Class 1B TECHNICAL REGULATIONS 2025

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

Introduction

Class 1B celebrates 100cc karts from the 70s era of 100cc kart racing, before the introduction of bodywork when racing was pure. Lightweight, nimble and simple, these karts highlight the heady days of karting Champions such as Francois Goldstein, Terry Fullerton and Mickey Allen to name a but a few.

Whilst it is impossible to accurately recreate racing classes from bygone eras, Class 1B brings drivers as close to the 70s racing experience as is possible, allowing for today's tyres, engineering and know-how.

To that end, Class 1B puts driving enjoyment and cost control at the forefront and since its first year in 2024, has proved to be one of the most popular classes at Retro Kart Championship, boasting entries of up to 20 drivers from teenage to over 70 years of age!

1. Chassis

1.1. Any 100cc kart chassis that was first manufactured prior to 1980. For further clarification – EG. a specific kart manufactured in 1982 whose identical model was first manufactured in 1978 is permitted. In all cases of identification, it is the competitor's responsibility to prove any such date of first manufacture.
1.2. Replica chassis are not permitted.
1.3. External chassis rails must be original. Repairs to cracks are permitted but the rails must retain their original shape and position with original mounting points for seat stays, cross members etc.
1.4. Removal of any part of the chassis is not permitted, Example: removing a bearing hanger.
1.5. Only one chassis may be used per race meeting.
1.6. In such circumstances as a cracked chassis, and only with the permission of the scrutineer, a chassis change may be permitted.

2. Bodywork, Bumpers and Pedals

2.1. Bodywork is not permitted.
2.2. Front and rear bumpers are mandatory and must be manufactured from steel and be in period style as originally fitted.
2.3. Rear bumper must not protrude past the outside edge of the wheel (regardless of dry/wet setup).
2.4. Pedals must not exceed the front bumper.
2.5. Throttle and brake pedals must be fitted with a return spring.

3. Steering & Front Geometry

3.1. Stub axles should be in the style and dimensions as originally fitted to the chassis with a maximum shaft diameter of 17mm. Due to the age and unusual design of some original stub axles, it is understood that exact replacements are not feasible and therefore shaft lengths and axle arms should be in-keeping with the original overall dimensions.

3.2. Castor / Camber kits are not permitted.

3.3. Chassis designs which originally incorporated steering geometry adjustments are permitted.

3.4. Maximum width must not exceed 980mm.

3.5. Ackerman steering is permitted only when originally fitted to the kart. See 12.2 for additional information.

3.6. Steering column safety locking device is mandatory – jubilee clips are acceptable.

3.7. Angled steering wheel bosses are not permitted.

3.8. Steering wheels must be of metal construction, enclosed, full circle design with leather, vinyl or rubber covering. Flat top or bottom wheels are not permitted.

3.9. Front brakes are not permitted.

4. Rear Axle

4.1. Maximum rear axle diameter must not exceed 25mm or 1” at any point.

4.2. Axle must be made from magnetic steel only.

4.3. Axle stiffeners are not permitted.

4.4. Maximum width must not exceed 1250mm.

4.5. Extended rear hubs are not permitted.

5. Brakes

5.1. Brakes are to act on the rear axle only.

5.2. Brakes should be of a similar period type to when the chassis was first manufactured. i.e drum, mechanical or hydraulic

5.3. Drum or if disc braked only solid, cross drilled or slotted are permitted.

5.4. Self-adjusting brakes are not permitted unless originally fitted.

5.5. Floating discs are not permitted unless this type of disc was originally fitted.

5.6. Maximum of 1 piston per pad.

5.7. Brake disc (if fitted) must be steel or cast iron.

5.8. A secondary brake cable is mandatory and the cable must be a minimum of 2mm thickness, the only exception allowed is for braking systems whose design makes impossible the fitting of a safety cable. In such cases, the class scrutineer will seek to give special dispensation.

6. Wheels & Tyres

6.1. Wheels either mono or split rims may be used. Front mono rims must have integral bearings. Separate, modern hub type rims are not permitted.

6.2. Maximum rear rim width 162mm and maximum front rim width 112mm measured outside edge to outside edge, applicable to both wet and slick tyre use.

6.3. Magnesium rims are not permitted.

6.4. The only tyres permitted are as follows:-

Slick – Dunlop “Cadet” SL3.

Wet – Dunlop “Cadet” KT3.

6.5. Only 1 set of slick tyres are permitted per race meeting.

6.6. Slick tyres may be obtained from any source.

6.7. Slick tyres must be presented to a scrutineer before their first use, their condition be verified as “used” to the satisfaction of the scrutineer - in the spirit of the class - and their barcodes recorded.

6.8. Slick tyre barcodes will be recorded and allocated to each competitor. Only those tyres recorded and allocated to the driver may be used in any heat or final by that same driver.

6.9. 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.

6.10. Non-championship rounds are treated independently and will be restricted to one set per event.
6.11. Wet tyres can be purchased from any source, new or used.
6.12. Wet and slick tyres may not be mixed
6.13. Wet tyres may only be used if the meeting is declared open or wet
6.14. In case of slick tyre failure you must report immediately to the scrutineer and the decision of a replacement tyre may be permitted.
6.15. Electrical equipment for warming tyres is not permitted.
6.16. Chemical application to the tyres is not permitted.

7. Seat

7.1. Seat must be free of structural damage, support the driver and be connected to the kart by four fixings.
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. Soft seat inserts – the type often found in rental karts - are not permitted.
7.4. Additional seat stays are not permitted.
7.5. Only plain coloured non-covered seats are permitted.
7.6. The fitment of padding is permitted and must be securely attached by adhesive and or adhesive tape. Period-style seat covers are permitted.

8. Engine

8.1. Engines must have their original (as per CIK/RAC homologation) external appearance (with the exception of bent, broken or missing fins). Evidence of machining to disguise a components' original appearance (for example, removal of cooling fins or their bracing) will be deemed a breach of this rule.
8.2. Engines must be air-cooled.
8.3. Engines must be direct drive. Clutches are not permitted.
8.4. Permitted engines are as shown in the Engine List Appendix A. Please contact a scrutineer (details at the end of this document) for any clarification of permissible engines. For reference, the engine list is formed from the CIK homologation list of the 1971 to 1977 period, with additional engines from the period before, and notable exceptions of slightly more modern models.
8.5. Engines must have their original CIK / RAC homologated stroke length.
8.6. Engines must have their original CIK / RAC homologated connecting rod length
8.7. Engines must have a capacity no larger than 106cc
8.8. 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; this includes adhesive between the liner and the cylinder which is required when fitting a non-original liner.
8.9. Later style lines are not considered to be within the spirit of the class and are not permitted. These can be identified by their elongated stud indents and the locating notch in the top flange. See Appendix D.
8.10. Material may be removed from crankcases, barrels, liners and heads but not added.
8.11. Only one engine may be fitted to the kart.
8.12. Minimum squish : 0.8 mm average measured across the axis of the piston pin when measured with maxi mum 1.6mm solder.

9. Ignition

9.1. Only analogue CEV, Luminition, PVL or Motoplat systems are permitted.
9.2. The use of ignition advance/retard boxes is not permitted.
9.3. Maximum ignition advance:
Short stroke engines 2.1mm BTDC for PVL, 2.3mm BTDC for all others
Long stroke engines 2.3mm BTDC for PVL, 2.5mm BTDC for all others
9.4. A scrutineer can stipulate that a competitor's ignition coil/stator/rotor must be swapped for another ignition coil, identical in make and model, which will be provided by the organiser at any time during the meeting.

9.5 Ignition lead must form 1 single piece between the coil and plug cap (repairs are permitted).

10. Intake

10.1. The Tillotson HL334A carburettor is the only permitted carburettor.
10.2. The main venturi must not be internally machined and must maintain the standard 19.8mm diameter.
10.3. Tillotson and pattern type repair kits are permitted.
10.4. Damage caused by contact with the chain is permitted and repairs to rectify only this damage are permitted.
10.5. No more than one carburettor is to be fitted to an engine at any time.
10.6. A CIK bullet type airbox is mandatory, no modifications allowed (eg additional holes) (See Appendix B).
10.7 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.
10.8 Maximum of 2 trumpets in airbox.
10.9 Maximum internal diameter of trumpets - 23mm. Minimum length 80mm.
10.10 A throttle return spring must be present within the carburettor throttle arm or fitted at one end to the engine barrel or cylinder head.

11. Exhaust

11.1. Period style 90mm small bore exhausts are compulsory.
11.2. Exhaust end cans (bean cans) are compulsory and must be securely fitted throughout the race.
11.3. Maximum exhaust flex diameter 40mm.
11.4. Exhaust flex must be completely covered with exhaust bandage and secured by the exhaust springs
11.5. Exhaust bandage must be present and securely fixed between the exhaust cradle and exhaust.
11.6. Exhaust end can holes must be facing a downward position at an angle of no less than 45 degrees to the horizontal.
11.7. Exhaust manifold, flex section and internal cones must retain their fixed dimensions while kart is in motion.
11.8. Modifications are not permitted, with the exception of small weld repairs.

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 Yellow number plates with Black numbers at the front and rear.
13.2 All karts entered for competition must be approved by the class rep for validity at least one week prior to each race day. This ensures karts adhere to these regulations and allows sufficient time for any research to be undertaken.
13.3 If a kart has already been approved during the racing season, it will not need further approval within the same season
13.4 Approval of karts under 13.2 can be done by sending photographs to the class rep or at prior race meetings.
13.5 Magnesium components are not permitted.
13.6 Carbon components are not permitted.

13.7 Chain and finger guards must be securely fitted preventing any access to the chain from above and the frontal area of the engine sprocket.
13.8 On board rev-counters maybe used. Data Loggers are permitted but must only display engine revs and or lap times and must not collect any other data.
13.9 Fuel – refer to Retro Kart Championship general regulations.
13.10 Engine oil is not controlled.
13.11 Minimum driver age is 16 years. Drivers whose 16th birthday falls within the racing calendar are also eligible.
13.12 Novice drivers - refer to Retro Kart Championship general regulations.

14. Weights

14.1. Minimum weight for kart and driver at the end of the qualifying, heat or final, including all racewear and fuel is 138kgs. Failure to adhere to this rule will result in disqualification from the respective heat or final
14.2. Lead weight to be attached securely by a minimum of two fixing bolts minimum 8mm diameter with a maximum of 5kg per two bolts. Ballast must not be carried by any other means than lead affixed to a kart

Regulations subject to change at the discretion of the class representative, meeting organiser, and/or scrutineer(s). Regulations are free of any ownership or trademark and made be used in part or in whole by any individual, club, company or other organisation. It is a competitors' responsibility to fully understand and abide by these regulations in their entirety. Racing in Class 1B is acceptance of these and the Retro Kart Championship general sporting regulations. Changes to race results due to regulation infringements of these regulations are the sole responsibility of the competitor.

Class representative – Nik Blower – 07855530861 nik@nikblower.com

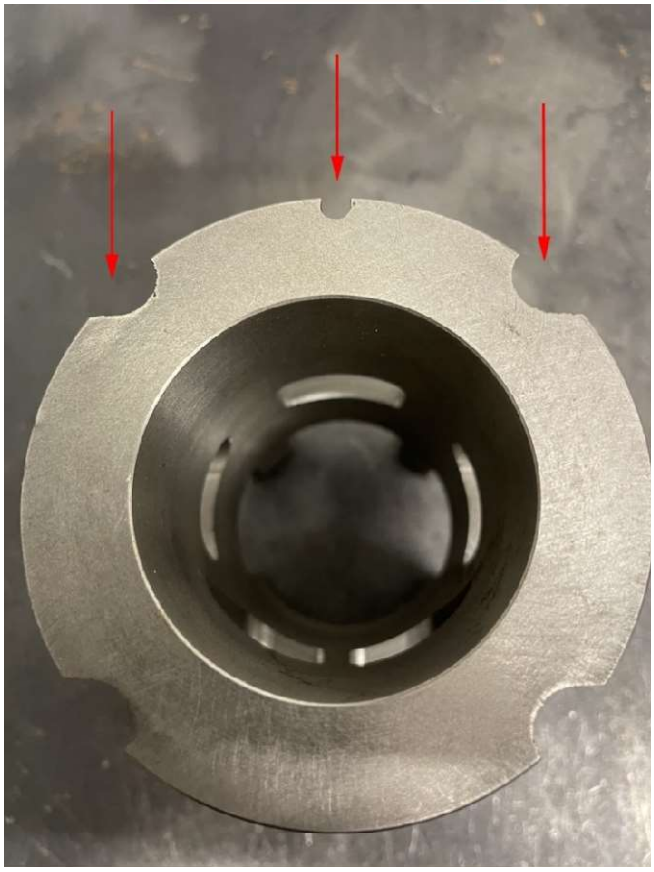
Appendix A: Eligible Engines

Class 1B Engine List 2024					
DAP	T70	Hewland	Arrow KE3	Saetta	V11
DAP	T70TT	Hewland	Arrow KE4	Saetta	V12
DAP	T80	Hewland	Arrow KE5	Saetta	V12 SPORT
DAP	Corsair T81	Komet	K12	Saetta	V12 SUPER
DAP JM ENGLAND	T71	Komet	K12S	Saetta	V16 COMP.
DAP	T72	Komet	K12C	Saetta	V16S
Delta M.E.	VRS74	Komet	K22	Saetta	V16 SPORT
McCullough	MC91/a/b/1	Komet	K33	Saetta	V17GP
McCullough	MC92	Komet	K44	Saetta	VT17TA
Miguel Tapias	ARISCO C75	Komet	K55 rotary	Saetta	V18GP
Miguel Tapias	ARISCO B	Komet	K33ST	Sirio	SC504
BM	F100	Komet	K77	Sirio	ST/50
BM	100JB	Komet	K96	Sirio	ST/52
BM	FC100	Komet	K88TT	Sirio	ST/L
BM	FC106	Komet	K89	Starr	SS100
BM	FK96	Komet	K75	Swift	100
BM	FC100/3	Komet	K78	Stihl	SK120DS
BM	FC/52	Komet	K78 TT	TKM	FF99
BM	FCL	Komet	K88 TT	TKM	FF99TT
BM	K96/3	Komet	K89	TKM	L90TT
Guazzoni	VR2	IMI	100FVT	Upton Manx	100/6
Guazzoni	VR2A	Mills	HK99	Upton Manx	100/7
Guazzoni	VR3	Parilla	SS20	Upton Manx	Long Stroke
Guazzoni	VR4	Parilla	TT22	Vega	VIC 19
Guazzoni	SVR2	Parilla	TG14L	Vega	VIC 19L
Guazzoni	SVR2A	Parilla	GP15L	Zip	Zed 100
Guazzoni	SVR3	Parilla	TT27	Zip	Zed 48
Guazzoni	SVR4	Petry	SFK100	Zip	Zed 50
Guazzoni	VR1	Petry	SFK100R	Zip	Zed 1B
Guazzoni	VR7	Petry	SFK100RR	Starr	SS100
Guazzoni	VR10	Petry	P100L	Swift	100
Guazzoni	CT11A	Famrel	FM1	Stihl	SK120DS

Appendix B: Airboxes

Appendix C: Air filters

Appendix D: Liners

Not Allowed	Allowed
	

Appendix E: Axle Widths