

Australian Karting Association Inc

Technical Committee

MINUTES



Venue: Crowne Plaza, 32 Mitchell Street, Darwin, NT

Date: 27/28 June 2009

Time: 9am

Meeting opened with all states present except Queensland.

Item 1 (From Technical Committee)



AKA Technical Committee
Australian Karting Association
Suite 2 / 483 High Street
PO Box 4222 Penrith Westfield
Penrith NSW 2751

March 26, 2009

To whom it may concern,

This letter is to advise that Yamaha has discontinued the CDI rotor for the KT100J engine (part number 7G9-85550-00). This part is now superseded by the TCI rotor (part number 7G9-85600-00).

The CDI stator and CDI unit (black box) are still available.

Sincerely,

A handwritten signature in black ink that reads "A. Wolfenden".

Adam Wolfenden,
National Kart Sales & Marketing Manager,
Yamaha Motor Australia
43 Westpool Drive Hallam
Vic. 3803
Ph: (03) 9703 5400
Fax: (03) 9702 4500
Mobile: 0400 026 129
<http://www.yamaha-motor.com.au>

Recommendation

New rule

Rule 36.20 (vii) The TCI rotor may be used as a replacement for the CDI rotor. Repolarising of the rotor is permitted

Addendum to be implemented immediately

UNANIMOUS

REASON: CDI rotor is no longer available, the remagnetising will be many dollars saved for the karter

Item 2 – WA Item 2

Chapter 25

New Rule 25.17 (K)

Add a table of all aftermarket clutches and the engines that they are applicable to.

Reason:

There are a myriad of clutches available now and without the above information in the rulebook, it is near impossible for anyone to know what is legal or not.

Agreed and suggest that the current table be put in the rule book

Item 3 – WA Item 3

Chapter 27

New Rule 27.02.01 (a)

Include **TWIN** Restricted 125 engines in this class if they conform to their relevant chapters.

Reason:

These engines are restricted to match the performance of a 100cc engine, so it would be logical to allow them in the class. As the Open class is usually run by a state subset of rules, it would be easy to include these in the class with a relevant minimum weight.

REJECTED

5/1

REASON: The potential of someone removing restrictors and giving the kart a squirt would be very dangerous, and inappropriate to the sport.

Item 4 – WA Item 4

Chapter 38

Remove ARC Spec 100W engines out of the class.

Reason:

The engine is not supported by ARC anymore and would make the class more affordable. The engines would be given a phase out period.

RECOMMENDATION: Review in two years time

REASON: Currently the engine is popular and parts are still readily available.

Item 5 – (From Technical Committee)

X30 Engine Homologation

Reports to be presented to the NKC for next stage approval.

Report on the IAME X30

Engine Number: 05086

Crankcase 211/211

All port passages are cast there is no grinding.

Iron liner, port opening, machined

Head is exact size to the profile gauge

Plug face to Bottom sealing face is 29.38

Barrel length 86.55

Transfer split 10.40 - both sides 5mm rod

Barrel height 36.90 5mm ATDC 5mm rod

Stroke 53.90

Reeds .29 they are not branded with "IAME"

Head cc 11cc using an AKA type 1 plug

Carby - IAME X30 Body – machine
Back – 27.90 – ventury 27.90
2 high speed holes – one low speed

Clutch – X30 125550 IAME centre – X30 125840

Sprocket – X30 125555 - Z11

Radiator - 16 core 30mm wide x 410 x 190mm

Ignition - Selectra IAME 25/8

Balance gears OK with drawing

Header pipe, Exhaust pipe, radiator (branded "IAME")

Noise box supplied – Socorem No: FMK 952/98

Harold Arnett
Vic Tech Coordinator

Motor meets the homologation papers.

RECOMMEDATION: A single engine in the Leopard class is still the preferred option for technical inspection and Parity

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Item 6 – (From Technical Committee)

PTG Rods for Yamaha KT100S, KT100J, Leopard Engine and other engines, and the (~~delete sneaky peak~~) ~~add transfer port checking/5mm pin tool~~ for approval from the NKC.

RECOMMENDATION:

Tech proposed the PTG rods that are used in conjunction with the transfer port checking tool be approved with the following modifications

- 1.The transfer port checking tool needs to be lengthened by 50mm on the handle shank.
- 2.The Leopard rod needs to be shortened 10mm.
- 3.The Comer SW 80 rod needs to be shortened by 10mm

Changes to rule 26.04 Steps 4 and 5 as below

Step 4 Check Exhaust /Inlet Port Split (only applicable to KT100S, KT100J, ARC SPEC 100, ARC A1 & Comer SW80 engines.)

Maintain the 5mm pin in the exhaust port, adjust the head of the gauge unit until it lines up with the second mark then remove the pin from the exhaust port. Turn the engine to TDC and insert the 5mm pin into the inlet port and turn engine slowly until piston comes in contact with 5mm pin which is to be “rolled” between the bottom of the inlet port and the piston skirt to find the lowest position of the piston, the third line on the rod should be above the head of the gauge body or in line. If it is below the piston is too short and does not conform

Step 5 Check exhaust/transfer port split when using a rod with 5 grooves (for rods for KT100S, KT100J, ARC SPEC 100, ARC A1 & Comer SW80 engines) or 4 grooves (for rods for Rotax MAX, JMA, Parilla Leopard, Cheetah SQ & PRD Fireball engines)

After step 3 (with the gauge body still set for the exhaust opening position), rotate the motor to allow the 5mm AKA transfer port checking tool to be inserted into one of the main transfer ports. Bring the piston up to gently hold pressure on the tool at this point the second mark on the piston travel rod must not be visible above the head of the gauge, repeat the process on the opposing transfer port.

REASON: The field testing has been completed and this is an admin tidy up.

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Item 7 - TAS Item 1

Chapter 12 Scrutineering & technical inspection

This Chapter isn't clear about whether the description of scrutineering at Rule 12.01 is valid when a competitor is requested to be re-scrutineered after an incident.

Reason:

The description of scrutineering at Rule 12.01 can be interpreted as 'self-scrutineering' but if something happens to a competitor's kart and he/she is asked to be re-scrutineered, is this valid? If the competitor hasn't initially been 'scrutineered' how can they be 're-scrutineered'?

WITHDRAWN Refer rule 19.11

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Item 8 - TAS Item 2

Rule 12.01 3(iii) presented a kart that appears to comply with the formula.

Reword this rule to take into account the recent addition to Rule 12.01 (in red) that describes 'self-scrutineering' viz 'All licence holders **may** (emphasis added) be required to present their kart,...

Suggested rewording (with addition in bold):

'(iii) Presented a kart, **if requested**, that appears to comply with the formula.'

Reason:

Rewording will qualify previous statement at Rule 12.01 (in red).

RECOMMENDATION: Leave as is

3/3

MOTION LOST

REASON: Rule is OK as is

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Item 9 - TAS Item 5

Rule 25.22. 2 (h) With the exception of repair to fixing points, any attempt to repair damage by cutting, welding or fabrication will automatically remove eligibility of the exhaust unit.

Allow fitment of hardened sleeve into muffler inlet. Sleeve to be retained by three external spot welds. Powermac to fit safety wire retainer near header spring retainer.

Reason:

Additional safety.

MOTION LOST

5/1

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Item 10 - TAS Item 10

Rule 41.30 Exhaust Header Pipe/s and Muffler and Rule 40.09 (same).

As per R25.08, R25.09, R25.22 (1) & (2). Each engine must have its own restrictor and header pipe for sealing. No changing of restrictor or header pipe is allowed.

Consider removal of the requirement to have second header pipe and restrictor for the Midgets and Rookies classes.

Reason:

Cost. Another \$170.00 we are charging new competitors to the sport and for something that appears to have no valid reason.

RECOMMENDATION:

MOTION LOST

5/1

REASON: Rule is fine as it is

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Item 11 – TAS Item 11

Chapter 23 Tyres

Consider removal of wet weather tyres in (~~delete National~~) add SL1A classes for a trial period of time.

Reason:

As the J class is considered a 'beginner' class and suiting the 'budget racer' the cost of wet weather tyres cannot be justified.

Anecdotal evidence in Tasmania suggests many competitors are declining to purchase wet weather tyres as they cannot justify spending the amount required to purchase them. Many can afford the cost, but view the expenditure as unjustified when compared to other purchases – for example, a set of tyres for the family car. The longevity and environmental issues of the tyres are also a concern.

Safety and duty of care is maximised when running karts on a wet surface with slicks because the speed of the karts is greatly reduced and all competitors are on a level playing field with driving skill playing a more important role.

RECOMMENDED: This item to go ahead for all SL1A classes and all relevant chapters and rules need to be changed including rule 25.02(x) E-E

4/2

REASON: Cost and not warranted in these low powered classes.

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Item 12 – VIC Item 2

25.01 (g) Bumper Bars

Add: **DELETE the sentences** These bars and plastic bumpers must be by the original manufacturer and must comply to the drawings attached in all respects. They must not extend outwards any further than 25 mm from the outside of the rear tyre at any time.

RECOMMENDATION: *Replace sentences above with:* They must not extend beyond the outside of the rear tyres/rims at any time dry or wet.

REASON: Safety

Item 13 – National Officials Coordinator Item 1

Proposed re-write to rule 25.17(e) to better reflect the requirement.

Clutch retention devices.

All clutches must have fitted, a guard or retention device to prevent the clutch mechanism from leaving the kart in the event of component failure. The guard or retention device must be “fit for purpose” and bolted to the engine in a minimum of two places.

RECOMMENDATION: accepted

1.CHANGE second sentence to read as above.

2. Rule 12.01d to read:

If the chief scrutineer’s report shows that a driver or kart should be excluded from any event or section of an event on safety grounds a driver cannot lodge a complaint or appeal on that decision.

Motion carried 5/0/1

REASON: to give scrutineer the right to reject a device deemed to be inadequate.

Item 14 – National Officials Coordinator Item 2

Rules 25.22.2(f), 25.23(d) and the first part of 28.33.10 are identical and state;

Any accidental damage to the unit will not incur a technical breach of these rules.

These three rules refer to the National AKA14, Clubman AKA39 and Rotax mufflers, respectively.

Rule 25.09.2 states;

Exhaust gases must all pass through the exhaust header pipe and the muffler and silencer (if mandatory) at all times.

These two rules appear to contradict each other.

If, during a race, an incident partially dislodges the end cap of a muffler, the item will fail post race technical inspection because it breaches rule 25.09.2 above, and the recommended penalty is exclusion from that section of the event.

Rules 25.22.2(f), 25.23(d) and the first part of 28.33.10 excludes the technical breach because the partially dislodged end cap was the result of accidental damage.

I suggest that rules 25.22.2(f), 25.23(d) and the first part of 28.33.10 are re-worded to reflect a clearer and more concise definition of accidental damage.

RECOMMENDED:

1. ALTER rules 25.22.2(f) & 25.23(d) to read :

Any accidental damage (when all gasses still pass through the exhaust system as per rule 25.09.2) will not incur a technical breach of these rules.

2. Reword 25.09.5 to read : Muffler must be instead of: Exhaust system must be.....

Unanimous

REASON: to remove rule contradiction.

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Item 15 – SA Item 1

Rule 25.13 Number Plates:

- (i) Front and rear numbers must be at least 130 mm high and 20 mm wide continuous brush stroke. They must be spaced at least 15 mm apart and have a minimum 15 mm border of the approved background colour around the number.
- (ii) Side pod numbers shall be at least 100 mm high and 15 mm wide continuous brush stroke. They shall be spaced a minimum 15 mm apart and be a minimum of 15 mm from the background edge. Side numbers are required to be mounted on both sides of the kart, and shall be on the outside of the side pods. They must be readable from a height of 3 meters and from a distance of 10 meters.

Amend to:

- (i) Front and rear numbers must be **a minimum of 130 mm high and 20 mm wide and conform to the text font - Arial** . They must be spaced **a minimum of 15 mm** apart and have a minimum 15 mm border of the approved background colour around the number. **For double digit numbers the background colour must be one piece.**
- (ii) Side pod numbers **must be a minimum of 100 mm high and 15 mm wide and conform to the text font - Arial**. They **must** be spaced a minimum 15 mm apart and be a minimum of 15 mm of the approved background colour around the number. **For double digit numbers the background colour must be one piece.** Side numbers are required to be mounted on both sides of the kart, and shall be on the outside of the side pods. **Lap scorers decision re legibility is final.**

Reasons:

Introduce a standard number font that cannot be argued by competitor – (no interpretation required).

Change the wording in both points to be fundamentally the same – to avoid confusion – (point 1 currently says must, while point 2 says shall as an example).

Solid background colour is easier to read and reduces clutter.

Remove high and distance requirement – the numbers might comply, but if the scorers can't read them, it is a useless comment.

RECOMMENDATION: Accept rule.

1. Request a diagram be inserted in rule book with measurements

2. Starter hole cannot interfere with the number plate background

6/0

REASON:

Item 16 – QLD Item 6

Rule 26.04.1Piston Travel Compliance Check as conducted by a State Technical Officer

This method should be available to Technical Inspectors.

Reason:

When the field test is too close to call, or the engine fails the field test, the competitor should be able to request that the test be repeated by this method by the Technical Inspector. This enables the matter to be finalised on the spot, in the same way that a second cc test can be decided. The current method requires referral to the State Technical Officer and ultimately, a tribunal hearing. This process is far too lengthy for club results.

In any case, many engine builders actually use a digital dial travel gauge when setting up an engine. Many Technical Inspectors have tools to use this method.

RECOMMENDATION: Motion Lost

6/0

REASON: Technical Inspectors are only there to check motors, with gauges, for compliance not to measure them.

Item 17 – QLD Item 7

To revoke the Rotax barrel. It is to go back to the AKA for a proper Technical review.

Reason:

The engine should be run as per the international rules for the Rotax Class.

RECOMMENDATION:

That the concerns of improved performance of both barrels has been shown under track and dyno testing. Should the NKC accept the barrels, we recommend:

1. That the barrels are marked on the RHS on the cast area to indicate that they are 09 barrels
2. That karts running the 09 barrels carry an extra 10 kg in weight
3. That new PTG rods be created and new port layout drawings be included in rulebook

6/0/0

REASON: To ensure that the new barrels do not offer an advantage over earlier barrels, forcing the karters into having buying later barrels

Item 18 – QLD Item 8

Chapter 43, part 2, item 2.7 Carburettor.

To have allowable adjustable (extended) low jet mixture screws on Walbro Carby for the Yamaha tag 100 Engine

Reason:

We have competitors not able to restart karts because of too much fuel on the race settings. Being able to adjust the carby is not a performance gain, and will assist karters in this situation.

RECOMMENDATION: MOTION PASSED

6/0

REASON: Common sense.

Item 19 – QLD Item 9

Chapter 26 ENGINE INSPECTION GUIDELINES:

Create New Rule:

That guidelines and instructions as to the conduct of competitors engine inspection and checking by officials be promulgated in rule form in the manual .

Reason:

People with inspection authority are currently **MEASURING** competitors equipment as opposed to inspecting and checking equipment for compliance , the practice of **measuring** and then obtaining that information for personal or other use is becoming rife in areas and needs to be stopped.

RECOMMENDATION: Motion CARRIED

ADD: Preamble to Chapter 26: *Technical Inspectors are only there to check motors, with gauges, for compliance not to measure them.*

6/0

REASON: Self explanatory

Item 20 – QLD Item 10

Chapter 12 Scrutineering / Technical Inspection: Create New Rule:

That a competitor or his representative may witness inspection of his competition equipment when the competitor requests to do so.

Reason:

The practice of denying a competitor to be present during the inspection of his equipment creates an aura of mistrust when this inspection should be open and transparent to all, and the implementation of a specific rule, to give the competitor or his representative the right to be present will eliminate that mistrust.

RECOMMENDATION: Withdraw, refer to Rule 19.12 last sentence

6/0

REASON: Self explanatory

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Item 21 KS

R26.01.4 Reword to read: “Carefully dispense the required volume of measuring fluid into the centre of the CC plug over a time period of between 25 and 35 seconds. Make sure that the fluid is visible within the bore of the CC gauge. If not rotate the crankshaft until level is raised in bore.” **Reason:** This time period provides a reasonable balance of time to allow the “hang up” of fluid on the sidewall of the burette to flow down to the meniscus level. It importantly provides a level of consistency for the benefit of the inspector and the engine builder.

PLUS

R26-01 Reword to read “To be measured by use of a burette of accuracy greater than 0.2 ml per 25 ml graduated capacity. (Note that this is the standard for an B grade burette, whereas an A grade burette is of 0.1 ml per 25 ml capacity). Electronic digital burettes are permitted if their accuracy level is shown to be better than 0.1 ml “

RECOMMENDATION:

Time to be investigated by Tech Committee plus the optional use of digital burettes that offer higher accuracy and no “hang up” issues.

6/0/0

REASON: Self explanatory

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Item 22 KS

R25.17.(k) New rule. "Any accidental engine damage, internal or external, that may possibly breach a class chapter rule is acceptable if it judged by the STO to not offer a performance gain. Timed port edge damage must pass the PTG test. Damaged ports will not be allowed at either State or National championship events". This was discussed and agreed to by the NKC last year, but never made it into the rulebook.

RECOMMENDATION: For review by NKC

6/0

REASON: To tidy up rule

Item 23 KS

R21.01.3 & R21.01. Reword to read "These will be passed on to the National Technical Committee for examination....." ie delete any reference to "other groups or committees" & "other AKA committee groups".

RECOMMENDATION : Reword rule 21.01.3 & R21.01 to read "These will be passed on to the National Technical Committee for examination....." ie delete any reference to "other groups or committees" & "other AKA committee groups".

6/0

REASON: If the Tech people aren't involved in the examination procedure, they will then not know and understand particular issues or details associated with engines or components. Plus, if the expectation that all the tech guys do is to attend race meetings and have no part in the rule formulation and inspection of new equipment then the whole technical committee role should be reviewed

Item 24 KS

R21.01.5. Add "It is not permissible to sell engines when the class is experimental". **Reason:** The experimental class is just that, experimental and as such could be cancelled. Therefore no competitor should be left in a situation where they buy an engine in good faith only to find out later that the class has been cancelled.

RECOMMENDATION: Add to rule R21.01.5 "It is not permissible to sell engines when the class is experimental".

6/0

REASON: The experimental class is just that, experimental and as such could be cancelled. Therefore no competitor should be left in a situation where they buy an engine in good faith only to find out later that the class has been cancelled.

Item 25 KS

R12.01 (f). New rule. “The responsibility for the safety of the kart and its adherence to the rules at all times belongs to the competitor, not the scrutineer who has absolutely no responsibility in this regard”. **Reason:** To clearly spell out the responsibility of the karter as distinct to the scrutineer.

RECOMMENDATION: New rule. R12.01 (f) “The responsibility for the safety of the kart and its adherence to the rules at all times belongs to the competitor,
6/0

REASON: To clearly spell out the responsibility of the karter

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Item 26 KS

Chapter 44. Make a note that the SQ Cheetah engine cylinder must have “machined scallops” in the roof of the two exhaust ports and two main transfer ports.

RECOMMENDATION: Page 259 That note to be put in with diagram “drawing of cylinder development”

REASON: To make clearer.

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Item 27KS

Chapter 26 ..AKA arrange for each club to have an exhaust rod for the AKA controlled mufflers

Recommendation: That exhaust rods are made available for AKA 14 and AKA 39 mufflers.
6/0

Reason: So on field testing can be achieved at race meetings.

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Item 28 KS

Chapter 28

Recommendation: Fix up chapter 28 where Addendum #45 from 2008 has been partially put in the manual.

6/0

Reason: The addendum wasn’t implemented into the 2009 rule book.

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Item 29KS

Fix up Chapter 35 .20 Intake silencer ... Rotax only make one filter – a fine one – the other is an aftermarket type ... the rules say must use a original **washable air cleaner**.

Recommendation: Reword to include the word original.

6/0

Reason: To clarify rule.

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Item 31 KS

Chapter 35 – Junior Max must use genuine gaskets ..the white gasket is an aftermarket type and **NOT** rotax .

Recommendation: Check if promoter has an objection to after market gaskets similar to Formula Rotax 125.

6/0

Reason: To allow squish to be optimised, gaskets should be a non tech item.

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Item 32 KS

35.19 – What is the clutch test ???

Recommendation: Change to include the procedure as shown in rule 25.17(d).

5/1

Reason: To clarify the test method.

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Item 33 KS

Red Clutch, Ken Seeber left the room. Chris Dell spoke on the clutch.

Technical Inspectors inspected the Red Clutch

Motion: The Technical Committee approved the Red S Taperlock Clutch.

Recommendation: To be forwarded to the NKC.

4-1-1

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General Business

Item 1

Cool Suits

Recommendation: Cool suits must be a fully sealed self contained body suit, concealed within the race suit.

Item 2

Air Tubes

Recommendation: Add new rule Rule 25.24.1(q)

It is permissible and advisable to secure the air inlet tubes into the air induction silencer body with an adhesive.

To be implemented immediately.

6/0

Reason: Self explanatory.

Item 3

Carburettor

The technical committee discussed carburettors.

Item 4

Preambles for Technical Issues.

The technical committee to supply wording.

Item 5

Rules 45.18(1) is duplicated within rule 45.18(5).

Recommendation: 45.18 remove all text after point 45.18.(5)

6/0

Reason: Tidy Up.

Item 6

Rules 45.18(1) is duplicated within rule 45.18(5).

Recommendation: 45.18 remove all text after point 45.18.(5)

6/0

Reason: Tidy Up.

Meeting closed