

## AR Motorsport Morgan Challenge Technical Regulations 2023

Class 1		360 Mean BHP per Tonne			
		<u>Specification A</u>			
Para	<u>Appendix 1</u>				
5.2	<u>Permitted - Only If it shows "v"</u>  <u>Prohibited - If it shows "X"</u>	8Cyl	6Cyl	4Cyl	4 Cyl
5.2	Maximum engine capacities	4600	3726	2500	2000
5.5	<b>General</b>				
5.5	<b>Chassis</b>				
5.5	Twin door bars	v	v	v	v
5.5	ROPS may be extended forward to front frame & strengthen bulkhead	v	v	v	v
5.5	ROPS may be extended behind rear axle cut away	v	v	v	v
5.5	ROPS welded to chassis	v	v	v	v
5.5	Engine support cradle / frame 25mm (1") box section, inc engine brackets welded to chassis	v	v	v	v
5.5	Engine mounting brackets welded, bolted or bonded to chassis	v	v	v	v
5.5	Position and design of engine mounting brackets free	v	v	v	v
5.6.1.1	Cross member linking - engine mounting brackets - either 1 off 50mm (2") x 25mm (1") or 2 off x 25mm (1") x 25mm (1") box section - Welded or bolted to chassis	v	v	v	v
5.6.1.1	Engine mounting rubber bushes - Free	v	v	v	v
5.6.1.1	Engine and or gearbox torque reaction steady bar	v	v	v	v
5.6.1.1	solid material (max thickness 3mm) one piece panel under chassis (min ride height applies)	v	v	v	v
5.6.1.3	Repositioning of engine longitudinally	v	v	v	v
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	v	v	v	v
5.6.1.1	<b>Bodywork</b>				
5.6.1.1	<b>General</b>				
5.6.1.2	Replacement of rear parcel shelf & bulkhead with Ali panels - design and configuration free	v	v	v	v
5.6.1.3	Additional cooling hole in front face of front wing	v	v	v	v
5.6.1.3	Additional cooling duct in top of front wing	v	v	v	v
5.6.1.1	Ali or Steel Engine Bulkhead to replicate design of a Std Morgan Item	v	v	v	v
5.6.1.1	Ali or Steel access panels in bulkhead - Free	v	v	v	v

5.6.1.1	Ali or Steel access panels - to aid gerabox removal	✓	✓	✓	✓
5.6.1.1	Removal of inner wing valances	✓	✓	✓	✓
5.6.1.3	Additional cooling hole in front face 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	No door body frame (production cars only)		✓		
5.6.1.3	Morgan style front cowl Superform Ali, Steel or Fibre glass with strengthening	✓	✓	✓	✓
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	✓	✓	✓	✓
5.6.1.4	Front Wing mounted spoiler - Material Free - see Drawing 3, Appendix 3	✓	✓	✓	✓
5.6.1.5	<b>Ground Clearance minimum</b> (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	✓	✓	✓	✓
<b>5.8.1</b>	<b><u>Suspensions</u></b>				
5.8.1	Front Frame position Free	✓	✓	✓	✓
5.8.1	Reinforcing of Frame Front without removal of material	✓	✓	✓	✓
5.8.1	Replacement of damper blades with Roller Bearings	✓	✓	✓	✓
5.8.1	Front Wheel Castor & Camber - Free	✓	✓	✓	✓
5.8.1	Rear wheel camber - Max 1° (Max 59mm Dia Axle Tubes)	✓	✓	✓	✓
5.8.1	Shock absorbers - Free - No remote reservoirs	✓	✓	✓	✓
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	✓	✓	✓	✓
5.8.1	Rear anti Roll Bar	✓	✓	✓	✓
5.8.1	Rear damper mountings free	✓	✓	✓	✓
5.8.1	Adjustable coil over damper on Rear - Free - No remote reservoirs	✓	✓	✓	✓
5.8.1	Lateral axle location free	✓	✓	✓	✓
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	Rear Spring Rates Free - Coil	✓	✓	✓	✓
5.8.1	Morgan production 5 link rear suspension consisting of Trailing arms, live axle, coil overs & panhard rod	✓	✓	✓	✓

	<b><u>Max Wheelbase</u></b>				
5.8.3	Wheelbase - Free	√	√	√	√
	<b><u>Max Front Track (Centre of Tyre to Centre of Tyre)</u></b>				
5.8.3	Track - Free	√	√	√	√
	<b><u>Max Rear Track (Centre of Tyre to Centre of Tyre)</u></b>				
5.8.3	Track - Free	√	√	√	√
	<b><u>Transmission</u></b>				
5.9.1	Axle Ratio's - Free	√	√	√	√
5.9.3	Use of any production H Pattern 5 or 6 Spd gearbox, Gear sets - Free	√	√	√	√
5.9.3	Gearbox oil cooler & pump	√	√	√	√
	<b><u>Brakes</u></b>				
5.11.1	Non Production brakes	√	√	√	√
5.11.1	Fitting of twin or dual brake master cylinders & balance bar - adjustable by driver when seated in car	√	√	√	√
5.11.1	Additional cooling (see bodywork)	√	√	√	√
	<b><u>Front Brakes</u></b>				
5.11.1	Front Hubs - Free	√	√	√	√
5.11.1	Brake discs - Max 315mm - Solid or Vented - Cast Iron	√	√	√	√
5.11.1	Callipers - Max 6 pot	√	√	√	√
5.11.1	Brake pad - Max 59.6cm2 swept pad area	√	√	√	√
	<b><u>Rear Brakes</u></b>				
5.11.1	Hubs - Free	√	√	√	√
5.11.1	Brake discs - Max 302mm - Solid or Vented - Cast Iron	√	√	√	√
5.11.1	Callipers - Max 4 pot	√	√	√	√
5.11.1	Brake pads - Max 44cm2 swept pad area	√	√	√	√
	<b><u>Electrics</u></b>				
5.6.1.2	Dash & instrumentation panel material free	√	√	√	√
5.6.1.2	Dash board instrumentation - Free	√	√	√	√
	<b><u>5.12 Wheels / Steering</u></b>				
	<b><u>Steering</u></b>				
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	√	√	√	√
	<b><u>Wheels</u></b>				
	<b><u>5.12 Fronts</u></b>				
5.12.1	Max size 9" x 16" front	√	√	√	√
	<b><u>Rears</u></b>				
5.12.1	Max size 10" x 17" rears	√	√	√	√

5.12.2	<b><u>Tyres</u></b>				
<b>5.13</b>	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	✓	✓	✓	✓
	<b><u>Front</u></b>				
5.13.2	Any tyre from MSUK Blue Book List 1A, 1B or 1C, maximum size 245 x 16", minimum profile 40%, M & H Compound.	✓	✓	✓	✓
	<b><u>Rear</u></b>				
5.13.2	Any tyre from MSUK Blue Book List 1A, 1B or 1C, maximum size 255 x 17", minimum profile 40%, M & H Compound.	✓	✓	✓	✓
5.13.3	<b><u>Tyres Prohibited</u></b>				
5.13.3	Change of wheel & tyre type or make and or designation between practice and race at any meeting	X	X	X	X