



# **2010**

## **GENERAL RULES AND REGULATIONS**

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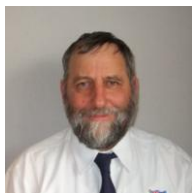
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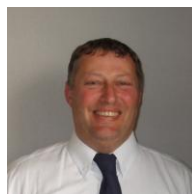
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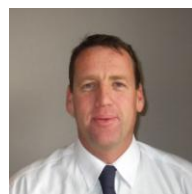
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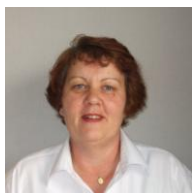
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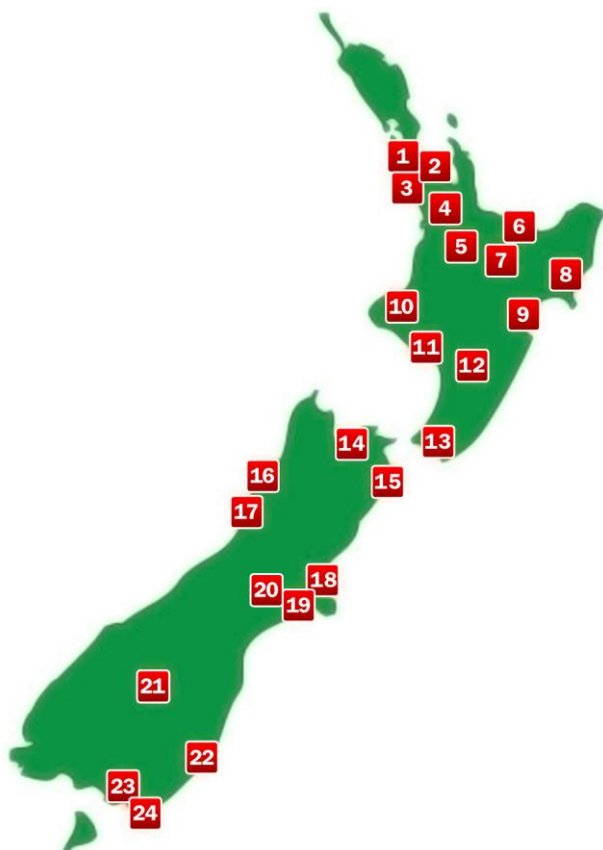
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# SPEEDWAY NEW ZEALAND TRACK LOCATOR



- |    |                  |    |               |
|----|------------------|----|---------------|
| 1  | Rosebank         | 13 | Wellington    |
| 2  | Western Springs  | 14 | Nelson        |
| 3  | Waikaraka Park   | 15 | Blenheim      |
| 4  | Huntly           | 16 | Westport      |
| 5  | Kihikihi         | 17 | Greymouth     |
| 6  | Baypark          | 18 | Woodford Glen |
| 7  | Rotorua          | 19 | Ruapuna       |
| 8  | Gisborne         | 20 | Moore Park    |
| 9  | Meeanee          | 21 | Cromwell      |
| 10 | Stratford        | 22 | Dunedin       |
| 11 | Wanganui         | 23 | Oreti Park    |
| 12 | Palmerston North | 24 | Riverside     |

# **SPEEDWAY NEW ZEALAND TRACK DETAILS**

## **1 ROSEBANK (AUCKLAND)**

Track Location: Rosebank Domain  
126 Patiki Road, Avondale, Auckland  
Promoter: Auckland Speedway Riders Club,  
PO Box 79-437, Royal Heights, Auckland 0656  
Track Ph No: (09) 828 2173  
Website: [www.rosebankspeedway.co.nz](http://www.rosebankspeedway.co.nz)

## **2 WESTERN SPRINGS (AUCKLAND)**

Track Location: Western Springs Stadium, 1 Stadium Road  
Western Springs, Auckland  
Promoter: Springs Promotions Ltd,  
PO Box 51-376, Pakuranga, Manukau 2140  
Track Ph No: (09) 845 4657  
Website: [www.springsspeedway.com](http://www.springsspeedway.com)

## **3 WAIKARAKA PARK (AUCKLAND)**

Track Location: Waikaraka Park  
Neilson Street, Onehunga, Auckland  
Promoter: Auckland Stock and Saloon Car Club,  
PO Box 13-488, Onehunga, Auckland 1643  
Track Ph No: (09) 636 5014  
Website: [www.waikarakafamilyspeedway.co.nz](http://www.waikarakafamilyspeedway.co.nz)

## **4 HUNTLY**

Track Location: McVie Road,  
Huntly  
Promoter: Waikato Stock and Saloon Car Club,  
PO Box 25, Hautapu Mail Centre, Hamilton  
Track Ph No: (07) 828 7244  
Website: [www.huntlyspeedway.co.nz](http://www.huntlyspeedway.co.nz)

## **5 KIHIKIHI**

Track Location: Kihikihi Domain  
Corner Oliver & Grey Streets, Kihikihi  
Promoter: Kihikihi Speedway Inc,  
PO Box 366, Te Awamutu  
Track Ph No: (07) 871 3333  
Website: [www.kihikihispeedway.co.nz](http://www.kihikihispeedway.co.nz)

## **6 BAYPARK (MOUNT MAUNGANUI)**

Track Location: 81 Truman Road,  
Mount Maunganui  
Promoter: Bay Park Speedway Promotions Ltd,  
PO Box 10-093, Bayfair, Mount Maunganui  
Track Ph No: (07) 574 2574  
Website: [www.bayparkspeedway.co.nz](http://www.bayparkspeedway.co.nz)

# **SPEEDWAY NEW ZEALAND TRACK DETAILS**

## **7 ROTORUA**

Track Location: Paradise Valley Raceway  
105 Paradise Valley Road, Rotorua  
Promoter: Rotorua Stockcar Club Inc,  
PO Box 1324, Rotorua  
Track Ph No: (07) 348 1484  
Website: [www.rotoruaspeedway.co.nz](http://www.rotoruaspeedway.co.nz)

## **8 GISBORNE**

Track Location: Awapuni Road,  
Gisborne  
Promoter: Gisborne Speedway Club Inc,  
P O Box 455, Gisborne  
Track Ph No: (06) 868 4917  
Website: [www.gisbornespeedway.co.nz](http://www.gisbornespeedway.co.nz)

## **9 MEEANEE (NAPIER)**

Track Location: Sandy Road, Meeanee,  
Napier  
Promoter: Hawkes Bay Speedway Club,  
PO Box 3202, Napier  
Track Ph No: (06) 834 4655  
Website: [www.hbspeedway.co.nz](http://www.hbspeedway.co.nz)

## **10 STRATFORD**

Track Location: Flint Road,  
Stratford  
Promoter: Taranaki Stockcar Club,  
P O Box 397, Stratford  
Track Ph No: (06) 765 5693  
Website: [www.stratford-speedway.co.nz](http://www.stratford-speedway.co.nz)

## **11 WANGANUI**

Track Location: Ocean View Speedway,  
Airport Road, Wanganui  
Promoter: Wanganui Stockcar & Speedway Club Inc,  
P O Box 4214, Wanganui  
Track Ph No: (06) 345 6249  
Website: [www.oceanviewspeedway.co.nz](http://www.oceanviewspeedway.co.nz)

## **12 PALMERSTON NORTH**

Track Location: Arena Manawatu, Cnr Cuba and Pascal Streets,  
Palmerston North  
Promoter: Palmerston North Speedway Ltd,  
PO Box 1889, Palmerston North  
Track Ph No: (06) 358 8838  
Website: [www.pnspeedway.co.nz](http://www.pnspeedway.co.nz)

# **SPEEDWAY NEW ZEALAND TRACK DETAILS**

## **13 WELLINGTON**

Track Location: 1039a Main Road North (SH2),  
Te Marua, Wellington  
Promoter: Wellington Speedway Society Inc,  
PO Box 40917, Upper Hutt  
Track Ph No: (04) 526 9732  
Website: [www.wellingtonspeedway.co.nz](http://www.wellingtonspeedway.co.nz)

## **14 NELSON**

Track Location: Lansdowne Road, Appleby,  
Nelson  
Promoter: Nelson Speedway Association,  
P O Box 3368, Richmond, Nelson  
Track Ph No: (03) 544 6423  
Website: [www.nelsonspeedway.co.nz](http://www.nelsonspeedway.co.nz)

## **15 BLENHEIM**

Track Location: State Highway 6, Renwick,  
Blenheim  
Promoter: Eastern States Speedway Club,  
P O Box 453, Blenheim  
Track Ph No: (03) 572 9142  
Website: [www.easternstatesspeedway.co.nz](http://www.easternstatesspeedway.co.nz)

## **16 WESTPORT**

Track Location: Craddock Drive, North Beach,  
Westport  
Promoter: Sunset Speedway Club Inc  
PO Box 370, Westport  
Track Ph No: (03) 789 7801  
Website: [www.sunsetspeedway.co.nz](http://www.sunsetspeedway.co.nz)

## **17 GREYMOUTH**

Track Location: North Tip Road, Cobden,  
Greymouth  
Promoter: West Coast Speedway Association  
PO Box 419, Greymouth  
Track Ph No: (03) 768 9697  
Website: [www.greenstonepark.co.nz](http://www.greenstonepark.co.nz)

## **18 WOODFORD GLEN (CHRISTCHURCH)**

Track Location: Doubledays Road, Kaiapoi,  
Christchurch  
Promoter: Woodford Glen Speedway Association  
PO Box 4367, Christchurch  
Track Ph No: (03) 359 0020  
Website: [www.woodfordglen.co.nz](http://www.woodfordglen.co.nz)

# **SPEEDWAY NEW ZEALAND TRACK DETAILS**

## **19 RUAPUNA (CHRISTCHURCH)**

Track Location: Hasketts Road, Templeton,  
Christchurch  
Promoter: Christchurch Speedway Association (Inc)  
PO Box 16 462, Hornby, Christchurch  
Track Ph No: (03) 349 7727 [info line]  
Website: [www.ruapunaspeedway.co.nz](http://www.ruapunaspeedway.co.nz)

## **20 MOORE PARK (CHRISTCHURCH)**

Track Location: Weedons Ross Road, West Melton,  
Canterbury  
Promoter: Canterbury Motor Cycle Speedway Club Inc,  
PO Box 5406, Papanui, Christchurch 8542  
Track Ph No: (027) 320 0977 [info line]  
Website: [www.moorepark.co.nz](http://www.moorepark.co.nz)

## **21 CROMWELL**

Track Location: Sandflat Road,  
Cromwell  
Promoter: Central Motor Speedway Club Cromwell Inc  
PO Box 99, Cromwell  
Track Ph No: (03) 445 3021  
Website: [www.centralmotorspeedway.co.nz](http://www.centralmotorspeedway.co.nz)

## **22 DUNEDIN**

Track Location: Friendship Drive, Waldronville,  
Dunedin  
Promoter: Beachlands Speedway Inc  
P O Box 1457, Dunedin  
Track Ph No: (03) 488 4578  
Website: [www.islandparkmotorspeedway.co.nz](http://www.islandparkmotorspeedway.co.nz)

## **23 ORETI PARK (INVERCARGILL)**

Track Location: Pitt Road, Otagara,  
Invercargill  
Promoter: Southland Motor Cycle Club Inc  
P O Box 1578, Invercargill 9840  
Track Ph No: (027) 655 4005  
Website: [www.oretiparkspeedway.com](http://www.oretiparkspeedway.com)

## **24 RIVERSIDE (INVERCARGILL)**

Track Location: Sandy Point Road, Otagara,  
Invercargill  
Promoter: Southland Stockcar Drivers Association Inc  
PO Box 1261, Invercargill  
Track Ph No: (027) 666 6587  
Website: [www.riversidespeedway.co.nz](http://www.riversidespeedway.co.nz)

# SPEEDWAY NEW ZEALAND ALLOCATED TITLES

## 2010/11 SEASON

Class	New Zealand	Grand Prix	North Island	South Island
Superstock	Rotorua	Wanganui	Palm North	Woodford Glen
Stockcar	Blenheim	Nelson	Baypark	Dunedin
Super Saloon	Napier	Baypark	Waikaraka	Nelson
Saloon	Wellington	Gisborne	Baypark	Blenheim
Sprintcar	Baypark	Palm North	Wellington	Invercargill
Midget	Western Springs	Huntly	Stratford	Ruapuna
TQ Midget	Nelson	Ruapuna	Western Springs	Blenheim
Modified	Waikaraka	Blenheim	Wellington	Greymouth
Streetstock	Woodford Glen	Cromwell	Napier	Greymouth
Minisprint	Kihikihi	Waikaraka	Palm North	
Solo	Rosebank	Waikaraka	Rosebank	Moore Park
Sidecar	Nelson	Oreti Park	Wanganui	Ruapuna

## 2011/12 SEASON

Class	New Zealand	Grand Prix	North Island	South Island
Superstock	Huntly	Waikaraka Park	Wellington	Nelson
Stockcar	Rotorua	Baypark	Gisborne	Greymouth
Super Saloon	Nelson	Woodford Glen	Baypark	Blenheim
Saloon	Kihikihi	Stratford	Wellington	Dunedin
Sprintcar	Ruapuna	Cromwell	Palmerston North	Cromwell
Midget	Huntly	Western Springs	Western Springs	Nelson
TQ Midget	Meeanee	Western Springs	Meeanee	Ruapuna
Modified	Not allocated	Waikaraka Park	Stratford	Woodford Glen
Streetstock	Gisborne	Meeanee	Wanganui	Nelson
Minisprint	Huntly	Wellington	Waikaraka Park	
Solo	Moore Park	Oreti Park	Rosebank	Oreti Park
Sidecar	Rosebank	Palmerston North	Gisborne	Moore Park

**Please refer to the relevant track website  
or [www.speedway.co.nz](http://www.speedway.co.nz) for event dates**



# **SPEEDWAY NEW ZEALAND CONSTITUTION 2010**

## **C1 TITLE**

The name of the Society is Speedway New Zealand Incorporated (hereinafter called SNZ).

## **C2 REGISTERED OFFICE**

The Registered Office of SNZ will be at a place as determined by the Directors. The Registrar of Incorporated Societies will be advised of any changes to the location of the Registered Office.

## **C3 OBJECTS**

The objects of SNZ are to:

- (a) Control and develop speedway in New Zealand.
- (b) Make and control rules and regulations for the conduct of speedway racing.
- (c) Represent the interests of members of SNZ.
- (d) Encourage respect and fair play.
- (e) Do any act or thing incidental or conducive to the attainment of any of the above objects.

## **C4 POWERS**

SNZ has the power to:

- (a) Sanction and licence speedway racing in New Zealand.
- (b) Enter into any amalgamation, fusion, affiliation or alliance with any other organisation.
- (c) Delegate control of any speedway competition to an outside body.
- (d) Appoint officials to preside at speedway competitions.
- (e) Register results of SNZ Allocated Titles and issue certificates to placegetters.
- (f) Recognise the achievements of persons who have made a significant contribution to speedway.
- (g) Instigate or defend legal proceedings.
- (h) Work with the Speedway Promoters Association of New Zealand (SPANZ) in recognition of the Memorandum of Understanding between SNZ and SPANZ.

## **C5 MEMBERSHIP**

Members of SNZ are:-

- (a) Any individual or entity licensed by SNZ.
- (b) Directors of SNZ
- (c) Officials of SNZ. They do not have voting rights at any SNZ General or Directors meetings.
- (d) Life members, who are elected at an AGM in acknowledgment of their services to the sport. They do not pay fees of any kind, have no voting rights at Annual or Special General Meetings, and are entitled to benefits as agreed by SNZ.
- (e) Associate members, who by virtue of their interest and contribution to the general aims of SNZ are worthy of nomination by a member of SNZ. They do not have voting rights or speaking rights at any Annual or Special General Meeting.

### **C5-1 Requirements of Membership**

- (a) Each member shall pay to SNZ such fees as may from time to time be determined by the Directors. Fees shall be payable in advance and shall be due and payable at the time or times set by the Directors.

- (b) No member of SNZ or any person associated with a member shall participate in or materially influence any decision made by SNZ in respect of the payment to or on behalf of that member or associated person of any income, benefit, or advantage whatsoever. Any such income paid shall be reasonable and relative to that which would be paid in an arm's length transaction (being the open market value). The provisions and effects of this clause shall not be removed from this document, and shall be included and implied in any document replacing this document.

## **C6 CESSATION OF MEMBERSHIP**

Membership of SNZ will cease by:

- (a) Mutual agreement in writing.
- (b) Expulsion for the non-payment of subscription fees or fines.
- (c) Expulsion for conduct which is prejudicial to SNZ.

## **C7 ANNUAL AND SPECIAL GENERAL MEETINGS**

- (a) The Annual General Meeting (AGM) will be held:-
  - (i) Before 1 July.
  - (ii) At a place decided at the previous AGM.
  - (iii) With 120 days notice in writing to all licenced tracks.
- (b) Each licensed track is entitled to send:-
  - (i) One representative per contracted class, who is a member (i.e. licensed competitor).
  - (ii) One promoters representative, who must be a member of the current promotion/club executive.
  - (iii) All representatives are responsible for their own travel and accommodation expenses.
- (c) The quorum is voting representatives from two-thirds of all tracks eligible to attend.
- (d) If a quorum is not formed, the CEO will recall the meeting within 14 days.
- (e) Will be conducted in accordance with SNZ Standing Orders which can be revised by the Directors and circulated to all representatives prior to the meeting.
- (f) Voting rights at Annual and Special General Meetings will be:-
  - (i) One competitors representative per licensed track.
  - (ii) One club or promoters representative per licensed track,
  - (iii) The voting will be made by a show of hands, but may be made by ballot on demand of voting representatives from three tracks.
- (g) Voting by proxy is not permitted.
- (h) General business (other than remits):-
  - (i) From SNZ members to be brought before the AGM and intended to be included in the Order Paper must be advised in writing to the CEO at least 60 days prior to the AGM.
  - (ii) Will be circulated by the CEO at least 40 days prior to the AGM.
  - (iii) Any urgent general business to be brought before the AGM shall be advised in writing to the Chairman of the AGM not later than 12 noon on the first day of such meeting and can be accepted at the Chairman's discretion.
- (i) The Order Paper of the AGM:-
  - (i) Is to include Annual Reports, Statement of Accounts, items of business, general business, and (every two years only) elections, ratifications, and consideration of all remits.
  - (ii) Is to be circulated to the licensed tracks by the CEO at least 14 days prior to the AGM.
- (j) A Special General Meeting to consider any matters of sufficient importance will be called on written request to the CEO by not less than two-thirds of all 1st Division tracks, or by the Directors. Such

meeting requires 14 days notice in writing to all SNZ licensed tracks.

- (k) If a rule becomes unworkable a vote on a new interpretation may be made at an AGM under General Business.

## **C8 COMPOSITION AND ELECTION OF THE BOARD OF DIRECTORS**

- (a) The Board of Directors consists of a President and six elected members.
- (b) Elections for the President and six Directors are to be held every two years at an AGM.
- (c) Nominations for the positions of the President and Directors will be in writing and received by the CEO at least 60 days prior to the AGM.
- (d) The President must have served as a Director for two of the previous six years.
- (e) Nominations for the positions of the President and Directors must be moved and seconded by a member of SNZ. The mover and seconder will be from different tracks.
- (f) The nominee must sign the nomination to indicate their willingness to stand.
- (g) A Declaration of Character signed by the nominee will accompany the nomination form.
- (h) Nominations shall be circulated by the CEO at least 40 days prior to the AGM.
- (i) Nominees will be present at the elections, except in exceptional circumstances and at the discretion of the floor. Nominees have the right to speak to their nomination.
- (j) Voting to be by ballot paper.
- (k) Order of Elections:-
- (i) President.
  - (ii) Incumbent Directors.
  - (iii) All remaining nominees.
- (l) Incumbent Directors are eligible for re-nomination as above and subsequent re-election at the first ballot vote.
- (m) The three highest polling Directors from the first ballot vote are re-elected as Directors.
- (n) Unsuccessful nominees from the first ballot vote join all new nominations in a second ballot to elect the remaining Directors. All nominees will again be granted speaking rights towards their nomination.
- (o) In the event of there being insufficient nominations to cover the positions, the balance will be elected from the floor.
- (p) The term of office is two years.
- (q) In the event of a Director vacating their position, the remaining Directors complying with Rule C10(f) may appoint a member to fill the vacancy until the next AGM.

## **C9 THE SENIOR EXECUTIVE**

### **C9-1 President**

- (a) The duties of the President are:-
- (i) Act as chairperson for the Appeal Committee.
  - (ii) Act as ambassador and spokesperson for the sport of speedway and for SNZ.
- (b) The President may receive an honorarium as set by the Directors from time to time.
- (c) In the event of the President vacating their position, the Vice President shall automatically assume the position of President.

### **C9-2 Vice President**

- (a) The Vice-President is voted for by the Directors at the first Directors meeting after the AGM.

- (b) In the event of the Vice-President assuming the role of President, the vacant position of Vice President will be voted on by the remaining Directors.

### **C9-3 Chairperson**

The Chairperson of the Directors will be that who the President nominates at the first Directors meeting after the AGM.

## **C10 MEETINGS OF THE DIRECTORS**

- (a) The Directors will meet as often as required.
- (b) A meeting will be called on the written request of any three Directors or on the written notification of the President or the CEO.
- (c) The CEO will, whenever possible, give one month's notice to all licensed tracks of the date of Directors meetings.
- (d) The CEO will provide a meeting summary to all licensed tracks as soon as possible after the meeting.
- (e) The Directors can be called together for a meeting without one month's notice if it is considered by the President and CEO to be of sufficient urgency.
- (f) Four will form a quorum at all meetings of the Directors. If a quorum is not formed, the CEO is to recall the meeting within 14 days.

## **C11 RESPONSIBILITIES OF THE DIRECTORS**

- (a) The Directors have the mandate to fulfil the objects and powers of SNZ.
- (b) Appoint a Chief Executive Officer (CEO), Chief Stipendiary Steward, Technical Advisor and to approve the appointment of office and managerial staff as and when required.
- (c) Compile the Appeal Panel (refer Rule G12-2-2).
- (d) Present the names of the people to be considered for Technical Committees (refer Rule G3-1-5).
- (e) Appoint sub-committees as and when required.
- (f) Impose, alter, remove or endorse disqualifications, suspensions or fines.
- (g) Enter into contracts on behalf of SNZ.
- (h) Administer the funds of SNZ.
- (i) Alter or add to the Regulations of SNZ and/or the Technical rules of any class if a safety issue has been identified which requires prompt resolution to ensure the ongoing safety of the sport.
- (j) Can give dispensation from the Rules and Regulations.
- (k) Appoint by majority vote and subject to Rule C10(f), no more than two members to hold office as Board National Representatives for a period determined by the Directors.
- (l) Investigate any person or persons as to their conduct or identity.
- (m) Deal with any contingency not provided for, pending consideration at the next AGM.

## **C12 PATRON**

Every two years the members will elect a Patron, from nomination/s put forward by the Directors. Their duties are ceremonial only.

## **C13 OFFICERS OF SNZ**

### **C13-1 Chief Executive Officer**

- (a) A Chief Executive Officer (CEO) is to be appointed by the Directors on terms which are negotiated.
- (b) The CEO will perform duties as laid down by the Directors in their job description.
- (c) The CEO will be paid a salary as the Directors think fit.

### **C13-2 Chief Stipendiary Steward**

- (a) The Chief Stipendiary Steward (CSS) is appointed annually by the Directors.
- (b) The duties of the CSS are to supervise and direct all SNZ officials in their various capacities.
- (c) The CSS may attend all SNZ and Directors meetings and will have speaking rights but not voting rights.
- (d) The CSS can receive an honorarium as set by the Directors.

### **C13-3 Technical Advisor**

- (a) The Technical Advisor is appointed annually by the Directors.
- (b) Their duties are to gather information for use by SNZ.
- (c) They may attend all Technical Committee, Directors and SNZ General Meetings in an advisory role.
- (d) They can receive an honorarium as set by the Directors.

## **C14 TECHNICAL COMMITTEES**

- (a) Each National and Regional class has its own Technical Committee.
- (b) Technical Committees are to provide a written report of their activities to the AGM.

### **C14-1 National Classes**

- (a) National Class Technical Committees will consist of a maximum of 6 people being:
  - (i) One competitor representative.
  - (ii) A maximum of four Technical specialists.
  - (iii) A Chairperson who is a Director.
- (b) Technical Committee Competitor representatives and Technical Specialists will be elected every two years at an AGM.
- (c) Voting for Technical Committee Specialists and Competitor Representatives will be:
  - (i) One promoter's representative.
  - (ii) One competitor's representative.per track that contracted the relevant class in that current season.
- (d) **Competitor Representatives**
  - (i) Nominees for the competitor's representative must be licenced to compete in that class.
  - (ii) Nominations must only be made by SNZ members from licensed tracks currently contracting competitors in that class.
  - (iii) They must be seconded by a SNZ member from another licensed track currently contracting competitors in that class.
  - (iv) Nominations must be received by the CEO at least 60 days prior to the AGM.
- (e) **Technical Specialists**
  - (i) SNZ members can make recommendations for Technical Specialists to the Directors through the CEO up to 60 days prior to the AGM.
  - (ii) Technical Specialists will be elected from a list of at least four nominations put forward by the Directors.
  - (iii) This list shall be circulated to tracks with all other nominations 40 days before the elections at the AGM.

### **C14-2 Regional Classes**

Regional Class Technical Committees are selected by the Directors.

## **C15 PROCEDURES FOR RULE CHANGES**

### **C15-1 Changing the Constitution**

- (a) Changes to this Constitution may be made only every two years at an AGM, or at a Special General Meeting called for the purpose.
- (b) Changes to this Constitution must be passed by a majority of two thirds of those eligible to vote.

- (c) Any proposed alteration to, addition to or rescinding of this Constitution will be deemed to be a remit.
- (d) All remits will be circulated by the CEO at least 40 days prior to the AGM.

### **C15-2 Changing the General Regulations**

- (a) Changes to the General Regulations of SNZ may be made only every two years at an AGM, or at a Special General Meeting called for the purpose.
- (b) Changes to the General Regulations of SNZ will be passed by a simple majority of those eligible to vote.
- (c) Any proposed alteration to, addition to or rescinding of the General Regulations of SNZ will be deemed to be a remit.
- (d) All remits will be circulated by the CEO at least 40 days prior to the AGM.

### **C15-3 Changing the Technical and Racing Rules**

- (a) **Stockcars, Superstocks, Saloons, Modifieds and Streetstocks**
  - (i) Changes are made only every two years at an AGM, or at a Special General Meeting called for the purpose.
  - (ii) Changes are passed by a simple majority of those eligible to vote.
  - (iii) Voting for ratification of technical rule changes, and additions and alterations to racing rules will be one promoter's representative and one competitor's representative per track that contracted the relevant class in that current season.
  - (iv) Any proposed alteration to, addition to or rescinding of these Racing Rules are deemed to be a remit.
  - (v) Any proposed change to these Technical Specifications received from members of SNZ are deemed a Technical Submission as per clause (vi).
  - (vi) Technical submissions from members of SNZ for consideration by Technical Committees, which may result in additions or alterations to technical rules, must be received by the CEO on or before the 1st day of October in the year prior to the relevant AGM in order that sufficient time be allowed for full investigation by the Technical Committees.
  - (vii) Technical submissions received after that date will be held over until the next AGM at which rule changes will be considered.
  - (viii) Technical submissions with written recommendations for technical rule changes from Technical Committees will be forwarded to the Directors as draft rule changes.
  - (ix) Draft rule changes from the Technical Committees will be circulated to tracks not less than 120 days prior to the AGM.
  - (x) Any proposed amendments to the draft rule changes as circulated must be received by the CEO not less than 80 days prior to the AGM.
  - (xi) Proposed amendments to the technical rules will be forwarded to the Technical Committees for final consideration.
  - (xii) All Technical rule changes in their final draft form and all Racing Rule remits will be circulated by the CEO at least 40 days prior to the AGM.
  - (xiii) The Technical Committee Chairperson, or their nominee will put the technical rule changes to the AGM. No seconder is required.
  - (xiv) All ratified rule changes will become effective 8 weeks following an AGM unless a lead in period applies.

- (b) **Midgets, TQ Midgets, Sprintcars, Minisprints, Solos, Sidecars and Super Saloons**  
After consultation with the technical committees, competitors and tracks of the class(es) concerned, the Directors can alter or add to the regulations or technical rules relating to the Midget, TQ Midget, Sprintcar, Minisprint, Solo, Sidecar and Super Saloon classes.
- (c) **Ministocks, Production Saloons, Modified Sprints, Youth Ministocks, Quarter Midgets, Junior Solos, Peewee Solos and Youth Saloons**  
The Directors can alter or add to the regulations or technical rules in the above classes.

## **C16 FINANCIAL PROCEDURES**

- (a) The financial year will commence on 1 April and end on 31 March of the following year.
- (b) An audited statement of accounts will be prepared for each financial year and circulated to all promoting bodies at least 14 days prior to the AGM.
- (c) The Directors will appoint an Auditor, who will be a member of the New Zealand Institute of Chartered Accountants. The appointed Auditor will perform all that is required as set down in the rules of the Institute.
- (d) The Directors can enter into a loan agreement or operate a bank overdraft where such borrowings do not exceed 50% of SNZ's assets, cash or otherwise.
- (e) All real and personal property owned by SNZ will be held and administered in the corporate name and title of SNZ, which, as such, may sue and be sued, and may recover any monies due to SNZ, whether by any member, club or other person or body.
- (f) The Directors can invest any of SNZ's funds not immediately required to carry out any of the functions of SNZ, on such securities authorised by law for the investment of trust funds.
- (g) The income and property of SNZ, from whatever source derived will be applied solely towards achieving the objects of SNZ.

## **C17 CONTROL AND USE OF THE COMMON SEAL**

The seal will consist of the words. "Speedway New Zealand (Incorporated) Common Seal", set up as a circular stamp and will be in the custody of the CEO, who will affix it to such documents as the Directors may from time to time direct. The CEO, the President and/or a Director will sign the common seal.

## **C18 WINDING UP**

If, upon the winding up or dissolution of SNZ, there remains after the satisfaction of all debts and liabilities, any property whatsoever, the same shall not be paid or distributed among the members of SNZ but shall be given or transferred to some other organisation or body having objects similar to the objects of SNZ, or to some other charitable organisation or purpose, within New Zealand.

## **C19 ALTERING THE RULES**

No addition to or alteration of the non-profit aims, personal benefit clause or the winding up clause can be confirmed without the approval of the Inland Revenue Department. The provisions and effects of this clause will not be removed from this document and will be included and implied into any document replacing this document.

# REGULATIONS OF SPEEDWAY NEW ZEALAND INC

## **G1 INTERPRETATION AND APPLICATION**

These regulations shall be considered the By-laws of Speedway New Zealand and shall be interpreted according to the Directors unless instructed by the members under Rule **C7(k)**. The Directors shall be empowered to decide any question within New Zealand concerning the interpretation of these regulations. Any technical matters must be referred to the relevant technical committees before the Director's rule on the issue concerned.

## **G1-1 DEFINITIONS**

The following terms, where used in these Regulations shall be deemed to bear the following meanings.

**G1-1-1 Approved:** An approved component will be a component built to a suitable standard acceptable to Speedway New Zealand.

**G1-1-2 Approved Safety Component:** An Approved Safety Component will be any component described in the "S3 Personal Safety" section, and must be "SNZ approved". Any component required to be "SNZ approved" must be submitted to the SNZ Office for approval. A record of approved components will be available from the SNZ office.

**G1-1-3 Championships:** The NZ, North Island and South Island Championships are the Official Speedway New Zealand Championships. All other Championships must be approved by the Directors.

(a) **Allocated Titles:** All championships as above as well as the New Zealand Grand Prix, for each National Class. These are allocated by SPANZ at each AGM.

**G1-1-4 Club:** Any constituent Club which has formally undertaken to observe and comply with the General Competition Rules and other Regulations of SNZ.

**G1-1-5 Clutch Start:** A clutch start is when the machine is started from a stationary position on the starting line with the engine running.

**G1-1-6 Competitor:** A person licenced to compete at a meeting.

**G1-1-7 Competitor's Agreement:** The approved form of agreement between a Promoter, a Competitor and SNZ.

**G1-1-8 Competitor's Representative:** A person elected by the competitors in each class to represent all competitors in the competition.

**G1-1-9 Composite Materials:** Composite materials are those of special properties made by a combination of components none of which alone could attain those properties. In particular, a combination of fibres in the form of fabric or tape with reactive polymer resins followed by curing, producing a composite component of extraordinary strength.



- G1-1-10 Cubic Capacity of the Engine:** The volume swept by the pistons or other moving parts subjected to the force of the products of combustion in producing power.
- The capacity of a Rotary engine produced under Wankel Licence shall be defined as:** the manufacturers stated capacity of one working chamber, multiplied by the number of rotors.
- G1-1-11 Declared Race:** Except for championships, teams racing, solo and sidechair races. The Clerk of the Course may declare a race during a stoppage. The results shall be as per the last completed lap. The referee may exclude any competitor deemed to be the primary cause of the stoppage.
- G1-1-12 Engine:**
- (i) The engine is the entire device that burns fuel to collectively produce sustained mechanical power, to convert heat energy into mechanical energy.
  - (ii) The engine must consist of every part and component to maintain the original factory configuration and all components necessary to allow a sustained operation as a unit of power.
  - (iii) Components not considered to be part of an engine are as follows Coolant fluids, heat exchange units, lubricating fluids, hoses, gaskets, ignition wires, spark plugs, filters, fastenings and drive belts will be free of restriction and not included in this definition.
- (a) **OEM:** OEM is an abbreviation of Original Equipment Manufacturer A component or part referred as OEM or Original Equipment Manufacture is also referred to as a genuine part. The parts or components are standard production parts and are usually purchased from the dealer or distributor of the brand of vehicle that part was intended for, and are usually branded, or identified or packaged in the colours or logo of the vehicle or company that manufactures the vehicle.
- (b) **After Market Specifications:**
- (i) A component or part may be produced to OEM specifications and maintaining the original factory configuration, but may not necessarily be made by the original manufacturer. A part produced to OEM specifications is intended to be a replacement part, without altering or amending the function or performance of the part, or the engine or vehicle to which it is fitted. These components or parts are commonly known as 'after market' parts and are usually purchased from outlets that specialise in the supply of parts or components and who are not dealers or distributors of any brand of vehicle.
  - (ii) A component or part produced to OEM specifications is intended to be a replacement part that is made available as an alternative to a genuine or standard production part produced by a vehicle manufacturer.
  - (iii) A component or part manufactured to OEM specifications will be produced to the same dimensions and will be made from similar or identical materials to those used in the manufacture of the original component.
  - (iv) A component or part that is regarded as OEM, or to OEM specifications, is a replacement part for a particular vehicle produced in the country of origin, and of a particular make, model and year of manufacture.

- (c) **Stock Replacement:** Stock Replacement components are components manufactured by aftermarket manufacturers to OEM Specifications.

- G1-1-13 Fidelity Fund:** The SPANZ/SNZ Fidelity Fund is a sum of money held in Trust, administered by a Board of Trustees, for the purpose of protecting SNZ competitors against default of their prize money payment.
- G1-1-14 FIM:** (Federation International De L'motorcyclistes). The Federation of Motor Cycling Clubs.
- G1-1-15 Fixture:** A race, series of races, or a meeting held on a pre-arranged date.
- G1-1-16 Flying Start:** The start made by the competitors on a track whose speed up to the starting line is not restricted.
- G1-1-17 Grand Parade:** There are two types of Grand Parade.
- (i) The Grand Parade of cars where the race vehicles parade at a modest pace before the Feature Race, drivers require Safety Helmets as per the regulations in S1.
  - (ii) The Grand Parade of vehicles where the vehicles are at a walking pace with drivers' on bonnets, or the official "Ride By" of riders; the crew and/or drivers are not required to wear Safety Helmets.
- G1-1-18 Handicap:** A method having for its purpose the equalising, so far as possible, of the chances of the competitors.
- G1-1-19 Heat:** One of a series of races over a specified number of laps of the track.
- G1-1-20 Holder of Record:** The competitor in the most recent successful attempt at a particular record.
- G1-1-21 Jurist:** Officials appointed by the Directors to adjudicate on action committees and urgent enquiries and matters related to SNZ should the need arise.
- G1-1-22 Licenced Speedway Track:** A track licenced with SNZ with a continuous circular or semi-circular course having a loose or hard surface bounded by a safety fence.
- G1-1-23 Saloon:** (formerly Limited Saloon) A car specially designed for racing on SNZ licensed tracks as per Super Saloon specifications but with further restrictions.
- G1-1-24 Log Book:** The competitor vehicle record book issued by the local track steward.
- G1-1-25 Midget Car:** A car with a front mounted engine especially designed for racing on Speedway New Zealand licenced tracks as per specifications and RETAINING THE CLASSICAL APPEARANCE OF A MIDGET CAR.
- G1-1-26 Minisprint:** A car with an automotive engine specially designed for racing on Speedway New Zealand licenced tracks as per specifications.

- G1-1-27**     **Ministock:** A car specially designed for racing on Speedway New Zealand tracks as per specifications.
- G1-1-28**     **MNZ:** Motorcycling New Zealand Inc. The controlling authority of Motor-cycling sport in New Zealand.
- G1-1-29**     **Modified:** A car specially designed for racing on Speedway New Zealand licenced tracks as per Specifications.
- G1-1-30**     **Modified Sprint:** A car with motorcycle engine specially designed for racing on Speedway New Zealand licenced tracks as per specifications.
- G1-1-31**     **National Class:** The following race vehicle classes are deemed as 'national classes' by SNZ: Solo Motorcycles, Sidecars, Three Quarter Midgets, Midgets, Sprintcars, Super Saloons, Saloons, Modifieds, Superstocks, Stockcars, Streetstocks and Minisprints
- G1-1-32**     **Overseas Competitor:** A competitor whose domicile or ordinary place of residence is situated outside of New Zealand.
- G1-1-33**     **Passenger:** A licenced person other than the competitor conveyed by a motor cycle and sidecar.
- G1-1-34**     **Permit:** The documentary authority to organise and hold a meeting granted solely by SNZ.
- G1-1-35**     **Postponement:** The date a promoter allocates a meeting within the 14 days allowable under SNZ rules for whatever reason, this can be advertised in advance.
- G1-1-36**     **Promoter:** The person, persons, limited liability company or incorporated society licenced by SNZ and proposing to hold, holding or organising a meeting on a licensed track.
- G1-1-37**     **Race/Event:** A competition in which the order of finishing is the major factor determining the result, of two or more persons against each other.
- G1-1-38**     **Race/Event Finish:** A race is not finished until the Chequered Flag is displayed and the last competitor has passed the finish line regardless of the number of laps run. A competitor must cross the finish line and receive the chequered flag before any finishing places are allocated in any race, except as provided for in Sections T10 and T11.
- G1-1-39**     **Raindate:** A date allocated by a promoter to run a meeting which has been rained off during a meeting, this can be advertised in advance.
- G1-1-40**     **Ready to Race:** A race vehicle is 'ready to race' once it has passed vehicle checking on the day/night in question.
- G1-1-41**     **Record:** The minimum time taken to cover a lap or a prescribed number of laps of a named track, with either a Standing, Rolling or Flying Start.
- G1-1-42**     **Regional Class:** The following race vehicle classes are deemed as 'regional classes' by SNZ: Production Saloons, Modified

Sprints, Ministocks, Youth Ministocks, Quarter Midgets, Youth Saloons and Kiwi Kidz Solos.

- G1-1-43      Rolling Start:** The mobile start made by one or more competitors on a track who accelerate up to the starting line.
- G1-1-44      Safety Fences:** Every Speedway shall be provided with a safety fence around the outer edge of the course, of approved design and construction, suitable and sufficient for the protection of the public and the competitor.
- G1-1-45      Super Saloon:** (formerly Saloon) A car specially designed for racing on Speedway New Zealand licenced tracks as per specifications.
- G1-1-46      SNZ:** Speedway New Zealand (Inc), the Speedway Controlling authority in New Zealand.
- G1-1-47      SNZ Officials:** These are defined as: Stipendiary Stewards, Stewards and Assistant Stewards, Senior Referees, Referees and Assistant Referees and Technical Stewards. The Chief Stipendiary Steward and Technical Advisor are Officers of SNZ.
- G1-1-48      SPANZ:** Speedway Promoters Association of New Zealand: The national association of speedway promoters, affiliated with SNZ through the Memorandum of Understanding.
- G1-1-49      Speedway Competitor's and Passengers Licence:** The documentary authority granted to a Competitor and a Passenger entitling the holder, if otherwise qualified to take part in the Speedway Meeting.
- G1-1-50      Speedway Cycle (Sidecar):** A Motor cycle and Sidecar specially designed for Speedway type of racing in promoted and club competitions.
- G1-1-51      Speedway Cycle (Solo):** A Motor cycle specially designed for Speedway type of racing in promoted and club competitions. Such machine to be single geared and fitted with a clutch.
- G1-1-52      Sprintcar:** A car specially designed for racing on Speedway New Zealand licenced tracks as per specifications.
- G1-1-53      Stockcar:** (Formerly Standard Stock) A car specially designed for racing on SNZ licensed tracks as per Superstock specifications but with further restrictions.
- G1-1-54      Stock Block:** Is an engine produced for or by a motor vehicle manufacturer for standard road vehicle use or manufactured to original manufacturers specifications.
- G1-1-55      Superstock:** (formerly Stockcar) A car specially designed for racing on Speedway New Zealand licenced tracks as per specifications.
- G1-1-56      Streetstock:** A standard road car specially modified for racing on Speedway New Zealand licensed tracks as per specifications.

- G1-1-57      **Suspension:**** The prohibition of a person or a body of persons from taking part in any capacity whatsoever in any Motorised Competition wherever held, or the prohibition of a machine of a certain make or description from being driven in any Competition. Suspension shall be either "sine die" or for a definite period, as defined by Speedway New Zealand Inc.
- G1-1-58      **Three-quarter Midget Car:**** A car with a front mounted engine specially designed for racing on Speedway New Zealand licenced tracks as per specifications and **RETAINING THE CLASSICAL APPEARANCE OF A THREE QUARTER MIDGET CAR.**
- G1-1-59      **Track Licence:**** The documentary authority granted by SNZ recording that the track to which it refers conforms to, and that the Licensee has undertaken to comply with, all the requirements of these Regulations.
- G1-1-60      **Unit Construction:**** A motorcycle engine that has the engine and transmission as one complete unit.

# GENERAL

## **G2 SCOPE OF THESE RULES AND REGULATIONS**

Every motor competition shall be held under the Regulations of SNZ. In addition these Regulations shall apply to all licenced tracks as defined in G1-1-22, Definitions, and, except as hereinafter provided, to all competitions held thereon.

### **G2-1 Action Committee**

An Action Committee comprising of SNZ appointed jurists, the Director for that class and the Chief Executive Officer is empowered to adjudicate on suspensions or disputes or other SNZ business which requires urgent settlement or attention. The committee is to be convened by the Chief Executive Officer. All decisions of the Action Committee shall stand until the next SNZ meeting when the decision/s must be confirmed or otherwise dealt with by the Directors. All decisions of the Action Committee must be in conformity with the rules and regulations and specifications of the SNZ rule book. No Action Committee shall have any authority to over rule any previous decision made by the SNZ during the current season.

## **G3 SUB-COMMITTEES**

### **G3-1 Technical Committees and Technical Rules**

**G3-1-1** All Technical rules are to be coordinated by the Directors in conjunction with Technical Committees.

**G3-1-2** Equipment (Section E) and Safety rules (Section S) are to be co-ordinated by the Directors.

**G3-1-3** Each national class (as defined in G1-1-31, Definitions) will have its own Technical Committee.

Each regional class shall have its own sub-committee as approved by the Directors.

**G3-1-4** Each Technical Committee shall consist of a maximum of 6 people being:

- (i) One (1) drivers' representative, elected every two years at an AGM by a majority vote of those representatives entitled to vote at the AGM.
- (ii) A maximum of four (4) Technical specialists, elected every two years at an AGM by a majority of those representatives entitled to vote at the AGM.
- (iii) A chairman who shall be a Director.

**G3-1-5** Nominees for the drivers' representative on each Technical Committee must be licenced competitors in that class.

- (i) Nominations for the drivers representative on each Technical Committee must only be made from tracks currently contracting competitors and running that class. They must be seconded by another track currently contracting competitors and running that class.
- (ii) Nominations must be in writing and received by the CEO no later than 60 days before the AGM.

**G3-1-6** Technical Specialists on each Technical Committee shall be elected from a list of at least four nominations put forward by the Directors. This list shall be circulated to tracks with all other nominations 40 days before the elections at an AGM.

- (i) Members may make recommendations for Technical Specialists to the Directors through the CEO up to 60 days prior to the AGM.

**G3-1-7** Every two years, the respective Technical Committee chairman, or his nominee will put the technical rule changes to the AGM. No seconder is required.

- G3-1-8** The proposed rule changes will be ratified or not every two years by a majority vote of those representatives entitled to vote at the AGM.
- G3-1-9** All ratified rule changes will become effective 8 weeks following an AGM unless a lead in period applies.
- G3-1-10** Each Technical Committee may provide a written report on their respective class to the AGM for discussion.
- G4** **ORGANISATION**
- G4-1** **Permission and Control**  
No meeting or competition shall be held other than under the control of and permit of SNZ. If any promoting body has been guilty of breach of the Rules of SNZ, the Directors may decline to grant or may withdraw a permit, without stating its reason.
- G4-2** **Application for Permit**  
Every application for a permit shall be made to the Steward prior to the commencement of a meeting and shall be accompanied by the appropriate fees.
- G4-3** **Permit Fees**  
A Permit Fee shall be payable by the Promoter for each meeting for the issue of a SNZ permit. These fees shall be payable to the Steward prior to the commencement of a meeting.
- G4-3-1** For all meetings requiring an FIM International Permit, an extra International Permit Fee must be paid by the Licenced Promoters.
- G4-3-2** If a meeting is not held or lapses before the commencement of the third event, the Permit Fee will be valid for the next meeting of similar value.
- G4-3-3** Once a Steward has issued a permit for a particular meeting and the meeting is in progress, the permit cannot be withdrawn except when safety factors are involved.
- G4-3-4** The meeting permit fee includes a SPANZ levy, which is a proportionate amount payable to SPANZ, as determined from time to time in agreement between SNZ and SPANZ.
- G4-4** **Special Levies**  
In the event of Speedway New Zealand funds raised by means of the fees not being sufficient for administration by the Directors, the Directors reserve the right to impose further levies.
- G4-5** **Practices**  
Each track must have at least three practice sessions prior to the commencement of its official season. New competitors shall ride or drive at three (3) compulsory practices prior to taking part in open competition or drive from rear of field for at least four races. (Refer Rule G8-1-5 re SNZ training programme)  
All such compulsory practices shall carry a permit fee for each of the first three sessions, and a fee for any practice held during the season. First Aid cover must be provided.
- G4-5-1** Under no circumstances may admission charges be made for any practices whatsoever.
- G4-5-2** No qualifying meetings or elimination meetings can be conducted under a practice permit.
- G4-6** **Promotions of Meetings**  
Meetings may be promoted as follows:  
(i) By Promoters, under the permit and control of SNZ.  
(ii) By a Club under the permit and control of SNZ.
- G4-6-1** Announcement to be made on all Official Documents: All entry forms or other official communications relating to any meeting or competition (i.e. Supplementary Regulations Programme Announcements) shall be conspicuously marked with the words

- "Held under the General Regulations of Speedway New Zealand Inc."
- G4-6-2** The Promoters may not commence operating until the Memorandum of Agreement has been duly executed and furnished to the Chief Executive Officer of SNZ and a track licence has been issued by the Directors.
- G4-6-3** It is the Promoter's responsibility to allow only those vehicles, which fully conform to all the required specifications to be raced on the licensed track, unless the provisions of rules G7-1-14(b) or G7-3-20(b) apply.
- G4-6-4** Promoters, who will not need competitors contracted to them for a specific meeting, should notify by word or notice board the unwanted competitors seven (7) days before hand.
- G4-7** **Prohibition of Betting**  
NO betting shall be permitted during any meeting held under these Regulations unless under regulations of TAB (Totalisator Agency Board).
- G4-8** **NZ Team Selection**  
The Directors shall appoint a committee to select an official New Zealand Team to compete against any other SNZ recognised team in the class required (i.e. Superstock, Super Saloon, Motor Cycle, Midget car, Three Quarter Midget car, etc) if the need arises each season. The Directors shall appoint a New Zealand Team Manager as required.
- G4-8-1** Promoters who desire to use an Official New Zealand Team must make application to the Directors in writing at least 21 days prior to the date on which the proposed event will be held.
- G4-8-2** No promoter is permitted to advertise, in any way, a meeting or Test Match between a New Zealand Team and any other Speedway New Zealand recognised team, unless he has the sanction of SNZ for the event and the New Zealand Team advertised is selected by a selection committee, which must be appointed by Speedway New Zealand.
- G4-8-3** No licenced competitor of SNZ will allow his name to be advertised as an Official New Zealand Team member either in New Zealand or Overseas unless he has been advised of his selection personally by the appointed selection committee.
- G4-8-4** Any promoter infringing the above regulation G4-8-1 shall be subject to a fine not exceeding \$1,000 and the Chief Executive Officer of SNZ is authorised to insert a disclaimer notice in the necessary newspapers, declaring the advertised meeting as unofficial and not licenced.
- G4-9** **Insurance**
- G4-9-1** A Promoter must indemnify and keep indemnified SNZ and its successors in title against all claims, actions, proceedings, demands, costs, damages, and expenses, which may be brought or made against it by:
- (a) A Competitor or Competitors, or by a member or members, of the public attending a Speedway Meeting, promoted by the Promoter or by any other person whatsoever.
  - (b) The administrators, executors or assigns of any Competitor or Competitors, or member or members of the public, or any other as aforesaid.
- G4-9-2** A Promoter must take out a Public Risk and Property Damage Insurance Policy in the name of the Promoter with Insurance Company and pay all premiums in respect thereof as and when they fall due.



The Directors must be advised that premiums in respect of the aforesaid Policy have been paid and if called upon to produce to the Directors receipts therefore.

**G4-9-3** The Competitor for himself, his Executors and Administrators hereby acknowledges and declares that he will at all times participate in all such races and all such practice at his own risk throughout and that neither the Competitor nor his estate shall institute or make any action, suit, claim or demand against the Promoter, or other competitor or SNZ for any injury or damages suffered by him or the machine or vehicle used by him during any such race or practice.

**G4-9-4** Competitors Personal Accident Insurance: Personal Accident Insurance is strongly advised but is not compulsory.

**G4-10 Moneys due to the Competitor**

The promoter must pay to the competitor all moneys due to the competitor from his contracted track within 14 days of such a meeting and within 30 days of a meeting at any other SNZ Licensed Track. In the case of an appeal affecting prize money, payments must be made to the competitor within 14 days of the release of the Appeal findings.

**G4-11 Fidelity Fund (Refer G1-1-13, Definitions)**

Every SNZ Track Licensee shall be a member of the Fidelity Fund once they have a signed Memorandum of Agreement with SNZ and upon payment of a one-off joining levy, which is non-refundable.

**G4-11-1** Claims against the Fidelity Fund can only be made in respect to an SNZ permitted meeting.

**G4-11-2** Claims must be lodged with Speedway New Zealand Inc. with sufficient tangible proof of the amount not paid before 30 June following the season's racing. No claims will be paid before 28 July following closure date. The Fidelity Fund is limited and any or all claims may not be honoured in full. Claimants must forward details in writing to the SNZ Chief Executive Officer, who will research claims and forward findings and any recommendations to the Fidelity Fund's Board of Trustees.

**G4-11-3** Any successful claims against the Fidelity Fund will be paid out within 30 days of the decision by the Board of Trustees.

**G5 TRACKS**

**G5-1 Licencing of Tracks**

No track shall be used for motorised competition or attempts on records until it has been licenced by SNZ, which may with hold, grant or withdraw a Track Licence at its discretion if any promoting body has been guilty of a breach of the rules of SNZ without stating any reason for such action.

**G5-1-1** A Track Licence may be granted to:

- (i) The Owner or Leasee of the track, being the applicant.
- (ii) A Promoter who, being the applicant, can satisfy the Directors that he has obtained the use of a track for motor racing for the season or such other period as the Directors in their uncontrolled discretion may deem sufficient.

**G5-1-2** A track licence shall expire on 31st August. Following its issue the existing licensee of the track must apply for renewal on or before 1st September. No licence will be renewed for a period greater than 24 months from the expiry date of the current licence without prior approval from the Directors.

**G5-1-3** A Track Licence shall not be transferable except with the written consent of the Directors. An original application for a track licence shall be accompanied by plans and other particulars of

- the course or track including the seating accommodation for visitors and officials and shall be made on the prescribed form.
- G5-1-4** A Track Licence shall state the length of the track and any restrictions as to the number, type of power of vehicles that may be used thereon.
- G5-1-5** A Track Licensee may not conduct or allow to be conducted by way of sublease, or permit from another Motorsport body, or other arrangement any form of motorised competition, exhibition or display for which it is not expressly licensed by Speedway New Zealand Inc. However should such activity not unreasonably interfere with the conduct of Speedway New Zealand Inc's business on the said licensed track, permission may be granted after an application.
- G5-1-6** Fees shall be payable to SNZ for the following:
- (i) New Track Licence Application
  - (ii) Track Licence Renewal
  - (iii) Track Licence Transfer Fee
- G5-1-7** A Track Licence will only be issued to a Promoter who can fulfil all the requirements of Section G5 of the SNZ regulations.
- G5-1-8** The Directors shall not be obliged to issue a license to any applicant who may comply with the provisions of Section G5 of the Regulations if in the view of the Directors the granting of that license is not conducive to the conduct of the sport or the interests of its existing licensed member tracks.
- G5-1-9** The Promoter must apply, on the official 'Track Application' form, to the SNZ office for a Licence to conduct 'named classes' of speedway racing at a 'named track and locality'. With the application must be the appropriate licence fee, copy of lease, list of nominated officials and event calendar for the coming season. (See also G13-2-3)
- SNZ has the right to refuse a track from running a meeting that is in direct conflict to an SNZ allocated Championship Title of the same class.
- G5-1-10** The SNZ office will forward to the Promoter a Memorandum of Agreement Document. The document must be fully filled in and returned promptly to the SNZ office. In addition, the Promoter must arrange for a Public Risk and Property Damage Insurance Cover of at least \$500,000 and the SNZ office must be advised by the Insurance Company (or Underwriters), of the amount of the Cover, the period of the Cover, the Policy number and copy of receipt. (See rule G4-9-2)
- G5-1-11** Once the completed Memorandum of Agreement document, and the advice from the Insurance Company re Public Liability and Property Damage Cover have been received, the Directors shall then consider the issuing of a Track Licence subject to a satisfactory Track Inspection Report from the appointed track inspector being received.
- G5-1-12** If at any time an adverse report is received concerning any track or the conduct of competitors or the conduct of promoter/s thereby necessitating, in the opinion of the Directors, a special visit of inspection or inquiry a fee of \$50.00 plus all expenses incurred by the inquiry or inspection shall be payable by the Promoter.
- G5-1-13** In consideration of any applicant for a Track Licence as aforesaid, SNZ will require Tracks on which racing will be held to be:
- (a) Minimum of 250m, maximum 1000m in circumference. Measurements shall be taken 1m out from the inside line of the track.
  - (b) Not less than 9m wide on straights.

- (c) Not less than 12m wide on bends.
- (d) Existing licensed tracks shall be allowed to construct a Motorcycle Solo and Sidecar only track inside the existing track provided that the measured length be a minimum of 100 metres measured one metre out from the pole line, and that the minimum width in the bends be 12 metres and in the straights 9 metres. The outside perimeter shall be clearly defined by collapsible markers. Where a Motorcycle Solo and Sidecar track is inside a larger track the existing safety fence shall be deemed to be the safety fence for the inside track. The outer track will be out of bounds to all vehicles and personnel while racing is in progress on the inside track.

SNZ can only sanction two and three wheels competition on tracks up to 457m provided that the Directors may under exceptional circumstances in their discretion, sanction tracks varying from the above measurements.

**G5-1-14** All Tracks must be inspected by an official of SNZ prior to the commencement of the speedway season and the full costs of inspection must be borne by the Track Promoter. In the case of the establishing of a new track, the costs of inspection/s are to be borne by the Promoter. Where an established Track fails to pass the inspection the Promoter/s of the track must also pay all costs incurred by subsequent inspection/s.

**G5-1-15** Acceptance as a Member Track by the Directors by way of a completed Memorandum of Agreement and the issuing of a Track Licence also means automatic acceptance as a member of SPANZ by the named Track Licensee.

## **G5-2 TRACK REQUIREMENTS**

### **G5-2-1 Track Lighting**

Lighting must be adequate and even, allowing no dark patches and all lights must be shaded so that there is no chance of glare in the competitor's eyes from overhead lights.

### **G5-2-2 Control Lights and Flags**

- (a) At least six (6) sets of red, amber and green lights are to be installed, one on every corner and one approximately halfway down each straight. They shall be placed an average height of 1.5m above track surface and on the track fence.
- (b) Red light to stop a race, amber lights for emitting warning signals and green lights for race in progress. The green light to be on continuously while race is in progress.
- (c) For daylight races, red lights must be supplemented by red flags, yellow lights by yellow flags.
- (d) When signals are given by flag and blackboard, the flag or blackboard should be at least 0.371m<sup>2</sup> (4 square feet) in area.

**G5-2-3** Tracks running Sidecars and/or Streetstocks to have all track flags and lights etc. to be viewed from both clockwise and anti-clockwise directions.

### **G5-2-4 Safety Fences – note that this section is replaced effective 1/9/2012, see below**

Every Speedway shall be provided with a wall and safety fence around the outer edge of the course, of approved design and construction, suitable and sufficient for the protection of the public and the competitor. While racing is in progress, approved gates MUST be closed and fixed so as to continue the general line of the wall.

(a) **Minimum Requirements**

Minimum height 1 metre (3 ft for fences built before 1980). Optional for motorcycle and sidecar tracks a wooden safety fence shall have a minimum thickness of 76 mm with vertical posts spaced not more than 2.5 metres centre to centre, suitable for the protection of the public. A skid rail must be firmly affixed to the structure of the fence at approximately hub height of competing vehicles. A 300mm x 50mm skid board is not required for a concrete safety fence, a smooth paneled or horizontal timbered fence, provided that the horizontal timbers are minimum 300mm x 76 mm and these are built to the satisfaction of the inspecting steward.

All other sections must have a wall made of smooth concrete or of an approved design. A further safety structure is required above or behind the concrete wall consisting of the placement of 32kg minimum railway irons, placed at not more than 5 metres apart and extending vertically not less than 2133mm above the track surface level. These must be built to the satisfaction of the inspecting steward.

Two 25mm diameter wire ropes completely around the circuit to be fixed to the iron posts in an approved manner, (i.e. may be threaded through or clamped), the bottom wire to be approximately 550mm above the existing fence. These wires to be approximately 550mm apart. Tracks with gates must have a 25mm diameter wire rope firmly fixed at each gate entrance, 550mm above the gate, whilst practices or races are in progress.

(b) **Alternative to Railway Irons**

The following are approved alternatives to Railway Irons, with the applicable maximum spacing between the relevant material:-

SECTION	MAXIMUM SPACING
150 UB 14	4 metre
150 UB 18	5 metre
180 UB 18	5 metre
150 UC 23	5 metre
150 x 75 x 6 RHS	4 metre
150 x 100 x 5 RHS	4 metre
150 x 100 x 6 RHS	5 metre
100 x 100 x 9 RHS	4 metre
125 x 125 x 5 RHS	4 metre
125 x 125 x 6 RHS	5 metre
80 NB Ned Galv. or Black	1.2 metre
100 NB Med Galv. or Black	1.9 metre
125 NB Med Galv. or Black	3 metre
150 NB Med Galv. or Black	4.5 metre

(c) **Safety Netting**

To stop tyres, wheels, etc. flying up into the spectators areas, deer or sheep netting or similar, must be attached to the fence posts with the top edge of the netting being at least 3m above the track surface level and the lower edge of the netting being no more than 1.20m from the track surface level, (excepting where an existing wooden or similar fence is over 1m high, when the lower edge of the netting must be no more than 300mm above the top of the safety fence) and the top edge of the netting must extend up to at least 3m above the track surface level.

**(d) Crowd Control Fences**

At tracks where spectators stand at track level a substantial pipe or post and a rail or similar Crowd Control Fence be erected at least 2.5m outside of safety fence.

**(e) At tracks where the wall is back-filled and spectators stand at least 1m above the track level, an adequate Crowd Control Barrier must be erected at least 600 mm outside the safety fence.**

**(f) All structures must be built to the satisfaction of the Track Inspector. After due application under Rule G5-5, the Directors can in special circumstances alter or amend these minimum requirements.**

**G5-2-4 SAFETY FENCES – EFFECTIVE 1 SEPTEMBER 2012**

All speedway tracks are to be enclosed by a wall and safety fence that complies with the specifications below. The safety fence structure includes:-

- Concrete Wall – see rule G5-2-4(a)
- Wire Rope Fence – see rule G5-2-4(b)
- Safety Netting Fence – see rule G5-2-4(c)
- Pit Gate & Chute – see rule G5-2-4(d)
- Crowd Control Fence – see rule G5-2-4(e)

Exception: Tracks running Solos and Sidecars only – see Section G5-2-4(g)

**G5-2-4(a) CONCRETE WALL**

- (i) Height: Minimum height is 1 metre above a prepared track surface at all times. Recommended height is 1.2m.
- (ii) Construction: Smooth concrete and/or of an approved design and construction. An angled kickout at the bottom of the wall is recommended.
- (iii) Curvature: The wall must follow the general shape of the poleline.

**G5-2-4(b) WIRE ROPE FENCE**

A further safety structure is required above or behind the concrete wall, consisting of posts and wire ropes, or an approved equivalent.

**(i) Posts**

- (a) Height: Posts will extend at least 1500mm above the concrete wall.
- (b) Location: Posts will be located no more than 2m from the front of the concrete wall, and no more than 5m apart. Recommended distances are no more than 1500mm from the front of the wall, and 4m apart.
- (c) Construction: Posts may be constructed of the following materials:-
  - (i) Railway Irons - 32kg minimum.
  - (ii) Black heavy pipe – 100mm nominal bore with a 5.4 mm wall.
  - (iii) Box section – 100mm x 100mm x 5 mm wall.
  - (iv) Box section – 150mm x 75mm x 5 mm wall.
  - (v) Universal beam - 150 UB 18kg per metre.
  - (vi) An approved equivalent.
- (d) Fitment: The posts must be secured at least to the following depths, depending on the method of fitment:-
  - (i) Fastened directly into the ground: Driven in at least 1500mm deep.
  - (ii) Sleeved: At least 1m below the surface, with the sleeve to be concreted to at least a depth of 1m.

- (iii) **Concreted:** At least 500mm deep if incorporated into the wall, and 1m deep if free standing
  - (iv) or an approved equivalent
- (e) **End Posts:** To ensure the integrity of the structure, the end posts must be securely stayed.
- (ii) **Wire Rope**
  - (a) A minimum of three wire ropes must completely enclose the track, excluding pit gate areas.
  - (b) **Construction:** All wire ropes will be a minimum diameter of 20mm.
  - (c) **Attachment:** Will be fixed to the posts on the track side, in an approved manner, eg threaded or clamped and able to slide.
  - (d) **Location:** The bottom wire rope will be 500mm above the wall, with subsequent wire ropes no more than 500mm apart. The top wire rope will be a maximum of 100mm from the top of the post. A tolerance of 100mm applies to these measurements.

#### G5-2-4(c) **SAFETY NETTING FENCE**

To minimise the risk of tyres, wheels etc leaving the track, a netting and pole fence will enclose the circuit.

- (i) **Poles**
  - (a) **Height:** Poles will extend at least 3.8m above the concrete wall.
  - (b) **Location:** Poles will be no more than 10m apart.
  - (c) **Construction:** Must be a minimum of 80mm nominal bore, or an approved equivalent.
  - (d) An angled kick in at the top of the poles is optional.
- (ii) **Netting**
  - (a) **Height:** The top edge of the netting will be at least 3.8m above the concrete wall, and the lower edge no more than 200mm above the top of the wall.
  - (b) **Construction:** Galvanised high tensile wire netting.
    - (i) Minimum wire diameter of the netting to be 2mm.
    - (ii) Maximum hole size in the netting to be 115cm<sup>2</sup> to a minimum height of 1.8m, deer netting above.
- (iii) **Separate Fence**

The Safety Netting Fence detailed above can be integrated into the Wire Rope fence described in Rule G5-2-4(b). Both sets of specifications will be met if this is the case.
- (iv) **Standalone Fence**

If the Safety Netting Fence is a standalone structure, it must be no more than 2.5m from the front of the concrete wall.

#### G5-2-4(d) **PIT GATE AND CHUTE**

All track entrances and exits will be covered by an approved pit gate, wire rope, and catch gate structure.

- (i) **Pit Gate**
  - (a) **Height:** Will be the same height as the concrete wall.
  - (b) **Location:** Will close so as to continue the general line of the concrete wall.
- (ii) **Wire Rope**

A minimum of one wire rope is required above the pit gate.

  - (a) **Height:** Will be 500mm above the top of the pit gate.
  - (b) **Location:** Will be firmly fixed while practice or racing is in progress.
  - (c) **Construction:** Will have a minimum diameter of 20mm.

- (iii) **Catch Gate**  
A swinging gate will cover gaps in the wire rope and safety netting fences.
  - (a) Height: Will begin no more than 200mm above the pit gate, and extend at least 2m above the pit gate.
  - (b) Location: Will be in line with the wire rope fence.
  - (c) Construction: Will be of approved construction, with a maximum hole size of 115cm<sup>2</sup>.
- (iv) **Mechanism**  
All structures detailed above will be suitably locked in position while practice or racing is in progress.
- (v) **No Go Area**  
A no go area for all personnel will be roped off behind the pit gate while practice or racing is in progress. The no go area is to be either 2.5m or the length of the arc of the pit gate, whichever is longer.

**G5-2-4(e) CROWD CONTROL BARRIER**

- (i) Where spectators stand at track level a substantial pipe or post and a rail or similar Crowd Control barrier will be erected at least 2.5m outside of the safety netting fence.
- (ii) Where the wall is back-filled and spectators stand at least 1m above the track level, an adequate standalone Crowd Control barrier will be erected at least 600 mm outside the safety netting fence.

**G5-2-4(f) CONSTRUCTION AND MAINTENANCE**

- (i) All structures will be built and maintained to the satisfaction of the Track Inspector.
- (ii) After due application under Rule G5-5, the Directors can alter or amend these minimum requirements.

**G5-2-4(g) MOTORCYCLE ONLY TRACKS**

- (i) Solo and Sidecar tracks may be enclosed by a wooden safety fence and pit gate.
- (ii) Minimum height of wooden safety fence is 1 metre, measured from the track surface.
- (iii) Minimum thickness is 76 mm, with vertical posts spaced not more than 2.5m centre to centre, suitable for the protection of the public.
- (iv) If the fence is a smooth panelled or horizontal timbered fence, with horizontal timbers a minimum of 300mm x 76 mm, then a skid board is not required.
- (v) Where required, a 300mm x 50mm skid board must be firmly affixed to the structure of the fence at approximately hub height of competing vehicles.
- (vi) A crowd control barrier will encircle the fence as per rule G5-2-4(e).
- (vii) All structures will be built and maintained to the satisfaction of the Track Inspector.

**G5-2-5 Pole Lines**

Inside or pole line to be clearly defined as to not constitute a hazard to competitors and shall remain clearly visible to competitors during the complete meeting. It shall not be more than 100mm above infield, nor shall it be more than 100mm above racing surface. Where infields are higher than polelines, the infield should be angled back in such a manner as not to

cause a hazard. The use of tyres on track area, either loose or filled with concrete, is prohibited.

**G5-2-6**

**Windrows**

Windrows are not permitted.

**G5-2-7**

**Referee's Stand**

The Referee's stand shall be at least 1.8m high, with platform on top at least 1.8m square, fitted with the necessary light switches and communications apparatus for the control and safety of the races. The box to be illuminated, and fitted with switch for the 2/3 minute bell.

**G5-3**

**PITS**

At every speedway there shall be pits of adequate size for the exclusive use of Competitors and their assistants. Pits to be suitably fenced, with signage erected at each entrance to advise against the entry of unauthorised persons. Adequate lighting and running water to be provided. Changing sheds and conveniences shall be adjacent to, or inside the pit area.

**G5-3-1**

Wording of signage to be erected to advise against entry to pits. (Signage may be used in other areas if required.)

**'NOTICE: THIS PIT AREA IS CLASSIFIED A HAZARDOUS AREA UNDER THE HEALTH AND SAFETY ACT.**

**HAZARDS INCLUDE: MOVING VEHICLES, VOLATILE FLUIDS, WELDING GLARE AND NOXIOUS FUMES.'**

**G5-3-2**

Vehicles started in pits must not constitute a danger or nuisance to other competitors.

**G5-3-3**

Competitors or Pit Crews using offensive language in the proximity of the public will be dealt with accordingly by the Steward.

**G5-3-4**

All competitors, vehicles, crews and equipment to be in the pits at least sixty minutes before commencement of the meeting, or in exceptional cases, at the discretion of the Steward and Promoter.

**G5-3-5**

The Promoter shall supply adequate fire-fighting equipment in the pits at least 15 minutes before the commencement of the meeting. Include both Carbon Dioxide and Dry Powder Extinguishers.

**G5-3-6**

Tracks provide changing sheds at least for Solo motorcycle riders.

**G5-3-7**

A level sealed or concrete vehicle checking strip must be made available at each track.

**G5-3-8**

All tracks licenced to run streetstocks to have a suitable set of rollers for the purpose of checking streetstock diffs at every meeting. No jacks permitted for this purpose.

**G5-3-9**

Race Results: A suitable notice board must be placed in the pit area for the posting of race results.

**G5-4**

**EQUIPMENT**

**First Aid Equipment**

**G5-4-1**

All promoters holding Speedway competitions under the jurisdiction of SNZ must provide suitable First Aid Equipment for the care of injured competitors.

**G5-4-2**

An approved first aid team (e.g. St Johns) must be in attendance when having a SNZ permitted meeting (including practices).

**Fire Fighting Equipment**

**G5-4-3**

Speedway Tracks Licenced by SNZ must have an efficient crash crew and vehicle equipped with auxiliary fire fighting equipment to go to the aid of a driver in difficulty. This should comprise of two (2) 9kg Dry Powder and one 3kg Carbon Dioxide type



extinguishers, a 20 litre water vessel or water extinguisher and at least two 9-litre Foam AFFF Extinguisher to be located on the infield for use on major fuel fires. Mandatory when having a SNZ permitted meeting (including practices).

**G5-4-4** The crew to be in position on the infield during the running of all events, with the engine running. In addition a minimum of one 9kg Dry Powder and one 3kg Carbon Dioxide type extinguisher must be located at a CENTRAL POSITION in the Pit Area throughout the duration of the meeting, mounted on a distinctively marked panel, with free access to all drivers, pit crews and officials.

**G5-4-5** **Crash Wagons and Safety Equipment**

Suitably equipped crash wagons must be stationed on the infield of the track. Such wagons must carry as minimum equipment fire extinguishers, and wrecking gear. A safety spotlight for night meetings only. Tracks holding competitions for super stock, super saloon car or streetstocks must provide an oxyacetylene cutting torch as minimum equipment.

**G5-4-6** Push vehicles should be available at all tracks to be used by the competitors who require them, at the discretion of the Clerk of the Course. (For Three Quarter Midget Cars, Midget Cars and Sprintcars.)

**G5-4-7** **Infield Personnel**

Access to the infield, during the meetings is prohibited to all persons not authorised by the Clerk of the Course.

**G5-4-8** All infield personnel at all tracks are to wear a NZ Safety approved glow jacket or similar during racing.

**G5-4-9** **Communication Equipment**

All Stewards and Referees at all licenced tracks, must be supplied with an adequate communication system, i.e. Telephone or "walkie talkie" radios. It shall be the responsibility of the Promoter to supply and maintain such equipment.

**G5-4-10** No drums or advertising signs to be closer than 40 feet (12 metres) to the pole line. Advertising signs to be no higher than 1 metre and collapsible.

**G5-4-11** **Compliance with Safety Provisions**

No meeting will be permitted to commence until such time as all the requirements of this section have been complied with.

**G5-5** **Division Two Tracks**

Some tracks comply with the regulations allowing them to join Speedway New Zealand as a Division Two track. These provisions allow the tracks to join SNZ at reduced fees. All enquiries must be made to the SNZ office.

**G6** **CLASSES**

**G6-1-1** **National Classes**

National classes are specified in G1-1-31, Definitions.

(a) The rules and specifications for these classes can only be changed every two years at an AGM as outlined in C10(f) of the Constitution.

(b) Only National Classes are eligible for Allocated Titles (Refer to G1-1-3(a), Definitions)

**G6-1-2** **Regional Classes**

Regional classes are specified in G1-1-42, Definitions.

(a) The rules and specifications for these classes are administered by the SNZ Directors.

(b) Local championships, only, can be held for Regional Classes, except where specifically excluded.

- (c) A National class may become a Regional class, any member may request the change by writing to the SNZ CEO. If the class is no longer suitable as a National class, after consultation with all tracks who contract the class, the Directors may notify that the class returns to regional status.

**G6-1-3 Novelty Events**

Demo-type Derbies, Caravan Derbies and other 'one-off' motorised events, such as rally cars, go-karts, which must be applied for and approved by SNZ Directors. (Refer also Rule G5-1-5.) Tractor and Figure 8 racing are specifically banned.

**G6-2 To become a Regional Class**

**G6-2-1** Applications to race a new Regional class should be made to the CEO.

**G6-2-2** SNZ Directors will consider the merits of the application, which is to include, at least, the following:

- (a) The proposed name of the class
- (b) Plans, rules and specifications
- (c) A statement of intent for the class, including any limitations to be put on competitors, such as age limits of the competitors, length of time a competitor is to be allowed to remain in this class, and any limitations to be put on the vehicles.

**G6-2-3** If and when the Directors approve the application, it must then be submitted to an AGM for general approval.

**G6-2-4** If and when approved by the members at an AGM, the Directors will take over responsibility for administration of the class and its rules.

**G6-2-5** Track Licensees must apply to run Regional classes with their Track Licence Application (Refer Rule G5-1-9).

**G6-3 To become a National Class**

**G6-3-1** An application must be made to the SNZ Directors for a Regional Class to be upgraded to a National Class.

**G6-3-2** A Regional Class will only be eligible to be upgraded if it meets the following criteria:

- (a) The class must have been a Regional Class for a minimum of five years.
- (b) A minimum of six tracks must run the class.
- (c) There must be a minimum of 100 registered competitors in this class.
- (d) A minimum of six tracks must support the application.

**G6-3-3** The Directors are responsible for ascertaining whether the class meets the criteria and also if approval of the application would maintain the original intent.

**G6-3-4** If and when the Directors are satisfied that the requirements in Rule G6-3-3 are met, it must be submitted to an AGM for general approval.

**G7 OFFICIALS**

**G7-1 SENIOR OFFICIALS**

**G7-1-1 Stipendiary Steward:**

An official appointed by the Directors to assist, advise, or supervise SNZ Stewards in the carrying out of their duties, and if necessary assume control.

**G7-1-2** There will be at least one Stipendiary Steward in the South Island and at least two Stipendiary Stewards in the North Island.

- G7-1-3** At any meeting where a Stipendiary Steward has been requested or sent by the Directors, he shall be in supreme control of the Meeting.
- G7-1-4** Stipendiary Stewards may fine up to \$300, exclude any competitor, SNZ Official, or any person the Clerk of the Course is responsible for, and crew members under competitors responsibility, for up to six weeks from the night or day in question, except as laid down in Section G11-3 Technical Exclusions.  
He may suspend any person or body under the jurisdiction of the by-laws of Speedway New Zealand, or pending such official inquiry, as he shall recommend to the Directors. This suspension to be effective from time of pronouncement until the findings of the Directors are advised in writing from the CEO or, if not available, the Chairman, to the defendant party.
- G7-1-5** The Stipendiary Steward imposing suspension will advise the Directors within 48 hours of his action.
- G7-1-6** Stipendiary Steward may declare a race or meeting concluded or completed, if in his opinion it would be unsafe for it to continue. He will advise the Steward and the Clerk of the Course of his intentions if for any reason verbal or otherwise indicated, a meeting or race will be in contravention of the by-laws of SNZ, a direction of SNZ, or a Stipendiary Steward. The Stipendiary Steward shall have the authority to instruct the Steward not to issue a permit, and advise the Clerk of the Course accordingly, he shall advise the Directors within 48 hours of this action.
- G7-1-7** Any competitor or party, under the authority of Speedway New Zealand may request the Stipendiary Steward to act as his advocate, at any inquiry or appeal meeting, giving the defendant competitor or party, the benefit of the Stipendiary Steward's experience, or they should be advised they may have an independent advocate.
- G7-1-8** **Senior Referee:**  
An Official appointed by the Directors to carry out duties as instructed. He is to assist or control the racing of a race meeting. See Section G7-4, except G7-4-2(b).
- G7-1-9** Senior Referee may fine up to \$200 (two hundred dollars).
- G7-1-10** **Head Technical Steward:**  
An official appointed by the Directors to carry out duties as instructed. He is to tutor Technical Stewards and Vehicle Checkers in all aspects as outlined in G7-1-14.
- G7-1-11** **Technical Steward:**  
An official appointed by the Directors.
- G7-1-12** Authority of Technical Steward
- A Technical Steward may be in attendance at any meeting to assist and advise in the application of vehicle compliance.
  - A Technical Steward may if necessary assume control of vehicle compliance at a meeting.
  - At any location where a Technical Steward has been appointed or sent by the Directors, they shall be in control of vehicle compliance.
  - At any location where a competitor has requested a technical steward, the technical steward is in control of vehicle compliance. When rule E1-4 does not apply, any non-compliance or infringements can be issued.
- G7-1-13** A Technical Steward has the Authority to:
- Issue an Infringement notice.
  - Issue a reprimand.
  - Fine up to \$200.

- (iv) Report within seven days of infringement a competitor to SNZ Directors for more severe penalty.
- (v) Exclude a competitor for up to 22 days (starting from the day/night in question), from racing at any SNZ sanctioned event.
- (vi) Declare a non-compliant vehicle, component or safety item.
- (vii) Declare an illegal vehicle, component or safety item.

G7-1-14

**(a) Duties of a Technical Steward:**

To examine and measure any vehicle, any item used in the support any vehicle, and any safety item.

1. A Technical Steward may order any vehicle or component be inspected, sealed or impounded, and such vehicle or component shall be retained for such period as may reasonably be necessary for its inspection.
  2. The Technical Steward will write down the impounding order in the log book and issue an impoundment notice.
  3. (i) A Technical Steward may demand dismantling as soon as possible to verify compliance.
  - (ii) If dismantled to determine a protest, the party against whom the decision is made shall bear the cost. Refer to Section G10-3.
  - (iii) A competitor who refuses any inspection, or removes his vehicle from the meeting without permission accepts that the vehicle log book will be automatically recorded as an illegal vehicle.
- (b) A Technical Steward can determine a vehicle or component as non-compliant at any time.
1. When the Technical Steward determines a non-compliance issue; the vehicle will not be permitted to race or practice.
  2. Provided the meeting is not an allocated title meeting, the Technical Steward may after consultation with the Head Vehicle Checker and the Steward, permit a non-compliant car to race or practice provided:
    - (i) The non-compliance will not affect safety.
    - (ii) The non-compliance will not provide a competitor with a significant competitive advantage.
    - (iii) The non-compliance is insubstantial.
    - (iv) All items of non-compliance must be noted in the log book.
    - (v) The vehicles' non-compliance must be corrected before competing at any future meeting.
    - (vi) Vehicles must be fully compliant at an allocated title.
    - (vii) As a result of a vehicle failing the above inspection, the Technical Steward will, if applicable, issue an infringement notice.
    - (viii) Should the non-compliance result in an exclusion that may affect a race meeting in progress, the Technical Stewards' exclusion must be reported to the promotion, the track steward and subsequently to the Directors.
    - (ix) Should the non-compliance be sufficient to result in the notation as 'Illegal Vehicle' the log book must be noted as such.
    - (x) An illegal vehicle must be re-inspected by a Technical Steward before it can be raced again. A fee may be charged.

- G7-2      Track Officials**  
Every Competition shall be directed and carried out by certain officials whose duties are either supervisory or executive.
- G7-2-1**      The head official responsible for the meeting shall be the Steward.
- G7-2-2**      The following officials shall be directly responsible to the Steward:  
The Assistant Steward.  
The Head Vehicle Checker.
- G7-2-3**      The Referee exercises control during the racing and it is his responsibility to enforce the race regulations. He may however consult the Steward if he considers his advice necessary in the line of his duties.
- G7-2-4**      The Stewards and Referee shall have no responsibility for the organisation of a meeting nor have any executive duty in connection therewith.
- G7-2-5**      The Directors shall appoint the Steward/s and Referee/s and Vehicle checker/s for each track at the commencement of a season. Because of circumstances beyond his control, such appointee may find it necessary to relinquish his position during the season. In that case the Directors reserve the right to make another appointment.
- G7-2-6**      Each steward shall forthwith upon his appointment by the Directors enter into contract with SNZ to carry out the duties of a Steward as set out in G7-3.
- G7-2-7**      All track vehicle checkers' appointments are made by Speedway New Zealand after receiving nominations from the Promoting body.
- G7-2-8**      Other officials may be appointed by the Promoter subject to the approval of the Directors.
- G7-2-9**      The Steward/s and Referee/s of the meeting, appointed by the Directors, shall receive such remuneration as the Directors may decide. In no circumstances shall these officials accept money payment direct from a Promoter.
- G7-2-10**      The executive official at a competition is the Clerk of the Course, under whose orders come the following executive officials:  
The Flag Stewards  
The Time Keepers  
The Lap Scorers  
The Handicappers  
The Medical Officer  
The Pit Steward  
And such other officials as are necessary for the conduct of the meeting.
- G7-3      Duties of a Steward**
- G7-3-1**      To see that the Rules and Regulations of SNZ are carried out in conjunction with authorised Officials.
- G7-3-2**      To issue Competitors Licences to those Competitors who present a completed Competitors/ Promoters contract. (NOTE: A Steward may issue a licence only for the classes actually raced at his home track).  
(Further Class extensions are covered in Rule G8-1-13.)
- G7-3-3**      He must be in attendance at any official practices and official meetings and must issue meeting permits for the same.
- G7-3-4**      He must forward to the SNZ office within three (3) days of issuing or receiving same:  
(a) All 'Office Copies' of receipts, permits and licences.  
(b) All 'Office Copies' of contracts and medical reports.

- (c) All duplicate bank receipts balanced with all competitors licence fees, permit fees and fines etc, received.
- (d) A completed and balanced Stewards Return Form.
- G7-3-5** Be responsible for the inspection of the protective equipment of the Competitors and all fire fighting equipment.
- G7-3-6** He shall see that the Control Lights and Communication apparatus are in order.
- G7-3-7** To see that the Promoter has an ambulance in attendance at all meetings.
- G7-3-8** To see that a doctor is in attendance, but in the event of a doctor not being available, the Promoter must satisfy the Steward that adequate alternative arrangements have been made. To report to the SNZ office in detail, any accident or incident requiring a competitor, official or member of the public needing treatment or admittance into hospital.
- G7-3-9** He must take steps to ensure the safety of the public in general and prohibit, in particular, a driver or machine, which in his opinion would constitute a danger to the public, from taking part in the meeting.
- G7-3-10**
  - (a) At all New Zealand Championship meetings the track Steward or Referee shall introduce any Senior Officials to the competitors at the drivers' briefing.
  - (b) The drivers briefing may discuss changes to the program and any procedural rules required.
- G7-3-11** A Steward has the authority to:
  - (a) Issue a reprimand.
  - (b) Fine up to \$200 (Two Hundred Dollars).
  - (c) Refer G11-2. Exception: Teams Racing
  - (d) Report within seven days of infringement a competitor to Speedway New Zealand Directors for a more severe penalty.
  - (e) A Steward may not suspend or disqualify a competitor.
  - (f) May exclude a Competitor from competing for up to a total of 22 days (starting from the day/night in question), from racing anywhere in New Zealand, except as laid down in Section G11-3 Technical Exclusions.
- G7-3-12** In addition he can order from the track or its vicinity, any driver, Official or other person who refuses to obey his instructions or the instructions of any senior Official.
- G7-3-13** He shall immediately deal with any Protest submitted to him by the competitor during the meeting as prescribed in the Regulations. In general, a Protest cannot be against fact. When a Protest is decided by the Protest Committee and the decision given it cannot be presented afresh during or after the Meeting. The same applies to an identical Protest by another driver. No Steward shall refuse any Protests.
- G7-3-14** He is to collect from any visiting competitor a clearance in writing from his promotion as required under rules G8-1-31 to G8-1-33. He must take note of the provision for 'Special Clearances' as outlined in Rule G7-3-20.
- G7-3-15** The steward is responsible for ensuring that no vehicle exceeds the sound level.
- G7-3-16** The steward is responsible for ensuring that engine sealing takes place according to the regulations.
- G7-3-17** The steward must confine his duties to stewarding and he must NOT undertake additional duties during a meeting.
- G7-3-18** Every Steward who presides over a meeting that has the word Championship included must furnish to the SNZ Office a fully filled-in programme giving the correct placings and points for

each race within 3 (three) working days of the meeting. This is mandatory.

**G7-3-19**

A Steward may order any vehicle or component be inspected, sealed or impounded, and such vehicle or component shall be retained for such period as may reasonably be necessary for its inspection.

1. The Steward will record the impounding order in the log book and issue an impoundment notice.
2. (i) A Steward may demand dismantling as soon as possible to verify compliance.  
(ii) If dismantled to determine a protest, the party against whom the decision is made shall bear the cost. Refer to Section G10-3.
3. A competitor who refuses any inspection, or removes his vehicle from the meeting without permission accepts that the vehicle log book will be automatically recorded as illegal vehicle.

**G7-3-20**

The Steward can determine a vehicle as non-compliant at any time.

- (a) When the Steward determines a vehicle as non-compliant, the vehicle will not be permitted to race or practice.
  - (b) Provided the said meeting is not an allocated title meeting the Steward may after consultation with the Head Vehicle Checker and the Clerk of the Course, permit a non-compliant car to race or practice provided:-
    1. The non-compliance will not affect safety.
    2. The non-compliance will not provide a competitor with a significant competitive advantage.
    3. The non-compliance is insubstantial.
    4. The non-compliance must be noted in the log book.
    5. The vehicles' non-compliance must be corrected before competing in any future meeting.
    6. Should the non-compliance affect a vehicle that has been specially advertised, the promoter may apply to the track steward for a "special clearance" for the vehicle. Provided that the vehicle has been passed at its last meeting by its home track vehicle checker and the promoter has engaged the vehicle in good faith and advertised the vehicle as a special attraction for the meeting. The Steward may thereupon grant a special clearance to race the vehicle at this ONE MEETING.If special clearance is granted the steward must include the following conditions.
    - a. This clearance does not apply to any Allocated Title of SNZ.
    - b. All monies won by the car during the meeting are to be forfeited by the driver or owner of the vehicle. These monies will be paid in full to SNZ.
    - (iii) Once all terms are agreed by all parties, the Steward makes a written entry in the log book, that indicates that the vehicle must be cleared of the compliance issue by an official nominated by a Stipendiary Steward.
7. Vehicles must be fully compliant at an allocated title.

**G7-4**

#### **Duties of a Referee**

**G7-4-1**

The Referee must confine his duties to refereeing and he must NOT undertake additional duties during a meeting.

**G7-4-2**

A Referee may:

- (a) Issue a reprimand.
- (b) Fine up to \$120 (One hundred and twenty dollars). Refer G11-2. Exception: Teams Racing
- (c) Exclude a competitor from a particular race or meeting for up to 15 days (starting from the day/night in question), from racing anywhere in New Zealand.
- (d) Relegate or promote race positions.

**G7-4-3** He controls the two-three minute bell as permitted in race regulations.

**G7-4-4** He will enforce all Regulations pertaining to the actual racing.

**G7-4-5** A Referee may, after consultation with the Clerk of the Course, recommend to the Steward that the meeting be postponed or abandoned in whole or part.

**G7-4-6** He shall start Motorcycle events if another starter has not been delegated in this position. Whosoever does the starting, will also operate the green light indicating a start is imminent.

**G7-4-7** UNLESS OTHERWISE PROVIDED IN THESE RULES, if an accident has occurred, and in the opinion of the Referee it would be dangerous for the race to continue, he shall have the race stopped by giving the stop signal, and the race shall then be re-run or re-started. The Referee and Steward only, are empowered to stop a race, and no other official shall initiate the 'stop' signal during the course of a race.

**G7-4-8** He shall penalise immediately a competitor who, in his opinion, indulges in foul, unfair or dangerous conduct including any competitor who steers or drifts from his course in such a manner as to impede any competitor who may be attempting to pass or, in the case of a non-team event, jeopardising the fair chance of one or more of the other competitors.

**G7-4-9** He must make himself conversant with the racing rules of the particular class/es racing at his track.

**G7-4-10** He shall be entitled to forbid the access to his box by any person during the meeting and nobody shall approach him without his permission.

**G7-4-11** A Referee has the duty to respect the right of drivers who consider themselves to be unjustly penalised, to expect a reasonable and courteous explanation.

## **G7-5 Duties of a Vehicle Checker**

**G7-5-1** The Head Vehicle Checker will

- (a) Have a number of appointed vehicle checkers under his authority.
- (b) Assign vehicle checkers to perform the CVI vehicle inspections.
- (c) Assign a vehicle checker to the infield during racing. The assigned official will satisfy the referee that damaged vehicles are fit to continue racing.
- (d) Assign a vehicle checker to inspect vehicles whose steering and suspension may have been repaired in any manner during the race meeting.

The Head Vehicle Checker and his appointees must to the best of their knowledge take sufficient steps in their checking procedures to insure that vehicles and components conform to the class that they are entered.

**G7-5-2** The Head Vehicle Checker or one of the vehicle checkers must have completed an apprenticeship as an Automotive Engineer.

**G7-5-3** An appointed vehicle checker has the authority to inspect any race vehicle at any time, and:-

- (i) Record in the log book the date of all pre-meeting vehicle checks.



- (ii) Record the date of CVI in logbook
- (a) In the event of a race vehicle not passing the initial pre-meeting vehicle checking and registration inspection, the vehicle checker will;
  - (i) Record the non-compliance on the pre-meeting inspection and registration certificate referred to in E1-2-2.
  - (ii) Record the non-compliance in the logbook and report the issue to the driver or crew of the vehicle so that compliance can be effected.
  - (iii) If the non-compliance is of a serious nature that will not/cannot be remedied the issue will be reported to the Head Vehicle Checker and the Steward.

**G7-5-4**      **Dangerous Construction:** The Head Vehicle Checker shall have discretionary powers (in consultation with the steward) with regard to whether a vehicle is fit to race, even though it may comply with specifications.

**G7-6                      Duties of the Clerk of the Course**

**G7-6-1**      The Clerk of the Course shall be responsible to the Steward for the conduct of the meeting and its administration in accordance with the Regulations and the official programme, and may not be a competitor for the duration of the meeting. His principle duties are as follows:

**G7-6-2**      To satisfy himself that all officials are at their posts and that the medical officer and ambulance is present, and to report the absence of any official to the steward.

**G7-6-3**      To satisfy himself that all officials are provided with the necessary information and knowledge to enable them to carry out their duties expeditiously and properly.

**G7-6-4**      To control competitors, crews and track officials at a race meeting. Assist and advise the Steward in the prevention of suspended and unlicensed persons. Assist and advise the Steward in particular to undesirable vehicles and general vehicle compliance.

**G7-7                      Duties of a Chief Lap Scorer**

It shall be the duty of the Chief Lap Scorer to declare the order in which the competing vehicles pass the finishing line. If the Chief Lap Scorer considers he has made a mistake he may correct it, his right to make such correction being subject to the approval of the Referee of the meeting.

**G7-8                      Duties of a Starter**

**G7-8-1**      It shall be the duty of the Starter to initiate each race when so instructed by the Clerk of the Course; from then until the start of the race the competitors are under the control of the Starter and Referee.

**G7-8-2**      In the case of a false start the Referee may order a re-start.

**G7-8-3**      Any competitor disobeying the signal or having been in a false start not obeying the re-start signal, may be excluded from that race.

**G7-8-4**      The Starter will indicate the last lap, the finish and use of all other flags instructed by the Referee.

**G7-8-5**      The starter should attend pre-meeting competitor briefing.

**G7-9                      Race Results**

- (a) It is the duty of the referee to approve and sign race results before they are posted on the race result board in the pit (Refer rule G5-3-11).

- (b) It is the duty of the Clerk of the Course to ensure that race results are posted and that the time of posting is recorded on the results.
- (c) If there is no protest, race results become confirmed 10 minutes after posting.

## **G8 COMPETITORS**

### **G8-1 Registration and Licences**

Any person desirous of qualifying as an entrant or competitor in a Speedway Meeting licenced under these Rules and Regulations shall either:-

- (a) make formal request for registration to their Track Steward. Such application shall be accompanied by a duly executed competitor's agreement between the competitor and a promoter on the prescribed form approved by SNZ, or
- (b) apply for a licence via the SNZ website, [www.speedway.co.nz](http://www.speedway.co.nz)

**G8-1-1** No person will be permitted to compete on any track licenced by Speedway New Zealand Incorporated until such time as a contract with a promoter, prepared on SNZ's recognised contract form has been entered into and correctly signed and witnessed.

**G8-1-2** A Competitor or Passenger shall not take part in any meeting under these Regulations until he has been registered by Speedway New Zealand (Inc) and his application for such licence shall be deemed to be an acknowledgement of his submissions to these Regulations.

**G8-1-3** No person will be permitted to compete on any track licenced by SNZ until such time as the following is completed:-

- (a) A contract has been entered into with a licensed track promoter
- (b) The applicable licence fee has been paid
- (c) A competition licence has been issued, appropriate to the class of intended competition

**G8-1-4** No Promoter shall permit any competitor to take part in any event until such competitor has duly executed an Official Contract and paid a registration fee.

**G8-1-5** All competitors new to speedway will be required to complete the current SNZ training programme before being permitted on a licensed track to either practice or compete.

**G8-1-6** The Licence fee payable on registration by all competitors shall be as determined by the Directors.

**G8-1-7** Competitor to give authority to use his/her name and address in all lists supplied by SNZ to allied organisations and businesses wishing to contact competitors. An authorization signed by the competitor is on the agreement form as follows:

'I authorize Speedway New Zealand Inc to furnish to other like organizations, my name and address.'

**G8-1-8** Subject to the provisions of these Rules and Regulations the Competitor shall thereupon be issued with a competition licence which shall expire on the following 31st day of August.

**G8-1-9** An entrant or a competitor at any meeting shall produce his licence, signed by him, on demand of a duly authorised official of that meeting.

**G8-1-10** Subject to the provisions of these Rules and Regulations, the Competitor shall, on demand by a duly authorised official of the meeting, produce the Log Book for the race vehicle for which he is entering the competition, and further documentation as

- required. Log Book for individual race vehicle will be issued by the local track Steward.
- G8-1-11** Sidecar passengers are deemed to be competitors and shall be required to be contracted to pay the licence fee determined by the Directors.
- G8-1-12** Competitors must have a SNZ licence covering the appropriate class of vehicle they are competing with. Track stewards may only issue licences for the classes actually raced at their particular track.
- G8-1-13** Extension for further classes to enable competitors to race different classes and vehicles elsewhere, must be applied for to, and may be granted only by, the steward of the meeting where the extra class is being run. Should a licence extension be made into 2 & 3 wheels, it may be subject to a capitation levy.
- G8-1-14** A Competitor's Licence will not be granted to:
- (a) A motorcyclist with only one eye or one leg or any other disability, which impairs his riding ability.
  - (b) Midget, three-quarter midget or other car driver who has one eye or any other disability, which affects the control of his vehicle.
- G8-1-15** **Minors Agreement**  
No agreement shall be entered into by a minor (a person between the ages of 16-18 years) for the purposes of competition unless with the written consent of his parent(s) or guardian and unless the consent clause is properly witnessed in accordance with the Promoter-Competitor Agreement. Minimum age 16 years.
- G8-1-16** The Directors may refuse to issue or may cancel a licence without stating any reason for such refusal or cancellation.
- G8-1-17** **One Agreement**  
A competitor shall enter only one principal competitors agreement at any time and he shall not enter into any further competitor's agreement unless it does not conflict with his obligations under the principal agreement.
- G8-1-18** Notwithstanding that it is the intent of SNZ that only one competitor's agreement shall be operative at any one time and notwithstanding anything obtained or implied in these rules and regulations or in any other contract or document relating to the administration of Speedway Meetings, Speedway New Zealand Incorporated shall be under no liability whatsoever for registering more than one competitors agreement in respect of one competitor.
- G8-1-19** If a competitor's agreement with a promoter is cancelled he must return his competitors licence to the SNZ Office within two weeks of the date of his application to the promoter/s and SNZ of his intention to cancel his competitor's agreement.
- G8-1-20** If a competitor cancels or terminates his licence during a Speedway season ('season' being defined for the purposes of this clause as being the period from the 1st September in one year to the following 31st August) the licence shall not be re-issued or a further new licence obtained without the approval of the Chief Executive Officer of Speedway New Zealand.
- G8-1-21** Licences shall expire on the "thirty first" day of August in each year.
- G8-1-22** Overseas Competitors: No overseas competitor or team may be contracted to a track licenced under these Regulations without the express permission of the Directors.
- G8-1-23** All visiting overseas competitors must sign a competitor's agreement on the form prescribed and approved by Speedway New Zealand Inc.

- G8-1-24** Where and when International Riders/Drivers are advertised as such, they must produce a Competition Licence issued by the country they have been advertised as coming from.
- G8-1-25** No New Zealand or overseas competitor shall leave New Zealand until his contract is completed unless permission is granted to do so by the Directors.
- G8-1-26** **SNZ Licence Abroad**  
No holder of a Competition Licence issued by SNZ may take part in any meeting or competition held overseas or outside the territory of SNZ without having applied for and obtained the permission of the Directors in writing. Such permission may be granted either for a particular meeting, competition or competitions.
- G8-1-27** Speedway New Zealand will not issue a licence to any competitor to freelance provided however that SNZ shall be under no liability whatsoever for registering more than one competitor's agreement in respect of the one competitor. SNZ will however, grant a licence to a competitor going overseas, provided that the competitor re-contracts to the promoter he was last contracted to on his/her return.
- G8-1-28** **Competitor's Agreement**  
Every registered competitor, subject to the approval of SNZ, must register his agreement with a promoter having first claim on his services, such agreement terminating on an agreed date or when a transfer of agreement has been approved by the Directors.
- G8-1-29** SNZ will not take cognisance of any agreement, contract or other arrangements made between a Promoter and a licenced competitor other than an agreement registered in accordance with the preceding Regulations.
- G8-1-30** Competitors under contract may compete in motor races other than on the licenced Speedway track provided they are not in breach of their performance contract with their Promoter.
- G8-1-31** **Clearance**  
The Competitor will not enter into any commitment with another promoter which shall prevent him from meeting his obligation to his promoter without first obtaining clearance. Clearances can be obtained:-  
(i) in writing, using the SNZ Clearance form which is handed to the Steward at the visiting track, or  
(ii) using an SNZ electronic clearance.
- G8-1-32** A competitor who has been given a release for an away meeting will then require a written release form from the away promoter before he can race at his home track.
- G8-1-33** A clearance is only required when a competitor has a meeting at his home track on the same night/day and for every SNZ Allocated Championship.
- G8-1-34** **Transfer of Agreement:** If a Promoter should, during the period of a registered agreement, agree to the transfer of the competitor to another Promoter, they shall make application to SNZ. A fee may be charged.
- G8-1-35** **Assumed Name**  
No person shall take part in any competition under an assumed name unless special application for the use of an assumed name has been made and granted by the Directors.
- G8-1-36** **Competitors' Responsibilities**  
Competitors will be responsible for the conduct and actions of their crews and their car owners.
- G8-1-37** At all times the driver or rider is held responsible for the safety of his vehicle and the actions of his crew and mechanics.

**G8-2****Championships**

Every Licenced Competitor of SNZ shall have the right to enter the Allocated Titles of his Class either directly or through any elimination conducted at his own track, provided he gives the promoter of his own track the required notice. Exception: Rule G13-2-12.

**G8-2-1**

No promoter shall refuse any competitor contracted to his track the right of entry to Allocated Titles, either by direct refusal to give clearance for the event or by threat of cancellation of contract, loss of privileges, or any other way whatsoever.

**G8-2-2****Absentees**

Any competitor having undertaken to compete in any championship or competition and failing to present himself at the start shall be reported to the Directors for conduct prejudicial to the sport and unless able to give a satisfactory reason may be suspended for such period as the Directors may decide.

**G8-3****One-Day Licences**

A one-day licence can only be issued to a driver at the steward's discretion and with the approval of the Promotion.

**G8-3-1**

A one-day licence holder must have successfully completed the current SNZ training programme or have previously competed in at least four races.

Exception: Novelty type events, e.g. Demo Derby, 50 lap Streetcar races, etc.

**G8-3-2**

The one-day license must be witnessed by a fully licensed competitor who must accept all responsibility for the rules and regulations and any penalties that may be bestowed on the holder of the one-day license.

**G8-3-3**

A one-day license holder must start from the rear of the field in open competition unless given dispensation from the Steward of the meeting.

**G8-3-4**

A one-day license cannot be issued to a driver to take part in a championship event.

**G8-4****Medical**

Any registered competitor who shall have received hospital treatment may be required to produce a certificate of clearance prior to the resumption of racing.

**G8-4-1**

If necessary, the Directors may order a competitor to have a medical inspection and the doctor shall be nominated by the Directors and the fees paid by the Competitor.

**G8-4-2**

When a competitor is diagnosed with concussion by a Medical Officer the stand-down period will be 22 days (starting from the day/night in question). A medical clearance may be required from a doctor nominated by the Directors prior to the resumption of racing.

**G8-4-3**

A competitor diagnosed with concussion may apply to the Directors to have their stand-down period reduced to an absolute minimum of 15 days (starting from the day/night in question). If the competitor wishes to race after 15 days he must see a doctor of SNZ's choosing. The Directors will consider this, taking into account the report from the Medical Officer and Steward at the time of injury. The concussion must be noted on the competitors licence.

**G8-4-4**

The SNZ office must be informed of the competitor's concussion.

- G9** **LIQUOR AND DRUGS**
- G9-1** The taking of, or suffering from the effects of drugs or alcohol by any competitor, or official, or mechanic, on the day of any meeting shall be deemed to be conduct prejudicial to the sport.
- G9-1-1** Suspected offenders may be subject to the appropriate tests, which shall be made under the supervision of the Steward of the Meeting.
- G9-1-2** Offenders will be removed from the pits and tracks, and will be reported to the Directors within 48 hours.
- G9-1-3** Refusal to submit to an alcohol or drug test at any time shall be taken as a positive test.
- G9-1-4** **Positive Test**  
In the event of a positive test a competitor be stood down until the next meeting of the Directors.
- G9-1-5** Any competitor who has tested positive to a drug test will be directed by the Directors to take a drug test (at his own expense) at any time after he re-licenses.
- G9-2** **Drug Offences**  
Any competitor or official, being convicted of a drug offence by the civil court and sentenced to a jail term or a fine exceeding one thousand dollars, will be disqualified for a mandatory period of not less than three years, or, for a lesser offence, to a punishment decided at the discretion of the Directors.
- G9-3** SNZ is affiliated to Drug Free Sport New Zealand, and has adopted their anti-doping rules, which may change from time to time.
- (i) For full details on Prohibited Substances, Specified Substances, Prohibited Methods, Treatment Guidelines and Therapeutic Use Exemptions, refer to their website, [www.drugfreesport.org.nz](http://www.drugfreesport.org.nz)
  - (ii) Alternatively, you can check on the status of a medication 24 hours a day 7 days a week from your mobile phone. Text the word drug, followed by a space, then the ingredient name or the product name to 4365. Texts cost 20 cents per message. This service is provided by Drug Free Sport NZ.
- G10** **PROTESTS**
- G10-1** Any competitor considering themselves aggrieved in any competition by another competitor or by the decision of any SNZ official, may make a formal protest as provided by these regulations.
- G10-1-1** All protests must be forwarded in writing on the official SNZ form and must be signed by the competitor actually engaged in the competition.
- G10-1-2** All protests should be signed by the steward of the meeting.
- G10-1-3** Such protest must be accompanied by a deposit of forty dollars (\$40.00).
- G10-1-4** Only competitors in the same race as a racing incident can protest that racing incident.
- G10-1-5** Protests must be lodged with the Steward within ten (10) minutes of the official posted results of that race. (Refer Rule G7-9, Race Results).
- G10-1-6** Protests relating to engine/vehicle specifications must be lodged with the Steward within ten (10) minutes of the last official posted results of that class. (Refer Rule G7-9, Race Results).

**G10-2****Protest Committee**

All protests shall be adjudicated upon by a Protest Committee consisting of the Steward of the meeting, one representative of the competitor's class and the Clerk of the Course. The Steward to be the Chairman of the Committee. All persons affected by or who may be affected by the outcome of the protest meeting, including the person against whom the protest was lodged must be given the opportunity to state their view to the Protest Committee. In the case of a racing incident the Referee must be interviewed by the Protest Committee.

**G10-2-1**

The protest will be heard on the day/night of the protest being lodged.

**G10-2-2**

In the event of a protest being lodged against a successful competitor, the prize shall be withheld until the protest has been dealt with. If the protest is upheld the prize shall be awarded to the competitor who is next to finish and the \$40 (forty dollars) shall be refunded to the person who makes the protest.

**G10-2-3**

If the protest is not upheld, the deposit shall be forfeited to SNZ unless the Protest Committee, who shall have adjudicated on the protest, shall certify that there was a reasonable ground for the protest.

**G10-3****Protests About Engine/Vehicle Specs****G10-3-1**

Should a competitor wish to protest engine and/or vehicle specifications that are routinely inspected by vehicle checkers the fee shall be \$40.

**G10-3-2**

Where the protest concerns engine and/or vehicle specifications, including fuel, that are not routinely inspected, the protest fee is \$300.

**G10-3-3**

Any vehicle protested under G10-3-2 must be impounded. Refer to rule E1-6.

**G10-3-4**

If the protest is lost, the initial fee of \$300 and any reasonable additional expenses shall be handed to the competitor against whom the protest was lodged.

**G10-3-5**

If the protest is upheld, the \$300.00 shall be refunded to the person who made the protest, and the owner of the vehicle shall be required to pay all costs incurred by the inspection of the engine.

**G10-3-6**

The only persons present when a motor is checked to be:

- (a) the vehicle competitor/owner
- (b) the person laying the protest
- (c) the measurer
- (d) an SNZ representative

This work to be done in a good garage.

**G10-3-7**

When the above are present (refer Rule G10-3-6), a Protest meeting is not necessary. The result of the checking becomes the result of the protest.

**G10-4**

All protest results must be in writing on the official SNZ letterhead.

**G11****PENALTIES****G11-1**

- (a) Any person or body of persons found guilty by a competent authority of a breach of these regulations may be penalised.
- (b) Any exclusion longer than eight days must be reported to SNZ within seven days of infringement.

**G11-1-1**

Any or all of the following penalties may be inflicted:

- (a) A reprimand, which may be private or public.
- (b) A fine by Steward's, Referee, or by SNZ Directors.

- (c) Exclusion by Referee or Steward's
- (d) Suspension by Stipendiary or Technical Steward.
- (e) Disqualification - only by SNZ Directors.
- (f) Relegation by Referee.

**G11-1-2** When a competitor is summoned by a Speedway New Zealand official, for a racing incident, the driver's rep of the competitor's class, must be available or present at the meeting.

**G11-2 Fines**

Any Infringement Notice or Protest or Protest result need only have the issuing officer's signature

**G11-2-1** A fine may be inflicted on any entrant, competitor assistant or passenger, who does not comply with the requirements of any Regulations or with any instruction of the steward of the meeting or who commits a breach of these rules.

**G11-2-2** A driver shall be responsible for the payment of any fine inflicted on himself his assistants or passenger.

**G11-2-3** The Steward of the Meeting may inflict a fine of up to a maximum of \$200.

**G11-2-4** The Steward of the Meeting shall notify the promoter that such competitor has been fined and the amount of the fine shall be paid prior to racing at the next meeting of his contracted track or handed to the Steward of the Meeting.

**G11-2-5** All fines must be paid within 28 days or a 10% penalty will be imposed monthly until the fine is paid.

**G11-3 Technical Exclusions**

**G11-3-1** Any driver of a race vehicle found over or under weight after a race by a Technical Steward or Steward, will be excluded by the Steward from the said race and for a further 30 days.

**G11-3-2** Any driver found to be using fuel outside of the specifications as laid down in rule E4-1-5 will be excluded from the meeting and for a further 3 months.

**G11-3-3** Any driver found to be using an illegal engine will be excluded from the meeting and for a further 22 days (starting from the day/night in question) by the Steward, and the driver will be placed on report to the Directors.

**G11-3-4** Any entrant found with an illegal tyre on the vehicle will be excluded from the meeting.

**G11-4** **Disqualification or Suspension** may be pronounced by the Directors after a hearing before the said Directors. Refer also G11-1-1(d) and G7-1-6.

**G11-4-1** A suspended or disqualified person or body shall thereby forfeit his or her right to:

- (a) Hold any licence, and/or
- (b) Hold any official appointment in connection with SNZ or any local body or in connection with any meeting or competition; and/or
- (c) Be a registered member of a club for competition purposes for such time as the Directors may think fit.
- (d) Promote or hold Competition requiring a permit from the Directors.

**G11-5** The Steward of the Meeting may report to the Directors any competitor or other person whose conduct on or off the track or course is injurious to the welfare of the sport or of SNZ.



- G11-6** Confederates are strictly prohibited and if in the opinion of the Steward of the Meeting a confederacy is proved which prevents the parties from competing on their true merits, such parties shall be reported to the Directors and be dealt with as the Directors may think fit.
- G11-7** Any Promoting body holding a licenced Speedway meeting shall have power after consultation with the Steward of the Meeting to declare a race 'void' when in their opinion, such race has been 'faked'.
- G11-7-1** Such decisions shall be final as to the sport in progress but an appeal therefrom will lie to the Directors.
- G11-8** Any person who shall promote, enter, drive, or officiate at, or in any manner whatsoever take part in a competition, not organised or held in accordance in all respects, with these Regulations, or who shall become disqualified or suspended by the governing body of any sport recognised by Speedway New Zealand Incorporated shall be disqualified or suspended.
- G11-9** Any penalty inflicted in accordance with these Regulations shall take effect forthwith and cannot be deferred by the lodging of an appeal.
- G12 APPEALS**
- G12-1** Every Promotional Body affected by a decision given under these rules shall have the right of appeal to the Appeal Committee of SNZ.
- G12-1-1** Every competitor affected by a decision given under these rules shall have the right of appeal to the Appeal Committee of SNZ.
- G12-1-2** To lodge an appeal against a race incident, a competitor must have lodged an official protest within the given time limit allowed. (Protests are not permitted for Superstock/Stockcar teams competition but appeals are permitted in this competition.)
- G12-1-3** An Appeal can only be about the reason for the infringement. Appeals about grammatical errors are frivolous and will not be accepted.
- G12-2 The Appeal Committee**
- G12-2-1** The President of SNZ shall himself, or through his nominee, chair each and every Appeal Committee hearing.
- G12-2-2** A minimum of five (5) persons shall be proposed by the Directors and ratified every two years at an AGM of SNZ to form the body of the Appeal Panel. Those on the Appeal Panel shall not be SNZ Directors.
- G12-2-3** The Appeal Committee shall be constituted of the President or his nominee, as outlined above, together with two persons from the Appeal Panel. In selecting those two persons, the President or his nominee shall select one such person and the appellant the other.
- G12-3 Lodging an Appeal**
- G12-3-1** All appeals shall be in writing.
- G12-3-2** All appeals shall be accompanied by payment of the sum of \$500 by the appellant.
- G12-3-3** All such appeals shall be deposited with the CEO of SNZ within seven (7) days of the date of the decision appealed from.
- G12-3-4** Any penalty appealed against shall continue notwithstanding lodgement of any appeal.
- G12-3-5** There shall be no communication with the Appeal Committee prior to the hearing other than in writing and through the office of the CEO.

## **G12-4 Hearing of Appeal**

- G12-4-1** An appeal shall be heard at the first convenient opportunity:-
- (i) at a place convenient to the Appeal Committee, or
  - (ii) by teleconference or video conference
- G12-4-2** The appellant shall notify the CEO within a minimum of three (3) days prior to the hearing, if he proposes to be represented by a lawyer or advocate.
- G12-4-3** Any appeal heard by the Appeal Committee is not a hearing de novo nor a new hearing into the matter from the beginning.
- G12-4-4** The burden of proving the appeal is solely on the appellant. SNZ and its officials shall not be required to prove or disprove anything.
- G12-4-5** At least one (1) week (7 days) prior to hearing the Appeal, the CEO shall furnish the appellant with any copies of written reports obtained from any officials present at the incident complained of, and any other written evidence it may have.
- G12-4-6** The Appellant shall likewise produce any written material he proposes to produce at the appeal together with a summary of any verbal submissions he might wish to make within five (5) days of the Appeal Hearing.
- G12-4-7** The Appeal Committee shall give its decision in writing through the CEO within seven (7) days of having heard the appeal.
- G12-4-8** The Appeal Committee may alter, cancel or substitute its own penalty or decision for that appealed from, or it may confirm the penalty or decision appealed from. Save that, it may not penalise another party who has not at the Appeal Hearing been given an opportunity to be heard.
- G12-4-9** Should the appeal fail, the appellant may at the Appeal Committee's discretion be ordered to pay the whole cost of the hearing.
- G12-4-10** The Appeal Committee may refund to the Appellant all or part of the \$500 appeal fee, at its discretion.
- G12-4-11** In the event that an engine, ruled by SNZ officials to be illegal, is subsequently found to be in fact legal, all costs incurred up to a maximum of \$500 shall be paid to the appellant by SNZ.

## **RECOMMENDED PROCEDURE FOR RULE ENFORCEMENT**

This is a Guideline to the sequence in which rule breaking incidents should be handled. It does not change any rules whatsoever, and does not apply to all Technical Infringements. The aim is to give both officials and competitors an easy to understand simplified guide to action.

It should promote:

- 1 Respect for the rules and the officials, through knowledge of procedure.
- 2 Acceptance of penalties by competitors by having had a fair and proper hearing.

Sections with borders refer to binding rules. Other sections are procedures recommended by SNZ.

<b>STEP 1</b>	Competitor breaks rule in book.
<b>STEP 2</b>	Offense witnessed by Steward, Referee, or reported to Steward by other official.
<b>OR</b>	
<b>STEP 2A</b>	Competitor makes written protest to Steward with \$40 fee, on proper form within specified time limits (Section G10-1)

**STEP 3** The Steward calls together the Clerk of the Course and the Competitor's Representative and chairs a Protest Meeting. (All persons affected by or who may be affected by the outcome of the protest meeting, including the person against whom the protest was lodged must be given the opportunity to state their view to the Protest Committee). In the case of a racing incident the Referee must be interviewed by the Protest Committee.

**STEP 4** If the offending competitor **ADMITS** or acknowledges actions to the Steward or Referee, that action will become a "MATTER OF FACT" (refer G7-3-13).  
The Steward will then take the appropriate action (refer section G7-3).

**NOTE:** There will be no right of appeal for penalties imposed on "MATTERS OF FACT" acknowledged by both sides, except with leave of Steward or referee concerned.

**STEP 5** If the offending competitor **DENIES** the actions the **PROTEST** will be considered by the **PROTEST COMMITTEE** (refer Section G10-2). Their decision will be by majority vote and will be given by the Steward who will apply penalty where appropriate.

**NOTE:** To facilitate the flow of a meeting the Protest Committee may elect to handle a dispute at the completion of the programme, **EXCEPT** in cases where the outcome of their decision may affect the starting position or results of other heats of a series on any **ONE** day.

Steps 1 to 5 will all take place at and during the meeting and should be completed no later than one hour after the last race on the programme.

**STEP 6** Any competitor who is not happy with any decision or penalty handed down under the above procedure may appeal through the CEO in writing with \$500.00 fee within specified time. (refer Section G12 on Appeals).

**COMPETITORS ARE WARNED THAT APPEALS SHOULD NOT BE ENTERED INTO LIGHTLY. APPELLANTS MAY BE REQUIRED TO APPEAR BEFORE THE APPEAL COMMITTEE AT THEIR OWN EXPENSE. IF THE APPEAL IS LOST AND THE APPEAL COMMITTEE FEEL THE APPEAL WAS FRIVOLOUS THE APPELLANT MAY BE CHARGED ALL COSTS.**

**G12-5 Mediation**

Should at any one time a dispute occur of a serious nature between promoter and competitor a meeting is to be arranged between both parties and the Directors or its representatives.

**G13 CHAMPIONSHIPS**

**G13-1 Approval of/Permission for Championship Title**

(a) All entry forms for SNZ Titles are to be available from the SNZ website

- G13-1-1** Any promoter to whom a track Licence has been issued may run an approved competition in order to ascertain his "Track Champion" and the winner shall be entitled the title of "Track Champion" of his class.
- G13-1-2** Before a promoter may conduct or advertise any event which has the word 'Championship' or 'Grand Prix' as part of its title, he must obtain permission from Speedway New Zealand.
- G13-1-3** The use of the words 'New Zealand', 'Nationals', or their equivalent, included with the word 'championship', is to be approved exclusively by the Directors.
- G13-1-4** Permission to use the words 'World', 'International' or their equivalent, as part of an event title is to be applied for.
- G13-1-5** For all World Championships or Rest of the World or applications with similar titles, applications must be made in writing to the Chief Executive Officer in ample time to have them approved by the F.I.M. and/or F.I.A. where required. The established fee must accompany each application.
- G13-2** **SNZ Championships and Allocated Titles:** SNZ Allocated Titles are allocated (subject to ratification by SNZ) each year by SPANZ. Two delegates from each licensed track are eligible to attend.
- (i) Allocation of titles will be according to SPANZ-By-Laws,
  - (ii) Only National Classes as defined in G1-1-31 are eligible for Allocated Titles as defined in G1-1-3(a).
  - (iii) For a class to be eligible to have a NZ Championship and/or Grand Prix, there must be at least one track in each Island, or more than three tracks in either Island, contracting the class.
- (a) The SNZ Titles and championship allocations, as recommended by the SPANZ AGM, will be submitted for ratification at a meeting of Directors following the AGM.
  - (b) Once ratified, the terms of the agreed championship will become a contract, this contract is between SPANZ, SNZ and the Promoting track which will be signed and become final.
  - (c) Only tracks who use Electronic Lapscore as per Rule E3-4 will be eligible to run a New Zealand Championship. Exception: Solos and Sidecars.
  - (d) Only tracks that meet the minimum grading requirements as set out in the SPANZ By-laws will be eligible to host an allocated championship
- G13-2-1** Only Promotions holding a Division One Track Licence and that have paid into the Fidelity Fund are eligible to apply for New Zealand, Grand Prix, North or South Island championships.
- (a) Exception to G13-2-1: If no Division One Promotion wants to host an SNZ Allocated Title in any one year, a Division Two Promotion may apply to SPANZ to hold the event.
  - (b) If no Promotion of either division wants to host an SNZ Allocated Title in any one year, the event is stood down for that year.
- G13-2-2** Tracks running NZ, North and South Island Championships, and NZ Grand Prix, must have run the class concerned three (3) times in the season prior to the championship and three (3) times prior to the championship, in the season of the championship.
- G13-2-3** All tracks are required to submit specific dates for approval, to be received by the CEO on the 31st July prior to when the championship is due to occur.
- G13-2-4** (a) A Promotion will incur a fine payable to SPANZ as per their bylaws and may have the championship reallocated if;

- (i) They fail to submit a date to SNZ for a New Zealand Championship prior to the AGM.
  - (ii) They fail to submit a date to SNZ for a North Island, South Island or Grand Prix prior to the 31st July prior to when the championship is due to occur.
  - (iii) They fail to submit an entry form for approval no later than 6 weeks prior to the championship approved date.
  - (b) A promotion will incur a fine and/or have future Allocated Titles (s) withdrawn by SNZ if they fail to meet the terms for the championship as agreed in the contract to host the title.
  - (c) A Promotion will incur a fine of up to \$1,000 if it is agreed that they can hand back a championship.
- G13-2-5** Copies of official entry forms for all allocated titles are to be submitted to Speedway New Zealand for approval no later than six (6) weeks prior to the approved date.
- G13-2-6** If a Promotion conducting a Championship, charges entry fees, these fees must be fully refunded if the entrant successfully passes pre-Championship race vehicle checking. Maximum fee \$25.
- G13-2-7** At New Zealand championships a stipendiary steward and senior referee shall be in attendance. At North and South Island, Grand Prix and major teams' meetings a senior referee shall be in attendance.
- G13-2-8** For New Zealand and Island Championships there will be no automatic seeding for the previous years winner or any other competitor.
- G13-2-9** All competitors entering a North Island, South Island or New Zealand Championship must have raced in that class for at least 3 meetings in the current season or have raced in that class for at least 3 meetings in the previous season and at least 1 meeting in the current season and be a New Zealand resident. Overseas competitors must have raced in that class for at least five (5) meetings in the current season.
- G13-2-10** The host track, prior to any New Zealand Championship is required to hold at least (1) one practice to enable visiting drivers to familiarise themselves with the track and conditions. The timing of this practice is to be optional but must be stated on the entry form.
- G13-2-11** At all Allocated Titles, the Senior Referee, and the Stipendiary Steward and Technical Steward (if in attendance), shall be introduced to competitors at the drivers briefing. A drivers representative is also to be elected at this meeting.
- G13-2-12** A competitor who enters one North/South Island championship in any one class must be contracted to a track in the same Island as the applicable Championship and cannot enter another North/South Island Championship in that class regardless of where they transfer their contract.
- G13-2-13** A vehicle can only be entered into one New Zealand Championship and/or New Zealand Grand Prix and/or Island Championship in any one season, unless said vehicle has been legitimately sold between Island Championships.
- G13-2-14** Every Steward who runs an Allocated Title must furnish to the SNZ Office a fully-filled in Programme giving the correct placings and points for each race within three (3) working days of the meeting. This is mandatory.
- G13-2-15** Eight days are required to elapse before payment of championships or major prize money to cater for the 7 days allowed for an appeal to be lodged. All payments must be paid within 30 days unless appealed.

**G13-3 Notification to Promoters**

**G13-3-1** Not less than three (3) weeks prior to the date of an allocated title, Promotion must send entry forms to all Promoters, clubs and stewards at tracks licensed for the class applicable, and make them available to eligible competitors.

**G13-3-2** Competitors wishing to enter the Championship must notify their own Promoter of their intention to compete not less than fourteen (14) days prior to the date of the event. (See also Rules G8-2 and G8-2-1). If less than 14 days or given clearance, will be at the discretion of the promoter.

**G13-4 Conduct of Motor Cycle (Solo) Championships**

(Refer also G13-1 to G13-3-2)

**G13-4-1** The New Zealand Solo Championships may be run on a points basis over twenty (20) heats between sixteen (16) competitors. The promoter has the right to submit an alternative format to SNZ, which if approved by SNZ shall be the format by which the championship shall be run.

(a) In the event of an alternative format being approved rules G13-4-2 to G13-4-8 inclusive shall not apply.

**G13-4-2** In each heat there will be four (4) competitors and heats will be so arranged that each competitor will ride in (5) heats and will race against every other competitor during the course of the meeting.

**G13-4-3** The sixteen (16) competitors shall draw for racing number 1-16.

**G13-4-4** Should more than sixteen (16) entries be received, the Promoters of the championship and the Stipendiary Steward (or his appointee) will require any number of entrants to compete in time or elimination trials to determine the sixteen (16) competitors.

**G13-4-5** In the event of a competitor having trouble in his elimination test he may, at the discretion of the Stipendiary Steward (or his appointee) be entitled to one other attempt.

**G13-4-6** Heats are to be run as follows:

Heat No.	A Red (inside)	B Blue	C White	D Yellow (outside)
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

\*riders in consecutive heats are allowed 5 mins.

**G13-4-7** Points to be a 3 2 1 basis to determine the Championship. In the event of a tie, a run off to be held.

**G13-4-8 Reserves**

**(a) Prior to Championship start:**

- (i) A rider unable to compete in, and withdrawing prior to the start of the championship shall be replaced by a reserve.
- (ii) If time permits, the reserve shall be the highest non-qualifying points scorer from the retired rider's qualifying event.
- (iii) Should time not permit then the reserve shall be the best available rider.
- (iv) Reserves replacing riders prior to the commencement of the championship shall take the number of the rider being replaced and shall be considered a qualified rider.

**(b) After commencement of the championship:**

- (i) There may be two reserves available for use as the racing rules allow during the championship, taking the next available numbers (i.e. 17 and 18 in a 16 rider system).
  - (ii) The reserves shall be the best available non-qualifying riders and appointed by the championship promotion and the steward.
  - (iii) Reserves used after the start of the event are not entitled to championship points but are entitled to start and point money where applicable, and may not compete in more than the designated number of races of any rider (i.e. 5 rides in a 20 heat system).
- (c) Reserves may only be taken from the list of unsuccessful competitors who attempted to qualify for the championship.

**G13-4-9 For all Championships other than the New Zealand Title** this alternative format may be used.

- (a) A fair system consisting of heats and repechages to find a maximum of 6 finalists to run in a 3 heat final. Unlimited number of entries. A maximum of 6 riders per race.
- (b) Points for qualifying rounds (if used) and final, to be 3 2 1 up to 4 starters. If more than 4 competitors in heats and final, points to be 4 3 2 1. This system to also be applied to sidecar tests. See Rule G13-4-4 for the New Zealand Championship format.

**G13-4-10** The promoter has the right to apply to SNZ to offer an alternative championship format.

**G13-4-11** Solo Numbers 1, 2 and 3 to be reserved for NZ Championship placegetters, to be displayed if competitor so wishes until the next championship is run. No other competitor is to use these numbers.

**G13-4-12** The first four (4) solo motorcycles in any New Zealand championship are to be re-checked after the final race.

**G13-5 Conduct of Sidecar Championships**  
(Refer also G13-1 to G13-3-2)

**G13-5-1** The New Zealand Sidecar Championship is to be run under the same format as the New Zealand Motorcycle Championships (see G13-4-1 to G13-4-12).

**G13-5-2** The promoter has the right to apply to SNZ to offer an alternative championship format.

- G13-5-3** Practice for the New Zealand Sidecar Championship to be run at least two (2) hours before the commencement of the Championship event and the time for the practice to be stated on the entry forms.
- G13-5-4** The New Zealand Championship to be an open meeting with tracks to send their competitors as laid out in these Regulations. Qualifying heats to be run on the day or night before the Championship proper.
- G13-5-5** Numbers 1, 2 and 3 to be reserved for NZ Championship placegetters, to be displayed if competitor so wishes until the next championship is run. No other competitor is to use these numbers.
- G13-5-6** The first 4 (four) sidecars in any New Zealand Championship to be re-checked after the final race.
- G13-6** **Conduct of SNZ Championships for Open Wheel Classes (Except Sprintcars, for Sprintcar Championships Refer Appropriate Rules)**
- G13-6-1** Elimination heats and repechages are to be held to find a maximum of 24 finalists. Minimum Number of Laps: Heats 12 laps: Finals 12 laps minimum or at least 1 lap per car in field to a maximum of 20 laps. e.g. 12 cars 12 laps, 15 cars 15 laps, 20 cars 20 laps.
- G13-6-2** The outside front row car shall be the pacesetter for the start of the race. Under a points system the top points person has the right to either grid 1 or 2 for the final race.
- G13-6-3** All SNZ Championships to be run on a three heat basis. Equal championship points to be derived from each of these three (3) heats

**G13-6-4** **Grid Draws**

<b>Race 1</b>	<b>Race 2</b>	<b>Race 3</b>
<b>Grid</b>	<b>Grid</b>	<b>Grid</b>
1	11	20
2	12	18
3	13	16
4	14	14
5	15	12
6	16	10
7	17	8
8	18	6
9	19	4
10	20	2
11	1	19
12	2	17
13	3	15
14	4	13
15	5	11
16	6	9
17	7	7
18	8	5
19	9	3
20	10	1

E.g. Car upon drawing grid 5, race 1 automatically takes grid 15, race 2, and grid 12 in race 3.

- G13-6-5** This system may be used for any number of cars by using the bottom half of column one as top half of column two etc and column three uses even numbers highest to lowest then add odd numbers highest to lowest.



- G13-6-6** Points will be awarded as per finishing position from 20 for first to one for last in a 20 car field, 16 for first to one for last in a 16 car field.
- G13-6-7** The highest point scorer over three heats shall be the winner. In the case of a draw there shall be a four lap run off.
- G13-6-8** Numbers 1, 2 and 3 to be reserved for national championship place getters to be displayed if competitor so wishes until next championship is run.
- G13-6-9** No substitute cars may be entered into a championship event after the commencement of the competition.
- G13-6-10** **Alternative Qualifying Method for N Z Three Quarter Midget Championships Only:**  
If elimination heats are required, competitors to be split into groups with a maximum of 24 cars in each group. Each group to have 3 races as per rules G13-6-5, G13-6-6 and G13-6-7 to determine qualifiers.
- G13-6-11** **Vehicle Re-checking**
- (a) **Three Quarter Midget Cars ONLY:** For a New Zealand Championship the first five cars to have their motors measured within 7 days. The competitor may, if he so desires have his motor sealed and measured under the supervision of the Steward of the competitor's home track.
  - (b) **Midget Cars ONLY:** The first 5 cars for the N.Z. Midget Championship may have their motors measured and fuel sampled, immediately on the completion of the last or any other championship race.
- G13-6-12** **Sprintcars and Alternative Method for all other Open Wheel Championships'**
- (a) Elimination Heats and repechages are to be held to find a maximum of 24 finalists - 12 laps minimum 20 laps maximum to find finalists.
  - (b) Finalists to draw for starting grid of first Final Heat.
  - (c) The second Final Heat starting grid to be reverse of grid one.
  - (d) Final heats 12 laps minimum 20 laps maximum
  - (e) Points will be awarded as per finishing position with maximum points for first in each heat descending in finishing order.
  - (f) The FINAL RACE Minimum 20, maximum 30 laps. The highest point scorer has a choice of grid one or grid two and the rest of the grid in descending order of points awarded from the previous final heats.
  - (g) Grid ties will be decided on the toss of a coin
  - (h) All previous points awarded do not count in the Final Race.
  - (i) The winner of the FINAL RACE becomes Champion
  - (j) The rest of the placings will be awarded in finishing order.
  - (k) Alternative format for Open Wheel Championships**
  - (l) All cars draw to establish qualifying order. Qualifying consists of two laps back to back, the fastest of which is counted. At the conclusion of qualifying, cars will be placed in order fastest to slowest. In regard to duplicate times, the first to achieve that time gets the position and so on.

**Heat Races (minimum 10 laps) 36 cars or more**

Cars will be placed by qualifying position with six cars inverted as follows:

1st Heat	2nd Heat	3rd Heat	4th Heat
24 17	23 18	22 19	21 20
16 9	15 10	14 11	13 12
8 1	7 2	6 3	5 4
32 25	31 26	30 27	29 28
40 33	39 34	38 35	37 36

Cars finishing in the top 4 transfer to the Championship.

#### Dashes (minimum 8 laps)

The 16 cars that have transferred to the Championship will be ranked fastest to slowest by qualifying time. They will then be split into two dashes (odd to the first dash, even to the second) with either zero, four, or six cars inverted. (inversion is determined by marble draw at the conclusion of qualifying), The first dash determines inside starting positions of the first six rows of the Championship. The second dash determines the outside of the first six rows.

#### B-Main (minimum 10 laps)

The remainder of the cars not qualified for the Championship will line up by qualifying time. The top four finishers transfer to the Championship race. They will retain qualifying time but the best they can start is 17th (behind Dash cars).

#### Heat Races (minimum 10 laps) less than 36 cars

Cars will be placed by qualifying position with six cars inverted as follows:

1st Heat	2nd Heat	3rd Heat
18 13	17 14	16 15
12 7	11 8	10 9
6 1	5 2	4 3
24 19	23 20	22 21
30 25	29 26	28 27
36 31	35 32	34 33

Cars finishing in the top 4 transfer to the Championship.

#### Dashes (minimum 8 laps)

The 12 cars that have transferred to the Championship will be ranked fastest to slowest by qualifying time. They will then be split into two dashes (odd to the first dash, even to the second) with either zero, four, or six cars inverted. The finishing order of the inversion is determined by marble draw at the conclusion of qualifying. The dash determines the starting positions of the first six rows of the Championship.

#### B-Main (minimum 10 laps)

The remainder of the cars not qualified for the Championship will line up by qualifying time. The top five finishers transfer to the Championship race. They will retain qualifying time but the best they can start is 13th (behind Dash cars).

#### Championship Final (minimum 20 laps)

The first 16 starting positions are determined by the dash finish order. The remaining 4 spots are "heads up" by qualifying time consisting of the 4 cars transferring from the B-Main.

#### **G13-6-13**

The Promoter has the right to apply to SNZ to offer an alternative Championship Format

### **G13-7-1      Championship Rules for SNZ Modified/Super Saloon Championships ONLY**

*The rules under G13-7-1 are for all recognised Championships and are not subject to dispensation.*

- (a) For the New Zealand Super Saloon Championship, the North & South Island and the New Zealand Grand Prix, any Senior Referee and Technical Steward may be appointed. These SNZ officials will be fully trained in all rules and will oversee at the above mentioned events.
- (b) Qualifying for championships to determine the number of starters to be a minimum of two heats, marble and reverse draw, per group over a maximum of 20 laps. Highest unqualified competitors to start from the front grid of a mandatory repechage.
- (c) Repechages: 2 repechage heats to be incorporated in any championship meeting where:
  - (i) Entries are of a very high number
  - (ii) The nature of the track or surface is such that single file racing or difficulty in over-taking is encountered in 12 laps.
- (d) The first Six Super Saloon cars placed in any New Zealand Championship may be re-checked after the final race.
- (e) Vehicles No.s 1,2 and 3 be reserved for New Zealand Championship pacesetters, to be displayed if competitor wishes until the next Championship is run.
- (f) No other competitor is to use these numbers.
- (g) No substitute cars may be entered into championship events if a particular car is eliminated during racing.

### **G13-7-2      A Format for Championships (to be known as "The SNZ Format")**

- (a) Speedway New Zealand Championships to be run on a 3 Heat basis equal. Championship points to be derived from each of these three (3) heats.
- (b) Grid Draws

<b>Race 1</b>	<b>Race 2</b>	<b>Race 3</b>
<b>Grid</b>	<b>Grid</b>	<b>Grid</b>
1	11	20
2	12	18
3	13	16
4	14	14
5	15	12
6	16	10
7	17	8
8	18	6
9	19	4
10	20	2
11	1	19
12	2	17
13	3	15
14	4	13
15	5	11
16	6	9
17	7	7
18	8	5
19	9	3
20	10	1

eg: Car upon drawing grid 5 , race 1 automatically takes grid 15, race 2, and grid 12 in race 3.

- (c) This system may be used for any number of cars by using the bottom half of column one as the top half of column two etc and column three uses even numbers highest to lowest then odd numbers highest to lowest.
- (d) Points will be awarded as per finishing positions from 20th for 1st to 1 for last .
- (e) The highest point points scorer over three heats shall be the winner.
- (f) In the case of a draw there will be a 4 lap run off.

### **G13-7-3**

#### **Alternative Method for SNZ Super Saloon and Modified Championships**

- (a) A Promoter has the right to apply to SNZ to offer an alternative format.
- (b) The method presented must be within rules G13-7-1
- (c) **Approved alternative format for all Modified and Super Saloon Championships**

All cars draw to establish qualifying order. Qualifying consists of two laps back to back, the fastest of which is counted. At the conclusion of qualifying, cars will be placed in order fastest to slowest. In regard to duplicate times, the first to achieve that time gets the position and so on.

#### **Heat Races (minimum 10 laps) 36 cars or more**

Cars will be placed by qualifying position with six cars inverted as follows:

1st Heat	2nd Heat	3rd Heat	4th Heat
24 17	23 18	22 19	21 20
16 9	15 10	14 11	13 12
8 1	7 2	6 3	5 4
32 25	31 26	30 27	29 28
40 33	39 34	38 35	37 36

Cars finishing in the top 4 transfer to the Championship.

#### **Dashes (minimum 8 laps)**

The 16 cars that have transferred to the Championship will be ranked fastest to slowest by qualifying time. They will then be split into two dashes (odd to the first dash, even to the second) with either zero, four, or six cars inverted. (inversion is determined by marble draw at the conclusion of qualifying) ,The first dash determines inside starting positions of the first six rows of the Championship. The second dash determines the outside of the first six rows.

#### **B-Main (minimum 10 laps)**

The remainder of the cars not qualified for the Championship will line up by qualifying time. The top four finishers transfer to the Championship race. They will retain qualifying time but the best they can start is 17th (behind Dash cars).

#### **Heat Races (minimum 10 laps) less than 36 cars**

Cars will be placed by qualifying position with six cars inverted as follows:

1st Heat	2nd Heat	3rd Heat
18 13	17 14	16 15
12 7	11 8	10 9
6 1	5 2	4 3
24 19	23 20	22 21
30 25	29 26	28 27
36 31	35 32	34 33

Cars finishing in the top 4 transfer to the Championship.

**Dashes (minimum 8 laps)**

The 12 cars that have transferred to the Championship will be ranked fastest to slowest by qualifying time. They will then be split into two dashes (odd to the first dash, even to the second) with either zero, four, or six cars inverted. The finishing order of the inversion is determined by marble draw at the conclusion of qualifying. The dash determines the starting positions of the first six rows of the Championship.

**B-Main (minimum 10 laps)**

The remainder of the cars not qualified for the Championship will line up by qualifying time. The top five finishers transfer to the Championship race. They will retain qualifying time but the best they can start is 13th (behind Dash cars).

**Championship Final (minimum 20 laps)**

The first 16 starting positions are determined by the dash finish order.

The remaining 4 spots are "heads up" by qualifying time consisting of the 4 cars transferring from the B-Main.

**G13-8 Superstock, Stockcar and Streetstock Championships:  
(Refer also G13-1 to G13-3-2)**

**G13-8-1 Format and Grid Draw for all SNZ Championships as follows:**

<b>Race 1</b>	<b>Race 2</b>	<b>Race 3</b>
<b>Grid</b>	<b>Grid</b>	<b>Grid</b>
1	14	26
2	15	24
3	16	22
4	17	20
5	18	18
6	19	16
7	20	14
8	21	12
9	22	10
10	23	8
11	24	6
12	25	4
13	26	2
14	1	25
15	2	23
16	3	21
17	4	19
18	5	17
19	6	15
20	7	13
21	8	11
22	9	9
23	10	7
24	11	5
25	12	3
26	13	1

**G13-8-2** Points will be awarded as per finishing position from 26 for 1st to 1 for last.

**G13-8-3** The highest point scorer over three heats shall be the winner. In the case of a draw there shall be a 4-lap run off.

- G13-8-4** The promoter has the right to apply to SNZ to offer an alternative championship format.
- G13-8-5** All Superstocks and Stockcars must be weighed before specified Championship events by systems approved by Speedway New Zealand.
- G13-8-6** The first six vehicles placed in any New Zealand Championships may be re-checked after the final race. Re-weighing optional.
- (i) Any cost of engine stripping when the engine is found to be legal, is to be borne by SNZ, if illegal the cost will be borne by the competitor.
- G13-8-7** No substitute cars or drivers may be entered into a Championship event if a particular car is eliminated during a race (exception Teams Racing). The next highest points scored or placegetter may substitute for a qualifier that is unable to start in the first race of the championship finals.
- G13-8-8** Vehicles Nos 1, 2 and 3 be reserved for New Zealand Championship placegetters, to be displayed if competitor so wishes until the next Championship is run. No other competitor is to use these numbers.  
Stockcars 1, 2 and 3 must be red on white or white on red.

## **G14 TRACK RECORDS**

- G14-1** Every attempt on records shall be an open competition and made in accordance with these regulations and no record shall be approved by SNZ unless it shall be satisfied that the record was so made.
- G14-1-1** SNZ shall adjudicate upon claims to records made within its territory and may decline to accept any claim without stating its reason.
- G14-1-2** Local or track records made in accordance with these Regulations shall always be expressed in terms of the time taken to cover one or more laps of a named and licenced track.
- G14-1-3** Every claim to a local record shall be made to the SNZ office within forty-eight (48) hours of the finish of the attempt and shall be supported by certificate of the time taken to within one-fifth of a second by three (3) official timekeepers.
- G14-1-4** When and wherever reference to a local record is published it shall invariably be described as a track record and the name of the track shall be given.

## **G15 MIXED CLASSES**

The mixing of classes using vehicles of a similar nature can be permitted. Agreement to do this must be in the form of a unanimous decision between the classes concerned, the track promotions and permission being received from the SNZ office.

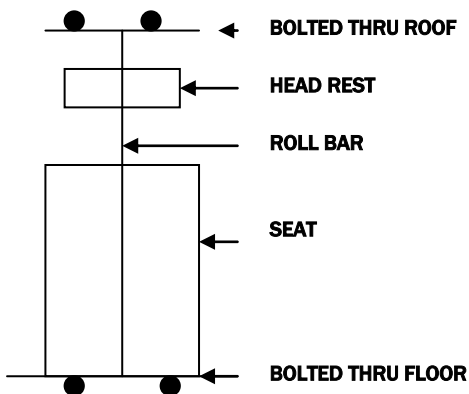
## **G16 CLUB SPEEDWAY MEETINGS**

- G16-1** The following conditions shall apply when Clubs affiliated to Speedway New Zealand Inc wish to conduct Club Speedway Meetings.
- (a) Club Speedway Meetings may be licenced only for Meetings of 25 competitors or less.
- (b) Club Speedway Meetings cannot run competitors from outside the Club.
- (c) Application for a licence to hold Club Speedway Meetings must be made to the Office of Speedway New Zealand at the beginning of every season and no licence to hold such a meeting will be granted until the track to be used has been inspected and passed by a Stipendiary Steward of Speedway New Zealand, or his appointee.

- (d) Thereafter applications for Permits must be made to, and will only be issued by the local Speedway New Zealand Steward who shall endorse thereon conditions as are considered necessary.
- (e) Every Club shall pay a Permit Fee of \$60.00 per Meeting.
- (f) No Club shall be permitted to run more than six Club Speedway Meetings in any one year. All such Meetings shall be held during the hours of daylight and all such Meetings will be run under the full conditions laid down for the conduct of Speedway racing on tracks licenced by SNZ.
- (g) All such Meetings shall be under the complete control of the local Speedway New Zealand Steward and Referee who shall be responsible for the safe conduct of the Meeting. The Club conducting the Meeting must satisfy the Steward that all precautions have been taken as to the safety of both the competitors and spectators.
- (h) All such Meetings will be conducted under the Rules and Regulations of Speedway New Zealand appropriate to the class of Track Licence and to the class of competition.

**G17-1 MINIMUM VEHICLE SPECIFICATIONS**

- (a) Only standard road cars eligible. NO 4-wheel drives, NO SUV's, NO Ute's. NO modifications or reinforcing permitted except the following.
- (b) All glass including mirrors to be removed from the vehicle. Tow bar to be removed.
- (c) All badges, interior and exterior trim and plastic to be removed.
- (d) Both front doors to be securely chained, bolted or welded shut. Pillarless cars must have the seam between front and rear doors fully welded.
- (e) Full harness seat belt (4-5 point) to be fitted to driver's seat and securely mounted. Seat belts must not be mounted to the roof. NO RETRACTABLE SEAT BELTS allowed.
- (f) A maximum of 18 litres of petrol to be carried in the tank.
- (g) All cars to be fitted with roll bar (not roll cage) consisting of one bar of minimum diameter of 38mm OD x 3.2mm, of steam pipe or RHS, to extend vertically from floor immediately behind driver's seat to the roof. A 300mm length of pipe or RHS (of the same size as the roll bar), or a 300mm x 300mm x 6mm plate must be welded to each end of the roll bar. These to be bolted through the roof and the floor using a minimum of 10mm bolts. A head rest must be mounted on bar. See diagram below.



- (h) Numbers must be painted in contrasting colours and clearly visible, on the driver's door and roof. Minimum size 300mm high x 50mm wide.
- (i) No obscene or offensive words or drawings on cars.
- (j) The driver's door may have a 3mm steel plate welded on the driver's side to replace the door trim, from behind the driver's seat, extended to past the firewall, and securely welded or bolted.
- (k) No locked diffs allowed.
- (l) No wide wheels or racing tyres allowed.
- (m) Battery must be adequately secured.
- (n) All airbags must be removed.
- (o) Fuel lines to be secured with no leaks or kinks, and of an approved type.
- (p) **Air conditioning systems to be discharged**

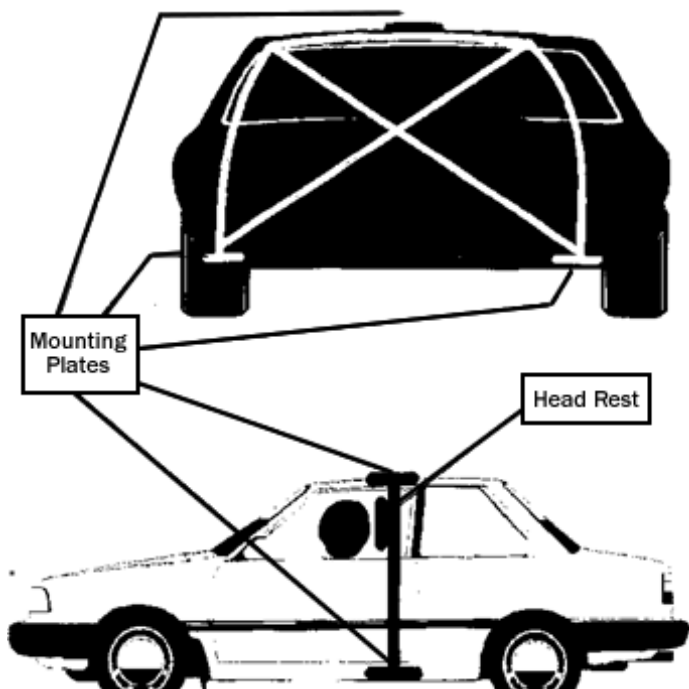


## **R17-2 DEMOLITION DERBY RACING RULES AND CONDITIONS**

- R17-2-1** All vehicles will be checked and must comply with the specifications.
- R17-2-2** All competitors must hold either an SNZ One-Day Derby Licence or a full SNZ licence.
- R17-2-3** Minimum age is 16 years. Competitors aged between 16 and 18 years must have signed consent by a parent or guardian.
- R17-2-4** All competitors must be aware and accept that they compete at their own risk.
- R17-2-5** Competitors must have proof from the issuing authority that they have held at least a Restricted civil drivers licence. Full civil drivers licence is not required.
- R17-2-6** All drivers must wear full length, long sleeved overalls. Leather gloves, boots or shoes must be worn, NOT JANDALS or SNEAKERS. NO NYLON ATTIRE. Clothing to be approved by the Steward on the day/night.
- R17-2-7** SNZ approved helmet and neck brace must be worn.
- R17-2-8** No passengers.
- R17-2-9** The Demo Derby is to be the last race of the meeting and the track surface must be heavily watered to reduce vehicle speed.
- R17-2-10** This competition is with the intention of demolishing opponent's vehicles. Those not competing in the spirit of the intention can be excluded.
- R17-2-11** When a red light or flag is shown, competitors must immediately STOP.
- R17-2-12** Drivers must not hit another vehicle in the driver's door.
- R17-2-13** Cars can only move forward on the track and in an anticlockwise direction, strictly within the confines of the track.
- R17-2-14** Competitors will be disqualified when driving on the infield unless the track is completely blocked. Competitors must return to the track immediately after passing the blockage.
- R17-2-15** A competitor that is immobilised for more than ONE minute shall be deemed out of the Derby and shall not be permitted a restart.
- R17-2-16** No competitor will be permitted to unclip his seat belts or get out of the car while the Derby is in progress, without a direction from the Clerk of the Course or SNZ Official. Obviously this restriction does not apply in case of fire.
- R17-2-17** All decisions taken by the track officials will be final and binding and no protests will be entered into.
- R17-2-18** The Promoter has the right to order winning cars to be rechecked.
- R17-2-19** The taking of, or suffering from the effects of drugs or alcohol by any competitor or mechanic, on the day of any meeting shall be deemed to be conduct prejudicial to the sport.

## **G17-3 DERBY TEAMS RACING ADDITIONAL MINIMUM VEHICLE SPECIFICATIONS**

- (a) All cars to be tidy in appearance and professionally signwritten.
- (b) All glass except interior mirror to be removed.
- (c) Cars that contain rust in critical areas e.g. door pillars or hinges will not be permitted.
- (d) Side intrusion bar to be fitted between drivers door pillars (same size and material as roll bar).
- (e) All vehicles must be fitted with an interior roll bar (not full cage) fitted behind the front seat, above the drivers normal seated position, as per diagram over.



- (f) Roll bar material – 38mm OD 3.2mm wall thickness steampipe or RHS.
- (g) Diagonal cross must be fitted inside roll bar.
- (h) Roll bar to be mounted to mounting plates at floor and middle of roof.
- (i) Mounting plates to be 125mm x 125mm x 6mm.
- (j) A headrest 280mm x 150mm x 3mm to be fitted centrally behind drivers helmet and securely mounted to rollbar.
- (k) Radiators to remain in original position but fan may be removed.
- (l) Fuel tanks must be mounted in the boot area centrally and as far forward as possible without intruding into the rear passenger area.
- (m) Fuel lines to be secured with no leaks or kinks and of an approved type.
- (n) All bolts used to effect modification are to be a minimum of 10mm in diameter.

#### **R17-4 DERBY TEAMS RACING ADDITIONAL RACING RULES**

- R17-4-1** Racing may take place during the meeting.
- R17-4-2** No competitor shall manoeuvre their vehicle into the path of others so their door is exposed.
- R17-4-3** No hitting any stationary vehicles. See Rule T12-3-5(e).
- R17-4-4** All competitors must race in the race direction.
- R17-4-5** In the event of a rollover the car is out of the race unless it returns to its wheels without assistance.

**G17-5      CARAVAN DERBIES  
ADDITIONAL MINIMUM VEHICLE SPECIFICATIONS**

- (a)    The windscreen opening is to be covered by maximum 100mm mesh covered by chicken netting.
- (b)    The drawbar is to be well attached, with a good safety chain.
- (c)    Caravans are to have all glass and breakables, beds, tables and other internal fixtures removed.
- (d)    All gas bottles and water tanks to be removed.

**R17-6      CARAVAN DERBIES  
ADDITIONAL RACING RULES**

**R17-6-1**    Racing to be on a dry track.

**R17-6-2**    First across the line with a minimum of drawbar, chassis and set of wheels will be the winner.

**R17-6-3**    Cars without a caravan or part thereof can continue, but cannot win.

# TECHNICAL/RACING RULES

## CONTINGENCIES

If any case occurs which is not, or which is alleged not to be provided for by the Rules, it shall be deemed by reference to the Directors.

## SECTION E: EQUIPMENT

### **E1 VEHICLE INSPECTIONS**

#### **E1-1 Comprehensive Vehicle Inspection: (CVI)**

**E1-1-1** No vehicle will be permitted to race or practice at all, until a comprehensive pre-season vehicle inspection has been completed (and passed) unless the stewards permission is given, competitors must produce a copy of inspection sheet on demand.

**E1-1-2** All comprehensive vehicle inspection sheets must be less than 20 meetings old.

**E1-1-3** No vehicle may be entered for competition without a vehicle log book issued by the steward.

(a) Log Book belongs to the vehicle, and must be provided to any new owner on completion of sale.

(b) Open Wheel Vehicles and Modifieds only; The date of issue of log book indicates age of vehicle; any replacement log book must use date from original log book.

**E1-1-4** All CVI's to be recorded in the log book.

**E1-1-5** All vehicles must carry VIN tags and record in logbook and supplied to the SNZ office. Replacements via stewards (see Vehicle Checker Booklet for placement)

#### **E1-2 Meeting Inspection**

**E1-2-1** All vehicles are subject to inspection at any time by a Vehicle Checker or Technical Steward.

**E1-2-2** No vehicle will be allowed to race unless it has a Pre-Meeting Vehicle Check and Registration Certificate issued on the night/day of the meeting by the vehicle checker.

**E1-2-3** No express or implied warranty of safety shall result from any inspection.

**E1-2-4** It is the responsibility of the entrant to have his race vehicle compliant with all specifications and supplementary regulations, free from mechanical defects, and in a safe racing condition.

**E1-2-5** Cars damaged or altered after they have been approved are subject to re-inspection and approval.

**E1-2-6** The steward will make the final decision on the safety and eligibility of an accident damaged vehicle.

**E1-2-7** Any competitor who refuses to have his vehicle inspected, or removes his vehicle from the meeting without prior permission is deemed to have an illegal vehicle.

**E1-2-8** Any vehicle declared illegal must be inspected as directed by a Stipendiary Steward at the competitor's expense before it can be used again in competition.

#### **E1-3 Random Technical Inspections**

**E1-3-1** When a vehicle or vehicle component is selected for a random technical inspection on the day of an event in the designated pit area, it is deemed as being submitted for inspection for and entered the said event.

**E1-3-2** The entrant/competitor must be present at the inspection and produce his/her licence, logbook and correctly filled in vehicle

checking card. Failure to submit a vehicle within a reasonable time may incur a penalty.

- E1-3-3** Once race vehicle has entered the designated pit area on the day/night of an event that vehicle is eligible for random technical inspection whether on or off the trailer/transporter.

**E1-4 Inspection by Request**

Any driver or car owner may request for their own vehicle and equipment to have technical tests done, i.e. motor, weight, fuel, etc. These tests may take place away from a meeting and carry no penalties to the driver or owner. A fee may be charged for travel by the Technical Steward.

**E1-5 Other Dispensations**

The dispensation for any overseas machine that does not fully comply with the specifications as laid down for its particular class can be granted ONLY by SNZ. Applications for any dispensation should be made in writing to the SNZ Office at the earliest possible moment so as to allow plenty of time for the assessment of the application.

**E1-6 Impounding a Vehicle or Component**

The Steward may order any vehicle or component be inspected, sealed or impounded, and such vehicle or component shall be retained for such period as may reasonably be necessary for its inspection.

**E1-7 Measurement of Material Thickness**

The measurement of material thickness may be by any of the following methods:-

- (a) 6mm drilled hole
- (b) x-ray
- (c) ultrasonic testing

**E2 DATA FOR VEHICLE CHECKERS**

- E2-1 Measuring Engines:** The following formula holds good for millimetres or inches; the result being either cubic centimetres (cc) or cubic inches (cu.in):

$B \times B \times .7854 \times S \times \text{No. of cylinders}$ , in which "B" is the bore diameter, "S" is stroke of the motor. In other words, Bore squared multiplied by .7854 multiplied by the stroke multiplied by the cylinders of the motor concerned.

- E2-2 OEM Parts:** Any vehicles that require OEM parts, their components must retain their original identification marks.

- E2-3 Rotary Motors:** The capacity of these units is calculated by applying the following international formula. Manufacture's CC Rating calculated by the following formula: Capacity of one working chamber x no of rotors.

- E2-4 Roll Bars and Cages:** Where metric sizes are specified, these will be adhered to, to the second decimal place (e.g. 31.75 or 32.00mm -NOT 31mm). This will apply in all cases involving safety.

- E2-5** No electro-plating is permitted on roll cages.

**E2-6 ISO Metric Bolts:**

<b>Metric Dia</b>	<b>Imperial equiv.</b>
M6	1/4" (.250")
M8	5/16" (.312")
M10	3/8" (.375")
M11	7/16" (.437")
M12	1/2" (.500")
M16	5/8" (.625")

Symbol `88' Symbol `HT' (high tensile)

- E2-7 Conversion:**

1 Centimetre = 10mm or .393"

1 inch	=	25.4mm or 2.54cm
1 kg	=	2.204 lbs
1 kg	=	1000 grams
1 lb	=	454 grams
1 litre	=	1.75 UK pints
1 Gal. (UK.)	=	4.4546 litres

## E2-7-1

### To Convert:

cc into cu. Ins.	multiply by .061
cu. Ins. Into cc	multiply by 16.389
lbs into kg	multiply by .453
kg into lbs	multiply by 2.204
Gallons (UK) into litres	multiply by 4.546
Litres into gallons (UK)	multiply by .219
Inches into millimetres	multiply by 25.4
Millimetres into inches	multiply by .0394
1 Gallon Water	approx. 10 lb
1 Gallon Methanol	approx. 8 lb
1 Gallon Oil	approx. 9 lb
1 Gallon Pump Gas	approx. 7.1 lb
5 Quarts oil	approx. 11 lb
1 Quart oil	approx. 2.1/4 lb

## E3

### ELECTRONICS

## E3-1

- (a) The use of in-vehicle transmitting or receiving is prohibited except approved one way radio communication from officials.
- (b) Ignition system settings must not be able to be accessed by the driver when in his normal seated position.

## E3-2

The use of electronic logic processors to control any function of the race vehicle and/or any system for gathering continuous data from any function of the vehicle is strictly prohibited.

- (a) Exception - Microprocessors are permitted to control ignition systems.
- (b) Exception: Microprocessors are permitted to control electronic fuel injection systems on Super Saloons, Saloons, Production Saloons, and Streetstocks, however the gathering and/or downloading of continuous data is permitted for Sidecars only.
- (c) Electronic engine RPM counters and limiters are permitted in all classes.
- (d) Exception - Dorian Data-1 transmitter TX8000.
- (e) Single Channel "Playback Tachometers" and "Hour Meters" are permitted, provided the said meter does not alter or change engine settings..
- (f) Electronically Controllable adjustable shock absorbers are not permitted.
- (g) The use of electronic traction control devices is not permitted in any form. EXCEPTION: Rule T11-15-1(e)
- (h) SNZ to approve two ECU control systems to be permitted for use in conjunction with OEM sensors
  - (i) ECU system to control ignition only
  - (ii) ECU system to control ignition and electronic fuel injection only

Both units to have a security control system

## E3-3

In all classes instrument warning lights to be white, blue or green only.

### E3-4 Electronic Lap Scoring

**E3-4-1** The official hardware for electronic lapscore on a SNZ track is Dorian Data-1™ or AMB TranX260 timing system.

**E3-4-2** The official software for electronic lapscore on a SNZ track is Natsoft Scoring/Timing System or AMB Orbits3.

**E3-4-3** The official transmitter for electronic lapscore on a SNZ track is Dorian Data-1 TX 8000™ or AMB Personal TranX260.

**E3-4-4** The loop width of the under track antennas will be a maximum of 1.1 metres.

**E3-4-5** It is the competitors responsibility to make sure that their transmitter is fitted to the vehicle in the correct position and charged correctly at all times when the Dorian Data-1 is in use.

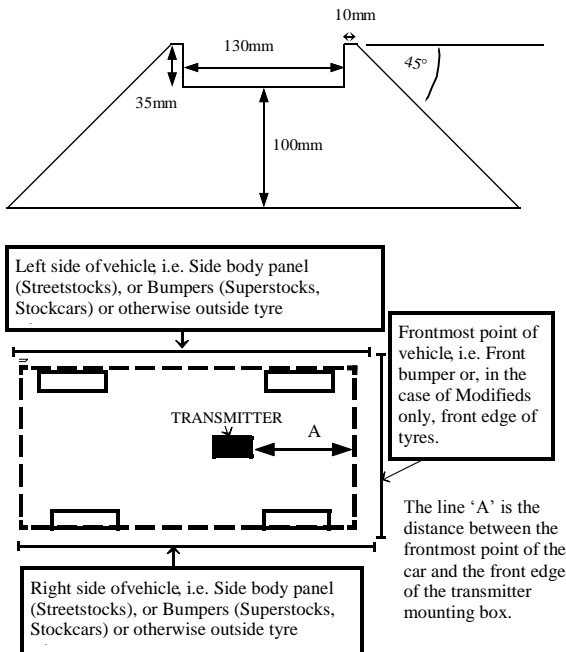
### E3-4-6 Placement of the transmitter:

(a) Minimum 'A' measurements (refer to diagram) as follows:

Superstocks	1200mm
Sprintcars	2200mm
Midget Cars	1250mm
TQ Midgets	1200mm
Modified Sprints	1250mm
Minisprints	1250mm
Modifieds	2000mm
Streetstocks	2000mm
Stockcars	1200mm
Sidecars	1500mm
Super Saloons	1800mm
Saloons	1800mm
Production Saloons	1800mm
Ministocks	1350mm*

\*It is recommended that the TX8000 transmitter placement for Ministocks be on the right-hand side of the foot well.

### TX8000 'A' Template Transmitter Placement



- (b) 300mm minimum from extreme right hand side of vehicle; 600mm minimum from the extreme left hand side of the vehicle.

Exception:

- (i) Sidecars
- (ii) Streetstocks will have their TX8000 transmitter at least 600mm from either side of the vehicle.
- (c)
  - (i) Must be mounted not more than 20mm above the lowest part of the frame/chassis, in the vicinity of the transmitter.
  - (ii) Must be mounted at least 150mm from exhaust systems.  
**Note: Open Wheel vehicles with a transmitter mounted less than 150mm from the exhaust pipe are to be fitted with a heat-deflecting shield. Minimum air clearance between transmitter and the shield to be 25mm.**
  - (iii) Must be not more than 200mm from the bottom of the transmitter above the ground.
  - (iv) The approved template must be able to fit the transmitter when mounted to check for metallic interference. (See diagram)
- (d)
  - (i) **Superstocks, Stockcars, Streetstocks and Ministocks:** Approved transmitter mounting box must be bolted to the vehicle by not less than 4 x 6mm diameter nuts, bolts and washers.
  - (ii) **Open Wheel Classes, Modifieds and Sidecars:** Approved transmitter mounting box must be bolted to the vehicle by not less than:  
 2 x 3/8" dzus style fasteners, or  
 3 x 5/16" dzus style fasteners, or  
 4 x 1/4" dzus style fasteners, or  
 3 x 6mm diameter nuts, bolts and washers.

**E3-4-7** Solo motorcycles do not need to use the Dorian Data-1 timing and scoring system.

**E3-4-8** At allocated titles, a tape of the number caller to be recorded and used as a backup scoring system.

**E3-4-9** For operation of Dorian Data-1 Timing/Scoring system and Natsoft Timing and Scoring System refer to SNZ handbook entitled Electronic Timing and Scoring.

## **E4 FUEL & FUEL TANKS**

### **E4-1 Fuels**

- E4-1-1**
  - (i) Petrol is restricted to commercially available products as supplied and by defined in the New Zealand Oil Companies, Petroleum Products Specifications and Regulations 2003 (See SNZ website, [www.speedway.co.nz](http://www.speedway.co.nz)).
  - (ii) Methanol fuel, with the same specifications as that supplied by recognised NZ Oil companies, is allowed, regardless of source (see SNZ website [www.speedway.co.nz](http://www.speedway.co.nz)).
  - (iii) Avgas 100 will comply with ASTM D910 and DEF STAN 91-90 (DERD 2485), specifications [www.speedway.co.nz](http://www.speedway.co.nz).
- E4-1-2** Fuels are permitted to contain commercially available lubricants as submitted to SNZ for identification and approval.
- E4-1-3** Fuel blending is not permitted. The addition of Toluene to fuels is not permitted. The addition of material to fuel or intake air to increase available oxygen is strictly prohibited. Such materials



include, oxygen, water, nitrous oxide, nitro methane, nitro propane, propylene oxide and nitropane etc.

**E4-1-4** All fuel is subject to testing at any time, if fuel is found to deviate from the approved fuel specification it will be considered illegal.

**E4-1-5** The use of fuel outside of specifications as described at [www.speedway.co.nz](http://www.speedway.co.nz) or blended fuel, will be declared an illegal fuel, Refer Section G11-3 Technical Exclusions.

**E4-2 Approved Fuels**

(a) Solo, Sidecar, Open Wheel Vehicles, Modifieds, Super Saloons: Methanol, Avgas 100, Petrol

(b) Saloons and Production Saloon, Superstocks, Stockcars: Avgas, 100, Petrol

(c) Streetstocks: Petrol, Avgas 100; – no blending of fuels allowed.

(d) Ministocks: Petrol Only

**E4-3 Fuel Tanks**

**E4-3-1** All vehicles will be fitted with one fuel tank, the tank must be fitted with an SNZ approved bayonet, screw type, or flush mount fuel cap; no radiator type caps are permitted.

**E4-3-2** All fuel tanks must be securely mounted.

**E4-3-3** The fuel tank must have welded seams and fittings and be constructed to a professional standard. Soldered tanks and fittings are not permitted.

**E4-3-4** The fuel tank must be located behind the engine firewall.

**E4-3-5** Pressurized fuel tanks are not permitted.

**E4-3-6** All 4-wheel vehicles to have a suitable breathing system so that fuel will not escape during a roll over. Superstock, Stockcar Modified, Streetstock must be further protected with a fuel air vent pipe of steel, copper or braided flexible line wrapped horizontally around the tank and extending through the vehicle to a distance of not less than 50mm and not more than 200mm.

**E4-3-7** Fuel vent pipe must avoid inboard disc braking systems and be at least 600mm away from exhaust pipes.

**E4-3-8** The addition of safety foam baffling to fuel tanks is highly recommended. NOTE: the tank will need to be filled with at least 80% foam to be effective.

**E4-3-9** Fuel tanks must be constructed and supported in a manner that will ensure every possible precaution has been taken to avoid rupture or breakage. It is highly recommended that the tank has an adequate supporting structure under the lowest portion of the tank. The structure should follow the contour of the tank and be welded or bolted to the framework of the car. A suitable upper structure fitting the contour of the tank should allow the tank to be firmly attached to the framework of the car. The practice of bolting the tank to the chassis entirely by mounting plates is not recommended.

**E4-4 Fuel Tank Dimensions**

**E4-4-1** **Modifieds:** Minimum thickness 1.0mm steel, maximum capacity 55 litres. Aluminium and aluminium alloy fuel tanks are not permitted.

**E4-4-2** **Superstocks, Stockcars and Streetstocks:** Minimum thickness 1.2mm steel, maximum capacity 22.75 litres. Aluminium and aluminium alloy fuel tanks are not permitted.

**E4-4-3** **Saloons:** Minimum thickness 1.2mm steel or 2.0mm aluminium for up to 36 litre capacity, whereas 1.5 mm steel

or 2.6mm aluminium minimum thickness is required for up to 55 litre maximum capacity.

#### **E4-5 Fuel Tank Location**

**E4-5-1 Open Wheel vehicles:** The fuel tank/tail tank confined within the tail cone area.

**E4-5-2 Superstocks and Stockcars:** The fuel tank confined towards the rear of the rollcage, or under the floor. The fuel tank, tank mounted master tap and fuel filler must be protected from impact damage by chassis or rollcage, or rollcage brace.

**E4-5-3 Streetstocks:** The fuel tank may be fitted in the boot area provided that the tank is as far forward as the rear seat frame allows. The tank and filler cap must be below the level of the upper bars. The tank must be securely attached to either the floor or the rollcage but not both.

**E4-5-4 Super Saloon, Saloon:** The fuel tank confined in the boot or rear compartment and behind the rear firewall.

#### **E4-6 Fuel Cells**

**E4-6-1** Semi rigid crosslink polymer type fuel tanks, also known as fuel cells, are permitted in Saloons, Super Saloons, Midget, Three Quarter Midget, Sprintcar, Minisprint, Modified Sprint, Superstocks, Stockcars and Modifieds.

**E4-6-2** All Open Wheel vehicles permitted to use semi rigid fuel tanks also known as fuel cells must be fitted with an approved collapsible insert or fuel bladder or fully protected on all sides and the bottom by 1.5 minimum alloy plate to be known as the fuel-can.

(a) All open wheel vehicles permitted approved integral/direct mount tail tanks fitted to manufacturers specifications.

**E4-6-3** Saloons, Super Saloons, Superstocks, Stockcars and Modifieds fitted with fuel cells must be protected on all sides and the bottom by a 3mm minimum steel plate fuel-can, the use of a collapsible fuel bladder is optional.

**E4-6-4** It is highly recommended that fuel cell inserts or bladders be replaced every 5 years.

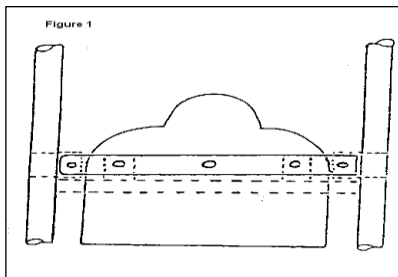
#### **E4-7 Fuel Cell Mountings**

**E4-7-1** Fuel cells must be constructed and supported in a manner that will ensure every possible precaution has been taken to avoid rupture and breakage. There must be no bolt heads inside the fuel-can that can rupture the fuel cell.

**E4-7-2** Fuel cells must not be mounted to the chassis utilizing any portion of the access plates or the nut plate bonded into the fuel bladder if fitted.

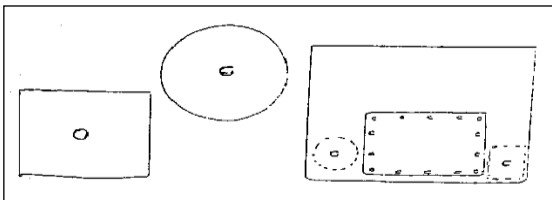
**E4-7-3** For Open Wheel vehicles using a semi rigid fuel cell tail tank, the front face of the cell must be mounted at the top by a minimum of three (3) 8mm (5/16") bolts through two bars either aluminium or steel minimum 50mm (2") x 5mm (3/16") sandwiching the crosslink polymer cell wall. (See Figure 1)

**E4-7-4** The fuel cell mounting bar can extend outside the width of the tank and attach



to lugs on the rollage verticals or alternatively, only be the width of the tank and mount on lugs attached to a tube running between the roll cage verticals on the outer two of the three bolts sandwiching the cell wall. All other fuel cells must be mounted in two 50mm x 3mm steel straps wrapped around the cell.

- E4-7-5** At the bottom of the cell on each side a washer or plate 5mm (3/16") inside the cell minimum of 65mm (2.5") diameter with a minimum of one 8mm (5/16") bolt.. (see Fig 2 below)



- E4-7-6** Open Wheel vehicles must have an adequate supporting structure under the forward section of the lowest portion of the fuel cell. This structure should follow the contour of the cell and be welded or securely attached to the frame of the car on each side.
- E4-7-7** Open Wheel vehicles must not fit the fuel pick up underneath a fuel cell.
- E4-7-8** An alternative mounting structure, as shown, is approved for use on fuel forward type tail tanks (Open Wheels only):



## **E4-8 Fuel Taps**

- E4-8-1** The fuel line from the tank must be fitted with a shut off tap which must be in reach of the competitor while in the normal seated and restrained position and in reach of a person outside the car.
- E4-8-2** Open Wheel vehicles may have the fuel tap handle outside the cockpit.
- E4-8-3** An additional simple on/off master fuel tap must be fitted as close as practical to the outlets from the tank on all Open Wheel vehicles.
- E4-8-4** The on/off master tap must be fitted directly into the fuel tank on Streetstocks and Superstocks.
- E4-8-5** All fuel taps must be clearly marked 'off' and 'on'.
- E4-8-6** Fuel filter bowls must be of metal construction.

## **E4-9 Fuel Lines**

- E4-9-1** Fuel lines must be of steel, copper, aluminium or of flexible construction. **Open Wheel vehicles must have fuel lines constructed of reinforced flexible construction. Copper, steel and aluminium fuel lines are not approved.**

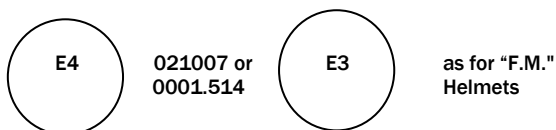
- E4-9-2** Fuel lines, where flexible, must be of an approved flexible type, securely clamped at joints, wire clamps are not permitted.
- E4-9-3** Plastic, reinforced plastic, nylon, or reinforced nylon fuel line is not permitted.
- E4-9-4** Armoured flexible neoprene plastic is permitted where fitted as a standard OEM part.
- E4-9-5** Approved 'push-lock' fittings and hoses are permitted. (Hose identification # R6)
- E4-9-6** Fuel lines and return lines must be secured to the chassis at the fuel tap and at intervals of not more than 300mm.
- E4-9-7** Saloons, Super Saloons and Modifieds: Grommets are to be fitted where fuel lines pass through bulkheads etc to prevent chafing.
- E4-10** **Refuelling**  
Refuelling of race vehicles on the track is prohibited except for solos and sidecars.

## SECTION S: SAFETY EQUIPMENT

- S1 PROTECTIVE CLOTHING AND SAFETY EQUIPMENT:**  
IN ALL RACES AND OFFICIAL PRACTICES THE FOLLOWING PROTECTIVE CLOTHING MUST BE WORN:
- (a) It is the responsibility of the Competitor to ascertain the effectiveness of personal safety equipment. Each competitor is expected to investigate and educate themselves with the effectiveness and availability of personal safety equipment.
  - (b) Any inspection of such equipment by an official or volunteer will not transfer this responsibility.
- S1-1 Helmets**
- S1-1-1** Protective helmets of approved types must be worn by competitors in competition, during practice, during grand parades, during demonstrations and testing, and on any other occasion that the Steward requires such helmets to be worn. Competitors surname must be on his helmet and must be of a minimum size of 12mm letters to be printed on both sides of the helmet.
- S1-1-2 Polycarbonate Helmets:** Competitors using polycarbonate helmets must use letterset labels for naming helmets. Polycarbonate Helmets that have been painted are banned from use in competition.
- S1-1-3 Competition Helmet Standard:**  
All competitors must wear safety helmets that equal or exceed the standards listed in clauses (a) to (f) below.
- (a) Open Wheel Competitors must wear safety helmets designed specifically for auto racing, that meet or exceed the 1995 or 2000 Snell Foundation, SFI 31.2, or BSI 6658/A/FR standards, and are labelled as such.
  - (b) The following are the minimum Helmet Standards approved for all other classes of competition in New Zealand:
    - New Zealand                      NZS 1884
    - NZS 5430
    - Europe                                ECE 22 02, 03 or 04
  - (c) European Standard: The Approval number should always begin with 02, 03 or 04 - which is the homologation number of the helmet.
  - (d) Each helmet under this standard will have a circle with an E and then a number from 1 to 22 in that circle. The European countries each have a number as follows:

1= East Germany	2= France
3= Italy	4= Netherlands
5= Sweden	6= Belgium
7= Hungary	8= Czechoslovakia
9= Spain	10= Yugoslavia
11= U K	12= Austria
13= Luxembourg	14= Switzerland
15= W Germany	16= Norway
17= Finland	18= Denmark
19= Romania	20= Poland
21= Portugal	22= not yet allocated

A helmet under this standard will have a label similar to this:



- (e) Label should always be sewn onto the retention system and should include the serial production number below the approval number:
- (Great Britain) BSI 2495 INCL AMEND 5  
BSI 6658 GRADE A  
(replaces lettering on label BS2495). Label is further the name
  - (Australia) AS 1698 Label on the inside.
  - (U.S.A.) D.O.T FMVSS - 218  
A sticker or printed lettering on the back of the helmet.
  - (France) AFNOR S - 72-305  
Label is made of green cloth and has to be sewn on to the inner harness of the helmet. The above number is the serial number, the below number is the approval number.
  - (Japan) JIS.T8133/1982 CLASS C.  
The paper label is affixed on the inside of the helmet and is blue coloured. The number is a production serial number.
  - (U.S.A.) SNELL.90 or SNELL.95
  - (Sweden) SIS 882411
  - (Finland) SF 3653
  - (Denmark) DS 2124
- (f) LASER MX 2 - DOT 218 - These helmets are approved but not if fitted with a peak not conforming to Rule S1-1-4.
- (g) Helmets manufactured with standards other than those above can only be used in competition after approval by Speedway New Zealand. This approval will be given upon receipt of a certificate from the Standards Association of New Zealand or a competent authority stating that such standard meets one of the above standards.
- (h) It is NOT SNZ's duty to provide helmet approval from other competent authorities. This up to the competitor or distributor.
- (i) Helmets not providing temple protection will not be permitted for competition use, even if carrying the mark of approval of overseas controlling bodies. In particular, helmets to B.S. 2001 or to B.S. 1869 prior to BS. 1869/62 even if approved in overseas countries WILL NOT BE APPROVED FOR COMPETITION USE IN NEW ZEALAND.
- (j) Despite the foregoing the Steward has the right to reject any helmet he considers unsafe through age and condition.

#### **S1-1-4**

##### **Helmet Peaks**

- (a) Helmet peaks if worn must be of a flexible material, i.e. something that will bend or deform, then return to the original shape.
- (b) Peaks constructed of metal or perspex will not be permitted.
- (c) Any type of peak not permanently attached to the helmet, must be held on with a strap, attached by press studs or original Manufacturers fastening system. Under no

circumstances will the attaching of peaks by self-tapping screws or by nuts and bolts be permitted.

#### **S1-1-5 Care of Helmets**

- (a) Make sure your helmet is not subject to solvents or fuel in storage or transport to and from and during meetings.
- (b) Solvents of any kind must not be used to clean your helmet - use soap and water.
- (c) Any sticker should only be placed on a helmet by using the adhesive provided on the sticker.
- (d) Do not place your helmet where it can be subject to sunlight, e.g. car windows, etc.
- (e) SNZ strongly recommends on advice from manufacturers that you do not use a helmet more than three years.
- (f) Make sure your helmet is not dropped, or subjected to abuse in any way. If this happens have it re-examined by a qualified person or replace it.

#### **S1-1-6 Goggles and Face Shields**

- (a) Goggles or face shields must be worn by all competitors.
- (b) The lenses of goggles must be made of non-splinterable material such as safety glass or flexible plastic.
- (c) Face shields must be of a flexible material, and the use of metal or rigid plastic (perspex) face shields is not permitted.

#### **S1-1-7 Dentures**

All Drivers are advised to remove dentures before racing in an event.

#### **S1-1-8 Body and Facial Piercings**

All drivers shall remove any body and facial piercings before racing.

#### **S1-2 Clothing**

- (a) All vehicle owners, drivers and pit crew must wear suitable attire in the pits and on the track to the satisfaction of the Clerk of the Course.
- (b) Nylon Banned: The wearing of nylon jackets or overalls by any competitor, pusher or pit crew is not permitted. The competitor must also ensure he does not wear nylon underwear, shoes or socks.
- (c) Shoes or boots must be worn. Bare feet, sandals, jandals or such like will not be permitted. This also applies to pit crew.
- (d) All pit crew must wear full-length long sleeve overalls or suitable team uniform.

#### **S1-2-1 Solo/Sidecar**

- (a) All competitors, including sidecar passengers must wear leather jackets, leather trousers, leather knee boots, and leather gloves or other suitable protective clothing, i.e. Vinyl type suits and/or Motocross style protective clothing is acceptable, but must include full body armour (chest/kidney protection), back brace and knee pads.
- (b) Skid shoes or metal slippers to be in good order, and binding to be leather strap at least 19mm wide and 2.4mm thick, with buckles in good order (Vehicle checkers to inspect regularly)
- (c) Two-piece leathers must be attached together, that is pants and jacket by zips or domes.

#### **S1-2-2 Open Wheel Sections and Modifieds**

- (a) All drivers must wear full-length long sleeve Proban, Nomex blend (or material possessing the same protection rating) protective clothing with close fitting fronts, cuffs and ankles.

- (b) If two-piece overalls are worn, they must be attached together, that is pants and jacket by zips or domes.
- (c) The wearing of flame retardant gloves while driving in competition and practices is compulsory.
- (d) Gloves manufactured of flame resistant material and arm restraints are compulsory, balaclavas optional.
- (e) The use of an approved head restraint device and/or a neck collar is compulsory.

**S1-2-3 Superstocks, Stockcars, Streetstocks, Ministocks, Super Saloons, Saloons, Production Saloons and Local Classes**

- (a) All drivers to wear full length, long sleeve Proban, Nomex blend (or material possessing the same protection rating), clothing with close fitting front, cuffs and ankles and gloves.
- (b) If two-piece overalls are worn, they must be attached together, that is pants and jacket by zips or domes.
- (c) All Super Stock, Stockcars and Streetstock drivers to wear an approved, neck brace while driving in competition and practice.

**S2 SAFETY HARNESSES AND RESTRAINTS**

If a driver unclips his seatbelt during a competition he is deemed to have retired from the race and cannot resume racing.

**S2-1 Latch Lever Covers**

**S2-1-1** When arm restraints are worn with a restraint system that utilises a "latch lever", a protective cover installed to prevent the arm restraint from accidentally releasing the latch lever is permissible.

**S2-1-2** Such covers must only be fitted where entirely practical. The cover must not hinder the quick release mechanism whatsoever.

**S2-1-3** The cover, if fitted must be made from Velcro type material, if the self-attaching properties of the Velcro become worn the material must be renewed. The Velcro cover must not be able to enter the webbing adjustment metal clamp.

**GUIDELINES**

*The following guidelines are applicable to vehicles where the competitor has chosen to use a Velcro lever latch cover and/or arm restraints. These guidelines cover the use of Velcro seat belt lever latch covers, arm restraints and are included here to maintain the highest level of safety in seat belt harnesses and their related devices.*

**LEVER LATCH COVERS.**

*It must be remembered that the mandatory 5-point safety harness stipulated for speedway must be locked by a lever latch mechanism that, with one action, will simultaneously release all belts of the harness. SNZ acknowledge that some competitors may decide to use lever latch covers to secure the lever latch mechanism against accidental release. However, the haphazard use of such covers may in some instances hinder the basic requirement of instant release.*

*An incorrectly fitted latch lever cover may be more of a hindrance than an asset. The lever cover may become entangled in the webbing adjustment mechanism causing the webbing to loosen, or it can work its way under the lever latch helping the latch to be accidentally released. The extremely dirty and gritty environment may be a hindrance to the Velcro self-attaching capabilities; with time the Velcro cover will not stay secure and work itself undone. The use of such covers in Speedway where driver actions are very extreme can gradually dislodge a cover with each cornering manoeuvre.*



*It is deemed that it is a driver's personal choice on whether or not he fits a Velcro lever latch cover. However if the cover is fitted, the cover must be carefully inspected and cleaned regularly.*

#### **ARM RESTRAINTS:**

*Arm restraints are mandatory in Open Wheel vehicles and Modifieds. Depending on design this flexible tape device is attached to the tongue buckle of the lap belt clamp and to both arms of the driver at or about the elbow area. The restraint must be long enough to enable the driver to maintain control of the vehicle and be short enough so as to restrain the arms from exiting the cockpit.*

*It is a matter of careful personal driver consideration that the arm restraints are fitted in such a manner as to lay clear of the lever latch. Due to different driving positions and contrasting sizes of drivers, it will be the driver's personal decision on whether arm restraints are fitted under or over the seat belt webbing.*

### **S2-2 Open Wheel Classes and Modifieds**

**S2-2-1 Side Head Nets:** The use of side head nets on the right and left-hand side of the vehicle is optional.

- (a) This restraint if fitted must be of webbing type material i.e. Jager, Simpson or similar.
- (b) These side head nets must not be manufactured of any elastic type material.
- (c) A head and neck restraint system certified to SFI Specification 38.1 is compulsory for Midgets **from the 2010/11 racing season.**
- (d) Midgets only: All cars to be fitted with roll cage nets on both the left and right sides of the roll cage.
  - (i) All roll cage nets must conform to SFI Specification 37.1, which specifies a functional quick release opening mechanism.
  - (ii) The life of roll cage nets shall not exceed two (2) years.
  - (iii) Caution should be used when positioning head restraining nets to be certain that the driver's head cannot get under the net in case of an accident. The bottom of the roll cage net should be as close to the top of the shoulder as possible.
  - (iv) **Roll cage side head nets are not required when an approved full containment seat is utilised.**

**S2-2-2 Arm Restraints:** Arm Restraints must be worn in all forms of practice and competition.

It will be up to the individual competitor to see the arm restraints are fitted to the safety harness in such a way that the arm restraints cannot release the safety harness.

### **S2-2-3 Seat Belts**

- (a) The vehicle must be fitted with an approved, quick release, full harness safety belt. A full harness consists of 5 belts, 2 lap belts of 75mm. Minimum width, 2 shoulder belts of 75mm. Minimum width, plus one crutch belt 45mm minimum width. All belts must be adjustable. These belts will connect or be part of a quick release mechanism: a device which, with one action, will release all belts simultaneously.
- (b) All belts must be securely attached to the structure of the vehicle.

- (c) All seat belt and shoulder harness installations must be mutually compatible, originally designed to be used with each other, and produced by the same manufacturer.
- (d) All belts must be adjustable and be able to be adjusted whilst in the normal seated position. All seat belts must swivel on their mounting points. If seat belts mount wrap around (wrap over) tubing, the tubing must be at 90 degrees to the line of the belt. Wrap around belting must be secured by a 3 bar sliding adjuster, of heavy-duty construction, 75mm for 75mm webbing and 45 mm for 45 mm webbing.
- (e) Seat Belt mountings that are concealed by panels are to be made easily visible to vehicle checkers at inspection time.
- (f) Seat belt webbing must not be twisted.
- (g) Chain link and "D" shackle mountings are not permitted.
- (h) The seat belt must be worn correctly at all times when vehicle is in motion.
- (i) Crotch belt or sub-belts anchoring point to provide a direct pull from the quick release mechanism.
- (j) The lap and crotch strap should not pass over the sides of the seat but through the seat, in order to wrap and hold the pelvic region over the greatest possible surface. The lap straps must fit tightly in the bend between the pelvic crest and the upper thigh. Under no conditions must they be worn over the region of the abdomen.
- (k) Holes may be made in the seat if this proves to be necessary in order to avoid such an occurrence. Seat belts must not pass over sharp edges, at any point where the belt passes through the sides of the seat, the seat edges must be rolled and or have grommets to prevent chaffing or cutting of the belt material. Seat belts showing signs of chafing against sharp edges must be rejected.
- (l) Under no circumstances may seat belts be secured to the seat.
- (m) The seat belt straps may be wrapped around the safety roll cage or to a reinforcement bar, or belt buckles bolted to seat belt mounting plates.
- (n) Wrap around harness webbing mounted over lower chassis rail is not permitted.
- (o) Where eyebolts are used, eyebolt must be fully into mounting, no back spacers permitted. The angle of approach to the webbing must be in line with the eye bolt ring. (See Fig. 1, page 92)
- (p) The shoulder straps must be directed towards the rear, directed downwards with an angle of between 1° and 40° to the horizontal from the top of the shoulder, an angle of 10° being recommended. (See Fig. 2, Page 92)
- (q) The belts must be anchored within 250mm of the back of the seat, or pass through guides within 250mm of the back of the seat. The mounting points or guides must be no more than 150mm apart with their centre point 90 degrees to the seat back. Where the shoulder straps pass through the seat the edges must be rolled or have grommets fitted to prevent chafing or cutting of the strap material.
- (r) Check the entire harness for chaffing; stitch damage, or hardware corrosion. Under no circumstances can cutting and resewing of webbing or modifications to hardware be permitted.

- (s) Two belts joining in a "Y" behind the neck to form one strap are not permitted.
- (t) Butler, Britax and other automotive safety harnesses where shoulder belts are only looped around lap belts, and fastened by a seat belt buckle, are not permitted. Parachute harnesses are not permitted.
- (u) Driver restraint system must be clearly labelled and be dated by manufacturer. This date to be recorded on vehicle green sheet.
- (v) (i) Safety Harness must display dated certification label of manufacturer and must meet SFI standard 16.1, or FIA homologated standard 8853/98.
- (ii) Safety harness must be replaced after two years from date of manufacture, or earlier at discretion of vehicle checker.

**Exception: Modifieds.** The harness must be replaced after 5 years from date of manufacture, or earlier at discretion of vehicle checker.

## S2-2-4

### Method of Application:

- (a) Carefully affix arm restraint webbing over tongue of lap belt buckle and assemble remaining buckles.
- (b) Tighten the lap seat belt; be certain that it comes across the pelvic area.
- (c) Adjust crutch belt with light tension on latch lever buckle assembly
- (d) Tighten the shoulder harness to the desired tension.

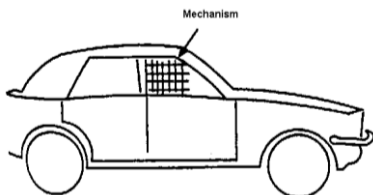
## S2-3

### S2-3-1

### Window Net:

All vehicles must be fitted with a window net on driver's side or driver to wear arm restraints (See Section S2-1 and S2-2-2)

Where safety nets are used they must be of approved "Simpson" type design with opening release mechanism to be in the top front. (Refer Diagram). The window net must be up and latched while racing or practising.



## S2-4

### Super Saloons, Saloons, Superstocks, Stockcars and Streetstocks

### S2-4-1

### Seat Belts

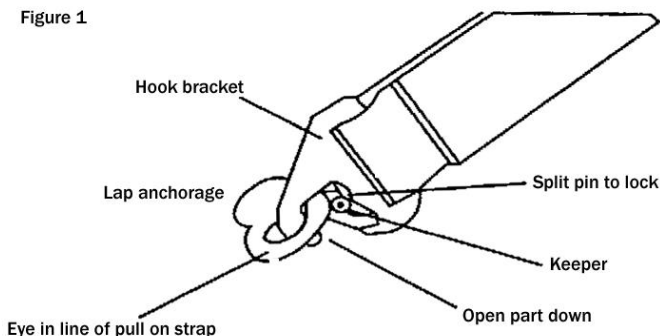
- (a) The vehicle must be fitted with an approved, quick release, full harness safety belt. A full harness consists of 5 belts, 2 lap belts of 75mm minimum width, 2 shoulder belts of 75mm minimum width, plus 1 crutch belt 45mm minimum width.
- (b) All belts must be adjustable; these belts will connect or be part of a quick release mechanism, a device that with one action will release all belts simultaneously.
- (c) All belts must be securely attached to the structure of the vehicle. Seat belt mounting bolts must be 10mm minimum diameter or certified fastening system supplied by the belt manufacturer. Optional chest or sternum protection belts and clips are now approved but fastener must be of a metal quick release type.
- (d) Plastic fasteners are not approved. Must be approved design. Recognized manufacturers e.g.: Simpson, Bell, RJS,

Leaf, Williams, Sabelt, Luke etc. local N Z) Easton and Jager. These normally have an SFI rating 16-1 tested to a safe working load for webbing and hardware.

- (e) All belts must be adjustable and be able to be adjusted whilst in the normal seated position. All seat belts must swivel on their mounting points. If seat belts mount wrap around (wrap over) tubing, the tubing must be at 90 degrees to the line of the belt. Wrap around belting must be secured by a 3 bar sliding adjuster of heavy-duty construction 75mm for 75mm webbing, 50mm for 50mm webbing and 45mm for 45mm webbing.
- (f) Seat belt webbing must not be twisted.
- (g) Chain link and "D" shackle mountings are not permitted.
- (h) The seat belt must be worn correctly at all times when vehicle is in motion (the exception being the grand parades - not hot laps).
- (i) Crutch belt or sub-belts anchoring point to provide a direct pull from the quick release mechanism.
- (j) The lap and crutch strap should pass over the sides of the seat or through the seat, in order to wrap and hold the pelvic region over the greatest possible surface.
- (k) The lap straps must fit tightly in the bend between the pelvic crest and the upper thigh. Under no conditions must they be worn over the region of the abdomen.
- (l) Holes may be made in the seat if this proves to be necessary in order to avoid such an occurrence. Seat belts must not pass over sharp edges, at any point where the belt passes through the sides of the seat, the seat edges must be rolled and/or have grommets to prevent chaffing or cutting of the belt material.
- (m) Seat belts showing signs of chaffing against sharp edges must be rejected.
- (n) Under no circumstances may seat belts be secured to the seat.
- (o) **Seat Belt Mountings:** The seat belt straps may be wrapped around the safety roll cage, provided (e) and (f) (above) are complied with, or wrapped around a separate reinforcement bar 25mm minimum diameter. The 'bar' may be solid or pipe.
- (p) On fabricated vehicles the seat belt buckles may be bolted to:
  - (i) the structure of the vehicle, or
  - (ii) mounting plates 8mm minimum thickness with corners rounded.
- (q) The structure is deemed as any plate or RHS 3mm minimum thickness, welded on at least two sides.
- (r) Minimum distance between seat belt mounting hole and unsupported or open edge of structure 25mm.
- (s) On OEM vehicles i.e. street stocks and production saloons, seat belt buckles may be bolted to:
  - (i) permitted reinforcing structure, or
  - (ii) to seat belt mounting plates 8mm thickness with corners rounded.
- (t) All seat belt mounting holes and mounting plate holes must be clearance drilled to a professional standard. All mounting plate holes to be a greater distance than 25mm from plate edge.
- (u) **Eyebolts:** Where eyebolts are used, eyebolt must be fully into mounting, no back spacers permitted. The angle of

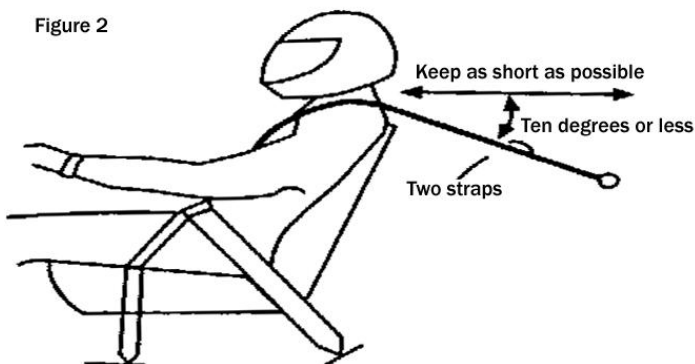
approach to the webbing must be in line with the eye bolt ring. (Fig. 1 below)

Figure 1



- (v) The shoulder straps must be directed towards the rear, directed downwards with an angle of between 1 (one) degree and 10 (ten) degrees to the horizontal from the top of the shoulder (Fig 2).

Figure 2



- (w) The belts must be anchored within 250mm of the back of the seat or pass through guides within 250mm of the back of the seat. The mounting points or guides must be no more than 150mm apart with their centre point 90 degrees to the seat back. Where the shoulder straps pass through the seat, the edges must be rolled or have grommets fitted to prevent chaffing or cutting of the strap material.
- (x) Check the entire harness for chaffing, stitch damage or hardware corrosion. Under no circumstances can cutting and re-sewing of webbing or modifications to hardware be permitted.
- (y) Two belts joining in a 'Y' behind the neck to form one strap are not permitted. Butler, Britax and other automotive safety harnesses, where shoulder belts are only looped around lap belts and fastened by a seat belt buckle are not permitted.

- (z) Safety harness to have date of manufacture visible to vehicle checker. This date to be recorded on vehicle green sheet.
- (aa) All harness webbing be renewed after five (5) years from date of manufacturer or earlier at the discretion of the vehicle checker.

#### **S2-4-2 Method of Application**

- (a) First tighten the lap seat belt, be certain that it comes across the pelvic area.
- (b) Adjust crutch belt with light tension on centre buckle assembly.
- (c) Tighten the shoulder harness to the desired tension.
- (d) Be certain that all mounting buckles are in alignment.

#### **S3 SOUND**

No vehicles shall exceed 95 dba. Measured from 25 metres on the infield from pole line on fastest part of straight with meter held not less than 1 metre above ground.

# TECHNICAL SPECIFICATIONS & RACING RULES

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## SECTION T7: RACING NUMBERS

### **T7 RACING NUMBERS**

#### **T7-1 Identification Numbers**

Each race vehicle or competitor must carry prominently displayed identification numbers or colours as per individual section regulations. No two or more local vehicles, in any class, may carry the same numbers as another competitor at the track to which they are contracted. The Track Licence holder shall be responsible for the allocation of racing numbers on all classes of vehicles.

#### **T7-1-1 Racing Numbers**

- (a) Racing numbers will be between 4 and 99, inclusive.
- (b) Two-digit racing numbers beginning or ending in '0', other than '10' are not allowed in any class of vehicle, i.e. 0-, 20, 30, 40, 50, 60, 70, 80, 90 are not permitted.
- (c) Racing numbers of more than two digits must be applied for to SNZ Directors.
- (d) Respective placegetters in the NZ Championships can choose to have 1,2,3 as their number and to add NZ if they wish.

#### **T7-1-2 All numbers must be legible and of contrasting colours.**

#### **T7-2 Track Identification codes** must appear immediately after race numbers on all vehicles, 50mm x 7mm for TQ's and motorcycles, 100mm x 13mm for all other vehicles - must be legible and of contrasting colours.

Exception: Vehicles eligible to carry 1, 2, or 3, may substitute NZ for their track code

Palmerston Nth	P	Kihikihi	K
Waikato	H	Ruapuna	C
Stratford	S	Hawkes Bay	B
Wellington	W	Western Springs	A
Rotorua	R	Waikaraka Park	A
Gisborne	G	Bay Park	M
Wanganui	V	Dunedin	D
Woodford Glen	C	Nelson	N
Invercargill	I	Cromwell	T
Blenheim	E	Greymouth	GM
Westport	Y	Oreti	O
Rosebank	A	Moore Park	C

#### **T7-3 Vehicle Identification Number (VIN)**

Selected classes of race vehicles will be required to carry permanent Vehicle Identification Numbers, affixed to the chassis in the area of the firewall and recorded in the logbook.

## SECTION T9 : MOTORCYCLE SOLO/SIDECAR SPECIFICATIONS AND RACING RULES



2009/10 New Zealand Solo Champion – Jason Bunyan

### T9-1 SOLO MOTORCYCLE SPECIFICATIONS

#### T9-1-1 Engine

- (a) Motorcycle engine shall not exceed 500cc.
- (b) Engine must be single-cylinder, four-stroke type with not more than one spark plug and not more than one carburettor.
- (c) Carburettors only can be used. Any electronic devices are forbidden. A section of the induction tract must have a 34mm (+/- 1.00mm) diameter constant circular shape. This section to be measured on the air intake side over a minimum length of 5mm, and on the engine side over a minimum length of 25mm from the slide / throttle valve edge of the carburettor. Only a single fuel nozzle with no other additions is permitted. An additional 6mm (maximum diameter) hole is permitted on the engine side (choke), for starting purposes.
- (d) For 2 valve engines: An additional jet and/or an additional hole (maximum diam. 2mm) on the engine side is authorised to improve the engine's response at lower rpm. Induction tract may be 36mm.
- (e) Oil catch cans, minimum volume of 300cc, must be fitted to any 'total loss' oil system and emptied after every heat / race.
- (f) The use of data recording devices and automatic electronic ignition is authorised. No signal of any kind may pass from a moving motorcycle to anyone, except the signal from a time keeping transponder or from on-board cameras.
- (g) No motorcycle shall exceed 95dba measured from infield. Refer S3.

#### T9-1-2 Exhaust System

- (a) The exhaust pipe, maximum outside diameter 50mm (in principle) constant over its entire length, must be fitted securely to the engine and frame of the machine in two separate locations (cylinder head not included).
- (b) The silencer must be secured to the frame in at least two separate locations which must be at least 100mm apart, or, with at least one mounting and additionally, a second flexible



coupling must be fitted from the first third of the silencer to the frame (steel cable of at least 3mm. for reasons of safety).

- (c) Springs may not be used to attach exhaust pipe to frame.
- (d) The outlet of the silencer over a length of 50mm must not exceed 45mm internal diameter, or have any slots, holes or perforations. It must discharge horizontally and parallel to the centre line of the machine (tolerance +/- 10deg.), and must not extend beyond the rear vertical tangent, or end further forward than the centre (axle) of the rear tyre. All sharp edges must be rounded with a minimum radius of 2mm. The end of the silencer must be cut at a right angle with a rounded edge minimum 5mm diameter.
- (e) The gap between the silencer and the rear tyre must not exceed beyond 60mm.
- (f) The silencer must be of a mechanical or 'baffle' type, with permanently fixed internal pipes and plates to achieve the required maximum sound level. A straight tube, directly connecting the inlet and outlet of the muffler, without deflection of exhaust gas is not permitted. An exhaust extraction (megaphone) effect must not be caused by the positioning of any tapered, conical, or other shaped parts. The silencer must be detachable at the inlet end for control purposes.
- (g) If, during a race, a silencer or any part of the exhaust system becomes displaced or detached so that all the exhaust gases fail to pass through the silencer, the rider must be immediately excluded from that race.

#### **T9-1-3 Footrests**

- (a) Right-hand footrests must be of rigid construction but may be able to swing and not be more than 320mm from the centre of frame to the outside end of footrest rod.
- (b) The outer edge of the footrest to be suitably protected (Donald Smith type footrest acceptable).
- (c) Auxiliary footrests of no greater length than 50 mm may be fitted to front left engine plate, or if fold-up type no longer than 120mm fully extended.
- (d) Fold-up footrests to be fitted so as to fold up and back should a fall occur.

#### **T9-1-4 Brakes:** Any brake on a motorcycle is prohibited.

#### **T9-1-5 Clutch Levers**

- (a) All clutch levers shall be ball ended, the ball to be not less than 16mm diameter. The ball can also be flattened (on the handlebar side), but edges must be rounded (minimum thickness of flattened part 14mm). These ends must be permanently fixed and form an integral part of the lever.
- (b) The clutch lever shall not exceed 175mm in length from the fulcrum to the end of the ball. Inside of the clutch lever to be rounded.
- (c) The lever must be mounted so as to swivel to prevent a rider's fingers from being trapped.

#### **T9-1-6 Handle Bars**

- (a) Maximum width 900mm, minimum width 700mm with the ends securely capped or plugged.
- (b) When light alloy handle bars are used, the distance between the two extremities on the clamping area (2 clamps) must be not less than 120mm. Clamps must be radiused and engineered so as to avoid causing fracture points in the handle bars.
- (c) The repair by welding of light alloy handle bars is prohibited.
- (d) If hand protectors are used, they must be of shatter resistant material and have a permanent opening for the hand.

#### **T9-1-7 Racing Numbers** (Refer also to Section T7)

- (a) All motorcycles to have front numberplate 150mm in minimum diameter, (e.g. BMX type plastic number plate) Minimum figure dimensions: Figure height 100mm, Figure width 60mm, width of stroke 15mm, space between 2 figures 15mm, legible and of contrasting colours.
- (b) Bibs or T shirts may be worn, but riders to have number on their back. All numbers must be legible and of contrasting colours.
- (c) Solo Numbers 1, 2 and 3 to be reserved for NZ Championships placegetters, to be displayed if competitor so wishes until the next championship is run. No other competitor is to use these numbers.

#### **T9-1-8 Throttle Cut-Out**

- (a) A device must be fitted to ensure that the ignition can be interrupted. The device must be mounted on the handlebars, as close as practicable to the throttle and securely attached to the throttle operation wrist, by a cord, of non elastic material, no longer than 300mm fully extended.
- (b) The interrupter must operate in the primary (low tension) circuit of the ignition system.
- (c) All throttle controls must return closed when not held by the hand.

#### **T9-1-9 Wheels and Tyres**

- (a) All spokes must be tight. Rear wheel rim to be 480mm.
- (b) Rear tyre shall not exceed 110mm in width.
- (c) All tyres be measured mounted on the rim at a pressure of 1 kg/cm (14 lb./sq.in.), measurements taken at a tyre section located 90 deg. from the ground.
- (d) Tyres to be inflated / filled with air and cannot be filled with any other substance to increase overall weight. Balancing weights may only be added and attached only to the rim or spokes.
- (e) Any modification to the rim or spokes of an integral wheel (cast, moulded, riveted) as supplied by the manufacturer or of a traditional detachable rim other than for spokes, valve or security bolts is prohibited except for tyre retention screws sometimes used to prevent tyre movement relative to the rim. If the rim is modified for these purposes, bolts, screws, etc., must be fitted.

#### **T9-1-10 Primary Chain Guard**

- (a) A guard, which ensures that the chain and sprocket cannot be touched accidentally, substantial enough to prevent a broken chain throwing upwards, must be fitted. Small holes (maximum diameter 10mm) are allowed for extra cooling. Excessive cutting of the guard is not allowed. Cutting is only allowed to expose the clutch pressure plate and to allow for adjustments to the clutch springs.
- (b) If plastic, or like (primary) guard is fitted a steel stud or bolt of not less than 10 mm diameter must be fitted in the area of the lower rear quadrant, close to the clutch sprocket, to prevent a broken chain throwing upward. The stud to protrude 10mm outside clutch sprocket. This stud, if damaged, must always be completely replaced. JHR frame type where stud is built into rear leg is acceptable.
- (c) A guard must be fitted to provide protection where the rear chain enters onto the rear wheel sprocket.

#### **T9-1-11 Mudguards and Wheel Protection**

- (a) Motorcycles must be fitted with mudguards.
- (b) Mudguards must project laterally beyond the tyre on each side.
- (c) The front mudguard must extend at least 5 degrees ahead of a vertical line running through the centre of the front wheel axle and at least 5 degrees under the top edge of the mudshield.

- (d) The rear mudguard must extend at least 5 degrees behind a vertical line running through the centre of the rear wheel.
- (e) Both front and rear mudguards must be made of flexible materials and the mudguards should not cause injury when damaged.
- (f) The rear wheel spokes must be enclosed (on the right hand side) by solid disc which must be within the confines of the rim.
- (g) No type of streamlining is allowed.
- (h) Definition of 'streamlining': any addition to the handlebars or to the frame of the machine, the effect of which is to shield the rider's arms, legs or body from the air stream (with the exception of the normal front number plate).

**T9-1-12 Dirt Deflectors:** Dirt deflectors may be used.

- (a) All dirt deflectors must be approved by SNZ (FIM homologated accepted).
- (b) The dirt deflector arm(s) and pivot mechanism must be constructed of the highest grade materials, with minimal distortion and maximum durability under all riding conditions. The arm(s) must be able to pivot a minimum of 25 deg in an upward direction to allow safe operation when the front wheel lifts. Any pivot arrangement must have its centre of rotation a maximum of 70mm from the rear wheel axis. The mechanism must maintain constant function of the pivot arrangement and be able to return the dirt deflector 'flap' to its normal operating position with minimal delay.
- (c) The dirt deflector 'flap' must be easily replaceable, constructed of a resilient, non metallic material and remain effective under all track surface and wind conditions. The upper flap edge to the complete tyre tread width is 18mm (+/- 5mm) and the lower edge shall be 35mm maximum from the track surface over an equal distance. Outside of this centre section, the lower edges may slope up to a maximum of 50mm above the track surface.
- (d) The deflector flap must be set at an angle, between 30deg and 50 deg maximum to the track surface, measured on the longitudinal centre line of the machine.
- (e) The deflector flap width to be 250mm minimum and 300mm maximum. The flap centre must be positioned within 10mm offset to the left of the tyre centre line, in the normal riding position. The flap holder width to be 100mm min and 160mm max.
- (f) All measurements are taken with the machine in a vertical position, with the tyres normally inflated without a rider.

**T9-1-13 Fuel:** refer rule E4-1 and E4-2.

**T9-1-14 Titanium:** The use of titanium in machines is forbidden (except engine parts).

**T9-1-15 Carbon Fibre:** The use of carbon fibre is authorised for other than main frame structural or fork, wheels.

**T9-1-16 Ceramic Materials:** The use of ceramic parts is forbidden. The use of ceramic coated parts is authorised.

**T9-1-17 Dangerous Construction**

- (a) The Steward of the meeting may exclude any vehicle the construction of which he deems to be dangerous and will give full effect to these Regulations by requiring the Vehicle Checker to check vehicle prior to its taking part in a competition.
- (b) Unnecessary equipment (such as inter-alia lamps, horns, speedometer, exhaust pipes directed so as to raise dust, spikes or other attachments to tyres) may be deemed dangerous.
- (c) The direction of all officials must be strictly obeyed.

**T9-1-18 Impounding a Motor-Cycle:** refer rule E1-2 and E1-6.



2009/10 New Zealand Sidecar Champions  
Mike Zachan and Paul Humphrey

## **T9-2 SIDECAR SPECIFICATIONS**

A vehicle with three wheels making two tracks on the ground in the direction of travel with a permanently attached sidecar forming a complete integral unit.

**T9-2-1** All sidecars must be inspected by a Director of SNZ or by an approved official of SNZ who shall have the authority to bar any machine or equipment he considers unfit for racing purposes. Such decision to be final.

**T9-2-2** **Brakes:** Any brake on motorcycle sidecar is prohibited.

**T9-2-3** **Construction**

- (a) The tubing used in the construction of the mainframe of a motorcycle sidecar shall have a minimum diameter of 25mm and minimum wall thickness of 1.5mm.
- (b) The use of light alloys in the construction of the frame and front forks is forbidden.
- (c) The height of any part of a Sidecar to be no higher than ONE (1) metre (at time of measurement, both wheels are to be in a straight line).
- (d) The use of titanium is forbidden (except engine parts).

**T9-2-4** **Engine**

- (a) The cubic capacity of the machine is limited to 1,045cc, and only the rear wheel of the machine shall be driven.

**NOTE:** Existing 1,060cc machines may compete until 31/8/2012.

- (b) Owners of vehicle must make individual arrangements with track steward or qualified Speedway New Zealand Official to inspect, certify and seal each individual motor before vehicle can be raced. **NO SEAL, NO RACE.**
- (c) On liquid cooled engines an overflow pipe must be used which directs any overflow of coolant away from the rider and passenger.
- (d) Engines shall be covered by a fuel tank or guard to ensure the engine cannot be contacted by the rider's body.
- (e) Electronic Fuel Injection systems are permitted.
- (f) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section G11-3 Technical Exclusions.

- (g) Fuel tanks must be constructed of a material that neither shatter or splinter upon impact.

**Frames built after July 2009:** Fuel tanks must be mounted to the rear of the steering headstock.

#### **T9-2-5      Wheels and Tyres**

- (a) 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, with the sidecar wheel no further forward than half the distance of the wheel base.
- (b) Sidecar wheel must be cambered inwards. No outward camber is allowed. The inclination angle of the Sidecar wheel must be between 25 degrees and 53 degrees.
- (c) Any wheels with slotted hubs must have bolts fitted between the spoke heads.
- (d) Wheels if constructed of the full disc type, aluminium or steel, to have a minimum disc wall thickness of 2.5mm for aluminium and 1.2mm for steel, and dished 50mm over diameter.
- (e) The centre hub to be shouldered with the disc affixed to the rim also by a continuous bead or weld, although a gap is allowable to make provision for the tyre valve.
- (f) Front wheels of motorcycles to be fitted with knock-out spindle or an approved clamp to fasten on fork tips.
- (g) Front wheels must have a safety guard fitted on the left hand side when viewed from the riders seat. Guard to be within the confines of the rims outer lip and fully cover the spoking.
- (h) Any tyre with knobs or lugs protruding out past the side walls are not permitted on the front wheel.
- (i) The one rear wheel and one rear tyre of a sidecar shall not exceed 200mm maximum tread width.
- (j) All three wheels and tyres to be of motorcycle configuration and have a minimum rim diameter of 400mm.
- (k) The drive shall be transmitted to the ground only through the rear wheel of the motorcycle.
- (l) Rear mudguard must be fitted, and extend from the rear seat to a maximum of 150mm from the ground with the sidecar laden and must be fitted with either:-
- (i) a one piece flexible mudflap without any slots which:
    - (i) is a minimum thickness of 6mm and be reinforced belting tyre rubber.
    - (ii) ends no more than 20mm above ground level with the sidecar laden.
    - (iii) is attached to 3 sides of the mudguard and projects forward by a minimum of 75mm on each side.
  - (ii) an FIM approved sidecar dirt deflector.
- (m) All sidecar machine rear fork legs to have an enclosed axle eye.
- (n) The rear wheel must have a safety guard fitted on the right hand side when viewed from the riders seat. Guard to be within the confines of the rims outer lip and fully cover the spoking.
- (o) The sidecar wheel must be contained within a continuous 25mm horizontal crash bar, fixed rigidly to the sidecar platform at sidecar floor height. Any open area in the sidecar platform inside the continuous crash bar and on the running board on the nearside, must be filled with a suitable material to prevent either the rider or passenger from trapping their feet. The inside of spoked, cast or welded wheels must be covered with a disc or shield. Sidecar wheel spindle minimum diameter is 20 mm. One sided alloy ex brake drum hubs are not to be used as sidecar wheels.

### **T9-2-6 Exhaust Pipe**

- (a) The exhaust pipe must be fixed to the cylinder head and frame with a minimum of three (3) clips (the point of fixture at the cylinder head is considered one clip. The silencer must be fixed to the frame with at least one clip.
- (b) Exhaust pipes and silencers may be of a "baffle" or "absorption" type and must fulfil the requirements concerning sound control. An exhaust extraction (megaphone types) effect must not be caused by the positioning of any tapered, conical or other shaped parts. Additionally a second flexible coupling must be fitted from the first third of the silencer to the frame (Steel cable of at least 3mm dia. For reasons of safety) or a solid steel spring.
- (c) Exhaust fumes must be discharged towards the rear but not in a manner as to raise dust, foul the tyres or inconvenience the passenger, or any other riders.
- (d) **Frames built after July 2009:** The entire exhaust system must be contained within the fairing, to ensure that the exhaust system cannot come in contact with any other rider, passenger, or motorcycle.

**T9-2-7 Handle Bars:** Handle bars must not be of greater width than 900mm and must be securely capped or plugged. When light alloy handle bars are used, the distance between the two extremities of the clamping area (or of the 2 clamps) must not be less than 120mm. The repair by welding of light alloy handlebars is prohibited.

**T9-2-8** A suitable hand hold must be provided for the passenger on the offside of the rear wheel of the machine. Offside is left hand side when standing at rear of machine facing forward.

### **T9-2-9 Throttle Cut-out**

- (a) A device must be fitted to ensure that the ignition can be interrupted, must be mounted on the handlebars not more than 100mm from the throttle and securely attached to the throttle operation wrist by a cord no longer than 300mm in the fully extended length, of a non-elastic material.
- (b) The interrupter must operate in the primary (low tension) circuit of the ignition system.
- (c) All throttle controls must return closed when not held by the hand.

**T9-2-10** A skid plate may be fitted on the underneath side of motor which is to extend from the front of the motor to the rear of the gearbox. The skidplate is to have a smooth finish and lead in and to be free of sharp edges and nuts and bolts.

### **T9-2-11 Dimensions**

- (a) The overall length from leading edge of the front tyre to outside of rear mudguard must not exceed 2600mm.
- (b) The overall width must not exceed 1500mm.
- (c) The wheelbase measured from the centre of the front spindle to the centre of the rear spindle, must measure between 1280mm and 1800mm.
- (d) The wheel track, measured between the centre lines of the track left by the rear and sidecar wheels, shall be a minimum of 800mm and a maximum of 1100mm.
- (e) The width of the running board on the right of the motorcycle must not exceed 400mm.
- (f) The angle of inclination of the main body of the motorcycle must not exceed 10 degrees from the vertical.
- (g) For FIM competition only: The minimum ground clearance at any point of the sidecar shall be 75mm unloaded.
- (h) Minimum Weight is 180kg.

- T9-2-12** Chain guards must be fitted so that the primary chain and sprocket is enclosed. A guard for the chains must be so constructed that a hand or foot cannot come into contact with the chain.
- T9-2-13** The sidecar floor to be of sound construction and to fully cover area from front of crankcase to rear axle 100mm tolerance.
- T9-2-14** **Attachment**
- (a) If the sidecar attachment to the motorcycle is not an integral part of the chassis, it must be fixed in at least 4 places in conjunction with Rule T9-2-14 (b, c, d).
  - (b) Two diagonal braces must be fitted of not less than 20mm x 1.5mm wall thickness to the unit from the top half of the motorcycle frame and to the outer edge of the side car frame.
  - (c) One to be placed in the front position of the sidecar, one to be placed in the centre or to the rear of the sidecar and the other two attachment points to bottom side of motorcycle frame.
  - (d) If rod ends are used, the minimum size shall be 12mm.
- T9-2-15** **Fairings**
- The outside of the sidecar wheel and tyre must be covered by a non-rotating shield or fairing. This fairing must be securely fixed to the sidecar and outside of the crash bar.
- (a) Fairings or streaming or any cover must not be closer than 50mm to the front forks or tyre in any steering position and no further back than the exterior of the rear rim.
  - (b) Fairings must be constructed of a flexible nature, either plastic, carbon-fibre or fibreglass and must remain flexible on the machine.
  - (c) No metal or aluminium fairings are allowed.
  - (d) No frame member or mounting point shall be outside the fairing, with the fairing attached to the motorcycle chair in no more than 8 (eight) places.
  - (e) The fairing to have all corners and ends rounded, especially the front left corner of the chair.
  - (f) Should a fairing be damaged or removed, no mounting point must be exposed.
  - (g) The height of any part of a sidecar to be no higher than 1 metre.
  - (h) The minimum clearance between streamlining, fairings or nose cones and the ends of the handlebars or their attachments is 30mm with the front wheel in any position. No aerofoils or similar devices are permitted.  
No part of any nose cone or fairing may extend beyond a vertical line drawn through the leading edge of the front tyre.  
No part of the sidecar fairing may extend beyond a vertical line drawn at a tangent to the rear edge of the back tyre.
  - (i) No part of the Fairings, Streamlining or framework may come into contact with the ground when the rear wheel only is raised 300mm from the ground.
  - (j) Fairings considered too radical by the Head Vehicle Checker and Steward shall be referred to the Directors.
- T9-2-16** **Fuel** (Refer also to E4-1 and E4-2)
- The use of fuel outside of specifications or blended fuel, will be declared an illegal fuel, Refer Section G11-3 Technical Exclusions.
- NOTE: Methanol fuel is compulsory for FIM international competition events.
- T9-2-17** **Racing Numbers** (Please refer to Section T7)
- (a) All sidecars to have front number plate between side wheel and steering head 200mm in diameter, e.g. BMX type plastic number plate, with maximum 2 digit numbers, 150mm high and 30mm thick, legible and of contrasting colours.

- (b) Bibs or T-shirts may be worn, but must be tight fitting and of tidy appearance. Riders must have a visible number on their back.
- (c) Sidecar Numbers 1, 2 and 3 to be reserved for NZ Championship placegetters, to be displayed if competitor so wishes until the next championship is run. No other competitor is to use these numbers.

**T9-2-18** Articulated Sidecars are strictly forbidden. Four point mounted sidecars may be adjustable and locked in position, but only when stationary.

**T9-2-19 Dangerous Construction**

The steward of the meeting may exclude any vehicle, the construction of which he deems to be dangerous and shall give full effect to these Regulations by requiring the Vehicle Checker to check every vehicle prior to its taking part in any competition. Unnecessary equipment (such as inter alia lamps, horns and speedometer, exhaust pipes directed so as to raise dust, spikes or other attachments to the tyres) may be deemed dangerous. The directions given by all officials must be strictly obeyed.

**T9-2-20 Impounding a Sidecar:** Refer E1-2 and E1-6.

**R9-3 RACING RULES – SOLOS/SIDECARS**

Only ONE person may operate any race vehicle at any one time.  
NO PASSENGERS ALLOWED. EXCEPTION: Passenger on sidecar.

**R9-3-1 Flags**

- (a) The following flags shall be recognised as the standard colours to be used as signals to competitors during the race:

*Green* *Start*

*Amber* *lights or flags are used before race starts and after race finishes*

*Red* *All competitors stop*

*White* *Last lap for individual competitor*

*Black flag/board* *Individual competitor to retire from race immediately*

*Black & White* *Finish*

*Chequered*

- (b) When a red flag or red light is shown competitors must immediately stop.
- (c) Failure to do so will render a competitor liable to a fine and/or exclusion for any period.

**R9-3-2 Punctuality In Starting**

- (a) Competitors shall always be prepared to start in accordance with the programme and when called on to do so. Any competitor not prepared to start within reasonable time after being called upon shall be excluded from the race.
- (b) A competitor shall be excluded from the race if he delays the start by more than two (2) minutes in all, in any one race. The two (2) minutes shall be calculated from the times or estimated by the Referee until his vehicle is again running under its own power.

**R9-3-3 Starting Position**

- (a) In scratch races starting positions will be balloted for in two (2) men match races of three (3) heats.
- (b) The competitor winning the ballot in the first heat takes outside position in the second heat and the positions are again decided for by ballot for the third heat.



- (c) In three (3) men match races a ballot shall be taken for the first heat only and the competitors shall take alternate positions thereafter.
- (d) Only four competitors or sidecar units will be permitted in a scratch race, but subject to approval being given by the Stipendiary Steward during annual track inspections, then up to six competitors or sidecar units may compete in a scratch race and up to eight competitors or sidecar units in a handicap race provided the track in use has adequate width at the start line.

#### **R9-3-4 Heats**

- (a) Starts may be arranged in heats. The arrangement and constitution of heats will be determined by the Promoters and shall be published in the programme, if any.
- (b) A competitor shall start in the heat which has been allotted to him unless by permission of the Clerk of the Course of the meeting.
- (c) A competitor may change his vehicle in subsequent heats, semi finals or finals, provided the Clerk of the Course is notified.
- (d) Only those competitors qualified in their heats shall take part in the semi finals and only those competitors qualified in the semi finals shall take part in the final.
- (e) Consolidation of Heats: The Clerk of the Course of the meeting shall be empowered to consolidate or otherwise modify the arrangements and constitution of heats if the number of entrants at the start or other conditions warrant his doing so.

#### **R9-3-5 Starts**

- (a) Line(s) across the track shall indicate the start and finish of the race.
- (b) **Standing Start**
  - (i) In the case of the standing start the starter may allow two (2) pushers off to assist a competitor whose machine stalls in moving up to the forward foul line.
  - (ii) On the order of the Clerk of the Course, riders must together leave the pit area and proceed by the shortest practical route to the starting tapes where they shall stop under the control of the Starting Marshall with front wheels close to the tapes.
  - (iii) The Referee or Starting Marshall once satisfied that the riders are correctly positioned and stationary, shall switch on the green light indicating to the Starting Marshall that the start is imminent and that he must leave the course.
  - (iv) After a pause sufficient to enable the riders to open up their engines and fix their attention on the tapes, the Referee or Starting Marshall shall release the gate.
  - (v) A rider taking up the wrong position or not complying with the instructions of the Starting Marshall or for any other reason impeding the gate to rise, or the race to start, shall be either fined or excluded.
  - (vi) A rider/sidecar team who allows their motorcycle to touch or break one or more tapes of the starting gate after the referee has switched on the green light must be disqualified. The heat must then be started properly.
  - (vii) A rider who has been excluded for breaking the tapes shall not be entitled to start money.
  - (viii) If, because of faulty operation of the gate or for any other reason, the Referee or Starting Marshall considers the start to be incorrect he shall immediately stop the race with the 'stop' signal and order a restart which the riders shall occupy their original starting position.

- (ix) After the green light has been switched on (or other starting warning given) or the start machine released, no outside assistance may be given to any rider/sidecar team. If, at that time a rider's machine is not moving under its own power, the rider/sidecar team concerned is disqualified from the heat and must leave the track with his machine.
- (x) In the case when the starting gate does not operate, the Referee or the Starting Marshall can use the green light or any other approved starting method to indicate to the riders that they shall come up to their starting positions. The starting being controlled by the dropping of the green flag.

#### **R9-3-6 Starting Tapes**

- (a) The use of a rubber band stretched across the track is not to be used as a starting method for sidecars.
- (b) For all New Zealand, North and South Island Championships only a starting gate approved by Speedway New Zealand Steward may be used and definitely not to be a rubber band stretched across the track.
- (c) Approved starting gates must rise vertically and evenly with no sagging in the middle gates. Tapes are to be divided into four equal parts, or six equal parts where applicable.

#### **R9-3-7 Crowding or Foul Riding**

The Referee will immediately exclude from that race a competitor who in his opinion, crowds or bores, whether intentionally or not or otherwise indulges in any foul or unfair practise during a race.

#### **R9-3-8 Driving in Wrong Direction**

Under no circumstances shall a competitor, at any time during a meeting or during a practice, be permitted to ride a vehicle in the wrong direction of the track.

#### **R9-3-9 Outside Assistance**

A rider/sidecar team must be disqualified from a heat if, after the green light has been switched on (or other starting warning given) or the heat has been properly started, they receive outside assistance except for removing them and/or their machine from the track in the interest of safety.

All contacts by other persons with the rider/sidecar team or their machine, whether intended to give assistance or not, shall be deemed outside assistance.

#### **R9-3-10 Defective Machines**

In the event of any defect developing in a machine during a race which may endanger other competitors, the Starter on instructions from the Referee, shall give the competitor the black board and the competitor concerned must immediately retire from the race.

#### **R9-3-11 Overtaking**

All races excepting sidecars shall be run left hand inwards and the Referee shall exclude immediately a competitor who in his opinion indulges in foul, unfair or dangerous conduct including any competitor who steers or drifts from his course in such a manner as to impede any competitor who may be attempting to pass or in the case of a non team event, jeopardising the fair chance of one or more of the other competitors.

#### **R9-3-12 Leaving the Course**

- (a) A rider/sidecar team whose machine crosses the inner edge of the track with 2 wheels must be disqualified unless, in the opinion of the referee, the action was taken in the interest of safety for other riders/sidecar teams or the rider/sidecar team involved was forced off-course by another rider/sidecar team.

- (b) Competitors riding 'out of bounds' of a smaller inside track (See rule G5-1-13(d) of the General Regulations) with one or more wheels during a race, may re-enter the race when the track is clear and at the rear of the field in the same straight or bend as going off the course.

#### **R9-3-13 Re-run Races**

- (a) If an accident has occurred, and in the opinion of the Referee it would be dangerous for the race to continue he shall cause the race to be stopped by giving the "Stop" signal and the race shall then be re-run.
- (b) The Referee or Steward only are empowered to stop a race and no other official shall initiate the 'stop' signal during the course of a race.
- (c) Any race so stopped shall be re-run or restarted. The Referee shall permit any competitor who has fallen or spun up as a result of being fouled or in the interests of safety to take part in the re-run or re-start.
- (d) As a result of a race stoppage, any competitor who is eligible for a re-run but cannot do so due to vehicle damage, may be permitted to change vehicles for that re-run and subsequent events providing the Clerk of the Course is notified and providing the Steward confirms that the vehicle damage sustained was wholly attributable to the incident resulting in the stoppage.
- (e) Any competitor who fails to start in, has retired from or has been excluded during the course of the race which is ordered to be re-run shall be ineligible to take part in the re-run or re-start.
- (f) Any competitor who is not proceeding under power at the time of the incident which results in the display of the "Stop" signal shall be deemed to have retired.
- (g) Any competitor who is primarily the cause of a race being stopped shall be ineligible to take part in the re-run or re-start and shall be excluded and a reserve competitor, if any is not permitted to take the excluded competitor's place in the re-run or re-start.
- (h) If in the interest of safety the Referee has stopped a race after one or more competitors have crossed the finishing line, the race shall not be re-run or re-started.

#### **R9-3-14 Dead Heats**

In the case of a dead heat, the entrants tying for a place shall divide amongst themselves any prize or prizes attributable to their placing, provided that upon the request of all entrants tying for a place, the Referee and Steward of the meeting may authorise a fresh start and may, with the consent of the said entrants, impose modified conditions for the re-run.

#### **R9-3-15 False Finish**

When a race has been stopped by the display of the black and white chequered flag before the required number of laps have been completed by the leading rider, the Referee shall declare the race void and it must be re-run. If however, the Chequered Flag has not been shown after the completion of the requisite number of laps, it shall be considered to have been properly shown.

- (a) A competitor must cross the finish-line and receive the chequered flag before any points are allocated in any race.

## **R9-4        ADDITIONAL SIDECAR RACING RULES**

- R9-4-1**        All sidecar races shall be run in a clockwise direction and the chair must be fitted to the left hand side of the machine.
- R9-4-2**        In order to qualify for a place both Competitor and Passenger must be on board the machine when crossing the finishing line.
- R9-4-3**        A competitor must withdraw from the race as soon as he has lost his passenger.
- R9-4-4**        In Sidecar Scratch Races, no competitor shall alter his course until after the 30m foul line, which shall be clearly defined.
- R9-4-5**        Any competitor who, through his own action or otherwise, rides off the course with one or more wheels during a race, may be liable to exclusion, reversal of position or fine.
- R9-4-6**        For sidecar handicap races, the starters up to 60 metres handicap shall be staggered. I.e. competitor on scratch grid one competitor on 10 metres grid two, competitor on 20 metres grid three, etc.
- R9-4-7**        In the event of a race stoppage during a sidecar race, red flags shall be displayed at the entrance to each bend in addition to the red lights.
- R9-4-8**        All sidecar races shall be no more than 7 (seven) laps and no less than 4 (four) laps, other than N Z, North and South Island Championships.
- R9-4-9**        **Motorcycle and Sidecar Combination**  
Riders may change up to their driving gear only and then not be permitted to change gear thereafter (i.e. change down).
- R9-4-10**       Subject to local conditions these Rules in this Chapter may be amended in part by the unanimous decision of the Stipendiary Steward, if in attendance, or the Steward of the Meeting, Clerk of Course, and a representative of the class of Competitor competing, bearing in mind the following three factors - Safety of Competitors, Safety of Spectators and better promotion of events.

# SECTION T10 : OPEN WHEEL VEHICLE SPECIFICATIONS AND RACING RULES (MIDGET, TQ MIDGET, SPRINTCAR AND MINISPRINT)



2009/10 New Zealand Midget Champion – Michael Pickens

## T10-1 MIDGET CAR SPECIFICATIONS

### T10-1-1 General Dimensions

- Wheel base: 1930mm Maximum 1676mm minimum.
- Front track: 1340mm maximum; rear track 1320mm maximum.
- Overall Length: 3,251mm (128") maximum including bumpers. Overall Width: 1,651mm (65") maximum width.
- All cars must weigh a minimum of 407.7kg (900lb), including water, oil and fuel, but without the driver. Exception: Horizontally opposed 4 cylinder air cooled, minimum 385kg (850lb). All ballast, excluding floorpans, must be securely bolted within the confines of the frame tubes and must be forward of the rear engine mounting plate and behind the front axle.
- The classical appearance of a midget car will be those with a tail cone of 18 gallons minimum size.

### T10-1-2 Engine Capacities

- Front engines only. No rear engined cars allowed.
- (OHV) pushrod, water cooled, cast iron or steel block 3278cc (200 cu in) maximum size.
- S O H C or O H V pushrod 2730.8cc (166.6 c.i.) maximum.
- DOHC 2 valve heads = 2600cc (158.66 c.i.) maximum. DOHC-SOHC or pushrod with 4 valves = 2400cc (146.45 c.i.) maximum.
- No two stroke engines are permitted.
- Supercharged and turbocharged four stroke: 1641.5cc (100.13 cu.ins) maximum.
- Rotary combustion engines: 1311cc (80 cu.ins) calculated by the following formula: Capacity of one working chamber x no. of rotors.
- Cars utilising inline engines are limited to a maximum of 45 degrees engine layover (angle from vertical) as measured through the crankshaft and/or cylinder bore centrelines. Engine

offset is limited to a maximum of 25mm overall from the chassis centreline. The crankshaft centreline, front to rear, will be used to determine maximum offset.

- (i) (i) Engine to be pre-drilled before CVI inspection with 3.3mm minimum size hole to enable vehicle checkers to seal engine. Refer rule G13-6-11(b).
- (ii) Pre-drilled holes to seal: barrels to crankcase, crankcase to crankcase etc. Note: Pre drilled retainers are acceptable.
- (iii) When rule G13-6-11(b) applies, approved person must measure engine within 28 days.
- (j) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section G11-3 Technical Exclusions.

#### **T10-1-3 Body**

- (a) Seat must be bolted to chassis frame by a minimum of 4 x 6mm high tensile bolts and fender washers.
- (b) A pad of resilient material measuring 100mm x 100mm or the top of high back seat, be attached to cross braces behind the driver's head. A further pad of material (right hand side head support) may be installed (suitably radiused) to measure in depth no more than 200mm and no less than 100mm. The pad shall not protrude further forward in length than 240mm and no less than 200mm from the front of the rear head support.
- (c) A tube of 16mm x 2.5mm minimum must be fitted at the rear of the seat and firmly attached to the chassis bar work no higher than the bottom edge of seat, or a torque tube hoop of minimum size 7/8 inch OD x .065 – 4130 chrome moly must be fitted.
- (d) An effective firewall of 1.2mm (0.046 inch) or other approved fire retarding material must be placed between driver and motor, sealing the engine compartment from the cockpit, down to the level of the chassis frame.
- (e) The motor plate must not be made of carbon fibre or any other composite material.
- (f) All panels and bonnets must be securely fastened primarily by way of dzus buttons minimum (bolts satisfactory). Plastic ties are not permitted.
- (g) Radiators and oil coolers to be mounted in the confines of the bodywork. Not to be mounted on roll cages.
- (h) **Belly Pan:** All vehicles must be fitted with a bellypan (floor tray) to go from the firewall back to at least the front of the seat. Belly pan to be bolted to mainframe tags. Minimum 1/4" (6mm) high tensile at least 4 points.

#### **T10-1-4 Safety Harness:** Refer to Section S2 up to S2-2.

#### **T10-1-5 Roll Cage**

A roll cage meeting the following specifications is mandatory.

- (a) SAE 4130 N Chrome-Moly Tubing 1.3/8" OD x .095 wall (1.375" OD x .095" WT)  
When high bar chassis are used front cockpit uprights may be 1.25" OD x .095" wall thickness
- (b) Cold drawn Seamless SAE 1010/1026 or Reynolds 531, 1 3/8 x 8 gauge (1.375" OD x .161" WT)
- (c) All existing cars built and raced prior to May 1998 to remain as they are **except** any car requiring a rebuilt roll cage must comply to latest new size specification. Log book to determine existing cars.
- (d) **Bottom Chassis Rail:** To be a minimum of 0.095"- 2.41mm as applicable to new chassis built after July 2004.

- (e) (i) The top line of both the horizontal tubes to be no less than 50mm above the drivers helmet when seated statically in the car.
- (ii) The top lines of the both horizontal tubes to be no less than 100mm above the driver's helmet when in normal restrained position. **Effective for new frames built after July 2002.**
- (f) (i) The main frame to be constructed of no more than eight pieces of uncut lengths of tubing, securely attached to the main chassis at the front. Pipe bends, elbows, or sockets are not permitted on main frame.
- (ii) Where the tubing changes direction, or is joined by another member, the inside of the radius or corner, must be gusseted. Gussets will be not less than 3.1mm plate or 16mm x 2.5 tube. Gussets must extend at least 75mm from centre of corner or join.
- (iii) The rear vertical tubes of the frame must be stayed to the chassis by a diagonal brace on either side of the car, forwards, or rearwards.
- (g) (i) Side intrusion bars may be added to the main frame of the roll cages.
- (ii) The said side intrusion bars must be attached adjacent to the rear cross tube at the top of the roll cage.
- (iii) A brace must be fitted midway between upper and lower mounting points
- (iv) All bent sections of intrusion bars to have a minimum radius of 4" – 102 mm and constructed of a minimum of 31.8mm (1.250") OD x 2.4mm (.095") chrome moly tube.
- (v) A minimum measurement of 750mm and a maximum of 880mm between the inside radius of the intrusion bars measured at driver's helmet height when in normal seated position.
- (vi) SFI certified rollcage padding must be fitted to all intrusion bars above shoulder height.
- (h) A cross brace must link the two longitudinal tube members behind the drivers seat. (One diagonal is NOT acceptable)
- (i) All bracing to the tail frame and also the roll cage vertical tubes, to connect as high as practically possible, to use the braces to full advantage.
- (j) Construction of the roll cage may be altered to allow wheel guards to be added to existing cages. Positioning of such wheel hoards to be no higher than shoulder height and no lower than waist height when seated in the driving position.
- (k) A "Full" (parachute type) body harness is compulsory with roll cages and provision must be made to anchor both sides of this to the main tail frame of the car, which will be adequately braced to the chassis. Also refer to rule S2-2-3.
- (l) Driver must have easy entry and exit from cockpit, at two exit points at all times. Arm guard panels to be no higher than 890mm measured from bottom of lower chassis rail.
- (m) The use of aerofoils in conjunction with roll cages will not be permitted under any circumstances, and all types of mirrors are illegal.
- (n) **Sun shields**  
Sun Shields are permitted. Sun shields must be no higher than the top line of the rollcage, must not exceed the overall width and length of the top of the rollcage. The sun shields must be no more than 100mm from the top to bottom when measured at the front and no more than 150mm when measured at the rear.

- (o) Roll cages must not be plated in any way at all.

**Notes concerning roll cages:**

- (p) All tubing diameters quoted are O/D (outside diameters).
- (q) All bolts, (other than specified) to be at least ISO M10 88.

**T10-1-6 Front Axle**

- (a) An approved locking device must retain front hub bearings.
- (b) Efficient shock absorbers to be fitted.
- (c) Where spherical bearing type of rose joints are used on radius rods there must be 11mm bore minimum and 12mm shank minimum. This specification will also apply when this type of joint is used on tie rod, and drag link ends.

**T10-1-7 Steering**

- (a) Pitman arm to be secured to cross shaft by an approved locking device.
- (b) All front stub to steering arm fasteners and associated location holes to be checked for security at CVI inspection and suitably lockwired.
- (c) Steering wheels must be of competition type.
- (d) Quick release steering wheels are mandatory and must be approved.

**T10-1-8 Rear Axle**

- (a) Approved conventional single axle
- (b) Shock absorbers must be fitted
- (c) Rear wheel drive only.

**T10-1-9 Transmission**

- (a) Clutch must be hand operated if fitted.
- (b) Transmission from and including the flywheel to centre of the differential must be totally enclosed (360 degrees) by not less than 3mm metal. This guard must retain all components in the event of a breakage or failure.

**T10-1-10 Wheels**

Also read Rule T14-4-7 for new rule on wheel spacers for midgets

- (a) Maximum front and left rear rim width 200mm (8 inches).
- (b) Maximum right rear rim width 250mm (10 inches).
- (c) Clearly identifiable professionally manufactured wheels are permitted, provided manufacturer's specifications are adhered to.
- (d) Laminated type to be secured by M8 ISO bolts and lock washers.
- (e) Clearly identifiable, professionally manufactured, direct mount front hub assemblies are permitted provided manufacturer's specifications are adhered to, e.g. Sanders, Weld, Real.
- (f) Front wheels only: Three (3) 12mm studs minimum approved.
- (g) Central locking nuts are approved for use on front and rear wheels.

**T10-1-11 Tyres**

- (a) 330mm (13") x 150mm minimum (6")
- (b) Maximum 4 ply construction with the exception that approved American type two ply racing tyres are permitted.
- (c) All tyres must be sound in beads and walls.
- (d) Tread design optional, but integral with the tyre.
- (e) 325mm (13") diameter low profile radial ply tyres may be used providing the overall diameter does not exceed 686mm (27"). This maximum will apply regardless of make, type or manufacturers marking.

**T10-1-12 Brakes**

- (a) Effective brakes must be fitted to rear axle.
- (b) Front brakes are optional and may be fitted to either wheel.
- (c) The brakes must be foot operated.



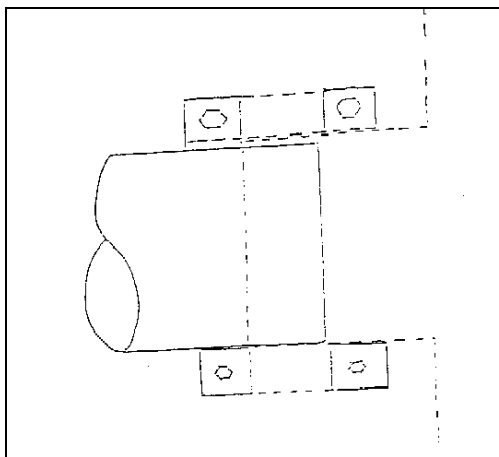
- (d) When nylon brake lines are used, the quality of the tubing and fittings is to be of an approved brake line quality or aircraft quality. Teflon or plastic line must be covered with stainless steel braid.

**T10-1-13 Knurping Irons**

- (a) All vehicles must be equipped with knurping irons extending outwards to effectively cover at least 75% of the width of the rear tyre that is to be used in competition. Rear outer end should be in line with centre of rear axle (75mm tolerance permitted) and must not protrude past outer edge of tyres.
- (b) All knurping irons to be attached with minimum of ISO M5 88 bolts or cap screws i.e. NO R clips or split pins, etc, to be used.
- (c) Bumpers where fitted, shall be designed and constructed on the underside to eliminate the danger of hooking other cars in the event of contact.
- (d) When front bumpers are fitted, they are to be tubular only, "U" shaped, and no wider than the mounting points.
- (e) Bumpers to be attached with minimum of ISO M5 88 bolts or cap screws i.e. NO R clips or split pins, etc, to be used.
- (f) No open-ended tubing allowed.

**T10-1-14 Exhaust Pipes**

- (a) Exhaust pipes and muffler must remain within the limits of the car, i.e. overall length and within knurping irons.
- (b) Where slip joints occur, two sets of lugs, 180 degrees apart, must be attached to the header pipe and mufflers. These lugs are to be linked by a strap attached with a minimum of two 6mm bolts and lock nuts, or one 6mm bolt and a lock nut through muffler and header. (See diagram.) A further secure bracket or support at the rear of the muffler or exhaust pipe.



**T10-1-15 Battery:** Must be secured in a safe position.

**T10-1-16 Engine Ignition System**

- (a) One Engine ignition switch must be mounted to cockpit firewall, to be easily accessible to driver when in normal restrained position. Ignition Switch must be clearly labelled "on" and "off"
- (b) All other ignition components to be mounted on Firewall. Should ignition components be mounted on driver's side of firewall, said components will be covered. Said covers to be removed for inspection.

**T10-1-17 Fuel Cock:** Refer to Rule E4-8.

**T10-1-18 Fuel:** Refer to Section E4.

**T10-1-19 Controls**

- (a) Throttle controls must be of positive action. At least two effective springs must be fitted with at least one to be attached to lever on butterfly shaft, where butterfly shaft is present.
- (b) All connections must be properly secured.

**T10-1-20 Racing Numbers** (Refer Section T7)

- (a) To be on both sides of the tail, the background colour to have a minimum of 13mm border.
- (b) 30mm thick numerals, of not less than 300mm in height.
- (c) 1st, 2nd, 3rd, placegetters in New Zealand Championships, MAY use relative number 1, 2, or 3 from the date won until the next New Zealand Championship. (Their previous number will not be issued to another competitor). In the event of a tie for placings, a four (4) lap run off must take place.
- (d) No cars in the same class may carry the same number at the track to which they are contracted. Visiting cars running the same number in the same class as a locally contracted car may be asked to change its number.
- (e) A number not less than 150mm x 15mm width per digit be on the front centre of the bonnet.

**T10-1-21 Electronic Control**

For the use of any electronic devices refer to Section E3.

**T10-1-22** The Steward, only, has discretionary powers in rule G7-3-20 as to whether a car is fit to race.

**T10-1-23** Impounding a Midget Car: Refer to E1-2 and E1-6.



2009/10 New Zealand TQ Midget Champion – Glen Durie

**T10-2 THREE QUARTER MIDGET CAR SPECIFICATIONS**

**T10-2-1 General Dimensions**

- (a) **Overall Length:** 2794mm (110") maximum, including bumpers.
- (b) **Wheelbase:** 1677mm (66") maximum, 1371mm (54") minimum.
- (c) **Wheel Track:** Maximum wheel track 1194mm (47") maximum. Track width measured centre to centre of tyre.
- (d) **Total Weight** at any time, no added fuel or ballast weight permitted; Minimum 260 kg, Maximum 360 kg, minus driver.

- (e) Rear Wheel drive only:  
All vehicles must drive through the rear wheels. The use of front wheel drive is not permitted.

## **T10-2-2 Engines**

- (a) Engines must be motorcycle derived.
- (b) Direct air-cooled and water-cooled only.
- (c) Carburettors or mechanical fuel injection or electronic controlled fuel injection allowed.
- (d) Only single input sourced electronic ignition allowed, except in water-cooled engines only.
- (e) Rev counters - refer Rule E3-2.
- (f) Engine to be either 3 or 4-cylinder in-line, 4 stroke, only. Forced induction engines are not permitted.
- (g) Maximum capacities permitted are:
  - (i) 4 stroke 2 valves per cylinder 917cc
  - (ii) 4 stroke 3 + valves per cylinder 771.25cc
- (h) Front engines only, no rear engines allowed. Engine must be fitted forward of the driver's knees when he is seated in the car.
- (i) The driver must sign a declaration stating the engine size at the start of the season. Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section G11-3 Technical Exclusions.
- (j)
  - (i) Engine to be pre-drilled before CVI inspection with 2mm minimum size hole to enable vehicle checkers to seal engine. Refer rule G13-6-11(a).
  - (ii) Pre-drilled holes to seal: barrels to crankcase, crankcase-to-crankcase etc. Note: Pre drilled retainers are acceptable.
  - (iii) When rule G13-6-11(a) applies, approved person must measure engine within 28 days.
- (k) **Liquid Cooled Engine Option:**
  - (i) Manufacture and model subject to SNZ Directors approval.
  - (ii) Engine capacity 750cc maximum.
  - (iii) The engine to be OEM.
  - (iv) Four (4) stroke, four (4) valves per cylinder.
  - (v) OEM Electronically fuel injected (EFI) or OEM carburettors.
  - (vi) Fuel: maximum 98 octane pump petrol only. (refer rule E4-1-1).
  - (vii) E.C.U. control unit OEM only.
  - (viii) OEM clutch, transmission and starter to be fully operational.
  - (ix) No engine manufactured after 2005 will be permitted.
  - (x) OEM airbox to be retained.
  - (xi) Air filter element and exhaust system is unrestricted.
  - (xii) Radiator type is unrestricted.
  - (xiii) The sump must be OEM.
  - (xiv) OEM where mentioned in clauses K(i) to K(xiii) above relate to 'Original Equipment Manufacture', including year, make and model used. (Also refer to rule G1-1-12(a) for a full description)

## **T10-2-3 Engine Offset**

- (a) Inline engines to be allowed a maximum 2 inches (50mm) off set from the centre line of chassis, measured to centre line of crankshaft.
- (b) Cross-mounted engine to have maximum off set of 3.25 inches (82.5mm), measured from centre line of engine barrels to centre line of chassis.

#### **T10-2-4      Wheels**

Also read Rule T14-4-7 for new rule on wheel spacers for Three Quarter Midgets.

- (a) Maximum front wheel rim width 200mm (8 inches).
- (b) Maximum rear rim width 250mm (10 inches).
- (c) Clearly identifiable, approved, professionally manufactured wheels are permitted, provided manufacturer's specifications are adhered to.
- (d) Laminated type to be secured by M8 ISO bolts and lock washers.
- (e) Clearly identifiable, professionally manufactured, direct mount front hub assemblies are permitted provided manufacturer's specifications are adhered to, e.g. Sanders, Weld, Real.
- (f) Central locking nuts are approved for use on front and rear wheels.
- (g) No plastic or composite wheels permitted.

#### **T10-2-5      Tyres**

Tyres 1905mm (75") maximum circumference. Measured before races. Knobblys not permitted

#### **T10-2-6      Rear Ends**

Rear end (differential) must be locked so that both axles turn at the same time. Chain drive can be used, if suitable guard is used to cover chain.

#### **T10-2-7      Clutch and Gear Box**

- (a) All vehicles must be equipped with a device so as to disengage the engine from the rear end.
- (b) All unit construction motorcycle engines with more than one gear and operational clutch lever must be in a prominent position on the exterior of the car with no internal access to the said gearshift.
- (c) Transmission from and including the flywheel to centre of the differential must be totally enclosed (360 degrees) by not less than 3mm metal. This guard must retain all components in the event of breakage or failure.

#### **T10-2-8      Firewall**

- (a) An effective firewall of 1.58mm (0.0625 inch) metal or other approved fire retarding material must be placed between driver and motor, sealing the engine compartment from the cockpit, down to the level of the chassis frame
- (b) Fuel tank to be on the opposite side of the firewall to the motor.

#### **T10-2-9      Fuel**

Refer also to Section E4.

- (a)
  - (i) Throttle controls must be positive action.
  - (ii) At least two effective springs must be fitted. At least one of these is to be attached to lever when throttle shaft is present.
  - (iii) All connections must be properly secured.
- (b) Oil coolers and radiators to be mounted in the confines of the body work, not to be mounted on roll cages.
- (c) Fuel lines: refer to rule E4-9.

#### **T10-2-10      Ignition Switch**

- (a) Must be on/off type, fitted to cockpit firewall, in working order, easily accessible to driver when in normal restrained position
- (b) On and Off positions clearly marked on firewall
- (c) All other ignition components (other than engine mounted components) to be mounted on firewall. Should ignition components be mounted on driver's side of firewall, said components to be covered. Said covers to be removed for inspection.

#### **T10-2-11      Batteries** must be securely mounted.

**T10-2-12 Brakes**

- (a) Effective brakes to be fitted to rear axle.
- (b) Foot brakes are compulsory
- (c) When nylon brake lines are used, the quality of the tubing and fittings is to be of approved brake line quality or aircraft quality. Teflon or plastic line must be covered with stainless steel braid.

**T10-2-13 Exhaust Pipes**

Refer to Rule T10-1-14

**T10-2-14 Bellypan**

All vehicles must be fitted with a bellypan mounted from the firewall back to at least the front of the seat. Belly pan to be bolted to main frame. Minimum 1/4" 6mm high tensile at least 4 points.

**T10-2-15 Steering**

- (a) Pitman arm to be secured to cross shaft by an approved locking device.
- (b) Steering wheel must be of competition type. Wood rim and road types of steering wheel are not permitted.
- (c) An approved locking device must retain front hub bearings.
- (d) If spherical bearing type joints are used on the tie rod or drag link ends, the minimum bore of these is to be 7/16" or 12mm.
- (e) Shock absorbers are restricted to hydraulic (oil), gas, gas/hydraulic only. No other medium/type are permitted.
- (f) Shock absorbers must have all valve mechanisms housed in a single cylindrical unit.
- (g) Shock absorbers may have only one external adjustment and may only be adjusted remotely by mechanical methods. Shock absorbers cannot operate or be adjusted electrically.
- (h) Quick release steering hub mechanism of approved type is compulsory.

**T10-2-16 Bonnets**

All panels and bonnets must be securely fastened primarily by way of dzus buttons minimum (bolts satisfactory). Plastic ties are not permitted.

**T10-2-17 Safety Hubs**

Rear axles must be engineered and assembled to an approved standard, Minimum diameter 32mm.

**T10-2-18 Roll Cages**

ROLL CAGES ARE MANDATORY and will meet the following specifications:

- (a) The main frame of the roll cage to be constructed from either:
  - (i) SAE 4130 N Alloy Steel Tubing 1.25" OD x .095" WT Minimum size (1.25" OD x .095" WT)
  - (ii) Cold drawn seamless, SAE 1010/1025 or Reynolds 531, 1.25" OD x 10 g minimum Size (1.25" OD x .125" WT)
  - (iii) ASTM A106 Grade B 25 mm Nominal Bore Sch 40 (33.4 mm OD x 3.38 mm WT)
  - (iv) API Std 5L Line Pipe 25 mm Nominal Bore Sch 40 (33.4 mm OD x 3.38mm WT)
  - (v) General purpose pipe, BS1387/AS1163-1991, grade C350, 25mm Nominal Bore, Heavy Gauge WT (33.7mm OD x 4.00mm WT)
- (b) No chrome plating is permitted on roll cages.
- (c) Bottom Chassis Rail: To be a minimum of 0.095"- 2.41mm as applicable to new chassis built after July 2004.
- (d)
  - (i) The top line of both the horizontal tubes to be no less than 50mm above the drivers helmet when seated statically in the car.
  - (ii) The top lines of the both horizontal tubes to be no less than 100mm above the driver's helmet when in normal

restrained position. Effective for new frames built after July 2002.

- (e) The main frame to be constructed of no more than eight (8) uncut pieces of tubing.
- (f) The cage must be welded to the main frame of the car becoming part and piece of the frame forming a unit structure.
- (g) Where the tubing changes direction, or is joined by another member, the inside of the radius or corner, must be gusseted. Gussets will be not less than 3.1mm plate or 16mm x 2.5mm tube. Gussets must extend at least 75mm from centre of corner or join.
- (h) A tubular cross brace must link the two longitudinal tube members behind the drivers head. (One diagonal brace is NOT acceptable).
- (i) These to be a minimum of 75mm apart or fitted with a gusset plate, or 16mm x 2.5mm tube, at the point where they meet the top of the cage.
- (j) Construction of the roll cage may be altered to allow wheel guards to be added to existing cages. Positioning of such wheel guards to be no higher than shoulder height and no lower than waist height when seated in the driving position.
- (k)
  - (i) Side intrusion bars may be added to the main frame of the roll cage.
  - (ii) The said side intrusion bars must be attached adjacent to the rear cross tube at the top of the roll cage.
  - (iii) A brace must be fitted midway between upper and lower mounting points.
  - (iv) All bent sections of intrusion bars to have a minimum radius of 4" - 102mm and constructed of a minimum of 31.8mm (1.250") OD x 2.4mm (.095") chrome moly tube.
  - (v) A minimum measurement of 750mm and a maximum of 880mm between the inside radius of the intrusion bars measured at driver's helmet height when in normal seated position.
  - (vi) SFI certified rollcage padding must be fitted to all intrusion bars above shoulder height.
- (l) Driver must have easy entry and exit from cockpit at two exit points at all times. Arm guard panels to be no higher than 890mm measured from bottom of lower chassis rail.
- (m) A tube of 16mm x 2.5mm minimum must be fitted at the rear of the seat and firmly attached to the chassis bar work no higher than the bottom edge of the seat.  
Exception: Does not include chain drive vehicles.
- (n) Seat: must be bolted to chassis frame by a minimum of 4 x 6mm high tensile bolts and fender washers
- (o) Sun Shields: Are permitted. Sun shields must be no higher than the top line of the rollcage, must not exceed the overall width and length of the top of the rollcage. The sun shields must be no more than 100mm from the top to bottom when measured at the front and no more than 150mm when measured at the rear.

**Notes on rollcages:**

- (p) All tubing diameters quoted are outside diameters.
- (q) A pad of resilient material measuring 100mm x 100mm or high back seat be attached to the cross braces behind the driver's head. A further pad of resilient material (right-hand side head support may be installed (suitably radiused) to measure in depth no more than 200mm and no less than 100mm. The pad shall

not protrude further forward in length than 240mm and no less than 200mm from the front of the rear head support.

**T10-2-19 Knurfling Irons**

- (a) All vehicles must be equipped with knurfling irons, extending outwards to effectively cover at least three quarters of the width of the rear tyres that are to be used in competition. The outer end of the knurf bar not to protrude past the outer side wall of tyre at any time.
- (b) All knurfling irons to be attached with minimum of ISO M5 88 bolts or cap screws. I.e. NO R clips or split pins etc to be used.
- (c) Bumpers where fitted, shall be designed and constructed on the underside to eliminate the danger of hooking other cars in the event of contact.
- (d) When front bumpers are fitted, they are to be tubular only, "U" shaped, and no wider than the mounting points.
- (e) Bumpers to be attached with minimum of ISO M5 88 bolts or cap screws ie NO R clips or split pins etc to be used. Vertical bar of rear bumper to be a maximum of 280mm from ground before it bends forward or stops.
- (f) No open ended tubing allowed.

**T10-2-20 Racing Numbers**

Refer also to Section T7

- (a) Numbers to be on both sides of the tail. The background colour to have a minimum 13mm border. Thick numerals of not less than 250mm in height.
- (b) 1st, 2nd, 3rd, placegetters in New Zealand Championships, MAY use relative number 1, 2, or 3 from the date won until the next New Zealand Championship. (Their previous number will not be issued to another competitor). In the event of a tie for placings, a four (4) lap run off must take place.
- (c) No cars in the same class may carry the same number at the track to which they are contracted. Visiting cars running the same number in the same class as a locally contracted car may be asked to change its number.
- (d) A number not less than 150mm x 15mm width per digit be on the front centre of the bonnet.

**T10-2-21 Safety Harness:** Refer to Section S2.

**T10-2-22 Illegal Fittings:** The use of aerofoils will NOT be permitted under any circumstances.

All types of mirrors are illegal.

**T10-2-23 Electronic Control**

For the use of any electronic devices refer to Section E3.

**T10-2-24** The Steward, only, has discretionary powers, in rule G7-3-20 as to whether a car is fit to race.

**T10-2-25 Impounding a Three Quarter Midget Car**

Refer to rule E1-2 and E1-6.

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2009/10 New Zealand Sprintcar Champion – Rodney Wood

## **T10-3 SPRINTCAR SPECIFICATIONS**

### **T10-3-1 General Dimensions**

- (a) Wheelbase 2.438mm (96") maximum, 2.134mm (84") minimum.
- (b) Wheel track 1600mm (63") maximum, 1270mm (50") minimum.
- (c) Total weight at any time, no added fuel or ballast weight permitted, Minimum 580kg, Maximum 800 kg, minus driver.
- (d) The classical appearance of a Sprintcar will be those with a tail cone of 24 gallons minimum size.
- (e) **Body style and design must resemble a classical Sprintcar with no additional panels attached to nerf bars.**

### **T10-3-2 Engine**

- (a) Maximum capacity of 6718cc (410 cubic inches).
- (b) Engines to be no more than 2 valves per cylinder.
- (c) Engines must be within 12mm (1/2") of the centreline.
- (d) Forced induction engines are not permitted.
- (e) Carburettors or mechanical fuel injection only, no form of electronic controlled fuel injection permitted.
- (f) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section G11-3 Technical Exclusions.

### **T10-3-3 Cooling System**

- (a) Radiator hoses must be of reinforced construction only.
- (b) Radiator cooling fans, if made of metal or plastic, must be shrouded with metal of sufficient thickness to contain a fan blade in the event of a fan breaking off.
- (c) Radiators and Oil Coolers: To be mounted within the confines of the bodywork. Not to be mounted on Roll Cages.

### **T10-3-4 Body**

- (a) Single seater bodies only.
- (b) All bodies to be of clean and neat design without any protruding or sharp edges especially in the cockpit, and must consist of a nose, tail and cockpit area.
- (c) Tail tanks may be used. Tail cones must have 100mm removed at rear at neck level. The 100mm piece out of the tail cone at neck level is only necessary if the car is not constructed so that



there is adequate protection to stop the tail piece moving forward.

- (d) Seat must be bolted to chassis frame by a minimum of 4 x 6mm high tensile bolts and fender washes.
- (e) A pad of resilient material measuring 100mm x 100mm or high back seat be attached to the cross braces behind the driver's head. A further pad of resilient material (right-hand side head support) may be installed (suitably radiused) to measure in depth no more than 200mm and no less than 100mm. The pad shall not protrude further forward in length than 240mm and no less than 200mm from the front of the rear head support.
- (f) A tube of 25mm x 2.5mm minimum must be fitted at the rear of the seat and firmly attached to the chassis bar work no higher than the bottom of the seat.
- (g) An effective firewall of 1.58mm (0.0625 inch) metal or other approved fire retarding material must be placed between driver and motor, sealing the engine compartment from the cockpit, down to the level of the chassis frame.
- (h) The motor plate must not be made of carbon fibre or any other composite material.
- (i) All panels and bonnets must be securely fastened primarily by way of dzus buttons minimum (bolts satisfactory). Plastic ties are not permitted.
- (j) **An SNZ Approved Full Containment Seat is compulsory from the 2010/2011 racing season.**
- (k) **SNZ Approved Full Containment Seat manufacturers/suppliers must provide all manufacturing details and specifications, together with full mounting details which must be complied with in full.**

#### **T10-3-5 Safety Harness**

Refer to Section S2.

#### **T10-3-6 Roll Cages:**

- (a) All new cars or cars with rebuilt roll cages are to have roll cages of a minimum of **1.375 inch OD x 0.095 inch wall thickness, 4130 Condition "N" tube** suitably braced and securely mounted to the chassis and main members of the vehicle. Galvanised pipe is not permitted.  
**CONSTRUCTION:**
- (b) **The rollcage must extend a minimum of 80mm above the drivers helmet when in the normal restrained position.**
- (c) **The top horizontal roll cage tubes must be fitted with SNZ approved protective roll cage padding certified to SFI specification 45.1.**
- (d) **Bottom Chassis Rail:** To be a minimum of 0.095"- 2.41mm as applicable to new chassis built after July 2004.
- (e) Belly pan under drivers feet must extend from the front edge of the seat to the firewall.
- (f) Mirrors are not permitted
- (g) **Sun Shields:** Sun Shields are permitted. Sun shields must be no higher than the top line of the rollcage, must not exceed the overall width and length of the top of the rollcage. The sun shields must be no more than 100mm from the top to bottom when measured at the front and no more than 150mm when measured at the rear.

#### **T10-3-7 Front Axle**

An approved locking device must retain front hub bearings.

#### **T10-3-8 Wheels**

Refer Section T14 wheels for specifications covering this class. Also read Rule T14-4-7 for new rule on wheel spacers for Sprintcars.

**T10-3-9 Steering**

- (a) Pitman arm to be secured to cross shaft by an approved locking device.
- (b) All front stub to steering arm fasteners and associated location holes to be checked for security at CVI inspection and suitably lockwired.
- (c) Drag links must utilise 4130 steel of a minimum of one (1) inch (25.4mm) diameter, with a minimum wall thickness of .058 inch (1.5mm).
- (d) Tie rods and rod ends in the steering, must be made of steel only. A magnet must stick at all times. No swaging of the tubing will be permitted.
- (e) Steering wheel must be of competition type. Wood rim and road types of steering wheel are not permitted.
- (f) All designs and manufacture of quick-release steering wheels must be approved by SNZ.
- (g) Hollow or drilled bolts, fasteners or rod ends are prohibited.

**T10-3-10 Rear Axle**

- (a) Differential must be locked so that both axles turn at the same time.
- (b) Rear wheel drive only.
- (c) Single wheel and/or tyres only.

**T10-3-11 Transmissslon**

- (a) Standard or dog type clutch must be fitted.
- (b) Transmission from and including the flywheel to centre of the differential must be totally enclosed (360 degrees) by not less than 3mm metal. This guard must retain all components in the event of breakage or failure.

**T10-3-12 Shock Absorbers and Tyres**

- (a) Shock absorbers must be fitted to axles
- Wheel Diameter:**
- (b) 300mm (12") min, 400mm (16") maximum.
- Tyres:**
- (c) Tyres must be approved.

**T10-3-13 Brakes**

- (a) Effective brake to be fitted to rear axle.
- (b) Front brakes are optional and may be fitted to either wheel.
- (c) The brakes must be foot operated.
- (d) When nylon brake lines are used, the quality of the tubing and fittings is to be of an approved brake line quality or aircraft quality. Teflon or plastic line must be covered with stainless steel braid.

**T10-3-14 Bumpers**

- (a) **Front bumper may not extend more than 205mm (8 inches) from the front torsion tube.** Front bumper and knurving irons to be a maximum of 25mm (1") diameter. No open ended tubing allowed.
- (b) When front bumpers are fitted, they are to be tubular only, "U" shaped, and no wider than the mounting points.
- (c) All vehicles must be equipped with knurving irons extending outwards to effectively cover at least 3/4 of the width of the rear tyres that are to be used in competition and not to extend beyond a point further forward than three quarters of the wheel base, as measured from the rear wheel centre.
- (d) All knurving irons to be attached with minimum of ISO M5 88 (3/16" H.T) bolts or cap screws. I.e. NO R clips or split pins etc to be used. No open ended tubing allowed.
- (e) Bumpers where fitted, shall be designed and constructed on the underside to eliminate the danger of hooking other cars in the event of contact.

- (f) Bumpers to be attached with minimum of ISO M5 88 (3/16"H.T). bolts or cap screws. I.e. NO R clips or split pins etc to be used. No open ended tubing allowed.

**T10-3-15 Exhausts**

- (a) Exhaust pipes can extend past the rear axle but not past the tail. Must be securely fastened.
- (b) **Mufflers:** refer T10-1-14(b)

**T10-3-16 Engine Ignition System**

- (a) Engine ignition switch must be mounted to cockpit firewall, to be easily accessible to driver in normal restrained position. Ignition switch(s) must be clearly labelled "on" and "off". Crank trigger ignition permitted.
- (b) All other ignition components to be mounted on firewall. Should ignition components be mounted on driver's side of firewall, **said components to be covered. Said covers to be removed for inspection.**

**T10-3-17 Battery**

Must be secured in a safe position and suitably covered to prevent spillage of acid.

**T10-3-18 Fuel**

Refer to Section E4.

**T10-3-19 Controls**

- (a) Throttle controls must be of positive action.
- (b) At least two effective springs must be fitted with at least one to be attached to lever on butterfly shaft.
- (c) All connections must be properly secured.
- (d) Self Starters are optional.

**T10-3-20 Racing Numbers: Refer also Section T7**

- (a) To be on both sides of the tail, the background colour to have a minimum 13mm border.  
Thick numerals of not less than 300mm (12") in height.
- (b) 1st, 2nd, 3rd placegetters in the New Zealand Championships may use relative numbers 1, 2, or 3 from the date won until the next New Zealand Championship. (Their previous number will not be issued to another competitor).
- (c) A visiting car running the same number as a locally contracted car may be asked to change its number.
- (d) A number not less than 150mm x 15mm width per digit, be on the front centre of the bonnet, or on the top flat surface of the front wing.

**T10-3-21 Air Foll**

- (a) Not necessary but to be of approved design and construction and be affixed to roll cage at four points by bolts of not less than 8mm (5/16") diameter.
- (b) Aerofoil to be a maximum 1500mm (5ft) in width provided aerofoil does not extend outside the rear wheels. Maximum total area of aerofoil to be 3.25m<sup>2</sup> (35 sq ft).

**T10-3-22 Electronic Control**

For the use of any electronic devices refer to Section E3.

**T10-3-23** The Steward, only, has discretionary powers in rule G7-3-20 as to whether a car is fit to race.

**T10-3-24 Impounding a Sprintcar**

Refer to rules E1-2 and E1-6.



2009/10 New Zealand Minisprint Champion – Brian Edwards

#### **T10-4 MINISPRINT SPECIFICATIONS**

Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section G11-3 Technical Exclusions.

##### **T10-4-1 Engine**

- (a) Front mounted engines only in North South direction. No rear engine or East West placements.
- (b) Automotive engines only. No motorcycles engines.
- (c) Selected engine to be 4 cylinder, inline, vertical stroke, water-cooled, single camshaft only.  
Must be 1340cc or less, at original manufacture.  
Engine can only be 1340cc maximum size for side valve, overhead valve or single overhead cam engine.
- (d) Original stroke to engine must be retained. Boring oversize and resleeving is permissible of any piston type must not exceed 1340cc swept volume (i.e. bore x stroke x 4 cylinder).
- (e) Engines with 4 or more valves per cylinders can be no more than 1200cc at original manufacture. Original stroke to be retained. Boring oversize and resleeving is permissible of any piston type but must not exceed 1240cc swept volume (i.e. bore x stroke x 4 cylinders)
- (f) No two stroke or rotary engines.
- (g) Naturally aspirated Carburettors only. No fuel injection, no turbo or super charges or water injection.
- (h) Owner/driver of vehicle must make individual arrangements with approved SNZ official to measure engine cubic capacity and affix engine seals in a prominent position. No seals, no race. A current certificate of engine capacity on the official SNZ form must be produced on demand. Note: pre drilled retainers are acceptable.
- (i) Any engine modifications are permitted provided original block is retained. Alternative head is permitted provided head is from the same manufacturer and series (i.e. Datsun A15 to Datsun A12) and conforms to rules T10-4-1 (c) and (e).
- (j) No titanium engine components.
- (k) Wet sumps only, no dry sump systems.

#### **T10-4-2 Exhaust**

- (a) Exhaust pipe or pipes to be securely mounted to the chassis or the frame on at least two mounting points.
- (b) Exhaust pipes and muffler must remain within the limits of the car, i.e. overall length and within knurled irons, however muffler and outlet must be no higher than top knurled iron bar.
- (c) Refer to Rule T10-1-14.

#### **T10-4-3 Chassis Types**

- (a) Chassis: Space frame round tubular construction.
- (b) Engine offset: 25.4mm [1"] measured centre line of motor and centre line of frame.

#### **T10-4-4 General Dimensions**

- (a) Wheelbase - 2030mm maximum (effective for cars constructed from 1985 onwards) 1520mm minimum.
- (b) Wheeltrack - 1320mm maximum 1070mm minimum. To be measured centre to centre of tyres.
- (c) Weight: Maximum 570kg minimum 420 kg less driver. Car must meet minimum weight at any time.

#### **T10-4-5 Body**

- (a) Single seater bodies only.
- (b) All bodies to be of clean and neat design without any protruding or sharp edges, especially in the cockpit and must consist of a nose, tail and cabin.
- (c) All panels and bonnets must be securely fastened primarily by way of dzus buttons minimum (bolts satisfactory). Plastic ties are not permitted.
- (d) An effective firewall of 1.58mm (0.0625 inch) metal or approved fire retarding material must be placed between driver and motor, sealing the engine compartment from the cockpit, down to the level of the chassis frame.
- (e) The motor plate must not be made of carbon fibre or any other composite material.
- (f) Seat must be bolted to chassis frame by a minimum of 4 x 6mm high tensile bolts and fender washers.
- (g) A tube of 16mm x 2.5mm minimum must be fitted at the rear of the seat and firmly attached to the chassis bar work no higher than the bottom of the seat.
- (h) Floor pan under drivers feet must extend from front edge of seat to firewall.

#### **T10-4-6 Seatbelts**

Refer to Section S2.

#### **T10-4-7 Roll Cage**

Rollcages satisfying the following requirements are mandatory, they should meet the following specifications:

- (a) SAE 4130 N Chrome-Moly Tubing 1.3/8" OD x .095 wall (1.375" OD x .095" WT). When high bar chassis are used front cockpit uprights may be 1.25" OD x .095" wall thickness
- (b) Cold drawn Seamless SAE 1010/1026 or Reynolds 531, 1 3/8 x 8 gauge (1.375" OD x .161" WT)
- (c) All existing cars built and raced prior to May 1998 to remain as they are except any car requiring a rebuilt roll cage must comply to latest new size specification. Log book to determine existing cars.
- (d) Bottom Chassis Rail: To be a minimum of 0.095" - 2.41mm as applicable to new chassis built after July 2004.
- (e)
  - (i) The top line of both the horizontal tubes to be no less than 50mm above the drivers head when seated statically in the car.
  - (ii) The top lines of the both horizontal tubes to be no less than 100mm above the driver's head when in normal

- restrained position. Effective for new frames built after July 2002.
- (f) (i) The main frame to be constructed of no more than eight pieces of uncut lengths of tubing, securely attached to the main chassis at the front. Pipe bends, elbows, or sockets are not permitted on main frame.
  - (ii) Where the tubing changes direction, or is joined by another member, the inside of the radius or corner, must be gusseted. Gussets will be not less than 3.1mm plate or 16mm x 2.5 tube. Gussets must extend at least 75mm from centre of corner or join.
  - (iii) The rear vertical tubes of the frame must be stayed to the chassis by a diagonal brace on either side of the car, forwards, or rearwards.
  - (g) (i) Side intrusion bars may be added to the main frame of the roll cage.
  - (ii) The said side intrusion bars must be attached adjacent to the rear cross tube at the top of the roll cage.
  - (iii) A brace must be fitted midway between upper and lower mounting points
  - (iv) All bent sections of intrusion bars to have a minimum radius of 4" – 102 mm and constructed of a minimum of 31.8mm (1.250") OD x 2.4mm (.095") chrome moly tube.
  - (v) A minimum measurement of 750mm and a maximum of 880mm between the inside radius of the intrusion bars measured at driver's helmet height when in normal seated position.
  - (vi) SFI certified rollcage padding must be fitted to all intrusion bars above shoulder height.
  - (h) A cross brace must link the two longitudinal tube members behind the drivers seat. (One diagonal is NOT acceptable)
  - (i) All bracing to the tail frame and also the roll cage vertical tubes, to connect as high as practically possible, to use the braces to full advantage.
  - (j) Construction of the roll cage may be altered to allow wheel guards to be added to existing cages. Positioning of such wheel guards to be no higher than shoulder height and no lower than waist height when seated in the driving position.
  - (k) A "Full" (parachute type) body harness is compulsory with roll cages and provision must be made to anchor both sides of this to the main tail frame of the car, which will be adequately braced to the chassis. Also refer to rule S2-2-3.
  - (l) Driver must have easy entry and exit from cockpit at all times. Arm guard panels to be no higher than 890mm measured from bottom of lower chassis rail.
  - (m) No mirrors.
  - (n) Sun shields:  
Sun Shields are permitted. Sun shields must be no higher than the top line of the rollcage, must not exceed the overall width and length of the top of the rollcage. The sun shields must be no more than 100mm from the top to bottom when measured at the front and no more than 150mm when measured at the rear.
  - (o) Roll cages must not be plated in any way at all

**Notes concerning roll cages:**

- (p) All tubing diameters quoted are O/D (outside diameters.)
- (q) All bolts, (other than specified) to be at least ISO M10 88.

**T10-4-8 Transmission**

- (a) Any revolving transmission and driveshaft must be enclosed with a 3mm thickness metal cover incorporating a 360-degree safety hoop at front of driveshaft (in case of driveshaft failure.)
- (b) All vehicles must be fitted with operative clutch.

**T10-4-9 Shock Absorbers**

Effective shock absorbers to be fitted to front and rear axles.

**T10-4-10 Differentials**

- (a) Differential only, no alternative drive lines such as chains.
- (b) Quick change diffs permissible
- (c) All differentials to be locked

**T10-4-11 Wheels and Tyres**

Also read Rule T14-4-7 for new rule on wheel spacers for midgets

**Wheels:**

- (a) Maximum front wheel rim width 200mm (8 inches).
- (b) Maximum rear rim width 250mm (10 inches).
- (c) Clearly identifiable professionally manufactured wheels are permitted, provided manufacturer's specifications are adhered to.
- (d) Laminated type to be secured by M8 ISO bolts and lock washers.
- (e) Clearly identifiable, professionally manufactured, direct mount front hub assemblies are permitted provided manufacturer's specifications are adhered to, e.g. Sanders, Weld, Real.
- (f) Wheel Studs front and rear must be a minimum of 11mm diameter if four or more are used, and a minimum of 12mm if only three studs are used.
- (g) Central locking nuts are approved for use on front and rear wheels.

**Tyres:**

- (h) 330mm (13") x 150mm minimum (6")
- (i) Maximum 4 ply construction with the exception that approved American type two ply racing tyres are permitted
- (j) All tyres must be sound in beads and walls
- (k) Tread design optional, but integral with the tyre.
- (l) 325mm (13") diameter low profile radial ply tyres may be used providing the overall diameter does not exceed 686mm (27"). This maximum will apply regardless of make, type or manufacturers marking.

**T10-4-12 Brakes**

- (a) Effective brake to be fitted to rear axle.
- (b) Front brakes are optional and may be fitted to either wheel.
- (c) The brakes must be foot operated.
- (d) When nylon brake lines are used, the quality of the tubing and fittings is to be of an approved brake line quality or aircraft quality. Teflon or plastic line must be covered with stainless steel braid.

**T10-4-13 Steering**

- (a) Steering box to be suitably mounted to chassis or frame. The extending of steering box sector shaft is not allowed.
- (b) Pitman arm to be secured to cross shaft by an approved locking device.
- (c) Steering wheels to be of competition type.
- (d) Steering wheel must be suitably secured to steering shaft by one of the following means:
  - (i) spline
  - (ii) keyed
  - (iii) Pinned
  - (iv) set screws.
- (e) Tierods, pitman arm, draglinks or any other type of steering arm must be suitably secured to each by means of bolt and castellated nut with split pin, nyloc nut or double nutted.

- (f) Where spherical bearing type of rose joints are used on radius rods there must be 11mm (7/16") bore minimum and 12mm (1/2") shank minimum. This specification will also apply when this type of joint is used on tie rod, and draglink ends.
- (g) An approved locking device must retain front hub bearings.
- (h) All front stub to steering arm fasteners and associated location holes to be checked at security at CVI inspection and suitably lockwired.

#### **T10-4-14 Bumpers**

- (a) **Front Bumpers:** Where front cross torsion suspension is used, bumpers shall be no more than 150mm ahead of torsions, or 150mm ahead of tyres, whichever is the lesser.
- (b) To be constructed of material no greater than 25mm OD.

#### **T10-4-15 Knurfling Irons**

- (a) All vehicles must be equipped with knurfling irons, extending outward, to effectively cover at least three quarters of the width of the rear tyre that is to be used in competition. The outer end of the bar to be at hub height.
- (b) All knurfling irons to be attached with minimum of ISO M5 88 bolts or cap screws i.e. NO R clips or split pins etc to be used.

#### **T10-4-16 Battery**

Must be secured in a safe position and suitably covered to prevent spillage of acid in the event of a capsized.

#### **T10-4-17 Engine Ignition System**

- (a) One engine ignition switch must be mounted to cockpit firewall, to be easily accessible to driver when in normal restrained position. Ignition Switch must be clearly labelled "on" and "off"
- (b) All other ignition components (other than OEM engine mounted components) to be mounted on firewall.
- (c) Should ignition components be mounted on driver's side of firewall, said components to be covered. Said covers to be removed for inspection.

#### **T10-4-18 Fuel: Refer Section E4.**

#### **T10-4-19 Controls:**

- (a) Throttle controls must be positive action.
- (b) At least two effective springs must be fitted with at least one to be attached to lever on throttle shaft.
- (c) Self Starter: Must be fitted and operational. All cars must leave pits under own power.

#### **T10-4-20 Numbers: Refer also Section T7**

- (a) Numbers and track letter must be displayed on Rear Air Foil. Numerals to be a minimum of 250mm high x 45mm wide with a 13mm border. Numerals to be displayed on both sides of left panel at uppermost rear corner.
- (b) To be on both sides of the tail, the background colour to have a minimum 13mm border. Numbers to be a minimum height of 250mm.
- (c) 1st, 2nd, 3rd placegetters in New Zealand Championships, MAY use relative number 1, 2, or 3 from the date won until the next New Zealand Championship. (Their previous number will not be issued to another competitor). In the event of a tie for placings, a four (4) lap run off must take place.
- (d) No cars in the same class may carry the same number at the track to which they are contracted. Visiting cars running the same number in the same class as a locally contracted car may be asked to change their number.

#### **T10-4-21 Air Foil**

- (a) Mandatory air foil to be fitted 1.486m<sup>2</sup> maximum (16 sq ft), to be fixed to the rollcage at four points by bolts of not less than



8mm diameter. Construction to be approved by the Vehicle checker.

- (b) Front wing optional.
- (c) The air foil must not be able to adjusted by the driver while seated in the racecar.

**T10-4-22 Electronic Control**

For the use of any electronic devices refer to Section E3.

**T10-4-23** The Steward, only, has discretionary powers in rule G7-3-20 as to whether a car is fit to race.

- (a) Impounding Car: Refer rules E1-2 and E1-6.

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**R10-5 RACING RULES – OPEN WHEEL CLASSES**

**R10-5-1 General**

- (a) Only ONE person may operate any race vehicle at any one time. NO PASSENGERS ALLOWED.

**R10-5-2 Dangerous Construction**

- (a) The Steward of the meeting may exclude any vehicle, the construction of which he deems to be dangerous, and shall give full effect to these Regulations and requiring the Vehicle Checker to check every vehicle immediately prior to its taking part in a competition.
- (b) Unnecessary Equipment: (Such as inter alia, lamps, horns and speedometer) may be deemed dangerous.
- (c) The direction of all officials must be strictly obeyed.

**R10-5-3 Flags**

The following flags will be recognised as the standard colours to be used as signals to competitors during a race:

<i>Green</i>	<i>Start</i>
<i>Red</i>	<i>All competitors stop</i>
<i>Yellow</i>	<i>Proceed with caution</i>
<i>White</i>	<i>Last lap for individual competitor</i>
<i>Black Flag/Board</i>	<i>Individual competitor to retire from race immediately upon receiving the black flag/board bearing the offending competitors number, held out for two laps</i>
<i>Black &amp; White Chequered</i>	<i>Finish</i>
<i>Black/Yellow</i>	<i>Re-run</i>

**R10-5-4 Heats**

- (a) Starts may be arranged in heats. The arrangement and constitution of heats shall be determined by the Promoters and shall be published in the programme, if any.
- (b) A competitor shall start in the heat which has been allotted to him unless by permission of the Clerk of the Course of the meeting.
- (c) Only those competitors, qualified in their heats, shall take part in the semi-finals, and only those competitors qualified in the semi-finals shall take part in the final.
- (d) Consolidation of Heats: The Clerk of the Course of the Meeting shall be empowered to consolidate, or otherwise modify the arrangements and constitution of heats, if the number of entrants at the start, or other conditions warrant their doing so.

**R10-5-5 Starting**

- (a) Competitors proceeding to, and awaiting the start of any race, are under the jurisdiction of the Starter and/or Referee.
- (b) The outside front row car shall be the pacesetter for the start of the race. All race starts to be at a reasonable pace.

- (c) **Punctuality In Starting:** Competitors shall always be prepared to start in accordance with the programme and when called on to do so. Any Competitor not prepared to start within a reasonable time after being called upon may be excluded from the race.
- (d) Vehicles proceeding to starting points must not be driven at excessive speed around the track, and at no stage shall any crew member ride on any vehicle.
- (e) **Starting Positions:** In scratch races starting positions shall be balloted for.
  - (i) In two (2) men match races of three (3) heats the competitor winning the ballot in the first heat takes outside position in the second heat, and the positions are again decided by ballot for the third heat.
  - (ii) In three (3) men match races a ballot shall be taken for the first heat only, and competitors shall take alternative positions thereafter.
- (f) Any vehicle failing to start after leaving the pits within the time limit of two (2) minutes must be pushed infield clear of the track, and remain there until the conclusion of the race.
- (g) A Competitor will be retired to the infield if he delays the start by more than two (2) minutes in all, in any one race. The two (2) minutes shall be calculated from the time or times estimated by the Referee, until his vehicle is again running under its own power.
- (h) Upon receiving the push off signal any vehicle which has failed to start within one full lap must be pushed to the infield clear of the track, and remain there until the conclusion of the race.

#### **R10-5-6 Driving In Wrong Direction**

- (a) Vehicles must at all times be driven in an anti clockwise direction.
- (b) Under no circumstances shall a competitor at any time during a meeting or during practice, be permitted to drive a vehicle in the wrong direction of the track.

#### **R10-5-7 Race In Progress**

- (a) Once a race is in progress, the competitors are under the jurisdiction of the referee.
- (b) **Crowding or Foul Driving:** The Referee may immediately exclude any competitor who in his opinion, crowds or bores whether intentionally or not, or otherwise indulges in any foul or unfair practice during the race.
- (c) Any competitor wilfully blocking, obstructing, or shepherding another competitor off course shall be penalised.
- (d) **Looking Back:** Looking back is forbidden and competitors doing so render themselves liable for a fine or exclusion.
- (e) **Outside Assistance:** If during a race any competitor receives outside assistance he shall retire.
- (f) Competitors may have outside assistance only in the form of limited pushing to re-start during Amber Lights or Yellow Flag periods.
- (g) Any competitor who has stopped or retired prior to the Amber Lights or Yellow Flag being displayed cannot restart in the race.
- (h) Drivers may change up to their racing gear only. Changing gear, or using clutches prohibited during racing or yellow flag/light periods.
  - a. (Minisprints/Modified Sprints may use clutches).
- (i) No wheels are permitted over the Pole Line unless evasive action is being taken to avoid an accident or a competitor is shunted onto the infield, then he must wait until the track is clear before returning to the track.

- (j) A Competitor deliberately putting a wheel or wheels over the pole line shall be penalised at the discretion of the Referee of the Meeting.
- (k) Any competitor who has proceeded to the infield and stopped shall be deemed to have retired.
- (l) If a driver unclips his seatbelt during a competition he is deemed to have retired from the race and cannot resume racing.

#### **R10-5-8 Emergency Stoppage**

- (a) Red Lights: WHEN RED LIGHTS COME ON OR RED FLAGS ARE DISPLAYED, ALL COMPETITORS MUST STOP AS SAFELY AND AS SOON AS PRACTICABLE AS A REAL EMERGENCY HAS OCCURRED.
- (b) Minor repairs may be carried out but refuelling is prohibited. Repairs cannot inhibit a restart.

#### **R10-5-9 Amber Light during Race**

- (a) After Amber Lights come on all cars must slow down at once.
- (b)
  - (i) The car which was prime cause of the incident causing the amber lights to come on shall be permitted to restart from the rear of the field.
  - (ii) Cars that are not the prime cause of the incident causing the amber lights to come on, may rejoin the field at the position they were in at the time of the last recorded lap.
- (c) Should any car stop or spin to a stop more than once they shall retire to the infield.
- (d) After the initial evasive action, the lead car must slow down, and the rest of the field close up bumper to bumper on it, in the positions they were in as per the last recorded lap at the start finish line.
- (e) The leading car will take the safest course past the accident, and the rest of the field must follow 'Indian File' behind, using same course as the leader. It is recommended that passing be done on the outside where possible.
- (f) Any car breaking the line will be black flagged and cannot restart.
- (g) When the track is cleared, the Amber Lights will go out as the lead car approaches the back straight
- (h) Laps run while the Amber Lights are on WILL NOT BE COUNTED AS RACE LAPS.
- (i) The race resumes for the number of laps remaining until the finish of the race.
- (j) If it subsequently becomes necessary to stop the race, after running on the caution signal, then restart rules will apply with positions taken from the last recorded lap.
- (k) Amber Lights should be used by flashing on and off and in the event of light failure, orange flags may be used.
- (l) Any driver who wilfully prevents his car being taken off, and enforces a race stoppage, will be immediately
- (m) suspended for three race meetings. This suspension will be a standard penalty and there will be no redress or right of appeal against the suspension.

#### **R10-5-10 Re-runs**

- (a) Any race stopped in the first lap will be a complete re-run event from the handicap or grid positions of the original start, and is over the original number of laps.
- (b) A competitor may not change his vehicle for the re-run.
- (c) Vehicles not running at the time the race is stopped may enter for the re-run on the original starting position.

- (d) The vehicle which is the primary cause of the stoppage may restart in the re-run from the rear of field

#### **R10-5-11 Re-Starts**

- (a) Any race if stopped after one lap has been completed, will be re-started.
- (b) Competing vehicles will form up on the dummy grid in the positions they were in as per the last recorded lap at start finish line. NOT the position they were in at the time the red light came on. The dummy grid positions will be given over the public address system by the lap scorer.
- (c) Any competitor who fails to start in, or has been excluded or retired from a race which is ordered to be restarted, shall be ineligible to take part in the re-start.
- (d) If, in the interest of safety the Referee has stopped a race after one or more competitors have crossed the finishing line at the completion of the race, the race shall not be re-started.
- (e) Any competitor who is not proceeding under power at the time of the incident which results in the display of the 'stop' signal shall be deemed to have retired.
- (f) Any competitor who has proceeded to the infield and stopped, shall be deemed to have retired.
- (g) The car which was the prime cause of the stoppage may restart from rear of field.
- (h) A Competitor may not change his vehicle for a re-start.
- (i) All re-starts to be at a reasonable pace.
- (j) A traffic cone will be placed on the exit of turn four (4) and no car is to overtake another car till the green flag is shown and the cars have passed on the outside of the cone.

#### **R10-5-12 Withdrawal**

- (a) In any race, any competitor who is lapped may be black boarded, and the competitor must withdraw his vehicle to the infield and remain there until the end of the race.
- (b) Defective Vehicles: In the event of any defect developing in a vehicle during a race which may endanger other competitors, the Starter on instructions from the Referee may give the competitor the black flag, then the competitor concerned must immediately retire from the event.
- (c) Any competitor withdrawing from a race with mechanical trouble, or for any other reason, shall, whenever practical ascertain that the track is clear of other vehicles, and signal his intention of pulling out, then pull onto the infield for a reasonable distance from the track and remain there until the conclusion of the race.
- (d) Should the vehicle remain stopped on the track while the race remains in progress, the driver shall remain strapped in his seat until he is given permission to leave it by an appropriate official. This restriction does not apply should the vehicle be on fire.

#### **R10-5-13 Race Finish**

- (a) A race is not finished until the chequered flag is displayed and the last competitor has passed the finish line regardless of the number of laps run.
- (b) From the point when the lead car receives the chequered flag, the race is finished for that vehicle but from that point on if the amber light is shown, all competitors who follow through the finish line are counted in order of passing the line.
- (c) If the race is stopped on red lights after one or more competitors has received the chequered flag, placings will be given in order of finished vehicles. The remainder of the field unable to finish will be counted as finishers as per their placings recorded on the lap preceding the stoppage, excluding any

competitor causing the stoppage unless that competitor causing the stoppage has already crossed the start-finish line and received the chequered flag.

- (d) Once the chequered flag has been displayed for one or more competitors, and the red lights are subsequently shown, the race cannot be restarted - the race is finished.
- (e) A competitor must cross the finish-line and receive the chequered flag before any points are allocated in any race.

#### **R10-5-14 Dead Heats**

- (a) In the case of a dead heat, the entrants tying for a place shall divide amongst themselves any prize or prizes attributed to their placing, provided that upon the request of all entrants tying for a place.
- (b) The Referee and the Steward of the meeting may authorise a fresh start and may with the consent of the said entrants, impose modified conditions for the re-run. This does not apply to SNZ. National Championships.

#### **R10-5-15 Avoidance of Delay**

- (a) So that races may be run off with the least amount of delay after a stoppage, or after running on caution, drivers must act on the instructions of the Referee or Official in charge, and follow the rules without question or delay.
- (b) If a competitor is excluded from a race prior to its start, in a series of heats, or during a red light stoppage, he may continue to race under protest if there is an element of doubt about his exclusion, and this is agreed to by the Steward and Referee. The decision to exclude or not exclude that Competitor will be made immediately after the race in question.
- (c) If necessary, a special protest committee can be set up to hear any protest after the running of the race. Any protests must be lodged in accordance with SNZ rules on the lodgement of protests.

#### **R10-5-16 Amendment of Rules**

- (a) Subject to local conditions, the Rules in this Chapter may be amended in part by the unanimous decisions of the Stipendiary Steward if in attendance, or the Steward of the Meeting, Clerk of Course, and a representative of the class of competitor competing, bearing in mind the following three factors - safety of Competitors, safety of Spectators, and the better promotion of the events.
- (b) These amendments will only be applicable for the meeting at which they are made, and must be displayed on the track notice board.

## SECTION T11: SUPER SALOON, SALOON AND MODIFIED SPECIFICATIONS AND RACING RULES



2009/10 New Zealand Super Saloon Champion – Brent Emerson

### **T11-1 SUPER SALOON CAR SPECIFICATIONS**

- (a) Car to be as original and only modifications specifically mentioned in this section are approved.
- (b) In vehicles that require OEM parts, their components must retain their original identification marks.

#### **T11-1-1 Eligibility**

- (a) To be eligible for competition the vehicle must have been manufactured in the last twenty (20) years except where earlier models are identical to those produced in that period. (Any promoter has the right to upgrade the year and make or model to allow cars over 20 years already competing and which are competitive).
- (b) For a car to be classified, a minimum of 200 must be produced by the manufacturer. The responsibility lies with the competitor for proof.
- (c) Any production saloon or sports car complying with rule T11-1-1(b) and manufactured with seating for at least two occupants are eligible. Convertibles are not allowed.
- (d) The use of titanium and carbon fibre materials except on motors and body panels is prohibited.
- (e) V8 engines over 4.6 litre to be no more than 2 valves per cylinder.
- (f) Late model or wedge style bodies are also permitted.

#### **T11-1-2 Engine**

Any engine modifications allowed.

- (a) Any engine that complies with these regulations may be fitted into any vehicle, provided that the vehicle being used has a minimum wheelbase of 95 inches, and is rear wheel drive only.
- (b) Cylinder heads to retain OEM valve stem angles angle in relation to cylinder block face:

Approved OEM Cylinder Head Angles are:

- (i) Chev small block heads: 23 degrees plus or minus 1 degree

- (ii) Ford Cleveland heads: 9.3 degrees plus or minus 1 degree
- (iii) Ford Windsor small block heads: 21 degrees plus or minus 1 degree.
- (iv) Chrysler small block heads: 18 degrees plus or minus 1 degree.
- (c) Maximum engine capacity 434 cu in.  
In the case of supercharging or turbocharging of any engine, the nominal engine cubic capacity will be multiplied by 1.7. The car will be treated in all respects as if its cylinder capacity thus increased were its real capacity. This shall particularly be the case for calculating vehicle minimum weights and maximum engine size.
- (d) A current SNZ supplied Engine Declaration of engine capacity must be produced on demand. (Does not apply for full-bodied production saloons).
- (e)
  - (i) Front mounted engine to be fitted with leading spark plug as No 1 in line with or forward of axle centre line as drawn between stub axle centres.
  - (ii) Rear mounted and mid mounted engine to be fitted with a spark plug behind the rear axle centre line.
  - (iii) East west mounted engine (front or rear mounted) must remain in the original position as measured laterally within the body with a 25mm tolerance.
  - (iv) North south mounted engine must be mounted centrally on the longitudinal axis of the body with a 25mm tolerance, no lateral offset permitted.
- (f) No aluminium blocks over 4.6 litre allowed.
- (g) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section G11-3 Technical Exclusions.

#### **T11-1-3 Exhaust**

- (a) Exhaust must extend not less than 450mm past bulkhead and underneath car, or may pass through cockpit towards the rear, and be suitably covered by 1.0mm steel or 1.2mm alloy.
- (b) If exhaust is to be fitted through body panels, maximum height from top of pipe to ground level, to be 300mm and exhaust to angle towards rear. Minimum angle 30 degrees and finish at body line.

#### **T11-1-4 Fuel System**

- (a) Two return springs must be fitted to the induction throttle shaft anchored at separate mounting points.
- (b) The fuel system may be modified, but must comply with the following:

#### **(c) FUEL & FUEL TANKS**

##### **Fuels**

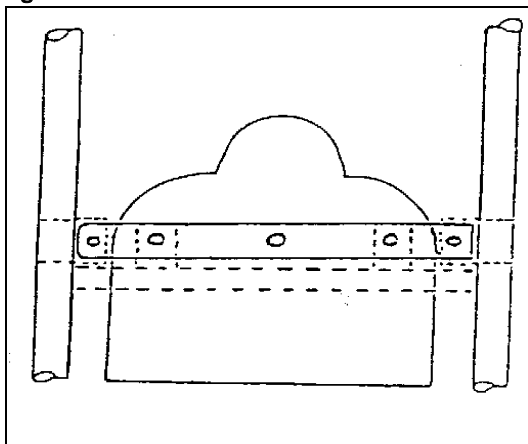
- (i) Petrol is restricted to commercially available products as supplied by and defined in the New Zealand Oil Companies Petroleum Products Specifications and Regulations 2003. (See SNZ website [www.speedway.co.nz](http://www.speedway.co.nz);
- (ii) Methanol fuel, with the same specifications as that supplied by recognised NZ Oil companies, is allowed, regardless of source. Refer E4-2 for fuel specifications.
- (iii) Avgas 100 will comply with ASTM D910 and DEF STAN 91-90 (DERD 2485) specifications [www.speedway.co.nz](http://www.speedway.co.nz);
- (d) Fuels are permitted to contain commercially available lubricants as submitted to SNZ for identification and approval.
- (e) Fuel blending is not permitted. The addition of Toluene to fuels is not permitted. The addition of material to fuel or intake air to increase available oxygen is strictly prohibited. Such materials

- include oxygen, water, nitrous oxide, nitro methane, nitro propane, propylene oxide and nitropane etc.
- (f) All fuel is subject to testing at any time, if fuel is found to deviate from the approved fuel specification it will be considered illegal.
  - (g) The use of fuel outside of specifications as described in E4-2 or blended fuel, will be declared an illegal fuel, Refer Section G11-3 Technical Exclusions.
  - (h) **Approved Fuels:**  
Methanol, Racing Fuel #5, Avgas 100, Petrol
  - (i) **Fuel Descriptions:**
    - (i) Methanol/Racing Fuel #5: .7956 to .7988 @ 15 degrees 106 Motor Octane
    - (ii) Petrol/PULP: .7347 to .7695 @ 15 degrees 96 Motor Octane
    - (iii) Avgas (Racegas):- no blending of fuels allowed: .6695 to .6985 @ 15 degrees 100 Motor Octane
  - (j) **Fuel Tanks:**
    - (i) All vehicles will be fitted with one fuel tank, the tank must be fitted with an SNZ approved bayonet, screw type, or flush mount fuel cap; no radiator type caps are permitted.
    - (ii) All fuel tanks must be securely mounted.
    - (iii) The fuel tank must have welded seams and fittings and be constructed to a professional standard. Soldered tanks and fittings are not permitted.
    - (iv) The fuel tank must be located behind the engine firewall.
    - (v) Pressurized fuel tanks are not permitted.
    - (vi) All 4-wheel vehicles to have a suitable breathing system so that fuel will not escape during a roll over. Super Saloon must be further protected with a fuel air vent pipe of steel, copper or braided flexible line wrapped horizontally around the tank and extending through the vehicle to a distance of not less than 50mm and not more than 200mm.
    - (vii) Fuel vent pipe must avoid inboard disc braking systems and be at least 600mm away from exhaust pipes.
    - (viii) The addition of safety foam baffling to fuel tanks is highly recommended. NOTE: the tank will need to be filled with at least 80% foam to be effective.
    - (ix) Fuel tanks must be constructed and supported in a manner that will ensure every possible precaution has been taken to avoid rupture or breakage. It is highly recommended that the tank has an adequate supporting structure under the lowest portion of the tank. The structure should follow the contour of the tank and be welded or bolted to the framework of the car. A suitable upper structure fitting the contour of the tank should allow the tank to be firmly attached to the framework of the car. The practice of bolting the tank to the chassis entirely by mounting plates is not recommended.
  - (k) **Fuel Tank Dimensions**  
Super Saloons: Minimum thickness 1.2mm steel or 2.0mm aluminium for up to 36 litre capacity, whereas 1.5 mm steel or 2.6mm aluminium minimum thickness is required for up to 80 litre maximum capacity.
  - (l) **Fuel Tank Location**  
The fuel tank confined in the boot or rear compartment and behind the rear firewall
  - (m) **Fuel Cells**
    - (i) Semi rigid crosslink polymer type fuel tanks, also known as fuel cells, are permitted in Super Saloons.



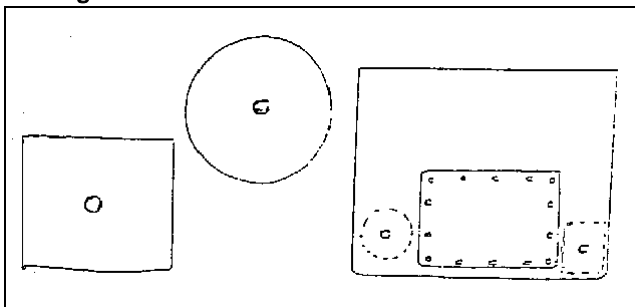
- (ii) Super Saloons, fitted with fuel cells must be protected on all sides and the bottom by a 3mm minimum steel plate fuel-can, the use of a collapsible fuel bladder is optional.
  - (iii) It is highly recommended that fuel cell inserts or bladders be replaced every 5 years.
- (n) **Fuel Cell Mountings**
- (i) Fuel cells must be constructed and supported in a manner that will ensure every possible precaution has been taken to avoid rupture and breakage. There must be no bolt heads inside the fuel-can that can rupture the fuel cell.
  - (ii) Fuel cells must not be mounted to the chassis utilizing any portion of the access plates or the nut plate bonded into the fuel bladder if fitted.
  - (iii) The fuel cell mounting bar can extend outside the width of the tank and attach to lugs on the rollcage verticals or alternatively, only be the width of the tank and mount on lugs attached to a tube running between the roll cage verticals on the outer two of the three bolts sandwiching the cell wall. All other fuel cells must be mounted in two 50mm x 3mm steel straps wrapped around the cell.

**Figure 1:**



- (o) At the bottom of the cell on each side a washer or plate 5mm (3/16") inside the cell minimum of 65mm (2.5") diameter with a minimum of one 8mm (5/16") bolt. (see Fig 2)

**Figure 2:**



- (p) **Fuel Taps**
  - (i) The fuel line from the tank must be fitted with a shut off tap which must be in reach of the competitor while in the normal seated and restrained position and in reach of a person outside the car.
  - (ii) All fuel taps must be clearly marked 'off' and 'on'.
  - (iii) Fuel filter bowls must be of metal construction.
- (q) **Fuel Lines**
  - (i) Fuel lines must be of steel, copper, aluminium or of flexible construction.
  - (ii) Fuel lines, where flexible, must be of an approved flexible type, securely clamped at joints, wire clamps are not permitted.
  - (iii) Plastic, reinforced plastic, nylon, or reinforced nylon fuel line is not permitted.
  - (iv) Armoured flexible neoprene plastic is permitted where fitted as a standard OEM part.
  - (v) Approved 'push-lock' fittings and hoses are permitted. (hose identification # R6)
  - (vi) Fuel lines and return lines must be secured to the chassis at the fuel tap and at intervals of not more than 300mm.
- (r) Grommets are to be fitted where fuel lines pass through bulkheads etc to prevent chafing – Super Saloons.

#### **T11-1-5 Electrical System**

- (a) The battery must be securely mounted inside a steel box, 1.2mm minimum or aluminium box 2.0mm minimum. Such boxes to be fitted with a secure lid and suitably insulated.
- (b) Battery cut-out switch and engine cut-out switch must be placed in a prominent position at least 300mm from fuel tap and within easy reach of driver and crew. The switch(es) must be clearly marked with on and off positions.
- (c) All vehicles must be able to be self started at all times without outside assistance i.e. jumper leads.
- (d) Only blue, white, or green instrument warning lights allowed.

#### **T11-1-6 Radiator**

- (a) Radiator and oil cooler positions may be altered, but must not change the body appearance, and must be below window level
- (b) All flexible hoses, joints and header must be shielded from the driver.
- (c) Radiator overflow must be below floor level.
- (d) Radiator air scoops are permitted within the body line, maximum height 200mm opening and not exceeding the width of the radiator.
- (e) There is to be a deflection shield between the radiator cap and the driver.

#### **T11-1-7 Transmission**

- (a) Any type of gear box may be used but must have at least one forward, and one reverse gear.
- (b) Gearbox position may be altered, but must not change appearance of car.
- (c) Any clutch, flywheel or transmission, mid mounted beside driver to be covered on drivers side with an approved safety blanket or 3.0mm plate.
  - (i) Any flywheel clutch or gearbox mounted on engine must have a bell housing or 3mm steel cover to adequately cover and contain ring gear, flywheel/clutch
- (d) Any type of rear axle assembly is permitted, limited slip and locked differential is permitted.

All vehicles to be 2 wheel drive only.

- (e) A driveshaft-retaining strap must be fitted so as to fully enclose the front end of driveshaft. The driveshaft-retaining strap must also be fitted to adequately protect driver's compartment.
- (f) Cars with midmounted flywheel and/or gearbox assemblies to have retaining straps fitted to each end of the input driveshaft.
- (g) Any type of front and rear wheel hub is permitted.

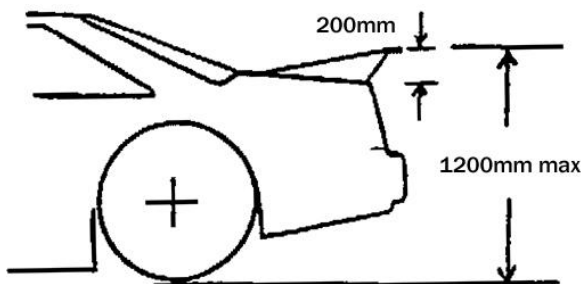
#### **T11-1-8 Suspension**

- (a) Any type of suspension may be used, and any type of steering system.
- (b) Active four wheel steering through a steering box is not permitted.
- (c) Any car fitted with coil springs must have the springs securely clamped or chained in position.
- (d) Wheel base must not be altered.  
**Exception:** All cars with an original wheel base of more than 102" may reduce the wheel base to 102", provided the original proportions of the original body measurements are maintained.  
**Note:** The existing 2" tolerance is permitted on the finished wheelbase.
- (e) Track may be altered.
- (f) Any repair to steering or suspension components that requires heating or welding during a race meeting is to be inspected by the track vehicle checker before the car races again.

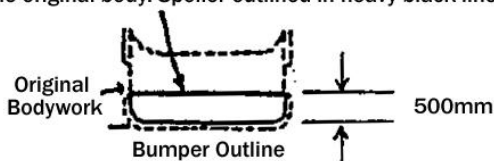
#### **T11-1-9 Body**

- (a) The Body must resemble its basic original appearance and be readily identifiable as the make and model of car depicted.
- (b) Where no model measurements are registered by SNZ, the onus is on the competitor applying to race the particular model, to supply suitable written proof of the original body measurements.
- (c) All model measurements must be registered before any new model of vehicle can be raced.
- (d) Guards may be flared 75mm from basic production.
- (e) Power bulge and air scoops allowed in bonnet, but opening must be to the front only.
- (f) Wheel-wells, wheel-openings, inner guards and chassis rails may be cut out or modified for ease of fitting larger tyres.
- (g) Body panels must retain their original profile and shape and may be made of either steel, aluminium, fibreglass or flexiglass to professional standards. Metal panels 1.2mm maximum thickness.
- (h) **Driver's Floor:** A 1.2mm steel or 2.0mm alloy floor must be fitted on the driver's side reaching from the front bulkhead lower cross member (T11-1-12h) back to (the new) rear lower horizontal cross member (T11-1-12i) and inboard from the lower driver's side pipe (T11-1-12k) to sufficiently cover below driver's seat and feet. All other interior panelling and front firewall a minimum of 1.00mm steel or 1.2mm alloy.
- (i) Alloy or panel steel partition between driver and boot must be fitted accurately. All panelling in and around driver's compartment to be accurately fitted to prevent fluids and fire from reaching driver.
- (j) All glass, headlights, upholstery and potentially flammable material must be removed. Driver's seat upholstery permitted.
- (k) Side window openings behind driver's seat may be covered with flexible transparent sheet to original window contour.
- (l) All chrome strips from car to be removed.
- (m) Bonnets, boots, and hatches to be securely fastened with the bonnet being fastened with quick release pins.

- (n) Protective mesh screens must be fitted to cover opening immediately in front of driver. Mesh to be 665 HRC or stronger.
- (o) Grilles to be original, or replica or wire mesh, NOT STEEL.
- (p) If car does not have a suitable bumper bar, then practical chain type or lifting hook devices must be fitted to front and rear, positioned under, over, or behind bumpers, no wider than 160mm and no deeper than 75mm.
- (q) A front spoiler (air dam) which may be constructed of plastic or similar material will be allowed and can have brake cooling ducts incorporated.
  - (i) The flat vertical face of the spoiler must not extend out further than the profile of the bumper.
  - (ii) Spoilers are allowed forms of splitters and these must not protrude out more than 50mm from the profile of the bumper. The lowest part of the spoiler must be at least 100mm above ground level.
- (r) A rear spoiler may be added.
  - (i) Spoiler, and spoiler end plates, to be a maximum 150mm high, and maximum 500mm long, front to rear.
  - (ii) The spoiler to be no wider than the maximum width of the bodywork to which it is attached.
  - (iii) Spoilers on hatchbacks must originate from below the base of the rear window.
  - (iv) Spoiler, and end plates, must finish within rear of car, and to be measured as per drawings.
  - (v) Maximum height of spoiler, or rear of car to be 1200mm from the ground.
  - (vi) An OEM spoiler, manufactured of fibreglass, aluminium or plastic, maximum height 200mm, which normally has two mountings is allowed, these have air going under or over the spoiler. The spoiler is to come within the existing rules on height, length and width.



Spoiler height to be measured vertically from attached join of the original body. Spoiler outlined in heavy black line.



- (s) The position of the front bumper is measured from the front axle line forward to the manufacturers specifications. The measurement to be supplied by SNZ.
- (t) A total tolerance of 50mm to be allowed on any measurement entered in vehicle log book specifications, i.e. Overall length, overall width, wheelbase, and front overhang.

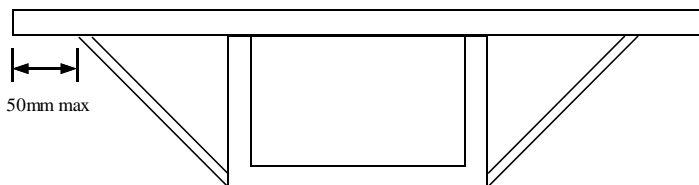
#### **T11-1-10 Chassis**

Space frames and/or rail construction of steel.

- (a) The chassis comprises of: all of the steel including chassis, bumpers and the roll cage. Space frames and/or rail constructions are to be of steel. No Chrome Moly or exotic alloys permitted above 450MPa yield.
- (b) Race vehicle minimum weight (including driver) must comply at any time. Race vehicle minimum weight for normally aspirated 6 & 8 cylinders will be calculated as per engine cubic capacity using SNZ Saloon/Super Saloon '96 weight tables.
- (c) Race minimum weight does not apply to full body production saloons.
- (d) If ballast is to be used, ballast is to be securely bolted to the chassis inside wheel base area or fully welded to chassis.

#### **T11-1-11 Bumpers**

- (a) Bumper ends must be capped and must be manufactured to an approved standard.
- (b) Front bumpers to be mounted by a maximum of (4) four points
- (c) Rear bumper reinforcing maximum of one 32 NB x 3.2mm max wall pipe [42.4 OD] or 40 x 3.0 RHS allowed to extend to wheel openings.
- (d) Rear bumper reinforcing, of 25 x 25 x 2.6mm minimum size pipe or RHS, must be mounted at 4 points, outer bumper reinforcing mounting points to be within 50mm of outside edge of bumper. As per diagram viewed from above rear bumper.



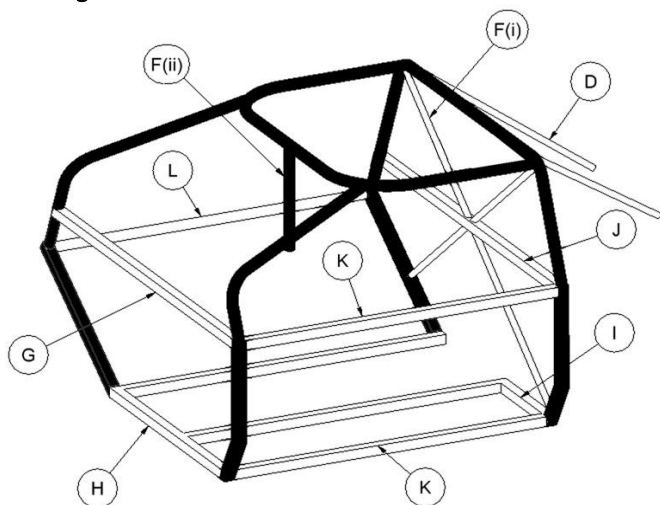
- (e) One 25mm OD pipe or RHS allowed above bumper reinforcing. Maximum 150mm high, front and rear only, and must not return around corner or down sides of car. Vertical bracing only with minimum 50mm radius on ends, a maximum of 4 mounting points.
- (f) Vehicle checker may drill a 6mm inspection hole in bumper or reinforcing to measure same.

#### **T11-1-12 Roll Cage**

- (a) Main body roll cage (as shaded in diagram on next page) to be constructed of one of the following types of steel:
  - (i) Medium steam pipe, minimum of 32mm nominal bore x 3.2mm wall
  - (ii) RHS, minimum of 40mm x 3mm
  - (iii) Seamless tube, minimum of 38mm OD x 3mm.
  - (iv) 38mm x 2.6mm Southward rollcage tube
- (b) Roll cage to follow interior contour of car, and to enclose driver's floor and be full body width.

- (c) Roll cage either welded to chassis or where attached to floor. A plate minimum size of .023m<sup>2</sup> (24 sq ins) must be welded to roll cage and bolted to floor.
- (d) **Roll Cage Types:** see block illustrations.
  - (i) Must have a minimum of two sideways stays in car suitably locked together.
  - (ii) A brace must be fitted from top rear of roll cage to floor or chassis behind rear axle, on both sides (Diagram A, next page) or three sideways stays in car suitably locked together.
  - (iii) Minimum of 50mm clearance between driver helmet to roof plate and all bars when in normal seated position.
- (e) **Front wheel drive cars only:** See block illustrations.
  - (i) Must have a minimum of two sideways stays in car suitably locked together.
  - (ii) An upper brace must be fitted from top rear of roll cage to floor or chassis behind rear axle or fuel tank (whichever is the most rearward) on both sides.
  - (iii) When no floor exists the chassis must consist of a lower brace which must be fitted from lower rear of roll cage to connect with upper brace (2) behind rear axle or fuel tank, on both sides.
  - (iv) Where no floor exists braces (2) and (3) must be further connected to each other behind rear axle or fuel tank (whichever is the most rearward).
- (f)
  - (i) A diagonal brace 25mm OD must go from the roll cage behind the drivers head, to the roll cage on the opposite side of floor. All saloon cars must have crossed diagonals.
  - (ii) If roll cage pillars have any angles more than 45 degrees from the vertical, then a centre brace, of the same material as used in the shaded roll cage construction, is to be fitted vertically in centre of front windscreen opening and suitably braced to a chassis member.
  - (iii) In vehicles where the front screen pillars are over 45 degrees and centre brace cannot be suitably braced as above, this may be replaced with 2 (one each side) 1/4 light uprights. Refer to T11-1-12(m) for pipe specifications.
- (g) A horizontal cross member travelling across bulkhead and attached to the roll cage on both sides, to be no less than 380mm between said bar and floor or bottom chassis or frame.
- (h) A horizontal cross member travelling across bulkhead and attached to the roll cage on both sides at floor or bottom chassis or frame level forward of drivers feet.
- (i) A horizontal cross member travelling across behind and below the driver's seat and attached to main roll cage frame at floor level, cross member to also attach to bottom chassis or frame level.
- (j) A horizontal cross member travelling behind seat and attached to roll cage on both sides, to be no less than 380mm between said bar, bottom chassis or frame.
- (k) Two pipes on driver's side 450mm apart to protect driver. Lower pipe (k) to be below hips and feet.  
NOTE: Lower pipe (pipe k) to be below hips and feet as viewed from the side of the car, not as viewed from above the seat.
- (l) One pipe to be 380mm minimum height from floor or bottom chassis or frame on passengers side, plus a brace (#9 in diagram) between (g) and (h). Space frame chassis need not have the #9 bar.

**Diagram A**



- (m) With the exception of the vertical brace as in (f)(ii) above, all pipes, and cross members, not shaded in the diagram must be a minimum of either:
  - (i) 25mm x 3.0mm RHS, or
  - (ii) 25mm x 3.0mm OD pipe, or
  - (iii) 38mm x 2.0mm OD pipe, or
  - (iv) 40mm x 2.0mm RHS.
- (n) The vehicle checker has the right to drill 6mm max. inspection holes in any rollcage to measure thickness and ensure compliance with the regulations.
- (o) **Roll Cage Plating:** A steel plate, 450mm minimum height by 3.0mm minimum thickness, to be welded continuously on all sides to the driver's side of the roll cage, extending from the driver's feet to behind the driver's seat and reaching from the upper driver's side pipe to the lower side pipe (pipe k) below hips and feet.
- (p) A 300mm square by 3.0mm steel plate above driver's head to be welded continuously on four sides to adequately protect driver's head.

**T11-1-13 Wheels:** Also refer section T11-7

- (a) A new light weight 3 piece rim of approved steel construction with 8mm steel centre, bolted no more than 50mm apart around the circumference of the rim with 6mm cap bolts. Where it attaches to the rim to be no less than 2.6mm. Centre to be bolted from the rear.
- (b) Wheels must be reinforced with 8mm steel plate as in Section T11-7. If original centres retained they must be reinforced with 6mm steel plate to outer rim.
- (c) Wheels can be widened as in Section T11-7
- (d) Magnesium or alloy wheels not allowed.
- (e) Alloy or Plastic exterior beadlocking rings are permitted.

**T11-1-14 Tyres**

- (a) Road or racing tyres only.
- (b) No wiresided or studded tyres, no chunky tyre treads, no rally grip tyres.

- (c) Grooving of tyres allowed.
- (d) Tyres may only extend 75mm outside guard flaring or 150mm outside normal body line.

**T11-1-15 Brakes**

- (a) Brakes must operate on all four wheels. One rear brake only required when equipped with locked diff or single axle type rear ends.
- (b) Any brake modification to improve them allowed.
- (c) No braking system to be fitted to driveshaft, pinion flange, or gearbox flange.

**T11-1-16 Seat**

- (a) Must be steel backed bucket type with sufficient lateral support to restrain driver. Minimum thickness of steel backing to be 1.2mm (18SWG).
- (b) An aluminium seat of 3mm thickness built to professional standards with no steel backing is permissible or an aluminium seat of 2mm minimum thickness built to professional standards, with back and perimeter bracing (Kirky type or similar seat) is permissible
- (c) Must be securely welded or bolted to the floor and roll cage or chassis.

**T11-1-17 Seatbelts:** Refer Section T11-5

**T11-1-18 Headrest**

- (a) All vehicles must be fitted with a headrest, or a high backed seat built to professional standards incorporating a headrest.
- (b) Must be constructed of steel with the surface padded and fitted to be effective.
- (c) Minimum size 150mm x 280mm x 3mm.

**T11-1-19 Mirror**

A steel backed mirror of not more than .022m<sup>2</sup> (35 sq in) in surface area may be fitted in the car with a minimum distance of 450mm from the driver's head.

**T11-1-20 Steering Wheel**

Complete wood rim or wirespoke steering wheels are not allowed.

**T11-1-21 Fire Extinguishers**

Fire extinguishers suitable for use on petrol fires may be fitted. If carried, the extinguisher must be fitted within easy reach of the driver.

**T11-1-22 Racing Numbers**

- (a) Numbers to be on both sides between front and rear wheel arches,
- (b) All racing numbers compulsory on roof to be read from the right hand side of the vehicle.
- (c) Numerals shall be a minimum height of 300mm by 50mm wide, with a minimum 13mm border. If used, the background border must be a minimum of 20mm.

**T11-1-23 IMPOUNDING** refer to **E1-2** and **E1-6**.





2009/10 New Zealand Saloon Champion – Steve Williams

## **T11-2 SALOON SPECIFICATIONS AND RACING RULES**

**INTENT:** The following Saloon specifications are written in accordance with the constitution to provide a low cost saloon racing class with rules to allow all cars to be equally competitive without unfair advantage.

### **T11-2-1 SALOON CAR SPECIFICATIONS**

- (a) Car to resemble an original production vehicle as per the following restrictive modifications
- (b) Only modifications specifically mentioned in this section are approved. i.e. if not written in these rules it can't be done.
- (c) Parts that are required to be OEM must retain their original identification marks

### **T11-2-2 Eligibility**

- (a) To be eligible, as a saloon, the vehicle referred to in T11-2-1 must have been manufactured within the last twenty (20) years.
- (b) Any competitor has the right to apply to the Directors for approval to race a make/model manufactured during or before the last 20 years.
- (c) For a car to be classified as a saloon, a minimum of 200 must be produced by the manufacturer referred to in T11-2-1 (a). The responsibility lies with the competitor for proof.
- (d) Any production vehicle complying with rules T11-2-1 (a) & T11-2-2 (b) must have been manufactured with seating for at least two occupants to be eligible. Convertibles are not allowed.
- (e) V8 engines over 3015cc (184cu in) to be no more than 2 valves per cylinder.
- (f) The use of Carbon Fibre materials is prohibited
- (g) Engines must be derived from original manufacture and the number of cylinders that were originally fitted in that make and model.

### **T11-2-3 Engine**

- (a) OEM engines may be modified for performance and reliability except where prohibited in these rules.
- (b) The engine block must be an OEM production car block.
  - (i) An alternative GM Block # 10066034 made in Mexico is permitted.

- (ii) Dart SHP type cylinder blocks using the following part numbers are also permitted:-  
**Chevrolet type blocks**  
 4" bore, part number 31161111,  
 4.125" bore, part number 31161211  
**Ford type blocks**  
 302 - 4" bore, part number 31364175,  
 302 - 4.125" bore, part number 31364275,  
 351 - 4" bore, part number 31355135,  
 351 - 4.125" bore, part number 31355235
- (c) Cast iron engines - maximum 5916cc (361 Cu In) - Only factory type heads with no external modifications permitted. [Brodex - Bowtie - Dart type heads, Chev 'Angle plug' heads are not permitted.]
- (d) All cylinder head manifold port centrelines must remain OEM at manifold face. No welding or adding material to ports or combustion chambers. Spark plug location to remain as factory supplied. Hand porting only. Cracks may be repaired/welded to original profile.
- (e) All cylinder head valve stem angles must remain OEM.
- (f) The following cast Iron Cylinder Heads are approved;  
**Chev:-**  
**World Products #4266B and #4267B**  
 with raised casting letters 'SR',  
**RHS #12400**  
 (76cc Chamber, 170cc Runner, 1.940/1.500 Valves);  
**RHS #12401**  
 (76cc Chamber, 170cc Runner, 2.020/1.600 Valves);  
**RHS #12402**  
 (67cc Chamber, 170cc Runner, 1.940/1.500 Valves);  
**RHS #12403**  
 (67cc Chamber, 170cc Runner, 2.020/1.600 Valves)  
**Ford:-**  
**World Products #5303B** with raised letters "WINDSOR JUNIOR".
- (g) Alloy blocks and or heads permitted as on factory standard engine - maximum 4592cc (280 Cu In)  
 NB: All cylinder head identification part numbers under rocker covers must be retained.
- (h) Roller Rockers are not permitted.
- (i) Rocker Configuration is to be as per the original engine. i.e. if shaft mounted must remain shaft mounted, if stud mounted must remain stud mounted.
- (j) Engines originally fitted with OEM Needle or roller and/or roller tip rockers may retain the OEM needle/roller set up, maximum 4212cc (257 Cu In).
- (k) Four valve per cylinder engines are permitted maximum 3015cc (184 Cu In)
- (l) OEM EFI engines are permitted, maximum 4212cc (257 Cu In)
- (m) Engines in 'i', 'j' and 'k' must be OEM production line type engines only. No specialist type engine (e.g.: Cosworth, Arias) are permitted.
- (n) Engine must be measured and sealed by an SNZ representative.
- (o) Carburetted, peripheral port Rotary engines are permitted to a maximum size of two (2) rotors.
- (p) Water pump must be OEM and mounted at front of engine. Water pump must be OEM profile/style, mounted in original position and functioning.
- (q) Oil Coolers are permitted
- (r) Dry sump systems are not permitted
- (s) External oil pumps in other than OEM form are not permitted.

- (t) Remote Oil filters are permitted
- (u) Oil accumulators are permitted
  - (i) Front mounted engine to be fitted with leading spark plug as No 1 in line with or forward of axle centre line as drawn between stub axle centres.
  - (ii) Rear mounted and mid mounted engine to be fitted with a spark plug behind the rear axle centre line.
  - (iii) East west mounted engine (front or rear mounted) must remain in the original position as measured laterally within the body with a 25mm tolerance.
  - (iv) North south mounted engine must be mounted centrally on the longitudinal axis of the body with a 25mm tolerance, no lateral offset permitted.
  - (v) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section G11-3.
- Technical Exclusions
- (v) Any new or radical design engines may be subject to performance assessment and approval by the Saloon Technical Committee even though the particular engine may comply with the rules. Any alterations or restrictions agreed upon by the committee will be recommended to the Directors for approval, whereupon the vehicle will not be permitted to take part in competition until all changes have been carried out.
- (w) The use of titanium in engines is restricted to Valve Spring Retainers.

#### **T11-2-4 Exhaust**

- (a) Exhaust must extend not less than 450mm past bulkhead and underneath car, or may pass through cockpit towards the rear, and be suitably covered by 1.0mm steel or 1.2mm alloy.
- (b) If exhaust is to be fitted through body panels, maximum height from top of pipe to ground level, to be 300mm and exhaust to angle towards rear. Minimum angle 30 degrees and finish at body line.

#### **T11-2-5 Fuel System**

- (a) Two return springs must be fitted to the induction throttle shaft anchored at separate mounting points.
- (b) 6 and 8 cylinder engines are permitted with one carburettor only.
- (c) Carburettor may be of a four barrel configuration, up to 600cfm maximum size all with vacuum secondaries. Holley #1850 or Holley #8007 carburettor; centre hung or side hung floats permitted.  
Venturi boosters, throttle body, throttle plates and throttle shafts will be subject to minimum specifications as supplied by the saloon technical committee. Minimum specifications will be available on the SNZ website.
- (d) Carburettor body and venturi boosters, throttle body, throttle plates and throttle shafts to remain as OEM specifications. Choke butterfly and shaft is to be retained. These items must remain unchanged in any way. [i.e. no modifications permitted]  
CLARIFICATION: The addition of or fitting of a Holley carburettor with a metering block on the secondary side of the carburettor between body and bowl is outside is not permitted.
- (e) Multiple carburettors permitted on 4 cylinder engines up to 2500cc (152 Cu In) only.
- (f) Forced induction [i.e. turbo/superchargers etc] not permitted.
- (g) Electric Fuel pumps are permitted with a pressure activated cutoff switch.

#### **T11-2-6 Fuel**

Only standard pump petrol – max 100 octane, or Avgas is permitted.

Fuels: Refer E4-1 and E4-2 Approved Fuels.

**T11-2-7 Electronic Fuel Injection Regulations**

- (a) The driver's foot must manually operate throttle control; no drive by wire throttle control is permitted.
- (b) EFI fuel pumps must only be operative when engine is running and when engine in start up mode.
- (c) Any EFI device that controls any function of the vehicle other than fuel and ignition is prohibited.
- (d) Any device that varies the geometry (length or cross section) of either intake ports, induction system or exhaust system is prohibited.
- (e) Six (6) plate throttle stacks on 6 cylinder engines and eight (8) plate throttle stacks on 8 cylinder engines are prohibited.
- (f) Any device to reduce the temperature of the fuel is prohibited.
- (g) Air filters and pipes are free to be changed.
- (h) Injector part numbers and parts are free. The OEM inlet manifold must remain unmodified other than the fitment of aftermarket air cleaner.
- (i) The ECU (electronic control unit) must be in its OEM casing.
- (j) Vehicles permitted to use OEM EFI systems must mount the ECU in an obvious location clearly visible from outside the vehicle (so that vehicle checkers may verify part numbers).

**T11-2-8 Fuel Tanks: Refer Rule E4-3**

**T11-2-9 Fuel Tank Dimensions: Refer Rule E4-4**

**T11-2-10 Fuel Tank Location: Refer Rule E4-5**

**T11-2-11 Fuel Cells: Refer Rule E4-6**

**T11-2-12 Fuel Cell Mountings: Refer to Rule E4-7**

**T11-2-13 Fuel Taps: Refer Rule E4-8**

**T11-2-14 Fuel Lines: Refer rule E4-9**

**T11-2-15 Electrical System**

- (a) The battery must be securely mounted inside a steel box, 1.2mm minimum or aluminium box 2.0mm minimum. Such boxes to be fitted with a secure lid and suitably insulated.
- (b) Battery cut-out switch and engine cut-out switch must be placed in a prominent position at least 300mm from fuel tap and within easy reach of driver and crew. The switch(es) must be clearly marked with on and off positions.
- (c) All vehicles must be able to be self started at all times without outside assistance i.e. jumper leads.
- (d) Only blue, white, or green instrument warning lights allowed.
- (e) No multiple spark discharge type units or magnetos permitted.
- (f) Twin point distributors allowed [i.e.: Mallory]
- (g) Electronic ignition is permitted in OEM form only.
- (h) After market HEI type distributors permitted e.g. Procomp, Accell, Mallory etc.

**T11-2-16 Radiator**

- (a) Radiator and oil cooler positions may be altered, but must not change the body appearance, and must be below window level.
- (b) All flexible hoses, joints and header must be shielded from the driver.
- (c) Radiator overflow must be below floor level.
- (d) Radiator air scoops are permitted within the body line. Maximum of 200mm above bottom rear window sill.
- (e) No plastic radiator tanks are permitted.
- (f) Electric Fans are permitted

### **T11-2-17 Transmission**

- (a) Gearbox must be of an OEM street vehicle type. Gearboxes can be interchanged i.e. not necessarily Ford to Ford or Holden to Holden. Bert type gearboxes with an internal clutch are not permitted.
- (b) All transmissions must be mounted to the engine block with standard length bell-housings.
- (c) No mid-mounted transmissions or quick-change gearboxes permitted.
- (d) Converter-less/clutched type autos are not permitted.
- (e) All Torque converters to be full of transmission fluid and functioning.
- (f) Aluminium flywheels are not permitted.
- (g) The single clutch centre plate is free but the pressure plate must be OEM.
- (h) A 40mm inspection hole in clutch bell-housing must be available. Position of inspection hole to be in line with clutch plate or converter and in a position above the 90° and readily accessible.
- (i) A driveshaft-retaining strap of a minimum size of 25mm x 3mm steel must be fitted so as to fully enclose the front end of driveshaft. A driveshaft retaining strap of a minimum size of 25mm x 3mm steel must also be fitted to adequately protect driver's compartment.

### **T11-2-18 Differential**

- (a) Closed tube and live axle quickchange permitted
- (b) Any type of rear axle assembly is permitted, limited slip and locked differential is permitted.
- (c) All vehicles to be 2 wheel drive only.
- (d) Axle Hubs: Front and rear axle hubs are free.  
Exception: OEM Cortina front stub axles. Re-manufactured Cortina stub axles are permitted

### **T11-2-19 Suspension**

- (a) Suspension must not be able to be adjusted by the driver while in the driver's seated position. i.e. Weight Jackers.
- (b) All types of springing are permitted, e.g. torsion bars, coil springs, or OEM system.
- (c) Torsion bar/coil type is free of restrictions.
- (d) Torsion arms and stops are free, threaded coil height kits are permitted.
- (e) All shock absorbers must be steel body non-adjustable type. No remote reservoirs.
- (f) External Adjustable Shock absorbers are not permitted.
- (g) Remote Reservoir Shock absorbers are not permitted.
- (h) Suspension wishbones, stub axles are free.

**Exception:** OEM Cortina front stub axles. Re-manufactured Cortina stub axles are permitted

- (i) All wishbone joints must be of steel construction.
- (j) Steering parts are free.
- (k) Active four wheel steering through a steering box is not permitted.
- (l) Any car fitted with coil springs must have the springs securely clamped or chained in position.
- (m) Wheel base must not be altered.

**Exception:** All cars with an original wheel base of more than 102" may reduce the wheel base to 102", provided the original proportions of the original body measurements are maintained. Note: The existing 2" tolerance is permitted on the finished wheelbase.

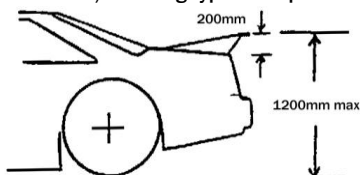
- (n) Track may be altered.

- (o) Any repair to steering or suspension components that requires heating or welding during a race meeting is to be inspected by the track vehicle checker before the car races again.

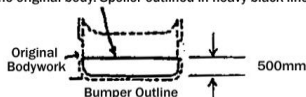
## **T11-2-20 Body**

- (a) The body must retain its original appearance, body model and measurements as specifically required in the SNZ drivers log book, which will be registered at the SNZ office, and available to competitors on request.
- (b) Where no model measurements are registered by SNZ, the onus is on the competitor applying to race the particular model, to supply suitable written proof of the original body measurements.
- (c) All model measurements must be registered before any new model of vehicle can be raced.
- (d) Guards may be flared 75mm from basic production.
- (e) Power bulge and air scoops allowed in bonnet, but opening must be to the front only.
- (f) Wheel-wells, wheel-openings, inner guards and chassis rails may be cut out or modified for ease of fitting larger tyres.
- (g) Framework of doors or inside panels may be removed at owner's discretion for panel beating purposes. Doors must be securely fastened (i.e. welded, bolted, or riveted).
- (h) Body panels must retain their original profile and shape and may be made of either steel, aluminium, fibreglass or flexiglass to professional standards. Metal panels 1.2mm maximum thickness.
- (i) Driver's Floor: A 1.2mm steel or 2.0mm alloy floor must be fitted on the driver's side reaching from the front bulkhead lower cross member (T11-2-23h) back to (the new) rear lower horizontal cross member (T11-2-23i) and inboard from the lower driver's side pipe (T11-2-23k) to sufficiently cover below driver's seat and feet. All other interior panelling and front firewall a minimum of 1.00mm steel or 1.2mm alloy.
- (j) Alloy or panel steel partition between driver and boot must be fitted accurately. All panelling in and around driver's compartment to be accurately fitted to prevent fluids and fire from reaching driver.
- (k) No glass, headlights, chrome strips is permitted.
- (l) Side window openings behind driver's seat may be covered with flexible transparent sheet to original window contour.
- (m) Bonnets, boots, and hatches to be securely fastened with the bonnet being fastened with quick release pins.
- (n) Protective mesh screens must be fitted to cover opening immediately in front of driver. Mesh to be 665 HRC or stronger.
- (o) Grills to be original, or replica or wire mesh, NOT STEEL.
- (p) If car does not have a suitable bumper bar, then practical chain type or lifting hook devices must be fitted to front and rear, positioned under, over, or behind bumpers, no wider than 160mm and no deeper than 75mm.
- (q) A front spoiler (air dam) which may be constructed of plastic material will be allowed and can have brake cooling ducts incorporated.
  - (i) The flat vertical face of the spoiler must not extend out further than the profile of the bumper.
  - (ii) Spoilers are allowed forms of splitters and these must not protrude out more than 50mm from the profile of the bumper. The lowest part of the spoiler must be at least 100mm above ground level.
- (r) A rear spoiler may be added.

- (i) Spoiler, and spoiler end plates, to be a maximum 200mm high, and maximum 500mm long, front to rear.
- (ii) The spoiler to be no wider than the maximum width of the bodywork to which it is attached.
- (iii) Spoilers on hatchbacks must originate from below the base of the rear window.
- (iv) Spoiler, and end plates, must finish within rear of car, and to be measured as per drawings.
- (v) Maximum height of spoiler, or rear of car to be 1200mm from the ground.
- (vi) OEM type rear spoiler as fitted to any production vehicle is permitted. Must comply with T11-2-20-(r) (i), (ii), (iii), (iv) and (v)
- (vii) No performance and/or racing type rear spoilers are permitted.



Spoiler height to be measured vertically from attached join of the original body. Spoiler outlined in heavy black line.



- (s) The position of the front bumper is measured from the front axle line forward to the manufacturer's specifications. The measurement to be supplied by the SNZ.
- (t) A total tolerance of 50mm to be allowed on any measurement entered in vehicle log book specifications. i.e. overall length, overall width, wheelbase, and front overhang.

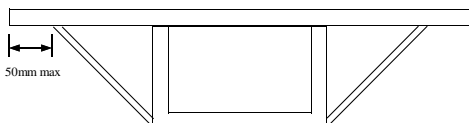
#### **T11-2-21 Chassis**

Space frames and/or rail construction of steel.

- (a) The chassis comprises of: all of the steel including chassis, bumpers and the roll cage. Space frames and/or rail constructions are to be of steel. No Chrome Moly or exotic alloys permitted above 450MPa yield.
- (b) Race vehicle minimum weight (including driver) must comply at any time. Race vehicle minimum weight for normally aspirated 4, 6 & 8 cylinders will be calculated as per engine cubic capacity using 'SNZ Saloon '96 weight tables.
- (c) Race minimum weight does not apply to full body production saloons.
- (d) If ballast is to be used, ballast is to be securely bolted to the chassis inside wheel base area or fully welded to chassis.

#### **T11-2-22 Bumpers**

- (a) Bumper ends must be capped and must be manufactured to an approved standard.
- (b) Front and Rear bumper maximum of one 32 NB x 3.2mm max wall pipe [42.4 OD] or 40 x 3.0 RHS allowed to extend to wheel openings.
- (c) Front bumpers to be mounted by a maximum of (4) four points
- (d) Rear bumper reinforcing, of 25 x 25 x 2.6mm minimum size pipe or RHS, must be mounted at 4 points, outer bumper reinforcing mounting points to be within 50mm of outside edge of bumper. As per diagram viewed from above rear bumper.

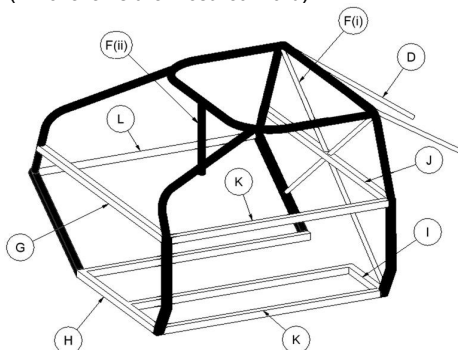


- (e) One 25mm OD pipe or RHS allowed above bumper reinforcing. Maximum 150mm high, front and rear only, and must not return around corner or down sides of car. Vertical bracing only with minimum 50mm radius on ends, a maximum of 4 mounting points. 50mm max
- (f) Vehicle checker may drill a 6mm inspection hole in bumper or reinforcing to measure same.

### **T11-2-23 Roll Cage**

- (a) Main body roll cage (as shaded in Diagram A) to be constructed of one of the following types of steel:
  - (i) Medium steam pipe, minimum of 32mm nominal bore x 3.2mm wall
  - (ii) RHS, minimum of 40mm x 3mm
  - (iii) Seamless tube, minimum of 38mm OD x 3mm.
- (b) Roll cage to follow interior contour of car, and to enclose driver's floor and be full body width.
- (c) Roll cage either welded to chassis or where attached to floor. A plate minimum size of .023m<sup>2</sup> (24 sq ins) must be welded to roll cage and bolted to floor.
- (d) Roll Cage Types: see block illustration.
  - (i) Must have a minimum of two sideways stays in car suitably locked together.
  - (ii) A brace must be fitted from top rear of roll cage to floor or chassis behind rear axle, on both sides (Diagram A) or three sideways stays in car suitably locked together.
  - (iii) Minimum of 50mm clearance between driver helmet to roof plate and all bars when in normal seated position.
- (e) Front wheel drive cars only: See block illustration.
  - (i) Must have a minimum of two sideways stays in car suitably locked together.
  - (ii) An upper brace must be fitted from top rear of roll cage to floor or chassis behind rear axle or fuel tank (which ever is the most rearward) on both sides.
  - (iii) When no floor exists the chassis must consist of a lower brace which must be fitted from lower rear of roll cage to connect with upper brace (2) behind rear axle or fuel tank, on both sides.
  - (iv) Where no floor exists braces (2) and (3) must be further connected to each other behind rear axle or fuel tank (whichever is the most rearward).

**Diagram A**





- (f) (i) A diagonal brace 25mm OD must go from the roll cage behind the drivers head, to the roll cage on the opposite side of floor. All saloon cars must have crossed diagonals.
  - a. If roll cage pillars have any angles more than 45 degrees from the vertical, then a centre brace, of the same material as used in the shaded roll cage construction, is to be fitted vertically in centre of front windscreen opening and suitably braced to a chassis member.
  - b. In vehicles where the front screen pillars are over 45 degrees and centre brace cannot be suitably braced as above, this may be replaced with 2 (one each side) 1/4 light uprights. Refer to T11-2-23(m) for pipe specifications.
- (g) A horizontal cross member travelling across bulkhead and attached to the roll cage on both sides, to be no less than 380mm between said bar and floor or bottom chassis or frame.
- (h) A horizontal cross member travelling across bulkhead and attached to the roll cage on both sides at floor or bottom chassis or frame level forward of drivers feet.
- (i) A horizontal cross member travelling across behind and below the driver's seat and attached to main roll cage frame at floor level, cross member to also attach to bottom chassis or frame level.
- (j) A horizontal cross member travelling behind seat and attached to roll cage on both sides, to be no less than 380mm between said bar, bottom chassis or frame.
- (k) Two pipes on driver's side 450mm apart to protect driver. Lower pipe (k) to be below hips and feet.  
NOTE: Lower pipe (pipe k) to be below hips and feet as viewed from the side of the car, not as viewed from above the seat.
- (l) One pipe to be 380mm minimum height from floor or bottom chassis or frame on passenger's side, plus a brace (#9 in diagram) between (g) and (h). Space frame chassis need not have the #9 bar.
- (m) With the exception of the vertical brace as in (f)(ii) above, all pipes, and cross members, not shaded in the diagram must be a minimum of either:
  - (i) 25mm x 3.0mm RHS, or
  - (ii) 25mm x 3.0mm OD pipe, or
  - (iii) 38mm x 2.0mm OD pipe, or
  - (iv) 40mm x 2.0mm RHS.
- (n) The vehicle checker has the right to drill 6mm max. Inspection holes in any roll cage to measure thickness and ensure compliance with the regulations.
- (o) Roll Cage Plating: A steel plate, 450mm minimum height by 3.0mm minimum thickness, to be welded continuously on all sides to the driver's side of the roll cage, extending from the driver's feet to behind the driver's seat and reaching from the upper driver's side pipe to the lower side pipe (pipe k) below hips and feet.
- (p) A 300mm square by 3.0mm steel plate above driver's head to be welded continuously on four sides to adequately protect driver's head.

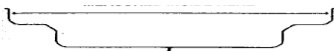
#### **T11-2-24 Wheels**

Refer Rule T14, plus

- (a) Beadlocks permitted (optional). To be of steel construction or ring of bolts only.
- (b) No aluminium/plastic wheels are permitted.

- (c) Wheels are restricted to a maximum width of 14" [inches] manufactured size, i.e. total edge to edge measurement. (See diagram below)

TO MEASURE 14 INCHES MANUFACTURED  
SIZE MEASURED INSIDE HERE:



- (d) A new light weight 3 piece rim of approved steel construction with 8mm steel centre, bolted no more than 50mm apart around the circumference of the rim with 6mm cap bolts. Where it attaches to the rim to be no less than 2.6mm. Centre to be bolted from the rear.
- (e) Wheels must be reinforced with 8mm steel plate as in Section T11-7. If original centres retained they must be reinforced with 6mm steel plate to outer rim.
- (f) Magnesium or alloy wheels not permitted.
- (g) The 'D Window' wheel centre, both 6-pin and 5 stud, as manufactured by INTERO is approved for Saloons and provided all existing offsets as described in these rules are maintained.
- (h) Two imported pressed steel wide 5 wheel centres are approved provided wheel assemblies are welded to comply with NZS 4711 class 4, and operators to comply with NZS 4711 in the appropriate position. The fluted centre is approved for left rear and front wheels only.

#### **T11-2-25 Tyres**

- (a) Road or racing tyres only.
- (b) No wiresided or studded tyres, no chunky tyre treads, no rally grip tyres.
- (c) Tyres are restricted to maximum over the side wall width of 19.5 [inches] measured at or above stub axle height.
- (d) Maximum tyre circumference of 100" (inches).
- (e) Grooving of tyres allowed.
- (f) Tyres may only extend 75mm outside guard flaring or 150mm outside normal body line.
- (g) Tyre bleed off valves are not permitted.

#### **T11-2-26 Brakes**

- (a) Brakes must operate on all four wheels. One rear brake only required when equipped with locked diff or single axle type rear ends.
- (b) Any brake modification to improve them allowed.
- (c) No braking system to be fitted to driveshaft, pinion flange, or gearbox flange.

#### **T11-2-27 Seat**

- (a) Must be steel backed bucket type with sufficient lateral support to restrain driver. Minimum thickness of steel backing to be 1.2mm (18SWG).
- (b) An aluminium seat of 3mm thickness built to professional standards with no steel backing is permissible or an aluminium seat of 2mm minimum thickness built to professional standards, with back and perimeter bracing (Kirky type or similar seat) is permissible.
- (c) Must be securely welded or bolted to the floor and roll cage or chassis.

#### **T11-2-28 Headrest**

- (a) All vehicles must be fitted with a headrest, or a high backed seat built to professional standards incorporating a headrest.
- (b) Must be constructed of steel with the surface padded and fitted to be effective.
- (c) Minimum size 150mm x 280mm x 3mm.

#### **T11-2-29 Mirrors**

Mirrors are not permitted.

#### **T11-2-30 Steering Wheel**

Complete wood rim or wire spoke steering wheels are not allowed.

**T11-2-31 Fire Extinguishers**

Fire extinguishers suitable for use on petrol fires may be fitted. If carried, the extinguisher must be fitted within easy reach of the driver.

**T11-2-32 Enforcement of Specifications**

- (a) All vehicles are subject to inspection by a vehicle checker, who will inform the Track Steward of any infringements in these specifications.
- (b) Competitors who fail to comply with the "intent" of these specifications, or deliberately and/or continuously infringe these specifications, may be penalised by the Steward and will be made to race in the Super Saloon Class as directed by the Steward.

**T11-2-33 Impounding: Refer to E1-2 and E1-6**

**T11-2-34 Protective Clothing and Safety Equipment: Refer Rule S1**

**T11-2-35 Sound: Refer Rule S3**

**T11-2-36 Electronics: Refer Rule E3**

**T11-2-37 Racing Numbers: Refer Rule T7**

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**T11-3 HELMETS**

**T11-3-1** Protective helmets of approved types must be worn by competitors in competition, during practice, during grand parades, during demonstrations and testing, and on any other occasion that the Steward requires such helmets to be worn. Competitors surname must be on his helmet and must be of a minimum size of 12mm letters to be printed on both sides of the helmet.

**T11-3-2 Polycarbonate Helmets**

Competitors using polycarbonate helmets must use letterset labels for naming helmets. Polycarbonate Helmets that have been painted are banned from use in competition.

**T11-3-3 Competition Helmet Standard**

All competitors must wear safety helmets that equal or exceed the standards listed in clauses (a) to (f) below

- (a) The following are the minimum Helmet Standards approved for all other classes of competition in New Zealand:

New Zealand                NZS 1884

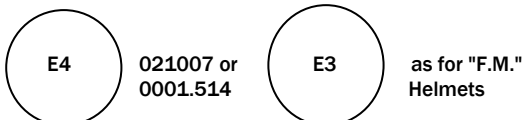
                                      NZS 5430:

(Europe):                    ECE 22 02, 03 or 04

- (b) European Standard: The Approval number should always begin with 02, 03 or 04 - which is the homologation number of the helmet.
- (c) Each helmet under this standard will have a circle with an E and then a number from 1 to 22 in that circle. The European countries each have a number as follows:

1 =	East Germany	2 =	France
3 =	Italy	4 =	Netherlands
5 =	Sweden	6 =	Belgium
7 =	Hungary	8 =	Czechoslovakia
9 =	Spain	10 =	Yugoslavia
11 =	U K	12 =	Austria
13 =	Luxembourg	14 =	Switzerland
15 =	W Germany	16 =	Norway
17 =	Finland	18 =	Denmark
19 =	Romania	20 =	Poland
21 =	Portugal	22 =	not yet allocated.

A helmet under this standard will have a label similar to this:



- (d) Label should always be sewn onto the retention system and should include the serial production number below the approval number:
- (Great Britain)      BSI 2495 INCL AMEND 5  
BSI 6658 GRADE A  
(replaces lettering on label BS2495. Label is further the same)
- (Australia)      AS 1698 Label on the inside.
- (U.S.A.)      D.O.T FMVSS - 218  
A sticker or printed lettering on the back of the helmet.
- (France)      AFNOR S - 72-305  
Label is made of green cloth and has to be sewn on to the inner harness of the helmet. The above number is the serial number, the below number is the approval number.
- (Japan)      JIS.T8133/1982 CLASS C.  
The paper label is affixed on the inside of the helmet and is blue coloured. The number is a production serial number.
- (U.S.A.)      SNELL.90 or SNELL.95
- (Sweden)      SIS 882411
- (Finland)      SF 3653
- (Denmark)      DS 2124
- (e) LASER MX 2 - DOT 218 - These helmets are approved but not if fitted with a peak not conforming to Rule S1-1-4.
- (f) Helmets manufactured with standards other than those above can only be used in competition after approval by Speedway New Zealand. This approval will be given upon receipt of a certificate from the Standards Association of New Zealand or a competent authority stating that such standard meets one of the above standards.
- (g) It is NOT SNZ's duty to provide helmet approval from other competent authorities. This up to the competitor or distributor.
- (h) Helmets not providing temple protection will not be permitted for competition use, even if carrying the mark of approval of overseas controlling bodies. In particular, helmets to B.S. 2001 or to B.S. 1869 prior to BS. 1869/62 even if approved in overseas countries WILL NOT BE APPROVED FOR COMPETITION USE IN NEW ZEALAND.
- (i) Despite the foregoing the Steward has the right to reject any helmet he considers unsafe through age and condition.

#### **T11-3-4      Helmet Peaks**

- (a) Helmet peaks if worn must be of a flexible material, i.e. something that will bend or deform, then return to the original shape.
- (b) Peaks constructed of metal or perspex will not be permitted.
- (c) Any type of peak not permanently attached to the helmet, must be held on with a strap, attached by press studs or original Manufacturers fastening system. Under no circumstances will the attaching of peaks by self-tapping screws or by nuts and bolts be permitted.

#### **T11-3-5      Care of Helmets**

- (a) Make sure your helmet is not subject to solvents or
- (b) fuel in storage or transport to and from and during meetings.
- (c) Solvents of any kind must not be used to clean your helmet - use soap and water.

- (d) Any sticker should only be placed on a helmet by using the adhesive provided on the sticker.
- (e) Do not place your helmet where it can be subject to sunlight, e.g. car windows, etc.
- (f) SNZ strongly recommends on advice from manufacturers that you do not use a helmet more than three years.
- (g) Make sure your helmet is not dropped, or subjected to abuse in any way. If this happens have it re-examined by a qualified person or replace it.

#### **T11-3-6 Goggles and Face Shields**

- (a) Goggles or face shields must be worn by all competitors.
- (b) The lenses of goggles must be made of non-splinterable material such as safety glass or flexible plastic.
- (c) Face shields must be of a flexible material, and the use of metal or rigid plastic (perspex) face shields is not permitted.

#### **T11-3-7 Dentures**

All Drivers are advised to remove dentures before racing in an event.

#### **T11-3-8 Body and Facial Piercings**

All drivers shall remove any body and facial piercings before racing.

### **T11-4 CLOTHING**

- (a) All vehicle owners, drivers and pit crew must wear suitable attire in the pits and on the track to the satisfaction of the Clerk of the Course.
- (b) Nylon Banned
- (c) The wearing of nylon jackets or overalls by any competitor, pusher or pit crew is not permitted. The competitor must also ensure he does not wear nylon underwear, shoes or socks.
- (d) Shoes or boots must be worn. Bare feet, sandals, jandals or such like will not be permitted. This also applies to pit crew.
- (e) All pit crew must wear full-length long sleeve overalls or suitable team uniform.
- (f) Two-piece leathers must be attached together, that is pants and jacket by zips or domes.

#### **T11-4-1**

- (a) All drivers to wear full length, long sleeve Proban, Nomex blend (or material possessing the same protection rating), clothing with close fitting front, cuffs and ankles and gloves.
- (b) If two-piece overalls are worn, they must be attached together, that is pants and jacket by zips or domes.
- (c) The use of an approved head restraint device and/or a neck collar is compulsory.

### **T11-5 SAFETY HARNESSES AND RESTRAINTS**

If a driver unclips his seatbelt during a competition he is deemed to have retired from the race and cannot resume racing.

#### **T11-5-1 Latch Lever Covers**

**T11-5-2** When arm restraints are worn with a restraint system that utilises a "latch lever", a protective cover installed to prevent the arm restraint from accidentally releasing the latch lever is permissible.

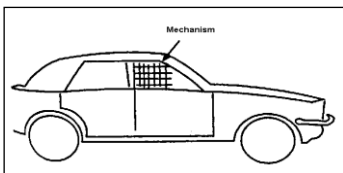
**T11-5-3** Such covers must only be fitted where entirely practical. The cover must not hinder the quick release mechanism whatsoever.

**T11-5-4** The cover, if fitted must be made from Velcro type material, if the self-attaching properties of the Velcro become worn the material must be renewed. The Velcro cover must not be able to enter the webbing adjustment metal clamp.

**T11-5-5**  
**T11-5-6**

**Window Net**

All vehicles must be fitted with a window net on driver's side or driver to wear arm restraints. (refer over page). Where safety nets are used they must be of approved "Simpson" type design with opening release mechanism to be in the top front (Refer Diagram). The window net must be up and latched while racing or practising.



**GUIDELINES**

*The following guidelines are applicable to vehicles where the competitor has chosen to use a Velcro lever latch cover and/or arm restraints. These guidelines cover the use of Velcro seat belt lever latch covers, arm restraints and are included here to maintain the highest level of safety in seat belt harnesses and their related devices.*

**LEVER LATCH COVERS.**

*It must be remembered that the mandatory 5-point safety harness stipulated for speedway must be locked by a lever latch mechanism that, with one action, will simultaneously release all belts of the harness. SNZ acknowledge that some competitors may decide to use lever latch covers to secure the lever latch mechanism against accidental release. However, the haphazard use of such covers may in some instances hinder the basic requirement of instant release.*

*An incorrectly fitted latch lever cover may be more of a hindrance than an asset. The lever cover may become entangled in the webbing adjustment mechanism causing the webbing to loosen, or it can work its way under the lever latch helping the latch to be accidentally released. The extremely dirty and gritty environment may be a hindrance to the Velcro self-attaching capabilities; with time the Velcro cover will not stay secure and work itself undone. The use of such covers in Speedway where driver actions are very extreme can gradually dislodge a cover with each cornering manoeuvre. It is deemed that it is a driver's personal choice on whether or not he fits a Velcro lever latch cover. However if the cover is fitted, the cover must be carefully inspected and cleaned regularly.*

**ARM RESTRAINTS:**

*Arm restraints are mandatory in Open Wheel vehicles and Modifieds. Depending on design this flexible tape device is attached to the tongue buckle of the lap belt clamp and to both arms of the driver at or about the elbow area. The restraint must be long enough to enable the driver to maintain control of the vehicle and be short enough so as to restrain the arms from exiting the cockpit.*

*It is a matter of careful personal driver consideration that the arm restraints are fitted in such a manner as to lay clear of the lever latch. Due to different driving positions and contrasting sizes of drivers, it will be the driver's personal decision on whether arm restraints are fitted under or over the seat belt webbing.*

**T11-6**  
**T11-6-1**

**SEATBELTS**  
**Seat Belts**

- (a) The vehicle must be fitted with an approved, quick release, full harness safety belt. A full harness consists of 5 belts, 2 lap belts of 75mm minimum width, 2 shoulder belts of 75mm minimum width, plus 1 crutch belt 45mm minimum width.

- (b) All belts must be adjustable, these belts will connect or be part of a quick release mechanism, a device that with one action will release all belts simultaneously.
- (c) All belts must be securely attached to the structure of the vehicle. Seat belt mounting bolts must be 10mm minimum diameter or certified fastening system supplied by the belt manufacturer. Optional chest or sternum protection belts and clips are now approved but fastener must be of a metal quick release type.
- (d) Plastic fasteners are not approved. Must be approved design. Recognized manufacturers e.g.: Simpson, Bell, RJS, Leaf, Williams, Sabelt, Luke etc. local N Z) Easton and Jager. These normally have an SFI rating 16-1 tested to a safe working load for webbing and hardware.
- (e) All belts must be adjustable and be able to be adjusted whilst in the normal seated position. All seat belts must swivel on their mounting points. If seat belts mount wrap around (wrap over) tubing, the tubing must be at 90 degrees to the line of the belt. Wrap around belting must be secured by a 3 bar sliding adjuster of heavy-duty construction 75mm for 75mm webbing, 50mm for 50mm webbing and 45mm for 45mm webbing.
- (f) Seat belt webbing must not be twisted.
- (g) Chain link and "D" shackle mountings are not permitted.
- (h) The seat belt must be worn correctly at all times when vehicle is in motion (the exception being the grand parades - not hot laps).
- (i) Crutch belt or sub-belts anchoring point to provide a direct pull from the quick release mechanism.
- (j) The lap and crutch strap should pass over the sides of the seat or through the seat, in order to wrap and hold the pelvic region over the greatest possible surface.
- (k) The lap straps must fit tightly in the bend between the pelvic crest and the upper thigh. Under no conditions must they be worn over the region of the abdomen.
- (l) Holes may be made in the seat if this proves to be necessary in order to avoid such an occurrence. Seat belts must not pass over sharp edges, at any point where the belt passes through the sides of the seat, the seat edges must be rolled and/or have grommets to prevent chaffing or cutting of the belt material.
- (m) Seat belts showing signs of chaffing against sharp edges must be rejected.
- (n) Under no circumstances may seat belts be secured to the seat.
- (o) Seat Belt Mountings: The seat belt straps may be wrapped around the safety roll cage, provided (e) and (f) (above) are complied with, or wrapped around a separate reinforcement bar 25mm minimum diameter.  
The 'bar' may be solid or pipe.
- (p) On fabricated vehicles the seat belt buckles may be bolted to:
  - [a] the structure of the vehicle, or
  - [b] mounting plates 8mm minimum thickness with corners rounded.
- (q) The structure is deemed as any plate or RHS 3mm minimum thickness, welded on at least two sides.
- (r) Minimum distance between seat belt mounting hole and unsupported or open edge of structure 25mm.
- (s) On OEM vehicles i.e. street stocks and production saloons, seat belt buckles may be bolted to:
  - [a] permitted reinforcing structure, or
  - [b] to seat belt mounting plates 8mm thickness with corners rounded.

- (t) All seat belt mounting holes and mounting plate holes must be clearance drilled to a professional standard. All mounting plate holes to be a greater distance than 25mm from plate edge.
- (u) Eyebolts: Where eyebolts are used, eyebolt must be fully into mounting, no back spacers permitted. The angle of approach to the webbing must be in line with the eye bolt ring. (Fig. 1)
- (v) The shoulder straps must be directed towards the rear, directed downwards with an angle of between 1 (one) degree and 10 (ten) degrees to the horizontal from the top of the shoulder (Fig 2).
- (w) The belts must be anchored within 250mm of the back of the seat or pass through guides within 250mm of the back of the seat. The mounting points or guides must be no more than 150mm apart with their centre point 90 degrees to the seat back. Where the shoulder straps pass through the seat, the edges must be rolled or have grommets fitted to prevent chaffing or cutting of the strap material.

Figure 1

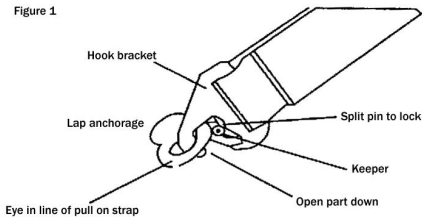
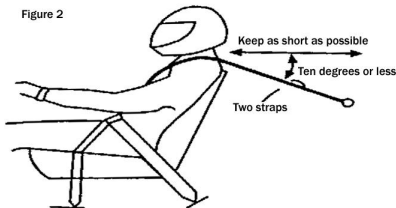


Figure 2



- (x) Check the entire harness for chaffing, stitch damage or hardware corrosion. Under no circumstances can cutting and re-sewing of webbing or modifications to hardware be permitted.
- (y) Two belts joining in a 'Y' behind the neck to form one strap are not permitted. Butler, Britax and other automotive safety harnesses, where shoulder belts are only looped around lap belts and fastened by a seat belt buckle are not permitted.
- (z) Safety harness to have date of manufacture visible to vehicle checker. This date to be recorded on vehicle green sheet.
- (aa) All harness webbing be renewed after five (5) years from date of manufacturer or earlier at the discretion of the vehicle checker.
- (ab) Safety Harness webbing, mounting points and release mechanism must be inspected for condition and fit at every green sheet inspection and before a race meeting by class vehicle checker.

#### **T11-6-2 Method of Application**

- (a) First tighten the lap seat belt, be certain that it comes across the pelvic area.
- (b) Adjust crutch belt with light tension on centre buckle assembly.
- (c) Tighten the shoulder harness to the desired tension.
- (d) Be certain that all mounting buckles are in alignment.



## **T11-7 WHEEL SPECIFICATION RULES**

**The rules set down hereafter are for each wheel assembly that comprises a manufactured outer rim of pressed and/or rolled steel welded to a centre section of flat or pressed steel plate or web which is centrally mounted to the hub with conventional stub and axles. The centre hole of the wheel must fit the axle hub.**

Refer to SNZ website: [www.speedway.co.nz](http://www.speedway.co.nz) for latest information on approved components.

- (a) All steel wheels must be inspected at CVI and date-stamped.
- (b) The life expectancy of OEM steel road wheels is three years. OEM steel road wheels must not be used after three years use.
- (c) OEM Cortina front stub axles are not permitted on Super Saloons. Re-manufactured Cortina stub axles are permitted

### **T11-7-1 Lightening: (Refer to Diagrams on following pages)**

**T11-7-2** Subject to the following provisions, all or any lightening holes must be symmetrical with respect to the studs.

**T11-7-3** In any one wheel, lightening holes should be identical in shape or, in the case of a number of smaller holes and various diameters, in pattern.

**T11-7-4** The distance from any stud hole to any adjacent hole as in Diagram 'A' must not be less than 40 mm. Excepting Super Saloon (front & rear) (wheels must not be less than 38mm. Except as stated in T11-9-2(e).

**T11-7-5** The maximum amount of metal removed from a 'spoked' web for lightening purposes when measured:

- (a) On any circle circumscribed on the centre, from the minimum inside radius of the rim, should not exceed one half of any such circumference. Nor shall more than 50 percent of area the area of the web be moved.
- (b) Radially, shall be outside of the P.C.D (Peripheral Circle Diameter) of the studs, excepting as is stated in T11-7-7 (a) and (b) below.

**T11-7-6** Where a web comprises a full disc on its outer circumference

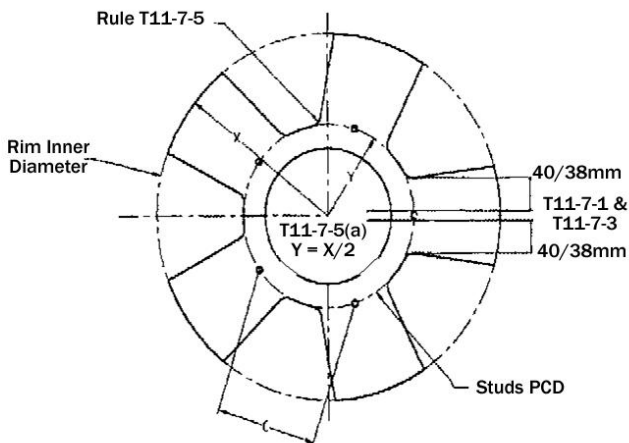
- (a) The minimum radius within the lightening holes shall be one sixth of the minimum distance between any two studs, PROVIDED the 50% welding rule as below in Rule T11-7-7-(a) is maintained.
- (b) The minimum distance from an inside surface of any lightening hole to the nearest adjacent outer surface on a web before welding may be 25mm.
- (c) The web thickness to be 8mm minimum.

**T11-7-7 Welds:** connecting the web to the inside of the rim

- (a) Shall have a total length of not less than 50% of the circumference around the welding circle, or equivalent peripheral length.
- (b) Shall be uniform and evenly spaced around the periphery, and have a fillet size of not greater than 50% of the web material thickness.
- (c) And where a web is in a 'spoked' configuration, both sides of each spoke shall be welded to the rim, over their full peripheral length, excepting only as in (d) below
- (d) And where the spokes or web itself fills in more than 75% of the circumference of the rim, alternate 'stepped' welding may be used, but each weld shall have a length of not more than 1/8 of the diameter, measured around the circumference, the total of all welds at the rim to occupy the full outer circumference of the web where it joins the rim.
- (e) To be from welding rods which are compatible with the rim and web material.

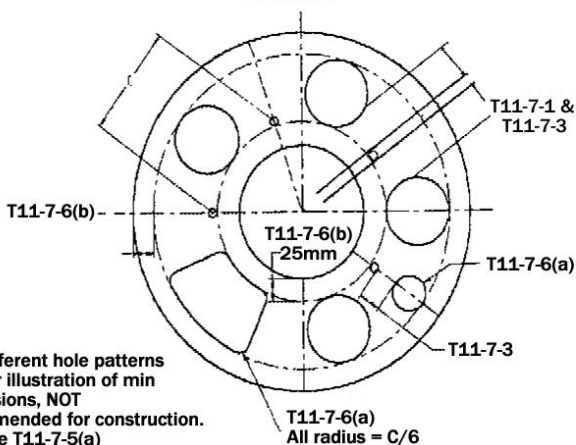
- (f) Shall be smooth, uniform and non porous welds without overheating or burning of any part of the welded joint.
- (g) There shall be no welding on the centre web whatsoever, other than where the web attaches to the rim.
- (h) The widening of wheel rims must be to a professional standard with smooth, uniform non-porous welds, without overheating or burning of any part of the welded joint.

**Diagram A**



**Wheel Centre Lightning Diagrams**  
Not to scale

**Diagram B**



**NB: Different hole patterns only for illustration of min dimensions, NOT recommended for construction. See rule T11-7-5(a)**

### **T11-7-8 Countersinks**

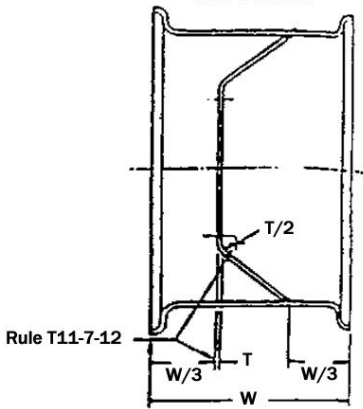
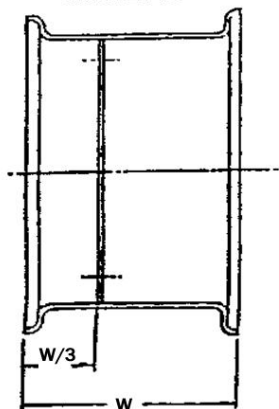
- (a) All webs shall be drilled and countersunk to properly fit the correct hub studs/nuts for the assembly being used.
- (b) The wheel must not prevent the wheel nuts from fully engaging their studs.
- (c) Wheels with slotted stud holes are not permitted.
- (d) The centre hole of the wheel web must fit the axle hub.
- (e) Centre webs of high tensile steel are not permitted

### **T11-7-9 Offsets: Refer Diagram C**

Diagram C - Not to Scale

Rule T11-7-10

Rule T11-7-11



**T11-7-10** Any offset applied to the web of a wheel should not be more than  $\frac{1}{3}$  of the width of the inner flange of the rim.

**T11-7-11** Any web of any wheel, whether offset or not, should be arranged such that, if not given additional strengthening as mentioned in T11-7-9 (10,11,12 below), both the outer diameter, where it welds to the rim, and the inner diameter, where it bolts to the hub, shall lie in the middle third of the width of the wheel.

**T11-7-12** On any pressed centre the cross sectional inside radius of the curvature shall not be less than twice the thickness of the plate from which the web was pressed.

**T11-7-13** On any saloon wheel centre web that is less than one third ( $\frac{1}{3}$ ) of the total rim width from the outer edge of either side of the rim the centre web must be 10mm minimum thickness with 12.5mm minimum size wheel studs, except saloons fitted with 'wide 5' wheels where the centre web must be 8mm minimum thickness.

**T11-7-14** All wheel stud spacers and wheel spacers are prohibited. Exception Halibrand type rear axles.

### **T11-8 Web Thickness**

For the type of wheel construction specified above, and subject to the constraints listed, the following thickness are minimums for class of cars listed hereunder:

- (ii) Super Saloon: Minimum 8mm
- (iii) For manufactured custom built and specialist production wheels using special pressing and/or alloy wheels; thicknesses may be less than the minimums above, but with an approved design certification required before use.

### **T11-9 Approved Wheels**

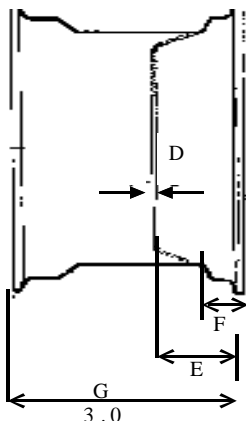
Clearly identifiable professionally manufactured wheels that are outside the above specifications may be submitted SNZ for testing and subsequent approval.

### **T11-9-1**

- (a) The 'D Window' wheel centre, both 6-pin and 5 stud, as manufactured by INTERO is approved for Super Saloons and Saloons provided all existing offsets as described in these rules are maintained.
- (b) Applicable Super Saloon and Saloon: Two imported pressed steel wide 5 wheel centres are approved provided wheel assemblies are welded to comply with NZS 4701 class 4, and operators to comply with NZS 4711 in the appropriate position. The fluted centre is approved for left rear and front wheels only.
- (c) Desert Rat/Lightening serial number 1947 approved for all classes to the following specifications:  
(Refer Diagram D)

**DIAGRAM D**

D=7mm,  
E=65mm,  
F=35mm,  
G=178mm



- (d) Beadlock rims approved for Modifieds, and Super Saloons only.
- (e) The use of HK Holden wheels are prohibited by Speedway New Zealand.

### **T11-9-2 Wide 5 wheels**

- (a) It is strongly recommended the centre web should comprise of a full disc on the inner circumference of the rim.
- (b) The centre web thickness must be 8mm minimum.
- (c) It is strongly recommended the minimum radial thickness of the web to be no less than 20mm
- (d) It is strongly recommended the angle between the main web and the extension (which comprise the stud holes) housing should be no more than 30% to the tangent.
- (e) If the stud holes are in the last 20% of the radius, (between the centre of the wheel to the inner surface of the rim) the distance from any stud hole to the edge of the web should not be less than 20mm
- (f) All wide 5 wheels date stamped after 1/06/98 must fully comply with all the above regulations.

### **T11-10 SOUND**

No vehicles shall exceed 95 dba. Measured from 25 metres on the infield from pole line on fastest part of straight with meter held not less than 1 metre above ground.

### **T11-11 ELECTRONICS**

#### **T11-11-1**

- (a) The use of in-vehicle transmitting or receiving is prohibited except approved one way radio communication from officials.
- (b) Ignition system settings must not be able to be accessed by the driver when in his normal seated position.

**T11-11-2** The use of electronic logic processors to control any function of the race vehicle and/or any system for gathering continuous data from any function of the vehicle is strictly prohibited.

- (a) **Exception** - Microprocessors are permitted to control ignition systems.
- (b) **Exception:** Microprocessors are permitted to control electronic fuel injection systems on Super Saloon cars, however the gathering and/or downloading of continuous data is permitted for Sidecars only.
- (c) Electronic engine RPM counters and limiters are permitted in all classes.
- (d) **Exception** - Dorian Data-1 transmitter TX8000.
- (e) Single Channel "Playback Tachometers" and "Hour Meters" are permitted, provided the said meter does not alter or change engine settings..
- (f) Electronically Controllable adjustable shock absorbers are not permitted.
- (g) The use of electronic traction control devices is not permitted in any form.

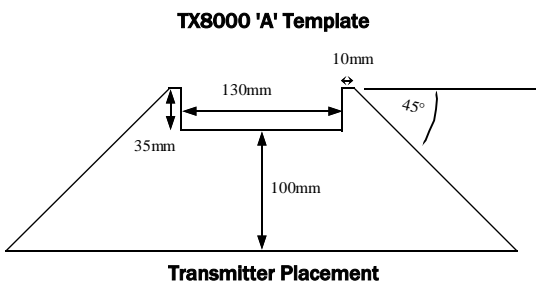
**T11-11-3** In all classes instrument warning lights to be white, blue or green only.

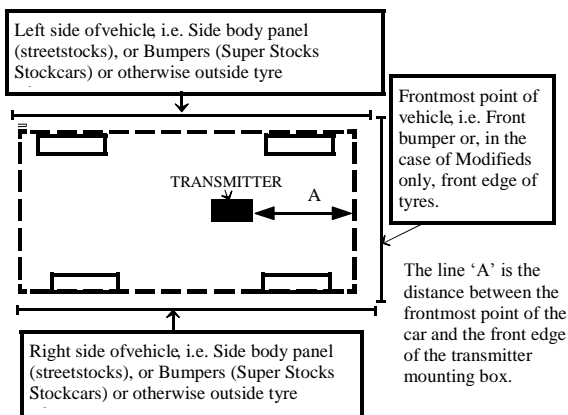
**T11-11-4 Electronic Lap Scoring**

- (a) The official hardware for electronic lapscore on a SNZ track is Dorian Data-1™ or AMB TranX260 timing system.
- (b) The official software for electronic lapscore on a SNZ track is Natsoft Scoring/Timing System or AMB Orbits3.
- (c) The official transmitter for electronic lapscore on a
- (d) SNZ track is Dorian Data-1 TX 8000™ or AMB Personal TranX260.

**T11-11-5 Placement of the transmitter**

- (a) Minimum 'A' measurement:  
Super Saloon cars 1800mm
- (b) 300mm minimum from extreme right hand side of vehicle;  
600mm minimum from the extreme left hand side of the vehicle.
- (c)
  - (i) Must be mounted not more than 20mm above the lowest part of the frame/chassis, in the vicinity of the transmitter.
  - (ii) Must be not more than 200mm from the bottom of the transmitter above the ground.
  - (iii) The approved template must be able to fit the transmitter when mounted to check for metallic interference. (See diagram)





- (d) Approved transmitter mounting box must be bolted to the vehicle by not less than 4 x 6mm diameter nuts, bolts and washers.

## **T11-12 RACING NUMBERS**

### **T11-12-1 Identification Numbers**

Each race vehicle or competitor must carry prominently displayed identification numbers or colours as per individual section regulations. No two or more local vehicles, in any class, may carry the same numbers as another competitor at the track to which they are contracted. The Track Licence holder shall be responsible for the allocation of racing numbers on all classes of vehicles.

### **T11-12-2 Racing Numbers**

- Racing numbers will be between 4 and 99, inclusive.
- Two-digit racing numbers beginning or ending in '0', other than '10' are not allowed in any class of vehicle, i.e. 0-, 20, 30, 40, 50, 60, 70, 80, 90 are not permitted.
- Racing numbers of more than two digits must be applied for to SNZ Directors.
- Respective placegetters in the NZ Championships can choose to have NZ1, NZ2 & NZ3 as their number.

**T11-12-3** All numbers must be legible and of contrasting colours.

**T11-12-4 Track Identification Codes** must appear immediately after race numbers on all vehicles, 50mm x 7mm for TQ's and motorcycles, 100mm x 13mm for all other vehicles - must be legible and of contrasting colours.

Kihikihi	K	Palmerston North	P
Waikato	H	Ruapuna	C
Stratford	S	Hawkes Bay	B
Wellington	W	Western Springs	A
Rotorua	R	Waikaraka Park	A
Gisborne	G	Bay Park	M
Wanganui	V	Dunedin	D
Nelson	N	Woodford Glen	C
Invercargill	I	Cromwell	T
Blenheim	E	Greymouth	GM
Westport	Y	Oreti	O
Rosebank	A	Moore Park	C

**T11-12-5** Super Saloons to have number displayed on rear of car (to be easily read by a following competitor) of minimum size of 100mm x 20mm, legible and of contrasting colours.

## **R11-14 RACING RULES: MODIFIED, SALOON AND SUPER SALOON**

Any alteration made to Saloon racing rules should not necessarily affect Modifieds or vice versa.

### **R11-14-1 General**

- (a) Only ONE person may operate any race vehicle at any one time. **NO PASSENGERS ALLOWED.**
- (b) New competitors shall drive at three (3) compulsory practices, or 4 races off the back of the field, prior to taking part in open competition.
- (c) All vehicles must be maintained in a clean and tidy condition.
- (d) During the process of a Saloon or Modified Race, advertising hoardings etc, are not allowed within 12 metres of the pole line, and must be placed well infield before and during a race.

### **R11-14-2 Track Signals**

- (a) The following flags will be recognised as the standard colours to be used as signals to competitors during a race.

*Green*                      *Start*

*Red*                        *All competitors stop*

*Yellow*                   *Proceed with caution*

*White*                    *Last lap for individual competitor*

*Black Flag/Board* *Individual competitor to retire from race immediately upon receiving the black flag/board bearing the offending competitors number, held out for two laps.*

*Black & White*

*Chequered*              *Finish*

- (b) When a red flag or red light is shown competitors must immediately stop. Failure to do so will render a competitor liable to a fine and/or exclusion for a defined period.

### **R11-14-3 Heats**

- (a) Starts may be arranged in heats. The arrangement and construction of heats shall be determined by the Promoters and shall be published in the programme, if any.
- (b) A competitor shall start in the heat that has been allotted to him, unless granted permission to change by the Clerk of the Course of meeting.
- (c) Only those competitors, qualified in their heats shall take part in the semi finals, and only those competitors qualified in the semi finals shall take part in the final.
- (d) Consolidation of Heats: The Clerk of the Course of the meeting shall be empowered to consolidate, or otherwise modify the arrangements and constitution of heats, if the number of entrants at the start, or other conditions warrant their so doing.

### **R11-14-4 Starting**

- (i) Competitors proceeding to and awaiting the start of any race are under the jurisdiction of the Starter and/or the Referee.
- (ii) The outside front row car shall be the pacesetter for the start of the race.
- (iii) Punctuality in Starting: Competitors shall always be prepared to start in accordance with the programme and when called on to do so. Any competitor not prepared to start within a reasonable time after being called upon may be excluded from the race.
- (iv) Vehicles proceeding to starting points must not be driven at excessive speed around the track, and at no stage shall any crew member ride on any vehicle.

- (v) Any vehicle failing to start after leaving the pits within the time limit of (3) three minutes must be pushed infield clear of the track, and remain there until conclusion of the race.
- (vi) A competitor shall be excluded from the race if he delays the start by more than (3) three minutes in all, in any one race.
- (vii) There is only one three minute bell allowed per race. These 3 minutes are before the green light or flag has been shown at the first start of the race.

#### **R11-14-5 Race In Progress**

- (a) **Driving in Wrong Direction:** Under no circumstances shall a competitor at any time during a meeting or during practice, be permitted to drive a vehicle in the wrong direction of the track.
  - (i) Vehicles must at all times be driven in an anti-clockwise direction.
- (b) Once a race is in progress, the competitors are under the jurisdiction of the Referee.
- (c) **Crowding or Foul Driving:** The referee may immediately exclude any competitor who, in his opinion, crowds or bores, whether intentionally or not, or otherwise indulges in any foul or unfair practice during a race.
- (d) Any competitor cutting in or forcing another vehicle off course, shall be penalised.
- (e) Any competitor wilfully blocking, obstructing or shepherding another competitor may be penalised.
- (f) **Outside Assistance:** If during a race any competitor receives assistance, whether after an accident or spin, he shall retire, except those competitors avoiding accidents who shall be allowed to restart. Push starts will be permitted for competitors who have stopped, avoiding the incident.
- (g) Any competitor using the pole or inside line to unfair advantage by placing one or more wheels over the line shall be penalised. On all tracks where this rule applies, the pole or inside line shall be clearly defined.
- (h) Any competitor using a concrete wall or bank to an advantage in the opinion of the Referee, may be penalised.
- (i) Any competitor whose vehicle, through his own action or otherwise, drives with one or more wheels on the infield, must wait until the track is clear before returning to the track.
- (j) If a driver unclips his seatbelt during competition he is deemed to have retired from the race and cannot resume racing.

#### **R11-14-6 Emergency Stoppage**

- (a) **Red Lights:** WHEN RED LIGHTS COME ON, OR RED FLAGS ARE DISPLAYED, ALL COMPETITORS MUST STOP AS SOON AS POSSIBLE, AS A REAL EMERGENCY HAS OCCURRED.
- (b) **FAILURE TO OBEY THIS INSTRUCTION WILL RESULT IN A SEVERE PENALTY.**

#### **R11-14-7 Running Under 'Caution'**

- (a) **Amber Lights During Race:** After amber lights come on, all cars must slow down at once.
- (b) The car which was the prime cause of the incident causing the amber lights to come on shall be permitted to restart from the rear of the field.
- (c) Cars that are not the prime cause of the incident causing the amber lights to come on, may rejoin the field at the position they were in at the time of the last recorded lap.
- (d) After the initial evasive action, the lead car must slow down and the rest of the field close up bumper to bumper on it. The leading car will take the safest course past the accident, and the rest of the field must follow 'Indian File' behind, using the



same course as the leader. It is recommended that passing be done on the outside where possible.

- (e) Any car breaking the line will be black flagged and cannot restart.
- (f) When the track is cleared, the amber lights will go out as the lead car approaches the start line, and the race resumes for the number of laps remaining until the finish of the race.
- (g) Laps run on the amber lights WILL NOT BE COUNTED AS RACE LAPS.
- (h) If it subsequently becomes necessary to stop the race, after running on the amber lights, then restart rule R11-14-9 will apply.
- (i) Amber lights should be used by flashing on and off, and in the event of failure, orange flags may be used.
- (j) Any driver who wilfully prevents his car from being taken off, and forces a race stoppage, will be immediately suspended for 3 race meetings. This suspension will be a standard penalty and there will be no redress or right of appeal against the suspension.
- (k) All starts and re-starts must be preceded by a period of at least 1/2 a lap with the lights out between the extinguishing of the amber light and the coming on of the green light.
- (l) Any driver who deliberately causes a race stoppage or caution period will be immediately excluded from the race.

#### **R11-14-8 Re-runs**

- (a) Any race stopped (red light/flag) in the first lap will be a complete re-run (new start) event from the grid positions of the original start and over the original number of laps.
- (b) A competitor may not change his vehicle for the re-run.
- (c) Any vehicle not running at the time the race is stopped
- (d) (red light) may enter the re-run on the original starting position.
- (e) When the amber light is shown, in the first lap of any race, cars will continue to circulate and re-grid to the original starting position. Except for the primary cause of the amber light who will start from the rear of the field.
- (f) The first lap is completed when the majority of the field has passed the start line.

#### **R11-14-9 Restart**

- (a) Any race, if stopped after one lap has been completed, will be restarted.
- (b) Competing vehicles will form up on the grid in the positions they were in on the last recorded lap prior to the red light being displayed. The grid positions will be given by the lap scorer.
- (c) The cars involved in the stoppage will be permitted to restart in their positions on the last completed lap.
- (d) The cars or cars that were the prime cause of the stoppage must start from the rear of the field.
- (e) Any competitor who is not proceeding under power at the time of the incident which results in the display of the 'stop' signal shall be deemed to have retired.
- (f) A competitor may NOT change his vehicle for a restart.

#### **R11-14-10 Withdrawal**

- (a) In any race of less than twenty (20) laps, any competitor who is lapped may be black flagged, and the competitor must go to the infield and remain there.
- (b) Any competitor withdrawing from a race with mechanical trouble, or for any other reason shall, whenever practicable, ascertain that the track is clear of other vehicles, then pull on to the infield for a reasonable distance from the track, and remain there until the conclusion of the race.

- (c) Should the vehicle remain stopped on the track while the race remains in progress, the driver shall remain strapped in his seat until he is given permission to leave it by an appropriate official. This restriction does not apply should the vehicle be on fire.
- (d) In the event of a vehicle becoming defective during a race, and/or endangering other competitors, the Starter, on instructions from the Referee, may give the competitor the black flag/board, when the competitor concerned must immediately retire from the event.
- (e) Any vehicle which has withdrawn in any race that has points awarded to it, the vehicle/driver will receive finishing points in the order of retirement.  
In the case of two or more cars retiring together, points will be awarded in order of the previous complete recorded lap.

#### **R11-14-11 Finish of Race**

- (a) Racing will continue until all vehicles have completed the lap they are on when the chequered flag is shown.
- (b) Placings other than first will then be determined according to the number of laps completed by each vehicle.
- (c) A race is not finished until the chequered flag is displayed, regardless of the number of laps run. Once a competitor has received the chequered flag he will take action to avoid all other cars.
- (d) From the point when the lead car receives the chequered flag, the race is finished for that vehicle but from that point on if the amber lights are shown, all competitors that follow through the finish line are counted in order of passing the line.
- (e) If the race is stopped on red lights after one or more competitors has received the chequered flag, placings will be given in order of finished vehicles. The remainder of the field unable to finish will be counted as finishers as per their race placings recorded on the lap preceding the stoppage, excluding any competitor causing the stoppage unless that competitor causing the stoppage has already crossed the start/finish line and received the chequered flag.

#### **R11-14-12 Dead Heats**

- (a) In the case of a dead heat, the entrants tying for a place shall divide amongst themselves any prize or prizes attributed to their placing.
- (b) Upon the request of all entrants tying for a place, the Referee and the Steward/s of the meeting may authorise a fresh start and may, with the consent of the said entrants, impose modified conditions for the rerun.

#### **R11-14-13 Protests**

- (a) **Avoidance of Delay:** So that races may be run off with the least amount of delay after a stoppage, or after running on caution, drivers must act on the instructions of the Referee or Official in charge, and follow the rules without question or delay.
- (b) If necessary, a special protest committee can be set up to hear any protests after the running of the race.
- (c) Any protests must be lodged in accordance with SNZ's rules on the lodgement of protests.

#### **R11-14-14 Amendment of Rules**

Subject to local conditions, the Rules in this Chapter may be amended in part by the unanimous decision of the Stipendiary Steward, if in attendance, or the Steward of the Meeting, Clerk of the Course, and a representative of the class of competitor competing, bearing in mind the following three factors: safety of competitors, safety of Spectators, and the better promotion of the events.

**SALOON/SUPER SALOON WEIGHT TABLE 96**

Cu In	Weight	Cu In	Weight	Cu In	Weight
100	757	156	828	212	899
101	759	157	830	213	900
102	760	158	831	214	902
103	761	159	832	215	903
104	762	160	833	216	904
105	764	161	835	217	905
106	765	162	836	218	907
107	766	163	837	219	908
108	768	164	838	220	909
109	769	165	840	221	910
110	770	166	841	222	912
111	771	167	842	223	913
112	773	168	843	224	914
113	774	169	845	225	916
114	775	170	846	226	917
115	776	171	847	227	918
116	778	172	849	228	919
117	779	173	850	229	921
118	780	174	851	230	922
119	781	175	852	231	923
120	783	176	854	232	924
121	784	177	855	233	926
122	785	178	856	234	927
123	787	179	857	235	928
124	788	180	859	236	929
125	789	181	860	237	931
126	790	182	861	238	932
127	792	183	862	239	933
128	793	184	864	240	935
129	794	185	865	241	936
130	795	186	866	242	937
131	797	187	867	243	938
132	798	188	869	244	940
133	799	189	870	245	941
134	800	190	871	246	942
135	802	191	873	247	943
136	803	192	874	248	945
137	804	193	875	249	946
138	805	194	876	250	947
139	807	195	878	251	948
140	808	196	879	252	950
141	809	197	880	253	951
142	811	198	881	254	952
143	812	199	883	255	954
144	813	200	884	256	955
145	814	201	885	257	956
146	816	202	886	258	957
147	817	203	888	259	959
148	818	204	889	260	960
149	819	205	890	261	961
150	821	206	892	262	962
151	822	207	893	263	964
152	823	208	894	264	965
153	824	209	895	265	966
154	826	210	897	266	967
155	827	211	898	267	969

Cu In	Weight	Cu In	Weight	Cu In	Weight
268	970	324	1041	380	1112
269	971	325	1042	381	1113
270	972	326	1043	382	1114
271	974	327	1045	383	1115
272	975	328	1046	384	1117
273	976	329	1047	385	1118
274	978	330	1048	386	1119
275	979	331	1050	387	1120
276	980	332	1051	388	1122
277	981	333	1052	389	1123
278	983	334	1053	390	1124
279	984	335	1055	391	1126
280	985	336	1056	392	1127
281	986	337	1057	393	1128
282	988	338	1058	394	1129
283	989	339	1060	395	1131
284	990	340	1061	396	1132
285	991	341	1062	397	1133
286	993	342	1064	398	1134
287	994	343	1065	399	1136
288	995	344	1066	400	1137
289	997	345	1067	401	1138
290	998	346	1069	402	1139
291	999	347	1070	403	1141
292	1000	348	1071	404	1142
293	1002	349	1072	405	1143
294	1003	350	1074	406	1145
295	1004	351	1075	407	1146
296	1005	352	1076	408	1147
297	1007	353	1077	409	1148
298	1008	354	1079	410	1150
299	1009	355	1080	411	1151
300	1010	356	1081	412	1152
301	1012	357	1083	413	1153
302	1013	358	1084	414	1155
303	1014	359	1085	415	1156
304	1015	360	1086	416	1157
305	1017	361	1088	417	1158
306	1018	362	1089	418	1160
307	1019	363	1090	419	1161
308	1021	364	1091	420	1162
309	1022	365	1093	421	1163
310	1023	366	1094	422	1165
311	1024	367	1095	423	1166
312	1026	368	1096	424	1167
313	1027	369	1098	425	1169
314	1028	370	1099	426	1170
315	1029	371	1100	427	1171
316	1031	372	1102	428	1172
317	1032	373	1103	429	1174
318	1033	374	1104	430	1175
319	1034	375	1105	431	1176
320	1036	376	1107	432	1177
321	1037	377	1108	433	1179
322	1038	378	1109	434	1180
323	1040	379	1110		



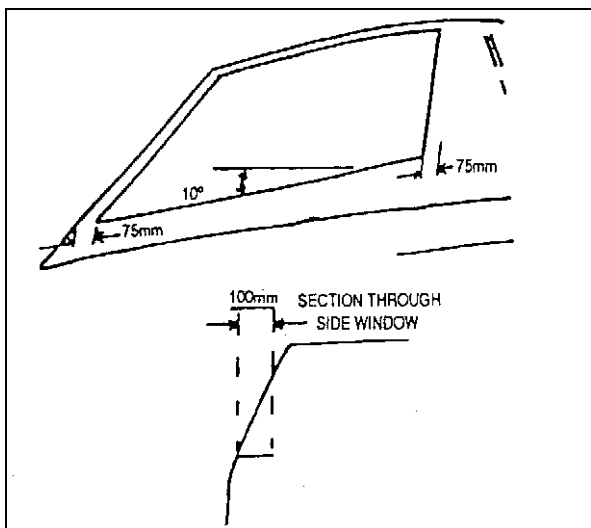
2009/10 New Zealand Modified Champion – Jamie Fox

## **T11-16 MODIFIED SPECIFICATIONS**

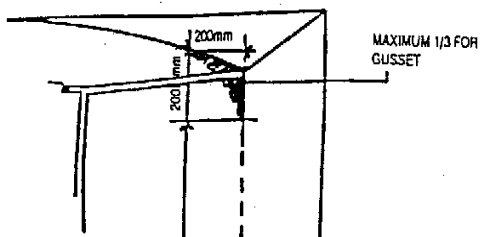
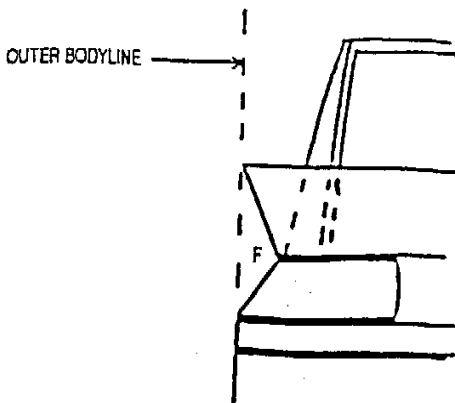
In vehicles that require OEM parts, their components must retain their original identification marks.

### **T11-16-1 Body**

- (a) Production car body from original bulkhead back.
- (b) Body can be shortened, narrowed from original body dimensions.
- (c) The body must retain original appearance when removed from the car, it must look like a car body and it must have front pillars.
- (d) Body may be constructed of fibreglass, alloy or steel.
- (e) All cars must have a bonnet from front of radiator to bulkhead to cover motor, but no front guards.
- (f) No aerodynamic devices or panels are permitted, placed on, or incorporated within the body panels.
- (g) The maximum allowable body rake be 10 degrees as measured, and determined at the lower window opening using a level/protractor.
- (h) No additional internal panels allowed other than on a horizontal or vertical plain within the body outline profile, other than window side panels, which may be turned in the direction of the cockpit, but must not exceed 100mm maximum from outer edge of body shell. These panels must not extend more than 75mm past either end of the window opening. (Refer to drawing).
- (i) Rear view mirrors not permitted
- (j) **Rear Spoilers:** Rear Spoilers optional. If used, they are subject to the following restrictions:
  - (i) Maximum width at top of spoiler blade cannot extend beyond the outer body-line, and cannot extend outside of point of attachment at the bottom of the spoiler blade.

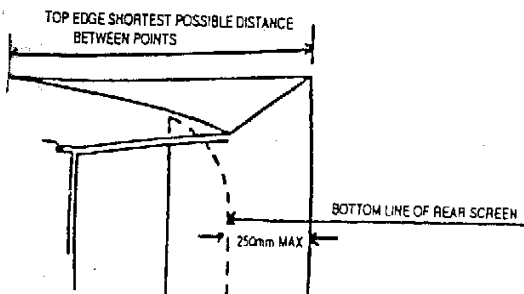


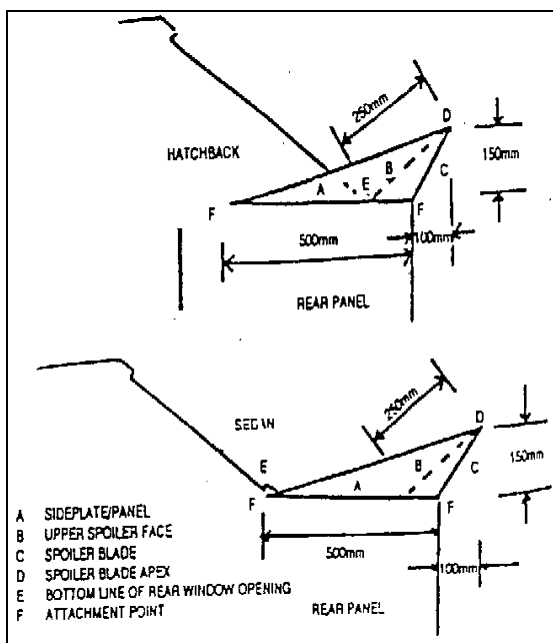
- (ii) The spoiler cannot extend rearwards more than 100mm maximum past the rear panel.
- (iii) The upper face of spoiler must not be greater in length and 250mm, regardless of angle. Cannot intrude past, or inside bottom line of rear window opening, regardless of length.
- (iv) Maximum height of spoiler to be 150mm measured from point of attachment, on a vertical plain.
- (v) Where side plates/panels are fitted, these must not exceed 500mm in length, measured from point of attachment on a horizontal plain, and must not overlap spoiler outline.
- (vi) The top edge of spoiler blade apex, to front of side panel attachment point, must be the shortest distance between these two points. Centre line of side panel to follow this line throughout its entire length.
- (vii) Body must retain original appearance when removed from the car, it must look like a car body and it must have front pillars.
- (k) Must have a floor securely fastened within the box forming the rollage and cover the area below the driver's feet. Minimum of 1.2mm steel or 1.6mm alloy.
- (l) A 1.00mm steel or aluminium fireproof firewall must be fitted to completely isolate the drivers compartment from the engine compartment.
- (m) Power bulge and air scoops allowed in bonnet but opening must not be to the rear.
- (n) Maximum height of finished car 1.6 metres not including wing (spoiler). Maximum length of car not to exceed 1.4 metres from centre of rear axle. Overall body width maximum 1.68 metres, minimum 1.2 metres. Maximum flare width to be 100mm. The use of car bodies under specified measurements to be acceptable if original width.
- (o) Body of car must be kept in good condition, and promoting bodies have the power to ask a competitor to upgrade his car before the next meeting.



SPOILER NOT TO INTRUDE PAST THE LINE OF THE BOTTOM OF THE REAR SCREEN, OTHER THAN FOR GUSSETS.

GUSSETS MUST NOT COVER MORE THAN 1/3 OF CORNER AREA, TO WHICH IT IS FITTED





#### T11-16-2 Tyres

- (a) Maximum tyre tread 540mm.
- (b) Rear tyre must extend 75mm minimum outside of body, or flares.
- (c) Right rear tyre must duro not less than 40.

#### T11-16-3 Chassis

- (a) Must be spaceframe only.
- (b) No part of chassis or rollcage can be in a position that denies access to compression tester.
- (c) Exhaust extractors must be removed for compression testing on demand.

#### (d) Weight:

Maximum 1100kg. Minimum weight including driver to be at least 920kg at all times. Exception: for a car with four cylinders or less, weight including driver to be at least 620kg at all times.

- (e) Any ballast added must be within the wheel base and secured in a way as to be deemed safe. The vehicle checker must ask the driver as to the location of any added ballast. The location of ballast will be noted in the vehicle Log Book.
- (f) Most forward length of car to be no further forward than the leading edge of the front tyre.

#### T11-16-4 Wheel Base

2.13 metres minimum, 2.74 metres maximum.

- (a) **Vehicle Width:** Maximum overall vehicle width 2.0 metres.

#### T11-16-5 Knurling Bar

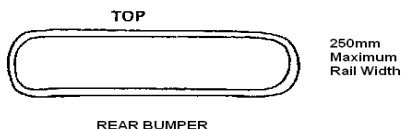
- (a) All vehicles must be fitted with knurling bars extending outward to effectively cover at least 2/3 of the width of the rear tyres, but not extend outside the width of the front and rear tyres that are to be used in competition.
- (b) Single or twin rail construction maximum diameter 27mm outside diameter tube with no more than three mounting points, mean average height 380mm.



### **T11-16-6 Bumpers**

- (a) Front (optional), construction from maximum 20mm nominal bore medium steam pipe, must fit between, and be level or behind with, the leading edge of front tyres, mounted 2 points only.
- (b) Rear bumpers are compulsory. Construction shall be two rail loop as per sketch with rails not more than 250mm apart at 400mm average centre height, of 20mm 10 gauge nominal bore pipe, or single rail of 25mm nominal bore steam pipe, with minimum 100mm radius on each end returning, and attached to chassis. single rail centre height to between 400mm & 500mm. Bumper must also be long enough to protect at least half the width of both rear tyres.

Note: Two rail hoops do not have to be vertical.



### **T11-16-7 Roll Cage**

- (a) A minimum of 780mm wide at shoulder position on inside edges and be contained within body.
- (b) (i) Main body roll cage constructed from steel, a minimum of 32mm nominal bore medium steam pipe 3.25mm wall, or 38mm OD x 3mm W/T boiler tube or chromoly 1½" x 120 thou (this allows for manufacturing tolerances), and to follow interior contour of car.
  - (ii) Roll cage to be welded to chassis, 6mm inspection holes can be drilled in main roll cage pipes if requested.
  - (v) Must have a minimum of two sideways stays in car, suitably locked together.
  - (vi) Parallel braces must be fitted from top rear of roll cage, to chassis, in front of, or behind rear axle.

#### **(c) Bracing**

Option 2 is the preferred bracing technique for all cars constructed after 1 Sept 2009 as defined in E1-1-3(b):-

- (i) Option 1: Diagonal braces from bottom left of roll cage to top right of roll cage on opposite side. All cars to have X brace fitted in roll hoop.
- (ii) Option 2: An "A" frame brace consisting of 2 vertical braces attached to base of rear roll cage hoop and rising to be attached to centre of rear roll cage hoop. A measurement of 90mm must exist at the upper points of attachment to rear hoop.
- (iii) A minimum of two horizontal braces must be attached inside the said braces. The upper horizontal brace to be at driver shoulder height, the lower horizontal brace to be at approx. 500mm above drivers seat base. Centre line of "A" frame brace to be in centre line of driver's seat. Brace material: 25mm OD x 10 gauge minimum size.
- (d) A horizontal cross member, travelling across bulkhead, and attached to the roll cage on both sides approximately 500mm from the floor.
- (e) A horizontal cross member, travelling across behind the seat, and attached to the roll cage on both sides approximately 500mm from the floor.
- (f) Two (2) horizontal pipes 300mm apart minimum, 450mm apart maximum, on each side of the cab. The rectangle formed by the top and bottom cab rails and engine plate bar upright and main

rollcage legs to be no greater in length than 1100mm and must have at least one diagonal per side.

- (g) The rectangle forming the top of the roll cage is to be 760mm x 840mm on the outside, measured so as to include the diameter of pipe as part of the 760mm, and the 50mm clearance between driver's head and top line of roll cage is maintained, no plating is allowed.

#### **T11-16-8 Wing**

- (a) The maximum area of the side panels (maximum 2 side panel per wing) left side 1.672m<sup>2</sup> (18sq.ft), right side 1.301m<sup>2</sup> (14sq.ft), a single piece centre cord not to exceed 2.323m<sup>2</sup> (25sq.ft). Panels must be of one-piece construction. Fixed/removable Gurney lip (wicker bill) allowed, max height 40mm.
- (b) No part of the aerofoil or side panel may extend beyond outer edge of tyres. One aerofoil only. To be attached to rollcage only. On a high bar car where the high bar is made of roll cage material the wing must be mounted no more than 200mm forward of the main roll cage upright and must not obstruct occupant's vision in any direction, or his ability to get into or out of the car from either side.
- (c) The wing and or suspension (including shocks) must not be able to be adjusted by the driver while seated in the race car.

#### **T11-16-9 Engine**

- (a) Engine, 4 cylinder, rotary, 6 cylinder or small block V8 production car engines with a maximum cubic capacity of 407.5 cu. Ins.
- (b) Front mounted engines only allowed.
- (c) All motors over 4916cc (300 cu in) must have cast iron block and cylinder heads.
- (d) Forced induction and multiple carburettors are permitted on 4 cylinder motors. Rotary and six cylinder engines are permitted multiple carburettors, 8 cylinder motors are permitted one only four barrel carburettor.
- (e) Standard production cylinder blocks may be machined. SNZ may approve alternative cylinder blocks provided the following standard dimensions and data are maintained: camshaft location, cylinder bore spacing, bank angle in case of 'V'; type engine, crankshaft centreline to deck face, material may not be added. SVO and Bowtie blocks are approved, Bowtie blocks with standard deck height only (9.025"). Dart Little 'M' block with standard deck eight (9.025") and Motown block made by World Castings are approved. Dedicated dry sump and rocket blocks are not permitted.

<b>Part No.</b>	<b>Approved Dart Block Description</b>
31131111	9.025" Deck/4.000" Bore/350 Mains
31131211	9.025" Deck/4.125" Bore/350 Mains
31132111	9.025" Deck/4.000" Bore/400 Mains
31132211	9.025" Deck/4.125" Bore/400 Mains

Part No.	Approved Motown Block Description
084010	9.025" Deck/3.990" Bore
084011	9.025" Deck/4.000" Bore
084020	9.025" Deck/4.115" Bore
084021	9.025" Deck/4.125" Bore

- (f) Production cylinder heads will be those that retain the same number of valves and retain OEM valve stem angle specifications in relation to the cylinder head face, number of spark plugs, number and location of ports and be interchangeable with the original OEM cylinder heads, as well as retain the original method of cooling. Cylinder heads may be machined but material may not be added. Cylinder heads may only be fitted to blocks of the same block deck height that the heads came from on production engine.
- (g) V8 engines to be a maximum of two valves per cylinder.
- (h) Crankshaft and Camshaft(s) may be substituted.
- (i) Other engine modifications include modifications and substitution of engine components except the following are not permitted:
- (i) variable camshaft timing (V8's only),
  - (ii) ceramic or carbon components,
  - (iii) pistons of any other material other than monolithic aluminium,
  - (iv) threaded fasteners of any material other than steel,
  - (v) flywheels of any material other than steel or aluminium,
  - (vi) Titanium components are limited to valve spring retainers only, effective 01/10/2010.
- NOTE:** Ceramic and carbon components permitted in rotary engines.
- (j) Maximum compression ratio **11:1**
- (k) Owners/drivers of vehicles must make individual arrangements with qualified SNZ officials to measure engine cubic capacity and affix engine seals to block and sump in a prominent position. **NO SEAL, NO RACE.** Engine reconditioning certificates **not** accepted.
- (l) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section G11-3 Technical Exclusions.
- (m) The fuel delivery system to the carburettor may be modified, however the engine must still be fuelled via the carburettor which may be altered for methanol, but must still function as a normally aspirated carburettor.
- (n) Any form of port or base injection, or the like is not permitted.
- (o) No fuel injection systems allowed.
- (p) Two return springs must be fitted to carburettors.
- (q) The exhaust must exit behind the bulkhead, facing the rear and down.

#### **T11-16-10 Battery**

- (a) Battery cut-out switch and engine cut-out switch to be fitted, and painted in a contrasting colour within easy reach of driver, at least 300mm from the fuel tap.
- (b) Battery must be in a fully covered alloy, steel case securely mounted with a removable lid suitably insulated with foam rubber and protected from impact.
- (c) Self starters must be in working order at all times.

## **T11-16-11 Fuel System**

- (a) Two return springs must be fitted to the induction throttle shaft anchored at separate mounting points.
- (b) The fuel system may be modified, but must comply with the following:
- (c) **FUEL & FUEL TANKS**
  - Fuels**
    - (i) Petrol is restricted to commercially available products as supplied by and defined in the New Zealand Oil Companies Petroleum Products Specifications and Regulations 2003. (See SNZ website [www.speedway.co.nz](http://www.speedway.co.nz));
    - (ii) Methanol fuel, with the same specifications as that supplied by recognised NZ Oil companies, is allowed, regardless of source. Refer T8-3 for fuel specifications.
    - (iii) Avgas 100 will comply with ASTM D910 and DEF STAN 91-90 (DERD 2485) specifications [www.speedway.co.nz](http://www.speedway.co.nz);
  - (d) Fuels are permitted to contain commercially available lubricants as submitted to SNZ for identification and approval.
  - (e) Fuel blending is not permitted. The addition of Toluene to fuels is not permitted. The addition of material to fuel or intake air to increase available oxygen is strictly prohibited. Such materials include oxygen, water, nitrous oxide, nitro methane, nitro propane, propylene oxide and nitropane etc.
  - (f) All fuel is subject to testing at any time, if fuel is found to deviate from the approved fuel specification it will be considered illegal.
  - (g) The use of fuel outside of specifications as described in T8-2 or blended fuel, will be declared an illegal fuel, Refer Section G11-3 Technical Exclusions.
  - (h) **Approved Fuels**  
Methanol, Racing Fuel #5, Avgas 100, Petrol
  - (i) **Fuel Descriptions**
    - (i) Methanol/Racing Fuel #5: .7956 to .7988 @ 15 degrees 106 Motor Octane
    - (ii) Petrol/PULP: .7347 to .7695 @ 15 degrees 96 Motor Octane
    - (iii) Avgas (Racegas):- no blending of fuels allowed: .6695 to .6985 @ 15 degrees 100 Motor Octane
  - (j) **Fuel Tanks**  
Fuel tank to be 55 litre maximum capacity.
    - (i) All vehicles will be fitted with one fuel tank, the tank must be fitted with an SNZ approved bayonet, screw type, or flush mount fuel cap; no radiator type caps are permitted.
    - (ii) All fuel tanks must be securely mounted within chassis and rollcage material. If outside the line of the rollcage a frame to protect the fuel tank must be made of minimum rollcage brace material.
    - (iii) The fuel tank must have welded seams and fittings and be constructed to a professional standard. Soldered tanks and fittings are not permitted.
    - (iv) The fuel tank must be located behind the engine firewall.
    - (v) Pressurized fuel tanks are not permitted.
    - (vi) All vehicles to have a suitable breathing system so that fuel will not escape during a roll over.
    - (vii) Fuel vent pipe must avoid inboard disc braking systems and be at least 600mm away from exhaust pipes.
    - (viii) The addition of safety foam baffling to fuel tanks is highly recommended. NOTE: the tank will need to be filled with at least 80% foam to be effective.

- (ix) Fuel tanks must be constructed and supported in a manner that will ensure every possible precaution has been taken to avoid rupture or breakage. It is highly recommended that the tank has an adequate supporting structure under the lowest portion of the tank. The structure should follow the contour of the tank and be welded or bolted to the framework of the car. A suitable upper structure fitting the contour of the tank should allow the tank to be firmly attached to the framework of the car. The practice of bolting the tank to the chassis entirely by mounting plates is not recommended.

(k) **Fuel Tank Location**

The fuel tank confined in the boot or rear compartment and behind the rear firewall

(l) **Fuel Taps**

- (i) The fuel line from the tank must be fitted with a shut off tap which must be in reach of the competitor while in the normal seated and restrained position and in reach of a person outside the car.
- (ii) All fuel taps must be clearly marked 'off' and 'on'.
- (iii) Fuel filter bowls must be of metal construction.

(m) **Fuel Lines**

- (i) Fuel lines must be of steel, copper, aluminium or of flexible construction.
- (ii) Fuel lines, where flexible, must be of an approved flexible type, securely clamped at joints, wire clamps are not permitted.
- (iii) Plastic, reinforced plastic, nylon, or reinforced nylon fuel line is not permitted.
- (iv) Armoured flexible neoprene plastic is permitted where fitted as a standard OEM part.
- (v) Approved 'push-lock' fittings and hoses are permitted. (hose identification # R6)
- (vi) Fuel lines and return lines must be secured to the chassis at the fuel tap and at intervals of not more than 300mm.

**T11-16-12 Transmission**

- (a) Optional; 3mm thick steel bell housing to be fitted, or where original bell housing is used, a 3mm scatter shield to be fitted when bell housing is in driver's compartment.
- (b) Automatic transmissions are not permitted.
- (c) When open drive-shaft is used, a 1.2mm steel or 2.1mm alloy plate is to be fitted from front of driver's seat to rear of bell housing or transmission, to completely enclose driveline.
- (d) Driveshaft safety hoops must be fitted to front and rear of drive shaft.
- (e) All vehicles must be fitted with a clutch operated by the driver.

**T11-16-13 Suspension:** Type optional.

**T11-16-14 Wheels**

Refer to Section T11-7 for specifications covering this class.

- (a) Wheels to be held to hub by a minimum of 7/16" (11.12mm) diameter studs. Maximum amount of studs to be 6, minimum of 3.  
Exception: Clearly identifiable, professionally manufactured, direct mount Front Hub Assemblies are permitted provided manufacturer's specifications are adhered to, i.e. Sanders, Weld, Real. If 3 (three) studs are used, they must be a minimum stud diameter of 5/8 inch.
- (b) Front hubs to house spindle bearings.

- (c) No aluminium adaptor plates allowed. Steel adaptor plates to be a minimum of 8mm thickness. Rear hubs, if aluminium or magnesium to be 6 pin knock-on or wide 5 type only.
- (d) One piece rims only (can be welded construction) No 2 or 3 piece wheels allowed (no bolt together rims). Bead locks permitted. Rim thickness to be a minimum of 2.4mm.
- (e) Rear wheels fitted to wide 5 hubs are permitted to use a wheel centre web offset outside of centre 1/3 of total rim width.

#### **T11-16-15 Brakes**

- (a) Right front brake is optional. Left front brake is mandatory.
- (b) Providing the two rear wheels cannot rotate independently, i.e. locked diff, or one piece rear axle, a single disc and calliper mounted on the rear end, is deemed to be braking on both rear wheels.

#### **T11-16-16 Seat**

Steel or aluminium backed, bucket type seat modified on the sides to hold driver securely. Bolted or welded to floor and/or integral bar work. Steel backing to be a minimum of 1.2mm (18SWG). Aluminium backing to be 3mm minimum thickness.

#### **T11-16-17 Headrest**

- (a) All vehicles must be fitted with an approved headrest.
- (b) The minimum constructed requirements are 150mm x 280mm x 3mm steel or aluminium surface padded, attached to the drivers seat or suspended from the roll cage and not more than 38mm from the drivers head.

#### **T11-16-18 Seat Belts: Refer to Section T11-5.**

#### **T11-16-19 Numbers**

Refer also to T7.

- (a) Numbers and track letters to read large and clear.
  - (b) Numbers to be displayed on airfoils or bodywork if airfoil not fitted.
  - (c) Numerals to be a minimum 300mm high x 50mm wide with a 13mm border, legible and of contrasting colours, to be displayed on both sides of airfoil at uppermost rear corner.
  - (d) If an airfoil is not fitted, a single number to be displayed on roof panel, facing towards the outside of the track.
  - (e) Modifieds to have number displayed on rear of car (to be easily read by a following competitor) of minimum size of 100mm x 20mm, legible and of contrasting colours.
- Refer to class specifications for sizes.

#### **T11-16-20 Bonnet**

Bonnet and boot must be securely fastened.

#### **T11-16-21 Protection**

100mm mesh screens must be fitted to cover opening immediately in front of the driver.

#### **T11-16-22 Towing Hitch**

Front and rear, positioned under, and behind the natural bumper, no wider than 160mm and no deeper than 75mm.

#### **T11-16-23 Enforcement of Specifications**

- (a) Impounding: Refer Rules E1-2 and E1-6
- (b) Inspection: Refer Section E1

#### **T11-16-24 Dangerous Construction**

The Steward of the meeting may exclude any vehicle the construction of which he deems to be dangerous, and shall give full effect to these Regulations by requiring the Vehicle Checker to check every vehicle immediately prior to its taking part in a competition.

## SECTION T12: SUPERSTOCK AND STOCKCAR SPECIFICATIONS AND RACING RULES



2009/10 New Zealand Superstock Champion – Brendan Higgins

### **T12 SUPERSTOCK SPECIFICATIONS**

#### **T12-1-1 General**

- (a) No glass except mirrors and gauges are permitted.
- (b) Instruments with glass are allowed, subject to inspection. Only blue, or white or green instrument lights are allowed.
- (c) Protective mesh screen must be fixed to completely cover screen opening in front of Driver. Mesh to have no larger squares than 100mm<sup>2</sup>, 4mm minimum thickness, welded on four sides.

#### **T12-1-2 Body**

- (a) Only approved Saloon type, Station Wagon, Van or Coupe bodies allowed.
- (b) All inner panels may be removed including floor and bulkhead.
- (c) May be shortened, narrowed and lowered. Must retain original appearance.
- (d) The minimum height shall be 1372mm from the ground to the finished roof line, not including roof number plate.
- (e) Replica bodies may be constructed of plastic, fibreglass, steel or alloy.
- (f) All cars must have a bonnet covering from the front of the radiator back to the firewall.
- (g) Power bulge and air scoops allowed in top of the bonnet, but any openings must face forward.
- (h) Convertibles with folding or removed roofs do not comply.

#### **T12-1-3 Doors**

Adequate window openings shall be provided on the right and left hand side of the vehicle to ensure unimpeded access to the drivers compartment of the car.

#### **T12-1-4 Firewall**

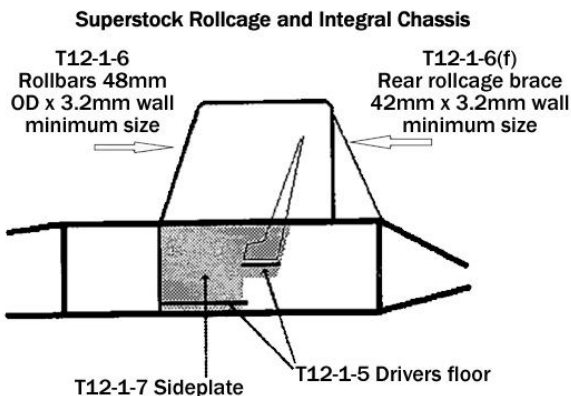
Adequate metal firewall must be fixed to completely isolate the driver from the engine compartment.

### **T12-1-5 Floorboards**

3mm plate minimum metal floorboards must be fixed to extend from beneath the rear of the driver's seat to the fire wall, and must contain driver's feet within the foot well. If the floor is not under the gearbox then gearbox must have a securely fastened metal cover.

### **T12-1-6 Roll Bars**

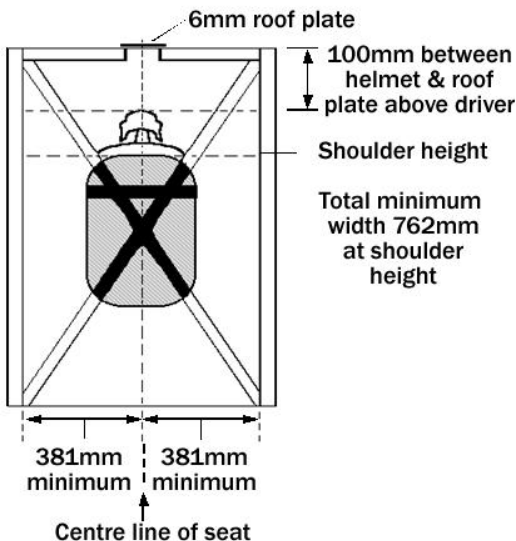
- (a) Rollcage material minimum size = 48mm OD x 3.2 mm wall thickness medium black pipe or 40mm x 40mm x 3mm RHS.
- (b) Rollcage brace material minimum size = 42mm OD x 3.2mm wall thickness medium black pipe or 40mm x 40mm x 3mm RHS.
- (c) Galvanised pipe is not permitted in rollcage.
- (d) A substantial interior rollcage structure must be fitted from above the driver's normal seated position to below the driver's feet. Where the rollcage is welded to the primary chassis structure the chassis structure becomes an integral part of the rollcage.
- (e) Where the driver's feet extend lower than the primary chassis, the rollcage material must extend to below the driver's feet to form a rectangle for attachment of a driver's floor. The driver's floor below the normal position for his feet shall be 3mm steel welded on 4 sides to the lower rollcage rectangle.



- (f) The rear of the rollcage structure must be securely braced at roof level to the chassis at the rear of the car and further secured by a diagonal cross brace, straight in section.
- (g) The rear roll bar must be a minimum internal width of 762mm measured at the driver's shoulder height. The vertical part of the rear roll bar must be as straight as possible and may have up to a maximum front to rear lay back of 200mm.
- (h) In addition to (g), the minimum internal measurement, from the centre of the back of the driver's seat to the inside of the roll cage, must be a minimum of 381mm, measured at the driver's shoulder height.
- (i) All roll bars and braces must be securely welded to each other, no bolt together sections are permitted. The construction must be smooth and even without ripples or cracks.
- (j) If the fuel tank is mounted at the rear of the vehicle, and is exposed between the two rear facing braces, there must be an additional horizontal brace (of minimum rollcage brace material), at tank level between the two rear facing braces.



- (k) On application to SNZ, a plate type chassis' monocoque can be considered the primary chassis structure. Rules T12-1-6(e), T12-1-7(a), (b) and (c) will not apply provided that side protection plates exceed 381mm by 3mm steel plate.



#### **T12-1-7 Sideplates**

- A steel plate of 3mm minimum thickness and 381mm minimum height must be welded to the front & rear rollbars, the chassis/floor, and the upper side pipe or on each side of the car. The upper side pipe must be of minimum rollcage brace material.
- Where the main lateral chassis members are at least 381mm apart the side plate/s can be welded to these lateral beams without additional upper sidepipes.
- Where the driver's feet extend below the main lateral chassis members the 3mm side plate material must be welded on 4 sides to the lower extension of the rollcage as described in T12-1-6(e).
- At all times the sideplate/s must protect the driver's hip and feet measured at right angles to the driver's body in the normal seated position.
- No holes permitted in side plates. Drivers requiring an exemption from this rule must apply to the Directors.

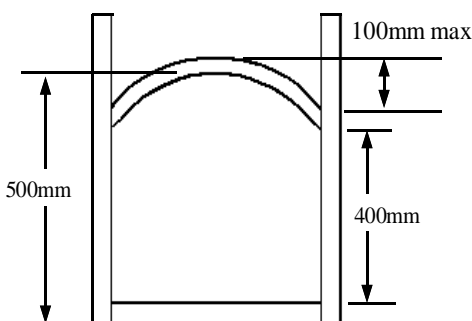
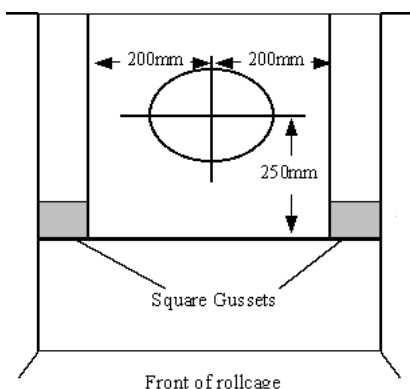
#### **T12-1-8 Roof Plate**

- At all times there must exist a minimum of 100mm clearance between the top of the driver's helmet and any part of the roof plate and/or the roof plate mounting steel work.
- A 6mm roof reinforcement plate must be welded to the rear roll cage hoop, with at least 200mm of roof plate on each side of the centre of the driver's helmet when in his normal seated position.
- Lateral roll cage material at least 400mm centre to centre must link the front and rear roll bars and be welded on each side of the roof plate. "If the roof plate does not extend to the full width of the roll cage, the roof plate must be welded to extra lateral bars and be gusseted to the main roll cage. Gussets to

be welded and must be square or rectangle and a minimum of 100mm long by 6mm plate steel.

- (d) The roof plate must measure at least 250mm forward of the centre of the driver's helmet when in his normal seated position. If the rear of the roof plate is not supported by the back cross or back brace then it must also be gusseted as above, to provide support.
- (e) The roof plate must be welded to rollcage material on all four sides; the roof plate must not have any lightening holes whatsoever.
- (f) The front diagonal pipe between the main roll cage where the head plate welds to, may have a maximum of 100mm bend in it, provided the head plate is 400mm at the shortest part, measured front to rear.
- (g) A vehicle checker may drill 6mm diameter holes for inspection anywhere in roll cage plating. Non destructive ultrasonic measuring is also permitted.

#### Minimum dimensions for Superstock Roofplate



#### T12-1-9 Seating & Headrest

- (a) The driver is the only permitted occupant of the car.
- (b) (i) The following Racetech driver seats have been approved for use: Model 4009, 4009HR, 4009HRV, 9009, 9009HR.  
Correct mounts to be used as per Manufacturer's diagram.  
The above Racetech seats are exempt from the following rules requiring the seat back to be steel backed.

- (ii) The Kirkey 64000 series open wheel full containment seat is also approved for use.
- (c) The driver's seat shall be of steel backed 1.2mm minimum thickness bucket type, incorporating a headrest constructed of 3mm minimum plate to a minimum size of 280mm width and 150mm depth, corners rounded off, surface padded.
- (d) The seat base must be securely bolted or welded to the floor and/or integral bar work in a minimum of four positions. The seat back support must be mounted in a minimum of four positions.
- (e) Whether the seat incorporates a headrest or not, the upper 2 mounting positions must be within 152mm of the top of the seat. Seat mounting bolts 8mm minimum with suitable washers.
- (f) If the seat does not have a built in headrest the gap between the top of the seat and the bottom of the head rest shall be no more than 75mm.
- (g) An aluminium seat of 3mm thickness with no steel backing is permissible, however, the 3mm section must include the full width of the seat back support and seat base - built to a professional standard.

#### **T12-1-10 Safety Harness**

Refer Section S2.

#### **T12-1-11 Rear Vision Mirrors**

- (a) One metal or plastic backed mirror of not more than 0.026m<sup>2</sup> (40sq.ins) may be fitted. Or two metal or plastic backed mirrors of not more than 0.023m<sup>2</sup> (35sq.ins) each may be fitted.
- (b) The mirror head must be in the interior of the car and be no closer than 450mm from the driver.
- (c) A mirror is an image reflective surface.

#### **T12-1-12 Steering Wheels**

The use of wood-rim steering wheels is prohibited.

#### **T12-1-13 Weight**

Vehicle weight, ready to race, 1400kg minimum - 1500kg maximum, at any time, excluding driver.

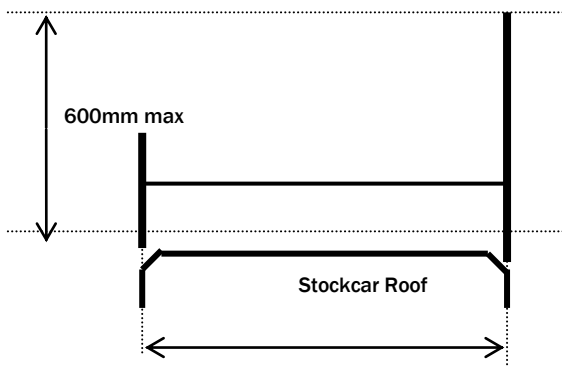
#### **T12-1-14 Racing Numbers**

Refer also Section T7.

- (a) Numbers to be of contrasting colours and to be placed;
  - (i) between the front and rear wheels on both sides of the vehicle. Numbers to be on the body or side panels in a visible area, so that they can be read from a minimum of 30m away at ground level.
  - (ii) on both sides of the fin or aerofoil.
  - (iii) on the rear of the vehicle.
- (b) Numbers to be prepared to a professional standard. Cardboard and tape type numbers are not acceptable.
- (c) The background colour must be a minimum of 20mm.
- (d) Rear numbers only to be a minimum height of 190mm with a minimum width of 30mm. Must be placed in a visible area and able to be read from a minimum 30m away at ground level from the rear of the vehicle.
- (e) Numbers on both sides shall be a minimum height of 380mm with a minimum width of 50mm.
- (f) A fin, with a minimum area of 300mm square, with a racing number on each side, shall be mounted on roof in such a position that the number can be read from each side of the car, and shall be a minimum height of 190mm with a width of 30mm for the numbers.

### **T12-1-15    Aerofoil**

- (a) One only aerofoil, consisting of a centre section with no more than two single-piece side panels, is permitted. Note: polygon side panels are not permitted.
- (b) The aerofoil assembly must be fitted above the roof and the assembly must not exceed the width and length of the car roof. The aerofoil must be securely mounted to the rollage.
- (c) The aerofoil assembly must not exceed the following measurements: 1200mm in length, 600mm in height, total maximum width 770mm.



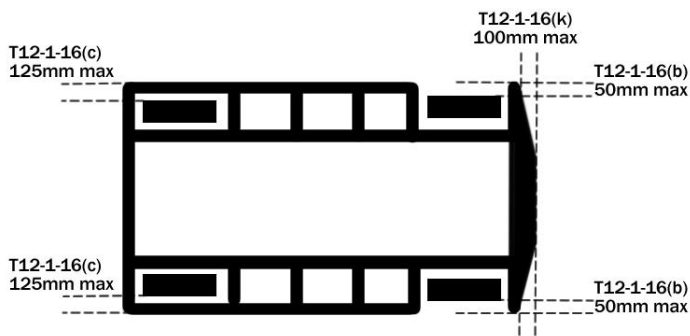
### **T12-1-16    Bumpers**

- (a) Bumpers must be fitted front and rear.
- (b) The front crash bar shall not extend more than 50mm (2") beyond the outer edge of the front tyres, when in the straight ahead position.
- (c) The rear crash bar shall not extend more than 125mm (5") past the outer edge of the rear tyre.
- (d) Approved bumper heights front and rear minimum 330mm maximum 380mm. Bumper height measured at centre of bumper and ground level at any point across full width of vehicle.
- (e) Minimum depth of bumper 75mm.
- (f) Chassis to bumper braces must not extend further forward than 50mm back from the front edge of bumper.
- (g) Extensions to the side rail and rear of the front bumper must be square or rounded not less than 38mm (1.5").
- (h) There must be upright and longitudinal radiator protection bars, minimum diameter 38mm, not further than 100mm from front edge top or bottom, and must be a minimum height of 250mm, suitably braced.
- (i) Front wheel protection bars are permitted, but must not extend higher than the point of attachment to the radiator protection bar, and must start 100mm in from the outside edge of the bumper, and must be vertical for a minimum of 100mm.
- (j) V-shaped or cow-catcher type crash bar protection is not permitted. No lifting bars will be permitted over the front wheels.
- (k) Under-rider bars will be fitted, extending to within 100mm from the outer edge of the bumper, and no further than 100mm from the front edge of the front bumper bar, mounted vertically. The minimum depth of the under-rider, to be 175mm, measured from the centre position of the front bumper.
- (l) The under-rider bar shall be constructed of pipe, minimum 42mm OD x 3mm wall, or 40mm x 40mm x 3mm RHS. A

minimum of four vertical mounts shall be used. The end can be radiused to a maximum of 200mm. Two of these mounts to be braced or gusseted, a minimum of 150mm back to chassis rails. Box section or pipe brace construction same material as under-rider bar, gusset plating minimum 4mm. If the under-rider structure is fully integrated into the front bumper, it must be constructed of a minimum of 3mm plate.

- (m) Dimensions as per figure T12-1-16(m).

Figure T12-1-16(m)



- (n) Side rails to be level with bumper, extending 50mm past outer edge of front tyre, with wheels in straight-ahead position, and must be substantially braced to the chassis.
- (o) Rear wheel guards must be constructed of minimum 50mm x 38mm channel or box steel. They shall not protrude more than 125mm outside the outer edge of the rear tyre.

#### **T12-1-17 Suspension**

- (a) Any type of suspension may be used.
- (b) Any car fitted with coil springs must have the springs securely clamped, or chained in position. A coil-over assembly is regarded as a suitable restraint for the spring to be securely clamped.
- (c) Suspension and aerofoil must not be able to be adjusted by driver while in the driver's seated position.

#### **T12-1-18 Wheels**

Refer Section T14 on wheels for specifications covering this class.

- (a) Bead lock rims are not permitted.
- (b) Bleed off tyre valves are not permitted.

#### **T12-1-19 Tyres**

- (a) Maximum width of tread not to exceed 210mm on the track, and overall width not exceed 255mm at or above bumper height.
- (b) All tyres must have sound casings.
- (c) Re-grooving of original tread depth is permitted. Increasing original tread width is not permitted. Additional grooving or additional cutting is not permitted. All original tread pattern grooves may not exceed 10mm.
- (d) When conventional road tyres (front or rear) are used, they must duro 55 or more prior to race.
- (e) All Hoosier and McCreary/American Racer type front tyres must duro 55 or more prior to race.
- (f) All Hoosier and McCreary/American Racer type rear tyres must duro 70 or more prior to race.

- (g) 70 duro tyres are those with '70' moulded in raised lettering on the side of the casing. If the tyre does not have '70' on the side it is not the correct tyre. When the 70 duro rule applies, the permitted size tyres are:  
Hoosier: 25.5/7/15 (82") or 27/7/15 (87.5")  
McCreary/American Racer: P245/70D -15 or 26.0/7.0 -15DT
- (h) M&S, RV and mud and snow tyres are not permitted. M&S, RV and mud and snow tyres are those tyres with any groove that exceeds 10mm in width and 10mm in depth at any time. Any tyre with grooves 10mm or less, as outlined here in, will be permitted, even if the tyre carries the logos mentioned.
- (i) All tyre specifications will be determined by the use of the SNZ approved tyre measuring tool.
- (j) Local rules do not apply to tyres at any time.
- (k) New and radical tyres are subject to performance assessment by SNZ and approval by the Superstock Technical Committee, even though the particular tyre may comply with these rules.

#### **T12-1-20 Brakes**

- (a) Brakes must be fitted on both front wheels, and at least one brake on the diff. Assembly, so as to provide braking on all four wheels.
- (b) They must be maintained in perfect working order at all times.
- (c) The brakes must not be able to be adjusted by the driver while seated in the race vehicle, except for front to rear brake bias.

#### **T12-1-21 Engine**

- (a) Maximum compression ratio (any cylinder), 10:1 Maximum inlet and exhaust valve lift 0.500in measured at valve
- (b) The cubic capacity of the engine must not exceed 248.5 cu.in. Motors that exceed this capacity in standard form are acceptable, provided that they are reduced to the said 248.5 cu.in or less.
- (c) Four valves per cylinder: cylinder head casings must retain OEM identification markings and be OEM for original make and model of engine block.
- (d) Owners of vehicles must make individual arrangements with the track Steward, or qualified Speedway New Zealand Official to inspect, certify and seal each individual motor before the vehicle can be raced. NO SEAL, NO RACE. Engine reconditioners certificates are not acceptable.
- (e) All motors must be drilled with holes through two sides of the sump in readiness for sealing by a Speedway New Zealand official.
- (f) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section G11-3 Technical Exclusions.

#### **T12-1-22 Carburettor**

- (a) The engine shall be normally aspirated only, and fitted with one carburettor only.
- (b) The said carburettor shall have a maximum of four chokes, and the use of fuel injection, supercharging and turbo charging is prohibited.
- (c) Glass bowls must not be fitted on carburettors or fuel pumps. Two throttle return springs must be fitted to the carburettor shaft linkages.

#### **T12-1-23 Ignition**

- (a) The use of any programmable multi-point rev limiter and/or a rate-of-acceleration rpm limiter, either by themselves (e.g. MSD 7561) or integrated into the ignition system (e.g. MSD 7531), is prohibited.
- (b) No throttle position sensors are allowed.

- (c) The self-starter must be in working order. Cars must leave pits and starting line under their own power.

**T12-1-24 Battery**

The battery must be securely mounted inside a metal box, with a secure lid suitably insulated. Aluminium, stainless steel or steel box, of not less than 1.2mm thickness.

**T12-1-25 Drive Shaft**

A drive shaft retaining strap must be fitted under and over the front end of the drive shaft. All drive shafts running through cockpit must be covered by 3mm metal plate cover.

**T12-1-26 Fuel**

Refer Section E4.

**T12-1-27 Oil Lines**

- (a) Engine oil lines must be capable of withstanding a pressure of 450psi and a temperature of 230° C.
- (b) When flexible, engine oil lines must have threaded connectors and an outer metal braid resistant to abrasion and flame (will not sustain combustion).
- (c) No engine oil line connectors in driver's compartment are permitted, except oil gauge fittings.

**T12-1-28 Exhaust Pipes**

- (a) Exhaust pipes must discharge towards the rear, or underneath the car.
- (b) Side mounted exhaust systems inside or outside the body, must be suitably guarded where they pass the driver, to enable first aid personnel to get driver out of the car without getting themselves burnt.

**T12-1-29 Vehicle Specifications**

Refer also Section E1.

- (a) Vehicles not complying with Speedway New Zealand specifications refer Section G7-5 (Duties of a Vehicle checker).
- (b) SNZ reserves the right to weigh any vehicle or all vehicles at any time. All Superstocks must be weighed before specified Championship events. Vehicles can only be weighed on SNZ approved weighing systems.



2009/10 New Zealand Stockcar Champion – Peter Rees

## **T12-2 STOCKCAR SPECIFICATIONS**

### **T12-2-1 General**

- (a) Only modifications specifically mentioned in this chapter are approved - no other modifications are allowed.
- (b) No glass except mirrors and gauges are permitted.
- (c) Instruments with glass are allowed, subject to inspection. Only blue, or white or green instrument lights are allowed.
- (d) Protective mesh screen must be fixed to completely cover screen opening in front of Driver. Mesh to have no larger squares than 100mm<sup>2</sup>, 4mm minimum thickness, welded on four sides.
- (e) OEM means 'Original Equipment Manufacture'. In any vehicles that require OEM parts, their components must retain their original identification marks.

### **T12-2-2 Body**

- (a) Only approved Saloon type, Station Wagon, Van or Coupe bodies allowed.
- (b) All inner panels may be removed including floor and bulkhead.
- (c) May be shortened, narrowed and lowered. Must retain original appearance.
- (d) The minimum height shall be 1372mm from the ground to the finished roof line, not including roof number plate.
- (e) Replica bodies may be constructed of plastic, fibreglass, steel or alloy.
- (f) All cars must have a bonnet covering from the front of the radiator back to the firewall.
- (g) Power bulge and air scoops allowed in top of the bonnet, but any openings must face forward.
- (h) Convertibles with folding or removed roofs do not comply.

### **T12-2-3 Doors**

Adequate window openings shall be provided on the right and left hand side of the vehicle to ensure unimpeded access to the drivers compartment of the car.

### **T12-2-4 Firewall**

Adequate metal fire wall must be fixed to completely isolate the driver from the engine compartment.



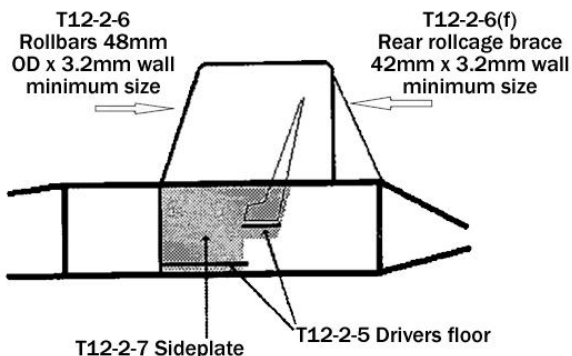
## **T12-2-5 Floorboards**

3mm plate minimum metal floorboards must be fixed to extend from beneath the rear of the driver's seat to the fire wall, and must contain driver's feet within the foot well. If the floor is not under the gearbox then gearbox must have a securely fastened metal cover.

## **T12-2-6 Rollbars**

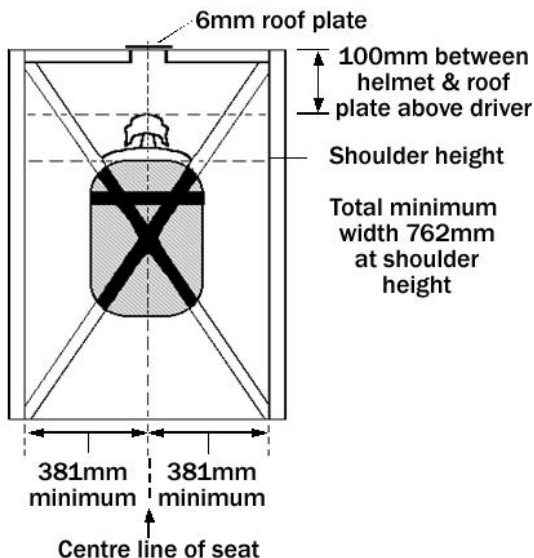
- (a) Rollcage material minimum size = 48mm OD x 3.2 mm wall thickness medium black pipe or 40mm x 40mm x 3mm RHS.
- (b) Rollcage brace material minimum size = 42mm OD x 3.2mm wall thickness medium black pipe or 40mm x 40mm x 3mm RHS.
- (c) Galvanised pipe is not permitted in rollcage.
- (d) A substantial interior rollcage structure must be fitted from above the driver's normal seated position to below the driver's feet. Where the rollcage is welded to the primary chassis structure the chassis structure becomes an integral part of the rollcage.
- (e) Where the driver's feet extend lower than the primary chassis, the rollcage material must extend to below the driver's feet to form a rectangle for attachment of a driver's floor. The driver's floor below the normal position for his feet shall be 3mm steel welded on 4 sides to the lower rollcage rectangle.

### **Stockcar Rollcage and Integral Chassis**



- (f) The rear of the rollcage structure must be securely braced at roof level to the chassis at the rear of the car and further secured by a diagonal cross brace, straight in section.
- (g) The rear roll bar must be a minimum internal width of 762mm measured at the driver's shoulder height. The vertical part of the rear roll bar must be as straight as possible and may have up to a maximum front to rear lay back of 200mm.
- (h) In addition to (g), the minimum internal measurement, from the centre of the back of the driver's seat to the inside of the roll cage, must be a minimum of 381mm, measured at the driver's shoulder height.
- (i) All roll bars and braces must be securely welded to each other, no bolt together sections are permitted. The construction must be smooth and even without ripples or cracks.
- (j) If the fuel tank is mounted at the rear of the vehicle, and is exposed between the two rear facing braces, there must be an additional horizontal brace (of minimum rollcage brace material), at tank level between the two rear facing braces.

- (k) On application to SNZ, a plate type chassis' monocoque can be considered the primary chassis structure. Rules T12-2-6(e), T12-2-7(a), (b) and (c) will not apply provided that side protection plates exceed 381mm by 3mm steel plate.



#### **T12-2-7 Sideplates**

- A steel plate of 3mm minimum thickness and 381mm minimum height must be welded to the front & rear rollbars, the chassis/floor, and the upper side pipe or on each side of the car. The upper side pipe must be of minimum rollage brace material.
- Where the main lateral chassis members are at least 381mm apart the side plate/s can be welded to these lateral beams without additional upper sidepipes.
- Where the driver's feet extend below the main lateral chassis members the 3mm side plate material must be welded on 4 sides to the lower extension of the rollage as described in T12-2-6(e).
- At all times the sideplate/s must protect the driver's hip and feet measured at right angles to the driver's body in the normal seated position.
- No holes permitted in side plates. Drivers requiring an exemption from this rule must apply to the Directors.

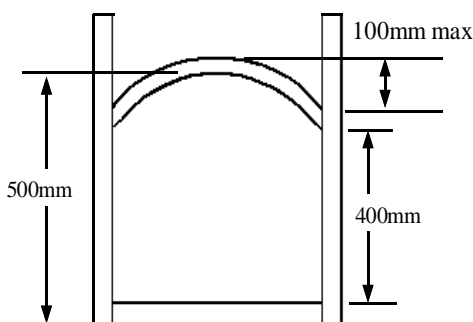
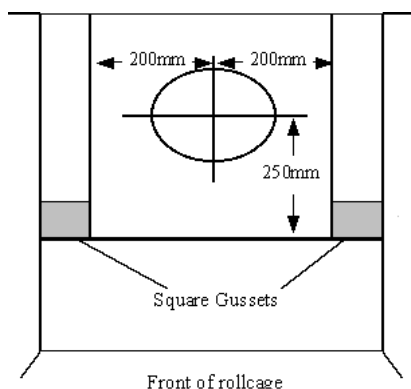
#### **T12-2-8 Roofplate**

- At all times there must exist a minimum of 100mm clearance between the top of the driver's helmet and any part of the roof plate and/or the roof plate mounting steel work.
- A 6mm roof reinforcement plate must be welded to the rear roll cage hoop, with at least 200mm of roof plate on each side of the centre of the driver's helmet when in his normal seated position.
- Lateral roll cage material at least 400mm centre to centre must link the front and rear roll bars and be welded on each side of the roof plate. "If the roof plate does not extend to the full width of the roll cage, the roof plate must be welded to extra lateral bars and be gusseted to the main roll cage. Gussets to

be welded and must be square or rectangle and a minimum of 100mm long by 6mm plate steel.

- (d) The roof plate must measure at least 250mm forward of the centre of the driver's helmet when in his normal seated position. If the rear of the roof plate is not supported by the back cross or back brace then it must also be gusseted as above, to provide support.
- (e) The roof plate must be welded to rollcage material on all four sides; the roof plate must not have any lightening holes whatsoever.
- (f) The front diagonal pipe between the main roll cage where the head plate welds to, may have a maximum of 100mm bend in it, provided the head plate is 400mm at the shortest part, measured front to rear.
- (g) A vehicle checker may drill 6mm diameter holes for inspection anywhere in roll cage plating. Non destructive ultrasonic measuring is also permitted.

#### Minimum dimensions for Stockcar Roofplate



#### T12-2-9 Seating and Headrest

- (a) The driver is the only permitted occupant of the car.
  - (i) The following Racetech driver seats have been approved for use: Model 4009, 4009HR, 4009HRV, 9009, 9009HR. Correct mounts to be used as per Manufacturer's diagram. The above Racetech seats are exempt from the following rules requiring the seat back to be steel backed.

- (ii) The Kirkey 64000 series open wheel full containment seat is also approved for use.
- (b) The driver's seat shall be of steel backed 1.2mm minimum thickness bucket type, incorporating a headrest constructed of 3mm minimum plate to a minimum size of 280mm width and 150mm depth, corners rounded off, surface padded.
- (c) The seat base must be securely bolted or welded to the floor and/or integral bar work in a minimum of four positions. The seat back support must be mounted in a minimum of four positions.
- (d) Whether the seat incorporates a headrest or not, the upper 2 mounting positions must be within 152mm of the top of the seat. Seat mounting bolts 8mm minimum with suitable washers.
- (e) If the seat does not have a built in headrest the gap between the top of the seat and the bottom of the headrest shall be no more than 75mm.
- (f) An aluminium seat of 3mm thickness with no steel backing is permissible, however, the 3mm section must include the full width of the seat back support and seat base - built to a professional standard.

#### **T12-2-10 Safety Harness**

Refer Section S2.

#### **T12-2-11 Rear Vision Mirrors**

- (a) One metal or plastic backed mirror of not more than 0.026m<sup>2</sup> (40sq.ins) may be fitted. Or two metal or plastic backed mirrors of not more than 0.023m<sup>2</sup> (35sq.ins) each may be fitted.
- (b) The mirror head must be in the interior of the car and be no closer than 450mm from the driver.
- (c) A mirror is an image reflective surface.

#### **T12-2-12 Steering Wheels**

The use of wood-rim steering wheels is prohibited.

#### **T12-2-13 Weight**

Vehicle weight, ready to race, 1400kg minimum - 1500kg maximum, at any time, excluding driver.

#### **T12-2-14 Racing Numbers**

Refer also Section T7.

- (a) Numbers to be of contrasting colours and to be placed;
  - (i) between the front and rear wheels on both sides of the vehicle. Numbers to be on the body or side panels in a visible area, so that they can be read from a minimum of 30m away at ground level
  - (ii) on both sides of the fin or aerofoil
  - (iii) on the rear of the vehicle
- (b) Numbers to be prepared to a professional standard. Cardboard and tape type numbers are not acceptable.
- (c) The background colour must be a minimum of 20mm.
- (d) Rear numbers only to be a minimum height of 190mm with a minimum width of 30mm. Must be placed in a visible area and able to be read from a minimum 30m away at ground level from the rear of the vehicle.
- (e) Numbers on both sides shall be a minimum height of 380mm with a minimum width of 50mm.
- (f) A fin, with a minimum area of 300mm square, with a racing number on each side, shall be mounted on roof in such a position that the number can be read from each side of the car, and shall be a minimum height of 190mm with a width of 30mm for the numbers.

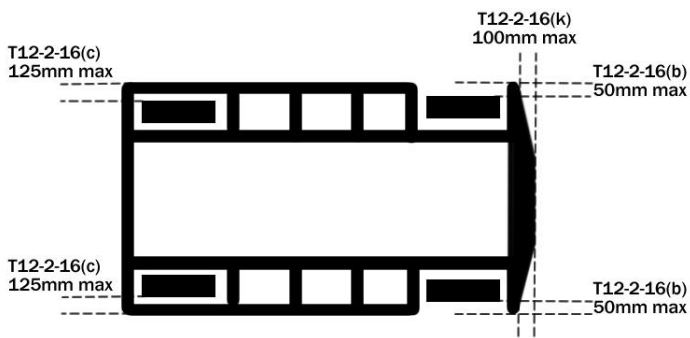
### **T12-2-15    Aerofoil**

- (a) One only aerofoil, consisting of a centre section with no more than two single-piece side panels, is permitted. Note: polygon side panels are not permitted.
- (b) The aerofoil assembly must be fitted above the roof and the assembly must not exceed the width and length of the car roof. The aerofoil must be securely mounted to the rollcage.
- (c) The aerofoil assembly must not exceed the following measurements: 1200mm in length, 600mm in height, total maximum width 770mm.

### **T12-2-16    Bumpers**

- (a) Bumpers must be fitted front and rear.
- (b) The front crash bar shall not extend more than 50mm (2") beyond the outer edge of the front tyres, when in the straight ahead position.
- (c) The rear crash bar shall not extend more than 125mm (5") past the outer edge of the rear tyre.
- (d) Approved bumper heights front and rear minimum 330mm maximum 380mm. Bumper height measured at centre of bumper and ground level at any point across full width of vehicle.
- (e) Minimum depth of bumper 75mm.
- (f) Chassis to bumper braces must not extend further forward than 50mm back from the front edge of bumper.
- (g) Extensions to the side rail and rear of the front bumper must be square or rounded not less than 38mm (1.5").
- (h) There must be upright and longitudinal radiator protection bars, minimum diameter 38mm, not further than 100mm from front edge top or bottom, and must be a minimum height of 250mm, suitably braced.
- (i) Front wheel protection bars are permitted, but must not extend higher than the point of attachment to the radiator protection bar, and must start 100mm in from the outside edge of the bumper, and must be vertical for a minimum of 100mm.
- (j) V-shaped or cow-catcher type crash bar protection is not permitted. No lifting bars will be permitted over the front wheels.
- (k) Under-rider bars will be fitted, extending to within 100mm from the outer edge of the bumper, and no further than 100mm from the front edge of the front bumper bar, mounted vertically. The minimum depth of the under-rider, to be 175mm, measured from the centre position of the front bumper.
- (l) The under-rider bar shall be constructed of pipe, minimum 42mm OD x 3mm wall, or 40mm x 40mm x 3mm RHS. A minimum of four vertical mounts shall be used. The end can be radiused to a maximum of 200mm. Two of these mounts to be braced or gusseted, a minimum of 150mm back to chassis rails. Box section or pipe brace construction same material as under-rider bar, gusset plating minimum 4mm. If the under-rider structure is fully integrated into the front bumper, it must be constructed of a minimum of 3mm plate.
- (m) Dimensions as per figure T12-2-16(m).
- (n) Side rails to be level with bumper, extending 50mm past outer edge of front tyre, with wheels in straight-ahead position, and must be substantially braced to the chassis.
- (o) Rear wheel guards must be constructed of minimum 50mm x 38mm channel or box steel. They shall not protrude more than 125mm outside the outer edge of the rear tyre.

**Figure T12-2-16(m)**



**T12-2-17 Engine**

- (a) Engine must be stock standard externally, except as expressly permitted in these rules.
- (b) Engine internals are free except for the restrictions listed below.
- (c) An OEM crankshaft must be used inside an original OEM Block.
- (d) Maximum compression ratio (any cylinder), 10:1 Maximum inlet and exhaust valve lift 0.500in measured at valve
- (e) The cubic capacity of the engine must not exceed 248.5 cu.in. Motors that exceed this capacity in standard form are acceptable, provided that they are reduced to the said 248.5 cu.in or less.
- (f) Both the cylinder head and the engine block must be from the same OEM manufacturer and must fit together in their OEM form: Ford to Ford, Chev to Chev, Holden to Holden.
- (g) The engine must be fitted with an inlet manifold that is standard for the engine being used, except as expressly permitted in T12-2-18.
- (h) Upon application to the Directors, inlet manifold package variations may be approved, provided that:
  - (i) The manifold is of the same generic manufacture as the original engine being used, and
  - (ii) The inlet manifold must fit to the cylinder head in its OEM form. No material is to be added or removed from either the manifold or the cylinder head to enable the manifold to be fitted.
  - (iii) Approved manifold packages and their specifications replace all other manifold clauses.
- (i) Spacers between cylinder head and inlet manifold, and cylinder head and exhaust manifold, are not permitted.
- (j) Engine to have maximum of 2 valves per cylinder.
- (k) No controlled vacuum leaks are permitted except OEM crankcase ventilation.
- (l) Engine sump may be modified to increase oil capacity. Engine sump may be modified so as to provide an engine mounting system. Engine dry sump systems are not permitted.
- (m) Water pump and oil filter must be fitted in OEM position. Fuel pump, rocker covers, air cleaner and radiator fan may be after market type.
- (n) Needle or roller type rockers are not permitted unless Standard OEM part of engine being used e.g.: Buick, EA Falcon and Nissan Maxima.
- (o) All overhead cam engines must retain OEM specification hydraulic valve lash adjusters and rockers, used in OEM form.
- (p) Porting and polishing of OEM heads is permitted.

- (q) Owners of vehicles must make individual arrangements with the track Steward, or qualified Speedway New Zealand Official to inspect, certify and seal each individual motor before the vehicle can be raced. NO SEAL, NO RACE. Engine reconditioners certificates are not acceptable.
- (r) All motors must be drilled with holes through two sides of the sump in readiness for sealing by a Speedway New Zealand official.
- (s) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section G11-3 Technical Exclusions.

#### **T12-2-18 Inlet Manifold**

- (a) Four-barrel inlet manifolds are not permitted. Unused or unwanted holes may be welded up or bunged/plugged.
- (b) **This clause applies to an engine originally fitted with a carburettor manifold:**
  - (i) The original V6 or V8 Carburettor manifold must be OEM for the engine being used.
  - (ii) The OEM manifold may be reduced in height only.
  - (iii) No other material of any kind may be added or removed from the interior or exterior of the OEM manifold. Except:
  - (iv) The OEM manifold may have a one-piece acceptor plate 25mm maximum thickness welded or bolted to the inlet manifold.
  - (v) The said acceptor plate hole must be square edged.
  - (vi) Where no OEM two-barrel carburettor manifold is made the original manifold may have inlet manifold material removed from directly below the restrictor plate hole.
  - (vii) The approved restrictor plate must be fitted above the said acceptor plate if fitted.
  - (viii) One adapter plate 35mm maximum height may be fitted if required above the Restrictor plate and below the carburettor.
  - (ix) The inlet tract of the carburettor - adapter plate - restrictor plate - acceptor plate must be in one vertical plane.
- (c) **This clause applies to Flat 4, Flat 6, V6 and V8 engines originally fitted OEM with EFI multi-point Injection manifolds;**
  - (i) The inlet manifold must be OEM for the engine being used, i.e. no Ford 221 engines use a multi-point EFI manifold.
  - (ii) The OEM manifold may be reduced in height only.
  - (iii) The inlet throttle body assembly must be removed; inlet manifold must be totally sealed off at throttle body area.
  - (iv) No other material of any kind may be added or removed from the interior or exterior of the OEM manifold, except that:
    - (i) The OEM manifold may have a one-piece acceptor plate 25mm maximum thickness welded or bolted to the inlet manifold.
    - (ii) The said acceptor plate hole must be square edged.
  - (v) The approved restrictor plate must be fitted above the acceptor plate if fitted.
  - (vi) One adapter plate 35mm maximum height may be fitted if required, above the Restrictor plate and below the carburettor.
  - (vii) The inlet tract of the carburettor - adapter plate - restrictor plate - acceptor plate must be in one vertical plane.
  - (viii) The base face edge of the carburettor must be no more than 130mm from the top of the nearest inlet port. Except flat 6 engine has no height restriction but must comply with clauses 1-7 above.

- (d) **This clause applies to In-line 4 & 6 cylinder engines.**
  - (i) The OEM manifold that is standard for the engine must be used.
  - (ii) No material of any kind may be added or removed from the interior or exterior of the OEM manifold. Except that material may be removed from directly below restrictor plate hole.
  - (iii) Where a carburettor type manifold or central throttle body injection manifold is used that is not fitted with the original carburettor, an adapter plate must be used.
  - (iv) This, one only adapter plate, must not exceed 35mm in height including gaskets and restrictor plate.
  - (v) The inlet tract of the carburettor - adapter plate - restrictor plate must be in one vertical plane.
- (e) **This clause applies to In-line 6-cylinder OEM multi-point EFI manifold.**

The EFI throttle body must be removed. A right angle adapter assembly with 60mm radius and a downdraft carburettor must be used. The base face edge of the carburettor must be no more than 100mm from the top of the inlet port. This adaptor measurement must include the thickness of the restrictor plate.

#### **T12-2-19 Exhaust**

- (a) A standard cast iron exhaust manifold must be used in its OEM form. It may be fitted in any configuration, as long as the manifold and head surface is not modified.
- (b) The following modifications are not permitted:-
  - (i) Standard exhaust manifold may not be of two front (or rear) halves.
  - (ii) No extractors permitted.
- (c) Mufflers are free, however sound levels must comply with Rule S3.
- (d) Exhaust pipes must discharge towards the rear, or underneath the car.
- (e) Side-mounted exhaust systems inside or outside the body, must be suitably guarded where they pass the driver, to enable first aid personnel to get driver out of the car without getting themselves burnt.

#### **T12-2-20 Carburettor**

- (a) The engine shall be normally aspirated only, and fitted with one carburettor only.
- (b) The carburettor must be of down draft design.
- (c) The said carburettor shall have a maximum of four chokes, and the use of fuel injection, supercharging and turbo charging is prohibited.
- (d) Glass bowls must not be fitted on carburettors or fuel pumps. Two throttle return springs must be fitted to the carburettor shaft linkages.
- (e) Plastic fuel pump and plastic fuel line fittings and plastic pump bases are not permitted.

#### **T12-2-21 Restrictor Plate**

- (a) A restrictor plate with an internal circular hole of 42mm diameter must be fitted between the inlet manifold and the carburettor base or between inlet manifold and adapter plate.
- (b) Restrictor plate to be SNZ approved 2001 version. Restrictor plate to be available from tracks and must be used at all times.
- (c) The internal hole of the restrictor plate must not be modified in any way. The restrictor plate must not be modified in any way.

#### **T12-2-22 Adapter Plate, Acceptor Plate**

- (a) The adapter plate must be detachable from both manifold and carburettor.



- (b) Any permitted adapter plate must be non-porous and fitted with conventional gaskets.
- (c) The acceptor plate, if permitted, must be non-porous.
- (d) The intake tract of the adapter plate must be in one vertical plane.

#### **T12-2-23 Ignition**

- (a) No twin point distributors permitted. No aftermarket distributors permitted. Lumination is not permitted.
- (b) Only original OEM electronic ignition distributors are permitted. Where a distributor is fitted, it must remain in original OEM ignition position in block or head, however where an engine has no ignition distributor fitted in its OEM form, the position of an OEM distributor is free.
- (c) Ignition may be controlled by:-
  - (i) a computer that is standard for the same engine family as the engine being used.
  - (ii) an SNZ approved aftermarket computer.
 No other aftermarket or modified computers will be permitted.
- (d) OEM crankshaft sensors, camshaft sensors and engine control units in their original OEM form are permitted to control ignition systems only.
- (e) The self-starter must be in working order. Cars must leave pits and starting line under their own power.

#### **T12-2-24 Oil Lines**

- (a) Engine oil lines must be capable of withstanding a pressure of 450psi and a temperature of 230° C.
- (b) When flexible, engine oil lines must have threaded connectors and an outer metal braid resistant to abrasion and flame (will not sustain combustion).
- (c) No engine oil line connectors in driver's compartment are permitted, except oil gauge fittings.

#### **T12-2-25 Fuel**

Refer Section E4.

#### **T12-2-26 Battery**

The battery must be securely mounted inside a metal box, with a secure lid suitably insulated. Aluminium, stainless steel or steel box, of not less than 1.2mm thickness,

#### **T12-2-27 Transmission**

- (a) Any clutch plate can be used, as long as it is a single plate.
- (b) An OEM pressure plate must be used.
- (c) Flex plates may be changed to steel flywheels. Flex plate may be altered to accept standard OEM clutch assembly.
- (d) No aluminium components are permitted. EXCEPTION – Hydraulic clutch throw out bearing, gearbox tail shaft housing, gearbox end plate, OEM gearbox housing, OEM differential head housing.
- (e) No quick-change gearboxes are permitted eg: standard gearboxes only, however may be shortened.
- (f) A 40mm inspection hole in clutch bell-housing must be available. Position of inspection hole to be in line with clutch plate, in a position above the 90° and readily accessible.

#### **T12-2-28 Driveshaft**

A drive shaft retaining strap must be fitted under and over the front end of the drive shaft. All drive shafts running through cockpit must be covered by 3mm metal plate cover.

#### **T12-2-29 Differential**

Quick-change or open tube type differentials are not permitted. Standard differentials may be offset. Alloy rear hubs will NOT be permitted.

**T12-2-30 Suspension**

- (a) Any type of suspension may be used.
- (b) Suspension and aerofoil must not be able to be adjusted by driver while in the driver's seated position.
- (c) (i) OEM joints, fixed pivot and bush joints are permitted.  
(ii) Steel tractor links and rod ends are permitted. 12mm minimum eye size.
- (d) Rear suspension 5th coil type torque arm systems are not permitted. Un-sprung and sliding torque arm systems are permissible.

**T12-2-31 Shock Absorbers**

- (a) OEM replacement shock absorbers must be used.
- (b) Internally adjustable and externally adjustable shock absorbers are not permitted.
- (c) Shock absorber must be removable for inspection.
- (d) Original brand names and part numbers must be visible, if no brand name or numbers are visible the shock absorber is illegal.
- (e) Steel rose joints/rodends, steel tie rod ends, tractor links and rubber bushing are permitted.

**T12-2-32 Springs**

- (a) Coil springs are permitted however coil-over spring assembly kits must be either cast iron, steel or brass.
- (b) Any car fitted with coil springs must have the springs securely clamped, or chained in position. A coil-over assembly is regarded as a suitable restraint for the spring to be securely clamped.
- (c) No aftermarket torsion bar systems are permitted.

**T12-2-33 Steering Joints**

- (a) Steel only OEM tie rod ends are permitted.
- (b) Tractor links and rod ends are permitted, 5/8 minimum eye size.

**T12-2-34 Brakes**

- (a) Brakes must be fitted on both front wheels, and at least one brake on the diff assembly, so as to provide braking on all four wheels.
- (b) OEM brake parts must be fitted however mixing and matching is permitted.
- (c) No adjustable hydraulic or mechanical brake bias systems are permitted.
- (d) Only one brake master cylinder is permitted.
- (e) They must be maintained in perfect working order at all times.
- (f) The brakes must not be able to be adjusted by the driver while seated in the race vehicle, except for front to rear brake bias.

**T12-2-35 Wheels**

Refer Section T14 on wheels for specifications covering this class.

- (a) Bead lock rims are not permitted.
- (b) Bleed off tyre valves are not permitted.

**T12-2-36 Tyres**

- (a) Standard road tyres must be used. All tyre grooves must not exceed 10mm in width or depth.
- (b) Racing type tyres, slick retreads are not permitted.
- (c) Hand grooving to original tread pattern of tyres is permitted, 10mm maximum groove width. Added grooves are not permitted.
- (d) Maximum width of tread not to exceed 210mm on the track, and overall width not exceed 255mm at or above bumper height.
- (e) All tyres must have sound casings.

- (f) When conventional road tyres (front or rear) are used, they must duro 55 or more prior to race.
- (g) All tyre specifications will be determined by the use of the SNZ approved tyre measuring tool.
- (h) Local rules do not apply to tyres at any time.
- (i) New and radical tyres are subject to performance assessment by SNZ and approval by the Stockcar Technical Committee, even though the particular tyre may comply with these rules.

#### **T12-2-37 Enforcement of Specifications**

- (a) Vehicles not complying with Speedway New Zealand specifications refer Section G7-5 (Duties of a Vehicle checker).
- (b) SNZ reserves the right to weigh any vehicle or all vehicles at any time. All Stockcars must be weighed before specified Championship events. Vehicles can only be weighed on SNZ approved weighing systems.
- (c) The use of any parts that may be considered nonstandard or performance equipment must be submitted to SNZ Board of Directors for clarification.

### **R12-3 RACING RULES: SUPERSTOCK AND STOCKCAR**

Only ONE person may operate any race vehicle at any one time. NO PASSENGERS ALLOWED.

#### **R12-3-1 Authority**

- (a) No race or practice will be allowed to start unless Speedway New Zealand officials are in attendance. A Speedway New Zealand Steward **MUST** be in attendance at all practice meetings.
- (b) The instructions of the Speedway New Zealand Steward or Stipendiary Steward, or any of his nominees, must be obeyed by all competitors without question.

#### **R12-3-2 Competitors**

- (a) Only one competitor may occupy a vehicle while it is on the track. No person shall ride on a vehicle other than accommodated in its seating capacity.
- (b) No competitor will drive with an arm, or any other part of his body outside the vehicle.

#### **R12-3-3 Track Signals**

- (a) The following flags will be recognised as the standard colours to be used as signals to competitors during the race:

*Green Start*

*Red All competitors to stop*

*White Last lap for individual competitor*

*Blackboard Individual competitor to retire immediately upon receiving the black board bearing the offending competitors number held out for two laps.*

*Black & White*

*Chequered Finish*

- (b) When a red light or red flag is shown, competitors must immediately stop. Failure to stop renders competitors liable to a fine and or disqualification for any period.

#### **R12-3-4 Starting**

- (a) The number of Starters permitted to start in any one race will be decided by the Steward, and his decision will be final and binding.
- (b) Vehicles must line up as directed by the starter in the order in which they are drawn.

- (c) Vehicles will move off to a rolling start together, and must not change positions until the starter drops the Green Flag. In all rolling starts the outside front (number 2 grid) is the pace setter.
- (d) A clutch start is permitted.
- (e) Any vehicles failing to start after leaving the pits within the time limit of three (3) minutes, must be pushed into the centre field and remain there until the completion of the race. This rule only applies before the start of the race, i.e. before the green light is shown. There is only one (1) three minute bell allowed per race.

#### **R12-3-5 Race In Progress**

- (a) Competitors shall take all proper care, and deliberate aggressive contact before and after a race is strictly forbidden. Stationary vehicles are to be avoided wherever possible, and competitors will not attempt to force or steer other vehicles into stationary vehicles.
  - (b) The driver of any vehicle that makes deliberate contact with any other competitor from/and on the centre of the field shall be fined and excluded from the results.
  - (c) If a car is forced, spun, or driven infield during racing, it must return to the track in the same straight or corner in which it left the track.
  - (d) Vehicles must race in an anti-clockwise direction. Should a competitor find himself in a position where he cannot drive in an anti-clockwise direction, he must not attack until in the correct position. The correct position is defined as anywhere from a right angle back to the direction of the flow of traffic.
  - (e) Attacking from a stationary position or hitting a stationary car is not permitted. Those vehicles which wish to wait for an opposing member should be moving, however slowly at all times in the correct direction. (It must be remembered that this competition is called racing and parked vehicles are not considered to be still part of the competition.)
  - (f) Any Competitor using a concrete wall or bank to an advantage, in the opinion of the Referee, may be penalised.
  - (g) Any competitor unfairly using the pole line to advantage by placing one or more wheels over the pole line to eliminate another competitor will be fined and excluded.
  - (h) Any competitor that deliberately places one or more wheels over the pole line to avoid contact with another competitor shall be fined and excluded from the race.
  - (i) Any loss of wheel gate or one that is not fully attached. Car to be removed from race.
  - (j) When Teams are racing for points, the winning team may be decided on by either 'first past the post' or 'points' racing. The chosen system and points awarded are up to the promoter's discretion. It is permissible to push your own team members cars at any stage during a teams race, providing the car doing the pushing has not already received the chequered flag, and was an original starter in that same race.
- NB No car will move on a red light.

#### **R12-3-6 Substitutions**

No substitute cars or drivers may be entered into Championship events if a particular car or driver is eliminated during racing. THIS DOES NOT APPLY TO TEAMS RACING.

#### **R12-3-7 Emergency Stoppage**

- (a) All vehicles must stop immediately on the display of red lights or red flags and remain stationary except under instruction from an Official.

- (b) In the event of a vehicle stopping or being stopped on the track during a race, the competitor shall remain strapped in his seat until he is given permission to leave it by an appropriate official. Obviously this restriction does not apply in the case of fire.
- (c) If a driver unclips his seatbelt during a competition he is deemed to have retired from the race and cannot resume racing.

#### **R12-3-8 Blockage of Track**

In the case of a complete blockage of the track, where there is no path to pass the obstruction, competitors may then proceed over the pole line without penalty but must return to the track immediately once past the blockage, by the shortest practical route, but must not drive on to the track in front of an oncoming vehicle. Failure to obey this Rule will lead to a fine and/or exclusion.

#### **R12-3-9 Restart**

- (a) The car which is the primary cause of the stoppage is not eligible to restart **Exception:** At the discretion of the Referee a car that has been rolled can be allowed to continue after a safety check has been carried out.  
The race continues from a clutch start when the green flag/light is displayed.
- (b) No Orange/Amber light to be used during a race.
- (c) When a car has been rolled over and has landed on it's wheels it shall be allowed to keep racing provided there is no outside assistance and it passes a quick safety check. The offending car won't be penalised for bringing on the red light.

#### **R12-3-10 Finish of Race**

- (a) Racing will continue until all able vehicles have completed the lap they are on when the chequered flag is shown.
- (b) All placings will be determined by the finishing order and number of laps completed by each vehicle, as recorded by the lap scorers.
- (c) A race is not finished until the chequered flag is displayed, regardless of the number of laps run.
- (d) Once a competitor has received the chequered flag he will take action to avoid all other cars until the amber lights are shown.
- (e) Once the amber lights are shown under a chequered flag, all racing is over. Competitors are then to return to the pits at a safe speed.
- (f) A competitor must cross the finish-line and receive the chequered flag before any points are allocated in any race.

#### **R12-3-11 Grand Parades**

A grand parade of vehicles to be at a speed not exceeding 40 kph.

#### **R12-3-12 Amendment to Rules**

Subject to local conditions these Rules in this section may be amended in part by the unanimous decision of the Stipendiary Steward, if in attendance, or the Steward of the Meeting, the relevant Class Representative, and the Clerk of the Course, bearing in mind the following 3 factors: safety of Competitors, safety of Spectators, and better promotion of events.

## **SUPERSTOCK and STOCKCAR TEAMS RACING CODE OF ETHICS**

Teams racing is a very exciting and competitive form of racing with many added responsibilities on competitors, crews, officials and Promotions.

It is the responsibility of the competitor to present his vehicle within the rules at all times. He must be aware of the SNZ rule book pertaining to Superstock and stockcar racing and teams racing. It is the responsibility of the team manager to make sure that all of his competitors **DO** in fact know the rules and the consequences of breaking those rules.

Competitors must realise that the Referee is in control of the racing and is responsible for the safety of competitors during racing. No official or competitor wants a race stopped. However, if the referee has to stop a race it must be accepted that a competitor is in an unsafe situation, or a competitor wants to be removed from the race. A competitor who in the opinion of the referee is repeatedly offending may be excluded and removed from a race at any time. All competitors must obey a referee's direction, often carried out through an infield official.

### **R12-4 SUPERSTOCK and STOCKCAR TEAMS RACING RULES**

- (a) Teams races begin with clutch starts only. The display of red light or flags signifies the stopping of a race immediately even if your race is run. Competitors must not pass other competitors, nor move to any other position unless instructed by an official. Competitors may freely proceed under green or orange lights or flags.
- (b) Placing one or more wheels inside the pole line is considered breaking the rules of racing, repeated offences may attract a penalty and/or a fine.
- (c) A competitor forced infield must give way once pushed over the pole line and return to the race once the track is clear. Passing inside the pole line will attract either a fine and/or the team may be excluded. The infield is not for racing, any vehicles on the infield must disengage from contact and return to the track in the same corner or straight from which they left the track.
- (d) Attacking another competitor from inside pole line will attract either a fine or individual exclusion on the driver and/or the team may be excluded.
- (e) Any competitor deliberately driving infield (to avoid oncoming cars) for a sanctuary (to gain advantage) will attract a fine on the driver, or the driver may be excluded.
- (f) Forcing competing cars into stationary cars will attract either a fine, individual exclusion and/or the team may be excluded.

#### **The situation of stationary cars is of the utmost importance.**

Competitors who wish to be removed from their vehicle must give the **"thumbs down" signal**, motionless drivers will obviously bring the race to a red flag stop.

Drivers on the racing surface in a blocking role will be considered to be part of the race and must realise that deliberate contact may occur.

Attacking cars **MUST** avoid cars that are in a non attacking position.

(Any inference that one can legitimately hit all stationary cars has been removed from the rules.)

- (g) Drivers must only drive in the correct direction. When the way is blocked by the wall or another vehicle one may reverse to clear the obstruction.

Drivers must not travel in the wrong direction unless the way is blocked by the wall or another vehicle.

When travelling in the wrong direction as just mentioned the track must be clear of on-coming vehicles, deliberate contact when travelling in the wrong direction will attract a fine, and/or individual exclusion, and/or the Team may be excluded.

- (h) Drivers may select reverse gear to move in the race direction without penalty.

Drivers may select reverse gear to cross to the track surface from the infield by the shortest route. When travelling onto the track as just mentioned the track must be clear of on-coming vehicles.

Drivers who reverse travelling in the wrong direction to reposition on the track will attract a fine.

- (i) The winning team will be decided by 'first past the post' or points. Promotions must clearly advertise the chosen system and any points that will be awarded.
- (j) Team managers must act in a responsible and professional manner and may seek verbal clarifications from the Steward and drivers representative. Team managers may assist with paper work requirements and gain driver's signatures as required.

The Team Manager's name must be submitted at the time of team entry, any changes to team or manager to be submitted in writing to the Steward of the meeting.

- (k) Abusive conduct by competitors and/or managers against other competitors or officials will be treated as a breach of conduct and may attract a penalty on the team concerned.
- (l) When a senior Referee is in control of teams racing, NO protests can be entered into.
- (m) Penalties - at the discretion of the referee
- Fine: \$100 to \$1,000
  - Individual Exclusion (from the meeting), an exclusion in any one race by a non winning driver is not a penalty.
  - Team Exclusion

## SECTION T13: STREETSTOCK SPECIFICATIONS AND RACING RULES



2009/10 New Zealand Streetstock Champion – Geoff Loan

### **T13            STREETSTOCK SPECIFICATIONS**

#### **T13-1        Specifications**

##### **T13-1-1     General**

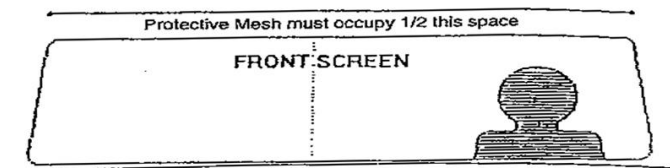
- (a) Only modifications specifically mentioned in this chapter are approved - no other modifications are allowed.
- (b) In any vehicles that require OEM parts, their components must retain their original identification marks.
- (c) All Streetstocks are to have a weight limit when ready to race and this weight must not be exceeded at any time before, during or after competition.
  - (i) For cars with an original kerb weight of up to 1000kg a weight increase of 20% above kerb weight is permitted.
  - (ii) For cars with an original kerb weight from 1000kg to 1500kg the weight increase may be up to 10% but no Streetstock ready to race is permitted to exceed 1550kg.
- (d) All glass (except rear vision mirrors), headlights, upholstery, and potentially inflammable material, must be removed. Instruments with glass are allowed, subject to inspection. Only blue, white or green instrument and warning lights are allowed. Towbars also to be removed.

##### **T13-1-2     Body**

- (a) Only approved Saloon, Station-wagon, Coupe or Van bodies are allowed.
- (b) Body shape is not to be altered, except for the following: Up to 75mm may be cut away from wheel openings of front and rear guards. Guards to retain original shape.
- (c) Centre door pillar must remain OEM between upper and lower side window openings.
- (d) Front body panel(s) shape, to top line of front bumper, must be as original. Original front panels and nose cone may be reproduced to original shape, 1.2mm maximum thickness.



- (e) Boot lids may be welded to the body around their perimeter, provided that a readily detachable panel, 600mm wide by 400mm deep is provided in the boot lid for inspection purposes.
- (f) Seam welding of inner panels to chassis rails is optional. Bars may be welded to body panels where they pass through them.
- (g) A protective mesh screen must fill at least 50% of the total area of the front screen opening. The protective mesh to have no larger squares than 100mm and must be secured along the upper and lower edge centrally in front of the driver.



- (h) All vehicles must be fitted with a window net on driver's side. Window net must be of approved 'Simpson' type design with opening release mechanism to be in the top front. (refer Rule S2-3-1) however arm restraints are not permitted. Plastic, elastic or bungy cord mountings are not permitted, however plastic-coated metal fastenings are permitted.
- (i) Excess internal panel work MAY be removed i.e. parcel tray, inside door panels, dash. Original parcel tray may be reproduced to original shape up to 1.2mm maximum thickness.
- (j) Non original internal body panels are to be removable and must be removed at vehicle checkers request for inspection purposes.
- (k) Panel steel on cars to be 1.2mm maximum thickness.
- (l) Inner guards must be original. Front inner guards may be removed.
- (m) Car pedal box to remain in OEM position.
- (n) All repair plating on bent/damaged chassis may be repaired with 1.6mm max thickness panel steel, 100mm x 100mm max square placed over area. There must be no less than 50mm spacing between each repaired area.
- (o) Original boot floor must remain.

#### **T13-1-3 Doors**

- (a) Outer door skins must be welded or bolted securely as to prevent opening. Adequate window openings shall be provided to allow access to the interior of the car.
- (b) Original outer door skins may be substituted by panel steel, reproduced close to original shape, to be 1.2mm maximum thickness.

#### **T13-1-4 Appearance**

Vehicles must be maintained in a reasonably tidy appearance at all times.

#### **T13-1-5 Firewall**

- (a) Original metal firewall must be fitted to completely isolate driver from the engine compartment.
- (b) All holes in firewall to be covered with panel steel. Fuel line and wiring passing through firewall must be grommetted, so as to prevent chaffing etc.

#### **T13-1-6 Suspension**

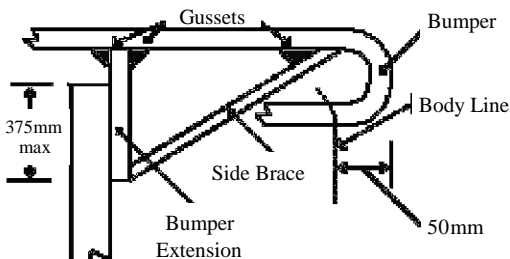
- (a) Suspension must not be changed but maybe lowered. Spring hangers may be inverted to achieve this lowering.
- (b) Front wishbone and lower arms may be reinforced.

- (c) Vehicle with leaf springs to be allowed the use of lowering blocks, and coil springs allowed to be cut.
- (d) Differential mounting points on the chassis or body may be strengthened with 100mm x 100mm x 3mm maximum size but the mounting position may not be changed.

### **T13-1-7 Front Bumpers**

- (a) To be made from maximum 50mm pipe or RHS, can be extended forward of the original bumper position by 100mm, by using maximum 50mm OD pipe, or RHS. This must not extend more than 375mm along the chassis rail.
- (b) Bumper material to be of 4mm maximum thickness.
- (c) When using RHS bumper must be on flat not on edge.

Rule T13-1-7

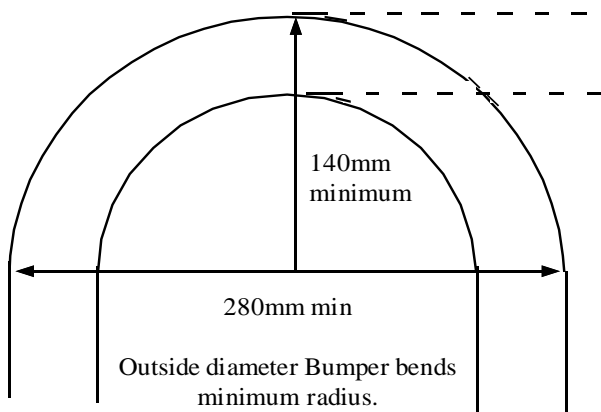


- (d)
  - (i) The welds to the chassis extension may be gusseted with two gussets.
  - (ii) A bumper side brace may be fitted between front bumper and bumper extension.
  - (iii) The welds to the side brace may be gusseted with one gusset.
  - (iv) Only six gussets 75mm x 4mm maximum size permitted on front bumper.
- (e) A maximum of two jointing slugs permitted inside bumper to join bumper ends to front bumper centre: one jointing slug each side, slug to be 4mm maximum thickness size. Jointing slugs are permitted to extend up to 50mm either side of bumper joint weld.
- (f) Bumper ends are to be mechanically rounded by bender or, if cut and welded, to have a rounded outer radius of 140mm minimum (see diagram) and curve back inside bodyline of car. Bumper end may be welded to the side brace. No shear bolt corners and no square corners. No sharp corners.
- (g) Front bumper ends must not protrude any more than 50mm past original skin line of body.

### **T13-1-8 Rear Bumper**

- (a) Rear Bumper may be made from 50mm OD pipe or 50mm OD RHS (maximum size) covered by original bumper or similar (optional), to be securely welded.
- (b) Bumper material to be of 4mm maximum thickness.
- (c) When using RHS bumper must be on flat not on edge.
- (d) A maximum of two jointing slugs permitted inside bumper to join bumper ends to rear bumper centre: one jointing slug each side, slug to be 4mm maximum thickness size. Jointing slugs permitted to extend up to 50mm either side of bumper joint weld.
- (e) Bumper may extend along the side of the car to the wheel arch. Ends of pipe or RHS to be mechanically rounded or, if cut and welded, to have a rounded outer radius of 140mm minimum

(see diagram). Rear bumper side extension ends are to be attached to the chassis rail or rear floor brace, but not both. No shear bolt corners and no square corners. No sharp corners.



- (f) (i) Rear bumper may have gussets at welds to rear of T13-1-10 rear floor bars, and may be gusseted where rear bumper side extensions are attached to sides of rear floor bars.
- (ii) A maximum of six gussets allowed on rear bumper - two gussets at each rear floor bar and one gusset at each bumper front extension. Gussets to be 75mm x 4mm maximum size.
- (iii) Rear bumper to extend no more than 100mm backwards than original.
- (g) 25mm OD pipe or square maximum badge bar. Bottom of bar to top of bumper pipe to be 150mm maximum. The badge bar may be connected to the bumper in up to seven places using the same material as the badge bar. Plating between the two bars is not permitted, but original car bumper or similar may be welded to badge bar and bumper.
- (h) Front and rear bumper pipe or RHS may be welded to the body as they pass through the body panel to the chassis rails to prevent body panels being torn off.

#### **T13-1-9 Roll Bars**

- (a) Substantial interior roll bars, to be constructed of minimum of 48mm diameter if galvanised pipe, or 38mm x 3.2mm wall, if constructed of steam pipe or RHS, must be fitted above the drivers normal seated position.
- (b) (i) A brace may be welded from top of rear of rollcage to the T13-1-10-rear floor bar.
- (ii) The said brace must be welded to the T13-1-10 rear floor bar between rear axle and inside of body.
- (c) The brace from rear of rollcage to floor or chassis should not be crossed. Addition of 4 optional bars to interior roll cage. (See diagram.)
- (d) The front rollcage down tubes may be suitably braced with 2 vertical [one each side]  $\frac{1}{4}$  light up rights, made of rollcage material. The said brace to be securely attached to the front rollcage and upper hip plate side pipe.
- (e) A floor runner bar may be used on each side of car to securely mount roll bar to floor. Floor runner to be maximum of 51mm

RHS, and extend from firewall to a maximum of 100mm behind rear rollage hoop.

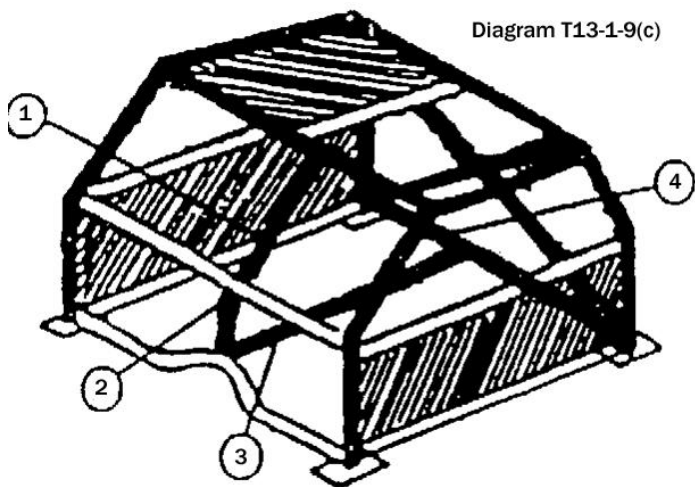
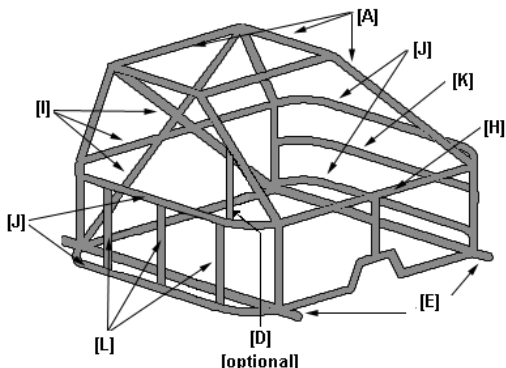


Diagram T13-1-9(c)

- (f) Rear roll cage hoop bar down tubes to be no more than 200mm behind the drivers seat.
- (g) Minimum distance from centre of driver's seat to outside of rollage to be 355mm measured at shoulder height.
- (h) The roll cage must be braced by a front horizontal cross member, attached to front rollage on each side at dash area.
- (i) The rollage must be secured by both a diagonal cross brace and a horizontal cross member travelling behind seat and attached to rollage on both sides.
- (j) A one piece steel hip-plate of 4mm minimum and 6mm maximum thickness and 381mm minimum height must be welded on each side of car to the front and rear roll bars, upper and lower side bars, to protect hips and feet. No holes permitted in plate. Driver's hip-plate may be curved around the rear of rollage behind driver's seat. Only to be welded to rollage.
- (k) One additional horizontal side bar is permitted, welded in a mid position between the upper and lower side bar mentioned in T13-1-9(i).
- (l) Three spaced vertical bars may replace the additional horizontal side bar on the driver's hip plate only. These vertical bars must be welded and fit between the upper and lower hip plate sidebars.
- (m) A driver's footplate is permitted. The driver's footplate (if fitted) must be 4 mm minimum thickness, must be fully welded on three sides to three of the four following, but must not protrude through the firewall:
  - 1 the front rollage down tube
  - 2 the T13-1-12(i) hoop brace
  - 3 a footplate front brace from the same T13-1-12(i) brace to the floor plate,
  - 4 the T13-1-11 floor plate.

- (n) A lower hip plate must be welded between floor runner bar and lower rollage side bar to protect driver from hips to feet.

#### T13-1-9 Rollage

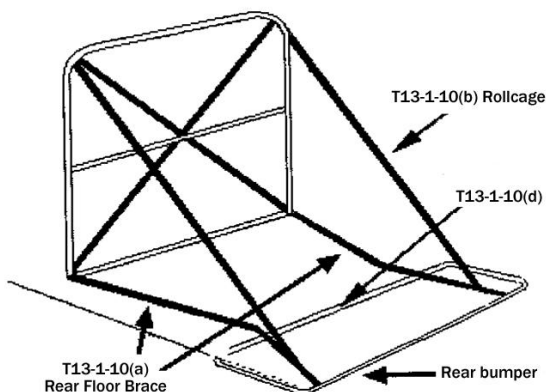


- (o) The roll cage must be reinforced above the driver's head with steel plate of 6mm thickness. Minimum size to be 400mm square, and welded continuously on 4 sides to the cage.
- (p) Head plate shall not have lightening holes cut into plate.
- (q) Driver head plate must extend 150mm in all directions from centre of driver's helmet when in the normal seated position to provide ample protection for the driver's head.
- (r) Driver's helmet must have 50mm clearance from any part of the car.
- (s) A Vehicle checker may drill a 6mm (1/4") diameter hole for inspection anywhere in roll cage, plating or chassis.

#### T13-1-10

##### Rear Floor Brace

- (a) The 51mm OD RHS or 50 mm OD pipe maximum size rear floor brace must be attached to the rear rollage down tubes and the rear bumper.



- (b) This brace may pass through differential tunnel or chassis but must be no lower than the top of the boot floor, i.e. bar must not be seen when looking under boot floor from behind vehicle.
- (c) This rear floor brace may be welded (not stitched) to the chassis with no more than 250mm of continuous weld between rear bumper and roll cage.
- (d) The two rear floor braces may be either joined to each other by welding or connected to each other by one 50 mm pipe or 51

mm OD RHS at the point where the rear bumper front extensions are attached to the rear floor brace. This same joining point must be behind the centre line of the rear axle housing.

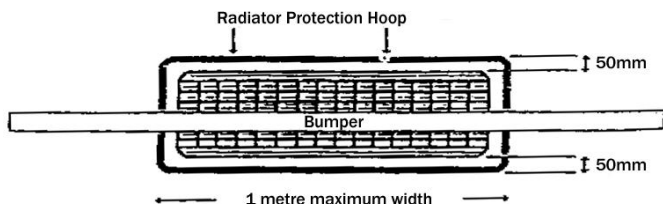
- (e) Each rear floor brace must consist of one continuous straight piece of brace material from the point of attachment at the rear of the rollcage until behind the centre line of the rear axle.
- (f) No prefabricated chassis allowed.

#### **T13-1-11 Floor Plate**

A steel plate 3mm thick must be fitted from the rear of the drivers seat to forward of the drivers feet. Floor plate to be a minimum of 455mm wide and maximum of (760mm).

#### **T13-1-12 Radiator Protection Hoop**

- (a) The hoop is to be fully extended to totally surround radiator. Uppermost edge of hoop to be no higher than 50mm from top of radiator and not higher than bonnet level. Lowermost edge of hoop to be no lower than 50mm from lower edge of radiator.
- (b) Only the top bar of the radiator hoop may extend sideways into the mudguard as far as the centre of the existing headlight surround.
- (c) The radiator must be no further forward than the leading edge of the bonnet.
- (d) The leading edge of the hoop must be no more than 100mm forward of the leading part of the radiator.
- (e) The base of the hoop may be attached to either the bumper mounting brackets, or the chassis rail, but not to the bumper itself.
- (f) A maximum of two braces may be fitted inside the hoop; these braces may be crossed. The leading face of the hoop may be covered with wire mesh.
- (g) The hoop may only be braced to the rollcage with one bar on either side of the hoop. Said brace bar may be gusseted at rollcage end of brace.  
Maximum gusset size, maximum of two gussets per brace 75mm x 75mm x 5mm.
- (h) The rear of the hoop brace bar must be attached to the vertical bar of the rollcage at upper side pipe height.
- (i) The front of the hoop brace must be secured to the hoop in an area between the top of the chassis and the top of the hoop and spaced between 500mm and 1 meter apart, where attached to the hoop (refer diagram).
- (j) The hoop brace may pass through inner guard or firewall and may be welded to those body panels.
- (k) All tubular reinforcing bars permitted within these rules to be 50mm maximum NOTE: maximum of 50mm RHS.



#### **T13-1-13 Radiator**

Any make or model of standard car radiator may be used. Electric fans may be used.

#### **T13-1-14 Sump guard**

may be fitted. To be constructed of maximum 3mm plate and attached to lower radiator bar and/or cross

member, and go back the full length of the sump. Also to be no wider than the sump.

**T13-1-15 Seating, Headrest**

- (a) The driver is the only permitted occupant of the car.
- (b)
  - (i) The drivers seat shall be made of steel bucket type, incorporating a headrest constructed of 3mm minimum steel plate to a minimum size of 280mm width, and 150mm depth, corners rounded off, surface padded, securely bolted or welded to the floor and/or integral bar work.
  - (ii) Technical committee will approve professionally made seats. However 3mm minimum, steel plate must be fitted within 100mm of the seat back. Minimum height of steel back to be from floor to top of shoulders. Said steel plate must equal the width of the seat taken at widest point of seat.
- (c) An aluminium seat of 3mm thickness with no steel backing is permissible. However, the 3mm section must include the full width of the seat back support and seat base built to a professional standard.

**T13-1-16 Safety Harness**

Refer Section S2.

**T13-1-17 Rear Vision Mirrors**

A single or two steel backed/plastic mirrors/reflective surfaces, of not more than 0.023m<sup>2</sup> (35sq.ins). each may be fitted. The mirror head must be in the interior of the car and be no closer than 450mm from the driver.

**T13-1-18 Steering Wheels**

The use of wood-rim steering wheels is prohibited.

**T13-1-19 Racing Numbers**

Refer also Section T7.

- (a) Numbers to be on both sides, between front and rear wheel arches.
- (b) All numbers to be legible and of contrasting colours. Outline to be 20mm minimum.
- (c) Side number to be minimum height of 300mm, minimum width 50mm.
- (d) Numbers to be on both sides of roof (300mm, minimum width 50mm) or on both sides of roof fin (190mm x 30mm minimum size). Roof fin must not exceed 400mm x 400mm.
- (e) Boot and roof fin number to be minimum height 190mm, minimum width 30mm. The rear number must be visible from behind the vehicle.

**T13-1-20 Engine**

- (a) Electronic Fuel Injection engines are permitted with the following restrictions.
  - (i) Original EFI engine as fitted to make and model.
  - (ii) Original engine must be 4.0 litre or less at time of manufacture.
  - (iii) Max OEM bore oversize = 1.00mm.
  - (iv) Maximum compression ratio 10 to 1.
  - (v) Exhaust Manifolds to be OEM.
  - (vi) Engine and EFI control systems must not otherwise be modified except as in clause (i) and (ii)
  - (vii) Air cleaner filtration system is free, however OEM EFI engine management sensors and air flow meters must be retained and working.
  - (viii) Fuel shut off tap must also switch off the electrical supply to the fuel pump, before the shut off tap is fully closed.  
NB Return fuel line must be beside main fuel line.

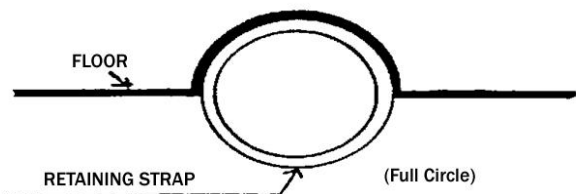
- (ix) An alloy or panel steel partition between EFI Fuel Pump and fuel tank must be fitted accurately to prevent fluids and fire from reaching driver
- (x) Streetstock Technical Committee may approve engines to use an SNZ approved ECU.
- (b) Original engine as fitted to the make and model. Maximum cubic capacity allowed 4753cc (290 cu in). Engine must not be otherwise modified except as in rule T13-1-21 and clause (i) (ii) and (iii) below.
  - (i) Air cleaner may be OEM or a fabricated air cleaner consisting of a metal top and base, the element medium is free.
  - (ii) Mechanical fuel pump may be substituted with an electric fuel pump.
  - (iii) Maximum compression ratio 10.0 to 1.
- (c) Distributor from previous model engine may be used, Ford/Ford, Holden/Holden, provided original factory distributor mounting location is retained.
- (d) In addition to the normal engine mounts or steel mountings, a steel wire or strap must be fitted across the top of the front of the motor, from chassis rail to chassis rail or on strong position in engine bay, e.g. chassis rail to engine cross-member, to prevent excess movement.
- (e) No sleeving back is allowed for engines bigger than 4753cc (290 cu in).
- (f) Component parts must be to OEM specifications.
- (g) All engines are subject to random testing by SNZ officials.
- (h) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section G11-3 Technical Exclusions.

#### **T13-1-21 Exhaust Manifold**

- (a) Stockcar or free flow exhausts are permitted. Exhausts must be extended at least 200mm past rear of driver's seat.
- (b) Exhaust pipe to comply with rule E4-3-7.
- (c) Exhaust pipe may pass through the interior of the car but must be shrouded and end outside the body.

#### **T13-1-22 Differential**

- (a) Locked or limited slip differentials are not allowed.
- (b) OEM steel differential covers from earlier model vehicle may be used in place of alloy equivalent. "L" shaped bracket, 40mm x 5mm x 100mm maximum size, may be welded to steel cover to allow watts linkage to be bolted to the cover. The remainder or the watts linkage system must be OEM.
- (c) Driveshaft hoop of full circle steel construction must be fitted in such a way, so as to retain the front end of each driveshaft section, should it become dislodged from the gearbox or centre joint.



#### **T13-1-23 Gearbox**

Original gearbox, or gearbox from same manufacturer may be used. E.g. Ford/Ford, Holden/Holden, Chrysler/Chrysler. Any gearshift mechanism may be used.



**T13-1-24 Clutch**

Any type of clutch mechanism may be fitted; from pedal to clutch fork e.g. hydraulic system, cable or chain. Flywheel, clutch plate, pressure plate and thrust bearing to be OEM to make and model parts only.

**T13-1-25 Battery**

The battery must be securely mounted inside a stainless steel, aluminium, or steel box or marine style battery box, of not less than 1.2mm thickness, or a steel framed wooden box. Such boxes must be fitted with a secure lid.

**T13-1-26 Self-Starter**

The self-starter must be in working order. Cars must leave pits and starting line under their own power.

**T13-1-27 Carburettor**

Exclusion: EFI, refer to rule T13-1-20

- (a) Only original carburettors are to be used with no modification whatsoever except removal of choke butterflies.
- (b) Maximum of 2 carburettor chokes only allowed, i.e. No four (4) barrel carburettors or triple carburettor set-ups allowed.
- (c) Fuel injected engine may be run minus injection but must be fitted with a carburettor from a previous carburettor model - single or two barrel.
- (d) Carburettor must be fitted to a factory manifold. Two throttle return springs must be fitted to carburettor shaft linkage at two separate positions.

**T13-1-28 Fuel**

Refer Section E4.

**T13-1-29 Fuel Tank**

Refer Section E4.

**T13-1-30 Wheels**

- (a) Original road wheels as per original model must be used.
- (b) Optional 10mm rod may be used on outside rim edge and welded full circumference.
- (c) No aluminium alloy or widened wheels permitted. However, when using reinforced centres refer to Section T14
- (d) Small metal valve protectors may be fitted, or valve holes in rims may be moved to protect valves.  
NB: For all Streetstock wheels, original offset and rim size must be retained.

**T13-1-31 Tyres**

- (a) Standard road tyres only permitted.
- (b) Re-grooved slicks are not permitted.
- (c) May be grooved to any pattern, but must retain sign of original tread pattern.
- (d) Maximum tread groove to be 10mm wide and 10mm deep. No cross grooving permitted.

**T13-1-32 Brakes**

Four wheel brakes must be fitted and maintained in perfect working order at all times.

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**R13-2 RACING RULES: STREETSTOCK**

Only ONE person may operate any race vehicle at any one time. NO PASSENGERS ALLOWED.

**R13-2-1 Authority**

No race or practice will be allowed to start unless Speedway New Zealand officials are in attendance. A Speedway New

Zealand Steward or Stipendiary Steward, or any of his nominees, must be obeyed by all competitors without question.

#### **R13-2-2 Competitors**

- (a) Only one competitor may occupy a vehicle while it is on the track. No person shall ride on a vehicle other than accommodated in its seating capacity.
- (b) No competitor will drive with an arm or any other part of his body outside the vehicle.

#### **R13-2-3 Track Signals**

The following flags will be recognised as the standard colours to be used as signals to competitors during the race.

*Green*                      *Start*

*Red*                        *All competitors to stop*

*White*                    *Last lap for individual competitor*

*Black Board*            *Individual competitor to retire immediately upon receiving the black board bearing the offending competitor's number held out for two laps.*

*Black & White*

*Chequered*            *Finish*

#### **R13-2-4 Startling**

- (a) The number of Starters permitted to start in any one race will be decided by the Steward, and his decision will be final and binding.
- (b) Vehicles must line up as directed by the starter in the order in which they are drawn.
- (c) Vehicles will move off to a rolling start together, and must not change positions until the starter drops the Green Flag. In all rolling starts the outside front (number 2 grid) is the pace setter.
- (d) A clutch start is permitted.
- (e) Any vehicles failing to start after leaving the pits within the time limit of three (3) minutes, must be pushed into the centre field and remain there until the completion of the race. This rule only applies before the start of the race, i.e. before the green light is shown. There is only one three minute bell allowed per race.

#### **R13-2-5 Race Direction**

- (a) Streetstocks race direction can be both clockwise and anti-clockwise, and all Streetstocks must travel and race in the direction instructed by the Clerk of the Course.
- (b) The direction, (clockwise or anti-clockwise), will be given by the Clerk of the Course as the first car leaves the pits, for each race and not before.
- (c) In any race programme there must be at least one race in the opposite direction.

#### **R13-2-6 Race In Progress**

- (a) Racing contact of vehicles engaged in Streetstock racing is permitted, but deliberately forcing other cars into the wall, or excess attacking is not allowed.
- (b) The driver of any vehicle which makes deliberate contact with any other competitor from/and on the centre of the field, may be subject to the appropriate penalty at the Referee's discretion.
- (c) If a car is forced, spun, or driven infield during racing, it must return to the track in the same straight or corner in which it left the track, but must not drive onto track in front of any oncoming vehicles.
- (d) Any competitor using a concrete wall or bank to an advantage, in the opinion of the Referee, may be penalised.

- (e) Any competitor unfairly using the pole line to advantage by placing one or more wheels over the pole line to eliminate another competitor, will be fined and excluded.
- (f) No reverse spinning.
- (g) In the event of a vehicle stopping, or being stopped on the track during a race, the competitor shall remain strapped in his seat, until he is given permission to leave it by an appropriate official. Obviously this restriction does not apply in the case of fire.
- (h) If a driver unclips his seatbelt during a competition he is deemed to have retired from the race and cannot resume racing.
- (i) No substitute cars may be entered into Championship events if a particular car or driver is eliminated during racing.

#### **R13-2-7 Emergency Stoppage**

All vehicles must stop immediately on the display of red lights or red flags, and remain stationary except under instruction from an Official.

#### **R13-2-8 Blockage of Track**

In the case of a complete blockage of the track, where there is no path to pass the obstruction, competitors may then proceed over the pole line without penalty but must return to the track immediately once past the blockage by the shortest practical route, and must not drive onto the track in front of an oncoming vehicle. Failure to obey this Rule will lead to a fine and exclusion.

#### **R13-2-9 Restarts**

The car which is the primary cause of the stoppage is not eligible to restart after receiving outside help. The race continues from a clutch start when the green flag is displayed.

#### **R13-2-10 Finish of Race**

- (a) Racing will continue until all vehicles have completed the lap they are on when the chequered flag is shown.
- (b) Placings other than first, will then be determined according to the number of laps completed by each vehicle.
- (c) A race is not finished until the chequered flag is displayed, regardless of the number of laps run.
- (d) Once a competitor has received the chequered flag he will take action to avoid all other cars, until the amber lights are shown.
- (e) Once the amber lights are shown under a chequered flag, all racing is over. Competitors are then to return to the pits at a safe speed.
- (f) A competitor must cross the finish-line and receive the chequered flag before any points are allocated in any race.

#### **R13-2-11 Grand Parades**

A grand parade of vehicles to be at a speed not exceeding forty kilometres per hour.

#### **R13-2-12 Amendment to Rules**

Subject to local conditions the Rules in this section may be amended, in part, by the unanimous decision of the Stipendiary Steward, if in attendance, or the Steward of the Meeting, the relevant Class Representative, and the Clerk of the Course, bearing in mind the following 3 factors: safety of Competitors, safety of Spectators, and better promotion of events.

## **SECTION T14 : WHEEL SPECIFICATION RULES**

**The rules set down hereafter are for each wheel assembly that comprises a manufactured outer rim of pressed and/or rolled steel welded to a centre section of flat or pressed steel plate or web which is centrally mounted to the hub with conventional stub and axles. The centre hole of the wheel must fit the axle hub.**

Refer to SNZ website: [www.speedway.co.nz](http://www.speedway.co.nz) for latest information on approved components.

- (a) All steel wheels must be inspected at CVI and date-stamped.
- (b) The life expectancy of OEM steel road wheels is three years. OEM steel road wheels must not be used after three years use.
- (c) OEM Cortina front stub axles are not permitted on Superstocks, Stockcars, Modifieds and Saloons. Exception: Production Saloons. Re-manufactured Cortina stub axles are permitted.

### **T14-1      Lightening**

Also Refer to Following Diagrams A, B and C

**T14-1-1**      Subject to the following provisions, all or any lightening holes must be symmetrical with respect to the studs.

**T14-1-2**      In any one wheel, lightening holes should be identical in shape or, in the case of a number of smaller holes and various diameters, in pattern.

**T14-1-3**      The distance from any stud hole to any adjacent hole as in Diagram 'A' must not be less than 40 mm. Excepting Saloon (front & rear) & Modified (front) wheels must not be less than 38mm. Except as stated in T14-6-2(e).

**T14-1-4**      The maximum amount of metal removed from a 'spoked' web for lightening purposes when measured:

- (a) On any circle circumscribed on the centre, from the minimum inside radius of the rim, should not exceed one half of any such circumference. Nor shall more than 50 percent of the area of the web be moved.
- (b) Radially, shall be outside of the P.C.D (Peripheral Circle Diameter) of the studs, excepting as is stated in T14-1-6(a) and (b) below.

**T14-1-5**      Excepting as is stated in rule 6 below, the inside radius of lightening hole or section removed, should not be less than one-quarter of the shortest distance measured between any two studs.

**T14-1-6**      Where a web comprises a full disc on its outer circumference

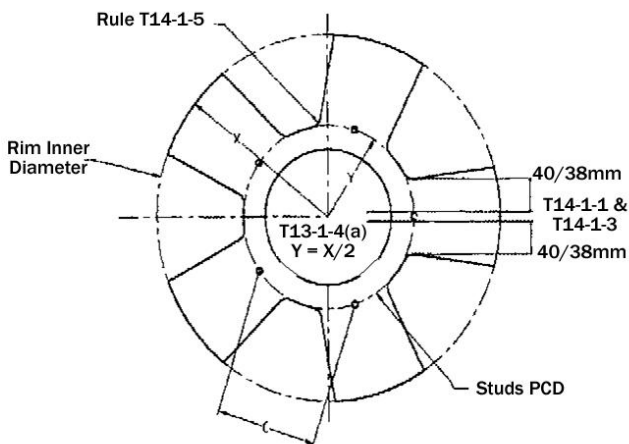
- (a) The minimum radius within the lightening holes shall be one sixth of the minimum distance between any two studs, PROVIDED the 50% welding rule as below in Rule T14-2(a) is maintained.
- (b) The minimum distance from an inside surface of any lightening hole to the nearest adjacent outer surface on a web before welding may be 25mm.
- (c) The web thickness to be 8mm minimum.

### **T14-2      Welds**

Welds connecting the web to the inside of the rim

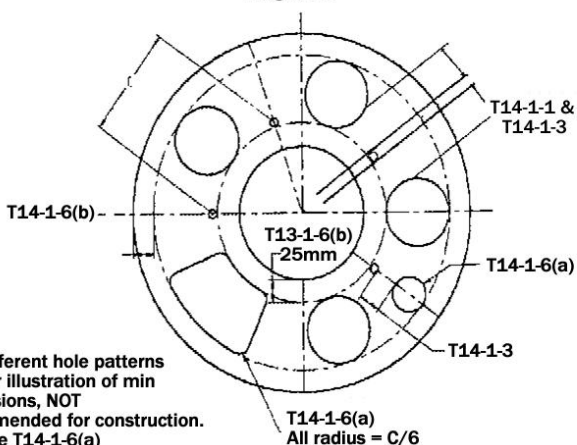
- (a) Shall have a total length of not less than 50% of the circumference around the welding circle, or equivalent peripheral length.
- (b) Shall be uniform and evenly spaced around the periphery, and have a fillet size of not greater than 50% of the web material thickness.

Diagram A



Wheel Centre Lightening Diagrams  
Not to scale

Diagram B



NB: Different hole patterns  
only for illustration of min  
dimensions, NOT  
recommended for construction.  
See rule T14-1-6(a)

- (c) And where a web is in a 'spoked' configuration, both sides of each spoke shall be welded to the rim, over their full peripheral length, excepting only as in (d) below
- (d) And where the spokes or web itself fills in more than 75% of the circumference of the rim, alternate 'stepped' welding may be used, but each weld shall have a length of not more than  $\frac{1}{8}$  of the diameter, measured around the circumference, the total of all welds at the rim to occupy the full outer circumference of the web where it joins the rim.
- (e) To be from welding rods which are compatible with the rim and web material.
- (f) Shall be smooth, uniform and non porous welds without overheating or burning of any part of the welded joint.

- (g) There shall be no welding on the centre web whatsoever, other than where the web attaches to the rim.
- (h) The widening of wheel rims must be to a professional standard with smooth, uniform non-porous welds, without overheating or burning of any part of the welded joint.

#### **T14-3 Countersinks**

- (a) All webs shall be drilled and countersunk to properly fit the correct hub studs/nuts for the assembly being used, e.g. 3 holes for 3 studs, 4 holes for 4 studs.
- (b) The wheel must not prevent the wheel nuts from fully engaging their studs.
- (c) Wheels with slotted stud holes are not permitted.
- (d) The centre hole of the wheel web must fit the axle hub.
- (e) Centre webs of high tensile steel are not permitted

#### **T14-4 Offsets**

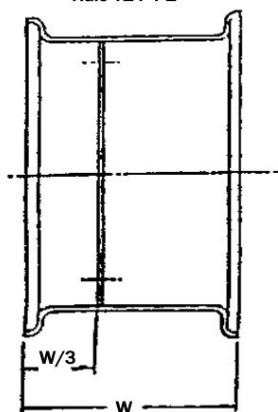
Also Refer Diagram C

**T14-4-1** Any offset applied to the web of a wheel should not be more than  $\frac{1}{3}$  of the width of the inner flange of the rim.

**T14-4-2** Any web of any wheel, whether offset or not, should be arranged such that, if not given additional strengthening as mentioned in T14-4 (4, 5 and 6 below), both the outer diameter, where it welds to the rim, and the inner diameter, where it bolts to the hub, shall lie in the middle third of the width of the wheel.

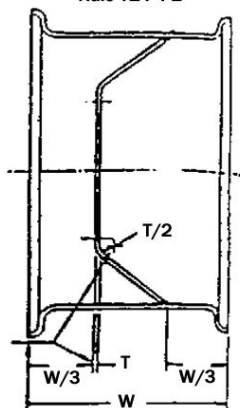
Diagram C - Not to Scale

Rule T14-4-1



Rule T14-4-2

Rule T14-4-3



**T14-4-3** On any pressed centre the cross sectional inside radius of the curvature shall not be less than twice the thickness of the plate from which the web was pressed.

**T14-4-4** Where a Superstock and Stockcar rear wheel centre web is a minimum of 10mm and with a minimum of 5 (five) 12.5mm minimum size wheel studs, both the outer diameter of the centre web where it welds to the rim and the inner diameter where it bolts to the hub, may lie inside the centre half of the width of the wheel.

**T14-4-5** On any Saloon wheel centre web that is less than one third ( $\frac{1}{3}$ ) of the total rim width from the outer edge of either side of the rim the centre web must be 10mm minimum thickness with 12.5mm minimum size wheel studs, except saloons fitted with 'wide 5' wheels where the centre web must be 8mm minimum thickness.

**T14-4-6** On any Wide 5 fitted to a Modified the centre web may lie outside the centre third ( $\frac{1}{3}$ ) of the total rim width.

**T14-4-7** All wheel stud spacers and wheel spacers are prohibited. Exception Halibrand type rear axles.

**T14-5 Web Thickness**

For the type of wheel construction specified above, and subject to the constraints listed, the following thickness are minimums for class of cars listed hereunder:

- (i) Sprintcar, Super Saloon, Saloon, Modified: Minimum 8mm
- (ii) Streetstock, Super Stocks/Stockcar: Minimum 8mm
- (iii) For manufactured custom built and specialist production wheels using special pressing and/or alloy wheels; thicknesses may be less than the minimums above, but with an approved design certification required before use.

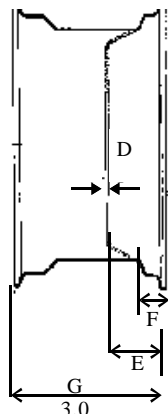
**T14-6 Approved Wheels**

Clearly identifiable professionally manufactured wheels that are outside the above specifications may be submitted SNZ for testing and subsequent approval.

**T14-6-1**

- (a) The 'D Window' wheel centre, both 6-pin and 5 stud, as manufactured by INTERO is approved for Modifieds, Super Saloons, Stockcars and Superstocks, provided all existing offsets as described in these rules are maintained.
- (b) Bassett Wheel: The Bassett Dot Approved Street Legal Racing Wheel 15" x 7" is approved for Superstocks and Stockcars. The wheel must be used as manufactured and fit to the hub as per manufacturers specifications, ie 5/8 studs and 1", 45 degree lug nuts
- (c) Applicable Super Saloon and Modified: Two imported pressed steel wide 5 wheel centres are approved provided wheel assemblies are welded to comply with NZS 4701 class 4, and operators to comply with NZS 4711 in the appropriate position. The fluted centre is approved for left rear and front wheels only.
- (d) Nissan Nivara Wheel J.I.S. D4103 approved for Superstocks.
- (e) Desert Rat/Lightening serial number 1947 approved for all classes to the following specifications: (Refer Diagram D) D=7mm, E=65mm, F=35mm, G=178mm
- (f) An alternative wheel centre with special offset has been approved for Superstocks/Stockcars. This specification exception applies to Rule T14-4, named 'Superstocks/Stockcar Wheel', to the following specifications: (Refer Diagram D) D=10mm E=70mm F=50mm G=200mm
- (g) Beadlock rims approved for Modifieds, Saloon but not production.
- (h) The use of HK Holden wheels are prohibited by Speedway New Zealand.

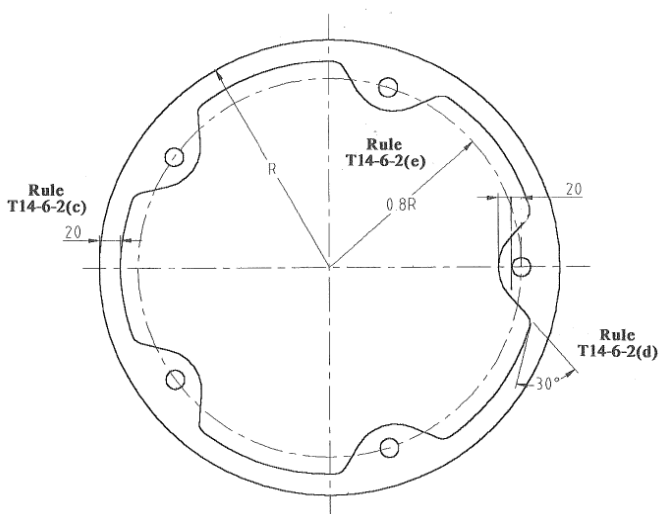
**Diagram D**



**T14-6-2 Wide 5 wheels**  
Refer Diagram E below.

- (a) It is strongly recommended the centre web should comprise of a full disc on the inner circumference of the rim.
- (b) The centre web thickness must be 8mm minimum.
- (c) It is strongly recommended the minimum radial thickness of the web to be no less than 20mm.
- (d) It is strongly recommended the angle between the main web and the extension (which comprise the stud holes) housing should be no more than 30% to the tangent.
- (e) If the stud holes are in the last 20% of the radius, (between the centre of the wheel to the inner surface of the rim) the distance from any stud hole to the edge of the web should not be less than 20mm
- (f) All wide 5 wheels date stamped after 1/06/98 must fully comply with all the above regulations.

**Diagram E**





## REGIONAL CLASSES

### **(Refer G1-1-42, Definitions, and Rule G6-1-2)**

The following rules covering Production Saloons, Adult & Youth Ministocks, Modified Sprints, Quarter Midgets, Kiwi Kidz Solos and Peewee Solos are included in this rule book as a service to members.

These rules are not to be subject to change at Annual General Meetings. The rules for these classes are administered by the Directors and sub-committees. These classes are not permitted to have North Island, South Island or New Zealand championships or Grand Prix. Further inquiries should be made to the Speedway New Zealand office.

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## SECTION T11-15 : PRODUCTION SALOONS

### **INTENT:**

Production saloons are designed as a budget class and competitors are expected to respect the spirit of these regulations. Only the modifications mentioned are permissible.

### **SPECIFICATIONS:**

Car specifications to be supplied at the time of green sheeting by the competitor and kept with the Log Book at all times.

Reference to OEM: Original Equipment Manufacture

EFI: Electronically Fuel Injected

### **T11-15-1 Eligibility**

- (a) To be eligible for competition the vehicle must have been manufactured in the last twenty (20) years, except where earlier models are identical to those produced in that period. Following an application from a track, the Directors have the right to upgrade the year and make or model to allow cars over 20 years already competing and which are competitive.
- (b) For a car to be classified, a minimum of 200 must have been produced by the manufacturer. The responsibility lies with the competitor for proof.
- (c) Any Production saloon car, Hatchback or Liftback car complying with rule T11-1-1(b) and manufactured with seating for at least four occupants is eligible.
- (d) Right hand drive models only. Front or rear wheel drives only. Convertibles are not allowed.
- (e) Any vehicle originally fitted with ABS, Traction Control or Drive By Wire is eligible with these standard features in place and functioning, providing that the vehicle complies with rule T11-15-14(c).

### **T11-15-2 Engine**

- (a) Engine must be the same as originally fitted to make, model and year of manufacture. Engine to be fitted in the original position of manufacture.
- (b) No V8's, no more than 6 cylinder or twin rotors. No turbochargers or superchargers
- (c) EFI cars only: 4 litre maximum engine capacity. (4/6 cylinder or V6) Original inlet and exhaust manifold as fitted to the make, model and year of manufacture. No modifications are permitted to throttle body size, however exhaust recirculation emission devices may be removed and resulting holes in inlet and exhaust manifold be sealed over.

- (d) Inlet air filtration system is free, however EFI engine management sensors and air flow meters fitted inside OEM inlet tract must be retained and working.
- (e) Only factory parts to be fitted to any make and model of engine. Maximum oversize bore allowed: 1.5mm (0-060"). No external after-market performance extras are permitted. No engine stroking. Cam grinds are allowed but the original manufacturer's lift must be maintained.
- (f) **Exhaust** must extend not less than 450mm past bulkhead and underneath car or may pass through cockpit towards the rear and be suitably covered by 1.0mm steel or 1.2mm alloy. If exhaust is fitted through body panels, maximum height from top of pipe to ground level to be 300mm and exhaust to angle towards rear. Minimum angle 40 degrees and finish at body line.
- (g) Free flow exhausts are permitted on carburettored engines only. Mufflers or baffles must be fitted. Exception: Any E.F.I. car with a factory fitted free-flow system to be permitted.
- (h) Sound level is 95 decibels (absolute maximum). (Rule S3 sound). Local Promotions may enforce lower readings.

#### **T11-15-3 Fuel System**

- (a) One Fuel tank, size must not exceed 36 litres (8 gallons), 1.2 mm steel or 2.0 mm aluminium to professional standards and securely mounted in the rear of the car. (Rule E4-5) A screw threaded cap must be fitted.

**Recognised fuel cells are able to be used.**

- (b) Pressurised fuel tanks and glass fuel bowls are not allowed. Overflow pipe must be wrapped horizontally, completely around the fuel tank and extend through the floor at least 50mm but away from any exhaust pipe.
- (c) Shut off tap or tap control lever for fuel must be situated on floor within reach of driver and at least 300mm from battery and engine cut off switch. Must indicate OFF/ON positions clearly.

**E.F.I cars:** Fuel shut off tap must also switch off the electrical supply to fuel pump, before the shut off valve is fully closed. **NB: Return fuel line, must be beside main fuel line.**

- (d) **Fuel Lines** must be steel or copper and in the case of flexible joints, must be of approved flexible type, securely clamped at joints. No wire clamps. Armoured flexible neoprene plastic may be allowed where fitted as standard parts. Other types of fuel piping may be useful if that specific type is approved by SNZ. Fuel line to be securely clamped every 450mm maximum.
- (e) Only original factory carburettor and manifold belonging to that make, model and year of car being used with a maximum of four chokes-barrels-venturies, etc are permitted.

No methanol or performance enhancing additives. Avgas or petrol only to be used. Carburettor identification numbers must remain legible.

#### **T11-15-4 Electrical System**

- (a) The battery must be securely mounted inside a steel box, 1.2 mm minimum or 2.0 mm aluminium minimum, and to be fitted with a secure lid and suitably insulated, or a marine battery box.
- (b) The battery and engine cut out switch must be fitted on floor and highlighted in a contrasting colour within easy reach of driver at least 300 mm from fuel tap. Must indicate OFF/ON positions.
- (c) All vehicles must be able to be self starting at all times without outside assistance, e.g. jumper leads, etc.
- (d) Only blue, white or green instrument warning lights allowed.

- (e) All unnecessary wiring to be removed (e.g. headlight, taillight wiring etc. Dash may remain standard.

#### **T11-15-5 Electronics**

- (a) The use of cellular or radio and/or telephone communication systems with the driver during the race is not permitted.
- (b) The use of electronic logic processors to control any function of the race vehicle and/or any system gathering continuous data from any function of the race vehicle is strictly prohibited.

Exceptions:

Microprocessors are permitted to control ignition systems.

Engine electronic fuel injection systems are permitted.

Dorian Data-1 transmitter TX 8000 for lap scoring.

Electronic engine RPM counters and limiters are permitted.

Single channel tachometers are approved.

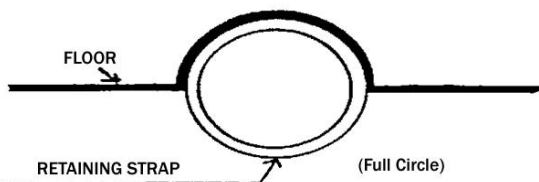
- (c) Electronically controlled adjustable shock absorbers are not permitted.
- (d) **Transmitter placement:** (refer Section E3-4 ) 'A' measurement 1800mm, 600mm from extreme right hand side of vehicle, 300 mm from the extreme left hand side of vehicle. 200mm maximum from bottom of transmitter to track surface.

#### **T11-15-6 Radiator**

- (a) One radiator of any make or model of standard radiator may be used but must be mounted in original position, i.e. if originally mounted in front of engine it must remain in front of engine.
- (b) Radiator overflow must be below floor level.
- (c) The use of electric fans is optional.
- (d) No radiator hoops or bracing.

#### **T11-15-7 Transmisssion/ Differential**

- (a) Must be of the same make of car being used, i.e. Ford car - Ford gearbox.  
Gearbox must be mounted to the engine block with OEM bell housing. No mid mounted engines / transmissions. (Exception OEM vehicles.) No quick change gears allowed. No converter-less/clutched type autos. All converters to be full of transmission fluid. No aluminium flywheels. (OEM) clutches only.
- (b) Differential must be of the same make of car being raced. Diff must bolt into original position. The suspension type (either leaf or coil spring) may not be changed. Original mounting points may be strengthened but not shifted. No added sway bars, tramp rods, lift bars or any additions to original diff mounting to the car being raced. No quick change gears allowed. Locked or limited slip type diffs are optional.
- (c) **Retaining Strap:** A shaft retaining strap must be fitted around the front end of drive shaft. For split drive shafts, a shaft retaining strap must be fitted at the front of each drive shaft section directly behind each yoke. Drive shaft retaining straps to be fitted to adequately protect driver's compartment.



#### **T11-15-8 Suspension**

- (a) Must be of original make and model of manufacture. Mounting points may be strengthened to improve handling but must remain in original position. Suspension may be lowered to

improve handling. Spring or Torsion weights may be altered. Any shock absorbers of OEM configuration may be used on original mounting points. No adjustable platform spring tensioning type shock absorbers are allowed. A 25mm x 25mm bar maybe bolted across front and rear suspension towers or vee'd back to firewall, attached to a bolted plate, 150mm long x 100mm wide x 3mm thick, (non adjustable). . No extra or aftermarket sway bars, only OEM.

- (b) Wheel base and track must not be altered and must remain within 50mm tolerance of standard OEM. (Specifications to be supplied by car owner.)

#### **T11-15-9 Steering**

- (a) Must be original steering components as per make and model of vehicle, (i.e. NO steering quickeners allowed.)

#### **T11-15-10 Body**

- (a) All panels to be original. Door panels may be steel panel of 1.2mm maximum thickness folded to original lines. No cutting wheel arches.

Cars are to be kept in a tidy condition and appearance at all meetings.

- (b) Frame work of doors may be permanently removed for panel beating purposes.
- (c) An alloy or panel steel partition between driver and boot, also driver and engine compartment must be fitted accurately to prevent fluids and fire from reaching the driver. Coup and lift back cars must have a boot/firewall partition to isolate the fuel tank from the driver by a minimum of 300mm.
- (d) All glass, headlights, upholstery and potentially inflammable material must be removed.
- (e) Bonnets and boots to be securely fastened with the bonnet being fastened with quick release pins.
- (f) Protective mesh must fill at least 50% of the total area of the front screen opening. Mesh to be 665 HRC or stronger and secured along the upper and lower edge.
- (g) No flare or wheel arch reinforcing allowed.
- (h) Framework of doors or inside panels may be removed at owners discretion for panel beating purposes. Doors must be securely fastened (i.e. welded, bolted, or riveted).

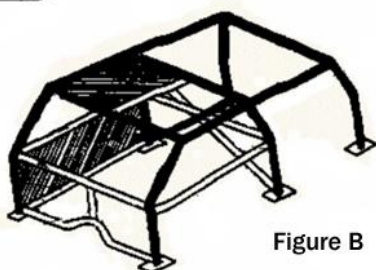
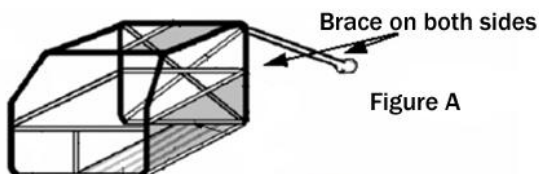
#### **T11-15-11 Bumpers**

- (a) Original bumper bars and bumper bar mounts only.
- (b) No reinforcing at all, except for lifting points located front and rear.
- (c) A chain or original eye must be attached to the front and rear for lifting purposes.
- (d) A bar 40mm x 40mm RHS 3 mm thick, may be fitted between the bumper irons, or 40mm x 40mm RHS 3 mm thick, as wide as chassis rails extending no more than 300mm along chassis rails to allow towing chain or eye to be fitted.
- (e) The original tow bar may be used as a lifting eye. It must be cut off inside the bodyline with a chain or eye fitted.
- (f) Vehicle checker may drill a 6mm inspection hole in bumper or reinforcing to measure same.

#### **T11-15-12 Roll Cage**

- (a) **Main body** roll cage (as shaded in diagram, below) to be constructed of one of the following types of steel:  
Medium steam pipe, minimum of 32mm nominal bore x 3.2mm wall,  
Black medium steel tubing or RHS, minimum of 40 mm OD x 3.00mm  
Seamless tube, minimum of 38mm OD x 3mm

- (b) Roll cage must follow the interior contour of the car to enclose driver's floor and be full body width. Roll cage to be attached to the floor, a 3mm plate minimum size of 0.023m<sup>2</sup> (24 sq in), must be welded to roll cage ends and bolted (4 x 10mm bolts) to another 3mm plate under the floor. Minimum of 50mm clearance between roof plate and pipe work to the driver's helmet when in his normal seated position.
- (c) **Roll Cage Types:** See block illustrations below. Must have minimum of two sideway stays in car suitably locked together. A brace must be fitted from top rear of roll cage and extend past the centre line of rear axle and finish no closer than 150mm from back panel of car (fig A) or three sideways stays in car suitably locked together (fig. B).



- (d) **Roll Cage Bracing:** A diagonal brace, 25mm, must go from the roll cage behind the driver's head to the roll cage on the opposite side floor. If roll cage pillars have any angles more than 45 degrees from the vertical, then a centre brace of the same material as used in the shaded roll cage construction is to be fitted vertically in centre of windscreen opening and attached to the floor with a 3mm plate.  
All saloon cars must have crossed diagonals.
- (e) A horizontal cross member travelling across bulkhead and attached to the roll cage on both sides approximately 380 mm from floor. See T11-1-12(g).
- (f) A horizontal cross member travelling across bulkhead and attached to the roll cage on both sides of floor to protect the driver's feet. See T11-1-12(h).
- (g) A horizontal cross member travelling across, behind and below the driver's seat and attached to main roll cage frame at floor level. See T11-1-12(i)
- (h) A horizontal cross member travelling across behind seat and attached to main roll cage on both sides, to be in line with the cross centre of the roll cage. See T11-1-12(j)
- (i) Two pipes on driver's side minimum of 300mm apart to protect driver. Lower pipe (refer to k in diagram) to be below hips and feet. (Note: lower pipe k to be below hip and feet as viewed from side or car, not as viewed from above the seat.)
- (j) One pipe approximately 380mm from floor on passenger's side. A brace (#9 in diagram) between bars (g) and (h). T11-1-12(l)

- (k) All pipes, braces and cross members not shaded in picture must be 25mm x 3.0mm RHS or 25mm x 3.0mm OD pipe min, exception vertical brace as in T11-1-12(f)(ii).
- (l) The vehicle checker has the right to drill a 6mm maximum inspection hole in any roll cage to measure thickness and ensure compliance with the regulations.
- (m) Roll Cage Plating: A 300mm high by 3mm thick minimum steel plate to be welded continuously on all sides to the driver's side of roll cage extending from the driver's feet to behind driver's seat and reaching from the upper driver's side pipe to the lower side pipe (k) below hips and feet.
- (n) 300mm square by 3.0mm steel plate above driver's head to be welded continuously on all four sides to adequately protect driver's head.

#### **T11-15-13 Wheels – Steel**

- (a) Standard original rims. Must be to make, model and year of manufacture only, or Speedway approved type (Refer section T14 Wheel Specification Rules)
- (b) No diameter miss-matches (eg: cannot run a mix of 13" and 14" wheels on the car at the same time).
- (c) Steel rims of OEM offset and size to be used.
- (d) Maximum rim width of 200mm
- (e) **Wheels – Aluminium:**  
Aluminium wheel rims are permitted providing the following clauses are complied with
- (f) Wheels to be to OEM offset and size.
- (g) Full set only, no mix and match of style or steel and Aluminium.
- (h) Must be stamped as per SNZ requirements.
- (i) No damaged wheels or repaired wheels are permitted.

#### **T11-15-14 Tyres**

- (a) Standard road tyres only permitted.
- (b) Standard road tread, maximum tread groove to be 10mm wide and 10mm deep and must follow the original pattern, with no cross grooving permitted.
- (c) Vehicles with ABS, Traction Control and/or drive by wire must use the original tyre size, unless the standard width is larger than 205mm. If the original tyre width is greater than 205mm, the maximum allowable tyre width is 205mm.
- (d) Maximum tyre width for all other vehicles is 205mm.
- (e) The Manufacturer's rating as displayed on the sidewall determines tyre width.
- (f) All wheels and tyres are to stay within the confines of the body profile.

#### **T11-15-15 Brakes**

- (a) Must operate on all four wheels and be from the make and model of car being raced.
- (b) Boosters may be fitted.
- (c) Handbrake is optional, but if fitted must be operational on both wheels as per original specification.

#### **T11-15-16 Seat**

- (a) Must be steel backed bucket type with sufficient lateral support to restrain driver. Minimum thickness of steel backing to be 1.2mm (18wg).
- (b) An aluminium seat of 3.0mm minimum thickness built to professional standards with no steel backing is permissible.
- (c) Must be securely welded or bolted to the floor and roll cage or brace material.

#### **T11-15-17 Seatbelts**

**Fitted to individual driver's body shape is ESSENTIAL.**

- (a) Must be fitted with an approved, quick release, full harness safety belt. A full harness consists of 5 belts: 2 shoulder belts of 75mm minimum width, 2 lap belts of 75mm minimum width, plus 1 crutch belt 45mm minimum width.
- (b) Shoulder belts must be anchored or pass through guide plates 25mm lower than driver's shoulder height and be within 250mm of the back of the seat.
- (c) All belts must be securely mounted to rollcage or brace material and be able to swivel.
- (d) Seat must not be an anchor point for seatbelts.
- (e) Must be approved by vehicle checker for condition and fit.  
(REFER SECTION S2 FOR EXAMPLES OF INSTALLATION OF DRIVER RESTRAINT SYSTEMS)

#### **T11-15-18 Headrests**

- (a) All cars must be fitted with a headrest or high backed seat incorporating a headrest.
- (b) Must be constructed of steel with the surface padded and fitted to be effective.
- (c) Minimum size 150mm x 280mm x 3.0mm

#### **T11-15-19 Mirror**

A steel backed mirror of not more than .022m<sup>2</sup> (35 sq in) in surface area may be fitted in the car with a minimum distance of 450mm from the driver's head.

#### **T11-15-20 Steering Wheel**

- (a) Complete wood rim or wire spoke steering wheels are not permitted.
- (b) Approved quick release steering wheels are permitted.

#### **T11-15-21 Fire Extinguishers (Optional)**

Fire extinguishers suitable for use on electrical and petrol fires may be fitted. If carried, the extinguisher must be within easy reach of the driver and securely fitted.

#### **T11-15-22 Racing Numbers**

- (a) Numbers to be painted (or computer cut transfers) on both sides between front and rear wheel arches, must be legible and of contrasting colours.  
All racing numbers compulsory on roof to be read from the right hand side of the car.
- (b) Door and roof numbers to be a minimum height of 300mm x 50mm wide, with a minimum 13mm border.
- (c) Numbers must be displayed on rear of car (to be easily read by a following competitor) a minimum size of 100mm x 20mm, legible and of contrasting colours. Racing numbers beginning or ending in '0' are not allowed.
- (d) Track identification code must appear immediately after race numbers, 100mm x 13mm, legible and of contrasting colours.

#### **T11-15-23 General**

- (a) No extra reinforcing of panels or chassis. No other bar work other than roll cage.
- (b) Damaged chassis rails maybe repaired using 1.2mm maximum sheet steel.
- (c) Mudflaps are optional. Local promotions may enforce this.
- (d) If you build your car outside these rules you will not get a personal dispensation.
- (e) If you are unsure of your car's eligibility, contact your local speedway club's class rep.
- (f) The Head Vehicle Checker will be the sole judge of the necessity of any work to be done.
- (g) Handicapping may be used, as deemed necessary in this class.

## SECTION T10 -4 : MODIFIED SPRINTS

### MODIFIED SPRINT SPECIFICATIONS:

Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section G11-3 Technical Exclusions.

#### T10-4-24 Engine

- (a) Front mounted motorcycle engine only. No rear engine cars permitted.
- (b) 1200cc maximum capacity for all engines. Engines must remain as standard production engines. No works race engines or modifications allowed. Original manufacturers allowable oversize only. No engines manufactures within two (2) years of the season being raced will be permitted.
- (c) No rotary or two (2) stroke motorcycle engines, supercharges, turbocharges or engines sleeved back.
- (d) Induction - Carburettors or mechanical fuel injection **OEM EFI, aftermarket airbox permitted with OEM velocity stacks.**
- (e) **OEM Ignition, no aftermarket electronic engine mapping or management devices allowed, eg Power Commander, Cobra Commander not permitted.**
- (f) Exhaust design is free.
- (g) Gearbox - Removal of gears is permitted.
- (h) Oil systems - No dry sumps permitted. Original oil pump pick up must be retained.
- (i) Clutch - Aftermarket clutches allowed provided same amount of plates and springs are used to comply with standard configuration.
- (j) Piston Rings - Aftermarket rings permitted but must comply with standard specification.
- (k) Shot peening of crankshaft and connecting rods is permitted.
- (l) Charging Systems - Alternators and/or charging systems can be removed.
- (m) Gaskets - Head and barrel gaskets must be used and of standard dimensions.
- (n) recent engine declaration certificate of engine capacity on the official SNZ form must be produced on demand.
- (o)
  - i) Engine to be pre-drilled before CVI inspection with 3.3mm minimum size hole to enable scrutineers to seal engine.
  - ii) Pre-drilled holes to seal: cylinder barrels to crankcase, cam cover to cylinder barrels. Note: Pre drilled retainers are acceptable.

#### T10-4-25 Exhaust

- (a) Exhaust pipe or pipes to be securely mounted to the chassis or the frame on at least two mounting points.
- (b) Exhaust pipes not to extend beyond the outer confines of the knurf bars. Mufflers refer T10-1-14(b)
- (c) Exhaust pipes and muffler must remain within the limits of the car, i.e. overall length and within knurging irons, however muffler and outlet must be no higher than top knurging iron bar.
- (d) Refer to Rule T10-1-14.

#### T10-4-26 Chassis Types

- (a) Chassis: Space frame round tubular construction.
- (b) Engine offset: 150mm [6"] measured centre line of motor and centre line of frame.

#### T10-4-27 General Dimensions



- (a) Wheelbase – 2030mm maximum (effective for cars constructed from 1985 onwards) 1520mm minimum.
- (b) Wheeltrack–1320mm maximum 1070mm minimum. To be measured centre to centre of tyres.
- (c) Maximum height–not to exceed 1520mm (not including aerofoil) measured from ground to top of rollcage.

#### **Body**

- (d) (i) Single seater bodies only.
- (ii) All bodies to be of clean and neat design without any protruding or sharp edges, especially in the cockpit and must consist of a nose, tail and cabin.
- (iii) All panels and bonnets must be securely fastened primarily by way of dzus buttons minimum (bolts satisfactory). Plastic ties are not permitted.
- (iv) An effective firewall of 1.58mm (0.0625 inch) metal or other approved fire retarding material must be placed between driver and motor, sealing the engine compartment from the cockpit, down to the level of the chassis frame.
- (e) Seat is to be of a suitable bucket type designed for racing and securely welded or bolted to the floor and internal barwork.
- (f) Floor pan under drivers feet must extend from front edge of seat to firewall.
- (g) No mirrors permitted.

#### **T10-4-28**

#### **Seatbelts**

Refer to Section S2.

#### **T10-4-29**

#### **Rollcage**

Roll cages satisfying the following requirements are mandatory, they should meet the following specifications.

- (a) SAE 4130 N Chrome-Moly Tubing 1.3/8" OD x .095 wall (1.375" OD x .095" WT) When high bar chassis are used front cockpit uprights may be 1.25" OD x .095" wall thickness
- (b) Cold drawn Seamless SAE 1010/1026 or Reynolds 531, 1 3/8 x 8 gauge, (1.375" OD x .161" W.T.)
- (c) All existing cars built and raced prior to May 1998 to remain as they are except any car requiring a rebuilt roll cage must comply to latest new size specification. Log book to determine existing cars.
- (d) **Bottom Chassis Rail to be a minimum of 0.083" wall thickness.**
- (e) (i) The top line of both the horizontal tubes to be no less than 50mm above the drivers head when seated statically in the car.
- (ii) The top lines of the both horizontal tubes to be no less than 100mm above the driver's head when in normal restrained position. Effective for new frames built after July 2002.
- (f) (i) The main frame to be constructed of no more than eight pieces of uncut lengths of tubing, securely attached to the main chassis at the front. Pipe bends, elbows, or sockets are not permitted on main frame.
- (ii) Where the tubing changes direction, or is joined by another member, the inside of the radius or corner, must be gusseted. Gussets will be not less than 3.1mm plate or 16mm x 2.5mm tube. Gussets must extend at least 75mm from centre of corner or join.
- (iii) The rear vertical tubes of the frame must be stayed to the chassis by a diagonal brace on either side of the car, forwards, or rearwards.
- (g) (i) Side intrusion bars may be added to the main frame of the roll cage.

- (ii) The said side intrusion bars must be attached adjacent to the rear cross tube at the top of the roll cage.
- (iii) A brace must be fitted midway between upper and lower mounting points.
- (iv) All bent sections of intrusion bars to have a minimum radius of 4" - 102mm and constructed of a minimum of 31.8mm (1.250") OD x 2.4mm (.095") chrome moly tube.
- (v) A minimum measurement of 750mm and a maximum of 880mm between the inside radius of the intrusion bars measured at driver's helmet height when in normal seated position.
- (vi) SFI certified rollcage padding must be fitted to all intrusion bars above shoulder height.
- (h) A cross brace must link the two longitudinal tube members behind the drivers seat (one diagonal is NOT acceptable).
- (i) All bracing to the tail frame and also the roll cage vertical tubes, to connect as high as practically possible, to use the braces to full advantage.
- (j) Construction of the roll cage may be altered to allow wheel guards to be added to existing cages. Positioning of such wheel guards to be no higher than shoulder height and no lower than waist height when seated in the driving position.
- (k) A "Full" (parachute type) body harness is compulsory with roll cages and provision must be made to anchor both sides of this to the main tail frame of the car, which will be adequately braced to the chassis. Also refer to rule S2-2-3.
- (l) Driver must have easy entry and exit from cockpit, at all times. Arm guard panels to be no higher than 890mm measured from bottom of chassis rail.
- (m) **Sun shields**  
Sun Shields are permitted. Sun shields must be no higher than the top line of the rollcage, must not exceed the overall width and length of the top of the rollcage. The sun shields must be no more than 100mm from the top to bottom when measured at the front and no more than 150mm when measured at the rear.
- (n) **Roll cages**
  - (i) Must not be plated in any way at all.

**Notes concerning roll cages:**

- (ii) All tubing diameters quoted are O/D (outside diameters).
- (iii) All bolts, (other than specified) to be at least ISO M10 88.

**T10-4-30 Transmission**

- (a) Any revolving transmission and drive shafts must be enclosed with a 1.6mm 3mm thickness metal cover incorporating a 360° safety loop at front of driveshaft (in case of driveshaft failure).
- (b) All vehicles must be fitted with operative clutch.

**T10-4-31 Shock Absorbers**

**Suspension must not be able to be adjusted by the driver while in the driver's seated position.**

**T10-4-32 Differentials**

- (a) All differentials to be locked.
- (b) Final chain drive is mandatory.
- (c) Chain must be properly guarded if the chain is located within the frame rails, the chain guard must be a minimum of 14 gauge stainless steel or 12 gauge mild steel, and designed in a manner to completely shield and protect the driver and the fuel tank (if the fuel tank is in line with the chain), from the chain.
- (d) The guard is to extend from the firewall, to be rear of the sprocket, on top and from the top, of the chain to the floorpan

and the firewall, to behind the seat on the side of the driver on both sides, if the chain is in the middle.

- (e) The fuel tank must be protected in such a manner that the chain cannot puncture the tank, if the fuel tank is directly in line with the chain.
- (f) Quickchange rearends are not permitted.

#### **T10-4-33 Tyres**

Maximum size: 13" x 12" x 84" (Hoosier), or 26.5" x 12" x 13" (American Racer). Manufacture size and markings to be retained on side wall. Maximum tyre circumference when measured will not exceed 84".

#### **T10-4-34 Brakes**

- (a) Effective brake to be fitted to rear axle.
- (b) Front brakes are optional and may be fitted to either wheel.
- (c) The brakes must be foot operated.
- (d) When nylon brake lines are used, the quality of the tubing and fittings is to be of an approved brake line quality or aircraft quality. Teflon or plastic line must be covered with stainless steel braid.

#### **T10-4-35 Steering**

- (a) Steering box to be suitably mounted to chassis or frame. The extending of steering box sector shaft is not allowed.
- (b) Pitman arm to be secured to cross shaft by an approved locking device.
- (c) Steering wheel to be of competition type.
- (d) Steering wheel must be suitably secured to steering shaft by one of the following means:
  - (i) spline
  - (ii) keyed
  - (iii) Pinned
  - (iv) set screws.
- (e) Tierods, pitman arm, draglinks or any other type of steering arm must be suitably secured to each by means of bolt and castellated nut with split pin, nyloc nut or double nutted.
- (f) Standard steering ball joints acceptable.
- (g) Heim joints, if used, must be 11mm minimum bore if not incorporating grease nipple, and 12mm minimum bore if incorporating grease nipple.
- (h) Heim Joints, if used, must be 11mm (7/16") minimum bore if not incorporating grease nipple and 12mm (1/2") bore if incorporating grease nipple.
- (i) Front hubs must be suitably secured with castellated nut and split pin.
- (j) An approved locking device must retain front hub bearings.
- (k) All front stub to steering arm fasteners and associated location holes to be checked at security at CVI inspection and suitably lock wired.
- (l) Wheel studs front and rear must be a minimum of 11mm diameter if four or more are used, and a minimum of 12mm if only three studs are used.

#### **T10-4-36 Bumpers**

- (a) Front Bumpers: Where front cross torsion suspension is used, bumpers shall be no more than 150mm ahead of torsions, or 150mm ahead of tyres, whichever is the lesser.
- (b) To be constructed of material no greater than 25mm OD.

#### **T10-4-37 Knurfling Irons**

- (a) All vehicles must be equipped with knurfling irons, extending outward, to effectively cover at least three-quarters of the width of the rear tyre that is to be used in competition. The outer end of the bar to be at hub height.

- (b) All knurled irons to be attached with minimum of ISO M5 88 bolts or cap screws i.e. NO R clips or split pins etc to be used.

**T10-4-38 Battery**

Must be secured in a safe position and suitably covered to prevent spillage of acid in the event of a capsize.

**T10-4-39 Engine Ignition System**

- (a) One engine ignition switch must be mounted to cockpit firewall, to be easily accessible to driver when in normal restrained position. Ignition Switch must be clearly labelled "on" and "off"
- (b) All other ignition components (other than OEM engine mounted components) to be mounted on firewall. Should ignition components be mounted on driver's side of firewall, said components to be covered. Said covers to be removed for inspection.

**T10-4-40 Fuel**

Refer Section E4.

**T10-4-41 Controls**

- (a) Throttle controls must be positive action.
- (b) At least two effective springs must be fitted with at least one to be attached to lever on throttle shaft.
- (c) All connections must be properly secured.
- (d) Self Starters: Must be fitted and operational. All cars must leave pits under own power.

**T10-4-42 Numbers**

Refer also Section T7.

- (a) Numbers and track letter must be displayed on Rear Air Foil. Numerals to be a minimum of 250mm high x 45mm wide with a 13mm border. Numerals to be displayed on both sides of left panel at uppermost rear corner.
- (b) To be on both sides of the tail, the background colour to have a minimum 13mm border. Numbers to be a minimum height of 250mm.
- (c) A number not less than 150mm x 15mm width per digit, to be on the front centre of the bonnet, or on the top flat surface of the front wing.
- (d) 1st, 2nd, 3rd, placemakers in New Zealand Championships, MAY use relative number 1, 2, or 3 from the date won until the next New Zealand Championship. (Their previous number will not be issued to another competitor). In the event of a tie for placings, a four (4) lap run off must take place.
- (e) No cars in the same class may carry the same number at the track to which they are contracted. Visiting cars running the same number in the same class as a locally contracted car may be asked to change their number.

**T10-4-43 Air Folds**

- (a) Mandatory air folds to be fitted 1.486 M2 maximum (16 sq ft), to be fixed to the rollcages at four points by bolts of not less than 8mm diameter. Construction to be approved by the Scrutineer.
- (b) Front wing optional.
- (c) The air foil must not be able to adjusted by the driver while seated in the racecar.

**T10-4-44 Electronic Control**

For the use of any electronic devices refer to Section E3.

**T10-4-45** The Steward, only, has discretionary powers in rule G7-3-20 as to whether a car is fit to race.

**T10-4-46 Impounding Car:** Refer Section E1.

## SECTION T15 : MINISTOCKS

### MINISTOCK SPECIFICATIONS:

**T15-1** Ministock vehicles must be built to the specifications and measurements outlined in the approved 2003 Ministock plans. (See Appendix A)

- (a) A 25mm tolerance is permitted on chassis measurements, except maximum and minimum measurements have no tolerance. No tolerance is permitted on material specifications and drivers helmet clearance.
- (b) Ministocks must be made from one donor car.
- (c) Donor cars are Datsun 1200, Datsun 120Y and Sunny 1200cc using A12 engine, or Toyota Corolla using 1200cc 3K engine, no SSS GT or performance model cars or parts, no vans, independent rear ends, automatic transmissions or 3-5 speed boxes.  
In any vehicles that require OEM parts, their components must retain their original identification marks.
- (d) All standard steering and steering box, struts, shocks, bottom arms, sway bar, ball joints, cross member, brakes, springs, engine and gear box mounts, rear axle and differential (differential may be locked), wheels, drive shaft and control pedals must be used.  
Accessory type pedal grippers are permitted.
- (e) Front and rear standard suspension systems must be fitted unaltered; however coil springs may be shortened and rear leaf springs may be shortened at the rear. Front and rear spring mounts are free.
- (f) Any other device to restrict suspension travel is not permitted.
- (g) Rear wheel drive only.
- (h) Speedometers are not permitted.
- (i) **Chassis:** The chassis arch inside measurement over the rear axle is to be 200mm maximum.

#### **T15-1-1 Body**

- (a) The minimum height shall be 1372mm from the ground to the finished roof line, not including roof number plate.
- (b) Body may be constructed of fibreglass, steel or alloy. All cars must have a bonnet covering from the front of the radiator back to the firewall.
- (c) Power bulge and air scoops allowed in top of bonnet, but any opening must face forward.
- (d) Air ducting leading to the OEM carburettor air cleaner housing may only be fitted in the engine bonnet.
- (e) Protective mesh screen must be fixed to completely cover screen opening in front of driver. Mesh to have no larger squares than 100mm square.
- (f) Radiator Protection Hoop to be 450mm maximum height with the minimum measurement being the height of the radiator.

#### **T15-1-2 Firewall**

Adequate metal firewall must be fixed to and in line of the front rollcage down tubes to isolate the driver from the engine compartment.

#### **T15-1-3 Floor**

- (a) 3mm plate minimum metal floor must be full width and must be welded to the chassis members.  
The floor is to be a minimum of 600mm in length and must extend from the firewall rearwards to the rear of the driver's

seat. The floor under the seat is to be full width and welded to the chassis.

- (b) The foot-well section of the floor must be a minimum of 210mm in depth measured from the top of the chassis to the base.
- (c) It is recommended that the gearbox be covered with a minimum of 3mm aluminium.

#### **T15-1-4 Roll Bars**

- (a) Ministock rollcage assembly to be constructed to specifications outlined on approved 2003 Ministock plans.
- (b) Rollcage hoop layout may be of a north-south or east-west aspect or a combination of both. (Refer to 3D diagrams, Appendix B.)
- (c) No additional bar work is permitted in rollcage.
- (d) Substantial interior roll bars, minimum of 32mm x 3.2mm nominal bore black medium pipe or minimum of 40mm OD x 3mm RHS must be fitted above the driver's normal seated position.
- (e) The roll bar must be securely welded and braced to the chassis at the rear of the car and be further secured by diagonal cross braces.
- (f) The roll bar should be a minimum internal width of 675mm at the driver's shoulder position, or 337mm minimum width from the centre of the seat at shoulder position.
- (g) An optional ¼ window brace is permitted to brace each of the front rollcage uprights. Said brace must be rollcage material, fully welded to rollcage and upper hip plate tubing. Said brace to be fitted a maximum of 250mm from behind firewall, brace must be fixed vertically in relation to hip plate
- (h) A steel plate of 3mm thickness and 500mm minimum height must be attached to the front and rear roll bars and chassis on both sides, to protect hips and feet (as defined in plan). Plates to be welded on four sides. No holes permitted in plates.
- (i) The upper hip plate pipe to be a minimum of 25mm x 3mm, to a maximum of rollcage material.

#### **T15-1-5 Roof plate**

- (a) The roll cage must be reinforced above the driver's head with a steel roof plate of 6mm thickness.
- (b) Roof plate to be 500 mm wide minimum size extending from the back of the headrest, 500mm forward and welded continuously on four sides to the cage (it shall not have lightening holes cut into plate whatsoever) to provide ample protection for the driver's head. (250mm in any direction from centre of driver's helmet when in a normal seated position).
- (c) At all times there must exist a minimum of 100mm clearance between the top of the driver's helmet and any part of the roof plate and/or the roof plate mounting steel work.
- (d) Any additional rollcage or chassis work not shown in the plans is not permitted.
- (e) Vehicle checker may drill a 6mm diameter hole for inspection anywhere in the car.

#### **T15-1-6 Seating and Headrest**

- (a) The driver is the only permitted occupant of the car.
- (b) The driver's seat shall be either of steel backed bucket type, or an aluminium seat of 3mm minimum thickness built to professional standard with no steel backing.
- (c) A headrest must be fitted. The headrest must be constructed of a minimum of 3mm plate, 280mm wide and 150mm deep, corners must be rounded off and the surface padded. A professionally built one-piece seat and headrest is permissible.

- (d) The seat base must be securely bolted or welded to the floor and/or integral bar work with a minimum of four positions. Whether the seat incorporates a headrest or not, the upper 2 mounting positions must be within 152mm of the top of the seat. Seat mounting bolts 8mm minimum with suitable washers.
- (e) If the seat and headrest are separate, the headrest must also be securely bolted or welded to the floor and/or integral bar work.
- (f) The 25x50x3mm chassis cross member under the seat must be welded between the sides of the chassis rails with either wide side or narrow side upper most.
- (g) The following Racetech driver seats have been approved for use: Model 4009, 4009HR, 4009HRV, 9009, 9009HR. Correct mounts to be used as per Manufacturer's diagram. The above Racetech seats are exempt from the following rules requiring the seat back to be steel backed.

#### **T15-1-7 Safety Harness**

- (a) Vehicle must be fitted with an approved quick release full harness 75 mm minimum, safety belt, which must be securely attached to the structure of the vehicle, by a minimum of 12mm bolts or certified fastening systems supplied by the belt manufacturer, which must allow the belts to swivel.
- (b) The driver must wear the belts at all times he occupies the vehicle. Shoulder straps must be anchored or pass through guide plates within 250 mm of the back of the seat.
- (c) Vehicle checker must approve seat belts for both condition and fit.

#### **T15-1-8 Rear Vision Mirrors**

One or two steel or plastic backed mirrors of not more than 0.023m<sup>2</sup> (35sq ins) each may be fitted. The mirror head must be in the interior of the car and be no closer than 450mm from the driver.

#### **T15-1-9 Steering Wheel**

- (a) Wood-rim steering wheel not permitted.
- (b) Approved quick-release steering wheel is permitted.

#### **T15-1-10 Weight**

Vehicle when ready for racing (excluding driver and ballast), must not exceed 730 kg, or below 630 kg in weight. Any car raced and subsequently found to be overweight or underweight will be suspended from racing for one (1) month.

#### **R15-1-11 Vehicle Numbers**

- (a) Numbers must be on front door panels on both sides of vehicle, on both sides of roof fin/roof side panel and on rear of vehicle – must be legible and of contrasting colours.
- (b) Rear numbers only to be a minimum height of 190 mm with a minimum width of 30mm.
- (c) Numbers on both sides shall be a minimum height of 380 mm with a minimum width of 50mm.
- (d) Roof number must be on both sides of a roof fin/side panel, 0.929mm<sup>2</sup> minimum size. Roof number minimum height: 190mm. Minimum width: 30mm.
- (e) Roof fin/panel maximum length: 1200mm. Roof fin/panel maximum height: 600mm.
- (f) One flat board/panel is permitted to be attached to one side of the roof fin/side panel. The said flat board/panel assembly to be confined within the roof drip rail area and must not restrict the occupant's vision in any direction.

#### **T15-1-12 Bumper Bars**

- (a) Bumper bars constructed of RHS must be fitted front and rear.

- (b) Approved bumper height is to be 355mm (14") to the centre, with 25mm (1") tolerance on either side from ground level. The outside ends must be rounded not more than 150mm (6") from the outer edge.
- (c) There must be upright and longitudinal radiator protection bars, diameter 25 x 25 x 3mm.
- (d) All front bumper to roll cage 25 x 50 x 3mm diagonal braces are free to be installed either wide side or narrow side uppermost.
- (e) Under-rider bars must be fitted, extending to 100mm from the outer edge of the bumper and no further than 50mm from the front edge of the front bumper bar, mounted vertically. The minimum depth of the under-rider bar to be 100mm. The under-rider bar must be constructed of 25 x 25 x 3mm box section steel. A minimum of four vertical mounts must be used.
- (f) Side rails to be level with bumper and must be substantially braced to the chassis. Side rails must be as per plan with no 'horns' added at leading edges.
- (g) Rear wheel guards must be constructed of maximum 65mm x 38mm x 3.2mm box steel.
- (h) All steel in car must be one piece box only. No wood etc in any part (e.g.: bumpers, rear wheel guards and chassis).
- (i) The addition of 3mm mounting reinforcing plates is permissible on front bumper only, between rear of bumper and front of bumper brace.
- (j) A 5mm steel plate may be inserted behind the front bumper to protect the main chassis rail and diagonal brace. Maximum dimensions are 225mm wide x 75mm high.

#### **T15-1-13 Suspension**

Any car fitted with coil springs must have the springs securely clamped or chained in position. Minimum D Shackles.

- (a) Hem joints/rod ends and aluminium suspension components other than those that are standard OEM parts, are not permitted.
- (b) Standard unmodified nolathane suspension bushes are a suitable replacement OEM part.

#### **T15-1-14 Brakes**

Brakes must be fitted on both front wheels and at least one brake on the diff assembly, so as to provide braking on all four wheels. They must be maintained in perfect working order at all times.

#### **T15-1-15 Self-Starter**

The self-starter must be in working order. Cars must leave pits and starting line under their own power.

#### **T15-1-16 Battery**

The battery must be securely mounted inside a stainless steel, aluminium or steel box of not less than 1.2 mm thickness or a steel framed wooden box. Such boxes must be fitted with a secure lid.

#### **T15-1-17 Driveshaft**

A drive shaft retaining strap must be fitted under and over the front end of the drive shaft. All drive shafts running through cockpit must be covered by 3mm plate cover.

#### **T15-1-18 Fuel**

Standard pump petrol only. Please refer rule: E4-2(d). See also Section G11-3 Technical Exclusions.

#### **T15-1-19 Fuel Tank**

- (a) Standard tank must be removed and one steel tank of not less than 1.2mm thickness and not more than 9.1 litres (2 gallons) capacity installed. Tank seams and fittings must not be



soldered. It must be mounted inside and towards the rear of the roll cage or under the floor, protected by chassis rails with adequate protection from impact damage. An efficient on/off tap must be fitted directly into the tank.

- (b) The fuel line from the tank must be fitted with a shut off tap which must be in reach of both the competitor while in the normal seated and restrained position and in reach of a person outside the car.
- (c) The tank must be fitted with a metal screw on cap. Tank must be fitted with a steel or copper or braided flexible air vent pipe, coiled once horizontally around the tank, fixed firmly to the tank, then passing through the floor boards of the vehicle to a distance of not less than 50mm (2 inches) and not more than 200mm (8 inches).
- (d) Fuel line from the tank to engine compartment to pumps and carburettor may be of armoured flexible construction, provided that no plastic or reinforced plastic, nylon or reinforced nylon is used.
- (e) Approved fuel cells allowed but they must be mounted in accordance with Rule E4-6-3.

#### **T15-1-20 Exhaust Pipe**

- (a) Must discharge towards the rear or underneath the car.
- (b) Side-mounted exhaust systems inside or outside the body and must be suitably guarded where they pass the driver to enable first aid personnel to get driver out of the car without getting themselves burnt.
- (c) Maximum pipe diameter 1.5 inches (38mm). Donor type offset mufflers only.



#### **T15-1-21 Wheels**

- (a) Pressed steel road wheel must be used, either 12" or 13" providing the wheel correctly fits the hub.
- (b) Mixing and matching of 12 & 13-inch road wheels is permitted.

#### **T15-1-22 Tyres**

Standard road tyres only permitted. (No winter type treads, Town and Country, off road, Sherpas, racing type or slick retread tyres.) Tyres may be grooved to original tread patterns, maximum width of groove 10 mm, maximum tyre width 190mm.

#### **T15-1-23 Restrictor Plate**

- (a) An approved Restrictor plate supplied by SNZ must be fitted between the inlet manifold and the carburettor insulator or between carburettor insulator and carburettor.
- (b) The restrictor plate must have two 21mm diameter circular holes.
- (c) The internal holes of the restrictor plate must not be modified in any way. The restrictor plate must not be modified in any way (however driver is permitted to install own restrictor plate stud mounting holes)

#### **T15-1-24 Engine**

- (a) Engine must be standard (no hot cams), standard two choke carb, standard exhaust & inlet manifold, standard head (eg: no porting etc), standard pistons, maximum piston oversize - 60th.
- (b) The use and fitment of alternator is optional.
- (c) Standard air cleaner housing, not cut, drilled or modified in any way, with the exception of T15-1-24(i)-(xii) below. Air filter element is free, refer Rule G1-1-12(b).
- (d) No SSS, GT or any other performance parts. No lightening or polishing of any engine parts. No electric fuel pumps, fans or

electronic ignitions. No off set rockers or shafts, cam timing must be STD.

- (e) Only single valve springs may be fitted to inlet and exhaust valves.
- (f) All engines to be sealed. Engines are subject to inspection at any time. If a car performs too well, the driver can supply gaskets so the engine can be stripped down, checked and reassembled ready to race (if it complies) at the protester's expense.
- (g) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section G11-3 Technical Exclusions.
- (h) The Directors may suspend any driver whose car is modified or oversize from the class ALTOGETHER.
- (i) **Engine - Things you can do:**
  - (i) Any radiator may be used.
  - (ii) Engines may be balanced.
  - (iii) Valve spring tension may be altered.
  - (iv) Electric idle solenoid may be removed and the resulting holes blocked off. Carburettor jets may be drilled out. All other carburettor parts must be in place and be functional.
  - (v) Maximum piston oversize: 0.060in.
  - (vi) Max compression ratio 10 to 1.
  - (vii) One piece of box steel may be used in place of rubber block in engine mounts.
  - (viii) Strop may be fitted to help hold engine
  - (ix) The exhaust hot box flapper valve, shaft, counterweight and spring may be removed from the manifold. The holes left in the manifold can be suitably plugged to stop the escape of exhaust gases.
  - (x) Distributor must be standard in appearance. It may be recurved and the vacuum advance does not need to be functional.
  - (xi) Air cleaner to tappet cover breather hoses and Positive Crankcase Ventilation (PCV) hoses are optional and if removed may be replaced with aftermarket breathers.
  - (xii) The air cleaner Air Reed breather valve may be removed.

#### **Donor Cars as per rule T15-1(c):**

##### **TOYOTA 3K 1166cc**

Bore: 2.95 inches (75.0mm) up to .60th

Stroke: 2.598 inches (66.0 mm)

##### **Camshaft Specifications:**

Lift: Inlet .225"

Exhaust .237"

Duration: Inlet 66 DGS

Exhaust 66 DGS

##### **Valve Specifications:**

Valve Head Diameter Inlet: (36mm), Exhaust (29mm)

Carburettor Type: Aisan ISO

Venturi Diameter: Primary (21mm)

Secondary (24mm)

Flywheel Weight: 7kg (Min)

##### **DATSUN A12 1171cc**

Bore: 2.87 inches (73.50mm) up to .60th

Stroke: 2.76 inches (70.0mm) only

##### **Camshaft Specification:**

Lift: Inlet .222"

	Exhaust .233"
Duration:	Inlet 68 DGS
Exhaust:	68 DGS
Valve Specifications:	
Valve Head Diameter	Inlet (35mm), Exhaust (29mm)
Carburettor Type:	Hitachi DCG 306
Venturi Diameter	Primary (20mm)
	Secondary (26mm)
Flywheel Weight	8kg (Min)

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## **R15-3 MINISTOCK - Racing Rules**

### **R15-3-1 Flags**

<i>Green</i>	<i>GO as soon as green flag is waved or green lights are on you may start racing.</i>
<i>Red</i>	<i>All drivers STOP when the red flag/light is put out/on ALL drivers must STOP as safely and as soon as possible. Must not move unless told by an official.</i>
<i>White</i>	<i>LAST LAP</i>
<i>Black</i>	<i>DRIVERS TO PULL OFF THE TRACK, due to a misdemeanour or faulty equipment the driver black flagged is to pull off the track as safely and as soon as possible.</i>
<i>Black &amp; White Chequered</i>	<i>FINISH Race finish slow down and stop as required for particular track being raced on.</i>

- (a) Only one competitor may occupy a vehicle while it is on the track. No person shall ride on a vehicle other than accommodated in its seating capacity. No competitor will drive with an arm or any other part of his body outside the vehicle.
- (b) In the event of a vehicle stopping or being stopped on the track during a race, the competitor shall remain strapped in his seat, until he is given permission to leave it by an appropriate official. Obviously this restriction does not apply in the case of fire.
- (c) The driver of any vehicle who makes deliberate contact with any other competitor from/and on the infield, will be subject to the appropriate penalty at the referee's discretion. If a car is driven infield during racing, it must return to the track in the same straight or corner in which it left the track but must not drive onto the track in front of any oncoming vehicles.
- (d) Any competitor using a concrete wall or bank to an advantage, in the opinion of the referee, will be subject to the appropriate penalty at the referees discretion. Any competitor unfairly using the pole line to advantage by placing one or more wheels over the pole line will be fined or excluded. Racing contact of vehicles engaged in Ministock racing is permitted, but forcing other cars into the wall or deliberate attacking is not allowed and will be penalised.
- (e) If a driver unclips his seatbelt during a competition he is deemed to have retired from the race and cannot resume racing.
- (f) **Blockage of track:** In the case of a complete blockage of the track, where there is no path to pass the obstruction, competitors may then proceed over the pole line without penalty but must return to the track immediately once past the blockage by the shortest practical route, but must not drive onto the track in front of an oncoming vehicle. Failure to obey this rule will lead to a fine and exclusion.

# SNZ TRAINING PROGRAMME FOR YOUTH & KIWI KIDZ CLASSES

For: Youth Ministocks, Youth Saloons, Kiwi Kidz Quarter Midgets,  
Kiwi Kidz Solos, Peewee Solos

**MISSION STATEMENT:** The purpose of the Youth & Kiwi Kidz classes is to teach our young drivers how to race safely. **THEY ARE PRIMARILY TRAINING CLASSES, NOT RACING CLASSES.** SNZ Youth and Kiwi Kidz classes are an introduction to speedway racing. They are non-contact classes designed to teach young competitors how to drive a speedway vehicle in a safe manner, in preparation for later years when they will go on to drive in other classes.

## **KIWI KIDZ LICENCE AGE: 8-15 years**

Once you turn 8 years old you can start racing in these classes. As long as you are 15 years old at the time you get your licence, you may continue to race for the rest of that season, at the discretion of the Directors. Proof of age, e.g. birth certificate will be asked for.

## **YOUTH LICENCE AGE: 12-16 years**

Once you turn 12 years old you can start racing in this class. (and continue racing) until your 17th birthday. Proof of age, e.g. birth certificate will be asked for.

### **Qualification to Race**

- 1 You must be a member of a club and hold a SNZ Licence before you race.
- 2 All drivers must go through the SNZ training programme (see below) before being allowed to race.
- 3 You will be required to show proof of age by way of a birth certificate to prove driver's age at first time of registering.
- 4 When you sign your licence contract you agree to abide by the rules and regulations as set by SNZ.

## **TRAINING**

Training courses are to be set up by each club, with a knowledgeable and responsible person (the Coach) in charge. A Coach must be appointed by the club and approved by SNZ.

Each youth must attend all training meetings until deemed ready to race, then attendance is optional. Training is to be in three parts and must incorporate the SNZ Mentor Programme for new competitors to speedway. Training will encompass:

- driving, setting up the vehicle (general guides to maintenance), and the rulebook.
- safety, flags, racing rules, general first aid.
- Training is to foster good manners and a willingness to help each other. Also how to get and look after sponsors for your racing.

The Coach is to run sessions, co-opting other people to help as necessary (e.g. a driver for driving lines, a mechanic for set ups and vehicle maintenance, a steward for rules, etc.). The training sessions will each last for two hours: 1 hour driving, 1/2 hour practical, 1/2 hour theory.

For all sessions the Coach is to be in charge of safety or appoint a safety officer. There will be a maximum of four vehicles on the track at any time during the session - if possible, all at the same experience level.

## **Track Responsibilities**

- Organise with the Steward for Training Session permits.
- Organise and have track prepared for training sessions.
- Help with officials for the running of the Youth programme.
- Have flags, first aid, fire fighting equipment on hand.
- To encourage youth into speedway.

## **Parents/Guardians**

Support from parents or guardians is imperative. They must be in attendance at all training sessions and on race night.

## **Drivers Rep**

A drivers rep is to be elected at each race meeting by the parents/guardians of the youth competitors. This person is to act as the guardian for all youth competitors for that meeting and is to accompany them if and when they are called to the race officials. It is suggested that each parent/guardian takes a turn as drivers rep to familiarise themselves with the role.

## **Your Licence**

Parent or guardian and competitor must fill in the contract as supplied by the steward.

There are two grades of Youth/Kiwi Kidz licence:

1. **'B' licence:** For new competitors and those not yet confident or skilled enough to fully compete in an open field.
  - Holders of a 'B' licence must race only at their home track for a minimum of 6 meetings and should start off the rear of the field.
  - When visiting cars are racing at their home track, they can race only with the approval of the coach.
  - 'B' licenses are sent from the SNZ office to the Coach, who will keep track of their race meetings and progress until the competitor is ready to move up to an 'A' licence. At this point the competitor will be presented with their SNZ licence.
2. **'A' licence:** For experienced youth competitors.
  - Holders of an 'A' licence can travel to other SNZ licensed tracks.
  - 'A' licenses are sent from the office directly to the competitor.

The Youth licence contract form has a large "A" and "B", which must be circled at the time the licence form is completed. Stewards are instructed to only allow visiting competitors to race at their track if they have their SNZ licence or if the "A" is circled on the competitor's copy of the licence contract.

The Coach is the person who decides when a Kiwi Kidz or Youth competitor is ready to race at an away track. He has the final say in these decisions.

## **Conduct**

- Appropriate behaviour must be maintained at all times by competitors, crew and family.
- Courteous behaviour is expected at all times.
- All competitors, crew and family in pit area must wear full footwear. **NO BARE FEET OR JANDALS.**
- All drivers' briefings must be attended.
- SNZ officials must always be obeyed.
- Any disorderly conduct is detrimental to the sport and will be referred to the SNZ Directors.

## **Complaints**

Any complaints are to be made immediately after the event in question, to the Drivers Rep who will approach the appropriate official, i.e. the Referee for a racing incident or the Steward for anything else. Discussions shall be contained to the driver, the Drivers Rep and the appropriate track official.

## **Referee**

Racing is under the control of the track referee. If you are unsure of any procedures or rules you should ask the track steward. The Coach is not to intervene once the race meeting is under way.

## **Safety Equipment**

- At all times during training, practice and racing, all competitors must wear all safety clothing, boots, helmets, gloves, etc as required in Section S1 of the SNZ Rulebook.
- The wearing of a neck brace is compulsory.

Helmets	See S1-1 of the SNZ Rulebook
Drivers Suit	See S1-2-3 of the SNZ Rulebook
Footwear	See S1-2(c) of the SNZ Rulebook
Seatbelts	See S2 of the SNZ Rulebook

PARENT OR GUARDIAN TO CHECK SEATBELTS JUST BEFORE COMPETITORS ENTER TRACK AFTER SITTING IN PIT CHUTE FOR A WHILE.

LET'S HAVE FUN!!!

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## **SECTION T15-2: YOUTH MINISTOCKS**

- (a) Specifications as per T15-1 of SNZ Rulebook.
- (b) Racing Rules as per R15-3 of SNZ Rulebook.

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## **SECTION T11-17: YOUTH SALOONS**

- (a) Specifications as per SNZ Rulebook Section T11-15, with the further restriction that engine size must be under 1600cc.
- (b) Racing Rules As outlined on pages R11-14 of the SNZ Rulebook.

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## **SECTION T10-6 : KIWI KIDZ - QUARTER MIDGETS**

### **DEFINITION OF A QUARTER MIDGET CAR:**

A car that retains the typical lines and layout of a Midget Car with a front mounted motorcycle engine, retaining full gearbox and the classical concept of chain drive, that has been specifically designed for racing on Speedway New Zealand tracks.

### **T10-6-1 Safety Equipment**

- (a) Full face helmet with a full visor only, tearoffs recommended for safety. Helmet to comply to a minimum NZS 1884 - 1969

standard or adhere to any specifications as per SNZ rulebook rules S1-1 through to S1-1-5.

- (b) Helmet restraints of the under arm strap type or the bolt to the seat type are optional.
- (c) Arm restraints must be worn at all times. Recognised brands only.
- (d) A neck brace is compulsory and must be worn at all times.
- (e) All drivers must wear a full length long sleeved fire resistant protective suit. Must be made of Nomex, Proban or material possessing the same protection rating. NO NYLON
- (f) Gloves: Fire proof or cotton only (NO NYLON) must be worn at all times.
- (g) Suitable footwear must be worn NO OPEN TOE SHOES. Cotton or Woollen socks to be worn. (NO NYLON).
- (h) Cage Nets: Twin cage nets allowable. They are an optional device. Only recognised brands allowable with a quick release front buckle assembly.
- (i) **Seat Belts** (See also Section S2 of SNZ Rulebook)  
Seat belts must be of a recognised brand with a minimum of 2" web material and be of a full 5 point style with a lever or camlock quick release buckle that releases all 5 belts. Harness assembly must be bolted to tabs with a minimum of 3/8" diameter bolts, wrap around a chassis rail or snap fit to tabs.

## **T10-6-2 Specifications**

- (a) **General Dimensions:**
  - (i) Wheel Base: Minimum 46" / Maximum 56"
  - (ii) Wheel Track: Minimum 33" / Maximum 39"
  - (iii) Centre to centre of wheel
  - (iv) Overall Length: Bumper to bumper, Maximum 96"
- (b) **Chassis Type**
  - (i) Space frame tubular construction only. Minimum tube size 1.1/8"OD x 16G. All new chassis to be checked by a club official before painting or powder coating. Mig, Tig, Steel Gas welding or Arc welding only allowed. NO Brazing.
  - (ii) All 1" chassis cars are now not eligible to compete (as from the end of the 2000/2001 season).
- (c) **Roll Cage**
  - (i) Must be constructed to Midget/Three Quarter Midget type specifications with a minimum tube size of 1.1/8" OD x 16g with appropriate gussets. Roll cage must have minimum clearance of 2" from the underside of the tube to the top of the driver's helmet.
  - (ii) All vehicles with 1" roll cage are now not eligible to compete (as from the end of the 2000/2001 season).
- (d) **Body**
  - (i) Single seater bodies only. All bodies to be of a clean and neat design. Must consist of a nose, tail and cockpit.
  - (ii) Arm Guards (mud shields) are optional on RH side. Must be below shoulder height with driver strapped into car.
- (e) **Floor Pan:** Floor pan under the driver's feet must extend from the front edge of the driver's seat to the firewall. Floor pan must be a minimum of 2mm alloy and be bolted in.
- (f) **Firewall:** All cars must have an alloy firewall separating cockpit and engine compartment.
- (g) **New And Radical Designs:** Any new or radical designs are subject to a preliminary inspection by Vehicle checkers and sub committee. Any alterations or additions agreed upon by the panel will be final.

- (h) **Numbers:** To be sign written on both sides of the tail and on the front nose (bonnet) in contrasting colours.
- (i) **Fuel:** Petrol based fuel only. No methanol or Nitromethane fuels allowed. Any breach of this rule means a 6 meeting stand down.
- (j) **Exhaust:** Exhaust systems are free. Exhaust pipe to be securely mounted to the chassis or frame. Must be in the confines of the knurf bar. Effective sound silencer or standard muffler to be fitted.
- (k) **Transmission:** Full OEM gearbox and clutch must be operational. Internal and external chain drive only. This chain is to be fitted from the engine sprocket to the rear live axle sprocket. The chain guard is mandatory.
- (l) **Brakes:** Hydraulic foot operated Rear brake. Must be able to lock rear wheels in a brake test with driver in the car.
- (m) **Shock Absorbers:** To be fitted to all cars and operate on each wheel.

#### **T10-6-3 Engine Specifications**

- (a) Up to 200cc naturally aspirated, air cooled 4 stroke, pre-1991 manufacture. Front engines only. Engine must be mounted in front of the drivers knees when sitting in the driver's seat.
- (b) **Make And Models Allowed:** Honda XR AND XL models.
- (c) **Modifications**
  - (i) All OEM components must be used with the exception of pistons, camshaft, valves. valve springs, retainers and keepers.
  - (ii) Cylinder head modifications are free.
  - (iii) Balancing, blue printing, shot peening and lightening of OEM rotating components are allowable.
- (d) **Carburettors:** Must be standard OEM carburettor, as fitted to that model engine, with no modifications to throttle slide. Other modifications are free.
- (e) **Ignition Switch:** Only standard OEM ignition to be used. Must be on/off type fitted within the driver's reach. OFF position to be clearly marked.
- (f) **Two Strokes:** 2 stroke powered cars are no longer eligible to compete (as from the end of the 2000/2001 season).

#### **T10-6-4 Wheels**

Maximum rim diameter 8" alloy or steel.

#### **T10-6-5 Tyres**

- (a) Turf tyres only. Size to be moulded in sidewall.
- (b) Front 16/6.50x8 maximum size
- (c) Rear 18/9.50x8 maximum size

#### **T10-6-6 Steering**

Go Kart type. Rack and pinion or steering box. Heim joints if used to be 3/8" minimum. Front hubs to be suitably secured with castellated nut and pin or nyloc nuts. Wheel studs front and rear minimum 5/16" diameter with a minimum of 3 studs.

#### **T10-6-7 Bumpers**

Bumpers to be fitted front and rear and shall be designed and constructed on the underside to eliminate the danger of hooking other cars in the event of contact. Bumpers to be attached with minimum of ISO M5 88 bolts or cap screws i.e: NO R clips or split pins etc to be used.

#### **T10-6-8 Knurf Bars**

All cars to be fitted with knurf bars extending out to cover at minimum 3/4 of the width of the rear tyres, not to extend out past the rear tyres, must be bolted on, no 'R' clips.



**T10-6-9      Seat**

- (a) Seat is to be of a suitable bucket type design for racing, securely bolted to the internal tube work with a penny washer.
- (b) Floor pan under driver's seat must extend from the front edge of the driver's seat to the fire wall.

**T10-6-10      Fuel Tank**

Fuel tank to be located at the rear of the cockpit or in front of the engine firewall. Fuel tap to be clearly marked OFF. Rubber fuel lines to be used at all times. All tank caps to be sealed with an overflow pipe to prevent leakage in the event of a roll over. The fire wall must seal off the engine compartment from the driver's cockpit. Full 360 degree loop is compulsory.

**T10-6-11      Throttle**

Throttle control to have two effective return springs and connections properly secured.

**R10-7****QUARTER MIDGET RACING RULES**

Unless specified, no car is to be driven in the pits at any race meeting.

- (a) The referee of the day shall reprimand obstructing, pushing, blocking or spinning another driver.
- (b) Looking back is totally forbidden at all times. The referee will black-flag the driver immediately and reprimand accordingly.
- (c) Gear changing: Changing down on yellow flag/light is permitted.

**Flags**

<i>Green</i>	GO as soon as green flag is waved or green lights are on you may start racing.
<i>Red</i>	All drivers STOP when the red flag/light is put out/on ALL drivers must STOP as safely and as soon as possible.
<i>Yellow</i>	SLOW DOWN - No overtaking, all drivers must form up in Indian file.
<i>White</i>	LAST LAP
<i>Black</i>	DRIVERS TO PULL OFF THE TRACK, due to a misdemeanour or faulty equipment the driver black flagged is to pull off the track as safely and as soon as possible.
<i>Black &amp; White Chequered</i>	FINISH Race finish slow down and stop as required for particular track being raced on.

## SECTION T9 -5: JUNIOR SOLOS

See also the relevant Training Programme pages above this section.

### T9-5-1 Safety Wear

All competitors, including sidecar passengers must wear leather jackets, leather trousers, leather knee boots, and leather gloves or other suitable protective clothing, i.e. Vinyl type suits and/or Motocross style protective clothing is acceptable, but must include full body armour (chest/kidney protection), back brace and knee pads.

- (a) **Helmet:** Protective helmets of approved type must be worn by competitors in competition and practice and on any other occasion the Steward requires such a helmet to be worn.
- (b) **Boots:** Sturdy leather or motorcross boots providing ankle support.
- (c) **Trousers:** Leather motorcross or similar
- (d) **Jacket:** (Leather) Must attach to trousers if two piece
- (e) **Jersey:** Minimum - Heavyweight cotton (football Jersey) or similar fabric, must have long sleeves.
- (f) **Gloves:** compulsory - Leather
- (g) **Goggles:** Lenses must be made of non-splinterable material such as safety glass or flexible plastic - worn at Steward's discretion

### T9-5-2 Engine

- (a) Motorcycle engine shall not exceed:  
125cc for 8 – 11 year old riders  
200cc for 12 – 15 year old riders  
250cc for 14 – 15 year old riders
- (b) Engine must be single-cylinder, four stroke type, maximum 4 valves, with not more than one sparkplug and not more than one carburettor or exhaust port. Air cooling only.
- (c) Engine must be from a production motorcycle of which at least 200 machines of the same model have been made.
- (d) External appearance of the cylinder head and crankcase cannot be altered.
- (e) Carburettors only can be used. Any electronic devices are forbidden.
- (f) The use of data recording devices and automatic electronic ignition is authorised. No signal of any kind may pass from a moving motorcycle to anyone, except the signal from the time keeping transponder or from on-board cameras.
- (g) No motorcycle shall exceed 95dba measured from infield. Refer rule S3.
- (h) **Competition Age & Dispensations**
  - (i) The minimum age for a junior solo motorcycle competitor shall be 8 years. The maximum age shall be 15 years. Proof of age (birth certificate) required.
  - (ii) Should a rider's 16th birthday fall during a competition season, the rider may continue junior racing until the conclusion of that season.
  - (iii) A parent or guardian must be in attendance at all training and race sessions. The parent or guardian may appoint a representative for themselves in the event the parent or guardian cannot attend.
  - (iv) A rider may gain dispensation to ride in a more powerful class upon application to SNZ, including junior riders wishing to move to 500cc senior competition



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- ♦ New Zealand made frame
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**(i) Conditions of application**

- (i) The rider's age must be within 1 yr of the age group of the class applying for
- (ii) Application must be made on and as per the appropriate form (on request from SNZ office) and accompanied by any supporting letters or evidence, preferably in a CV type presentation. Parent or guardian permission is required.

**T9-5-3 Frame & Design**

- (a) Must resemble speedway solo bike in appearance. All welded joints to be gusseted.
- (b) Frame and wheel size to be relevant to rider size
- (c) Rider must be able to comfortably reach the handlebars when seated on the bike and feet must be able to reach the ground.
- (d) Suspension on forks only, no rear suspension.

**T9-5-4 Fuel Tank**

To be mounted in same location as per Solo motorcycle.

**T9-5-5 Fuel**

- (a) Commercially available petrol only. Avgas allowed.

- (b) 250cc may use methanol.
- (c) No performance enhancing additive allowed.

#### **T9-5-6 Exhaust System**

- (a) The exhaust pipe, maximum outside diameter 50mm (in principle) constant over its entire length, must be fitted securely to the engine and frame of the machine in two separate locations (cylinder head not included).
- (b) The silencer must be secured to the frame in at least two separate locations at least 100mm apart, or, with at least one mounting and additionally, a second flexible coupling must be fitted from the first third of the silencer to the frame (steel cable of at least 3mm. for reasons of safety).
- (c) Fully welded exhaust systems (silencer is welded to front pipe) maybe securely attached to engine and frame in three separate locations (cylinder head not included).
- (d) Springs may not be used to attach exhaust pipe to frame.
- (e) The outlet of the silencer must not exceed 45mm internal diameter, or have any slots, holes or perforations. It must discharge horizontally and parallel to the centre line of the machine (tolerance +/- 10deg.), and must not extend beyond the rear vertical tangent, or end further forward than the centre (axle) of the rear tyre. The end of the silencer must be cut at a right angle. All sharp edges must be rounded. The gap between the silencer and the rear tyre must not exceed beyond 60mm.
- (f) The silencer must be of a mechanical or 'baffle' type, with permanently fixed internal pipes and plates to achieve the required maximum sound level. A straight tube, directly connecting the inlet and outlet of the muffler, without deflection of exhaust gas is not permitted. An exhaust extraction (megaphone) effect must not be caused by the positioning of any tapered, conical, or other shaped parts.
- (g) If, during a race, a silencer or any part of the exhaust system becomes displaced or detached so that all the exhaust gases fail to pass through the silencer, the rider must be immediately excluded from that race.

#### **T9-5-7 Chain Guards**

- (a) Gearbox type motorcycle engines must have a guard fitted which covers the front sprocket and front part of the top run of the drive chain.
- (b) If a gear change lever is in the area of the chain, the chain must be well protected to prevent the rider's foot coming into contact with the chain.
- (c) Guards must be substantial enough to prevent the chain throwing upwards and causing injury to the rider.
- (d) A steel stud or bolt of not less than 10mm diameter must be fitted in the area of the lower rear quadrant, below and close to the chain, to prevent a broken chain throwing upward. The stud to protrude 10mm outside the chain. This stud if damaged, must always be completely replaced.
- (e) Primary chain and dry clutch type refer to solo specifications
- (f) A guard must be fitted to provide protection where the rear chain enters onto the rear wheel sprocket.

#### **T9-5-8 Mudguards and Wheel Protection**

As per Solo rule T9-1-11

#### **T9-5-9 Footrests**

As per Solo rule T9-1-3

#### **T9-5-10 Brakes**

Any brake on a Solo motorcycle is prohibited

#### **T9-5-11 Clutch Levers**

As per Solo rule T9-1-5 with addition:

- (d) Levers must be of size and positioned so that the rider can comfortably operate the lever.

**T9-5-12      Handlebars**

As per Solo rule T9-1-6 with alteration:

- (a) Maximum width 900mm, minimum width 700mm with ends securely capped or plugged. For scaled down machines, minimum width 600mm.

**T9-5-13      Ignition Cutout**

As per Solo rule T9-1-8

**T9-5-14      Wheels and Tyres**

- (a) All spokes must be tight.
- (b) Rear wheel size optional but must not exceed 480mm (19")
- (c) Rear tyre shall not exceed 110mm in width.
- (d) Front wheel size optional but must not exceed 585mm (23")
- (e) All tyres be measured mounted on the rim at a pressure of 1 kg/cm (14 lb./sq.in.): measurements taken at a tyre section located 90 deg. From the ground.
- (f) Tyres to be inflated / filled with air and cannot be filled with any other substance to increase overall weight. Balancing weights may only be added and attached only to the rim or spokes.
- (g) Tyre retention screws maybe used to prevent tyre movement relative to the rim.

**T9-5-15      Dirt Deflectors**

As per Solo rule T9-1-12 with addition:

- (e) For scaled down machines, the minimum width of the deflector flap to be the tyre width plus 150mm. (eg. if tyre width 80mm, minimum flap width 230mm)

**R9-6            JUNIOR SOLO RACING RULES:**

- (a) As per SNZ Rule Book, Section T9-3.
  - (b) Riders may change up to their riding gear only and then no permitted to change gear thereafter (i.e. change down).
-

## SECTION T9-7

### KIWI KIDZ - PEEWEE SOLOS

#### T9-7-1 Introduction

This Kiwi Kidz class is designed as an introduction for youngsters to the sport, to learn basic motorcycle skills and some of the rules and code of conduct of speedway motorcycle racing in a safe and organised manner.

Costs to the parent are to be kept to a minimum, with machines competing in a particular class to be of similar specifications and performance.

The emphasis is on fun and tolerance. Parents are expected to fully participate. No prizes are to be awarded, but product may. Participation is the main aim at this stage.

All Peewee riders are to hold a licence for all training and competition.

**Peewee track size** to be 100m to 180m maximum. Recommended size is 130 – 160m. Minimum width 5m at any point.

#### T9-7-2 Competition & Training Age

- (a) Minimum age is 5 years, maximum age is 8 years. Should a riders 9th birthday fall during a competition season, the rider may continue Peewee riding until the conclusion of that season.
- (b) A rider may only enter competition after having completed appropriate training and at the discretion of the youth coach, mentor and steward.
- (c) A parent or guardian must be in attendance at all training and race sessions. The parent or guardian may appoint a representative for themselves in the event the parent or guardian cannot attend.

#### T9-7-3 Classes

The Peewee Class may have the following divisions

**Division 2:** Maximum 53cc for 5 – 6 year old riders

**Division 1:** Maximum 70cc for 7 – 8 year old riders

Division 2 may be split into auto or manual clutch class

There shall be no dispensations for division 2 riders to compete on 70cc machines.

#### T9-7-4 Construction

- (a) Any air cooled two or four stroke mass produced mini machine, or
- (b) Home built scaled motorcycles of a safe and well constructed nature. Home built speedway style motorcycles must use these regulations in conjunction with the Junior Motorcycle Specifications T9-5 as applicable
- (c) Liquid cooling allowed for division 1 only
- (d) Engine must be single cylinder, with not more than one sparkplug, carburettor or exhaust exit port.
- (e) Carburettors only can be used. Any electronic devices are forbidden
- (f) No motorcycle shall exceed 95dba measured from the infield. Refer rule S3.
- (g) Commercial available petrol only. Avgas allowed. No performance enhancing fuel additive allowed. (two stroke fuel / oil mix taken as read)
- (h) Fuel tank must have a secure cap with no leakage. Any breather outlet on the cap must have a tube fitted to exit away from the rider.
- (i) Exhaust system must be securely fixed to the machine in at least two separate locations other than the cylinder head. A

silencer must be fitted and if a removable type, must be attached so as to remain on the machine should it separate from the exhaust pipe.

- (j) Mudguards front and rear must be fitted.
- (k) Footrests if not fold up type, must be suitably protected on the outer edge to prevent injury.
- (l) All hand control levers to be ball ended and the inside to be rounded
- (m) Handle bars to have a minimum width of 550mm with the ends securely capped or plugged. The repair of light alloy bars by welding is prohibited.
- (n) An ignition cutout must be fitted.
- (o) All wheels and tyres to be in good condition. Spokes must be tight. Other style wheels must have no cracks in spoking. All wheels must run true.
- (p) For chain driven machines, refer Junior Motorcycle rule T9-5-7. Clause (d) 10mm stud is excluded for Peewee class.
- (q) All motorcycles must have a front number plate, with a maximum 2 digits. Figure height 150mm, figure width 80mm, stroke width 25mm. Black numbers on white background.

#### **T9-7-5**

##### **Safety Equipment**

As a minimum the following safety clothing must be worn:-

- (a) Safety helmet to approved SNZ standard.
- (b) Boots at least 200mm high of sturdy leather. A gumboot of same height allowed.
- (c) Jersey of at least heavy weight cotton or similar type, with long sleeves.
- (d) Trousers, full length, motorcross style, or heavy denim or corduroy.
- (e) Gloves, leather or motorcross style.
- (f) Goggles, good fitting with lenses in good condition.
- (g) Vinyl suits or motorcross style clothing must include full body armour of a commercially available brand.

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#### **R9-8**

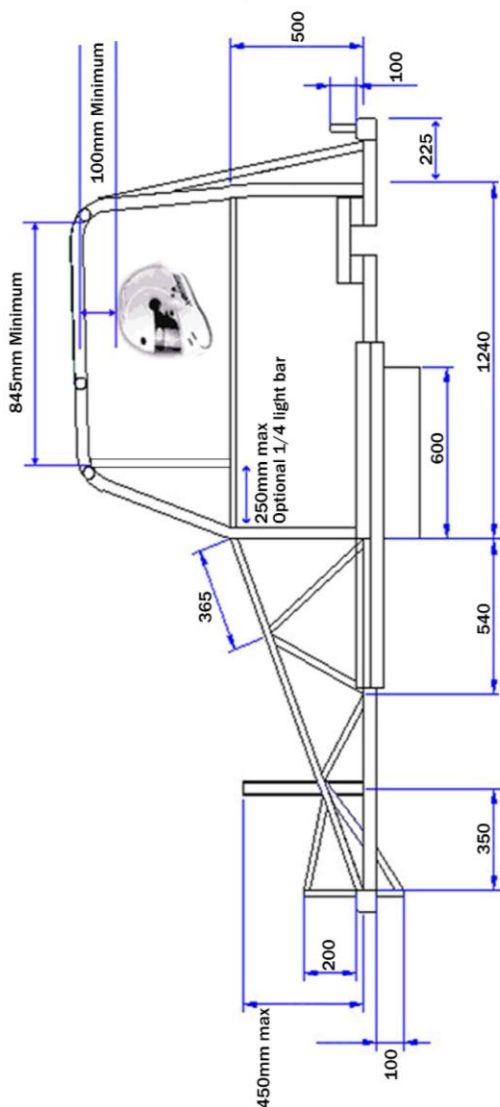
##### **PEEWEE SOLO RACING RULES:**

- (a) Starts from a stationary position controlled by tapes, bungee, or flag. For division 2 riders, a parent may, if required, stand behind the motorcycle for assistance if required.
- (b) Gearbox motorcycles may only change up to their racing gear and then not permitted to change gear thereafter (ie. not allowed to change down during race).
- (c) Fallen riders may be assisted to their machine and restarting the engine. Motorcycle may be pushed only to restart.
- (d) Maximum of 4 riders on the track at any one time.

## APPENDIX A

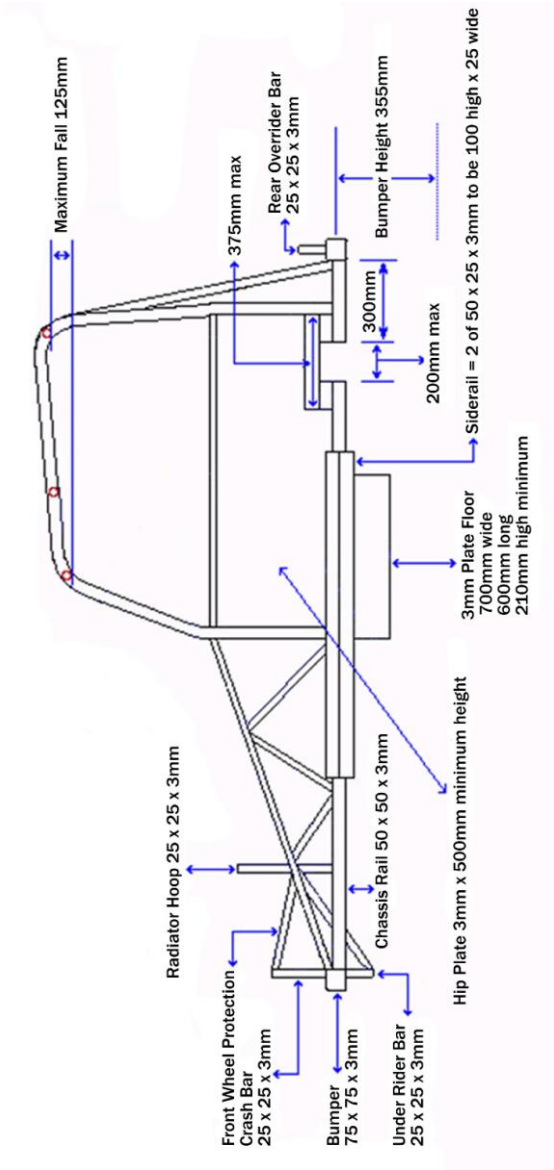
### 2003 SNZ MINISTOCK PLANS

**NOTE:** A 25mm tolerance is permitted on all chassis measurements, except minimum and maximum measurements have no tolerance. No tolerance is permitted on material specifications and drivers helmet clearance.

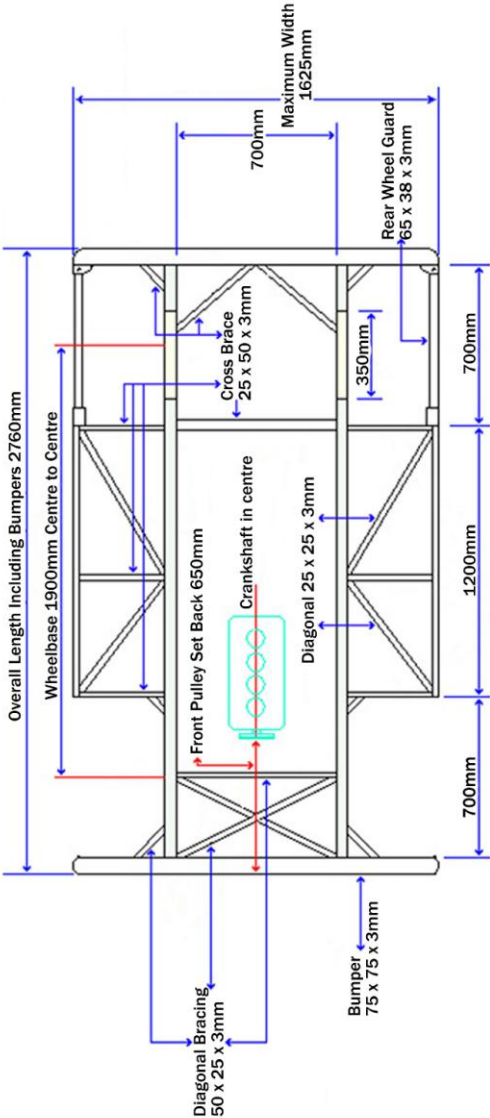




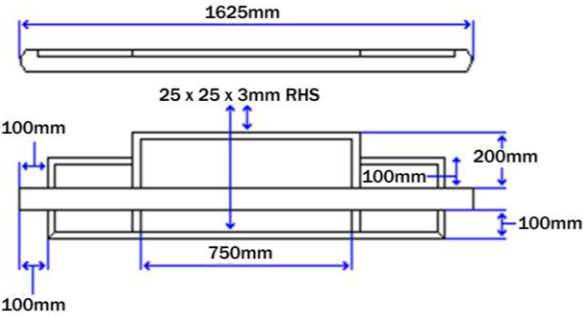
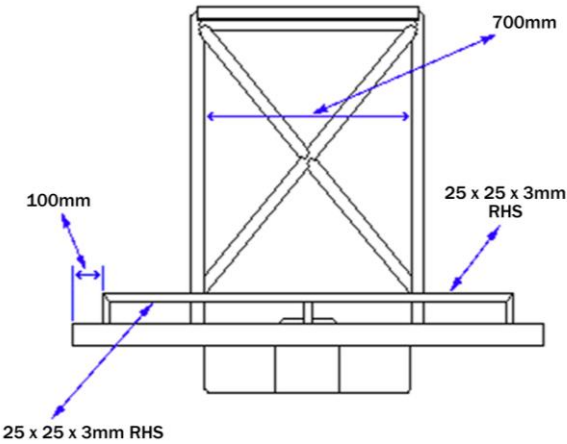
**NOTE:** A 25mm tolerance is permitted on all chassis measurements, except minimum and maximum measurements have no tolerance. No tolerance is permitted on material specifications and drivers helmet clearance.



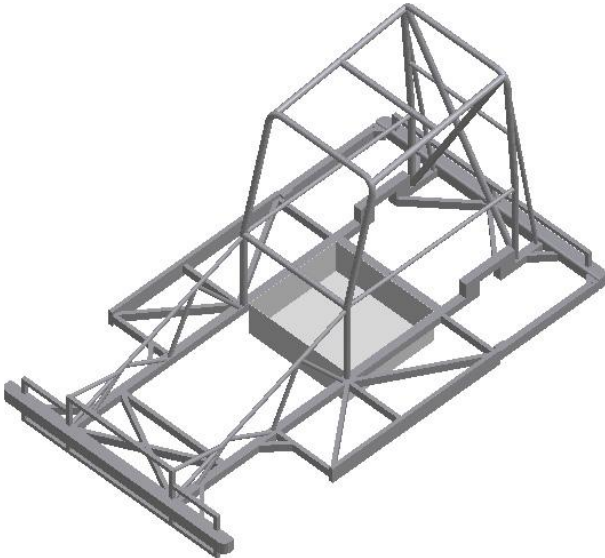
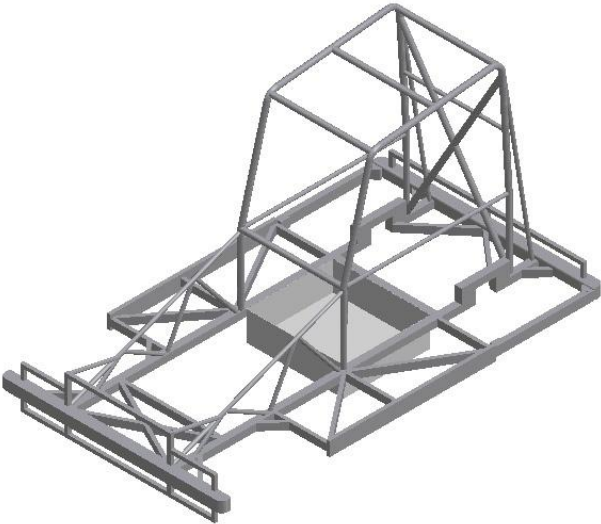
**NOTE:** A 25mm tolerance is permitted on all chassis measurements, except minimum and maximum measurements have no tolerance. No tolerance is permitted on material specifications and drivers helmet clearance.



**NOTE:** A 25mm tolerance is permitted on all chassis specifications.  
No tolerance is permitted on material specifications.



**APPENDIX B**  
**3D DIAGRAMS OF MINISTOCK ROLL CAGE**



## APPENDIX C

### STREETSTOCKS - OEM ENGINE CAM SHAFT MAXIMUM LOBE LIFT SPECIFICATIONS

(Measured at pushrod tip)

	<b>Inlet</b>	<b>Exhaust</b>
Holden or Torana Inline 6 cylinder	0.226"	0.226"
Commodore VB Inline 6	0.234"	0.258"
Commodore VK Inline 6	0.258"	0.258"
Chrysler Inline 6 cylinder	0.245"	0.245"
Holden 253 V8	0.260"	0.273"
Rover 3.5 V8	0.252"	0.252"
Ford 289 V8	0.238"	0.238"
Falcon 250 and 4.1 Crossflow	0.255"	0.255"
Falcon EA 3.9	0.242"	0.226"
Falcon EB 4.0 litre	0.236"	0.226"

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