



## 100 NATIONAL TECHNICAL REGULATIONS 2025

**Please read these regulations in conjunction with the Retro Kart Championship Sporting Regulations and 2025 Noise Regulations**

### 1. Chassis

- 1.1 Any chassis first produced or used up to and including December 1988
- 1.2 The onus is on the competitor to prove eligibility.
- 1.3 All components used on the kart must be in keeping with the period of the kart, aluminium components must be natural or black in colour.
- 1.4 Removal/adding of any part of the chassis that varies from its original design is not permitted, Example: removing/adding a bearing hanger.
- 1.5 Replica chassis are not permitted.

### 2. Bodywork, Bumpers & Pedals

- 2.1 Bodywork is not permitted unless originally fitted. The only acceptable period pods are fibreglass.
- 2.2 Period style Nassau panels may be used in place of the front number plate.
- 2.3 Front and rear bumpers are mandatory and made from magnetic steel.
- 2.4 Rear bumpers may include an extension to accommodate the protrusion of the exhaust.
- 2.5 Side bars / nerf bars are mandatory and should be in keeping with those originally fitted.
- 2.6 Pedals must not be able to exceed the front bumper.
- 2.7 Throttle pedal must be fitted with a return spring.
- 2.8 Rear bumpers and side bars must not protrude beyond the outermost part of the rear wheels.

### 3. Steering & Front Geometry

- 3.1 The maximum diameter of the stub axle shafts must not exceed 17mm.
- 3.2 Stub axles must be constructed from 3 parts - CNC type not permitted.
- 3.3 Castor and camber adjustment is permitted but must be in keeping with the age of the chassis.
- 3.4 Ackerman steering is permitted.
- 3.5 Steering column locking collar must be fitted below the upper column support to prevent the column pulling out of the lower bearing.
- 3.6 Steering wheels must be round - flat tops or other made specifically to fit data loggers are not permitted.
- 3.7 Angled steering bosses are not permitted.
- 3.8 Maximum front track width 1150mm (wet or dry). See Appendix D.

## 4. Rear Axle

- 4.1 Maximum rear axle diameter - 30mm.
- 4.2 Axle must be magnetic steel but may be hollow or solid.
- 4.3 Circlips must be used with rear hubs having an overall length (excluding wheel studs) of less than 60mm or with a single pinch bolt. Longer hubs may be used to exceed the ends of the axle without circlips provided they have 2 or more pinch bolts.
- 4.4 Maximum rear track width 1400mm (wet or dry). See Appendix D.

## 5. Brakes

- 5.1 Brake systems, must be in keeping with the age of the kart, and should be of the same type originally fitted e.g. either drum, mechanical disc or hydraulic disc acting only on the rear axle.
- 5.2 Self-adjusting brakes are not permitted.
- 5.3 Maximum of 1 piston per pad.
- 5.4 Brake discs must be of a ferrous material and have a round circumference. Cross drilled, slotted or vented discs are permitted. Maximum width 13mm.
- 5.5 A secondary brake safety cable is mandatory and the cable must be a minimum of 2mm thickness. Dispensation may be given if it is not practical to fit a second cable due to the original design of the kart.

## 6. Wheels & Tyres

- 6.1. Split or mono rims are permitted. Front mono rims must have integral bearings. Maximum overall rim width for Fronts 132mm, Rears 212mm. Wet or Dry
- 6.2 Aluminium or Magnesium rims are permitted.
- 6.3 The only tyres permitted are as follows:-
  - a) Dry – Maxxis Sport.
  - b) Wet – Komet K1W
- 6.5. Only 2 sets of slick tyres will be allowed for the championship; 2 sets may be registered and used in any combination but only 4 barcodes may be used per meeting.
- 6.6 Non-championship rounds are treated independently and will be restricted to one set per event.
- 6.7 Wet Tyres will be Komet K1W and usage is not restricted but will be subject to circuit conditions as defined by the Clerk of the Course.
- 6.8 In case of dry tyre failure (eg puncture) you must report immediately to the scrutineer and the decision of a replacement tyre may be permitted. A tyre of similar wear may be required (see Sporting Regulations).
- 6.9 Mixing of wet and dry tyres is not permitted.
- 6.10 Pre heating of tyres is not permitted.
- 6.11 Chemical applications to the tyres is not permitted.

## 7. Seat

- 7.1 Seats must be a plain or black coloured shell; quarter or fully carpet covered seats are allowed.
- 7.2 Seats must be free of damage to adequately support the driver.
- 7.3 Seats must be securely fitted by a minimum of 4 bolts of at least 8mm diameter and must have washers between the seat and all seat supports, steel washer or plastic washer is permitted. Washer dimensions a minimum of 1.5mm thick, 40mm diameter.
- 7.4 A maximum of one additional seat stay per side is permitted.
- 7.5 Carbon fibre or exotic materials are not permitted.

## 8. Engine

- 8.1 Only rotary valve engines homologated by MSA or CIK prior to 1992 are permitted.  
See Appendix A
- 8.1.1 Any Non listed Engines - please contact the Technical Scrutineer.
- 8.2 Engine cubic capacity must not exceed 106cc.
- 8.3 Must use original stroke length.
- 8.4 Must use original con-rod length.
- 8.5 Must use original overall diameter of the crankshaft.
- 8.6 Cylinder liner made from a single piece of ferrous material with an integral centre exhaust divide. The exhaust divide must be in contact with the piston ring as the piston passes the exhaust port. No material may be added.
- 8.7 Engine must have same external features as manufactured/homologated. Bent, broken and repaired fins are permissible.
- 8.8 Minimum squish : 0.8 mm average measured across the axis of the piston pin when measured with maximum 1.6mm solder.

## 9. Ignition

- 9.1 Only analogue Motoplat systems are permitted.
- 9.2 The use of ignition advance/retard boxes is not permitted.
- 9.3 Maximum ignition advance: short stroke engines 2.3mm BTDC, long stroke engines 2.5mm BTDC

## 10. Intake

- 10.1 Carburettors must be Tillotson butterfly type only.
- 10.2 Maximum venturi diameter if 25.4mm measured at any point.
- 10.3 The use of power jet systems is not permitted.
- 10.4 A throttle return spring must be fitted at the carburettor.
- 10.5 A CIK bullet type airbox is mandatory, no modifications allowed (eg additional holes) (See Appendix B).
- 10.6 Airbox must include a foam filter, intact and without splits or tears, sealed to the carburettor mouth. The only acceptable types are shown in Appendix C.
- 10.7 Maximum of 2 trumpets in airbox.
- 10.8 Maximum internal diameter of trumpets - 23mm. Minimum length 80mm.

## 11. Exhaust

- 11.1 Period style exhausts are compulsory. Big bore (110mm max diameter) Vevey style, straight or bent exhaust are permitted. Exhaust manifold 50mm maximum diameter.
- 11.2 Exhaust mounting cradle must be contained within the perimeter of the kart.
- 11.3 Bean cans / Decibels must be fitted at all times with the exit holes facing downwards ie: below horizontal.
- 11.4 Exhaust wrap (or similar) must be fitted under all exhaust springs including the central flexi section (between header and pipe); and between the exhaust and support cradle.

## 12. Noise

- 12.1 Intake and Exhaust silencing is mandatory.
- 12.2 Fin rubbers are mandatory on cylinders and cylinder heads; these may be solid pieces or moulded using silicone/butyl sealant
- 12.3 Competitors must ensure that engines are prepared and equipped in order to meet or better sound level requirements.

- 12.4. Please refer to the RKC Noise Regulations for guidance to ensure the best possible steps are made to ensure compliance is met.

### 13. Miscellaneous

- 13.1 Karts must display Green number plates with White numbers at the front and rear.  
13.2 Finger guards must be in place to cover the area around the engine sprocket.  
13.3 Chain guards must be securely fastened and cover the length of the chain.  
13.4 Datalogging is permitted (including GPS) for laptiming and engine rpm only. The use of additional sensors for steering position or throttle/brake application is forbidden.  
13.7 Minimum driver age is 16 years. Drivers whose 16<sup>th</sup> birthday falls within the racing calendar are also eligible.

### 14. Weight

- 14.1 Minimum weight - 145kg including kart, driver, clothing, helmet and fuel.  
14.2 If ballast is required, it must be secured using 2 mechanical fixings. A maximum of 5kgs per fixing point.

### Appendix A: Eligible Engines

ARROW. KEB, KEB2, KE3 TT), KE4 3P, KE5.

ATK AKV90, TSV80.

BM.F100, 100JB, FC100, FC106, FK96, FC100/3, K96/3.

CMP MAC 1 - 100 V

COMER MIK 352, MIK 655

CORONA GIOVANNI MK1

DAP. T80B, T70GB, T72B, T72BTT, T90, T800BTT.T91, T92, T70TT, T50, T75, T76, T77, T78, T93.

DINO. 100R , 100 3K, 100 T, 50TT, 545TT.

DK. MK100A.

EME. Hornet TTL 48, Hornet TTS 50, Mosquito BPS 50, Mosquito BPL 48, Hornet TTL 48, Hornet TTS 50.

FEBKART. FBS/82TT.

GUAZZONI. VR2, VR2A, VR3, VR4, SVR2, SVR2A, SVR3, SVR4, VR1,VR7, VR8, VR10, CT11, UR10.

JEABOR. PAJ 19A.

K.K. BLACK POWER 4WTT

KOMET. K12, K12S, K12C, K22, K33, K44, K33ST, K55, K77, K96, K88, K89, K80, K80TT, K78, K55TT.

KZH 100 A

MAC MINARELLI. 100V, XX3 MARZO.

MILLS. HK89.

MUGEN. MK A 11.

PARILLA. TG14LB, SS20, SS20GB, SS31, TT55, V11, S13, S13AC, BA13, TG14, TG14L, GP15L, GP15, MK16, HF17, TT22, TT23, TT25, TT27, TT31, TT32, TT36, TT65, TT95.

PCR. 50/3P, TS 50/3, TS 50/3 Nordica , TS 55/3, TS 54/3.

PETRY. P 101 M, SFK100, SFK100R.

REFO B3, B5, C3, C5, MA-5, MA-3-JUN.

RKD. IT3/TT/, IT3/TT/C, CB 82, IT3 C89, IT 82-3, IT 82-5, RD86C, RD86L.

ROTAX. R100, R100DS, DSB.

SAETTA. V11, V12, V12 Sport, V12 Super, V16 Competition, V16S, V16 Sport, V17GP, VT17TA, V18TA, V18GP.

SIRIO. ST50, ST51TT, 50 ALL VARIANTS

SOLO TT44

STARR. SS100.  
STIHL. SK120DS.  
SWIFT. 100.  
TECNO SATURNO RV100.  
TKM. FF99 3P, FF99TT, L9OTT, S89 3P, S89TT, RL66TT, RS98TT, RL8OTT, L92TT, L95TT, KA100.  
UPTON MANX. 100B LS, 100B SS, 100/6, 100/7, 100TT SS.  
VEGA. VIC19, VIC19L.  
YAMAHA. 100S, KT100AX.  
ZIP. ZED IB, 50, 48

### Appendix B: Airboxes



### Appendix C: Air filters



### Appendix D: Maximum Widths

