AR Motorsport Morgan Challenge Technical Regulations 2022

Motorsport UK Blue Book Regulations apply to all appendices

Class 3		250 BHP per Tonne														
Para	Appendix 2	Specification	Specification		Specification	Specification										
		C	R		S	D										
5.2	Permitted - Only If it shows "√" Prohibited - If it shows "X"	8 Cyl	6Cyl	+4 SS (9)	+4 Club Sport	Moss 4 Spd	Rover 4 Spd	Rover 5 Spd	X Flo (2) (2)	Fiat (3) (5)	M/T (4) (7)	TR (5) (6)	Zetec (6) (4)	Zetec (7) (4)	Sigma (8)	Dura (9)
5.2	Maximum engine capacities	4000	2999	2000	2000	3612	3612	3612	1700	2100	2100	2300	1814	1998	1600	2000
5.7	**Engine General**															
	Blocks															
5.7.1	Cross bolted blocks	√														
5.7.1	**Heads**															
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	Omex valve springs. Part No: OMEP 4022															√
5.7.1	Uprated valve springs	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5.7.1	**Crankshafts & Conrods**															
5.7.1	Crankshaft free - Std firing order								√			√				
5.7.1	Connecting rods - Free								√	√	√	√	√	√	√	
5.7.1	**Pistons**															
5.7.1	Pistons - Free								√	√	√	√	√	√	√	
5.7.1	Pistons free may protrude above cylinder block				√	√	√	√	√	√		√	√	√	√	
5.7.1	**Compression ratio**															
5.7.1	Compression ratio - Free											√				
5.7.1	Max compression ratio 12.5:1				√				√						√	
5.7.1	Max compression ratio 11.5:1												√			
5.7.1	Max compression ratio 11:1									√	√			√		
5.7.1	Max compression ratio 10.5:1					√										√
	Max compression ratio 10:1		√	√												
5.7.1	Max compression ratio 9.75:1	√														
5.7.1	Max compression ratio 9.35:1						√	√								
5.7.1	**Engine RPM**															
5.7.1	Engine RPM - Free								√	?	?					
5.7.1	Max Engine RPM 8250														√	
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 6750				√											
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 P6 or SD1					√	√	√								
5.7.1	Omex - Inlet cam. Or Kent - OMC005. Omex -Exhaust cam. Or Kent: OMC006.															√
5.7.1	Propriety manufactured & available Camshafts Maximum Duration 285°				√					√	√		√	√	√	
5.7.1	Solid Lifters			√	√					√						
5.7.1	Followers - Free	√				√	√	√	√	√		√				
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								√			√				
5.7.1	Camshaft / valve / head configurations not used by MMC in production - (SLR only)											√				
5.7.4	**Lubrication**															
5.7.4	Dry Sumping								√							
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		√	√	√										√	√
5.7.7	**Ignition Systems**															
5.7.7	Ignition / ECU - Free								√	√	√		√	√	√	√
5.7.7	Std Morgan production ECU system		√													
5.7.7	Morgan challenge ECU system	√														
5.7.7	Challenge series approved Omex 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)	√				√	√	√				√				
5.7.5	**Induction & Fuel systems**															
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 1.75" max of 2	√				√	√	√								
5.7.5	Maximum 2 x twin choke carburettors 45mm choke									√		√	√	√		
5.7.5	Maximum 2 x twin choke carburettors 48mm choke								√							
5.7.5	42mm throttle body kit			√											√	
5.7.5	45 mm throttle body kit			√												√
5.7.5	45mm throttle body's								√	√	√		√	√		
5.7.5	Position of Mass air flow meter Free	√		√												

5.7.5	Challenge fuel chip (14 CUX)	√															
5.7.5	Bosch EV6 Injectors	√															
5.7.8	Adjustable Fuel pressure regulator Injection								√	√	√		√	√	√	√	
5.7.8	Adjustable Fuel pressure regulator Carbs	√				√	√	√	√	√		√	√	√			
5.7.8	Fuel Pumps injection - Free								√	√	√		√	√	√	√	
5.7.8	Fuel Pumps Carbs - Free	√				√	√	√	√	√	√	√	√	√			
5.7.8	Only Std Fuel Pumps - injection	√	√	√	√												
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		√														
5.7.6	**Exhaust system**																
5.7.6	Exhaust manifold ~~- Naturally aspirated -~~ Free	√			√	√	√	√	√	√	√	√	√	√	√	√	
	Std production to single pipe		√														