



16

SPEEDWAY

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APPLICATION OF CHAPTER

The Rules set out in this chapter are for the discipline of Speedway.

SECTION 16A: AUSTRALIAN CHAMPIONSHIPS**16.1 CATEGORIES FOR SENIOR AUSTRALIAN SPEEDWAY CHAMPIONSHIPS**

SENIOR SPEEDWAY
Solo Individual
Under 21
Sidecar
Pro ATV
Open ATV

16.2 CATEGORIES FOR JUNIOR AUSTRALIAN SPEEDWAY CHAMPIONSHIPS

AGE RANGE	CAPACITY/CLASS
9 to under 16 Individual	125cc Solo
9 to under 16 Teams	125cc Solo
13 to under 16 Individual	250cc Solo
11 to under 16 - Rider 9 to under 16 - Passenger	250cc Sidecar

16.3 CHAMPIONSHIP MEDALLIONS AND TROPHIES**16.3.1 Individual Competitions**

16.3.1.1 MA medallions will be presented to the 1st, 2nd and 3rd placed riders in each Championship solo class and 1st, 2nd and 3rd placed rider and passenger in the Championship sidecar class at all Australian Championship meetings.

16.3.2 All Competitions

16.3.2.1 At least the first three (3) place getters in any Australian Championship event must be awarded a sash or similar permanent memento of the achievement by the Promoter, irrespective of MA awards.

16.3.2.2 Medallions and points will be awarded in Australian Speedway Championships where there are:

- Senior & Under 21 Solo 16 starters
- Senior Sidecar 16 starters
- Junior 250cc Solo 13 starters
- Junior Sidecar 9 starters
- Junior 125cc Solo 16 starters
- Junior 125cc Solo Teams 14 starters

16.3.3 Duke of Edinburgh Trophies

16.3.3.1 The Duke of Edinburgh Trophies will be inscribed each year with the names of the winners of the highest capacity solo and sidecar Australian Championship for the Speedway.

16.3.3.3 The winners of the Duke of Edinburgh Trophy will be entitled to have a photograph taken of them with the trophy.

16.3.3.4 The trophy will be held by MA.

SECTION 16B: COMPETITION CLASSES**16.4 JUNIOR COMPETITION CLASSES**

AGE RANGE	CAPACITY/CLASS
4 to under 9	50cc 2-stroke & 4-stroke Solo (Non-competitive)
7 to under 9	50cc 2-stroke & 4-stroke Solo
7 to under 9	125cc single cylinder 4-stroke Solo
9 to under 16	125cc single cylinder 4-stroke Solo
13 to under 16	250cc Solo
14 to under 16	350cc Solo
11 to under 16	250cc 4-stroke Sidecar Rider
9 to under 16	250cc 4-stroke Sidecar Passenger

SECTION 16C: COMPETITION RULES

16.5 ELIGIBILITY: GENERAL

16.5.0.1 No person may participate in an Australian Championship unless and until:

- a) That person's protective clothing/equipment and machine have been examined and approved by the Scrutineer for that meeting, or
- d) If stipulated in supplementary regulations, the person provides the Scrutineer with a signed checklist that the protective clothing/equipment and machine have been self-scrutineered.

16.5.0.2 At scrutineering, competitors must produce documents or other evidence as required to verify engine and frame identity.

16.5.0.3 The onus of proving that a competitor, and the competitor's machine and protective clothing/equipment, are eligible to compete, is on the person seeking to prove it.

16.5.0.4 Where any Rule prohibits the modification of any machine or class of machines, that machine or that class will be deemed to have been modified if any part or parts thereof have been altered from the machine or class as manufactured by the machine manufacturer.

16.5.0.5 In the interpretation of any Rule relating to the design requirements for any machine or class of machines, reference may be made to relevant diagrams appearing in these Rules.

16.6 ELIGIBILITY: JUNIORS

16.6.1 Junior Competitions

16.6.1.1 Juniors only to compete in Junior competitions

16.6.1.2 In Junior competition,

- a) A rider's age on 1st January will determine their age for competition purposes for that year,
- b) A rider may move to the next higher age class when they become eligible by reason of celebrating a birthday, but once the rider moves to that higher age class, they may not move back to the lower age class,
- c) Any points earned by the rider

in the lower age class cannot be transferred when the rider moves to the higher age class,

- d) This GCR applies to all riders up to and including the age of 16 years.

16.6.1.3 No person who is unable to lift his or her machine unaided from the horizontal to the vertical may compete in any Junior competition.

16.6.1.4 Subject to GCR 16.6.1.2 a), a Junior who is under the age of 9 years may compete on a 50cc automatic machine despite being unable to lift the machine unaided from the horizontal to vertical.

16.6.1.5 No applicant will be issued with their first competition licence if they are under the age of 7 years,

16.6.1.6 Unless otherwise permitted in writing by the Relevant Controlling Body, for any event there must be no greater age variation between competitors than four (4) years,

16.6.1.7 In the 4 to under 9 years 50cc Non-competitive class, all riders are entitled to receive a prize or award of the same size/value.

16.6.1.8 Subject to the following two GCRs, a Relevant Controlling Body may permit age group racing, graded racing, or a combination of both.

16.6.1.9 Age group racing: Only competitors in the same age groups may compete against each other.

16.6.1.10 A Relevant Controlling Body may grade Junior competitors according to their respective skills.

16.6.1.11 Any person participating in a non-competition activity using 50cc Machines (4 to Under 9 years), is not eligible to participate in any competition class at the same event.

16.6.2 Junior Speedway Endorsements

16.6.2.1 Junior endorsements, from an MA licenced coach, will be issued for:

- 50cc
- 125cc 4-stroke
- 250cc 4-stroke
- 350cc 4-stroke
- Speedway
- Sidecar Rider 250cc 4-stroke
- Sidecar Passenger 250cc 4-stroke

16.7 GENERAL RULES**16.7.1 Homologation**

16.7.1.1 For any competition, MA may require that any machine, or any part of a machine, including tyres, be homologated. For homologation details contact MA.

16.7.2 Helmet Cameras

16.7.2.1 Helmet cameras may be fitted providing the mounting to the helmet will allow the camera to detach if impacted upon and the attachment method must not impair the integrity or operation of the helmet.

16.8 PROTECTIVE CLOTHING AND HELMETS

16.8.0.1 No competitor may practice, start or compete in any Speedway competition unless wearing the protective equipment and clothing as outlined in Appendix A: Protective Clothing and Equipment.

16.9 RIDER IDENTIFICATION**16.9.1 Helmet Colours**

a) Speedway competitors must wear helmet colours as prescribed in the program for the competition, selected from the following table and subject to the following sub-Rules:

- b) At all race meetings, competitors must wear racing numbers allocated by the Relevant Controlling Body as follows:
- i) A number worn on a competitor's back which must:
 - Measure 230mm x 230mm,
 - For solo riders, be black, with a white background,
 - For sidecar riders, be black with a yellow background,
 - Have a maximum background area of 300mm².
 - ii) A number worn on a competitor's front must:
 - Measure at least 100mm x 80mm,
 - For solo riders, be black, with a white background,
 - For sidecar riders, be black with a yellow background,
 - Be worn on the left breast.
- e) Not have advertising on clothing within 25mm of number backgrounds.

RACE	RED	BLUE	WHITE	YELLOW	YELLOW & BLACK	GREEN	ORANGE	BLACK	BLACK & WHITE
Scratch 4 Riders	✓	✓	✓	✓	✓	X	X	X	X
Scratch 6 Riders	✓	✓	✓	✓	✓	✓	✓	X	X
Handicap	✓	✓	✓	✓	✓	✓	✓	✓	✓

NOTE: In table 16.9.1 ✓ means available, X means unavailable.

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16.9.1.1 The helmet colour of each competitor must be clearly visible to the Referee, the Judge and the Timekeeper throughout each event.

16.9.1.2 A competitor who has a helmet of the specified colour for an event may wear the helmet in that event without a helmet cover.

16.10 RACE MEETING PROTOCOLS

16.10.0.1 Competitions may be individual events or team events.

16.10.1 Flags and Signals

16.10.1.1 The minimum dimension of flags must be 600mm x 600mm.

16.10.1.2 All control lights:

- a) Must be visible to all competitors,
- b) May only be operated by the Referee or the Referee's nominee.

16.10.1.3 In addition to, or in substitution for the flags and lights applicable to other disciplines the following signals apply:

- a) Start - Green or National flag,
- b) Race stoppage - Red flag,
- c) Last lap - Yellow flag with black diagonal cross 50mm wide.
- d) Exclusion- Black flag, light or disc, indicating competitor's number or helmet colour.

16.10.2 Change of Machines

16.10.2.1 Competitors must use the machine presented at scrutineering. The machines that go through machine examination must match frame and engine numbers used by the rider in said meeting.

16.10.2.2 Subject to the supplementary regulations, a competitor may compete on a machine other than that described in the competitor's entry application but,

- a) **Must inform a key official of any change, and**
- b) **May not, in any heat or Final, use a machine on which another rider has qualified for the same heat or Final.**

16.10.3 Identification of Machines

16.10.3.1 All machines must have the competitor's name displayed on the rear mudguard,

seat or valance, in letters with a minimum height of 25mm.

16.10.3.2 All sidecars must have the competitor's race number on the side wing of the machine. The number must be a minimum 150mm high with a contrasting background.

16.10.4 Log Books

16.10.4.1 Each competitor must possess a prescribed log book which must:

- a) Be produced by the competitor at Scrutineering,
- b) Be available for production at any other time during the meeting,
- c) Contain provision for the following entries:
 - i) The meeting date and place,
 - ii) The Scrutineer's report as to any defects or faults in the machine,
 - iii) Any penalties imposed by the Referee.

16.10.4.2 A competitor must correct any machine defects noted in the log book before being permitted to compete on that machine again.

16.10.5 Measurement at Meetings

16.10.5.1 A Referee of a meeting may direct the measurement of the capacity of the engine of any machine, to be carried out at the conclusion of the meeting. Until the measurement is completed the machine must remain under the control of the Relevant Controlling Body.

16.10.5.2 If an engine is measured at the request of a rider or entrant, that rider or entrant is liable for the cost of the measurement.

16.10.6 Measurements: All Australian and State Championship Events

16.10.6.1 All machines must have provision for the placement of sealing wire.

16.10.6.2 An entrant may request that the entrant's machine be measured and sealed before the event. As soon as practicable after receiving the request the measurer for the event must measure and seal the machine. Any machine examined under this sub-rule may, on application by the entrant, at the discretion of the measurer, be exempted from further examination at the event.

16.10.6.3 The 1st, 2nd, 3rd and 4th placed machines must be impounded for a period of 30 minutes immediately following the event, pending any protest, and the event result will be provisional,

- a) At the conclusion of that period, if no protest is received, the result will be final,
- b) If the machines are to be ridden in another event within that period, they must be sealed before being returned to the competitor for that event,
- c) If no protest is received within that period, the seals may be removed,

16.10.6.4 Any machine sealed as the result of a protest may only be measured by a measurer. All measurer's reports, together with the seals, must be delivered to the Relevant Controlling Body within 21 days after the event,

16.10.6.5 No prize monies may be paid until measurer's reports and seals are received or the expiration of 21 days whichever occurs first.

16.10.7 Competitors

16.10.7.1 A competitor who has entered for a meeting may practice on a machine on the track before the commencement of the meeting where the competitor has:

- a) Not ridden on the track previously,
- b) Had an accident, which has damaged the machine so as to require major repairs to the frame.

16.10.7.2 The Referee ~~may~~ **must** require ~~all:~~ **all:**

- a) **Newly licenced competitors, both Junior and Senior, moving to Senior 500cc competition, to be endorsed by a licenced MA coach;** or
- b) Competitors whose abilities are not known to the Referee, to submit to such test as the Referee considers proves that the competitor is able to perform safely in competition.

16.10.8 Radio Communication

16.10.8.1 Radio communications with riders is not allowed, and will be classed as outside assistance.

16.10.9 Juniors

16.10.9.1 Where a Junior track is situated on the infield of a Senior track, a Junior Speedway event may be conducted in conjunction with a Senior meeting.

16.10.9.2 Demonstrations, Coaching and Practice:

- a) A Junior licence holder who has turned 15 years of age and in the opinion of an MA accredited coach is capable of handling a 500cc solo Speedway machine may give a demonstration during a break in the Senior program. Only one rider in this category is allowed on the track at a time,
- b) A Junior licence holder who has turned 12 years of age and 9 months will be allowed to be coached/ practice on a 250cc solo Speedway machine. Only one rider in this category is allowed on the track at a time,
- c) A Junior licence holder who has turned 13 years of age and 9 months will be allowed to be coached/ practice on a 350cc solo Speedway machine. Only one rider in this category is allowed on the track at a time.

16.10.9.4 Junior Sidecar competitors on Junior Sidecar machines are allowed to compete on Senior tracks to a maximum length of 450 metres. Rider and passenger must be aged 14 to 16 years of age. Riders must be assessed by an accredited coach prior to competition.

16.10.10 Late Arrival

16.10.10.1 The Referee may refuse permission to compete to a competitor who arrives at the venue for a meeting later than the arrival time prescribed in the supplementary regulations.

16.10.11 Sidecar Passenger

16.10.11.1 In the event that the nominated sidecar passenger is unable to continue during the meeting, they may be replaced providing the new passenger signs the relevant **indemnity** forms and is authorised by the Clerk of Course and Referee prior to taking part.

16.10.12 Starts

16.10.12.1 Competitors must be ready for the start when called upon to do so by the relevant official.

- a) The Referee will sound a two minute warning signal and illuminate the amber flashing light (if available) in the pit area,
- b) At the order of the Clerk of Course, competitors must leave the pit area together and proceed by the shortest practical route to the starting tapes and there stop under the control of the starting Marshal,
- c) Any competitor not ready to start at the expiration of two minutes after the signal may be excluded from the race,
- d) A competitor so excluded may be replaced by a reserve,
- e) Unless otherwise directed by the Referee, the time between the finish of one race and the start of the next will not exceed five minutes.
- f) In non-Championship events, if a rider is excluded for the two minute rule, or a tape touching offence, they may start the re-run from 15 metres back, and move to gate position 4. All other riders will move to the inside positions. In the event of two riders having been excluded, they will both move 15 metres back and start from positions three and four.
- g) For riders not ready to start at the expiration of the two minutes (after warning signal has been sounded), riders have 30 seconds to move to the 15 metre line for the race start.
- h) For touching the tape, the Referee will decide the time allowed for the race re-start.

16.10.12.2 Competitors who are members of the same team or pair may exchange their starting positions.

16.10.12.3 Standing starts, controlled by the Referee, are to be used.

16.10.12.4 For other than handicap starts:

- a) Competitors must form up in the

prescribed order behind the tapes,

- b) Once all competitors are correctly positioned and stationary, a green light or flag is shown,
- c) The starting Marshal then leaves the area of the tapes,
- d) After a pause of not less than two seconds, the Referee then releases the gate to start the race,
- e) The first competitor whose machine touches one or more of the tapes during the pause before the gate is raised will be excluded and the event will be re-started; **except in the case of non-Championship events where the Referee may allow the rider to start the re-run from gate 4, and 15 metres back,**

16.10.12.5 For handicap starts in Speedway:

- a) Competitors must form up at their handicap marks on indication by red light or red flag,
- b) Once all competitors are correctly positioned and stationary, the red light is extinguished or flag withdrawn to indicate that a start is imminent,
- c) After a pause, the Referee then shows a green light or flag to start the race,
- d) The first competitor whose machine crosses the applicable starting line in the pause before the green light or flag is shown will be excluded and the event will be re-started; **except in the case of non-Championship events where the Referee may allow the rider to start the re-run from gate 4, and 15 metres back,**
- e) A machine is deemed to have crossed the starting line when its rear wheel axle passes over the line.

16.10.12.6 A race may be re-started if, in the opinion of the Referee:

- a) Any aspect of the start is unfair or incorrect,
- b) The actions of any competitor have given that competitor an unfair advantage over another.

16.10.12.7 A competitor may not receive outside assistance after the showing of the green

light or flag, or, in handicap events, the red light or flag.

- 16.10.12.8 A competitor excluded under the preceding Rule in:
- Individual contests; may be replaced by a reserve,
 - Teams contests; may be replaced by a track reserve,
 - Test and teams matches; may be replaced by a team reserve,

And must leave the track without delay to return to the pit.

16.10.13 Leaving the Course

- 16.10.13.1 A rider whose machine crosses the inner edge of the track with two wheels must be excluded unless, in the opinion of the Referee, the action was taken in the interest of safety of other riders or the rider was forced off course by another rider.
- 16.10.13.2 When tracks do not have an outer fence and are marked by other means, a competitor will be excluded if one wheel crosses the outer marker.
- 16.10.13.3 A rider who returns to the track and continues to race when not entitled to shall be excluded.

16.10.14 Retirements

- 16.10.14.1 A competitor who, in the opinion of the Referee:
- Has not completed the race distance within three minutes of the start,
 - Has not started the last lap before the winner has crossed the finish line;
- will be deemed to have retired from the race.
- 16.10.14.2 If the chequered flag has not been shown after the race distance has been completed by the leading competitor, it will be deemed to have been shown and that competitor will be declared the winner.

16.10.15 Stopping Events

- 16.10.15.1 Where an incident causes an event to be stopped, the Referee may declare the event complete if at least 75% of the event distance or time, whichever is the less, has been run.
- 16.10.15.2 The results so declared will be based on the placings at the finish line of the last full

lap completed before the incident but will exclude those competitors who:

- Caused the incident, or
- Having been involved in the incident, could not continue in the event.

16.10.16 Reserves

- 16.10.16.1 The Referee may direct a reserve to replace a competitor who has failed to start in an event.
- 16.10.16.2 Reserves will be used in rotation.
- 16.10.16.3 A reserve is not entitled to any points towards any subsequent race but must be paid any prize monies to which the reserve would have been entitled if the reserve had been an original competitor.
- 16.10.16.4 A reserve who replaces an excluded competitor in pairs or team races may use:
- The reserve's original start position,
 - The competitor's original start position.

16.10.17 Re-Runs

- 16.10.17.1 When a chequered flag is displayed before the race distance has been completed by the leading competitor, the Referee must order a re-run.
- 16.10.17.2 In a re-run:
- Competitors must start from their original starting positions, and
 - Reserves must occupy the position of the replaced competitors.
- 16.10.17.3 Any competitor who has failed to start in or been excluded from any race may not compete in the re-run.
- 16.10.17.4 Any competitor who has retired from any race may not compete in the re-run unless, in the opinion of the Referee, the competitor retired in the interests of safety or after being fouled.

16.10.18 Scoring

- 16.10.18.1 In every heat, unless otherwise prescribed by the supplementary regulations:
- The winner receives three points,
 - The 2nd receives two points,
 - The 3rd receives one point.
 - The 4th receives zero points
 - Zero for last place is better than M,R,F,T,E and N where:

- O = For last place,
- M = Excluded for two minute rule,
- R = Retired from the race,
- F = Fall but not excluded,
- T = Excluded for false start,
- E = Excluded,
- N = No start.

16.10.18.2 In individual events, ties will be resolved by a run-off between the tied competitors.

16.10.18.3 Alternatively, in individual events ties may be resolved as follows:

- a) Precedence will be given to the riders (tied on points) having the most 1st, 2nd, 3rd, 4th placings (a 'O' for last place is better than being disqualified);
- b) If the tie still persists and involves only two riders, precedence will be given to the better placed rider in the heat or heats where the two riders met;
- c) If the tie still persists and involves more than two riders, it shall be checked whether there is a possibility to determine a proper precedence (e.g. three riders tied on points: A, B, C: rider A has beaten rider B, rider A has beaten rider C, rider B has beaten rider C. Precedence will be best position for rider A, then rider B and rider C respectively);
- d) If solutions a), b), and c) cannot resolve the tie, then a run-off will take place.

16.10.18.4 In team events, ties will be resolved by a run-off with one competitor from each team.

16.10.18.5 All competitors taking part in a run-off in the event of tied scores must be paid prize money for the run-off.

16.10.19 Dead Heats

16.10.19.1 In the event of a dead heat between two or more competitors, the combined points will be shared between the tied competitors.

16.10.20 Pit Control

16.10.20.1 No persons may be or remain in the pits during a meeting other than:

- a) Competitors,

- b) Competitors' mechanics,
- c) Police, fire or medical staff,
- d) Officials,
- e) Others authorised by the Clerk of Course.

16.10.20.2 The pits will be under the control of the Clerk of Course who will be assisted by a Pit Marshal:

- a) The Pit Marshal may report to the Clerk of Course any person who breaches any rule or disobeys any instruction given by the Clerk of Course or Pit Marshal,
- b) The Pit Marshal may report to the Clerk of Course any person as to that person's mode of dress or behaviour,
- c) The Clerk of Course may eject any person who, in their opinion is behaving in an unsafe or unsatisfactory manner.

16.10.20.3 Mechanics must not enter the racing area unless authorised to do so by the Clerk of Course for the purposes of:

- a) Push starting the competitor's machine,
- b) Attending to the accident damaged machine of the relevant competitor.

16.10.20.4 A mechanic may not attend any riders' briefing without the permission of the Referee.

16.10.20.5 It is recommended that mechanics be dressed in pit uniform for a specific rider, team, factory team, or dress in clean overalls. A promoter may specify pit attire.

16.10.21 Payments

16.10.21.1 Prize monies and travelling expenses must be prescribed in the supplementary regulations.

16.10.21.2 All travelling monies must be paid in cash unless the competitor otherwise agrees.

16.10.21.3 A competitor will be deemed to have qualified for starting money if, after receiving the starting signal, the competitor moves forward under power from the starting position.

16.10.21.4 In races other than handicaps, a competitor who defeats a competitor of a higher grade is entitled to prize monies at the level of the defeated rider.

16.10.22 Referee

16.10.22.1 In Speedway, the functions and authority of Steward and Clerk of Course, as described in Chapter 2 will be exercised.

16.10.22.2 The Clerk of Course shall be responsible to the Referee:

- a) For the conduct of the meeting and its administration in accordance with these regulations and the official program,
- b) To put into effect all instructions given by the Referee received verbally or in writing, directly or by any other means,
- c) Ensure that all the necessary officials, riders and spectators are informed without delay of the Referee's decision,
- d) To prevent any person from communicating directly with the Referee, including communicating by telephone, during the meeting without the Referee's permission,
- e) Must ensure that protests are in order and accompanied by the appropriate fees before passing them to the Referee,
- f) The Clerk of Course may fine or reprimand a competitor, mechanic or official in the pit area. The Clerk of Course must notify the Referee of any penalties handed out during the meeting.

Thinking about Rule changes?

If you believe a rule should be changed or a new rule added, you can have your say by working through your Club to propose amendments and/or additions.

Proposals for changes can be sent to your SCB or direct to MA. The details are at the front of this book.

The most successful applications are when the proposer includes the new wording for an existing rule, where a new rule should sit in the structure of this book, and **must** include a rationale on why the rule should be changed or added.

16.11 RACE MEETING PROTOCOLS: AUSTRALIAN SPEEDWAY CHAMPIONSHIP

16.11.1 Applications to Conduct

16.11.1.1 Applications for the conduct of Australian Championships must be received by MA by February 1st in the preceding year.

16.11.1.2 The permit fees for Australian Speedway Championship events be set and released by November 30th of the previous year.

16.11.2 Dates for Conduct

16.11.2.1 Unless otherwise determined by the Speedway Commission (hereafter referred to as the 'Commission'), the Australian 500cc Solo Championships must be run in January or February of each year and the Australian Sidecar Championships to be run on a date at the discretion of Promoter and Commission.

16.11.3 Selection Committee

16.11.3.1 The selection Committee will be the Commission which must:

- a) Forward the competitor and reserve selections to MA,
- b) Allow MA will notify the competitors and the Promoter of the selections.

16.11.4 Selection and Qualification

16.11.4.1 To qualify for selection for an Australian Championship event, a competitor must apply in writing no less than 30 days prior to the event, and:

- a) Be the current Australian Champion, or a Top 4 rider in the previous Australian Championships, or a current GP rider, or
- b) Be the best performing competitor in the State Championship of the State which issued the competitors' licence, held a minimum of 30 days prior to the Australian Championship.
- c) Competitors who are not Australian residents may nominate to compete in the Australian Speedway Championship, and will be considered by the Speedway Commission for inclusion.

16.11.4.2 Any State unable to conduct a Championship of 12 entries or more prior to the close of entries in the

supplementary regulations for an Australian Championship may nominate one competitor for the Speedway Commission's approval to represent that State. The nominated competitor may be the competitor selected in the Australian Championship. If the State Championship is held between the close of entries in the supplementary regulations and the relevant Australian Championship the State title holder may not be eligible for selection.

16.11.4.3 The team for a State will be selected by that State's Speedway sub-Committee.

16.11.4.4 The selected competitors must notify the Promoter of their acceptance of the conditions and the anticipated time of arrival at the track concerned.

16.11.5 Alternate Qualification

16.11.5.1 A Promoter may run qualifying and, if so:

- a) The Promoter must obtain the permission of MA,
- b) The Australian Champion automatically qualifies for the Australian Championship meeting,
- c) Current State Champions are automatically seeded into qualifying meeting in the event they are overlooked for a direct transfer into the Championship,
- d) After nominations have closed the Promoter and the Commission will decide on a race format (to be put to the Board for its consideration),
- e) If more competitors have nominated for the meeting than positions are available, the Commission may select to compete those competitors it considers appropriate based on merit.

16.11.6 Practice

16.11.6.1 Practice must be conducted for all Australian Championships.

16.11.6.2 Practice times and format must be stipulated in the supplementary regulations for each Championship.

16.11.7 Examination Before an Event

16.11.7.1 Before an event, the Promoter must set a time and place, giving reasonable notice

to every competitor, for:

- a) Identification and examination of licences,
- b) Examination of motorcycles,
- c) Noise testing,
- d) Checking of helmets and protective clothing, and
- e) Such other examinations as are necessary.

16.11.7.2 The Referee may forbid:

- a) Any competitor who does not comply with the Rules mentioned above, or
- b) Any competitor who can be a danger to other participants or to spectators, from participating in any practice or event at the meeting.

16.11.8 Carburettor Examination

16.11.8.1 All solo machine carburettors must be checked and measured before the meeting.

16.11.8.2 During the meeting carburettors may be measured.

16.11.9 Twenty Two Race Format

16.11.9.1 There will be 20 heats and an A & B Final.

16.11.9.2 The three competitors who accumulate the most points during the course of the heats will compete in the A Final.

16.11.9.3 There will be a B Final made up of the riders who finish 4th to 7th. The winner of the B Final will go to the A Final.

16.11.9.4 Starting positions will be offered to the riders in descending order of points accumulated in the heats. In the case of riders for the Final being tied on points, gate choice will be determined by count back, where 0 is better than M,R,F,T,E and N where:

M = Excluded for 2 minute rule,

R = Retired from the race,

F = Fall but not excluded,

T = Excluded for false start,

E = Excluded,

N = No start.

16.11.9.5 In case of riders being tied on points for the A & B Final, all Final places will be determined by count back.

16.11.9.6 There must be 16 competitors with the heat format according to the following table:

HEAT NUMBER	HELMET COLOUR			
	Red (Inside)	Blue	White	Yellow/Black (Outside)
Competitors Starting Numbers				
1	1	2	3	4
2	5	7	6	8
3	10	11	9	12
4	15	14	16	13
5	13	1	5	9
6	14	10	2	6
7	11	15	7	3
8	4	8	12	16
9	6	16	1	11
10	12	5	15	2
11	8	9	3	14
12	13	4	10	7
Interval				
13	7	12	14	1
14	2	13	8	11
15	16	3	10	5
16	9	6	4	15
17	1	8	15	10
18	9	2	7	16
19	3	12	13	6
20	5	14	11	4

16.11.10 Twelve Race Format

16.11.10.1 As an alternative to the preceding GCR there may be a 12 race format of three laps, with 18 competitors plus reserves, according to the following table:

HEAT NUMBER	HELMET COLOUR					
	Red (Inside)	Blue	White	Yellow/Black	Green	White/Black (Outside)
Competitors Starting Numbers						
1	1	2	3	4	5	6
2	7	8	9	10	11	12
3	13	14	15	16	17	18
4	3	17	1	15	8	10
5	16	12	5	2	9	13
6	4	6	11	18	14	7
7	18	15	7	12	2	1
8	5	10	17	11	16	4
9	14	9	13	6	3	8

- 16.11.10.2 The Twelve Race format must be used where the track is over 450 metres in length and is licenced for six competitors.
- 16.11.10.3 In races 10 and 11, the highest 12 point scorers in heats 1 to 9 must participate as follows:
- Race 10: Competitors finishing in 1st, 4th, 5th, 8th, 9th & 12th places,
 - Race 11: Competitors finishing in 2nd, 3rd, 6th, 7th, 10th & 11th places,
 - Final: The highest six point scorers.
- 16.11.10.4 Any vacancies for races 10 and 11 must be filled from those competitors who were placed 13th or lower after heats 1 to 9 in descending order of point scores.
- 16.11.10.5 Any vacancies for the Final must be filled from those competitors who were placed 7th or lower after races 10 and 11 in descending order of point scores.
- 16.11.10.6 Starting positions for races 10 and 11 must be balloted in the presence of the Referee or Clerk of Course.
- 16.11.10.7 Starting positions for the Final will be offered to the six competitors in descending order of points accumulated in the heats. In the case of competitors for the Final being tied on points, gate choice will be determined by countback.
- 16.11.10.8 In the case of competitors being tied on points at the conclusion of heats:
- Finalists will be determined by run-off,
 - Other places will be determined by countback.
- 16.11.10.9 The finishing order of each competitor in the Final will determine Championship placings. After completion of the series if any of the four point scorers are tied the respective positions shall be decided by a run-off.

16.11.11 Thirteen Rider Format

HEAT NUMBER	HELMET COLOUR			
	R	B	W	Y
1	1	2	4	10
2	2	3	5	11
3	3	4	6	12
4	4	5	7	13
5	5	6	8	1
6	6	7	9	2
7	7	8	10	3
8	8	9	11	4
9	9	10	12	5
10	0	11	13	6
11	11	12	1	7
12	12	13	2	8
13	13	1	3	9

16.11.12 Prize Money

- 16.11.12.1 Prize money for reserve riders will be determined by the Promoter and the selection committee and the amount will be included in the supplementary regulations.
- 16.11.12.2 Prize money will be included in the supplementary regulations.

16.12 RACE MEETING PROTOCOLS: AUSTRALIAN TEAM CHAMPIONSHIPS

16.12.1 Qualifying

- 16.12.1.1 Teams Championships will consist of qualifying rounds run in each State and one Final.
- 16.12.1.2 Seven teams will take part in each meeting.
- 16.12.1.3 One team from each State will qualify. Should a State not have qualified competitors, or decide not to nominate a team, the extra team required will be selected by the Commission based on performance during any qualifying rounds.
- 16.12.1.4 The Commission must send the names of the seven qualifying teams to the Promoter of the event as well as the Relevant Controlling Body.

16.12.1.5 For Championship qualifying rounds the State Controlling Body holding qualifying must, within 48 hours after the meeting, send the results to MA and to the State Controlling Body organising the Final.

16.12.2 Twenty-One Heat Format: Teams

HEAT NUMBER	HELMET COLOURS			
	Red (Inside)	White	Blue	Yellow/Black (Outside)
Competitors Starting Numbers				
1	1	3	2	4
2	5	7	6	8
3	9	11	10	12
4	13	1	14	2
5	3	5	4	6
6	7	9	8	10
7	13	11	14	12
8	1	5	2	6
9	7	3	8	4
10	9	13	10	14
11	11	1	12	2
Interval				
12	3	9	4	10
13	5	11	6	12
14	13	7	14	8
15	1	9	2	10
16	11	3	12	4
17	5	13	6	14
18	7	1	8	2
19	3	13	4	14
20	9	5	10	6
21	11	7	12	8

16.12.2.1 This format allows members of the same team to change positions at the starting gate.

16.12.3 Heat Format: Teams

16.12.3.1 There must be 14 heats with three teams per heat according to the following table:

HEAT	HELMET COLOURS					
	Red	Blue	White	Yellow	Green	Black & White
	Competitors Starting Numbers					
1	1	10	7	2	9	8
2	3	6	1	4	5	2
3	9	14	3	10	13	4
4	5	12	9	6	11	10
5	13	8	5	14	7	6
6	7	4	11	8	3	12
7	11	2	13	12	1	14
	Interval					
8	10	1	2	7	8	9
9	6	3	4	1	2	5
10	14	9	10	3	4	13
11	12	5	6	9	10	11
12	8	13	14	5	6	7
13	4	7	8	11	12	3
14	2	11	12	13	14	1

16.12.3.2 The above format must be used where the track is over 400 metres in length and is licenced for more than four competitors.

16.12.3.3 Heats must be as follows:

- There must be seven teams with each team having six heats and each team meeting all other teams twice,
- Between each heat there must be either another event or a four minute break,
- Competitors cannot change gate position in this format.

16.12.4 Ties

16.12.4.1 A tie for 1st, 2nd or 3rd places will be resolved by one heat with one rider from each tied team taking part.

16.12.5 Finals

16.12.5.1 If one or both competitors of a team who qualify for the Final cannot participate they may be replaced by competitors nominated by the selection committee.

16.12.5.2 If a qualified team is not present, its place in the Final will be taken by the team which has scored the next highest number of points in the previous meeting.

16.12.5.3 Inability to take part in the Final must be notified to the Relevant Controlling Body as soon as possible.

16.12.5.4 When competitors of the same team finish 1st, and 2nd or 2nd and 3rd in a heat, the competitor finishing 2nd or 3rd respectively will be awarded a bonus point, entitling that competitor to remuneration, but the point will not be counted towards the heat or in the Finals.

16.13 RACE MEETING PROTOCOLS: TEST MATCHES

16.13.1 Definition

16.13.1.1 A test match is an International event between two or more countries appointed by their respective FMNs.

16.13.2 Format

16.13.2.1 There must be 18 heats in a format according to the following table:

HEAT NUMBER	HOME TEAM			
	Red	Blue	White	Yellow & Black
1	1	2	1	2
2	3	4	3	4
3	5	6	5	6
4	3	4	1	2
5	5	6	3	4
6	1	2	5	6
7	5	6	1	2
8	1	2	3	4
9	3	4	5	6
Interval				
10	1	2	1	2
11	3	4	3	4
12	5	6	5	6
13	3	4	1	2
14	5	6	3	4
15	1	2	5	6
16	5	6	1	2
17	1	2	3	4
18	3	4	5	6

Competitor Numbers 7 & 8 or Number 7 of each team are the reserves.

16.13.3 Bonus Points

16.13.3.1 Bonus points are allotted for prize money only with an additional bonus point for a competitor who finishes 2nd or 3rd immediately behind their team mate.

16.13.4 Starting Positions

16.13.4.1 The captains of each team will toss for starting positions in the first heat, the choice being positions 1 and 3 or positions 2 and 4, counting from the inside of the track.

16.13.4.2 The team that selects positions 1 and 3 in the first heat must take positions 2 and 4 in the second heat, and so on alternately throughout the meeting.

16.13.4.3 The relative positions of the two competitors of each team in each heat may be changed.

16.13.5 Reserves

16.13.5.1 A competitor who has been unable to commence or complete an event due to an accident, and who has not been excluded, may be replaced by a reserve. The event will be deemed to be a new event with the reserve as a competitor.

16.13.5.2 A reserve may not ride in more than six events.

16.13.5.3 Only one reserve may participate in each event.

16.14 WORLD CHAMPIONSHIP SELECTION**16.14.1 Open Solo**

16.14.1.1 The placings from the Australian Speedway Championships will dictate the following:

- a) The highest placed Australian rider who has not already achieved World Championship qualification for the following year will be qualifier 1.
- b) The next highest will be qualifier 2.
- c) The riders who will occupy the 3rd and any additional positions (where applicable) will be chosen by the MA Speedway Commission.
- d) Should a rider who qualifies choose to forfeit his or her right to participate in the subsequent rounds, again the Commission will choose the replacement riders/s.

16.14.2 Under 21 Solo and Sidecar

16.14.2.1 The placings from the Australian Speedway Championship will dictate the following:

- a) The highest placed Australian rider will be qualifier 1.
- b) The next highest will be qualifier 2.
- c) The riders who will occupy the 3rd and any additional positions (where applicable) will be chosen by the MA Speedway Commission.
- d) Should a rider who qualifies choose to forfeit his or her right to participate in the subsequent rounds the Commission will choose the replacement rider/s.

16.14.3 World Cup

16.14.3.1 The riders for the FIM World Cup teams will be chosen by the MA Speedway Commission in consultation with the Australian Speedway Manager.

16.14.3.2 To be eligible for selection in the World Cup Teams, both Senior & Junior, riders must participate in the Australian Senior Solo or the Under 21 Championships for that year. In addition Team selection will be based on current form, previous achievements, suitability to the venue and willingness to represent Australia.

Note: Australian GP riders are exempt from this requirement.

16.14.4 FIM Gold Trophy Selection: Under 16 Solo.

16.14.4.1 The placings from the Australian Championship will dictate the following:

- a) The highest placed Australian rider will be qualifier 1,
- b) The next highest will be qualifier 2,
- c) The riders who will occupy the 3rd and any additional positions (where applicable) will be chosen by the MA Speedway Commission,
- d) Should a rider who qualifies choose to forfeit his or her right to participate in the subsequent event the Commission will choose the replacement rider/s.

16.14.5 Inability to Compete (Applies to Open, Under 21 and Gold Trophy Events)

16.14.5.1 Riders who are unable to compete in the National Championship due to exceptional circumstances, but have previously shown strong support for Australian Speedway may be considered for selection. This avenue is only open where the rider in question has informed MA in writing prior to the event, stating the reasons for non-participation.

16.14.6 Australian Speedway Manager

16.14.6.1 The Australian Speedway Team Manager is to be selected by the MA Speedway Commission in consultation with the MA Board. The appointment will be reviewed annually and advertised in Australia and the United Kingdom.

SECTION 16E: TECHNICAL REGULATIONS**16.15 SOUND EMISSIONS**

16.15.0.1 Sound testing must be carried out at all permitted events; however, it is not mandatory to test all machines.

16.15.1 Specifications

16.15.1.1 Sound emissions are set out in the table below:

2 Metre Max Method	
DISCIPLINE	LIMIT dB(A)
Speedway	115 + 3dB(A) tolerance, total 118dB(A) maximum

16.15.1.2 Where government regulations or planning orders exist in relation to lower sound emissions or where a venue has lower sound emission requirements as part of the hire contract, the sound emission required will prevail over GCR 16.15.1.1.

16.15.2 Sound Control during Competition

16.15.2.1 The Sound Control Officer (SCO) must arrive in sufficient time for discussions with the Referee and other Technical Officials in order that a suitable test site and testing policy can be agreed.

16.15.2.2 Machines can be tested before, or after competing in an event, chosen by ballot, or as required by a Referee or SCO.

16.15.3 Use of Sound Level Meters

16.15.3.1 Sound testing apparatus must:

- a) Comply with International standard IEC 651, Type 1 or Type 2.
- b) Include a compatible calibrator, which must be used immediately before testing begins and always just prior to a re-test if a disciplinary sanction may be imposed.

16.15.3.2 Sound testing apparatus must be set to

- a) 'Fast response',
- b) 'A' weighted,
- c) Select range High 80~130 dB,
- d) Activate the function MAX MIN - set on MAX

16.15.4 '2 Metre Max' Test

16.15.4.1 '2 Metre Max' set up of the sound meter and the motorcycle:

- a) The sound levels will be measured with the sound meter/microphone fixed on a tripod, in the horizontal position, at the rear of the motorcycle.
- b) For the place and position of the motorcycle, ensure that there are no solid obstacles within a 10 metre radius of the microphone.
- c) The sound meter will be positioned at a distance of two metre behind the motorcycle, with an angle of 45° away from the centerline, on the exhaust side and at a height of 1.35 metres above the ground, with the

sound meter level.

- d) The two metre distance is measured from the point where the centre of rear tyre touches the ground.
- e) It is preferred that the tests are conducted on soft ground, to prevent reverberation, i.e. grass or fine gravel.
- f) In other than moderate wind, machines should face forward in to the wind direction.
- g) The ambient sound level must remain lower than 100 dB/A.

16.15.4.2 '2 Metre Max' positioning of the motorcycle:

The reference points:

- a) For a motorcycle: the contact point of the rear wheel on the ground.
- b) For motorcycles fitted with two exhaust outputs, the measurement will be made on the side of the air intake. If a central positioned air intake is used, both sides will be tested.
- c) For Sidecars: the contact point of the side wheel on the ground.
- d) For ATV vehicles: the vertical line to the ground from the centre point of the rear axle.
- e) For ATV vehicles with exhaust outlet moved from the median axis, the measurement will be made on the offset side. To make repetitive measurements, all motorcycles can be positioned into a small frame fixed on the ground.

16.15.4.3 '2 Metre Max' method:

- a) The measurement is made with the motorcycle on its wheels, with a hot engine.
- b) During a sound test, machines not equipped with a gear box neutral must be placed on a stand.
- c) The SCO should stand beside the motorcycles, opposite the microphone and not screen or stand between the bike and the microphone. An assistant, placed on the left side of the motorcycle, shall disengage the clutch.

- d) The SCO shall open the throttle as fast as possible until full open throttle (instantly, within 0.3 seconds) and keep at max engine 'rpm' for at least one second. To end, the SCO will release the throttle quickly.
- e) If the result exceeds the limit, including 'after fire', the Inspector shall test the motorcycle a maximum of two more times.
- f) For motorcycles equipped with an engine rpm limiter, opening the throttle will be made – instantly, within 0.3 seconds – and kept open until at least one second has evolved and/or when there is an audible sign of over revving the engine.
- g) For motorcycles without an engine 'rpm' limiter, the opening of the throttle will have to be lower than two seconds and/or when there is an audible sign of over-revving the engine.
- h) If the engine tends to suffocate, close the throttle slightly and re-open the throttle.
- i) If detonations appear, the measurement must be started again.
- j) The numbers obtained from the test shall not be rounded down.
- k) For the sound level measurement, the handling of the throttle is limited only to the SCO, who shall open the throttle himself in order to minimize the influence by another operator (for that, it is helpful to have the microphone equipped with an extension cable to the sound meter).

16.15.4.4 Tests shall not take place in the rain.

16.15.5 Machine Testing

- 16.15.5.1 If a machine fails, it can be represented for re-testing.
- 16.15.5.2 No person may compete in any event on a machine whose noise emissions exceed the prescribed levels.
- 16.15.5.3 A machine which does not comply with the sound limits can be presented several times.

16.16 FUEL

16.16.1 Fuel Warning

- 16.16.1.1 Fuels and lubricants are highly specialised substances and participants must be aware they may contain substances that are extremely dangerous to human health if misused, inhaled or allowed to contact skin.
- 16.16.1.2 Some of the components of fuel and lubricants are suspected of having the potential to cause cancer in rare circumstances.
- 16.16.1.3 The use of petrol as a general cleaning and washing agent is a common misuse of a potentially dangerous substance.
- 16.16.1.4 Fuels should be used and stored with extreme care and in accordance with the manufacturer's instructions.

16.16.2 Fuel Testing

- 16.16.2.1 For any event, meeting or series, the Relevant Controlling Body may direct that no fuels other than fuels of prescribed specifications and from a prescribed source may be used.
 - a) Tests to ensure that only prescribed fuels are used in an event, meeting or series may be administered at any time and place during the course of the same,
 - b) The Referee, Race Director or Chief Scrutineer may direct the administration of fuel tests.
- 16.16.2.2 Fuel tests must comply with the following procedures:
 - a) All containers for holding samples must be clean and constructed of robust non-reactive impermeable material, must be sealable, and must have provision for identification,
 - b) Equipment used for the extraction of fuel from machines must be clean and constructed of fuel non-reactive material,
 - c) All samples must be divided into two lots (Sample A and Sample B) of not less than 5ml each, which must be placed in separate containers,
 - d) Once samples are placed in containers, the containers must immediately be sealed and identified

by reference to the machine from which the sample was taken. This information must be entered on a fuel sample certificate which must certify the date, place and time of taking the sample, the identity of the machine from which the sample was taken and the identity of the rider,

- e) Both samples must remain in the control of the official who administered the test.
- f) The rider or the representative must sign the fuel sample certificate acknowledging samples have been taken and are sealed,
- g) All samples held by the official must be delivered as soon as practicable after the competition to the Relevant Controlling Body which must deliver the Sample A as soon as practicable to a laboratory approved by MA where they must be tested for content and quality in accordance with standard scientific procedures,
- h) The Relevant Controlling Body must as soon as practicable after receipt of the results notify the rider or rider's team representative and MA,
- i) If the rider is dissatisfied with the test result of sample A, they may request sample B be tested at an MA approved laboratory in their presence.

16.16.3 Refuelling

- 16.16.3.1 During refuelling, each machine must be stationary with the engine stopped.
- 16.16.3.2 Refuelling will be deemed to have commenced when the fuel tank has been opened and completed when the tank is closed.
- 16.16.3.3 Smoking is strictly prohibited in areas where refueling is permitted.
- 16.16.3.4 Riders are liable for exclusion from an event for failing to adhere to GCR 16.16.3.3, and are responsible for the actions of their mechanics and support team members.

16.16.4 Homologation of Fuel

- 16.16.4.1 Unleaded fuel produced by an oil company for sale in the Australian general transport

fuel market through retail petrol pumps in at least five (5) States does not have to be homologated. For the avoidance of doubt this means the fuel must be available for sale on demand from a roadside bowser outlet at each of at least five (5) separate service stations in each of at least five (5) Australian States or Territories.

- 16.16.4.2 Organisations seeking homologation of fuel must provide MA with:

- a) Two one-litre sealed containers of the fuel for analysis,
- b) Details of the fuels characteristics,
- c) The distribution network,
- d) The price structure,
- e) A homologation fee of \$2,500 in the first year and \$2,000 per year thereafter.

- 16.16.4.3 Fuels approved under this GCR will be published at www.ma.org.au.

16.16.5 Fuel: Speedway

- 16.16.5.1 Fuel must:

- a) Be Unleaded, and
- b) Be no more than 100 RON; and
- c) Contain no additives other than those added at the point of manufacture except for lubricating oil for 2-stroke engines; and
- d) Be readily available in Australia as per GCR 16.16.4.1; or
- e) Be a brand of fuel homologated by MA that is compatible with the "Fuel Quality Standards Act 2000".

- 16.16.5.2 For Senior and Classic competition, as well as 250cc and 350cc Junior machines, the following fuels are permitted:

- a) Commercially available pure Methanol with no additives other than lubricating oil, or
- b) Unleaded fuel which complies with GCR 16.16.5.1.

16.17 ENGINES

16.17.1 Reciprocating Engines

16.17.1.1 Formulae for calculation of capacities and classes

$$\text{Cubic capacity} = \frac{(D^2 \times 3.1416 \times C \times N)}{4}$$

Where:

D = Bore in centimetres

C = Stroke in centimetres

N = Number of cylinders

16.17.2 Engine Capacity Tolerances

16.17.2.1 Unless otherwise specified in the following table, the actual engine capacity of a machine competing in a capacity class may not exceed the prescribed capacity for that class by more than 2%:

CLASS	PERMITTED EXCESS
Sidecar	5%
80cc 2-stroke (Manufactured prior to 1/1/1995)	5%
Record Attempts, Senior Speedway	Nil
65cc and 85cc	Nil

16.17.3 250/350/500cc Solo Engines

16.17.3.1 Engine capacity must not exceed 250cc, 350cc, or 500cc.

16.17.3.2 Engines must be:

- a) Single cylinder,
- b) 4-stroke,
- c) Four valves maximum,
- d) Fitted with one carburettor of 34mm +/- 0.1mm diameter, and
- e) One spark plug.

16.17.3.3 Two-valve engines may use a carburettor of 36mm +/- 0.1mm diameter.

16.17.3.4 The carburettor measurements must:

- a) Remain constant over a distance of no less than 25mm on the engine side and 5mm on the air intake side,
- b) Be taken from the edges of the throttle valve or throttle butterfly.

16.17.3.5 The fuel output section of the carburettor must be of circular shape.

16.17.3.6 Direct injection must comply with the above carburettor sizes.

16.17.3.7 Supercharging and turbocharging are not permitted.

16.17.4 Sidecar Engines

16.17.4.1 An event may be restricted to machines of a capacity of no more than 500cc, which will be known as a 500cc class event.

16.17.4.2 For a machine competing in a 500cc class event, the engine must comply as follows:

- a) Where electronic fuel injection is installed it must be of a standard production type,
- b) The engine may not be turbocharged or supercharged.

16.17.4.3 For a machine competing in any event other than a 500cc class event, the engine must comply as follows:

- a) The engine capacity must not exceed 1045cc,
- b) Supercharged and turbocharged engines must not exceed 500cc,
- c) On liquid cooled engines an overflow pipe must be used to direct any overflow of coolant away from the rider and passenger,
- d) Titanium may be used if fitted as OEM.

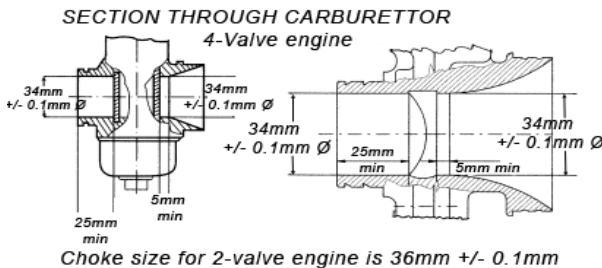


Figure 16.17.3.4 Carburettor dimensions

16.18 FRAMES AND PARTS

16.18.1 General

16.18.1.1 Titanium: The use of Titanium is not permitted in the construction of the frame, the front forks, the handlebars, the swingarms or the wheel axles of any machine.

16.18.1.2 Handlebars must:

- Be fitted to the unsprung part of the front suspension,
- Be securely plugged so as to present a flush or rounded end,
- Have a width of not more than 900mm nor less than 700mm, and
- Have handlebar grips attached to the ends with a maximum length of 150mm

16.18.1.3 Clutch levers must:

- Have ball ends with a minimum diameter of 19mm,
- Measure no more than 200mm from the fulcrum to the extremity of the ball.

16.18.1.4 Throttle controls and mechanical carburettor linkages must:

- Be self-closing,
- Be enclosed so as to prevent jamming.

16.18.1.5 There must be a kill switch which must:

- Cut out the ignition,
- Operate on the primary circuit,
- Be fitted with a lanyard which must:
 - Have a total extended length not exceeding 500mm,
 - Be attached around the rider's right wrist when the machine is in motion,
 - Not be secured to the handlebar unless by a readily torn material.

16.18.1.6 Stops or other devices must be fitted to ensure a minimum clearance of 30mm between the handlebars and any other part of the machine when on full lock.

16.18.1.7 Steering must be:

- Direct,
- Through the front wheel,
- By a classic telescopic fork, leading link, earles, or girder type.

16.18.1.8 Light alloys may not be used for wheel axles.

16.18.1.9 The front wheel must be fitted with a knockout spindle or an approved clamp to fasten on the fork tips.

16.18.1.10 Brakes may not be fitted.

16.18.1.11 For any cast or welded wheel, the gaps between the spokes must be filled in.

16.18.1.12 Machines need not carry number plates.

16.18.1.13 FIM homologated dirt deflectors must be fitted to all solo Speedway machines with the exceptions of 125cc Junior machines, and 500cc upright engined machines when used in Classic Speedway events.

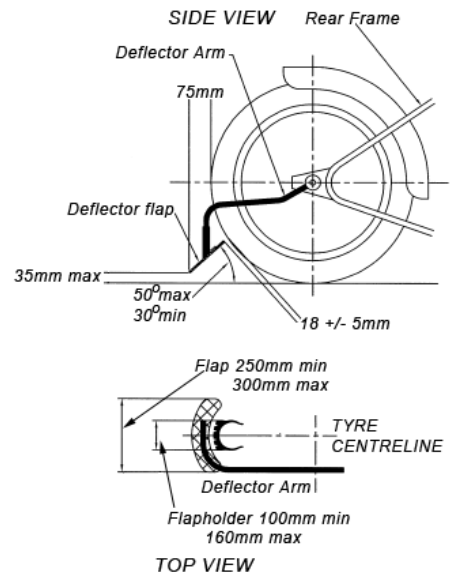


Figure 16.18.1.13 Dirt Deflector

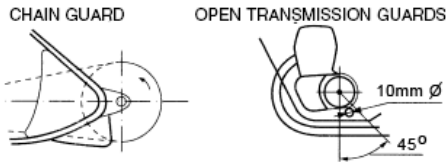


Figure 16.18.1.14 Chain Guard

16.18.1.14 Primary chain guard protection must be provided by:

- Fully enclosing the chain with a steel guard, or
- If a plastic, fibreglass or part open chain guard is used, a steel bolt of not less than 10mm minimum diameter, placed outside the bottom rear quadrant of the clutch sprocket. This bolt, if damaged, must be replaced.

16.18.1.15 Mechanical carburettor linkages must be:

- Enclosed by a suitable material, or
- Fully enclosed by a box.

16.18.2 Streamlining

16.18.2.1 All streamlining fitted to motorcycles or sidecars must be free of any sharp edges on exposed extremities.

16.18.2.2 For fibreglass construction, edges must be rounded to their own thickness but need not be wired.

16.18.2 Fuel Tanks

16.18.2.1 Fuel tanks may be constructed from any material that has been approved by the Australian Standards Association as a petrol or fuel container material.

SECTION 16E: TECHNICAL REGULATIONS: SOLO CLASSES

16.19 ALL CLASSES

16.19.1 General

16.19.1.1 Rear chain guards must:

- Be fitted to the back end of the rear assembly of machines,
- Provide protection where the rear chain enters onto the rear wheel sprocket.
- Ensure rear wheel adjusters are totally enclosed with a rounded or closed end so that no thread is exposed.

16.19.1.2 The minimum weight, without fuel, is 77kg

16.19.1.3 Rear suspension is prohibited.

16.19.1.4 A single gear only is permitted.

16.19.2 Exhaust Systems

16.19.2.1 Exhaust systems must not extend beyond the outer circumference of the rear wheel rim and tyre.

16.19.2.2 The gap between the silencers and the tyre must not exceed 60mm.

16.19.2.3 Exhaust gases must be discharged from the system horizontally and parallel to the centre line of the machine.

16.19.2.4 Only FIM homologated exhausts may be used. A heat shield must be fitted.

16.19.2.5 The exhaust pipe must be fixed to the cylinder head and frame with a minimum of three clips, one of which must be attached to the cylinder head.

16.19.2.6 The silencer must be attached to the frame with at least one clip. A second moveable coupling must be fitted from the first third of the silencer to the frame with steel cable of at least 3mm or strong steel spring.

16.19.2.7 The diameter of the exhaust pipe must not exceed 50mm or an equivalent area and must remain constant up to the silencer.

16.19.2.8 The outlet area of the silencer must remain constant over a length of 50mm, must not exceed 45mm, or an equivalent area, and must not be perforated.

16.19.2.9 The outside shell of the silencer must form one unit. The end of the pipe must be cut at right angles.

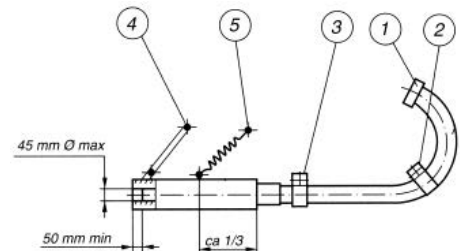


Figure 16.19.2 250/350/500cc Solo Exhaust

16.19.2.10 Where turbo or similar types of approved silencers are fitted:

- The silencer must be mounted in a position to discharge the exhaust fumes at a minimum deflection of 15° from the centre line of the machine and a maximum of 30° to the ground,
- The silencer must not be altered in shape or modified in any way, other than a welded transition section to allow clamping to the exhaust pipe,
- The maximum internal outlet diameter must be 47mm and must remain as manufactured.

16.19.3 Footrests

16.19.3.1 Footrests:

- Must be on the right hand side of the machine and must not exceed 320mm in length measured from the centre line of the motorcycle,
- Must have metal protection at the end of at least 8mm radius,
- May be folding and, if so, must be fitted with a device which automatically returns them to the normal position.

16.19.4 Tyres

16.19.4.1 Rear tyre requirements are as follows:

- Subsequent modification of tyres is not permitted,
- The overall width must not exceed 100mm,
- The tyre must be mounted and inflated to 14psi at Scrutineering,
- The tread depth must not exceed 8mm measured at right angles to the face of the tread,
- All blocks in the same circumference must be of the same depth,
- The space between the blocks must not exceed 9.5mm across the tyre or 13mm in a circumferential direction,
- The space between the blocks must not exceed 22mm. The space across C in the relevant diagram must not extend completely across the tyre measured at right angles to the wall of the tyre, unless broken by a block.

16.19.4.2 The front tyre may be of any size or type but limited to an overall width of 80mm.

16.19.4.1 Tyres may not be treated by chemicals, tyre warmers or other means which tend to alter the shape, minimum shore hardness, construction or other characteristics.

16.19.5 Mudguards

16.19.5.1 Machines must be fitted with a front mudguard that extend at least 5° ahead of a vertical line running through the centre of the front wheel axle and at least 5° under the top edge of the mud-shield protecting the front of the engine.

16.19.5.2 The rear mudguard must extend at least 5° behind a vertical line running through the centre of the rear axle. Distance between rear mudguard and top of rear tyre must be no more than 35mm plus 5mm tolerance. If a push bar is used, it should be made in one piece, of strong material which should not break under impact and must not protrude any higher than 35mm above the rear mudguard.

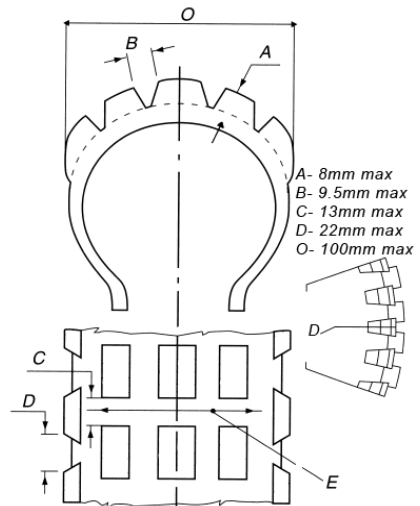
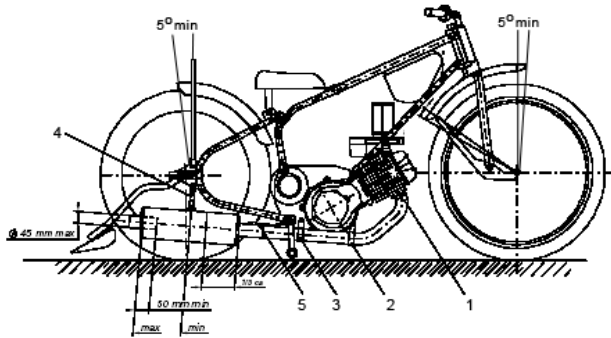


Figure 16.19.4 Solo Tyre

Figure 16.19 Solo Speedway machine: Side and Top view



16.20 250CC SOLO INTERMEDIATE

16.20.0.1 This class is for State level competition only.

16.20.0.2 Promoters intending to conduct competition for 250cc Intermediate class must:

- Obtain approval from the Speedway Commission, in addition to obtaining approval from the State Controlling Body,
- Provide the Commission with a report on the merits of the class. The report should include statements from riders and officials and engineering personnel.

16.20.1 Engine

16.20.1.1 4-stroke single cylinder engine up to 250cc.

16.20.1.2 If the engine is fitted with a gearbox, the gearshift lever must be removed and the machine must remain in one gear during racing.

16.21 250CC/350CC CLASS

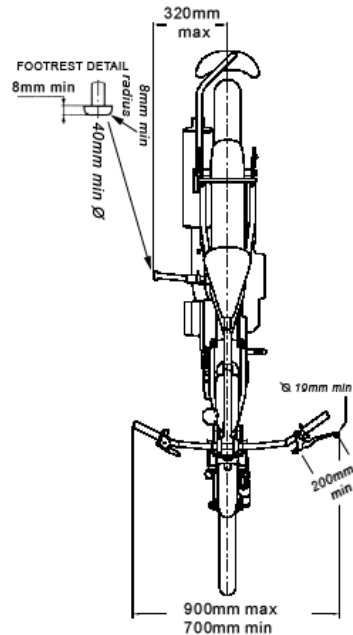
16.21.1 Eligibility

16.21.1.1 Junior and Senior riders must be assessed by an MA accredited coach prior to competition.

16.21.1.2 Riders competing on these machines must be:

- A minimum age of:
 - 13 to under 16 years for 250cc,
 - 14 to under 16 years for 350cc,

16.21.1.3 Junior riders can practice or demonstrate on a 250cc machine from the age of 12 years and 9 months,



16.12.1.4 Junior riders can practice on a 350cc machine from the age of 13 years and 9 months,

16.12.1.4 Senior riders can ride 250cc or 350cc machines,

16.21.1.5 No Juniors are permitted on track with Seniors.

16.21.1.6 350cc machines are not eligible to enter the Australian Speedway Championship.

16.21.1.7 For Junior 250cc machines only, refer to **the relevant MA Track specifications for track length. tracks must be no more than 350 metres in length, and licensed by MA or the relevant SCB.**

16.21.2 Machine Requirements

16.21.2.1 Engines:

- a) Must be OEM 250cc and 350cc,
- b) Carburettor size 34mm +/- 0.1mm,
- c) After market parts may be used, however parts must be the same size as factory fitted parts,
- d) ~~Valves and valve springs may be changed but must be the same size as OEM;~~
- e) ~~Pistons may be changed. Replacement pistons must be the same compression as OEM;~~
- d) Use of Titanium is not permitted.

16.22 JUNIOR 50CC CLASS

16.22.1 Engine

- 16.22.1.1 The use of Titanium in Junior Speedway engines is prohibited.
- 16.22.2.1 Eligible machines are any production solo motorcycles utilising 50cc 2 or 4-stroke engines. All machines must be OEM.
 - a) Engine capacity must not exceed 50cc,
 - b) The gearbox must not have more than one gear for 2-stroke machines and three gears for 4-stroke machines,
 - c) The clutch must not be of other than OEM and other than of a centrifugal type,
 - d) Rear wheel must not be other than 10" (254mm)
 - e) Front wheel must not be other than 10" (254mm) or 12" (304mm),
 - f) A lanyard kill switch must be fitted,
 - g) Working brakes must be retained.

16.22.2 Permitted Modifications

- 16.22.2.1 Parts equivalent to OEM may be fitted.
- 16.22.2.2 The following may be altered.
 - a) Seat,
 - b) Colour,
 - c) Mudguards,
 - d) Handlebars,
 - e) Grips,
 - f) Levers,
 - g) Cables,
 - h) Chains,

- i) External gearing,
- j) Tyre brand and pattern,
- k) Foot pegs and foot peg position.
- 16.22.2.3 Rear shock absorber may be removed and replaced with a solid replacement.
- 16.22.2.4 Throttle limiting devices may be removed.
- 16.22.2.5 Restrictor washers in the header pipe abutting cylinder barrel may be removed.

16.23 JUNIOR 125CC CLASS

16.23.1 Engine

- 16.23.1.1 The use of Titanium in Junior Speedway engines is prohibited.
- 16.23.2.2 If the engine is fitted with a gearbox, the gearshift lever must be removed and the machine must remain in one gear while racing.
- 16.23.2.3 The engine capacity must not exceed 125cc with a +1mm tolerance of the bore diameter.
- 16.23.2.4 A single cylinder 4-stroke engine, fitted with one carburettor, of a mass produced type must be used.
- 16.23.2.5 The cylinder head must be as follows:
 - a) Two-, three- or four-valve cylinder heads can be fitted, but three- and four-valve heads must retain manufacturers' specifications,
 - b) The action of the valves must be controlled by valve springs,
 - c) The cylinder head may be ported and, if damaged in use, bearing journals may be bored and bearings replaced with either roller or bronze bearings,
 - d) For two-valve heads, maximum valve size must be:
 - i) Exhaust - 25mm, and
 - ii) Inlet - 30mm.
- 16.23.2.6 Carburettors no bigger than 24mm can be fitted.
- 16.23.2.7 Inlet manifold must be round for entire length.
- 16.23.2.8 ~~Early model crankcases may be used with late model heads but the~~ Compression ratio must not exceed 9.7:1.
- 16.23.2.9 Any type of ignition system may be used.
- 16.23.2.10 Later model parts, or parts of different manufacture, may be installed.

16.23.2.11 The "Shupa" brand Junior Speedway machine is approved for competition in the Junior 125cc Solo class when the machine is fitted with the two or three-valve head.

16.23.2 Frames and Parts

16.23.2.1 Wheelbase must not exceed 1375mm.

16.23.2.2 Rear rim diameter must not exceed 17" (432mm).

16.23.2.3 Rear tyres must:

- a) Have Trial or Speedway pattern tread tyres,
- b) Not exceed 90mm x 432mm (3.5" x 17"),
- c) Not be modified.

16.23.2.4 Front rim diameter must not exceed 482mm (19").

16.23.2.5 Front tyres must:

- a) Have Trial pattern or Speedway tread,
- b) Have a diameter not exceeding 19" (482mm),
- c) Not be modified.

16.23.2.6 Exhaust mounts:

- a) The exhaust must have at least three mounts to the motorcycle,
- b) The silencer must be attached to the frame with at least one clip. A second moveable coupling must be fitted from the first third of the silencer to the frame with a steel cable of at least 3mm or a strong steel spring.

SECTION 16F: TECHNICAL REGULATIONS: SIDECARS AND CLASSIC SPEEDWAY

16.24 SIDECARS: ALL CLASSES

16.24.1 Frames and Parts

16.24.1.1 Overall height must not exceed 1200mm.

16.24.1.2 The tubing used in the construction of the main frame of a sidecar motorcycle must have a minimum wall thickness of 1.5mm.

16.24.1.3 The sidecar must be on the left of the motorcycle and, if not an integral part of the chassis, must be fixed to the motorcycle in at least four places.

16.24.1.4 The sidecar wheel must be staggered inwards. If the sidecar wheel is mounted

by a plate on both sides, the diameter of the axle must exceed 12mm.

16.24.1.5 Where the sidecar wheel is mounted with a bracket on one side only, the axle diameter must be at least 20mm.

16.24.1.6 The sidecar frame must have a continuous bar along the exterior of the sidecar wheel.

16.24.1.7 Fuel tanks must be of a material approved by the Australian Standards Association for fuel containers.

16.24.1.8 Drive must only be transmitted through the rear wheel of the motorcycle.

16.24.1.9 Promoters may require additional specifications for the protection of spectators.

16.24.1.10 All exterior barwork and tubework ends must be plugged or capped so as to present a flush or convex end.

16.24.2 Streamlining

16.24.2.1 The streamlining:

- a) Must not be in front of a vertical line drawn through the leading edge of the front tyre,
- b) Must not to the rear of a vertical line drawn through the exterior edge of the rear rim,
- c) May come into contact with the ground with the rear wheel raised 300mm from the ground.

16.24.2.2 Aero panels, side panels and similar attachments may be used provided they are:

- a) Constructed of metal, fibreglass or polycarbonate material,
- b) Free of sharp or protruding edges,
- c) Not dangerous to the rider or other competitors.

16.24.2.3 Horizontal wings and aerodynamic friction assisting devices are prohibited.

16.24.2.4 In all handlebar positions, there must be a space of at least 30mm between the streamlining and the ends of the handlebars, including any attachments.

16.24.3 Handholds & Footrests

16.24.3.1 A suitable handhold must be provided for the passenger on the offside of the machine and near the front.

16.24.3.2 Footrests must be on the right hand side

to the direction of travel and linked by a continuous bar.

16.24.3.3 Any space between the sidecar body and the rear or sidecar wheel of the motorcycle greater than 76mm must be decked so as to prevent the passenger's hands or feet entering between the chassis bars.

16.24.3.4 Any open area between the footrests, the continuous bar and the right hand side to the direction of travel must be filled in with a suitable material so as to stop a rider or passenger from trapping their feet.

16.24.4 Wheels, Rims & Tyres

16.24.4.1 Tyres:

- Knobby tyres may not be used,
- Speedway or Universal Trial block pattern tyres only to be used,
- Tyres may be cut or grooved.

16.24.4.2 The sidecar wheel must be either spoked, moulded type mag, or other approved wheel. Riveted type mag wheels are not permitted.

16.24.4.3 The area inside a spoked wheel must be covered by a disc or shield so as to prevent a rider's or passenger's feet or hands coming into contact with the spoked area.

16.24.4.4 The sidecar wheel must be covered by a non-rotating shield which must:

- Be constructed of sheet metal, fibreglass or similar material and be flat or nearly so,
- Be securely fitted to the sidecar,
- Incorporate a 25mm (20mm for Junior Sidecars) horizontal crash bar surrounding the outer side of the sidecar wheel at floor level,
- Cover at least the outward facing spoked area, and,
- If trials tyres are fitted, cover the tyre area as well.

16.24.5 Mudguards

16.24.5.1 The fitting of a front mudguard is not compulsory.

16.24.5.2 Rear mudguards must be:

- Valanced on both sides down to axle level, to a maximum of 170mm from ground level,

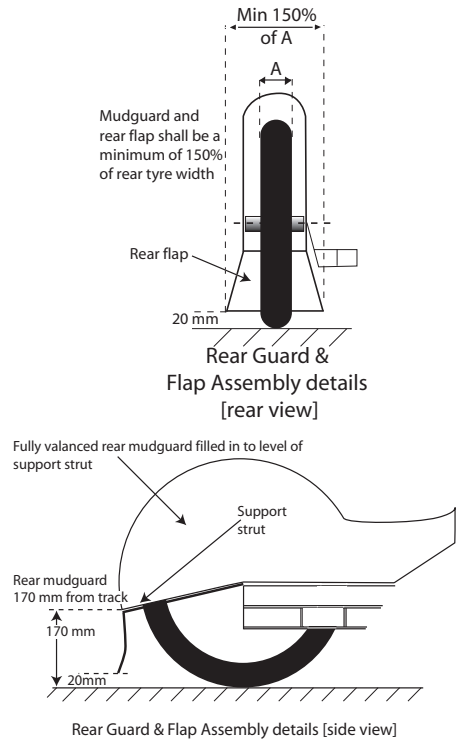


Figure 16.24.5 Rear guard and flap assembly details

- Fitted with a one piece flexible mud flap without any slots, which:
 - Is a minimum thickness of 6mm and be of a reinforced belting type rubber,
 - Is attached to the rear mudguard,
 - Ends no more than 20 mm above ground level,
 - Is attached to three sides of the mudguard and projects forward by a minimum of 75 mm on each side,
 - Is a consistent width from top to bottom,
 - And/or be fitted with an FIM homologated dirt deflector,
- 16.24.5.3 Rear mudguards may be incorporated into the passenger's seat moulding,

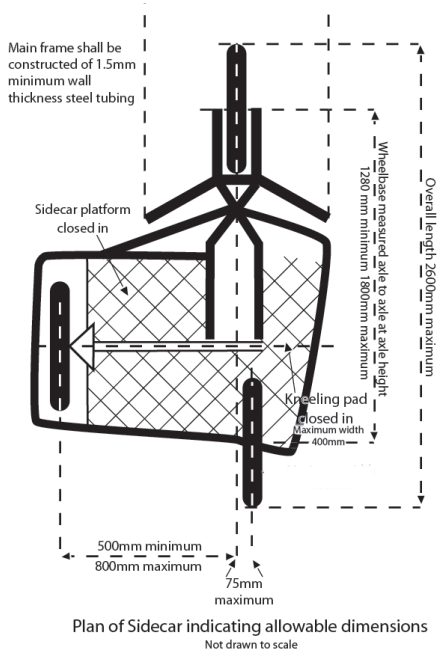


Figure 16.24.1 Speedway sidecar dimensions

16.24.5 Exhaust Systems

16.24.5.1 Exhaust fumes must be discharged towards the rear of the machine. Exhaust fumes must not be discharged so as to raise dust, foul the tyres or inconvenience the passenger or any other rider or passenger.

16.24.5.2 The exhaust must be attached to the machine at a minimum of three locations, two on the frame, (one to the rear), in addition to the one on the cylinder head.

16.25 SIDECAR: SENIOR

16.25.1 General

16.25.1.1 The overall width must not exceed 1500mm.

16.25.1.2 Overall length from the leading edge of the front tyre to the outside of the rear mudguard must not exceed 2600mm.

16.25.1.3 The wheel base taken at axle height from the centre of the front axle to the centre of the rear axle, must measure between 1280mm and 1800mm.

16.25.1.4 The wheel track, taken between the

tracks left by the centre lines of the rear motorcycle wheel and the sidecar wheel, must measure between 500mm and 1100mm.

16.25.1.5 The centre lines of the tracks made by the front and rear wheels of the motorcycle when the machine is proceeding directly forward must be no further apart than 75mm.

16.25.1.6 The width of the kneeling pad on the offside of the machine must not exceed 400mm.

16.25.1.7 Stub axles must have a minimum diameter at the base plate of 40mm.

16.25.1.8 Solo two ply and four ply 75mm (3") tyres may not be used on rear rims exceeding 127mm (5") in width,

16.25.1.9 The rear wheels minimum 450mm (18") maximum 475mm (19") diameter, rim width maximum 125mm (5"),

16.26 SIDECAR: JUNIOR

16.26.1 General

16.26.1.1 The overall width must not exceed 1250mm.

16.26.1.2 Overall length from the leading edge of the front tyre to the outside edge of the rear mudguard must not exceed 2100mm.

16.26.1.3 The wheelbase, taken at axle height from the centre of the front axle to the centre of the rear axle, must measure between 1500mm and 1200mm.

16.26.1.4 The wheel track, taken between the tracks left by the centre lines of the rear motorcycle wheel and the sidecar wheel, must measure between 800mm and 600mm.

16.26.1.5 The width of the kneeling pad on the off side of the motorcycle must not exceed 300mm.

16.26.1.6 Stub axles must have a minimum diameter at the base plate of 25mm.

16.26.1.7 Front and rear rim diameter for the motorcycle must not exceed 19" (482mm).

16.26.1.8 Rear rim width for the motorcycle must not exceed 102mm.

16.26.2 Engine

16.26.2.1 Engine capacity must not exceed 250cc, and must be 4-stroke only.

16.26.2.2 Machines must be fitted with an

unmodified 4-stroke production engine and may be fitted with an operating gearbox. ~~OEM engine electrics must also be used.~~

16.27 CLASSIC SPEEDWAY

16.27.1 Eligibility: Classic Solo

- 16.27.1.1 Engines must have been manufactured before 31st December 1976.
- 16.27.1.2 Competitors must be aged at least 30 years at the date of the competition.

16.27.2 Solo Frames

- 16.27.2.1 The frame must:
- Have a front wheel diameter of 23" (594mm),
 - Have a rear wheel diameter of 19" (482mm),
 - Have rear tyres with a maximum tread pattern depth of 8mm,
 - Not be fitted leading-link front forks.

16.27.3 Solo Engines

- 16.27.3.1 The engine must:
- Be single cylinder,
 - Be two-valve with push rod operation,
 - Have a single spark plug,
 - Have a maximum capacity of 500cc +/- 2% tolerance,
 - Be vertical in the chassis,
 - Be fitted with a round slide carburettor of 38mm maximum bore,
 - Not be fitted with a centre port cross flow cylinder head.

16.27.4 Eligibility: Classic and Post Classic Sidecars

- 16.27.4.1 For the Classic Class : British, European & American Sidecar and Classic Japanese Sidecar Class riders must be aged 30 years or over at the date of competition.
- 16.27.4.2 Sidecar passengers must be 16 years or over at the date of competition.
- 16.27.4.3 Machines and all parts used in their construction are to be commercially available in their selected era only.
- 16.27.4.4 All machines must comply with GCR 16.18.1.5 (kill switch).
- 16.27.4.5 Maximum standard engine capacity of 1020cc and no reconditioning tolerance is

allowed.

- 16.27.4.6 Only machines of the type raced in Australian Speedway competition for the selected era will be eligible.

16.27.5 Classic Class: British, European & American Sidecars

- 16.27.5.1 This class will cover machines using original factory motorcycle frames and standard forks, i.e. one made by a recognised motorcycle manufacturer.
- 16.27.5.2 Motors will be 4-stroke two valves per cylinder, air cooled and a maximum of two cylinders, manufactured ~~and raced~~ prior to December 31st 1974.

16.27.6 Classic Class: Japanese Sidecars

- 16.27.6.1 This class will cover machines with factory motorcycle frames. ~~and standard forks, i.e. one made by a recognised motorcycle manufacturer.~~
- 16.27.6.2 Motors will be Japanese 2-stroke and 4-stroke SOHC multi cylinder engines with a maximum of two valves per cylinder,
- 16.27.6.3 Engines must be manufactured ~~and raced~~ prior to December 31st 1974.

16.27.7 Post Classic Sidecars

- 16.27.7.1 This class will cover machines using original factory frames. ~~and standard forks, i.e. one made by a recognised motorcycle manufacturer.~~
- 16.27.7.2 Motors will be 2-stroke and 4-stroke two valve DOHC multi cylinder air cooled engines,

16.27.8 Evolution Class Sidecars

- 16.27.8.1 This class will cover machines using period style and purpose built frames.
- 16.27.8.2 Motors will be maximum two valve DOHC multi-cylinder air cooled engines manufactured prior to 31st December 1985,
- 16.27.8.3 Bodywork and fairings to be a type and material relevant to the period.

- ~~16.27.8.3 Low Line and custom frames fitted with 2 valve DOHC multi cylinder air cooled engines.~~