



## TKM TECHNICAL REGULATIONS 2025

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

Whilst the spirit of the early Tal-ko regulations are being embraced, certain changes have been implemented with the sole aim of reducing costs, whilst also opening up the class to as many competitors as possible without affecting performance and allowing majority of equipment to still be mainstream legal.

Championship points and positions will be awarded for all signed up RKC members for both Junior and Senior TKM. Senior TKM Heavy will be permitted to race from the rear of the Senior TKM grid at the discretion of RKC.

RKC reserve the right to amend the regulations based on safety or force majeure at short notice.

These regulations cover TKM Senior, TKM Heavy & TKM Junior classes. **Please read these regulations in conjunction with the Retro Kart Championship Sporting Regulations and 2025 Noise Regulations**

### 1 Chassis

#### 1.1 Permitted Chassis – Senior:

Any chassis homologated for the TKM class up to and including the 2001 homologation.

Any British non-gearbox 2 bearing chassis manufactured between 1983 and 1994 (onus is on entrant to prove age if it is not easily recognised) that meets the ethos and spirit of the TKM chassis regulations.

Having:

- a) Only 2 axle bearings.
- b) No adjustable rear ride height.
- c) No adjustable torsion bars.
- d) No adjustable camber system.

1.2 Any adjustable torsion bars must be removed.

1.3 No torsion devices maybe fitted to the kart or rear axle including rear bumper.

1.4 Re-manufactured and replica chassis are not permitted.

### 2 Bodywork, Bumpers & Pedals

2.1 Chassis must run side pods and front spoiler/nose cone – style up to and including CIK02.

2.2 Rear bumpers must be full length covering at least 50% of the rear tyres. The rear bumper CANNOT protrude beyond the outer edge of the rear wheels. The bumper must be of magnetic metal construction and be visible akin to the TKM class and period.

2.3 Pedals may not exceed the front bumper.

2.4 Throttle pedal must be fitted with a return spring.

### 3 Steering & Front Geometry

3.1 Single point steering must be used – NO ACKERMAN STEERING SETUPS, multi position columns can be fitted providing only central mounting is used.

3.2 If fitted, camber/caster adjustment must be removed and neutral bushes fitted.

3.3 Maximum permitted stub axle shaft diameter is 17mm.

3.4 Steering wheels must be 3 bolt fitting type only with 3 spokes (not shaped for a data logger) and may have flat top or bottom.

3.5 Steering column locking collar must be fitted below the upper column support to prevent the column pulling out of the lower bearing.

### 4 Rear Axle

4.1 Axles up to a maximum diameter of 30mm are permitted and may be hollow or solid.

4.2 Extended rear hubs are permitted and may overhang the rear axle providing that they are of a 2 bolt design (bolts must be set out in parallel or side by side as opposed to securing the same circular fixing point, or in series).

4.3 If hubs are used with single pinch bolts a circlip must also be fitted on the axle.

### 5 Brakes

5.1 Brakes may be hydraulic or cable operated.

5.2 Brake disc must be steel or cast iron and may be solid or vented. Cross drilled discs are permitted.

5.3 Self-adjusting brakes are NOT permitted. Where fitted as original homologated equipment by the manufacturer they may be used only if the optional return springs and screws are in place to negate the self-adjustment function.

5.4 Caliper and Master Cylinder (if applicable) are free, except for:

- a) No ABS
- b) Maximum of 1 pad per side and 2 pistons per pad

5.5 Brakes must operate on the rear wheels only.

5.6 Secondary (back-up) brake cable or bar of 2mm minimum thickness is required between pedal and master cylinder.

### 6 Wheels & Tyres

6.1 Aluminium or Magnesium wheels are permitted but must be of one piece moulding.

6.2 Front wheels must have integral bearings. Separate front hubs are not permitted.

6.3 Maximum wheel width is front, 132mm front and rear, 212mm rear, measured externally.

6.4 Tyres for all TKM categories are:

- a) Dry Tyres - Dunlop SL3 with laser etched serial number.
- b) Wet Tyres - Maxxis SLW

6.5 Chemical treatment and pre-heating of tyres is not permitted.

6.6 No more than one set of slick tyres may be used per meeting. In the event of a puncture/damage, the damaged tyre must be presented to a scrutineer who can authorise its replacement. See Sporting regs.

6.7 No more than two sets of slicks to be used for the championship rounds.

6.8 No more than two sets of wet tyres can be nominated for a meeting. The sets must have a minimum of 1mm of tread prior to the start of any race. Scrutineers may perform measurements on the grid to ensure safety. Both sets of tyres for the meeting in question must be nominated before heat 1.

Tyres can be excluded from further use in a race meeting if measured at under 1mm of tread at any time after a heat.

#### 6.9 Maximum Width/Track

6.9.1 Maximum front track, measured from outer most points of front tyres/wheels – 1150mm.

6.9.2 Maximum rear track, measured from outer most points of rear tyres/wheels – 1350mm.

See Appendix D

## 7 Seat

7.1. Seat must be free of damage and support the driver.

7.2. 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.

7.3. A maximum of one additional seat stay per side is permitted and must be bolted at both ends if present.

## 8 Engine

8.1 All classes will use the TKM BT82 engine. Juniors must use the 100cc and Seniors may use the 100cc.

8.2 All engines are to meet the Tal-Ko fiche and all internal components must be genuine Tal-Ko items.

8.3 Front Sprocket can be 9t, 10t or 11t but does NOT have to be TKM stamped.

8.4 Fin rubbers must be present but type is optional.

8.5 Cylinder head sealing nut to be fitted to the engine to allow for engine sealing at an event. This can be fitted after or before a heat when requested by the scrutineer. Type is free.

8.6 Direct Drive engines or clutched engines with external starters are permitted – TAG variants are not allowed.

8.7 Only cast cylinder liners are permitted – CNC Liners are prohibited (see Appendix B).

8.8 Minimum head volume:

a) 100cc engines Junior and Senior: 11cc (measure by Burette) or 10.6cc (measured by Digital).

b) 115cc engines Heavy: 12cc (measure by Burette) or 11.6cc (measured by Digital).

8.9 Period cylinder head only – no EaziStart heads allowed.

8.10 Maximum serial number of 6,799 on the crankcases to keep the period bottom end.

8.11 Maximum of 2 engines per entrant to be signed on per race day.

8.12 External repainting of external surface of barrel and head is allowed for aesthetic purposes.

8.13 Engine mount may be aluminium, steel or magnesium.

8.14 Helicoil/Timesert repairs are permissible.

8.15 'Oil seal type is open but competitors should be aware that only the 'Rolf RP' type may be acceptable in some other organisers' events.

## 9 Ignition

- 9.1 Motoplat (9600903-1) or PVL ignition (TKM Stamped version) are both permissible.
- 9.2 Ignition timing must be as per Tal-Ko fiche being Motoplat 2.0mm to 3.0mm BTDC and PVL 1.5mm to 2.1mm BTDC.
- 9.3 Spark plug cap type is free choice.
- 9.4 Spark plugs are free choice.

## 10 Carburettor

- 10.1 The only permitted carburettor is the Walbro WB19 (TKM Stamped) – No Modification except for the following:
- 10.2 Extensions are permitted to both the low and the high jets if required for ease of adjustment by the driver.
- 10.3 Carb Spacer block may only be modified, by the means of a slot, to aid the fitment/removal of the throttle cable.
- 10.4 Only Walbro repair kits D10-WB and K10-WB are permitted.
- 10.5 JUNIORS may run appropriate TKM stamped restrictor. NO modification permitted and coloured anodising must be intact on all surfaces. If used the restrictor must be fitted between the cylinder and the spacer block. See permissible colour and weight combinations in Appendix A.
- 10.6 A throttle return spring must be fitted at the carburettor.

## 11 Airbox

- 11.1. Airboxes can be either of the TKM versions to maintain the period look or the RR ASR EVO 100 airbox which is the same as the 'Mark 2' TKM system without the TKM badge. Socorem or other airboxes etc are not allowed. If in doubt seek clarification before attempting to race. See (Appendix C)
- 11.2. Where using 2 trumpets the maximum permitted internal diameter of 23mm applies.
- 11.2a. No drilling of the airbox is permitted except for the following:
- 11.2b. On the original "Dome" TKM Airbox, a maximum of 3 holes expressly used for the sole purpose of securing the dome to the back plate. Where a hole is drilled it must be used.
- 11.2c. One small drill hole can be added to the fin on the underside of the new style airbox to allow for a fixing to be added for stability. This may not perforate the main element of the airbox, nor may it increase airflow to the filter on any way other than maintaining the orientation of the airbox.
- 11.3 Internal Air Filter must be present – type free – of comparable filtration/restriction to original part.
- 11.3b Air Filter must be intact.

## 12 Exhaust

- 12.1 Only small bore straight exhausts are permitted and must have the original TKM stamp.
- 12.2 End cans also referred to as 'Decibels' or 'Baked Bean Cans' must be fitted and exit holes must face downwards – type free.
- 12.3 Exhausts must be intact both internally and externally, and as sold by Tal-ko
- 12.4 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.

### 13 Chain & Finger guards

13.1 Fully enclosed chain guard must be fitted to enclose front engine sprocket or full chain guard can be modified and used in conjunction with TKM engine mounted front sprocket guard.

### 14 Exotic material

14.1 Magnesium is not allowed except for where specified within these regulations.

14.2 Carbon Fibre/Carbon composites are not allowed except for seat and floor tray.

14.3 No other form of exotic material are permitted including but not limited to titanium etc.

### 15 Race numbers

Race numbers are to be displayed front, rear and sides as per Sporting Regs and in colours as per Appendix A.

### 16 Data logging

Rev Counters are allowed and systems such as Mychron and Alfano are allowed providing that they are only logging lap time and engine revolutions.

### 17.Weight / Age class eligibility

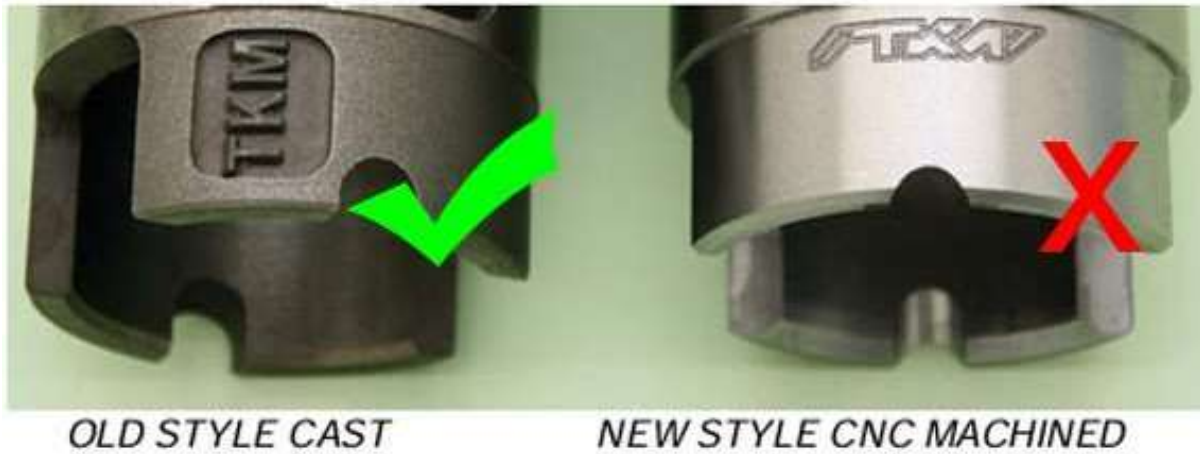
Minimum weight includes kart, driver, clothing, helmet and fuel as presented at the end of any race.

Although drivers should cease racing in the Junior class if they have reached their 16<sup>th</sup> birthday prior to the start of the first event, dispensation may be considered by RKC where excessive ballast would be required. RKC may allow dispensation for lighter drivers to remain in Juniors for a further period on the grounds of safety but this will be done on a case-by-case basis.

### Appendix A – Weights & Numbers

<b>TKM Number Plates &amp; Class weights (kg)</b>		
<b>Class</b>	<b>Number Plate / Number</b>	<b>Min Overall Weight &amp; (Driver Weight)</b>
<b>TKM SENIOR 100cc</b>	<b>RED/WHITE</b>	<b>152KG</b>
<b>TKM HEAVY 115CC</b>	<b>GREEN/WHITE</b>	<b>175KG</b>
<b>TKM JUNIOR</b>	<b>BLUE/WHITE</b>	<b>BLACK REST 123KG (34KG) GOLD REST 128KG (39KG) BLUE REST 135KG (47KG) PURPLE REST 142KG (57KG) UNRESTRICTED 148KG (67kg)</b>

Appendix B - Liners



Appendix C - Airboxes



Appendix D – Maximum widths

