

FORMULA R - Technical Regulations

Technical regulations of Formula-R are designed to encourage parity with Formula 2 and Formula 3 chassis, of the same era whilst utilising a technically simpler and lower cost engine option.

To date Formula-R has achieved highly successful parity. Our first engine installation has achieved 5 years of racing with no loss of performance and excellent reliability.

Engine construction cost is approximately AUD \$5000.00 and features off the shelf components from the USA.

1-1 Chassis

All chassis must have 5 speed 'H' pattern transaxle.

Chassis featuring majority carbon fibre construction must have a total weight limit including driver and fluids of no less than 550kg and be fitted with front wheels 8" maximum width and rear wheels 10" maximum width.

Chassis must retain the same design and manufacturing elements of the model in its era. For example a 398 Dallara may not be altered to incorporate the complete 'flat bottom' of a 913 Reynard.

Chassis featuring majority aluminium construction must have a total weight limit including driver and fluids of no less than 525 kg. All Aluminium chassis are required to meet Formula 2 chassis guidelines with the exception of engine as defined in the following chapter.

Engine must be as specified in regulation **1-2**

1-2 Engine

Engine - Any 2.0/1.8 litre, inline, 4 cylinder VW/Audi cast iron block
Capacity is limited to 2000cc with allowance of 40cc for cylinder boring in the reconditioning process.

Pistons - Wiseco part no: K611M83 are to be used (83mm bore)

Crankshaft - Any VW/Audi 4 cylinder crankshaft of maximum stroke 92.8mm

Cylinder Head - VW/Audi 16 Valve head part No 027103373. Decking is allowed to make head servicable. Hydraulic lifters must be used. No solid lifters or lash pads. Intake/exhaust porting is allowed. Valve guides are free.

Inlet valve - maximum 30mm diameter. Exhaust Valve - maximum 28mm diameter. Combustion chamber volume - 40cc minimum.

Camshaft - only Techtonic Tuning 109570 cams are permitted. Static adjustable sprockets/ pulleys may be used on camshafts. No dynamically variable pulleys or sprockets.

Inlet Manifold & Airbox - Intake and exhaust manifold are to be constructed using Formula-R restrictor profile flanges available free of charge. Formula-R airbox will also be supplied free of charge and is mandatory.

Fuel delivery - Weber DCOE side draught carburettors only. No mechanical or electronic fuel injection. Only permissable fuel is Australian, low lead AvGas.

Ignition - must be VW/Audi distributor and single coil operated by Bosch module no. 0227100137250 or VW Telefunken 191905351B. No variable timing ignition components.

Revlimiter - must be MSD part no. 8728 with a 7000rpm pill fitted.

Chassis 2-1

FIA-F3 chassis up to and including 1998 are eligible to compete in the Formula-R class/category. Must retain engine model and make raced in F3 up to and including 1998. For example no chassis is to use the later Spiess-Opel, VW or Mercedes engines used in F3 post 1998. Must retain 5 speed 'H' pattern transaxle.

Notes

Regulations as described in this document will apply for the year 2014 unchanged. Before 2015, all regulations will be reviewed and any changes will be published for comment and discussion by writing only to technical officer Warwick Robertson wazza33racer@gmail.com