vented - Cast Iron	√	√	√	√											
5.11.1	Brake discs - Max 302mm - Solid or Vented –Cast Iron					√	√	√		√	√	√				
5.11.1	Front brake discs - Max 278mm x 12.75mm thickness - Cast Iron												√	√	√	√
5.11.1	Grooved or Dimpled discs (not drilled)	√	√	√	√	√	√	√		√	√	√	√	√		√
5.11.1	Drum brakes 9" x 1 3/4" Cast Iron											√				
5.11.1	Callipers - Max 6 pot	√	√	√	√											
5.11.1	Caparo Ail Callipers - max 4 pot												√	√	√	
5.11.1	Callipers - Max 4 pot					√	√	√	√	√	√	√	√	√		
5.11.1	Callipers - Max 2 pot															√
5.11.1	Brake pad - Max 68.8cm2 swept pad area								√							
5.11.1	Brake pad - Max 59.6cm2 swept pad area	√	√	√	√	√	√	√		√	√	√				
5.11.1	Brake pad - Max 43.5cm2 swept pad area												√	√	√	
5.11.1	Brake pad - Max 37.9cm2 swept pad area															√
5.11.1	**Rear Brakes**															
5.11.1	Hubs - Free	√	√	√	√											
5.11.1	Brake discs - Max 306 x 24mm - Solid or Vented - Cast Iron								√							
5.11.1	Brake discs - Max 302mm - Solid or Vented - Cast Iron	√	√	√	√											
5.11.1	Brake discs - Max 280mm solid or vented - Cast Iron					√	√	√		√	√	√				
5.11.1	Grooved or Dimpled discs (not drilled)	√	√	√	√	√	√	√		√	√	√				
5.11.1	Callipers - Max 4 pot	√	√	√	√											
5.11.1	Callipers - Max 2 pot					√	√	√	√	√	√	√				
5.11.1	Brake pads - Max 44cm2 swept pad area	√	√	√	√											
5.11.1	Rear brake pads - Max 30.5cm2 swept pad area								√							
5.11.1	Rear brake pads - Max 27.5cm2 swept pad area					√	√	√		√	√	√				
5.11.1	Change of rear wheel cylinders	√	√	√	√			√		√		√	√	√	√	
5.11.1	Rear drum - max size 9" x 1 3/4" - Cast Iron											√	√	√	√	√
5.11.1	Modified rear drums - max size 9" x 1 3/4"	√	√	√	√			√		√		√				
5.11.2	**Brakes Prohibited**															
5.11.2	Ceramic or Carbon brake disks	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5.11.2	ABS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5.10	**Electrics**															
5.10.1	Exterior lighting must meet Road Traffic Act and or MSA regulations	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.10.2	Rear Fog must meet MSA Regulations apply	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.10.3	Batteries position & type free - MSA Regulations apply	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.10.4	Fully working generators - Type and make of generator free, MSA regulations apply	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.10.4	Generator pulleys - Free	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.7.7	Fully working starters Free - MSA - Regulations apply	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√

Published Copy

Para	Appendix 1	Classes A - G - J - R - S - H														
5.2		Class A				Glass G			Class J				Class R		Class S	Class H
5.2	**Permitted - Only If it shows "√"** **Prohibited - If it shows "X"**	8Cyl	6Cyl	4Cyl	4 Cyl	ARV6	6Cyl	6Cyl	Aero	8 Cyl	Baby Doll, +4 SS, & Class D (9)	4Cyl. Class from D (2-8)	6Cyl	+4 SS	+4 Club Sport	8 Cyl HSCC
5.2	Maximum engine capacities	4600	3726	2500	2000	3726	3726	3000	4600	3999 / 4600	2000	2000	2999	2000	2000	3612
5.7.8	Removal or deactivation of fuel cut out switch	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.7.7	Removal or deactivation of steering lock	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.6.1.2	Repositioning of ignition and starter switch	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.6.1.2	Dash & instrumentation panel material free	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.6.1.2	Supplementary gauge permitted i.e. Oil temp gauge	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.6.1.2	Dash board instrumentation - Free	√	√	√	√	√	√	√		√	√	√				√
5.10.3	Wiring harness - Free	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.7.1	Rev limiters	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.6.1.2	Shift lights	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.6.1.2	Timing systems	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.12	**Wheels / Steering** **Steering**															
5.12.1	Alternative Steering Column (collapsible section recommended)	√	√	√	√	√	√	√		√	√	√				√
5.12.1	Gemma Steering Box	√	√	√	√					√		√				√
5.12.1	Steering rack	√	√	√	√	√	√	√	√	√	√	√	√	√	√	
5.12.1	Hi Ratio Steering Rack	√	√	√	√	√	√	√	√	√	√	√			√	
5.12.1	Power Steering	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.12.1	Alternative Steering wheel	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.12.1	Removable Steering Wheel	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.12	**Wheels**															
5.12.1	Any Make or Design - Steel or Aluminium	√	√	√	√	√	√	√	√	√	√	√				
5.12.1	**Fronts**															
5.12.4	Max size 9" x 16" front	√	√	√	√											
5.12.1	**Rears**															
5.12.4	Max size 10" x 17" rears	√	√	√	√											
5.12.4	**Front & Rear**															
5.12.4	Max size 9" x 18"								√							
5.12.4	Max size 7" x 16" Alloy					√	√	√		√	√	√				
5.12.4	Std Morgan style Minilite max size 7" x 15" alloy													√		
5.12.4	Std Morgan style max size 6.5" x 15" alloy												√		√	
5.12.4	Max size 6" x 15" Alloy, Steel or Wire															√
5.12.2	**Wheels Prohibited**															
5.12.2	Magnisium wheels	X	X	X	X	X	X	X		X	X	X	X	X	X	X
5.13	**Tyres**															
5.13.1	Change wheel type and or tyre at any point in a single practice or race	√	√	√	√											
5.13.1	Tyre pressures - free	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.13.1	Tyre inflation - use of compressed air or nitrogen	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.13	**Front**															
5.13.2	Yokohama A048R or A052, or Toyo R888R. Max size 225 x 18". Min profile 40%. M & H Compound								√							

Published Copy

Para	Appendix 1	Classes A - G - J - R - S - H														
5.2		Class A				Glass G			Class J				Class R		Class S	Class H
5.2	**Permitted - Only If it shows "√"** **Prohibited - If it shows "X"**	8Cyl	6Cyl	4Cyl	4 Cyl	ARV6	6Cyl	6Cyl	Aero	8 Cyl	Baby Doll, +4 SS, & Class D (9)	4Cyl. Class from D (2-8)	6Cyl	+4 SS	+4 Club Sport	8 Cyl HSCC
5.2	Maximum engine capacities	4600	3726	2500	2000	3726	3726	3000	4600	3999 / 4600	2000	2000	2999	2000	2000	3612
5.13.2	Dunlop DZ03G. or-Yokohama A048R or A052, Toyo R88R. Max- size 245 x 16". Min profile 40%. M & H Compound	√	√	√	√											
5.13	**Rear**															
5.13.2	Yokohama A048R or A052, or Toyo R888R. Max size 245 x 18". Min profile 40%. M & H Compound								√							
5.13.2	Dunlop DZ03G,-or Yohohama A048R or A052. M & H Compound - Max size 255 x 17". Min profile 40%. M & H Compound	√	√	√	√											
5.13.2	**Front & Rear**															
	Yokohama A048R or A052, Toyo R888R. Max size 225 x 16" Min profile 45%. M & H Compound					√	√	√		√	√	√				
5.13.2	Yokohama A048R or A052. Toyo R888R. Max size 205 x 15" - 200/590R15 - 200/630/R15. Min profile-55%. M & H compound												√	√		
5.13.2	Toyo R888R. Max size 195 x 15" Min profile 55%. M & H Compound														√	
5.13.2	Tyres permitted are any from the MSA Year Book 2018, Tyre list 1a, 1b or 1c Max size 205 x 15. min profile of 60%															√
5.13.1	If a designated make or size of tyre is not available the Championship Co-ordinator may approve an alternative tyre from the MSA List 1a, 1b, 1c in writing to all competitors	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.13.3	**Tyres Prohibited**															
5.13.3	Use of Soft or super compound soft tyres	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5.13.3	Change of wheel & tyre type or make and or designation between practice and race at any meeting					X	X	X	X	X	X	X	X	X	X	X
5.13.3	Use of tyre heating/heat retention devices, tyre treatments & compounds	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5.15	**Fuel Tank / Fuel**															
5.15.1	Fuel tank material any - MSA regulations apply	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.15.2	Fuel tank location - Free	√	√	√	√											
5.15.2	Fuel tank mountings - Free	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.15.1	Fuel tank capacity - Free	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.15.3	Proprietary additives - Lead replacement and or Ethanol Reduction	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.15.3	Pump fuel quality - MSA regulations apply	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√

Published Copy

MSA Blue Book Regulations Apply to all Appendices

AR Motorsport Morgan Technical Regulations 2019

Appendix 2

Classes A - G - J - H - R - S

Para		Class A				Class G			Class J						Class H	Class R			Class S
5.2		8Cyl	6Cyl	4 Cyl	4 Cyl	6Cyl	6Cyl	6Cyl	8Cyl			4Cyl	4Cyl	4Cyl	8Cyl	6Cyl	6Cyl	4 Cyl	4 Cyl
5.2	**Permitted - Only If it shows "√"** / **Prohibited - If it shows "X"**		Inc AVR6			ARV6	Roadster	Roadster	Aero	+8	+8	+ 4 SS	Baby Doll	4/4 & +4	HSCC Spec	Roadster S1	Roadster S2	+ 4 SS	+4 Club Sport
5.2		Rover	Cyclone V6	Duratec I4	Any 4cyl -from classes - D (2 to 9)	Cyclone V6	Cyclone V6	Duratec 30	BMW MT62 / N62	Rover	Rover	Mazda MZR (L)	Duratec I4. Class D (9)	Any 4cyl - from - Class D (2 to 8)	Rover	Duratec 30	Duratec 30	Mazda MZR (L)	Ford GDI
5.2	**Max Capacity cc**	4600	3726	2500	2000	3726	3726	3000	4600	4600	3999	2000	2000	2000	3612	2999		2000	2000
5.7	**Engine General**																		
	Blocks																		
5.7.1	Std block production castings	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.7.1	P6, SD1 or Cocast castings/forgings	√								√	√				√				
5.7.1	Cross bolted blocks	√								√	√				√				
5.7.1	Std bore + rebore up to maximum capacity	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.7.2	**Engine Prohibited**																		
5.7.2	Use of other than a complete Std M62/N62 Engine								√										
5.7.1	**Heads**																		
5.7.1	Std production Head Casting	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.7.1	Use of P6, SD1 or Cocast castings / forgings	√								√	√				√				
5.7.1	Use of production Twin cam heads		√	√		√	√	√	√			√	√	√		√	√	√	√
5.7.1	Modified cylinder heads, No adding of material, Std production valves							√		√	√	√	√	√					
5.7.1	Modified heads, but No adding of material	√	√	√	√										√				
5.7.1	Valve sizes - Free	√	√	√	√									√	√				
5.7.1	Uprated valve springs	√	√	√	√	√	√	√		√	√	√	√	√	√				
5.7.1	**Crankshafts & Conrods**																		
5.7.1	Std stroke		√			√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.7.1	Crankshaft free - Std firing order	√	√	√	√							√	√	√					
5.7.1	Connecting rods - Free	√	√	√	√			√				√	√	√	√				
5.7.1	Harmonic dampers & front pulleys free	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.7.1	Balancing Permitted	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.7.1	HD Con Rod Bolts	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.7.1	**Pistons**																		
5.7.1	Pistons - Free	√	√	√	√			√			√	√	√	√	√				
5.7.1	Pistons free may protrude above cylinder block		√	√								√	√	√					√
5.7.1	Balancing Permitted	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.7.1	**Compression ratio**																		

Published Copy

MSA Blue Book Regulations Apply to all Appendices

AR Motorsport Morgan Technical Regulations 2019

Appendix 2

Classes A - G - J - H - R - S

Para		Class A				Class G			Class J						Class H	Class R			Class S
5.2		8Cyl	6Cyl	4 Cyl	4 Cyl	6Cyl	6Cyl	6Cyl	8Cyl			4Cyl	4Cyl	4Cyl	8Cyl	6Cyl	6Cyl	4 Cyl	4 Cyl
5.2	**Permitted - Only If it shows "√"**		Inc AVR6			ARV6	Roadster	Roadster	Aero	+8	+8	+ 4 SS	Baby Doll	4/4 & +4	HSCC Spec	Roadster		+ 4 SS	+4 Club Sport
	Prohibited - If it shows "X"															S1	S2		
5.2		Rover	Cyclone V6	Duratec I4	Any 4cyl -from classes - D (2 to 9)	Cyclone V6	Cyclone V6	Duratec 30	BMW MT62 / N62	Rover	Rover	Mazda MZR (L)	Duratec I4. Class D (9)	Any 4cyl - from - Class D (2 to 8)	Rover	Duratec 30	Duratec 30	Mazda MZR (L)	Ford GDI
5.2	**Max Capacity cc**	4600	3726	2500	2000	3726	3726	3000	4600	4600	3999	2000	2000	2000	3612	2999		2000	2000
5.7.1	Compression ratio - Free	√	√	√	√										√				
5.7.1	Max compression ratio 12.5:1											√	√	√					√
5.7.1	Max compression ratio 11:1					√	√												
5.7.1	Max compression ratio 10.5:1								√		√								
5.7.1	Max compression ratio 10:1							√								√	√	√	
5.7.1	Max compression ratio 9.35:1									√									
5.7.1	Forced Induction				√														
5.7.1	Maximum Boost Pressure 1.5 Bar				√														
5.7.1	Maximum Single Scroll turbo, maximum size (under review for 2019)				√														
5.7.1	**Engine RPM**																		
5.7.1	Engine RPM - Free				√														
5.7.1	Max Engine RPM 8750			√								√	√	√					
5.7.1	Max Engine RPM 8250		√																
5.7.1	Max Engine RPM 7750							√											
5.7.1	Max Engine RPM 7600																	√	√
5.7.1	Max Engine RPM 7500	√																	
5.7.1	Max Engine RPM 7000					√	√								√	√	√		
5.7.1	Max Engine RPM 6500									√	√								
5.7.1	Max Engine RPM 6250								√										
5.7.1	**Camshafts**																		
5.7.1	Cam shaft - Free - position in block or head Std	√	√	√	√			√						√	√				
5.7.1	Std cams					√	√		√	√						√	√	√	√
5.7.1	Std cams Inlet - Kent OMC005, Exhaust - Kent OMC006												√						
5.7.1	Cams with VVC - Inlet cam - Kent OMC011, Exhaust Cam - Kent OMC004											√							
5.7.1	Cams without VVC - Inlet man - Kent OMC 011, Exhaust cam - Kent OMC004											√							
5.7.1	Crane H218 or JEDH218										√								
5.7.1	Timing chain assembly - Free	√	√	√	√	√	√	√		√	√	√	√	√	√				

Published Copy

MSA Blue Book Regulations Apply to all Appendices

AR Motorsport Morgan Technical Regulations 2019

Appendix 2

Classes A - G - J - H - R - S

Para		Class A				Class G			Class J						Class H	Class R			Class S
5.2		8Cyl	6Cyl	4 Cyl	4 Cyl	6Cyl	6Cyl	6Cyl	8Cyl			4Cyl	4Cyl	4Cyl	8Cyl	6Cyl	6Cyl	4 Cyl	4 Cyl
5.2	**Permitted - Only If it shows "√"** / **Prohibited - If it shows "X"**		Inc AVR6			ARV6	Roadster	Roadster	Aero	+8	+8	+ 4 SS	Baby Doll	4/4 & +4	**HSCC Spec**	Roadster **S1**	Roadster **S2**	**+ 4 SS**	**+4 Club Sport**
5.2		Rover	Cyclone V6	Duratec I4	Any 4cyl -from classes - D (2 to 9)	Cyclone V6	Cyclone V6	Duratec 30	BMW MT62 / N62	Rover	Rover	Mazda MZR (L)	Duratec I4. Class D (9)	Any 4cyl - from - Class D (2 to 8)	Rover	Duratec 30	Duratec 30	Mazda MZR (L)	Ford GDI
5.2	**Max Capacity cc**	4600	3726	2500	2000	3726	3726	3000	4600	4600	3999	2000	2000	2000	3612	2999		2000	2000
5.7.1	Cam belt assembly - Free				√									√					
5.7.1	Removal of VVT assembly's		√																
5.7.1	Chain & belt guides - Free	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.7.1	Solid Lifters	√		√	√										√			√	√
5.7.1	Followers - Free	√	√	√	√					√	√			√	√				
5.7.1	Std Ali rocker arms									√	√				√				
5.7.1	Ali or Steel rocker arms - Std Ratio									√	√				√				
5.7.1	Modified rocker arms	√		√	√														
5.7.1	Steel or Ali pillars with Outrigger Supports	√		√	√					√	√			√	√				
5.7.4	**Lubrication**																		
5.7.4	Oil Coolers	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.7.4	Accusump Pressure System								√										
5.7.4	Dry Sumping	√	√	√	√	√	√	√				√	√	√					
5.7.1	Modified / Reduced depth sump, baffling & modified oil pick up	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.9.1	**Clutch & Flywheel**																		
5.9.1	Flywheel - Free	√	√	√	√							√	√	√					
5.9.1	Clutch Size - Free	√	√	√	√							√	√	√					
5.9.1	Lightened Flywheel	√	√		√			√	√	√	√				√				
5.9.1	Solid replacement for dual mass flywheel, at 75% of Std weight					√	√	√	√							√	√	√	√
5.9.1	Balancing Permitted	√	√		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.7.4	**Cooling**																		
5.7.4	Cooling system - Free	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.7.7	**Ignition Systems**																		
5.7.7	Ignition / ECU - Free	√	√	√	√							√	√	√					
5.7.7	Std Morgan production ECU system															√	√		
5.7.7	Morgan Std ECU (remap allowed)							√		√	√								
5.7.7	Remap allowed Morgan M62 TUB44								√										

Published Copy

MSA Blue Book Regulations Apply to all Appendices

AR Motorsport Morgan Technical Regulations 2019

Appendix 2

Classes A - G - J - H - R - S

Para		Class A				Class G			Class J						Class H	Class R			Class S
5.2		8Cyl	6Cyl	4 Cyl	4 Cyl	6Cyl	6Cyl	6Cyl	8Cyl			4Cyl	4Cyl	4Cyl	8Cyl	6Cyl	6Cyl	4 Cyl	4 Cyl
5.2	**Permitted - Only If it shows "√"** / **Prohibited - If it shows "X"**		Inc AVR6			ARV6	Roadster	Roadster	Aero	+8	+8	+ 4 SS	Baby Doll	4/4 & +4	HSCC Spec	Roadster S1	Roadster S2	+ 4 SS	+4 Club Sport
5.2		Rover	Cyclone V6	Duratec I4	Any 4cyl -from classes - D (2 to 9)	Cyclone V6	Cyclone V6	Duratec 30	BMW MT62 / N62	Rover	Rover	Mazda MZR (L)	Duratec I4. Class D (9)	Any 4cyl - from - Class D (2 to 8)	Rover	Duratec 30	Duratec 30	Mazda MZR (L)	Ford GDI
5.2	**Max Capacity cc**	4600	3726	2500	2000	3726	3726	3000	4600	4600	3999	2000	2000	2000	3612	2999		2000	2000
5.7.7	Challenge series approved Omex or MBE Ecu (locked)																	√	
5.7.7	Morgan/Aero Racing supplied ECU (Locked)					√	√												√
5.7.7	Ecu's are liable to be changed by the organisers for another of the same type & specification					√	√	√								√	√	√	√
5.7.7	Electronic Ignition (not programmable on carb / injection / distributer cars)										√				√				
5.7.7	**Prohibited Ignition**																		
5.7.7	Switchable programs / maps	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5.7.5	**Induction & Fuel systems**																		
5.7.5	Induction system - Free	√	√	√	√														
5.7.5	Std production inlet manifold & trumpet bases to air cleaner					√	√	√	√	√	√				√				
5.7.5	Std production inlet manifold & air flow meter																		√
5.7.5	Change of Inlet Manifold	√	√	√	√														
5.7.5	Cable Operated Throttle	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	
5.7.5	SU/Stromberg carbs up to a max of 2									√	√								
5.7.5	SU / Stromberg carbs 1.75" max of 2														√				
5.7.5	2 x twin choke carburettors Maximum 48mm choke													√					
5.7.5	42mm throttle body kit																		
5.7.5	45 mm throttle body kit																	√	
5.7.5	48 mm throttle body kit											√	√						
5.7.5	50mm throttle body kit													√					
5.7.5	Challenge fuel chip (14 CUX)									√	√								
5.7.5	Bosch EV6 Injectors									√	√								
5.7.5	Carb Needles - Free										√				√				
5.7.8	Adjustable Fuel pressure regulator Injection	√	√	√	√			√	√	√	√								
5.7.8	Adjustable Fuel pressure regulator Carbs	√			√					√	√			√	√				
5.7.8	Fuel Pumps injection - Free	√	√	√	√			√		√	√			√					

Published Copy

MSA Blue Book Regulations Apply to all Appendices

AR Motorsport Morgan Technical Regulations 2019

Para	Appendix 2	Classes A - G - J - H - R - S																	
		Class A				Class G			Class J						Class H	Class R			Class S
5.2		8Cyl	6Cyl	4 Cyl	4 Cyl	6Cyl	6Cyl	6Cyl	8Cyl			4Cyl	4Cyl	4Cyl	8Cyl	6Cyl	6Cyl	4 Cyl	4 Cyl
5.2	**Permitted - Only If it shows "√"**		Inc AVR6			ARV6	Roadster	Roadster	Aero	+8	+8	+ 4 SS	Baby Doll	4/4 & +4	HSCC Spec	Roadster		+ 4 SS	+4 Club Sport
	Prohibited - If it shows "X"															S1	S2		
5.2		Rover	Cyclone V6	Duratec I4	Any 4cyl -from classes - D (2 to 9)	Cyclone V6	Cyclone V6	Duratec 30	BMW MT62 / N62	Rover	Rover	Mazda MZR (L)	Duratec I4. Class D (9)	Any 4cyl - from - Class D (2 to 8)	Rover	Duratec 30	Duratec 30	Mazda MZR (L)	Ford GDI
5.2	**Max Capacity cc**	4600	3726	2500	2000	3726	3726	3000	4600	4600	3999	2000	2000	2000	3612	2999		2000	2000
5.7.8	Fuel Pumps Carbs - Free									√	√			√	√				
5.7.8	Only Std Fuel Pumps - injection					√	√		√			√	√	√		√	√	√	√
5.7.5	Air cleaner - Free	√	√	√	√			√	√	√	√	√	√	√	√				
5.7.5	Air Filter element free - must fit Std housing					√	√									√	√	√	√
5.7.5	Remove blanking plate above Radiator and extend air intake to duct cold air into Std air filter housing							√									√		
5.7.5	**Prohibited Fueling Systems**																		
5.7.5	Switchable programs / maps	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5.7.6	**Exhaust system**																		
5.7.6	Exhaust manifold - Naturally aspirated - Free	√	√	√				√		√	√	√	√	√	√				√
5.7.6	Turbo exhaust manifold - Free				√														
5.7.6	Exhaust systems Std production to single pipe															√	√		
5.7.6	Silencers free (Comply with MSA)	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.7.6	Std or Race catalytic converters fitted (after 31st December 1999) MSA Regulations apply		√	√	√	√	√	√	√	√	√	√	√	√		√	√	√	√
5.14	**Weights**																		
5.14	Weights - Kg (With Driver complete with helmet, suit, gloves, overalls and 3 litres of fuel)	950	950	815	950	950	950	935	See 5.2 ref PTW	950	950	850	850	850	935	950	950	900	920
5.14	All ballast to be located in the forward passenger footwell								√										
5.14	Ballast position - Free	√	√	√	√	√	√	√		√	√	√	√	√	√	√	√	√	√
3.2	Weight review applicable (See sporting regs)	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.4	**Registered disabled drivers**																		
5.4	Disabled persons operational modifications	√	√	√	√	√	√	√	√	√	√		√	√	√	√	√	√	√

Published Copy