



**READING THESE RULES AND REGULATIONS  
IS THE COMPETITOR'S RESPONSIBILITY**

# **2012 ELECTRONIC RULEBOOK**

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[WWW.SPEEDWAY.CO.NZ](http://WWW.SPEEDWAY.CO.NZ)**

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## PARTNER ORGANISATIONS AND AFFILIATIONS



## ABOUT THIS RULEBOOK

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The diagrams and photographs in this rulebook are included to illustrate a written rule or rules. They should be used in conjunction with the written rules and not in isolation.

### COLOURED AREAS

The red text in this rulebook highlights rules or regulations that have been introduced, corrected or amended since the last printing of the rulebook in 2011.

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### DATE OF ISSUE

This online edition is correct as at June 2012.

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Indie Taylor  
 PHOTOGRAPHY







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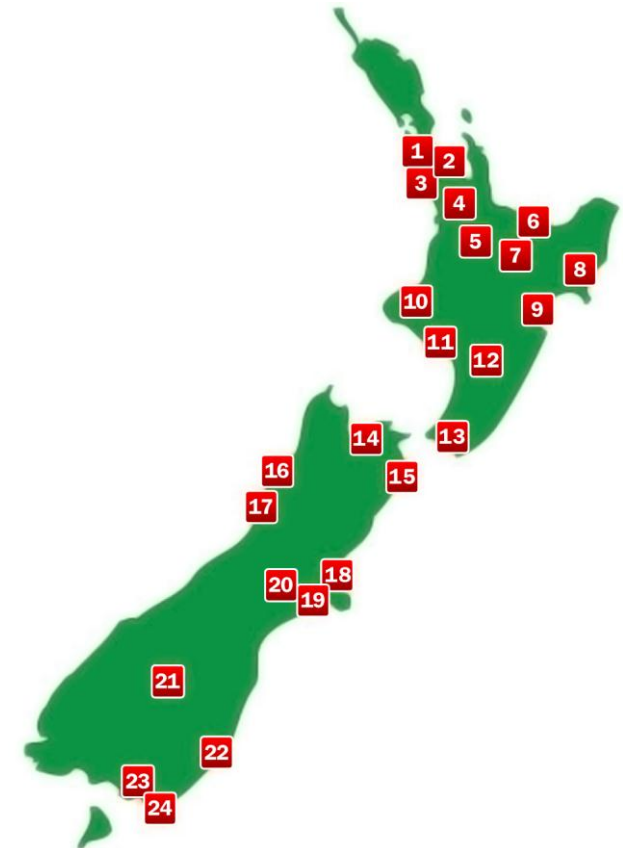
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## SPEEDWAY NEW ZEALAND TRACK LOCATOR

see next page for details

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





## 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 Phone: 09 828 2173  
 Website: www.rosebankspeedway.co.nz



## 2 WESTERN SPRINGS (AUCKLAND)

Track Location: 1 Stadium Road, Western Springs, Auckland  
 Promoter: Springs Promotions Ltd  
 PO Box 51-376, Pakuranga, Manukau 2140  
 Track Ph No: 09 588 4050  
 Website: 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 Phone: 09 636 5014  
 Website: 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 3451  
 Track Phone: 07 828 7244  
 Website: www.huntlyspeedway.co.nz



## 5 KIHIKIHI

Track Location: Kihikihi Domain, Corner Oliver & Grey Streets, Kihikihi  
 Promoter: Kihikihi Speedway Inc  
 PO Box 366, Te Awamutu 3840  
 Track Phone: 07 871 3333  
 Website: www.kihikihispeedway.co.nz



## 6 BAYPARK (MOUNT MAUNGANUI)

Track Location: 81 Truman Lane, Mount Maunganui  
 Promoter: Tauranga City Venues Ltd  
 PO Box 10-237, Bayfair, Mount Maunganui 3118  
 Track Phone: 07 574 6009  
 Website: www.baypark.co.nz



## 7 ROTORUA

Track Location: 105 Paradise Valley Road, Rotorua  
 Promoter: Rotorua Stockcar Club Inc,  
 PO Box 1324, Rotorua 3040  
 Track Phone: 07 348 1484  
 Website: www.rotoruaspeedway.co.nz



## 8 GISBORNE

Track Location: Awapuni Road, Gisborne  
 Promoter: Gisborne Speedway Club Inc  
 PO Box 455, Gisborne 4040  
 Track Phone: 06 868 4917  
 Website: www.gisbornespeedway.co.nz



## 9 MEEANEE (NAPIER)

Track Location: Sandy Road, Meeanee, Napier  
 Promoter: HB Speedway Club Inc  
 PO Box 3058, Napier 4112  
 Track Phone: 06 834 4655  
 Website: www.meeaneespeedway.co.nz



## 10 STRATFORD

Track Location: Flint Road, Stratford  
 Promoter: Taranaki Stockcar Club Inc  
 PO Box 397, Stratford 4352  
 Track Phone: 06 765 5693  
 Website: www.stratford-speedway.co.nz



## 11 WANGANUI

Track Location: Ocean View Speedway, Airport Road, Wanganui  
 Promoter: Wanganui Stockcar & Speedway Club Inc  
 PO Box 4214, Wanganui 4541  
 Track Phone: 06 345 6249  
 Website: 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, Palm North 4140  
 Track Phone: 06 358 8838  
 Website: www.pnspeedway.co.nz



## 13 WELLINGTON

Track Location: 1039a Main Road North (SH2), Te Marua, Wellington  
 Promoter: Wellington Speedway Society Inc  
 PO Box 40917, Upper Hutt 5140  
 Track Phone: 04 526 9732  
 Website: www.wellingtonspeedway.co.nz



## 14 NELSON

Track Location: Lansdowne Road, Appleby, Nelson  
 Promoter: Nelson Speedway Association  
 PO Box 3368, Richmond 7050  
 Track Phone: 03 544 6423  
 Website: www.nelsonspeedway.co.nz



## 15 BLENHEIM

Track Location: State Highway 6, Renwick, Blenheim  
 Promoter: Eastern States Speedway Club  
 PO Box 453, Blenheim 7240  
 Track Phone: 03 572 9142  
 Website: www.easternstatespeedway.co.nz



## 16 WESTPORT

Track Location: Craddock Drive, North Beach, Westport  
 Promoter: Sunset Speedway Club Inc  
 PO Box 370, Westport 7866  
 Track Phone: 03 789 7801  
 Website: www.sunsetspeedway.co.nz



## 17 GREYMOUTH

Track Location: North Tip Road, Cobden, Greymouth  
 Promoter: West Coast Speedway Assoc  
 PO Box 419, Greymouth 7840  
 Track Phone: 03 768 9697  
 Website: www.greenstonepark.co.nz



## 18 WOODFORD GLEN (CHRISTCHURCH)

Track Location: Doubledays Road, Kaiapoi, Christchurch  
 Promoter: Woodford Glen Speedway Assoc  
 PO Box 4367, Christchurch 8140  
 Track Phone: 03 359 0020  
 Website: www.woodfordglen.co.nz



## 19 RUAPUNA (CHRISTCHURCH)

Track Location: Hasketts Road, Templeton, Christchurch  
 Promoter: Chch Speedway Association Inc, PO Box 16 462, Hornby, Christchurch 8441  
 Track Phone: 03 349 7727 [info line]  
 Website: 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, Chch 8542  
 Track Phone: 027 320 0977 [info line]  
 Website: www.moorepark.co.nz



## 21 CROMWELL

Track Location: Sandflat Road, Cromwell  
 Promoter: Central Motor Speedway Club Cromwell Inc  
 PO Box 99, Cromwell 9342  
 Track Phone: 03 445 3021  
 Website: www.centralmotorspeedway.co.nz



## 22 DUNEDIN

Track Location: Friendship Drive, Waldronville, Dunedin  
 Promoter: Beachlands Speedway Inc  
 PO Box 1457, Dunedin 9054  
 Track Phone: 03 488 4578  
 Website: www.islandparkmotorspeedway.co.nz



## 23 ORETI PARK (INVERCARGILL)

Track Location: Pit Road, Otatara, Invercargill  
 Promoter: Southland Motor Cycle Club Inc  
 PO Box 1578, Invercargill 9840  
 Track Phone: 027 655 4005  
 Website: www.oretiparkspeedway.org



## 24 RIVERSIDE (INVERCARGILL)

Track Location: Sandy Point Road, Otatara, Invercargill  
 Promoter: Southland Stockcar Drivers Association Inc  
 PO Box 1261, Invercargill 9840  
 Track Phone: 027 666 6587  
 Website: www.riversidespeedway.co.nz



## 2012/13 SEASON

Class	New Zealand	Grand Prix	North Island	South Island
Superstock	Nelson 11/12 Jan 2013	Woodford Glen 18/19 Jan 2013	Wanganui 29/30 Dec 2012	Woodford Glen 1 Dec 2012
Stockcar	Woodford Glen 3/4 Jan 2013	Greymouth 8/9 Jan 2013	Waikaraka Park 15/16 Feb 2013	Blenheim 15/16 Feb 2013
Super Saloon	Woodford Glen 15/16 Feb 2013	Napier	Wellington	Riverside 26 Jan 2013
Saloon	Cromwell 1/2 Feb 2013	Dunedin 8/9 Feb 2013	Waikaraka Park 29/30 Dec 2012	Cromwell
Sprintcar	Western Springs 5 Jan 2013	Baypark	Palmerston North 16 March 2013	Ruapuna 2 Feb 2013
Midget	Ruapuna 25/26 Jan 2013	Stratford	Western Springs 2 Feb 2013	Ruapuna 1 March 2013
TQ Midget	Western Springs 2 Feb 2013	Ruapuna 17 Jan 2013	Gisborne	Greymouth
Modified	Stratford	Wellington	Rotorua 27/28 Dec 2012	Blenheim 2 March 2013
Streetstock	Dunedin 4/5 Jan 2013	Kihikihi	Gisborne	Riverside 12 Jan 2013
Minisprint	Palmerston North 16 March 2013	Palmerston North 1 Jan 2013	Huntly 23 Feb 2013	
Solo	Rosebank 6 Jan 2013	Moore Park	Gisborne	Moore Park
Sidecar	Moore Park 11/12 Jan 2013	Wanganui	Rosebank 31 March 2013	Oreti Park 16 March 2013

### Key

**Green** Approved  
**Red** Other date has priority, approval on hold

### Other Dates of Interest

NZ Stock Team Palm Nth 19/20 Jan 2013  
World 240s Rotorua 25/26 Jan 2013  
Teams Champs Palm Nth 8/9 Feb 2013  
NZU21 Solo Oreti Park 8 Dec 2012

## 2013/14 SEASON

Class	New Zealand	Grand Prix	North Island	South Island
Superstock	Meeanee	Huntly	Stratford	Nelson
Stockcar	Palmerston North 29/30 Dec 2013	Wanganui	Wellington	Woodford Glen
Super Saloon	Waikaraka Park	Baypark	Meeanee	Cromwell
Saloon	Stratford	Waikaraka Park	Gisborne	Riverside
Sprintcar	Cromwell	Western Springs	Baypark	Riverside
Midget	Western Springs	Ruapuna	Kihikihi	Nelson
TQ Midget	Ruapuna	Nelson	Western Springs	Nelson
Modified	Woodford Glen 3/4 Jan 2014	Rotorua	Waikaraka Park	Unallocated
Streetstock	Nelson	Riverside	Waikaraka Park	Greymouth
Minisprint	Stratford	Waikaraka Park	Wellington	
Solo	Oreti Park	Moore Park	Rosebank	Ruapuna
Sidecar	Ruapuna	Rosebank	Palmerston North	Nelson

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



## 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 Board. 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) To be the organisation that represents Speedway in New Zealand.
- (b) Encourage, control and develop speedway racing, safety and education in New Zealand.
- (c) Provide governance for the sport of speedway in New Zealand.
- (d) Make and control rules and regulations for the conduct of speedway racing.
- (e) Represent the interests of members of SNZ.
- (f) Encourage respect and fair play.
- (g) 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.

## 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 Board 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 Board. Fees shall be payable in advance and shall be due and payable at the time or times set by the Board.
- (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

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 licenced track is entitled to send:-
- (i) One competitors representative, who is a licensed competitor at the track.
  - (ii) One promoters representative.
  - (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 Board 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 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 Board. 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, "The Board".
- (b) Elections for President and six Directors be held every two years at a non-remit AGM.  
Note: To facilitate this transition the 2011 elections for President and Directors of SNZ are for a one year term, with the next election for President and Directors be held during the 2012 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 two 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 next highest polling unsuccessful candidate will be appointed to fill the vacancy until the next AGM.
- (r) If the unsuccessful candidate does not wish to be appointed, or if another Director vacates 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 Board 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 Board at the first Board 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 Board will be that who the President nominates at the first Board meeting after the AGM.

## **C10 MEETINGS OF THE BOARD**

- (a) The Board 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 Board meetings.
- (d) The CEO will provide a meeting summary to all licensed tracks as soon as possible after the meeting.
- (e) The Board 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 Board. If a quorum is not formed, the CEO is to recall the meeting within 14 days.

## **C11 RESPONSIBILITIES OF THE BOARD**

- (a) The Board has 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 M7-10-10).

- (d) Present the names of the people to be considered for Technical Committees (refer Rule C14-1(a)(ii)).
- (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) Interpret the bylaws of SNZ as and when required.
- (j) Obtain a recommendation from the relevant Technical Committee before making a technical interpretation.
- (k) 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.
- (l) Can give dispensation from the Rules and Regulations.
- (m) 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 Board.
- (n) Investigate any person or persons as to their conduct or identity.
- (o) Address and rule on any contingency not provided for, pending consideration at the next AGM.

## **C12 PATRON**

- (a) Every two years the members will elect a Patron, from nomination/s put forward by the Board. Their duties are ceremonial only.
- (b) The current Patron has the same rights and privileges under the constitution as a Life Member (C5(d)).

## **C13 OFFICERS OF SNZ**

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

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

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

- (a) The Chief Stipendiary Steward (CSS) is appointed annually by the Board.
- (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 Board meetings and will have speaking rights but not voting rights.
- (d) The CSS can receive an honorarium as set by the Board.

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

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

## **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 Board 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 Board.
- (iii) This list shall be circulated to tracks with all other nominations 40 days before the AGM elections.
- (iv) In the event that a Technical Committee Specialist resigns or is deemed to have resigned, the Board can appoint a replacement.

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

Regional Class Technical Committees are selected by the Board.

### **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) Remits to change the constitution can only be submitted by any SNZ member at least 60 days prior to the AGM.
- (d) Any proposed alteration to, addition to or rescinding of this Constitution will be deemed to be a remit.
- (e) 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) Remits to change the General Regulations can only be submitted any SNZ member at least 60 days prior to the AGM.
- (e) 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) Remits to change Equipment (Section E), Safety (Section S) or Racing Rules (Section R) can only be submitted by any SNZ member at least 60 days prior to the AGM.
  - (vi) Any proposed change to these Technical Specifications received from members of SNZ are deemed a Technical Submission as per clause (vi).
  - (vii) 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.
  - (viii) Technical submissions received after that date will be held over until the next AGM at which rule changes will be considered.
  - (ix) Written recommendations for technical rule changes from Technical Committees will be forwarded to the Directors as draft rule changes.
  - (x) Draft rule changes from the Technical Committees will be circulated to tracks not less than 120 days prior to the AGM.
  - (xi) 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.
  - (xii) Proposed amendments to the technical rules will be forwarded to the Technical Committees for final consideration.
  - (xiii) 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.
  - (xiv) The Technical Committee Chairperson, or their nominee will put the technical rule changes to the AGM. No seconder is required.

- (xv) 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 Board 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 Board can alter or add to the regulations or technical rules in the above classes.

### **C16 PROMOTIONAL TEAM**

#### **C16-1 The Promotional Team are responsible for co-ordinating:-**

- (a) promotional activities within SNZ
- (b) the allocation of allocated titles

#### **C16-2 Composition of the Promotional Team**

- (a) The promotional team will consist of five members
    - (i) Four people elected at the Speedway NZ AGM. To facilitate this process the elected members of the SPANZ executive as at 16/6/2012 will be the initial appointees to the Promotional Team.
    - (ii) The promotional team will then select the fifth member from the elected Speedway NZ Directors.
  - (b) The promotional team will select their Chairperson.
- #### **C16-3 Duties of the Promotional Team**
- (a) Promotional activities within SNZ
    - (i) The activities of the sub-committee will be funded by a permit fee levy, and any other arrangements approved by the Board.
    - (ii) The Promotional Team will recommend an annual Budget to the Board.
  - (b) Allocation of Allocated titles, as per Section M4 of the Regulations.

### **C17 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 Board 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 Board 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, promoter or other person or body.
- (f) The Board 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.

### **C18 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 Board may from time to time direct. The CEO, the President and/or a Director will sign the common seal.

### **C19 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.

### **C20 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.



### M1 CLASSES

#### M1-1 Activity at Speedway Tracks

**M1-1-1** Speedway activity at licensed tracks must be held in accordance with SNZ rules.

**M1-1-2** Non-speedway activity can be approved upon application to the SNZ Office.

**M1-2** Speedway competition is divided into the following categories:-

- (i) Section M1-3: National Classes
- (ii) Section M1-4: Regional Classes
- (iii) Section M1-5: Local Classes
- (iv) Section M1-6: Novelty Events

#### M1-3 National Class

**M1-3-1** (a) Definition: A speedway class eligible for Allocated titles.

- (b) For a class to be eligible to have a New Zealand Championship and Grand Prix, there must be at least one track in each Island, or more than three tracks in either Island, contracting the class.

**M1-3-2** National classes are:-

- (i) Section T9-1: Solo Motorcycles
- (ii) Section T9-2: Sidecars
- (iii) Section T10-1: Midgets
- (iv) Section T10-2: TQ Midgets
- (v) Section T10-3: Sprintcars
- (vi) Section T10-4: Minisprints
- (vii) Section T11-1: Super Saloons
- (viii) Section T11-2: Saloons
- (ix) Section T11-3: Modifieds
- (x) Section T12-1: Superstocks
- (xi) Section T12-2: Stockcars
- (xii) Section T13: Streetstocks

#### M1-3-3 Upgrading to a National class

- (a) Applications to upgrade to a National class must be made to the SNZ Office. The SNZ Office will determine if the class meets the following eligibility criteria:-
- (i) Been a Regional class for a minimum of five seasons
  - (ii) At least six licensed tracks contract the class.
  - (iii) At least 100 licensed competitors.
  - (iv) Have the written support of six licensed tracks.
- (b) If the class meets the eligibility criteria, the application will be submitted as General Business at the next AGM for ratification.

#### M1-3-4 Reverting to a Regional Class

- (a) A National class can revert to a Regional class,
- (b) Any member can request the change by writing to the SNZ Office.
- (c) The Board can revert the class to regional status after consultation with the licensed tracks that contract the class.

#### M1-4 Regional Class

**M1-4-1** Definition: A speedway class not eligible for Allocated titles

**M1-4-2** Regional classes are:-

- (i) Section T11-5: Production Saloons
- (ii) Section T10-7: Modified Sprints

- (iii) Section T15: Ministocks
- (iv) Section T15-2: Youth Ministocks
- (v) Section T11-7: Youth Saloons
- (vi) Section T10-6: Quarter Midgets
- (vii) Section T9-5: Junior Solos
- (viii) Section T9-7: Peewee Solos
- (ix) Section T9-9: Junior Sidecars

#### M1-4-3 Establishing a Regional Class

- (a) Applications to establish a Regional class are made to the SNZ Office.
- (b) The application will include the following:
  - (i) The proposed name of the class.
  - (ii) A statement of intent for the class.
  - (iii) Plans, rules and specifications.
  - (iv) Any competitor restrictions.
- (c) The application will be considered by the Board.
- (d) If the Board believes the application has merit, it can submit the proposal as General Business to the next AGM for ratification.
- (e) If ratified, the rules of the class will be administered as per Rule C15-3(c).

#### M1-5 Local Classes

**M1-5-1** A licensed track can apply to the SNZ Office to contract a Local class.

**M1-5-2** Technical specifications and racing rules are to be submitted to the Directors for approval.

#### M1-6 Novelty Events

**M1-6-1** A licensed track can apply to run a Novelty event, using SNZ recognised vehicles

**M1-6-2** Novelty events can include:-

- (i) Section D1-1: Demolition Derby
- (ii) Section D1-3: Derby Teams Racing
- (iii) Section D1-5: Caravan Derby
- (iv) Ramp Derby
- (v) Streetcar Race

**M1-6-3** All competing vehicles must be compliant with the relevant SNZ rules.

**M1-6-4** All competitors must have an SNZ competition licence.

#### M1-7 Non-Speedway Activity

**M1-7-1** Non speedway activity at a licensed track can be categorised as follows:-

- (a) **All Non-motorised activity:** Approval is not required from SNZ.
- (b) **Motorised demonstrations:** Application for approval will be submitted to the SNZ Office, using the Extraordinary Event Application Form.
- (c) **Motorised competition:** Application for approval will be submitted to the SNZ Office, using the Extraordinary Event Application Form.
  - (i) The competition must be conducted under the rules & regulations of the relevant governing body where applicable.
  - (ii) Examples include ATV's, Motocross, Rally Cars, Go Karts etc.
- (d) Failure to gain approval from SNZ for any motorised non-speedway activity is a breach of SNZ rules.

## M2 LICENSING OF TRACKS

- M2-1-1** All tracks must have a current SNZ Division One or Division Two track licence to conduct speedway racing.
- M2-1-2** A track licence is the authority granted by SNZ recording that the track to which it refers complies with SNZ Rules.
- M2-1-3** The Track Licence will be granted to a Promoter.
- M2-1-4** A Promoter is an individual or entity who has obtained the use of a track for any period that the Board deem sufficient.
- M2-2** **Applying for a Track Licence**  
To obtain a track licence the Promoter will:-
- M2-2-1** Complete an SNZ Track Application form.
- M2-2-2** Provide relevant information, including:-
- Track name and locality.
  - Classes to be raced.
  - Proof of facility ownership, copy of facility lease or other relevant agreement.
  - List of nominated officials.
- M2-2-3** Sign and return the SNZ Memorandum of Agreement
- M2-2-4** Submit the calendar for the upcoming season for approval. Note that SNZ has the right to refuse a track from running a meeting that is in direct conflict with an SNZ Allocated Title of the same class.
- M2-2-5** Obtain the necessary insurances (see M2-3).
- M2-2-6** Pay the appropriate licence fee (see M2-4).
- M2-2-7** Supply plans and other particulars of the track and facility. Note: This clause only applies to an application from a new Promoter or for a new track.
- M2-2-8** Have the application approved by the Board.
- M2-2-9** Pass a Track Inspection (see M2-7).
- M2-3** **Insurance**  
A promoter must:-
- M2-3-1** Provide proof to SNZ that Public Risk and Property Damage Insurance Cover of at least \$500,000 has been obtained.
- M2-3-2** 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 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.
  - The administrators, executors or assigns of any Competitor or Competitors, or member or members of the public, or any other as aforesaid.
- M2-4** **Fees**
- M2-4-1** Fees are payable to SNZ for the following:
- New Track Licence Application.
  - Track Licence Renewal.
  - Track Licence Transfer Fee.
- M2-4-2** Division Two tracks pay reduced fees
- M2-5** **Track Licence**
- M2-5-1** The Track Licence will state:-
- The length of the track.
  - The classes permitted.
  - Any restrictions as to the maximum number of vehicles in a race in any class.
- M2-5-2** The track licence expires on 31st August.
- M2-5-3** Applications for a track licence renewal must be received by the SNZ Office by 1 September.
- M2-5-4** No licence will be issued for a period greater than 24 months without prior approval from the Board.
- M2-5-5** The Track Licence is not transferable, unless approved by the Board.

### M2-6 Other Obligations of a Track Licence Holder

- M2-6-1** All track licence holders are members of the Fidelity Fund (see M3-8).
- M2-6-2** 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 Board, a special visit of inspection or inquiry a fee of \$50 plus all expenses incurred by the inquiry or inspection shall be payable by the Promoter.
- M2-6-3** The Board may withhold, 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.
- M2-6-4** A licence application can be declined if in the view of the Board the granting of a license is not conducive to the conduct of the sport or the interests of its existing licensed tracks.

### M2-7 Track Inspections

- M2-7-1** All tracks must be inspected by an appointed SNZ track inspector prior to the commencement of the speedway season.
- M2-7-2** The track must pass its inspection before practice or racing can commence.
- M2-7-3** All inspection costs are the responsibility of the Promoter.

### M2-8 Track Size

- M2-8-1** Minimum length = 250m.
- M2-8-2** Maximum length = 1000m.
- M2-8-3** Length to be measured 1000mm out from the poleline.
- M2-8-4** Minimum width on the straights = 9m.
- M2-8-5** Minimum width in the corners = 12m.

### M2-9 Safety Fences

- M2-9-1** All speedway tracks are to be enclosed by a wall and safety fence that complies with the specifications below.
- M2-9-2** The safety fence structure includes:-
- Section M2-10: Concrete Wall
  - Section M2-11: Wire Rope Fence
  - Section M2-12: Safety Netting Fence
  - Section M2-13: Pit Gate & Chute
  - Section M2-14: Crowd Control Fence
  - Section M2-16: Exception - Tracks running Solos and Sidecars only

### M2-10 Concrete Wall

- M2-10-1** Height: Minimum height is 1 metre above a prepared track surface at all times. *Recommended height is 1.2m.*
- M2-10-2** Construction: Smooth concrete and/or of an approved design and construction. An angled kickout at the bottom of the wall is recommended.
- M2-10-3** Curvature: The wall must follow the general shape of the poleline.

### M2-11 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.

### M2-11-1 Posts

- Height: Posts will extend at least 1500mm above the concrete wall.
- 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.*
- Construction: Posts may be constructed of the following materials:-
  - Railway Irons - 32kg minimum.
  - Black heavy pipe - 100mm nominal bore with a 5.4 mm wall.
  - Box section - 100mm x 100mm x 5 mm wall.
  - Box section - 150mm x 75mm x 5 mm wall.
  - Universal beam - 150 UB 18kg per metre.
  - 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 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) An approved equivalent.
- (e) End Posts: To ensure the integrity of the structure, the end posts must be securely stayed.

#### **M2-11-2 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, e.g. 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.

#### **M2-12 Safety Netting Fence**

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

#### **M2-12-1 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) Wire netting pole depth to be the same as wire rope fence in M2-11-1(d). Alternative methods can be approved on a case-by-case basis.
- (e) An angled kick in at the top of the poles is optional.

#### **M2-12-2 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.

#### **M2-12-3 Separate Fence**

The Safety Netting Fence detailed above can be integrated into the Wire Rope fence described in Rule M2-11. Both sets of specifications will be met if this is the case.

#### **M2-12-4 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.

#### **M2-13 Pit Gate and Chute**

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

#### **M2-13-1 Pit Gate**

- (i) Height: Will be the same height as the concrete wall.
- (ii) Location: Will close so as to continue the general line of the concrete wall.

#### **M2-13-2 Wire Rope**

- A minimum of one wire rope is required above the pit gate.
- (i) Height: Will be 500mm above the top of the pit gate.
  - (ii) Location: Will be firmly fixed while practice or racing is in progress.
  - (iii) Construction: Will have a minimum diameter of 20mm.

#### **M2-13-3 Catch Gate**

A swinging gate will cover gaps in the wire rope and safety netting fences.

- (i) Height: Will begin no more than 200mm above the pit gate, and extend at least 2m above the pit gate.
- (ii) Location: Will be in line with the wire rope fence.
- (iii) Construction: Will be of approved construction, with a maximum hole size of 115cm<sup>2</sup>.

#### **M2-13-4 Mechanism**

All structures detailed above will be suitably locked in position while practice or racing is in progress.

#### **M2-13-5 No Go Area**

A no go area for all personnel will be identified 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 pitgate, whichever is longer.

#### **M2-14 Crowd Control Barrier**

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.

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.

#### **M2-15 Construction and Maintenance of the Safety Fence**

All structures will be built and maintained to the satisfaction of the Track Inspector. After due application under Rule M2-4-2, the Board can alter or amend these minimum requirements.

#### **M2-16 Motorcycle Only Tracks**

Solo and Sidecar tracks may be enclosed by a wooden safety fence and pit gate. Minimum height of wooden safety fence is 1 metre, measured from the track surface. Minimum thickness is 76 mm, with vertical posts spaced not more than 2.5m centre to centre, suitable for the protection of the public.

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.

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.

A crowd control barrier will encircle the fence as per rule M2-14. All structures will be built and maintained to the satisfaction of the Track Inspector.

#### **M2-17 Track Lighting**

When floodlighting is used it must be adequate for the purpose, with no dark patches on the track surface.

#### **M2-18 Control Lights/Flags**

Each track must have at least six sets of red, yellow and green lights. Placement: At least one in every corner and approximately halfway along each straight. Daylight racing: Red and yellow lights to be supplemented by red and yellow flags. Tracks racing Sidecars and/or Streetstocks to have all control lights visible from both clockwise and anti-clockwise directions.

#### **M2-19 Pole Line & Infield**

The Pole line is to be clearly defined at all times. Pole line Height: Maximum of 100mm above the infield and track surface. Pole line is not to constitute a hazard to competitors. Pole lines constructed of tyres are not permitted. Objects placed on the infield must be no closer than 12 metres from the pole line. Advertising signs to be no higher than 1 metre and must be collapsible.



## **M2-20 Hazards**

**M2-20-1** Any other hazard identified by a Track Inspector must be rectified before a track passes its inspection.

**M2-20-2** No meeting permit will be issued until all the safety requirements of SNZ have been complied with.

## **M2-21 Optional Infield Motorcycle Track**

**M2-21-1** Minimum length is 100m.

**M2-21-2** All other measurements in M2-8 apply.

**M2-21-3** The outside perimeter is to be clearly defined by collapsible markers.

**M2-21-4** The existing safety fence is to be deemed to be the safety fence for the inside track.

**M2-21-5** The outer track will be out of bounds to all vehicles and personnel while racing is in progress on the inside track.

## **M2-22 Referee's Stand**

**M2-22-1** To be placed at least 1.8m above the track surface.

**M2-22-2** Must provide an adequate view of the track.

**M2-22-3** Minimum area of 1.8m<sup>2</sup>.

**M2-22-4** To be provided with the switches to operate the track control lights and 2/3 minute bell.

**M2-22-5** Must be constructed in such a way to provide a safe operating environment.

## **M2-23 Lapscoreing Facilities**

**M2-23-1** The track must provide a suitable facility to accommodate the Chief Lapscoreer and assistants.

**M2-23-2** The track must provide and maintain in good working order the approved lapscoreing equipment as described herein.

## **M2-24 Pits**

**M2-24-1** All licensed tracks must provide a pit area of adequate size.

**M2-24-2** The pit area must be suitably fenced.

**M2-24-3** Signage identifying hazards at each pit entrance to read:-  
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.

**M2-24-4** Adequate lighting and running water must be provided.

**M2-24-5** Changing sheds and toilet facilities must be adjacent to, or inside the pit area.

**M2-24-6** A level sealed or concrete scrutineering strip must be provided.

**M2-24-7** A suitable notice board must be placed in the pit area for the posting of race results and other information.

## **M2-25 Communication Equipment**

**M2-25-1** All Stewards and Referees must be supplied with an adequate two-way communication system, provided by the Promoter.



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## **M3 MEETINGS AND PRACTICES**

### **M3-1 Permit and Fees**

**M3-1-1** Speedway Meeting: A race meeting comprising of procedural activities related to and including a race or a number of races held under permit to SNZ.

**M3-1-2** All meetings and practices require an SNZ permit, which attracts a fee.

**M3-1-3** The permit fee is payable to the Steward before the event commences.

**M3-1-4** 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.

**M3-1-5** Once a Steward has issued a permit and the event is in progress, the permit cannot be withdrawn unless safety factors are involved.

### **M3-2 Punctuality/Timing**

**M3-2-1** A Steward must be in attendance at all race meetings and practices.

#### **M3-2-2 Duration of Race Meeting**

A meeting is deemed to open:-

- (i) two hours before the scheduled time for commencement of the first event, or
- (ii) at the time scrutineering commences if this time is prior to the two hour time limit.

**M3-2-3** All competitors, vehicles, crews and equipment must be in the pits at least 60 minutes before commencement of the meeting.

**M3-2-4** In exceptional cases, the requirement in M3-2-3 may be waived at the discretion of the Steward and Promoter.

**M3-2-5** In order to participate in a race meeting, the competitor must attend the drivers briefing.

**M3-2-6** A meeting will finish:-

- (i) 30 minutes after the finish of the last event on the scheduled program, or
- (ii) 30 minutes after the last vehicle/component inspection has been completed at the track, whichever is the later.

### **M3-3 Classes Running Together**

**M3-3-1** Different classes can run together, providing the vehicles are of a similar nature.

**M3-3-2** Agreement to do this must be in the form of a unanimous decision between:-

- (i) the competitors in the classes concerned
- (ii) the track promotion
- (iii) permission being received from the SNZ Office.

### **M3-4 Infield Personnel**

**M3-4-1** Access to the infield during a meeting is prohibited to all persons not authorised by the Clerk of the Course.

**M3-4-2** All persons on the infield are to wear a high visibility vest or jacket during racing.

### **M3-5 Betting**

**M3-5-1** Only betting arranged by the New Zealand Racing Board (TAB) is permitted.

### **M3-6 Race Results**

**M3-6-1** It is the duty of the Referee to approve and sign race results before they are posted on the track noticeboard.

**M3-6-2** 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.

**M3-6-3** When a race is completed, all results will be provisional until:

- (i) The absence of any protests within 10 minutes of the race results being posted.
- (ii) Regulatory vehicle/component compliance inspections are completed.

### **M3-7 Competitor Payments**

The promoter must pay all money owed:-

**M3-7-1** To a competitor contracted to their track within 14 days of the meeting.

**M3-7-2** To a competitor from any other track within 30 days of the meeting.

**M3-7-3** 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.

### **M3-8 Fidelity Fund**

**M3-8-1** 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.

**M3-8-2** Claims against the Fidelity Fund can only be made in respect to a SNZ permitted meeting.

**M3-8-3** Claims must be lodged with SNZ with sufficient tangible proof of the amount not paid before 30 April following the season's racing. No claims will be paid before 28 May 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 CEO, who will research claims and forward findings and any recommendations to the Fidelity Fund's Board of Trustees.

**M3-8-4** Any successful claims against the Fidelity Fund will be paid out within 30 days of the decision by the Board of Trustees

### **M3-9 Club Speedway Meetings**

**M3-9-1** The following additional conditions shall apply when licensed tracks wish to conduct Club Speedway Meetings:-

- (i) A maximum of 25 competitors.
- (ii) No competitors contracted to other tracks.
- (iii) Permit Fee of \$60.
- (iv) Maximum of six club meetings in any one season.

### **M3-10 Practices**

**M3-10-1** Each track must have at least three practice sessions prior to the commencement of its official season.

**M3-10-2** Approved First Aid coverage must be provided.

**M3-10-3** The SNZ Steward must be present.

**M3-10-4** Admission fees cannot be charged.

**M3-10-5** No racing can occur under a practice permit.

### **M3-11 Grand Parade**

There are two types of Grand Parade permitted:-

**M3-11-1** 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 S3.

**M3-11-2** 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.

### **M3-12 Postponement or Cancellation of Meeting**

**M3-12-1** 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.

**M3-12-2** 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.

**M3-12-3** Allocated Titles: See Section M4-30 for additional information.

## M4 CHAMPIONSHIPS, ALLOCATED TITLES AND NZ TEAMS

### M4-1 Definition and Allocation of Allocated titles

#### M4-1-1 Allocated titles are:

- (i) New Zealand Championship.
- (ii) North Island Championship.
- (iii) South Island Championship.
- (iv) New Zealand Grand Prix.

#### M4-1-2 Allocated Title hosts are determined at the SNZ AGM.

#### M4-1-3 Allocated Title hosts are ratified by the Board of SNZ.

#### M4-1-4 Once ratified, the terms of the allocation will become a contract between SNZ and the Promoting track.

### M4-2 Eligibility to host Allocated titles

#### M4-2-1 Division One track licence

#### M4-2-2 Meets track grading criteria

#### M4-2-3 Have run the class concerned:-

- (i) three times in the season prior to the title.
- (ii) three times prior to the title, in the season of the title.

#### M4-2-4 Exceptions to the above

- (a) New Zealand Championship (excluding Solos and Sidecars): Tracks must use Electronic Lapscore as per Rule E4-4.
- (b) If no Division One track wants to host an SNZ Allocated Title in any season a Division Two track can apply to hold the event.
- (c) If no track wants to host an SNZ Allocated Title in any season, the event is stood down for that season.

### M4-2-5 The Allocation of Allocated titles (formerly SPANZ by-laws)

#### (a) Application

Any track applying for a title must send in the application on the Official Form, the form must be completely filled in and be returned to the office 30 days before the allocations take place. The Form to include:

- (i) Name of Track
- (ii) Name of Allocated title applying for
- (iii) Number of times that the class was run in year of application
- (iv) Detailed format proposed for the running of the event
- (v) Minimum prize monies to be paid and awards
- (vi) Prizemoney format as to whether payment is for heats and/or finals
- (vii) Proposed prizemoney structure
- (viii) For NZ title applications there will be additional information to complete regarding the Track Grading criteria including ELS Time Base Listing and/or the ELS Results for three of the dates listed on the Track Grading form (N/A for Sidecars and Solos)

The completed list of championships will be circulated to all tracks 20 days before the meeting.

The Track must be represented at the AGM to be eligible for applications to be accepted.

#### (b) Track Grading for New Zealand titles only

- (i) All facilities must be able to accommodate the crowd, competitors & associated vehicles pertaining to their championship being held.
- (ii) If night racing, good lighting for track, pits, toilets and carparks (lighting not necessarily permanent). In the event of inclement weather or other exceptional circumstances this may be waived or amended in part by the unanimous decision of the Promotion, Stipendiary Steward if in attendance, or Steward of the meeting, Clerk of the Course and a class representative of the class competing, bearing in mind the following 3 factors- Safety of the competitors, safety of spectators and the better promotion of the event
- (iii) 2 toilet blocks / 25 toilets minimum, sufficient lighting and all in good working order (2 disabled person toilets).
- (iv) Grader, welder, water truck and appropriate vehicles depending on the class racing.
- (v) Running water in pits.

- (vi) Electronic lap scoring, fully operational and with competent personnel operating the system (N/A for Sidecars or Solos).
- (vii) Competent marshalls, track staff, announcers and PA system for crowd and pits
- (viii) Health and safety in place and operating
- (ix) Fire crew, crash crew, medics and appropriate vehicles in the infield. (Including specialised infield personal depending on the classes racing).
- (x) Adequate ticket boxes, entrance way and signage.
- (xi) Adequate results board – with plenty of room around it for checking of results.
- (xii) Fully operational website / media releases process.
- (xiii) Championship log book to be implemented and filled out.
- (xiv) All amenities and grounds of the facility must be in presentable condition.
- (xv) Minimum car numbers and meetings held, as below:-

New Zealand title	Minimum Contracted Competitors	Extra Contracted or Visitors	Total Minimum Number	Minimum Prizemoney
Superstocks	10	0	10	\$25,000
Stockcars	10	0	10	\$20,000
Super Saloons	6	4	10	\$10,000
Saloons	6	2	8	\$10,000
Streetstocks	6	2	8	\$5,000
TQ's	6	4	10	\$5,000
Minisprints	6	2	8	\$3,000
Midgets	6	4	10	\$15,000
Sprintcars	6	2	8	\$15,000
Modifieds	4	2	6	\$10,000
Solos	3	1	4	\$2,000
Under 21 Solos	3	1	4	\$1,000
Sidecars	4	0	4	\$4,000

#### (c) Unallocated Title

- (i) This is a title not allocated at the AGM, due to no eligible track applying for the championship or by no applications meeting the criteria.
- (ii) Unallocated titles will be held over to the next years AGM, unless an application that meets the criteria is received seven days prior to the AGM.

#### (d) Voting

- (i) On New Zealand and Grand Prix titles each track will have one vote. Equal votes will go back to the floor, for a further vote. All voting shall be by ballot.
- (ii) On South Island and North Island Championships, The North Island tracks to vote for the North Island Championships only and the South Island Tracks to vote for the South Island Championships only.
- (iii) The voting on any Championship will go to the highest polled track.
- (iv) Each track may talk for up to 3 minutes on the championship subject. Questions to this delegate will be through the chair and at the discretion of the Chairperson.

#### (e) Order of Voting

- (i) The order of allocations will be all New Zealand championships, followed by Grand Prix, North Island and South Island.
- (ii) Class order is as follows: Superstocks, Super Saloons, Sprintcars, Stockcars, Saloons, Modifieds, Midgets, T Q Midgets, Minisprints, Streetstocks, Sidecars, Solos, NZ Under 21 Solos.



- M4-3** **Allocated Title Dates**  
**M4-3-1** **New Zealand Championship**  
Proposed date must be submitted to SNZ by 1 June prior to the season of the event.
- M4-3-2** **North Island, South Island and Grand Prix**  
Proposed date must be submitted to SNZ by 31 July prior to the season of the event.
- M4-3-3** **Allocated titles cannot take place before December 1 in the relevant season.**
- M4-4** **Allocated Title Entry Forms**  
**M4-4-1** **Must be submitted to the SNZ Office no later than six weeks prior to the approved title date.**  
**M4-4-2** **Must be made available to all potential entrants and be posted on the SNZ website, www.speedway.co.nz.**  
**M4-4-3** **Must be sent to all Stewards and tracks that licence the applicable class no later than three weeks prior to the approved date.**
- M4-5** **Non-Performance**  
**M4-5-1** **Failure to comply with the requirements in Sections M4-2 to M4-5 will result in-**  
(a) **A fine.**  
(b) **Possible reallocation of the title.**
- M4-5-2** **Failure to comply with the terms of the contract as outlined in M4-1-4 may result in-**  
(a) **A fine.**  
(b) **Future allocated titles being reallocated.**
- M4-5-3** **A request to hand back an allocated title must be approved, and will incur a \$1,000 fine.**
- M4-6** **Eligibility to Enter Allocated Titles**  
**M4-6-1** **Every competitor has the right to enter Allocated Titles, subject to complying with the following conditions:-**  
(i) **Holding an SNZ competition licence for the applicable class (one day licences are not accepted).**  
(ii) **Submitting a completed entry form, by the due date.**  
(iii) **Paying the entry fee if applicable. This fee is a maximum of \$25 and must be refunded if their vehicle passes pre-event scrutineering.**  
(iv) **Notifying their own Promoter of their intention to compete at least 14 days prior to the event.**  
(v) **Obtaining a clearance from their own Promoter.**
- M4-7** **Specific Additional entry criteria**  
**M4-7-1** **North Island, South Island and New Zealand Championships:**  
(a) **New Zealand Residents**  
(i) **must have raced in that class for a minimum of three meetings in the current season, or**  
(ii) **have raced in that class for a minimum of three meetings in the previous season and a minimum of one meeting in the current season.**  
(b) **Overseas competitors must have raced in that class for a minimum of five meetings in the current season.**  
(c) **There can be no direct seeding into the finals of the previous winner, or any other competitor.**
- M4-7-2** **Further criteria for North Island and South Island Championships:**  
(a) **A competitor can only enter one Island championship per season in any one class.**  
(b) **At the time of the event, the competitor must be contracted to a track in that Island.**
- M4-7-3** **New Zealand Grand Prix: No additional conditions apply.**
- M4-8** **If a track is not hosting the Allocated title-**  
(a) **An application to race the class on the date of the Allocated title can be declined.**  
(b) **Its competitors cannot be denied the right to enter the Allocated title.**
- M4-9** **Eligibility of Vehicles**  
**M4-9-1** **A vehicle can only be entered into one New Zealand Championship and/or Grand Prix and/or Island Championship in any one season, unless the vehicle has been legitimately sold between Island Championships.**  
**M4-9-2** **Vehicles must be compliant with all Technical Regulations at an allocated title.**

- M4-10** **Officials**  
**M4-10-1** **New Zealand championships:**  
A Stipendiary Steward and Senior Referee will be appointed to officiate.  
**M4-10-2** **North and South Island, Grand Prix and major teams' meetings:**  
A Senior Referee will be appointed to Officiate.
- M4-11** **New Zealand Championship Practice**  
**M4-11-1** **The host track is required to hold at least one practice to enable visiting drivers to familiarise themselves with the track and conditions.**  
**M4-11-2** **The timing of this practice is to be optional but must be stated on the entry form.**  
**M4-11-3** **Sidecars only: Practice must be run at least two hours before the commencement of the event.**
- M4-12** **Drivers Briefing**  
**M4-12-1** **All appointed Senior Officials will be introduced to competitors by the Clerk of the Course at the drivers briefing.**  
**M4-12-2** **A drivers representative will be elected at this meeting.**  
**M4-12-3** **The drivers briefing can discuss changes to the programme and any procedural requirements.**
- M4-13** **Substitute Vehicles**  
**M4-13-1** **Are permitted in Solo and Sidecar Allocated titles**  
**M4-13-2** **Are not permitted in all other Allocated titles**
- M4-14** **Substitute Competitors**  
**M4-14-1** **Are permitted in Solo and Sidecar Allocated titles.**  
**M4-14-2** **The next highest pointscorer or placegetter can replace a qualifier that is unable to start in the first race of the championship finals.**
- M4-15** **Additional Scrutineering Requirements**  
**M4-15-1** **Superstocks and Stockcars must be weighed before specified allocated titles by systems approved by SNZ.**
- M4-16** **Vehicle Rechecking at New Zealand Championships**  
Refer to Section E2-9.
- M4-17** **Lap scoring and results**  
**M4-17-1** **An audio recording must be used as a backup lap scoring system.**  
**M4-17-2** **The Steward of the meeting must provide to the SNZ Office the points and placings from each race of the title within three working days of the meeting.**  
**M4-17-3** **SNZ will issue certificates to the first three placegetters at Allocated titles.**
- M4-18** **Prizemoney**  
**M4-18-1** **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.**  
**M4-18-2** **All payments must be paid within 30 days unless appealed.**  
**M4-18-3** **If prizemoney is not forthcoming, refer to Section M3-8 Fidelity Fund.**

**M4-19-1 New Zealand Solo and Sidecar Championships**

The preferred format for New Zealand titles is a points based system over 20 heats between 16 competitors.

- (a) (i) At the conclusion of the 20 heats the competitors' points are tallied.
- (ii) Competitors with a total points score placing the competitor fourth, fifth, sixth or seventh (4th - 7th) will compete in a four rider 'B' Final.
- (iii) The winner of the 'B' Final will then join the first, second and third points scorers (1st - 3rd) in a four rider Grand Final.
- (iv) In the event of competitors being tied on points, qualifying position in the first instance will be decided by who beat who in the heat in which the competitors met. If that is inconclusive then order will be by competitor with most wins. If a decision still cannot be determined then a race-off will decide the positions.
- (v) The order of finishing in the Grand Final race shall be the order of championship finishing position (i.e. winner take all).
- (vi) Competitors in the two (2) Finals shall choose their gate starting position in order of qualifying for their respective Final (i.e. highest points scorer has first choice).
- (b) The Promoter has the right to submit an alternative format to SNZ, which if approved by SNZ is the format by which the championship is competed.
  - (i) For alternative championship format refer rule M4-19-9.
  - (ii) If an alternative format is used then rules M4-19-2 to M4-19-8 inclusive do not apply.

**M4-19-2** In each heat there will be 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.

**M4-19-3** The 16 competitors shall draw for racing number 1-16.

**M4-19-4** Should more than 16 entries be received refer rule M4-19-10.

**M4-19-5** 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.

**M4-19-6** 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.

**M4-19-7** Points to be a 3 2 1 basis to determine the Championship. In the event of a tie, a run off to be held.

**M4-19-8 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.

**M4-19-9 Other Titles and Alternative Formats**

The Promoter may submit (or apply) to SNZ an alternative format to the 20 heat, 16 rider format (rule M4-19-1) for any Championship. The alternative format must include:

- (a) A fair system consisting of qualifying heats, repechages and Final(s).
- (b) System may be a points based or knock-out system, or combination of both.
- (c) Where points are used:

(i) **For heats with four starters:**

The points allocation is 3-2-1.

(ii) **Formats involving heats with more than four starters:**

The promoter shall decide the points allocation. Once decided the points allocation shall remain constant for all qualifying heats regardless the number of starters and to be published in the format or at the competitors briefing.

(d) The alternative format as approved by SNZ will be the format by which the championship is competed.

(e) Minor alterations may be made on the race day if affected by competitor attendance or other unforeseen circumstance, but must not derive from the base format and must be agreed by the attending Stipendiary Steward (or their appointee) and all competitors notified at the competitors' briefing.

**M4-19-10 Qualifying for Championships**

Should more entries be received than available positions in the championship format, the entrants will be required to compete in eliminations which will be either:

- (a) A fair system of elimination heats and repechages consistent with rule M4-19-9 (b) and (c), or
- (b) Timed elimination trial where the entrant shall be timed over one flying lap.
  - (i) Competitors shall draw from ballot box for order of their timed run.
  - (ii) A competitor suffering trouble, mechanical failure or fall will be entitled to another attempt at the discretion of the Stipendiary Steward (or their appointee).
  - (iii) After the timed trial, the fastest competitors will immediately fill the top three quarters of the championship positions available. (e.g. 12 positions in a 16 rider field).
  - (iv) The remaining non-qualified competitors will then have a second run if they so wish in reverse order from the first run. Competitors with the fastest time from either of their timed runs will fill the remaining championship positions
- (v) Promoters will make every effort to ensure an even, consistent and fair racing surface for all competitors in the timed trials.

**M4-20 Format and Grid Draws: Open Wheel Allocated titles****M4-21 Option One – 3 Heat Finals****M4-21-1 Qualifying**

- (a) Qualifying for the finals to be a minimum of two heats, marble and reverse draw, per group, over a minimum of 12 laps per race.
- (b) Highest unqualified competitors then start from the front grid of a repechage.
- (c) Two repechages required when more than 36 entries are received.

**M4-21-2 Option for NZ TQ Champs Qualifying:**

Three qualifying heats using the grid method below, with no repechage required.

**M4-21-3 Finals**

- (a) Finals to consist of a maximum of 24 competitors, racing over three heats.
- (b) No competitor can be seeded directly into the finals.
- (c) Minimum number of laps is the higher of 12 or one lap per starter to a maximum of 20, e.g. 14 starters = minimum of 14 laps, maximum of 20 laps.
- (d) Points are awarded as per finishing position from 24 points for first to 1 point for 24th
- (e) Highest point scorer over three heats is the winner.
- (f) In the case of a tie on points for first, second or third place overall, there will be a 4-lap run off.
- (g) Grid draw as per diagram right:-
- (h) If there are less than 24 entrants, the grid system right can be used for any number of cars. Use the bottom half of the grid from column 1 as the top half of column two. Column three uses even numbers highest to lowest then the odd numbers from highest to lowest.

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

**M4-22 Option Two – One Race Final****M4-22-1 Qualifying**

- (a) Elimination Heats and repechage(s) are held to find a maximum of 24 finalists.
- (b) Races to be a minimum of 12 laps and maximum of 20 laps.
- (c) No competitor can be seeded directly into the finals

**M4-22-2 Heats to determine grid for final**

- (a) Finalists to draw for starting grid of first Final Heat.
- (b) The second Final Heat starting grid to be reverse of grid one.
- (c) Final heats to be a minimum of 12 laps and maximum of 20 laps.
- (d) Points will be awarded as per finishing position with maximum points for first in each heat descending in finishing order.

**M4-22-3 Final Race**

- (a) The Final race is to be a minimum of 20 laps and maximum of 30 laps.
- (b) The highest point scorer has a choice of grid one or grid two and the rest of the grid is in descending order of points awarded from the previous final heats.
- (c) Grid ties will be decided on the toss of a coin.
- (d) All previous points awarded do not count in the Final race.
- (e) The winner of the Final race becomes the Champion.
- (f) The rest of the placings will be awarded in finishing order.

**M4-23 Option Three – A Main Format**

**M4-23-1** All cars draw to establish qualifying order.

**M4-23-2** Qualifying consists of a two-lap time trial back to back, the fastest of which is counted.

**M4-23-3** At the conclusion of qualifying, cars will be placed in order fastest to slowest. In the event of a duplicate time, the first competitor to achieve that time gets the position and so on.

**M4-23-4 Format for 36 entrants or more**

- (a) Heat Races to be a minimum of 10 laps
- (b) 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

- (c) Cars finishing in the top 4 transfer to the Championship Final.
- (d) Dashes (minimum 8 laps)
  - (i) The 16 cars that have transferred to the Championship will be ranked fastest to slowest by qualifying time.
  - (ii) 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).
  - (iii) The first dash determines inside starting positions of the first eight rows of the Championship Final.
  - (iv) The second dash determines the outside of the first eight rows.
- (e) B-Main (minimum 10 laps)
  - (i) The remainder of the cars who have not qualified for the Championship will line up by qualifying time.
  - (ii) The top four finishers transfer to the Championship race.
  - (iii) They will retain qualifying time but the best they can start is 17th (behind Dash cars).
- (f) Championship Final/A Main
  - (i) Minimum race distance is 20 laps
  - (ii) The first 16 starting positions are determined by the dash finish order.
  - (iii) The remaining 4 spots are "heads up" by qualifying time consisting of the 4 cars transferring from the B-Main.

**M4-23-5 Format for less than 36 entrants**

- (a) Heat Races to be a minimum of 10 laps
- (b) 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

- (c) Cars finishing in the top 4 transfer to the Championship Final.
- (d) Dashes (minimum 8 laps)
  - (i) The 12 cars that have transferred to the Championship will be ranked fastest to slowest by qualifying time.
  - (ii) 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).
  - (iii) The first dash determines inside starting positions of the first six rows of the Championship Final.
  - (iv) The second dash determines the outside of the first six rows.
- (e) B-Main (minimum 10 laps)
  - (i) The remainder of the cars who have not qualified for the Championship will line up by qualifying time.
  - (ii) The top four finishers transfer to the Championship race.
  - (iii) They will retain qualifying time but the best they can start is 13th (behind Dash cars).
- (f) Championship Final/A Main
  - (i) Minimum race distance is 20 laps
  - (ii) The first 12 starting positions are determined by the dash finish order.
  - (iii) The remaining 8 spots are "heads up" by qualifying time consisting of the 8 cars transferring from the B-Main.

**M4-24 Option Four – Alternative Format**

**M4-24-1** The promoter has the right to apply to SNZ to offer an alternative championship format.



**M4-26 Option One – 3 Heat Finals**

**M4-26-1 Qualifying**

- (a) Qualifying for the finals to be a minimum of two heats, marble and reverse draw, per group, over a maximum of 20 laps per race.
- (b) Highest unqualified competitors then start from the front grid of a repechage.
- (c) Two repechages are required when more than 36 entries are received.

**M4-26-2 Finals**

- (a) Finals to consist of 20 competitors, racing over three heats.
- (b) No competitor can be seeded directly into the finals
- (c) Points are awarded as per finishing position from 20 points for first to 1 point for 20th, regardless of whether the car crosses the finish line.
- (d) Highest point scorer over three heats is the winner.
- (e) In the case of a tie on points for first, second or third place overall, there will be a 4-lap run off.
- (f) Grid draws are as follows:-

Race 1	Race 2	Race 3
Grid	Grid	Grid
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

- (g) If there are less than 20 entrants, the above grid system can be used for any number of cars. Use the bottom half of the grid from column 1 as the top half of column two. Column three uses even numbers highest to lowest then the odd numbers from highest to lowest.

**M4-27 Option Two – A Main Format**

**M4-27-1** All cars draw to establish qualifying order.

**M4-27-2** Qualifying consists of a two-lap time trial back to back, the fastest of which is counted.

**M4-27-3** At the conclusion of qualifying, cars will be placed in order fastest to slowest. In the event of a duplicate time, the first competitor to achieve that time gets the position and so on.

**M4-27-4 Format for 36 entrants or more**

- (a) Heat Races to be a minimum of 10 laps
- (b) 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

- (c) Cars finishing in the top 4 transfer to the Championship Final.
- (d) Dashes (minimum 8 laps)
  - (i) The 16 cars that have transferred to the Championship will be ranked fastest to slowest by qualifying time.

- (ii) 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).
- (iii) The first dash determines inside starting positions of the first eight rows of the Championship Final.
- (iv) The second dash determines the outside of the first eight rows.
- (e) B-Main (minimum 10 laps)
  - (i) The remainder of the cars who have not qualified for the Championship will line up by qualifying time.
  - (ii) The top four finishers transfer to the Championship race.
  - (iii) They will retain qualifying time but the best they can start is 17th (behind Dash cars).
- (f) Championship Final/A Main
  - (i) Minimum race distance is 20 laps.
  - (ii) The first 16 starting positions are determined by the dash finish order.
  - (iii) The remaining 4 spots are "heads up" by qualifying time consisting of the 4 cars transferring from the B-Main.

**M4-27-5 Format for less than 36 entrants**

- (a) Heat Races to be a minimum of 10 laps
- (b) 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

- (c) Cars finishing in the top 4 transfer to the Championship Final.
- (d) Dashes (minimum 8 laps)
  - (i) The 12 cars that have transferred to the Championship will be ranked fastest to slowest by qualifying time.
  - (ii) 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).
  - (iii) The first dash determines inside starting positions of the first six rows of the Championship Final.
  - (iv) The second dash determines the outside of the first six rows.
- (e) B-Main (minimum 10 laps)
  - (i) The remainder of the cars who have not qualified for the Championship will line up by qualifying time.
  - (ii) The top four finishers transfer to the Championship race.
  - (iii) They will retain qualifying time but the best they can start is 13th (behind Dash cars).
- (f) Championship Final/A Main
  - (i) Minimum race distance is 20 laps
  - (ii) The first 12 starting positions are determined by the dash finish order.
  - (iii) The remaining 8 spots are "heads up" by qualifying time consisting of the 8 cars transferring from the B-Main.

**M4-28 Option Three - Alternative Format**

**M4-28-1** A Promoter has the right to apply to SNZ to offer an alternative format.

**M4-29** **Format and Grid Draws:**  
**Superstock, Stockcar and Streetstock Allocated Titles**

- M4-29-1** Finals to consist of 26 competitors, racing over three heats.  
**M4-29-2** No competitor can be seeded directly into the finals.  
**M4-29-3** Points are awarded as per finishing position from 26 points for first to 1 point for 26th.  
**M4-29-4** Highest point scorer over three heats is the winner.  
**M4-29-5** In the case of a tie on points for first, second or third place overall, there will be a 4-lap run off.  
**M4-29-6** Grid draws are as follows:-

Race 1 Grid	Race 2 Grid	Race 3 Grid
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

- M4-29-7** If there are less than 26 entrants, the above grid system can be used for any number of cars. Use the bottom half of the grid from column 1 as the top half of column two. Column three uses even numbers highest to lowest then the odd numbers from highest to lowest.  
**M4-29-8** The promoter has the right to apply to SNZ to offer an alternative championship format.

**M4-30** **Weather Affected Allocated Titles**

**M4-30-1** When an Allocated Title is called off due to adverse weather, it is up to each promoter to decide which alternative best fits their own individual set of circumstances. SNZ must be notified as to whether the Title has been 'postponed' or 'abandoned'.

**M4-30-2** **Rain date**

When the original Title can be rerun on the day(s) immediately following the weather-affected meeting. It is essentially a continuation of the original meeting. The original clearance will apply for the rain date.

**M4-30-3** **Postponed Meeting**

This is when the meeting cannot be rerun on the day(s) immediately following the rain affected meeting, but can be held within 14 days. It will essentially be the same meeting, with the original entries, but held at a later date. In this case the entries cannot be reopened to allow new competitors.

- (a) The original clearance will apply for a Postponed Meeting.
- (b) Once a competitor has withdrawn from a championship, for whatever reason, that withdrawal cannot be selectively ignored.
- (c) If a competitor qualifies prior to the Title being 'postponed', but is unable to attend on the rescheduled date, (i.e. withdraws) their place in the finals is forfeited, even in the event of the Postponed Meeting also being rained off.

**M4-30-4** **Abandoned Meeting**

If the original meeting is declared abandoned, a new entry form must be submitted and sent out; entry into the Title must be reopened for all competitors.

When a new date is being set for an Abandoned Meeting, promoters must take into account the requirement for competitors to give their home promoter 14 days notice and to obtain a written clearance.

**M4-31** **All Other Championships**

**M4-31-1** Any promoter may run an approved competition in order to ascertain their "Track Champion" in a class.

**M4-31-2** Before a promoter may conduct or advertise any event which has the following words or their equivalents as part of the title, they must obtain permission from SNZ:-

- (i) Championship
- (ii) New Zealand
- (iii) Nationals
- (iv) Grand Prix
- (v) World
- (vi) International

A fee may apply.

**M4-32** **New Zealand Team**

**M4-32-1** Before a promoter may conduct or advertise any event or Test Match which features a New Zealand team, they must obtain permission from SNZ.

**M4-32-2** All applications to promote an event featuring a New Zealand team must be submitted to the SNZ Office at least 21 days prior to the proposed date of the event.

**M4-32-3** All New Zealand team members must be selected by an SNZ-appointed selection panel.

**M4-32-4** A New Zealand Team Manager can be appointed by SNZ.

**M4-32-5** A breach of the above rules will incur a fine of up to \$1,000.

## M5 OFFICIALS

### M5-1 Officials

All speedway-related activity at SNZ tracks is overseen and carried out by representatives of SNZ and the promotion.

#### M5-1-1 SNZ Officials include:-

- |                                |                     |
|--------------------------------|---------------------|
| (i) M5-3: Stewards             | (ii) M5-4: Referees |
| (ii) M5-5: Technical Officials |                     |

#### M5-1-2 Promotion Officials include:-

- |                               |  |
|-------------------------------|--|
| (i) M5-6: Clerk of the Course | (ii) M5-7: Chief Lap Scorer              |
| (iii) M5-8: Starter           | (iv) M5-9: Flag Marshalls                |
| (v) M5-10: Medical Officer    | (vi) M5-11: Crash Crew                   |
| (vii) M5-12: Pit Marshall     | (viii) M5-13: Competitor representatives |
| (ix) M5-14: Mentor/Coach      |  |

And other officials as necessary for the conduct of the meeting.

### M5-2 Appointment of SNZ Officials

All SNZ Officials are appointed by the Board annually, giving preference to nominees from the track concerned.

M5-2-2 SNZ Officials will receive such remuneration as the Board may decide.

M5-2-3 Under no circumstances can SNZ Officials accept payment direct from a Promoter.

M5-2-4 If an Official finds it necessary to relinquish their position during the season, the Board reserves the right to make another appointment.

### M5-2-5 Appointment of non-SNZ Officials

Other officials may be appointed by the Promoter subject to the approval of the Board.

### M5-3 Stewards

M5-3-1 The following positions are covered in this section, in order of seniority:-

- (i) M5-3-2: Chief Stipendiary Steward
- (ii) M5-3-3: Stipendiary Steward
- (iii) M5-3-4: Steward
- (iv) M5-3-9: Assistant Steward

M5-3-2 **Chief Stipendiary Steward:** Refer to Section C13-2 for the duties of this position.

#### M5-3-3 Stipendiary Steward

- (a) A Senior Official appointed by the Board to assist, advise, or supervise Stewards in the carrying out of their duties, and if necessary assume control.
- (b) Stipendiary Stewards can impose penalties as per Rule M7-2-5.
- (c) A Stipendiary Steward may declare a race or meeting concluded or completed, if in their opinion it would be unsafe for it to continue or is in breach of SNZ rules. They will consult with the Steward and the Clerk of the Course prior to making the decision.
- (d) There will be at least one Stipendiary Steward in the South Island and at least two Stipendiary Stewards in the North Island.
- (e) Any competitor or party may request a Stipendiary Steward to act as their advocate at any inquiry or appeal meeting.

#### M5-3-4 Steward

- (a) An Official appointed by the Board to see that the Rules and Regulations of SNZ are carried out at their appointed track.
- (b) The Steward can have a number of Assistant Stewards under their authority, who can be delegated any of the responsibilities of a Steward outlined in SNZ's rules.

#### M5-3-5 Duties of a Steward at any time

- (a) Issue competitor licences when presented with completed Competitor- Promoter Agreements for the classes raced at their track.
- (b) Ensure that engine sealing takes place according to the regulations.
- (c) Ensure that Comprehensive Vehicle Inspections take place according to the regulations.

#### M5-3-6 Duties of a Steward before a meeting

- (a) Be in attendance at any practices and meetings and issue meeting permits.
- (b) The Steward has the authority not to issue a permit, and advise the Clerk of the Course accordingly. The Steward must advise the SNZ Office within 48 hours of this action.
- (c) The Steward must take steps to ensure the safety of the public in general. They can prohibit a driver or machine from taking part in a meeting, which in their opinion would constitute a danger to the public.
- (d) Collect clearances from visiting competitors.
- (e) Issue a special clearance if required under Rule E2-4-4(b).
- (f) Oversee scrutineering requirements as per Rule E2-5.

#### M5-3-7 Duties of a Steward during a meeting

- (d) The Steward must ensure they have no responsibility for the organisation of a meeting nor have any executive duty in connection therewith.
- (e) The Steward may declare a race or meeting concluded or completed, if in their opinion it would be unsafe for it to continue or is in breach of SNZ rules. They will consult with the Clerk of the Course prior to making the decision.
- (c) A Steward has the authority to penalise as per rule M7-2-2.

#### M5-3-8 Duties of a Steward after a meeting

- (a) Forward to the SNZ office within three days of issuing or receiving:-
  - (i) All 'Office Copies' of receipts, permits and licences.
  - (ii) All 'Office Copies' of contracts and medical reports.
  - (iii) All duplicate bank receipts balanced with all competitors licence fees, permit fees and fines etc, received.
  - (iv) A completed and balanced Stewards Return Form.
- (b) 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.
- (c) Any time the Steward presides over a meeting that has the word Championship included, they must provide the SNZ Office a fully filled-in programme giving the correct placings and points for each race within three working days of the meeting.

#### M5-3-9 Assistant Steward

- (a) An Official appointed by the Board to assist the Steward in the undertaking of their duties at their appointed track.
- (b) There can be any number of Assistants at any track.
- (c) The Steward can delegate any of their responsibilities to an Assistant.

### M5-4 Referees

M5-4-1 The following positions are covered in this section, in order of seniority:-

- |                                 |                      |
|---------------------------------|----------------------|
| (i) M5-4-2: Senior Referee      | (ii) M5-4-3: Referee |
| (iii) M5-4-4: Assistant Referee |                      |

#### M5-4-2 Senior Referee

- (a) A Senior Official appointed by the Board to referee race meetings as required
- (b) Senior Referees can impose penalties as per Rule M7-2-4.

#### M5-4-3 Referee

- (a) An Official appointed by the Board to see that the Racing rules of SNZ are carried out at their appointed track.
- (b) The Referee must confine their duties to refereeing and cannot undertake additional duties during a race meeting.
- (c) The Referee controls the two or three minute bell as permitted in the relevant racing rules.
- (d) The Referee will become familiar with the relevant racing rules for the classes competing at their track, and be prepared to apply them.
- (e) A Referee can, after consultation with the Clerk of the Course, recommend to the Steward that the meeting be postponed or abandoned in whole or part.
- (f) The Referee can consult with the Steward at any stage during the undertaking of their duties.
- (g) Referees can impose penalties as per Rule M7-2-1.



**M5-4-4 Assistant Referee**

- (a) An Official appointed by the Board to assist the Referee in the undertaking of their duties at their appointed track.
- (b) There can be any number of Assistants at any track.
- (c) The Referee can delegate any of their responsibilities to an Assistant.

**M5-5 Technical Officials**

**M5-5-1** The following positions are covered in this section, in order of seniority:-

- (i) M5-5-2: Head Technical Steward
- (ii) M5-5-3: Technical Steward
- (iii) M5-5-4: Head Scrutineer
- (iv) M5-5-6: Scrutineer

**M5-5-2 Head Technical Steward**

A Senior Official appointed by the Board to mentor Technical Stewards and Scrutineers in all aspects of their duties.

**M5-5-3 Technical Steward**

- (a) A Senior Official appointed by the Board to undertake, assist or advise with vehicle compliance, and if necessary assume control.
- (b) A Technical Steward can be in attendance at any meeting to assist and advise in the application of vehicle compliance.
- (c) A Technical Steward can if necessary assume control of vehicle compliance at a meeting.
- (d) At any location where a Technical Steward has been appointed or sent by the Board, they are in control of vehicle compliance.
- (e) At any location where a competitor has requested a Technical Steward, the Technical Steward is in control of vehicle compliance. When rule E2-5 does not apply, any non-compliance or infringements can be issued.
- (f) Technical Stewards can impose penalties as per Rule M7-2-6.

**M5-5-4 Head Scrutineer**

- (a) An Official appointed by the Board to see that the Technical rules of SNZ are adhered to at their appointed track.
- (b) The Head Scrutineer reports to the Steward.
- (c) The Head Scrutineer will have a number of Scrutineers under their authority, who can be delegated any of the responsibilities of a Head Scrutineer outlined in SNZ's rules.
- (d) The Head Scrutineer or one of the Scrutineers must satisfy the Steward that the person has worked full time for a minimum of three years carrying out repairs and maintenance to safety aspects of motor vehicles and have a reasonable understanding of the rulebook.

**M5-5-5 Duties of a Head Scrutineer**

- (a) Assign Scrutineers to perform Comprehensive Vehicle Inspections (CVI's).
- (b) Assign Scrutineers to perform pre-meeting scrutineering.
- (c) Assign a Scrutineer to the infield during racing. The assigned official will satisfy the Referee that damaged vehicles are fit to continue racing.
- (d) Assign a Scrutineer to inspect vehicles whose steering and suspension has been repaired in any manner during the race meeting.
- (e) Dangerous Construction: The Head Scrutineer has discretionary power (in consultation with the Steward) with regard to whether a vehicle is fit to race, even though it may comply with specifications.

**M5-5-6 Scrutineer**

- (a) An Official appointed by the Board to assist the Head Scrutineer in the undertaking of their duties at their appointed track.
- (b) An appointed Scrutineer has the authority to inspect any race vehicle at any time, and:-
  - (i) Record in the log book the date of all pre-meeting scrutineering.
  - (ii) Record the date of CVI in logbook.
- (c) In the event of a race vehicle not passing the initial pre-meeting scrutineering and registration inspection, the Scrutineer will;

- (i) Record the non-compliance on the pre-meeting inspection and registration certificate referred to in E2-2-3.
- (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 Scrutineer and the Steward.

**M5-6 Non-SNZ Officials****M5-6-1 Clerk of the Course**

The Clerk of the Course is responsible to the Steward for the conduct of the meeting and its administration in accordance with SNZ Rules and the official programme.

**M5-6-3** The Clerk of the Course cannot be a competitor for the duration of the race meeting.

**M5-6-4** All Officials referred to in Rule M5-1-2 report to the Clerk of the Course.

**M5-6-5** The Clerk of the Course can delegate any of their responsibilities to an Assistant.

**M5-6-6 Principle Duties of the Clerk of the Course**

- (a) Ensure that all Officials are at their posts and that the medical officer and ambulance are present.
- (b) Report the absence of any Official to the Steward.
- (c) Ensure that all Officials are provided with the necessary information and knowledge to enable them to carry out their duties.
- (d) Control competitors, crews and track officials at a race meeting.
- (e) Assist and advise the Steward in the prevention of suspended and unlicensed persons.
- (f) Assist and advise the Steward in particular to undesirable/unsafe vehicles and general vehicle compliance.

**M5-7 Chief Lap Scorer**

The Official responsible for declaring the order in which competing vehicles pass the finishing line.

**M5-7-1** The Chief Lapscore will use approved lapscore equipment to determine the results of all races.

**M5-7-2** The Chief Lapscore must be proficient in the racing rules pertaining to the class being raced.

**M5-7-3** If the Chief Lap Scorer considers they have made a mistake they must advise of the mistake within 10 minutes of the posting of the results of the race.

**M5-7-4** The right to make such a correction is subject to the approval of the Referee of the meeting.

**M5-8 Starter**

The Official responsible for displaying flags to competitors at the start/finish line.

**M5-8-1** It is the duty of the Clerk of the Course to advise the Referee that the track is clear and ready for racing.

**M5-8-3** It is the duty of the Starter to initiate each race when so instructed by the Referee.

**M5-8-4** The Starter will indicate the last lap, the finish and use of all other flags instructed by the Referee.

**M5-8-5** The Starter will attend all pre-meeting competitor briefings.

**M5-9 Flag Marshal**

**M5-9-1** An Official responsible for displaying flags to competitors when instructed by the Referee.

**M5-10 Medical Officer**

**M5-10-1** The Official from the appointed First Aid team in overall control of medical requirements at the race meeting.

**M5-11 Crash Crew**

**M5-11-1** Infield staff responsible for attending to vehicles after an incident.

**M5-12 Pit Marshal**

**M5-12-1** The Official responsible for co-ordinating activity in the pit area before and during a race meeting.

**M5-13 Competitor Representative**

**M5-13-1** The representative appointed by the competitors of each class or group to assist them during their dealings with Officials at a race meeting.

**M5-14 Mentor/Coach**

**M5-14-1** The co-ordinator of competitors who are undertaking the approved SNZ Training Programme.

## **M6**      **COMPETITORS**

### **M6-1**      **Eligibility to Compete**

To participate in speedway activity the following must be completed:-

- M6-1-1** The appropriate agreement between a licensed track promoter, SNZ and the competitor.
- M6-1-2** The licence fee paid.
- M6-1-3** A competition licence issued.
- M6-1-4** Sufficient proof of identity provided.

### **M6-2**      **Mentor Programme**

**M6-2-1** Before being permitted to either practice or compete, the SNZ Mentor Programme must be completed by the following:-

- (i) All new competitors to speedway
- (ii) Those who have not competed in the previous five years

**M6-2-2** This programme includes a requirement to ride or drive in at three practices prior to taking part in open competition or racing from the rear of field for at least the first four races.

### **M6-3**      **Competition Licence**

- M6-3-1** All competition licences expire on the following 31 August.
- M6-3-2** Licences must be produced if requested by an SNZ Official.
- M6-3-3** Competitors must nominate the class or classes they wish to licence from those available at their home track.
- M6-3-4** Extension to compete in classes not available at their home track must be made to the Steward at a track where the class is being raced.
- M6-3-5** **Adult Licence**  
Minimum age 16 years.
- M6-3-6** **Minors Agreement**  
A competitors agreement will be entered into by a minor when
  - (i) the written consent of their parent(s) or guardian is provided
  - (ii) the consent clause of the agreement is properly witnessed.
- M6-3-7** The Board can refuse to issue or cancel a licence without stating any reason for such refusal or cancellation.

### **M6-4**      **Competitors Agreement**

- M6-4-1** It is the intent of SNZ that only one competitor's agreement is operative at any one time.
- M6-4-2** A competitor cannot enter into any further competitor's agreement unless it does not conflict with their obligations under the principal agreement.
- M6-4-3** SNZ will not be liable in the event that more than one agreement is registered in respect of one competitor.
- M6-4-4** SNZ is not responsible for any agreement, contract or other arrangement entered into by a competitor other than an agreement registered in accordance with SNZ rules.
- M6-4-5** If a competitor cancels or terminates his licence during a Speedway season, the licence will not be re-issued or a further new licence obtained without the approval of the SNZ Office.
- M6-4-6** Competitors may compete in motorsport other than on their licenced speedway track provided they are not in breach of their performance contract with their Promoter.
- M6-4-7** A competitor may transfer their agreement to another track with the approval of both Promoters. A transfer fee applies.
- M6-4-8** Subject to the provisions of the Privacy Act, 1993, competitors may be asked to give authority for their contact details to be included in all lists supplied by SNZ to allied organisations and businesses wishing to contact competitors.  
If a competitor agrees to provide that information then an authorization is required to be signed by the competitor on the agreement form as follows:  
*'I authorize Speedway New Zealand Inc to furnish to other like organisations my name and contact details.'*
- M6-4-9** The Competitor for themselves, their Executors and Administrators hereby acknowledges and declares that they will at all times participate in all such races and all such practice at their own risk throughout and that neither the Competitor nor their 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 themselves or the machine or vehicle used by themselves during any such race or practice.

- M6-4-10** Competitors Personal Accident Insurance: Personal Accident Insurance is strongly advised but is not compulsory.
- M6-4-11** 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.

### **M6-5**      **One-Day Licences**

- M6-5-1** A one-day licence can only be issued at the Steward's discretion and with the approval of the Promotion.
- M6-5-2** A one-day licence holder must have successfully completed the current SNZ Mentor programme or have previously competed in at least four races.  
Exception: Novelty type events, e.g. Demo Derby, Streetcar race etc.
- M6-5-3** A one-day licence holder must start from the rear of the field in open competition unless given dispensation from the Steward of the meeting.
- M6-5-4** A one-day licence cannot be issued to a driver to take part in an Allocated title or other championship event.
- M6-5-5** The one-day licence 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 licence.

### **M6-6**      **Overseas Competitors**

- M6-6-1** Overseas competitors are those without New Zealand residency.
- M6-6-2** Permission must be received from the SNZ Office to licence an overseas competitor.
- M6-6-3** All overseas competitors must sign a competitor's agreement on the form prescribed and approved by SNZ.

### **M6-7**      **Clearance**

- M6-7-1** A Competitor will not enter into any commitment with another promoter that prevents them from meeting their obligation to their promoter, unless a clearance is 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.
- M6-7-2** A competitor who has been given clearance to race at another track will then require a written clearance from that promoter before they can race elsewhere.
- M6-7-3** A clearance is required:-
  - (i) when there is a meeting for their class at their home track on the same date
  - (ii) for every SNZ Allocated title.

### **M6-8**      **Competitors' Responsibilities**

- M6-8-1** Competitors are responsible for:-
  - (a) the safety of their vehicle at all times during a race meeting.
  - (b) the conduct and actions of their crew and/or vehicle owners.
- M6-8-2** Any competitor undertaking to compete at a race meeting and failing to attend can be reported to the SNZ Office.
- M6-8-3** In order to participate in a race meeting, the competitor must attend the drivers briefing.

### **M6-9**      **Promoters Responsibilities**

The promoter will give no less than 5 days notice to classes not racing at the next scheduled meeting at their registered track.

### **M6-10**      **Medical**

- M6-10-1** A Competitor's Licence will not be granted to any person, unless the Board in their sole and absolute discretion are satisfied that all competitors both have the skills and experience as well as the physical ability to, at all times, be fully in control of their vehicles, and will not at any time for any reason pose any risk or danger to other competitors, or the public or any person.

**M6-10-2** Any competitor who has received hospital treatment can be required to produce a medical clearance deeming them fit to resume racing.

**M6-10-3** The Board can request any competitor to undergo a medical examination from a Doctor of their choosing. Cost to be borne by the competitor.

**M6-11** **Concussion**

**M6-11-1** When a competitor is diagnosed with concussion by a Doctor or Medical Officer the stand-down period from racing is 22 days, commencing from the date of the injury.

**M6-11-2** The concussion must be noted on the competitor's licence.

**M6-11-3** The SNZ Office must be informed of the competitor's concussion.

**M6-11-4** A medical clearance can be required from a doctor advised by the SNZ Office prior to the resumption of racing.

**M6-11-5** Where suspicion of a concussion exists, and a competitor refuses or doesn't receive a medical assessment, the Track Steward can issue the 22 day stand-down.

**M6-11-6** A competitor diagnosed with concussion can apply to the SNZ Office to have their stand-down period reduced to an absolute minimum of 15 days from the date of the injury. They will be required to see a doctor selected by SNZ (at their cost), prior to a decision by the Board.

**M6-12** **Alcohol and Drugs**

**M6-12-1** SNZ has a zero tolerance regarding the use of drugs and alcohol in sport.

**M6-12-2** The taking of, or suffering from the effects of drugs or alcohol by any competitor, official or crew at a race meeting is conduct prejudicial to the sport.

**M6-12-3** SNZ is affiliated to Drug Free Sport New Zealand, and has adopted their anti-doping rules, which may change from time to time.

(a) 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)

(b) 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.

**M6-12-4** Any competitor, official or crew can be subject to the appropriate tests, which will be made under the supervision of the Steward.

**M6-12-5** Offenders will be removed from the Stadium grounds and track complex, and will be reported to the SNZ Office within 48 hours.

**M6-12-6** Refusal to submit to an alcohol or drug test at any time will be deemed to be a positive test.

**M6-12-7** In the event of a positive alcohol or drug test a competitor will be stood down until a Hearing before the Board.

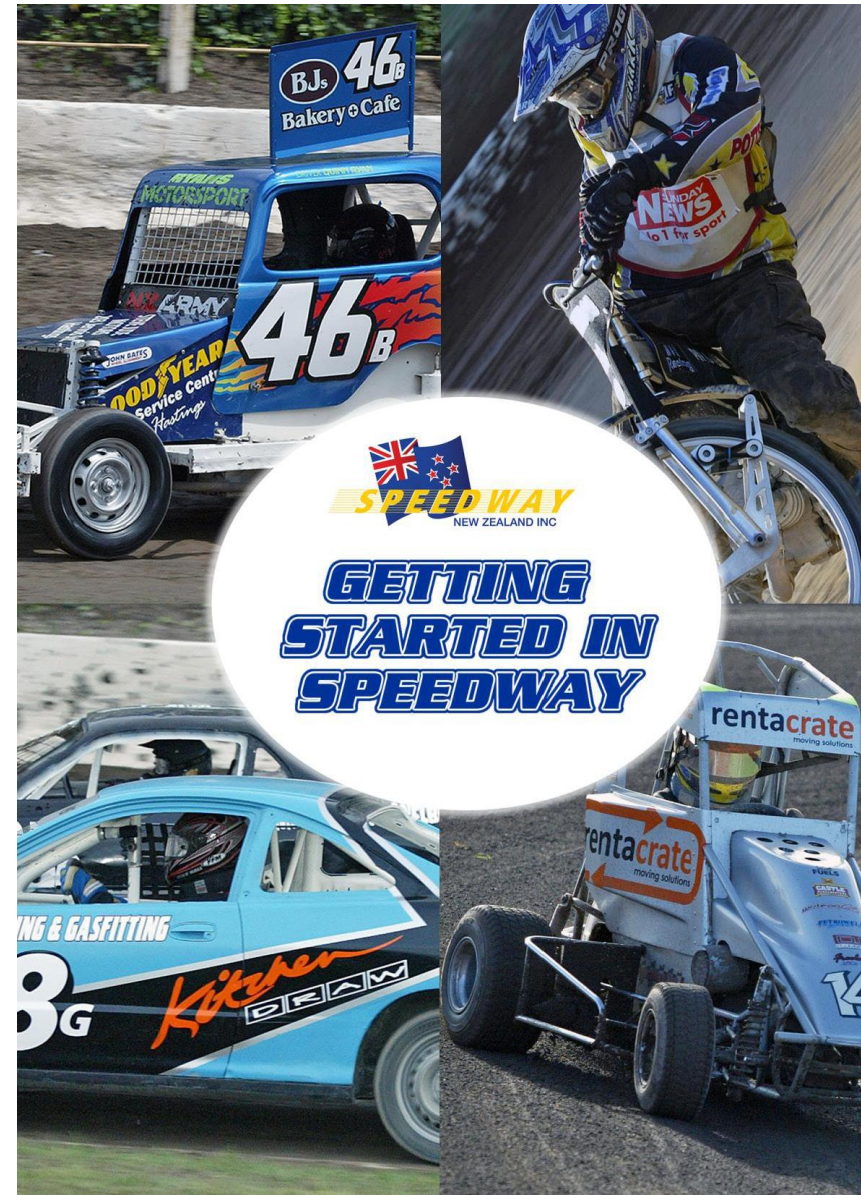
**M6-12-8** Any licensed competitor who has returned a positive drug test can be requested to take subsequent drug tests at any time, at their own expense.

**M6-12-9** Any competitor or official convicted of a drug offence by the civil court and sentenced to a jail term or a fine exceeding \$1000, 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 Board.

**M6-13** **SNZ Training Programme starts on the next page**

## A NEW OR INTENDING COMPETITOR?

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AVAILABLE AT [WWW.SPEEDWAY.CO.NZ](http://WWW.SPEEDWAY.CO.NZ)**





## **M6-13** SNZ Training Programme for Youth and Junior Classes

### **M6-13-1** Applicable Classes:

**Youth Ministocks, Youth Saloons, Quarter Midgets, Junior Solos, Peewee Solos, Junior Sidecars.**

**M6-13-2** MISSION STATEMENT: The purpose of these classes is to teach our young drivers how to race safely. They are primarily training classes, not racing classes.

**M6-13-3** 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.

### **M6-13-4** Peewee Solo

Licence Age: 5-8 years

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.

### **M6-13-5** Quarter Midget & Junior Solo

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 Board. Proof of age, e.g. birth certificate will be asked for.

### **M6-13-6** Youth Ministock, Youth Saloon and Junior Sidecars.

Licence Age: 12-16 years

Once you turn 12 years old you can start racing in this class. (and continue racing) until the day before your 17th birthday. Proof of age, e.g. birth certificate will be asked for.

### **M6-13-7** Qualification to Race

- You must have an SNZ Licence before you race.
- You must go through the SNZ training programme (see below) before being allowed to race.
- 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.
- When you sign your licence contract you agree to abide by the rules and regulations as set by SNZ.

### **M6-13-8** Training

Training courses are to be set up by each Promoter, with a knowledgeable and responsible person (the Coach) in charge.

A Coach must be appointed by the Promoter and approved by SNZ.

**M6-13-9** Each Youth must attend all training meetings until deemed ready to race, then attendance is optional.

**M6-13-10** Training is to be in four 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.
- fostering good manners and a willingness to help each other.
- How to get and look after sponsors for your racing.

**M6-13-11** 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.).

**M6-13-12** The training sessions will each last for two hours: 1 hour driving, 1/2 hour practical, 1/2 hour theory.

**M6-13-13** For all sessions the Coach is to be in charge of safety or appoint a safety officer.

**M6-13-14** 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.

### **M6-13-15** 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.
- Encourage youth into speedway.

### **M6-13-16** Parents/Guardians

Support from parents or guardians is imperative. They must be in attendance at all training sessions and on race night.

### **M6-13-17** 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.

### **M6-13-18** Competition Licence

Parent or guardian and competitor must fill in the contract as supplied by SNZ.

**M6-13-19** There are two grades of licence. The Youth licence contract form has a large "A" and "B", which must be circled at the time the licence form is completed.

### **M6-13-20** '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.

### **M6-13-21** '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.

**M6-13-22** 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.

**M6-13-23** The Coach is the person who decides when a competitor is ready to race at an away track. He has the final say in these decisions.

### **M6-13-24** 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 and track Officials must always be obeyed.
- Any disorderly conduct is detrimental to the sport and will be referred to the SNZ Board.

### **M6-13-25** 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.

### **M6-13-26** Racing Rules

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.

### **M6-13-27** 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 S3 of the SNZ Rulebook.
- The wearing of a neck brace is compulsory.
- Helmets - See S3-1 of the SNZ Rulebook
- Drivers Suit - See S3-8-3 of the SNZ Rulebook
- Footwear - See S3-8(c) of the SNZ Rulebook
- Seatbelts - See S4 of the SNZ Rulebook

**M6-13-28** PARENT OR GUARDIAN TO CHECK SEATBELTS AND HELMET STRAPS JUST BEFORE COMPETITORS ENTER TRACK AFTER SITTING IN PIT CHUTE FOR A WHILE.

**M6-13-29** LET'S HAVE FUN!!!

## M7 RULE ENFORCEMENT

### M7-1 Penalties

**M7-1-1** Any person or entity found guilty of a breach of these rules can be penalised.

**M7-1-2** Rule breaches can be classified as follows

- (a) Racing – as per Section R.
- (b) Technical – as per Section E, S and T.
- (c) Behavioural – as per Section M7-7.

**M7-1-3** Any or all of the following penalties can be applied:

- (a) Reprimand by a Steward, Referee or the Board which can be private or public.
- (b) Relegation of finishing positions by a Referee.
- (c) Exclusion from the results of the race by a Referee or Steward
- (d) Fine by a Steward, Referee or the Board.
- (e) Suspension for a given period by a Referee, Steward or the Board.
- (f) Disqualification of SNZ membership by the Board.

**M7-1-4** Any Infringement Notice need only have the issuing Officials signature to be valid.

**M7-1-5** Any penalty imposed will take effect immediately and cannot be deferred by the lodging of an appeal.

### M7-2 Penalties by Official

**M7-2-1** A Referee has the authority to penalise a competitor as follows:-

- (a) Reprimand which can be private or public.
- (b) Relegate finishing positions.
- (c) Exclude from the results of the race.
- (d) Fine up to \$120.
- (e) Suspend for up to 15 days, starting from the date of the offence.
- (f) Penalise as per Teams Racing Code of Ethics Section R12-4.

**M7-2-2** A Steward has the authority to penalise a competitor as follows:-

- (a) Reprimand which can be private or public.
- (b) Exclude from the results of the race.
- (c) Fine up to \$200.
- (d) Suspend for up to 22 days, starting from the date of the offence.
- (e) Report a competitor within seven days of the date of the offence to the Board, for possible further penalty.
- (f) Penalise as per Section M7-4, Specific Technical Offences.

**M7-2-3** In addition the Steward can order from the track or its vicinity, any driver, Official or other person who refuses to obey their instructions or the instructions of any Official.

**M7-2-4** A Senior Referee has the authority to penalise a competitor as follows:-

- (a) Reprimand which can be private or public.
- (b) Relegate finishing positions.
- (c) Exclude from the results of the race.
- (d) Fine up to \$200.
- (e) Suspend for up to 22 days, starting from the date of the offence.
- (f) Penalise as per Teams Racing Code of Ethics Section R12-4.

**M7-2-5** A Stipendiary Steward has the authority to penalise as follows:-

- (a) Reprimand which can be private or public.
- (b) Exclude competitors from the results of the race.
- (c) Fine competitors up to \$300.
- (d) Suspend competitors, crew, SNZ Officials or any person under the control of the Clerk of the Course for up to 42 days, starting from the date of the offence.
- (e) Report a competitor within seven days of the date of the offence to the Directors, for possible further penalty
- (f) Penalise as per Section M7-4, Specific Technical Offences.
- (g) Suspend any person or entity under the jurisdiction of SNZ, effective from time of pronouncement until the findings of the Board are advised in writing by the SNZ Office.

**M7-2-6** A Technical Steward has the authority to penalise as follows:-

- (a) Reprimand which can be private or public.
- (b) Fine up to \$200.
- (c) Suspend for up to 22 days, starting from the date of the offence.
- (d) Report a competitor within seven days of the date of the offence to the Directors, for possible further penalty.
- (e) Penalise as per Section M7-4, Specific Technical Offences.
- (f) Declare a vehicle, component or safety item non-compliant.

### M7-3 Racing Rule Offences

**M7-3-1** When a competitor is summoned by a SNZ Official for a racing incident, the driver's rep of the competitor's class must be available or present at the meeting.

**M7-3-2** If a competitor wishes to speak with an SNZ Official after a racing incident, they must make this request through their nominated competitor representative.

**M7-3-3** A Referee has the duty to respect the right of competitors who consider themselves to be unjustly penalised to be given a reasonable and courteous explanation.

### M7-4 Specific Technical Offences

#### M7-4-1 Over or under weight

If a vehicle is found to be over or under weight after a race the competitor will be excluded by the Steward from the race and suspended for a further 30 days.

#### M7-4-2 Non-compliant Fuel

If a vehicle is found to be using fuel outside of the specifications in rule E5-1-5 the Competitor will be excluded from the meeting and suspended for three months.

#### M7-4-3 Non-compliant engine

If a vehicle is found to have a non-compliant engine the Competitor will be:-

- (i) Excluded from the meeting by the Steward, and
- (ii) Suspended for 22 days, commencing from the date of the offence, and
- (iii) Reported within seven days of the date of the offence to the Board, for possible further penalty

#### M7-4-4 Non-compliant tyre

If a vehicle is found with a non-compliant tyre the Competitor will be excluded from the meeting.

### M7-5 Disqualification of SNZ Membership

**M7-5-1** Disqualification can be imposed after a hearing before the Board.

**M7-5-2** A disqualified person or entity loses the right for as long as the Board see fit to:

- (i) Hold any SNZ licence, and/or
- (ii) Hold any official appointment at an SNZ meeting or competition, and/or
- (iii) Promote or hold Competition requiring a permit from SNZ.

### M7-6 Payment of Fines

**M7-6-1** The competitor is responsible for the payment of any fine imposed upon themselves or their crew.

**M7-6-2** Fines are payable to SNZ by the next meeting at their contracted track, or within 28 days of the date of the offence, whichever is sooner.

**M7-6-3** Any fine not paid within 28 days attracts a 10% penalty per month until paid.

### M7-7 Abuse and Misconduct

**M7-7-1** SNZ has a zero tolerance regarding verbal and physical abuse.

#### M7-7-2 Improper comment

It is an offence for any SNZ member to publish or permit to be published or connive at, any statement or conduct which improperly criticises SNZ, their Officials, or comments on any matter which is subjudice.

**M7-7-3** No member of SNZ or track official at a race meeting shall verbally or physically abuse (assault) any person, or use any intimidating or threatening language or actions from the time they enter a speedway complex until they depart the complex after the meeting is completed.

- M7-7-4** Any acts of verbal or physical abuse, text messaging and online cyber-bullying, shall be reported to the track Steward, who if deems any blame is warranted may serve an Infringement Notice on any SNZ member.
- M7-7-5** Where any person at a race meeting receives any form of abuse from a driver, race-car owner, pit crew member, or official the matter shall be reported to the Steward, who may investigate, and if deems the allegation is justified, may serve an Infringement Notice on this person and exclude the relevant person from the track complex.
- M7-7-6** **Offensive language**  
Competitors or Pit Crews using offensive language in the proximity of the public will be dealt with accordingly by the Steward.
- M7-7-7** **Conduct unbecoming**  
The Steward may report to the Board any competitor or other person whose conduct off the track is injurious to the welfare of the sport or of SNZ.
- M7-7-8** **Confederates**  
Confederates are strictly prohibited and if in the opinion of the Steward a confederacy is proved which prevents the parties from competing on their true merits, such parties will be reported to the Board and be dealt with as the Board may think fit.
- M7-7-9** **Match Fixing**  
Any Promoter has the power after consultation with the Steward to declare a race 'void' when in their opinion, such race has been 'faked'. Such decisions shall be final as to the sport in progress but an appeal therefrom will lie to the Board.
- M7-7-10** **Right to Suspend**  
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 SNZ shall be disqualified or suspended.
- M7-8** **Protests**
- M7-8-1** Any competitor considering themselves aggrieved in any competition by another competitor or by the decision of any SNZ Official can make a formal Protest.
- Lodging a Protest**
- M7-8-2** All Protests will be submitted in writing to the Steward on the official SNZ Protest form.
- M7-8-3** The Protest will be signed by the competitor lodging the protest, who is engaged in the competition.
- M7-8-4** A Protest form will be accompanied by a deposit of \$40.
- M7-8-5** A Steward cannot refuse a correctly-lodged Protest, and will sign the form to accept that the Protest has been lodged.
- M7-8-6** The Steward will then immediately deal with the Protest.
- Protest Criteria**
- M7-8-7** A Protest cannot be against a "Matter of Fact".
- M7-8-8** Only competitors in the same race as a racing incident can protest that racing incident.
- M7-8-9** Protests relating to a racing incident must be lodged within 10 minutes of the official posted results of that race.
- M7-8-10** Protests relating to Technical specifications must be lodged within 10 minutes of the last official posted results of that class.
- M7-8-11** When a Protest is decided and the decision given it cannot be presented afresh during or after the meeting. The same applies to an identical Protest by another driver.
- M7-8-12** When a competitor has been shown a black flag/board for excessive noise, NO protests can be entered into.
- Protest Committee**
- M7-8-13** All protests are adjudicated upon by a Protest Committee consisting of:-
- (i) The Steward of the meeting
  - (ii) One representative of the competitor's class.
  - (iii) The Clerk of the Course.
- M7-8-14** The Steward is the Chairperson of the Committee.

### The Protest Hearing

- M7-8-15** The protest will be heard on the day/night of the protest being lodged.
- M7-8-16** To facilitate the flow of a meeting the Protest Committee can elect to handle a Protest 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 during that meeting.
- M7-8-17** 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.
- M7-8-18** In the case of a racing incident the Referee must be interviewed by the Protest Committee.

### Decision of the Protest Committee

- M7-8-19** The Protest Committee reach a decision by majority vote.
- M7-8-20** If the Protest is successful (upheld):-
- (i) the \$40 deposit is refunded to the person who made the Protest.
  - (ii) the result will be advised to the Steward who will apply a penalty as per Rule M7-2-2.
- M7-8-21** If the Protest is unsuccessful (not upheld) the \$40 deposit is forfeited to SNZ, unless the Protest Committee determine that there was reasonable ground for the Protest.
- M7-8-22** All protest results must be stated on the Protest form or SNZ letterhead.
- M7-8-23** Any competitor who is not happy with any decision or penalty handed down under the above procedure may lodge an Appeal, subject to the conditions in Section M7-10.

### M7-9 Protests About Technical Specifications

- M7-9-1** If a competitor wishes to protest engine and/or vehicle specifications that are routinely inspected by scrutineers the Protest fee is \$40.
- M7-9-2** If the protest concerns engine and/or vehicle specifications, including fuel, that are not routinely inspected, the Protest fee is \$300.
- M7-9-3** Any vehicle protested under M7-9-2 must be impounded. Refer to rule E2-7.
- M7-9-4** The only persons present when a component is checked to be:
- (a) the vehicle competitor/owner.
  - (b) the person laying the protest.
  - (c) the person inspecting the component.
  - (d) an SNZ representative.
- M7-9-5** The inspection of componentry is to be undertaken in a clean and suitable environment, e.g. a workshop/garage.
- M7-9-6** When the people referred to in M7-9-4(a) are present a Protest meeting is not necessary. The result of the checking becomes the result of the protest.
- M7-9-7** If the protest is upheld, the \$300 will 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 componentry.
- M7-9-8** If the protest is unsuccessful the initial fee of \$300 and any reasonable additional expenses will be handed to the competitor against whom the protest was lodged.

### M7-10 Appeals

- M7-10-1** Every SNZ member affected by a decision given under these rules has the right of appeal to the Appeal Committee of SNZ.

### Appeal Criteria

- M7-10-2** To lodge an appeal against a racing incident, a competitor must have lodged an official protest within the given time limit allowed.
- M7-10-3** An Appeal can only be about the reason for the infringement.
- M7-10-4** There will be no right of appeal for penalties imposed on "Matters of Fact" acknowledged by both sides, except with leave of the Steward or Referee concerned.
- M7-10-5** Appeals about grammatical errors are frivolous and will not be accepted.

### Lodging an Appeal

- M7-10-6** A member wishing to Appeal must in the first instance contact the SNZ Office. An Appeal will be submitted in writing to the Appeal Committee Chairperson.
- M7-10-7** The Appeal will be accompanied by payment of an Appeal fee of \$1000.



**M7-10-8** An Appeal will be submitted to the Appeal Committee Chairperson within seven days of the date of the decision appealed from.

**M7-10-9** Any penalty appealed against will continue notwithstanding lodgement of any Appeal.

#### **The Appeal Committee**

**M7-10-10** The Chair of the Appeal Committee hearing will rotate around the 4 members of the Appeal Panel selected as Chairpersons by the Board.

**M7-10-11** A minimum of five persons shall be proposed by the Board and ratified every two years at an AGM of SNZ to form the body of the Appeal Panel.

**M7-10-12** Those on the Appeal Panel cannot be SNZ Directors.

**M7-10-13** The Appeal Committee will consist of the Chairperson and two persons from the Appeal Panel.

**M7-10-14** In selecting those two persons, the Board will select one such person and the appellant the other.

**M7-10-15** There is to be no communication with the Appeal Committee prior to the hearing other than in writing and through the Appeal Committee Chairman.

#### **The Appeal Hearing**

**M7-10-16** 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

**M7-10-17** The appellant must notify the Appeal Committee Chairman within a minimum of three days prior to the hearing if they intend to be represented by a lawyer or advocate, or have witnesses/support people present.

**M7-10-18** Any appeal heard by the Appeal Committee is not a hearing de novo, nor a new hearing into the matter from the beginning.

**M7-10-19** The burden of proving the appeal is solely on the appellant. SNZ and its Officials are not required to prove or disprove anything.

**M7-10-20** SNZ and its Officials and any Promotion Officials can appear before the Appeal Panel in person, or make submissions in writing.

**M7-10-21** At least seven days prior to the Appeal Hearing, the SNZ Office and the Appellant will provide the Appeal Committee Chair with copies of any written reports obtained from any officials present at the incident complained of, and any other written evidence they may have.

**M7-10-22** The Appeal Committee Chair will then supply the information to both parties five days prior to the Appeal Hearing.

#### **Result of the Appeal**

**M7-10-23** The Appeal Committee will give its decision in writing within seven days of having heard the appeal.

**M7-10-24** 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.

**M7-10-25** The decision of the Appeal Committee will be final and binding.

**M7-10-26** The Appeal Committee may not penalise another party who has not at the Appeal Hearing been given an opportunity to be heard.

**M7-10-27** Should the appeal fail, the appellant may at the Appeal Committee's discretion be ordered to pay all or part of the whole cost of the hearing.

**M7-10-28** The Appeal Committee may refund to the Appellant all or part of the \$1,000 appeal fee at its discretion.

#### **M7-11 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 Board or its representatives.

## **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.

**STEP 1** Competitor breaks rule in book.

**STEP 2** Offence witnessed by Steward, Referee, or reported to Steward by other Official.

**OR**

**STEP 2A** Competitor makes written protest to Steward with \$40 fee, on proper form within specified time limits

**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" The Steward will then take the appropriate action.  
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. 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.

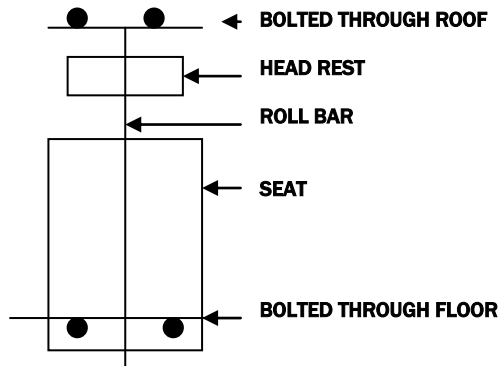
Steps 1 to 5 will all take place at and during the meeting and should be completed no later than one hour after the last race on the programme.

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.

### D1 DEMOLITION DERBY RULES / SPECIFICATIONS INCLUDING CARAVAN AND TEAMS DERBIES

#### D1-1 Demolition Derby Minimum Vehicle Specifications

- D1-1-1** Only standard road cars eligible. NO 4-wheel drives, NO SUV's, NO Ute's.
- D1-1-2** NO modifications or reinforcing permitted except the following.
- D1-1-3** All glass including mirrors to be removed from the vehicle.
- D1-1-4** Tow bar to be removed.
- D1-1-5** All badges, interior and exterior trim and plastic to be removed.
- D1-1-6** Both front doors to be securely chained, bolted or welded shut.
- D1-1-7** Pillarless cars must have the seam between front and rear doors fully welded.
- D1-1-8** Full harness seat belt (4-5 point) to be fitted to driver's seat and securely mounted.
- D1-1-9** Seat belts must not be mounted to the roof.
- D1-1-10** NO RETRACTABLE SEAT BELTS allowed.
- D1-1-11** A maximum of 18 litres of petrol to be carried in the tank.
- D1-1-12** 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.



- D1-1-13** Numbers must be painted in contrasting colours and clearly visible, on the driver's door and roof. Minimum size 300mm high x 50mm wide.
- D1-1-14** No obscene or offensive words or drawings on cars.
- D1-1-15** 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.
- D1-1-16** No locked diffs allowed.
- D1-1-17** No wide wheels or racing tyres allowed.
- D1-1-18** Battery must be adequately secured.
- D1-1-19** All airbags must be removed.
- D1-1-20** Fuel lines to be secured with no leaks or kinks, and of an approved type.

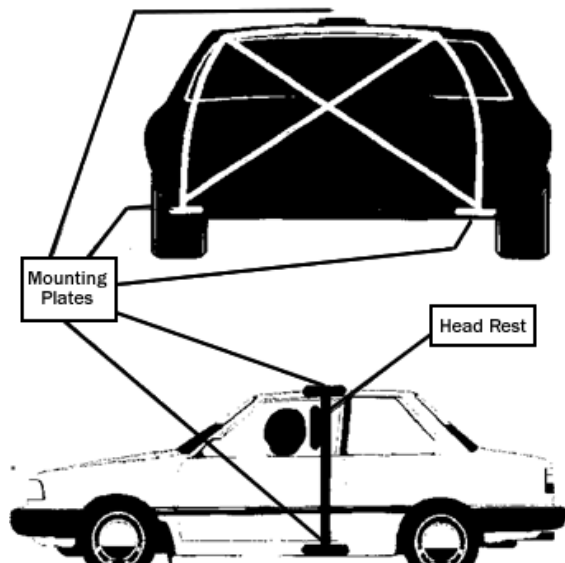
#### D1-2 Demolition Derby Racing Rules and Conditions

- D1-2-1** All vehicles will be checked and must comply with the specifications.
- D1-2-2** All competitors must hold either an SNZ One-Day Derby Licence or a full SNZ licence.
- D1-2-3** Minimum age is 16 years. Competitors aged between 16 and 18 years must have signed consent by a parent or guardian.
- D1-2-4** All competitors must be aware and accept that they compete at their own risk.
- D1-2-5** 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.
- D1-2-6** 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.
- D1-2-7** SNZ approved helmet and neck brace must be worn.
- D1-2-8** No passengers.
- D1-2-9** The Demo Derby is to be the last race of the meeting and the track surface must be heavily watered to reduce vehicle speed.
- D1-2-10** This competition is with the intention of demolishing opponent's vehicles. Those not competing in the spirit of the intention can be excluded.
- D1-2-11** When a red light or flag is shown, competitors must immediately STOP.
- D1-2-12** Drivers must not hit another vehicle in the driver's door.
- D1-2-13** Cars can only move forward on the track and in an anticlockwise direction, strictly within the confines of the track.
- D1-2-14** 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.
- D1-2-15** A competitor that is immobilised for more than ONE minute shall be deemed out of the Derby and shall not be permitted a restart.
- D1-2-16** 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.
- D1-2-17** All decisions taken by the track officials will be final and binding and no protests will be entered into.
- D1-2-18** The Promoter has the right to order winning cars to be rechecked.
- D1-2-19** 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.

## D2-1 Derby Teams Racing: Additional Minimum Vehicle Specifications

- D2-1-1** All cars to be tidy in appearance and professionally signwritten.
- D2-1-2** All glass except interior mirror to be removed.
- D2-1-3** Cars that contain rust in critical areas e.g. door pillars or hinges will not be permitted.
- D2-1-4** Side intrusion bar to be fitted between drivers door pillars (same size and material as roll bar).
- D2-1-5** 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.
- D2-1-6** Roll bar material – 38mm OD 3.2mm wall thickness steampipe or RHS.
- D2-1-7** Diagonal cross must be fitted inside roll bar.
- D2-1-8** Roll bar to be mounted to mounting plates at floor and middle of roof.
- D2-1-9** Mounting plates to be 125mm x 125mm x 6mm.
- D2-1-10** A headrest 280mm x 150mm x 3mm to be fitted centrally behind drivers helmet and securely mounted to rollbar.
- D2-1-11** Radiators to remain in original position but fan may be removed.
- D2-1-12** Fuel tanks must be mounted in the boot area centrally and as far forward as possible without intruding into the rear passenger area.
- D2-1-13** Fuel lines to be secured with no leaks or kinks and of an approved type.
- D2-1-14** All bolts used to effect modification are to be a minimum of 10mm in diameter.

Pictured:  
Roll bar as required  
in Teams Derby Rules  
D2-1-5 to D2-1-10



## D2-2 Derby Teams Racing: Additional Racing Rules

- D2-2-1** Racing may take place during the meeting.
- D2-2-2** No competitor shall manoeuvre their vehicle into the path of others so their door is exposed.
- D2-2-3** No hitting any stationary vehicles. See Rule T12-3-5(e).
- D2-2-4** All competitors must race in the race direction.
- D2-2-5** In the event of a rollover the car is out of the race unless it returns to its wheels without assistance.

## D3-1 Caravan Derbies: Additional Minimum Vehicle Specifications

- D3-1-1** The windscreen opening is to be covered by maximum 100mm mesh covered by chicken netting.
- D3-1-2** The drawbar is to be well attached, with a good safety chain.
- D3-1-3** Caravans are to have all glass and breakables, beds, tables and other internal fixtures removed.
- D3-1-4** All gas bottles and water tanks to be removed.

## D3-2 Caravan Derbies: Additional Racing Rules

- D3-2-1** Racing to be on a dry track.
- D3-2-2** First across the line with a minimum of drawbar, chassis and set of wheels will be the winner.
- D3-2-3** Cars without a caravan or part thereof can continue, but cannot win.

## 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 Board.

## SECTION E: EQUIPMENT

**E1** Rules in this Section are managed by the Directors.

### E2 VEHICLE INSPECTIONS

#### E2-1 Comprehensive Vehicle Inspection (CVI)

**E2-1-1** 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.

**E2-1-2** All comprehensive vehicle inspection sheets must be less than 20 meetings old.

**E2-1-3** 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.

**E2-1-4** All CVI's to be recorded in the log book.

**E2-1-5** All vehicles must carry VIN tags and record in logbook and supplied to the SNZ office. Replacements via Stewards (see Scrutineering Booklet for placement)

#### E2-2 Meeting Inspection

**E2-2-1** All vehicles are subject to inspection at any time by a Scrutineer or Technical Steward.

**E2-2-2** No vehicle will be allowed to race until any competitor/s intending to race the vehicle have endorsed the relevant pre-meeting and race vehicle registration documentation.

**E2-2-3** No vehicle will be allowed to race until an authorised Scrutineer has completed a pre-meeting vehicle inspection of the vehicle, and endorsed the relevant pre-meeting/race vehicle registration documentation.

**E2-2-4** A pre-meeting/race vehicle registration is only valid for and on the date entered on the registration document.

**E2-2-5** No express or implied warranty of safety shall result from any inspection.

**E2-2-6** It is the responsibility of the competitor to have their race vehicle compliant with all specifications and supplementary regulations, free from mechanical defects, and in a safe racing condition.

**E2-2-7** Vehicle log books will be checked at scrutineering for validity and outstanding compliance faults. If the log book is presented with compliance faults outstanding, the competitor will be given the option of fixing the faults. If the competitor decides not to fix the faults the car concerned will not be cleared to race. The log book will be retained by the Official and forwarded to the Steward.

**E2-2-8** Vehicles damaged or altered after they have been approved are subject to re-inspection and approval.

**E2-2-9** The Steward will make the final decision on the safety and eligibility of an accident damaged vehicle.

**E2-2-10** 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.

**E2-2-11** 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.

#### E2-3 Technical Inspections

**E2-3-1** Any race vehicle in the designated pit area on the day/night of a race meeting is deemed to have entered the events on the meeting program.

**E2-3-2** Any race vehicle and/or its components may be selected for a technical inspection, on a random basis, or as advised at the drivers briefing, or as mandated herein.

**E2-3-3** The entrant/competitor may be present or request an agent to be present during any inspection of the vehicle or its components.

**E2-3-4** The entrant/competitor must provide his licence and log book when requested by the inspecting official.

**E2-3-5** Should the vehicle need dismantling to expose internal engine components the competitor is entitled to request the inspection be conducted in a clean environment.

**E2-3-6** Should track buildings be unsuitable for inspection purposes resulting in the vehicle leaving the pits an impoundment notice must be issued.

**E2-3-7** Should any any vehicle or component resulting in the vehicle/component (i.e. an ECU or fuel) being removed from the pits for later inspection an impoundment notice must be issued.

**E2-3-8** When any vehicle or its components are impounded, the official must advise the competitor and promotion that any race results recorded on the day/night in question, of the impounded vehicle/component are provisional.

**E2-3-9** Any non-compliance found by an Official or any SNZ authorised agent will result in an infringement notice being written immediately by an SNZ official authorized to do so.

**E2-3-10** The issuing official will contact the competitor, track Official and promotion and advise of the relevant details. (Also read Section M7-4 Penalties)

**E2-3-11** Any non-compliance that will deem a competitor excluded from the result of a race/meeting will take effect immediately.

**E2-3-12** When any non-compliance that will deem a competitor to incur a period of exclusion, the exclusion period will begin on the day the infringement notice was written.

**E2-3-13** Any race meeting results awarded to the competitor between the date of the impoundment notice and the date of the infringement notice will remain deemed as official.

**E2-3-14** Where an infringement notice is issued outside the duration of the race meeting (definitions) the infringement notice must include a referral to the Board. The race meeting protest rules do not apply. Rule C11(f) and the competitors right to appeal do apply.

#### E2-4 Duties of a Technical Steward: Compliance

**E2-4-1** A Steward or Technical Steward may order any vehicle or component be inspected, sealed or impounded, and such vehicle or component will be retained for such period as may reasonably be necessary for its inspection.

**E2-4-2** The Steward or Technical Steward will write down the impounding order in the log book and issue an impoundment notice.

**E2-4-3** (a) A Steward or Technical Steward may demand dismantling as soon as possible to verify compliance.

(b) If dismantled to determine a protest, the party against whom the decision is made will bear the cost. Refer to Section M7.



- (c) A competitor who refuses any inspection, or removes his vehicle from the meeting without permission accepts that the vehicle will be automatically recorded as illegal in the vehicle log book.
- E2-4-4** A Steward or Technical Steward can determine a vehicle or component as non-compliant at any time.
- (a) When the Steward or Technical Steward determines a non-compliance issue; the vehicle will not be permitted to race or practice.
- (b) Provided the meeting is not an allocated title meeting, the Steward or Technical Steward may after consultation with the Head Scrutineer 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 will be recorded in the vehicle 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.

**E2-5** **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.

**E2-6** **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.

**E2-7** **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.

**E2-8** **Measurement of Material Thickness**

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

- (a) 6mm drilled hole
- (b) x-ray

**E2-9** **New Zealand Championship Inspections**

**E2-9-1** At any New Zealand Championship the first 5 placegetters vehicles must have the engine fuel and engine components inspected for compliance by the assigned Technical Steward.

**E2-9-2** 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 assigned Technical Steward or the Steward of the competitor's home track. The vehicle log book must be dated by the Technical Steward when engine seals are applied, the log book will be again dated when engine seals are removed. Also refer rule T10-2-4(j).

**E2-9-3** Midget Cars ONLY: The first 5 cars for the N.Z. Midget Championship must have the motor measured and fuel sampled, immediately on the completion of the last or any other championship race. The vehicle log book must be dated by the Technical Steward when engine seals are applied, the log book will be again dated when engine seals removed.

Also refer rule T10-1-4(i).

**E2-9-4** External inspections, ignition and fuel inspections, restrictor plate inspections and any relevant engine regulations that may require no more than spark plug removal will be conducted by the assigned Technical Steward during the hours of the meeting. The competitor/Clerk of the Course may request that any of these inspections mentioned in this rule will be inspected after the end of racing or after any infield presentations.

**E2-9-5** Should the relevant class have internal components requiring measurements/calculations that require dismantling/removal of any engine covers etc, the relevant removable component will be sealed by lock wire, to enable compliance with relevant engine regulations. The compliance of the relevant specification will be verified by a Technical Steward, at an agreed venue, within 30 days.

Exceptions:-

- (i) Three Quarter Midget refer rule T10-2-4(j).
- (ii) Midget refer rule T10-1-4(i).

**E2-9-6** Should clause E2-9-5 apply, a minimum of two cover/housing retaining screws/studs/nuts must be predrilled before CVI with 2mm minimum size holes to enable NZ Championship meeting Officials to seal component against unauthorised dismantling.

**E2-9-7** The vehicle log book must be dated by the Technical Steward when any engine seals are applied; the log book will be again dated when engine seals removed.

**E2-9-8** Should upon inspection, NZ Championship applied retaining seals be removed by an unauthorized person, the engine will be declared illegal as of date of application of seals.

**E3** **EQUIPMENT DEFINITIONS AND DATA**

**E3-1** **Approved**

An approved component will be a component built to a suitable standard acceptable to SNZ.

**E3-2** **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.

**E3-3** **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.

**E3-3-1** **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.

**E3-3-2** **DOHC - Dual Overhead Cam**

A dual overhead camshaft (also called DOHC, double overhead cam, dual overhead cam, or twin cam) valve train layout is characterised by two camshafts being located within the cylinder head, where there are separate camshafts for inlet and exhaust valves. Typical automotive engines with dual overhead camshafts can have multiple camshafts, depending on the engine configuration.

**E3-3-3** **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.

**E3-3-4** **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.

**E3-3-5 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.

**E3-3-6 Stock Replacement**

Stock Replacement components are components manufactured by aftermarket manufacturers to OEM Specifications.

**E3-3-7 OEM Parts**

Any vehicles that require OEM parts, their components must retain their original identification marks.

**E3-4 Ready to Race**

A race vehicle is 'ready to race' once it has passed scrutineering on the day/night in question.

**E3-5 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.**E3-6** No electro-plating is permitted on roll cages.**E3-7 ISO Metric Bolts:**

Metric Dia	Imperial equiv.
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)

**E3-8 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

**E3-8-1 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

**E4 ELECTRONICS**

**E4-1-1** The use of in-vehicle transmitting or receiving is prohibited except approved one way radio communication from officials.

**E4-1-2** Ignition system settings must not be able to be accessed by the driver when in his normal seated position.

**E4-2** Electronic logic processors that control only engine function of the race vehicle and/or any system for gathering continuous data from the engine of the vehicle is permitted.

- (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 T11-5-1(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.
  - (i) Electronic power steering is permitted.
- In all classes instrument warning lights to be white, blue or green only.

**E4-3****E4-4 Electronic Lap Scoring**

**E4-4-1** The official hardware for electronic lapscoreing on a SNZ track is Dorian Data-1™ or AMB TranX260 timing system.

**E4-4-2** The official software for electronic lapscoreing on a SNZ track is Natsoft Scoring/Timing System or AMB Orbits3.

**E4-4-3** The official transmitter for electronic lapscoreing on a SNZ track is Dorian Data-1 TX 8000™ or AMB Personal TranX260.

**E4-4-4** The loop width of the under track antennas will be a maximum of 1.1 metres.

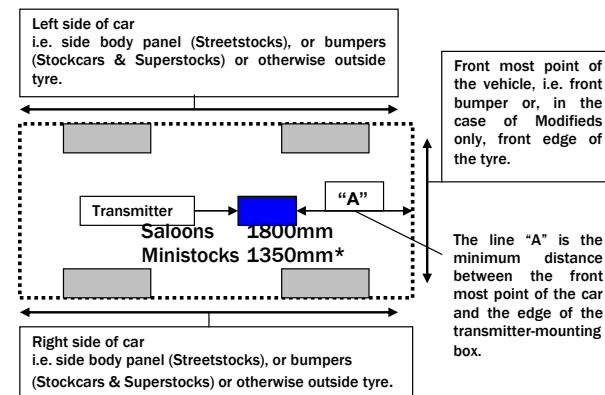
**E4-4-5** It is the competitors responsibility to make sure that their transmitter is fitted to the vehicle in the correct position and charged correctly at all times when the Dorian Data-1 is in use.

**E4-4-6 Placement of the transmitter**

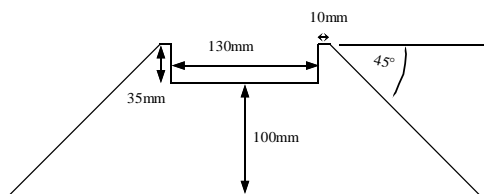
(a) Minimum 'A' measurements (refer to diagram below) are as follows:

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
Prod Saloons	1800mm
Ministocks	1350mm*

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



- (b) 300mm minimum from extreme right hand side of vehicle; 600mm minimum from the extreme left hand side of the vehicle. Exceptions:
- (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.  
 The approved template must be able to fit the transmitter when mounted to check for metallic interference. (See diagram below).



- (d) **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.
- 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.
- E4-4-7** Solo motorcycles do not need to use the Dorian Data-1 timing and scoring system.
- E4-4-8** At allocated titles, a tape of the number caller to be recorded and used as a backup scoring system.
- E4-4-9** For operation of Dorian Data-1 Timing/Scoring system and Natsoft Timing and Scoring System refer to SNZ handbook entitled Electronic Timing and Scoring.

## HANDY HINTS - DORIAN DATA-1 TX8000 TRANSMITTER

### Charging

- Always allow the transmitter to charge fully, uninterrupted for 9 hours prior to use.
- Transmitter can run for 9-10 days once fully charged (i.e. 2 weekends in a row).
- For maximum battery life always allow the transmitter to run until flat before recharging.
- The transmitter should also be charged at least every 3 months during the off season to keep the battery in top condition.
- Do not allow anything metallic to short the gold terminals this can cause serious damage to the transmitter. If you want to protect the gold terminals, simply tape over them.
- If the terminals require cleaning, use a pencil eraser - nothing else.

### Off season Repairs

- It is recommended that if the TX8000 Transmitter is 4 years old or more, you should have it serviced during the off season.
- Speedway NZ service the units for approx \$150, which includes new original type batteries and a 12 month warranty.
- Other repairs if required incur extra charges

### Fitting in the race vehicle

If the transmitter is fitted on its side the LEDs must always be facing down (towards the track surface), and the contacts towards the centre of the race vehicle.

### What the lights on the Transmitter mean – when unit on charge

Green Indicator	Red Indicator	Meaning
Flashing	Flashing	Low Battery Voltage.
Solid Green	Off	Charging. Leave on cradle until green is flashing.
Green Flash	Off	Charging complete. On trickle charge.
Off	Red flash	Charge interrupted. Put back on the cradle.
Off	Solid Red	Faulty. Clean contacts and retry.
Off	Off	Unit is not charging. Try again as above.
Solid Green	Solid Red	Unit has internal fault. Contact the SNZ Office.

### What the lights on the Transmitter mean – when unit off the charger

Green Indicator	Red Indicator	Meaning
Flash every 6 sec	Off	Fully charged over 24 hours ago
Flash every 2 sec	Off	Fully charged within the last 24 hours
Off	Flash every sec	Battery running low – a few hours left
Off	Flash every 6 sec	About one hour of charge left in the battery
Off	Off	Unit flat. Recharge for 9 hours.

## E5 FUEL & FUEL TANKS

### E5-1 Fuels

**E5-1-1** (i) Petrol is restricted to commercially available products as supplied and by defined in the Engine Fuel Specifications Regulations 2008 (See www.speedway.co.nz for details).

**Note: See next page for an Interpretation**

(ii) Methanol fuel, with the same specifications as that supplied by recognised NZ Oil companies, is allowed, regardless of source (see www.speedway.co.nz for details).

(iii) Avgas 100 will comply with ASTM D910 and DEF STAN 91-90 (DERD 2485), specifications available at www.speedway.co.nz.

**E5-1-2** Fuels are permitted to contain commercially available lubricants.

**E5-1-3** The addition of any chemical or substance to fuels that may in any way alter the properties of the fuel from those of the original manufacturer is prohibited. This includes but is not limited to the addition of hydrocarbons (toluene, xylene), alcohols (ethanol, methanol), ether's (MTBE, TAME), ketones (MEK) or heavy metal compounds (TEL, Ferrocene).

**E5-1-4** 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.

**E5-1-5** The use of fuel outside of specifications as described at www.speedway.co.nz or blended fuel, will be declared an illegal fuel, Refer Section M7-4 Specific Technical Exclusions.

### E5-2 Use of Approved Fuels

**E5-2-1** Solo, Sidecar, Open Wheel Vehicles, Modifieds and Super Saloons are permitted to use the following fuels as defined in section E5-1-1:

- Methanol
- Avgas
- Petrol
- Ethanol/petrol blended fuel containing up to 85% ethanol (E85)
- Fuel grade Ethanol

**E5-2-2** Saloons, Production Saloons, Streetstocks, Superstocks and Stockcars are permitted to use the following fuels as defined in section E5-1-1:

- Avgas
- Petrol
- Ethanol/petrol blended fuel containing up to 85% ethanol (E85)

**E5-2-3** Ministocks are permitted to use the following fuels as defined in section E5-1-1:

- Petrol
- Ethanol/petrol blended fuel containing up to 10% ethanol (E10)

### E5-3 Fuel Tanks

**E5-3-1** 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.

**E5-3-2** All fuel tanks must be securely mounted.

**E5-3-3** The fuel tank must have welded seams and fittings and be constructed to a professional standard. Soldered tanks and fittings are not permitted.

**E5-3-4** The fuel tank must be located behind the engine firewall.

**E5-3-5** Pressurized fuel tanks are not permitted.

**E5-3-6** 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.

**E5-3-7** Fuel vent pipe must avoid inboard disc braking systems and be at least 600mm away from exhaust pipes.

**E5-3-8** 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.

**E5-3-9** 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.

### E5-4 Fuel Tank Dimensions

#### E5-4-1 Modifieds

Minimum thickness 1.0mm steel, maximum capacity 55 litres. Aluminium and aluminium alloy fuel tanks are not permitted.

#### E5-4-2 Superstocks, Stockcars and Streetstocks

Minimum thickness 1.2mm steel, maximum capacity 22.75 litres. Aluminium and aluminium alloy fuel tanks are not permitted.

#### E5-4-3 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.

### E5-5 Fuel Tank Location

#### E5-5-1 Open Wheel Vehicles

The fuel tank/tail tank confined within the tail cone area.

#### E5-5-2 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.

#### E5-5-3 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.

#### E5-5-4 Super Saloon, Saloon

The fuel tank confined in the boot or rear compartment and behind the rear firewall.

### E5-6 Fuel Cells

#### E5-6-1

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.

**E5-6-2** 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.

**E5-6-3** 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.

**E5-6-4** It is highly recommended that fuel cell inserts or bladders be replaced every 5 years.

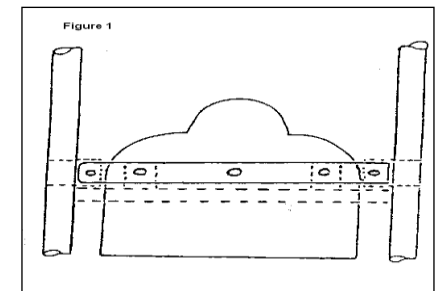
### E5-7 Fuel Cell Mountings

#### E5-7-1

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.

**E5-7-2** 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.

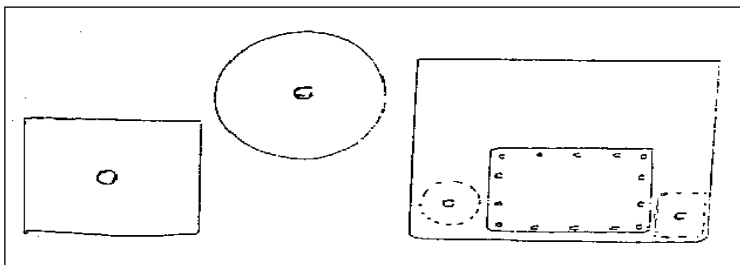
**E5-7-3** For Open Wheel vehicles using a semi rigid fuel cell tail tank, the front face of the cell must be mounted at the top by a minimum of three (3) 8mm (5/16") bolts through two bars either aluminium or steel minimum 50mm (2") x 5mm (3/16") sandwiching the crosslink polymer cell wall. (See Figure 1 above).





**E5-7-4** 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.

**E5-7-5** 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)



**E5-7-6** 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.

**E5-7-7** Open Wheel vehicles must not fit the fuel pick up underneath a fuel cell.

**E5-7-8** An alternative mounting structure, as shown, is approved for use on fuel forward type tail tanks (Open Wheels only):



#### **E5-8** Fuel Taps

**E5-8-1** 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.

**E5-8-2** Open Wheel vehicles may have the fuel tap handle outside the cockpit.

**E5-8-3** 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.

**E5-8-4** The on/off master tap must be fitted directly into the fuel tank on Streetstocks, Superstocks and Stockcars.

**E5-8-5** All fuel taps must be clearly marked 'off' and 'on'.

**E5-8-6** Fuel filter bowls must be of metal construction.

#### **E5-9** Fuel Lines

**E5-9-1** 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.

**E5-9-2** Fuel lines, where flexible, must be of an approved flexible type, securely clamped at joints, wire clamps are not permitted.

**E5-9-3** Plastic, reinforced plastic, nylon, or reinforced nylon fuel line is not permitted.

**E5-9-4** Armoured flexible neoprene plastic is permitted where fitted as a standard OEM part.

**E5-9-5** Approved 'push-lock' fittings and hoses are permitted. (Hose identification # R6)

**E5-9-6** Fuel lines and return lines must be secured to the chassis at the fuel tap and at intervals of not more than 300mm.

**E5-9-7** Saloons, Super Saloons and Modifieds: Grommets are to be fitted where fuel lines pass through bulkheads etc to prevent chafing.

#### **E5-10** Refuelling

Refuelling of race vehicles on the track is prohibited except for Solos and Sidecars.

### FROM THE TECHNICAL DATABASE

#### Interpretation of Rule E5-1-1(i): Approved Fuels

As at 1 January 2009, some of the fuels conforming to these specifications (and approved for use as petrol by SNZ) are:-

BP 91 Octane  
BP 95 Octane  
BP Ultimate  
Caltex Regular with Techron  
Caltex Premium with Techron  
Challenge 91 Unleaded  
Challenge 95 Unleaded  
Gull Regular  
Gull Regular +  
Gull Premium  
Gull Force 10  
Mobil Synergy 1000  
Mobil Synergy 5000  
Mobil Synergy 8000  
Mobil E3  
Mobil E10  
Shell Unleaded  
Shell V-Power

This is not an exhaustive list, but does cover all supplies from the 6 major retail outlets

## SECTION 5: SAFETY EQUIPMENT

**S1** Rules in this Section are managed by the Directors in conjunction with the Personal Safety Committee.

### S1-1 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

## S2 TRACK SAFETY EQUIPMENT

### S2-1 First Aid

At all meetings and practices, the following must be provided:-

- Suitable First Aid Equipment for the care of injured competitors.
- An approved first aid team (e.g. St Johns) must be present.
- An ambulance must be in attendance.
- A doctor must be in attendance. In the event of a doctor not being available, the Promoter must satisfy the Steward that adequate alternative arrangements have been made.

### S2-2 Safety Equipment

#### S2-2-1 Infield Equipment

At all meetings and practices, the following must be provided:-

- An efficient crash crew and vehicle equipped with auxiliary fire fighting equipment to go to the aid of a competitor in difficulty.
- Fire extinguishers to be located on the infield to include:-
  - Two 9kg Dry Powder extinguishers
  - One 3kg Carbon Dioxide type extinguisher
  - One 20 litre water vessel or water extinguisher
  - At least two 9-litre Foam AFFF Extinguishers
- Other equipment stationed on the infield to include:-
  - tools/wrecking gear
  - A safety spotlight (night events only)
  - suitable cutting gear (4-wheeled classes only)
- The crash crew is to be in position on the infield during all races, with the engine running.

#### S2-2-2 Pit Area Equipment

- At all meetings and practices, the following extinguishers must be provided at a central position in the Pit Area
  - One 9kg Dry Powder extinguisher
  - One 3kg Carbon Dioxide type extinguisher
- These extinguishers are to be mounted on a distinctively marked panel, with free access to all drivers, pit crews and officials from at least 15 minutes before the commencement of the meeting/practice.

#### S2-2-3 Inspection of Equipment

The Steward is responsible for inspecting the fire fighting and protective equipment prior to the commencement of the meeting.

## S3

## PROTECTIVE CLOTHING AND SAFETY EQUIPMENT

IN ALL RACES AND OFFICIAL PRACTICES THE FOLLOWING PROTECTIVE CLOTHING MUST BE WORN:

- 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.
- Any inspection of such equipment by an official or volunteer will not transfer this responsibility.

### S3-1 Helmets

**S3-1-1** Competitors must wear an approved Helmet, at all times on the track. Exception: Grand Parades, Rule M3-11.

**S3-1-2** The competitor must wear the helmet in accordance with the directions provided by the helmet manufacturer and/or supplier.

**S3-1-3** Competitors surname must be on the helmet and must be of a minimum size of 12mm letters to be printed on both sides of the helmet.

**S3-1-4** The following guidelines are recommended for children's helmets:-

- For 6 to 11 years olds, the helmet weight should not exceed 1,100g or 1,200g if configured with face shields.
- For 12 to 15 years old, the helmet weight should not exceed 1,250g or 1,350g if configured with face shields.

### S3-2 Competition Helmet Standards

#### S3-2-1 Solo/Sidecar/Youth Classes

The following standards or greater are acceptable for Solo, Sidecar and Youth classes:

- AS/NZS: 1698:2006
- Europe: ECE 22-04 or 22-05, 'P', 'NP' or 'J'.

The ECE mark consists of a circle surrounding the letter E followed by the distinguishing number of the country which has granted approval (see sample).



Homologation series (must be 02, 03, 04 or 05)      Production number

E1 for Germany, E2 for France, E3 for Italy, E4 for Netherlands, E5 for Sweden, E6 for Belgium, E7 for Hungary, E8 for Czech Republic, E9 for Spain, E10 for Yugoslavia, E11 for UK, E12 for Austria, E13 for Luxembourg, E14 for Switzerland, E15 (- vacant), E16 for Norway, E17 for Finland, E18 for Denmark, E19 for Roumania, E20 for Poland, E21 for Portugal, E22 for the Russian Federation, E23 for Greece, E24 for Ireland, E25 for Croatia, E26 for Slovenia, E27 for Slovakia, E28 for Bielo Russia, E29 for Estonia, E30 (- vacant), E31 for Bosnia and Herzegovina, E32 for Letonie, E34 for Bulgaria, E37 for Turkey, E40 for Macedonia, E43 for Japan, E44 (- vacant), E45 for Australia, E46 for Ukraine, E47 for South Africa, E48 New Zealand.

- Japan: JIS T 8133:2000 (see sample below)



- USA: SNELL M2000 or M2005 (see sample below)



**S3-2-2 Saloon, Super Saloon, Stockcar, Superstock, Streetstock, Modified Sprint, Production Saloon, Adult Ministock Classes.**

In addition to the standards in clause S3-2-1, the following standards or greater are acceptable:-

- (a) Snell Standard SA2000 or SA2005 and labeled as such (right).
- (b) SFI Foundation 31.1 (Open face) or 31.2 (Closed face) and labeled as such (right).
- (c) British Standards Institute (BSI) BS6658-85 type A/FR.



**S3-2-3 Open Wheel and Modified Classes**

The following standards or greater are acceptable to Open Wheel and Modified classes.

- (a) Snell Standard SA2000 or SA2005 and labeled as such (right).
- (b) SFI Foundation 31.1 (Open face) or 31.2 (Closed face) and labeled as such (right).
- (c) British Standards Institute (BSI) BS6658-85 type A/FR (right).



**S3-3 Helmet Fit and Attachments**

- (a) Helmets manufactured to standards other than those approved can only be used in competition after approval by SNZ. It is not SNZ's duty to provide helmet approval from other competent authorities. This is up to the competitor or distributor.
- (b) Each competitor will be required to prove good fit of their helmet.
- (c) All helmets, regardless of approved marks, must provide temple protection (commonly known as 'Jet' or 'Open Face' or 'Full Face').
- (d) Helmet peaks, if worn, must be of flexible material attached by press studs, straps, plastic screws, or tape.
  - (i) The peak must be capable of being torn from the helmet in the event of an accident.
  - (ii) Helmets provided with metal screw attachments as original will be accepted, as well as metal screw replacements, provided the original mounting in the helmet is not modified in any way.
- (e) Face shields must be of a flexible plastic or moulded material.
  - (i) Perspex face shields are not permitted.
- (f) No helmet will be drilled, screwed or taped other than as per original manufacture, or helmet manufacturers instructions. The competitor is required to provide proof that it is a helmet manufacturers instruction.
- (g) Polycarbonate helmets that have been painted are banned from use in competition.



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- S3-4 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.

- S3-5 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.

- S3-6 Dentures**  
All drivers are advised to remove dentures before racing in an event.

- S3-7 Body and Facial Piercings**  
All drivers shall remove any body and facial piercings before racing.

- S3-8 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.

- S3-8-1 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 (Scrutineers to inspect regularly).
  - (c) Two-piece leathers must be attached together, that is pants and jacket by zips or domes.

- S3-8-2 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.

- S3-8-3 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.

## S4 SAFETY HARNESSES AND RESTRAINTS

If a driver unclips their seatbelt during a competition they are deemed to have retired from the race and cannot resume racing.

- S4-1 Latch Lever Covers**  
**S4-1-1** 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.
- S4-1-2** Such covers must only be fitted where entirely practical. The cover must not hinder the quick release mechanism whatsoever.
- S4-1-3** 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.*



## S4-2 Open Wheel Classes and Modifieds

### S4-2-1 Side Head Nets

The use of side head nets on the right and left-hand side of the vehicle is optional.

- This restraint if fitted must be of webbing type material i.e. Jager, Simpson or similar.
- These side head nets must not be manufactured of any elastic type material.
- A head and neck restraint system certified to SFI Specification 38.1 is compulsory for Midgets.
- Midgets only: All cars to be fitted with roll cage nets on both the left and right sides of the roll cage.
  - All roll cage nets must conform to SFI Specification 37.1, which specifies a functional quick release opening mechanism.
  - The life of roll cage nets shall not exceed two (2) years.
  - 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.
  - Roll cage side head nets are not required when an approved full containment seat is utilised.

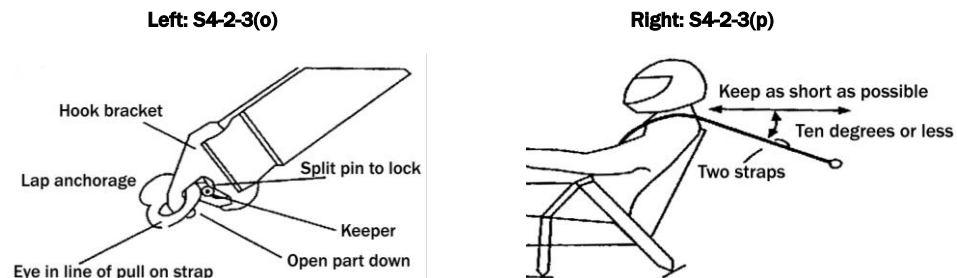
### S4-2-2 Arm Restraints: Arm Restraints must be worn in all forms of practice and competition.

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.

### S4-2-3 Seat Belts

- The vehicle must be fitted with an approved quick release full harness.  
A full harness consists of five belts:-
  - Two lap belts of 75mm minimum width
  - Two shoulder belts of 75mm minimum width. If using a head and neck support device, the minimum width of the shoulder belt is 50mm.
  - 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.
- All belts must be securely attached to the structure of the vehicle.
- 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.
- 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.
- Seat Belt mountings that are concealed by panels are to be made easily visible to Scrutineers at inspection time.
- Seat belt webbing must not be twisted.
- Chain link and "D" shackle mountings are not permitted.
- The seat belt must be worn correctly at all times when vehicle is in motion.
- Crotch belt or sub-belts anchoring point to provide a direct pull from the quick release mechanism.
- 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.
- 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 chaffing against sharp edges must be rejected.
- Under no circumstances may seat belts be secured to the seat.
- 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.
- Wrap around harness webbing mounted over lower chassis rail is not permitted.
- 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 left above right).

- The shoulder straps must be directed towards the rear, directed downwards with an angle of between 1° and 10° to the horizontal from the top of the shoulder (figure right below).



- 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.
- 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.
- 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. Parachute harnesses are not permitted.
- Driver restraint system must be clearly labelled and be dated by manufacturer. This date to be recorded on vehicle green sheet.
- Safety Harness must display dated certification label of manufacturer and must meet SFI standard 16.1, or FIA homologated standard 8853/98.
  - Safety harness must be replaced after two years from date of manufacture, or earlier at discretion of Scrutineer.  
**Exception: Modifieds.**  
The harness must be replaced after 5 years from date of manufacture, or earlier at discretion of Scrutineer.

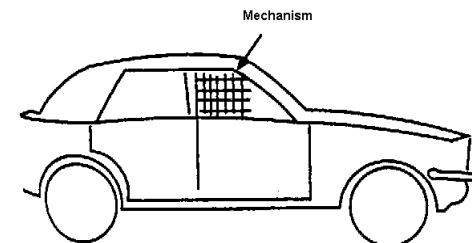
### S4-2-4 Method of Application

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

### S4-3 Window Net

#### S4-3-1

Super Saloons, Saloons and Streetstocks must be fitted with a window net on driver's side or driver to wear arm restraints (See Section S4-1 and S4-2-2) 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.



**S4-4 Super Saloons, Saloons, Production Saloons, Superstocks, Stockcars, Streetstocks and Ministocks**

**S4-4-1 Seat Belts**

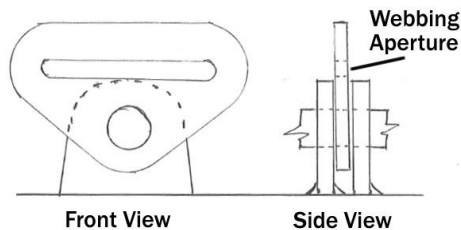
- (a) The vehicle must be fitted with an approved, quick release, full harness safety belt. A full harness consists of 5 belts, 2 lap belts of 75mm minimum width, 2 shoulder belts of 75mm minimum width, plus 1 crutch belt 45mm minimum width.
- (b) All belts must be adjustable; these belts will connect 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.

**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) between two mounting plates 5mm minimum thickness with rounded corners. Plates to be spaced to allow the belt mounting hardware to move freely between them (see diagram right).

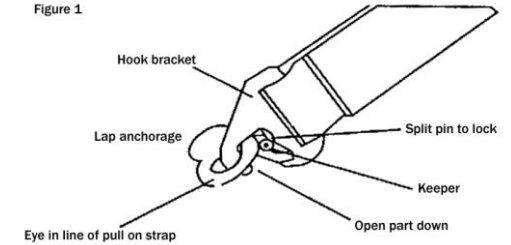


- (q) The structure is deemed as any plate or RHS 3mm minimum thickness, welded on at least two sides.
- (r) Minimum distance between seat belt mounting hole and unsupported or open edge of structure is 8mm with a maximum allowable distance of 15mm.
- (s) On OEM vehicles i.e. Streetstocks and Production Saloons, seat belt buckles may be bolted to:
  - (i) permitted reinforcing structure, or
  - (ii) seatbelt mounting plates 8mm thick 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.

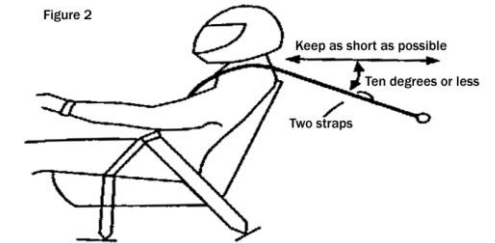
Figure 1



- (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 right).

- (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 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 Scrutineer. 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 Scrutineer.

**S4-4-2 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.

**S5 SOUND**

- S5-1** 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.
- S5-2** The Steward is responsible for ensuring that no vehicle exceeds the sound level.

## TECHNICAL SPECIFICATIONS & RACING RULES

**T1** Rules in this Section are managed by the Directors in conjunction with Technical Committees.

### SECTION 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 Board.
- (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** The competitor's track identification code must appear immediately before or 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	I
Rosebank	A	Moore Park	C

**T7-2-1 Open Wheel Vehicles Only**

Rear track code must appear on the end of tail cone, i.e. before number on RH side, after number on LH side. Must be legible and of contrasting colours. Minimum size 100mm x 13mm. Exception for TQ's, minimum size 50mm x 7mm.

**T7-2-2 Overseas Competitors**

Overseas Competitors (as defined in Section M6-6) from the relevant country may apply to use the following designations instead of a track code:-

Australia	AUS	Great Britain	GB
Netherlands	NL	USA	USA

**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.

### INTERPRETATION FROM THE TECHNICAL DATABASE

**T7-1-1(c): Three-digit Number Policies**

- (a) There is a one-off \$50 fee for the initial approval of a three-digit number.
- (b) The request for a three-digit number has to come via your track, who are required to pre-approve the use of the number. They will be invoiced for the fee, and may choose to onchange this to you.
- (c) Numbers beginning with zero (0) are not allowed
- (d) Numbers 100, 101, 110, & 111 are not allowed
- (e) The same number can be used by a total of three different competitors. The office is now keeping separate databases for the following groups of classes, and each number may be allocated once within the three groups.
  - (i) Stockcars & Superstocks
  - (ii) Saloons, Super Saloons, Modifieds & Streetstocks
  - (iii) Adult Ministocks, Youth Ministocks & Production Saloons

The upshot of this is that for example there can be separate competitors registered as 112 in both Saloons and Superstocks, but not in Stockcars and Superstocks.
- (f) Three-digit numbers are no longer being issued in Motorcycle or Open Wheel classes, due to the lack of space on the machine.

**Policy correct as at 1 July 2012**



## SECTION T9-1: SOLO MOTORCYCLES

2011/12 1NZ Jason Bunyan at the Speedway GP



Photo: James Selwyn

**Solo:** A motorcycle specially designed for speedway racing that is single geared and fitted with a clutch.

### 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.

## SOUTH ISLAND SOLO SPARES

PHONE: 0274 364 378



**NEW ZEALANDS ONLY  
AUTHORISED  
JRM/JAWA DEALER**

- |   |  |
|---|--|
| ▶ Stockists of all solo parts & accessories | ▶ Vehhill  |
| ▶ After market parts                        | ▶ Foxy   |
| ▶ Talon sprockets & wheels                  | ▶ Blixt  |
| ▶ Steel Shoes, NEB & LZ clutches            | ▶ Regina   |
|   | ▶ Also suppliers of spares for classic and vintage engines |
|   | ▶ Engine overhauls   |



**JAWA RACING MOTORCYCLES**

Email: [jawanz@xtra.co.nz](mailto:jawanz@xtra.co.nz)



- (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 S5.

#### **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 E5-1 and E5-2.

**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 Scrutineer 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 Sections E2-2 to E2-7.

## SECTION T9-2: SIDECARS



Photo: Shelley Clark

### 2011/12 1NZ Rob & Deane Miller at the 2011 World Sidecar Champs

#### T9-2 SIDECAR SPECIFICATIONS

**Sidecar:** 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**

- 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.
- The use of light alloys in the construction of the frame and front forks is forbidden.
- 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).
- The use of titanium is forbidden (except engine parts).

**T9-2-4 Engine**

- 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.
- Owners of vehicle must make individual arrangements with track steward or qualified SNZ Official to inspect, certify and seal each individual motor before vehicle can be raced. NO SEAL, NO RACE.
- On liquid cooled engines an overflow pipe must be used which directs any overflow of coolant away from the rider and passenger.

- Engines shall be covered by a fuel tank or guard to ensure the engine cannot be contacted by the rider's body.
- Electronic Fuel Injection systems are permitted.
- Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section M7-4 Specific Technical Offences.
- 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

- 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.
- 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.
- Any wheels with slotted hubs must have bolts fitted between the spoke heads.
- 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.
- 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.
- Front wheels of motorcycles to be fitted with knock-out spindle or an approved clamp to fasten on fork tips.
- 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.
- Any tyre with knobs or lugs protruding out past the side walls are not permitted on the front wheel.
- The one rear wheel and one rear tyre of a sidecar shall not exceed 200mm maximum tread width.
- All three wheels and tyres to be of motorcycle configuration and have a minimum rim diameter of 400mm.
- The drive shall be transmitted to the ground only through the rear wheel of the motorcycle.
- 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-
  - a one piece flexible mudflap without any slots which:
    - is a minimum thickness of 6mm and be reinforced belting tyre rubber.
    - ends no more than 20mm above ground level with the sidecar laden.
    - is attached to 3 sides of the mudguard and projects forward by a minimum of 75mm on each side.
  - an FIM approved sidecar dirt deflector.
- All sidecar machine rear fork legs to have an enclosed axle eye.
- 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.
- 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

- 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.
- 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.
- 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 Hand Hold**

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 Skid Plate**

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 Guard**

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 Floor**

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 Scrutineer and Steward shall be referred to the Board.

**T9-2-16 Fuel**

Refer also to E5-1 and E5-2.

The use of fuel outside of specifications or blended fuel, will be declared an illegal fuel, Refer Section M7-4 Specific Technical Offences.

**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**

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 Scrutineer 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 Rules E2-2 to E2-7.



## R9-3 RACING RULES – SOLOS/SIDECARS

### R9-3-1 Competitors

- (a) A Solo can only be operated by one licensed competitor.
- (b) A Sidecar will be operated by two licensed competitors.

### R9-3-2 Flags/Lights

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

<i>Green</i>	<i>Start</i>
<i>Amber</i>	<i>lights or flags are used before race starts and after race finishes</i>
<i>Red</i>	<i>All competitors stop</i>
<i>White</i>	<i>Last lap for individual competitor</i>
<i>Black flag/board</i>	<i>Competitor to retire from race immediately</i>
<i>Black &amp; White</i>	<i>Finish</i>
<i>Chequered</i>	

- (b) The green light to be on continuously while race is in progress.
- (c) When a red flag or red light is shown competitors must immediately stop.
- (d) Failure to do so will render a competitor liable to a fine and/or exclusion for any period.
- (e) In the event of a race stoppage during a sidecar race, in addition to the red lights, red flags shall be displayed at the entrance to each bend.
- (f) 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.

### R9-3-3 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.

### R9-3-4 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.
- (e) 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.

### R9-3-5 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) The Referee is to start the race if another starter has not been delegated in this position. Whoever does the starting will also operate the green light indicating a start is imminent.
- (c) 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.
- (d) A competitor may change his vehicle in subsequent heats, semi finals or finals, provided the Clerk of the Course is notified.
- (e) 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.

- (f) 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.

### R9-3-6 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 riders 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 of a false start the Referee may order a re-start.
- (xi) Any competitor disobeying the signal or having been in a false start not obeying the re-start signal, may be excluded from that race.
- (xii) 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.

### R9-3-7 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.

### R9-3-8 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.

### R9-3-9 Driving In Wrong Direction

- (a) 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.
- (b) All sidecar races will be run in a clockwise direction and the chair must be fitted to the left hand side of the machine.

**R9-3-10 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.

**R9-3-11 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.

**R9-3-12 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.

**R9-3-13 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 Section M2-21) 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.

**R9-3-14 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.

**R9-3-15 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.

**R9-3-16 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 rider/sidecar team must cross the finish-line and receive the chequered flag before any points are allocated in any race.
- (b) A Sidecar must be immediately withdrawn from the race if the rider loses their passenger.

**R9-3-17 Required Laps**

All Solo / Sidecar races shall be no more than 7 laps and no less than 3, other than Championships which will be 4 laps.

**R9-3-18 Changing Gear**

Riders may change up to their driving gear only and are not permitted to change down gear.

## SECTION T10-1: MIDGETS



Photo: James Selwyn

2011/12 New Zealand Midget Champion - Michael Pickens

### T10-1 MIDGET CAR SPECIFICATIONS

#### T10-1-1 Midget Car

A car with a front mounted engine especially designed for racing on SNZ licenced tracks as per specifications and retaining the classical appearance of a Midget Car.

#### T10-1-2 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.

#### T10-1-3 Design and Construction

All phases of design and construction are subject to the approval of the Board. After consultation with the relevant Technical Committee, the Board may exclude any car design or construction which they deem unsafe or not meeting the specifications, the spirit, and or the intentions of the rules contained herein.

#### T10-1-4 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.
- SOHC or OHV 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.

#### (h) Engine Offset

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

#### (i) Engine Layover

- 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.
  - V-type engines are limited to a maximum of 45 degrees inclination from vertical as measured through the crankshaft centre and cylinder bore. Where the engine is laid over the angle will be determined from the greater angle of the cylinder bores.
- Engine to be pre-drilled before CVI inspection with 3.3mm minimum size hole to enable Scrutineers to seal engine. Refer rule E2-9-3.
    - Pre-drilled holes to seal: barrels to crankcase, crankcase to crankcase etc. Note: Pre drilled retainers are acceptable.
    - When rule E2-9-3 applies, approved person must measure engine within 28 days.
- Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section M7-4 Specific Technical Offences.

#### T10-1-5 Body

- Seat must be bolted to chassis frame by a minimum of 4 x 6mm high tensile bolts and fender washers.
- 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.
- 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.

#### T10-1-6 Safety Harness

Refer to Sections S4-1 and S4-2.

#### T10-1-7 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 S4-2-3.
- (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) Sail panels between the rear cage upright and brace are allowed. Sail panels and/or the edges of side panels may not be flared outward.
- (o) **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.
- (p) Roll cages must not be plated in any way at all.

#### Notes concerning roll cages:

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

#### T10-1-8 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.

#### T10-1-9 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) Steering wheels must be of competition type.
- (d) Quick release steering wheels are mandatory and must be approved.

#### T10-1-10 Rear Axle

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

#### T10-1-11 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.

#### T10-1-12 Wheels

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

- (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.

#### T10-1-13 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.

#### T10-1-14 Brakes

- (a) Effective brakes must be fitted to rear axle.



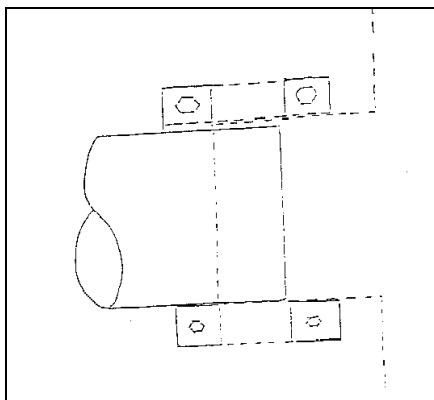
- (b) Front brakes are optional and may be fitted to either wheel.
- (c) The brakes must be foot operated.
- (d) When nylon brake lines are used, the quality of the tubing and fittings is to be of an approved brake line quality or aircraft quality. Teflon or plastic line must be covered with stainless steel braid.

**T10-1-15 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.

**T10-1-16 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 over) A further secure bracket or support at the rear of the muffler or exhaust pipe.



**T10-1-17 Battery**

Must be secured in a safe position.

**T10-1-18 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.

**T10-1-19 Fuel Cock**

Refer to Rule E5-8.

**T10-1-20 Fuel**

Refer to Section E5.

**T10-1-21 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.

**T10-1-22 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.

**T10-1-23 Electronic Control**

For the use of any electronic devices refer to Section E4.

**T10-1-24**

The Steward, only, has discretionary powers in rule E2-4-4(b) as to whether a car is fit to race.

**T10-1-25 Impounding a Midget Car**

Refer to Rules E2-2 to E2-7.

## SECTION T10-2: THREE QUARTER MIDGETS



Photo: Kenley Brown

2011/12 New Zealand TQ Midget Champion – Craig Todd

### T10-2 THREE QUARTER MIDGET CAR SPECIFICATIONS

#### T10-2-1 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.

#### T10-2-2 General Dimensions

- Overall Length:** 2794mm (110") maximum, including bumpers.
- Wheelbase:** 1677mm (66") maximum, 1371mm (54") minimum.
- Wheel Track:** Maximum wheel track 1194mm (47") maximum. Track width measured centre to centre of tyre.
- Total Weight** at any time, no added fuel or ballast weight permitted; Minimum 260 kg, Maximum 360 kg, minus driver.
- Rear Wheel drive only:**  
All vehicles must drive through the rear wheels. The use of front wheel drive is not permitted.

#### T10-2-3 Design and Construction

All phases of design and construction are subject to the approval of the Board. After consultation with the relevant Technical Committee, the Board may exclude any car design or construction which they deem unsafe or not meeting the specifications, the spirit, and or the intentions of the rules contained herein.

#### T10-2-4 Engines

- Engines must be motorcycle derived.
- Direct air-cooled and water-cooled only.
- Carburettors or mechanical fuel injection.

- EFI permitted on water-cooled engines only.
- Only single input sourced electronic ignition allowed, except in water-cooled engines only.
- Rev counters - refer Rule E4-2.
- Engine to be either 3 or 4-cylinder in-line, 4 stroke, only.  
Forced induction engines are not permitted.
- Maximum capacities permitted are:
  - 4 stroke 2 valves per cylinder - 917cc
  - 4 stroke 3 + valves per cylinder - 771.25cc
- Front engines only, no rear engines allowed. Engine must be fitted forward of the driver's knees when he is seated in the car.
- 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 M7-4 Specific Technical Offences.
- Engine to be pre-drilled before CVI inspection with 2mm minimum size hole to enable Scrutineers to seal engine. Refer rule E2-9-2.
  - Pre-drilled holes to seal: barrels to crankcase, crankcase-to-crankcase etc. Note: Pre drilled retainers are acceptable.
  - When rule E2-9-2 applies, approved person must measure engine within 28 days.
- Liquid Cooled Engine Option:**
  - Manufacture and model subject to SNZ Board approval.
  - Engine capacity 750cc maximum.
  - The engine to be OEM.
  - Four stroke, four valves per cylinder.
  - OEM Electronically fuel injected (EFI) or OEM carburettors.
  - Fuel**
    - maximum 98 octane pump petrol
    - ethanol/petrol blended fuel containing up to 85% ethanol (E85)
  - E.C.U. control unit OEM only.
  - OEM clutch, transmission and starter to be fully operational.
  - No engine manufactured after 2005 will be permitted.
  - OEM airbox to be retained.
  - Air filter element and exhaust system is unrestricted.
  - Radiator type is unrestricted.
  - OEM sump and pickups can be cut, or aftermarket sump can be fitted.
  - 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 Rules E3-3-4 to E3-3-7 for a full description).

#### T10-2-5 Engine Offset

- Inline engines to be allowed a maximum 2 inches (50mm) off set from the centre line of chassis, measured to centre line of crankshaft.
- 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.

#### T10-2-6 Wheels

- Also read Rule T14-4-7 for rule on wheel spacers.
- Maximum front wheel rim diameter 330mm (13 inches).  
Maximum front wheel rim width 200mm (8 inches).
  - Maximum rear wheel rim diameter 330mm (13 inches).  
Maximum rear wheel rim width 250mm (10 inches).
  - Clearly identifiable, approved, professionally manufactured wheels are permitted, provided manufacturer's specifications are adhered to.
  - Laminated type to be secured by M8 ISO bolts and lock washers.
  - Clearly identifiable, professionally manufactured, direct mount front hub assemblies are permitted provided manufacturer's specifications are adhered to, e.g. Sanders, Weld, Real.
  - Central locking nuts are approved for use on front and rear wheels.
  - No plastic or composite wheels permitted.

#### T10-2-7 Tyres

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

**T10-2-8 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.

**T10-2-9 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.  
A unit construction engine is one that has the engine and transmission as one complete unit.
- (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.

**T10-2-10 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.

**T10-2-11 Fuel**

Refer also to Section E5.

- (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 E5-9.

**T10-2-12 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.

**T10-2-13 Batteries**

Must be securely mounted.

**T10-2-14 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.

**T10-2-15 Exhaust Pipes**

Refer to Midget Car Rule T10-1-16.

**T10-2-16 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.

**T10-2-17 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.

**T10-2-18 Bonnets**

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

**T10-2-19 Safety Hubs**

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

**T10-2-20 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 3.38 mm 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.

Refer to Rules E2-2 to E2-7.

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.
- (p) Sail panels between the rear cage upright and brace are allowed. Sail panels and/or the edges of side panels may not be flared outward.

**Notes on rollcages:**

- (q) All tubing diameters quoted are outside diameters.
- (r) 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.

**T10-2-21 Knurving Irons**

- (a) All vehicles must be equipped with knurving 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 knurving 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.

**T10-2-22 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.

**T10-2-23 Safety Harness**

Refer to Section S4.

**T10-2-24 Illegal Fittings**

The use of aerofoils will NOT be permitted under any circumstances. All types of mirrors are illegal.

**T10-2-25 Electronic Control**

For the use of any electronic devices refer to Section E4.

**T10-2-26** The Steward, only, has discretionary powers, in Rule E2-4-4(b) as to whether a car is fit to race.

**T10-2-27 Impounding a Three Quarter Midget Car**



## SECTION T10-3: SPRINTCARS



Photo: Trevor Palmer

### 2011/12 New Zealand Sprintcar Champion – Sammy Swindell

## T10-3 SPRINTCAR SPECIFICATIONS

### T10-3-1 Sprintcar

A car specially designed for racing on SNZ licenced tracks as per specifications.

### T10-3-2 General Dimensions

- Wheelbase 2.438mm (96") maximum, 2.134mm (84") minimum.
- Wheel track 1600mm (63") maximum, 1270mm (50") minimum.
- Total weight at any time, no added fuel or ballast weight permitted, Minimum 580kg, Maximum 800 kg, minus driver.
- The classical appearance of a Sprintcar will be those with a tail cone of 24 gallons minimum size.
- Body style and design must resemble a classical Sprintcar with no additional panels attached to nerf bars.

### T10-3-3 Design and Construction

All phases of design and construction are subject to the approval of the Board. After consultation with the relevant Technical Committee, the Board may exclude any car design or construction which they deem unsafe or not meeting the specifications, the spirit, and or the intentions of the rules contained herein.

### T10-3-4 Engine

- Maximum capacity of 6718cc (410 cubic inches).
- Engines to be no more than 2 valves per cylinder.
- Engines must be within 12mm (1/2") of the centreline.
- Forced induction engines are not permitted.

- Carburettors or mechanical fuel injection only, no form of electronic controlled fuel injection permitted.
- Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section M7-4 Specific Technical Offences.

### T10-3-5 Cooling System

- Radiator hoses must be of reinforced construction only.
- 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.
- Radiators and Oil Coolers: To be mounted within the confines of the bodywork. Not to be mounted on Roll Cages.

### T10-3-6 Body

- Single seater bodies only.
- 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.
- 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.
- Seat must be bolted to chassis frame by a minimum of 4 x 6mm high tensile bolts and fender washes.
- 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.
- 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.
- 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.
- The motor plate must not be made of carbon fibre or any other composite material.
- All panels and bonnets must be securely fastened primarily by way of dzus buttons minimum (bolts satisfactory). Plastic ties are not permitted.
- An SNZ Approved Full Containment Seat is compulsory.
- 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.

### T10-3-7 Safety Harness

Refer to Section S4.

### T10-3-8 Roll Cages

- 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:**
- The rollcage must extend a minimum of 80mm above the drivers helmet when in the normal restrained position.
- The top horizontal roll cage tubes must be fitted with SNZ approved protective roll cage padding certified to SFI specification 45.1.
- Bottom Chassis Rail: To be a minimum of 0.095"- 2.41mm as applicable to new chassis built after July 2004.
- Belly pan under drivers feet must extend from the front edge of the seat to the firewall.
- Mirrors are not permitted
- 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.
- Sail panels between the rear cage upright and brace are allowed. Sail panels and/or the edges of side panels may not be flared outward.

**T10-3-9 Front Axle**

An approved locking device must retain front hub bearings.

**T10-3-10 Wheels**

Refer Section T14 wheels for specifications covering this class. Also read Rule T14-4-7 for rule on wheel spacers.

**T10-3-11 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.

**T10-3-12 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.

**T10-3-13 Transmission**

- (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.

**T10-3-14 Shock Absorbers and Tyres**

- (a) Shock absorbers must be fitted to axles
- (b) Wheel Diameter: 300mm (12") min, 400mm (16") maximum.
- (c) Tyres: Tyres must be approved.

**T10-3-15 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.

**T10-3-16 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.

**T10-3-17 Exhausts**

- (a) Exhaust pipes can extend past the rear axle but not past the tail. Must be securely fastened.
- (b) **Mufflers:** refer Midget Car Rule T10-1-16(b).

**T10-3-18 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.**

**T10-3-19 Battery**

Must be secured in a safe position and suitably covered to prevent spillage of acid.

**T10-3-20 Fuel**

Refer to Section E5.

**T10-3-21 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.

**T10-3-22 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.

**T10-3-23 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).

**T10-3-24 Electronic Control**

For the use of any electronic devices refer to Section E4.

**T10-3-25** The Steward, only, has discretionary powers in Rule E2-4-4(b) as to whether a car is fit to race.

**T10-3-26 Impounding a Sprintcar**

Refer to Rules E2-2 to E2-7.



## SECTION T10-4: MINISPRINTS



2011/12 New Zealand Minisprint Champion – Dayne Maxwell

### T10-4 MINISPRINT SPECIFICATIONS

#### T10-4-1 Minisprint

A car with an automotive engine specially designed for racing on Speedway New Zealand licenced tracks as per specifications.

#### T10-4-2 Design and Construction

All phases of design and construction are subject to the approval of the Board. After consultation with the relevant Technical Committee, the Board may exclude any car design or construction which they deem unsafe or not meeting the specifications, the spirit, and or the intentions of the rules contained herein.

#### T10-4-3 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 T10-4-3(c) and (e).

- (j) No titanium engine components.
- (k) Wet sumps only, no dry sump systems.
- (l) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section M7-4 Specific Technical Offences.

#### T10-4-4 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 knurting irons, however muffler and outlet must be no higher than top knurting iron bar.
- (c) Refer to Midget Car Rule T10-1-16.

#### T10-4-5 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.

#### T10-4-6 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.

#### T10-4-7 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.

#### T10-4-8 Seatbelts Refer to Section S4.

#### T10-4-9 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 S4-2-3.
  - (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 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
  - (p) Sail panels between the rear cage upright and brace are allowed. Sail panels and/or the edges of side panels may not be flared outward.
- Notes concerning roll cages:**
- (q) All tubing diameters quoted are O/D (outside diameters.)
  - (r) All bolts, (other than specified) to be at least ISO M10 88.

#### **T10-4-10 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.

#### **T10-4-11 Shock Absorbers:** Effective shock absorbers to be fitted to front and rear axles.

#### **T10-4-12 Differentials**

- (a) Differential only, no alternative drive lines such as chains.
- (b) Quick change diffs permissible.
- (c) All differentials to be locked.

#### **T10-4-13 Wheels and Tyres**

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

##### **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.

#### **T10-4-14 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.

#### **T10-4-15 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.

#### **T10-4-16 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.

#### **T10-4-17 Knurving Irons**

- (a) All vehicles must be equipped with knurving 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 knurving 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.

#### **T10-4-18 Battery:**

Must be secured in a safe position and suitably covered to prevent spillage of acid in the event of a capsized.

#### **T10-4-19 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.

#### **T10-4-20 Fuel:** Refer Section E5.

#### **T10-4-21 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 if fitted.
- (c) Self Starter: Must be fitted and operational. All cars must leave pits under own power.

#### **T10-4-22 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.

#### **T10-4-23 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 Scrutineer. Front wing optional.
- (c) The air foil must not be able to adjusted by the driver while seated in the racecar.

#### **T10-4-24 Electronic Control**

For the use of any electronic devices refer to Section E4.

#### **T10-4-25 The Steward, only, has discretionary powers in Rule E2-4-4(b) as to whether a car is fit to race.**

#### **T10-4-26 Impounding a Minisprint** Refer to Rules E2-2 to E2-7.



## 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 Scrutineer 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/Lights

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</i>	<i>Finish</i>
<i>Chequered</i>	
<i>Black/Yellow</i>	<i>Re-run</i>

- (a) The green light to be on continuously while race is in progress.
- (b) When signals are given by flag and blackboard, the flag or blackboard should be at least 0.371m2 (4 square feet) in area.

### 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) 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.
- (i) 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.
- (j) Allocated Titles Only: Any vacant grids to be held, failure to do so can result in a penalty.
- (k) In the case of a false start the Referee may order a re-start.
- (l) Any competitor disobeying the signal or having been in a false start not obeying the re-start signal, may be excluded from that 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 is prohibited during racing or yellow flag/light periods.
- (i) 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) Driving in a hazardous manner: If a vehicle receives a flat outside tyre the competitor will immediately retire from the race.
- (l) Any competitor who has proceeded to the infield and stopped shall be deemed to have retired.
- (m) If a driver unclips his seatbelt during a competition he is deemed to have retired from the race and cannot resume racing.
- (n) In the event of a vehicle stopping, or being stopped on the track or infield 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.

### R10-5-8 Emergency Stoppage

- (a) 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.
- (b) 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.
- (c) 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 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 Declared Race**

- (a) The Clerk of the Course can declare a race during a stoppage.
- (b) The results will be as per the last completed lap.
- (c) The Referee can exclude any competitor deemed to be the primary cause of the stoppage.
- (d) Exception: This clause does not apply to Allocated title events.

**R10-5-15 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. 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.
- (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.

**R10-5-16 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.

**R10-5-17 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 T11-1: SUPER SALOONS



2011/12 New Zealand Super Saloon Champion – Steve Flynn

### T11-1 SUPER SALOON SPECIFICATIONS

**T11-1** Super Saloon: A two-door or four-door passenger saloon approved for racing on SNZ licensed tracks as per Super Saloon 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.

#### 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 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 M7-4 Specific Technical Offences.

#### 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) Grommets are to be fitted where fuel lines pass through bulkheads etc to prevent chafing.
- (c) Also refer to Section E5: Fuel

#### 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

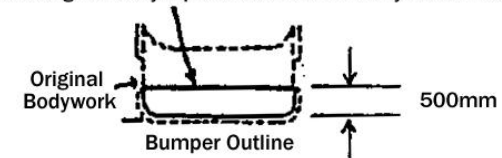
- (a) Any type of suspension may be used, and any type of steering system.
- (b) Active four wheel steering through a steering box is not permitted.
- (c) Any car fitted with coil springs must have the springs securely clamped or chained in position.
- (d) Wheel base must not be altered.  
**Exception:** 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 Scrutineer before the car races again.

#### T11-1-9 Body

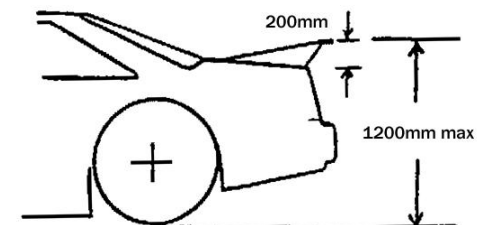
- (a) The competitor will nominate the year, make and model of the vehicle when presented for a CVI. These details will be entered into the vehicle logbook.
- (b) The vehicle must retain the original appearance of the nominated model, except where permitted in the following rules.
- (c) The length, width, wheelbase and front overhang measurements of the nominated model must comply with the dimensions registered by SNZ, available at [www.speedway.co.nz](http://www.speedway.co.nz). These dimensions will be entered into the vehicle logbook.
- (d) A tolerance of 50mm is allowed on any measurement entered in the vehicle log book.
- (e) Where model measurements are not registered by SNZ, the onus is on the competitor to supply documentation outlining the original body measurements.
- (f) All model measurements must be registered by SNZ before any new model of vehicle can be presented for a CVI.
- (g)
  - (i) Body panels can be constructed of steel, aluminium, fibreglass or flexiglass.
  - (ii) **Commercially available plastic noses and front fenders can also be used. Plastic fenders can extend no further back than 150mm from the centre of the front axle line.**
- (h) Body panels will retain their original shape, however side panels (bonnet, door, rear quarter panel) can be flat. Flat panels are to have a minimum radius roll at the top of the panel of 25mm.
- (i) The width of the roof of a Chevrolet Corvette may be extended by 100mm.
- (j) Guards may be flared 75mm from basic production.
- (k) Power bulge and air scoops allowed in bonnet, but opening must be to the front only.
- (l) Wheel-wells, wheel-openings, inner guards and chassis rails may be cut out or modified for ease of fitting larger tyres.

- (m) 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.
- (n) 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.
- (o) All glass, headlights, upholstery, chrome strips and potentially flammable material must be removed. Driver's seat upholstery permitted.
- (p) Side window openings behind driver's seat may be covered with flexible transparent sheet to original window contour.
- (q) Bonnets, boots, and hatches to be securely fastened with the bonnet being fastened with quick release pins.
- (r) Protective mesh screens must be fitted to cover opening immediately in front of driver. Mesh to be 665 HRC or stronger.
- (s) Grilles to be original, or replica or wire mesh, NOT STEEL.
- (t) 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.
- (u) 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.
- (v) A front airdam (spoiler) is permitted.
  - (i) It must be constructed of a flexible, non metallic material.
  - (ii) It can have brake cooling ducts incorporated.
  - (iii) It can have splitters incorporated.
  - (iv) It must not protrude more than 200mm from the profile of the bumper
  - (v) The lowest part must be at least 100mm above ground level.
  - (vi) Overall length of the vehicle can be extended by the length of the airdam.
- (w) A rear panel that fully encloses the aperture must be fitted above the rear bumper. Tail light holes can be cut out, but not more than 25% of the surface area of the panel may be removed.
- (x) 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.

Spoiler height to be measured vertically from attached join of the original body. Spoiler outlined in heavy black line.



- (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.





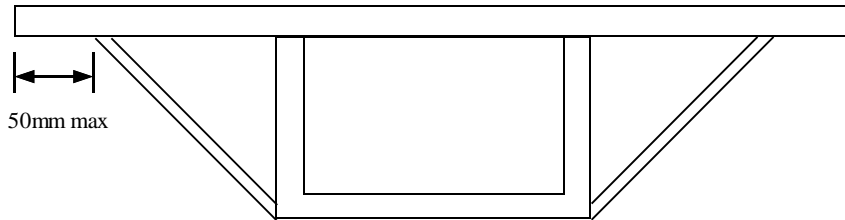
### T11-1-10 Chassis

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.



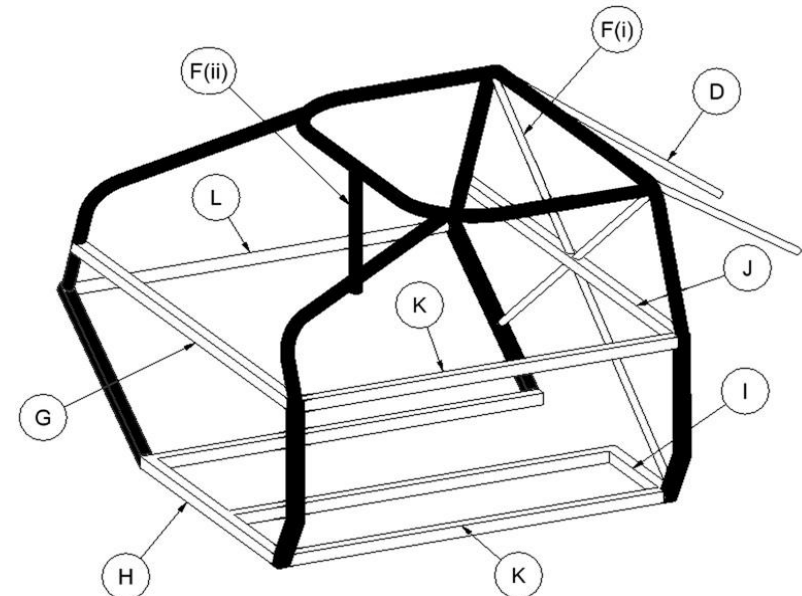
- (e) One 25mm OD pipe or RHS allowed above bumper reinforcing. Maximum 150mm high, front and rear only, and must not return around corner or down sides of car. Vertical bracing only with minimum 50mm radius on ends, a maximum of 4 mounting points.
- (f) Scrutineer may drill a 6mm inspection hole in 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.
- (m) The Scrutineer has the right to drill 6mm max. inspection holes in any rollcage to measure thickness and ensure compliance with the regulations.

- (n) **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.
- (o) 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 T14**

- (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 T14. If original centres retained they must be reinforced with 6mm steel plate to outer rim.
- (c) Wheels can be widened as in Section T14.
- (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 S4.

**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 wiperspoke 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.
- (d) Also see Section T7 for additional racing number rules.

**T11-1-23 Impounding**

Refer to Rules E2-2 to E2-7.

**T11-1-24 Protective Clothing & Safety Equipment**

Refer Rule S3.

**T11-1-25 Sound**

Refer Rule S5.

**T11-1-26 Electronics**

Refer Rule E4.

## SECTION T11-2: SALOONS



### 2011/12 New Zealand Saloon Champion – Jeff Barron

#### T11-2 SALOON SPECIFICATIONS

##### T11-2 Saloon

A two-door or four-door passenger saloon approved for racing on SNZ licensed tracks as per Saloon Specifications.

- (a) 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 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) 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.
- (b) Any production saloon, (2 or 4 door) or sports car (2 or 4 door), complying with rule T11-2-1 and manufactured with seating for at least two occupants are eligible.  
NB: Convertibles, Vans, Station Wagons, Sports Utility Vehicles (SUV's) and any other Utility Type vehicles are not allowed.
- (c) V8 engines over 3015cc (184cu in) to be no more than 2 valves per cylinder.
- (d) The use of Carbon Fibre materials is prohibited
- (e) Engines must be derived from original manufacture and be of the same number of cylinders, and configuration, that was 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
- (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 Board 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.
- (x) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section M7-4 Specific Technical Offences.



**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 250Occ (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:** Refer E5-1 and E5-2-2 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 Scrutineers may verify part numbers).

**T11-2-8 Fuel Tanks:** Refer Rule E5-3**T11-2-9 Fuel Tank Dimensions:** Refer Rule E5-4**T11-2-10 Fuel Tank Location:** Refer Rule E5-5**T11-2-11 Fuel Cells:** Refer Rule E5-6**T11-2-12 Fuel Cell Mountings:** Refer to Rule E5-7**T11-2-13 Fuel Taps:** Refer Rule E5-8**T11-2-14 Fuel Lines:** Refer rule E5-9**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

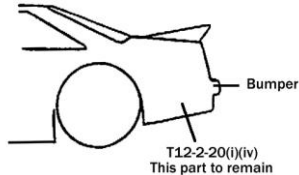
**T11-2-19 Suspension**

- (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 Scrutineer before the car races again.

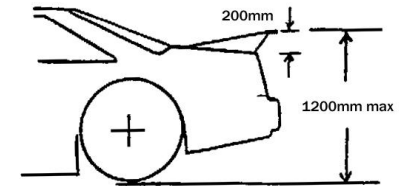


### T11-2-20 Body

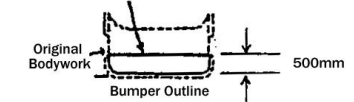
- (a) The competitor will nominate the year, make and model of the vehicle when presented for a CVI. These details will be entered into the vehicle logbook.
- (b) The vehicle must retain the original appearance of the nominated model, except where permitted in the following rules.
- (c) The length, width, wheelbase and front overhang measurements of the nominated model must comply with the dimensions registered by SNZ, available at [www.speedway.co.nz](http://www.speedway.co.nz). These dimensions will be entered into the vehicle logbook.
- (d) The SNZ registered width of a Saloon is exclusive of Original Equipment door mirrors.
- (e) A Saloon body may have a tolerance of +/- 50mm against any registered measurement entered in the log book.
- (f) Where model measurements are not registered by SNZ, the onus is on the competitor to supply documentation outlining the original body measurements.
- (g) All model measurements must be registered by SNZ before any new model of vehicle can be presented for a CVI.
- (h) Body panels can be constructed of steel, aluminium, fibreglass or flexiglass.
- (i) Body panels will retain their original profile and shape.
  - (i) Holes left by the removal of door handles, wiper spindles, key locks etc may be filled in.
  - (ii) Skirts may be added to the bottom of door panels as long as they conform to original width and must be at least 100mm above ground level.
  - (iii) A rear panel across the back of the car must remain down to bumper level (below bumper is optional). Cut outs for taillights optional, but must remain in original position and be no larger than for make and model specified.
  - (iv) Rear profile of fender and bumper behind rear wheel opening (as viewed from side) must remain as original, i.e no cutting of bottom of guard/bumper, except to allow for reasonable ground clearance. See diagram right.
- (j) Guards may be flared 75mm from basic production.
- (k) Power bulge and air scoops allowed in bonnet, but opening must be to the front only.
- (l) Wheel-wells, wheel-openings, inner guards and chassis rails may be cut out or modified for ease of fitting larger tyres.
- (m) 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 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.
- (n) 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.
- (o) Glass, headlights, chrome strips are not permitted.
- (p) Side window openings behind driver's seat may be covered with flexible transparent sheet to original window contour.
- (q) Bonnets, boots, and hatches to be securely fastened with the bonnet being fastened with quick release pins.
- (r) Protective mesh screens must be fitted to cover opening immediately in front of driver. Mesh to be 665 HRC or stronger.
- (s) Grilles to be original, or replica or wire mesh, NOT STEEL.
- (t) 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.
- (u) The position of the front bumper is measured from the front axle line forward to the registered front overhang specification entered in the log book.
- (v) 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.



- (w) 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(w)(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.



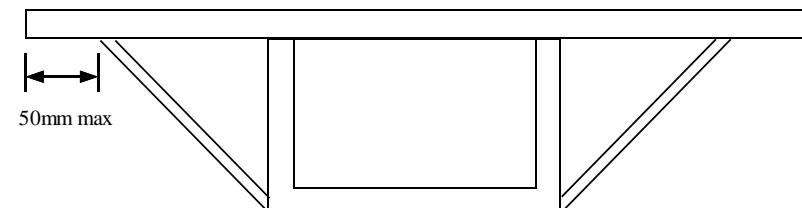
### T11-2-21 Chassis

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.
- (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.
  - (v) East west mounted engine (front or rear mounted) must remain in the original position as measured laterally within the body with a 25mm tolerance.
  - (vi) North south mounted engine must be mounted centrally on the longitudinal axis of the body with a 25mm tolerance, no lateral offset permitted.

### 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. NB: The joining/welding of two (or more) separate lengths of bumper reinforcing steel at their respective ends, prior to welding to the bumper, is still considered to be 2 (or more) mounting 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) Scrutineer may drill a 6mm inspection hole in bumper or reinforcing to measure same.

#### T11-2-23 Roll Cage

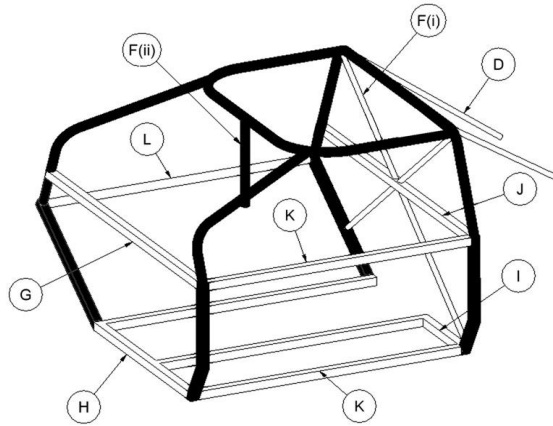


Diagram A

- (a) Main body roll cage (as shaded in Diagram A above) 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 roll cage tube.
  - (v) 44mm x 2.6mm Southward roll cage 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 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).
- (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 T11-2-23(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.

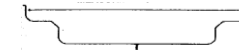
- (h) A horizontal cross member travelling across bulkhead and attached to the roll cage on both sides at floor or bottom chassis or frame level forward of drivers feet.
- (i) A horizontal cross member travelling across behind and below the driver's seat and attached to main roll cage frame at floor 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 Scrutineer 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 3mm steel plate must be welded above the driver to protect the driver's helmet.
  - (i) The steel plate must be welded to a minimum of 25mm x 3mm steel pipe.
  - (ii) The steel plate must be a minimum length and width of 300mm.

#### 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 wired-sided 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.

**SALOON/SUPER SALOON WEIGHT TABLE 96**

**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 (Kirkey 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**

Refer Section E Vehicle Inspections and Section M5 Duties of Officials.

**T11-2-33 Impounding**

Refer to Rules E2-2 to E2-7.

**T11-2-34 Protective Clothing and Safety Equipment:**

Refer Rule S3.

**T11-2-35 Sound**

Refer Rule S5.

**T11-2-36 Electronics**

Refer Rule E4.

**T11-2-37 Racing Numbers**

Also Refer Rule T7.

- (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.
- (d) If used, the background border must be a minimum of 20mm.

Cu In	Weight	Cu In	Weight	Cu In	Weight	Cu In	Weight	Cu In	Weight
100	757	167	842	234	927	301	1012	368	1096
101	759	168	843	235	928	302	1013	369	1098
102	760	169	845	236	929	303	1014	370	1099
103	761	170	846	237	931	304	1015	371	1100
104	762	171	847	238	932	305	1017	372	1102
105	764	172	849	239	933	306	1018	373	1103
106	765	173	850	240	935	307	1019	374	1104
107	766	174	851	241	936	308	1021	375	1105
108	768	175	852	242	937	309	1022	376	1107
109	769	176	854	243	938	310	1023	377	1108
110	770	177	855	244	940	311	1024	378	1109
111	771	178	856	245	941	312	1026	379	1110
112	773	179	857	246	942	313	1027	380	1112
113	774	180	859	247	943	314	1028	381	1113
114	775	181	860	248	945	315	1029	382	1114
115	776	182	861	249	946	316	1031	383	1115
116	778	183	862	250	947	317	1032	384	1117
117	779	184	864	251	948	318	1033	385	1118
118	780	185	865	252	950	319	1034	386	1119
119	781	186	866	253	951	320	1036	387	1120
120	783	187	867	254	952	321	1037	388	1122
121	784	188	869	255	954	322	1038	389	1123
122	785	189	870	256	955	323	1040	390	1124
123	787	190	871	257	956	324	1041	391	1126
124	788	191	873	258	957	325	1042	392	1127
125	789	192	874	259	959	326	1043	393	1128
126	790	193	875	260	960	327	1045	394	1129
127	792	194	876	261	961	328	1046	395	1131
128	793	195	878	262	962	329	1047	396	1132
129	794	196	879	263	964	330	1048	397	1133
130	795	197	880	264	965	331	1050	398	1134
131	797	198	881	265	966	332	1051	399	1136
132	798	199	883	266	967	333	1052	400	1137
133	799	200	884	267	969	334	1053	401	1138
134	800	201	885	268	970	335	1055	402	1139
135	802	202	886	269	971	336	1056	403	1141
136	803	203	888	270	972	337	1057	404	1142
137	804	204	889	271	974	338	1058	405	1143
138	805	205	890	272	975	339	1060	406	1145
139	807	206	892	273	976	340	1061	407	1146
140	808	207	893	274	978	341	1062	408	1147
141	809	208	894	275	979	342	1064	409	1148
142	811	209	895	276	980	343	1065	410	1150
143	812	210	897	277	981	344	1066	411	1151
144	813	211	898	278	983	345	1067	412	1152
145	814	212	899	279	984	346	1069	413	1153
146	816	213	900	280	985	347	1070	414	1155
147	817	214	902	281	986	348	1071	415	1156
148	818	215	903	282	988	349	1072	416	1157
149	819	216	904	283	989	350	1074	417	1158
150	821	217	905	284	990	351	1075	418	1160
151	822	218	907	285	991	352	1076	419	1161
152	823	219	908	286	993	353	1077	420	1162
153	824	220	909	287	994	354	1079	421	1163
154	826	221	910	288	995	355	1080	422	1165
155	827	222	912	289	997	356	1081	423	1166
156	828	223	913	290	998	357	1083	424	1167
157	830	224	914	291	999	358	1084	425	1169
158	831	225	916	292	1000	359	1085	426	1170
159	832	226	917	293	1002	360	1086	427	1171
160	833	227	918	294	1003	361	1088	428	1172
161	835	228	919	295	1004	362	1089	429	1174
162	836	229	921	296	1005	363	1090	430	1175
163	837	230	922	297	1007	364	1091	431	1176
164	838	231	923	298	1008	365	1093	432	1177
165	840	232	924	299	1009	366	1094	433	1179
166	841	233	926	300	1010	367	1095	434	1180



# SECTION T11-3: MODIFIEDS



2011/12 New Zealand Modified Champion – Richard Pierce

## T11-3 MODIFIED SPECIFICATIONS

### T11-3 Modified

A car specially designed for racing on SNZ licenced tracks as per Specifications.

- (a) In vehicles that require OEM parts, their components must retain their original identification marks.

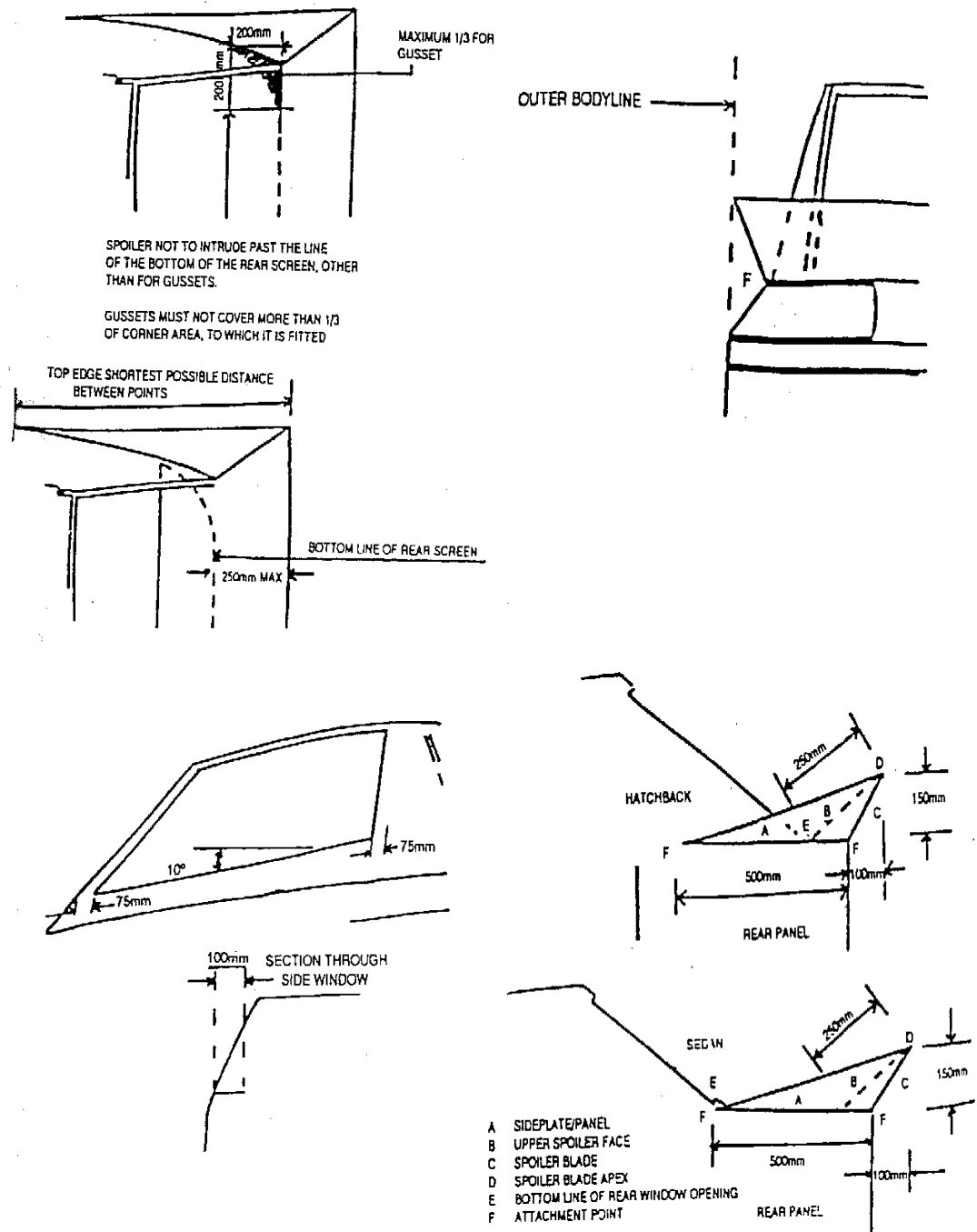
### T11-3-1 Body

- (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:

- (ii) 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.

## Relevant Body Diagrams



- (iii) The spoiler cannot extend rearwards more than 100mm maximum past the rear panel.
- (iv) 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.
- (v) Maximum height of spoiler to be 150mm measured from point of attachment, on a vertical plain.
- (vi) 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.
- (vii) 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.
- (viii) 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 rollcage 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.

#### T11-3-2 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.

#### T11-3-3 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 Scrutineer 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.

#### T11-3-4 Materials

- (a) Carbon fibre is not allowed unless specifically allowed for elsewhere in these rules.
- (b) Titanium is not allowed unless specifically allowed for elsewhere in these rules.
- (c) Ceramic coatings are not allowed unless specifically allowed for elsewhere in these rules.
- (d) 4130 steel commonly known as Chrome molly is recommended for all parts of roll cage construction. With this becoming compulsory for all cars constructed after 30 September 2013 as defined by E2-1-3(b).

#### T11-3-5 Wheel Base: 2.13 metres minimum, 2.74 metres maximum.

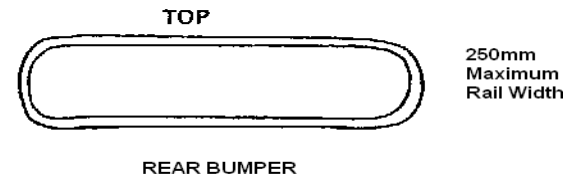
- (a) **Vehicle Width:** Maximum overall vehicle width 2.0 metres.

#### T11-3-6 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.

#### T11-3-7 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 be 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.



#### T11-3-8 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.
- (iii) Must have a minimum of two sideways stays in car, suitably locked together.
- (iv) 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 E2-1-3(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 maximum on the outside, measured so as to include the diameter of pipe as part of the 760mm, and the 50mm clearance between driver's helmet and top line of roll cage is maintained, no plating is allowed.

#### T11-3-9 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, either by placing out of reach or by a mechanical locking mechanism, by the driver while seated in the race car.

#### T11-3-10 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.

Part No.	Approved Dart Block Description
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 M7-4 Specific Technical Offences.
- (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.

#### T11-3-11 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.

#### T11-3-12 Fuel System

- (a) Fuel System: Refer E5.  
 (b) Fuel Tanks: Refer Rule E5-3.  
 (c) Fuel Tank Dimensions: Refer Rule E5-4.  
 (d) Fuel Cells: Refer Rule E5-6.  
 (e) Fuel Cell Mountings: Refer to Rule E5-7.  
 (f) Fuel Taps: Refer Rule E5-8.  
 (g) Fuel Lines: Refer rule E5-9.  
 (h) Fuel Tank Location: The fuel tank is to be positioned to the rear of the driver's compartment.  
 (i) **Two return springs must be fitted to the induction throttle shaft, anchored at separate mounting points.**

#### T11-3-13 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.

#### T11-3-14 Suspension

Type optional.

- (a) Remote reservoir shock absorbers are not allowed, the damping reservoir must be contained within the body of the shock.

#### T11-3-15 Wheels

Refer to Section T14 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 and wheel centre assemblies of aluminium or magnesium are allowed, if clearly identifiable, professionally manufactured, Rear Hub Assemblies are permitted provided manufacturer's specifications are adhered to, i.e. Sanders, Weld, Real, Winters, Vmac etc.  
 (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.

#### T11-3-16 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.



**T11-3-17 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 (Kirkey type or similar seat) is permissible.
- (c) Must be securely bolted to the roll cage or chassis.

**T11-3-18 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.

**T11-3-19 Seat Belts**

Refer to Section S4.

**T11-3-20 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.

**T11-3-21 Bonnet**

Bonnet and boot must be securely fastened.

**T11-3-22 Protection**

100mm mesh screens must be fitted to cover opening immediately in front of the driver.

**T11-3-23 Towing Hitch**

Front and rear, positioned under, and behind the natural bumper, no wider than 160mm and no deeper than 75mm.

**T11-3-24 Enforcement of Specifications**

- (a) Impounding: Refer Rules E2-2 to E2-7.
- (b) Inspection: Refer Section E2.

**T11-3-25 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 Scrutineer to check every vehicle immediately prior to its taking part in a competition.

## R11-4 RACING RULES: MODIFIED, SALOON AND SUPER SALOON

Any alteration made to Saloon racing rules should not necessarily affect Modifieds or vice versa.

### R11-4-1 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.

### R11-4-2 Track Signals

- (a) 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</i>	
<i>Chequered</i>	<i>Finish</i>
- (b) The green light to be on continuously while race is in progress.
- (c) 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.
- (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.

### R11-4-3 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.

### R11-4-4 Starting

- (a) Competitors proceeding to and awaiting the start of any race are under the jurisdiction of the Starter and/or the Referee.
- (b) The outside front row car shall be the pacesetter for the start of the race.
- (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) 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.
- (f) 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.
- (g) 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.
- (h) Allocated Titles Only: Any vacant grids to be held, failure to do so can result in a penalty.
- (i) In the case of a false start the Referee may order a re-start.
- (j) Any competitor disobeying the signal or having been in a false start not obeying the re-start signal, may be excluded from that race.

### R11-4-5 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) Driving in a hazardous manner: If a vehicle receives a flat outside tyre the competitor will immediately retire from the race.
- (k) In the event of a vehicle stopping, or being stopped on the track or infield 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.
- (l) If a driver unclips his seatbelt during competition he is deemed to have retired from the race and cannot resume racing.

### R11-4-6 Emergency Stoppage

- (a) 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.
- (b) 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.
- (c) FAILURE TO OBEY THIS INSTRUCTION WILL RESULT IN A SEVERE PENALTY.

### R11-4-7 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 R11-4-9 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.

**R11-4-8 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.

**R11-4-9 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 car 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.

**R11-4-10 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.

**R11-4-11 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.

**R11-4-12 Declared Race**

- (a) The Clerk of the Course can declare a race during a stoppage.
- (b) The results will be as per the last completed lap.
- (c) The Referee can exclude any competitor deemed to be the primary cause of the stoppage.
- (d) Exception: This clause does not apply to Allocated title events.

**R11-4-13 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.

**R11-4-14 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.

**R11-4-15 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.



## SECTION T12-1: SUPERSTOCKS



2011/12 New Zealand Superstock Champion – Joe Faram

### T12 SUPERSTOCK SPECIFICATIONS

**T12-1 Superstock:** (formerly Stockcar) A car specially designed for racing on SNZ licenced tracks as per 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) May be shortened, narrowed and lowered. Must retain original appearance.

- (c) The minimum height shall be 1372mm from the ground to the finished roof line, not including roof number plate.
- (d) Replica bodies may be constructed of plastic, fibreglass, steel or alloy.
- (e) All cars must have a bonnet covering from the front of the radiator back to the firewall.
- (f) Power bulge and air scoops allowed in top of the bonnet, but any openings must face forward.

#### 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.

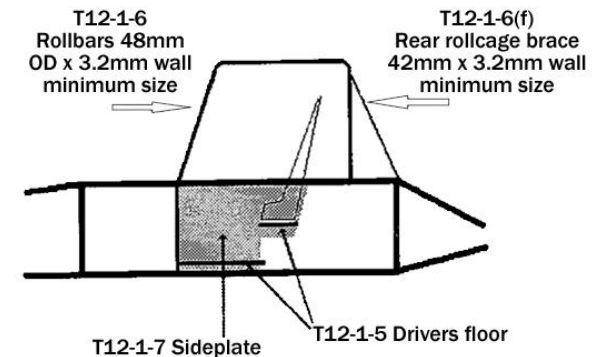
#### T12-1-5 Floorboards

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.

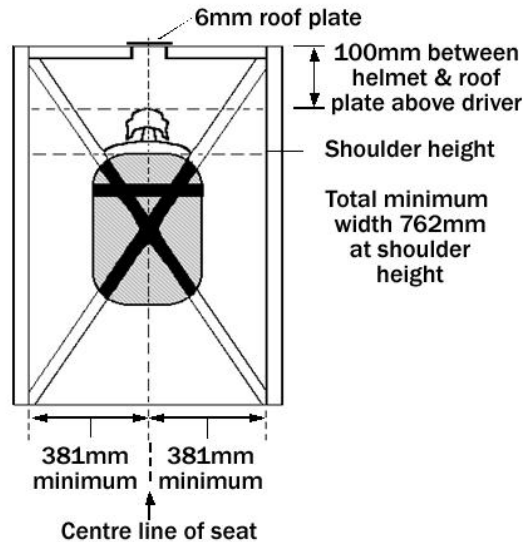
#### T12-1-6 Roll Bars

- (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.

Superstock 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 T12-1-6(e), T12-1-7(a), (b) and (c) will not apply provided that side protection plates exceed 381mm by 3mm steel plate.



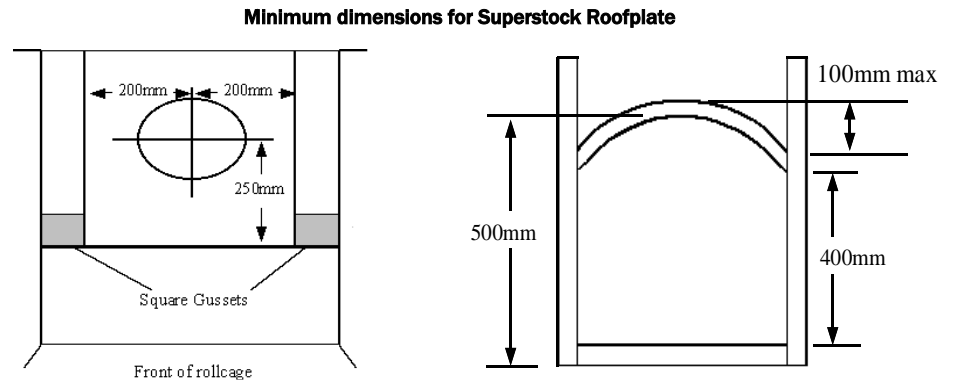
#### T12-1-7 Sideplates

- (a) 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 on each side of the car. The upper side pipe must be of minimum rollcage brace material.
- (b) 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.
- (c) 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).
- (d) 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.
- (e) No holes permitted in side plates. Drivers requiring an exemption from this rule must apply to the Board.

#### T12-1-8 Roof Plate

- (a) 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.
- (b) 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.

- (c) 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 Scrutineer may drill 6mm diameter holes for inspection anywhere in roll cage plating. Non destructive ultrasonic measuring is also permitted.



#### T12-1-9 Seating & Headrest

- (a) The driver is the only permitted occupant of the car.
- (b) Refer to the SNZ website for professionally manufactured Superstock seats approved for use. All approved seats must have mounting instructions supplied to SNZ.
- (c) The driver's seat shall be of steel backed 1.2mm minimum thickness bucket type, incorporating a headrest constructed of 3mm minimum thickness 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 S4.

#### 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 350mm from the driver's forehead.
- (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

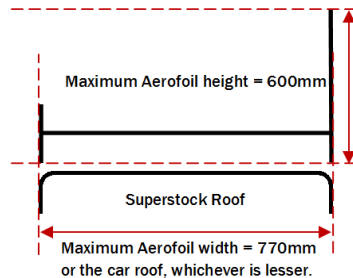
Refer also Section T7.

- (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.

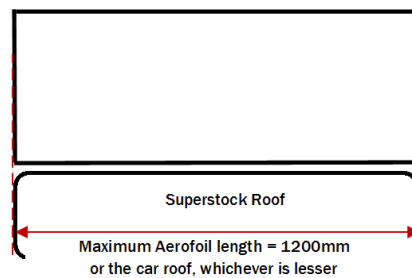
### T12-1-15 Aerofoil

- (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, including any front visor or rear wing that has been moulded into the body. 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.

T12-1-15: END VIEW



T12-1-15: SIDE VIEW

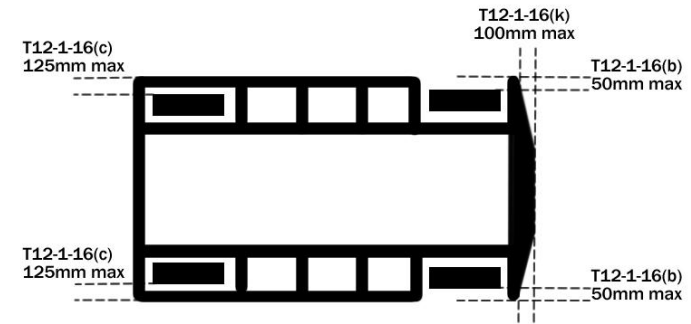


### T12-1-16 Bumpers

- (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.
- (d) Front wheel hubs unmodified OEM iron or steel hubs only permitted.
  - (i) OEM rotor may be removed and replaced with hat and aftermarket rotor.
  - (ii) Approved alternative hubs. Clearly identifiable professionally manufactured front hubs that are outside the above specification may be submitted to SNZ for testing and subsequent approval.

### 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 to 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) = 10.0:1
- (b) Maximum inlet and exhaust valve lift = 12.7mm (0.500 inch)
- (c) 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.
- (d) Four valves per cylinder: cylinder head casings must retain OEM identification markings and be OEM for original make and model of engine block.
- (e) Owners of vehicles must make individual arrangements with the track Steward, or qualified SNZ 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.
- (f) All motors must be drilled with holes through two sides of the sump in readiness for sealing by a SNZ Official.
- (g) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section M7-4 Specific Technical Offences.

**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 E5.****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 E2.**

- (a) Vehicles not complying with SNZ specs refer Section M5-5.
- (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.

**T12-1-30 Technical/Racing Rules:**

Refer Section E2.

**T12-1-31 Protective Clothing and Safety Equipment:**

Refer Section S3.

**T12-1-32 Safety Harnesses and Restraints:**

Refer Section S4.

**T12-1-33 Sound:**

Refer Section S5.



## SECTION T12-2: STOCKCARS



2011/12 New Zealand Stockcar Champion – Peter Rees

### T12-2 STOCKCAR SPECIFICATIONS

**T12-2-1 Stockcar:** (Formerly Standard Stock). A car specially designed for racing on SNZ licensed tracks.

- (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) May be shortened, narrowed and lowered. Must retain original appearance.
- (c) The minimum height shall be 1372mm from the ground to the finished roof line, not including roof number plate.
- (d) Replica bodies may be constructed of plastic, fibreglass, steel or alloy.
- (e) All cars must have a bonnet covering from the front of the radiator back to the firewall.
- (f) Power bulge and air scoops allowed in top of the bonnet, but any openings must face forward.



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### 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

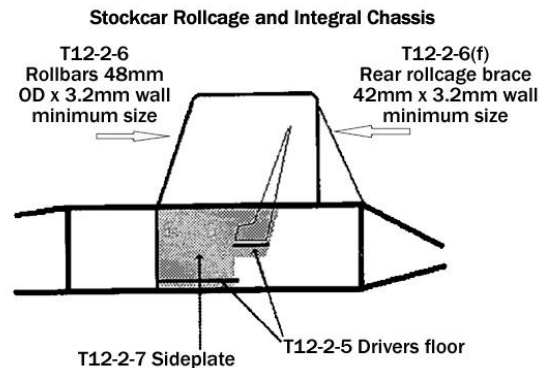
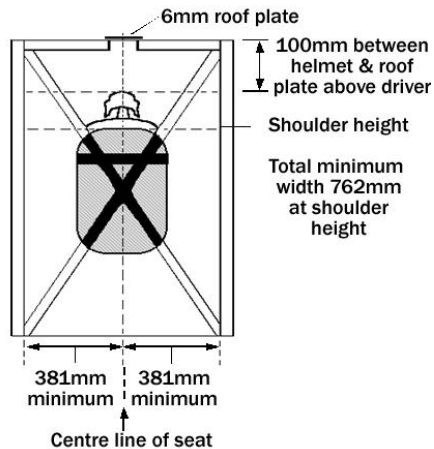
Adequate metal fire wall must be fixed to completely isolate the driver from the engine compartment.

### 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

- Rollcage material minimum size = 48mm OD x 3.2 mm wall thickness medium black pipe or 40mm x 40mm x 3mm RHS.
- Rollcage brace material minimum size = 42mm OD x 3.2mm wall thickness medium black pipe or 40mm x 40mm x 3mm RHS.
- Galvanised pipe is not permitted in rollcage.
- 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.
- 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.



- 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.
- 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.
- 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.
- 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.
- 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.
- 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.

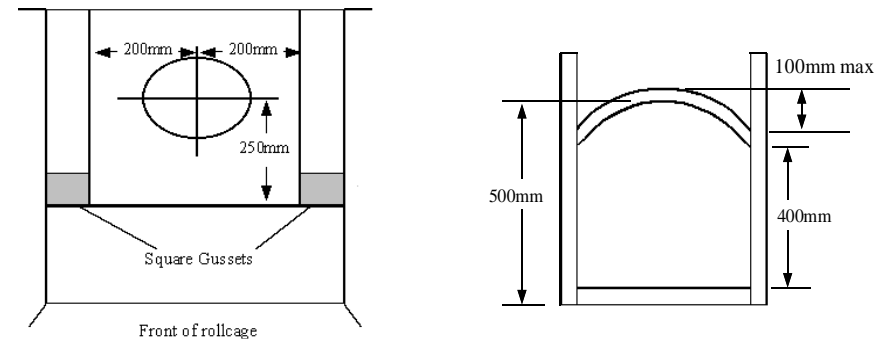
### T12-2-7 Sideplates

- 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 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 T12-2-6(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 Board.

### 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.
- 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.
- The roof plate must be welded to rollcage material on all four sides; the roof plate must not have any lightening holes whatsoever.
- 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.
- A Scrutineer 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

- The driver is the only permitted occupant of the car.
- Refer to the SNZ website for professionally manufactured Stockcar seats approved for use. All approved seats must have mounting instructions supplied to SNZ.



- (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 headrest 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.

**T12-2-10 Safety Harness:** Refer Section S4.

**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 350mm from the driver's forehead.
- (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.

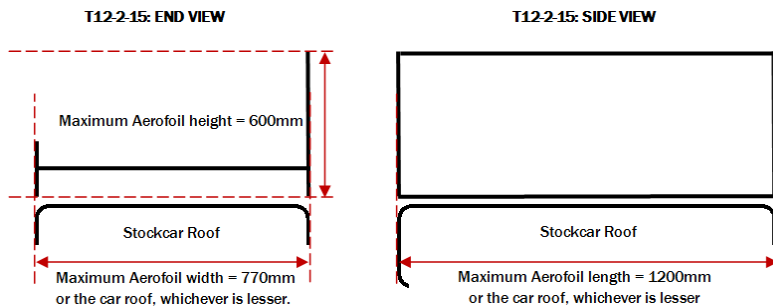
**T12-2-14 Racing Numbers**

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, including any front visor or rear wing that has been moulded into the body. The aerofoil must be securely mounted to the rollage.

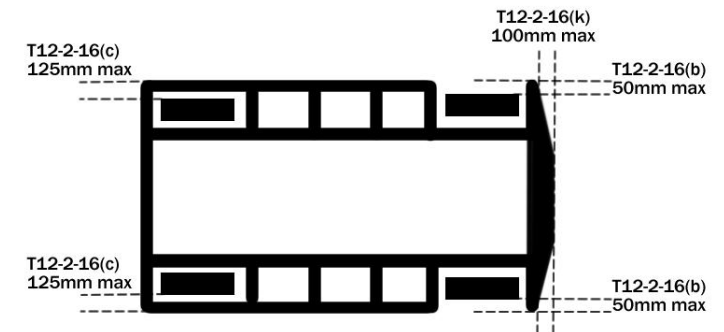


- (c) The aerofoil assembly must not exceed the following measurements: 1200mm in length, 600mm in height, total maximum width 770mm.

**T12-2-16 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) = 10.0:1.
- (e) Maximum inlet and exhaust valve lift = 12.7mm (0.500 inch).
- (f) 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.

- (g) 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.
- (h) 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.
- (i) Upon application to the Board, 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.
- (j) Spacers between cylinder head and inlet manifold, and cylinder head and exhaust manifold, are not permitted.
- (k) Engine to have maximum of 2 valves per cylinder.
- (l) No controlled vacuum leaks are permitted except OEM crankcase ventilation.
- (m) 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.
- (n) 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.
- (o) Needle or roller type rockers are not permitted unless Standard OEM part of engine being used e.g.: Buick, EA Falcon and Nissan Maxima.
- (p) All overhead cam engines must retain OEM specification hydraulic valve lash adjusters and rockers, used in OEM form.
- (q) Porting and polishing of OEM heads is permitted.
- (r) Owners of vehicles must make individual arrangements with the track Steward, or qualified SNZ 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.
- (s) All motors must be drilled with holes through two sides of the sump in readiness for sealing by a Speedway New Zealand official.
- (t) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section M7-4 Specific Technical Offences.

#### **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 130mm 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.
- (d) Mufflers are free, however sound levels must comply with Rule S5.
- (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 outside of the plate may be cut/drilled to fit manifold and adapter plate/s but must still retain the SNZ logo.

#### **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.
- (f) Any ECU may be submitted to SNZ for approval.

#### **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 E5.

#### **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.
- (g) 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**

- (a) Quick-change or open tube type rear axles are not permitted.
- (b) Automotive OE rear axles may be offset.
- (c) Automotive OE differentials may be spooled/locked/welded so that both side axle shafts rotate as one.
- (d) Alloy rear axle hubs are not 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) Aftermarket torsion bar systems are permitted, steel arms and stops only are permitted, no alloy or brass arms/stops allowed.

#### **T12-2-33 Steering Joints**

- (a) Steel only OEM tie rod ends are permitted.
- (b) Tractor links and rod ends are permitted, 5/8 or 16mm minimum eye size.

#### **T12-2-34 Brakes**

- (a) Brakes must be fitted on both front wheels, and at least one brake fitted to rear axle assembly.
- (b) Automotive OEM brake parts must be fitted however mixing and matching is permitted. Brake pedal may be fabricated.
- (c) Adjustable Hydraulic and Mechanical brake bias systems are not permitted.
- (d) Only one brake Master Cylinder is permitted.
- (e) All brake components must be in perfect working order at all times.

#### **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) Road tyres must be used. All tyre grooves must not exceed 10mm in width or depth. Tyres not complying with this rule may be altered to comply with this rule, but no markings can be removed. Racing type tyres, slick retreads are not permitted.
- (b) Hand grooving to original tread pattern of tyres is permitted, 10mm maximum groove width. Added grooves are not permitted.
- (c) Maximum width of tread not to exceed 210mm on the track, and overall width not exceed 255mm at or above bumper height.
- (d) All tyres must have sound casings.
- (e) When conventional road tyres (front or rear) are used, they must duro 55 or more prior to race.
- (f) All tyre specifications will be determined by the use of the SNZ approved tyre measuring tool.
- (g) Local rules do not apply to tyres at any time.
- (h) 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 SNZ specifications refer Section M5-5.
- (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 for clarification.

#### **T12-2-38 Technical/Racing Rules:** Refer Section E.

#### **T12-2-39 Protective Clothing and Safety Equipment:** Refer Section S3.

#### **T12-2-40 Safety Harnesses and Restraints:** Refer Section S4.

#### **T12-2-41 Sound:** Refer Section S5.

## 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 SNZ Officials are in attendance. A SNZ Steward MUST be in attendance at all practice meetings.
- (b) The instructions of the SNZ Steward or Stipendiary Steward, or any of their 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:

<i>Green</i>	<i>Start</i>
<i>Red</i>	<i>All competitors to stop</i>
<i>White</i>	<i>Last lap for individual competitor</i>
<i>Blackboard</i>	<i>Competitor to retire immediately upon receiving the black board bearing the offending competitors number held out for two laps.</i>
<i>Black &amp; White</i>	
<i>Chequered</i>	<i>Finish</i>
- (b) The green light to be on continuously while race is in progress.
- (c) 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.
- (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.

### 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. A clutch start is when the machine is started from a stationary position on the starting line with the engine running.
- (e) Any vehicles failing to start after leaving the pits within the time limit of three 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.
- (f) In the case of a false start the Referee may order a re-start.
- (g) Any competitor disobeying the signal or having been in a false start not obeying the re-start signal, may be excluded from that 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) 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.
- (b) All vehicles must stop immediately on the display of red lights or red flags and remain stationary except under instruction from an Official.
- (c) In the event of a vehicle stopping or being stopped on the track or infield during a race, the competitor shall remain strapped in his seat until they are given permission to leave it by an appropriate official. Obviously this restriction does not apply in the case of fire.
- (d) 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 Declared Race**

- (a) The Clerk of the Course can declare a race during a stoppage.
- (b) The results will be as per the last completed lap.
- (c) The Referee can exclude any competitor deemed to be the primary cause of the stoppage.
- (d) Exception: This clause does not apply to Allocated title or Teams events.

#### **R12-3-12 Grand Parades**

A grand parade of vehicles to be at a speed not exceeding 40 km/h.

#### **R12-3-13 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.

### **R12-4 SUPERSTOCK/STOCKCAR TEAMS RACING CODE OF ETHICS**

**R12-4-1** Teams racing is a very exciting and competitive form of racing with many added responsibilities on competitors, crews, officials and Promotions.

**R12-4-2** It is the responsibility of the competitor to present his vehicle within the rules at all times. They 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.

**R12-4-3** 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.

#### **R12-4-4 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
  - (i) Fine: \$100 to \$1,000
  - (ii) Individual Exclusion (from the meeting). An exclusion in any one race by a non winning driver is not a penalty.
  - (iii) Team Exclusion
- (n) Appeals are permitted.





2011/12 New Zealand Streetstock Champion – David Hampton

## T13 STREETSTOCK SPECIFICATIONS

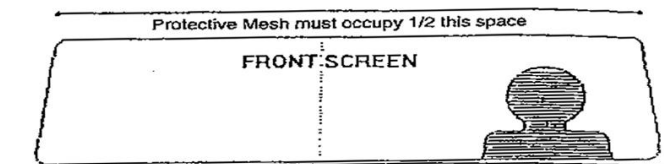
**T13-1** Streetstock: A standard road car specially modified for racing on SNZ licensed tracks as per specifications.

### 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 S4-3-1) 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 Scrutineers 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 may be replaced by panel steel, either flat or to original profile.

### 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

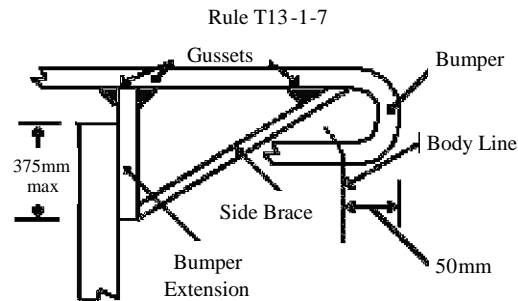
- (a) Original metal firewall must be fitted to completely isolate driver from the engine compartment.
- (b) All holes in firewall to be covered with panel steel. Fuel line and wiring passing through firewall must be grommetted, so as to prevent chaffing etc.

### 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

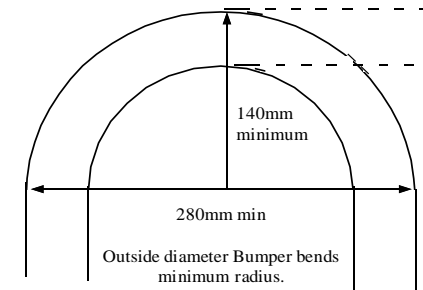
- (a) To be made from maximum 50mm pipe or RHS, can be extended forward of the original bumper position by 100mm, by using maximum 50mm OD pipe, or RHS. This must not extend more than 375mm along the chassis rail.
- (b) Bumper material to be of 4mm maximum thickness.
- (c) When using RHS bumper must be on flat not on edge.



- (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

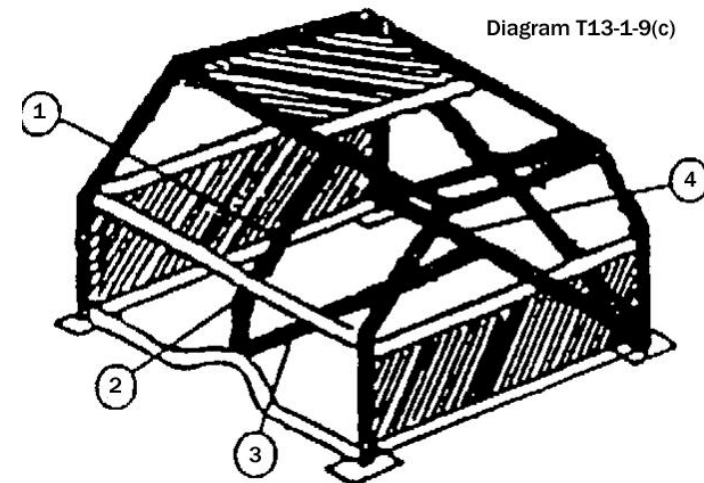
- (a) Rear Bumper may be made from 50mm OD pipe or 50mm OD RHS (maximum size) covered by original bumper or similar (optional), to be securely welded.
- (b) Bumper material to be of 4mm maximum thickness.
- (c) When using RHS bumper must be on flat not on edge.
- (d) A maximum of two jointing slugs permitted 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.

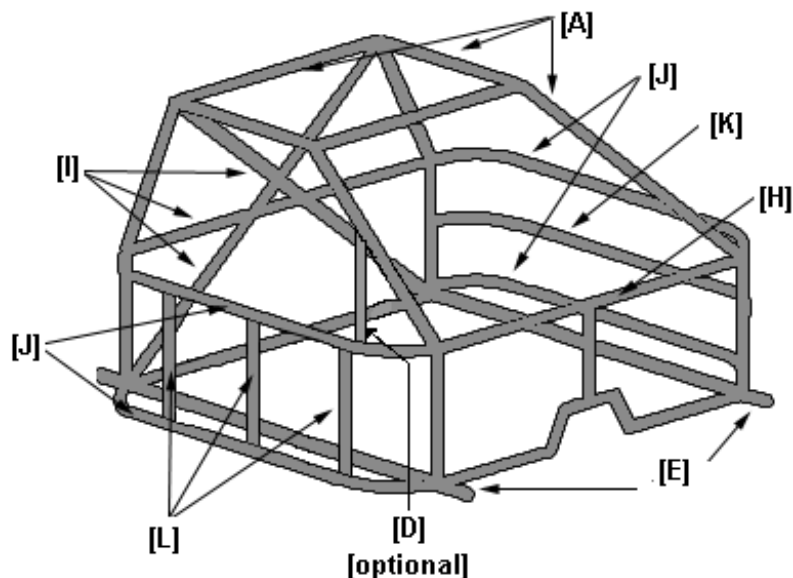
### T13-1-9 Roll Bars

- (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] ¼ 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 rollcage hoop.



- (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 rollcage to be 355mm measured at shoulder height.
- (h) The roll cage must be braced by a front horizontal cross member, attached to front rollcage on each side at dash area.
- (i) The rollcage must be secured by both a diagonal cross brace and a horizontal cross member travelling behind seat and attached to rollcage on both sides.

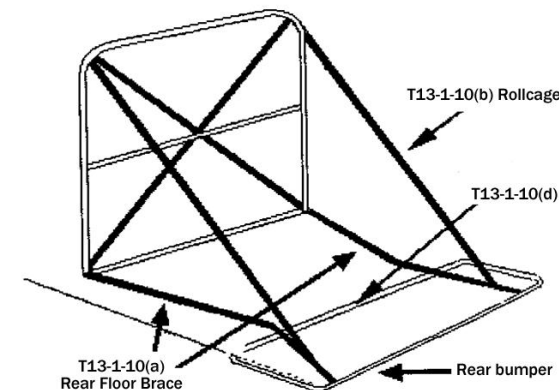
### T13-1-9 Rollcage



- (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 rollcage behind driver's seat. Only to be welded to rollcage.
- (k) One additional horizontal side bar is **required**, 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 rollcage 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 rollcage side bar to protect driver from hips to feet.
- (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 Scrutineer 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 rollcage 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.

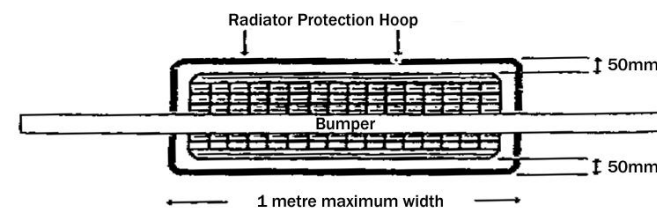


### T13-1-11 Floor Plate

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 steel mesh, maximum thickness 4mm.
- (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**

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 S4.

**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) No forced induction.
- (b) 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) Ignition may be controlled by:-
- (i) a computer that is standard for the make/model of the engine being used.

- (ii) an SNZ approved aftermarket computer.

No other aftermarket or modified computers will be permitted.

- (c) 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.
- (d) Distributor from previous model engine may be used, Ford/Ford, Holden/Holden, provided original factory distributor mounting location is retained.
- (e) In addition to the normal engine mounts or steel mountings, a steel wire or strap must be fitted across the top of the front and/or rear of the motor, from chassis rail mounting plate to chassis rail mounting plate or on strong position in engine bay, e.g. chassis rail to engine cross-member, to prevent excess movement. Maximum size of the mounting plates to be 200mm x 100mm x 3mm.
- (f) No sleeving back is allowed for engines bigger than 4753cc (290 cu in).
- (g) Component parts must be to OEM specifications.
- (h) All engines are subject to random testing by SNZ officials.
- (i) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section M7-4 Specific Technical Offences.

### APPENDIX C: STREETSTOCKS OEM ENGINE CAMSHAFT MAXIMUM LOBE LIFT SPECIFICATIONS

(Measured at pushrod tip)

	Inlet	Exhaust
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"

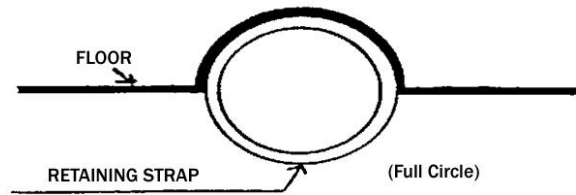
**T13-1-21 Exhaust Manifold**

- (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 permitted.
- (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.



**T13-1-32 Brakes**

Four wheel brakes must be fitted and maintained in perfect working order at all times.

**RACING RULES BEGIN ON THE NEXT PAGE**

**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 E5.**

**T13-1-29 Fuel Tank - Refer Section E5.**

**T13-1-30 Wheels**

- (a) Wheels will be:-
  - (i) Original road wheels as per original model, or
  - (ii) Approved wheels, providing existing size and offset is maintained
- (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.

## 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 SNZ Officials are in attendance. A SNZ Steward or Stipendiary Steward, or any of their 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.

<i>Green</i>	<i>Start</i>
<i>Red</i>	<i>All competitors to stop</i>
<i>White</i>	<i>Last lap for individual competitor</i>
<i>Black Board</i>	<i>Individual competitor to retire immediately upon receiving the black board bearing the offending competitor's number held out for two laps.</i>

*Black & White  
Chequered*      *Finish*

- (a) The green light to be on continuously while race is in progress.
- (b) 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.

### R13-2-4 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. A clutch start is when the machine is started from a stationary position on the starting line with the engine running.
- (e) Any vehicles failing to start after leaving the pits within the time limit of three 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.
- (f) In the case of a false start the Referee may order a re-start.
- (g) Any competitor disobeying the signal or having been in a false start not obeying the re-start signal, may be excluded from that 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 or infield during a race, the competitor shall remain strapped in his seat, until they are 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

- (a) 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.
- (b) 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 Declared Race

- (a) The Clerk of the Course can declare a race during a stoppage.
- (b) The results will be as per the last completed lap.
- (c) The Referee can exclude any competitor deemed to be the primary cause of the stoppage.
- (d) Exception: This clause does not apply to Allocated title events

### R13-2-12 Grand Parades

A grand parade of vehicles to be at a speed not exceeding forty kilometres per hour.

### R13-2-13 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.



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.

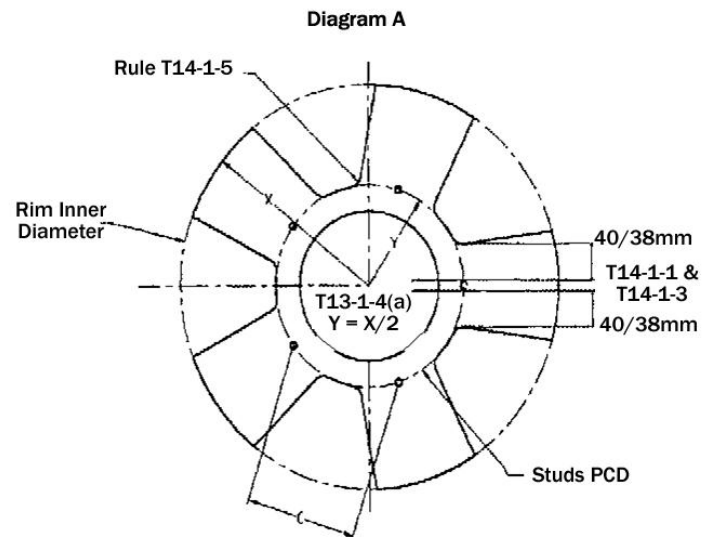
**T14-1-6** Where a web comprises a full disc on its outer circumference

- (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.

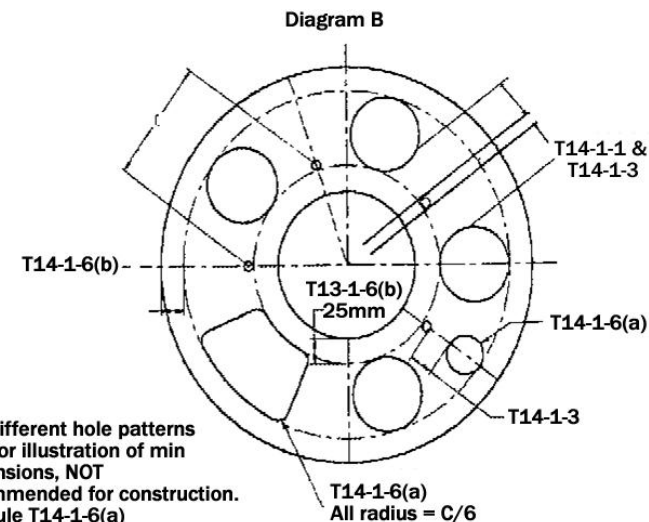
## T14-2 Welds

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.
- (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.



Wheel Centre Lightening Diagrams  
Not to scale



NB: Different hole patterns only for illustration of min dimensions, NOT recommended for construction. See rule T14-1-6(a)

- (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 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.

**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 (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.

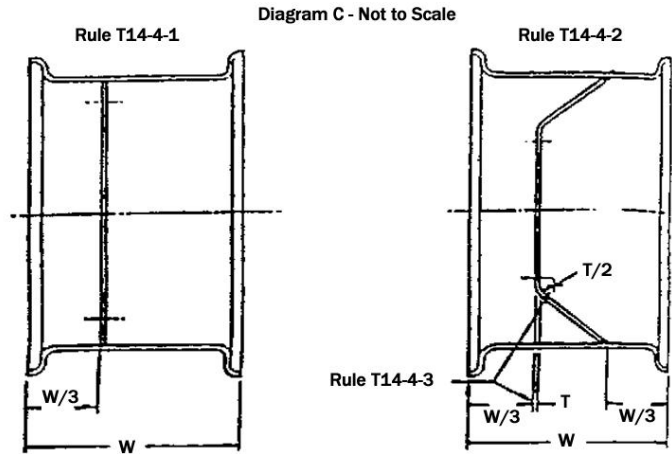
**T14-4-6** On any Wide 5 fitted to a Modified the centre web may lie outside the centre third (1/3) of the total rim width.

**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**

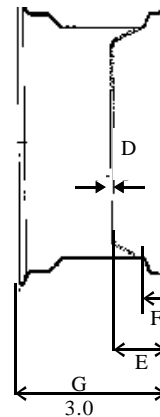
- (a) The 'D Window' wheel centre, both 6-pin and 5 stud, as manufactured by INTERO is approved for Modifieds, Super Saloons, Stockcars and Superstocks, provided all existing offsets as described in these rules are maintained.
- (b) Bassett Wheel: The Bassett Dot Approved Street Legal Racing Wheel 15" 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 471.1 in the appropriate position. The fluted centre is approved for left rear and front wheels only.
- (d) Nissan Navara Wheel J.I.S. D4103 approved for Superstocks and Stockcars.
- (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 SNZ.

**T14-6-2 Wide 5 Wheels**

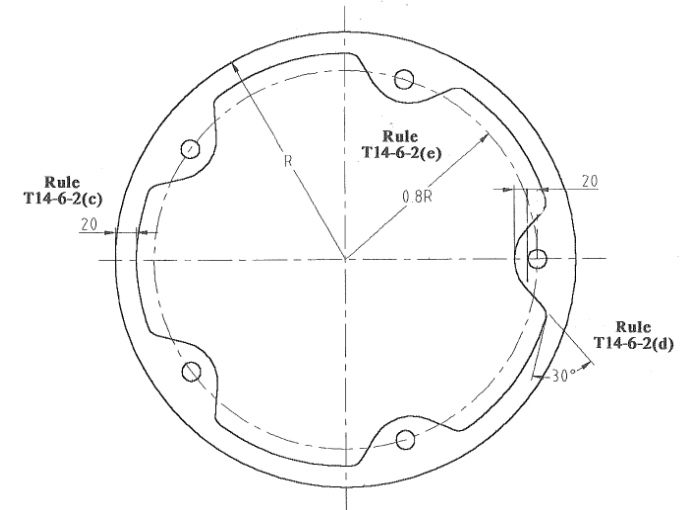
Refer Diagram E below.

- (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 D**



**Diagram E**



These rules are not to be subject to change at Annual General Meetings. The rules for these classes are administered by the Board 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.

Refer to Section M1-4 for more information.

## SECTION T11-5: 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

### T11-5-1 Eligibility

- 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.
- 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.
- Any Production saloon car, Hatchback or Liftback car complying with rule T11-5-1(b) and manufactured with seating for at least four occupants is eligible.
- Right hand drive models only. Front or rear wheel drives only. Convertibles are not allowed.
- 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).

### T11-5-2 Engine

- 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.
- No V8's, no more than 6 cylinder or twin rotors. No turbochargers or superchargers
- 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.
- 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.
- 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.

- 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.
- 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.
- Sound level is 95 decibels (absolute maximum). (Rule S5 sound). Local Promotions may enforce lower readings.

### T11-5-3 Fuel System

- 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 E5-5) A screw threaded cap must be fitted.  
**Recognised fuel cells are able to be used.**
- 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.
- 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.**
- 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.
- 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.

### T11-5-4 Electrical System

- 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.
- 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.
- All vehicles must be able to be self starting at all times without outside assistance, e.g. jumper leads, etc.
- Only blue, white or green instrument warning lights allowed.
- All unnecessary wiring to be removed (e.g. headlight, taillight wiring etc. Dash may remain standard.

### T11-5-5 Electronics

- The use of cellular or radio and/or telephone communication systems with the driver during the race is not permitted.
- 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.

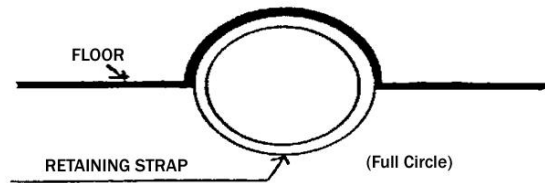
- (c) Electronically controlled adjustable shock absorbers are not permitted.
- (d) Transmitter placement (refer Section E4-4): 'A' measurement 1800mm, 600mm from extreme right hand side of vehicle, 300 mm from the extreme left hand side of vehicle. 200mm maximum from bottom of transmitter to track surface.

#### T11-5-6 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.

#### T11-5-7 Transmission/ 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.



#### T11-5-8 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).

#### T11-5-9 Steering

- (a) Must be original steering components as per make and model of vehicle, (i.e. NO steering quickeners allowed.)

#### T11-5-10 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.

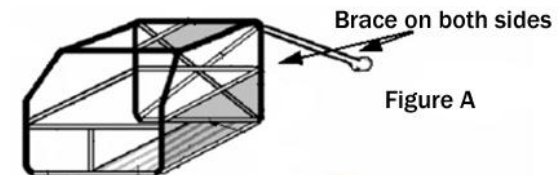
- (c) An alloy or panel steel partition between driver and boot, also driver and engine compartment must be fitted accurately to prevent fluids and fire from reaching the driver. Coup and lift back cars must have a boot/firewall partition to isolate the fuel tank from the driver by a minimum of 300mm.
- (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).

#### T11-5-11 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.  
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) Scrutineer may drill a 6mm inspection hole in bumper or reinforcing to measure same.

#### T11-5-12 Roll Cage

- (a) **Main body roll cage** (as shaded in diagram, below) 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) Black medium steel tubing or RHS, minimum of 40 mm OD x 3.00mm
  - (iii) 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 Scrutineer 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.

#### **T11-5-13 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.

#### **T11-5-14 Tyres**

- (a) Standard road tyres only permitted. A standard road tyre is defined as a non-studded tyre that is legal for highway use in New Zealand.
- (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.

#### **T11-5-15 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.

#### **T11-5-16 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.

#### **T11-5-17 Seatbelts**

Refer to Section S4-4.

#### **T11-5-18 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

#### **T11-5-19 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.

#### **T11-5-20 Steering Wheel**

- (a) Complete wood rim or wire spoke steering wheels are not permitted.
- (b) Approved quick release steering wheels are permitted.

#### **T11-5-21 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.

#### **T11-5-22 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.

#### **T11-5-23 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 Scrutineer 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.

**Racing Rules are the same as Modified, Saloon and Super Saloon. See Section R11-4.**

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## **SECTION T11-6: YOUTH SALOONS**

**See also the relevant Training Programme Section, M6-13.**

- (a) Specifications as per Section T11-5 (Production Saloons), with the further restriction that engine size must be under 1600cc.
- (b) Racing Rules as outlined in Section R11-4 of the SNZ Rulebook.

## SECTION T10-7: MODIFIED SPRINTS

- T10-7 Modified Sprint:**  
A car with motorcycle engine specially designed for racing on SNZ licenced tracks as per specifications.
- T10-7-1 Engine**
- Front mounted motorcycle engine only. No rear engine cars permitted.
  - 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.
  - No rotary or two (2) stroke motorcycle engines, supercharges, turbocharges or engines sleeved back.
  - Induction - Carburettors or mechanical fuel injection OEM EFI, aftermarket airbox permitted with OEM velocity stacks.
  - OEM Ignition, no aftermarket electronic engine mapping or management devices allowed, eg Power Commander, Cobra Commander not permitted.
  - Exhaust design is free.
  - Gearbox - Removal of gears is permitted.
  - Oil systems - No dry sumps permitted. Original oil pump pick up must be retained.
  - Clutch - Aftermarket clutches allowed provided same amount of plates and springs are used to comply with standard configuration.
  - Piston Rings - Aftermarket rings permitted but must comply with standard specification.
  - Shot peening of crankshaft and connecting rods is permitted.
  - Charging Systems - Alternators and/or charging systems can be removed.
  - Gaskets - Head and barrel gaskets must be used and of standard dimensions.
  - recent engine declaration certificate of engine capacity on the official SNZ form must be produced on demand.
  - Engine to be pre-drilled before CVI inspection with 3.3mm minimum size hole to enable scrutineers to seal engine.
    - Pre-drilled holes to seal: cylinder barrels to crankcase, cam cover to cylinder barrels. Note: Pre drilled retainers are acceptable.
  - Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section M7-4 Specific Technical Offences.
- T10-7-2 Exhaust**
- Exhaust pipe or pipes to be securely mounted to the chassis or the frame on at least two mounting points.
  - Exhaust pipes not to extend beyond the outer confines of the knurf bars. Mufflers refer T10-1-16(b).
  - Exhaust pipes and muffler must remain within the limits of the car, i.e. overall length and within knurfing irons, however muffler and outlet must be no higher than top knurfing iron bar.
  - Refer to Rule T10-1-16.
- T10-7-3 Chassis Types**
- Chassis: Space frame round tubular construction.
  - Engine offset: 150mm [6"] measured centre line of motor and centre line of frame.
- T10-7-4 General Dimensions**
- Wheelbase – 2030mm maximum (effective for cars constructed from 1985 onwards) 1520mm minimum.

- Wheeltrack–1320mm maximum 1070mm minimum. To be measured centre to centre of tyres.
  - Maximum height–not to exceed 1520mm (not including aerofoil) measured from ground to top of rollcage.
- Body**
- Single seater bodies only.
    - 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.
    - All panels and bonnets must be securely fastened primarily by way of dzus buttons minimum (bolts satisfactory). Plastic ties are not permitted.
    - 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.
  - Seat is to be of a suitable bucket type designed for racing and securely welded or bolted to the floor and internal barwork.
  - Floor pan under drivers feet must extend from front edge of seat to firewall.
  - No mirrors permitted.
- T10-7-5 Seatbelts:** Refer to Section S4.
- T10-7-6 Rollcage**
- Roll cages satisfying the following requirements are mandatory, they should meet the following specifications.
- 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
  - Cold drawn Seamless SAE 1010/1026 or Reynolds 531, 1 3/8 x 8 gauge, (1.375" OD x .161" W.T.)
  - 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.
  - Bottom Chassis Rail to be a minimum of 0.083" wall thickness.
  - The top line of both the horizontal tubes to be no less than 50mm above the drivers head when seated statically in the car.
    - 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.
  - 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.
    - 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.
    - 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.
  - Side intrusion bars may be added to the main frame of the roll cage.
    - The said side intrusion bars must be attached adjacent to the rear cross tube at the top of the roll cage.
    - A brace must be fitted midway between upper and lower mounting points.
    - 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.
    - 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.
    - 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 S4-2-3.
- (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.

**T10-7-7 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.

**T10-7-8 Shock Absorbers**

Suspension must not be able to be adjusted by the driver while in the driver's seated position.

**T10-7-9 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.

**T10-7-10 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".

**T10-7-11 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.

**T10-7-12 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.

**T10-7-13 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.

**T10-7-14 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.

**T10-7-15 Battery**

Must be secured in a safe position and suitably covered to prevent spillage of acid in the event of a capsizes.

**T10-7-16 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 (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.

**T10-7-17 Fuel: Refer Section E5.**

**T10-7-18 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.

**T10-7-19 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, 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.
- (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.

**T10-7-20 Air Folls**

- (a) Mandatory air foils 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.

**T10-7-21 Electronic Control**

For the use of any electronic devices refer to Section E4.

**T10-7-22 The Steward, only, has discretionary powers in Rule E2-4-4(b) as to whether a car is fit to race.**

**T10-7-23 Impounding a Modified Sprint: Refer Rules E2-2 to E2-7.**

## SECTION T10-6: KIWI KIDZ - QUARTER MIDGETS

See also the relevant Training Programme Section, M6-13.

### T10-6 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 SNZ tracks.

### T10-6-1 Safety Equipment

- (a) Full face helmet with a full visor only, *tearoffs recommended for safety.* Helmet to comply with Section S3-2-1.
- (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 S4 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 track 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.
- (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.

### (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 Scrutineers 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 2-valve 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/golf cart style
  - (b) Size to be moulded on side walls
  - (c) No sidewall alterations permitted
  - (d) Front 16/6.5 x 8 Max size
  - (e) Rear 18/9.5 x 8 Max 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</i>	FINISH Race finish slow down and stop as
<i>Chequered</i>	required for particular track being raced on.

## SECTION T15: MINISTOCKS

### T15-1 Ministock

A car specially designed for racing on SNZ tracks as per specifications.

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) Scrutineer 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 Seatbelts:** Refer to Section S4-4.

**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) 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:** Please refer to Rule E5-2-3. See also Section M7-4 Specific Technical Offences.

**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 E5-6-3.

**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.  
A standard road tyre is defined as a non-studded tyre that is legal for highway use in New Zealand.

### 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 E3-3-5.
- (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 M7-4 Specific Technical Offences.
- (h) The Board 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 vaccum 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

<b>Bore:</b>	2.95 inches (75.0mm) up to .60th		
<b>Stroke:</b>	2.598 inches (66.0 mm)		
<b>Camshaft Specs:</b>	Lift:	Inlet .225"	Exhaust .237"
	Duration:	Inlet: 66 DGS	Exhaust: 66 DGS
<b>Valve Specifications:</b>	Valve Head Diameter	Inlet: 36mm	Exhaust: 29mm
<b>Carburettor Type:</b>	Aisan ISO		
<b>Venturi Diameter:</b>	Primary: 21mm	Secondary: 24mm	
<b>Flywheel Weight:</b>	7kg (Min)		

### DATSUN A12 1171cc

<b>Bore:</b>	2.87 inches (73.50mm) up to .60th		
<b>Stroke:</b>	2.76 inches (70.0mm) only		
<b>Camshaft Specs:</b>	Lift:	Inlet .222"	Exhaust .233"
	Duration:	Inlet: 68 DGS	Exhaust: 68 DGS
<b>Valve Specifications:</b>	Valve Head Diameter	Inlet: 35mm	Exhaust: 29mm
<b>Carburettor Type:</b>	Hitachi DCG 306		
<b>Venturi Diameter:</b>	Primary: 20mm	Secondary: 26mm	
<b>Flywheel Weight:</b>	8kg (Min)		

## SECTION T15-2: YOUTH MINISTOCKS

See also the relevant Training Programme Section, M6-13.

- (a) Specifications as per T15-1 of SNZ Rulebook.
- (b) Racing Rules as per R15-3 of SNZ Rulebook.

## R15-3 MINISTOCK – RACING RULES

### R15-3-1 Flags

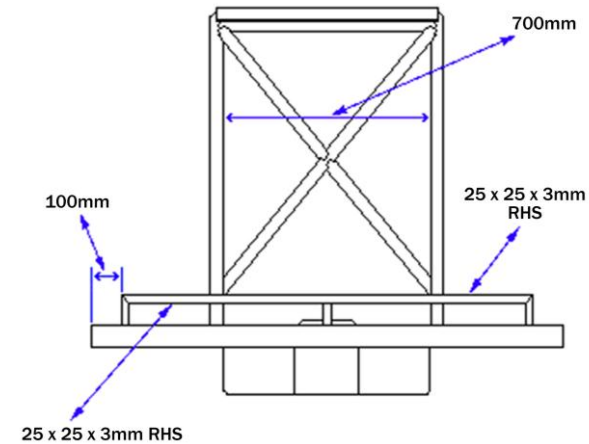
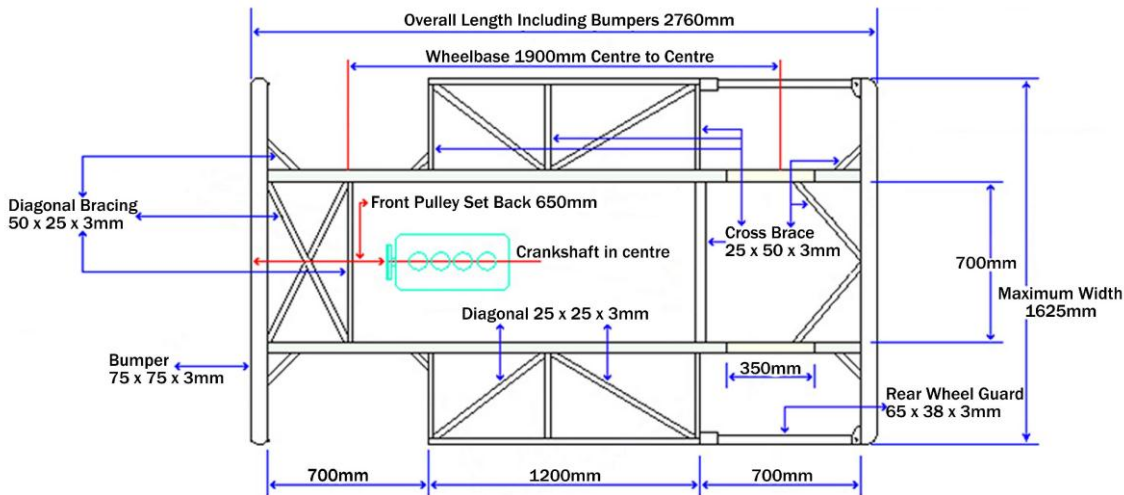
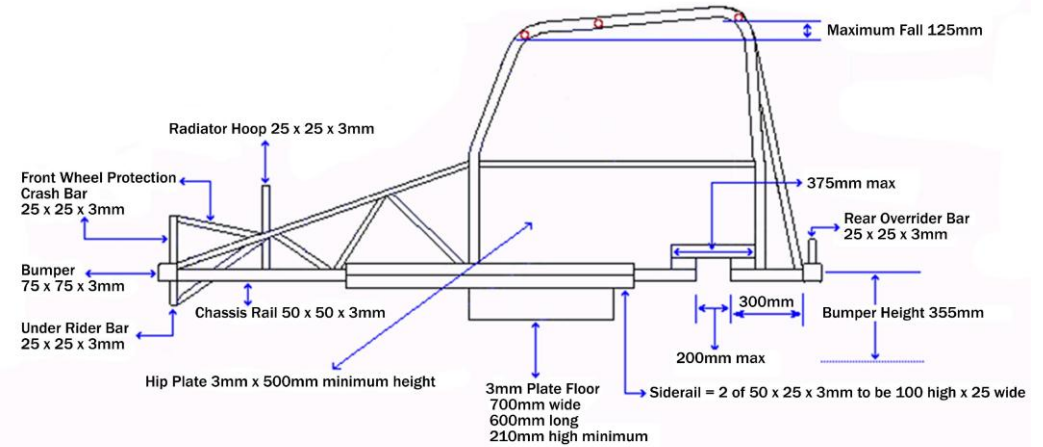
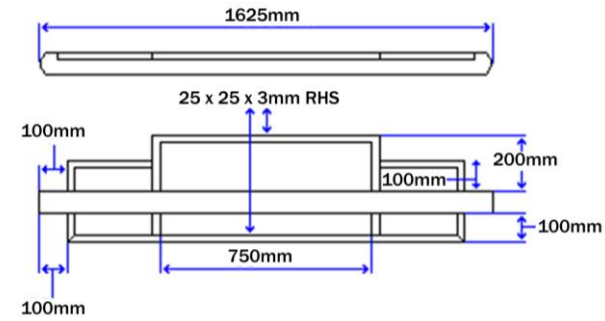
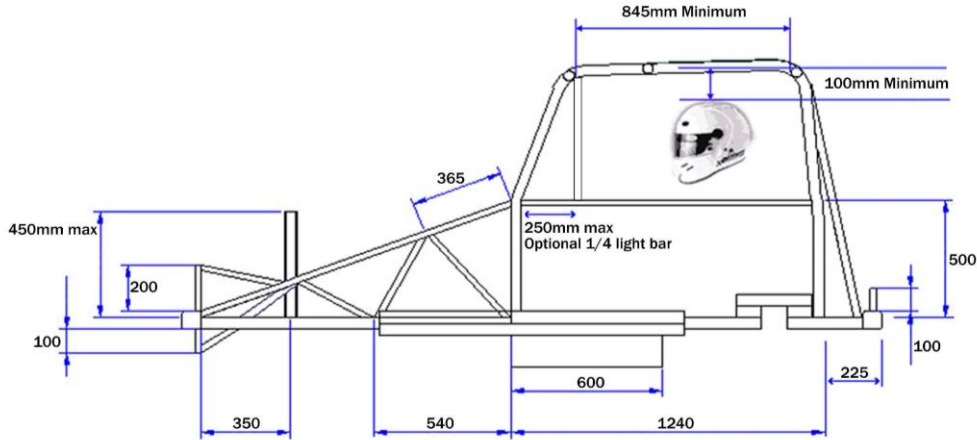
<i>Green</i>	<i>GO as soon as green flag is waved or green lights are on you may start racing.</i>
<i>Red</i>	<i>ALL drivers STOP when the red flag/light is put out/on ALL drivers must STOP as safely and as soon as possible. Must not move unless told by an official.</i>
<i>White</i>	<i>LAST LAP</i>
<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</i>	<i>FINISH Race finish slow down and stop as</i>
<i>Chequered</i>	<i>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) 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)
  - (i) Deliberate contact and attacking other vehicles is not permitted and will be penalised.
  - (ii) Using a concrete wall or bank to gain an advantage will be penalised.
  - (iii) Placing one or more wheels over the pole line can result in relegation or exclusion.
- (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.
- (g) **Declared Race:**
  - (i) The Clerk of the Course can declare a race during a stoppage.
  - (ii) The results will be as per the last completed lap.
  - (iii) The Referee can exclude any competitor deemed to be the primary cause of the stoppage.

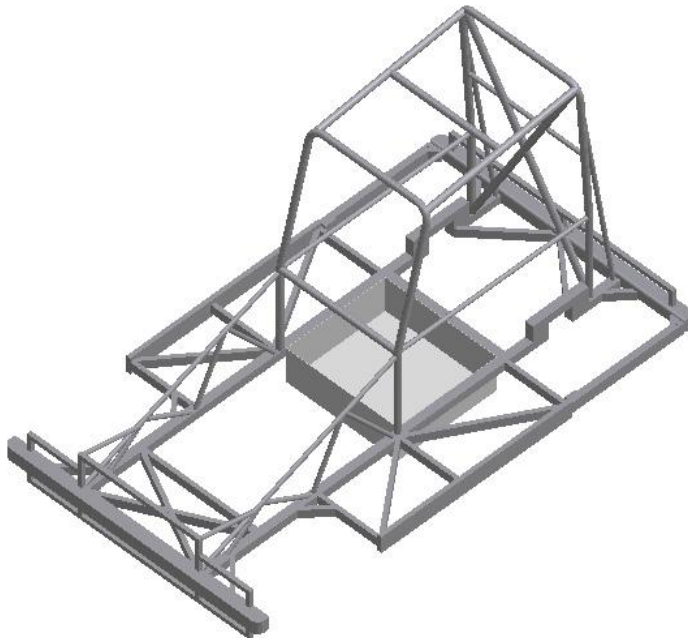
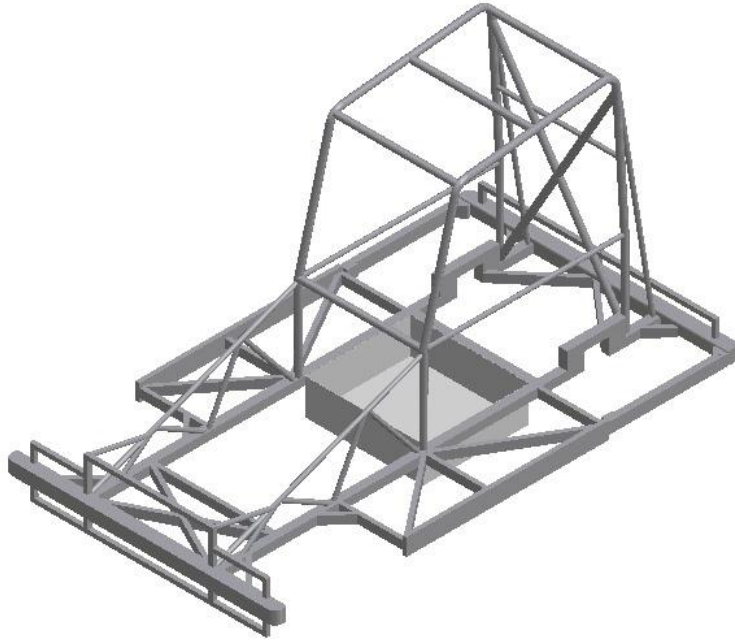


# APPENDIX A: 2003 SNZ MINISTOCK PLANS

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.



**APPENDIX B: 3D DIAGRAMS OF MINISTOCK ROLL CAGE**



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## SECTION T9-5: JUNIOR SOLOS

See also the relevant Training Programme, Section M6-13.

### 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 motocross boots providing ankle support.
- (c) **Trousers:** Leather motocross 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 of 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 S5.
- (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
- (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 R9-3.
- (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**

See also the relevant Training Programme, Section M6-13.

### **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 prizemonies 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 S5.
  - (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.

#### **R9-8 PEEWEE SOLO RACING RULES:**

- (a) Starts from a stationary position controlled by tapes, bungy, 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.

## **SECTION T9-9: JUNIOR SIDECARS**

See also the relevant Training Programme, Section M6-13.

#### **T9-9: Technical Specifications**

- T9-9-1** Overall length from the leading edge of the front tyre to the outside edge of the rear mudguard must not exceed 2100mm.
- T9-9-2** Overall width must not exceed 1250mm.
- T9-9-3** Wheelbase, taken at axle height and from the centre of the front axle to the centre of the rear axle must measure between 1500mm and 1200mm.
- T9-9-4** Stub axles must have a minimum diameter at the base plate of 25mm.
- T9-9-5** Wheel track taken between the tracks left by the centre lines of the rear motorcycle wheel and the sidecar wheel must measure between 800mm and 600mm.
- T9-9-6** The width of the kneeling pad on the off side of the motorcycle must not exceed 300mm.
- T9-9-7** The sidecar wheel must be covered by a non-rotating shield which must:
- (a) Be fitted securely to the sidecar.
  - (b) Incorporate a 20mm horizontal crash bar surrounding the outer side of the sidecar wheel at floor level.
  - (c) Cover at least the outward facing spoked area.
- T9-9-8** Rear mudguards:
- (a) Must be valanced on both sides down to axle level,
  - (b) Must be fitted with a 1 piece flexible mud flap without any slots, which:
    - (i) Is a minimum thickness of 6mm and be of a reinforced belting rubber
    - (ii) Is attached to the rear mudguard
    - (iii) Ends no more than 20mm above ground level ,
    - (iv) Is attached to 3 sides of the mud guard and projects forward by a minimum of 75mm on each side.
- T9-9-9** Front and rear rim diameter for the motorcycle must not exceed 482mm (19 inches).
- T9-9-10** Rear rim width for the motorcycle must not exceed 102mm and trail pattern tread may be fitted.
- T9-9-11** Hand holds and footrests must comply with the requirements for Senior Speedway Sidecars (Section T9-2).
- T9-9-12** Sidecar wheels and tyres:
- (a) Knobby tyres are not permitted,
  - (b) Cutting or grooving tyres is permitted,
  - (c) The sidecar wheel must be either spoked, moulded type mag, or other approved type wheel
- T9-9-13** Riveted type mag wheels are not permitted.
- T9-9-13** Engine capacity must not exceed 250cc. 4 stroke only permitted.
- T9-9-14** Machines must be fitted with unmodified production engines and may be fitted with an operating gearbox.
- R9-9-1** **Youth Licence Age:** 12-16 years as per Section M6-12.
- R9-9-2** Junior Sidecar Racing Rules: As per Section R9-3.

## T10-6 SIX SHOOTER SPECIFICATIONS AS AT 1 JULY 2012

### T10-6-1 General Dimensions

- (a) Wheelbase 2438mm (96") maximum, 2134mm (84") minimum.
- (b) Wheel track 1600mm (63") maximum, 1270mm (50") minimum.
- (c) Total weight at any time minus driver, Minimum 580kg, Maximum 800 kg.
- (d) Ballast is permitted, provided it is securely mounted in front of the firewall/engine plate.

### T10-6-2 Engine

- (a) Permitted engines are Holden Commodore V6 VN, VP and VR pre Ecotec.
- (b) Maximum capacity 3.8 litre plus 40 thou overbore.
- (c) Ecotec engine can be used from 1 September 2014. Ecotec injection can be used on earlier engine from 1 September 2014.
- (d) Harmonic balancer must remain standard and cannot be modified. Different sized steering pump and water pump pulleys may be used.
- (e) The core engine must remain standard as per OEM.
- (f) External modifications, which do not in any way affect performance gain, are allowed. Examples: Aftermarket rocker covers, external oil filters.
- (g) No titanium parts allowed in engine.
- (h) Cylinder heads must remain standard OEM.
- (i) No head porting or valve inserts permitted.
- (j) Valve springs may be replaced with aftermarket springs that comply to the same physical dimensions as the OEM springs.
- (k) Shims may be used under the valve springs to obtain uniform seat pressure.
- (l) Gaskets are a free non-technical item.
- (m) Stroke must remain standard at 86.3mm.
- (n) Aftermarket timing chains and gears may be used. Cam timing must be set to zero degrees advance when using adjustable chain/gear sets.
- (o) Engine may be balanced as per OEM ie EXTERNAL BALANCE.
- (p) No "knife edge", no major modifications to con rod balance pads, no counter weights or balance shafts to be removed or disabled.
- (q) Compression ratio must not exceed 9.5:1.
- (r) Camshaft may be replaced with a standard OEM item.
- (s) Engine to be sealed by SNZ approved Official.
- (t) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section G11-3 Technical Exclusions.

### T10-6-3 Inlet Manifold and Accessories

- (a) Throttle body must remain standard but may be repositioned on the manifold, internal dimension is 60mm max.
- (b) Inlet manifold must remain STD except for the following modifications:
  - (i) Throttle body mount may be repositioned on top of the manifold by use of a 7.62mm (3 inch) circular tube in the centre of the manifold without any major modifications.
  - (ii) PCV valve or passage must be blocked off and the return to the throttle body from the inlet manifold may be vented to the atmosphere. Additional natural crankcase ventilation via tappet covers allowed, no vent pumps, etc allowed.
  - (iii) Water jackets may be drilled and tapped to allow fitment of additional cooling outlets and fitment of water temperature sensors. No other water jacket reworking allowed.
- (c) No internal modifications allowed.

### T10-6-4 Injectors and Fuel Rail

- (a) Injectors must remain standard fitment.
- (b) Fuel rails and injector ports in the inlet manifold must remain standard.

### T10-6-5 Fuel Pump and Lines

- (a) Electric fuel pump must be used, wired to the SNZ control ECU (see T10-6-7), so as to stop the fuel pump when the engine is not running.
- (b) Fuel pump must be mounted forward of engine plate and in the engine bay.
- (c) Fuel return line must be fitted to the standard OEM fuel pressure regulator and return back to the fuel tank without any restriction.

### T10-6-6 Sump

- (a) Engine oil pan and pick up may be modified.
- (b) No dry sumps permitted.
- (c) A minimum 25mm inspection plug must be mounted into oil pan above the oil level and close to the oil filter (or owner/driver must be prepared to remove sump if asked to do so for checking).

### T10-6-7 Engine Management

- (a) Maximum rev limit up to 6000rpm.
- (b) Sequential Fuel Injection not permitted.
- (c) Only SNZ control ECU can be used.
- (d) Engine rev limit and ECU can be checked at any time by SNZ Officials.

### T10-6-8 Ignition System

- (a) SNZ control ECU to energise the coil pack.
- (b) Coil packs to be OEM style brands.
- (c) SNZ control ECU to shut down fuel pump when engine is not running.
- (d) 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.
- (e) All other ignition components to be mounted on firewall. Should ignition components be mounted on driver's side of firewall, the componentry is to be covered. Covers to be able to be removed for inspection.

### T10-6-9 Cooling System

- (d) Radiator hoses must be of reinforced construction only.
- (e) 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.
- (f) Radiators and Oil Coolers: To be mounted within the confines of the bodywork. Not to be mounted on Roll Cages.

### T10-6-10 Body

- (l) Single seater bodies only.
- (m) 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.
- (n) 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.
- (o) Seat must be bolted to chassis frame by a minimum of 4 x 6mm high tensile bolts and fender washes.
- (p) 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.

- (q) 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.
- (r) 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.
- (s) The motor plate must not be made of carbon fibre or any other composite material.
- (t) All panels and bonnets must be securely fastened primarily by way of dzus buttons minimum (bolts satisfactory). Plastic ties are not permitted.
- (u) Tail cone to be 24 gallons minimum size.
- (v) No aerodynamic devices, wings or aerofoils allowed.

#### **T10-6-11**

##### **Safety Harness**

Refer to Section S4.

#### **T10-6-12**

##### **Roll Cages**

- (i) All new cars or cars with rebuilt roll cages are to have roll cages of a minimum of 38mm x 2.5mm mild steel or 1 3/8" OD x 12 gauge chrome moly material suitably braced and securely mounted to the chassis and main members of the vehicle. Galvanised pipe is not permitted.
- (j) The top lines of both horizontal tubes to be no less than 80mm above drivers helmet when in normal restrained position.
- (k) Bottom Chassis Rail: To be a minimum of 0.095" - 2.41mm as applicable to new chassis built after July 2004.
- (l) Belly pan under drivers feet must extend from the front edge of the seat to the firewall.
- (m) Mirrors are not permitted
- (n) 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.

#### **T10-6-13**

##### **Front Axle**

An approved locking device must retain front hub bearings.

#### **T10-6-14**

##### **Steering**

- (h) Pitman arm to be secured to cross shaft by an approved locking device.
- (i) All front stub to steering arm fasteners and associated location holes to be checked for security at CVI inspection and suitably lockwired.
- (j) 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).
- (k) 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.
- (l) Steering wheel must be of competition type. Wood rim and road types of steering wheel are not permitted.
- (m) All designs and manufacture of quick-release steering wheels must be approved by SNZ.
- (n) Hollow or drilled bolts, fasteners or rod ends are prohibited.

#### **T10-6-15**

##### **Rear Axle**

- (d) Differential must be locked so that both axles turn at the same time.
- (e) Rear wheel drive only.
- (f) Single wheel and/or tyres only.

#### **T10-6-16**

##### **Transmission**

- (c) Standard or dog type clutch must be fitted.
- (d) 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.
- (e) Vehicle must leave the pits under its own power and not be pushed.

#### **T10-6-17**

##### **Shock Absorbers**

- (b) Shock absorbers must be fitted to axles.
- (c) No external adjustment methods allowed eg. No screws, knobs, or valves or remote reservoirs of any sort allowed. Steel and aluminium body shock absorbers permitted. No adjustable sway bars

#### **T10-6-18**

##### **Wheels and Tyres**

- (a) Wheel diameter: 381mm (15 inch)
- (b) All other wheel specifications are as per Section T14.
- (c) Tyres must be approved.

#### **T10-6-19**

##### **Brakes**

- (e) Effective brake to be fitted to rear axle.
- (f) Front brakes are optional and may be fitted to either wheel.
- (g) The brakes must be foot operated.
- (h) 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.

#### **T10-6-20**

##### **Bumpers**

- (g) Front bumpers to be no more than 280 mm (11") ahead of the front tyres. Front bumper and knurting irons to be a maximum of 25mm (1") diameter. No open ended tubing allowed.
- (h) When front bumpers are fitted, they are to be tubular only, "U" shaped, and no wider than the mounting points.
- (i) All vehicles must be equipped with knurting 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.
- (j) All knurting 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.
- (k) Bumpers where fitted, shall be designed and constructed on the underside to eliminate the danger of hooking other cars in the event of contact.
- (l) 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.

#### **T10-6-21**

##### **Exhausts**

- (c) Exhaust pipes can extend past the rear axle but not past the tail. Must be securely fastened.
- (d) **Mufflers:** refer T10-1-14(b)

#### **T10-6-22**

##### **Battery**

Must be secured in a safe position and suitably covered to prevent spillage of acid.

#### **T10-6-23**

##### **Fuel**

- Refer to Section E5 where applicable to Open Wheel vehicles, with the following alterations:-
- Approved fuels are Petrol and Methanol only, as defined in Section E5-1 of the SNZ Regulations.
- An additional simple on/off master tap must be fitted as close as practicable to the outlets of the fuel tank.
- The tank fuel tap must electrically turn off the fuel pump.
- The tap defined in Rule E5-8-1 is not required.

#### **T10-6-24**

##### **Controls**

- (e) Throttle controls must be of positive action.
- (f) At least two effective springs must be fitted with at least one to be attached to lever on butterfly shaft.
- (g) All connections must be properly secured.
- (h) Throttle pedal to have a half stirrup toe clip to enable mechanical closing of the throttle.
- (i) Self Starters are mandatory.

#### **T10-6-25**

##### **Racing Numbers: Refer also Section T7**

- (e) 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.
- (f) A number not less than 150mm x 15mm width per digit, be on the front centre of the bonnet.

#### **T10-6-26**

##### **Electronic Control**

For the use of any electronic devices refer to Section E4.

#### **T10-6-27**

##### **Placement of the Electronic Lapscoreing Transmitter**

Minimum 'A' Measurement as defined in Rule E4-4-6, is 2200mm.

#### **T10-6-28**

The Steward, only, has discretionary powers in rule E2-4-4(b) as to whether a car is fit to race.

#### **T10-6-29**

##### **Impounding a Six Shooter**

Refer to rules E2-2 to E2-7.

#### **Racing Rules**

Refer to Section R10-5 of the 2011 Rules and Regulations.

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