



Speedway

NEW ZEALAND

2017

GENERAL RULES &
REGULATIONS

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The **red** text in this rulebook highlights rules or regulations that have been introduced, corrected or amended via the consultation process. The **green** text in this rulebook highlights rules or regulations that were introduced, corrected or amended at the 2017 AGM.

SUBJECT TO CHANGE

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SPEEDWAY NZ CONTACT DETAILS

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Facebook	www.facebook.com/SpeedwayNZ

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Seaview, Lower Hutt 5010

Postal Address PO Box 39-236
Wellington Mail Centre
Lower Hutt 5045

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 Greymouth
- 17 Woodford Glen
- 18 Ruapuna
- 19 Moore Park
- 20 Cromwell
- 21 Dunedin
- 22 Oreti Park
- 23 Riverside



SPEEDWAY NEW ZEALAND MEMBER TRACKS

1 ROSEBANK (AUCKLAND)

Track Location: Rosebank Domain,
126 Patiki Road, Avondale, Auckland
Promoter: Auckland Speedway Riders Club
PO Box 70-063, Ranui,
Auckland 0655
Track Phone: 09 828 2173
Website: www.rosebankspeedway.co.nz



2 WESTERN SPRINGS (AUCKLAND)

Track Location: 1 Stadium Road,
Western Springs, Auckland
Promoter: Speedway Racing 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 & 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 155, Huntly 3770
Track Phone: 07 828 9681
Website: www.huntlyspeedway.co.nz



SPEEDWAY NEW ZEALAND MEMBER TRACKS

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: Clearize Limited
P O Box 14-335, Tauranga 3143
Track Phone: 07 571 0630
Website: www.bayparkspeedway.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: Hawkes Bay Speedway Limited
PO Box 3058, Napier, 4142
Track Phone: 06 834 4655
Website: www.meeaneespeedway.co.nz

SPEEDWAY NEW ZEALAND MEMBER TRACKS

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

SPEEDWAY NEW ZEALAND MEMBER TRACKS

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.easternstatesspeedway.net.nz



16 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



17 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



18 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



19 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



SPEEDWAY NEW ZEALAND MEMBER TRACKS

20 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

21 DUNEDIN



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

22 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.nz

23 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



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SPEEDWAY NEW ZEALAND 2017 CONSTITUTION

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) Full Members: Any individual or entity licensed by SNZ. They have voting rights or speaking rights at any Annual or Special General Meeting.
- (b) Directors of SNZ.
- (c) Officials of SNZ: They do not have voting rights at any SNZ General or Board meetings.
- (d) Life members: 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) General Members: Any individual or entity who by virtue of their interest and contribution to the general aims of the organisation may apply to be 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.

G7 ANNUAL AND SPECIAL GENERAL MEETINGS

- (a) The Annual General Meeting (AGM) will be held:-
 - (i) Before 1 July.
 - (ii) At a place decided at the previous AGM.
 - (iii) With 120 days notice in writing to all licenced tracks.
- (b) Each licensed track is entitled to send:-
 - (i) One 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 General Manager 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 General Manager at least 60 days prior to the AGM.
 - (ii) Will be circulated by the General Manager 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 General Manager 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

General Manager 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 General Manager 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 General Manager 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 to 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 General Manager.
- (c) The General Manager will, whenever possible, give one month's notice to all licensed tracks of the date of Board meetings.
- (d) The General Manager 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 General Manager to be of sufficient urgency.

- (f) Four will form a quorum at all meetings of the Board. If a quorum is not formed, the General Manager 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 General Manager, Head Official, 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.
- (p) Address and rule on the original intent of a rule.
- (q) The Directors may appoint a CEO if required

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 General Manager

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

C13-2 Head Official

- (a) The Head Official is appointed annually by the Board.
- (b) The duties of the Head Official are to supervise and direct all SNZ officials in their various capacities.
- (c) The Head Official may attend all SNZ and Board meetings and will have speaking rights but not voting rights.
- (d) The Head Official 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.
- (iv) 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 General Manager 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 General Manager 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 General Manager at least 40 days prior to the AGM.

C15-3 Changing the Technical and Racing Rules

- (a)
 - (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 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.
- (b) After consultation with the technical committees, competitors and tracks of the class concerned, the Board can alter or add to the regulations or technical rules relating to a class.

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 **bi-annually, in the same year as the election of technical committees**, at the Speedway NZ AGM.
 - (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 General Manager, 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.

SPEEDWAY NEW ZEALAND GENERAL REGULATIONS

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 T11-5: Production Saloons
- (xi) Section T12-1: Superstocks
- (xii) Section T12-2: Stockcars
- (xiii) 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 T10-7: Modified Sprints
- (ii) Section T15: Ministocks
- (iii) Section T15-2: Youth Ministocks
- (iv) Section T11-7: Youth Saloons
- (v) Section T10-8: Quarter Midgets
- (vi) Section T9-5: Junior Solos
- (vii) Section T9-7: Pee wee Solos
- (viii) Section T9-9: Junior Sidecars
- (ix) Section T10-6: Six Shooters

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(b).

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.
- (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:-
 - (i) Track name and locality.
 - (ii) Classes to be raced.
 - (iii) Proof of facility ownership, copy of facility lease or other relevant agreement.
 - (iv) 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** Insurance must be obtained via the SNZ group policy insuring a minimum of:
 - (i) General Liability cover of at least \$10,000,000
 - (ii) Associations Liability cover (if applicable) of \$3,000,000
 - (iii) Employers Liability cover of \$1,000,000
 - (iv) Statutory Liability cover of \$1,000,000
- 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:

- (i) 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.
- (ii) 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:

- (i) New Track Licence Application.
- (ii) Track Licence Renewal.
- (iii) 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:-

- (i) The length of the track.
- (ii) The classes permitted.
- (iii) 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:-

- (i) Section M2-10: Concrete Wall
- (ii) Section M2-11: Wire Rope Fence
- (iii) Section M2-12: Safety Netting Fence
- (iv) Section M2-13: Pit Gate & Chute
- (v) Section M2-14: Crowd Control Fence
- (vi) 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

- (a) Height: Posts will extend at least 1500mm above the concrete wall.
- (b) Location: Posts will be located no more than 2m from the front of the concrete wall, and no more than 5m apart. *Recommended distances are no more than 1500mm from the front of the wall, and 4m apart.*
- (c) Construction: Posts may be constructed of the following materials:-
 - (i) Railway Irons - 32kg minimum.
 - (ii) Black heavy pipe – 100mm nominal bore with a 5.4 mm wall.
 - (iii) Box section – 100mm x 100mm x 5 mm wall.
 - (iv) Box section – 150mm x 75mm x 5 mm wall.
 - (v) Universal beam - 150 UB 18kg per metre.
 - (vi) An approved equivalent.
- (d) Fitment: The posts must be secured at least to the following depths, depending on the method of fitment:-
 - (i) Fastened directly into the ground: Driven in at least 1500mm deep.
 - (ii) Sleeved: At least 1m below the surface, with the sleeve 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 115cm² 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 115cm².

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

M2-14-1 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.

M2-14-2 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

M2-15-1 All structures will be built and maintained to the satisfaction of the Track Inspector.

M2-15-2 After due application under Rule M2-4-2, the Board can alter or amend these minimum requirements.

M2-16 Motorcycle Only Tracks

M2-16-1 Solo and Sidecar tracks may be enclosed by a wooden safety fence and pit gate. A SNZ approved air fence may also be attached to the safety fence.

M2-16-2 Minimum height of wooden safety fence is 1 metre, measured from the track surface.

M2-16-3 Minimum thickness is 76 mm, with vertical posts spaced not more than 2.5m centre to centre, suitable for the protection of the public.

M2-16-4 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.

M2-16-5 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.

M2-16-6 A crowd control barrier will encircle the fence as per rule M2-14.

M2-16-7 All structures will be built and maintained to the satisfaction of the Track Inspector.

M2-17 Track Lighting

M2-17-1 When floodlighting is used it must be adequate for the purpose, with no dark patches on the track surface.

M2-18 Control Lights/Flags

M2-18-1 Each track must have at least six sets of red, yellow and green lights.

M2-18-2 Placement: At least one in every corner and approximately halfway along each straight.

M2-18-3 Daylight racing: Red and yellow lights to be supplemented by red and yellow flags.

M2-18-4 Tracks racing Sidecars and/or Streetstocks to have all control lights visible from both clockwise and anti-clockwise directions.

M2-19 Pole Line & Infield

M2-19-1 The Pole line is to be clearly defined at all times.

M2-19-2 Pole line Height: Maximum of 100mm above the infield and track surface.

M2-19-3 Pole line is not to constitute a hazard to competitors.

M2-19-4 Pole lines constructed of tyres are not permitted.

M2-19-5 Objects placed on the infield must be no closer than 12 metres from the pole line.

M2-19-6 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 1.8m².

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.

M2-24-8 A concrete pit or approved equivalent 3.2m x 2.4m x150mm must be provided for the use of SNZ approved scales. This applies to tracks running car classes, effective from 1 September 2016. Every SNZ licensed venue must have calibrated scales available suited to the purpose of weighing the race vehicles that they hold permission to run under their track license.

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.

M3 MEETINGS, PRACTICES & TRAINING

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.

M3-4-3 The maximum number of infield personnel during a race (excluding competitors) is 38.

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 General Manager, 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 continue a meeting which has been rained off or otherwise halted during a meeting. This date can be advertised in advance.
- M3-12-3** Allocated Titles: See Section M4-30 for additional information.

M3-13 Training

M3-13-1 Definition:

Any on track activity by speedway vehicles that isn't categorized as racing or practicing.

M3-13-2 Permit:

An SNZ training permit is required, issued by the Track Steward or by Speedway NZ.

M3-13-3 No practicing or racing can occur under a training permit.

M3-13-4 First Aid Personnel:

There must be a minimum of a St John Level 2 Certified first aid person (or approved equivalent) in attendance.

M3-13-5 First Aid Equipment:

Minimum first aid equipment is a St John's Sports Kit (Part #402280), or approved equivalent.

M3-13-6 Fire fighting equipment:

Minimum of one foam extinguisher, one powder extinguisher, and 1 x 20 litre water vessel. All extinguishers must have been certified in the last 12 months.

M3-13-7 Landline or Cellphone must be available for emergencies.

M3-13-8 Officials:

A SNZ Steward and Speedway NZ Approved Trainer/s are to be in attendance. Tracks wishing to submit nominations for approved trainers should ensure the nominee completes the "Application for Warrant Card" form, and returns them to the SNZ Office.

M3-13-9 Flag Marshalls:

At least one must be present.

M3-13-10 Car Training:

There are to be no more than two cars on the track at any one time.

M3-13-11 Participant Licensing:

If the participant does not hold a competition licence, they must obtain a training licence, for either one day or the current season.

M3-13-12 No unlicensed participants are permitted on any Speedway NZ track, at any time.

M3-13-13 Any participant 16 years or over can train in an adult class without affecting their licence status, including Youth licence holders. Fees apply.

M3-13-14 Participants obtaining a training licence can subsequently upgrade to a full licence by paying the appropriate fee difference.

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 by a 5 year rotation system voted in 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 Lapscoring 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.

(d) New Zealand Stockcar Teams Championship

This event is considered an allocated title, and all relevant allocated title rules apply apart from the following exceptions:-

- (i) Only one team per licensed track.
- (ii) Competitors must be licensed to the track they represent.
- (iii) The winning track is allocated the title for the next season.

M4-2-5 Track Grading for New Zealand and Grand Prix titles only

- (a) All facilities must be able to accommodate the crowd, competitors & associated vehicles pertaining to their championship being held.
- (b) 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, Senior Official 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
- (c) 2 toilet blocks / 25 toilets minimum, sufficient lighting and all in good working order (2 disabled person toilets).
- (d) Grader, welder, water truck and appropriate vehicles depending on the class racing.
- (e) Running water in pits.
- (f) Electronic lap scoring, fully operational and with competent personnel operating the system (N/A for Sidecars or Solos).
- (g) Competent marshalls, track staff, announcers and PA system for crowd and pits
- (h) Health and safety in place and operating
- (i) Fire crew, crash crew, medics and appropriate vehicles in the infield. (Including specialised infield personnel depending on the classes racing).
- (j) Adequate ticket boxes, entrance way and signage.
- (k) Adequate results board – with plenty of room around it for checking of results.
- (l) Fully operational website / media releases process.
- (m) All amenities and grounds of the facility must be in a presentable condition.
- (n) Minimum car numbers as below:-

New Zealand Title	Mininum 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
U21 Solos	3	1	4	\$1,000
Sidecars	4	0	4	\$4,000

Note: Sidecars minimum refers to contracted Sidecar teams, i.e 4 contracted riders and 4 contracted passengers

- (o) Minimum prize money for Grand Prix to be no less than 50% of the prizemoney minimum for New Zealand Titles.

M4-2-6 New Zealand Titles

New Zealand titles for the period from 2016/17 to 2020/21 are allocated as follows:-

Season	Superstocks	Stockcars	Super Saloons
2016/17	Palmerston North	Kihikihi	Cromwell
2017/18	Waikaraka Park	Gisborne	Baypark
2018/19	Woodford Glen	Baypark	Huntly
2019/20	Wanganui	Greymouth	Woodford Glen
2020/21	Rotorua	Meeanee	Waikaraka Park

Season	Saloons	Sprintcars	Midgets
2016/17	Waikaraka Park	Ruapuna	Nelson
2017/18	Woodford Glen	Western Springs	Huntly
2018/19	Meeanee	Cromwell	Stratford
2019/20	Huntly	Palmerston North	Ruapuna
2020/21	Riverside	Baypark	Western Springs

Season	Modifieds	TQ Midgets	Streetstocks
2016/17	Greymouth	Meeanee	Stratford
2017/18	Stratford	Nelson	Riverside
2018/19	Waikaraka Park	Ruapuna	Rotorua
2019/20	Wellington	Western Springs	Meeanee
2020/21	Woodford Glen	Greymouth	Dunedin

Season	Minisprints
2016/17	Wellington
2017/18	Stratford
2018/19	Palmerston North
2019/20	Stratford
2020/21	Wellington

Season	Sidecars	Solos	NZU21 Solos
2016/17	Wanganui	Oreti Park	Moore Park
2017/18	Meeanee	Moore Park	Rosebank
2018/19	Moore Park	Rosebank	Oreti Park
2019/20	Gisborne	Oreti Park	Moore Park
2020/21	Oreti Park	Moore Park	Rosebank

M4-2-7 Grand Prix Titles

Exception to rule M4-2-5: Grand Prix titles for the period from 2016/17 to 2020/21 are allocated as follows:-

Season	Superstocks	Stockcars	Super Saloons
2016/17	Meeanee	Rotorua	Riverside
2017/18	Rotorua	Stratford	Wellington
2018/19	Nelson	Huntly	Meeanee
2019/20	Palmerston North	Woodford Glen	Blenheim
2020/21	Huntly	Gisborne	Baypark

Season	Saloons	Sprintcars	Midgets
2016/17	Baypark	Nelson	Ruapuna
2017/18	Blenheim	Palmerston North	Western Springs
2018/19	Wellington	Riverside	Huntly
2019/20	Kihikihi	Baypark	Nelson
2020/21	Cromwell	Western Springs	Stratford

Season	Modifieds	TQ Midgets	Streetstocks
2016/17	Woodford Glen	Western Springs	Rotorua
2017/18	Wellington	Greymouth	Woodford Glen
2018/19	Stratford	Nelson	Waikaraka Park
2019/20	Waikaraka Park	Meeanee	Wellington
2020/21	Greymouth	Ruapuna	Nelson

Season	Minisprints	Sidecars	Solos
2016/17	Huntly	Rosebank	Rosebank
2017/18	Wellington	Gisborne	Oreti Park
2018/19	Kihikihi	Oreti Park	Moore Park
2019/20	Palmerston North	Meeanee	Rosebank
2020/21	Stratford	Nelson	Oreti Park

M4-2-8 North & South Island Titles

- (a) Exception to rule M4-2-5: North Island titles for the period from 2016/17 to 2020/21 are allocated as follows:-

Season	Superstocks	Stockcars	Super Saloons
2016/17	Huntly	Palmerston North	Stratford
2017/18	Palmerston North	Huntly	Huntly
2018/19	Wellington	Meeanee	Palmerston North
2019/20	Waikaraka Park	Kihikihi	Wellington
2020/21	Wanganui	Baypark	Meeanee

Season	Saloons	Sprintcars	Midgets
2016/17	Meeanee	Western Springs	Huntly
2017/18	Huntly	Baypark	Stratford
2018/19	Baypark	Palmerston North	Baypark
2019/20	Wellington	Western Springs	Western Springs
2020/21	Kihikihi	Palmerston North	Kihikihi

Season	Modifieds	TQ Midgets	Streetstocks
2016/17	Stratford	Huntly	Wellington
2017/18	Waikaraka Park	Meeanee	Kihikihi
2018/19	Wellington	Western Springs	Stratford
2019/20	Stratford	Huntly	Rotorua
2020/21	Wellington	Meeanee	Gisborne

Season	Minisprints	Sidecars	Solos
2016/17	Kihikihi	Meeanee	Palmerston North
2017/18	Palmerston North	Wanganui	Rosebank
2018/19	Waikaraka Park	Gisborne	Palmerston North
2019/20	Wellington	Palmerston North	Rosebank
2020/21	Huntly	Rosebank	Palmerston North

- (b) Exception to rule M4-2-5: South Island titles for the period from 2016/17 to 2020/21 are allocated as follows:-

Season	Superstocks	Stockcars	Super Saloons
2016/17	Woodford Glen	Nelson	Woodford Glen
2017/18	Nelson	Blenheim	Blenheim
2018/19	Woodford Glen	Woodford Glen	Riverside
2019/20	Nelson	Riverside	Cromwell
2020/21	Woodford Glen	Greymouth	Dunedin

Season	Saloons	Sprintcars	Midgets
2016/17	Dunedin	Cromwell	Ruapuna
2017/18	Cromwell	Nelson	Nelson
2018/19	Riverside	Ruapuna	Ruapuna
2019/20	Woodford Glen	Riverside	Nelson
2020/21	Blenheim	Nelson	Ruapuna

Season	Modifieds	TQ Midgets	Streetstocks
2016/17	Woodford Glen	Nelson	Blenheim
2017/18	Greymouth	Ruapuna	Woodford Glen
2018/19	Woodford Glen	Greymouth	Nelson
2019/20	Greymouth	Ruapuna	Dunedin
2020/21	Woodford Glen	Nelson	Riverside

Season	Sidecars	Solos
2016/17	Ruapuna	Moore Park
2017/18	Oreti Park	Oreti Park
2018/19	Nelson	Moore Park
2019/20	Moore Park	Oreti Park
2020/21	Ruapuna	Moore Park

- (i) That the South Island tracks are able to handback any currently allocated South Island Championship prior to the AGM without penalty. Any handed back championship will be re-allocated to any South Island track that meets the track requirements by the promotions team after consultation with SNZ and all registered South Island competitors of the class concerned.

M4-3 Championship Re-allocation

- (a) Any track not wanting to take up a championship allocated to them can hand it back for reallocation by the Promotion Team in consultation with SNZ and potential new host tracks. Championship must be handed back a

minimum of 2 months before the AGM 2 seasons prior to when they were due to host it.

- (b) Any track failing to meet the criteria for 2 successive seasons prior to them hosting a championship will be removed from the rotation and the championship will be reallocated by the Promotion Team in consultation with SNZ and potential new host tracks.

M4-4 Allocated Title Dates

M4-4-1 New Zealand Championship

Proposed date must be submitted to SNZ to be approved by 31st **March** prior to the season of the event.

M4-4-2 New Zealand Grand Prix

Proposed date must be submitted to SNZ to be approved by 30th **April** prior to the season of the event.

M4-4-3 North Island and South Island Championships

Proposed date must be submitted to SNZ to be approved by 31st **May** prior to the season of the event.

M4-4-4 Allocated titles cannot take place before December 1 in the relevant season.

M4-4-5 Championship dates for the 2017-18 season only must be submitted for approval as per the previous deadlines. New Zealand Championship 31st May 2017, New Zealand Grand Prix 30th June 2017, North & South Island Championships 31st July 2017.

M4-5 Allocated Title Entry Forms

M4-5-1 Must be submitted to the SNZ Office no later than six weeks prior to the approved title date.

M4-5-2 Must be made available to all potential entrants and be posted on the SNZ website, www.speedway.co.nz.

M4-5-3 Tracks can charge an approved non-refundable entry fee. The proposed fee is to be included on the entry form, for approval by SNZ.

M4-6 Non-Performance

M4-6-1 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.

M4-6-2 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.

M4-6-3 A request to hand back an allocated title must be approved, and will incur a \$1,000 fine.

M4-7 Eligibility to Enter Allocated Titles

M4-7-1 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.
- (iv) Late Entries: At the discretion of the promoter, and if stated on the entry form, late entries can be accepted and a non-refundable fee of \$50 can be charged.
- (v) Notifying their own Promoter of their intention to compete at least 14 days prior to the event.
- (vi) Obtaining a clearance from their own Promoter.

M4-8 Specific Additional entry criteria

M4-8-1 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.

M4-8-2 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.

M4-8-3 New Zealand Grand Prix: No additional conditions apply.

M4-9 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.

M4-10 Eligibility of Vehicles

- M4-10-1** 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.
- M4-10-2** Vehicles must be compliant with all Technical Regulations at an allocated title.

M4-11 Officials

M4-11-1 New Zealand championships:

At least two Senior Officials will be appointed to officiate.

M4-11-2 North and South Island, Grand Prix and major teams' meetings:

At least one Senior Official will be appointed to Officiate.

M4-12 New Zealand Championship & SNZ Allocated Solo/Sidecar Titles Practice

- M4-12-1** The host track is required to hold at least one practice to enable visiting drivers to familiarise themselves with the track and conditions.
- M4-12-2** The timing of this practice is to be optional but must be stated on the entry form.
- M4-12-3** Sidecars only: Practice must be run at least two hours before the commencement of the event.

M4-13 Drivers Briefing

- M4-13-1** All appointed Senior Officials will be introduced to competitors by the Clerk of the Course at the drivers briefing.
- M4-13-2** A drivers representative will be elected at this meeting.
- M4-13-3** The drivers briefing can discuss changes to the programme and any procedural requirements.

M4-14 Substitute Vehicles

- M4-14-1** Are permitted in Solo and Sidecar Allocated titles
- M4-14-2** Are not permitted in all other Allocated titles

M4-15 Substitute Competitors

- M4-15-1** Are permitted in Solo and Sidecar Allocated titles.
- M4-15-2** The next highest pointscorer or placegetter can replace a qualifier that is unable to start in the first race of the championship finals.

M4-16 Additional Scrutineering Requirements

M4-16-1 Superstocks and Stockcars must be weighed before specified allocated titles by systems approved by SNZ.

M4-17 Vehicle Rechecking at New Zealand Championships

Refer to Section E2-9.

M4-18 Lap scoring and results

M4-18-1 A backup lap scoring system must be used.

M4-18-2 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.

M4-18-3 SNZ will issue certificates to the first three placegetters at Allocated titles.

M4-19 Prizemoney

M4-19-1 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.

M4-19-2 All payments must be paid within 30 days unless appealed.

M4-19-3 If prizemoney is not forthcoming, refer to Section M3-8 Fidelity Fund.

M4-20 FORMAT AND GRID DRAWS: MOTORCYCLE ALLOCATED TITLES

M4-20-1 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 will be decided by countback in the following order until a decision can be reached. who beat who when the competitors met. competitor with most wins, competitor with most highest placings or a race-off only if the above do not yield a result.

- (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.

M4-20-2 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.

- (a) The competitors shall wear helmet colours to denote their starting position in each heat
- (b) Starting position colours from Gate 1 (pole) to Gate 4 (fence) shall be:
 - Gate 1 – Red
 - Gate 2 – Blue
 - Gate 3 – White
 - Gate 4 – Yellow

M4-20-3 The 16 competitors shall draw for racing number 1-16.

M4-20-4 Should more than 16 entries be received refer rule M4-19-10.

M4-20-5 In the event of a competitor having trouble in his elimination test they may, at the discretion of a Senior Official (or their appointee) be entitled to one other attempt.

M4-20-6 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.

M4-20-7 Points to be a 3 2 1 basis to determine the Championship.
In the event of a tie, a run off to be held.

M4-20-8 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.

M4-20-9 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.
- (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 Senior Official (or their appointee) and all competitors notified at the competitors' briefing.

M4-20-10 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 Stipendary 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.

**M4-21 FORMAT AND GRID DRAWS:
OPEN WHEEL ALLOCATED TITLES**

M4-22 Points are awarded from 1st to last, regardless of whether the car crosses the line to receive the chequered flag.

M4-23 Option One – One Race Final

M4-23-1 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
- (d) Optional: Qualifying format:
 - (i) Competitors are split into 5 groups and race in 2 heats as follows:

	Heat1	Heat2	Heat3	Heat4	Heat5
Outside row	Gp1	Gp3	Gp5	Gp2	Gp4
Inside row	Gp2	Gp4	Gp1	Gp3	Gp5

- (ii) The second heat is in reverse grid draw to the first marble draw and on different row.
- (iii) The top 16 highest points qualify for the final race.
- (iv) Remaining competitors go in Semi–Main to determine the remaining finalists.
- (v) Highest points start on front row of grid for final race and so on down.

M4-23-2 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.

M4-23-3 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.
Optional: The top 6 points scorers will take place in a pole shuffle to determine the first 6 grid positions.
- (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.

M4-24 Option Two – A Main Format

M4-24-1 All cars draw to establish qualifying order.

M4-24-2 Qualifying consists of a two-lap time trial back to back, the fastest of which is counted.

M4-24-3 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.

M4-24-4 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.

M4-24-5 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.
- (b) 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.

M4-25 Option Three- Six Group Qualifying Format

- M4-25-1** Drivers will be split in to six groups (dependant on no. of entries)

- M4-25-2** Each group will race each other once over two nights – three heats on night one and two heats on night two.
- M4-25-3** The top 16 points scorers after all 5 heats have been completed will qualify directly to a winner takes all final race.
- M4-25-4** The driver highest on points will have the choice of grid 1 or 2 for the final with the second highest points scorer starting from the leftover grid. Drivers positioned 3rd – 16th on points will fill grids 3 – 16 for the final.
- M4-25-5** All remaining drivers will race in a last chance ‘B Main’ race. The first 4 drivers to cross the finish line after a set number of laps (determined by the host track) will transfer to the winner takes all final race. These drivers will fill grids 17-20.
- M4-25-6** If more than 16 drivers are left to race in the B-Main, two B-Main races may be held with the first two drivers to cross the finish line from each race transferring to the final.
- M4-25-7** In the case of a tie on points the driver who has the highest finishing position in any of the five heat races will be deemed highest qualifier.
- M4-25-8** Final race will be held over a set number of laps determined by the host track but will not be less than 20 laps.
- M4-25-9** Final race to consist of 20 cars.
- M4-25-10** The winner of the final race will be the winner of the championship.
- M4-26 Option Four – Alternative Format**
- M4-26-1** The promoter has the right to apply to SNZ to offer an alternative championship format.

M4-27 FORMAT AND GRID DRAWS:
SUPER SALOON,
SALOON, MODIFIED
AND PRODUCTION
SALOON ALLOCATED
TITLES

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

- M4-28 Option One – 3 Heat Finals**
- M4-28-1 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) Repechages may or may not be run at the discretion of the host track or promoter. Where repechages are included the highest unqualified competitors start from the front of the grid.
- (c) Two repechages are required when more than 36 entries are received.

M4-28-2 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 per diagram right:-
- (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.

M4-29 Option Two – A Main Format

M4-29-1 All cars draw to establish qualifying order.

M4-29-2 Qualifying consists of a two-lap time trial back to back, the fastest of which is counted.

M4-29-3 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.

M4-29-4 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.

M4-29-5 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.

M4-30 Option Three – One Race Final

M4-30-1 Qualifying

- (a) Elimination Heats and repechage(s) are held to find a maximum of 20 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

M4-30-2 Heats to determine grid for final

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

M4-30-3 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.

M4-31 Option Four - Alternative Format

- M4-31-1** A Promoter has the right to apply to SNZ to offer an alternative format.

M4-32 FORMAT & GRID DRAWS: SUPERSTOCK, STOCKCAR & STREETSTOCK TITLES

M4-32-1 Superstocks & Streetstocks:

Finals to consist of 26 competitors, racing over three heats.

M4-32-2 Stockcars:

Finals to consist of a maximum of 30 competitors, racing over three heats.

M4-32-3 No competitor can be seeded directly into the finals.

M4-32-4 Points are awarded as per finishing position from 26 points for first to 1 point for 26th.

M4-32-5 Highest point scorer over three heats is the winner.

M4-32-6 In the case of a tie on points for first, second or third place overall, there will be a 4-lap run off.

M4-32-7 Grid draws are as follows:-

Race 1	Race 2	Race 3
Grid	Grid	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

M4-32-8 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.

M4-32-9 The promoter has the right to apply to SNZ to offer an alternative championship format.

M4-33 Weather Affected Allocated Titles

M4-33-1 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'.

M4-33-2 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.

M4-33-3 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.

M4-33-4 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.

M4-34 All Other Championships

M4-34-1 Any promoter may run an approved competition in order to ascertain their "Track Champion" in a class.

M4-34-2 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 | (iv) Grand Prix |
| (ii) New Zealand | (v) World |
| (iii) Nationals | (vi) International |

A fee may apply.

M4-35 New Zealand Team

M4-35-1 Before a promoter may conduct or advertise any event or Test Match which features a New Zealand team, they must obtain permission from SNZ.

M4-35-2 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.

M4-35-3 All New Zealand team members must be selected by an SNZ-appointed selection panel.

M4-35-4 A New Zealand Team Manager can be appointed by SNZ.

M4-35-5 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
- (iii) 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

M5-2-1 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: Head Official
- (ii) M5-3-3: Senior Official
- (iii) M5-3-4: Steward
- (iv) M5-3-9: Assistant Steward

M5-3-2 Head Official

Refer to Section C13-2 for the duties of this position.

M5-3-3 Senior Official

- (a) A Senior Official is appointed by the Board to assist, advise, or supervise Stewards & Referees in the carrying out of their duties, and if necessary assume control.
- (b) Senior Officials can impose penalties as per Rule M7-2-5.
- (c) A Senior Official 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 Senior Official in the South Island and at least two Senior Officials in the North Island.
- (e) Any competitor or party may request a Senior Official 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

- (a) The Steward must ensure they have no responsibility for the organisation of a meeting nor have any executive duty in connection therewith.
- (b) 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) M5-4-3: Referee
- (iii) M5-4-4: Assistant Referee

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 be 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 rollcage, steering, suspension and other safety-related components have 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

M5-6-2 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

M5-7-1 The Official responsible for declaring the order in which competing vehicles pass the finishing line.

M5-7-2 The Chief Lapscore will use approved lapscore equipment to determine the results of all races.

- M5-7-3** The Chief Lapscorer must be proficient in the racing rules pertaining to the class being raced.
- M5-7-4** 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.
- M5-7-5** The right to make such a correction is subject to the approval of the Referee of the meeting.
- M5-8 Starter**
- M5-8-1** The Official responsible for displaying flags to competitors at the start/finish line.
- M5-8-2** 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 Marshall**
- 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 Marshall**
- 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.
- M5-15 Team Manager**
- Appointed by a Superstock or Stockcar team to co-ordinate off-track responsibilities.

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
- (iii) Those competitors that move up from youth class to adult class must complete a mentor programme in the adult class they wish to partake in.

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 license 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 license cannot be issued to a driver to take part in an Allocated title or other championship event.

M6-5-5 The one-day license must be witnessed by a fully licensed competitor who must accept all responsibility for the rules and regulations and any penalties that may be bestowed on the holder of the one-day license.

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, while on the property of any Speedway NZ licensed venue.

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 injured at an SNZ track who has received hospital treatment is 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 competitors licence.

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

M6-11-4 A medical clearance is 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

(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 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

- (a) You must have an SNZ Licence before you race.
- (b) You must go through the SNZ training programme (see below) before being allowed to race.
- (c) 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.
- (d) 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:

- (a) driving, setting up the vehicle (general guides to maintenance), and the rulebook.
- (b) safety, flags, racing rules, general first aid.
- (c) fostering good manners and a willingness to help each other.
- (d) 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

- (a) Organise with the Steward for Training Session permits.
- (b) Organise and have track prepared for training sessions.
- (c) Help with officials for the running of the Youth programme.
- (d) Have flags, first aid, fire fighting equipment on hand.
- (e) 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

- (a) For new competitors and those not yet confident or skilled enough to fully compete in an open field.
- (b) Holders of a 'B' licence must race only at their home track for a minimum of 6 meetings or practices, and should start off the rear of the field.
- (c) When visiting cars are racing at their home track, they can race only with the approval of the coach.
- (d) '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

- (a) For experienced youth competitors.
- (b) Holders of an 'A' licence can travel to other SNZ licensed tracks.
- (c) '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

- (a) Appropriate behaviour must be maintained at all times by competitors, crew and family.
- (b) Courteous behaviour is expected at all times.
- (c) All competitors, crew and family in pit area must wear full footwear. NO BARE FEET OR JANDALS.
- (d) All drivers' briefings must be attended.
- (e) SNZ and track Officials must always be obeyed.
- (f) 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

- (a) 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.
- (b) The wearing of a neck brace is compulsory.
- (c) Helmets - See S3-1 of the SNZ Rulebook
- (d) Drivers Suit - See S3-8-3 of the SNZ Rulebook
- (e) Footwear - See S3-8(c) of the SNZ Rulebook
- (f) 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.
- M7-2-5 A Senior Official** has the authority to penalise as follows:-
- Reprimand which can be private or public.
 - Exclude competitors from the results of the race.
 - Fine competitors up to \$300.
 - 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.
 - Report a competitor within seven days of the date of the offence to the Directors, for possible further penalty
 - Penalise as per Section M7-4, Specific Technical Offences.
 - 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:-
- Reprimand which can be private or public.
 - Fine up to \$200.
 - Suspend for up to 22 days, starting from the date of the offence.
 - Report a competitor within seven days of the date of the offence to the Directors, for possible further penalty.
 - Penalise as per Section M7-4, Specific Technical Offences.
 - Declare a vehicle, component or safety item non-compliant.
 - Suspend any competitor under the jurisdiction of SNZ effective from time of pronouncement until the findings of the Board are advised in writing by the SNZ Office
- M7-3 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.

- (a) Failure to report to the weigh bridge when requested will result in the competitor being 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.

M7-4-5 Tampering or interfering with any measurement process will result in the competitor incurring the penalty for breaching the rule being checked

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 Any competitor with an outstanding account payable to Speedway New Zealand is not eligible to race until such time as the account is settled in full.

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 on or 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 A protest about the penalty imposed can only be made by the competitor who received the penalty.

M7-8-12 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.

M7-8-13 When a competitor has been shown a black flag/board for excessive noise, NO protests can be entered into.

Protest Committee

- M7-8-14** 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.
- M7-8-15** The Steward is the Chairperson of the Committee.

The Protest Hearing

- M7-8-16** The protest will be heard on the day/night of the protest being lodged.
- M7-8-17** 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.
- M7-8-18** 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.
- M7-8-19** In the case of a racing incident the Referee must be interviewed by the Protest Committee.

Decision of the Protest Committee

- M7-8-20** The Protest Committee reach a decision by majority vote.
- M7-8-21** 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.
- M7-8-22** 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.
- M7-8-23** All protest results must be stated on the Protest form or SNZ letterhead.
- M7-8-24** 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 \$500.
- (a) If the protest will require engine dismantling, the Protest fee is \$2,500.
- 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 Protest fee 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 \$500 or up to \$2,500 will be handed to the competitor against whom the protest is lodged.

M7-10 Appeals

- M7-10-1** Every SNZ member adversely affected by the outcome of:
- (a) A racing infringement that has resulted in a protest, Exception: Teams Racing Rules & Sidecar / Solo Rules;
(b) A technical infringement;
(c) A SNZ Hearing outcome.
- M7-10-2** Any appeal so lodged, will not operate as a stay against any penalty imposed.
- M7-10-3** All appeals shall be conducted within the rules of natural justice, to which end the parties to the appeal will receive all information pertinent to the subject matter of the appeal, they will be given a fair

opportunity to respond to the subject matter of the appeal and they will be heard by an unbiased Tribunal.

M7-10-4 The burden of proving an appeal shall be on the appellant.

M7-10-5 Any appeal hearing shall not be a hearing de novo.

M7-10-6 An appellant will have been successful, if the appellant can establish on a balance of probabilities that the decision appealed from is wrong.

M7-10-7 Lodging an appeal

- (a) An appellant must lodge an appeal on the prescribed Appeal Notice found on the SNZ website. Such Appeal Notice is to be delivered to the General Manager SNZ, by email in the first instance, with a hard copy following by post or personal delivery.
- (b) Such appeal shall be accompanied by payment of an appeal fee of \$2,000.00.
- (c) The Appeal Notice and fee must be deposited within 7 days following the decision appealed from.
- (d) The General Manager of SNZ shall on receipt of an appeal and the appeal fee within 7 days copy the appeal to the Appeal Committee Chairperson

M7-10-8 The Appeal Committee

- (a) A minimum of 5 persons shall be nominated by the Board and ratified at an AGM of SNZ to be members of the Appeal Panel.
- (b) Appeal Panel members must be members of SNZ.
- (c) Appeal Panel members cannot be current SNZ directors.
- (d) The Chair of an Appeal Committee will be selected by the President of SNZ from the available Appeal Panel.
- (e) An Appeal Committee shall consist of a Chairperson, and two persons from the Appeal Panel.
- (f) The President of SNZ will select one such member and the appellant the other.
- (g) All communications regarding an appeal shall be through the office of the General Manager of SNZ and on no account should an appellant communicate directly with any member of an Appeal Committee.

M7-10-9 Hearing

- (a) An appeal shall be heard at the first available opportunity.
- (b) The Appeal Committee may regulate its own procedure, subject only to the rules of natural justice.

- (c) The Appeal Committee will strive to provide a prompt, practical and fair process from the hearing of appeal.
- (d) Such appeal may be heard in person, by video link, telephone or other media as decided by the Appeal Committee, having first heard from the appellant and the respondent.
- (e) SNZ shall provide a written Response to the matters raised in the appeal, such response to include copies of all reports, notes and other records created of the matter appealed against.
- (f) The parties may be represented or assisted in any Proceeding by a lay person of their choice. Legal or professional representation is prohibited. If the Allegation involves a minor, they may have their parent or legal guardian present, in addition to a lay person of their choice. However, only one of these has speaking rights, unless approved by the Judiciary Committee. NB. This does not preclude seeking legal advice prior to the hearing.
- (g) The SNZ General Manager will ensure that all members of the Appeal Committee, the appellant and the respondent receive copies of all documentation relevant to the appeal.
- (h) The hearing shall proceed as follows:
 - (i) The appellant shall present his or her case.
 - (ii) The respondent shall respond to the appeal.
 - (iii) The appellant will be given an opportunity to make further submissions to the Appeal Committee but only in response to any matters raised by SNZ and not previously addressed in the appellant's submissions.
 - (iv) Members of the Appeal Committee can ask questions at any time.

M7-10-10 Result

- (a) The Appeal Committee shall give its decision in writing within 7 days of having heard the appeal.
- (b) 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.
- (c) The decision of the Appeal Committee shall be final and binding.
- (d) The Appeal Committee has discretion on disposal of the appeal to determine the outcome of the appeal fee paid, and to award costs.

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.

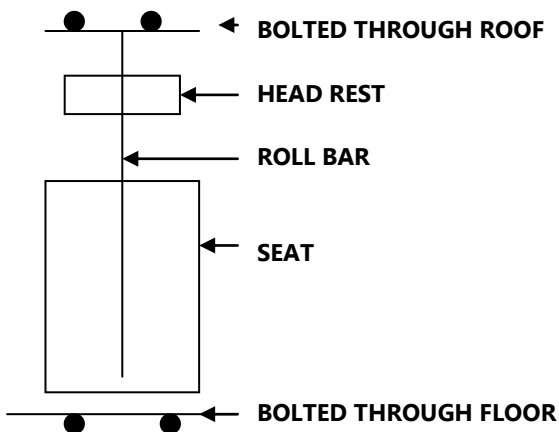
Steps 1 to 5 will all take place at and during the meeting and should be completed no later than one hour after the last race on the programme.

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 AND SPECIFICATIONS INCLUDING CARAVAN, TEAMS AND RAMP 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. UNLESS IT SAYS YOU CAN THEN YOU MUST NOT.
- 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, racing tyres or spacesaver 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.

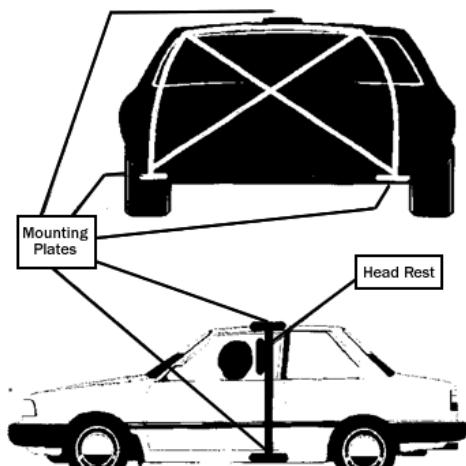
- D1-2-13** Cars can only move forward on the track and in an anticlockwise direction, strictly within the confines of the track.
- D1-2-14** Competitors will be disqualified when driving on the infield unless the track is completely blocked. Competitors must return to the track immediately after passing 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** Rollbar material: 38mm OD 3.2mm wall thickness steampipe or RHS.
- D2-1-7** Diagonal cross must be fitted inside roll bar.
- D2-1-8** Rollbar 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 Rules R12-3-20 to 25.
- 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.

D4-1 Ramp Derby: Additional Racing Rules

D4-1-1 One ramp is permitted on one of the straights.

D4-1-2 Maximum height of ramp from the track surface = 300mm.

D4-1-3 Minimum length of ramp = 2400mm.

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 Should the scrutineer find non-compliance, the scrutineer must record the non-compliance on the reverse side of the pre-meeting/race vehicle registration documentation.

E2-2-5 If the non-compliance be of a nature that cannot be safely remedied on the day of the inspection, rules E2-4-4(a) & (b) must apply with the non-compliance recorded in the log book.

E2-2-6 A pre-meeting/race vehicle registration is only valid for and on the date entered on the registration document.

- E2-2-7** No express or implied warranty of safety shall result from any inspection.
- E2-2-8** 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.
- E2-2-9** 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.
- E2-2-10** Vehicles damaged or altered after they have been approved are subject to re-inspection and approval.
- E2-2-11** The Steward will make the final decision on the safety and eligibility of an accident damaged vehicle.
- E2-2-12** 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.
- E2-2-13** Any vehicle declared illegal must be inspected as directed by a Senior Official 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 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

- (a) The issuing official will contact the competitor, track Official and promotion and advise of the relevant details. (Also read Section M7-4 Penalties)
- (b) It is the duty of the Steward to approve and sign technical inspection results before they are posted on the track noticeboard.
- (c) It is the duty of the Steward to ensure that technical inspection results are posted and that the time of posting is recorded on the results.
- (d) When a race is completed, all results will be provisional until regulatory vehicle/component compliance inspections are completed and 10 minutes have passed with no protest

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.

- E2-4-5** Engine Seals and/or Impoundment Seals fitted by Stewards and/or Technical Stewards are to be seals easily distinguished as "Official Seals" from seals used by Approved Engine Measurers.
- E2-5** **Inspection by Request**
- E2-5-1** 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.
- E2-5-2** Vehicles that are subject to New Zealand Championship engine inspection rules contained in Rule E2-9, may at any time prior to the event, contact a Technical Steward who will measure, seal and document the engine specification in the rear of the log book, then affix Technical Steward seals and record the engine seal numbers. 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
 - (c) ultrasonic testing
- 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** TQ Midgets and Midgets: Engines measured by a Technical Steward and sealed by a Technical Steward prior to the NZ Championship as in (rule E2-5-2), will be deemed to comply with the appropriate specification.
- E2-9-5** 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.
- E2-9-6** 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).
- E2-9-7** 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.

- E2-9-8** 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.
- E2-9-9** 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 or Swept Volume of an Engine

This rule explains the volume swept by all the pistons inside the cylinders of a reciprocating engine in a single movement from top dead centre (TDC) to bottom dead centre (BDC).

The capacity of a Rotary engine produced under Wankel Licence is the manufacturers stated capacity of one working chamber, multiplied by the number of rotors.

E3-3-2 Cubic Capacity

The Cubic Capacity of an engine must be found by using approved precision measuring equipment to accurately measure the bore and stroke.

The Cubic Capacity will be calculated by the following formula;

$(\text{Bore}) \times (\text{Bore}) \times (\text{Stroke}) \times (\text{Number of Cylinders}) \times 0.7854$
= Cubic Capacity.

E3-3-3 Compression Ratio

The compression-ratio of an engine will be defined as the ratio of the maximum cylinder volume when the piston is at bottom dead centre known as (BDC) to the minimum cylinder volume (the clearance volume) with the piston at top dead centre known as (TDC) - that is, the sum of the swept volume and clearance volumes divided by the clearance volume.

E3-3-4 Compression Ratio Tests

- (a) Compression Ratio screening tests using the Katech Whistler are approved. Should an engine compliance issue arise with the Whistler, refer rules contained in E2-3. The final determination will be found by way of clause (b) below.
- (b) The compression ratio of an engine must be determined by using approved precision measuring equipment. The compression ratio must be verified by the Columbus Compression Ratio/Capacity method.

E3-3-5 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.

E3-4 OE, OEM and Aftermarket Parts

E3-4-1 OE Parts

Parts that SNZ required to be OE, are parts that must be Original Equipment parts. Original equipment parts are used by automotive manufacturers in a vehicle when the vehicle left the assembly factory. That OE part must have been made under contract by an OEM supplier, i.e. Yamaha, Bosch, Lucas, Nippon Denso, KYB or other OEM supplier.

- E3-4-2** In these rules when referring to 'standard', 'standard production' and 'OEM' parts, the parts will be recognised by SNZ as 'OEM' parts. OEM parts must be a part made by the manufacturer of the original part.

- E3-4-3** To comply with clause E3-4-1 & E3-4-2 there must be no removal, alteration or covering of any casting numbers, part numbers, manufacturers name, logo's, insignias, from the part.
- E3-4-4** OEM parts will mean that the part, dimension and specification must be manufactured for a mass produced production road vehicle.
- E3-4-5** "OEM" is the abbreviation for original equipment manufacturer.
- E3-4-6** Purpose built race vehicles are not mass produced production road vehicles. Examples of purpose built race vehicles that require OEM parts include; Three Quarter Midget, Minisprint, Saloon, Stockcar, Modified, Superstock, Streetstock, Modified Sprint, Quarter Midget, Ministock, Six Shooter.
- E3-4-7** **OEM Replacement Parts**
Parts that may have OEM prominently displayed but followed by a qualifier such as "meets OEM standards" are not OEM; they are aftermarket parts simply claiming to have been manufactured to the same physical specifications as the OEM parts—specifications that may well be unpublished and different to the OEM part.
- E3-4-8** **Aftermarket**
An aftermarket part is made by a supplier other than the OE or OEM manufacturer.
- E3-5** **Ready to Race**
A race vehicle is 'ready to race' once it has passed scrutineering on the day/night in question.
- E3-6** **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.
- E3-7** No electro-plating is permitted on roll cages.
- E3-8** **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) |

E3-9**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

E3-9-1**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.

Approved one-way radio communication is compulsory in all National classes and must be used at all race meetings.

- Only SNZ officials or Clerk of the Course can communicate with competitors at any time.
- Race directors can communicate with drivers for race series only and must be approved by the promotion, Clerk of the Course and Senior Official.
- It is the competitors responsibility to ensure their receiver is in working order at race meetings.
- Solo and Sidecars are exempt from this rule.

E4-1-2

A consistent specifically placed master kill switch is required in ALL vehicles effective 1/9/2016. Refer to Technical Committees for placement.

E4-1-3

Ignition system settings must not be able to be accessed by the driver when in his normal seated position.

Devices with Microprocessors are permitted for the following uses;

- (a) Control of engine ignition in relevant 'ECU controlled classes'.
- (b) Control of engine ignition and fuel injection in relevant 'ECU controlled classes'.
- (c) Control of engine ignition in relevant 'Open ECU classes'.
- (d) Control of engine ignition and fuel injection in relevant 'Open ECU classes'.
- (e) Continuous logging of Data of engine parameters.
- (f) Continuous logging of Acceleration, GPS position and recorded Video.
- (g) Continuous logging of Competitor heart rate.
- (h) Digital displays and/or the display of Data/Information to the competitor.
- (i) Electronic power steering

E4-3 Devices with Microprocessors are NOT permitted for the following uses:

- (a) Electronic Traction Control. EXCEPTION: Rule T11-5-41.
- (b) Control or adjustment of shock absorbers or spring heights.
- (c) Continuous logging of Data of any kind. EXCEPTIONS: Rules E4-2 (d),(e),(f).

E4-4 In car cameras must be safely mounted and must not point directly at the driver. Recorded footage must not be distributed in the event of injury. SNZ reserves the right to any recorded footage at an SNZ event.

E4-5 A list of SNZ controlled ECU's and vendors can be found at www.speedway.co.nz

E4-5 Electronic Lap Scoring

E4-5-1 The official hardware for electronic lapscore on a SNZ track is Dorian Data-1™ or AMB TranX260 timing system.

E4-5-2 The official software for electronic lapscore on a SNZ track is Natsoft Scoring/Timing System or AMB Orbits3.

E4-5-3 The official transmitter for electronic lapscore on a SNZ track is Dorian Data-1 TX 8000™ or AMB Personal TranX260.

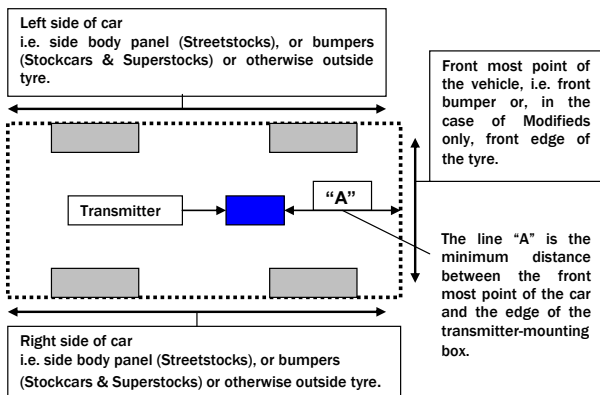
E4-5-4 The loop width of the under track antennas will be a maximum of 1.1 metres.

E4-5-5 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.

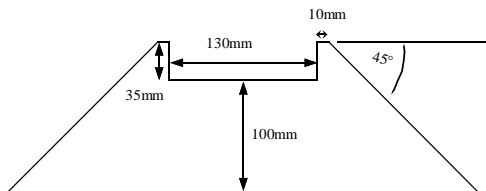
E4-5-6 Placement of the transmitter

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

1200mm	Superstocks, Stockcars, TQ Midgets
1250mm	Midgets, Minisprints, Modified Sprints
1350mm	Ministocks (RHS of footwell recommended)
1500mm	Sidecars
1800mm	Saloons, Super Saloons, Production Saloons
2000mm	Streetstocks, Modifieds
2200mm	Sprintcars



- (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 next page).



(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.

E4-5-7 All vehicles must have a correctly mounted and functioning transmitter in order to successfully pass scrutineering at a race meeting. Exceptions: Solos and Sidecars

E4-5-8 Solo motorcycles do not need to use the Dorian Data-1 timing and scoring system.

E4-5-9 A backup lap scoring system must be used at allocated titles.

E4-5-10 For operation of Dorian Data-1 Timing/Scoring system and Natsoft Timing and Scoring System refer to SNZ handbook entitled Electronic Timing and Scoring.

**AMB Personal TranX260 Transmitter
Placement and Mounting**

This minimum measurement is from the most forward part of the vehicle (front bumper, or front cross tube if no bumper fitted), to the centre of the transmitter.

- TQ's 185mm minimum
- Midgets 225mm minimum
- Sprintcars 285mm minimum

The Transmitter mounting bracket will be secured to the chassis by two 8mm wide heavy duty nylon cable ties or two metal hose clips with a further cable tie wrapped around transmitter (when mounted in bracket), securing it to the chassis rail.

HANDY HINTS DORIAN DATA-1 TX8000 TRANSMITTER

Charging

- Allow the transmitter to charge uninterrupted for 9 hours prior to use.
- Transmitter can run for 9-10 days once fully charged (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.



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

Green Light	Red Light	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 Light	Red Light	Meaning
Flash x6 sec	Off	Fully charged over 24 hours ago
Flash x2 sec	Off	Fully charged within the last 24 hours
Off	Flash x1 sec	Battery running low – a few hours left
Off	Flash x6 sec	About one hour of charge left in the battery
Off	Off	Unit flat. Recharge for 9 hours.

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 \$195, 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.

Courier Address for Speedway NZ's transmitter repair service:-

Speedway NZ
Pelorus Trust SportsHouse
93 Hutt Park Road
Seaview, Lower Hutt 5010

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 current NZ Engine Fuel Specifications Regulations. (See www.speedway.co.nz for details).
- (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:
- (a) Methanol
- (b) Avgas
- (c) Petrol
- (d) Ethanol/petrol blended fuel containing up to 85% ethanol (E85) Note: E85 not permitted for liquid cooled TQ Midgets.
- (e) 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:
- (a) Avgas
 - (b) Petrol
 - (c) Ethanol/petrol blended fuel containing up to 85% ethanol (E85) Note: E85 not permitted for Saloons.
- E5-2-3** Ministocks are permitted to use the following fuels as defined in section E5-1-1:
- (a) Petrol
 - (b) 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 Open Wheel 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** 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 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 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)

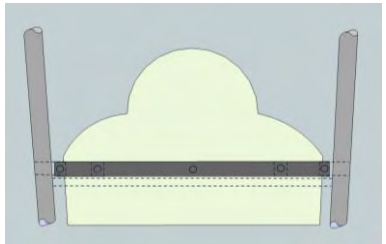
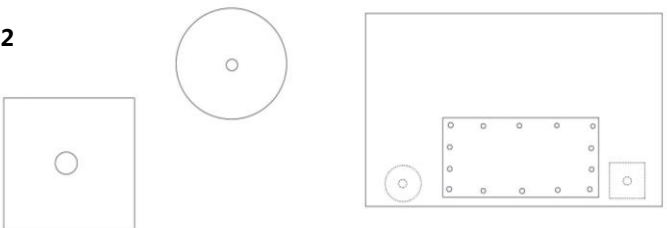


Figure 2



E5-7-6 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:



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

- (i) Fuel lines and return lines must be secured to the chassis at the fuel tap and at intervals of not more than 300mm.
- (ii) Fuel lines must be located at least 100mm away from any uncovered electrical contact i.e ignition switches and electrical cabling.

E5-9-7

Saloons, Super Saloons, Modifieds, Stockcars and Superstocks: Insulation Grommets must be fitted where fuel lines pass through bulkheads, panels etc to prevent chafing.

E5-10

Refuelling

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

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:-

- (a) A paramedic that has authority to practice as an Intermediate Life Support Paramedic (ILS) in addition to a First Responder or Primary Care Officer.
- (b) An ambulance that meets the NZ Standard: NZS 8156:2008
- (c) Any attending medical crew must be able to verify their qualifications to the track steward. Consideration must be given by the track promotion for events with increased competitor numbers.

S2-2 Safety Equipment

S2-2-1 Infield Equipment

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

- (a) An efficient crash crew and vehicle equipped with auxiliary fire fighting equipment to go to the aid of a competitor in difficulty. All fire extinguishing equipment must meet servicing and certification requirements.
- (b) Fire extinguishers to be located on the infield to include:-
 - (i) Two 9kg Dry Powder extinguishers (ABE Type)
 - (ii) One 3kg Carbon Dioxide type extinguisher
 - (iii) One 20 litre water vessel or water extinguisher
 - (iv) At least two 9-litre Foam AFFF Extinguishers
- (c) Other equipment stationed on the infield/Crash truck to include:-
 - (i) tools/wrecking gear
 - (ii) A safety spotlight (night events only)
- (d) The crash crew is to be in position on the infield during all races, with the engine running.

S2-2-2 Pit Area Equipment

- (a) At all meetings and practices, the following extinguishers must be provided at a central position in the Pit Area
 - (i) One 9kg Dry Powder extinguisher
 - (ii) One 3kg Carbon Dioxide type extinguisher
- (b) 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.
- (c) All competing vehicles to carry their own fire extinguisher as part of their "pit area" equipment. Compliance will be verified at green sheeting

S2-2-3 Infield Equipment

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

- (a) An efficient crash crew and vehicle equipped with auxiliary fire fighting equipment to go to the aid of a competitor in difficulty. All fire extinguishing equipment must meet servicing and certification requirements.
- (b) Fire extinguishers to be located on the infield to include:-
 - (i) A minimum of four 9kg Dry Powder extinguishers (ABE Type)
 - (ii) One 3kg Carbon Dioxide type extinguisher
 - (iii) A minimum of one 50 litre water vessel or water extinguisher
 - (iv) A minimum of four 9-litre Foam AFFF Extinguishers
- (c) Other equipment stationed on the infield/Crash truck to include:-
 - (i) tools/wrecking gear
 - (ii) A safety spotlight (night events only)
 - (iii) Suitable cutting gear
- (d) The crash crew is to be in position on the infield during all races, with the engine running.

S2-2-4 Pit Area Equipment (Four wheel meetings)

- (a) At all meetings and practices, the following extinguishers must be provided at a central position in the Pit Area
 - (i) A minimum of two 9kg Dry Powder extinguisher
 - (ii) A minimum of two 9-litre Foam AFFF Extinguishers
- (b) 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.

- (c) All competing vehicles to carry their own fire extinguisher as part of their "pit area" equipment. Compliance will be verified at green sheeting

S2-2-5 Inspection of Equipment

The Steward is responsible for inspecting the firefighting 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:

- (a) It is the responsibility of the Competitor to ascertain the effectiveness of personal safety equipment. Each competitor is expected to investigate and educate themselves with the effectiveness and availability of personal safety equipment.
- (b) Any inspection of such equipment by an official or volunteer will not transfer this responsibility.

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:-*

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

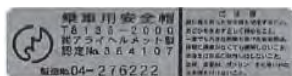
S3-2 Minimum Helmet Standards

S3-2-1 Solo and Sidecar

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

The ECE mark also consists of a circle surrounding the letter E followed by the distinguishing number of the country which has granted approval

- (c) Japan: JIS T 8133:2000 (see sample below left)
- (d) USA: SNELL M2000 or M2005 (see sample below right)



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

- Snell Standard SA2005, SA2010, SA2015, SAH2010 or SAH2015 and labelled as such (below top left).
- SFI Foundation 31.1 (Open face) or 31.2 (Closed face) or 24.1 (Youth classes) and labelled as such (below top right).
- British Standards Institute (BSI) BS6658-85 type A/FR (below bottom right). Not valid after 1 September 2016.
- FIA Standard 8860 & 8858 (below bottom left)



S3-2-3 Open Wheel and Modified Classes

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

- Snell Standard SA2000 (not valid after 1 September 2016), SA2005, SA2010, SA2015, SAH2010 or SAH2015 and labelled as such (above top left).
- SFI Foundation 31.1 (Open face) or 31.2 (Closed face) or 24.1 (Youth classes) and labeled as such (above top right).
- British Standards Institute (BSI) BS6658-85 type A/FR (below right). Not valid after 1 September 2016.
- FIA Standard 8860 & 8858 (above, below left).

S3-3 Helmet Fit and Attachments

- 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.
- Each competitor will be required to prove good fit of their helmet.
- All helmets, regardless of approved marks, must provide temple protection (commonly known as 'Jet' or 'Open Face' or 'Full Face').
- 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.

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

All competitors, including sidecar passengers must wear:

- (a) leather jackets, leather trousers, leather knee boots, and leather gloves or other suitable protective clothing, i.e. Kevlar. The shoulders, elbows, hip joints and knees must be padded with at least a double layer of leather, similar or protective pads. Vinyl type suits and/or Motocross style protective clothing is acceptable, but must include full body armour providing protection to the chest/kidney and body areas as mentioned. Motorcross style top and pants must under/overlap and if not attached together, an under garment (which may be part of the armour) long enough to avoid exposing the body must be worn
- (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.
- (d) A back protector which is either commercially manufactured or an integral part of the jacket/suit/body armour must be worn and extend the full length of the back from collar to base of the spine
- (e) Boots constructed of leather or other material of similar or greater durability, but not rubber, and must provide ankle and calf protection and under/overlap the suit or trousers when the rider is in the normal riding position. Sidecar riders and passengers may wear "ankle boots" which must cover at least the ankles and be of the mentioned construction.
- (f) Long hair must be securely restrained

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 that meets one of the following standards:
 - (iii) FIA8856-2000 or Norme 1986 Standard
 - (ii) SFI Spec 3.2(A)
 - (iii) ISO 6940
- (b) Approved protective underwear is compulsory for Single layer suits.
- (c) Driver Accessories: The various items that complement a driver's suit to protect the wearer are compulsory. This covers gloves, underclothing, hoods, socks, shoes, boots, helmet supports, arm restraints that meet one of the following standards:
 - (i) FIA8856-2000 or Norme 1986 Standard
 - (ii) SFI Spec 3.3
 - (iii) ISO 6940
- (d) If two-piece overalls are worn, they must be attached together, that is pants and jacket by zips or dows.
- (e) The wearing of flame retardant gloves while driving in competition and practices is compulsory.
- (f) Gloves manufactured of flame resistant material and arm restraints are compulsory.
- (g) Balaclava – made of fire retardant material, must be worn and tucked into the neck line of the race suit.
- (h) Footwear (shoes and socks) of Fire retardant material and that completely enclose the foot and cover the ankles must be worn. Socks made from 100% wool are approved.
- (i) 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 that meets one of the following standards:
 - (i) FIA8856-2000 or Norme 1986 Standard
 - (ii) SFI Spec 3.2(A)
 - (iii) ISO 6940
- (b) Approved protective underwear is compulsory for Single layer suits.
- (c) Driver Accessories: The various items that complement a driver's suit to protect the wearer are compulsory. This

covers gloves, underclothing, hoods, socks, shoes, boots, helmet supports, that meet one of the following standards:

- (i) FIA8856-2000 or Norme 1986 Standard
 - (ii) SFI Spec 3.3
 - (iii) ISO 6940
- (d) If two-piece overalls are worn, they must be attached together, that is pants and jacket by zips or dows.
- (e) All Superstock, Stockcar and Streetstock drivers to wear an approved, neck brace while driving in competition and practice.
- (f) Footwear (shoes and socks) of Fire retardant material and that completely enclose the foot and cover the ankles must be worn.
- (i) Standard leather upper work boots with an AS/NZS Safety Standard are approved for Stockcars, Superstocks, Streetstocks, & Ministocks.
 - (ii) Socks made from 100% wool are approved.

S3-9

Open Wheel Classes: Head and Neck Restraint

The use of an approved head restraint device is compulsory in TQ Midgets, Midgets, Sprintcars and Minisprints.

- (a) Systems compliant to FIA standard 8858-2002 and 8858-2012 or SFI standard 38.1 are the only devices authorised.

Note: SFI 38.1 devices must be recertified for use every 5 years by an approved re-certifier.

- (b) All devices requiring Tether Posts shall be worn with a compliant helmet bearing one of the following standard markings or higher:
- (i) FIA: 8860 & 8858
 - (ii) SFI : 31.1 or 24.1
 - (iii) Snell: SA 2005, SA2010, SA2015, SAH 2010 & SAH2015.
 - (iv) British Standard: BS 6658-85 A/FR (not valid after 1 September 2016).

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

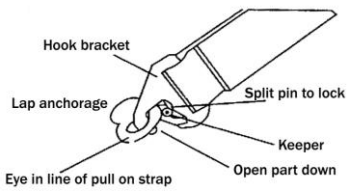
S4-1-1 When arm restraints are worn with a restraint system that utilises a "latch lever", a protective cover installed to prevent the arm restraint from accidentally releasing the latch lever is permissible.

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.

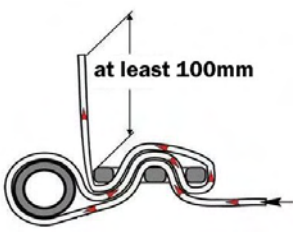
S4-1-4 Snap in Mountings

Where eye bolts are permitted, 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 as per diagram (above).



S4-1-5 Wrap Around Mountings

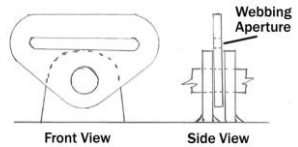
- (a) Seatbelt webbing may be wrapped around the safety roll cage, or wrapped around a separate reinforcement bar 25mm minimum diameter.
- (b) The 'bar' may be solid or pipe and must be at 90 degrees to the line of the webbing.
- (c) Wrap around type mounts must terminate in a 3-bar slider attachment, threaded to manufacturer's instructions.
- (d) The 3-bar slider to be outside and clear of the seat and as close to the structure as possible.



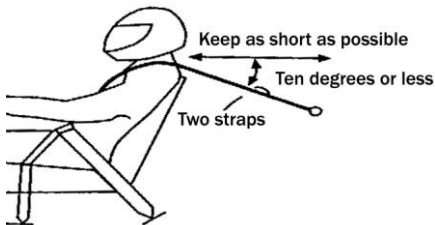
- (e) Note: SFI Seat belt specification 16.5 does not permit wrap around mountings for the lap belt.

S4-1-6 On fabricated vehicles and OEM (Streetstock and Production Saloon) vehicles the seat belt buckles must be bolted to either of the following:

- The structure of the vehicle. In OEM vehicles, permitted reinforcing of the structure of the vehicle is deemed as any plate or RHS 3mm minimum thickness, welded at least two sides.
- Mounting plates 8mm thickness with corners rounded.
- 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 above).
- Minimum distance between seat belt mounting hole and unsupported or open edge of structure or mounting plate is 25mm.
- All seat belt buckles must be self aligning.
- Seat belt buckle mounting bolts minimum 10mm diameter.



S4-1-7 Shoulder belts 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 as below.



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.

- (c) Midgets only: All cars to be fitted with roll cage nets on both the left and right sides of the roll cage.
 - (i) All roll cage nets must conform to SFI Specification 37.1, which specifies a functional quick release opening mechanism.
 - (ii) The life of roll cage nets shall not exceed two (2) years.
 - (iii) Caution should be used when positioning head restraining nets to be certain that the driver's head cannot get under the net in case of an accident. The bottom of the roll cage net should be as close to the top of the shoulder as possible.
 - (iv) Roll cage side head nets are not required when an approved full containment seat is utilised.

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 Seats and Seat Belts

S4-2-4 Approved aluminum and composite seats may be used, no fibreglass. Seats must be mounted with minimum of 4 x 6mm high tensile bolts and fender washers.

S4-2-5 It is mandatory that all cars have a headrest of high impact, shock-absorbing material behind the driver's head with a minimum thickness of 25mm.

S4-2-6 Seat belts must meet the following specification:

- (a) SFI 16.5, SFI 16.1 or
- (b) FIA homologated standard 8853/98 or 8854/98, and Must be within label expiry date or two years from date of manufacturer, or earlier at the discretion of an inspecting official.

S4-2-7 The same date of manufacture must be indicated on all three SFI labels

- (a) at the left lap belt
- (b) at the left shoulder harness and
- (c) at the Anti-Sub Strap.

The label date to be recorded on CVI sheet.

S4-2-8 Seat belts and seats must be installed and used in accordance with manufacturer's instructions.

Note that SNZ Approved full containment seat fitting instructions are available from SNZ.

S4-2-9 The belts length 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 belts pass through the seat the edges must be rolled or have grommets fitted to prevent chafing or cutting of the belt material.

- S4-2-10** The seat belt must be worn correctly at all times when vehicle is in motion.
- S4-2-11** Crotch belt or sub-belts anchoring point to provide a direct pull from the quick release mechanism.
- S4-2-12** 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.
- S4-2-13** Holes may be made in the seat if this proves to be necessary in order to avoid such an occurrence.
- S4-2-14** 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 chafing or cutting of the belt material. Seat belts showing signs of chafing against sharp edges must be rejected.
- S4-2-15** Under no circumstances may seat belts be secured to the seat.

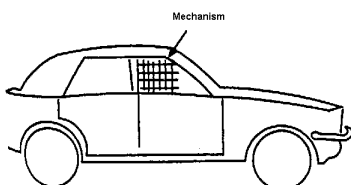
S4-2-16 Method of Application

- 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 Super Saloons, Saloons, Production Saloons, Superstocks, Stockcars, Streetstocks and Ministocks

S4-3-1 Window Net

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 Seats and Seatbelts

- S4-4-1** The vehicle must be fitted with an approved, quick release, full harness safety belt, fitted as per the manufactures instructions. 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. When using an approved head and neck support device, the minimum width of the shoulder belt is 50mm.
- S4-4-2** Safety Harness must display dated certification label of manufacturer and must meet SFI standard 16.1, 16.5 or FIA homologated standard 8853/98. This date to be recorded on vehicle green sheet.
- S4-4-3** Stockcars and Superstocks: Seat Belts to be within five years from date of manufacture, or earlier at discretion of inspecting official.
- S4-4-4** Other classes: Seat Belts to be within five years from date of manufacture, or earlier at discretion of inspecting official.
- S4-4-5** The same date of manufacture must be indicated on all three SFI labels
- (a) at the left lap belt
 - (b) at the left shoulder harness and
 - (c) at the Anti-Sub Strap.
- The label date to be recorded on CVI sheet.
- S4-4-6** Seat belts and seats must be installed and used in accordance with manufacturer's instructions.
- S4-4-7** Where SNZ Approved Full Containment Seats are permitted, SNZ approved seats fitting instructions are available from SNZ and must be fully complied with.
- S4-4-8** The belts length 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 belts pass through the seat the edges must be rolled or have grommets fitted to prevent chafing or cutting of the belt material.

- S4-4-9** The seat belt must be worn correctly at all times when vehicle is in motion (the exception being the grand parades - not hot laps).
- S4-4-10** Crutch belt or sub-belts anchoring point to provide a direct pull from the quick release mechanism.
- S4-4-11** 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.
- S4-4-12** 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.
- S4-4-13** 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.
- S4-4-14** Seat belts showing signs of chaffing against sharp edges must be rejected.
- S4-4-15** Under no circumstances may seat belts be secured to the seat.
- S4-4-16** **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.

T2 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 T7: RACING NUMBERS

T7 Racing Numbers

T7-1 Every race vehicle must carry racing numbers to clearly identify the competitor to officials, spectators and other competitors.

T7-1-1 **Definition:** The racing number is defined as the one-colour numeral/s, the track letter code and the one-colour border immediately adjacent to the numbers and track code.

T7-1-2 Racing number and track code specifications are as per the Technical regulations of the relevant class.

T7-1-3 Chrome numbers / Borders are not permitted. Numbers that share the approved border space are acceptable, but numerals cannot overlap, see sample below:

APPLICABLE TO ALL CLASSES WITH NUMBER BORDERS

 ✓ Acceptable - numerals can be spaced

Note: All racing numbers must include the track code - back, side, front, back, wing etc

 ✓ Acceptable - numerals can share borders

 ✗ Not Acceptable - numerals cannot overlap, are considered illegible

T7-2 Permitted Numbers

T7-2-1 Numbers 1, 2 & 3

1, 2 and 3 are reserved for the placegetters at the New Zealand Championship of the relevant class.

- (a) Placegetters at the New Zealand Championship must change their racing number to reflect their finishing position of 1NZ, 2NZ, or 3NZ.

Their regular racing number will be placed on hold for them until the next running of the New Zealand Championship.

T7-2-2 Zero

0 is not permitted as a racing number.

T7-2-3 Two digit numbers

- (a) All numbers from 4 to 99 are permitted, excluding 20, 30, 40, 50, 60, 70, 80 and 90.
- (b) Two-digit numbers are issued by the contracting track.
- (c) Only one competitor or vehicle from each class is permitted to be allocated the racing number at each track.

T7-2-4 Three digit numbers

- (a) These are permitted in all classes, excluding Motorcycle (Section T9) and Open Wheel (Section T10) classes.
- (b) All numbers beginning and ending in zero are not permitted.
- (c) 101 and 111 are not permitted.
- (d) Three-digit numbers are issued by SNZ, who keep a national allocations register.
- (e) Only one competitor in each class can be issued the three-digit number.
- (f) There is a one-off \$50 fee payable for the initial approval of a three-digit number.
- (g) A competitor automatically relinquishes their three-digit number when they haven't obtained a full competition licence for two seasons.

T7-3 Track Code

T7-3-1 All competitors must display the letter code (see T7-4) of the track they are contracted to, in conjunction with their racing number.

T7-3-2 Exception: Competitors earning the right to run 1, 2 and 3 may replace their track code with the letters NZ.

T7-3-3 Exception: Overseas Competitors (as defined in Section M6-6) from the relevant country must use the approved national designations in T7-4 instead of a track code.

T7-4 Approved Letter Codes

A	Western Springs, Waikaraka Park and Rosebank
B	Meeanee
C	Ruapuna, Woodford Glen and Moore Park
D	Dunedin
E	Blenheim
G	Gisborne
GM	Greymouth

H	Huntly
I	Oreti Park and Riverside
K	Kihikihi
M	Baypark
N	Nelson
P	Palmerston North
R	Rotorua
S	Stratford
T	Cromwell
V	Wanganui
W	Wellington
NZ	New Zealand Championship Placegetter
AUS	Australia
GB	Great Britain
NL	Netherlands
USA	USA

T7-5 Track Code Sizes

T7-5-1 Motorcycles, TQ Midgets: Letters to be at least 50mm high, with a stroke width of at least 7mm.

T7-5-2 All other classes: Letters to be at least 100mm high, with a stroke width of at least 13mm.

T7-6 Vehicle Identification Number (VIN)

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

SECTION T9-1

SOLO MOTORCYCLES



**2016-17 NEW ZEALAND SOLO CHAMPION
BRADLEY WILSON-DEAN**

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.
- (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) Track Code Size: Letters to be at least 50mm high, with a stroke width of at least 7mm.
- (c) Bibs or T shirts may be worn, but riders to have number on their back. All numbers must be legible and of contrasting colours.
- (d) Solo Numbers 1, 2 and 3 to be reserved for NZ Championship placegetters, and to be displayed 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 SIDECAR SPECIFICATIONS



2016-17 NEW ZEALAND SIDECAR CHAMPIONS DEREK AND MATTHEW RAMSAY

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

- (a) The tubing used in the construction of the mainframe of a motorcycle sidecar shall have a minimum diameter of 25mm and minimum wall thickness of 1.5mm.
- (b) The use of light alloys in the construction of the frame and front forks is forbidden.
 - (i) The front fork yokes or device to transfer load from the legs to the steering head are not to be a fabrication of an aluminium alloy. Extruded one piece or machined from billet aluminium of good design is acceptable. If U-bolts are used a minimum of 8mm diameter on 32mm fork legs.
 - (ii) All bushed shock mounts must be fitted with non-pull through washers or fit inside a double bracket to ensure shocks cannot pull through their mount bolt.
- (c) The height of any part of a Sidecar to be no higher than ONE (1) metre (at time of measurement, both wheels are to be in a straight line).
- (d) The use of titanium is forbidden (except engine parts).

T9-2-4 Engine

- (a) The cubic capacity of the machine is limited to 1,045cc, and only the rear wheel of the machine shall be driven.
NOTE: Naturally aspirated (injected or carburetted) four Stroke engines to apply to above rule from 2017/18 season.
- (b) 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.
- (c) On liquid cooled engines an overflow pipe must be used which directs any overflow of coolant away from the rider and passenger.
- (d) Engines shall be covered by a fuel tank or guard to ensure the engine cannot be contacted by the rider's body.
- (e) Electronic Fuel Injection systems are permitted.
- (f) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section M7-4 Specific Technical Offences.
- (g) Fuel tanks must be constructed of a material that neither shatter or splinter upon impact.

Frames built after July 2009:

Fuel tanks must be mounted to the rear of the steering headstock.

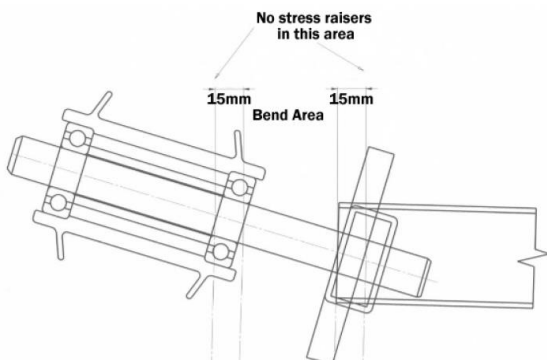
T9-2-5 Wheels and Tyres

- (a) The centre lines of the tracks made by the front and rear wheels of the motorcycle, when the machine is proceeding directly forward, must be no further apart than 75mm, with the sidecar wheel no further forward than half the distance of the wheel base.
- (b) Sidecar wheel must be cambered inwards. No outward camber is allowed. The inclination angle of the Sidecar wheel must be between 25 degrees and 53 degrees.
- (c) Any wheels with slotted hubs must have bolts fitted between the spoke heads.
- (d) Wheels if constructed of the full disc type, aluminium or steel, to have a minimum disc wall thickness of 2.5mm for aluminium and 1.2mm for steel, and dished 50mm over diameter.
- (e) The centre hub to be shouldered with the disc affixed to the rim also by a continuous bead or weld, although a gap is allowable to make provision for the tyre valve.

- (f) Front wheels of motorcycles to be fitted with knock-out spindle or an approved clamp to fasten on fork tips.
- (g) Front wheels must have a safety guard fitted on the left hand side when viewed from the riders seat. Guard to be within the confines of the rims outer lip and fully cover the spoking.
- (h) Any tyre with knobs or lugs protruding out past the side walls are not permitted on the front wheel.
- (i) The one rear wheel and one rear tyre of a sidecar shall not exceed 200mm maximum tread width. Rear wheel safety guard/disc covering spokes is not required when the wheel is fully enclosed by mudguard no higher than 150mm from the ground as in T9-2-5 (l).
- (j) All three wheels and tyres to be of motorcycle configuration and have a minimum rim diameter of 400mm.
- (k) The drive shall be transmitted to the ground only through the rear wheel of the motorcycle.
- (l) Rear mudguard must be fitted, and extend from the rear seat to a maximum of 150mm from the ground with the sidecar laden and must be fitted with either:-
 - (i) a one piece flexible mudflap without any slots which:
 - (i) is a minimum thickness of 6mm and be reinforced belting ~~tyre~~ **type** rubber.
 - (ii) ends no more than 20mm above ground level with the sidecar laden.
 - (iii) is attached to 3 sides of the mudguard and projects forward by a minimum of 75mm on each side.
 - (iv) **Solo Bike style deflectors are not to be used** (july 2017)
 - (ii) an FIM approved sidecar dirt deflector.
- (m) All sidecar machine rear fork legs to have an enclosed axle eye.
- (n) The rear wheel must have a safety guard fitted on the right hand side when viewed from the riders seat. Guard to be within the confines of the rims outer lip and fully cover the spoking.
- (o) The sidecar wheel must be contained within a continuous 25mm horizontal crash bar, fixed rigidly to the sidecar platform at sidecar floor height. Any open area in the sidecar platform inside the continuous crash bar and on the running board on the nearside, must be filled with a suitable material to prevent either the rider or passenger from trapping their feet. The inside of spoked, cast or welded wheels must be covered with a disc or shield.

Sidecar wheel spindle minimum diameter is 20 mm. One sided alloy ex brake drum hubs are not to be used as sidecar wheels.

- (p) The sidecar axle to have no stress raisers in the bend area.
 - (i) The bend area is from the sidecar inner wheel bearing face to the first fixed mounting part of the chassis plus 15mm each way (see diagram below).
 - (ii) A stress raiser is a thread, notch or groove and or a change in diameter. A change in diameter must have a suitable smooth radius. Minimum radius is 6mm.
 - (iii) All axles to be crack tested (non-destructive testing) by the start of the season with certificate supplied at CVI.



T9-2-6 Exhaust Pipe

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

T9-2-7 Handle Bars

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

T9-2-8 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 freely return closed when not held by the hand. The use of a twin cable push/pull throttle assembly to assure positive closing of the throttle valve(s) is mandatory from 2016/17 season.
- (d) All throttle linkages, shafts and exposed cable liners must be shielded to prevent dirt or foreign material from directly contaminating them and restricting movement. The shield must be easily removable for inspection of the mechanism.

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) **Track Code Size:** Letters to be at least 50mm high, with a stroke width of at least 7mm.

- (c) 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.
- (d) 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.
- (c) Any rider(s) lapped or about to be lapped by the leading rider shall be shown the black flag and must retire safely from the race.

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 & White Chequered 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.
- (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^2 (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 commence once the competitors have been called to proceed to the race start line and shall be calculated from the times or estimated by

the Referee until his vehicle is again running under its own power. Notification of the commencement of the two (2) minutes shall be by bell, horn and or flashing amber light. A fully visible countdown clock display used in conjunction with the flashing light may replace the bell or horn.

- (c) Riders in consecutive heats be allowed 5 minutes between heats.

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 Senior Official 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.
- (f) New Zealand, North and South Island Championships using the 16 rider, 20 heat formats, riders shall wear helmet colours to denote their starting position. See rule M4-20-2.

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. The referee shall start the race in all SNZ allocated championships as in rule R9-3-7(b)
- (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.
- (xiii) A race may be re-started if, in the opinion of the referee:
 - (a) any aspect of the start is unfair or incorrect
 - (b) the actions of any competitor have given any competitor an unfair advantage over another.
 - (i) the referee may or may not exclude rider(s)

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 up to six equal parts where applicable, known as "gates".

For Sidecars each of the “equal parts” or “gates” to be no less than 2.0 metres (2000mm) in width. i.e. if the track width is 10 metres wide, 5 units can start, if it is less, i.e. 9 metres only 4 units can start, the width of the track will determine how many units you can safely start in one line. The track width shall remain constant (or greater) of the starting line width through until the exit of turn two (i.e., the entrance of the back straight).

The width of the track meaning: from the outside perimeter fence to the inside established pole line.

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. Competitors shall be awarded race placings as their position at the time the red light was applied. The prime cause of the stoppage to be excluded unless the incident requiring the race to be stopped happened after the finish line.
- (i) **First Bend Incident**
Should an incident occur in the first bend or off the start line resulting in a rider or riders be unfairly disadvantaged and the referee unable to determine a clear prime cause through "rider bunching", he may stop the race and order a restart with all starters.

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.

R9-3-19 Protests are not permitted under Solo & Sidecar racing rules, appeals are permitted as per SNZ Rules and Regulations

SECTION T10-1 MIDGET SPECIFICATIONS



**2016-17 NEW ZEALAND MIDGET CHAMPION
MICHAEL PICKENS**

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

- (a) Wheel base: 1930mm maximum, 1676mm minimum.
- (b) Front track: 1340mm maximum;
Rear track: 1320mm maximum.
- (c) Overall Length: 3,251mm (128") maximum including bumpers.
Overall Width: 1,651mm (65") maximum width.
- (d) 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.
- (e) 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

- (a) Front engines only. No rear engined cars allowed.
- (b) (OHV) pushrod, water cooled, cast iron or steel block 3278cc (200 cu in) maximum size.
- (c) SOHC or OHV pushrod 2730.8cc (166.6 c.i.) maximum.
- (d) DOHC 2 valve heads = 2600cc (158.66 c.i.) maximum.
DOHC-SOHC or pushrod with 4 valves = 2400cc (146.45 c.i.) maximum.
- (e) No two stroke engines are permitted.
- (f) Supercharged and turbocharged four stroke: 1641.5cc (100.13 cu.ins) maximum.
- (g) 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**
 - (i) 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.
 - (ii) 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.
 - (iii) V or W type engines: Maximum 90 degrees of V as measured through the centre lines of the bores.
- (j)
 - (i) 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.
 - (ii) Pre-drilled holes to seal: barrels to crankcase, crankcase to crankcase etc. Note: Pre drilled retainers are acceptable.
 - (iii) When rule E2-9-3 applies, approved person must measure engine within 28 days.
- (k) 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

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

T10-1-6 Safety Harness

Refer to Sections S4-1 and S4-2.

T10-1-7 Roll Cage

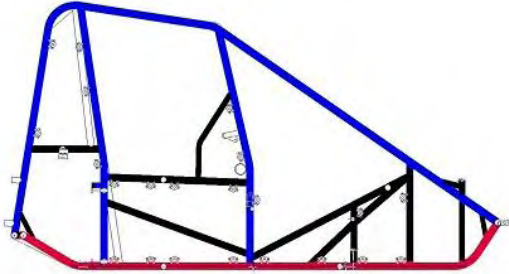
A roll cage meeting the following specifications is mandatory. **Refer diagram below:**

- (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.

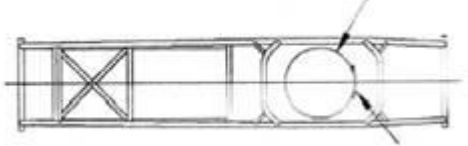
(d) **Bottom Chassis Rail:**

Red Tube: Minimum size SAE 4130 N Chrome-Moly Tubing ~~1.1/4" OD x .095" wall (1.25" OD x .095" WT)~~ **1 1/4" OD X 0.083" wall (1.375" OD X 0.083" WT)** (June 2017)



- (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, which must not encroach on an imaginary cylinder, 500 mm in diameter, extending through the top cockpit.

500mm clearance cylinder over seat



Seat back

- (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) A side intrusion bar 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 375mm and a maximum of 440mm between the inside radius of the intrusion bar measured from the centre of the drivers rollcage 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) Arm Guards

- (i) Driver must have easy entry and exit from cockpit, at two access points at all times.
- (ii) The use of a LH arm guard is not permitted
- (iii) RH Arm Guard panel to be NO higher than 890mm measured from bottom of chassis rail. (B in diagram below).

- (iv) Arm Guard must be able to be removed from the vehicle without the need to remove any other panel/components, except for fasteners.
- (v) The LH cockpit panel to be a maximum height of 450mm measured from the bottom of chassis rail. If panel extends above chassis rail, there must be a safety edge fitted.
- (vi) The dash panel must not extend more than 400mm back from the top leading edge of the engine plate, measured horizontally

(m) Sail Panels

- (i) Sail panels between the rear cage upright and brace are allowed.
- (ii) LH Sail panels and or edges must not be flared outwards, and must not protrude past the rear cage upright and brace.
- (iii) RH sail panel and/or edges must not be flared outwards, and must not protrude past the rear cage upright. The leading edge may go past the brace but must not encroach into the minimum opening (rule T10-1-7(o)).

(n) Sun Shields

- (i) Side Sun Shields are permitted.
- (ii) Side Sun shields must be no higher than the top line of the rollcage, must not exceed the overall width and length (or outside the confines) of the top of the rollcage. Side sun shields must be a separate panel.
- (iii) The sun shields must be no more than 130mm from the top of roll cage to bottom when measured at the front (D in drawing) and no more than 165mm when measured from top of roll cage to bottom of panel at the rear (C in drawing). Note: Minimum window opening below must be maintained.
- (iv) Front sun shields to be a maximum of 216mm measured at the widest point (See drawing below). Visor must be one piece and must not protrude over the top line of the rollcage at any point.



(o) Arm Guard Opening

- (i) RH Arm guard, side sun shield and sail panel must form a MINIMUM opening, measuring 500mm long min from inside of the front vertical roll cage tube (motor plate upright) by 255mm high min (measured at 890mm from the bottom of bottom chassis rail).
- (ii) Side panels adjacent to the bonnet must not be higher than the top line of the bonnet at any point.
- (p) The use of aerofoils in conjunction with roll cages will not be permitted under any circumstances, and all types of mirrors are illegal.

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. A nyloc nut on its own is not an approved locking device.
- (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.
- (d) Hub spacers: If fitted, the outer spacers must be internally splined to match the axle splines.

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 T14-6-10 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.
- (h) Wheel Covers
 - (i) Aluminum wheels covers utilizing dzus style fasteners must be attached with a minimum of 5 steel dzus buttons.
 - (ii) Aluminum wheels covers with only 3 attachment points must be bolted using 3 x 8mm steel bolts and approved fastener / nut system.
 - (iii) Covers must be securely attached and in place on the Dummy grid before entering the track.

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, tyre or manufacturers marking.

T10-1-14 Brakes

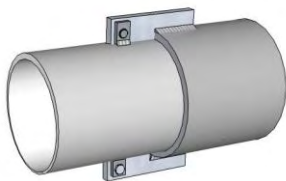
- (a) Effective brakes must be fitted to rear axle.
- (b) Front brakes are optional and may be fitted to either wheel.
- (c) The brakes must be foot operated.
- (d) When nylon brake lines are used, the quality of the tubing and fittings is to be of an approved brake line quality or aircraft quality.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

T10-1-15 Knurving Irons

- (a) All vehicles must be equipped with knurving 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 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 i.e. NO R clips or split pins, etc, to be used.
- (f) No open- ended tubing allowed.
- (g) No panelling permitted on RH knurf bar. An air cleaner shield may be fitted to the LH knurf bar. Minimum shield mounting to be steel hose clips.

T10-1-16 Exhaust Pipes

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



T10-1-17 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, must 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.
- (f) **Track Code Sizes:** Letters to be at least 100mm high, with a stroke width of at least 13mm.

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 TQ MIDGET SPECIFICATIONS



**2016-17 NEW ZEALAND TQ MIDGET CHAMPION
HAYDEN GUPTILL**

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

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

T10-2-3 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

- (a) Engines must be motorcycle derived.
- (b) Direct air-cooled and water-cooled only.
- (c) (i) Carburettors or mechanical fuel injection.
(ii) EFI permitted on water-cooled engines only.
- (d) Only single input sourced electronic ignition allowed, except in water-cooled engines only.
- (e) Rev counters - refer Rule E4-2.
- (f) Engine to be either 3 or 4-cylinder in-line, 4 stroke, only. Forced induction engines are not permitted.
- (g) Maximum capacities permitted are:
 - (i) 4 stroke 2 valves per cylinder - 917cc
 - (ii) 4 stroke 3 + valves per cylinder - 771.25cc
- (h) Front engines only, no rear engines allowed. Engine must be fitted forward of the driver's knees when he is seated in the car.
- (i) The driver must sign a declaration stating the engine size at the start of the season. Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section M7-4 Specific Technical Offences.
- (j) (i) Engine to be pre-drilled before CVI inspection with 2mm minimum size hole to enable Scrutineers to seal engine. Refer rule E2-9-2.
(ii) Pre-drilled holes to seal: barrels to crankcase, crankcase-to-crankcase etc. Note: Pre drilled retainers are acceptable.
(iii) When rule E2-9-2 applies, approved person must measure engine within 28 days.

(k) Liquid Cooled Engine Option:

- (i) Manufacture and model subject to SNZ Board approval.
- (ii) Engine capacity 750cc maximum. Approved Engine 2000-2005 Suzuki 750 GSXR. Existing engines built prior to 2000 may receive dispensation to compete, upon application to the Board.
- (iii) The engine to be OEM. Competitors are forbidden from modifying components in any way except where a specific modification is stated in these

regulations. UNLESS IT SAYS YOU CAN, THEN YOU MUST NOT!

- (iv) Four stroke, four valves per cylinder.
- (v) OEM Electronically fuel injected (EFI) with OEM injectors and manifold or OEM carburettors.
- (vi) Fuel: maximum 98 octane pump petrol only.
- (vii) E.C.U. control unit OEM only.
- (viii) OEM clutch, transmission and starter to be fully operational.
- (ix) No engine manufactured after 2005 will be permitted.
- (x) OEM airbox to be retained and must not be modified.
- (xi) Air filter element and exhaust system is unrestricted.
- (xii) Radiator type is unrestricted.
- (xiii) OEM sump and pickups can be cut, or aftermarket sump can be fitted. Wet sump only, no dry sump systems permitted.
- (xiv) OEM where mentioned in clauses k(i) to k(xiii) above relate to 'Original Equipment Manufacture', including year, make and model used. Also refer to Rule E3-4 for a full description.
- (xv) Fuel Pump must be 2000-2007 Suzuki GSXR 750.
 - (i) Approved part numbers are: 15100-35F00, 15100-35F10, 15100-29G00, 15100-01H00.
 - (ii) Fuel pressure at injectors must be the standard 2000- 2005 Suzuki 750 GSXR fuel pressure of 43psi, with a maximum limit of 45psi.
 - (iii) An SNZ approved fuel pressure test point must be fitted to fuel delivery pipe for the purpose of testing fuel pressure at any time.
 - (iv) Fuel pump operation will be controlled directly by the ECU via a relay with no additional switches or bypasses fitted to the system.

T10-2-5 Engine Offset

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

T10-2-6 Wheels

Also read Rule T14-6-10 for rule on wheel spacers.

- (a) Maximum front wheel rim diameter 330mm (13 inches).
Maximum front wheel rim width 200mm (8 inches).
- (b) Maximum rear wheel rim diameter 330mm (13 inches).
Maximum rear wheel rim width 250mm (10 inches).
- (c) Clearly identifiable, approved, professionally manufactured wheels are permitted, provided manufacturer's specifications are adhered to.
- (d) Laminated type to be secured by M8 ISO bolts and lock washers.
- (e) Clearly identifiable, professionally manufactured, direct mount front hub assemblies are permitted provided manufacturer's specifications are adhered to, e.g. Sanders, Weld, Real.
- (f) Central locking nuts are approved for use on front and rear wheels.
- (g) A nyloc nut on its own is not an approved locking device.
- (h) No plastic or composite wheels permitted.
- (i) Wheel Covers
 - (i) Aluminum wheels covers utilizing dzus style fasteners must be attached with a minimum of 5 steel dzus buttons.
 - (ii) Aluminum wheels covers with only 3 attachment points must be bolted using 3 x 8mm steel bolts and approved fastener / nut system.
 - (iii) Covers must be securely attached and in place on the Dummy grid before entering the track.

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)~~ **1.2mm (0.046 inch) minimum^(aug2017)** 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 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 3.38mm WT)
- (v) General purpose pipe, BS1387/AS1163-1991, grade C350, 25mm Nominal Bore, Heavy Gauge WT (33.7mm OD x 4.00mm WT)
- (b) No chrome plating is permitted on roll cages.
- (c) Bottom Chassis Rail: To be a minimum of 0.095" - 2.41mm as applicable to new chassis built after July 2004.
- (d) (i) The top line of both the horizontal tubes to be no less than 50mm above the drivers helmet when seated statically in the car.
- (ii) The top lines of the both horizontal tubes to be no less than 100mm above the driver's helmet when in normal restrained position. Effective for new frames built after July 2002.
- (e) The main frame to be constructed of no more than eight (8) uncut pieces of tubing.
- (f) The cage must be welded to the main frame of the car becoming part and piece of the frame forming a unit structure.
- (g) Where the tubing changes direction, or is joined by another member, the inside of the radius or corner, must be gusseted. Gussets will be not less than 3.1mm plate or 16mm x 2.5mm tube. Gussets must extend at least 75mm from centre of corner or join.
- (h) A tubular cross brace must link the two longitudinal tube members behind the drivers head. (One diagonal brace is NOT acceptable).
- (i) These to be a minimum of 75mm apart or fitted with a gusset plate, or 16mm x 2.5mm tube, at the point where they meet the top of the cage.
- (j) Construction of the roll cage may be altered to allow wheel guards to be added to existing cages. Positioning of such wheel guards to be no higher than shoulder height and no lower than waist height when seated in the driving position.
- (k) (i) A side intrusion bar 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 28.6mm (1 1/8") OD x 2.1mm (.083") chrome moly tube.
- (v) A minimum measurement of 375mm and a maximum of 440mm between the inside radius of the intrusion tube measured from centre of rollcage at drivers helmet height when in normal seated position.
- (vi) SFI certified rollcage padding must be fitted to all intrusion bars above shoulder height.
- (l) Driver must have easy entry and exit from cockpit at two exit points at all times. Arm guard panels to be no higher than 890mm measured from bottom of lower chassis rail.
- (m) A tube of 16mm x 2.5mm minimum must be fitted at the rear of the seat and firmly attached to the chassis bar work no higher than the bottom edge of the seat.
Exception: Does not include chain drive vehicles.
- (n) Seat: must be bolted to chassis frame by a minimum of 4 x 6mm high tensile bolts and fender washers
- (o) (i) **Side 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.
- (ii) **Front sun shields to be a maximum of 216mm measured at the widest point (see drawing below). Visor must be one piece and must not protrude over the top line of the rollcage at any point. (aug2017)**



- (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, must 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.
- (e) **Track Code Sizes:** Letters to be at least 50mm high, with a stroke width of at least 7mm.

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

Refer to Rules E2-2 to E2-7.

SECTION T10-3 SPRINTCAR SPECIFICATIONS



2016-17 NEW ZEALAND SPRINTCAR CHAMPION JAMIE LARSEN

T10-3-1 Sprintcar

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

T10-3-2 General Dimensions

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

T10-3-3 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

- (a) Maximum capacity of 6718cc (410 cubic inches).
- (b) Engines to be no more than 2 valves per cylinder.
- (c) Engines must be within 12mm (1/2") of the centreline.
- (d) Forced induction engines are not permitted.
- (e) Carburettors or mechanical fuel injection only, no form of electronic controlled fuel injection permitted.
- (f) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section M7-4 Specific Technical Offences.

T10-3-5 Cooling System

- (a) Radiator hoses must be of reinforced construction only.
- (b) Radiator cooling fans, if made of metal or plastic, must be shrouded with metal of sufficient thickness to contain a fan blade in the event of a fan breaking off.
- (c) Radiators and Oil Coolers: To be mounted within the confines of the bodywork. Not to be mounted on Roll Cages.

T10-3-6 Body

- (a) Single seater bodies only.
- (b) All bodies to be of clean and neat design without any protruding or sharp edges especially in the cockpit, and must consist of a nose, tail and cockpit area.
- (c) Tail tanks may be used. Tail cones must have 100mm removed at rear at neck level. The 100mm piece out of the tail cone at neck level is only necessary if the car is not constructed so that there is adequate protection to stop the tail piece moving forward.
- (d) Seat must be bolted to chassis frame by a minimum of 4 x 6mm high tensile bolts and fender washes.
- (e) A pad of resilient material measuring 100mm x 100mm or high back seat be attached to the cross braces behind the driver's head. A further pad of resilient material (right-hand side head support) may be installed (suitably radiused) to measure in depth no more than 200mm and no less than 100mm. The pad shall not protrude further forward in length than 240mm and no less than 200mm from the front of the rear head support.
- (f) A tube of 25mm x 2.5mm minimum must be fitted at the rear of the seat and firmly attached to the chassis bar work no higher than the bottom of the seat.

- (g) An effective firewall of 1.58mm (0.0625 inch) metal or other approved fire retarding material must be placed between driver and motor, sealing the engine compartment from the cockpit, down to the level of the chassis frame.
- (h) The motor plate must not be made of carbon fibre or any other composite material.
- (i) All panels and bonnets must be securely fastened primarily by way of dzus buttons minimum (bolts satisfactory). Plastic ties are not permitted.
- (j) An SNZ Approved Full Containment Seat is compulsory.
- (k) SNZ Approved Full Containment Seat manufacturers/suppliers must provide all manufacturing details and specifications, together with full mounting details which must be complied with in full.

T10-3-7 Safety Harness

Refer to Section S4.

T10-3-8 Roll Cages

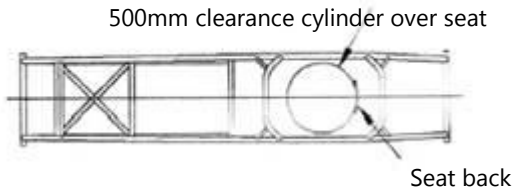
- (a) All new cars or cars with rebuilt roll cages are to have roll cages of a minimum of 1.375 inch OD x 0.095 inch wall thickness, 4130 Condition "N" tube suitably braced and securely mounted to the chassis and main members of the vehicle. Galvanised pipe is not permitted.

CONSTRUCTION:

- (b) The rollcage must extend a minimum of 80mm above the drivers helmet when in the normal restrained position.
- (c) The top horizontal roll cage tubes must be fitted with SNZ approved protective roll cage padding certified to SFI specification 45.1.
- (d) Bottom Chassis Rail: To be a minimum of 0.095" - 2.41mm as applicable to new chassis built after July 2004.
- (e) Belly pan under drivers feet must extend from the front edge of the seat to the firewall.
- (f) Mirrors are not permitted
- (g) Sun Shields: Sun Shields are permitted. Sun shields must be no higher than the top line of the rollcage, must not exceed the overall width and length of the top of the rollcage. The sun shields must be no more than 100mm from the top to bottom when measured at the front and no more than 150mm when measured at the rear.
- (h) Sail panels between and not past the side intrusion bar and rear brace are allowed. Sail panels and/or the edges of side panels may not be flared outward.

(i) **Side Intrusion**

- (i) A side intrusion bar may be added to the main frame of the roll cages.
 - (ii) The said side intrusion bar 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 375mm and a maximum of 440mm between the inside radius of the intrusion bar measured from the centre of the drivers rollcage 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.
- (k) Pipe bends, elbows, or sockets are not permitted on main frame, which must not encroach on an imaginary cylinder, 500 mm in diameter, extending through the top cockpit opening directly above the seat. See diagram below.



T10-3-9 Front Axle

An approved locking device must retain front hub bearings. A nyloc nut on its own is not an approved locking device.

T10-3-10 Wheels

Refer Section T14 wheels for specifications covering this class. Also read Rule T14-6-10 for rule on wheel spacers.

(b) **Wheel Covers**

- (i) Aluminum wheels covers utilizing dzus style fasteners must be attached with a minimum of 5 steel dzus buttons.
- (ii) Aluminum wheels covers with only 3 attachment points must be bolted using 3 x 8mm steel bolts and approved fastener / nut system.
- (iii) Covers must be securely attached and in place on the Dummy grid before entering the track.

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 knurting 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 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.
- (d) 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.
- (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 must 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.
- (e) **Track Code Sizes:** Letters to be at least 100mm high, with a stroke width of at least 13mm.

T10-3-23 Air Foil

- (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 1524mm (5ft) in width provided aerofoil does not extend outside the rear wheels. Maximum total area of aerofoil to be 3.25m² (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 MINISPRINT SPECIFICATIONS



2016-17 NEW ZEALAND MINISPRINT CHAMPION CHRISTIAN HERMANSEN

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 Alternative Engine Package:

Toyota 4A-GELU Black Top, 20 valve,

- (a) The engine to be OEM unless otherwise stated in the sections below. Modification of components is not permitted in any way except where a specific modification is stated in these regulations. **UNLESS IT SAYS YOU CAN, THEN YOU MUST NOT!**
- (b) OEM sump and pickups can be cut, or aftermarket sump can be fitted. Wet sump only, no dry sump systems permitted.
- (c) Flywheel/flexplate are open. The flywheel/flexplate must be enclosed as per T10-4-11(a)
- (d) The water cooling system is open. Electric water pumps may be fitted and the cooling system flow direction may be reversed or modified. Any radiator may be used.
- (e) Rocker cover breather position can be changed

- (f) SNZ control Link G4+ Atom II ECU or ECS SNZ ECU must be used. Coil packs, trigger wheels and sensors are open. The max RPM limit is 8400 rpm.
- (g) OEM injectors, manifold, fuel rail and fuel pressure regulator must be used. Maximum Fuel Pressure permitted 3.16kgf/cm² (45 psi).
- (h) ECU must control the fuel pump i.e. pump cannot be hardwired.
- (i) Fuel:
 - (i) Maximum 98 octane pump petrol only.
 - (ii) Ethanol E10 fuel is permitted
 - (iii) Ethanol E85 fuel is NOT permitted
 - (iv) Blending of Fuel is NOT permitted
 - (v) Fuel Additives are NOT permitted
- (j) Air filter element and exhaust system is unrestricted.
- (k) OEM where mentioned in clauses (a) to (h) above relate to 'Original Equipment Manufacture', including year, make and model used. Also refer to Rule E3-4 for a full description.
- (l) 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. Bore and stroke measurements must be recorded in the log book. Note: pre drilled retainers are acceptable.
- (m) The oil pump may be modified and an oil cooler may be added. The block may be modified to accommodate this or adapters may be used. The use of an external oil pump or vacuum pump is not permitted
- (n) Inlet trumpets may be modified or replaced (anything upstream of the OE throttle body is open). Forced Induction, Turbo Charged or Supercharged is NOT permitted
- (o) Non-standard sensors may be used. Sensors may be removed / relocated (MAP etc). Idle control valve must be removed and holes blocked off.
- (p) The auxiliary drive is open. Drive belts and or pulleys can be added or removed for alternators, power steering and water pumps.
- (q) The throttle mechanism may be modified to accommodate a linkage and springs etc.
- (r) Fuel / water system may be modified to accept earls/professional style hoses and fittings.
- (s) SNZ Minisprint restrictor plates (maximum of 45mm diameter) must be fitted between the throttle bodies

and the inlet manifold. Modification to the restrictor plate is NOT PERMITTED with the exception of drilled mounting holes. The serial number MUST be recorded in the log book and on the CVI. SNZ reserves the right to adjust the size of the restrictor plate at any time.

- (t) Minisprints using the 4AGE alternative engine must meet the following weight specification. Weight: Maximum 570kg minimum 420 kg less driver. Car must meet minimum weight at any time. SNZ reserves the right to adjust these weight limits at any time.
- (u) Any 20v powered car may be required to remove their engine for teardown checking at any meeting when requested by SNZ.
- (v) Any 20v powered car may be required to remove their engine for the checking outlined above upon the request of another competitor who must pay \$1000. In the event of the engine being non-compliant the protesting competitor will be given a \$500 refund. In the event of the engine being compliant the competitor being protested will be given \$500. SNZ will keep the remainder to cover teardown and freight.
- (w) Engine rebuild: The following rules apply to any engine repairs requiring to be carried out:
 - (i) Max Compression ratio 11.000:1
 - (ii) Any damaged threads in the engine can be repaired by the use of a thread inset.
 - (iii) Replacement OE parts, (unmodified) must be used for valves, valve guides, valve springs, valve seats, camshafts, bearings, pistons, timing pulleys, tensioner and belt, gaskets.
 - (iv) OE Camshaft lobe height - Intake 40.28 – 40.38mm. Exhaust 40.09 – 40.19mm
- (x) **Cylinder Head**
 - (i) Surfacing and straightening of the head is permitted.
 - (ii) Porting and Polishing of head is NOT PERMITTED
 - (iii) Modification of the chambers is NOT PERMITTED. No grinding or finishing of any kind is permitted. It is permitted to reclaim the valve seat. The valve seat must be made of a ferrous material.
 - (iv) Valve Guides to be OE or a Replacement that meets OE specifications (i.e. Length, OD and ID). Modification is not permitted. The valve guides must be made of a ferrous material.

- (v) Valves to be OE or alternative replacement that meet the following dimensions: Inlet head Dia 26.5mm +/- 0.15mm, Exhaust head Dia 26mm +/- 0.15mm. Valves may be refaced with a 45° +/-1° seat angle and 30° +/- 1° back face angle. Titanium valves are NOT Permitted.
- (vi) Valve springs to be OE or an OE replacement.
Approved replacements:
SuperTech Part number: SPR-A2095-BT
Franklin Part number is (00SPT0Y20V)
- (vii) Head Gasket set: OE Toyota replacement or aftermarket ACL Payen PA5930 or Permaseal V2116KCX
- (viii) Head Bolts may be substituted for an ARP head bolt or stud kit.
- (y) **Camshafts**
 - (i) Camshafts are to be standard OE.
 - (ii) Camshafts are to be in standard OE position.
 - (iii) Cam gears are to be OE.
 - (iv) Repair and Regrind is not permitted on Camshafts. Camshafts must be OE. Cam specs are available from SNZ.
 - (v) OE camshaft lobe height: Intake 40.28mm - 40.38mm. Exhaust 40.09mm - 40.19mm
- (z) **Bottom End**
 - (i) Block must be standard OE unmodified unless elsewhere stated.
 - (ii) Material is NOT Permitted to be removed from the block, with the exception of the block face, and Bore.
 - (iii) Sleeving of the block is NOT Permitted.
 - (iv) Maximum bore oversize to suit 0.5mm (0.019") oversize pistons.
 - (v) The engine stroke must be 77mm +/- 0.1mm.
 - (vi) Balancing of reciprocating and rotating mass is permitted, with the following being adhered to;
Crank shaft may be drilled perpendicular to the rotational axis for balancing purposes, NO other material is permitted to be removed. Polishing of crankshaft counterweights is NOT PERMITTED. Crankshaft grinding to suit max 0.25mm undersize bearings is permitted.
 - (vii) Material may only be removed from 3 of the 4 Conrods, Polishing of Conrods is NOT PERMITTED.

- (viii) Conrod bolts are to be OE or an aftermarket OE replacement. No Titanium con rod bolts to be used. Permitted Kit part number: ARP 203-6001
- (ix) Pistons are to be of OE specification. Aftermarket approved part numbers: STA Piston set PS2024ageu20v.50R
- (x) Pistons are NOT permitted to be modified in anyway.
- (xi) Piston rings are open but must be OE dimensions.
- (xii) Main Bearings, Big End Bearings and Thrust Bearings are to be OE or an aftermarket replacement, approved part numbers:
 - ACL; main bearings 5M1695H-###
 - ACL; big end bearings 4B1780H-###
 - King Race Bearings; main bearings EB1695 M 5000 HK
 - King Race Bearings: big end bearings EB1780 B 4000 HK
 - STA Main Bearings MS1410STD
 - STA Big end bearings CB1425STD
 - STA Thrust Washers TW1400
- (xiii) Bottom end gasket set is to be OE Toyota replacement or ACL Payen or NZ Gaskets part no ER750

T10-4-5 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 knurping irons, however muffler and outlet must be no higher than top knurping iron bar.
- (c) Refer to Midget Car Rule T10-1-16.

T10-4-6 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.

T10-4-7 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.

T10-4-8 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)~~ **1.2mm (0.046 inch) minimum** ^(aug2017) 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.

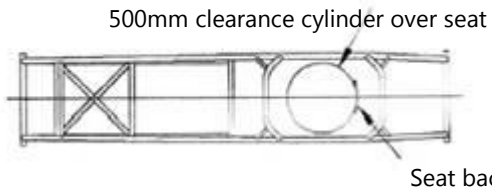
T10-4-9 Seatbelts Refer to Section S4.

T10-4-10 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~~ **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 ~~head~~ **helmet** ^(Aug 2017) 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, which must not encroach on an imaginary cylinder, 500 mm in diameter, extending through the top cockpit opening directly above the seat. See diagram.



- (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) A side intrusion bar may be added to the main frame of the roll cages.
- (ii) The said side intrusion bar 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 375mm and a maximum of 440mm between the inside radius of the intrusion bar measured from the centre of the drivers rollcage 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) (i) **Side 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.
- (ii) **Front sun shields to be a maximum of 216mm measured at the widest point (see drawing below). Visor must be one piece and must not protrude over the top line of the rollcage at any point^(aug2017)**



- (o) Roll cages must not be plated in any way at all
- (p) Sail panels between and not past 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.

T10-4-11 Transmission

- (a) Any revolving flywheel/flexplate transmission and driveshaft must be enclosed via one of the following methods
 - (i) a 3mm thickness metal cover incorporating a 360-degree safety hoop at front of driveshaft (in case of driveshaft failure.)
 - (ii) OE Bell housing for make of engine being used
 - (iii) Torque tube and Torque ball assemblies from a reputable manufacturer e.g. Sanders, DMI, MPD.
- (b) All vehicles must be fitted with operative clutch.

T10-4-12 Shock Absorbers

Effective shock absorbers to be fitted to front and rear axles.

T10-4-13 Differentials

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

T10-4-14 Wheels and Tyres

Also read Rule T14-6-10 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.
- (h) A nyloc nut on its own is not an approved locking device.

Tyres:

- (i) 330mm (13") x 150mm minimum (6")
- (j) Maximum 4 ply construction with the exception that approved American type two ply racing tyres are permitted

- (k) All tyres must be sound in beads and walls
- (l) Tread design optional, but integral with the tyre.
- (m) 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.

(n) Wheel Covers

- (i) Aluminum wheels covers utilizing dzus style fasteners must be attached with a minimum of 5 steel dzus buttons.
- (ii) Aluminum wheels covers with only 3 attachment points must be bolted using 3 x 8mm steel bolts and approved fastener / nut system.
- (iii) Covers must be securely attached and in place on the Dummy grid before entering the track.

T10-4-15 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.

T10-4-16 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.

T10-4-17 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.

T10-4-18 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.

T10-4-19 Battery

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

T10-4-20 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.

T10-4-21 Fuel

Refer Section E5.

T10-4-22 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.

T10-4-23 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) **Track Code Sizes:** Letters to be at least 100mm high, with a stroke width of at least 13mm.

T10-4-24 Air Foil

- (a) Mandatory air foil to be fitted 1.486m² 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.
- (b) Front wing optional.
- (c) The air foil must not be able to adjusted by the driver while seated in the racecar.

T10-4-25 Electronic Control

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

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

T10-4-27 Impounding a Minisprint

Refer to Rules E2-2 to E2-7.

R10-5 RACING RULES – OPEN WHEEL CLASSES

SIGNALS

R10-5-1 The following lights and flags are used to signal competitors on the track:

Green Flag & Light	Start of race
Green Light	Race in progress
Yellow Flag & Light	Proceed with caution
Red Flag & Light	Stop immediately
White Flag	One lap remaining
Black Flag/Board	Offending competitor to retire from race immediately.
Black & White Chequered	Race complete

R10-5-2 The green light is to be on continuously while the race is in progress.

BEFORE THE RACE

R10-5-3 The maximum number of competitors in the race will be decided by the Steward.

R10-5-4 Vehicles not on the track when the pit gate is shut are not eligible to start.

R10-5-5 Vehicles must be running within one lap of receiving the push off signal.

R10-5-6 Minisprints and Modified Sprints: The above rule does not apply and vehicles must leave the pits under their own power.

R10-5-7 Vehicles proceeding to the start must not be driven at excessive speed.

R10-5-8 Vehicles will grid up as directed by the Clerk of the Course.

R10-5-9 Any vehicle failing to grid up after leaving the pits within the time limit of **three** minutes is not eligible to start the race.

R10-5-10 The Referee is the sole judge of R10-5-9 above and can only allow one **3** minute delay per race. The **3** minute delay cannot be used in the event of a re-run.

R10-5-11 The Clerk of the Course will advise the Referee that the track is clear and ready for racing.

R10-5-12 The Starter will initiate each race when instructed to do so by the Referee.

R10-5-13 All competitors are under the jurisdiction of the Referee once the race commences.

RACE START

R10-5-14 All races are rolling starts, with grid 2 setting the pace.

R10-5-15 The Referee will signal that the race is about to start by turning off the yellow lights at least half a lap prior to the start.

R10-5-16 The race commences when the green flag is waved and green lights activated.

Option: The race commences when both front row vehicles have entered the start box at a reasonable pace.

R10-5-17 In the case of a false start the Referee can order a re-run by activating the yellow light.

R10-5-18 Any vacant grids to be held, failure to do so can result in a penalty.

RACE IN PROGRESS

R10-5-19 The race will be in an anti-clockwise direction.

R10-5-20 Vehicles are not to be driven in the wrong direction.

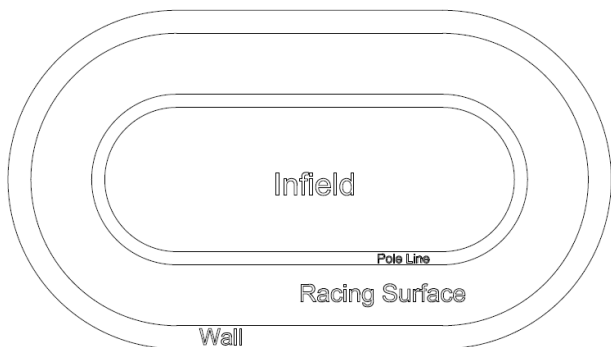
R10-5-21 The following racing practices are not permitted:-

- (i) Contact: Deliberate or accidental.
- (ii) Forcing another competitor off their racing line.
- (iii) Cutting Off.
- (iv) Blocking.
- (v) Looking back.
- (vi) Using the concrete wall to gain an advantage
- (vii) Any other foul or unfair practice.

Penalties will apply as per Section M7-2

R10-5-22 In any race, lapped competitors can be black flagged.

POLELINE/INFIELD



R10-5-23 Refer to explanatory diagram above for a definition of terms.

R10-5-24 A competitor can be penalised for placing one or more wheels off the racing surface, unless taking evasive action.

R10-5-25 If a vehicle is forced, spun, or driven to the infield during the race, the competitor must wait until the track is clear before returning to the racing surface.

SUSPENSION OF RACING

R10-5-26 Racing can be suspended at any time by the activation of the yellow or red lights

- (i) Yellow lights: all vehicles must slow immediately.
- (ii) Red lights: all vehicles must stop immediately.

R10-5-27 First Lap Incident

When the race is suspended before one full lap is completed:-

- (i) it will be completely rerun over the original number of laps
- (ii) the original grid positions will apply, except for the prime cause of the stoppage who will restart from the rear of the field (Note: currently applies to yellow lights only)
- (iii) no 2 minute bells are permitted
- (iv) competitors may not change their vehicles
- (v) vehicles on the infield at the time of the race suspension are permitted to take part in the restart. (Note: currently applies to red lights only)

R10-5-28 Single File Resumption

When the race is suspended after one full lap is completed the race will resume as follows:-

- (a) Single File under yellow lights
 - (i) The lead car will take the safest course past any incident.
 - (ii) The rest of the field will follow in single file.
 - (iii) Any car breaking file will be immediately excluded.
 - (iv) The vehicles will restart in the order they were in at the last completed lap prior to the caution period.
- (b) Vehicles involved in the incident are permitted to restart:
 - (i) The primary cause from the rear of the field.
 - (ii) All other vehicles in the position they were in at the time of the last completed lap.

- (c) The Referee will signal that the race is about to recommence by turning off the yellow lights at least half a lap prior to the start/finish line.
- (d) All restarts must be at a reasonable pace.
- (e) The race restarts when the green flag is waved and green lights activated.
- (f) Laps run on the yellow lights are not counted as race laps.

R10-5-29 Double File Restart

The lead car for the restart will choose grid 1 or 2 and lead car can accelerate anytime they wish once passed cone on turn 3 and before cone on turn 4. All other cars cannot accelerate until lead car has.

HEALTH & SAFETY

- R10-5-30** Vehicle must be operated by one competitor only, with no passengers permitted.
- R10-5-31** If a competitor unclips their seatbelts or window net during the race they are deemed to have retired.
- R10-5-32** No competitor will drive with an arm or any part of their body outside the vehicle.
- R10-5-33** If a vehicle becomes unsafe during the race it will be removed by the Referee.
- R10-5-34** If a vehicle receives a flat outside tyre the competitor must immediately retire from the race.
- R10-5-35** Competitors in stationary vehicles must remain in their seat with belts on until they are permitted to get out by an Official. This does not apply in the case of fire.
- R10-5-36** Refuelling is not permitted on the track at any time.

OUTSIDE ASSISTANCE

- R10-5-37** Communication with the driver, other than by Officials or competitors in the race is not permitted.
- R10-5-38** Physical contact with a vehicle by someone other than the driver is permitted under the following circumstances
 - (a) during a yellow light race suspension:-
 - (i) to ascertain if the vehicle is fit to continue to race.
 - (ii) to untangle, restart or push start the vehicle if it was involved in the incident.

- (b) during a red light race suspension:-
 - (i) to ascertain if the vehicle is fit to continue to race.
 - (ii) to untangle, restart or push start the vehicle if it was involved in the incident.
 - (iii) to undertake minor repairs at the Referees discretion. These repairs cannot inhibit a restart.

RETIRING FROM THE RACE

R10-5-39 Any competitor withdrawing from a race must move safely to the infield and remain there until the end of the race.

R10-5-40 Any competitor deliberately causing a race stoppage or caution period will be immediately excluded from the race.

R10-5-41 Any competitor that is the prime cause that stops or spins to a stop more than once in a race must retire to the infield.

(a) Option: At the discretion of the Clerk of the Course, any competitor that stops or spins to a stop must retire to the infield. This option is not available at allocated titles.

R10-5-42 Any competitor refusing to retire infield when instructed, forcing a race stoppage will be immediately suspended for 8 days. This suspension cannot be protested or appealed.

FINISH OF RACE

R10-5-43 A race is not finished until the chequered flag is displayed, regardless of the number of laps run.

R10-5-44 The vehicle must cross the finish-line and receive the chequered flag to be deemed to have finished the race.

R10-5-45 Racing will continue until all able vehicles have completed the lap they are on when the chequered flag is shown.

R10-5-46 All placings are determined by the finishing order and number of laps completed by each vehicle as recorded by the approved lap scoring system.

R10-5-47 Any vehicle not receiving the chequered flag is recorded as a DNF.

DISRUPTED RACE FINISH

R10-5-48 **Yellow light finish**

If the yellow lights are activated after the lead car has finished the race, all competitors that follow through the finish line are counted in order of passing the line.

R10-5-49 **Red light finish**

If the race is stopped on red lights after one or more vehicles have received the chequered flag:-

- (i) placings will be given in order for finished vehicles.
- (ii) The remainder of the field will be counted as finishers as per their race placings recorded on the lap preceding the stoppage. This excludes any competitor causing the stoppage unless that competitor has already finished.

DECLARED RACE

R10-5-50 The Clerk of the Course can declare a race during a suspension of racing.

R10-5-51 The results will be as per the last completed lap.

R10-5-52 The Referee can exclude any competitor deemed to be the primary cause of the stoppage.

R10-5-53 Exception: Rules R10-5-49, 50 and 51 do not apply to Allocated titles.

LOCAL RULES

R10-5-54 The rules in this section may be amended by the unanimous decision of a Senior Official 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:

- (i) safety of Competitors
- (ii) safety of Spectators
- (iii) better promotion of events.

R10-5-55 Local rules are only valid for the meeting at which they are enacted, and must be posted on the track noticeboard in order to be considered in effect.

SECTION T11-1-1 SUPER SALOON SPECIFICATIONS



**2016-17 NZ SUPER SALOON CHAMPION
PETER DICKSON**

T11-1-1 DEFINITION:

A Super Saloon is a custom built racecar, designed and built using the drawings and specifications outlined in this section of the rulebook. It includes a spaceframe chassis covered with body panels (roof, boot, bonnet, side panels etc).

T11-1-2 OEM means Original Equipment Manufacturer.

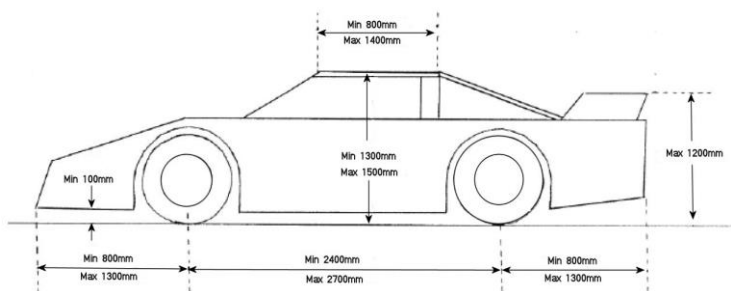
T11-1-3 Titanium and carbon fibre materials are permitted on engine and driveshaft only

SECTION ONE: FRAME/CHASSIS

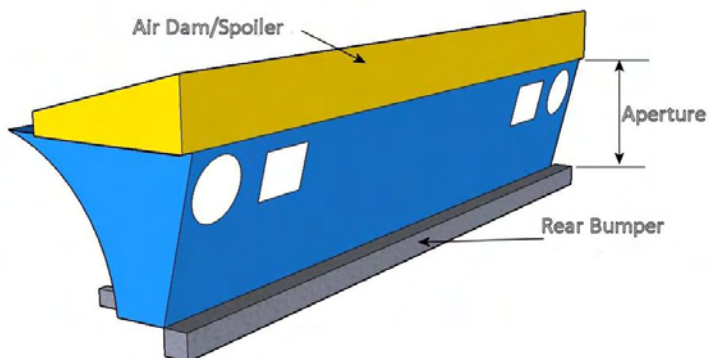
T11-1-4 Dimensions

- (a) Minimum wheelbase = 2400mm, maximum wheelbase = 2700mm.
- (b) Body width: Maximum = 2000mm
- (c) Front overhang: Minimum = 800mm, maximum = 1300mm
- (d) Rear overhang: Minimum = 800mm, maximum = 1300mm
- (e) Roof width: Minimum = 1050mm, maximum = 1400mm
- (f) Roof length: Minimum = 800mm, maximum = 1400mm. This measurement does not include the sunvisor, which must follow the contour of the A pillars.
- (g) Window aperture: Minimum = 300mm high x 450mm wide.
- (h) A pillar width: Maximum = 100mm

- (i) Overall Height: Minimum = 1300mm, max = 1500mm



- T11-1-5 Body panels must be constructed of steel, aluminium, fibreglass or flexiglass.
- T11-1-6 Front panels: 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.
- T11-1-7 A front airdam (spoiler) is permitted.
- It must be constructed of a flexible, non-metallic material.
 - It can have brake cooling ducts incorporated.
 - It can have splitters incorporated.
 - The lowest part must be at least 100mm above ground level.
- T11-1-8 **Towing Eye**
If no bumper present, these must be fitted front and rear
- T11-1-9 **Bonnet**
- May be flat.
 - Power bulge and air scoops allowed but opening must be to the front only.
- T11-1-10 **Side panels**
- Doors and rear quarter panels can be flat. Flat panels are to have a minimum radius roll at the top of the panel of 25mm.
 - Wheel openings may be cut out or modified for ease of fitting larger tyres.
- T11-1-11 **Roof:** Single layer construction, with no under-skins.
- T11-1-12 Side window openings behind driver's seat: Can be covered with flexible transparent material.
- T11-1-13 **Rear Panel:** Must fully enclose the aperture between boot line and the rear bumper. Tail light holes can be cut out, but not more than 25% of the surface area of the panel can be removed.



T11-1-14 Panel security: Bonnet, bootlid or hatch to be securely fastened, with the bonnet to have quick release pins.

T11-1-15 Windscreen:

- (a) Protective mesh to cover the area immediately in front of competitor.
- (b) Windscreen mesh specifications: Minimum 5.3mm diameter wire, maximum square size = 150mm

T11-1-16 A Rear Spoiler or rear wing is permitted:

T11-1-17 Rear Spoiler Specifications

- (a) Location:
 - (i) The spoiler to be no wider than the maximum width of the bodywork to which it is attached.
 - (ii) Spoiler, and end plates, must finish within rear of car, and to be measured as per drawings.
 - (iii) Maximum height of spoiler or rear of car to be 1200mm from the ground.
- (b) Dimensions: Spoiler, and spoiler end plates, to be a maximum 200mm high, and maximum 500mm long, front to rear.

T11-1-18 Rear Wing Specifications:

- (a) Location: Can be added to the rear of the car from the centre of the axle back
- (b) Construction: manufactured of fibreglass, aluminium or plastic, maximum height 200mm, with two mountings allowed.
- (c) Dimensions: Wing, and wing end plates, to be a maximum 200mm high, and maximum 500mm long, front to rear.

CHASSIS

T11-1-19 Definition: The entire welded steel structure including bumpers and rollcage.

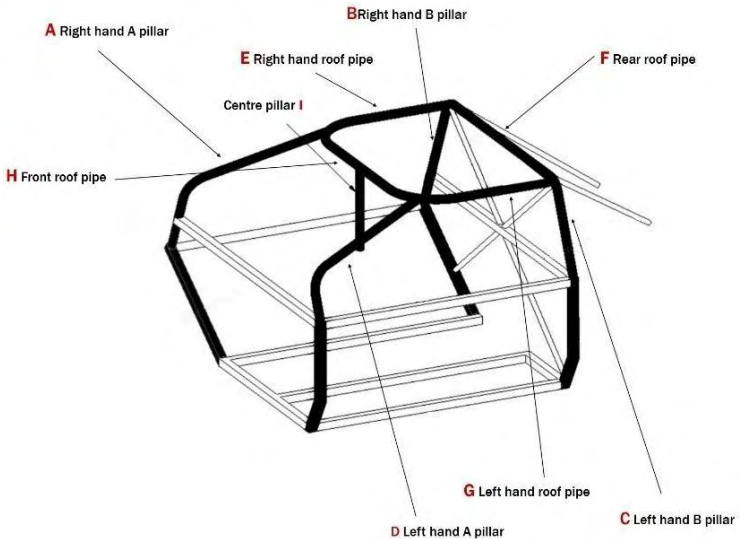
T11-1-20 Construction: Steel only, no Chromoly or exotic alloys permitted above 450MPa yield.

ROLLCAGE

T11-1-21 Rollcage Construction

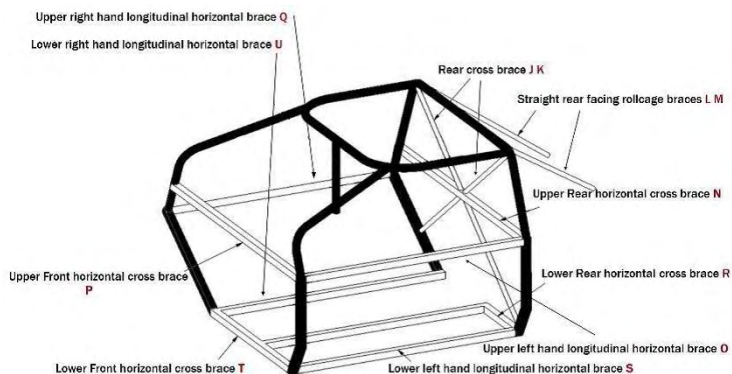
See diagrams T11-1-21 and T11-1-22

- (a) The primary rollcage structure consists of the 4 uprights (A-D), 4 roof pipes (E-H), plus the centre pillar (I).
- (b) The secondary brace structure consists of pipes J-U.
- (c) The diagrams are an aid to interpretation.
- (d) All joints must be welded.



T11-1-22 Primary rollcage pipes A-I 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) Rollcage tube NZTM-Q29, 38mm x 2.6mm (cars first CVIed before 1/9/2013 only)



T11-1-23 All secondary rollcage pipes J-U must be a minimum of either:

- (i) 25mm x 3.0mm RHS, or
- (i) 25mm x 3.0mm OD pipe, or
- (ii) 38mm x 2.0mm OD pipe, or
- (iii) 40mm x 2.0mm RHS.

T11-1-24 Rollcage Design

- (a) Driver to be completely enclosed by the rollcage
- (b) Must enclose the drivers floor. (intent: protect in a rollover)
- (c) Minimum width between Bars A&B and C&D = 1450mm
- (d) Rollcage roof pipes above the drivers head to be a minimum of 600mm long x 900mm wide.
- (e) All bars in diagrams are compulsory unless stated.

T11-1-25 Angle of Front Pillars (Rollcage bars A&D)

Where these exceed 45 degrees from the vertical, the following additional braces are required:-

- (a) Option One: Centre pillar (Bar I1), or
- (b) Option Two: Quarter light uprights (Bars I2 & I3)

T11-1-26 Rollcage Dimensions

- (a) Bars P & T to be a minimum of 380mm apart (may use diagram instead of rule wording).
- (b) Bars N& R to be a minimum of 380mm apart.
- (c) Bars O&S to be a minimum of 450mm apart.
- (d) Bars Q&U to be a minimum of 380mm apart
- (e) Bars L & M must extend from Bar F to the chassis behind the rear axle.

T11-1-27 Side Intrusion Plate

- (a) Construction: Minimum = 3mm steel.
- (b) Dimensions: Fully welded within the rectangle formed by bars O,C,S & D.

- (c) If any part of the drivers body sits on the right of the centreline of the body work, the above plating is also required on the rectangle formed by bars Q,U, A and B

T11-1-28 Roofplate

A 3mm steel plate must be welded above the driver to protect the driver's helmet.

- (a) Dimensions: A minimum length and width of 300mm.
- (b) Mounting: welded to a minimum of 25mm x 3mm steel pipe.
- (c) Clearance: There must be a minimum of 50mm between the top of the drivers helmet, the roofplate and the roofplate mounting structure.

T11-1-29 Floor

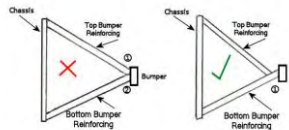
- (a) Construction: Minimum = 1.2mm steel or 2mm aluminium.
- (b) Dimensions: Attached to the rectangle formed by bars R,U,S and T.

T11-1-30 Firewall and Interior Panelling

- (a) Panelling in and around the drivers compartment must be fitted below window line.
- (b) Construction: Minimum = 1mm steel or 1.2mm aluminium

T11-1-31 Front Bumper

- (a) Construction: One of the following types of steel:
 - (i) Medium steam pipe, maximum of 32mm nominal bore x 3.2mm wall
 - (ii) RHS, maximum of 40mm x 3mm
- (b) Maximum Dimensions: Across the front of the car and as far back as the front wheel openings.
- (c) Mounting: By a maximum of 4 points (see diagram)
- (d) Bumper ends: Must be capped.



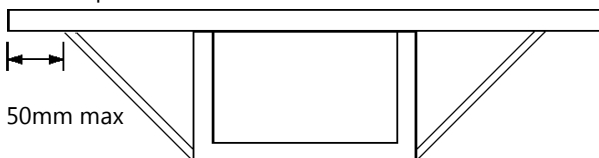
T11-1-32 Optional Front Bumper over-rider

- (a) Construction: One of the following types of steel:
 - (i) Pipe, maximum of 25mm OD
 - (ii) RHS, maximum of 25mm
- (b) Height: Maximum = 150mm
- (c) Dimensions: Can only extend across the front of the bumper, not around the sides.
- (d) Bracing: Maximum of 4 vertical braces, with the ends having a minimum radius of 50mm

T11-1-33 Rear Bumper

- (a) Construction: One of the following types of steel:
 - (i) Medium steam pipe, maximum of 32mm nominal bore x 3.2mm wall.

- (ii) RHS, maximum of 40mm x 3mm
- (b) Maximum Dimensions: Across the rear of the car and as far forward as the rear wheel openings.
- (c) Bumper ends: Must be capped
- (d) Rear Bumper Reinforcing:
 - (i) Construction: One of the following types of steel:
 - (a) Pipe, minimum of 25mm OD.
 - (b) RHS, minimum of 25mm.
 - (ii) Dimensions: 4 mounting points, with the outer two within 50mm of the outside edge of the bumper. As per diagram below, viewed from above rear bumper.



- (e) Optional Rear Bumper over-rider:
 - (i) Construction: One of the following types of steel:
 - (a) Pipe, maximum of 25mm OD
 - (b) RHS, maximum of 25mm
 - (ii) Height: Maximum = 150mm
 - (iii) Dimensions: Can only extend across the rear of the bumper, not around the sides.
 - (iv) Bracing: Maximum of 4 vertical braces, with the ends having a minimum radius of 50mm

T11-1-34 Mirrors: Mirrors are not permitted.

T11-1-35 Racing Numbers

Also Refer Rule T7.

- (a) Numbers to be displayed on:-
 - (i) both sides between front and rear wheel arches
 - (ii) the roof
 - (iii) the rear
- (b) All racing numbers compulsory on roof to be read from the right hand side of the vehicle.
- (c) Numerals must 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.
- (e) The number displayed on rear of car is to be a minimum size of 100mm x 20mm, legible and of contrasting colours.
- (f) **Track Code Sizes:** Letters to be at least 100mm high, with a stroke width of at least 13mm.

T11-1-36 Weight

- (a) Super Saloon minimum all-up weight (including driver) must comply at any time.
- (b) Minimum weight is determined by the engine cubic capacity using SNZ Saloon/Super Saloon weight tables.
- (c) Forced induction engines: Engine capacity must be multiplied by 1.7 to obtain the relevant minimum weight

T11-1-37 Ballast

- (a) When fitted inside the wheelbase area it must be securely bolted or welded to the chassis
- (b) When fitted outside the wheelbase area it must be fully welded to the chassis.

SECTION TWO: ENGINE

T11-1-38 Engine Location

- (a) Leading spark plug hole to be no further back than the stub axle centre line.
- (b) Centre of the crankshaft to be no more than 25mm from the centre of the body.
- (c) Crankshaft must remain parallel to the body centreline.

T11-1-39 Engine Capacity Restrictions

- (a) Forced induction: Maximum capacity = 4184 cc (255.3 ci)
- (b) Aluminium block: Maximum capacity = 4600 cc (280.71 ci)
- (c) All other engines: Maximum capacity = 7112 cc (434 ci)

T11-1-40 Engine Capacity Compliance

- (a) Option One: The engine capacity must be declared in the vehicle logbook.
- (b) Option Two: Engine bore and stroke can be measured and sealed by an SNZ appointed engine sealer, and the measurement information entered into the vehicle logbook.

T11-1-41 Engine configuration

V8 engines over 4600cc: Maximum of 2 valves per cylinder.

T11-1-42 Cylinder Head

Cylinder heads to retain OEM valve stem angles angle in relation to the cylinder centre line

- (a) Approved valve stem Head Angles are:
 - (i) Chevrolet small block heads: 22-24 degrees
 - (ii) Ford Cleveland heads: 9.3 degrees plus or minus 1 degree (not right)
 - (iii) Ford Windsor small block heads: 20-22 degrees
 - (iv) Chrysler small block heads: 17-19 degrees

- (b) If the engine is not listed above, relevant details must be supplied to SNZ before the Super Saloon can receive a CVI.

T11-1-43 Engine Non-compliance

Refer Section M7-4 Specific Technical Offences if an engine is found to be non-compliant.

T11-1-44 Fuel Management

Two return springs must be fitted to the induction throttle shaft anchored at separate mounting points.

T11-1-45 Exhaust Location

- (a) Option One: Must extend at least 450mm past the bulkhead and underneath the chassis,
- (b) Option Two: Must pass through the chassis towards the rear, and be covered by 1mm steel or 1.2mm aluminium panels.
- (c) Where the exhaust exits through body panels:
 - (i) The maximum height from top of pipe to ground level to be 300mm.
 - (ii) exhaust to angle towards the rear, at a minimum angle of 30 degrees.
 - (iii) exhaust to finish at body line.
- (d) Exhaust header must be shielded from the driver.

T11-1-46 Radiator

- (a) Radiator must be below window level.
- (b) All flexible hoses and joints must be shielded from the competitor.
- (c) Radiator overflow must be below floor level.

T11-1-47 Fuel

- (a) Grommets are to be fitted where fuel lines pass through bulkheads etc to prevent chafing.
- (b) Also refer to Section E5: Fuel

SECTION THREE: DRIVETRAIN

T11-1-48 Gearbox

Any type of gearbox can be used but it must have at least one forward, and one reverse gear.

T11-1-49 Drivetrain Safety

- (a) If flywheel, clutch or gearbox is mounted to the engine: there must be a bell housing or 3mm steel cover to adequately cover and contain ring gear, flywheel/clutch.
- (b) If flywheel, clutch or gearbox is mid mounted beside driver:
 - (i) it must be covered on drivers side by an approved safety blanket or 3.0mm metal cover.
 - (ii) 360 degree retaining straps must be fitted at each end of the input driveshaft.

T11-1-50 Driveshaft

A minimum 25mm x 3mm steel driveshaft-retaining strap must fully enclose the front end of driveshaft.

T11-1-51 Drive End

- (a) Rear wheel drive only.
- (b) Quickchange, limited slip differential and locked axles permitted.

SECTION FOUR: WHEELS/TYRES

T11-1-52 Wheels: Also refer to Section T14

- (a) Wheels can be widened as in Section T14.
- (b) Magnesium or alloy wheels not allowed.
- (c) Alloy or Plastic exterior beadlocking rings are permitted.

T11-1-53 Tyres

- (a) Road or racing tyres only.
- (b) Grooving of tyres permitted.
- (c) Tyres can only extend 75mm outside guard flaring or 150mm outside normal body line.

SECTION FIVE: ELECTRICAL

T11-1-54 Battery

- (a) The battery must be securely mounted inside a minimum 1.2mm steel or 2mm aluminium box, with an insulated lid.
- (b) Battery cut-out switch will be
 - (i) at least 300mm from fuel tap
 - (ii) within easy reach of driver and crew.
 - (iii) clearly marked with on and off positions.

T11-1-55 Electrical System

All vehicles must be able to be self-starting at all times without outside assistance, e.g. jumper leads, etc.

T11-1-56 Instruments

Only blue, white, or green instrument warning lights allowed.

SECTION SIX: BRAKES AND SUSPENSION

T11-1-57 Brakes

- (a) Brakes must operate on at least 3 wheels.
- (b) One rear brake only required when equipped with locked diff or single axle type rear ends.
- (c) No braking system to be fitted to driveshaft, pinion flange, or gearbox flange.

- (d) Any type of front and rear wheel hub is permitted.
- (e) Right rear wheel hub:
 - (i) The hub type commonly known as '6 pin' when used on the right rear, must only be used with 10mm wheel centres.
 - (ii) Pressed wheel centres are not permitted on the right rear regardless of thickness.

T11-1-58 Suspension

- (a) Any type of suspension can be used
- (b) Any type of steering system can be used.
- (c) Active four wheel steering through a steering box is not permitted.

SECTION SEVEN: SAFETY EQUIPMENT

T11-1-59 Approved Seats

- (a) Refer to the SNZ website for professionally manufactured Saloon seats approved for use.
- (b) All approved seats must have mounting instructions supplied to SNZ.

T11-1-60 Other Seats

All other seats must meet the following specifications:-

- (a) Type: Bucket
- (b) Back: 1.2mm minimum thickness steel
- (c) Headrest: 3mm minimum plate, minimum size = 280mm wide and 150mm deep, and the surface padded.
- (d) Mounting: Base must be securely bolted or welded to the floor and/or chassis.
- (e) An aluminium seat of 3mm thickness with no steel backing is also acceptable, however the 3mm section must include the full width of the seat back support and seat base.

T11-1-61 Seatbelts: Refer Section S4

T11-1-62 Enforcement of Specifications

Refer Section E Vehicle Inspections and Section M5 Duties of Officials.

T11-1-63 Impounding: Refer to Rules E2-2 to E2-7.

T11-1-64 Protective Clothing and Safety Equipment: Refer Rule S3.

T11-1-65 Sound: Refer Rule S5.

T11-1-66 Electronics: Refer Rule E4.

SECTION T1 1-2 SALOON SPECIFICATIONS



**2016-17 NEW ZEALAND SALOON CHAMPION
CHRIS COWLING**

T11-2-1 DEFINITION:

A Saloon is a custom built speedway vehicle based on a two or four door road car, designed and constructed as per this section of the rulebook.

T11-2-2 INTENT OF THE SALOON CLASS: The Saloon specifications are to be interpreted in conjunction with the constitution to allow for cost effective, competitive racing without unfair advantage.

T11-2-3 Only modifications specifically mentioned in Section T11-2 are permitted. No other modifications are allowed. **UNLESS IT SAYS YOU CAN THEN YOU MUST NOT!**

(a) The use of Carbon Fibre materials is prohibited.

T11-2-4 OEM means Original Equipment Manufacturer. OEM parts must retain their original identification marks.

T11-2-5 OE means Original Equipment as supplied when the road car was sold new.

SECTION ONE: FRAME/CHASSIS

BASE ROAD CAR

T11-2-6 SNZ holds a database of all road car makes and models used in the Saloon class.

(a) The year, make and model of the road car that the Saloon is based upon will be declared at the time of CVI.

- (b) If the road car hasn't previously been registered by SNZ, relevant details must be supplied before the Saloon can receive a CVI.
- (c) At least 200 of the relevant road car must have been produced.
- (d) The road car must have seating for at least two occupants
- (e) The road car must be a two or four door production saloon or sportscar. It cannot be a convertible, ute, SUV, van, wagon or similar.

ROAD CAR MEASUREMENTS

T11-2-7 The length, width, wheelbase and front overhang of the Saloon must be within 50mm of the road car dimensions.

T11-2-8 The road car year, make, model, length, width, wheelbase and front overhang are to be entered into the Saloon logbook.

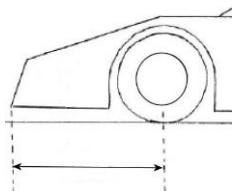
T11-2-9 Width: Road car width excludes OE mirrors.

WHEELBASE

T11-2-10 Option One: The wheelbase of the Saloon must be within 50mm of the road car dimensions.

T11-2-11 Option Two: Where the road car wheelbase exceeds 2540mm, the Saloon wheelbase can be reduced to a minimum of 2540mm (100 inches), provided the original proportions of the original body measurements are maintained.

T11-2-12 **Front Overhang:** Measured as per diagram T11-2-12 (right)

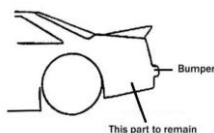


BODY

T11-2-13 The Saloon must retain the original appearance of the road car, except where mentioned in this Section.

Body Panels

- (a) Permitted materials: steel, aluminium, fibreglass or flexiglass.
- (b) Shaping: Road car door handles, wiper spindles, key locks etc can be filled.
- (c) Side Skirts: Can be added to the bottom of door panels, but must be at least 100mm above ground level.
- (d) Rear Panel: A panel that fully encloses the aperture must be fitted above the rear bumper. Tail light holes can be cut out, but must remain in position and be no larger than for the roadcar specified.
- (e) Rear Guard: Rear profile behind rear wheel opening (as viewed



from side) must remain as per road car. No cutting of bottom of guard/bumper, except to allow for ground clearance. See diagram right.

- (f) Wheel Guards: Can be flared up to 75mm from road car.
- (g) Wheel opening: Can be modified to fit larger tyres.
- (h) Bonnet: Power bulge and air scoops allowed, but openings must face forward.
- (i) Accessories: Glass, headlights and chrome strips are not permitted.
- (j) Side Windows: Road car openings behind driver's seat may be covered with flexible transparent material to original contour.
- (k) Panel security: Bonnet, bootlid or hatch to be securely fastened, with the bonnet to have quick release pins.
- (l) Windscreen: Protective mesh to cover the area immediately in front of competitor.
- (m) Windscreen mesh specifications: Minimum 5.3mm diameter wire, maximum square size = 150mm
- (n) Grille: Can be filled in, original or replica, but not steel.
- (o) Towing Eye: If no bumper present, these must be fitted front and rear

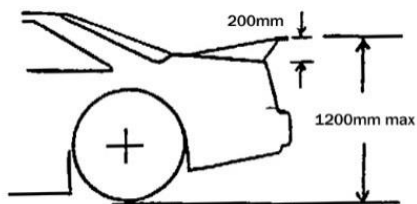
T11-2-14 Front Airdam

Permitted materials: steel, aluminium, fibreglass, flexiglass or plastic.

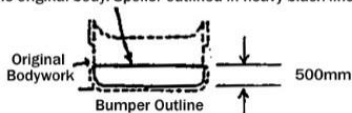
- (a) Brake cooling ducts can be incorporated
- (b) Must not protrude more than 50mm forward of the bumper line
- (c) The lowest part must be at least 100mm above ground level.

T11-2-15 Rear Spoiler and End Plates

- (a) Height:
 - (i) Maximum 200mm above bootlid,
 - (ii) Maximum 1200mm above ground.
- (b) Length:
 - (i) Maximum 500mm, front to rear
 - (ii) Must finish within the rear of the car
- (c) Width: No wider than the maximum width of the bodywork to which it is attached.
- (d) Hatchback Models: Must originate from below the base of the rear window.
- (e) OE Spoiler: Any road car spoiler is permitted, provided it complies with rules T11-2-38, 39 and 40. Performance and racing type spoilers are not permitted.
- (f) Radiator Air Scoop: Permitted within the body line, a maximum of 200mm above the rear window sill.



Spoiler height to be measured vertically from attached join of the original body. Spoiler outlined in heavy black line.



CHASSIS

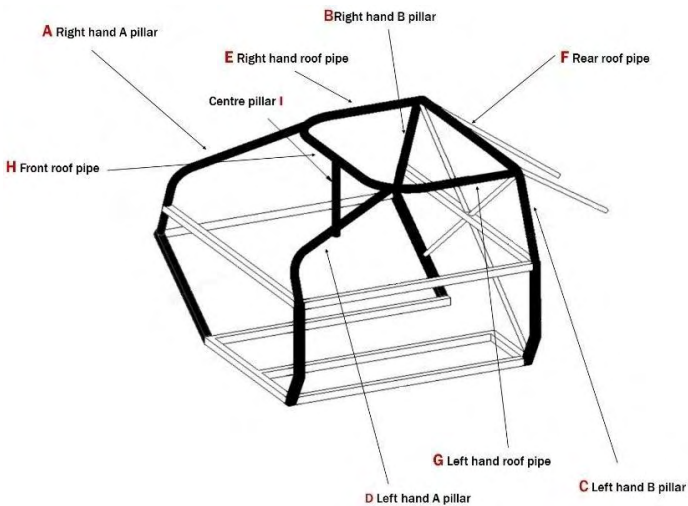
- T11-2-16 Definition: The entire welded steel structure including bumpers and rollcage.
- T11-2-17 Construction: Steel only. No Chromoly, no exotic alloys permitted above 450MPa yield.

ROLLCAGE

T11-2-18 Rollcage Construction

See diagrams T11-2-19 and T11-2-20

- The primary rollcage structure consists of the 4 uprights (A-D), 4 roof pipes (E-H), plus the centre pillar (I).
- The secondary brace structure consists of pipes J-U.
- The diagrams are an aid to interpretation.
- All joints must be welded.

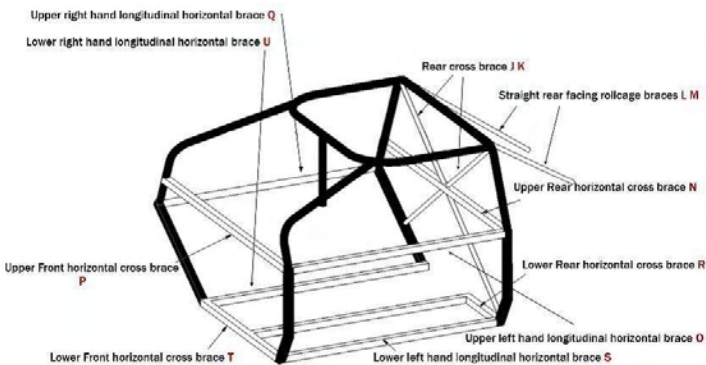


T11-2-19 Primary rollage pipes A-I to be constructed of one of the following types of steel:

- (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) Rollage tube NZTM-Q29, 38mm x 2.6mm
- (v) Rollage tube NZTM-Q29, 44mm x 2.6mm

T11-2-20 All secondary rollage pipes J-U must be a minimum of either:

- (i) 25mm x 3.0mm RHS, or
- (i) 25mm x 3.0mm OD pipe, or
- (ii) 38mm x 2.0mm OD pipe, or
- (iii) 40mm x 2.0mm RHS.



T11-2-21 Rollage Design

- (a) Must follow the interior contour of the car. (intent: so it's close to the bodyline)

- (b) Must enclose the drivers floor. (intent: protect in a rollover)
- (c) Must be full body width. (intent: the body is attached to the cage)
- (d) All bars in diagrams are compulsory unless stated.
- (e) Rear wheel drive cars: Bars L & M must extend from Bar F to the chassis behind the rear axle.
- (f) Front wheel drive cars: Bars L & M must extend from Bar F to the chassis:-
 - (i) behind the rear axle, or
 - (ii) beyond the fuel tank, whichever is most rearward.

T11-2-22 Angle of Front Pillars (Rollcage bars A&D)

Where these exceed 45 degrees from the vertical, the following additional braces are required:-

- (i) Option One: Centre pillar (Bar I1), or
- (ii) Option Two: Quarter light uprights (Bars I2 & I3)

T11-2-23 Rollcage Dimensions

- (a) Bars P & T to be a minimum of 380mm apart (may use diagram instead of rule wording).
- (b) Bars N& R to be a minimum of 380mm apart.
- (c) Bars O&S to be a minimum of 450mm apart.
- (d) Bars Q&U to be a minimum of 380mm apart.

T11-2-24 Side Intrusion Plate

- (a) Construction: Minimum = 3mm steel.
- (b) Dimensions: Fully welded within the rectangle formed by bars O,C,S & D.

T11-2-25 Roofplate

A 3mm steel plate must be welded above the driver to protect the driver's helmet.

- (a) Dimensions: A minimum length and width of 300mm.
- (b) Mounting: welded to a minimum of 25mm x 3mm steel pipe.
- (c) Clearance: There must be a minimum of 50mm between the top of the drivers helmet, the roofplate and the roofplate mounting structure.

T11-2-26 Floor

- (a) Construction: Minimum = 1.2mm steel or 2mm aluminium.
- (b) Dimensions: Attached to the rectangle formed by bars R,U,S and T.

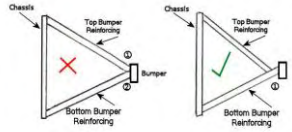
T11-2-27 Firewall and Interior Panelling

Panelling in and around the drivers compartment must be fitted below window line.

- (a) Construction: Minimum = 1mm steel or 1.2mm aluminium

T11-2-28 Front Bumper

- (a) Construction: One of the following types of steel:
 - (i) Medium steam pipe, maximum of 32mm nominal bore x 3.2mm wall
 - (ii) RHS, maximum of 40mm x 3mm
- (b) Maximum Dimensions: Across the front of the car and as far back as the front wheel openings.
- (c) Mounting: By a maximum of 4 points (see diagram)
- (d) Bumper ends: Must be capped.

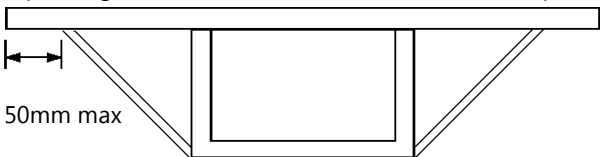


T11-2-29 Optional Front Bumper over-rider

- (a) Construction: One of the following types of steel:
 - (i) Pipe, maximum of 25mm OD
 - (ii) RHS, maximum of 25mm
- (b) Height: Maximum = 150mm
- (c) Dimensions: Can only extend across the front of the bumper, not around the sides.
- (d) Bracing: Maximum of 4 vertical braces, with the ends having a minimum radius of 50mm

T11-2-30 Rear Bumper

- (a) Construction: One of the following types of steel:
 - (i) Medium steam pipe, maximum of 32mm nominal bore x 3.2mm wall.
 - (ii) RHS, maximum of 40mm x 3mm
- (b) Maximum Dimensions: Across the rear of the car and as far forward as the rear wheel openings.
- (c) Bumper ends: Must be capped
- (d) Rear Bumper Reinforcing:
 - (i) Construction: One of the following types of steel:
 - (a) Pipe, minimum of 25mm OD.
 - (b) RHS, minimum of 25mm.
 - (ii) Dimensions: 4 mounting points, with the outer two within 50mm of the outside edge of the bumper. As per diagram below, viewed from above rear bumper.



- (e) Optional Rear Bumper over-rider:
 - (i) Construction: One of the following types of steel:
 - (a) Pipe, maximum of 25mm OD

- (b) RHS, maximum of 25mm
- (ii) Height: Maximum = 150mm
- (iii) Dimensions: Can only extend across the rear of the bumper, not around the sides.
- (iv) Bracing: Maximum of 4 vertical braces, with the ends having a minimum radius of 50mm

T11-2-31 Mirrors: Mirrors are not permitted.

T11-2-32 Racing Numbers

Also Refer Rule T7.

- (a) Numbers to be displayed on:-
 - (i) both sides between front and rear wheel arches
 - (ii) the roof
 - (iii) the rear
- (b) Roof number on roof to be read from the right hand side of the vehicle.
- (c) Numerals on the side and roof are to be a minimum height of 300mm by 50mm wide, with a minimum 13mm border.
- (e) Numerals on rear of car are to be a minimum size of 100mm by 20mm, legible and of contrasting colours with a minimum 13mm border.
- (f) **Track Code Sizes:** Letters to be at least 100mm high, with a stroke width of at least 13mm.

T11-2-33 Weight

- (a) Minimum weight (including driver) must comply at any time.
- (b) Minimum weight for Saloons with normally aspirated 4, 6 & 8 cylinder engines will be calculated as per engine cubic capacity using 'SNZ Saloon '96 weight tables.

SECTION TWO: ENGINE

T11-2-34 Engine

- (a) Same manufacturer as nominated road car
- (b) Same number of cylinders as nominated road car
- (c) Same configuration as nominated roadcar eg V8, inline 6
- (d) OE engine can be modified except where prohibited in this Section.

T11-2-35 Engine Location

- (a) North-South Front mounted engine:
 - (i) Leading spark plug to be no further back than the stub axle centre line.
 - (ii) Centre of the crankshaft to be no more than 25mm from the centre of the body.

- (iii) Crankshaft must remain parallel to the body centreline.
- (b) North-South rear or mid-mounted engine: to be fitted with a spark plug behind the rear axle centre line.
- (c) East-West engine: Can be moved a maximum of 25mm from the original position.

T11-2-36 Engine Capacity & Configuration Restrictions

- (a) Cast iron block and head: maximum 5916cc (361ci)
 - (i) OE or OE replacement cylinder heads with no external modifications only.
 - (ii) Brodix, Bowtie, Dart type, Chevrolet 'angle plug' etc are not permitted.
- (b) V8 engine over 3015cc (184ci): 2 valves per cylinder only.
- (c) Aluminium block and/or cylinder heads: maximum 4592cc (280ci)
- (d) Four valve per cylinder engine: maximum 3015cc (184ci)
- (e) EFI engine: maximum 4212cc (257ci)
- (f) Engine originally fitted with OE needle or roller and/or roller tip rockers that retains the OE needle/roller set up: maximum 4212cc (257ci).
- (g) Engines in (d), (e) and (f) must be OE engines only, e.g. Cosworth, Gaerte not permitted.
To prove compliance cylinder head identification part numbers under valve covers must be retained.
- (h) Rotary engine: maximum two rotors, carburetted only.
- (i) Turbocharging and/or supercharging not permitted.
- (j) Titanium is not permitted, except where mentioned in this section

T11-2-37 Engine Block

- (a) Option One: OE road car block.
Tall deck or raised cam blocks are not permitted.
- (b) Option Two: Approved GM blocks
 - (i) GM Block # 10066034 made in Mexico. (check Mexico)
 - (ii) Dart SHP # 31161111
 - (iii) Dart SHP # 31161211
- (c) Option Three: Approved Ford blocks
 - (i) Dart SHP # 31364175
 - (ii) Dart SHP # 31364275
 - (iii) Dart SHP # 31355135
 - (iv) Dart SHP # 31355235
 - (v) Ford Boss Block M-6010-BOSS302

T11-2-38 Cylinder Head

- (a) Cylinder head manifold port centrelines must remain OE at manifold face.
- (b) OE cylinder head valve stem angles only.
- (c) OE spark plug location only.

- (d) Hand porting only.
- (e) Cracks can be repaired to original profile.
- (f) Welding or adding material to ports or combustion chambers is not permitted.
- (g) Cylinder head identification part numbers will be retained.
- (h) Approved Chevrolet cast iron cylinder heads
 - (i) World Products #4266B & #4267B with raised casting 'SR'
 - (ii) RHS #12400, 76cc Chamber 170cc Runner, 1.940/1.5 Valves
 - (iii) RHS #12401, 76cc Chamber, 170cc Runner, 2.020/1.6 Valves
 - (iv) RHS #12402, 67cc Chamber, 170cc Runner, 1.940/1.5 Valves
 - (v) RHS #12403, 67cc Chamber, 170cc Runner, 2.020/1.6 Valves
 - (vi) RHS #2236794 (167T 67cc chamber)
 - (vii) RHS #2237694 (167T 76cc chamber)
 - (viii) RHS #2236720
 - (ix) RHS #2237620
- (i) Approved Ford cast iron cylinder heads
World Products #5303B with raised letters "WINDSOR JUNIOR".

T11-2-39 Rockers

- (a) Rocker Configuration is to be as per OE
 - (i) shaft mounted must remain so,
 - (ii) stud mounted must remain so.
- (b) Engines originally manufactured with pressed steel rockers:-
 - (i) can have the rocker stud slot lengthened.
 - (ii) no other modifications permitted.
- (c) Roller Rockers not permitted.
- (d) Titanium Valve Spring Retainers are permitted.

T11-2-40 Engine compliance

- (a) Engine must be drilled with holes through two sides of the sump in readiness for sealing.
- (b) Engine bore and stroke must be measured and sealed by an SNZ appointed engine sealer. NO SEAL, NO RACE. Measurement information must be entered into the vehicle logbook.
- (c) Refer Section M7-4 Specific Technical Offences if an engine is found to be non-compliant.
- (d) Any new or radical design engines:-

- (i) can be subject to assessment and approval by the Saloon Technical Committee even if the engine complies with the rules.
- (ii) Alterations or restrictions agreed upon by the Committee will be recommended to the Board for approval
- (iii) the engine cannot be used in competition until the alterations or restrictions are made.

T12-2-41 Fuel Management

Two return springs must be fitted to the induction throttle shaft anchored at separate mounting points.

T11-2-42 Carburettor

- (a) 6 and 8 cylinder engines are permitted to use one carburettor only.
- (b) 4 cylinders engines:-
 - (i) Up to 2500cc: Multiple carburettors permitted
 - (ii) 2500cc and over: One carburettor only
- (c) The carburettor must remain OE in specification, except where specifically mentioned in this section. **UNLESS IT SAYS YOU CAN, THEN YOU MUST NOT!**
- (d) Permitted modification: the fitment of centre hung float bowls.
- (e) Permitted tuning methods: Changes to the jets, powervalve, accelerator pump nozzle and secondary springs are the only permitted tuning methods.
- (f) Carburettors are subject to the minimum specifications, available at www.speedway.co.nz
- (g) The only approved four barrel carburettor is the 600cfm Holley with vacuum secondary's and #1850 marked on the choke tower.
- (h) Other carburettor configurations will be subject to Saloon Technical Committee approval.

T11-2-43 Electronic Fuel Injection

- (a) Injector part numbers and parts are unrestricted.
- (b) Manually operated throttle control; drive by wire not permitted.
- (c) OEM inlet manifold must remain unmodified other than the fitment of aftermarket air cleaner.
- (d) Any device that varies the geometry (length or cross section) of either intake ports, induction system or exhaust system is not permitted.
- (e) Six plate throttle stacks on 6 cylinder engines and eight plate throttle stacks on 8 cylinder engines are prohibited.
- (f) The OE ECU must be in its OE casing.

- (g) ECU must be easily accessible so that part numbers and compliance can be verified.
- (h) Any ECU that controls any function of the vehicle other than fuel and ignition is not permitted.

T11-2-44 Inlet Manifold

The realignment of intake manifold mounting bolt holes to allow the fitting of aftermarket manifolds is permitted.

T11-2-45 Lubrication

- (a) Remote Oil filters are permitted
- (b) Oil accumulators are permitted
- (c) Dry sump systems are not permitted
- (d) External oil pumps in other than OE form are not permitted.

T11-2-46 Exhaust Location

- (a) Option One: Must extend at least 450mm past the bulkhead and underneath the chassis,
- (b) Option Two: Must pass through the chassis towards the rear, and be covered by 1mm steel or 1.2mm aluminium panels.
- (c) Where the exhaust exits through body panels:
 - (i) The maximum height from top of pipe to ground level to be 300mm.
 - (ii) exhaust to angle towards the rear, at a minimum angle of 30 degrees.
 - (iii) exhaust to finish at body line.
- (d) Exhaust header must be shielded from the driver.

T11-2-47 Cooling

- (a) Water pump must be OE profile, mounted in OE position and operational.
- (b) Oil Coolers are permitted, below window level.

T11-2-48 Radiator

- (a) Radiator must be below window level.
- (b) All flexible hoses and joints must be shielded from the competitor.
- (c) Radiator overflow must be below floor level.
- (d) Plastic radiator tanks are not permitted.
- (e) Electric Fans are permitted

T11-2-49 Fuel

- (a) Refer E5-1 and E5-2-2 Approved Fuels
- (b) E85 is not permitted.
- (c) Fuel Tanks: Refer Rule E5-3
- (d) Fuel Tank Dimensions: Refer Rule E5-4
- (e) Fuel Tank Location: Refer Rule E5-5
- (f) Fuel Cells: Refer Rule E5-6

- (g) Fuel Cell Mountings: Refer to Rule E5-7
- (h) Fuel Taps: Refer Rule E5-8
- (i) Fuel Lines: Refer rule E5-9
- (j) Electric fuel pumps are permitted with a pressure activated cut-off switch.
- (k) Fuel pumps must only activate when engine is running or in start up mode.
- (l) Devices to reduce the temperature of the fuel are not permitted.

SECTION THREE: DRIVETRAIN

T11-2-50 Manual Transmission

- (a) Must be of an OEM road car type.
- (b) Can be interchanged i.e. not necessarily Ford to Ford or Holden to Holden.
- (c) Single plate clutch only.
- (d) The single centre plate is free.
- (e) The pressure plate must be OE.
- (f) Aluminium flywheels are not permitted.
- (g) To be mounted to the engine, i.e. not mid-mounted.
- (h) Quick-change gearbox not permitted.
- (i) Internal clutched type gearbox not permitted e.g. Bert.

T11-2-51 Automatic Transmission

- (a) Must be an OEM road car type.
- (b) Torque converter to be full of transmission fluid and functioning.
- (c) Converter-less/clutched type autos are not permitted.
- (d) To be mounted to the engine, i.e. not mid-mounted.

T11-2-52 Gearbox Compliance

The clutch plate or torque converter must be visible for inspection via a 40mm diameter hole in the bell-housing.

T11-2-53 Driveshaft

A minimum 25mm x 3mm steel driveshaft-retaining strap must fully enclose the front end of driveshaft.

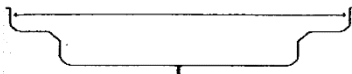
T11-2-54 Drive End

- (a) Two wheel drive only.
- (b) Quickchange, limited slip differential and locked axles permitted.

SECTION FOUR: WHEELS/TYRES

T11-2-55 Wheels

- (a) Also refer Section T14
- (b) Steel or ring of bolt beadlocks permitted.
- (c) Aluminium, magnesium or plastic wheels are not permitted
- (d) Maximum width of wheel = 355mm (14"), measured bead seat to bead seat as per diagram above.



T11-2-56 Tyres

- (a) Road or racing tyres only.
- (b) Maximum tyre width = 495mm, at or above axle height.
- (c) Maximum tyre circumference = 2540mm.
- (d) Grooving of tyres permitted.
- (e) Tyres can only extend 75mm outside guard flaring or 150mm outside normal body line.
- (f) Tyre bleed off valves not permitted.

SECTION FIVE: ELECTRICAL

T11-2-57 Battery

- (a) The battery must be securely mounted inside a minimum 1.2mm steel or 2mm aluminium box, with an insulated lid.
- (b) Battery cut-out switch will be
 - (i) at least 300mm from fuel tap
 - (ii) within easy reach of driver and crew.
 - (iii) clearly marked with on and off positions.
- (c) Vehicle must self-start without outside assistance i.e. jumper leads.
- (d) Engine cut-out switch will be
 - (i) at least 300mm from fuel tap
 - (ii) within easy reach of driver and crew.
 - (iii) clearly marked with on and off positions.

T11-2-58 Ignition

- (a) Twin point distributors permitted
- (b) Electronic ignition permitted in OE form only.
- (c) Aftermarket high energy ignition distributors permitted e.g. Procomp, Accell, Mallory etc.
- (d) Multiple spark discharge type units not permitted
- (e) Magnetos not permitted

T11-2-59 Instruments

Only blue, white, or green instrument warning lights allowed.

SECTION SIX: BRAKES AND SUSPENSION

T11-2-60 Suspension

- (a) Axle hubs: Free.
- (b) Springing systems: Free.
- (c) Suspension wishbones and stub axles: Free.
- (d) Steering parts: Free.

T11-2-61 Weight Jackers

Suspension must not be able to be adjusted by the driver while in the driver's seated position.

T11-2-62 Shock Absorbers

- (a) Steel bodied only
- (b) non-adjustable only
- (c) Remote reservoirs not permitted.
- (d) External Adjustable Shock absorbers not permitted.
- (e) Remote Reservoir Shock absorbers are not permitted.

T11-2-63 Wishbones: Joints must be of steel construction.

T11-2-64 Steering

Active four wheel steering through a steering box is not permitted.

T11-2-65 Coil Springs

- (a) Must be securely fastened in position.
- (b) A coil-over assembly is regarded as a suitable restraint for the spring to be securely clamped.

T11-2-66 Brakes

- (a) Any brake modification permitted, provided they are operable on all four wheels, at all times.
- (b) Only one rear brake required if equipped with locked diff or single axle type rear end.
- (c) Braking system not to be fitted to driveshaft, pinion flange, or gearbox flange.

SECTION SEVEN: SAFETY EQUIPMENT

T11-2-67 Approved Seats

- (a) Refer to the SNZ website for professionally manufactured Saloon seats approved for use.
- (b) All approved seats must have mounting instructions supplied to SNZ.

T11-2-68 Other Seats

All other seats must meet the following specifications:-

- (a) Type: Bucket
- (b) Back: 1.2mm minimum thickness steel
- (c) Headrest: 3mm minimum plate, minimum size = 280mm wide and 150mm deep, and the surface padded.

- (d) Mounting: Base must be securely bolted or welded to the floor and/or chassis.
- (e) An aluminium seat of 3mm thickness with no steel backing is also acceptable, however the 3mm section must include the full width of the seat back support and seat base.

T11-2-69 Enforcement of Specifications

Refer Section E Vehicle Inspections and Section M5 Duties of Officials.

T11-2-70 Impounding: Refer to Rules E2-2 to E2-7.

T11-2-71 Protective Clothing and Safety Equipment: Refer Rule S3.

T11-2-72 Sound: Refer Rule S5.

T11-2-73 Electronics: Refer Rule E4.

SALOON/SUPER SALOON WEIGHT TABLES

Cu In	Weight	Cu In	Weight	Cu In	Weight
100	757	156	828	212	899
101	759	157	830	213	900
102	760	158	831	214	902
103	761	159	832	215	903
104	762	160	833	216	904
105	764	161	835	217	905
106	765	162	836	218	907
107	766	163	837	219	908
108	768	164	838	220	909
109	769	165	840	221	910
110	770	166	841	222	912
111	771	167	842	223	913
112	773	168	843	224	914
113	774	169	845	225	916
114	775	170	846	226	917
115	776	171	847	227	918
116	778	172	849	228	919
117	779	173	850	229	921
118	780	174	851	230	922
119	781	175	852	231	923
120	783	176	854	232	924
121	784	177	855	233	926
122	785	178	856	234	927
123	787	179	857	235	928
124	788	180	859	236	929
125	789	181	860	237	931
126	790	182	861	238	932
127	792	183	862	239	933
128	793	184	864	240	935
129	794	185	865	241	936
130	795	186	866	242	937
131	797	187	867	243	938
132	798	188	869	244	940
133	799	189	870	245	941
134	800	190	871	246	942
135	802	191	873	247	943
136	803	192	874	248	945
137	804	193	875	249	946
138	805	194	876	250	947
139	807	195	878	251	948
140	808	196	879	252	950
141	809	197	880	253	951
142	811	198	881	254	952
143	812	199	883	255	954
144	813	200	884	256	955
145	814	201	885	257	956
146	816	202	886	258	957
147	817	203	888	259	959
148	818	204	889	260	960
149	819	205	890	261	961
150	821	206	892	262	962
151	822	207	893	263	964
152	823	208	894	264	965
153	824	209	895	265	966
154	826	210	897	266	967
155	827	211	898	267	969

Cu In	Weight	Cu In	Weight	Cu In	Weight
268	970	324	1041	380	1112
269	971	325	1042	381	1113
270	972	326	1043	382	1114
271	974	327	1045	383	1115
272	975	328	1046	384	1117
273	976	329	1047	385	1118
274	978	330	1048	386	1119
275	979	331	1050	387	1120
276	980	332	1051	388	1122
277	981	333	1052	389	1123
278	983	334	1053	390	1124
279	984	335	1055	391	1126
280	985	336	1056	392	1127
281	986	337	1057	393	1128
282	988	338	1058	394	1129
283	989	339	1060	395	1131
284	990	340	1061	396	1132
285	991	341	1062	397	1133
286	993	342	1064	398	1134
287	994	343	1065	399	1136
288	995	344	1066	400	1137
289	997	345	1067	401	1138
290	998	346	1069	402	1139
291	999	347	1070	403	1141
292	1000	348	1071	404	1142
293	1002	349	1072	405	1143
294	1003	350	1074	406	1145
295	1004	351	1075	407	1146
296	1005	352	1076	408	1147
297	1007	353	1077	409	1148
298	1008	354	1079	410	1150
299	1009	355	1080	411	1151
300	1010	356	1081	412	1152
301	1012	357	1083	413	1153
302	1013	358	1084	414	1155
303	1014	359	1085	415	1156
304	1015	360	1086	416	1157
305	1017	361	1088	417	1158
306	1018	362	1089	418	1160
307	1019	363	1090	419	1161
308	1021	364	1091	420	1162
309	1022	365	1093	421	1163
310	1023	366	1094	422	1165
311	1024	367	1095	423	1166
312	1026	368	1096	424	1167
313	1027	369	1098	425	1169
314	1028	370	1099	426	1170
315	1029	371	1100	427	1171
316	1031	372	1102	428	1172
317	1032	373	1103	429	1174
318	1033	374	1104	430	1175
319	1034	375	1105	431	1176
320	1036	376	1107	432	1177
321	1037	377	1108	433	1179
322	1038	378	1109	434	1180
323	1040	379	1110		

SECTION T1 1-3 MODIFIED SPECIFICATIONS



**2016-17 NEW ZEALAND MODIFIED CHAMPION
RICHARD PIERCE**

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. Body must not extend more than 300mm forward of the #1 spark plug.
- (b) Body can be shortened, narrowed from original body dimensions.
- (c) The body must retain original appearance when removed from the car, it must look like a car body and it must have front pillars.
- (d) Body may be constructed of fibreglass, alloy or steel.
- (e) All cars must have a bonnet from front of radiator to bulkhead to cover motor, but no front guards.
- (f) No aerodynamic devices or panels are permitted, placed on, or incorporated within the body panels.
- (g) The maximum allowable body rake be 10 degrees as measured, and determined at the lower window opening using a level/protractor.
- (h) No additional internal panels allowed other than on a horizontal or vertical plain within the body outline profile,

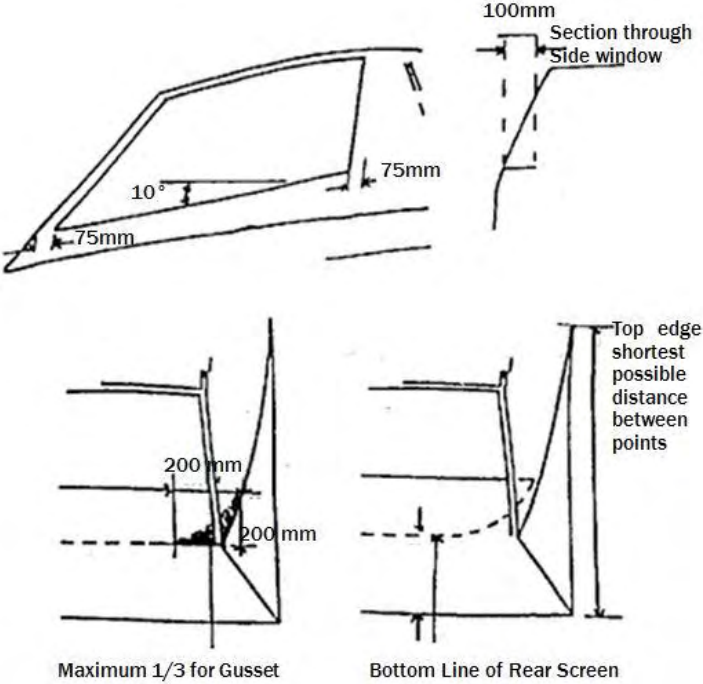
other than window side panels, which may be turned in the direction of the cockpit, but must not exceed 100mm maximum from outer edge of body shell. These panels must not extend more than 75mm past either end of the window opening. (Refer to drawing).

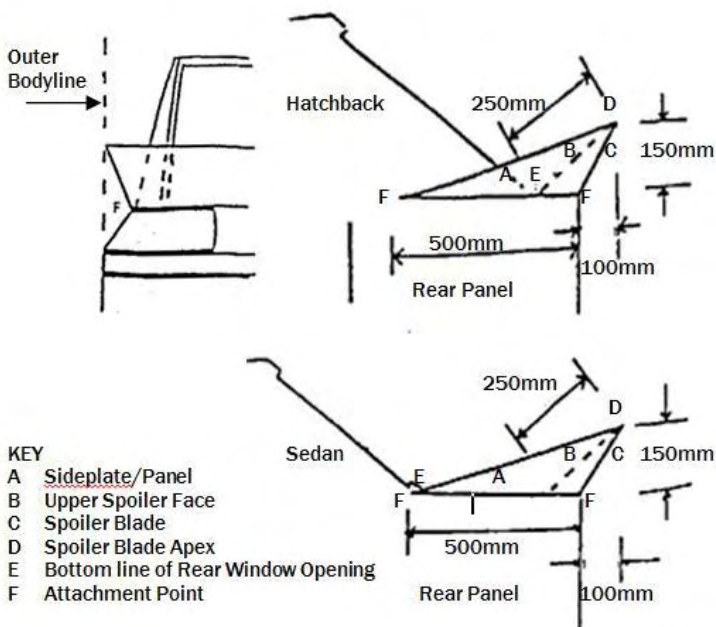
- (i) Rear view mirrors not permitted
- (j) Rear Spoilers

Rear Spoilers optional. If used, they are subject to the following restrictions:

- (i) Maximum width at top of spoiler blade cannot extend beyond the outer body-line, and cannot extend outside of point of attachment at the bottom of the spoiler blade.

Relevant Body Diagrams





- (ii) The spoiler cannot extend rearwards more than 100mm maximum past the rear panel.
- (iii) The upper face of spoiler must not be greater in length and 250mm, regardless of angle. Cannot intrude past, or inside bottom line of rear window opening, regardless of length.
- (iv) Maximum height of spoiler to be 150mm measured from point of attachment, on a vertical plain.
- (v) Where side plates/panels are fitted, these must not exceed 500mm in length, measured from point of attachment on a horizontal plain, and must not overlap spoiler outline.
- (vi) The top edge of spoiler blade apex, to front of side panel attachment point, must be the shortest distance between these two points. Centre line of side panel to follow this line throughout its entire length.
- (vii) Body must retain original appearance when removed from the car, it must look like a car body and it must have front pillars.
- (k) Must have a floor securely fastened within the box forming the 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 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.

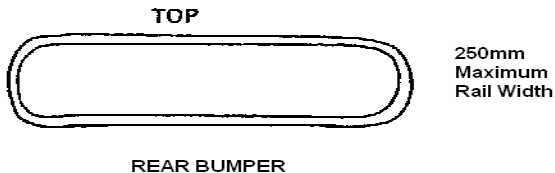
- (a) **Vehicle Width:** Maximum overall vehicle width 2.0 metres.

T11-3-6 Knurfining Bar

- (a) All vehicles must be fitted with knurfining 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 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) 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"x120

thou (allows for manufacturing tolerances), and contained within the body. Refer also to rule T11-3-4.

- (b) Roll cage to be welded to main frame, 6mm inspection holes can be drilled in main roll cage pipes if requested.
- (c) Parallel braces must be fitted from top rear of roll cage, to main frame, in front of, or behind rear axle.

- (d) Rear rollcage internal width:-

Option 1: A minimum of 780mm wide at shoulder position on inside edges and contained within the body.

Option 2:

- (i) If the internal width of the rear rollcage uprights does not comply with option 1, side intrusion bars must be added to both sides of the rear frame of the roll cage.
- (ii) The minimum internal width of the side intrusion bars must be 780mm wide at shoulder position and contained within the body.
- (iii) The side intrusion bars must be attached adjacent to the rear cross tube at the top of the roll cage.
- (iv) The lower end of the side intrusion bars must be welded to the main frame.
- (v) A diagonal brace must be fitted midway between upper and lower side intrusion bar mounting points.
- (vi) Side intrusion bars and brace to be constructed of rollcage material.

(e) **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.

- (f) A horizontal cross member, travelling across bulkhead, and attached to the roll cage on both sides approximately 500mm from the floor.
- (g) A horizontal cross member, travelling across behind the seat, and attached to the roll cage on both sides approximately 500mm from the floor.
- (h) Two 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.
- (i) 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 1.672m² (18sq.ft), right side 1.301m² (14sq.ft), a single piece centre cord not to exceed 2.323m² (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
31161111	9.025" Deck/4.000" Bore/350 Mains
31161211	9.025" Deck/4.125" Bore/350 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**

Minimum thickness 1.0mm steel or 2.6mm aluminium,
maximum capacity 55 litres.

Effective for new cars as defined in Rule E2-1-3(b) from 1
September 2013: Minimum thickness of steel tanks is
1.5mm.

(d) **Fuel Tank Mounting**

Effective for new cars as defined in Rule E2-1-3(b) from 1
September 2013. All fuel tanks must be securely mounted
using straps; tabs welded to the tank for the purpose of
mounting the tank are not approved.

(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) **Fuel tank venting**

Fuel Tanks must be vented, using one of:

(a) 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. The
vent pipe must avoid inboard disc braking systems
and be at least 600mm clear of exhaust pipes

(b) An SNZ approved roll over valve. The board will
maintain and publish a list of approved roll over
valves.

(i) Approved roll over valves:

RCI Racing - Part # 7021A

RCI Racing Part # 7022A

Saldana Part # SAL-SAC-009

Aeroflow Part # AF614-08

(j) 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) The hub type commonly known as '6 pin' when used on the right rear, must only be used with 10mm wheel centres. Pressed wheel centres are not allowed regardless of thickness.
- (e) 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.
- (f) 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.
- (d) All seats must contain an approved headrest.

T11-3-18 Seat Belts

Refer to Section S4.

T11-3-19 Numbers

Refer also to T7.

- (a) Numbers and track letters to read large and clear.
- (b) Numbers to be displayed on airfoils or bodywork if airfoil not fitted.
- (c) Numerals to be a minimum 300mm high x 50mm wide with a 13mm border, legible and of contrasting colours, to be displayed on both sides of airfoil at uppermost rear corner.
- (d) If an airfoil is not fitted, a single number to be displayed on roof panel, facing towards the outside of the track.
- (e) Modifieds to have number displayed on rear of car (to be easily read by a following competitor) of minimum size of 100mm x 20mm, legible and of contrasting colours.
- (f) **Track Code Sizes:** Letters to be at least 100mm high, with a stroke width of at least 13mm.

T11-3-20 Bonnet

Bonnet and boot must be securely fastened.

T11-3-21 Protection

100mm mesh screens must be fitted to cover opening immediately in front of the driver.

T11-3-22 Towing Hitch

Front and rear, positioned under, and behind the natural bumper, no wider than 160mm and no deeper than 75mm.

T11-3-23 Enforcement of Specifications

- (a) Impounding: Refer Rules E2-2 to E2-7.
- (b) Inspection: Refer Section E2.

T11-3-24 Dangerous Construction

The Steward of the meeting may exclude any vehicle the construction of which he deems to be dangerous, and shall give full effect to these Regulations by requiring the Scrutineer to check every vehicle immediately prior to its taking part in a competition.

SECTION T11-5 PRODUCTION SALOONS



2017 PRODUCTION SALOON COMPETITOR OF THE YEAR: SHANE CARSON

- T11-5-1 DEFINITION:** A Production Saloon is a road car converted for non-contact speedway racing.
- T11-5-2 INTENT OF THE PRODUCTION SALOON CLASS:** The Production Saloon specifications are to be interpreted in conjunction with the constitution to allow for low cost, competitive racing without unfair advantage.
- T11-5-3** Only modifications specifically mentioned in Section T11-5 are permitted. No other modifications are allowed.
- UNLESS IT SAYS YOU CAN, THEN YOU MUST NOT!
- T11-5-4** OEM means Original Equipment Manufacturer. OEM parts must retain their original identification marks.
- T11-5-5** OE means Original Equipment as supplied when the road car was sold new.
- T11-5-6** Where OE or OEM specifications are required, it is the responsibility of the competitor to provide this information.

SECTION ONE: FRAME/CHASSIS

T11-5-7 BASE ROAD CAR

- The year, make and model of the road car that the Production Saloon is based upon will be declared at the time of CVI.
- At least 200 of the relevant road car must have been produced.
- The relevant road car must have been manufactured within the last 20 years, unless earlier models are identical.

- (d) Tracks have the right to allow existing Production Saloons over 20 years old to remain in competition.
- (e) The road car must be a two or four door production saloon or hatchback or liftback.
- (f) The road car cannot be a sportscar, convertible, ute, SUV, van, wagon or similar.
- (g) The road car must have seating for at least four occupants.
- (h) Right hand drive models only.
- (i) Two wheel drive only.

T11-5-8 WHEELBASE

- (a) Wheelbase and track must remain as per OEM specifications.
- (b) A tolerance of 50mm applies.

T11-5-9 BODY - EXTERIOR

- (a) All panels excluding doors to be OE.
- (b) Door panels: Can be replaced with steel panel of 1.2mm maximum thickness, folding to original lines.
- (c) Doors: Must be securely fastened by welding, bolting, or riveting.
- (d) Wheel arches: Must not be modified.
- (e) Glass: All glass must be removed.
- (f) Lights: All lights must be removed.
- (g) Panel security: Bonnet, bootlid or hatch to be securely fastened, with the bonnet to have quick release pins.
- (h) Windscreen: Protective mesh to cover the area immediately in front of competitor.
- (i) Windscreen mesh specifications: Minimum 5.3mm diameter wire, maximum square size = 150mm
- (j) Mudflaps: Optional, tracks can make them compulsory.
- (k) Production Saloons are to be kept in a tidy appearance to the satisfaction of the Head Scrutineer.

T11-5-10 Bumpers

- (a) OE bumpers and mounts only.
- (b) No reinforcing permitted.

T11-5-11 Towing Hooks

- (a) A chain or towing eye must be attached to the front and rear for lifting purposes.
- (b) Fitment of towing eye:
Option One: A bar of 40mm x 40mm x 3mm RHS between the bumper irons.
Option Two: A bar of 40mm x 40mm x 3mm RHS as wide as chassis rails, extending no more than 300mm along the chassis rails.

Option Three: 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.

T11-5-12 Chassis

- (a) No extra reinforcing of panels or chassis.
- (b) No other bar work other than the rollcage.
- (c) Damaged chassis rails can be repaired using 1.2mm maximum panel steel.

T11-5-13 Body Interior

- (a) Front Firewall: Steel or aluminium firewall must be fitted to prevent fluids or fire entering the passenger compartment.
- (b) Rear firewall: Steel or aluminium firewall must isolate the fuel tank from the passenger compartment.
- (c) Door framework or inside panels: Can be permanently removed.
- (d) Upholstery: All upholstery must be removed
- (e) Dash: Can remain standard
- (f) Mirror: Mirrors are not permitted.

T11-5-14 ROLLCAGE CONSTRUCTION

See diagrams T11-5-15 and T11-5-16

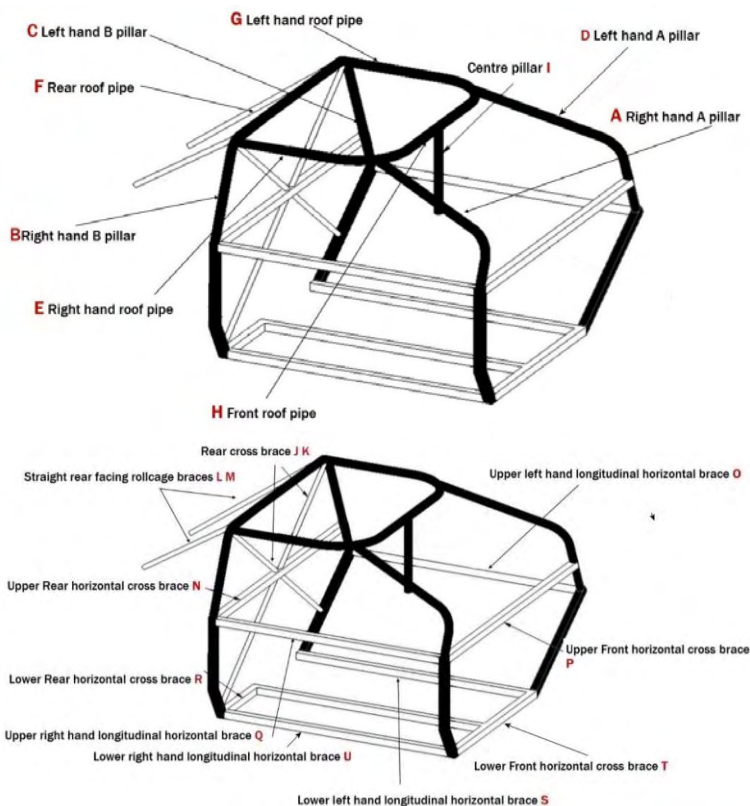
- (a) The primary rollcage structure consists of the 4 uprights (A-D), 4 roof pipes (E-H), plus the centre pillar (I).
- (b) The secondary brace structure consists of pipes J-U.
- (c) The diagrams are an aid to interpretation.
- (d) All joints must be welded.

T11-5-15 Primary rollcage pipes A-I 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.

T11-5-16 All secondary rollcage pipes J-U must be a minimum of either:

- (i) 25mm x 3.0mm RHS, or
- (i) 25mm x 3.0mm OD pipe



T11-5-17 Rollcage Design

- Must follow the interior contour of the car.
- Must enclose the drivers floor.
- Must be full body width.
- All bars in diagrams are compulsory unless stated.

T11-5-18 Rollcage Mounting

Rollcage pipes A-D to be mounted to the car via the following method:-

- Welded to a 3mm steel plate, minimum size = 155mm^2 .
- The steel plate then to be bolted through the floor, to a stiffener plate of the same dimensions.
- A minimum of four 10mm bolts per plate.

T11-5-19 Rear Bracing

- Option One: Bars L & M must extend from Bar F:-
 - to the chassis behind the

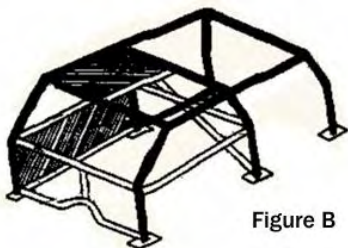


Figure B

- centreline of the rear axle, but
- (ii) no closer than 150mm from the back panel of the car.
- (b) Option Two: "C" pillars of rollcage materials on both sides, as per Figure B above.

T11-5-20 Angle of Front Pillars (Rollcage bars A&D)

- (a) Where these exceed 45 degrees from the vertical, the additional brace outlined in the diagram above is required.
- (b) The brace is to be constructed of rollcage material is required to be bolted to the floor by a 3mm steel plate.

T11-5-21 Rollcage Dimensions

- (a) Bars P & T to be approximately 380mm apart
- (b) Bars O&S to be a minimum of 380mm apart.
- (c) Bars Q&U to be a minimum of 300mm apart.

T11-5-22 Roofplate

- (a) A 3mm steel plate must be welded above the driver to protect the driver's helmet.
- (b) Dimensions: A minimum length and width of 300mm.
- (c) Mounting: welded to a minimum of 25mm x 3mm steel pipe.
- (d) Clearance: There must be a minimum of 50mm between the top of the drivers helmet, the roofplate and the roofplate mounting structure.

T11-5-23 Side Intrusion Plate

- (a) Construction: Minimum = 3mm steel.
- (b) Dimensions: Fully welded within the rectangle formed by bars A,E,Q & U.

SECTION TWO: ENGINE

T11-5-24 Engine Configuration Restrictions

- (a) Same engine as make, model and year of road car.
- (b) Engine location: In the OE position.
- (c) Components: OE componentry only.
- (d) Maximum of 6 cylinders only.
- (e) Rotaries: Maximum twin rotor only.
- (f) Naturally aspirated engines only

T11-5-25 Engine Modifications

- (a) Modifying engine components in any way is prohibited, except where a specific modification is stated in these regulations. **UNLESS IT SAYS YOU CAN, THEN YOU MUST NOT!**
- (b) Maximum oversize bore allowed: 1.5mm (0-060").
- (c) No engine stroking.
- (d) Cam regrinds are permitted but the original manufacturer's lift must be maintained.
- (e) Air filter is free.

T11-5-26 Carburettor

- (a) OE Carburettor only.
- (b) Maximum of 4 chokes-barrels-venturies only.
- (c) Carburettor identification numbers must remain legible.

T11-5-27 Specific Additional Requirements for Fuel Injection

- (a) 4 litre maximum engine capacity.
- (b) 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.
- (c) EFI engine management sensors and air flow meters fitted inside OEM inlet tract must be retained and working.

T11-5-28 Exhaust

- (a) Free flow exhausts are permitted on carburetted engines.
- (b) Mufflers or baffles must be fitted.
- (c) EFI car with a factory fitted free-flow system permitted.

T11-5-29 Exhaust Location

- (a) Option One: Must extend at least 450mm past the bulkhead and underneath the chassis,
- (b) Option Two: Must pass through the cockpit towards the rear, and be covered by 1mm steel or 1.2mm aluminium panels.
- (c) Where the exhaust exits through body panels:
 - (i) The maximum height from top of pipe to ground level to be 300mm.
 - (ii) Exhaust to angle towards the rear, at a minimum angle of 40 degrees.
 - (iii) Exhaust to finish at body line.

T11-5-30 Cooling System

- (a) One radiator of any make or model permitted.
- (b) Radiator must be mounted in original position.
- (c) Radiator overflow must be below floor level.
- (d) The use of electric fans is optional.
- (e) No radiator hoops or bracing.

T11-5-31 Fuel

- (a) Fuel Tank size: One tank of up to 36 litres.
- (b) Fuel tank construction: 1.2mm steel or 2.0mm aluminium, to professional standards.
- (c) Fuel Tank mounting: Securely mounted in the rear of the car.
- (d) Fuel Tank cap: Screw threaded cap only
- (e) Fuel Cells: Cells complying with Section E5-6 can be used.
- (f) Pressurised fuel tanks: Not permitted
- (g) Glass Fuel bowls: Not permitted

- (h) 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.
- (i) Fuel Taps: As per Section E5-8.
- (j) Additional feature for EFI cars:
 - (i) Fuel shut off tap must also switch off the electrical supply to fuel pump, before the shut off valve is fully closed.
 - (ii) Return fuel line must be beside main fuel line.
- (k) Fuel Lines:
 - (i) must be steel or copper and in the case of flexible joints, must be of approved flexible type, securely clamped at joints.
 - (ii) No wire clamps.
 - (iii) Armoured flexible neoprene plastic may be allowed where fitted as standard parts.
 - (iv) Other types of fuel piping may be useful if that specific type is approved by SNZ.
 - (v) Fuel line to be securely clamped every 450mm maximum.
- (l) Avgas or petrol only to be used.
- (m) No methanol or performance enhancing additives.

SECTION THREE: DRIVETRAIN

T11-5-32 Transmission

- (a) Must be of the same make of the road car, i.e. Ford car - Ford gearbox.
- (b) Gearbox must be mounted to the engine block with OE bell housing.
- (c) No mid mounted engines / transmissions, unless OEM.
- (d) No converter-less/clutched type autos.
- (e) All converters to be full of transmission fluid.
- (f) No aluminium flywheels.
- (g) OE clutches only.

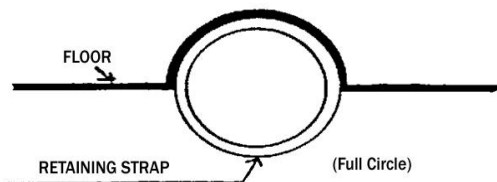
T11-5-33 Differential

- (a) Differential must be of the same make of the road car.
- (b) Differential must bolt into OEM position.
- (c) No quick change gears allowed.
- (d) Locked or limited slip type diffs are optional.

T11-5-34 Driveshaft Retaining Strap

- (a) A shaft retaining strap must be fitted around the front end of driveshaft on RWD vehicles.

- (b) For two-piece drive shafts, a shaft retaining strap must be fitted at the front of each drive shaft section directly behind each yoke.
- (c) Drive shaft retaining straps to be fitted to adequately protect driver's compartment.



SECTION FOUR: WHEELS/TYRES

T11-5-35 Wheels – Steel

- (a) Option One: OE wheels of correct size and offset.
- (b) Option Two: SNZ Approved wheels as per Section T14-2
- (c) No diameter mis-matches (e.g. cannot use 13" and 14" wheels at the same time).
- (d) Maximum rim width = 200mm

T11-5-36 Wheels – Aluminium:

Aluminium wheel rims are permitted providing the following clauses are complied with:-

- (a) Wheels to be to OE offset and size.
- (b) Matching set of wheels only.
- (c) No mix and match of style or steel and Aluminium.
- (d) Must be stamped as per SNZ requirements.
- (e) Damaged or repaired wheels are not permitted.

T11-5-37 Tyres

- (a) Road tyres must be used. A road tyre is defined as being legal for highway use in New Zealand.
- (b) All tread pattern grooves cannot exceed 10mm in width or depth.
- (c) Grooving of original tread depth and width is permitted.
- (d) Additional grooving or cutting is not permitted.

T11-5-38 Tyre Size

- (a) Vehicles with ABS traction control and/or drive by wire: OE tyre size, to a maximum width of 205mm.
- (b) All other cars: Maximum tyre width of 205mm
- (c) The tyre Manufacturer's rating as displayed on the sidewall determines tyre width.
- (d) Wheels and tyres are to stay within the confines of the body profile.

SECTION FIVE: ELECTRICAL

T11-5-39 Battery

- (a) The battery must be securely mounted inside a minimum 1.2mm steel or 2mm aluminium box, with an insulated lid.
- (b) Battery cut-out switch will be
 - (ii) at least 300mm from fuel tap
 - (ii) within easy reach of driver and crew.
- (c) clearly marked with on and off positions.

T11-5-40 Electrical System

- (a) All vehicles must be able to be self-starting at all times without outside assistance, e.g. jumper leads, etc.
- (b) Only blue, white or green instrument warning lights allowed.
- (c) All unnecessary wiring to be removed (e.g. headlight, taillight wiring etc).
- (d) OE ABS, Traction Control and Drive By Wire is permitted. A tyre size limitation applies, as per Rule T11-5-38.

T11-5-41 Electronics

- (a) 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.

- (b) Electronically controlled adjustable shock absorbers are not permitted.
- (c) Transmitter placement (refer Section E4-5): 'A' measurement 1800mm, 300mm from extreme right hand side of vehicle, 600 mm from the extreme left hand side of vehicle. 200mm maximum from bottom of transmitter to track surface.

SECTION SIX: BRAKES AND SUSPENSION

T11-5-42 Brakes

- (a) Must be from the road car make and model.
- (b) Must operate on all four wheels.
- (c) Boosters can be fitted.

- (d) Handbrake is optional, but if fitted must be operational on both wheels as per OE specification.

T11-5-43 Suspension

- (a) OE Suspension only.
- (b) The suspension type (either leaf or coil spring) cannot be changed.
- (c) Mounting points can be strengthened to improve handling but must remain in OEM position.
- (d) Suspension can be lowered to improve handling.
- (e) Spring or Torsion weights can be altered.
- (f) Any shock absorbers of OE configuration can be used on OEM mounting points.
- (g) Strut brace: A non-adjustable 25mm x 25mm bar can be:-
 - (i) bolted across front and rear suspension towers or
 - (ii) braced back to firewall by a bolted plate, maximum of 150mm long x 100mm wide x 3mm thick.
- (h) No added sway bars, tramp rods, lift bars or any additions to original differential mounting to the road car.
- (i) Adjustable platform spring tensioning type shock absorbers are not permitted.

T11-5-44 Steering:

- (a) OE steering compentry only.
- (b) Approved quick release steering wheels are permitted.

SECTION SEVEN: SAFETY EQUIPMENT

T11-5-45 Approved Seats

- (a) Refer to the SNZ website for professionally manufactured Saloon seats approved for use.
- (b) All approved seats must have mounting instructions supplied to SNZ.

T11-5-46 Other Seats

All other seats must meet the following specifications:-

- (a) Type: Bucket
- (b) Back: 1.2mm minimum thickness steel
- (c) Headrest: 3mm minimum plate, minimum size = 280mm wide and 150mm deep, and the surface padded.
- (d) Mounting: Base must be securely bolted or welded to the floor and/or chassis.
- (e) An aluminium seat of 3mm thickness with no steel backing is also acceptable, however the 3mm section must include the full width of the seat back support and seat base.

T11-5-47 Seatbelts: Refer Section S4

T11-5-48 Enforcement of Specifications

Refer Section E Vehicle Inspections and Section M5 Duties of Officials.

T11-5-49 Impounding: Refer to Rules E2-2 to E2-7.

T11-5-50 Protective Clothing and Safety Equipment: Refer Rule S3.

T11-5-51 Sound: Refer Rule S5. Tracks may enforce lower readings.

T11-5-52 Electronics: Refer Rule E4.

T11-5-53 Racing Rules: As per Section R11-4.

SECTION EIGHT: RACING NUMBERS

T11-5-54 Racing Numbers

Also Refer Rule T7.

- (a) Numbers to be displayed on:-
 - (i) both sides between front and rear wheel arches
 - (ii) the roof
 - (iii) the rear
- (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.
- (e) The number displayed on rear of car is to be a minimum size of 100mm x 20mm, legible and of contrasting colours.
- (f) **Track Code Sizes:** Letters to be at least 100mm high, with a stroke width of at least 13mm.

R 1 1-4 RACING RULES: MODIFIED, SUPER SALOON, SALOON AND PRODUCTION SALOON

SIGNALS

R11-4-1 The following lights and flags are used to signal competitors on the track:

Green Flag & Light	Start of race
Green Light	Race in progress
Yellow Flag & Light	Proceed with caution
Red Flag & Light	Stop immediately
White Flag	One lap remaining
Black Flag/Board	Offending competitor to retire from race immediately.
Black & White Chequered	Race complete

R11-4-2 The green light to be on continuously while race is in progress.

BEFORE THE RACE

R11-4-3 The maximum number of competitors in the race will be decided by the Steward.

R11-4-4 Vehicles must leave the pits under their own power.

R11-4-5 Vehicles not on the track when the pit gate is shut are not eligible to start.

R11-4-6 Vehicles proceeding to the start must not be driven at excessive speed.

R11-4-7 Vehicles will grid up as directed by the Clerk of the Course.

R11-4-8 Any vehicle failing to grid up after leaving the pits within the time limit of three minutes is not eligible to start the race.

R11-4-9 The Referee is the sole judge of R11-4-8 above and can only allow one 3 minute delay per race. The 3 minute delay cannot be used in the event of a re-run.

R11-4-10 The Clerk of the Course will advise the Referee that the track is clear and ready for racing.

R11-4-11 The Starter will initiate each race when instructed to do so by the Referee.

R11-4-12 All competitors are under the jurisdiction of the Referee once the race commences.

RACE START

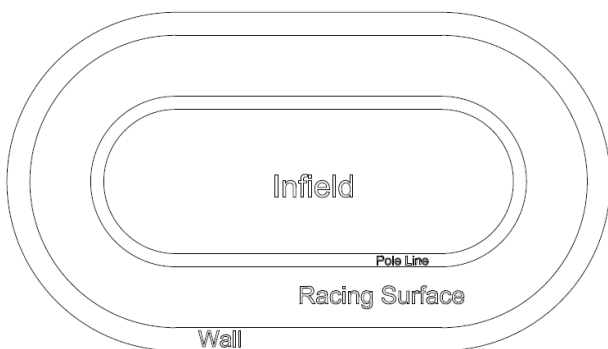
R11-4-13 All races are rolling starts, with grid 2 setting the pace.

R11-4-14 The Referee will signal that the race is about to start by turning off the yellow lights at least half a lap prior to the start.

- R11-4-15** The race commences when the green flag is waved and green lights activated.
Option: The race commences when both front row vehicles have entered the start box at a reasonable pace.
- R11-4-16** In the case of a false start the Referee can order a re-run by activating the yellow light.
- R11-4-17** Any vacant grids to be held, failure to do so can result in a penalty.

RACE IN PROGRESS

- R11-4-18** The race will be in an anti-clockwise direction.
- R11-4-19** Vehicles are not to be driven in the wrong direction.
- R11-4-20** The following racing practices are not permitted:-
- (i) Contact: Deliberate or accidental.
 - (ii) Forcing another competitor off their racing line.
 - (iii) Cutting Off.
 - (iv) Blocking.
 - (v) Using the concrete wall to gain an advantage.
 - (vi) Any other foul or unfair practice.
- Penalties will apply as per Section M7-2.
- R11-4-21** In any race of less than 20 laps, lapped competitors can be black flagged.



POLELINE/INFIELD

- R11-4-22** Refer to explanatory diagram right for a definition of terms.
- R11-4-23** A competitor can be penalised for placing one or more wheels off the racing surface, unless taking evasive action.
- R11-4-24** If a vehicle is forced, spun, or driven to the infield during the race, the competitor must wait until the track is clear before returning to the racing surface.

SUSPENSION OF RACING

R11-4-25 Racing can be suspended at any time by the activation of the yellow or red lights

- (i) Yellow lights: all vehicles must slow immediately.
- (ii) Red lights: all vehicles must stop immediately.

R11-4-26 First Lap Incident

When the race is suspended before one full lap is completed:-

- (i) it will be completely rerun over the original number of laps
- (ii) the original grid positions will apply, except for the prime cause of the stoppage who will restart from the rear of the field Note: currently applies to yellow lights only
- (iii) no 3 minute bells are permitted
- (iv) competitors may not change their vehicles
- (v) vehicles on the infield at the time of the race suspension are permitted to take part in the restart.

R11-4-27 Single File Resumption

When the race is suspended after one full lap is completed the race will resume as follows:-

- (a) Single File under yellow lights
 - (i) The lead car will take the safest course past any incident.
 - (ii) The rest of the field will follow in Single File.
 - (iii) Any car breaking file will be immediately excluded.
 - (iv) The vehicles will restart in the order they were in at the last completed lap prior to the caution period.
- (b) Vehicles involved in the incident are permitted to restart:
 - (i) The primary cause from the rear of the field.
 - (ii) All other vehicles in the position they were in at the time of the last completed lap.
- (c) The Referee will signal that the race is about to recommence by turning off the yellow lights at least half a lap prior to the start/finish line.
- (d) The race restarts when the green flag is waved and green lights activated.
- (e) Laps run on the yellow lights are not counted as race laps.

HEALTH & SAFETY

- R11-4-28** Vehicle must be operated by one competitor only, with no passengers permitted.
- R11-4-29** If a competitor unclips their seatbelts or window net during the race they are deemed to have retired.
- R11-4-30** No competitor will drive with an arm or any part of their body outside the vehicle.
- R11-4-31** If a vehicle becomes unsafe during the race it will be removed by the Referee.
- R11-4-32** If a vehicle receives a flat outside tyre the competitor must immediately retire from the race.
- R11-4-33** Competitors in stationary vehicles must remain in their seat with belts on until they are permitted to get out by an Official. This does not apply in the case of fire.
- R11-4-34** Refuelling is not permitted on the track at any time.

OUTSIDE ASSISTANCE

- R11-4-35** Communication with the driver, other than by Officials or competitors in the race is not permitted.
- R11-4-36** Physical contact with a vehicle by someone other than the driver is not permitted unless:-
- (i) it is to ascertain if the vehicle is fit to continue to race
 - (ii) the vehicle has stopped in an incident. Providing it is not the primary cause, the vehicle can be untangled, restarted or push started.

RETIRING FROM THE RACE

- R11-4-37** Any competitor withdrawing from a race must move safely to the infield and remain there until the end of the race.
- R11-4-38** Any competitor deliberately causing a race stoppage or caution period will be immediately excluded from the race.
- R11-4-39** Any competitor refusing to retire infield when instructed, forcing a race stoppage, will be immediately suspended for 3 race meetings. This suspension cannot be protested or appealed.

FINISH OF RACE

- R11-4-40** A race is not finished until the chequered flag is displayed, regardless of the number of laps run.
- R11-4-41** The vehicle must cross the finish-line and receive the chequered flag to be deemed to have finished the race.
- R11-4-42** Racing will continue until all able vehicles have completed the lap they are on when the chequered flag is shown.

- R11-4-43** All placings are determined by the finishing order and number of laps completed by each vehicle as recorded by the approved lap scoring system.
- R11-4-44** Any vehicle that has withdrawn from a race will receive finishing points in the order of retirement.
- R11-4-45** In the case of two or more cars retiring together, points will be awarded in order of the previous complete recorded lap.

DISRUPTED RACE FINISH

R11-4-46 Yellow light finish

If the yellow lights are activated after the lead car has finished the race, all competitors that follow through the finish line are counted in order of passing the line.

R11-4-47 Red light finish

If the race is stopped on red lights after one or more vehicles have received the chequered flag:-

- (i) placings will be given in order for finished vehicles.
- (ii) The remainder of the field will be counted as finishers as per their race placings recorded on the lap preceding the stoppage. This excludes any competitor causing the stoppage unless that competitor has already finished.

DECLARED RACE

- R11-4-48** The Clerk of the Course can declare a race during a suspension of racing.
- R11-4-49** The results will be as per the last completed lap.
- R11-4-50** The Referee can exclude any competitor deemed to be the primary cause of the stoppage.
- R11-4-51** Exception: Rules R11-4-48, 49 and 50 do not apply to Allocated titles.

LOCAL RULES

- R11-4-52** The rules in this section may be amended by the unanimous decision of a Senior Official 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:
- (i) safety of Competitors
 - (ii) safety of Spectators
 - (iii) better promotion of events.
- R11-4-53** Local rules are only valid for the meeting at which they are enacted, and must be posted on the track noticeboard in order to be considered in effect.

SECTION T1 2-1 SUPERSTOCK SPECIFICATIONS



**2016-17 NEW ZEALAND SUPERSTOCK
CHAMPION: SIMON JOBLIN**

T12-1-1 DEFINITION: A car designed for speedway racing where contact between vehicles is permitted.

SECTION 1: FRAME/CHASSIS

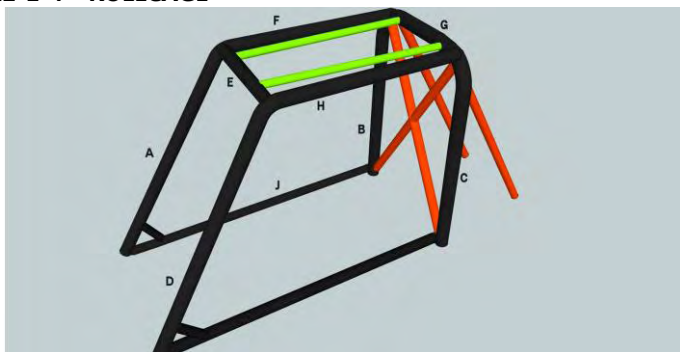
T12-1-2 GENERAL DIMENSIONS - WEIGHT

- (a) Minimum weight excluding driver = 1400kg.
- (b) Maximum weight excluding driver = 1500kg.
- (c) These weights apply ready to race at any time
- (d) Vehicles must be weighed before allocated title events.
- (e) Vehicles can only be weighed on SNZ approved weighing systems.

T12-1-3 GENERAL DIMENSIONS - HEIGHT

The minimum height is 1370mm from the ground to the top of the roof line.

T12-1-4 ROLLAGE



- (a) The rollage is defined in black on the diagram above.
- (b) Rollage bracing is defined in red on the diagram above.
- (c) Rollage tertiary structures are defined in green on the diagram above.
- (d) The diagram above is an aid to interpretation only.

T12-1-5 ROLLAGE MINIMUM STEEL SPECIFICATIONS

- (a) 48mm OD x 3.2 mm wall thickness medium black steel pipe or 40mm x 40mm x 3mm Steel RHS.
- (b) ASTM A106 Grade B Schedule 40 steel pipe (48.3 mm OD x 3.68mm WT).
- (c) API 5L Line Pipe Schedule 40 steel pipe (48.3mm OD x 3.68mm WT).
- (d) Galvanised pipe is not permitted in rollage.
- (e) For rollages built new (and CVI inspected) from 1 September 2013, the main frame of the Rollage must use one of the following:-
 - (i) ASTM A106 Grade B Schedule 40 steel pipe (48.3 mm OD x 3.68mm WT).
 - (ii) API 5L Line Pipe Schedule 40 steel pipe (48.3mm OD x 3.68mm WT).

T12-1-6 ROLLAGE BRACING MINIMUM STEEL SPECIFICATIONS

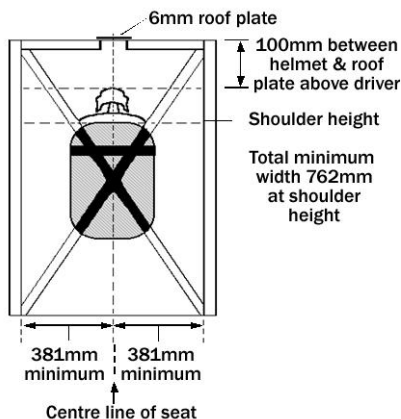
Rollage brace material minimum size = 42mm OD x 3.2mm wall thickness medium black, or Steel pipe or 40mm x 40mm x 3mm steel RHS.

T12-1-7 ROLLAGE CONSTRUCTION

The primary rollage structure consists of the 4 uprights (A-D) and 4 roof pipes (E-H) as per the diagram on the previous page. The diagram is an aid to interpretation.

T12-1-8 The rear uprights (B and C) can have a maximum front to rear layback of 200mm.

- T12-1-9** The minimum measurement from the centre of the back of the seat to the rear rollcage uprights is 381mm, measured at the driver's shoulder height as per diagram.



- T12-1-10** Lateral roll cage material at least 400mm centre to centre must link the (E and G) front and rear roll bars and be welded on each side of the roof plate.

T12-1-11 ROLLAGE BRACING

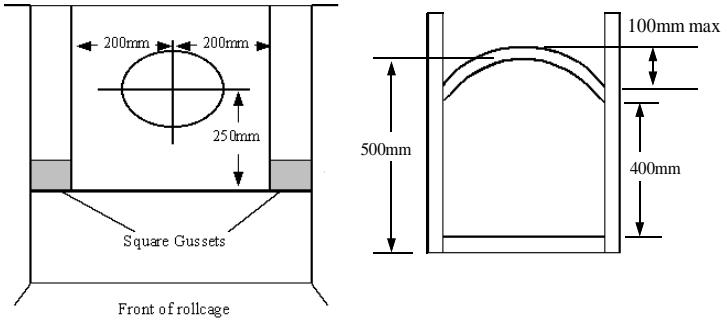
- (a) Rollcage bracing consists of:-
 - (i) a cross brace between the rear uprights.
 - (ii) rear braces as per the diagram on page 172.
- (b) The top of the rear rollcage cross and straight rear facing rollcage braces can be located:-
 - (i) at least 400mm measured centre to centre on the top of rear rollbar, or
 - (ii) as far down as the centre of the radius of the bend or the corner of the rear rollbar.

T12-1-12 ROOFPLATE

- (a) 6mm steel plate must extend from the top of pipe G to:-
 - (i) 250mm forward of the centre of the drivers helmet.
 - (ii) 200mm either side of the top of drivers helmet.
- (b) The roof plate must be welded to rollcage material on all four sides.
- (c) The roof plate must be flat and not have any holes.
- (d) There must be a minimum of 100mm between the top of the drivers helmet, the roofplate and the roofplate mounting structure.
- (e) 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.

- (f) Gussets to be welded and must be square or rectangle and a minimum of 100mm long by 6mm plate steel.
- (g) The front diagonal pipe between the primary 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.

Minimum Dimensions for Superstock Roofplate



T12-1-13 ROLLAGE CONSTRUCTION AND MAINTENANCE

- (a) All sections of the cage must be welded where they meet.
- (b) The construction must be smooth and even without ripples.
- (c) No more than 10% deformation permitted in any rollcage bends.
- (d) All rollcage structures must be fully notched where they meet.
- (e) No cracks permitted.

T12-1-14 CHASSIS

The chassis can be categorised as one of the following, with the relevant rules applying:-

- (a) Spaceframe
- (b) Tank/Monocoque: Rules T12-1-15(a), (b), (c) and (d) will not apply provided that side protection plates exceed 380mm minimum height by 3mm steel plate.
- (c) Flat: 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. 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.

T12-1-15 SIDE IMPACT PROTECTION

- (a) Steel plates of 3mm minimum thickness and 380mm minimum height must protect the driver's hips and feet.
- (b) The plates must be welded to the front & rear rollbars, the chassis/floor, and the upper side pipe on each side of the car.
- (c) The upper side pipe must be minimum rollcage brace material (marked J on the rollcage diagram T12-1-4).
- (d) Where the main lateral chassis rails are at least 380mm apart the side plates can be welded to these without additional upper sidepipes.
- (e) No holes permitted in sideplates.
- (f) Side Intrusion bars may be fitted but must comply with the minimum measurement of 381mm as in rule T12-1-9. Minimum pipe diameter to be 42mm OD x 3.2mm wall thickness.

T12-1-16 BODY

- (a) Bodies can be constructed of plastic, fibreglass, steel or alloy.
- (b) The windows must be large enough to allow the driver to enter the cockpit from both sides of the car.
- (c) A bonnet must cover from the firewall forward to the front of the radiator.
- (d) Bonnet openings must face forward.

T12-1-17 WING/FIN

All vehicles must have a fin or wing on their roof that displays the racing number and letter code on both sides.

T12-1-18 FIN SPECIFICATIONS

- (a) Must be large enough to fit the racing numbers described in in Rule T12-1-67.
- (b) To have a North-South orientation on the roof

T12-1-19 WING SPECIFICATIONS

- (a) One wing consisting of a centre section with no more than two single-piece side panels is permitted.
- (b) It must be mounted to the rollcage or roofplate.
- (c) It must be fitted above the roof.
- (d) Wing must not be able to be adjusted by driver while in the driver's seated position.

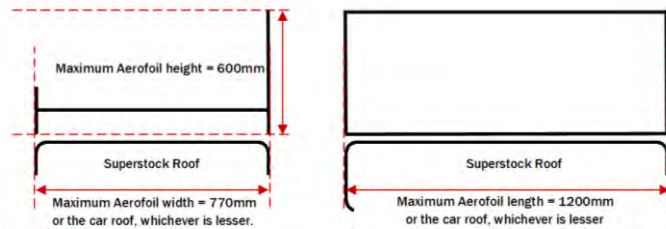
T12-1-20 WING DIMENSIONS

It must not exceed the width and length of the car roof (for the purposes of interpretation the roof includes front visors or moulded rear spoilers).

T12-1-21 WING MEASUREMENTS

Maximum wing assembly measurements:

- (i) Length = 1200mm
- (ii) Height = 600mm
- (iii) Width = 770mm



Wing: End View

Wing: Side View

T12-1-22 COCKPIT: FIREWALL

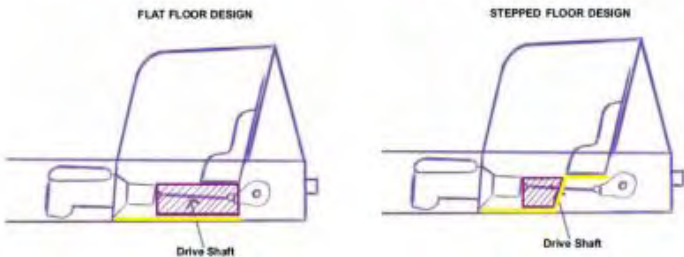
A metal firewall must seal the engine compartment from the cockpit.

T12-1-23 COCKPIT: FLOOR

- (a) Construction: Minimum 3mm steel plate, welded on all sides.
- (b) Location: From the firewall back to at least the rear of the drivers seat.
- (c) If the floor is not under the gearbox then gearbox must

Yellow = approved floor

Purple = required driveshaft cover



have a securely fastened metal cover.

T12-1-24 WINDOW MESH

- (a) Front window mesh must be welded on all 4 sides to completely cover the opening.
- (b) Mesh squares to be no larger than 100mm x 100mm.
- (c) Minimum material thickness = 4mm.

T12-1-25 INSTRUMENT LIGHTS

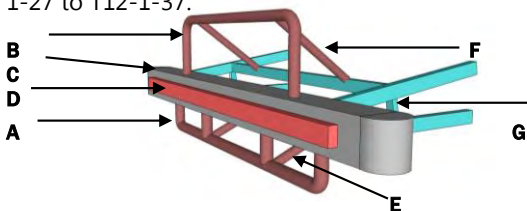
Red or orange instrument lights are not permitted.

T12-1-26 PERMITTED MIRRORS

- (a) One mirror not more than 260cm^2 or,
- (b) Two mirrors not more than 230cm^2 each,
- (c) Mounted in the interior of the car no closer than 350mm from the driver's forehead.

T12-1-27 BUMPERS

Bumpers are the front and rear extremities of the vehicle. Refer to the diagram below when interpreting Rules T12-1-27 to T12-1-37.



T12-1-28 BUMPER HEIGHT

Height from the ground to the centre of the bumper at any point across its width: Minimum = 330mm, Maximum = 380mm.

T12-1-29 BUMPER THICKNESS

Minimum height of bumper = 75mm.

T12-1-30 FRONT BUMPER

- (a) Must not extend more than 50mm beyond the outer edge of the front tyres, when in the straight ahead position.
- (b) The ends must be rounded not less than 38mm diameter, or flat.
- (c) The front face of the bumper may have a maximum deviation of no more than 100mm, as per diagram T12-1-35.
- (d) Extensions to the rear of the front bumper must be rounded not less than a 38mm diameter, or square.

T12-1-31 REAR BUMPER

Must not extend more than 125mm past the outer edge of the rear tyres.

T12-1-32 RADIATOR PROTECTION BAR

Bar B in Diagram T12-1-27, must be:-

- (a) A minimum height of 250mm above the top of the bumper.
- (b) Not more than 100mm from the front of the vehicle.
- (c) Constructed of minimum 38mm diameter material, with minimum 3mm wall thickness.
- (d) Braced.

T12-1-33 FRONT WHEEL PROTECTION BARS

Also called a lifting bar.

- (a) They cannot extend higher than the point of attachment to the radiator protection bar.
- (b) They must start 100mm in from the outside edge of the bumper.
- (c) They must be vertical for a minimum of 100mm.

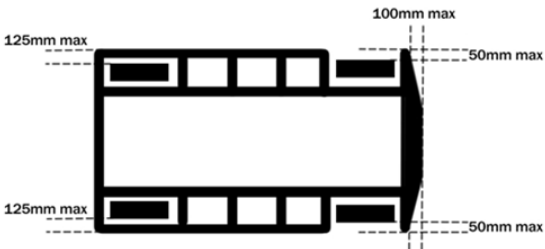
T12-1-34 UNDER-RIDER BARS

Bar A in Diagram T12-1-27

- (a) Location: They must be no further than 100mm from the front edge of the front bumper bar, mounted vertically.
- (b) Width: They must extend to within 100mm of the outer edge of the bumper.
- (c) Height: The minimum height is 175mm, measured from the centre position of the front bumper.
- (d) Construction:
 - (i) pipe, minimum 42mm OD x 3mm wall, or
 - (ii) RHS, 40mm x 40mm x 3mm.
- (e) Mounting:
 - (i) A minimum of four vertical mounts must be used.
 - (ii) Two of these mounts to be braced or gusseted, a minimum of 150mm back to chassis rails.
 - (iii) The end can be radiused to a maximum of 200mm
 - (iv) Box section or pipe brace construction same material as under-rider bar, gusset plating minimum 4mm.
 - (v) If the under-rider structure is fully integrated into the front bumper, it must be constructed of a minimum of 3mm plate.

T12-1-35 BUMPER DIMENSIONS

Dimensions of bumpers as per figure below



T12-1-36 SIDERAILS

- (a) Siderails must be level with bumpers, and braced to the chassis.
- (b) They can extend a maximum of 50mm past outer edge of front tyre (when wheels in straight-ahead position).

- (c) Extensions to the siderail must be rounded not less than a 38mm radius, or square.

T12-1-37 REAR WHEEL GUARDS

- (a) Rear wheel guards must be constructed to ensure that all finished surfaces are at least 75mm x 38mm.
- (b) They cannot protrude more than 125mm outside the outer edge of the rear tyre.

SECTION 2: ENGINE

T12-1-38 ENGINE

- (a) Maximum compression ratio of any cylinder = 10.0:1.
- (b) Maximum inlet and exhaust valve lift = 12.7mm (0.500 inch).
- (c) Maximum cubic capacity = 4072cc (248.5 cu inches).
- (d) Naturally aspirated only.
- (e) Engines with 4 valves per cylinder:
 - (i) Cylinder head casings must retain the OEM identification markings.
 - (ii) Cylinder head must be OE for the make and model of engine block
- (f) Engines fitted with hydraulic/electronic adjustable valve timing e.g. VVTi:
 - (i) the mechanism must be locked in one position. i.e. variable valve timing is not permitted.
- (g) Variable valve/cam lift is not permitted.

T12-1-39 ENGINE COMPLIANCE

- (a) Engines must be drilled with holes through two sides of the sump in readiness for sealing.
- (b) Engines must be measured and sealed by an SNZ appointed engine sealer. NO SEAL, NO RACE. Measurement information must be entered into the vehicle logbook.
- (c) Refer Section M7-4 Specific Technical Offences if an engine is found to be non-compliant.

T12-1-40 FUEL MANAGEMENT

- (a) One carburettor only, with a maximum of four barrels.
- (b) Two throttle return springs must be fitted to the carburettor shaft linkages.
- (c) Throttle position sensors are not permitted.
- (d) Fuel injection, supercharging and turbocharging is prohibited.

T12-1-41 LUBRICATION

- (a) Engine oil lines must be capable of withstanding a pressure of 350psi 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).

T12-1-42 EXHAUST

- (a) Exhaust pipes must discharge towards the rear, or underneath the vehicle.
- (b) All side exhaust systems extending past the A pillar must be shielded.

T12-1-43 COOLING

Any radiator can be used. It must be enclosed by the bonnet and located forward of the firewall, to ensure the driver is protected.

T12-1-44 FUEL

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

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

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.

T12-1-44 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.

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. Superstocks 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.
- E5-4-2** **Fuel Tank Dimensions**
Minimum thickness 1.2mm steel, maximum capacity 22.75 litres. Aluminium and aluminium alloy fuel tanks are not permitted.
- E5-5-2** **Fuel Tank Location**
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.
- E5-6-1** **FUEL CELLS**
Semi rigid crosslink polymer type fuel tanks, also known as fuel cells, are permitted in Superstocks.
- E5-6-3** Superstocks 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.
- E5-8** **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.

- E5-8-4** The on/off master tap must be fitted directly into the fuel tank on Superstocks.
- 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, or of flexible construction.
- E5-9-2** Fuel lines, where flexible, must be of an approved fuel carrying 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.

SECTION 3: DRIVETRAIN

T12-1-45 Driveshaft

- (a) A driveshaft retaining hoop must be fitted around the front end of the driveshaft.
- (b) A driveshaft running through the cockpit must be covered by 3mm metal plate.

SECTION 4: WHEELS AND TYRES

T12-1-46 WHEELS

Also refer Section T14.

- (a) Bead lock rims are not permitted.
- (b) Bleed off tyre valves are not permitted.

T12-1-47 TYRE DIMENSIONS

- (a) Maximum tyre tread footprint = 210mm.
- (b) Maximum tyre width = 255mm at or above bumper height.
- (c) Above measurements are determined by the use of an SNZ approved device.

T12-1-48 TYRE TREAD

- (a) Re-grooving of original tread depth is permitted.
- (b) Increasing original tread width is not permitted.
- (c) Additional grooving or cutting is not permitted.
- (d) All original tread pattern grooves may not exceed 10mm in width or depth.

T12-1-49 FRONT TYRES

Front tyres must duro 55 or more prior to race.

T12-1-50 REAR TYRES

- (a) Permitted tyres
 - (i) Hoosier: 25.5/7/15 (82") or 27/7/15 (87.5").
 - (ii) McCreary/American Racer: P245/70D -15 or 26.0/7.0 -15DT
 - (iii) Standard Road Tyres. A standard road tyre is defined as a non-studded tyre that is legal for highway use in New Zealand.
 - (iv) Other tyres that meet specifications can be submitted to the Board for approval.
- (b) Permitted Durometer readings
 - (i) Hoosier and McCreary/American Racer rear tyres: Minimum of 70 prior to race.
Aid to interpretation: 70 duro tyres are those with '70' moulded in raised lettering on the side of the casing.
 - (ii) Standard road tyres = minimum of 55 prior to race.

T12-1-51 TYRE COMPLIANCE

- (a) Local rules do not apply to tyres at any time.
- (b) 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 the rules.

SECTION 5: ELECTRICAL

T12-1-52 IGNITION

Programmable multi-point rpm limiters or rate-of-acceleration rpm limiters are not permitted.

T12-1-53 The self-starter must be operational at all times.

T12-1-54 The battery must be securely mounted inside a minimum 1.2mm thick metal box, with an insulated lid.

SECTION 6: BRAKES AND SUSPENSION

T12-1-55 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 vehicle, except for front to rear brake bias.

T12-1-56 AXLES: PERMITTED FRONT HUBS

- (a) Unmodified OEM iron or steel hubs.
The OEM brake rotor may be removed and replaced with aftermarket hat and rotor.
- (b) 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.
 - (i) Clearly identifiable and individually numbered version #001 JPT and #002 JPT steel front hubs are approved for use on Superstocks.
 - (ii) The version #001 and #002 JPT 4140 steel front hubs are approved for use in their original manufactured form, modification of the hub is not permitted in any circumstances.

Note: Speedway New Zealand holds manufacturing and material specifications for the JPT version #001 and #002 hub. Any hub used and found not to comply with rule T12-1-56 will be deemed to be non-compliant and will attract the appropriate penalty.

T12-1-57 SUSPENSION

- (a) Any type of suspension can be used.
- (b) Coil springs must be clamped or chained in position. The coil-over assembly is regarded as a suitable restraint for the spring to be securely clamped.
- (c) Suspension must not be able to be adjusted by driver while in the driver's seat.

SECTION 7: SAFETY EQUIPMENT

T12-1-58 APPROVED SEATS

- (a) Refer to the SNZ website for professionally manufactured Superstock seats approved for use.
- (b) All approved seats must have mounting instructions supplied to SNZ.

T12-1-59 OTHER SEATS

All other seats must meet the following specifications:-

- (a) Type: Bucket
- (b) Back: 1.2mm minimum thickness steel
- (c) Headrest: 3mm minimum plate, minimum size = 280mm wide and 150mm deep, with corners rounded off and the surface padded.
- (d) Mounting:
 - (i) Base: Must be securely bolted or welded to the floor and/or integral bar work in a minimum of four positions.
 - (ii) Back: The seat back support must be mounted in a minimum of four positions. Whether the seat incorporates a headrest or not, the upper 2 mounting positions must be within 155mm of the top of the seat. 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 can be no more than 75mm.
 - (iii) Seat mounting bolts are to be a minimum 8mm with suitable washers.
- (e) An aluminium seat of 3mm thickness with no steel backing is also acceptable, however the 3mm section must include the full width of the seat back support and seat base.

T12-1-60 PROTECTIVE CLOTHING AND SAFETY EQUIPMENT

Refer Section S3.

T12-1-61 SAFETY HARNESSSES AND RESTRAINTS

Refer Section S4.

SECTION 8: RACING NUMBERS

T12-1-62 Refer also Section T7.

T12-1-63 Numbers and track code must be:-

- (a) of contrasting colours.
- (b) prepared to a professional standard.

T12-1-64 Cardboard and tape numbers are not permitted.

T12-1-65 SIDE NUMBERS

- (a) Dimensions as per diagram right:
- (i) Minimum height of numerals = 380mm.
 - (ii) Minimum thickness of numerals = 50mm.
 - (iii) Minimum width of background colour = 20mm.
- (b) Location: On the body or side panels, between the front and rear wheels.
- (c) Visibility: Must be readable 30m away at ground level.



T12-1-66 REAR NUMBER

- (a) Dimensions as per diagram right:
- (i) Minimum height of numerals = 190mm.
 - (ii) Minimum thickness of numerals = 30mm.
 - (iii) Minimum width of background colour = 20mm.
- (b) Visibility: Must be readable 30m away at ground level.



T12-1-67 FIN/WING NUMBER

Dimensions as per diagram right:

- (i) Minimum height of numerals = 190mm.
- (ii) Minimum thickness of numerals = 30mm.
- (iii) Minimum width of background colour = 20mm.

T12-1-68 COMPETITORS TRACK LETTER CODE

- (a) Dimensions:
- (i) Minimum height of letters = 100mm.
 - (ii) Minimum thickness of letters = 13mm.
- (b) Location: Before or after all racing numbers above.

SECTION 9: OTHER

T12-1-69 VEHICLE SPECIFICATIONS

Refer also Section E2.

Vehicles not complying with SNZ specs refer Section M5-5.

T12-1-70 RACING RULES

Refer Section R12-3.

T12-1-71 SOUND (REPLICATED FROM SECTION S5)

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.

SECTION T12-2 STOCKCAR SPECIFICATIONS



2016-17 NEW ZEALAND STOCKCAR CHAMPION JOSH PRENTICE

T12-2-1 DEFINITION:

A car designed for speedway racing where contact between vehicles is permitted.

- (a) Only modifications specifically mentioned in Section T12-2 are permitted. No other modifications are allowed.
- (b) OEM means Original Equipment Manufacturer. OEM parts must retain their original identification marks.
- (c) OE means Original Equipment as supplied when the road car was sold new

SECTION 1: FRAME/CHASSIS

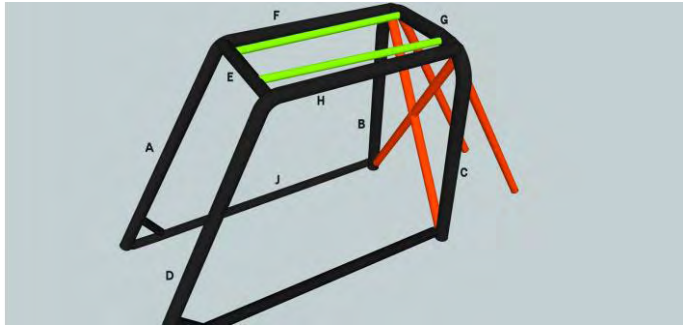
T12-2-2 GENERAL DIMENSIONS - WEIGHT

- (a) Minimum weight excluding driver = 1400kg.
- (b) Maximum weight excluding driver = 1500kg.
- (c) These weights apply ready to race at any time, in certain circumstances dirt may be removed under the Stewards supervision.
- (d) Vehicles must be weighed before allocated title events.
- (e) Vehicles can only be weighed on SNZ approved weighing systems.

T12-2-3 GENERAL DIMENSIONS - HEIGHT

The minimum height is 1370mm from the ground to the top of the roof line.

T12-2-4 ROLLAGE



- (a) The rollage is defined in black on the diagram above.
- (b) Rollage bracing is defined in red on the diagram above.
- (c) Rollage tertiary structures are defined in green on the diagram above.
- (d) The diagram above is an aid to interpretation only.

T12-2-5 ROLLAGE MINIMUM STEEL SPECIFICATIONS

- (a) 48mm OD x 3.2 mm wall thickness medium black steel pipe or 40mm x 40mm x 3mm Steel RHS.
- (b) ASTM A106 Grade B Schedule 40 steel pipe (48.3 mm OD x 3.68mm WT).
- (c) API 5L Line Pipe Schedule 40 steel pipe (48.3mm OD x 3.68mm WT).
- (d) Galvanised pipe is not permitted in rollage.
- (e) For rollages built new (and CVI inspected) from 1 September 2013, the main frame of the Rollage must use one of the following:-
 - (i) ASTM A106 Grade B Schedule 40 steel pipe (48.3 mm OD x 3.68mm WT).
 - (ii) API 5L Line Pipe Schedule 40 steel pipe (48.3mm OD x 3.68mm WT).

T12-2-6 ROLLAGE BRACING MINIMUM STEEL SPECIFICATIONS

- (i) 42mm OD x 3.2 mm wall thickness medium black pipe.
- (ii) 40mm x 40mm x 3mm RHS.

T12-2-7 ROLLAGE CONSTRUCTION

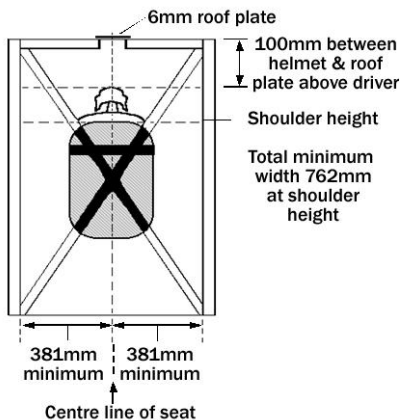
The primary rollage structure consists of the 4 uprights (A-D) and 4 roof pipes (E-H) as per the diagram on the previous page. The diagram is an aid to interpretation.

T12-2-8

The rear uprights (B and C) can have a maximum front to rear layback of 200mm.

T12-2-9

The minimum measurement from the centre of the back of the seat to the rear rollage uprights is 381mm, measured at the driver's shoulder height as per diagram.



T12-2-10 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.

T12-2-11 ROLLAGE BRACING

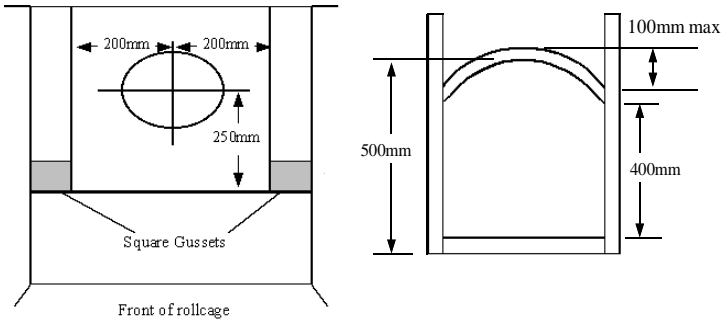
- (a) Rollage bracing consists of:-
 - (i) a cross brace between the rear uprights.
 - (ii) rear braces as per the diagram on page 182.
- (b) The top of the rear rollage cross and straight rear facing rollage braces can be located:-
 - (i) at least 400mm measured centre to centre on the top of rear rollbar, or
 - (ii) as far down as the centre of the radius of the bend or the corner of the rear rollbar.

T12-2-12 ROOFPLATE

- (a) 6mm steel plate must extend from the top of pipe G to:-
 - (i) 250mm forward of the centre of the drivers helmet.
 - (ii) 200mm either side of the top of drivers helmet.
- (b) The roof plate must be welded to rollage material on all four sides.
- (c) The roof plate must be flat and not have any holes.
- (d) There must be a minimum of 100mm between the top of the drivers helmet, the roofplate and the roofplate mounting structure.
- (e) 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.
- (f) Gussets to be welded and must be square or rectangle and a minimum of 100mm long by 6mm plate steel.

- (g) The front diagonal pipe between the primary 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.

Minimum Dimensions for Stockcar Roofplate



T12-2-13 ROLLAGE CONSTRUCTION AND MAINTENANCE

- All sections of the cage must be welded where they meet.
- The construction must be smooth and even without ripples.
- No more than 10% deformation permitted in any rollage bends.
- All rollage structures must be fully notched where they meet.
- No cracks permitted.

T12-2-14 CHASSIS

The chassis can be categorised as one of the following, with the relevant rules applying:-

- Spaceframe
- Tank/Monocoque: Rules T12-1-15(a), (b), (c) and (d) will not apply provided that side protection plates exceed 380mm minimum height by 3mm steel plate.
- Flat: Where the driver's feet extend lower than the primary chassis, the rollage material must extend to below the driver's feet to form a rectangle for attachment of a driver's floor. 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.

T12-2-15 SIDE IMPACT PROTECTION

- Steel plates of 3mm minimum thickness and 380mm minimum height must protect the driver's hips and feet.

- (b) The plates must be welded to the front & rear rollbars, the chassis/floor, and the upper side pipe on each side of the car.
- (c) The upper side pipe must be minimum rollcage brace material (Marked J on the rollcage diagram T12-2-4).
- (d) Where the main lateral chassis rails are at least 380mm apart the side plates can be welded to these without additional upper sidepipes.
- (e) No holes permitted in sideplates.
- (f) Side Intrusion bars may be fitted but must comply with the minimum measurement of 381mm as in rule T12-1-9. Minimum pipe diameter to be 42mm OD x 3.2mm wall thickness.

T12-2-16 BODY

- (a) Bodies can be constructed of plastic, fibreglass, steel or alloy.
- (b) The windows must be large enough to allow the driver to enter the cockpit from both sides of the car.
- (c) A bonnet must cover from the firewall forward to the front of the radiator.
- (d) Bonnet openings must face forward.

T12-2-17 WING/FIN

All vehicles must have a fin or wing on their roof that displays the racing number and letter code on both sides.

T12-2-18 FIN SPECIFICATIONS

- (a) Must be large enough to fit the racing numbers described in in Rule T12-2-79.
- (b) To have a North-South orientation on the roof

T12-2-19 WING SPECIFICATIONS

- (a) One wing consisting of a centre section with no more than two single-piece side panels is permitted.
- (b) It must be mounted to the rollcage or roofplate.
- (c) It must be fitted above the roof.
- (d) Wing must not be able to be adjusted by driver while in the driver's seated position.

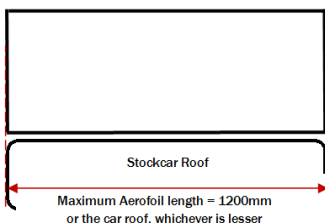
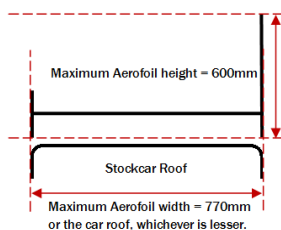
T12-2-20 WING DIMENSIONS

It must not exceed the width and length of the car roof (for the purposes of interpretation the roof includes front visors or moulded rear spoilers).

T12-2-21 WING MEASUREMENTS

Maximum wing assembly measurements:

- (i) Length = 1200mm
- (ii) Height = 600mm
- (iii) Width = 770mm



Wing: End View

Wing: Side View

T12-2-22 COCKPIT: FIREWALL

A metal firewall must seal the engine compartment from the cockpit.

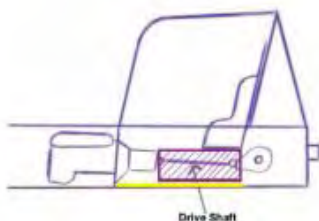
T12-2-23 COCKPIT: FLOOR

- Construction: Minimum 3mm steel plate, welded on all sides.
- Location: From the firewall back to at least the rear of the drivers seat.
- If the floor is not under the gearbox then gearbox must have a securely fastened metal cover.

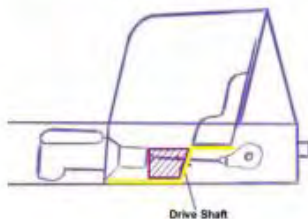
Yellow = approved floor

Purple = required driveshaft cover

FLAT FLOOR DESIGN



STEPPED FLOOR DESIGN



T12-2-24 WINDOW MESH

- Front window mesh must be welded on all 4 sides to completely cover the opening.
- Mesh squares to be no larger than 100mm x 100mm.
- Minimum material thickness = 4mm.

T12-2-25 INSTRUMENT LIGHTS

Red or orange instrument lights are not permitted.

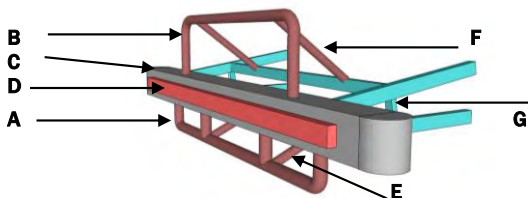
T12-2-26 PERMITTED MIRRORS

- One mirror not more than 260cm² or,
- Two mirrors not more than 230cm² each,
- Mounted in the interior of the car no closer than 350mm from the driver's forehead.

T12-2-27 BUMPERS

Bumpers are the front and rear extremities of the vehicle.

Refer to the diagram below when interpreting Rules T12-2-27 to T12-2-37.



T12-2-28 BUMPER HEIGHT

Height from the ground to the centre of the bumper at any point across its width: Minimum = 330mm, Maximum = 380mm.

T12-2-29 BUMPER THICKNESS

Minimum height of bumper = 75mm.

T12-2-30 FRONT BUMPER

- (a) Must not extend more than 50mm beyond the outer edge of the front tyres, when in the straight ahead position.
- (b) The ends must be rounded not less than 38mm diameter, or flat.
- (c) The front face of the bumper may have a maximum deviation of no more than 100mm, as per diagram T12-2-35.
- (d) Extensions to the rear of the front bumper must be rounded not less than a 38mm radius, or square.

T12-2-31 REAR BUMPER

Must not extend more than 125mm past the outer edge of the rear tyres.

T12-2-32 RADIATOR PROTECTION BAR

Bar B in Diagram T12-2-27, must be:-

- (a) A minimum height of 250mm above the top of the bumper.
- (b) Not more than 100mm from the front of the vehicle.
- (c) Constructed of minimum 38mm diameter material, with minimum 3mm wall thickness.
- (d) Braced.

T12-2-33 FRONT WHEEL PROTECTION BARS

Also called a lifting bar.

- (a) They cannot extend higher than the point of attachment to the radiator protection bar.
- (b) They must start 100mm in from the outside edge of the bumper.

- (c) They must be vertical for a minimum of 100mm.

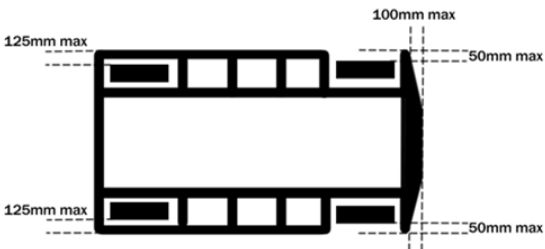
T12-2-34 UNDER-RIDER BARS

Bar A in Diagram T12-2-27

- (a) Location: They must be no further than 100mm from the front edge of the front bumper bar, mounted vertically.
- (b) Width: They must extend to within 100mm of the outer edge of the bumper.
- (c) Height: The minimum height is 175mm, measured from the centre position of the front bumper.
- (d) Construction:
 - (i) Pipe, minimum 42mm OD x 3mm wall, or
 - (ii) RHS, 40mm x 40mm x 3mm.
- (e) Mounting:
 - (i) A minimum of four vertical mounts must be used.
 - (ii) Two of these mounts to be braced or gusseted, a minimum of 150mm back to chassis rails.
 - (iii) The end can be radiused to a maximum of 200mm
 - (iv) Box section or pipe brace construction same material as under-rider bar, gusset plating minimum 4mm.
 - (v) If the under-rider structure is fully integrated into the front bumper, it must be constructed of a minimum of 3mm plate.

T12-2-35 BUMPER DIMENSIONS

Dimensions of bumpers as per figure below:-



T12-2-36 SIDERAILS

- (a) Siderails must be level with bumpers, and braced to the chassis.
- (b) They can extend a maximum of 50mm past outer edge of front tyre (when wheels in straight-ahead position).
- (c) Extensions to the siderail must be rounded not less than a 38mm radius, or square.

T12-2-37 REAR WHEEL GUARDS

- (a) Rear wheel guards must be constructed to ensure that all finished surfaces are at least 75mm x 38mm.
- (b) They cannot protrude more than 125mm outside the outer edge of the rear tyre.

SECTION 2: ENGINE

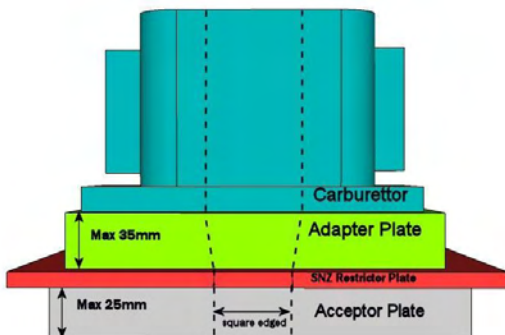
T12-2-38 ENGINE

- (a) Engine must be stock standard externally, except as expressly permitted in these rules.
- (b) Engine internals are free, excluding the restrictions listed in this section.
- (c) Maximum compression ratio of any cylinder = 10.0:1.
- (d) Maximum inlet and exhaust valve lift = 12.7mm (0.500 inch).
- (e) Maximum cubic capacity = 4072cc (248.5 cu inches).
- (f) Naturally aspirated only.
- (g) An OE crankshaft must be used inside an original OEM engine block.
- (h) Cylinder Head
 - (i) Engine to have maximum of 2 valves per cylinder.
 - (ii) The cylinder head must be from the same OE manufacturer and must fit together with the block in their OEM form, eg Ferrari to Ferrari, Skoda to Skoda.
 - (iii) Porting and polishing of OEM heads is permitted.
 - (iv) Needle or roller type rockers are not permitted unless they are a standard OEM part of the engine being used e.g.: Buick, EA Falcon and Nissan Maxima.
 - (v) All overhead cam engines must retain OEM specification hydraulic valve lash adjusters and rockers, used in OEM form.
- (i) No controlled vacuum leaks are permitted except OEM crankcase ventilation.
- (j) Engine sump can be modified to
 - (i) increase oil capacity
 - (ii) provide an engine mounting system.
- (k) Engine dry sump systems are not permitted.
- (l) Water pump and oil filter must be fitted in OE position.
- (m) Fuel pump, rocker covers, air cleaner and radiator fan can be aftermarket type.

T12-2-39 ENGINE COMPLIANCE

- (a) Engines must be drilled with holes through two sides of the sump in readiness for sealing.
- (b) Engines must be measured and sealed by an SNZ appointed engine sealer. NO SEAL, NO RACE. Measurement information must be entered into the vehicle logbook.
- (c) Refer Section M7-4 Specific Technical Offences if an engine is found to be non-compliant.

T12-2-40 FUEL MANAGEMENT SYSTEM DIAGRAM



T12-2-41 CARBURETTOR

- (a) One down-draft carburettor only, with a maximum of four barrels.
- (b) Two throttle return springs must be fitted to the carburettor shaft linkages.
- (c) Fuel injection, supercharging and turbocharging are prohibited.
- (d) Plastic fuel pump, fuel line fittings and pump bases are not permitted.

T12-2-42 ADAPTER PLATE (See Sections T12-2-44 to 48)

- (a) The adapter plate must be detachable from the manifold and carburettor.
- (b) The adapter plate must be non-porous and fitted with conventional gaskets.

T12-2-43 RESTRICTOR PLATE

- (a) All engines must be fitted with an SNZ supplied restrictor plate.
- (b) The restrictor plate has a 42mm internal diameter hole.
- (c) The internal hole of the restrictor plate must not be modified in any way.

- (d) The outside of the plate may be cut/drilled to fit manifold and adapter plate/s but must still retain the SNZ logo.
- (e) The plate must be fitted between the inlet manifold and the carburettor base, or between the inlet manifold and the adapter plate.

T12-2-44 INLET MANIFOLD: Engine originally fitted with a carburettor manifold

- (a) The engine must be fitted with an inlet manifold that is OE for the engine being used.
- (b) Four-barrel inlet manifolds are not permitted.
- (c) Unused or unwanted holes can be filled in.
- (d) No material of any kind may be added or removed from the interior or exterior of the manifold except:-
 - (i) The manifold can be reduced in height only.
 - (ii) A one-piece non-porous acceptor plate of 25mm maximum thickness can be attached.
 - (iii) The acceptor plate hole must be square edged.
 - (iv) If no OE two-barrel carburettor manifold was produced the manifold can have material removed from directly below the restrictor plate hole.
- (e) One adapter plate of 35mm maximum height can be fitted between the restrictor plate and the carburettor.
- (f) The inlet tract of the carburettor - adapter plate - restrictor plate - acceptor plate must be in one vertical plane.
- (g) Spacers between cylinder head and inlet manifold are not permitted.

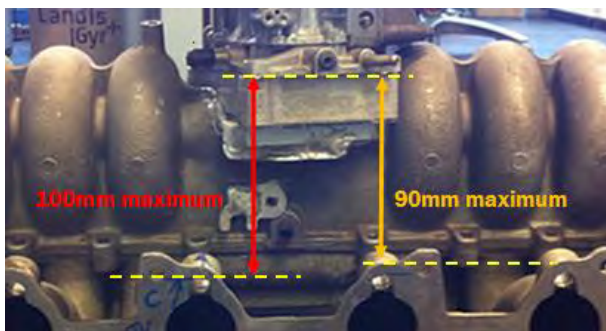
T12-2-45 INLET MANIFOLD: FLAT 4 FLAT 6 V6 AND V8 ENGINES ORIGINALLY FITTED WITH EFI MULTI-POINT INJECTION MANIFOLD

- (a) The engine must be fitted with an inlet manifold that is OE for the engine being used.
- (b) Unused or unwanted holes can be filled in.
- (c) The inlet throttle body assembly must be removed.
- (d) No material of any kind may be added or removed from the interior or exterior of the manifold except:-
 - (i) inlet manifold must be totally sealed off at throttle body area.
 - (ii) The manifold can be reduced in height only.
 - (iii) A one-piece non-porous acceptor plate of 25mm maximum thickness can be attached.

- (iv) The acceptor plate hole must be square edged.
- (e) One adapter plate of 35mm maximum height can be fitted between the restrictor plate and the carburettor.
- (f) The inlet tract of the carburettor - adapter plate - restrictor plate - acceptor plate must be in one vertical plane.
- (g) Flat 4, V6 and V8 engines: The base face edge of the carburettor must be no more than 130mm from the top of the nearest inlet port.
- (h) Spacers between cylinder head and inlet manifold are not permitted.

T12-2-46 INLET MANIFOLD: INLINE 4 & 6 CYLINDER ENGINES

- (a) The engine must be fitted with an inlet manifold that is OE for the engine being used.
- (b) Unused or unwanted holes can be filled in.
- (c) The manifold can have material removed from directly below the restrictor plate hole.
- (d) One adapter plate of 35mm maximum height can be fitted between the restrictor plate and the carburettor.
- (e) No other material of any kind may be added or removed from the interior or exterior of the manifold.
- (f) The inlet tract of the carburettor - adapter plate - restrictor plate must be in one vertical plane.
- (g) Spacers between cylinder head and inlet manifold are not permitted.
- (h) Alternative Falcon Manifold
 - (i) This applies to Ford EF, EL and AU Falcon inline 6 cylinder multi point injection manifolds.
 - (ii) The following modifications are permitted to the manifold:-
 - (1) Material may be removed from the inlet manifold as required, to allow the fitting of an acceptor plate to be welded to the inlet manifold. No other material may be removed or added except as permitted in (2) (3) & (5) below.
 - (2) Manifold material may only be removed from centre section adjacent to the throttle body.
 - (3) Refer to diagram for the maximum measurement from the top of the nearest inlet port to the carburettor base plate.



- (4) The acceptor plate will be a maximum of 25 mm thick. The hole in the acceptor plate will be the same diameter as the hole in the restrictor plate, and will be square edged. The adaptor plate will be a maximum of 35 mm thick.
- (5) The removed centre section of the manifold is to be filled and welded with aluminium plate. The plate must be of the same thickness as the manifold material that it is being welded to.

T12-2-47 INLET MANIFOLD - INLINE 6 CYLINDER ENGINES ORIGINALLY FITTED WITH MULTI-POINT EFI MANIFOLD (APPROX EB – EL FALCON).

- (a) The engine must be fitted with an inlet manifold that is OE for the engine being used.
- (b) Unused or unwanted holes can be filled in.
- (c) The EFI throttle body must be removed.
- (d) A right angle adapter assembly with a maximum 60mm radius and a downdraft carburettor must be used.
- (e) The base face edge of the carburettor must be no more than 130mm from the top of the inlet port.
- (f) Spacers between cylinder head and inlet manifold are not permitted.

T12-2-48 ALTERNATIVE INLET MANIFOLDS

- (a) The SNZ Board can approve inlet manifold packages that are outside the specifications in clauses T12-2-44 to 47, provided that:-
 - (i) The manifold is of the same generic manufacture as the original engine being used
 - (ii) The manifold fits to the cylinder in its OE form

- (iii) No material is added or removed from either the manifold or the cylinder head to enable the manifold to be fitted.
- (b) If the package is approved, clauses T12-2-44 to 47 do not apply.
- (c) Approved inlet manifold package specifications will be published on the SNZ website, www.speedway.co.nz

T12-2-49 EXHAUST SYSTEM

- (a) An OE cast iron exhaust manifold must be used.
- (b) It can be fitted in any configuration, as long as the manifold and head surface is not modified.
- (c) The following modifications are not permitted:-
 - (i) Standard exhaust manifold may not be of two front or two rear halves.
 - (ii) No extractors permitted.
 - (iii) Spacers between cylinder head and exhaust manifold are not permitted.
- (d) Mufflers are free, however sound levels must comply with Rule S5.
- (e) Exhaust pipes must discharge towards the rear, or underneath the vehicle.
- (f) All side exhaust systems extending past the A pillar must be shielded.

T12-2-50 LUBRICATION

- (a) Engine oil lines must be capable of withstanding a pressure of 350psi and a temperature of 230°C.
- (b) Flexible engine oil lines must have threaded connectors and an outer metal braid.

T12-1-51 COOLING

Any radiator can be used. It must be enclosed by the bonnet and located forward of the firewall, to ensure the driver is protected.

T12-2-52 FUEL

Refer Section T12-1-44.

T12-2-53 BATTERY

The battery must be securely mounted inside a minimum 1.2mm thick metal box, with an insulated lid.

SECTION 3 : DRIVETRAIN

T12-2-54 CLUTCH

- (a) Flex plates can be changed to steel flywheels.
- (b) Flex plate can be altered to accept OE clutch assembly.
- (c) Any clutch plate can be used, as long as it is a single plate.
- (d) An OE pressure plate must be used.
- (e) Aluminium Hydraulic clutch throw out bearing assembly is permitted.
- (f) No aluminium flywheels.
- (g) The bell-housing must have a 40mm inspection hole. Inspection hole to be in line with clutch plate in a position above the 90°, and readily accessible.

T12-2-55 GEARBOX

- (a) Only OE gearboxes can be used.
- (b) OE gearboxes can be shortened.
- (c) Quick-change gearboxes are not permitted.
- (d) Aluminium gearbox tail shaft housings are permitted.
- (e) Aluminium end plates are permitted.
- (f) OE Aluminium gearbox housings are permitted.

T12-2-56 DRIVESHAFT

- (a) A driveshaft retaining hoop must be fitted around the front end of the driveshaft.
- (b) A driveshaft running through the cockpit must be covered by 3mm metal plate.

T12-2-57 REAR END

- (a) OE rear axles can be offset.
- (b) OE differentials can be spooled, locked or welded.
- (c) Quick-change rear end assemblies are not permitted.
- (d) Open tube type rear axles are not permitted.
- (e) OE aluminium differential head housing is permitted.
- (f) Aluminium rear axle hubs are not permitted.
- (g) No other aluminium components are permitted.

SECTION 4 : WHEELS AND TYRES

T12-2-58 WHEELS

- (a) Also refer Section T14.
- (b) Bead lock rims are not permitted.
- (c) Bleed off tyre valves are not permitted.

T12-2-59 TYRES

- (a) Road tyres must be used. A road tyre is defined as being legal for highway use in New Zealand.
- (b) All manufacturers' tyre markings must be visible.
- (c) Tyres must duro 55 or more prior to race.
- (d) Maximum tyre tread footprint = 210mm.
- (e) Maximum tyre width = 255mm at or above bumper height.
- (f) Above measurements are determined by the use of an SNZ approved device.
- (g) All tread pattern grooves cannot exceed 10mm in width or depth.
- (h) Grooving of original tread depth and width is permitted.
- (i) Additional grooving or cutting is not permitted.
- (j) Tyres not complying with these clauses can be altered to comply with this rule.
- (k) Local rules do not apply to tyres at any time.
- (l) 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 the rules.

SECTION 5: ELECTRICAL

T12-2-60 IGNITION

The self-starter must be in working order.

T12-2-61 OPTION ONE – MECHANICAL DISTRIBUTOR

- (a) Twin point distributors are not permitted.
- (b) Aftermarket distributors are not permitted.
- (c) Optical triggers are not permitted.
- (d) Distributor must remain in original OEM ignition position in block or head.
- (e) If an engine had no ignition distributor fitted in its OEM form, the position of the distributor is free.

T12-2-62 OPTION TWO – ELECTRONIC IGNITION

- (a) Only OE electronic ignition distributors are permitted.
- (b) Optical triggers are not permitted.
- (c) Distributor must remain in original OEM ignition position in block or head.
- (d) If an engine had no ignition distributor fitted in its OEM form, the position of the distributor is free.

T12-2-63 OPTION THREE – OE ECU

- (a) An OE computer from the same engine family is permitted.
- (b) OE crankshaft sensors and camshaft sensors in their OE form are permitted.

T12-2-64 OPTION FOUR – ALTERNATIVE ECU'S

- (a) An SNZ approved aftermarket ECU is permitted.
- (b) See the SNZ website for current approved ECU's.
- (c) Any other ECU's may be submitted to SNZ for approval.

SECTION 6 : BRAKES AND SUSPENSION

T12-2-65 SUSPENSION

- (a) Any type of suspension can be used, except where noted below.
- (b) Un-sprung and sliding torque arm systems are permitted.
- (c) OE joints, fixed pivot and bush joints are permitted.
- (d) Tractor links and rod ends are permitted, minimum eye size = 12mm.
- (e) Rear suspension sprung torque arm systems are not permitted.
- (f) Suspension must not be able to be adjusted by driver while in the drivers seat.

T12-2-66 SPRINGS

- (a) Coil springs are permitted.
- (b) The coil-over spring assembly kits must be either cast iron, steel or brass.
- (c) Any car fitted with coil springs must have the springs securely fastened in position.
- (d) A coil-over assembly is regarded as a suitable restraint for the spring to be securely clamped.
- (e) Aftermarket torsion bar systems are permitted. Only steel arms and stops are permitted.

T12-2-67 SHOCK ABSORBERS

- (a) OE or OE replacement steel bodied shock absorbers as approved by the Stockcar Technical Committee must be used. These will be published on the SNZ website.
- (b) Steel rod ends, steel tie rod ends, tractor links and rubber bushing are permitted.
- (c) Shock absorber brand name and part number must be visible.

- (d) Internally adjustable and externally adjustable shock absorbers are not permitted.
- (e) Shock absorbers must be removable for inspection.

T12-2-68 STEERING JOINTS

- (a) Steel OE tie rod ends are permitted.
- (b) Tractor links and rod ends are permitted, 12mm minimum eye size.

T12-2-69 BRAKES

- (a) Front: Fully operational OE brake assemblies must be fitted to both front wheels.
- (b) Rear: At least one fully operational OE brake assembly must be fitted.
- (c) OE brake components can be mixed and matched.
- (d) OE brake components can be machined to fit the hub.
Note: this is a common current practice that needs to be legalised.
- (e) Only one brake Master Cylinder is permitted.
- (f) Brake pedal may be fabricated.
- (g) Adjustable brake bias systems are not permitted.

SECTION 7: SAFETY EQUIPMENT

T12-2-70 APPROVED SEATS

- (a) Refer to the SNZ website for professionally manufactured Superstock seats approved for use.
- (b) All approved seats must have mounting instructions supplied to SNZ.

T12-2-71 OTHER SEATS

All other seats must meet the following specifications:-

- (a) Type: Bucket
- (b) Back: 1.2mm minimum thickness steel
- (c) Headrest: 3mm minimum plate, minimum size = 280mm wide and 150mm deep, with corners rounded off and the surface padded.
- (d) Mounting:
 - (i) Base: Must be securely bolted or welded to the floor and/or integral bar work in a minimum of four positions.
 - (ii) Back: The seat back support must be mounted in a minimum of four positions. Whether the seat incorporates a headrest or not, the upper 2 mounting positions must be within 155mm of the top of the seat. 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 can be no more than 75mm.

- (iii) Seat mounting bolts are to be a minimum 8mm with suitable washers.
- (e) An aluminium seat of 3mm thickness with no steel backing is also acceptable, however the 3mm section must include the full width of the seat back support and seat base.

T12-2-72 PROTECTIVE CLOTHING AND SAFETY EQUIPMENT

Refer Section S3.

T12-2-73 SAFETY HARNESES AND RESTRAINTS

Refer Section S4.

SECTION 8: RACING NUMBERS

T12-2-74 Refer also Section T7.

T12-2-75 Numbers and track code must be:-

- (a) of contrasting colours.
- (b) prepared to a professional standard.

T12-2-76 Cardboard and tape numbers are not permitted.

T12-2-77 SIDE NUMBERS

- (a) Dimensions as per diagram right:

- (i) Minimum height of numerals = 380mm.
- (ii) Minimum thickness of numerals = 50mm.
- (iii) Minimum width of background colour = 20mm.



- (b) Location: On the body or side panels, between the front and rear wheels.
- (c) Visibility: Must be readable 30m away at ground level.

T12-2-78 REAR NUMBER

- (a) Dimensions as per diagram right:
 - (i) Minimum height of numerals = 190mm.
 - (ii) Minimum thickness of numerals = 30mm.
 - (iii) Minimum width of background colour = 20mm.
- (b) Visibility: Must be readable 30m away at ground level.



T12-2-79 FIN/WING NUMBER

Dimensions as per diagram right:

- (i) Minimum height of numerals = 190mm.
- (ii) Minimum thickness of numerals = 30mm.
- (iii) Minimum width of background colour = 20mm.

T12-2-80 COMPETITORS TRACK LETTER CODE

- (a) Dimensions:
 - (i) Minimum height of letters = 100mm.
 - (ii) Minimum thickness of letters = 13mm.
- (b) Location: Before or after all racing numbers above.

SECTION 9: OTHER

T12-2-81 VEHICLE SPECIFICATIONS

Refer also Section E2.

Vehicles not complying with SNZ specs refer Section M5-5.

T12-2-82 RACING RULES: Refer Section R12-3.

T12-2-83 SOUND (REPLICATED FROM SECTION S5)

- 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.

R 12-3 RACING RULES: SUPERSTOCK AND STOCKCAR

SIGNALS

R12-3-1 The following lights and flags are used to signal competitors on the track:

Green Flag & Light	Start of race
Green Light	Race in progress
Red Flag & Light	Stop immediately
White Flag	One lap remaining
Black & White Chequered	Race complete, avoid other cars
Yellow Flag & Light	Proceed with caution

R12-3-2 The green light is to be continuously activated while race is in progress.

BEFORE THE RACE

R12-3-3 The maximum number of competitors in the race will be decided by the Steward.

R12-3-4 Cars must leave the start line under their own power.

R12-3-5 Vehicles not on the track when the pit gate is shut are not eligible to start.

R12-3-6 Vehicles proceeding to the start must not be driven at excessive speed.

R12-3-7 Vehicles will grid up as directed by the Clerk of the Course.

R12-3-8 Any vehicle failing to grid up after leaving the pits within the time limit of three minutes is not eligible to start the race.

R12-3-9 The Referee is the sole judge of time in Rule R12-3-8 and can only allow one 3 minute delay per race.

R12-3-10 The Clerk of the Course will advise the Referee that the track is clear and ready for racing.

R12-3-11 The Starter will initiate each race when instructed to do so by the Referee.

R12-3-12 There will be no contact between vehicles prior to the race start.

START OF THE RACE

R12-3-13 All competitors are under the jurisdiction of the Referee once the race commences.

R12-3-14 Option One: Clutch Start

The race commences with vehicles in a stationary position on the grid.

R12-3-15 Option Two: Rolling Start

- (i) Vehicles move off the grid in formation, with grid 2 setting the pace.
- (ii) The race commences when the green flag is waved and green lights activated.

FALSE START

R12-3-16 In the case of a false start the Referee can order a re-run by activating the red light.

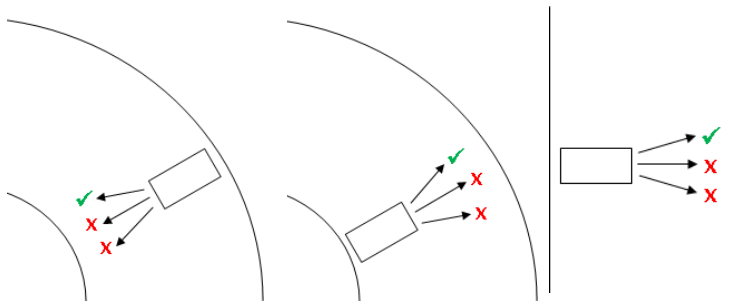
R12-3-17 It will be completely rerun over the original number of laps.

- (i) the original grid positions will apply
- (ii) no 3 minute bells are permitted
- (iii) competitors may not change their vehicles
- (iv) vehicles on the infield at the time of the race suspension are permitted to take part in the restart.

RACE DIRECTION

R12-3-18 The race will be in an anti-clockwise direction.

R12-3-19 Vehicles can only make contact when travelling in an anti-clockwise direction. See diagrams for examples:-



STATIONARY VEHICLES

R12-3-20 A vehicle that is stationary for any reason can be removed by the Referee activating the red lights.

R12-3-21 Competitors in stationary vehicles must remain in their seat with belts on until they are permitted to get out by an Official. This does not apply in the case of fire.

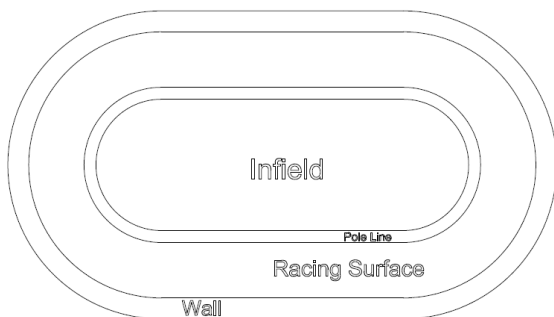
R12-3-22 Stationary vehicles are to be avoided where possible.

R12-3-23 Competitors cannot force or steer other vehicles into stationary vehicles.

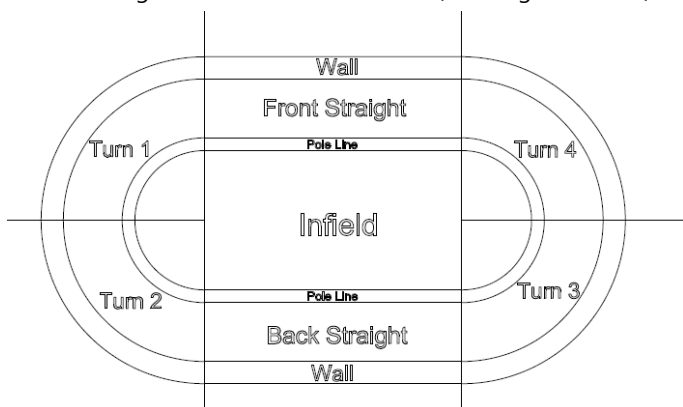
R12-3-24 Attacking from a stationary position or hitting a stationary car is not permitted.

R12-3-25 Competitors waiting for another vehicle must be moving (however slowly) at all times, i.e. you can't stop and wait.

POLELINE/INFIELD



- R12-3-26** Refer to explanatory diagram above for a definition of terms.
- R12-3-27** A competitor can be penalised for placing one or more wheels off the racing surface.
- R12-3-28** Deliberate contact from the infield/poleline to the racing surface will result in a penalty including a fine and exclusion from the results.
- R12-3-29** Deliberate contact on the infield/poleline will result in a penalty including a fine and exclusion from the results.
- R12-3-30** Deliberately moving to the infield/poleline to avoid an attacking vehicle will result in a penalty including a fine and exclusion from the results.
- R12-3-31** If a vehicle is forced, spun, or driven to the infield during the race, it must return to the racing surface in the same straight or corner in which it left (see diagram below).



- R12-3-32** Exception to the above rules. Competitors can use the infield to avoid a complete blockage of the racing surface. They must return -immediately to the track once past the blockage, giving way to passing vehicles already on the racing surface.

WALL

R12-3-33 Riding the concrete wall to gain an advantage can be penalised.

OVER AGGRESSIVE-ATTACKING – SUPERSTOCKS ONLY

R12-3-34 Over-aggressive attacking is not permitted in turns 1 and 3.

EMERGENCY STOPPAGE

R12-3-35 If an incident has occurred that the Referee deems dangerous, the race will be stopped.

R12-3-36 All vehicles must stop immediately and remain stationary except under instruction from an Official.

R12-3-37 There will be no deliberate contact between vehicles during an emergency stoppage.

R12-3-38 When a vehicle is the primary cause of an emergency stoppage, it is not eligible to restart. Exception: Rollovers, see R12-3-47 below.

- (a) If one or more cars are up the wall or with rollcages exposed, the race will be stopped to remove the primary cause of the emergency stoppage from the race.
- (b) The Referee, once the danger has cleared, will give the unendangered car (not the primary cause of the stoppage) a 30 second opportunity to free themselves from the other car.
- (c) If they are unable to free their car they will be removed from the race.

R12-3-39 When the track is cleared for a restart, the red light will be turned off to indicate a start is imminent (approx 5 seconds).

R12-3-40 The race continues from a clutch start when the green lights/flag are displayed.

HEALTH & SAFETY

R12-3-41 Vehicle must be operated by one competitor only, with no passengers permitted.

R12-3-42 If a competitor unclips their seatbelts during the race they are deemed to have retired.

R12-3-43 No competitor will drive with an arm or any part of their body outside the vehicle.

R12-3-44 If a vehicle becomes unsafe during the race it will be removed by the Referee.

R12-3-45 If a wheelguard becomes loose or detaches during the race, the vehicle will be removed by the Referee.

R12-3-46 Refuelling is not permitted on the track at any time.

ROLLOVERS

R12-3-47 When a vehicle has rolled and landed on its wheels it can restart the race without penalty provided:-

- (i) there is no outside assistance
- (ii) it passes a safety check outlined in Rule M5-5-5(c).

OUTSIDE ASSISTANCE

R12-3-48 The competitor can be penalised by the Referee in the event of:-

- (i) Communication with the driver, other than by Officials or competitors in the race
- (ii) The vehicle being touched during a stoppage

FINISH OF RACE

R12-3-49 A race is not finished until the chequered flag is displayed, regardless of the number of laps run.

R12-3-50 The vehicle must cross the finish-line and receive the chequered flag to be deemed to have finished the race.

R12-3-51 When a competitor has received the chequered flag they will take action to avoid all other cars until the yellow lights are shown.

R12-3-52 Racing will continue until all able vehicles have completed the lap they are on when the chequered flag is shown.

R12-3-53 When yellow lights are shown the race is over. Competitors are to return to the pits at a safe speed.

R12-3-54 All placings are determined by the finishing order and number of laps completed by each vehicle as recorded by the approved lap scoring system.

R12-3-55 Any vehicle not receiving the chequered flag is recorded as a DNF.

DECLARED RACE

R12-3-56 The Clerk of the Course can declare a race during an emergency stoppage.

R12-3-57 The results will be as per the last completed lap.

R12-3-58 The Referee can exclude any competitor deemed to be the primary cause of the stoppage.

R12-3-59 Exception: Rules R12-3-56, 57 and 58 do not apply to allocated titles or teams events.

RUNOFFS

R12-3-60 For Stockcar or Superstock runoffs, Teams Racing rules will apply, as per Section R12-4.

SUBSTITUTIONS

R12-3-61 No substitute vehicles or competitors can be entered into championship events if a particular vehicle or competitor is eliminated during racing. This does not apply at teams events.

LOCAL RULES

R12-3-62 The rules in this section may be amended by the unanimous decision of a Senior Official 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:

- (i) safety of Competitors
- (ii) safety of Spectators
- (iii) better promotion of events.

R12-3-63 Local rules are only valid for the meeting at which they are enacted, and must be posted on the track noticeboard in order to be considered in effect.

R12-4 SUPERSTOCK/STOCKCAR TEAMS RACING CODE OF ETHICS

R12-4-1 OVERVIEW

- (a) Teams Racing is unique. It is furious "Full On Contact" racing, extremely exciting and the most competitive form of Stockcar racing in NZ. All competitors must act in an honest and sportsmanlike manner and obey the rules. Teams racing has many added responsibilities "To Get It Right" not only for the competitors but team managers, crews, officials and promoters.
- (b) These are a standalone set of rules that are used for teams racing instead of the rules in Section R12-3.
- (c) It is the Competitors responsibility to present and maintain their race car within the SNZ Rules throughout the event.
- (d) The Competitor must be conversant with the SNZ Rules relating to Teams Racing.
- (e) The Referee is in control of the racing and is responsible for the safety of ALL competitors. If the Referee has to stop a race, it must be accepted that:-
 - (i) A competitor or his vehicle is in an unsafe situation, or
 - (ii) A competitor has infringed and gained a race advantage for themselves or their Team and will be removed from the race, or
 - (iii) A competitor has been injured "thumbs down" and wants to be removed from the race, or
 - (iv) There is a safety concern for a competitor or the spectators.
- (f) Any competitor who, in the opinion of the Referee, breaks the rules (and gains an advantage for themselves or their Team), may at any time, be removed from the race and will face penalties.
- (g) All competitors must obey the Referee's direction, often carried out through an infield Official.
- (h) It must be emphasized that no Official wants to stop a race and remove a competitor.

If a competitor infringes, it is up to them to put it right i.e. accidentally or not, passed a car over the pole line, they must put it right e.g, do a "U" turn on the infield and return to the Track behind the car just passed - "Undo the wrong".
- (i) The competitor is responsible, and the Referee can only react to correct "your" wrong.

R12-4-2 The Team Manager:-

- (a) must be fully conversant with the Teams Racing Rules.
- (b) is in control of their team at the venue.
- (c) will ensure the team members understand the Rules and the consequences of breaking them.
- (d) will ensure the team members pay close attention to all aspects of the safety of their vehicle and safety equipment.
- (e) must ensure all team members sign all the team's scrutineering cards, and all competitors can legally use all vehicles (e.g. have sufficient head clearance).
- (f) must ensure any pre-race or post-race medical checks are undertaken.
- (g) will attend a team managers meeting with relevant officials prior to the drivers meeting, and inform their team of any information brought up at the meeting.
- (h) is responsible for the conduct and safety of the team in the grand parade.
- (i) must notify the nominated drivers rep in writing, before the vehicles called to the dummy grid, of any driver changes.
- (j) will not allow a competitor to continue in the event if in their opinion they are unfit or have suffered a concussion.
- (k) must notify the nominated drivers rep in writing, before the vehicles are called to the dummy grid, if the 6th driver is used due to injury.
- (l) can seek verbal clarification from the Steward in conjunction with the Drivers Rep.
- (m) will assist with paperwork, drivers signatures etc, as directed.

R12-4-3 The Team Manager must act in a professional and responsible manner.

R12-4-4 Abusive or unbecoming conduct by a Team Manager will be treated as a breach of conduct with consequences

GRAND PARADES

R12-4-5 Whilst it's appreciated that many people want to take part in the grand parade, safety **MUST** come first.

R12-4-6 Maximum of 3 people in or on the vehicle.

R12-4-7 Parade will be at walking pace to allow for banners, mascots etc.

ENTRY FORM AND TEAMS

R12-4-8 Promoters must state on the entry form:-

- (a) The format, date, time.
- (b) Whether the racing will be first across the line or the points system.
- (c) The number of races and how many teams will be involved in the second night (if applicable).
- (d) The appearance and travel money.
- (e) The prizemoney.
- (f) Number of gate passes or refunds, per car.

R12-4-9 Names of team members and Manager must be submitted on the entry form.

R12-4-10 Any team changes will be advised in writing to the Promoter at the time of the meeting.

DISPUTES

R12-4-11 The Referee is in control of the race.

R12-4-12 A team, through their Team Manager, in conjunction with the Drivers Rep, may seek verbal clarification of an incident and ask for any matters of concern to be taken into account after the race.

R12-4-13 After consultation with officials and drivers the Referee's decision is final.

R12-4-14 There is no protesting in teams racing, but Appeals are permitted.

SIGNALS

R12-4-15 The following lights and flags are used to signal competitors on the track:

Green Flag & Light	Start of race
Green Light	Race in progress
Red Flag & Light	Stop immediately
White Flag	One lap remaining
Black & White Chequered	Race complete, avoid other cars
Yellow Flag & Light	Proceed with caution

R12-4-16 The green light is to be continuously activated while racing is in progress

R12-4-17 If the lead car is taken out after the white flag but before the chequered flag, the white flag will stay out until the next car has completed the required number of laps, and receives the chequered flag.

R12-4-18 There are to be a minimum of 4 infield flagman for all teams races.

TEAMS RACING RULES

- R12-4-19** Competitors & crew must act in a respectful, responsible and professional manner. Abusive or unbecoming conduct toward another competitor, team, crew or official will be treated as a breach of conduct with penalties for an individual or the team.
- R12-4-20** A teams race will be completed by 4 cars per team, with the exception of Stockcars that can run 5 cars (+ reserves).
(a) A team can have a maximum of one driver from another track to compete in a New Zealand title event.
- R12-4-21** The 6th driver can only be used in the event of one of the starting lineup competitors being injured, or at risk to continue, as determined by the Team Manager or Steward. The injured driver is out of the title.
- R12-4-22** There will be a minimum of 10 laps and a maximum of 15 laps per race.
- R12-4-23** The winning team is decided by "first past the post" of the number of advertised laps in the race, or to the chequered flag.
- R12-4-24** If a points system is used, it will be:
1st = 100 points
2nd = 40 points
3rd = 25 points
4th = 20 points
5th = 10 points

Pre-Race

- R12-4-25** One only 3 minute bell will be given on request, prior to the start, after the pit gate has been closed.
- R12-4-26** Teams races will begin with a clutch start only on the drop of the green flag, in conjunction with the green lights.
- R12-4-27** The front grid position will be determined by a toss of a coin between the opposing Team Managers.
- R12-4-28** The winner of the toss can choose either front grid for their team. The winner of the toss must line up first and has the choice of where they line up on the grid, provided they leave sufficient room for the other team from the poleline or the wall.
- R12-4-29** The teams will grid up with alternate cars beside and behind the polesitter, bumper to bumper.
- R12-4-30** There will be no intentional contact prior to the race start.

Race Direction

R12-4-31 The race will be in an anti-clockwise direction only.

R12-4-32 Competitors must only drive in the race direction, in forward or reverse gear.

R12-4-33 Competitors cannot reverse against the race direction to re-position, unless their way is blocked.

Poleline & Infield

R12-4-34 The infield is a safety zone for infield staff and officials. Racing across or through the infield is prohibited.

R12-4-35 Poleline: Placing one or more wheels off the racing surface is a breach of the rules. Competitors cannot cut the pole, at any point, to hit another competitor or pass a vehicle.

R12-4-36 A competitor forced over the poleline must disengage and return to the racing surface behind the competitor that forced them over the poleline.

R12-4-37 If a competitor forces a car over the poleline, they must also "disengage" and cannot continue to force the opposing vehicle further onto the infield.

R12-4-38 The car that was forced over the poleline must return to the track behind the forcer, on the same straight or corner. If the competitor that forced the car over the poleline chooses to sit there, the car forced over must do a u turn on the infield and return to the track, behind the opposing car.

R12-4-39 Attacking a competitor from inside the poleline is prohibited.

R12-4-40 Attacking a competitor from the track, who is on the infield, is prohibited.

R12-4-41 Seeking sanctuary on the infield is prohibited (i.e. to avoid contact or assess the race). At the Referee's discretion they may choose not to penalise a competitor who for safety reasons only, briefly drove infield - i.e. to catch their breath, tighten their belts etc.

Blocking Role

R12-4-42 Drivers on the racing surface, in a blocking role, will be considered (stationary or not) part of the race and contact may occur.

R12-4-43 If a driver wants to be removed, they must signal "Thumbs Down" to be removed from the race.

Stationary Vehicles

R12-4-45 If a stationary vehicle is blocked by the wall, poleline or another vehicle, they cannot hit or be hit.

- R12-4-46** A vehicle that is stationary for any reason can be removed by the Referee activating the red lights.
- R12-4-47** Competitors in stationary vehicles must remain in their seat with belts on until they are permitted to get out by an Official. This does not apply in the case of fire.
- R12-4-48** Competitors cannot force or steer other vehicles into stationary vehicles.

Health & Safety

- R12-4-49** If a competitor unclips their seatbelts during the race they are deemed to have retired.
- R12-4-50** A competitor who is injured and who wants to be removed from the race must signal "Thumbs Down". This will bring on the red lights and they will be removed.
- R12-4-51** A competitor who is obviously motionless will bring the race to a red light stop.

Emergency Stoppages

- R12-4-52** If an incident has occurred that the Referee deems dangerous, the race will be stopped.
- R12-4-53** All vehicles must stop immediately and remain stationary except under instruction from an Official.
- R12-4-54** There will be no deliberate contact between vehicles during an emergency stoppage.
- R12-4-55** When a vehicle is the primary cause of an emergency stoppage, it is not eligible to restart. Exception: Rollovers, see Rule R12-4-56 below.
- R12-4-56** When a vehicle has rolled and landed on its wheels it can restart the race without penalty provided:-
- (i) there is no outside assistance
 - (ii) it passes a safety check outlined in Rule M5-5-5(c).
- R12-4-57** If one or more cars are up the wall or with roll cages exposed, the race will be stopped to remove the primary cause of the emergency stoppage from the race.
- (i) The Referee, once the danger has cleared, will give the unendangered car (not the primary cause of the stoppage) a 30 second opportunity to free themselves from the other car.
 - (ii) If they are unable to free their car they will be removed from the race.
- R12-4-58** If a fire extinguisher is used on a fire, the vehicle will be removed by the Referee.
- R12-4-59** If the bonnet is removed, the vehicle will be removed by the Referee.

R12-4-60 Any loss of wheelguard or one that is not fully attached - vehicle to be removed from race.

R12-4-61 If a vehicle becomes unsafe in any other way during the race it will be removed by the Referee.

Restarts

R12-4-62 Re-Starts. The flag marshalls will pull in their flags and move infield, indicating the race is about to re-start.

R12-4-63 When the track is cleared for a restart, the red light will be turned off to indicate a start is imminent (approx 5 seconds).

R12-4-64 The race continues from a clutch start when the green lights/flag are displayed.

Finish of Race

R12-4-65 A race is not finished until the chequered flag is displayed, regardless of the number of laps run.

R12-4-66 The vehicle must cross the finish-line and receive the chequered flag to be deemed to have finished the race.

R12-4-67 When a competitor has received the chequered flag they will take action to avoid all other cars until the yellow lights are shown. They may not provide assistance to team mates who have not crossed the line.

R12-4-68 Racing will continue until all able vehicles have completed the lap they are on when the chequered flag is shown.

R12-4-69 When yellow lights are shown the race is over. Competitors are to return to the pits at a safe speed (after a victory lap where appropriate).

R12-4-70 All placings are determined by the finishing order and number of laps completed by each vehicle as recorded by the approved lap scoring system.

R12-4-71 Any vehicle not receiving the chequered flag is recorded as a DNF.

Outside Assistance

R12-4-72 A competitor can be penalised by the Referee in the event of:-

- (i) Communication with the driver, other than by Officials or by hand signal from other competitors in the race
- (ii) The vehicle being touched during a stoppage.

PENALTIES

R12-4-73 If an infringement is serious enough to warrant exclusion, the Referee can stop the race and remove the offending competitor. Other penalties can still apply.

R12-4-74 The penalties listed below are at the discretion of the Referee.

- (a) a fine of between \$50 and \$1000 can be issued for each and every breach of the rules
- (b) Exclusion during the race.
- (c) Relegation of finishing positions.
- (d) Exclusion from the results of the race.
- (e) Exclusion from the remainder of the event.
- (f) Suspension for up to 15 days (Referee) or 22 days (Senior Referee), starting from the date of the offence.
- (g) Reporting a competitor within seven days of the date of the offence to the Board, for possible further penalty.
- (h) In a worst case scenario, the entire team can be excluded.

R12-4-75 After-meeting stand-down

A full medical clearance by a qualified doctor must be supplied by any teams racing competitor who intends on competing (in any class) within 8 days of any teams racing event.

SECTION T13

STREETSTOCK SPECIFICATIONS



**2016-17 NEW ZEALAND STREETSTOCK
CHAMPION: TREVOR DE MALMANCHE**

T13-1 Streetstock: A standard road car specially modified for racing on SNZ licensed tracks as per specifications.

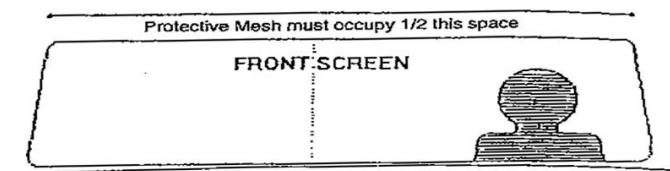
T13-1-1 General

- (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.

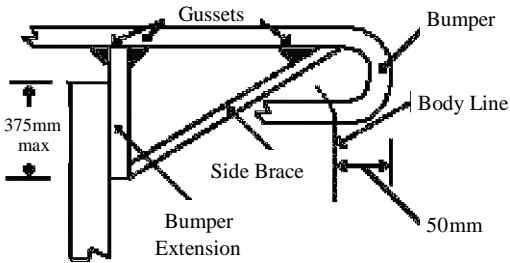
T13-1-6 Suspension

- (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.

Rule T13-1-7

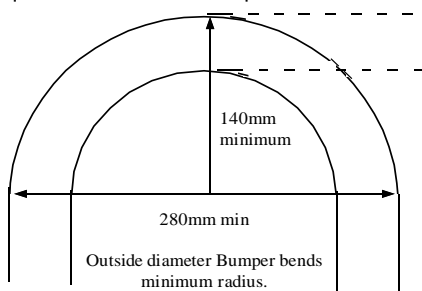


- (d) (i) The welds to the chassis extension may be gusseted with two gussets.
- (ii) A bumper side brace may be fitted between front bumper and bumper extension.
- (iii) The welds to the side brace may be gusseted with one gusset.
- (iv) Only six gussets 75mm x 4mm maximum size permitted on front bumper.
- (e) A maximum of two jointing slugs permitted inside bumper to join bumper ends to front bumper centre: one jointing slug each side, slug to be 4mm maximum thickness size. Jointing slugs are permitted to extend up to 50mm either side of bumper joint weld.
- (f) Bumper ends are to be mechanically rounded by bender or, if cut and welded, to have a rounded outer radius of 140mm minimum (see diagram) and curve back inside bodyline of car. Bumper end may be welded to the side brace. No shear bolt corners and no square corners. No sharp corners.
- (g) Front bumper ends must not protrude any more than 50mm past original skin line of body.

T13-1-8 Rear Bumper

- (a) Rear Bumper may be made from 50mm OD pipe or 50mm OD RHS (maximum size) covered by original bumper or similar (optional), to be securely welded.
- (b) Bumper material to be of 4mm maximum thickness.
- (c) When using RHS bumper must be on flat not on edge.
- (d) A maximum of two jointing slugs permitted inside bumper to join bumper ends to rear bumper centre: one jointing slug each side, slug to be 4mm maximum thickness size. Jointing slugs permitted to extend up to 50mm either side of bumper joint weld.
- (e) Bumper may extend along the side of the car to the wheel arch. Ends of pipe or RHS to be mechanically rounded or,

if cut and welded, to have a rounded outer radius of 140mm minimum (see diagram). Rear bumper side extension ends are to be attached to the chassis rail or rear floor brace, but not both. No shear bolt corners and no square corners. No sharp corners.

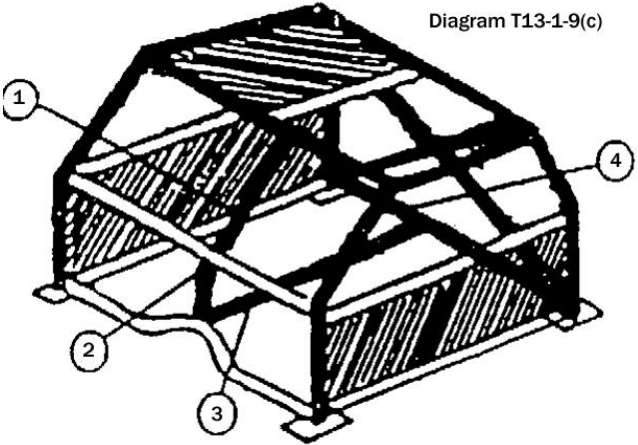


- (f) (i) Rear bumper may have gussets at welds to rear of T13-1-10 rear floor bars, and may be gusseted where rear bumper side extensions are attached to sides of rear floor bars.
- (ii) A maximum of six gussets allowed on rear bumper - two gussets at each rear floor bar and one gusset at each bumper front extension. Gussets to be 75mm x 4mm maximum size.
- (iii) Rear bumper to extend no more than 100mm backwards than original.
- (g) 25mm OD pipe or square maximum badge bar. Bottom of bar to top of bumper pipe to be 150mm maximum. The badge bar may be connected to the bumper in up to seven places using the same material as the badge bar. Plating between the two bars is not permitted, but original car bumper or similar may be welded to badge bar and bumper.
- (h) Front and rear bumper pipe or RHS may be welded to the body as they pass through the body panel to the chassis rails to prevent body panels being torn off.

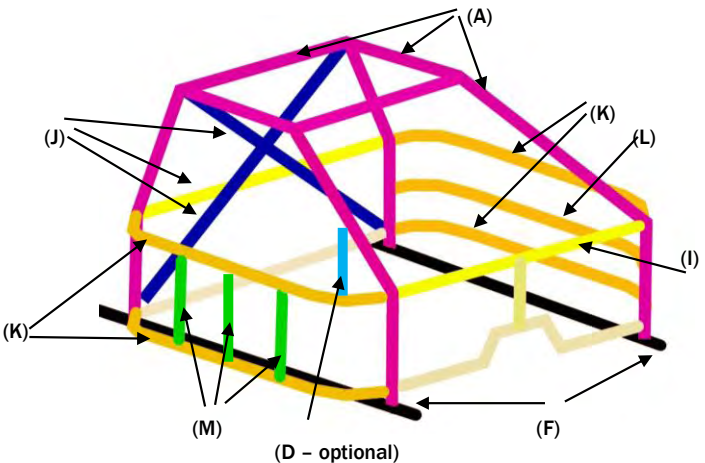
T13-1-9 Roll Bars

- (a) Substantial interior roll bars, to be constructed of minimum of 48mm diameter if galvanised pipe, or 38mm x 3.2mm wall, if constructed of steam pipe or RHS, must be fitted above the drivers normal seated position.
- (b) (i) A brace may be welded from top of rear of rollcage to the T13-1-10 rear floor bar.
- (ii) The said brace must be welded to the T13-1-10 rear floor bar between rear axle and inside of body.

- (c) The brace from rear of rollcage to floor or chassis should not be crossed. Addition of 4 optional bars to interior roll cage. (See diagram.)



- (d) The front rollcage down tubes may be suitably braced with 2 vertical [one each side] $\frac{1}{4}$ light up rights, made of rollcage material. The said brace to be securely attached to the front rollcage and upper hip plate side pipe.
- (e) Rollcage may be mounted to
- (i) the floor/black bar on the diagram, or
 - (ii) the lower hip plate mounting bar (lower tan bar on the diagram below)

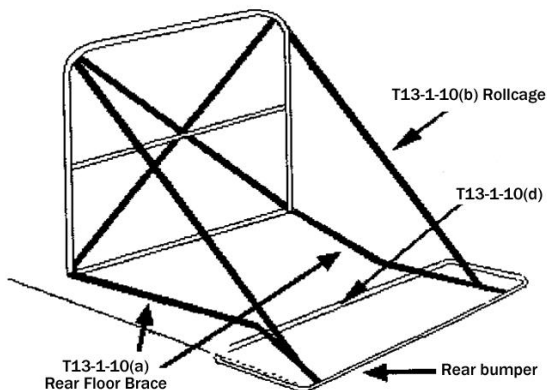


- (f) A floor runner bar may be used on each side of car to securely mount roll bar to floor. Floor runner to be

- maximum of 51mm RHS, and extend from firewall to a maximum of 100mm behind rear rollcage hoop.
- (g) Rear roll cage hoop bar down tubes to be no more than 200mm behind the drivers seat.
 - (h) Minimum distance from centre of driver's seat to outside of rollcage to be 355mm measured at shoulder height.
 - (i) The roll cage must be braced by a front horizontal cross member, attached to front rollcage on each side at dash area.
 - (j) 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.
 - (k) 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.
 - (l) One additional horizontal side bar is required, welded in a mid position between the upper and lower side bar mentioned in T13-1-9(j).
 - (m) 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.
 - (n) A driver's side footplate is permitted. The driver's side 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(j) hoop brace
 - 3 a footplate front brace from the same T13-1-12(j) brace to the floor plate,
 - 4 the T13-1-11 floor plate.
 - (o) A lower hip plate must be welded between floor runner bar and lower rollcage side bar to protect driver from hips to feet.
 - (p) 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.
 - (q) Head plate shall not have lightening holes cut into plate.

- (r) 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.
- (s) Driver's helmet must have 50mm clearance from any part of the car.
- (t) 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.

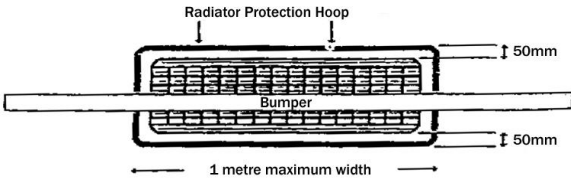
T13-1-11 Floor Plate

- (a) 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).
- (b) The floor plate may extend up the firwall a max. of 350mm measured from the floor plate base.
- (c) If the original drivers side floor pan is removed, the added floor plate must extend back to the the rear roll cage bars and this plate must be welded continuously on all four sides.
- (d) The underside of the floor plate must not have any seatbelt anchoring bolts, or seat mounting bolts/nuts protruding, if the original floor pan has been removed.

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 6mm.
- (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 0.023m² (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.
- (f) **Track Code Sizes:** Letters to be at least 100mm high, with a stroke width of at least 13mm.

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.

T13-1-21 Engine Compliance

Effective 1 September 2015:-

- (a) Engines must be drilled with holes through two sides of the sump in readiness for sealing.
- (b) Engines must be measured and sealed by an SNZ appointed engine sealer. NO SEAL, NO RACE.

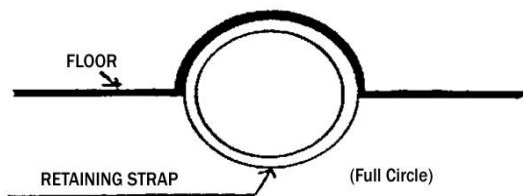
T13-1-22 Refer Section M7-4 Specific Technical Offences if an engine is found to be non-compliant.

T13-1-23 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.

T13-1-24 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 of 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.



T13-1-25 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.

T13-1-26 Bellhousing

Manufactured steel bell housings are permitted, to original dimensions.

T13-1-27 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.

T13-1-28 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.

T13-1-29 Self-Starter

The self-starter must be in working order. Cars must leave pits and starting line under their own power.

T13-1-30 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.
- (e) Mounting holes on a Ford Falcon XE or XF 2 barrel carburettor may be modified to enable it to fit to the EA manifold, or vice versa.

T13-1-31 Fuel - Refer Section E5.

T13-1-32 Fuel Tank - Refer Section E5.

T13-1-33 Wheels

- (a) Wheels will be:-
 - (i) Original road wheels as per original model, or
 - (ii) The approved wheels listed on the SNZ website, 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.

T13-1-34 Tyres

- (a) Standard road tyres only permitted.
- (b) Re-grooved slicks are not permitted.
- (c) May be grooved to any pattern, but must retain sign of original tread pattern.
- (d) Maximum tread groove to be 10mm wide and 10mm deep. No cross grooving permitted.

T13-1-35 Brakes

Four wheel brakes must be fitted and maintained in perfect working order at all times.

APPENDIX: STREETSTOCK 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"

R13-2 RACING RULES: STREETSTOCK

SIGNALS

R13-2-1 The following lights and flags are used to signal competitors on the track:

Green Flag & Light	Start of race
Green Light	Race in progress
Red Flag & Light	Stop immediately
White Flag	One lap remaining
Black & White Chequered	Race complete, avoid other cars
Yellow Flag & Light	Proceed with caution

R13-2-2 The green light is to be continuously activated while race is in progress.

BEFORE THE RACE

R13-2-3 The maximum number of competitors in the race will be decided by the Steward.

R13-2-4 Cars must leave the pits under their own power.

R13-2-5 Vehicles not on the track when the pit gate is shut are not eligible to start.

R13-2-6 Vehicles proceeding to the start must not be driven at excessive speed.

R13-2-7 Vehicles will grid up as directed by the Clerk of the Course.

R13-2-8 Any vehicle failing to grid up after leaving the pits within the time limit of three minutes is not eligible to start the race.

R13-2-9 The Referee is the sole judge of time in Rule R13-2-8 and can only allow one 3 minute delay per race.

R13-2-10 The Clerk of the Course will advise the Referee that the track is clear and ready for racing.

R13-2-11 The Starter will initiate each race when instructed to do so by the Referee.

R13-2-12 There will be no contact between vehicles prior to the race start.

START OF THE RACE

R13-2-13 All competitors are under the jurisdiction of the Referee once the race commences.

R13-2-14 Option One: Clutch Start

The race commences with vehicles in a stationary position on the grid.

R13-2-15 Option Two: Rolling Start

- (i) Vehicles move off the grid in formation, with grid 2 setting the pace.
- (ii) The race commences when the green flag is waved and green lights activated.

FALSE START

R13-2-16 In the case of a false start the Referee can order a re-run by activating the red light.

R13-2-17 It will be completely rerun over the original number of laps.

- (i) the original grid positions will apply, except for the prime cause of the stoppage who will restart from the rear of the field.
- (ii) no 3 minute bells are permitted
- (iii) competitors may not change their vehicles
- (iv) vehicles on the infield at the time of the race suspension are permitted to take part in the restart.

RACE DIRECTION

R13-2-18 The race direction will be either clockwise or anti-clockwise.

R13-2-19 The race direction is determined by the Clerk of the Course as the first car leaves the pits for each race, and not before.

R13-2-20 At any race meeting there must be at least one race in the opposite direction.

R13-2-21 Vehicles are not to be driven in the wrong direction.

RACE IN PROGRESS

R13-2-22 Contact between vehicles during racing is permitted.

R13-2-23 Deliberately forcing other cars into the wall is not permitted

R13-2-24 Excess attacking is not permitted.

R13-2-25 Reverse spinning is not permitted.

STATIONARY VEHICLES

R13-2-26 A vehicle that is stationary for any reason can be removed by the Referee activating the red lights.

R13-2-27 Competitors in stationary vehicles must remain in their seat with belts on until they are permitted to get out by an Official. This does not apply in the case of fire.

R13-2-28 Stationary vehicles are to be avoided where possible.

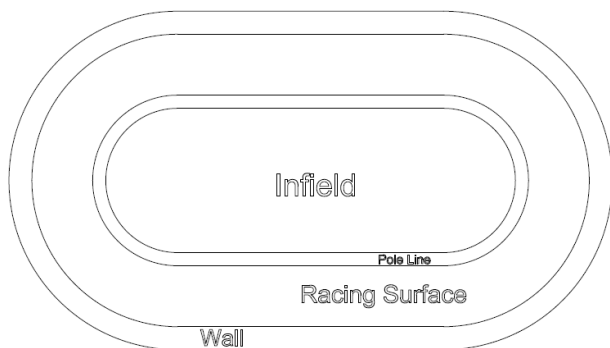
R13-2-29 Competitors cannot force or steer other vehicles into stationary vehicles.

R13-2-30 Attacking from a stationary position or hitting a stationary car is not permitted.

R13-2-31 Competitors waiting for another vehicle must be moving (however slowly) at all times, i.e. you can't stop and wait.

POLELINE/INFIELD

Refer to explanatory diagram below for a definition of terms.



R13-2-32 A competitor can be penalised for placing one or more wheels off the racing surface.

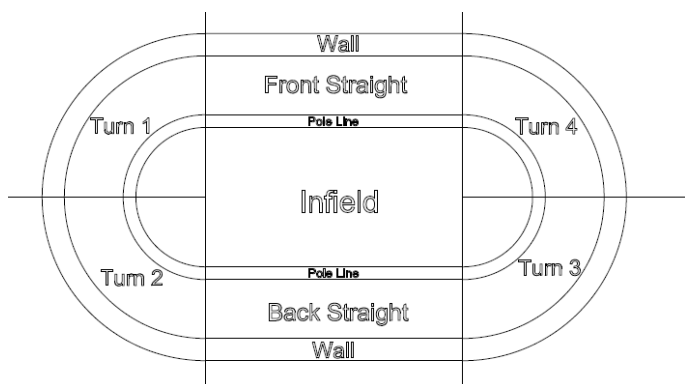
R13-2-33 Deliberate contact from the infield/poleline to the racing surface will result in a penalty including a fine and exclusion from the results.

R13-2-34 Deliberate contact on the infield/poleline will result in a penalty including a fine and exclusion from the results.

R13-2-35 (a) Deliberately moving to the infield/poleline to avoid an attacking vehicle will result in a penalty including a fine and exclusion from the results.

(b) Seeking sanctuary on the infield is prohibited (i.e., to avoid contact or access the race). Once a driver has voluntarily pulled into the infield and stopped, they have been deemed to have ceased their involvement in the race. At the referee's discretion, they may choose not to penalise a competitor who for safety reasons only, briefly drove infield - i.e., to catch their breath, tighten their belts, etc.

R13-2-36 If a vehicle is forced, spun, or driven to the infield during the race, it must return to the racing surface in the same straight or corner in which it left (see diagram below).



R13-2-37 Exception to the above rules. Competitors can use the infield to avoid a complete blockage of the racing surface. They must return -immediately to the track once past the blockage, giving way to passing vehicles already on the racing surface.

WALL

R13-2-38 Riding the concrete wall to gain an advantage can be penalised.

EMERGENCY STOPPAGE

R13-2-39 If an incident has occurred that the Referee deems dangerous, the race will be stopped.

R13-2-40 All vehicles must stop immediately and remain stationary except under instruction from an Official.

R13-2-41 There will be no deliberate contact between vehicles during an emergency stoppage.

R13-2-42 When a vehicle is the primary cause of an emergency stoppage, it is not eligible to restart.

R13-2-43 When the track is cleared for a restart, the red light will be turned off to indicate a start is imminent (approx 5 seconds).

R13-2-44 The race continues from a clutch start when the green lights/flag are displayed.

HEALTH & SAFETY

R13-2-45 Vehicle must be operated by one competitor only, with no passengers permitted.

R13-2-46 If a competitor unclips their seatbelts or window net during the race they are deemed to have retired.

R13-2-47 No competitor will drive with an arm or any part of their body outside the vehicle.

R13-2-48 If a vehicle becomes unsafe during the race it will be removed by the Referee.

R13-2-49 Refuelling is not permitted on the track at any time.

OUTSIDE ASSISTANCE

R13-2-50 The competitor can be penalised by the Referee in the event of:-

- (i) Communication with the driver, other than by Officials or competitors in the race
- (ii) The vehicle being touched during a stoppage

FINISH OF RACE

R13-2-51 A race is not finished until the chequered flag is displayed, regardless of the number of laps run.

R13-2-52 The vehicle must cross the finish-line and receive the chequered flag to be deemed to have finished the race.

R13-2-53 When a competitor has received the chequered flag they will take action to avoid all other cars until the yellow lights are shown.

R13-2-54 Racing will continue until all able vehicles have completed the lap they are on when the chequered flag is shown. Note: Referees need to pay attention to this rule.

R13-2-55 When yellow lights are shown the race is over. Competitors are to return to the pits at a safe speed.

R13-2-56 All placings are determined by the finishing order and number of laps completed by each vehicle as recorded by the approved lap scoring system.

R13-2-57 Any vehicle not receiving the chequered flag is recorded as a DNF.

DECLARED RACE

R13-2-58 The Clerk of the Course can declare a race during an emergency stoppage.

R13-2-59 The results will be as per the last completed lap.

R13-2-60 The Referee can exclude any competitor deemed to be the primary cause of the stoppage.

R13-2-61 Exception: Rules R12-3-58, 59 and 60 do not apply to allocated titles.

SUBSTITUTIONS

R13-2-62 No substitute vehicles or competitors can be entered into championship events if a particular vehicle or competitor is eliminated during racing.

LOCAL RULES

R13-2-63 The rules in this section may be amended by the unanimous decision of a Senior Official 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:

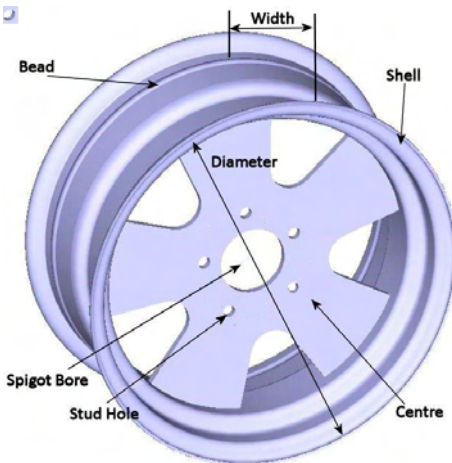
- (i) safety of Competitors
- (ii) safety of Spectators
- (iii) better promotion of events.

R13-2-64 Local rules are only valid for the meeting at which they are enacted, and must be posted on the track noticeboard in order to be considered in effect.

SECTION T14: WHEELS

T14 Wheels

- (a) Rules in this section are managed by the Board in conjunction with the Wheel Technical Committee.
- (b) A wheel consists of the components as per the diagram below.
- (c) Wheels are categorised as follows:-
 - Section T14-1: Steel – custom fabricated wheels
 - Section T14-2: Steel – Approved wheels/centres
 - Section T14-3: Steel – OE road wheels
 - Section T14-4: Steel – wide 5
 - Section T14-5: Aluminium – 14-16 bolt
 - Section T14-6: Aluminium – wide 5
 - Section T14-7: Aluminium – modular wheels
 - Section T14-8: Aluminium – OE road wheels
 - Section T14-9: Offsets



T14-1 STEEL: CUSTOM FABRICATED WHEELS

T14-1-1 Construction:

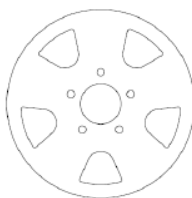
Saloon, Super Saloon, Modified, Superstock, Stockcar, Streetstock.

- (a) Wheel centre minimum thickness = 8mm
- (b) Material specification = Up to NZS Grade 250 mild steel.

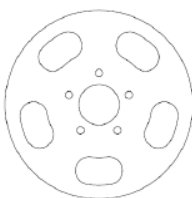
T14-1-2 Manufactured Plate Centre

- (a) Approved designs

Design A



Design B



Design C



Design D

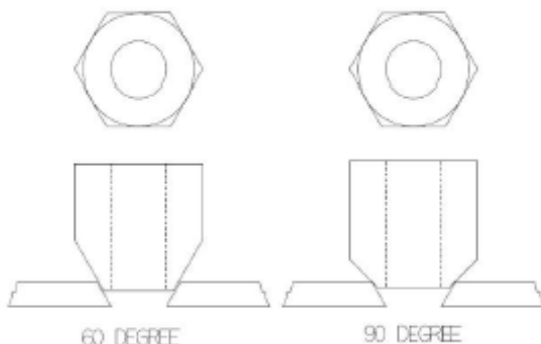


- (b) The designs above are available to download from www.speedway.co.nz
- (c) Alternative designs:
Anyone wishing to submit an alternative wheel design to SNZ for approval must ensure all specifications as mentioned in Section T14 of the SNZ rulebook are complied with. A copy of these specifications are available from the Speedway NZ

T14-1-3 Specifications for welding the centre of the wheel to the shell

- (a) The welding must be uniform.
- (b) Fillet size of the weld = 4mm minimum.
- (c) Approved design A & B: the centre must be welded to the shell either 100% on one side or 50% of each side of the centre
- (d) Approved designs C & D: Both sides of each spoke must be fully welded to the shell.
- (e) All welds must meet the welding standard AS/NZ 1554.1
- (f) The only welding permitted on the centre is where it attaches to the shell.

T14-1-4 Countersinks



- (a) All centres must be countersunk to correctly match the wheel nuts being used (see diagram).
- (b) The wheel nuts must fully engage the studs.
- (c) Wheels with slotted stud holes are not permitted.

T14-1-5 Compliance

- (a) All steel wheels must be inspected at CVI and date-stamped by an SNZ Scrutineer.
- (b) All OE steel road wheels must not be used after three years from the date of the oldest SNZ date stamp.

T14-1-6 Beadlocks

Approved for use in Open Wheel, Super Saloon/Saloon and Modified classes only.

T14-1-7 Wheel Fitment

The centre Spigot bore must fit the axle hub with minimum clearance.

T14-1-8 Spacers: All wheel stud spacers and wheel spacers/adaptors are prohibited.

T14-1-9 Updates: Refer to the Speedway NZ website for the latest wheel information.

T14-2 STEEL: APPROVED WHEELS/CENTRES

T14-2-1 Definition

A wheel and/or centre tested by an engineer of Speedway NZ's choice, and approved for use by SNZ.

T14-2-2 Identification

An approved wheel/centre must be clearly identifiable and will be marked with the SNZ issued stamp to ensure inferior copies are not used.

T14-2-3 Approval Process

A wheel cannot be used until an application has been submitted and approved by Speedway NZ. The application will include the report from the SNZ approved engineer. The cost of testing the wheel is the responsibility of applicant. SNZ can charge an application fee.

14-2-4 Approved wheels/centres cannot be modified.

T14-2-5 Countersinks

- (a) All centres must be countersunk to correctly match the wheel nuts being used. See diagram T14-1-4.
- (b) The wheel nuts must fully engage the studs.
- (c) Wheels with slotted stud holes are not permitted.

T14-2-6 Compliance

All steel wheels must be inspected at CVI and date-stamped by an SNZ Scrutineer.

T14-2-7 Beadlocks: Approved for use in Open Wheel, Super Saloon/Saloon and Modified classes only.

T14-2-8 Wheel Fitment

The centre Spigot bore must fit the axel hub with minimum clearance.

T14-2-9 Spacers

All wheel stud spacers and wheel spacers/adaptors are prohibited.

T14-2-10 Specifications for welding the centre of the wheel to the shell

- (a) The welding must be uniform.
- (b) Fillet size of the weld = 4mm minimum.
- (c) Approved design A & B: the centre must be welded to the shell either 100% on one side or 50% of each side of the centre.
- (d) Approved designs C & D: Both sides of each spoke must be fully welded to the shell.
- (e) All welds must meet the welding standard AS/NZ 1554.1
- (f) The only welding permitted on the centre is where it attaches to the shell.

T14-2-11 Approved Componentry as at 1 September 2015, and thereafter

Refer to www.speedway.co.nz/wheels

T14-3 STEEL: OE ROAD WHEELS

T14-3-1 Countersinks

- (a) All wheel nuts must match the countersunk for the wheel being used. (See diagram T14-1-4)
- (b) The wheel nuts must fully engage the studs.
- (c) Wheels with slotted stud holes are not permitted.

T14-3-2 Compliance

- (a) All steel wheels must be inspected at CVI and date-stamped by an SNZ Scrutineer.
- (b) All OE steel wheels must not be used after three years from the first applied SNZ date stamp.

T14-3-3 Wheel Fitment

The centre Spigot bore must fit the axle hub with minimum clearance.

T14-3-4 Spacers

All wheel stud spacers and wheel spacers/adaptors are prohibited.

T14-4 STEEL: WIDE 5

T14-4-1 The centre must comprise a full disc on the inner circumference of the rim.

T14-4-2 The centre thickness must be 8mm minimum.

T14-4-3 The minimum radial thickness of the centre is 20mm.

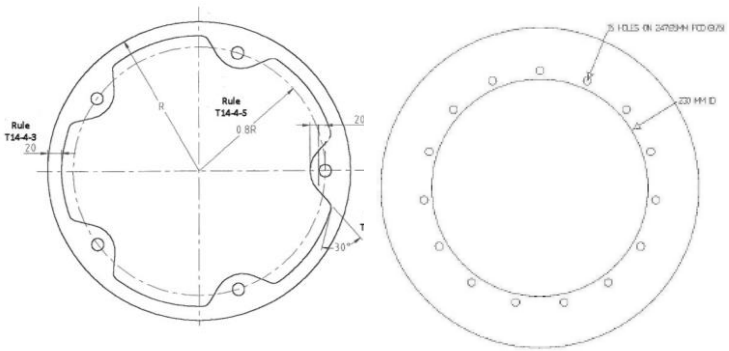
T14-4-4 The angle between the centre and the extension housing (which comprise the stud holes) must be no more than 30 degrees to the tangent.

T14-4-5 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 centre must be a minimum of 20mm.

T14-4-6 Modified Wide 5:

The centre web may lie outside the centre third (1/3) of the total rim width.

T14-4-7 Also Refer Diagram left below.



T14-5 ALUMINIUM CENTRE 14-16 BOLT (DIRECT MOUNT)

T14-5-1 The centre must comprise a full disc on the inner circumference of the rim.

T14-5-2 The centre thickness must be 8mm minimum and fully welded.

T14-5-3 All bolt holes must be used.

T14-5-4 Also Refer Diagram above right.

T14-5-5 Saloon Wide 5 and Aluminium centre 14-16 bolt:

Where the 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 8mm minimum thickness with 12.5mm minimum size wheel studs.

T14-5-7 Countersinks

- (a) All centres must be countersunk to correctly match the wheel nuts being used. (See diagram T14-1-4 above).
- (b) The wheel nuts must fully engage the studs.
- (c) Wheels with slotted stud holes are not permitted.
- (d) The Spigot Bore of the wheel web must fit the axle hub. Refer to diagram T14 for interpretation assistance.

T14-5-8 Compliance

All steel wheels must be inspected at CVI and date-stamped by an SNZ Scrutineer.

T14-5-9 Beadlocks

Approved for use in Open Wheel, Super Saloon/Saloon and Modified classes only.

T14-5-10 Wheel Fitment: The centre Spigot bore must fit the axle hub with minimum clearance.

T14-5-11 Spacers : All wheel stud spacers and wheel spacers/adaptors are prohibited.

T14-5-12 6 Pin wheels/hubs

6 Pin wheels are permitted on Saloons, Super Saloons or Modifieds. The RHR wheel must be a minimum 10mm wheel center.

T14-6 ALUMINIUM – WIDE 5

- T14-6-1** The centre must comprise a full disc on the inner circumference of the rim.
- T14-6-2** The centre thickness must be 8mm minimum.
- T14-6-3** The minimum radial thickness of the centre is 20mm.
- T14-6-4** The angle between the centre and the extension housing (which comprise the stud holes) must be no more than 30 degrees to the tangent.
- T14-6-5** If the stud holes are in the last 20degrees 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 centre must be a minimum of 20mm.
- T14-6-6** Also Refer Diagram above.
- T14-6-7 Compliance:**
All Aluminium wheels must be inspected at CVI but no date stamp is required
- T14-6-8 Beadlocks:**
Approved for use in Open Wheel and Modified classes only.
- T14-6-9 Wheel Fitment**
The centre Spigot bore must fit the axle hub with minimum clearance.
- T14-6-10 Spacers:**
All wheel stud spacers and wheel spacers/adaptors are prohibited.

T14-7 ALUMINIUM – COMPOSITE WHEEL

- T14-7-1 Beadlocks:**
Approved for use in Open Wheel and Modified classes only.
- T14-7-2 Compliance**
All Aluminium wheels must be inspected at CVI but no date stamp is required
- T14-7-3 Wheel Fitment:**
The centre Spigot bore must fit the axle hub with minimum clearance.

T14-8 ALUMINIUM – OE ROAD WHEELS

- T14-8-1 Countersinks**
(a) All centres must be countersunk to correctly match the wheel nuts being used. (See drawing T14-1-4)

- (b) The wheel nuts must fully engage the studs.
- (c) Wheels with slotted stud holes are not permitted.
- (d) The centre hole of the wheel web must fit the axle hub with minimum clearance.

T14-8-2 Compliance

- (a) All Aluminium wheels must be inspected at CVI and date-stamped by an SNZ Scrutineer.
- (b) All Aluminium OE road wheels must not be used after three years from the first applied SNZ date stamp.

T14-8-3 Wheel Fitment

The centre Spigot bore must fit the axel hub with minimum clearance.

T14-8-4 Spacers

All wheel stud spacers and wheel spacers/adaptors are prohibited.

T14-9 OFFSETS

T14-9-1 The entire centre will be contained within the centre 1/3 of the shell, refer diagram (A & B below)

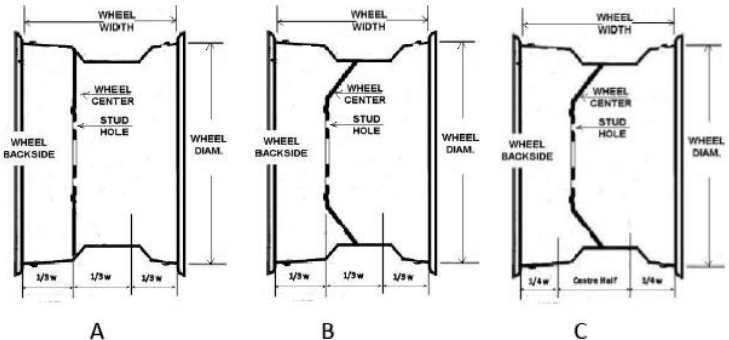
T14-9-2 On any pressed centre the cross sectional inside radius of the curvature shall not be less than twice the thickness of the plate from which the web was pressed.

T14-9-3 Superstock or Stockcar

Can have the rear wheel centre welded in the centre half of the rim. The centre must be a minimum of 10mm and with a minimum of five x 12.5mm diameter minimum size wheel studs or an SNZ approved centre. The entire centre will be contained within the centre 1/2 of the shell, refer diagram C below.

T14-9-4 Saloon or Super Saloon

Wheel centre that is offset less than 1/3 of the total rim width from the outer edge of either side of the rim, the centre will be a 10mm minimum thickness centre with 12.5mm minimum size wheel studs.



SECTION T1 1-6 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



2017 MODIFIED SPRINT COMPETITOR OF THE YEAR: BRENDAN DALY

T10-7 Modified Sprint:

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

T10-7-1 Engine

- (a) Front mounted motorcycle engine only. No rear engine cars permitted.
- (b) 1200cc maximum capacity for all engines. Engines must remain as standard production engines. No works race engines or modifications allowed. Original manufacturers allowable oversize only. No engines manufactured within two years of the season being raced will be permitted.
- (c) Engine manufacturers allowed: Honda, Yamaha, and Suzuki.
- (d) Engines to be 4 cylinder inline.
- (e) Direct air-cooled & water cooled only.
- (f) Radiator type is unrestricted.
- (g) Radiator is to be mounted in the confines of the bodywork.
Not to be mounted on roll cages.
- (h) Fuel pump is free choice/unrestricted.
- (i) OEM sump & pick up can be cut or aftermarket sumps can be fitted.
- (j) No rotary or two stroke motorcycle engines, supercharges, turbocharges or engines sleeved back.

- (k) Induction - Carburettors or mechanical fuel injection OEM EFI, aftermarket airbox permitted with OEM velocity stacks.
- (l) OEM Ignition, no aftermarket electronic engine mapping or management devices allowed, eg Power Commander, Cobra Commander not permitted.
- (m) Exhaust design is free.
- (n) Gearbox - Removal of gears is permitted.
- (o) Oil systems - No dry sumps permitted. Original oil pump pick up must be retained.
- (p) Clutch - Aftermarket clutches allowed provided same amount of plates and springs are used to comply with standard configuration.
- (q) Piston Rings - Aftermarket rings permitted but must comply with standard specification.
- (r) Shot peening of crankshaft and connecting rods is permitted.
- (s) Charging Systems - Alternators and/or charging systems can be removed.
- (t) Gaskets - Head and barrel gaskets must be used and of standard dimensions.
- (u) Recent engine declaration certificate of engine capacity on the official SNZ form must be produced on demand.
- (v)
 - (i) Engine to be pre-drilled before CVI inspection with 3.3mm minimum size hole to enable scrutineers to seal engine.
 - (ii) Pre-drilled holes to seal: cylinder barrels to crankcase, cam cover to cylinder barrels. Note: Pre drilled retainers are acceptable.
- (w) 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

- (a) Exhaust pipe or pipes to be securely mounted to the chassis or the frame on at least two mounting points.
- (b) Exhaust pipes not to extend beyond the outer confines of the knurled bars. Mufflers refer T10-1-16(b).
- (c) Exhaust pipes and muffler must remain within the limits of the car, i.e. overall length and within knurled iron bars, however muffler and outlet must be no higher than top knurled iron bar.
- (d) Refer to Rule T10-1-16.

T10-7-3 Chassis Types

- (a) Chassis: Space frame round tubular construction.
- (b) Engine offset: 150mm [6"] measured centre line of motor and centre line of frame.

T10-7-4 General Dimensions

- (a) Wheelbase -- 2030mm maximum (effective for cars constructed from 1985 onwards) 1520mm minimum.
- (b) Wheeltrack--1320mm maximum 1070mm minimum. To be measured centre to centre of tyres.
- (c) Maximum height--not to exceed 1520mm (not including aerofoil) measured from ground to top of rollcage.
- (d)
 - (i) Single seater bodies only.
 - (ii) All bodies to be of clean and neat design without any protruding or sharp edges, especially in the cockpit and must consist of a nose, tail and cabin.
 - (iii) All panels and bonnets must be securely fastened primarily by way of dzus buttons minimum (bolts satisfactory). Plastic ties are not permitted.
 - (iv) An effective firewall of ~~1.58mm (0.0625 inch)~~ **1.2mm (0.046 inch) minimum**^(aug2017) metal or other approved fire retarding material must be placed between driver and motor, sealing the engine compartment from the cockpit, down to the level of the chassis frame.
- (e) Seat is to be of a suitable bucket type designed for racing and securely welded or bolted to the floor and internal barwork.
- (f) Floor pan under drivers feet must extend from front edge of seat to firewall.
- (g) No mirrors permitted.

T10-7-5 Seatbelts: Refer to Section S4.

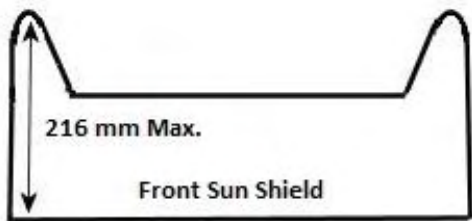
T10-7-6 Rollcage

Roll cages satisfying the following requirements are mandatory, they should meet the following specifications.

- (a) SAE 4130 N Chrome-Moly Tubing 1.3/8" OD x .095 wall (1.375" OD x .095" WT) When high bar chassis are used front cockpit uprights may be 1.25" OD x .095" wall thickness
- (b) Cold drawn Seamless SAE 1010/1026 or Reynolds 531, 1 3/8 x 8 gauge, (1.375" OD x .161" W.T.)
- (c) All existing cars built and raced prior to May 1998 to remain as they are except any car requiring a rebuilt roll cage must comply to latest new size specification. Log book to determine existing cars.
- (d) Bottom Chassis Rail to be a minimum of 0.083" wall thickness.
- (e)
 - (i) The top line of both the horizontal tubes to be no less than 50mm above the drivers head when seated statically in the car.

- (ii) The top lines of the both horizontal tubes to be no less than 100mm above the driver's head when in normal restrained position. Effective for new frames built after July 2002.
- (f)
 - (i) The main frame to be constructed of no more than eight pieces of uncut lengths of tubing, securely attached to the main chassis at the front. Pipe bends, elbows, or sockets are not permitted on main frame.
 - (ii) Where the tubing changes direction, or is joined by another member, the inside of the radius or corner, must be gusseted. Gussets will be not less than 3.1mm plate or 16mm x 2.5mm tube. Gussets must extend at least 75mm from centre of corner or join.
 - (iii) The rear vertical tubes of the frame must be stayed to the chassis by a diagonal brace on either side of the car, forwards, or rearwards.
- (g)
 - (i) Side intrusion bars may be added to the main frame of the roll cage.
 - (ii) The said side intrusion bars must be attached adjacent to the rear cross tube at the top of the roll cage.
 - (iii) A brace must be fitted midway between upper and lower mounting points.
 - (iv) All bent sections of intrusion bars to have a minimum radius of 4" - 102mm and constructed of a minimum of 31.8mm (1.250") OD x 2.4mm (.095") chrome moly tube.
 - (v) A minimum measurement of 750mm and a maximum of 880mm between the inside radius of the intrusion bars measured at driver's helmet height when in normal seated position.
 - (vi) SFI certified rollcage padding must be fitted to all intrusion bars above shoulder height.
- (h) A cross brace must link the two longitudinal tube members behind the drivers seat (one diagonal is NOT acceptable).
- (i) All bracing to the tail frame and also the roll cage vertical tubes, to connect as high as practically possible, to use the braces to full advantage.
- (j) Construction of the roll cage may be altered to allow wheel guards to be added to existing cages. Positioning of such wheel guards to be no higher than shoulder height and no lower than waist height when seated in the driving position.

- (k) A "Full" (parachute type) body harness is compulsory with roll cages and provision must be made to anchor both sides of this to the main tail frame of the car, which will be adequately braced to the chassis. Also refer to rule 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**
 - (i) **Side 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.
 - (ii) **Front sun shields** to be a maximum of 216mm measured at the widest point (see drawing below). Visor must be one piece and must not protrude over the top line of the rollcage at any point^(aug2017)



- (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 the sprocket. It must adequately shield the driver on top and from the top of the chain to the floorpan and 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 secured with castellated nut and split pin.
- (j) An approved locking device must retain front hub bearings.
- (k) A nyloc nut on its own is not an approved locking device.
- (l) All front stub to steering arm fasteners and associated location holes to be checked at security at CVI inspection and suitably lock wired.
- (m) 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.
- (n) Wheel Covers
 - (i) Aluminum wheels covers utilizing dzus style fasteners must be attached with a minimum of 5 steel dzus buttons.
 - (ii) Aluminum wheels covers with only 3 attachment points must be bolted using 3 x 8mm steel bolts and approved fastener / nut system.
 - (iii) Covers must be securely attached and in place on the Dummy grid before entering the track.

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 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.

T10-7-15 Battery: Must be secured in a safe position and suitably covered to prevent spillage of acid in the event of a capsized.

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) **Track Code Sizes:** Letters to be at least 100mm high, with a stroke width of at least 13mm.

T10-7-20 Air Foils

- (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.

SECTION T10-8 QUARTER MIDGETS



2016 QUARTER MIDGET COMPETITOR OF THE YEAR: JAKOB LE CREN

See also the relevant Training Programme Section, M6-13.

T10-8 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.

T10-8-1 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.

T10-8-2 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

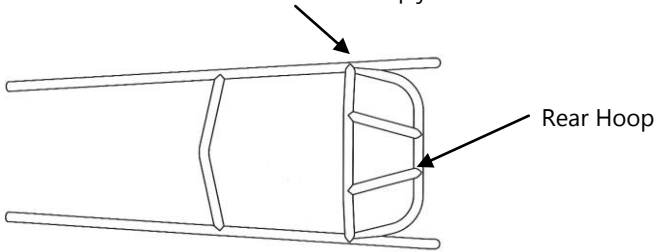
Space frame tubular construction only. Minimum tube size 1.1/8"OD x 16G. All new chassis to be checked by a track official before painting or powder coating. Mig, Tig, Steel Gas welding or Arc welding only allowed. NO Brazing.

(c) Roll Cage

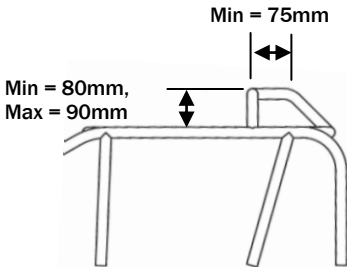
- (i) Must be constructed to Midget/Three Quarter Midget type specifications with a minimum tube size of 1.1/8" OD x 16g with appropriate gussets. Roll cage must have minimum clearance of 2" from the underside of the tube to the top of the driver's helmet.
- (ii) Roll cage must have minimum clearance of 80mm from the top of the roll cage tube.
Measured from front to rear of roll cage, to the top of the driver's helmet, when in the seated position.
- (iii) The addition of a halo is permitted on cars built before 1 September 2012. It must consist of 3 tubular pieces 1.1/8" OD x 16g. Maximum permitted height and placement as per diagrams on next page.

APPROVED HALO: TOP VIEW

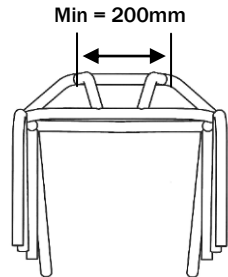
Must be within 30mm of the rear hoop joint



LEFT VIEW



REAR VIEW



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

(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 the Technical Committee. Any alterations or additions agreed upon by the SNZ panel will be final.

(h) **Numbers**

To be signwritten on both sides of the tail and on the front nose (bonnet) in contrasting colours.

(i) Minimum height 200mm tail cone, 150mm front of bonnet.

(ii) Track code: Minimum size 50mm letter. If on left hand side the letter appears after number. Right hand side letter appears before number.

(j) **Fuel:**

Quarter Midgets are permitted to use the following fuels as defined in section E5-1-1:

(i) Petrol, maximum 98 octane.

(ii) Ethanol/petrol blended fuel containing up to 10% ethanol (E10).

(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.

T10-8-3 Engine Specifications

- (a) Up to 200cc naturally aspirated, air cooled 4 stroke. 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.
 - (iv) Rocker cover breathers accepted.
 - (v) Additional timing chain adjusters accepted.
- (d) **Carburettors**
Must be standard OEM as fitted to that model engine. Identical style copies accepted. Round throttle slide only and to be NO larger than 24mm in diameter. 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) Engine bore and stroke must be measured and sealed by an SNZ appointed engine sealer. NO SEAL, NO RACE. Measurement information must be entered into the vehicle logbook

T10-8-4 Wheels

- (a) Maximum rim diameter 8" alloy or steel.
- (b) Clearly identifiable approved professionally manufactured wheels are permitted, provided manufacturer's specifications are adhered to.

T10-8-5 Tyres

- (a) Turf tyres only/golf cart style.
- (b) Size to be moulded on side walls.
- (c) No sidewall alterations permitted.
- (d) Front 16/6.50x8" maximum size.
- (e) Rear 18/9.50x8" maximum size.

T10-8-6 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.

T10-8-7 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.

T10-8-8 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.

T10-8-9 Seat

Seat is to be of a suitable bucket type design for racing, securely bolted to the internal tube work by way of minimum 6mm high tensile bolts and penny washers to be used. Two bolts into base frame and two bolts into rear frame.

T10-8-10 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.

T10-8-11 Throttle

Throttle control to have two effective return springs and connections properly secured.

R 10-9: 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) Once the Race begins or restarts Quarter Midgets are permitted to change up to their racing gear and then not permitted to change gear thereafter (i.e. not allowed to change down during race).
- (d) Gear changing: Changing down on yellow flag/light is permitted.

(e) **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 & White Chequered</i>	FINISH Race finish slow down and stop as required for particular track being raced on.

SECTION T15 MINISTOCKS



2016 YOUTH MINISTOCK COMPETITOR OF THE YEAR: REGAN PENN

Note: In this Ministock Section.

Red text are rule changes that apply immediately.

Purple text will be implemented in the 2018/19 season.

Blue text will be implemented in the 2019/20 season.

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 specs and 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.
- (j) The Board may suspend any driver whose car is modified or oversize from the class ALTOGETHER.

T15-1-1 Body

- (a) The minimum height is 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.
- (b) 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. No cut out sections for the gearbox etc are permitted. The floor under the seat is to be full width and welded to the chassis.

- (c) 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.
- (d) *It is recommended that the gearbox be covered with a minimum of 3mm aluminium. extending to and attached to the firewall presenting no sharp edges to the vehicles occupant.*

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) A pipe to be a minimum of 25mm x 3mm, to a maximum of roll cage material or 25mm x 25mm x 3mm RHS to be mounted on its flat surface will be welded to the top of the hip plate.

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.

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.

Rollcage Nets: All cars to be fitted with rollcage nets on the right hand side of the roll cage.

- (a) All rollcage nets must conform to SFI Specification 37.1, which specifies a functional quick release opening mechanism.
- (b) The life of rollcage nets cannot exceed 2 years.

- (c) 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.
- (d) Rollcage side head nets are not required when an approved full containment seat is utilised.

T15-1-8 Rear Vision Mirrors

One or two steel or plastic backed mirrors of not more than 0.023m² (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

- (a) Minimum weight excluding driver = 650kg
- (b) Maximum weight excluding driver = 730kg
- (c) These weights apply when presented for technical inspections and on the dummy grid prior to a race. Penalty = 30 day suspension, starting from the day of the offence.

T15-1-11 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, 0.929mm² minimum size. Roof number minimum height: 190mm. Minimum width: 30mm.
- (e) **Track Code Sizes:** Letters to be at least 100mm high, with a stroke width of at least 13mm.
- (f) Roof fin/panel maximum length: 1200mm. Roof fin/panel maximum height: 600mm.
- (g) 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

Front: Both OE brake assemblies must be fitted and fully operational.

Rear: Both OE brake drums must be fitted, and at least one brake assembly must be fully operational.

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 = 38mm OD. Donor type offset mufflers only. Primary pipe (exhaust manifold outlet to muffler inlet pipe) will be a maximum length of 750mm.
- (d) No air/fuel ratio (Lambda) sensing devices may be fitted to any part of the exhaust system.

T15-1-21 Wheels

- (a) Pressed steel road wheel must be used, either 12" or 13" providing the wheel correctly fits the hub.
- (b) Any aftermarket 12" or 13" pressed steel wheel may be used providing that the wheel is an appropriate fitment to the axle or hub and wheel stud sizes and is unmodified and carries a DOT or equivalent standard rating stamped on the wheel.
- (c) 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, **for the 2017/18 season only. From 1st September 2018 re-grooving of tyres is not permitted** 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) The approved 2015 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 **circular holes each with a maximum diameter of 17mm** ~~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

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.
UNLESS IT SAYS YOU CAN MODIFY THEN YOU MUST NOT!
- (a) **The engine to be OEM unless otherwise stated in the sections below. Modification of components is not permitted in anyway except where a specific modification**

is stated in these regulations. Unless it says you can then you MUST NOT.

- (b) The head, manifold and gasket cannot be modified.
All Nissans must use the Payen/ACL gasket part # JA010, and the stud pattern of the head and manifold must match the gasket without modification.
- (c)(b) The use and fitment of alternator is optional.
- (d)(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.
- (e)(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 offset rockers or shafts, cam timing must be STD.
- (f) Only single valve springs may be fitted to inlet and exhaust valves.
- (g)(e) All engines must be measured for capacity compliance and have two SNZ Approved Seals applied to the block and sump and 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.
- (h)(f) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section M7-4 Specific Technical Offences.
- (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 10.0 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 ~~can~~ **may** be recurved and the vaccum advance does not need to be functional.
- (xi) **Air cleaner to tappet cover breather hoses is optional and if removed from air cleaner, must have breather on end of pipe from block**
- (xii) **Positive Crankcase Ventilation (PCV) valve and hose must be removed and hole in intake manifold must be plugged**
- ~~(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.~~
- (xiii) The air cleaner Air Reed breather valve may be removed.

(g) **Cylinder Head**

- (i) Cylinder head must be in OEM form and must retain the original manifold stud pattern.
- (ii) Heads with the casting number M30 064 are NOT PERMITTED.
- (iii) Aftermarket head studs are not permitted. OE and Aftermarket Cylinder Head Bolts are permitted.
- (iv) The head must NOT be modified in any way, unless otherwise stated in the sections below.
- (v) Material can be removed from the cylinder head surface.
- (vi) Max Compression ratio 10.000 to 1.
- (vii) Polishing of any components is NOT PERMITTED. This includes but is not limited to Valves, Valve Spring Retainers, Ports and Chambers.
- (ix) Valve seats can be refaced and valves can be refaced.
- (x) Valve spring tension may be altered. OE Spring retainer to be used. Shims must be flat. Stepped shims and valve spring locators are NOT PERMITTED.
- (xi) Modified rockers or shafts are not permitted.
- (xii) Datsun engines must use the Payen/ACL/Permaseal gasket part# JA010, Toyota engines must use the ACL# Intake:EJ290, Exhaust: JA029 and the stud pattern of the head and manifold must match the gasket without modification.

(h) **Engine Block**

- (i) Engine block must be in OE form.

- (ii) Modification of oil galleries is NOT PERMITTED
- (iii) Offsetting of Bores is not permitted.
- (iv) Removing material from or polishing the block, bearing caps and bolts is NOT PERMITTED.
- (v) Aftermarket Main bearing cap bolts or studs are not permitted.
- (vi) Block face can be machined.
- (vii) Main and Big End Bearings may be replaced with an aftermarket bearing.
- (viii) Permitted Engine Stroke – Toyota 66mm +/- 0.127mm. Datsun 70mm +/- 0.127mm.

(i) **Rotating and Reciprocating Mass**

- (i) Balancing of the Rotating and Reciprocating Mass is permitted subject to the following being adhered to:
- (ii) Crankshaft may be drilled perpendicular to the rotational axis for balancing purposes. No other material is permitted to be removed. Polishing of crankshaft counterweights is NOT PERMITTED. Crankshaft grinding to suit max 0.5mm undersize bearings is permitted.
- (iii) Material can be removed from the small end of a maximum of three conrods only for balancing purposes.
- (iv) Polishing of conrods and crankshaft counterweights is NOT PERMITTED.
- (v) Shot penning of Crankshaft, Conrods or Pistons is NOT PERMITTED
- (vi) Conrod bolts are to be standard with no modification; NO aftermarket Rod, bolts or nuts are permitted.
- (vii) Pistons are to be OE Datsun, or a standard replacement piston with the following part numbers: PNIA 1240603E, PNIA 1240403E and PNIA 1240203E, PNIA 1240003E, PS201A12.50, PS201A121.00, PS201A121.50, PKN1407301G, 4RY2562-1.50
- (viii) Pistons are to be OE Toyota, or a standard replacement piston with the following part numbers: PT03K40004E, PT03K40201E, PT03K40204E, PT03K40404E, PT03K40604E, PS2023K1.00, PS2023K1.50, 4RY2509
- (ix) It is not permitted to remove material from the pistons, with the exception of the top ring land groove to allow the use of a ring saver insert.

- (x) Piston Rings are to be standard or standard replacement and meet the following measurements: Top Ring: 2mm, Second Ring 2mm and oil Ring 4mm.

(j) Camshaft

Refer to current cam shaft specs list in the tables below.

- (i) Cam gear to be OE only.
- (ii) It is not permitted timing chain sprockets to be modified, dowel hole must not be moved and no extra holes drilled or machined. Offset dowels and keys not permitted.
- (iii) Timing chain must be OE or OE replacement.
- (iv) Camshaft timing in relation to crankshaft must not be altered.
- (v) Camshafts are subject to inspection at any time.

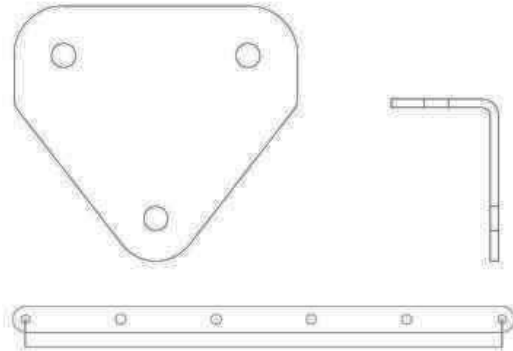
(k) Inlet, Exhaust Manifold and Carburettor

- (i) Inlet and exhaust manifolds must be OE
- (ii) Modification to inlet or exhaust manifold is not permitted.
- (iii) No porting or polishing of inlet or exhaust manifold is permitted.
- (iv) The exhaust hot box flapper valve, shaft, counter weight and spring can be removed from the manifold. The flapper valve shaft holes left in the manifold can be suitably plugged to stop the escape of exhaust gases. If hot box flapper valve, shaft, counterweight and spring remains in the manifold it must retain OE form and function. The OE or an SNZ approved alternative hotbox gasket must be in place.
- (v) It is not permitted for the hot box flapper valve to be welded in an open or closed position.
- (vi) OE two choke carburettor is to be used.
- (vii) Model # Datsun: Hitachi DCG06 or 6010-H1602 or Chinese replacement carb # 16010-H1602.
- (viii) Model # Toyota: 3K Aisan ISO
- (ix) Modification of the carburettor is NOT PERMITTED.
- (x) Electric idle solenoid may be removed and the resulting holes blocked off.
- (xi) OE carburettor jets may be modified. All other carburettor parts must be in place and functional.

(l) Engine - Things you can do

- (i) The use and fitment of an alternator is optional.
- (ii) Any radiator may be used.

- (iii) One piece of box steel may be used in place of rubber block in engine mounts.
- (iv) Engine can be fitted with secondary securing device:
 - (a) Flexible steel wire cable (strops) can be fitted.
 - (b) Two steel flat bars, size 25mm x 3mm x 50mm, with a maximum of four 10mm lightening holes, mounted to existing engine mount holes. See drawing below.



- (v) Distributor must be standard in appearance. It can be recurved and the vacuum advance does not need to be functional. OE or OE replacement points and condenser must be fitted and be operational. Additional electronic devices are not permitted to control ignition function.
- (vi) Air cleaner to tappet cover breather hoses is optional and if removed from air cleaner, must have breather on end of pipe from block.
- (vii) Positive Crankcase Ventilation (PCV) valve and hose must be removed and hole in intake manifold must be plugged.
- (vii) The air cleaner Air Reed breather valve may be removed.

T15-1-25 Gearbox: Gearbox will be standard from the donor vehicle, and will be unmodified both internally and externally, with the exception of the gear lever which may be bent to allow for seat clearance.

T15-1-26 Donor Cars as per rule T15-1(c):

TOYOTA 3K 1 1 66cc

Bore:	2.95 inches (75.0mm) up to .60th	
Stroke:	2.598 inches (66.0 mm)	
Camshaft Lift:	Inlet .225"	Exhaust .237"
Camshaft Duration:	Inlet: 66 DGS	Exhaust: 66 DGS
Valve Head Diameter:	Inlet: 36mm	Exhaust: 29mm
Carburettor Type:	Aisan ISO	
Venturi Diameter:	Primary: 21mm	Secondary: 24mm
Flywheel Weight:	7kg (Min)	

DATSUN A12 1 1 71cc

Bore:	2.87 inches (73.50mm) up to .60th	
Stroke:	2.76 inches (70.0mm) only	
Camshaft Lift:	Inlet .222"	Exhaust .233"
Camshaft Duration:	Inlet: 68 DGS	Exhaust: 68 DGS
Valve Head Diameter:	Inlet: 35mm	Exhaust: 29mm
Carburettor Type:	Hitachi DCG 306 or 6010-H1602	
Venturi Diameter:	Primary: 20mm	Secondary: 26mm
Flywheel Weight:	8kg (Min)	

R15-2-1 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 & White Chequered</i>	<i>FINISH Race finish slow down and stop as required for particular track being raced on.</i>

- (a) Only one competitor may occupy a vehicle while it is on the track. No person shall ride on a vehicle other than accommodated in its seating capacity. No competitor will drive with an arm or any other part of his body outside the vehicle.
- (b) In the event of a vehicle stopping or being stopped on the track during a race, the competitor shall remain strapped in his seat, until he is given permission to leave it by an appropriate official. Obviously this restriction does not apply in the case of fire.
- (c) 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

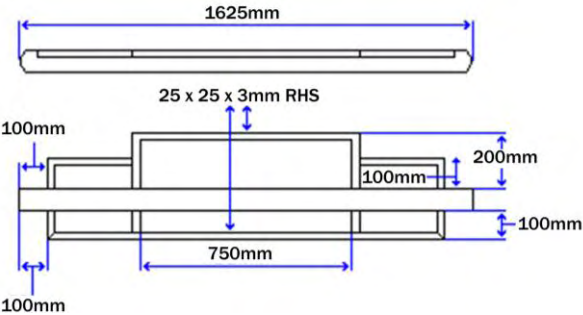
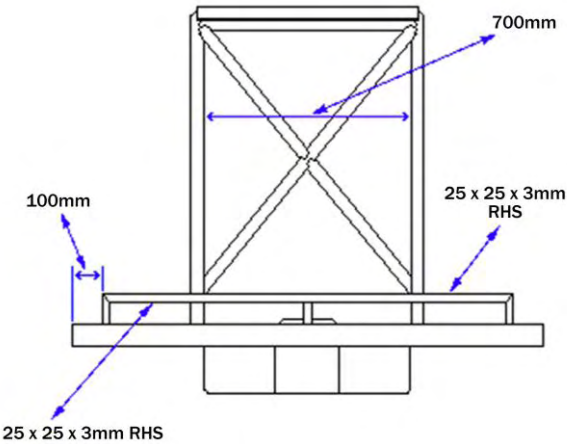
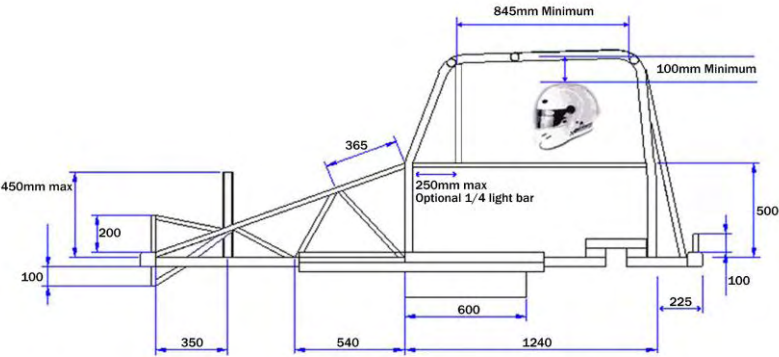
past the blockage by the shortest practical route, but must not drive onto the track in front of an oncoming vehicle. Failure to obey this rule will lead to a fine and exclusion.

(g) Declared Race:

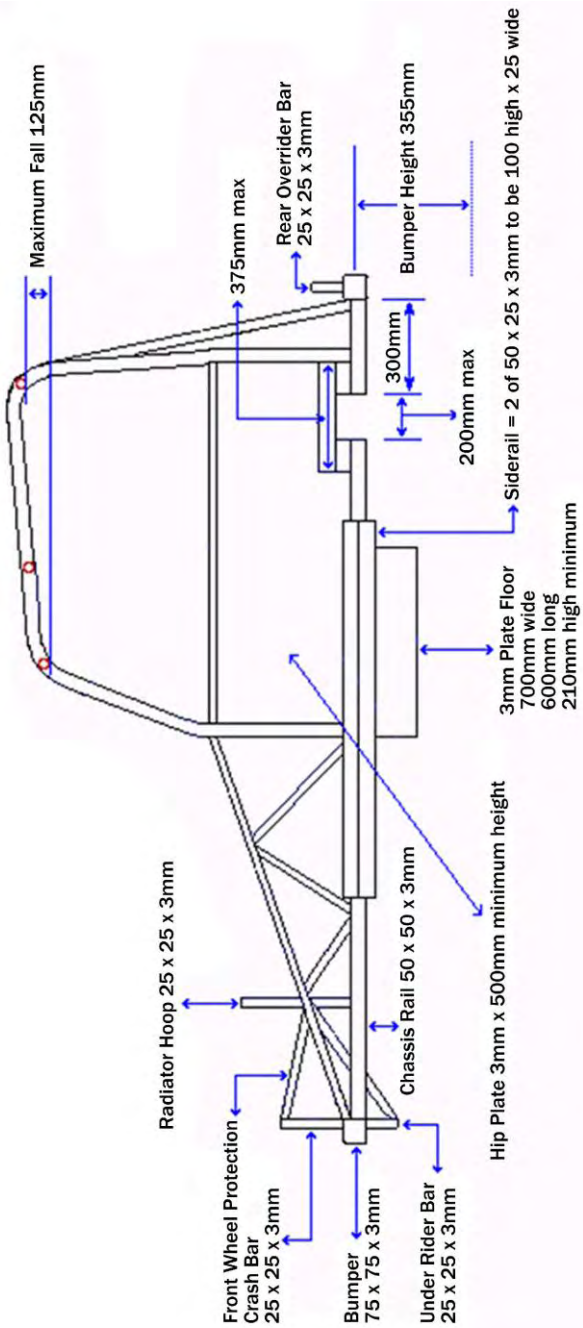
- (i) The Clerk of the Course can declare a race during a stoppage.
- (ii) The results will be as per the last completed lap.
- (iii) The Referee can exclude any competitor deemed to be the primary cause of the stoppage.

APPENDIX A:
2003 SNZ MINISTOCK PLANS

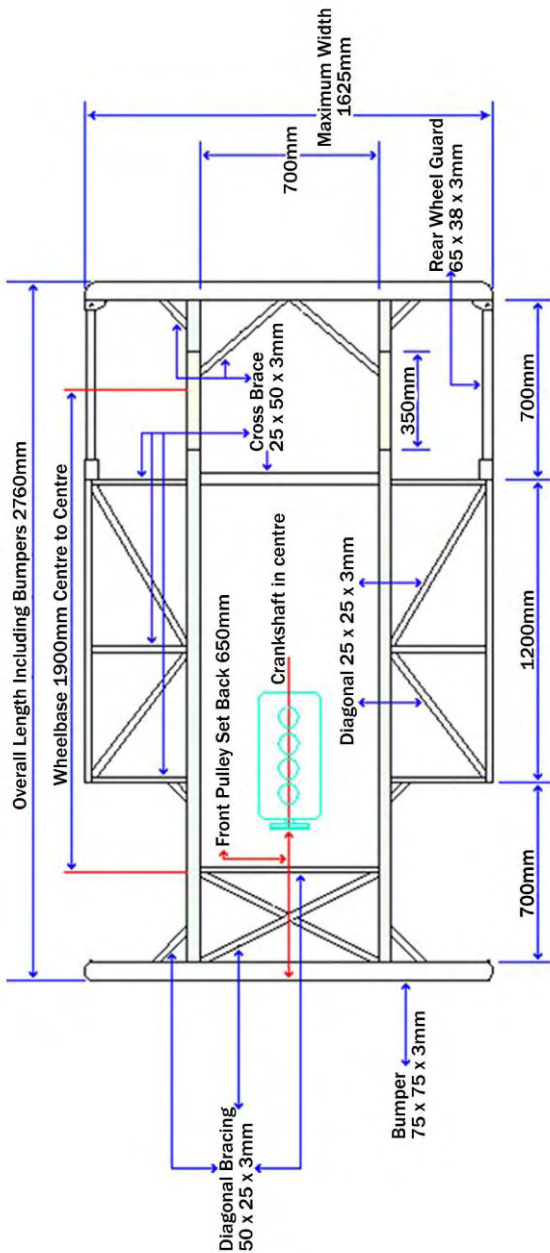
NOTE: A 25mm tolerance is permitted on all chassis measurements, except minimum and maximum measurements have no tolerance. No tolerance is permitted on material specifications and drivers helmet clearance.



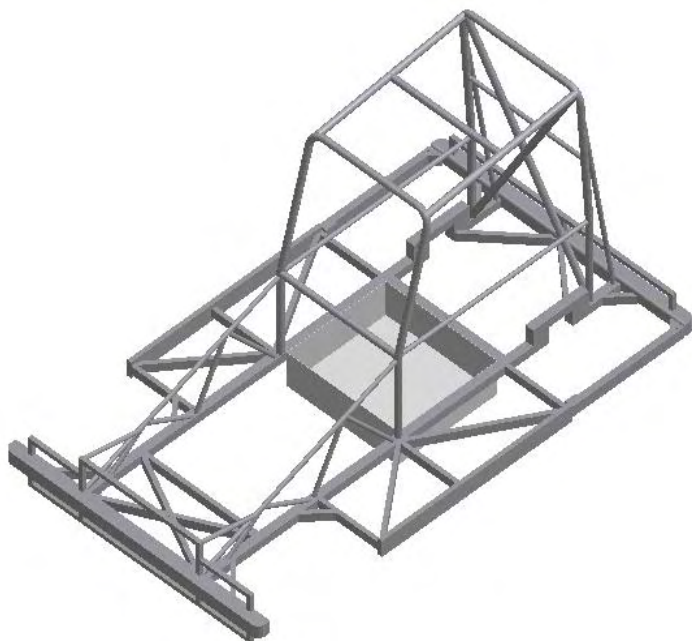
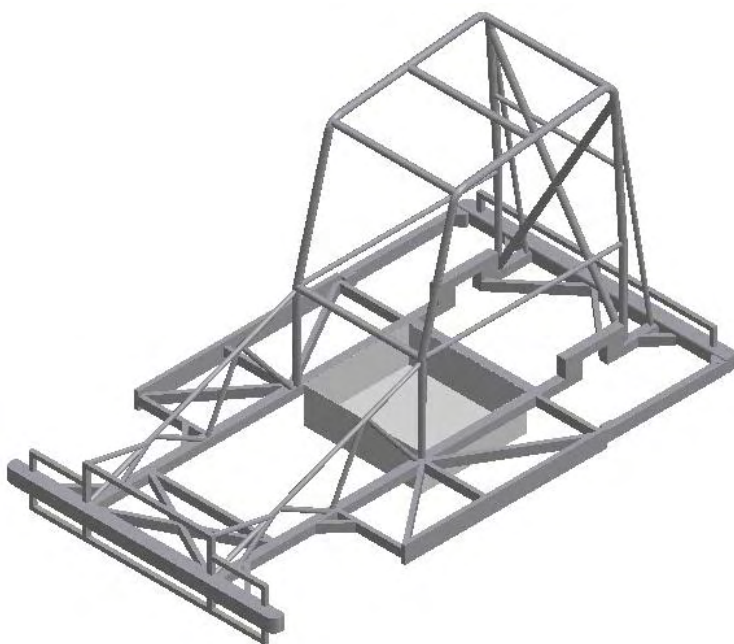
NOTE: A 25mm tolerance is permitted on all chassis measurements, except minimum and maximum measurements have no tolerance. No tolerance is permitted on material specifications and drivers helmet clearance.



NOTE: A 25mm tolerance is permitted on all chassis measurements, except minimum and maximum measurements have no tolerance. No tolerance is permitted on material specifications and drivers helmet clearance.



APPENDIX B: 3D DIAGRAMS OF MINISTOCK ROLL CAGE



SECTION T9-5 JUNIOR SOLOS



2017 JUNIOR SOLO COMPETITOR OF THE YEAR CORMAC BUCHANAN

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 motorcross boots providing ankle support.
- (c) **Trousers:** Leather motorcross or similar.
- (d) **Jacket:** (Leather) Must attach to trousers if two piece.
- (e) **Jersey:** Minimum - Heavyweight cotton (football Jersey) or similar fabric, must have long sleeves.
- (f) **Gloves:** compulsory – Leather.
- (g) **Goggles:** Lenses must be made of non-splinterable material such as safety glass or flexible plastic - worn at Steward's discretion.

T9-5-2 Engine

- (a) Motorcycle engine shall not exceed:
125cc for 8 – 11 year old riders
200cc for 12 – 15 year old riders
250cc for 14 – 15 year old riders
- (b) Engine must be single-cylinder, four stroke type, maximum 4 valves, with not more than one sparkplug and not more than one carburettor or exhaust port. Air cooling only.
- (c) Engine must be from a production motorcycle of which at least 200 machines of the same model have been made.
- (d) External appearance of the cylinder head and crankcase cannot be altered.
- (e) Carburettors only can be used. Any electronic devices are forbidden. **The addition of external oil coolers are not permitted.** (july 2017)
- (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 prizes are to be awarded, but product may. Participation is the main aim at this stage.

All Peewee riders are to hold a licence for all training and competition.

Peewee track size to be 100m to 180m maximum. *Recommended size is 130 – 160m.* Minimum width 5m at any point.

T9-7-2 Competition & Training Age

- (a) Minimum age is 5 years, maximum age is 8 years. Should a riders 9th birthday fall during a competition season, the rider may continue Peewee riding until the conclusion of that season.
- (b) A rider may only enter competition after having completed appropriate training and at the discretion of the youth coach, mentor and steward.
- (c) A parent or guardian must be in attendance at all training and race sessions. The parent or guardian may appoint a representative for themselves in the event the parent or guardian cannot attend.

T9-7-3 Classes

The Peewee Class may have the following divisions

Division 2: Maximum 53cc for 5 – 6 year old riders

Division 1: Maximum 70cc for 7 – 8 year old riders

Division 2 may be split into auto or manual clutch class

There shall be no dispensations for division 2 riders to compete on 70cc machines.

T9-7-4 Construction

- (a) Any air cooled two or four stroke mass produced mini machine, or
- (b) Home built scaled motorcycles of a safe and well constructed nature. Home built speedway style motorcycles must use these regulations in conjunction with the Junior Motorcycle Specifications T9-5 as applicable
- (c) Liquid cooling allowed for division 1 only
- (d) Engine must be single cylinder, with not more than one sparkplug, carburettor or exhaust exit port.
- (e) Carburettors only can be used. Any electronic devices are forbidden
- (f) No motorcycle shall exceed 95dba measured from the infield. Refer Rule 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.

- (r) Track Code Size: Letters to be at least 50mm high, with a stroke width of at least 7mm.

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 T10-6 SIX SHOOTER SPECIFICATIONS

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.~~
VN series 1 and Ecotec engines are NOT permitted.
(Aug 2017)
- (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 **measured and** sealed by SNZ approved Official.
- (t) Any engine inspected and found to contravene the rules will be declared an illegal engine. Refer Section M7-4 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. **Throttle body mounting flange must be no higher than 60mm above the upper surface of the manifold to the top of the flange** ^(Aug 2017)
- (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 76.2mm (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

- (a) Radiator hoses must be of reinforced construction only.
- (b) Radiator cooling fans, if made of metal or plastic, must be shrouded with metal of sufficient thickness to contain a fan blade in the event of a fan breaking off.
- (c) Radiators and Oil Coolers: To be mounted within the confines of the bodywork. Not to be mounted on Roll Cages.

T10-6-10 Body

- (a) Single seater bodies only.
- (b) All bodies to be of clean and neat design without any protruding or sharp edges especially in the cockpit, and must consist of a nose, tail and cockpit area.
- (c) Tail tanks may be used. Tail cones must have 100mm removed at rear at neck level. The 100mm piece out of the tail cone at neck level is only necessary if the car is

not constructed so that there is adequate protection to stop the tail piece moving forward.

- (d) Seat must be bolted to chassis frame by a minimum of 4 x 6mm high tensile bolts and fender washes.
- (e) A pad of resilient material measuring 100mm x 100mm or high back seat be attached to the cross braces behind the driver's head. A further pad of resilient material (right-hand side head support) may be installed (suitably radiused) to measure in depth no more than 200mm and no less than 100mm. The pad shall not protrude further forward in length than 240mm and no less than 200mm from the front of the rear head support.
- (f) A tube of 25mm x 2.5mm minimum must be fitted at the rear of the seat and firmly attached to the chassis bar work no higher than the bottom of the seat.
- (g) An effective firewall of 1.58mm (0.0625 inch) metal or other approved fire retarding material must be placed between driver and motor, sealing the engine compartment from the cockpit, down to the level of the chassis frame.
- (h) The motor plate must not be made of carbon fibre or any other composite material.
- (i) All panels and bonnets must be securely fastened primarily by way of dzus buttons minimum (bolts satisfactory). Plastic ties are not permitted.
- (j) Tail cone to be 24 gallons minimum size.
- (k) No aerodynamic devices, wings or aerofoils allowed.

T10-6-11 Safety Harness

Refer to Section S4.

T10-6-12 Roll Cages

- (a) 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.
- (b) The top lines of both horizontal tubes to be no less than 80mm above drivers helmet when in normal restrained position.
- (c) Bottom Chassis Rail: To be a minimum of 0.095"-2.41mm as applicable to new chassis built after July 2004.

- (d) Belly pan under drivers feet must extend from the front edge of the seat to the firewall.
- (e) Mirrors are not permitted
- (f) 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. A nyloc nut on its own is not an approved locking device.

T10-6-14 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.

T10-6-15 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.

T10-6-16 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.

- (c) Vehicle must leave the pits under its own power and not be pushed.

T10-6-17 Shock Absorbers

- (a) Shock absorbers must be fitted to axles.
- (b) 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

- (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.

T10-6-20 Bumpers

- (a) 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.
- (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 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.
- (d) 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.
- (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.

T10-6-21 Exhausts

- (c) Exhaust pipes can extend past the rear axle but not past the tail. Must be securely fastened.
- (d) **Mufflers:** refer T10-1-16(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:-

- (a) Approved fuels are Petrol and Methanol only, as defined in Section E5-1 of the SNZ Regulations.
- (b) An additional simple on/off master tap must be fitted as close as practicable to the outlets of the fuel tank.
- (c) The tap defined in Rule E5-8-1 is not required.

T10-6-24 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) Throttle pedal to have a half stirrup toe clip to enable mechanical closing of the throttle.
- (e) Self Starters are mandatory.

T10-6-25 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) A number not less than 150mm x 15mm width per digit, be on the front centre of the bonnet.
- (c) **Track Code Sizes:** Letters to be at least 100mm high, with a stroke width of at least 13mm.

T10-6-26 Electronic Control

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

T10-6-27 Placement of the Electronic Lapscore 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 2017 Rules and Regulations.

SECTION T12-5 HISTORIC STOCKCAR SPECIFICATIONS



T12-5-1 Definition of an Historic Stockcar

- Category 1:** Roadcar chassis/big bodied cars
- Category 2:** Up to 1985 or flat chassis design
- Category 3:** From 1985 or spaceframe design, pushrod engines only
- (a) The onus is on the competitor to prove eligibility.
 - (b) In General the running of Historic Stockcars will comply with the current Stockcar/Superstock rules of Speedway NZ. Additions/amendments are in **Green**.
 - (c) All cars must be registered with SNZ and run a SNZ Logbook/VIN Tag. Logbook to include an era-appropriate photo of the car, and a current picture.
 - (d) Competitors must hold a Speedway NZ Vintage Licence.
 - (e) Competitors must join a Speedway NZ affiliated Historic club.

T12-5-2 Pre-season CVI Inspections

All cars must have a body off pre-season inspection, before its first race meeting of the season.

T12-5-3 Body

- (a) All cars should have a period body suitable for the age of the car.
- (b) All cars must be fitted with a bonnet covering from the radiator to the firewall.
- (c) All original opening panels on the body must be secured i.e. bolted or welded.

T12-5-4 Floor Boards

- (a) 3mm steel plate is minimum.
- (b) Must be fixed to extend from beneath the rear of the drivers feet to the firewall.

T12-5-5 Roll Bars

- (a) All rollage materials are minimum size of 38mm OD x 3.2mm wall thickness black pipe or 40mm x 40mm x 3mm RHS.
- (b) Galvanised pipe is not permitted in roll cage construction.
- (c) A substantial interior rollage structure must be fitted from above the driver's normal seated position to below the driver's feet. Where the rollage is welded to the primary chassis structure the chassis structure becomes an integral part of the rollage.
- (d) Where the driver's feet extend lower than the primary chassis, the rollage material must extend to below the drivers feet to form a rectangle for attachment of a driver's floor. The driver's floor below the normal position for their feet shall be 3mm steel welded on 4 sides to the lower rollage rectangle.
- (e) The rear of the roll cage structure must be securely braced at roof level to the chassis at the rear of the car and further secured by diagonal cross brace, straight in section. The roof to chassis brace can go forward facing or rear facing.
- (f) The rear roll bar must be a minimum internal width of 762mm measured at the driver's shoulder height.
- (g) In addition to Roll Bars (f), the minimum internal measurement, from the centre of the back for the driver's seat to the inside of the rollage, must be a minimum of 381mm, measured at the driver's shoulder height.
- (h) 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.
- (i) Fuel tank must be mounted inside and towards the rear of the rollage.

T12-5-6 Sideplates

- (a) A steel plate of 3mm minimum thickness and 381mm minimum height must be welded to the front and rear rollbars, the chassis/floor, and the upper side pipe or on each side of the car. The upper side pipe must be of minimum rollage brace material.

- (b) Where the driver's feet extend below the main lateral chassis member the 3mm side plate material must be welded on 4 sides to the lower extension of the rollcage as described in Roll Bars (d)
- (c) At all times the sideplate/s must protect the driver's hip and feet measured at the right angles to the driver's body in the normal seated position.
- (d) No **open** holes permitted in side plates.

T12-5-7 Roofplate

- (a) At all times there must exist a minimum of **50mm** 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 this 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.
- (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 be gusseted as above, to provide support.
- (e) The roof plate must be welded to the rollcage material on all four sides; the roof plate must not have any lightening holes whatsoever.
- (f) A scrutineer may drill 6mm diameter holes for inspection anywhere in rollcage plating. Non-destructive ultrasonic measuring is also permitted.

T12-5-8 Seating and Headrest

- (a) The driver is the only permitted occupant of the car
- (b) The driver's seat shall be of steel backed 1.2mm minimum thickness bucket type, incorporating a headrest constructed of 3mm minimum plate to a minimum size of 280mm width and 150mm depth, corners rounded off, surface padded.
- (c) The seat base must be securely bolted or welded to the floor and/or integral bar work in a minimum of four positions. The seat back support must be mounted in a minimum of four positions.
- (d) Whether the seat incorporates a headrest or not, the upper 2 mounting positions must be within 152mm of

the top of the seat. Seating mounting bolts 8mm minimum with suitable washers.

- (e) If the seat does not have a built in headrest the gap between the top of the seat and the bottom of the headrest shall be no more than 75mm.
- (f) An aluminium seat of 3mm thickness with no steel backing is permissible, however the 3mm sections must include the full width of the seat back support and seat base – built to a professional standard.

T12-5-9 Safety belts

Seat belts must comply with SNZ Rules S4-1 and S4-4.

T12-5-10 Rear Vision Mirrors

- (a) One metal or plastic backed mirror of not more than 0.026m^2 (40sq.ins) may be fitted. Or two metal or plastic backed mirrors of not more than 0.023m^2 (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.

T12-5-11 Steering Wheels

The use of wood-rim steering wheels is prohibited.

T12-5-12 Weight

Vehicle weight, ready to race, 1300kg minimum – 1500kg maximum, at any time excluding driver.

T12-5-13 Numbers

- (a) Black on white, white on black numbers only, only both sides of the body minimum height of 380mm minimum. Width of 50mm.
- (b) Number on the rear of the body and the roof fin are a minimum of 190mm x 30mm

T12-5-14 Aerofoil

Must be in keeping with the original construction of the car (era-appropriate) and suitably braced.

T12-5-15 Bumpers

- (a) Bumpers must be fitted and constructed close to the original chassis design as possible.
- (b) Minimum depths of the bumper must be a minimum of 75mm.
- (c) Bumper heights must be set between 330mm centres to 380mm centres.
- (d) Side rails, drum catchers, radiator protection hoops to be constructed and keeping of the original construction of the car.

T12-5-16 Engines

- (a) Engine's must be of a push rod configuration.
- (b) No overhead cam engines.
- (c) Modified race engines must not exceed 241.6 cu.in. This allows whatever modifications you wish including 4 barrel carburettor.
- (d) All engines exceeding 241.6 cu.in but not exceeding 310 cu.in must be stock standard, and only run a 2 barrel carburettor
- (e) Engine size, and modification are done on a trust factor if any complaints are made you could be asked to produce proof of the size of your engine.

T12-5-17 Exhaust

- (a) Mufflers are free, however sound levels must comply with Rule S5 (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).
- (b) Exhaust pipes must discharge towards the rear, or underneath the car.
- (c) 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.

T12-5-18 Fuel System

- (a) Fuel tank minimum thickness 1.2mm screw type sealed fuel cap, maximum capacity 22.75 L. Aluminium tanks are not permitted.
- (b) Fuel taps must be fitted one at the outlet of the tank, one within reach of the driver.
- (c) Fuel lines must be steel, copper or flexible construction. When flexible it must be an approved reinforced flexible type.
- (d) All fuel lines must securely be mounted to the construction of the car.
- (e) Fuel must not exceed 100 octane.

T12-5-19 Battery

Battery must be securely mounted in a metal box of a minimum thickness of 1.2mm with a secured lid suitably insulated.

T12-5-20 Driveshaft

- (a) Driveshaft retaining strap must be fitted under and over the front end of the drive shaft.
- (b) Driveshafts running through the car must be fitted with a 3mm plate cover.

T12-5-21 Springs

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.

T12-5-22 Steering Joints

All steering joints must be in serviceable condition.

T12-5-23 Brakes

- (a) Brakes must be fitted on both front wheels, and at least one brake fitted to rear axle assembly.
- (b) All brake components must be perfect working order at all times.

T12-5-24 Wheels

- (a) All wheels must be stamped annually with SNZ stamps and logged in the car logbook.
- (b) Wheels must comply with the current SNZ T14 Wheel Specification or
 - (i) Front wheels may consist of standard car wheels as a minimum, to what was era appropriate construction.
 - (ii) Rear wheels must be of a minimum of 8mm construction to the maximum of era appropriate construction.

T12-5-25 Tyres

- (a) Standard road car tyres and SUV tyres only, not exceeding 10mm tread width.
- (b) Hoosier/American racer type tyres not permitted.

RACING RULES

- (a) Ministock racing rules apply as per Section R15-2

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