



# IHRA NZ RULE BOOK

This rule book is the property of Meremere Dragway Incorporated (MDI) operating as NAPA Auto Parts Dragway and IHRA (NZ) Incorporated. If IHRA (NZ) Incorporated or MDI is dissolved the rulebook will be the property of the other party. No part of this publication can be copied or reproduced without written permission from IHRA (NZ) Incorporated and MDI.

**NOTE: All changes/revisions from previous rules are highlighted in yellow with the latest updates highlighted in blue for ease of reference.**

Safety rules and regulations can be instigated and implemented by the IHRA (NZ) Inc at any time of the year if deemed necessary.

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## Introduction

### IHRA STEWARD JURISDICTION

The IHRA Steward at a sanctioned event is directly responsible to IHRA for the safe running of the event and/or its cancellation due to safety reasons as well as the compliance by all competitors with MDI/IHRA rules and regulations. As such the Steward has the power to veto any decisions made on the day by any organizer or official of the event as regards the safe running of the event.

With respect to the compliance of any competitor with the rules, the Steward can request any competitor to undertake any check that the Steward deems necessary to ensure compliance with the rules. Failure to comply with such a request will result in immediate disqualification provided that such disqualification can be appealed to the IHRA Appeal Board. All events/test days must have an area steward or a track official that is approved by IHRA NZ Board or Chief Area Steward.

**NOTE:** When a Stewards decision is contested an "IHRA Appeal Board" consisting of the Steward, a track rep and Driver's representative not involved shall make a binding majority decision.

### ILLEGAL DRUGS, SUBSTANCE AND ALCOHOL POLICY

- 1) Illegal Drugs, Definition: Illegal drugs are those substances defined and prohibited by the New Zealand Government.
- 2) General Prohibition: Possession or use of illegal drugs or drug substances, as defined above, is prohibited in any form, by any participant at any MDI/IHRA event, either on the Dragway, grounds, or in any area considered to be used in the operation of the Dragway.
- 3) VIOLATIONS AND PENALTIES: Any person found to be in possession of or under the influence of an illegal drug or drug substance at an IHRA NZ event, as defined above, SHALL BE SUBJECTED TO THE FOLLOWING PENALTIES BELOW.

Any individual WITH an IHRA/NZDRA licence, or participating in MDI/IHRA events, shall be deemed to have consented to any tests for prohibited substances required by MDI/IHRA.

All participants and officials must comply with the Drugs, Substance, and Alcohol policy and submit to such test procedures as may be conducted from time to time at the sole discretion of MDI/IHRA or its designated administrator.

#### Offences

A competitor or crew commits a violation of the Substance Abuse policy if:

(a) a prohibited substance is present within the competitors body tissue, fluids or expired air unless the competitor uses the prohibited substance for a therapeutic purpose whereas the person had written approval prior to testing from a recognised Medical Assessor or the level of the prohibited substance in the sample is consistent with the approved therapeutic use, and the prohibited substance in the opinion of a reasonable Medical Practitioner has beneficial effects for an actual diagnosed medical condition.



## Testing

(a) Competitors, crew, and Officials selection shall be made at random, with all parties having equal chance of selection.

(b) Competitors, crew, and Officials may be required to submit to urine, blood, breath and or saliva testing if there exists reasonable suspicion that a person may be under the influence of a prohibited substance and or alcohol during an MDI/IHRA event.

(c) Competitors, crew, and Officials may be required to submit to urine, blood, breath and or saliva testing following any incident or accident involving injury or property damage.

Competitors and Officials refusing to provide a sample for testing when requested will be deemed a reported violation and MDI/IHRA will be advised of such.

## Penalties

Any person found to be in possession of or under the influence of an illegal drug or drug substance or alcohol at or during an MDI/IHRA event will be suspended from competition and evicted from all MDI/IHRA events, and denial of further entry in a MDI/IHRA event for a period to be determined by IHRA/MDI officials. **There will be no refund of race entry or gate entry fees for the driver and crew.**

## TRACK PHOTOGRAPHERS

### Track Photographers

It is IHRA policy that the photographs taken at IHRA events are free from copyright.

All **track** photographers and media personnel must have a current media pass on their person and supply their own orange Hi-Vis vest.

Applications for season passes can be found on **tracks** website, otherwise day passes are available at the track from the MDI main tower.

Policy Guidelines:

Only Track/Magazine/TV endorsed personnel can apply for a Season Media Pass.

Copies of photographs may be made by competitors to present to sponsors/crew etc.

Multiple reproductions of photographs for commercial gain would require the agreement of the photographer.

## FEES AND LEVIES

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The fees and levies, as set down by IHRA are effective as of 30<sup>th</sup> June 2024, and are as follows:

Licence fees (IHRA Membership is inclusive)	1 YEAR	2 YEARS	3 YEARS
a/ Junior Dragster licence.	\$70.00		
b/ Competition licence. Under 11.0 seconds	\$160.00	\$300.00	\$440.00
c/ Group One Licence	\$160.00	\$300.00	\$440.00
d/ Teen Racer	\$10.00		

The above fees are in \$AUD

### Logbooks

\$60.00. Includes 12 months membership to IHRA NZ Inc, through the IHRA office.

\$70.00. Fee for logbook at the track. Includes 12 months membership to IHRA NZ Inc.

White tech forms to be sent to IHRA office where IHRA will issue logbooks with tech sticker.

If teched within 10 days of event take tech sheet to event where Area Steward will issue a log book.

### Tech Inspectors fees

Full Inspection from \$50.00 per half hour.

Partial Inspection from \$50.00 per half hour

Re-Check as above

Re-Classify \$50.00

### Protest Fees

Initial protest fee \$200.00

Appeal fee's \$500.00 - \$1000.00

Fuel test Protest fee \$200.00

Teardown fees as required.

### Fines

Fines imposed on competitors or entrants for misconduct.

Reprimand \$200.00 - \$500.00

Suspension \$500.00 - \$1000.00

Full Disqualification \$1000.00 - \$2000.00

Disbarment \$5000.00

# 1.0 GENERAL RACING REGULATIONS

## 1.00 Accidents

All accidents or incidents involving bodily injury or race vehicle damage must be reported immediately to the Area Steward and the Meeting Director. The Area Steward or an appointed agent, must record details of all structural damage to the vehicle/s in their respective Logbook and produce a written report to IHRA. The Area Steward can also impound any vehicle, component, article of driver/ rider apparel or related document for investigation. The vehicle may take no further part in any competition until the damage is rectified to the satisfaction of the Area Steward or an appointed inspector.

### 1.00.01 Medical

In the event of a serious accident the competitor may be required to produce a medical and maybe required to undergo licensing observations passes before being permitted in paired competition.

## 1.01 Advising out

If an elimination contestant is unable to contest the next round, he must notify the Pit Tower as early as is practicable.

## 1.02 Antifreeze

All **teched (WOF- Rego vehicles exempted)** vehicle/bikes are prohibited from having antifreeze/glycol in their vehicle/bike. Violations may result in disqualification/fine at the discretion of the IHRA steward/MDI Race director.

## 1.03 Bracket seeding

The five local Competition meetings at Meremere will be running a Sportsman ladder, 1 runs 5, 2 runs 6, 3 runs 7 and 4 runs 8. At the National rounds, we will be using a Pro ladder and bracket qualifiers will be seeded in the following manner, the numbers relating to qualifying positions. In an 8-car field; 1 runs 8, 2 runs 7, 3 runs 6, 4 runs 5. In a 16-car field; 1 runs 16, 2 runs 15, 3 runs 14 etc. All open fields do not need to be seeded until the last 16.

## 1.04 Burnouts

Only one burnout across the start line is allowed. Maximum time allowed for this will be two minutes. The two-minute period starts when the first competitor commences his/her burnout or moves forward from the water box. The two-minute period applies even if one competitor pre-stages immediately. It will be the Starter's responsibility to enforce these requirements and they will apply in all classes. Burnouts must be unassisted (no holding of vehicles).

**Note:** Vehicles that have shut down following the burnout more than 30 metres past the start line must be removed from the racing surface before any race can be run. The Starter may shut down the waiting racer and allow him/her to run at the back of the round for their run. If it is the final pairing the waiting racer at a minimum must stage, accept the green and shut off. If the disabled vehicle is less than 30 metres the driver must remain in the vehicle belted up with helmet on until the end of that pairing.

No vehicle with street tyres may cross the start line during a burnout, the offender will be given one warning and on the second offence, at the discretion of the Starter will be removed from racing. **ALL CHUTE PINS MUST BE REMOVED BEFORE APPROACHING THE START OF THE RACETRACK (WATER TROUGH), FAILURE TO REMOVE CHUTES PINS BEFORE APPROACHING THE WATER TROUGH CAN LEAD TO DISQUALIFICATION AT THE STARTERS DISCRETION.**

## 1.05 Bye Runs and Lane Choice Procedure

### Bye Runs

Bye runs must be made in all categories. The driver must stage under the vehicle's own power and break the beam. Lane boundary line crossing and red-light disqualification rules do not apply on bye runs. Bye Run Winners do not need to stop at the scales or fuel check unless they elect to do so to have the run validated for lane choice, Record setting purposes, etc.

In all random pairing classes (Night Speed Drag Wars), the practice of parking at the rear of the staging lanes and selectively pulling in behind or beside specific competitors will not be tolerated. All competitors must enter the lanes upon arrival at the rear of staging. MDI reserves the right to "randomly shuffle" the competitors at the rear of staging area to ensure that fair competition is being adhered to.

The procedure for selecting the **bye run in the non-qualified classes** (e.g., all Night Speed Drag Wars classes except King of the Street and Pro Street) will be based upon the best winning reaction time from the previous round. A race number will be selected at random for the bye run in round 1. If there is not a bye run in the round, the competitor selected will have lane choice. The competitor who runs the bye will be noted on a 'no more byes' register.

The procedure for selecting the **bye run in the qualified classes** at Competition Meetings and National Events will be automatically qualified and ladderred by the system based on qualifying performance. The first bye run goes to the number 1 qualifier. All subsequent bye runs are allocated as follows: 2nd bye number 2 qualifier, 3rd bye number 3 qualifier, etc. If the 1st, 2nd or 3rd qualifier is knocked out of racing by their opponent, that opponent will take over that bye privilege i.e., in a seven-car field, if qualifier number 7 beats qualifier 2 in a race, then qualifier 7 takes over qualifier number 2's position on the ladder and therefore owns the next bye. Please note: a bye as a result of an opponent not fronting for the race or advising out after the ladders have been set is not considered an official "bye" and the ladder will remain as published.

### 1.06 Competition Numbers

Any vehicle competing at IHRA events must have the driver's competition number displayed on both sides of the vehicle. Numbers must be no smaller than 150mm high and 38mm wide. Class designation letters must be no smaller than 75 mm high and 38mm wide. All competition numbers and class designations must be able to be read from the Control tower, if practicable the same designation at half size should be placed on the windscreen. Class and numbers must be of some sort of permanent decals or paint. The use of non-permanent paint in any form is prohibited except for Sportsman and Super Street division and / or Temporary Licence Numbers.

### 1.07 Computer – Data Logger

Only Category one and two electronics will be permitted.

The devices currently used within the sport fall into three categories:

Category 1 – Simple Timing and Triggering: Examples are electronic ignition, electronic fuel injection, pre-set devices such as Shift lights, RPM limiters and RPM switches. Note: RPM activated shifters are not permitted in some classes – refer class regulations.

Category 2 – Information Recording: Data acquisition systems, which collect data only, without affecting vehicle operation,

Category 3 – Interactive controlling devices:

Category three electronics will be prohibited unless technology such as traction control or fly-by-wire, RPM limiters are OEM factory fitted.

**Data Recorders/Electronic Devices:** May only be used to record vehicle functions. They must be activated by a separate switch, and not activated by any other switches on the vehicle. Systems may only display data after a pass or run. Any device that assists in determining track location of any entry is prohibited. The use of ride height sensors and related accessories is prohibited from use in all categories. The transmission of data or information to the driver or any remote location during the run is prohibited. Except those computers installed on stock vehicles by the new vehicle manufacturers for the proper operation of such vehicles, no vehicles may be equipped with computers which in any way affect the operation of the vehicle. Data recorders may be used to record functions of a vehicle so long as they do not activate any function on the vehicle. The use of data recording systems for control of any engine, transmission, suspension, and torque split devices, etc is prohibited. Torque split devices etc must be manually controlled or pre-set before a run.

**Traction/Slew Control:** The use or fitment of any ignition system (e.g., MSD 7531) or related accessory (e.g., 7561 or power grid accessory 7761) that uses a programmable multi-point rev limiter and/or a rate of acceleration rpm limiter, either by themselves or integrated into the ignition systems are strictly prohibited.

All Competitors must allow an official to inspect any ignition/engine data at their request.

Competitors found to be using or have fitted to their vehicle Category 3 electronics will be liable to a fine of \$5000, removal of points and suspension for two years.

### 1.08 Credentials

Each driver of a vehicle entered in any IHRA event/track must have a valid civil driver's licence. For any teched car or bike regardless of ET or a bike/car quicker than 11.00 the driver/rider must also have an appropriate IHRA/ NZDRA or equivalent competition licence subject to inspection by officials at any time. Juniors/Teen racers exempt, must have a competition Drag Racing Licence

A restricted civil driver's licence is acceptable for street legal/competition vehicles. On a street legal bike, a rider can race a bike on a learners/restricted licence if the bike is on the LAMS approved list.

### 1.09 Delay Boxes/Devices

Prohibited in all classes. Any device (electrical, pneumatic, mechanical, or otherwise) or any modification to existing components that intentionally creates a delay between the driver releasing the clutch, trans brake, etc., and the forward movement of vehicle will be considered a delay device. **NOTE: IF A DELAY BOX IS FITTED TO THE VEHICLE, IT IS DEEMED AS BEING USED.**

### 1.10 Driver Conduct

Any driver or rider who refuses to voluntarily reduce speed or stop in the event of a vehicle not handling properly (i.e., excessive drifting of the vehicle towards the centre or edge of the strip) or any driver who wilfully fishtails or weaves to show off with undue disregard for the safety of himself, his opponent or spectators, will be immediately barred from further competition. If such conduct should take place during an elimination run-off, the race will automatically be forfeited to his opponent. Any driver / rider and/or pit crew member found to be under the influence of alcoholic beverages or drugs, regardless of amount will be barred from the meeting and is cause for suspension and/or revocation of competition privileges. (Refer Illegal Drugs, Substance & Alcohol Policy on page 1 of this rulebook).

**1.10.1 Officials –** Abuse of any kind to officials will not be tolerated and any person or persons involved, will be barred from the event and is cause for suspension and/or revocation of competition privileges. Entrants / Drivers are also responsible for their crew's behaviour.

### 1.11 Driver/Crew Apparel

Each crew member of a racer must be fully attired when present in the staging, start line and competition areas of the racetrack. Closed in shoes are compulsory. Team uniforms are preferred, bare torsos are prohibited and not acceptable.

Competitors are reminded crews may be rejected from the start-line area at major events if not "presentable".

### 1.12 Fuels

Fuel protests will incur a \$200 protest fee to be paid by the protesting competitor. If the protested competitor is in the wrong, they will be required to pay the test fee and the fee will be returned to the protester. Test samples may be sent to testing laboratories for further analysing. Number 1 Racing (110 Octane) shall be defined as having a research number between 105 and 112.

Methanol (Alcohol S/G @15°C .794) – the addition of substances to Methanol for the purpose of lubrication is permitted where the specific gravity is not adversely affected, all other substances are prohibited. VP racing M5 is strictly prohibited. Nitro additives will be classified as per running Nitro methane. The use of propylene oxide is prohibited in all categories. Test samples may be sent to testing laboratories for further analysing.

### 1.13 Ground Clearance

A minimum of 3 inches (73mm) from front end to the centre line of the front spindle and 2 inches for the remainder of the car except for oil pan / diaper, headers, and wheelie bars. All entries must be high enough to not interfere with the function of the timing system.

### 1.14 Inspection

Each vehicle regardless of class must complete and satisfactorily pass the inspection of the scrutineers / tech inspectors before being allowed to make any practice runs or participate in any IHRA event. MDI/IHRA has the right to inspect any part of a car at any IHRA meeting. This inspection may involve the dismantling of any part of the vehicle to verify correct use of parts.

### 1.15 Lane Choice

Choice of lanes in any elimination shall follow this procedure:

- a. In the first round, the competitor with the highest qualifying position shall be granted lane choice.
  - b. In subsequent rounds:
    - i. Categories/brackets that qualify by lowest non-red reaction time: the competitor with the lowest non-red reaction time from the previous round is granted lane choice.
    - ii. Categories/brackets that qualify by the quickest E.T.: the competitor with the quickest E.T. from the previous round is granted lane choice.
    - iii. Categories/brackets that qualify by the quickest ET compared to the vehicles particular class index: the competitor whose E.T. was quickest in comparison with the vehicle's particular index from the previous round is granted lane choice.
  - c. If two bye runs are run together, the racer competing for the higher position shall have lane choice.
- The competitor having right of lane choice must exercise this right by stating his/her intention to either the head of stage and / or opponent prior to coming under Starter's orders.

### 1.16 Track records

Official track Drag Racing Records may only be set if:

- (a) Any down strip wind assistance does not exceed 17k.p.h. (10 m.p.h.).
- (b) The competitor has a current New Zealand accepted Drag Racing licence (IHRA/NZDRA)
- (c) The competitor's vehicle, fuel, etc. complies with New Zealand Drag Racing rules and class and safety requirements relevant to the class to which the vehicle has been designated.
- (d) Record runs will apply during qualifying, eliminations or exhibition rounds at any sanctioned event where an area steward is present.
- (e) Separate records will be recognised for E.T.'s and M.P.H.
- (f) All new records need a backup pass of within 1% at the same event. If the two runs exceed the existing record but are not within 1% of each other, the quicker time or faster speed will be acceptable to backup for the slower time or speed, which will stand as the new record.

**NOTE: Record run ratification is compulsory for all Group One & Two divisions, this may include weight checks.**

Owners / Racers that fail to present their vehicle/ bike immediately to the weigh bridge after the run will not be able to claim that run for the record.

All Record runs at an event must be applied for by the competitor to the IHRA Area Steward in attendance at the event and the necessary forms are filled out completely by the competitor and handed to the IHRA Area Steward.

Certificates will be provided to competitors once ratification is finalised.

### 1.17 Occupants

No more than one person is permitted in any vehicle participating in a drag racing event, unless allowed under the vehicles class requirements (Teen racing) or except by express permission of the event Area Steward and Race Director.

Note: Any passes that are permitted in any competition car must not exceed 150mph (240 kph).

Special circumstances may preclude this rule, but in all cases the Race Director and Area Stewards decision is final.

The passenger must have the same level of protection as required for the driver of the vehicle in question, an indemnity will be a requirement prior to the run commencing.

### 1.18 Tow Vehicles Start Line Access

All crew members, passengers, etc, must be in a seated position completely inside all vehicles. Crew members hanging on, standing, or seated in unsafe places in the tow vehicle is prohibited. All tow vehicles used must display the towed vehicle's competition number.

Apart from participation of minors in Junior Dragster competition no person under the age of 14 will be permitted on the start line area.

No tow vehicles are to wait at the start line, they must wait beyond the burnout pad as to allow spectators to view the cars on the track.

### 1.19 Staging

All vehicles will be called to the staging lanes by the announcer or pit runners. Once a vehicle reaches the front of the staging lanes for a run, it must be prepared to fire and race as directed by the Starter. Any vehicle not prepared to fire or unable to fire when directed by the Starter may be excluded/disqualified from the race at the Starter's discretion. **ALL CHUTE PINS MUST BE REMOVED BEFORE APPROACHING THE WATER TROUGH TO START THE BURNOUT – any racer found to have the chute pin in place when approaching the water trough will face immediate disqualification.**

To be considered a round winner, the competitor's final Staging motion, using vehicle's applied power, must be in a forward motion going from pre-stage to stage position. The car's starter is not considered "applied power". Once the vehicle is staged it is considered in the race. Staging must be made with the front wheels only. Rear wheel starts are prohibited. Once a competitor is pre staged, if the opponent rolls the beams, he/she will be disqualified.

Failure to stage when instructed by the Starter, over-staging or leaving the starting line before the timing system is activated, or leaving the starting line before the start system has been reset will result in no "E.T." for that run, and possible disqualification.

## 1.20 Courtesy Staging

Failure to courtesy stage more than once at one race meeting will result in disqualification at the discretion of the Starter.

Courtesy Staging - Both vehicles must pre-stage before either vehicle stages. A vehicle that accidentally lights both bulbs may be allowed to back up (pull back with juniors) and re-stage correctly if time allows or if the opponent is not in Pre-Stage or Stage. If the tree is activated during this process and the entry is not restaged, he will be eliminated. The amount of time allowed for the second vehicle to stage is predetermined by the Auto Start.

**1.20.1 Starting System:** "Auto Start" can be used in all classes. Once both vehicles are pre-staged and the first vehicles stages, the second vehicle has a predetermined amount of time to stage before the tree is automatically activated. This predetermined amount of time is referred to as "Time Out". If the second car fails to stage before the system "Times Out", it will be given a red light. The time out for each class is as follows:

Auto Start Settings	Staged Minimum	Staged to Start	Total
All classes except JD	0.6	0.9	10
TDS and T/A	0.6	0.9	7
Junior Dragster (8-9)	1.0	0.8	15
Junior Dragster (10-17)	1.0	0.8	15

1. Staged Minimum is the amount of time the tyre breaks the beam to begin Auto Start.

2. Staged to Start is the required amount of time both cars are staged to begin Auto Start countdown. Accutime programming may add an additional .2 for variance.

3. Total is when one car is pre-staged and staged, and the other car is only pre-staged, this is the amount of time left before tree activates.

In the Auto Start system, the tyre must be in the stage beam for a minimum amount of time before the Auto Start begins. This "Staged Minimum" in Sportsman classes is 0.6 seconds; for Junior classes it is 1 second.

During eliminations, any sportsman vehicle starting a run before the tree is activated will be automatically disqualified. If both leave early, both will be disqualified. In final round, both cars will re-run.

NOTE: The Auto Start does not activate until two Pre-Stage lights and one Stage light have been lit. If one side has both Pre-Stage and Stage lights lit, **the Auto Start will not activate until the second driver Pre-Stages.**

## 1.21 Dial Ins

All Dial-Ins must be set and visible to the Main Tower as your vehicle approaches the water trough before the Starter gives the order to fire and before you begin your burnout. Once the dial in is set and the burnout starts, no further dial-in changes will be permitted. In the case that the Officials have lodged the dial-in incorrectly, the dial-in may be corrected, but it cannot be changed.

## 1.22 Warm-ups

All vehicles when started for warm-up or testing procedures must have a qualified driver in/on the vehicle prior to starting the vehicle and be entirely within the confines of the participants designated pit area.

When drive wheels are raised and the engine is running, the vehicle must be adequately supported by jack stands. Also refer Jack stands (refer 3.58). Failure to observe this rule is grounds for instant disqualification.

## 1.23 Weight Distribution

Each vehicle must have an adequate percentage of its weight carried on the front wheels to ensure proper handling ability at all times.

## 1.24 Wheelbase

Maximum wheelbase variation from left to right is 50mm, unless otherwise stated in Class Requirements.

## 1.25 Return Road "Give Way" MDI

All vehicles in the **left** lane must give way to all vehicles when turning off the track onto the return road. Junior Dragsters drivers will take instruction from Officials.

## 1.26 Footwear

Enclosed footwear is to be worn at all times by competitors and crew within the staging lanes, designated pit/paddock area and start line.

## 1.27 Prohibited Items

Use of any electronic devices and traction/slew control items e.g., Traction Control/Delay Boxes/NOS unless allowed in class rules is strictly prohibited. If any such items are found to be fitted to the vehicle, it will be deemed as being used and all penalties will apply.

## 1.28 Re-runs

Re-runs, when necessary, must be run as soon as possible. Standard run changes (dial ins, lane choice, weight, timing etc) may be made before a re-run. All Racers must have Dial Ins set before the Starter gives the order to fire / before you begin your burnout as noted in rule 1.21 of this rulebook.



## 2.0 RACING CREDENTIALS

To be eligible to compete at an MDI/IHRA event all competitors must comply with the following criteria.

### 2.01 Competition Meetings

To be eligible to compete in any competition meeting, all competitors quicker than 11.00 seconds must have a current IHRA/NZDRA/ANDRA competition licence and logbook (where applicable) which are to be sited at entry, dated, and initialled by entry personal. Any car running slower than 11.00 seconds and bike running slower than 11.00 seconds not teched, all drivers/riders must have a current civil driver's licence (bikes minimum Learners and cars minimum Restricted). Any car running slower than 11.00 seconds and bike running slower than 11.00 seconds that is teched without a WOF or Rego the driver/rider must have a current IHRA licence. A MSNZ driver and logbook may compete at one event if the vehicle runs slower than 10.00 seconds, if they would like to do more events the person will need an IHRA licence and tech. **Please note all teched NZDRA vehicles must have a safety audit before it may compete on an IHRA track to make sure it complies with the IHRA NZ rules.**

### 2.02 Meeting Entry

Entry and indemnity forms must be signed by Drivers and an appropriate entry made in vehicle logbook at entry booth by track staff. **No teched vehicle will be entered unless accompanied by a valid IHRA/NZDRA logbook.** Loss or destruction of such will require the competitor to apply for a replacement to the Area Steward. **All Drivers are responsible for their crews conduct and safety.**

### 2.03 New Licence -

All applications for new licences will be handled at Test and Tune days or Race Day if permitted. On arrival, go to entry booth or area steward and ask for a licence application form (forms also available on the IHRA NZ and MDI websites). Medicals are as per IHRA NZ medical form, forms also available on the IHRA NZ and MDI websites (Group 1 medical valid for two years and Group 2 & 3 medical valid for 3 years). The application must be made prior to scrutineering or any runs. After entry, all prospective competition licence holders are required to hand their license application form to the Area Steward. Once signed off by the area Steward the forms can be emailed to IHRA or handed to track personnel to be processed. If the prospective licence applicant has not met all the requirements the Area Steward will hand the form back to the applicant to resubmit the application at the next meeting attended. No prospective licence holders will be permitted in paired competition until the Area Steward has been satisfied that the competitor has met the relevant licence criteria.

Vehicles must have an IHRA NZ tech/logbook for all drivers/riders applying for new licences or wanting to upgrade their IHRA NZ licences or need to do new vehicle passes. Only IHRA NZ licences/new vehicle passes can be run and signed off on an IHRA NZ track.

### 2.04 Licences

#### a/ Top Door Slammer – Top Alcohol G1

This licence is compulsory for all Top Alcohol and Top Doorslammer vehicles.

IHRA Medical Certificate is required. These forms are obtainable from the IHRA NZ and NAPA websites and must be renewed every 2 years. This licence can be valid for 12 months to 36 months from date of issue.

#### b/ G2 – G3

This licence is compulsory for all classes of vehicles: All licence holders that are quicker than 10.00 must have a medical certificate. IHRA NZ medical forms are available off the IHRA NZ and NAPA websites and is valid for 3 years.

This licence can be valid for 12 months to 36 months from date of issue.

#### A3

This licence is compulsory for all classes of vehicles that are slower than 10.00 and quicker than 11.00. A3 licence is compulsory for racers running slower than 11.00 seconds with a teched vehicle that does not have a WOF/Reg, no medical required.

#### c/ Junior Dragster Licence

Beginners Class: Age 7 or 9, ET limited to 11.90 or slower.

Advance Class: Age 10-17, ET restricted to 8.90 or slower.

Master's Class: Age 12 and up, **minimum 1 year licenced prior experience**, ET 7.90 or slower

Junior Drag Bike: Age

No medical required.

This licence is valid for 12 months.

#### Licence Procedure for New JD Licences

1. Launch (Beginners class only)
2. Launch (Beginners class only)
3. Half Pass E.T. \_\_\_\_\_ MPH \_\_\_\_\_
4. Half Pass E.T. \_\_\_\_\_ MPH \_\_\_\_\_
5. Full Pass E.T. \_\_\_\_\_ MPH \_\_\_\_\_
6. Full Pass E.T. \_\_\_\_\_ MPH \_\_\_\_\_
7. Full Pass E.T. \_\_\_\_\_ MPH \_\_\_\_\_
8. Full Pass E.T. \_\_\_\_\_ MPH \_\_\_\_\_

#### Licence Procedure for New G1 G2 G3 Licences

1. 100 meters E.T. \_\_\_\_\_ MPH \_\_\_\_\_
2. Half Pass E.T. \_\_\_\_\_ MPH \_\_\_\_\_
3. Half Pass E.T. \_\_\_\_\_ MPH \_\_\_\_\_
4. Full Pass E.T. \_\_\_\_\_ MPH \_\_\_\_\_
5. Full Pass E.T. \_\_\_\_\_ MPH \_\_\_\_\_

## 2.05 Civil Drivers Licence

Apart from Junior Dragster/Teen Racers competitors, all competitors must have held a current civil driver's licence at the time of obtaining their Competition Drag Racing Licence. Restricted civil licence accepted. Bike Learners licence accepted with NZTA approved bikes.

Civil Driver's licences are required to be produced at entry booth when licence application is made and when entering at each event.

## 2.06 Producing Licence

If a licence is lost or mislaid the competitor shall be required to sign a declaration that they are the holder of an appropriate valid licence. In the instance of a false declaration being made in any degree whatsoever, this could result in disqualification. Licences cannot be renewed at the track, please make sure your licence is current!

## 2.07 Tech Inspections –

Any car running under 11.0 seconds, bike under 10.0 seconds or vehicles without a WOF at any IHRA NZ event is required to have passed an annual IHRA/NZDRA Tech Inspection consisting of a comprehensive check of all General, Safety and Class Regulations according to this rule book. A valid Logbook and a Tech sticker must be displayed at all times during events.

**NOTE: A tech inspector / scrutineer is there to aid the competitor to ensure their vehicle complies with relevant class / safety regulations. There are no warranties expressed or implied as to the safe condition of any vehicle so checked. That responsibility and legal liability is put in the hands of the Driver / Entrant. The Driver / Entrant must sign tech inspection / scrutineer forms, thus indicating that their vehicle complies with all relevant regulations. No Signature - No Racing.**

**Please note all teched NZDRA vehicles may have a Chassis/Safety audit before it may compete on an IHRA track to make sure it complies with the IHRA NZ rules. Any FACTORY STOCK STANDARD bike with WOF and Rego must only have a tech inspection when it runs quicker than 10.00 sec.**

## 2.08 Logbook -

Each Tech inspected vehicle must have an IHRA or NZDRA logbook.

This item is as important if not more so than a licence! It is a safety record of the Vehicle, if lost / mislaid your vehicle may have to be re-Tech inspected and classified at the full inspection fee.

The Area Steward may issue a temporary logbook from your pink tech sheet if the original is in transit.

## 2.09 Race Day incidents -

In the event of an incident or damage during an event, the driver is responsible to inform the Area Steward, and a safety inspection is to be carried out to the satisfaction of the Area Steward and / or Tech Inspector and if required an entry made in the vehicle's logbook. If there is major chassis damage from an incident, seat belts will be cut, tech sticker removed from chassis and logbook handed in to Area Steward.

**2.10 Tech Inspections –** All cars running quicker than 11.00 must have a current New Zealand tech inspection/logbook. **Any FACTORY STOCK STANDARD bike with WOF and Rego must only have a tech inspection when it runs quicker than 10.00 sec.** A list of [IHRA tech inspectors](#) are on the IHRA NZ and NAPA Auto Parts Dragway web site.

## 2.11 Scrutineering -

All vehicles with a WOF must report to the scrutineering bay in a safe and race ready condition, you must pass an inspection by the Scrutineering Team before being permitted to race. Competitors are responsible for ensuring their vehicle meets a warrantable standard and is fit for racing purposes. Any modifications or alterations that do not meet warrant of fitness standards is understood by the competitor it will not affect their or others safety. All vehicles must be presented to the scrutineering bay in the configuration that it is racing in.

## 2.12 Modern Street Vehicles –

Sedans slower than 9.00 @ 150mph (5.70 1/8 mile) factory manufactured after 01/01/2013 and sedans slower than 9.50 @ 150mph (6.00 1/8 mile) factory manufactured after 01/01/2002 and before 31/12/2012, must have current WOF and registration and may compete using standard Sedan-based vehicles (and derivatives such as utilities and wagons). No convertible style vehicles permitted. Late model vehicles with a high centre of gravity (such as SUV and vans are not accepted) OEM equipment as minimum. Air bags/ABS must be in working condition if factory fitted. Prohibited modifications include any alterations to structural/floor pan/firewall and wheel tubs. Must run radial rear tyres. Front runners on RWD vehicles running quicker than 10.00 highly recommended. Chassis must be factory stock, vehicle must be teched and driver must have an IHRA licence. Driver must have all current safety apparel as per class rules for ET and a fire extinguisher.



## 3.0 SAFETY REGULATIONS

**Safety rules and regulations can be instigated and implemented by the IHRA (NZ) Inc at any time of the year if deemed necessary.**

### ENGINE

#### 3.01 Carburettor

Must have 2 return springs attached directly to carburettor throttle arm.

Flash shields – Injector tubes may extend through individual holes in the bonnet, but carburettors may not be openly exposed or uncovered. In lieu of bonnet, carburettors must be equipped with a metal flash shield which covers the top, back, and sides, to prevent gas from being siphoned into the air stream or blown into driver's face.

#### 3.02 CNG or LPG

Provided the installation meets the requirements of N.Z.S.5422 part 1 and 2 the use of CNG and LPG fuel is permitted in any class.

#### 3.03 Cooling System

Antifreeze/glycol prohibited in all comp vehicles. If an engine cooling system is utilised no part must be installed in the drivers' compartment. Front engine dragsters must have system installed in front of engine. Cars without steel hood (bonnet) and/or steel front fenders, steel fans prohibited when engine driven.

#### 3.04 Electrical

Master Cut-off: All vehicles quicker than 11.00 seconds (**excluding Modern Street Cars see 2.12**) require a battery isolation switch, capable of cutting off current flow, stopping the engine and operable from the exterior of vehicle. Must be installed on the rear of vehicle and marked ON/OFF or Push Off. If a sealed battery is used to run minor accessories i.e., warning/shift lights, rev counter etc. but not including ignition system or fuel pump, a fusible link of no more than 20-amp capacity may be used in lieu of isolation switch.

#### 3.05 Engine

All contestants in weight to cubic inch classes must claim exact cubic inch displacement of engine used. No allowance will be given for overbore or extra weight. If engine size is changed during a race, the competitor must report to the technical director before a run is attempted. Crankshaft centreline may not exceed 600mm from the ground in any class.

Engine set back is measured from the forward most spark plug to the front spindle centre line in those classes where limits apply.

**Lower Engine containment device (Nappies):** Required for all supercharged, turbo and nitrous vehicles quicker than 10.0 and 9.00 for all other vehicles. Must be capable of containing oil and debris. IHRA accepted belly pan may be used in place of the diaper provided it meets the following criteria. It must extend from frame rail to frame rail and be minimum of 2 inches high on all sides and extend beyond the engine and its related oil accessories. A non-flammable absorbent pad must be utilized in the device. In addition, supercharged nitro methane powered vehicles must be fitted with an engine oil retention (belly) pan also. Competitors requiring nappies that omit to refit them and drop oil on the track surface are liable for a \$200 fine.

#### 3.06 Exhaust

Each car, regardless of the class, must be equipped with exhaust collectors installed in such a manner as to direct the exhaust gasses out of the body away from the car. Flex pipes are prohibited. Collectors and collector mufflers should be attached with a minimum of 4 springs per collector or 4 tabs. Exhaust stacks must have a metal connecting strap to prevent loss of one or more stacks during competition. If mufflers are used, they must be securely attached to exhaust system and car body or frame.

**Turbo Exhaust Cross:** All turbocharged vehicles that do not use mufflers must have two bolts or similar inserted across the diameter of the turbine outlet pipe at ninety degrees to each other, to prevent the exit of debris in the event of a turbine failure. Cars are to have a minimum 10mm cross, bikes a minimum 6mm cross.

#### 3.07 Fuel Systems

**Driver's compartment** – Fuel tanks or other units containing fuel prohibited in driver's compartment. All tanks must be isolated from driver's compartment by a firewall and completely sealed to prevent any gasoline from entering driver's compartment.

Hatch back type of vehicles must seal / cover fuel tanks in back with sealed cover or box to prevent fuel seepage in driver's compartment in case of rollover, upset etc.

**Filler cap** – A positive locking gas tank cap is required on all cars.

**Flywheel area** – Fuel lines in flywheel bellhousing area must be enclosed in a 400mm length of steel tubing of 3mm minimum wall thickness and securely mounted as a protection against fuel line rupture. This requirement is waived if vehicle is fitted with steel bellhousing / shield. Fuel blocks, if used, must be mounted at least 150mm forward of flywheel bellhousing area.

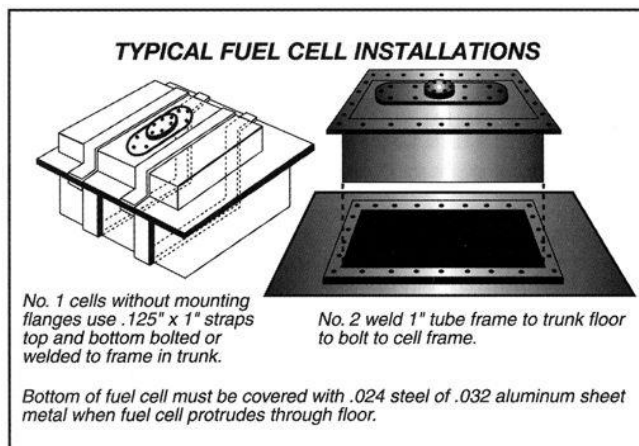
**Fuel cells** – When used, fuel cells must have a metal box protecting any part of the cell, which would be outside bodylines or trunk floor. All fuel cells must have a pressure cap and be vented to the outside of the body or have a built-in check valve. Pressurized fuel tanks prohibited.

**Fuel lines** – Fuel lines must be isolated from the driver's compartment by a sub-floor or housing where engine is located in rear and fuel tank is in front of driver. All fuel lines (including gauge lines) must be metallic, steel braided or approved i.e., Kevlar "Starline or "Goodridge 536 hose" otherwise a maximum of 300mm total (front to rear) of non-metallic or non-steel braided hose is permitted for connection purposes only.

**Location** – Wherever possible, fuel tanks and fuel lines should be located ahead of engine. All fuel tanks, lines, pumps, etc., must be within the confines of the frame and/or steel body. Where fuel tanks are located out of protective areas of mainframe rails or wheels, fuel cells are highly recommended, and a minimum 12mm tube encasement must provide adequate protection against collision damage. Fuel lines must not be routed in driveline tunnel. Top of fuel tank must be below top of rear tyres.

**Shut-off valves** – Entries with altered systems (other than electric fuel pumps) must have a fuel shut-off valve within easy reach of driver and located in main fuel line between fuel tank and carburettor and/or injectors.

**Supercharger lines** – Mandatory that fuel lines passing supercharger drive areas be steel braided or enclosed in protective steel tubing.



### 3.08 Harmonic Balancer

All vehicles quicker than 11.00 (1/4 mile)/7.00 (1/8 mile) require a harmonic balancer/pulley meeting SFI 18.1 or otherwise completely made of steel or forged aluminium, or a scatter shield as below. **Excludes Modern Vehicles see section 2.12.**

Vehicles using a cast balancer/pulley must be fitted with a scatter shield constructed of 6mm (1/4 inch) steel plate securely fastened with at least two 10mm (3/8 inch) high tensile bolts in such a manner as to contain or deflect fragments should the balancer disintegrate. The width and circumference of the outer ring must be covered, and the front of the shield should extend down to at least the level of the mounting ring in order to retain fragments or to prevent the outer ring from coming forward. A 10mm (3/8 inch) diameter hole may be drilled in the shield for timing mark purposes. No other openings are allowed. Vehicles using a steel outer ring do not require a shield, but the Outer ring must have some positive means of preventing it moving forward. This can be achieved by having a step on the back of the ring or a front retaining plate equal to the outer diameter of the ring, made of at least 4.5mm 3/16 inch steel or 6mm (1/4 inch) alloy plate. All pulleys/crank hubs/harmonic balancers must be positively retained to the crankshaft with a bolt. Factory nonharmonic hubs permitted.

### 3.09 Ignition

Each Car in competition must have an ignition switch or magneto kill switch in good working order, located within easy reach of a belted in driver, which must also override and shut off all electric fuel pumps when in the off position.

#### **Traction/Slew Control/Data Loggers**

The use or fitment of any ignition system (e.g., MSD 7531) or related accessory (e.g., 7561 or power grid accessory 7761) that uses a programmable multi-point rev limiter and/ or a rate of acceleration rpm limiter, either by themselves or integrated into the ignition systems are prohibited.

See General Regulations 1.07

### 3.10 Liquid Overflow

All cars in competition must be equipped with a system that will prevent excess fluids from spilling onto the race surface. Minimum catch can capacity: 600mls. Overflow may be routed into headers on cars that are supercharged or burn fuel or alcohol.

Antifreeze/glycol prohibited in all comp vehicles. Catch cans should be emptied/checked between rounds.

### 3.11 Nitrous Oxide

The use of any agents other than nitrous oxide as part of, or mixed with, this pressurized system is strictly prohibited. The presence of a bottle installed on a vehicle infers it is being used. Nitrous Oxide bottles located in driver compartment must be equipped with a relief valve and vented outside of driver's compartment. All bottles must be securely mounted, stamped with minimum DOT-1800-pound rating. Hoses from bottle(s) to solenoids must be high pressure steel braided hoses. External heating of bottle(s) prohibited except commercially manufactured bottle warmers. Bottle clamps must be securely mounted to car. If mounted to floor, a minimum of 75mm x 3mm spreader plates to be used to prevent bolts "pulling" through floor. All systems must be activated by a wide-open throttle switch and utilize all manufacturers safety products.

### 3.12 Nuts & Bolts

All nuts, bolts, and component parts on each car's suspension system, system, chassis and running gear must be secured with lock nuts, lock washers or cotter keys, and must have at least one full thread showing through nuts.

### 3.13 Oil System

Accu-sump, dry-sump, oil filters, oil supply lines, etc., are **not permitted** in driver's compartment. Oil pressure gauge and line are permitted in driver's compartment. Metal or steel braided line is mandatory on all gauges.

### 3.14 Supercharger

Unless otherwise stated in class regulations overdrive limits may apply.  
See current NZ Drag racing rules for overdrives etc.

### 3.15 Supercharger Restraint

A supercharger restraint system is mandatory for cars quicker than 10.0 seconds to prevent superchargers from being blown free of engine. Vehicles quicker than 11.0 second must have a restraint system unless the intake manifold has a blow off valve.

Aluminium studs (supercharger to manifold) mandatory on all superchargers with restraints.

All cars under 9.0 seconds with Roots-type require minimum SFI Spec 14.1 restraint and SFI 23.1 burst panel.

All other Roots-type if required minimum of restraint system fabricated and accepted by IHRA Technical Inspector.

All Screw-type require minimum SFI Spec 14.21 restraint and SFI Spec 23.1 manifold burst panel in addition to supercharger panel.

Whipple Supercharger list of street/strip superchargers

Model	Displacement	Max Continuous RPM	Max Peak RPM	Max CFM	Max M <sup>3</sup> /HR	Max PSI	Peak VE	Peak AE	SC Blueprint (PDF)
W100AX	1.6 Liter/rev	18,000	20,000	1120	1902	30	99	81	100AX
W140AX	2.3 Liter/rev	18,000	18,000	1430	2430	30	99	80	140AX
W140R	2.3 Liter/rev	18,000	18,000	1389	2360	30	95	77	140R
W175AX	2.9 Liter/rev	18,000	18,000	1720	2922	30	99	78	175AX
W200AX	3.3 Liter/rev	16,000	18,000	2140	3635	30	99	78	200AX
W200R	3.3 Liter/rev	16,000	18,000	2030	3449	30	94	76	200R
W245AX	4.0 Liter/rev	16,000	18,000	2518	4278	30	99	78	245AX
W305AX	5.0 Liter/rev	18,000	20,000	3462	5882	30	98	77	305AX
W305R	5.0 Liter/rev	18,000	20,000	3250	5522	30	93	75	305R
W510AX	8.3 Liter/rev	11,000	12,000	3462	5882	30	98	77	510AX
W510R	8.3 Liter/rev	11,000	12,000	3250	5522	30	93	75	510R

The above listed units are designed for street/strip application, and some are OEM. They do not require the use of ballistic blanket but will require the same mounting hardware as a roots' blower as per our rule book (alloy mounting studs /restraints/burst panel or pop off valve in manifold) unless in OEM situation where non modified factory installation is used.

### 3.16 Throttle

Each car, regardless of class, must have a foot throttle incorporating positive acting return springs attached directly to the throttle arm. Licensed hand throttle is permitted with approval from tech director.

Hardware - Cable throttle (Morse type) systems are mandatory for all **Group One and all mechanical injected supercharged vehicles.**

Cables and linkage may not extend below frame rails. A positive stop or override prevention must be used to prevent linkage from passing over centre and sticking in an open position.

Throttle Return - Unless Throttle body and mechanism is factory original each car must have two-positive-acting return springs attached directly to the carburettor / injector throttle arm. In addition to return springs all vehicles that use a Morse type or mechanical linkage require some means of manually returning the throttle to a closed position by use of the foot.

**Fly By Wire allowed in group two and three vehicles (unless mechanical injected supercharged) Factory FBW must not be modified, aftermarket FBW must be fitted as per the manufactures instructions.**

### 3.17 Turbochargers

Heat shields are recommended and are mandatory any time the exhaust comes within 75mm of a combustible material because of the extreme heat around the exhaust housing. Lower engine containment device (Nappies) mandatory on all Turbocharged vehicles running under 10.0 seconds.

### 3.18 Vent Tubes, Breathers

Mandatory on all supercharged cars quicker than 10.0. Where used, the tubes must terminate into an acceptable, permanently attached catch-tank/ or tanks with a total capacity of 4 litre minimum. The catch-tank must be baffled to keep overflow off track. A sight glass or tube is recommended to verify that the tank is empty prior to run.

## BODY / CHASSIS

### 3.19 Alignment

Each car in competition, regardless of class, must have sufficient positive caster into the front end to ensure proper handling of car at all speeds.

### 3.20 Ballast

As allowed in Current NZ Class Requirements.

Ballast types -

Recommended forms of ballast are:

- (1) Heavier gauge steel floor
- (2) Frame reinforcing cross members
- (3) Additional protective equipment such as roll bars, flywheel shield, etc.

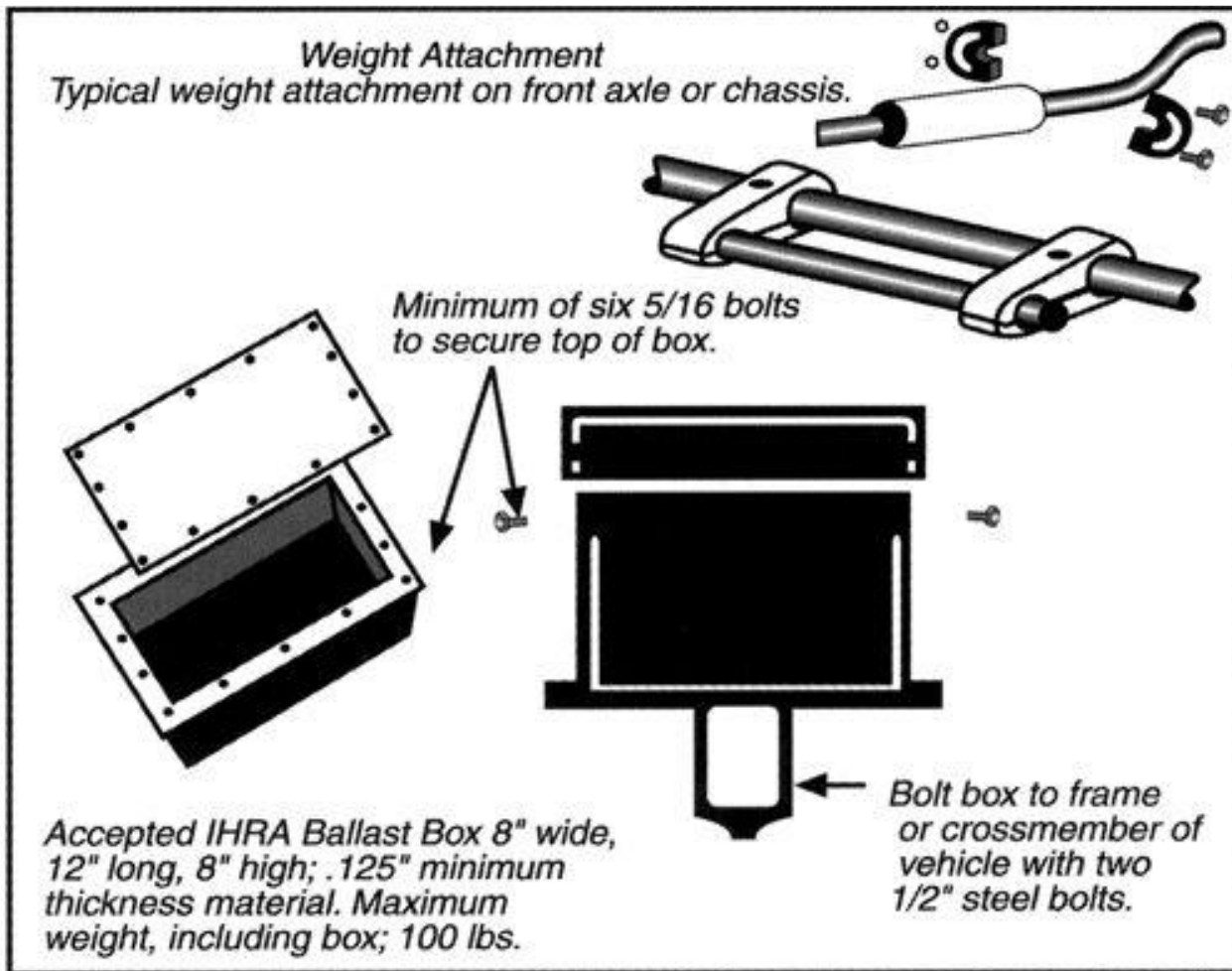
No liquid or loose ballast permitted, i.e., water, sandbags, rocks, shot bags, metal weights, etc. Any liquid other than engine fuel being used, located behind the front firewall, is considered ballast, and is not permitted. Use of railway track, cylinder heads, or other bulky items prohibited.

Maximum - Total removable ballast, including weight box and contents, may not exceed 90kgs in any class.

Mounting - Any material used for the purpose of adding to a car's total weight must be permanently attached to the car's structure and must not extend behind the rear of the car's body or above the rear tyres.

Removable weight must be securely fastened to the frame or frame structure by a minimum of two 12.7mm steel bolts (1/2") or 4 M10 fasteners grade 8.8 per 45kg of weight. Hose clamps, wire, strapping, tape, etc. not acceptable.

Weight boxes (2 maximum) of 3mm material may be constructed to hold small items such as shot bags, lead bars etc. as long as each box and contents do not weigh more than 45 kgs. The box must be securely fastened to the car's frame or cross member with at least two 12.7 steel bolts, or 4 M10 fasteners grade 8.8 minimum.



### 3.21 Batteries

All wet cell / gel cell batteries must not be located into the driver or passenger compartment and must be securely mounted with a minimum of 2 x 8mm fasteners (holding battery), where batteries can leak / spill liquid onto driver in cases of spin out, collision or upset, battery must be in-cased in sealed battery box.

### 3.22 Bodies

Each car in competition, regardless of class, must be equipped with some kind of body, surrounding the driver. Any car raced / built which may not meet these specifications as required under their class requirements may be submitted to a Tech inspector / IHRA for inspection and will be judged on its own merits.

### 3.23 Chassis

Each chassis built as outlined in class requirements must be inspected yearly by IHRA/ NZDRA as part of Technical Inspection procedure. Grinding of welds not permitted. All butt welds must have visible reinforcement. Refer also Frame & Roll Bar/ Cage.

### 3.24 Firewalls

Each car in competition must be equipped with a flame-proof and fuel-proof firewall including fiberglass or carbon fibre extending from side to side of the body and from the top of the engine compartment's upper seal (hood, cowl, or deck) to the bottom of the floor and/or belly pan. Firewall must be constructed to provide a bulkhead between the engine and driver's compartment. All holes or openings must be sealed with metal, or other fireproof material. A minimum of 0.8mm aluminium or 0.6mm steel. Use of magnesium prohibited.

### 3.25 Floors

All cars not having floors must be equipped with floor pans which must extend the full length and width of drivers compartment to the rear of drivers' seat, if not factory must be minimum 0.9mm aluminium or 0.6mm steel.

### 3.26 Frames and Roll Cage

#### GROUP 1

Any newly built Group 1 fabricated chassis must be built to the current respective SFI specifications. Any newly imported chassis to have a SFI chassis tag displaying the respective SFI specification in place at the time of its production.

Top Fuel.	SFI 2.3S
Funny Car.	SFI 10.5A
Top Alcohol Dragster	SFI 2.1A
Top Alcohol FED Dragster	SFI 2.2c
Top Alcohol Funny Car	SFI 10.1E
Top Alcohol altered	SFI 10.1E
Top Doorslammer	SFI 25.1H

From 1/07/2021 any Group 1 vehicle competing that is built with a mild steel chassis will be limited to run no quicker than 7.5 seconds or 180mph.

#### GROUP 2 and 3

All group 2&3 vehicles faster than 8.50 seconds are recommended to be built to a relevant chassis/cage SFI specification. Vehicles in this group may build chassis designs using either Mild Steel or Chrome Moly/Docol R8 as per the SFI specs. See section 3.62.

SFI 2.4C FED 6.00 to 7.49 seconds ET, Chrome Moly only

SFI 10.2 Altered 6.00 to 7.49, Chrome Moly only

SFI 25.3D Door car 6.50 to 7.49 3600lbs max Chrome Moly only

SFI 25.5E Door car 7.50 to 8.49 seconds 3600lbs max

SFI 25.4D Door car 7.50 to 8.49 seconds 3600lbs max

As of 1/07/2021 any newly built group 2/3 vehicle competing that is built with a mild steel chassis will be limited to run no quicker than 7.5 seconds or 180mph.

Existing or imported Mild Steel group 2/3 vehicles will be limited to run no quicker than 6.50 or 210mph. Must fit the following rules, if they do not fit these rules then may run no quicker than 7.50 seconds or 180mph

#### 7.50 to 7.00

1: NZ built vehicle pre 01/07/2021 The owner must produce a Mill Cert and proof of purchase stating that the roll cage/chassis material is CDS/CDW with the correct OD and thickness with a Yield Strength of 350MPa (min)

2: IHRA Australia/ANDRA imported vehicle The owner must produce a log book for the vehicle.

3: USA imported vehicle, the vehicle must have a chassis cert and paperwork from a reputable USA governing body (NHRA IHRA PDRA to name some)

#### 7.00 to 6.50

1: NZ built vehicle pre 01/07/2021 The owner must produce a Mill Cert and proof of purchase stating that the roll cage/chassis material is CDS/CDW with the correct OD and thickness with a Yield Strength of 350MPa (min)

2: IHRA Australia/ANDRA imported vehicle The owner must produce a log book for the vehicle.

3: USA imported vehicle, the vehicle must have a chassis cert and paperwork from a reputable USA governing body (eg NHRA IHRA PDRA)

4: The vehicles above it is mandatory to have electromotion fitted. Funny car cage with a full containment seat with wrap around head protection or lateral head supports sfi45.2 (eg Butler, Seat Inserts) highly recommend for the 2024/2025 season, mandatory after 01/07/2025, Street Cars with WOF and Rego may have a removable Funny Car Cage as long as an approved drag racing roll cage joiners are use (eg BRC)

The above documents must be produced to the IHRA NZ Tech inspector or to an Area Steward at the first event you attend.

#### If a MS vehicle goes quicker than its allowed ET over the 1/4 mile or over the 1/8 mile:

- If a competitor runs quicker than the vehicle allowed safety ET by 2 tenths in qualifying they will get one warning. If the competitor does this a second time at the same event, they will be disqualified from that event.
- If a competitor goes more than 2 tenths under the vehicles allowed safety ET, they do not get a second warning and are disqualified immediately, from that event.
- If a competitor goes under its allowed safety ET during eliminations, they will be disqualified.
- If both competitors in the same race go under their allowed safety E.T., they will both be disqualified.
- If a competitor consistently runs under their allowed safety E.T. at events, they will be sanctioned by IHRA (NZ)Inc.

**PLEASE NOTE** – Please be advised that it is the responsibility of the driver to withdraw your vehicle completely from any event, where they have run quicker than the allowable E.T. cut off, as detailed above. If this is not done, a penalty of one meetings' suspension will be imposed and any points gained at that event will be forfeited. After the event is completed, all run sheets will be checked, and any team found to have breached this rule will be notified.

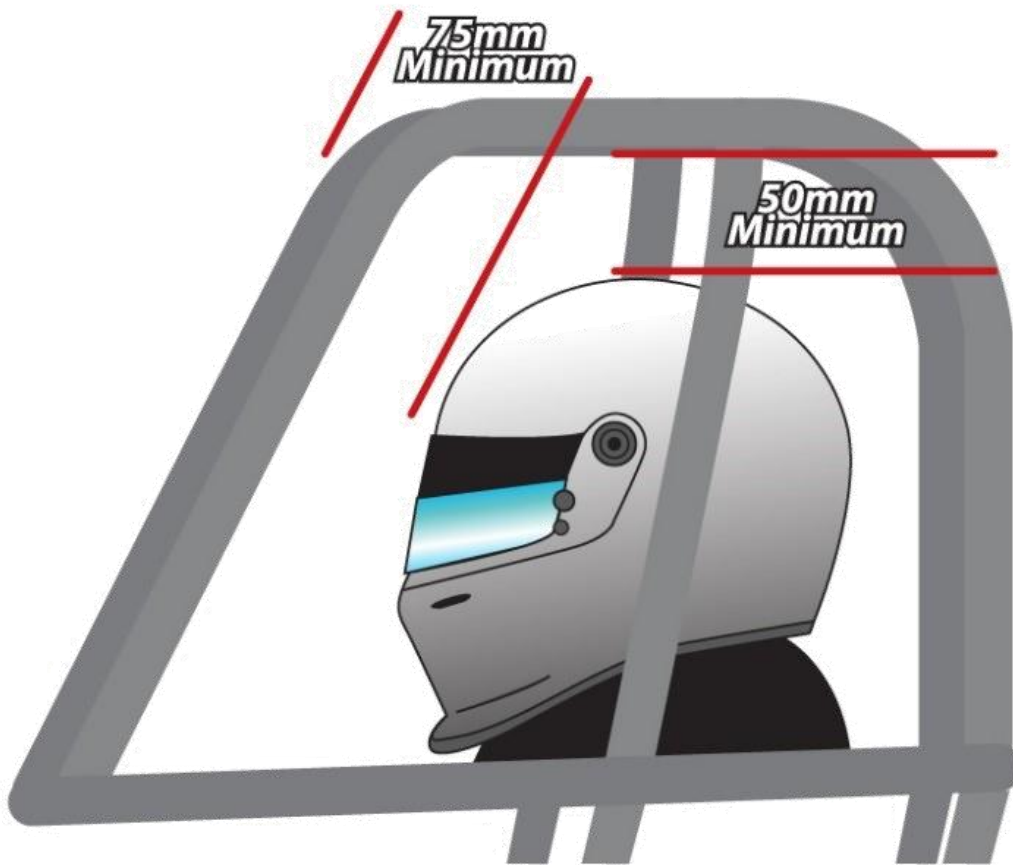


All new fabricated chassis or repairs must be inspected in an unpainted state by an IHRA Tech Inspector. All butt welds must have visible reinforcement and excessive grinding of welds not permitted.

**Damage to the frame / chassis as the result of an accident must be noted in the IHRA Logbook.**

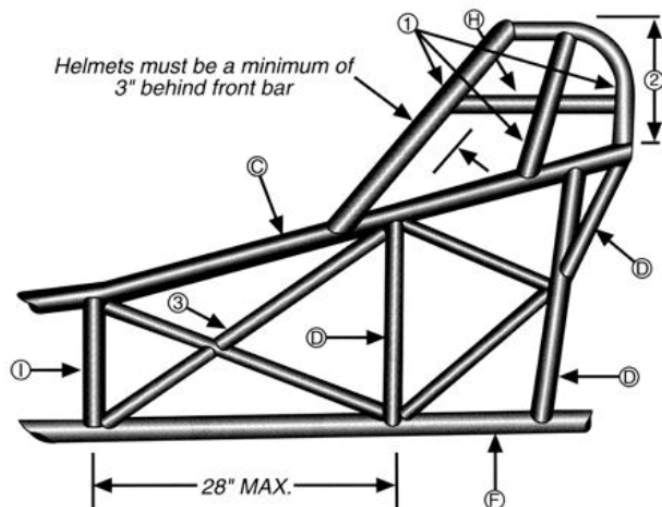
Motorsport homologated roll cages will be accepted for one off event down to 10.00 seconds where the original monocoque integrity of the vehicle has not been impaired and proof of current homologation and MSNZ logbook is produced. If a racer wants to race more than one event, they must have a current homologation and MSNZ logbook, an engineer certificate stating the MSNZ cage is as strong or stronger than an IHRA NZ roll bar and have a IHRA NZ tech and licence, they will be limited to 10.00.

Most SFI Chassis plans are available from IHRA NZ, also see 3.61 Roll bars and 3.62 Roll cage.

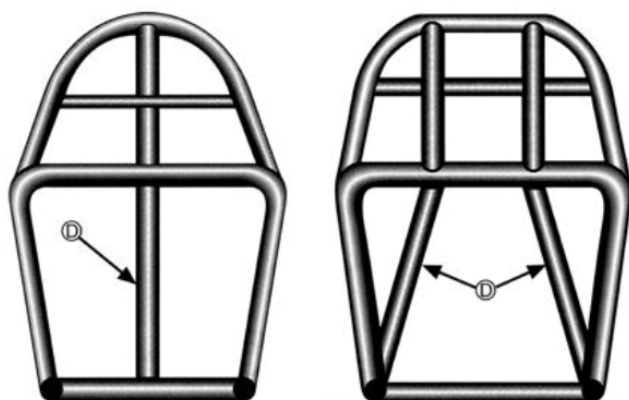


# ALTEREDS, FUNNY CARS

7.50 seconds E.T. and slower



REAR VIEWS



When using 2 uprights, they may be 1" x .049" wall, minimum.

#1 Funny Car and front engine dragster use tubing code B. All others use code A. There shall be a minimum of 6 points of attachment on all vehicles (except: rear engine dragsters 5 points). Front engine dragsters may use 5 point 1 5/8" OD, or 6 point 1 1/2" OD.

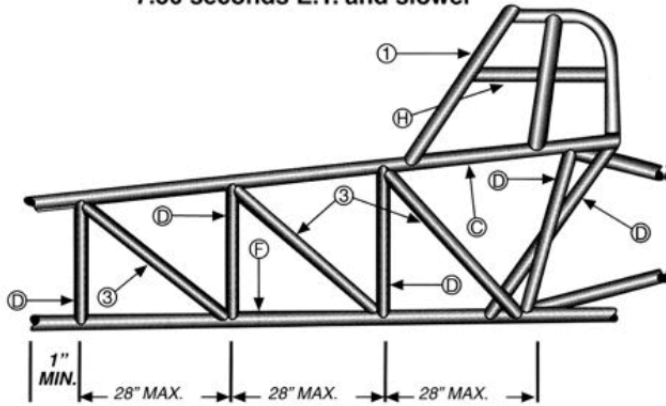
#2 If over 18", dimension A becomes B, and C becomes A.

#3 If an X or K is used then 5/8" 058", otherwise E.

RED, FED Altered and Funny Car Tubing Code			
	O.D.	Chrome Moly	Mild Steel
A	1 1/2	.065	.118
B	1 5/8	.065	.118
C	1 3/8	.058	.118
D	1 1/4	.058	.118
	1 1/8	.065	.118
E	3/4	.058	.118
	1	.049	.118
F	1 1/4	.058	.118
	1 3/8	.049	.118
G	5/8	.058	.118
H	1	.058	.118
I	1 1/4	.049	.118

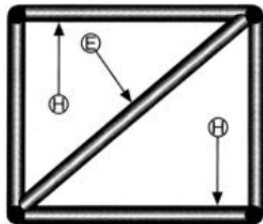
## REAR ENGINE DRAGSTERS

7.50 seconds E.T. and slower

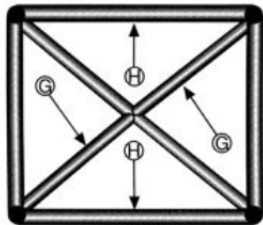


All dimensions apply to drivers compartment only.

### FRONT VIEWS (Dragster rear engine)

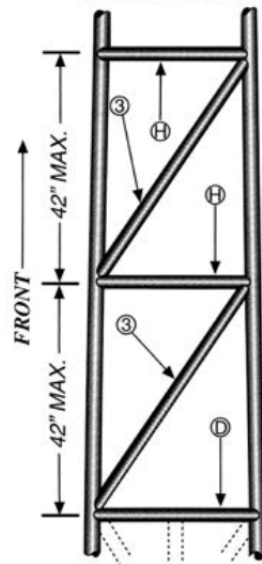


OPTION #1



OPTION #2

### BOTTOM VIEW

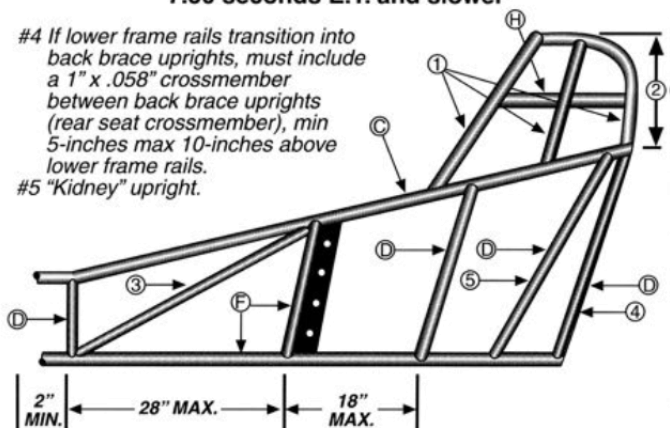


## FRONT ENGINE DRAGSTERS

7.50 seconds E.T. and slower

#4 If lower frame rails transition into back brace uprights, must include a 1" x .058" crossmember between back brace uprights (rear seat crossmember), min 5-inches max 10-inches above lower frame rails.

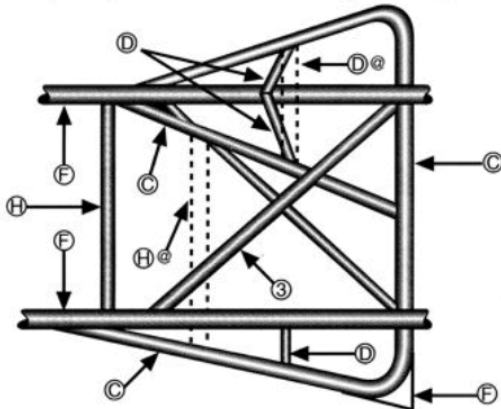
#5 "Kidney" upright.



# STREET ROADSTER

7.50 E.T. and slower

## TOP VIEW FROM ABOVE (roll cage removed from drawing for clarity)



**H-** Foot box support 1 x .058"

**H@-** Retention for drivers legs, also can be a dash mount 1 x .058"

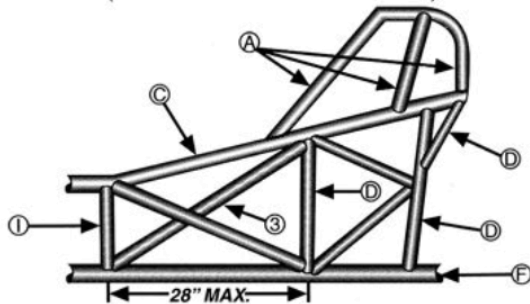
**F- Lower frame** - needs extension on left side when driver seat is overhanging lower frame rail.

**D@-** Horizontal, 1 1/4 x .058" used to tie inner and outer upper frame, only when no other support exists.

When 1 5/8 x .083" is used, for upper © and Lower © frame and uprights ©, eliminates the need for inner frame diagonals ©. Diagonals © along outer frame and uprights still mandatory.

## LEFT SIDE VIEW

(Driver is on left side of driveshaft)



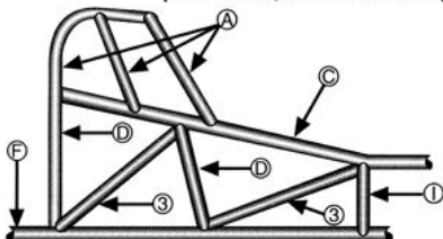
**Helmet must be a minimum of 3" behind front bar.**

- |                          |                        |                           |                   |
|--------------------------|------------------------|---------------------------|-------------------|
| <b>A-</b> Roll cage hoop | 1 5/8" x .065"         | <b>3-</b> Single Diagonal | 3/4" x .058"      |
|                          | 6 points of attachment | <b>X- or K Design</b>     | 5/8" x .058"      |
| <b>C-</b> Upper frame    | 1 1/2" x .058"         | <b>F-</b> Lower frame     | 1 5/8" x .058"    |
| <b>D-</b> Uprights       | 1 1/4" x .058"         |                           | or 1 3/8" x .049" |
|                          | or 1 1/8" x .065"      | <b>I-</b> Foot upright    | 1 1/4" x .049"    |

Mild steel construction requires .118" minimum wall thickness.  
Lower frame of square tubing minimum is 2" x 2" x .058".

## RIGHT SIDE VIEW

(Inner view, base for roll cage)



When this design is used for the inner structure, adjacent to the driver, then the outer structure has no minimum requirements.

### 3.27 Hood Scoop

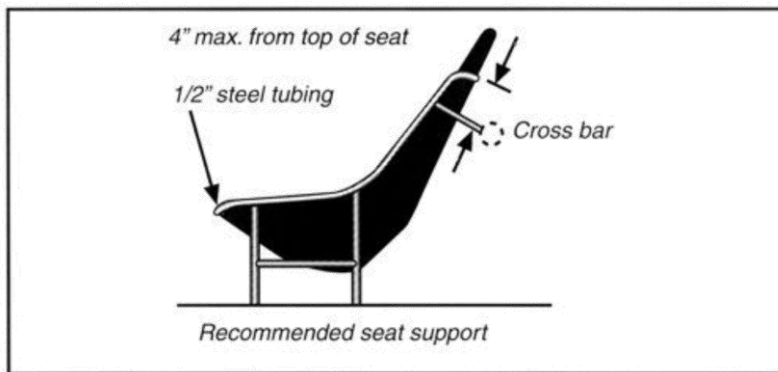
All scoops must be adequately mounted.

### 3.28 Seats, Upholstery

The driver's seat of any car in competition must be constructed and braced mounted and upholstered so that it will give full back and shoulder protection in the event of car upset, spinout or collision. The driver's seat must be supported on the bottom and back by the frame or cross member. All seats must be upholstered, or as noted under Class Requirements.

Properly braced, framed, supported by, and constructed accessory seat or seats of aluminium or fiberglass of adult size (minimum 600mm seat back) are acceptable. Magnesium seats prohibited. It is acceptable that all seats be mounted vertically and incorporates a compatible crotch strap.

Vehicles running quicker than 9.99 (excluding modern vehicles) require a one piece non reclining FIXED (no rails) seat fit for purpose that correctly fits the occupant. Seat must have a centre hole for the crutch belt. Highly recommended for all cars running a 5-point harness. 5 points harness must be correctly fitted to the vehicle and driver. Crutch belt must be correctly fitted as per diagram 3.56 in the rule book.



### 3.29 Taillights

All vehicles must have one working taillight as minimum requirements for night operations.

**3.30 Windscreen & Windows** – All Windscreens / windows must be in good condition, polycarbonate allowed in classes where WOF not required. All windows must be closed. Windows must not be tinted beyond W.O.F and Reg. 3mm minimum thickness.

**3.31 Windshield** – On open bodied cars, or any other class permitted to enter without a windshield, a metal or other fireproof deflector must be installed. The deflector should divert wind, liquids, and foreign matter over the driver's head, be securely mounted and installed in such a way that it does not obstruct the driver's frontal view in any way.

### 3.32 Wings / Air foils

Air foils, canards, wings, and spoilers: Adjustment or movement of any aerodynamic device during a run is prohibited.

All devices must be securely supported and mounted.

## DRIVE LINE

### 3.33 Anti-Blowback Device

Mandatory for all supercharged TA/- T/D, -/D, -/A and highly recommended for supercharged -/TS. A brace or device must be installed that will prevent the bellhousing or adaptor shield from being blown rearward in the event of flywheel and/or clutch explosion. Minimum material is 22mm O.D. x 2.1 mm wall chrome moly tubing (or 3mm wall M/S) with M10 fasteners. Use of Ball-lock or quick-pins for attachment is prohibited.

### 3.34 Clutch

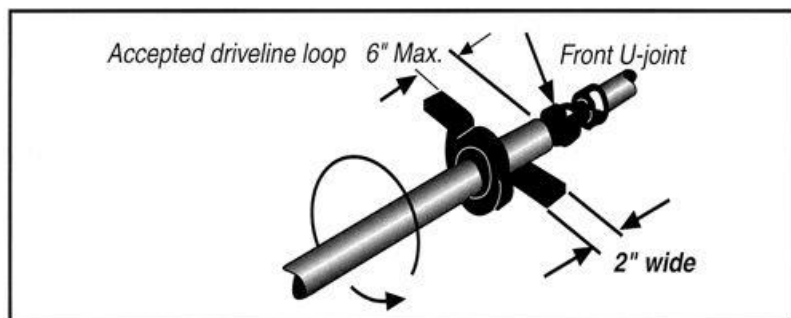
Each car in competition, except those with automatic transmissions, must be equipped with a foot-operated clutch incorporating a positive stop to prevent clutch from going over centre or past neutral as in the case of centrifugal units. All pedals must be covered with non-skid material. All slider clutches must meet SFI Spec 1-2.

The use of stock-type cast iron flywheels and/or pressure plates prohibited on all cars running under 12.99. Steel or Units meeting SFI Spec 1.1 or 1.2 are mandatory for vehicles under 11:00

### 3.35 Driveline

a/ **Drive shaft loop** – All cars running under 11.00 using open drive shafts must have a retaining loop or cross member in the vicinity of each front universal joint for support of the drive shaft in event of U-joint failure. Minimum requirement is 360 degree of enclosure, 6mm thickness and 50mm wide steel plate or 22 x 3mm welded steel tubing; securely mounted and located within 150mm of the front universal joint. It is recommended the loop is round rather than oblong to minimize loading on the loop. **Modern Vehicles fitted with a two-piece driveshaft are exempt from this requirement where the driveshaft comes complete with a securely mounted centre bearing.**





**Drive shaft covers** – Open drivelines passing any part of the driver's body must have a 180-degree protection of minimum 1.2 aluminium or steel, securely mounted to the frame or frame structure.

b/ **UJ & Coupler covers** – On any car in which the driver sits over or behind the rear-end centre section, a suitable protective shield must be installed. Vehicles with universal joints require a protective shield of 3 mm minimum thickness steel plate securely mounted to the rear-end centre section and the bellhousing adaptor.

Where possible, couplers are recommended in place of U-joints. For straight couplers, the minimum cover requirement is 1.6 mm aluminium (which must contain an inspection plate for removal and inspection of coupler), securely mounted to the rear-end centre section and the bellhousing adaptor, or as noted in Class Requirements. An anti-rotation device is mandatory in any car where the driver sits over or behind the rear axle.

### 3.36 Flex plate Shield

Cars running quicker than 9.9 seconds without factory firewall/floor pan require flex plate shield meeting SFI Spec 30-1 or made of 50mm x 3mm thickness steel plate of 180-degree minimum cover (must protect all chassis rails). Transverse mounted engines must surround 180 degrees except were protected by diff casing.

### 3.37 Flywheel Shields / Bellhousings

The use of a S.F.I spec 6.2 bellhousing or equivalent is required in Top Alcohol, Top Doorslammer. All other rear wheel drive vehicles quicker than 10.0 seconds, a totally enclosing 360-degree, bell housing must be formed or fabricated entirely from 6.25mm (1/4") steel plate and attached directly to the rear of the engine. Shields meeting S.F.I 6.1, 6.2, or 6.3 highly recommended.

Motor plat – A one-piece motor plate of 3mm minimum thickness steel or titanium, or 1/8" 2024T3, 6061, or 7075T6 aluminium and fitting between the engine and steel bellhousing is required.

Openings & Mods – A clutch inspection/ maintenance hole may be cut on the back of the housing. The opening may not be longer than an area covering 90 degrees (no longer than 215mm) of the housing. No part of the rotating clutch assembly may extend past the forward edge of the clutch inspection and maintenance hole. A cover for the opening must be made of the same material and thickness as the flywheel shield, incorporating a welded fillet that fits the opening, and be fastened to the flywheel shield with at least twelve 8mm-class 10.9 bolts. An engine support strap made of steel or aircraft cable capable of supporting the rear of the engine in case of bellhousing failure is required on all cars, unless it is evident that the headers or frame rails will prevent the engine from dropping.

### 3.38 Flywheels

Clutch, pressure plate and flywheel meeting SFI 1.1 mandatory for all vehicles under 11.00. No cast iron units allowed.

### 3.39 Shields

**Note: All Rotary** powered cars, scatter shields are recommended for vehicles running 11.0 or slower.

All clutch equipped cars running quicker than 11.0 but slower than 9.99, shield described is mandatory minimum.

Where used, flywheel shields must be constructed so they completely surround the bellhousing to stop material entering the driver's compartment in the case of clutch failure. The shield should be constructed from 6mm (1/4") steel plate and extend forward to a point at least 25.4mm (1") ahead of the flywheel, and 25.4 (1") to the rear of the clutch and pressure plate. Shields must not be bolted to the bellhousing and should attach securely to the "preferred" frame/chassis or engine. SFI spec bellhousing blanket acceptable in place of shield. All clutched vehicles running under 10.0 seconds must be fitted with a steel bellhousing.

### 3.40 All Front wheel drive or transverse-mounted

Applications using a clutch and running 11.99 or quicker, shield must surround the bellhousing completely except for area of bellhousing adjacent to differential and axle shaft. Shield may be multi-piece, with pieces bolted together using minimum 10mm class 8.8 bolts; may be attached to engine and/or bellhousing mounting points. The shield should be constructed as above. SFI spec bellhousing blanket acceptable in place of shield.

### 3.41 Pinion Support

All cars using an open driveline must have radius arms, traction bars or some suitable support to prevent rear-end housing rotation. It is recommended that a torque tube, steel, 3.2mm minimum wall thickness be used to enclose all drivelines.



### 3.42 Rear end

**Note** – Periodic magna flux of axles is recommended. The attention of competitors is drawn to the possibility of handling hazards in the event of an axle shaft breaking with a vehicle having a locked rear end.

Welded spider gears or side gears prohibited in all rear-ends. No welded axles on cars with locked (spool) diffs.

**Axle-retention devices** - bearing retainers - All cars quicker than 11.99, with locked (spool) diffs must be equipped with a minimum of 3.0 reinforcement of stock bearing retainer and/or C-clip eliminator. (Not required for aftermarket retainers).

**Axles** – All vehicles quicker than 8.50, aftermarket axles of 35 spline minimum.

All supercharged vehicles quicker than 7 seconds and weighting over 1133kg (2500lb) require full floating hubs.

All Supercharged vehicles quicker than 7.00 seconds and weighing less than 1133kg (2500lb) require full floating hubs or aftermarket 40 spline 2-piece axles.

Top Fuel/Top Alcohol: Full floating or live axle mandatory.

### 3.43 Steering

Each vehicle's steering system must be secure and have no patent deficiencies. All welded parts must have additional visible reinforcement. Only conventional automotive steering systems are permitted.

Rod-ends –All rod ends must be a minimum of 10 mm shank diameter and must be installed with flat washers to prevent bearing pull out. Hollow rod ends are prohibited.

Mounting – All steering boxes, sectors and shafts must be mounted to the frame or suitable cross member and cannot be mounted in any case to the bellhousing and/or bellhousing adaptor shield, or motor plate. A secondary steering shaft stop must be installed to prevent long steering shaft from injuring driver in case of frontal impact, i.e., collar or U-joint pinned at cross member, bracket, etc.

Steering wheel – Commercially available quick-disconnect steering wheels permitted.

Fasteners - All fasteners must be of a positive nature; no roll or press pins, no ball-lock pins, set screws, etc.

### 3.44 Suspension

Shock absorbers – Each car requiring suspension must be equipped with one operative shock absorber for each sprung wheel, unless specified in Class Requirements. Shock absorbers may be either hydraulic or friction type, securely mounted, and in good working order.

Type – All cars must have a full suspension system of the type produced by an automobile manufacturer, i.e., springs, torsion bars, etc.

Rigid-mount front and/or rear axles are permitted when so indicated in Class Requirements.

Front axle – Radius rods are not required on front axles, which are rigidly mounted 460mm, or less from king pin axis. Any front suspension using a beam or tubular axle must have radius rods attached to frame.

Traction bars – Minimum requirement for rod ends is 19mm diameter steel on the front of all ladder-type bars or 16mm on 4-bar type suspension. It is mandatory that a rod strap be installed to keep ladder bar secured in event of rod end failure. All traction devices that are not attached at front, i.e., slapper bars must have a U-bolt to prevent them from coming in contact with track.

Three-wheel vehicles – Are not eligible for any competition class. Refer Exhibition class.

### 3.45 Transmissions

All automatic transmissions must have reverse lockout and a working neutral safety switch.

#### Aftermarket Planetary

Air Bottles – Air shifter bottles must be approved type and permanently mounted (no hose clamps or cable tie's)

Mounting – At least five bolts, M10 minimum, must be used to secure aftermarket planetary transmissions to bell-housing, except as noted in TA/-.

Trans Shield – A transmission shield that meets SFI Spec 4.1 is mandatory if engine burns nitro methane, methanol or is supercharged, or on any overdrive unit.

### 3.46 Automatic Transmission

All cars must be equipped with a reverse gear.

#### Automatic

**Transmission Coolers/Locking Dip Sticks:** All vehicles quicker than 8.00 seconds plus all vehicles with the transmission in the drivers compartment that is not sealed that run under 10 seconds must have steel braid transmission cooler line, AN fitting, and a positive locking transmission dip stick. All other vehicles must use industry standard cooler lines and barbed fittings and correct clamps as a minimum.

Rubber fuel line or hosing not meeting industry standards for the application not permitted. Note: Drivers of vehicles leaking transmission fluid due to the failure of pipes, hoses or fittings may be liable to a fine of up to \$200 and /or disqualification if the failure was due to incorrect assembly or the use of substandard components.

Tran's brakes – Momentary type switches only permitted for actuating Transmission brakes. No toggle or rocker type switches permitted.

Inhibitor & Lockout – Functional neutral safety (inhibitor switch) mandatory in all automatic transmission vehicles. Any Non-OEM automatic floor-mounted automatic transmission shifter must be equipped with a spring-loaded positive reverse lockout device to prevent the shifter from accidentally being put into reverse gear.

**Trans Shield** – Cars quicker than 10.99 or have non-OEM trans tunnel, must be equipped with a transmission shield fabricated from a minimum 6mm aluminium or 3mm steel offering 180-degree protection (pan rail to pan rail) mounted securely with 2 steel straps passing under the transmission. Shields meeting SFI Spec 4-1 are acceptable. **Modern street Cars are excluded, see section 2.12.**

### 3.47 Trans cover

Full transmission covers are highly recommended in all front engine -/D, -/A, to prevent fluid entering drivers compartment in case of transmission failure. Covers may be removable but must be adequately sealed at floor pan, and firewall or engine-plate.

### 3.48 Tyres

Type & Condition -

Tyres will be visually checked for condition, pressure, etc, and must be considered free of patent deficiencies by the scrutineers prior to any run. All street tyres must be a minimum of 1.6mm tread depth. Farm implement or Trailer tyres prohibited.

**Front Tyres: Only** Dragsters, Altereds and Motorcycles may use motorcycle tyres. **All** Dragsters/Funny Cars/Bikes and Altereds exceeding 160mph are required to be fitted with specifically designed drag racing tyres.

Cars quicker than 11.00 with independent front suspension and slicks/ET street type tyres are not recommended to use radial front tyres, specifically designed drag racing tyres (e.g., Front Runners) are highly recommended.

**All RWD Door Cars (excluding Modern Vehicles) exceeding 140 mph or 10.0 are to have a front tyre specifically built for drag racing use (e.g., M/T, Firestone or Goodyear front runners).** Vehicles racing in Super Street may fit front runners or equivalent if they have E/T Streets or equivalent tyres,

### 3.49 Wheelie Bars

May be adjustable but must be fixed during run. Any movement or adjustment during run prohibited. Wheelie-bar wheels must spin freely on start line. Preloading prohibited, No metallic wheels.

### 3.50 Wheels

Must be automotive – Type wheels suitable for street or race use.

Inspection – Hub caps must be removed for Scrutineers, who will check for loose nuts, cracked wheels, worn or oversize lug holes, and condition of studs, axle nuts, cotter pins, etc. Snap-on hubcaps are not permitted on any class car. No rear wheel discs or covers permitted in any category.

All wheel studs must project into the hex portion of the wheel nut by a distance equal to one diameter of the stud. Aluminium wheel nuts accepted if recognized manufacturers name and part no stamped into the outside face of each and every nut.

Wire Wheels – Where permitted motorcycle wheels or lightweight automotive wire wheels must be equipped with 2.5mm minimum diameter steel spokes, properly cross-laced to provide maximum strength. All spoke holes in rim and hub must be laced.

## DRIVER SAFETY / SUPPORT

### 3.51 Arm Restraints

All open vehicles under 13 sec must use arm restraints which must be worn and adjusted in such a manner that driver's hands and arms cannot be extended outside of roll cage and/or frame rails. Arm restraints must be installed in a way that they will release with the driver's restraint system.

### 3.52 Brakes

Brake lines must be steel, steel braided or D.O.T.-approved flexible and must not be routed in the driveline tunnel. On all cars with a manual transmission, recommended for automatic transmissions, brake lines must be either routed outside the frame rail or enclosed in a 400 mm length of 3 mm minimum wall thickness steel tubing securely mounted where lines pass the flywheel bell-housing area.

All brake lines on any rear-engine car must be protected inside of tubing or be braided steel construction where they pass the engine. Brakes must be in good working order and up to the job required of them, with two-wheel hydraulic brakes on rear wheels as a minimum requirement. Four-wheel hydraulic brakes are recommended, or as specified under Class Requirements.

A supplementary or back-up brake system is recommended on all cars, particularly those equipped with only two rear-wheel brakes.

All pedals must be covered with non-skid material. Brakes on each car, regardless of class, are tested for adequate pedal pressure.

Handbrake – If handbrake is used, brake handle must be inside car's body or driver's compartment. Brake leavers/pedals must have a positive stop to prevent push rod from coming out of cylinder.

Modifications – Lightening of backing plates, brake drums and/or brake shoes by cutting or trimming metal prohibited. Cooling or lightening holes may not be drilled in cast iron disc brake rotors.

System control – Automated braking systems (electronic, pneumatic, etc.) to reduce tyre spin are prohibited; application and release of brakes must be a function of the driver.

### 3.53 Deflector Plate

A deflector plate must be installed between the roll cage and engine on all rear-engine cars, to protect the driver and fuel tank.

The deflector plate of minimum 3.0mm aluminium, or 1.6mm steel or titanium must be installed between roll cage and engine extending from 25mm above top blower pulley to 25mm below bottom pulley and no less than 25mm wider than each pulley. Normally aspirated cars must have plate from shoulder level to bottom of chassis.

On any enclosed engine/driver configuration a full bulkhead must be installed to completely seal driver from engine and fuel tank.

Minimum attachment for any plate is four M8, Grade 5 bolts.

### 3.54 Fire Extinguishers

Each Tech inspected vehicle and/or crew must have a loaded, serviceable fire extinguisher in his or her possession, carried in the push/tow car or otherwise available for immediate use. Dry chemical, foam, or CO2 type extinguishers, 1kg size, are required minimum.

**IT IS HIGHLY RECOMMENDED THAT ALL VEHICLES THAT RUN ON METHANOL FUEL HAVE AN ARC FOAM (ALCOHOL RESISTANCE FOAM) FIRE EXTINGUISHER AVAILABLE IN THEIR PITT SPACE/TOW VEHICLE**

### 3.55 Onboard Fire Suppression Systems

Front Engine Top Fuel Dragsters/Altereds and any supercharged vehicle with an enclosed fiberglass or composite body running quicker than 8.99 are required to carry an on-board fire extinguisher system with a minimum capacity of 9kg (20lbs). Any enclosed vehicle faster than 8.00 seconds, must have a fire suppression system with a minimum 5lbs (10lbs recommended) installed. Must be manually controlled on board fire extinguisher system of Approved Type and mounted per manufacturer's specifications with the primary nozzle(s) directed to protect the driver. Upon activation of the system the contents of the bottle(s) must be totally discharged. Partial-discharge systems not permitted.

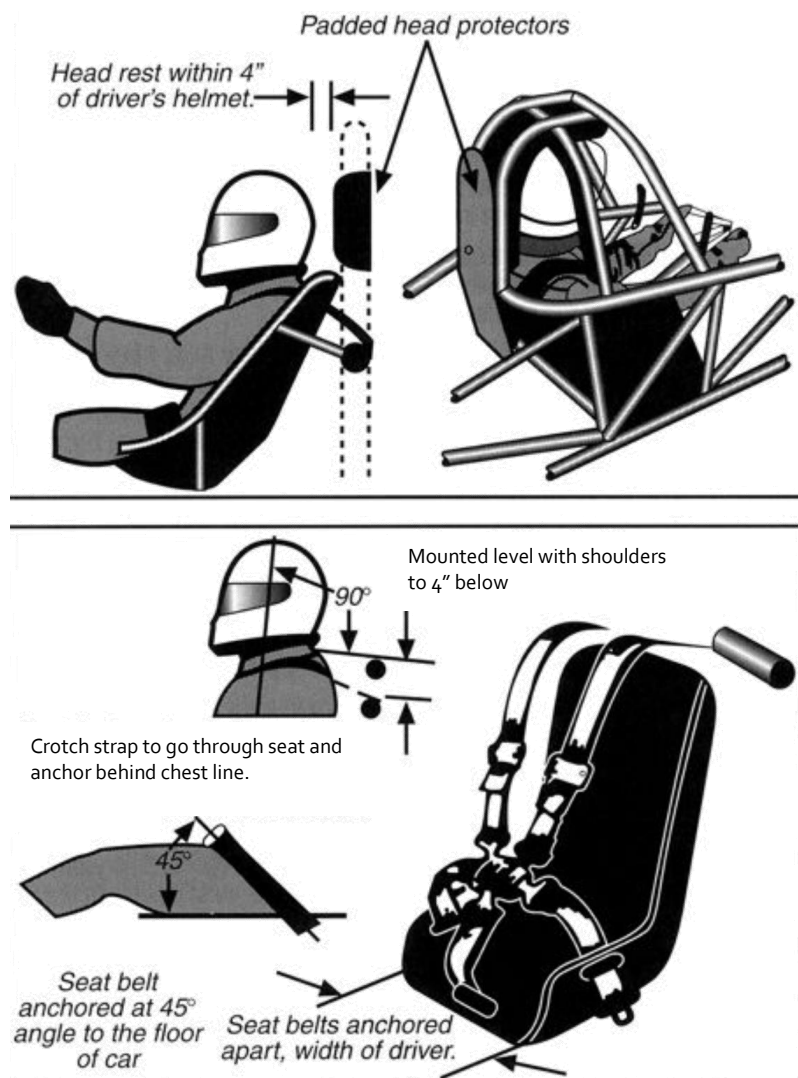
**Lines & Bottles** – Manufacturer's recommendations regarding installation must be followed, especially on bend radius and protection from crimping or kinking. Bottles and lines must be permanently and securely mounted to the frame. All fire systems must use metallic lines and distribution nozzles and must be equipped with a pressure gauge. The use of nozzles or tubing other than that recommended by the manufacturer is not permitted. All bottles must be identified with a gross loaded weight figure. It is the responsibility of the competitor to weigh the bottle prior to each event.

**Nozzles** – Nozzle placement is extremely important. Two nozzles are placed at the front of the engine (one on each side), and one nozzle is located in the driver's compartment near the steering column. It is recommended that there be no more than three nozzles per bottle.

**Protection** – The bottles must be mounted in such a manner that should an explosion or failure of any mechanical component of the vehicle occur, the bottles will be protected from flying parts. Also, the position of the bottles in the vehicles must be high enough that they cannot come into contact with the track surface following loss of a tyre or wheel. They should be protected from excessive temperature and mounted rigidly to the vehicle. Remote cables must be installed so they are protected in the event of an upset or collision.

### 3.56 Head Protection/Roll bar Padding

In any car where a roll bar/cage is installed, a padded head protector must be provided at the back of the driver's head and constructed to prevent whiplash upon impact. All vehicles with a roll cage or roll bar must have padding meeting SFI 45.1 where the driver's helmet can make contact with the roll cage/bar. A padded roll bar or cage alone may not be acceptable as a padded head protector. However, a seat that incorporates a headrest is acceptable.



**3.57 Helmets:** All competitors must always wear a protective full-face helmet at all times during racing, eliminations, time trials or practices. Each helmet must comply with the relevant standards for the level of competition. All helmets covered by the relevant IHRA NZ accepted standards will be accepted for 10 years from the date of manufacture where a date of manufacture is listed, regardless of standard date, or 10 years from the standard date for helmets produced without a date of manufacture. Where it can be established that a face respirator is necessary, such as funny cars or methanol burning sedans, an open face helmet meeting the relevant SNELL standard for the class/performance will be accepted as will full faced helmets with built in respirators be accepted. No cameras to be fitted to helmets on bikes.

#### **EJECT HELMET REMOVAL SYSTEMS**

All 4 wheel categories exceeding 6.50 ET 1/4 MILE (4.15 1/8 MILE). Eject Helmet Removal System (Part Number 890-01-30) Recommended, mandatory from 1<sup>st</sup> July 2025. must be installed per manufactures instructions.  
A Stand 21 Lid Lifter head sock meeting SFI 3.3 or FIA 8856-2000 may be used in lieu of the Eject Helmet Removal System.

Any Motorcycle running quicker than 7.50 ET 1/4 mile (4.75 ET 1/8 mile). Eject Helmet Removal System (Part Number 890-01-30) Recommended, mandatory from 1<sup>st</sup> July 2025. must be installed per manufacturer's instructions. A Stand 21 Lid Lifter head sock meeting SFI 3.3 or FIA 8856-2000 or any approved / equipped EQRS (Emergency Quick Release System) helmet may be used in lieu of the Eject Helmet Removal System.

All Group One, two and three sedans, Altereds, funny cars and dragsters quicker than 10.00 seconds (1/4 mile) 6.50 seconds (1/8 mile) must have the following helmet, SNELL SA2015, SAH2015, SA2020 SAH2020 SFI 31.1 or SFI41.1

Group Two and three sedans, Altereds, funny cars and dragsters quicker than 11.00 seconds and slower than 10.00 seconds must have the following helmet, SNELL SA2015, SA2020, M2015, M2020 SFI 31.1 or SFI41.1

Cars slower than 11.00 seconds, any open or full face (no Motocross helmets) helmet meeting one of the following standards: SNELL SA2015, SA2020, M2010, M2015, SA2020 SFI 31.1, SFI41.1, AS/NZS 1698:2006, AS or NZS 1698 or European Standard (R22); 'E' Mark, 02, 03, 04 or 05 series

Motorcycles with ET quicker than 10.00 seconds: SNELL M2015, M2020, SA2010, SAH2010, SA2015, SAH2015, SA2020, SAH2020 SFI 31.1, SFI41.1 or European Standard (R22) 'E' Mark, 05 and 06 series helmets.

Motorcycles with ET slower than 10.00 seconds: SNEL M2015, M2020, SA2015, SAH2015, SA2020L, SAH2020 SFI 31.1, SFI41.1, SFI41.1, AS/NZS 1698:2006, AS or NZS 1698 or European Standard (R22); 'E' Mark, 02, 03, 04 or 05 series

Junior Dragster: SNELL M2015, M2020, SA2015, SAH2015, SA2020, SAH2020 SFI 31.1, SFI41.1, SFI41.1, AS/NZS 1698:2006, AS or NZS 1698 or European Standard (R22); 'E' Mark, 02, 03, 04 or 05 series

#### **3.58 Jacks & Jack stands**

No work may be done under any car in the pit area while the car is supported by only one jack. Additional devices such as jack stands are mandatory to provide additional protection in the event of jack failure. Engines may not be running while driving wheels are raised off the ground unless supported by adequate jack stands, which must be constructed to provide adequate ground clearance with full tyre growth of the rear tyres. Failure to observe this rule is grounds for immediate disqualification.

#### **3.59 Parachutes**

A braking parachute produced by a recognized drag racing parachute manufacturer required on all cars exceeding 150 mph (130mph if only two wheels braked). All cars exceeding 200 mph must have two parachutes, both operational. Chutes must be fit for purpose and installed as per the manufacture's recommendations re: vehicle weight, speed and mounting.

Inspection – Chutes will be inspected for worn or frayed shroud lines, ripped or dirty canopies and worn or ragged pilot chutes.

Mounting – Parachute cable housings should be mounted solidly to frame tube or another suitable member. The release housing must be attached within 300mm of the parachute pack and in a manner that will allow the inner cable to release the chute. Drag chutes must have their own independent mounting. The use of quick pins and carabineers for chute mounting prohibited. All chute shroud-line mounting points must have minimum 1 inch diameter sleeve to spread load. Dual parachutes applications require separate shroud-line mounting points for each parachute system.

Parachute pins – In all cases where parachute/s are fitted, a clearly visible, brightly coloured ribbon/flag must be attached to any safety pins or devices used to prevent opening of the parachute/s. **ALL CHUTE PINS MUST BEFORE APPROACHING THE WATER TROUGH, FAILURE TO REMOVE CHUTE PINS BEFORE APPROACHING THE WATER TROUGH CAN LEAD TO DISQUALIFICATION AT THE STARTERS DISCRETION.**

Protection – On any fuel-burning car, it is mandatory that the parachute pack and unpacked shroud lines be protected with fire-resistant material. Recommended on all other parachute packs.

### 3.59:1 Electrimotion Safety Shutoff System

Any vehicle running 6.50 over the ¼ mile or quicker, any vehicle 210mph or faster, it is mandatory to have an Electrimotion Safety system fitted, with the following functions: Fuel Shutoff, Ignition Shut Down and Parachute release. Devices must be functional and to be fitted as per the Electrimotion instructions, **the device must be fitted in a way that the testing indicators are visible for inspection.** The use of a driver activated momentary button to override the Electrimotion Safety shutdown system may **NOT** be fitted. It is highly recommended that any vehicles quicker than 7.00 sec or 190mph have this system fitted.

### 3.60 PROTECTIVE CLOTHING:

The wearing of protective clothing is compulsory at all times during racing, time trials or practice. One or two-piece driving suits are acceptable in all levels of competition. Minimum protective clothing requirements for each type of vehicle are listed below. No racer is discouraged from using equipment to a higher level than the minimum requirement.

**\*\*Please note: the addition of wearing under wear meeting SFI 3.3 will be accepted as bringing your suit up to the next protection level.**

SFI Rating	TPP Value	Time to 2nd Degree Burn
3.2A/1	6	3 Seconds
3.2A/3	14	7 Seconds
3.2A/5	19	10 Seconds
3.2A/10	38	19 Seconds
3.2A/15	60	30 Seconds
3.2A/20	80	40 Seconds

#### **Funny Car (Alcohol & Nitro), Top door Slammer, Supercharged Enclosed Composite Body quicker than 9.00, Front Engine Top Fuel Dragster or Fuel Altered.**

Drivers Suit meeting SFI 3.2A/20 as a minimum\*\*

Shoes/Boots meeting SFI 3.3/15 as a minimum

Gloves meeting SFI 3.3/15 as a minimum

Balaclava meeting SFI 3.3 or helmet skirt meeting SFI 3.3/10 as minimum

Underwear meeting SFI 3.3 recommended but not mandatory.

Socks meeting SFI 3.3 recommended, Flame resistant mandatory.

#### **Top Alcohol Dragsters/Alteredes, Steel Body Supercharged Group 2 classes with fabricated firewall, Rear engine Top Fuel Dragster**

Drivers Suit meeting SFI 3.2A/15 as a minimum\*\*

Shoes/Boots meeting SFI 3.3/15 as a minimum

Gloves meeting SFI 3.3/15 as a minimum

Balaclava meeting SFI 3.3 or helmet skirt meeting SFI 3.3/10 as minimum

Underwear meeting SFI 3.3 recommended but not mandatory.

Socks meeting SFI 3.3 recommended, Flame resistant mandatory.

#### **All other supercharged Competition, SCO & Modified, any Supercharged Sedan under 8 seconds.**

Drivers Suit meeting SFI 3.2A/15 as a minimum\*\*

Shoes/Boots meeting SFI 3.3/5 as a minimum

Gloves meeting SFI 3.3/5 as a minimum

Balaclava meeting SFI 3.3 or helmet skirt meeting SFI 3.3/10 as minimum

Underwear meeting SFI 3.3 recommended but not mandatory.

Socks meeting SFI 3.3 recommended, Flame resistant mandatory.

#### **Naturally aspirated Competition & Modified, any Sedan quicker than 10.00 seconds, Supercharged Enclosed Composite body slower than 9.00 seconds.**

Drivers Suit meeting SFI 3.2A/5 as a minimum\*\*.

Shoes/Boots meeting SFI 3.3/5 as a minimum.

Gloves meeting SFI 3.3/5 as a minimum.

Balaclava meeting SFI 3.3 on supercharged vehicles mandatory.

Underwear meeting SFI 3.3 recommended but not mandatory.

Socks meeting SFI 3.3 recommended, Flame resistant mandatory.



### **Sedans slower than 10.00 seconds and quicker than 11.00 seconds**

Drivers Suit meeting SFI 3.2A/1 as a minimum  
Enclosed Shoes and socks as a minimum

### **Sedans slower than 11.00 seconds**

Enclosed Shoes and socks as a minimum

### **Junior Dragsters**

All drivers are required to wear a minimum of a fire-resistant overalls, shoes, socks, gloves and full-face helmet, Competitors running 8.89 or quicker must utilize a minimum of a driver's suit meeting SFI Spec 3.2A-1 in addition to the above requirements.

### **Neck Collar**

All cars running 9.99 or quicker or exceeding 150 mph unless required in class regulations.  
Recommended for all vehicles were full harness seat belts required.

### **Frontal Head Restraints**

Any driver of a car running faster than 200mph or 7.99 requires the use of a proprietary Frontal Head Restraint system meeting either SFI 38.1 or FIA 8858-2002 or FIA 8858-2010. The Frontal Head Restraint (**Hans devise or similar**), when connected, must conform to the manufacturer's instructions. Highly recommended for any car running faster than 150mph, a Frontal Head Restraint may be used with or without or in place of a neck collar. Where required, the fitment of tether post and eyelets to helmets must only be done in accordance with the manufacturer's guidelines and only if the helmet is approved for the purpose. When using a Frontal Head Restraint, at all times that the driver is in the race vehicle, from when the vehicle is in the hands of the Starter until the vehicle is on the return road, the driver must properly utilise the Frontal Head Restraint, including connecting the helmet as required for full functionality of the device.

### **3.61 Roll bars:** (For cars that retain standard floor pan to B pillar)

**Please Note: Modern Street Cars excluded see section 2.12.**

Roll bar/cages are required as follows:

(a) For all open cars under 13.00 and those running slicks a minimum 4-point roll bar required.

(b) Vehicles under 12.0 seconds where monocoque construction has been modified as follows: 11.99 seconds to 11.00 se, 4-point minimum roll bar

All Vehicles under 11.0 seconds as follows:

(ii) 10.99 seconds to 10.00 sec 5-point minimum roll bar

(iii) 9.99 seconds and quicker 6-point minimum roll cage

All tubing shown except "A" must be 1 3/4" OD X .118" wall thickness mild steel or 1 5/8 .083 thou Chrome Moly.  
"A" maybe 1 1/4 OD x.118". (Or metric equivalent)

Dimensions - All roll bars must be within 150mm of the rear, or side, of the driver's head, extend in height at least 75mm above the driver's helmet with driver in normal driving position, and at least as wide as the driver's shoulders or within 25mm of the driver's door. Must be adequately supported or cross braced to prevent forward or lateral collapse of roll bar in case of spin out, collision or upset. Braces must intersect with the roll bar at a point not more than 125mm from the top of the roll bar. 10.99 to 10.00-side bar must be included on driver's side and must pass the driver at a point midway between the shoulder and elbow. All roll bar structures must have in their construction a cross bar for seat bracing and as the shoulder harness attachment point, cross bar must be installed no more than 100 mm below, and not above, the driver's shoulders or to side bar.

Material - Low carbon (mild) steel tubing is recommended for all types of roll bar construction. Braces must be of same diameter and wall thickness as the roll bar. All chrome moly welding must be done by approved TIG Heliarc process; mild steel welding is recommended to be MIG or TIG. Welding must be free of slag and porosity. Flush grinding welds prohibited. Due to variations in wall thickness of drawn tubing competitors are recommended to make allowance in construction, (e.g., 3.2mm wall in preference to 3.0mm minimum).

Mounting - Roll bar must be fully welded or fastened to the frame or frame structure; if car has no frame, a 150 x 150 x3 mm steel plate (or a different configuration of the same area) welded to floor, or top and bottom of floor securely bolted together with at least four 10mm bolts and nuts.

Motorsport homologated roll cages will be accepted for one off event's down to 10.00 seconds where the original monocoque integrity of the vehicle has not been impaired and proof of current homologation and MSNZ logbook is produced. If a racer wants to race more than one event, they must have a current homologation and MSNZ logbook, an engineer certificate stating the MSNZ cage is as strong or stronger than an IHRA NZ roll bar and have a IHRA NZ tech and licence, they will be limited to 10.00.





### 3.62 Roll Cage

All cage structures must be designed to protect the driver from any angle, 360 degrees. (See illustration 2)

Dimensions – On all full tube cars and recommended for all other roll cages, when driver is in driving position if helmet is forward of main hoop a helmet bar is required, if no part of the helmet is located forward of the main hoop, then a funny car cage with minimum four points of attachment must be used.

The side bar must pass the driver at a point midway between the shoulder and elbow, (passenger side bar required). All roll cage structures must have in their construction a cross bar for seat bracing and as the shoulder harness attachment point, cross bar must be installed no more than 100 mm below, and not above, the driver's shoulders or to side bar.

Material – It is recommended that all cage welds be gusseted. All chrome moly welding must be done by approved TIG Heliarc process; mild steel welding is recommended to be MIG or TIG. Welding must be free of slag and porosity.

No tubing will be accepted as Chrome-moly that does not bear the 4130 markings. Reynolds 531 tube may be used in place of chrome-moly, proof of tubing specification required in all cases. Japanese Moly substitute will not be accepted. Due to variations in wall thickness of drawn mild steel tubing competitors are recommended to make allowance in construction, (e.g., 3.2mm wall in preference to 3.0mm minimum).

#### Removable Cages / Bars:

All vehicles quicker than 10.00 must have a fully welded cage.

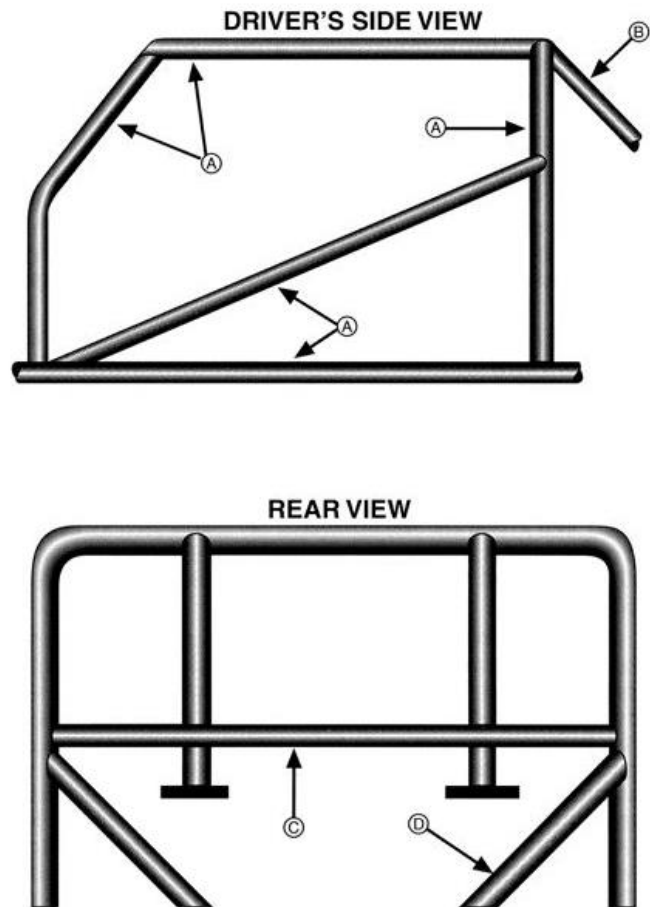
Any vehicles built and under construction prior to 01-07-2024 with a bolt in cage may run no quicker than 8.50,

No vehicle quicker than 8.00 may have removable intrusion bars.

All cage bar joins must use drag racing approved, commercially available parts OR must be submitted to the IHRA NZ technical team for approval

## FULL-BODIED CARS

8.50 seconds E.T. and slower



All cars with an OEM frame must have roll cage welded to frame.

B- If A, two bars any length.

If B1, two bars, 30" or less.

If B2, minimum 4 bars.

If B3, minimum 6 bars.

D- 1 1/4" x .058" cm or .118 ms, mandatory when main hoop welded to plates on floor, must be connected to sub frame.

\* Door diagonals may be substituted with an "X" brace of 1-1/2" by .065 CM or .118 MS.

Tubing Code			
	O.D.	C.M.	M.S.
A	1 5/8	.083	.118
B-1	1 1/2	.058	.118
B-2	1 3/8	.049	.118
B-3	1 1/4	.049	.118
C	1 1/4	.065	.118
D	1 1/4	.058	.118
CM	Chrome Moly		
MS	Mild Steel		

### 3.63 Safety Harness –

All competition vehicles requiring a roll bar or cage, or as outlined by class requirements, must use an SFI Spec 16-1 (SFI 16.5 highly recommended) driver restraint system. All cars not required by class requirements to use SFI 16.1 driver restraint system must be equipped with an accepted quick release-type driver's seat belt. SFI belts with 2inch shoulder belts to better fit a Frontal Head Restraint system permitted. Juniors permitted 50mm shoulder harness.

Mounting - Shoulder harness must be securely fastened to the frame, cross member, or reinforced mounting of the vehicle so that the fittings are in direct line with the direction of the pull and installed to limit driver's body travel both upward and forward. Seat belts may not be wrapped around lower frame rails. Under no circumstance are bolts inserted through belt webbing acceptable for mounting. For harness installation, see drawing.

Any mounting through light panelling such as a stock floor panel is inadequate and will not be permitted without further reinforcement. Where belt fasteners are mounted through such panelling, a plate of no less than 2500 sq. mm x 6 mm thickness (2 sq." x 1/4") per mounting must be inserted between the outer face of the panelling and belt fastener.

All corners and edges of the reinforcing plates must be radiused.

Mounting shall be accomplished with a minimum of grade 8.8 metric (grade-5 imperial) bolts at a diameter recommended by the belt manufacturer or 12 mm (7/16") where no recommendation exists.

Shoulder harnesses must be mounted in a manner to prevent them slipping off the shoulders.

All points of the seatbelt must be connected in the designed manner at all times when in use and each belt adjusted to give constant firm support to the wearer.

Belts must be maintained in good condition and discarded at any sign of belt fraying, nicks or cuts. Any belt deterioration or loss of material colour due to over exposure to sunlight or corrosive chemicals also mandates full replacement.

All latching and mounting hardware to be maintained in perfect operating condition.

Specification - Driver restraint system must be clearly labelled and dated by manufacturer. System must be updated at five-year intervals from date of manufacture. (Later belts that do not have date of manufacture label may be used for 3 years after the expiry date on the label) All seat belt and shoulder harness installations must be mutually compatible, originally designed to be used with each other.

Installations NOT allowed where the harness is sewn, fastened or where seat belt is fed through loops in the harness. Only those units that release all four / five attach points in one motion are accepted.

### 3.64 Window Net –

All cars running under 11.0 seconds (**excluding Modern Street Cars**) having doors and a roll cage must be fitted with an accepted window net attached to the inside of the side bar and the inside of the top bar of the roll cage at driver's window. Net must be permanently attached at the bottom. The top may be clipped at each end to eyebolts or seat belt type fastener and must be releasable by the driver and crash crew. The use of dog clips or hose clamps not allowed. In lieu of window nets, arm restraint on door side is acceptable. (Refer arm restraints 3.51 for all open vehicles).

## 4.0 DISQUALIFICATION & JUDICIAL PROCEDURES

### Procedural Protests & Disqualifications

The Race Director or Technical Committee present at a meet shall have authority to disqualify any organization, automobile, or participant from a meet. Officials and the Association shall have the right to publicize any disqualification. Disqualified participants, organizations or manufacturers shall have no legal or equitable right of action against officials of the Association for publicizing notice of disqualification. Aggravated cases of flagrant violations shall be reported by the Race Director or Technical Committee to a three-man Executive Committee appointed by the Board.

The Executive Committee shall have authority to suspend or expel permanently. Authority to suspend or expel is not confined to rule infractions which may occur during a race but is extended to cover any and all infractions on or off a drag strip. Any suspended or expelled party may appeal to the Executive Committee within 30 days after the rendering of a penalty and must fully set forth the facts of the case. A non-refundable filing fee of \$500 must accompany all appeals. All appeals must be submitted to IHRA NZ in writing. The appeal must contain specific information pertaining to the process and the reason for consideration of reinstatement. IHRA NZ shall determine in its sole discretion if an appeal is to be granted. If an appeal is granted, the hearing must be conducted in the MDI office in Pukekohe. IHRA NZ shall determine the parties that shall be allowed to participate in the appeals process and reserves the right to not permit parties that are not directly related to the case.

### Protest Procedure on Race Days

- i. The complaint must be laid officially (\$200 protest fee applies) by the driver (not crew chief or team member, a Junior Dragster driver may have one parent or guardian present). We will not accept complaints from a crew member. Protest forms are available from the Area Steward.
- ii. A statement must be attained from both/all drivers on neutral ground (generally the Pit Tower or base of the Main Tower) and not in any particular drivers Pit space.
- iii. The Starter and/or the Race Director will be consulted if the complaint / dispute involves start line procedures (especially with all rules that state "at Starters discretion") or race rules.
- iv. The Area Steward will be consulted if the dispute/complaint relates to vehicle safety, technical or fuel rules.
- v. The Race Director will be notified immediately of the outcome one way or another so that seedings, ladders etc can be revised if necessary.

### Social Media Policy

This policy sets expectations, obligations and acceptable use practices for consuming and creating social media content.

This policy applies to all staff, racers and crew and will apply even when using personal devices and accounts.

IHRA New Zealand acknowledges the enormous value of social networking applications & websites, such as (but not limited to) Facebook, Instagram, Twitter, Snap chat and Youtube to promote our sport and celebrate the achievements and success of the people involved in our sport.

Social media content, including postings, comments, blogs, status updates and tweets:

- Must not use offensive, provocative or hateful language
- Must not be misleading, false or injure the reputation of another person
- Must respect and maintain the privacy of others and not release information not suitable for public, i.e. internal organisational details or personal details.
- Must not damage the reputation or operations of IHRA New Zealand
- Must not be detrimental to our organisation, reputation or relationships, your relationships with racers, crew or the trust and confidence we have in you

### Breach of this policy

Breaches of this policy will be considered a serious matter.

Employees/racers/crew who do so will be subject to disciplinary action, up to and including termination of IHRA NZ Licence/log book.

Where appropriate, the company will involve the police or other law enforcement agencies in relation to breaches of this policy.

### Grounds for Disqualifications and Rank of Worst Offenses (the lower the number, the worse the offense)

0. Bypassing scales on competition run.
0. Burnouts in the staging lanes or in the pit area, or on return road.
0. Burnouts pass the start line for JD, Super Street and Super Sedan
0. Use of other than proper crewman or driver credential.
0. Displaying advertising for or promoting a product without permission of an MDI official.
0. Use of Alcoholic Beverages by driver, owner, or crewman.
0. Use of any prohibited item e.g., Traction Control/Delay Boxes/NOS unless allowed in class rules, if fitted to vehicle it is deemed that it is being used
0. A Junior Dragster, Teen Racer, Super Street competitor running quicker or faster than permitted with his or her current license/logbook.
0. Fitment or utilization of Traction/slew control unit, e.g., any programmable multi-point rev limiter and/ or a rate of acceleration rpm

limiter, either by themselves or integrated into the ignition systems are prohibited.

0. Refusing an official to view engine/ignition data.

1. Failure to report to staging when called or entering closed staging lanes.

1. Loose or illegal ballast after a run will be suspended from the event.

1. Leaving race car after approaching starting line, leaving car unattended at starting line, bleach box, or staging area.

1. Refusal to submit to engine inspection by MDI/IHRA officials.

1. Any modifications or change to the wheelbase, engine displacement, carburetion, body, heads, etc., after Technical inspection is grounds for immediate disqualification.

1. Refusing an official re-run.

1. Running a vehicle on the track before the vehicle has been approved by tech director at an event.

1. Unsportsmanlike conduct, improper language or conduct detrimental to racing.

1. Any condition considered to be unsafe or unfair by the race director and/or the Technical Committee.

1. Utilization or fitment of Delay Box on car.

2. Failure to fire engine in required manner for class of participant.

2. Failure to remove chute pin before approaching the water trough. At Starter's discretion.

2. Losing fire after entire car has crossed the starting line during burn out procedures.

2. Backing into staging beams

3. Touching strip centre line or track fixture, in any situation during measured 1,320 feet (or 1/8 mile) unintentionally. (Except on single run)

4. Neutral start.

5. Touching strip outer marker line or leaving strip surface during measured race unintentionally. (Except on a single run).

5. Excessive braking in handicap eliminators that causes loss of control. If only fire smoke is obvious, a warning may be issued for first offense. This is at the discretion of race director.

6. Foul start on dual competition run.

7. "Breakout" or running under your dial-in on dual competition run.

8. Not crossing the finish line on a dual competition run.

NOTE: In case of equal infractions, the "first" offense will be the loser. The Race Director will determine "first" offense.

NOTE: Items ranked "0" will be given a value by the Race Director depending on circumstances.

NOTE: In dual offense situations, the worse offense is the applicable offense, unless both are equal, then the first offense will be the loser.

NOTE: Should a driver receive a red-light foul start, and the opposing driver crosses the lane boundary line, the latter infraction would prevail and the driver committing the foul start would be reinstated.

## The Quick Reference Chart below should be read with the safety regulations in section 3.0

ET	7.99 & Under	8.00 to 8.99	9.00 to 9.99	10.00 to 10.99	11.00 to 11.99	12.00 to 12.99	13.00 to 13.99
Arm restraints	Yes	Yes	Yes	Yes	Yes	Yes	No
Auto Reverse Lock out	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Competition License	Yes	Yes	Yes	Yes	No	No	No
Drive Shaft Loop	Yes	Yes	Yes	Yes	No	No	No
Electrical Cut off	Yes	Yes	Yes	Yes	No	No	No
Flex Plate Shield	Yes	Yes	Yes	No	No	No	No
Flywheel Shield	Yes	Yes	Yes	Yes	See Regs	No	No
Harmonic Balancer SFI	Yes	Yes	Yes	Yes	No	No	No
Helmet	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Liquid Overflow	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Neck Protection	Yes	Yes	Yes	No	No	No	No
Parachute, over 150mph	Yes	Yes	Yes	Yes	No	No	No
Roll Bar	No	No	No	Yes	See Regs	See Regs	No
Roll Cage	Yes	Yes	Yes	No	No	No	No
Safety Harness 5 point	Yes	Yes	Yes	Yes	No	No	No
Supercharger							
Restraints	Yes	Yes	Yes	See Regs	No	No	No
Tail Light	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Transmission Shield	Yes	Yes	Yes	No	No	No	No
Window Net	Yes	Yes	Yes	Yes	No	No	No
Lower Engine containment	Yes	Yes	See regs	No	No	No	No

## 5.0 DRAG RACING CLASSES

### 5.01 JUNIOR DRAGSTER

The Junior Dragster program is designed to allow youth, as young as 7 years of age and up to 17, the opportunity to race against their peers in near replicas of the models that the Pros drive. Juniors may compete through the race season if they turn 17 after the 1<sup>st</sup> October. If a competitor turns 10 during the season, they may finish the year out in the beginner class.

IHRA Junior Dragsters are restricted to competition in half-scale cars over a distance of 1/8 mile. The competition structure is designed to be conducted on an ET dial-your-own format.

Functional taillight mandatory on all entries. A photocopy of every competitor's birth certificate or Passport must accompany all new license applications.

Competitors must make 6 passes to obtain or upgrade IHRA license. (2 launches, 2 half-track and 2 full passes within ET range for respective license).

Qualifying: Best non red reaction time. Should a driver run outside of the allowed ET for their class in a qualifying pass, their reaction time will still be eligible for qualifying purposes. If the racer has been disqualified for running outside the class E.T (<11.50 in Beginners, <8.50 in Advanced or if they run twice below 7.70 in qualifying or run once below 7.50), they will be removed from all Qualifying data and will not be eligible for qualifying position or points.

Unlimited field sizes running on a .4 Full tree.

Turnaround: 15 minutes from last pairing

#### PLEASE NOTE

**Please be advised that it is the responsibility of Parents/Guardians of Junior Dragster competitors to withdraw your racer/racers completely from any event, where they have run quicker than the allowable ET cut off, as detailed below. If this is not done, a penalty of one meetings suspension will be imposed and any points gained at that event will be forfeited. After the event is completed, all run sheets will be checked, and any team found to have breached this rule will be notified.**

#### CLASS DESIGNATIONS

**BEGINNER:** Age 7 to 9 years only. ET restricted to 11.90 seconds or slower based on ET dial-your-own. Breakout rules apply. In qualifying one warning will be issued if a competitor runs quicker than 11.70. If the competitor does this a second time, they will be disqualified from the event. If the competitor goes under 11.90 during eliminations they will be disqualified, if both competitors in the same race go under 11.90, they will both be disqualified. Any competitor running quicker than 11.50 at any time will be disqualified for the remainder of the event.

**ADVANCED:** Age 10 to 17 years. Class based on dial-your-own ET. ET restricted to 8.90 or slower. Breakout rules apply. In qualifying one warning will be issued if a competitor runs quicker than 8.70. If the competitor does this a second time, they will be disqualified from the event. If the competitor goes under 8.90 during eliminations they will be disqualified, if both competitors in the same race go under 8.90, they will both be disqualified. Any competitor running quicker than 8.50 at any time will be disqualified for the remainder of the event.

**MASTER:** Age 12 to 17 years. Must meet all requirements for Advanced **PLUS: minimum 12 months racing mandatory.** The competitor must provide documentation of experience and submit it with all license applications. Licensing by IHRA or Track official after 3 approved runs between 7.90 and 8.90. Rack & pinion steering, and steel brake lines are mandatory. ET 7.90 or slower; maximum speed of 85 mph: In qualifying one warning will be issued if a competitor runs quicker than 7.70. If the competitor does this a second time, they will be disqualified from the event. If the competitor goes under 7.90 during eliminations they will be disqualified, if both competitors in the same race go under 7.90, they will both be disqualified. Any competitor running quicker than 7.50 at any time will be disqualified for the remainder of the event.

Due to the radical combinations available for the class additional safety requirements may be mandated if deemed necessary by the technical department.

#### REQUIREMENTS AND SPECIFICATIONS

**BODY:** Body and cowl must be structured of aluminium or fiberglass and extend forward to firewall. Driver compartment, frame structure, roll cage, and body must be designed to prevent driver's body or limbs from making contact with wheels, tyres, exhaust system, or track surface. Front overhang cannot exceed 15", measured from centreline of front spindle to most forward point of car. Body panels must be removable fastened to tabs welded to frame. Drilling of frame for mounting body prohibited.

FUNNY CARS are acceptable providing design has been approved by the IHRA technical department prior to competition. Additional safety requirements may be imposed based on design characteristics. Contact the IHRA Technical department for specific details. Maximum Front overhang 25", Minimum height (roof) 35", Maximum Height (roof) 40", Minimum Roof hatch opening 15" x 10".

**BURNOUTS:** One Burn and one pull back is allowed before the competitor must move forward under their own power and stage, (note a dry hop is not a burn out) Vehicles cannot be held in place or touched by a parent or crew member during the burnout. Vehicles are not permitted to burnout past the starting line. The maximum time allowed for the burn and to pre stage is one minute. The one-minute period starts when the starter gives the order to fire/start your vehicles. The one-minute period applies even if one competitor pre-stages immediately. It will be the starters responsibility to enforce these requirements.



**DIAL-INS:** The driver and crew are responsible for the accuracy of their dial-in. Dial-ins must be within class and performance limits. Any dial-in below allowable limits will have to be changed to an allowable dial-in before staging. Dial-ins, and Competition Numbers must be at least 150mm tall and clearly posted on both sides of the car, and visible from the control tower.

#### **DRIVER**

The driver must remain in the confines of the roll cage at all times and safety equipment may not be removed until the vehicle has come to a complete stop off the racing surface.

**ARM RESTRAINTS:** Mandatory. Must be worn and adjusted in such a manner that driver's hands and/or arms cannot be extended outside of roll cage and/or frame rails. Arm restraint shall be combined with the driver restraint system such that the arm restraints are released with the driver restraints. Refer to manufacturer for instructions.

**CREDENTIALS:** Valid IHRA Competition Certificate and IHRA Jr. Membership mandatory.

**HELMET:** See Safety regulations

**NECK RESTRAINT:** Mandatory, a neck restraint/system meeting SFI 38.1 or FIA 8858-2010, this system may be used with or without a neck collar' if the device is used without a neck collar, a head sock/balaclava or skirted helmet is mandatory.

**PROTECTIVE CLOTHING:** All drivers are required to wear a minimum of a fire-resistant overalls, shoes, socks, gloves and full-face helmet. Competitors running 8.89 or quicker must utilize a driver's suit, minimum of SFI Spec 3.2A-1 in addition to the above requirements.

**RESTRAINT SYSTEM:** SFI 16.1 certified Five-point minimum, 1 3/4" wide minimum driver restraint system mandatory. All seat belt and shoulder harness installations must be mutually compatible, originally designed to be used with each other. Only those units that release all five attachment points in one motion permitted. All harness sections must be mounted to the frame cross member, or reinforced mounting, and installed to limit driver's body travel both upward and forward. Wrapping of belts around frame rail prohibited. Under no circumstances are bolts to be inserted through belt webbing for mounting.

#### **DRIVETRAIN**

**CHAIN/BELT GUARD:** All cars must be equipped with a guard to cover the width and at least the top run to the centre line of the sprocket of any chains or belts. Guards must be minimum 3mm steel, or aluminium, and must be securely mounted, no tie wraps. Moving engine/drive train parts must be protected by frame rails or steel or aluminium guards to avoid unintentional contact.

**CLUTCH:** All cars must be equipped with a dry centrifugal-type engine clutch. Chain or belt drive only. Axle clutches prohibited.

**FLYWHEEL:** Aftermarket billet flywheel mandatory unless OEM type carburettor is used. Cast aluminium flywheel prohibited. Modification to stock units other than keyway modifications is prohibited.

**TRANSMISSION:** Beginner not allowed. Gear-type with RPM Shifters and torque converter belt assembly units allowed. for Advanced and Masters

**BRAKES & SUSPENSION:** Two-wheel hydraulic steel drum or disc brakes, Steel brake lines mandatory on 8.89 or quicker. No part of lines may run below bottom frame rails. Drilling of brake components prohibited. Live axle may have brakes on one wheel only if 7" minimum go-cart disc brake is used.

#### **ELECTRICAL**

**IGNITION SHUTOFF:** A positive ignition shutoff switch, within easy reach of the driver, mandatory. A second shutoff switch on the centre top portion of the deflector plate within easy reach of the crew or race official mandatory. FC additional switch must be on the upper rear drivers' side of the vehicle labelled as to function.

**TAILLIGHT:** Functional taillight mandatory. It must be visible from the rear of the car.

#### **ENGINE**

**ENGINE:** Beginner: Maximum of 125 cc engine or Stock 5HP (210cc) Briggs & Stratton engine or equivalent Honda, Robin, Tecumseh etc. Advanced and Master: Maximum of 250 cc engine or Briggs & Stratton engine or equivalent Honda, Robin, Tecumseh etc. as per IHRA rules.

No Supercharging / turbo / NOS allowed.

**FUEL:** Gasoline or alcohol only. Nitrous oxide and/or nitro methane and/or propylene prohibited in all classes. Fuel tank must be behind driver's compartment and securely mounted within frame rails. Maximum capacity of Four Litres', must have screw-on or positive locking cap. All vents must be routed downward, away from driver and extend beyond the bottom of the fuel cell. No vented fuel caps permitted, except on Briggs & Stratton or Tecumseh stock tanks.

**OIL SYSTEM:** Oil additives for the intent of producing power prohibited.

**IGNITION:** Positive ignition shut off within easy reach of driver, mandatory. It is highly recommended that a second separate ignition shut off switch is fitted outside of drivers compartment within easy reach of crewmember or race official and must be clearly labelled on/off.

#### **FRAME**

**BALLAST:** Must be secured to frame with a minimum of one 3/8 bolt per 5 pounds.

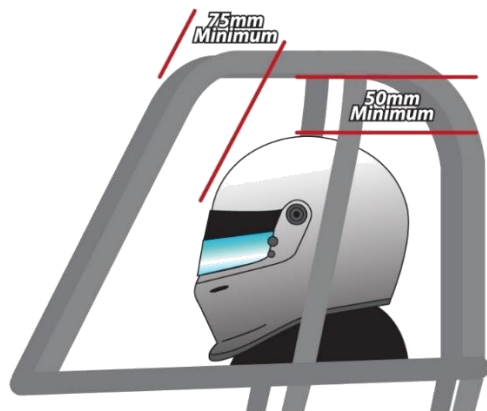
Hose clamps / ties wraps/ etc may not be used to attach ballast to the entry. No ballast may be installed on the vehicle higher than the top of the rear tyres.

**CATCH CANS:** and lines must be securely fastened.

**DEFLECTOR PLATE:** A deflector plate of a minimum 1/16" aluminium must be installed between roll cage and engine extending from lower frame rail to the top and width of driver's helmet. Carbon fibre prohibited.

**GROUND CLEARANCE:** Minimum three (3) inches front of car to 12 inches behind centreline of front axle. (2) inches for remainder of car.

**ROLL CAGE:** Mandatory five-point roll cage. Upper frame rails-minimum 1 1/8" diameter by .083. Diagonals-minimum 3/4" by .083". Uprights in driver's compartment must be spaced 20" or less. Must conform to standard dragster configuration as outlined elsewhere in this guide. Mild steel chassis prohibited in the Master classification. Note: cm may be used in place of .083 ms  
Chassis Sizing, Existing beginner vehicles with 1-inch rails and roll cages have a speed and ET limit of 13.90 or 50mph as long as they pass the helmet front and top clearance rules.



**SHEET METAL:** Driver compartment interior must be aluminium, steel or fiberglass. Magnesium prohibited.

**STEERING:** All components must have a positive through-bolt or welded connection. All rod ends must be of aircraft quality or better, and they must have a bolt through with lock nut or drilled and cotter keyed. Steering must also have washers on bolts to keep rod ends from pulling through. Minimum spindle diameter is 1/2".

**WHEELBASE:** Dragsters Minimum 2.1m. Maximum 3.8m on long side. Maximum 50mm wheelbase variations from left to right. Funny Cars 70" to 95", Roadsters 65" to 95, (2" variation maximum).

#### INTERIOR

**SEAT:** Properly braced and supported seat constructed of aluminium or fiberglass mandatory.

**UPHOLSTERY:** Optional.

#### RESTARTS

After initial start-up, one chance will be given to restart the car within a reasonable time at the Starter's discretion. The crew person should keep the Starter close by in case it's needed. Push starting any vehicle is prohibited.

#### STAGING

Once an entry reaches the front of the staging lanes for a run, it must be prepared to fire and race. In order to be a legitimate race winner, the competitor must start and self-stage the vehicle under applied power. This rule also applies to single runs. All competitors will be given reasonable time to re-fire their entry, provided it is not pre-staged.

The amount of reasonable time is determined by the Starter. Crew members are prohibited from touching the vehicle after it is pre-staged. Crew members touching the vehicle once it is pre-staged will be disqualified.

**STAGING:** "Auto Start" will be used in all classes at all IHRA events. Once both cars are pre-staged and the first car fully stages, the second car has a predetermined amount of time (15 seconds) to stage before the tree is automatically activated. This predetermined amount of time is referred to as "Time Out". If the second car fails to stage before the system "Times Out", it will be given a red light. If either car rolls deep after "Auto Start" has been activated, the competitor accepts the deep staging and will not be pulled back.

**"Courtesy Staging"** is mandatory at all Junior events in all categories. If a competitor unintentionally lights both bulbs before the opponent stages, the Starter will pull the vehicle back and allow to re-stage. This is considered a "pull back" and will only be permitted one time. The Starter has full control and is the only one who may pull back a car whether it is pre-staged, staged or over-staged.

**DEEP STAGING:** Is allowed but not guaranteed. The auto start system will be activated when both cars are pre-staged, so if you are staging deep, you should do it in a timely fashion.

Crew member may assist the entry in the pre-staging of the vehicle. Once the entry is pre-staged, crew members must be behind the vehicle and out of both competitor's view. Pull Backs in the case of over staging are permitted one time if time permits. If the AutoStart system cycles during the pull back, the run will stand.

THE FINAL STAGING MOTION, USING APPLIED POWER, MUST BE IN A FORWARD MOTION GOING FROM PRE-STAGE TO STAGE.

#### SUPPORT GROUP

**COMMUNICATIONS:** 2-way communication of any kind is prohibited. The use of any handheld portable device such as an MP3 player or iPod is also prohibited on racetrack or any time the competitor is seated in the vehicle.

**DELAY BOXES:** Prohibited. If fitted it is deemed to be used.

**DATA RECORDERS:** Permitted. May be utilized to record engine RPM, cylinder head and exhaust temperature. No sensor of any type may be used on the front wheels or spindles. All data recorders and related components including switches, push buttons and wires must be located outside of the driver's compartment and isolated from the drivers view. Data recorders may only be activated by a crew member and must be done before the entry Pre-Stages. The units may not display any information to the driver or remote location. A tachometer that incorporates download capabilities is classified as a data recorder.

**GAUGES:** Engine and Cylinder head temperature gauges are permitted. A tachometer is also permitted.

**STAGING DEVICES:** Mechanical, hydraulic, electric, or pneumatic staging systems prohibited.

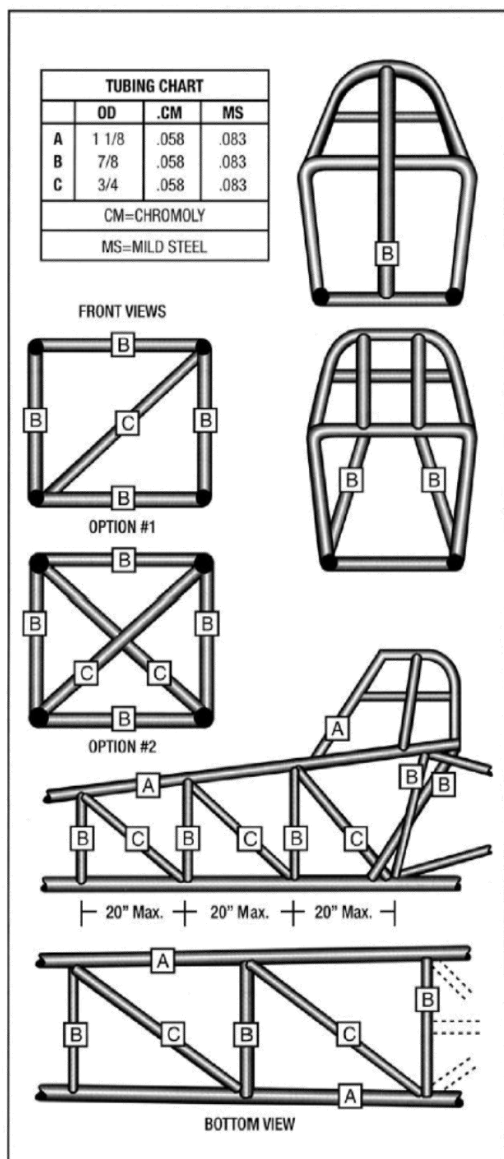
#### **TYRES & WHEELS**

**TYRES:** Rear tyres; 18" diameter x 7 1/2" wide minimum, measured at widest or tallest point. All front tyres must have a manufacturer's maximum inflation rating. Tyres may not be inflated above manufacturer's rating. All tyres must be pneumatic. No solid tyres. Treatment of tyres in the lanes, burnout area or starting line is not permitted and tyre covers must be removed prior to leaving the head of staging area.

**WHEELS:** Front wheels, five-inch diameter minimum with a minimum spindle diameter of 1/2". Front spindle must be able to retain a cotter pin, or use a nylon locking-type nut, rear wheels, eight-inch diameter minimum. No modifications allowed to any wheels.

#### **TOWING**

Tow vehicles if used must be in the form of a golf cart or four-wheel support vehicle, if the vehicle doesn't have a roof all occupants must have a helmet on. Full-size tow vehicles prohibited. Driving of Jr. Drag on the return road is allowed up to the JD pits, driving a vehicle through pits is prohibited. Tow vehicle to be operated "ONLY" by a person that is 14 years of age or older. Any time a Jr. Drag Racing vehicle is being towed or on a tow frame the driver must be seated in the cockpit. No passengers. The tow strap may not be attached to any point of the roll cage. It is recommended that all entries utilize a fluorescent or brightly coloured flag attached to the entry any time the vehicle is being towed. Minimum height of flag is five feet.



## 5.01a JUNIOR DRAG BIKE

All to be read in conjunction with general racing rules/Junior dragster and competition bike rules 5.11. The Junior Drag Bike program is designed to allow youth, as young as 8 years of age and up to 17, the opportunity to race against their peers in near replicas of the models that the Pros ride. Juniors may compete through the race season if they turn 17 after the 1<sup>st</sup> October. IHRA Junior Drag Bikes are restricted to competition over a distance of 1/8 mile with a minimum et of 8.5 seconds. If a rider goes under 8.5 during qualifying, they will get one warning, the second time during qualifying they will be put on the trailer, if a rider goes under 8.5 seconds during eliminations they will be disqualified, if both riders in the same race go under 8.5 seconds they will both be disqualified. The competition structure is designed to be conducted on an ET dial-your-own format. Motorcycle must have current IHRA Tech.

Junior Drag Bikes are to race in their own class (if insufficient numbers (4) they can run off the back of the Junior Dragster field), they are not to be paired against any Junior Dragster car.

Functional tail-light mandatory on all entries. A photocopy of every competitor's birth certificate or Passport must accompany all new license applications.

Competitors must make 6 passes to obtain IHRA license. (2 launches, 2 halftrack and 2 full passes).

Qualifying: Best non red reaction time. Unlimited field sizes running on a .4 Full tree. If there is not four bikes, they will race within the Junior Dragster class.

Turnaround: 15minutes from last pairing.Must stage under their own power unaided or will be disqualified. (Licensing runs exempted.)

**Burnouts:** Bikes cannot be held in place or touched by a parent or crewmember during the burnout. Bikes are not permitted to burnout past the starting line.

**Dial-ins:** The driver and crew are responsible for the accuracy of their dial-in. Dial-ins must be within class and performance limits. Any dial-in below allowable limits will have to be changed to an allowable dial-in before staging.

**DRIVER:**

**CREDENTIALS:** Valid IHRA Competition Certificate and IHRA Jr. Membership mandatory.

**HELMET:** See Safety regulations

**PROTECTIVE CLOTHING:** Full leather one- or two-piece zippered Leather suit with knee, elbow and shoulder reinforcement. Full leather boots and full leather gloves with knuckle and palm reinforcement.

**ENGINE:** Maximum of 125 cc engine, No Supercharging / turbo / NOS allowed.

**FUEL:** Gasoline or alcohol only. Nitrous oxide and/or nitro methane and/or propylene prohibited in all classes. Must have an accessible shut off between tank and carburettor. Oil additives for the intent of producing power prohibited.

**IGNITION:** Must be fitted with a positive ignition cut off switch attached to the rider with a lanyard. Cut off must be on low voltage side of ignition circuit. Throttle must be spring return with 2 springs. Push/Pull throttle cable recommended.

**EXHAUST:** any permitted

**DRIVETRAIN:**

**CHAIN/BELT GUARD:** Chain guard must cover top of chain and extend to vertical tangent from rear sprocket. 5mm aluminium or 3mm steel construction.

**TRANSMISSION/CLUTCH:** Any make or model with automatic or manual clutch.

**BRAKES & SUSPENSION:** Two-wheel drum or disc brakes. No part of lines may run below bottom frame rails. Drilling of brake components prohibited. 25mm minimum front fork travel

**FRAME:**

**GROUND CLEARANCE:** Minimum 75mm with rider in position

**FRAMES:** Custom frames permitted or modified OEM. Custom frames must be purpose built and of tubular construction, main frame rail must be minimum of 25mm by 1.6mm wall thickness for double rail or 38mm by 1.6mm wall thickness for single rail. Rider must be able to place both feet flat on the ground and reach all controls.

Steering damper recommended.

Must have rear mudguard or bodywork extending past the rear axle.

Rigid rear end, wheelie bar mandatory.

**TYRES:** Must be motorcycle tyres and suitable for racing.

**Tow vehicles permitted.**

## 5.02 SUPER STREET

This class of racing is intended for street driven vehicles which race on a Dial Your Own handicap racing system. No vehicle is to go quicker than 11.00 seconds over the ¼ mile. If a competitor runs quicker than 11.00, they will get one warning, If the competitor does this a second time at any event, they will be banned from running in Super Street with that vehicle. If a competitor goes under 10.70, they do not get a second warning and are banned immediately. If they wish to compete with that vehicle again it must be teched and raced in Super Sedan. If a competitor goes under 11.00 during eliminations they will be disqualified, if both competitors in the same race go under 11.00, they will both be disqualified.

**Please be advised that it is the responsibility of the competitors to withdraw from eliminations at any event, where they have run quicker than the 11.00 ET cut off. If this is not done, a penalty of one meetings suspension will be imposed and any points gained at that event will be forfeited. After the event is completed, all run sheets will be checked, and any racer found to have breached this rule will be notified.**

Teen racing may be incorporated into this class.

### **BURN OUTS**

**Prohibited to cross the start line during burn outs, one warning given during qualifying, disqualification if Start line crossed during eliminations.** The maximum time allowed for the burn and to pre stage is one minute. The one-minute period starts when the starter gives the order to fire/start burn of your vehicles. The one-minute period applies even if one competitor pre-stages immediately. It will be the starters responsibility to enforce these requirements

Qualifying: Best non red reaction time. Unlimited field sizes running on a .4 Full tree.

Turnaround: 15minutes from last pairing

### **REQUIREMENTS & SPECIFICATIONS**

#### **LICENSE**

All competitors must hold a minimum of a restricted civil driver's licence; if the vehicle is teched the competitor must have an IHRA or recognized Drag Racing Licence

#### **SAFETY EQUIPMENT**

Seat Belts and Helmets and Closed Shoes Mandatory. All rotary powered vehicles must have a 6mm steel bell housing or flywheel shield covering at least 180 degrees of the flywheel/clutch. A SFI flywheel blanket is also acceptable.

#### **TYRES**

It is highly recommended that if your vehicle has radial tyres on the front and you want to fit DOT drag race tyres that radial DOT drag race tyres are fitted to the rear, if your vehicle has DOT race tyres e.g., ET Streets/Quick Times it is recommended that Front Runners are fitted to the front.

#### **VEHICLE**

Must be full-bodied car, Ute, van, or SUV. Vehicle must pass MDI scrutineering and have a current WOF and registration or current tech and logbook. Battery must be secure, and radiator must have a catch can.

DOT drag race tyres allowed with WOF, it is highly recommended that if your vehicle has radial tyres on the front and you want to fit a DOT drag race tyre, that radial DOT drag race tyres are fitted to the rear, if your vehicle has DOT race tyres e.g., ET Streets/Quick Times it is recommended that Front Runners are fitted to the front. Slicks permitted if vehicle has been teched and has roll bar/cage and 5-point harness Electronics prohibited (delay boxes)



## 5.02.1 TEEN RACING (TR)

IHRA has developed a new program for our racers of tomorrow. TR allows youth ages 13 to 17 the opportunity to race in full-bodied street vehicles, with no need to buy a special vehicle. A Co-Driver accompanies the TR on all runs to act as a coach and to join in the fun. The TR program is an inexpensive way for families to get involved in drag racing and another chance for parents to cultivate a close working relationship with their children.

All races are conducted over a distance of 1/4 mile with an ET dial-in format and will compete with Super Street.

In qualifying one warning will be issued if a competitor runs quicker than 2 tenths under their minimum ET. If the competitor does this a second time, they will be disqualified from the event. If the competitor goes under their minimum ET during eliminations they will be disqualified, if both teen competitors in the same race go under their minimum ET, they will both be disqualified. Any competitor running quicker than 4 Tenths of their minimum ET at any time will be disqualified for the remainder of the event.

### PLEASE NOTE

**Please be advised that it is the responsibility of Parents/Guardians of Teen Racer competitors to withdraw your racer/racers completely from any event, where they have run quicker than the allowable ET cut off, as detailed below. If this is not done, a penalty of one meetings suspension will be imposed and any points gained at that event will be forfeited. After the event is completed, all run sheets will be checked, and any team found to have breached this rule will be notified.**

## REQUIREMENTS & SPECIFICATIONS

### CO-DRIVER

The Co-Driver must be the driver's parent, legal guardian, or adult 25 years of age or older and must hold a valid full civil driver's license for more than two years. The Co-Driver must be seated in the passenger seat of the vehicle any time the Driver is in the driver's seat. Co-Driver must drive the vehicle in the pits, into the staging lanes, and on the return road past the time slip booth.

### DRIVER

Youth ages 13 to 14 limited to 17.0 seconds or slower, youths 14 to 15 limited to 16.0 seconds or slower, youths 15 to 17 limited to 15.0 seconds or slower (up until they have achieved a restricted civil driver's license) may be licensed to compete in TR. All runs must be made with an approved Co-Driver (see above). A photocopy of every competitor's birth certificate must accompany all license applications. Both the competitor and Co-Driver must sign entry and indemnity forms. Vehicle owner must also sign forms if not the Co-Driver.

**LICENSE:** All competitors must be licensed by an IHRA Track Official. The licensing procedure includes Vehicle Orientation, a Basic Driving Test, and a minimum of six approved runs, as follows. An Official or Co-Driver must be in the vehicle at all times. To satisfy Vehicle Orientation requirements, licensee must demonstrate familiarity with all of the vehicle's primary controls such as pedals, steering, shifter, lights, etc. Drivers must perform this orientation test for each vehicle entered in competition. Licensee must complete a Basic Driving Test, demonstrating the ability to start the vehicle, select gears, turn, brake, and stop proficiently.

The Official will make one run with the Licensee as a passenger. This will allow the Official to determine the safety and eligibility of the vehicle per Elapsed Time limits, and orient the Licensee to track fixtures, starting line, timing system, return road, time slip booth, etc. If approved by the official the licensee must make a minimum of three (3) approved runs with the Official as co-driver.

The Licensee must then make a minimum of three (3) approved runs with the assigned Co-Driver, witnessed by the Official. If passed, the Official and Co-Driver sign the driver's licence.

Officials will deny a license to a driver they feel cannot handle the vehicle. Driver may only drive vehicle from the staging lanes and on the track. The Co-Driver must drive the vehicle at all other times.

### SAFETY EQUIPMENT

**SEAT BELTS and HELMETS and Closed Shoes:** Mandatory for both driver and Co-Driver.

### VEHICLE

The vehicle must be full-bodied car, truck, van, or SUV. Convertibles, Jeeps, motorcycles and race cars prohibited. Vehicle must pass IHRA scrutineering (a T must be put behind the race number to denote Teen Racing) and a current WOF and registration.

Mufflers and street tyres are mandatory (no ET Streets or Quick Times etc). Electronics prohibited (delay boxes).

Any runs under the minimum ET will result in instant **DISQUALIFICATION**. Sand Bagging is prohibited, one warning will be issued. If a competitor re-offends they will be Disqualified for the remainder of the event, this ruling will be up to the discretion of the track Official.

## 5.03 MODIFIED BIKE

This class of racing is open to street driven motorbikes as well as competition motorbikes which race on a Dial Your Own handicap racing system.

Qualifying: Best non red reaction time. Unlimited field sizes running on a .4 Full tree. If numbers allow class can be split into 2 classes, 10.99 and quicker and 11.00 and slower this is up to the promoter's discretion. Maximum dial in 18.00 seconds.

Turnaround: 30 minutes from last pairing

### BURN OUTS

**Prohibited to cross the start line during burn outs, one warning given during qualifying, disqualification if Start line crossed during eliminations.** The maximum time allowed for the burn and to pre stage is one minute. The one-minute period starts when the starter gives the order to fire/start burn of your vehicles. The one-minute period applies even if one competitor pre-stages immediately. It will be the starters responsibility to enforce these requirements

### REQUIREMENTS & SPECIFICATIONS

#### CLASS DESIGNATIONS

AA/MB -	OVER 900CC SUPERCHARGED/TURBO/NITROUS
A/MB -	OVER 900CC NATURALLY ASPIRATED
BB/MB -	500-900CC SUPERCHARGED/TURBO/NITROUS
B/MB -	500-900CC NATURALLY ASPIRATED
CC/MB -	O-499CC SUPERCHARGED/TURBO/NITROUS
C/MB -	O-499CC NATURALLY ASPIRATED

#### LICENCE

All competitors must hold a minimum of a civil bike driver's licence.

All bikes quicker than 11.00 seconds over the ¼ mile must have a drag racing licence.

All bikes quicker than 10.00 seconds over the ¼ mile must have a drag racing licence and tech inspection.

### SAFETY EQUIPMENT

Bikes quicker than 11.00 seconds or Tched FULL PROTECTIVE BIKE PANTS, JACKET/SUIT, HELMET (as per section 3.57), BIKE GLOVES and BIKE BOOTS extending at least 270mm from the base of the heel.

Bikes slower than 11.00 seconds with WOF and Rego, Lace up foot wear, long pants, jacket and Helmet as per section 3.57 highly recommend FULL PROTECTIVE BIKE PANTS, JACKET/SUIT, HELMET (as per section 3.57), BIKE GLOVES and BIKE BOOTS

#### BIKE

Bikes may be road legal or tched (IHRA or recognized drag racing tech)

## 5.04 SCREAMING EAGLES

This class of racing is intended for **Tched** or street ridden bikes which race on a Dial Your Own handicap racing system with racer return.

Qualifying: Best non red reaction time. Unlimited field sizes running on a .4 Full tree.

Turnaround: 30 minutes from last pairing

### BURN OUTS

**Prohibited to cross the start line during burn outs, one warning given during qualifying, disqualification if Start line crossed during eliminations.** The maximum time allowed for the burn and to pre stage is one minute. The one-minute period starts when the starter gives the order to fire/start burn of your vehicles. The one-minute period applies even if one competitor pre-stages immediately. It will be the starters responsibility to enforce these requirements

### REQUIREMENTS & SPECIFICATIONS

#### LICENCE

All competitors must hold a minimum of a civil bike driver's licence; under 11.00 all competitors must also have a Drag Racing Licence

#### SAFETY EQUIPMENT

As per mod bike

#### TYRES

No slicks allowed.

#### BIKE

Must have a Harley Davidson or Buell based engine, all bikes are to be road bikes with a current WOF and Registration, if running under 10.00 the bike must also have an IHRA or recognized drag racing tech.

No wheelie bars or air shifters (electronic assist) permitted,

## 5.05 SUPER SEDAN

This class of racing is intended for sedan vehicles with no weight breaks which race on a Dial Your Own handicap racing system. No vehicle is to dial in above 10.99 seconds over the 1/4 mile.

Qualifying: Best non red reaction time. Unlimited field sizes running on a .4 Full tree.

Turnaround time is 20 minutes' minimum from last pairing.

### BURN OUTS

**Prohibited to cross the start line during burn outs, one warning given during qualifying, disqualification if start line crossed during eliminations**

### REQUIREMENTS & SPECIFICATIONS

#### LICENSE

All competitors must hold a minimum of a restricted civil driver's licence; and the competitor must have an IHRA or recognized Drag Racing Licence

#### SAFETY EQUIPMENT

For safety requirements please go Safety Regulations section 3.0 and read in conjunction with the Safety Reference Chart.

#### VEHICLE

Must be full-bodied car, Ute, van or SUV. Vehicle must not be centre steer; Pre 32 hot rods must run in Modified.

#### Classes

SS/AA	Supercharged / Turbocharged / Nitrous Sedans with 8 or more cylinders.
SS/BB	Supercharged / Turbocharged / Nitrous 6 cylinder or Rotary Powered Sedans.
SS/CC	Supercharged / Turbocharged / Nitrous 4-cylinder Sedans.
SS/ A	Normally Aspirated Sedans with 8 or more cylinders.
SS/ B	Normally Aspirated 6 cylinder or Rotary Powered Sedans.
SS/ C	Normally Aspirated 4-cylinder sedans.

## 5.06 MODIFIED

This class of racing is intended for Dragsters, Funny Cars, Altereds and pre 35 hot rods (T buckets etc) with no weight breaks which race on a Dial Your Own handicap racing system.

Qualifying is Best non red reaction time. Unlimited field sizes running on a .4 full tree.

Turnaround time is 15 minutes minimum from last pairing.

### REQUIREMENTS & SPECIFICATIONS

#### LICENSE

All competitors must hold a minimum of a restricted civil driver's licence; and the competitor must have an IHRA or recognized Drag Racing Licence

#### SAFETY EQUIPMENT

For safety requirements please go Safety Regulations section 3.0 and read in conjunction with the Safety Reference Chart.

#### Classes

##### Dragsters

AA/MD	Supercharged / Turbocharged / Nitrous with 8 or more cylinders.
BB/MD	Supercharged / Turbocharged / Nitrous 6 cylinder or Rotary Powered.
CC/MD	Supercharged / Turbocharged / Nitrous 4 cylinder.
A/MD	Normally Aspirated with 8 or more cylinders.
B/MD	Normally Aspirated 6 cylinder or Rotary Powered.
C/MD	Normally Aspirated 4 cylinder.

##### Altereds, Funny cars & Hot Rods.

AA/MA	Supercharged / Turbocharged / Nitrous with 8 or more cylinders.
BB/MA	Supercharged / Turbocharged / Nitrous 6 cylinder or Rotary Powered.
CC/MA	Supercharged / Turbocharged / Nitrous 4 cylinder.
A/MA	Normally Aspirated with 8 or more cylinders.
B/MA	Normally Aspirated 6 cylinder or Rotary Powered.
C/MA	Normally Aspirated 4 cylinder.

## 5.07 SPORT COMPACT

This division is restricted to 4, 6 and Rotary powered sedan vehicles, which compete on the NZ National records as an index. Any type of fuel injection/carburettor permitted. Must have the appearance of stock type headlight and taillights in stock location. One operative taillight required.

Qualifying: Closest to or quicker than index. Unlimited field size running on .4 Full Tree. Racing Format: Index racing on national records. Turnaround: 45minutes from last pairing.

### CLASS REQUIREMENTS

#### LICENCE

All competitors must hold a minimum of a restricted civil driver's licence; and must have an IHRA or recognized Drag Racing Licence. These requirements must be read in conjunction with Safety Regulations 3.0 and safety reference chart.

**Pro Import – P/I** Naturally Aspirated, Turbo-charged, Nitrous Oxide or Super Charged engine's only, (maximum 2 power adders allowed) in a full tube chassis in Two-wheel drive or four-wheel drive. Any automotive production type 4-cylinder, 6 cylinder or Rotary engine. Minimum weight breaks based on engine size/capacity.

**Sport Mod – S/M** Naturally Aspirated, Turbo-charged, Nitrous Oxide or Super Charged engine's only, (maximum 2 power adders only). Back halved cars not permitted, must have standard OEM floor pan with Two Wheel Drive or Four-Wheel Drive. Any production type automotive 4-cylinder, 6 cylinder or Rotary engine. Minimum weight based on engine power adder combination. The following restrictions – front upper & lower frame mounting point for strut assemblies must be in factory location. Two Wheel Drive limited to 9" wide slicks / DOT tyres maximum 28-inch diameter. Four Wheel Drive limited to 8.0" wide slicks / DOT tyres.

**Street Import – ST/I** same as the Sport Mod rules with these extra restrictions: Must retain OEM transmission cases, however dog gear sets (performance gear sets) inside OEM transmission cases permitted. Clutch must be used to shift gear. Rear tyres limited to 9 inch wide & maximum 24.5-inch diameter.

#### Minimum Weights - Pro Import – P/I

P/I – A	4 rotor 1090Kg. 2 power adders allowed no weight penalty.
P/I – B	3 rotor 998Kg. 2 power adders allowed no weight penalty.
P/I – C	2 rotor 885Kg. 2 power adders allowed no weight penalty.
P/I – D	6 cylinder or 4 cylinders over 3 litre 1090Kg. 2 power adders allowed no weight penalty.
P/I – E	4 Cylinder under 3 litre 885Kg. 2 power adders allowed no weight penalty.
Note – All weights include driver.	

#### Minimum Weights - Sport Mod – S/M

S/M – B	3 rotor 1100Kg. For second power adder add 90 Kg.
S/M – C	2 rotor 950Kg. For second power adder add 50 Kg.
S/M – D	All 6 cylinder or 4 cylinders over 3 litre 1160Kg. For second power adder add 90 Kg.
S/M – E	4 Cylinder under 3 litre 950Kg. For second power adder add 50 Kg.
Note- All weights include driver.	

#### Minimum Weights – Street Import – ST/I

ST/I – B	3 rotor 1050Kg. For second power adder add 90 Kg.
ST/I – C	2 rotor 900Kg. For second power adder add 50 Kg.
ST/I – D	All 6 cylinder or 4 cylinders over 3 litre 1110Kg. For second power adder add 90 Kg.
ST/I – E	4 Cylinder under 3 litre 900Kg. For second power adder add 50 Kg.
Note- All weights include driver.	

### ENGINE

**Catch Can:** Required and compulsory.

**Cooling System:** Radiator optional. No glycol allowed.

**Electrical / Electronics:** EFI Computer: Permitted: must be used for the purpose of engine parameter control only. The use of non-OEM computers for control of any transmission, suspension, and torque split devices, etc, is prohibited.

Data Recorder Permitted: must be for the purpose of data acquisition only.

The use of data recorders for control of any transmission, suspension, and torque split devices, etc is prohibited.

Traction control is prohibited.

**Lower Engine containment device (Nappies):** Required and compulsory, see safety section 3.05.

**Exhaust:** Any exhaust permitted.

**Fuel**

Methanol (Alcohol S/G @15Ç .794) – the addition of substances to Methanol for the purpose of lubrication is permitted where the specific gravity is not adversely affected, all other substances are prohibited. VP racing M5 is not permitted. Nitro additives will be classified as per running Nitro methane. The use of propylene oxide is prohibited in all categories. Test samples may be sent to testing laboratories for further analysing.

**Fuel system:** Any fuel system permitted.

**Harmonic Balancer:** Required under 10.99 seconds. See Safety Regulations 3.08

**Ignition Systems:** Any Ignition systems permitted apart from the use of any ignition system or related accessory that uses a multipoint or rate or acceleration rev limiter are prohibited (traction/slew control). See General Regulations 1.07

**Intercoolers:** Liquid intercoolers limited to water and/or ice ONLY.

No cooling mediums may be sprayed on intercoolers or manifolds during pre-stage or staging.

Water must not be dropped on to the racing surface.

**Nitrous Oxide:** Permitted, Single or multistage Nitrous will be known as 1 power adder.

**Supercharging:** Permitted, Single or multiple superchargers will be known as 1 power adder.

**Turbo Charging:** Single or multiple turbos will be known as 1 power adder.

## **BODY / CHASSIS**

**Ballast:** Permitted.

**Batteries:** Batteries must be securely mounted; may not be located in driver compartment unless sealed off

**Body:** Body shell must be of production 4-cylinder, 6 cylinder or Rotary manufactured origin.

Stock or replica production body required. Mild customising permitted. Non-Stock bubbles or bulges are not permitted in front fenders.

Grille must be retained or reproduced. Driver must sit to either right or left of centreline.

## **Chassis:**

**Pro Import** – Full tube chassis permitted.

**Sport Mod & Street Import** – Standard floor/chassis with cage. If Factory Front wheel drive or Rear wheel drive, vehicle must remain as factory, but four-wheel drive can be converted to rear wheel drive only.

**Competition Numbers:** Mandatory.

**Fire Wall:** Mandatory.

**Flex plate shield:** See Safety Regulations 3.36.

## **Floor Pan:**

**Street Import** – OEM but mini tubs may be fitted.

**Sport Mod** – OEM, but transmission tunnel modifications and mini tubs accepted.

**Pro Import** – See Safety Regulations

**Ground Clearance:** 75mm minimum

**Seat / Upholstery:** Upholstery optional.

**Wheelbase:** Maximum wheelbase 3200mm. Maximum wheelbase variation from left to right is 25mm.

Driven wheels and tyres may extend outside original body – work by a distance not greater than 25mm when viewed from above on FWD vehicles, measurements will be taken with the steering in the straight-ahead position. Non-driven wheels must remain within vehicle silhouette.

**Windshield & Windows:** Polycarbonate allowed.

**Wings / Spoilers:** Custom rear wings may be installed but not higher than the highest point of the roof.

No adjustment or movement is allowed during any run.

## **DRIVE LINE**

**Clutches:** Any clutch permitted. Street Import must use OEM type clutch.

**Differential:** Any allowed.

**Drive shaft loop:** 1 Required on all drive shafts, (front and Rear if 4WD)

**Flywheel:** No Cast iron flywheels. See safety Regulations 3.38

**Flywheel Bell housing / Shield:** Required and compulsory.

**Steering:** See Safety Regulations

**Suspension:** working suspension front and rear mandatory in this class.

**Wheelie Bars:** Permitted

**Wheels:** See Safety Regulations

## **DRIVER SAFETY**

See Safety regulations 3.0.

**Electrification Safety Shutoff System** see safety regulations 3.59:1

**EJECT HELMET REMOVAL SYSTEMS** see safety regulations 3.57

## 5.08 TOP STREET (MODIFIED STREET)

This division is restricted to street appearing vehicles, which compete on the NZ National records as an index, must have the appearance of stock type headlight and taillights in stock location. One operative taillight required.

Qualifying: Closest to or quicker than index. 16 car field running on .4 Full Tree.

Turnaround: 45minutes from last pairing.

### Weight Break Adjustments

OEM type automatics and conventional clutched manual transmissions e.g., Turbo 400, power glide, Muncie, C4/C6, top loader, T5/T6, torque flite equipped vehicles may weigh 90kgs less for class (after-market planetary type and race manuals e.g., B&J, Lenco drive, Liberty, and G Force not eligible). Gasoline may weigh 50kg less for class.

### CLASS REQUIREMENTS

These requirements must be read in conjunction with safety Regulations 3.0 and safety reference chart.

**All AA to GG vehicles with EFI will run on their own index. E.g., CC/TSi**

### LICENCE

All competitors must hold a minimum of a restricted civil driver's licence; and must have an IHRA or recognized Drag Racing Licence.

**Top Street – T/S** Street appearing car with a full race chassis (tube car).

**Modified Street – M/S** Street appearing car with OEM body/floor making up part of the integral structure of the chassis.

### WEIGHT BREAKS

XX/TS	XX/MS	85kgs to 124kgs per litre supercharged.
XX/TSi	XX/MSi	85kgs to 124kgs per litre supercharged EFI
X/TS	X/MS	85kgs to 124kgs per litre naturally aspirated.
AA/TS	AA/MS	125kgs to 154kgs per litre supercharged.
AA/TSi	AA/MSi	125kgs to 154kgs per litre supercharged EFI
A/TS	A/MS	125kgs to 154kgs per litre naturally aspirated.
BB/TS	BB/MS	155kgs to 184kgs per litre supercharged.
BB/TSi	BB/MSi	155kgs to 184kgs per litre supercharged EFI
B/TS	B/MS	155kgs to 184kgs per litre naturally aspirated.
CC/TS	CC/MS	185kgs to 209kgs per litre supercharged.
CC/TSi	CC/MSi	185kgs to 209kgs per litre supercharged EFI
C/TS	C/MS	185kgs to 209kgs per litre naturally aspirated.
DD/TS	DD/MS	210kgs to 234kgs per litre supercharged.
DD/TSi	DD/MSi	210kgs to 234kgs per litre supercharged EFI
D/TS	D/MS	210kgs to 234kgs per litre naturally aspirated.
EE/TS	EE/MS	235kgs to 254kgs per litre supercharged.
EE/TSi	EE/MSi	235kgs to 254kgs per litre supercharged EFI
E/TS	E/MS	235kgs to 254kgs per litre naturally aspirated.
FF/TS	FF/MS	255kgs to 254kgs per litre supercharged.
FF/TSi	FF/MSi	255kgs to 254kgs per litre supercharged EFI
F/TS	F/MS	255kgs to 274kgs per litre naturally aspirated.
GG/TS	GG/MS	275kgs or more per litre V8s supercharged.
GG/TSi	GG/MSi	275kgs or more per litre V8s supercharged EFI
G/TS	G/MS	275kgs or more per litre V8s naturally aspirated.
HH/TS	HH/MS	Restricted to six cylinders or less. 300kgs or more per litre supercharged
H/TS	H/MS	Restricted to six cylinders or less. 300kgs or more per litre naturally aspirated
RR/TS	RR/MS	450kgs or more per litre supercharged / turbocharged rotary engines only.
R/TS	R/MS	450kgs or more per litre normally aspirated rotary engines only.

### ENGINE

Any automotive allowed, maximum 10% engine setback, on board starters only, only one form of super charging allowed.

**Catch Can:** Required.

**Cooling System:** Radiator optional. No glycol allowed.

**Lower Engine containment device (Nappies):** Required see safety regulations 3.05.

**Exhaust:** Any exhaust permitted,

**Fuel:** Methanol (Alcohol S/G @15°C .794) – the addition of substances to Methanol for the purpose of lubrication is permitted where the specific gravity is not adversely affected, all other substances are prohibited. VP racing M5 is not permitted. Nitro additives will be classified as per running Nitro methane. The use of propylene oxide is prohibited in all categories. Test samples may be sent to testing laboratories for further analysing.

**Fuel system:** Any fuel system permitted.

**Harmonic Balancer:** required under 10.99 seconds. see safety regulations 3.08.

**Ignition Systems:** Any Ignition systems permitted apart from the use of any ignition system or related accessory that uses a multipoint or rate or acceleration rev limiter are prohibited (traction/slew control). See General Regulations 1.07

**Nitrous Oxide:** Permitted, Single or multistage Nitrous allowed. Only one form of supercharging allowed.

**Supercharging:** Permitted, Single or multiple superchargers allowed. All blowers larger than 10.71 30% maximum overdrive. All High Helix



blowers 20% maximum overdrive, PSI screw blowers 70% maximum. Whipple screw blowers 18% maximum overdrive.

**Turbo Charging:** Single or multiple turbos allowed.

**Vent Tubes:** see safety regulations 3.18.

## BODY / CHASSIS

**Ballast:** Permitted. see safety regulations 3.20.

**Batteries:** Batteries must be securely mounted; may not be located in driver compartment unless sealed off

**Body:** Production body required, must be reproduction or stock. Maximum height reduction 120mm post 48 and 150mm for pre 1948 vehicles by Roof chop, channelling and/or sectioning. Bodies may not be sectioned to a wedge shape or narrowed or widened. Front fenders may be lengthened a maximum of 100mm from Stock and dropped 12 mm for every 300mm of length. Non-Stock bubbles or bulges are not permitted in front fenders. Grille must be retained or reproduced. Grille angle may be either Stock or Raked to a maximum of 10 degrees from vertical, whichever is greater. Driver must sit to either right or left of centreline.

**Competition Numbers:** Mandatory

**Fire Wall:** Mandatory

**Floor Pan:** see safety regulations 3.25.

**Ground Clearance:** - 75mm minimum

**Hood Scoop:** allowed, see safety regulations.

**Seat / Upholstery:** Upholstery optional.

**Wheelbase:** Maximum wheelbase 2921mm (115 inch). Standard wheelbase allowed if longer. Maximum wheelbase variation from left to right is 25mm.

**Windshield & Windows:** Polycarbonate allowed.

**Wings / Spoilers-** Custom rear wings may be installed but not higher than the highest point of the roof.

No adjustment or movement is allowed during any run.

## DRIVE LINE

**Anti-Blowback Struts,** recommended for super charged T/S

**Axles:** aftermarket required for CC/TS/MS and above

**Clutches:** Any clutch permitted.

**Differential:** Any allowed

**Drive shaft loop:** 1 required on all drive shafts,

**Flex-plate Shield:** See safety regulations 3.36.

**Flywheel:** No Cast iron flywheels. See safety regulations 3.38.

**Flywheel Shield:** See Safety Regulations 3.37

**Steering:** See Safety Regulations 3.43

**Suspension:** working suspension front and rear mandatory in this class.

**Transmission:** any permitted

**Wheelie Bars:** Permitted

**Wheels:** See Safety Regulations 3.50

## DRIVER SAFETY

See Safety regulations 3.0.

**Electrimation Safety Shutoff System** see safety regulations 3.59:1.

**EJECT HELMET REMOVAL SYSTEMS** see safety regulations 3.57

## 5.09 SUPERCHARGED OUTLAWS

This class of racing is intended for Dragsters, Funny Cars, and Sedans with no weight breaks. Supercharged Outlaws race on a Dial Your Own handicap racing format. The maximum dial in is 8.00 seconds. All vehicles must be either Super Charged, Turbo Charged or Nitrous Oxide powered.

Non-qualifiers from Top Alcohol and Top Doorslammer will be seeded in this field.

Qualifying is fastest to slowest ET. Unlimited field sizes running on a .4 Pro Tree.

Turnaround time is 60 minutes minimum from last pairing.

## REQUIREMENTS & SPECIFICATIONS

### LICENCE

All competitors must hold a minimum of a restricted civil driver's licence; and the competitor must have an IHRA or recognized Drag Racing Licence

### SAFETY EQUIPMENT

For safety requirements please go to Safety Regulations section 3.0 and read in conjunction with the General Racing Regulations section 1.0 and Safety Reference Chart.

**Electrimation Safety Shutoff System** see safety regulations 3.59:1

**EJECT HELMET REMOVAL SYSTEMS** see safety regulations 3.57

## 5.10 COMPETITION ELIMINATOR

This class is traditionally designed for vehicles specifically built for Drag Racing of the altered wheel-base hot rod, funny car and dragster variety and will run on an Index based format of racing.

**All AA to EE vehicles with EFI will run on their own index. E.g. AA/FCi**

Qualifying: Closest to or quicker than Index/Record.

Field size will be Eight-Car field running on a .4 Pro Tree.

Turnaround time is 45 minutes minimum from last pairing.

### WEIGHT BREAKS,

**Minimum weight in A/, AA/, B/, and BB/ classes is 600 kg, all others 475 kg.**

AA/A 125 kgs or less per litre supercharged.

AA/Ai 125 kgs or less per litre supercharged EFI

A/A 125 kgs or less per litre normally aspirated

BB/A 126 kgs to 155 kgs per litre supercharged.

BB/Ai 126 kgs to 155 kgs per litre supercharged EFI

B/A 126 kgs to 155 kgs per normally aspirated

CC/A 156 kgs to 184 kgs per litre supercharged.

CC/Ai 156 kgs to 184 kgs per litre supercharged EFI

C/A 156 kgs to 184 kgs per litre normally aspirated

DD/A 185 kgs to 214 kgs per litre supercharged.

DD/Ai 185 kgs to 214 kgs per litre supercharged EFI

D/A 185 kgs to 214 kgs per litre normally aspirated

EE/A 215 kgs to 244kgs per litre supercharged.

EE/Ai 215 kgs to 244kgs per litre supercharged EFI

E/A 215 kgs to 244kgs per litre normally aspirated

FF/A 245kgs to 274 kgs per litre supercharged.

FF/Ai 245kgs to 274 kgs per litre supercharged EFI

F/A 245kgs to 274 kgs per litre normally aspirated

GG/A 275 kgs or more per litre supercharged.

GG/Ai 275 kgs or more per litre supercharged EFI

G/A 275kgs or more normally aspirated

RRR/A Supercharged/ turbo 20B Rotary

RR/A Supercharged/ turbo 13B Rotary

R/A Normally aspirated Rotary

AA/FNA Supercharged, Nitro fuelled Flat head Altered.

AA/NA Nostalgia Altered supercharged alcohol. (Flathead only).

A/NA Nostalgia Altered normally aspirated. (Flathead only).

### WEIGHT BREAKS

**A/FD** – Nitro injected engines only

138.40 or more kg/litre (5.00 or more lb's/cu in)

Min weight 975kg

Min Displacement 410 cu in (6.7L) Max Displacement 456 cu in (7.47L)

Maximum Nitromethane content 94%

All Fuels other than nitromethane and methanol prohibited.

Minimum fuel temp when car is outside pit space is 40 degrees Fahrenheit.

Fuel tank and line up to pump may be insulated.

**Minimum weight in A/, AA/, B/, BB/, class is 600 kg, all others 475 kg.**

AA/D 125 kgs or less per litre supercharged.

AA/Di 125 kgs or less per litre supercharged.

A/D 125 kgs or less per litre normally aspirated

BB/D 126 kgs to 155 kgs per litre supercharged.

BB/Di 126 kgs to 155 kgs per litre supercharged.

B/D 126 kgs to 155 kgs per litre normally aspirated

CC/D 156 kgs to 184 kgs per litre supercharged.

CC/Di 156 kgs to 184 kgs per litre supercharged.

C/D 156 kgs to 184 kgs per litre normally aspirated

DD/D 185 kgs to 214 kgs per litre supercharged.

DD/Di 185 kgs to 214 kgs per litre supercharged.

D/D 185 kgs to 214 kgs per litre normally aspirated

EE/D 215 kgs to 244kgs per litre supercharged.

EE/Di 215 kgs to 244kgs per litre supercharged.

E/D 215 kgs to 244kgs per litre normally aspirated

FF/D 245kgs to 274 kgs per litre supercharged.  
 FF/DI 245kgs to 274 kgs per litre supercharged EFI  
 F/D 245kgs to 274 kgs per litre normally aspirated  
 GG/D 275 kgs or more per litre supercharged.  
 GG/DI 275 kgs or more per litre supercharged EFI  
 G/D 275kgs or more normally aspirated  
 RRR/D Supercharged/ turbo 20B Rotary  
 RR/D Supercharged/ turbo 13B Rotary  
 R/D Normally aspirated Rotary  
 AA/FND Supercharged, Nitro fuelled Flat head dragster.  
 AA/ND Nostalgia supercharged alcohol Flat head dragster.  
 A /ND Nostalgia normally aspirated Flat head dragster.

## ENGINE

**Carburetion - EFI** Any carburettor or fuel injection allowed. Refer to Safety Regulations 3.0.

**Cooling System** – Optional, Refer to Safety Regulations 3.03.

**Electrical** – Refer to Safety Regulations 3.04.

**Engine** - Any automotive allowed and any modifications allowed; a maximum of two engines may be used in any location for Dragsters only, all Alters and Funny cars engines must be located in front of the driver. Push starts or tow starts not permitted.

**Lower Engine containment device (Nappies):** Refer to Safety Regulations 3.05.

**Exhaust system** - Refer to Safety Regulations 3.06.

**Fuel** - Methanol (Alcohol S/G @15¢ .794) – the addition of substances to Methanol for the purpose of lubrication is permitted where the specific gravity is not adversely affected, all other substances are prohibited. VP racing M5 is not permitted. Nitro additives will be classified as per running Nitro methane. The use of propylene oxide is prohibited in all categories. Test samples may be sent to testing laboratories for further analysing. Gasoline & Alcohol fuels with nitrous oxide permitted. Nitro Methane fuels classified as supercharging. Max 50% when mechanically supercharged. If a vehicle has two forms of supercharging e.g., Turbo and Nitrous it moves up one class.

**Fuel System** – Refer to Safety Regulations 3.07.

**Harmonic Balancer** - Refer to Safety Regulations 3.08.

**Ignition** - Refer to Safety Regulations 3.09.

**Ignition Systems:** Any Ignition systems permitted apart from the use of any ignition system or related accessory that uses a multipoint or rate or acceleration rev limiter is prohibited (traction/slew control). See General Regulations 1.07

**Nitrous Oxide** - Permitted, Single or multistage Nitrous allowed. Refer to Safety Regulations 3.11.

**Supercharger** – Permitted. Overdrives limits as per formula.

Standard Roots 14.71 .00322 x cubic inches, 50% max.

10.71 Hi helix .00322 x cubic inches, 50% max.

14.71 Hi helix .00300 x cubic inches, 40% max.

16.71 Hi helix .00285 x cubic inches, 33% max.

Screw type with rotor diameter 215.9mm (8") or less, 00369 x cubic inches, 72% max.

If two forms of supercharging used, moves vehicle up one class i.e., Vehicles running nitro methane must comply with Top Alcohol regulations and as per Nostalgia vehicles running Nitro. Refer to Safety Regulations 3.0.

**Throttle** - Refer to Safety Regulations 3.16.

**Turbocharger** Single or multiple turbos allowed.

**Vent tube / Breathers** - Refer to Safety Regulations 3.18.

## BODY CHASSIS

**AIRFOILS/WINGS:** A positive locking device to prevent accidental movement must be used on any air foil. Side mounted. No part of wing may be within 6" of tire. A wing is mandatory on all rear engine dragsters if the entry exceeds 200 mph. Refer to Safety Regulations 3.0.

**Ballast** - Permitted. Refer to Safety Regulations 3.20.

**Battery** - Optional Refer to Safety Regulations 3.21.

**Dragster/Altered Body** and cowl may be constructed of metal, fiberglass, carbon fibre or other suitable flameproof material and must extend forward to firewall. Altered entries must use IHRA accepted body. Driver's compartment - frame structure, roll bars, body – must be designed to prevent driver's body or limbs from making contact with wheels, tires, exhaust system, or strip surface, should spin-out, collision, or upset occur. If driver's body is in contact with belly pan, an inspection and sub-floor is required. The maximum front overhang is 1016mm on all dragsters and Alters as measured from most forward spindle centre. Minimum ground clearance is 75mm.

**FUNNY CAR - BODY:** Bodies must resemble the original mass-produced make and model. Body must lift off as a one-piece unit. Minimum body width is 1448mm measured from the centreline of front and rear axle. Front fender bubbles permitted, maximum height 2 1/2 inches. Side windows prohibited. Vent windows permitted and may not extend more than 2 inches from where the A-pillar meets the roof as measured from the inside of the upper opening of the window. All vent windows must be flat and not direct air inward or outward and may not extend more than 2 inches from where the A-pillar meets the roof line. A maximum of 1 inch lip is permitted around the bottom of the body. **ESCAPE HATCH:** A working escape hatch must be installed in top of body to permit easy driver exit. Minimum size, 18 inches x 17 inches. Roof hatch must be permanently attached and hinged at front. Must have release mechanism, operable from both inside and outside of car. Front overhang not to exceed 1016mm (40 inch)

**Note:** All post 1949 vehicles must be centre steer to compete in this class.

Drivers must be able to exit from a fully belted position unaided in a maximum of 25 seconds in all body styles.

**Competition Numbers** - Refer to General Regulations 1.06.

**Firewall** - Refer to Safety Regulations 3.24.

**Floor Pan** - Refer to Safety Regulations 3.25.

**Frame / Roll cage** - Refer to Safety Regulations 3.26.

**Ground Clearance – 75mm** to insure proper operation of timing beams.

**Hood Scoop** -. Refer to Safety Regulations 3.0.

**Seat** - If used, Nomex-type fireproof material mandatory as seat upholstery. Refer to Safety Regulations 3.28.

**Taillight** - Refer to Safety Regulations 3.29.

**Wheelbase Altered/Funny Car- Minimum.** Wheelbase 2.1m, maximum wheelbase 3.175m. All cars may not have a wheelbase variance from left to right of more than 50mm. Minimum of 1.2m track as measured from the centre of the tyre treads must be maintained on at least one axle.

**Wheelbase Dragster-** Minimum 3.2m maximum 7.6m. Maximum wheelbase variation from left to right 50mm on long side. Minimum front tread width 660mm

**Windscreen & Windows** - Refer to Safety Regulations 3.30.

**Windshield** - Refer to Safety Regulations 3.31.

## DRIVE LINE

**Anti-Blowback Device** - Mandatory on clutch equipped cars, Refer to Safety Regulations 3.33.

**Flex-plate shield** - Refer to Safety Regulations 3.36.

**Flywheel / Clutch / Shields --** Refer to Safety Regulations 3.37. 3.38

**Rear End** - Full Floating hubs or live axle mandatory in AA/A & BB/A. Highly recommend for all vehicles Refer to Safety Regulations 3.42.

**Steering** -Commercially available quick disconnect steering wheel highly recommended. Butterfly wheels permitted.

**Suspension** - Full automotive type front suspension is required. Rigid rear axles permitted. Cars with wheelbase of over 2.8m suspension optional. Refer to Safety Regulations 3.44.

**Transmission** – Any. Refer to Safety Regulations 3.45.

**Tyres** - Refer to Safety Regulations 3.48.

**Wheelie Bars** - Permitted. Refer to Safety Regulations 3.49.

**Wheels** - Refer to Safety Regulations 3.50.

## DRIVER SAFETY

**Arm Restraints** - Mandatory. Refer to Safety Regulations 3.51.

**Brakes** - Minimum of two rear-wheel hydraulic brakes required Refer to Safety Regulations 3.52.

**Fire extinguishers** - Required, Refer to Safety Regulations 3.54.

**Fire Extinguisher Systems** - Refer to Safety Regulations 3.55.

**Head Protector** - Required. Refer to Safety Regulations 3.56.

**Helmet** - Required. Refer to Safety Regulations 3.57.

**Parachute** - Required over 150mph and on any vehicle with two-wheel brakes from 130mph. Refer to Safety Regulations 3.59.

**Protective Clothing** - Mandatory. Refer to Safety Regulations 3.60.

**Roll cage** - All new chassis must comply with SFI Spec 10.1B. Refer to Safety Regulations 3.62.

**Safety Harness** - Quick release 5-point mandatory, Refer to Safety Regulations 3.63.

**Tow Vehicles** - Permitted.

**Electrification Safety Shutoff System see safety regulations 3.59:1**

**EJECT HELMET REMOVAL SYSTEMS see safety regulations 3.57**

## 5.11 COMPETITION BIKE

All motorcycles either specifically built or modified for drag racing, road racing motorcycles, road racing motorcycles with modified frames, factory built for drag racing or with any modifications to frame will run in this category.

Qualifying: Closest to or quicker than Index/Record.

Field size will be Sixteen-bike field running on a .4 Full Tree.

Turnaround time is 45 minutes minimum from last pairing.

**Runaway indexes:** In order to prevent anyone gaining significant advantage from "sandbagging", any bike that runs quicker than their index during any competition round, will have his/her class's index reduced by half the amount they exceed the index by. ie: 8.2 index, runs 8.0, new index for next round will be 8.1. If any bike goes twice under the index, it will then be an IHRA NZ record and will then become the new index for that class at next/subsequent meetings until it is lowered again.

### CLASSES

#### Drag Bike

AA1/DB: 1500cc and over super charged

AA2/DB: 1250=>1499cc super charged

AA3/DB: 1000=>1249cc super charged

A1/DB: 1500cc and over naturally aspirated.

A2/DB: 1250=>1499cc naturally aspirated

A3/DB: 1000=> naturally aspirated

BB/DB 750 cc to 999 cc supercharged.

B/DB 750 cc to 999 cc naturally aspirated.

CC/DB 240 cc to 749 cc supercharged.

C/DB 240 cc to 749 cc naturally aspirated.

#### Push Rod Competition Bike

AA/PCB: Over 131ci (2146cc) supercharged.

A/PCB: Over 131ci (2146cc) naturally aspirated.

BB/PCB: 100ci (1639cc) – 131ci (2146cc) supercharged.

B/PCB: 100ci (1639cc) – 131ci (2146cc) naturally aspirated.

CC/PCB: 55ci (901cc) - 100ci (1639cc) supercharged.

C/PCB: 55ci (901cc) - 100ci (1639cc) naturally aspirated.

DD/PCB: Up to and incl 55ci (901cc) supercharged.

D/PCB: Up to and incl 55ci (901cc) naturally aspirated.

#### Altered Bike

AA1/AB: 1500cc and over supercharged.

AA2/AB: 1250=>1499cc supercharged.

AA3/AB: 1000=>1249cc supercharged.

A1/AB: 1500cc and over naturally aspirated.

A2/AB: 1250=>1499cc. naturally aspirated.

A3/AB: 1000=>1249cc. naturally aspirated.

BB/AB: 750=>999cc supercharged.

B/AB: 750=>999cc. naturally aspirated.

CC/AB: 600=>749cc supercharged.

C/AB: 600=>749cc. naturally aspirated.

DD/AB: <600cc supercharged.

D/AB: <600cc. naturally aspirated.

### ENGINE

**Engine -/DB** There are no limitation on type or number of engines, however there is a maximum of eight cylinders.

**Engine -/PCB** There are no limitations on number of engines but must have Pushrod operated valves as opposed to overhead camshaft operated valves, with a maximum of eight cylinders.

**Engine -/AB** Any engine modifications permitted, engine swaps permitted provided replacement is from the same manufacturer as the original and is of the same configuration and series. OEM barrel may be bored to standard manufacturer piston oversize without class change from original cc rating.

**Fuel** – Gasoline and methanol permitted. Nitro methane refer Top Bike.

**Fuel Shut Off** - All motorcycles must have fuel-shut off tap between tank and carburettor.

**Ignition** - All must be fitted with a positive ignition cut off switch attached to the rider with a lanyard. Cut off switch must be on low-voltage side of ignition circuit.

**Nitrous Oxide** - Permitted (classified as supercharging). Refer to Safety Regulations 3.0.

**Supercharging** - Permitted. Refer to Safety Regulations 3.0.

Any 1 form of supercharging places bike one class up, ie supercharged B class bike becomes "BB" class.

Any 2 forms of supercharging places bike two classes up.

Note: "supercharging" means any form of power adder, mechanical or chemical, which is not classed as natural aspiration.

**Throttle** - Each motorcycle must have a spring-loaded throttle return. Butterfly type carburettors must have two return springs fitted.

**Turbo charging** - Permitted (classified as supercharging).

## FRAME

**Fork - Brace** - Required if front guard not steel reinforced. Note: Fork brace is not required on bikes fitted with Upside Down (USD) forks.

**Frames -/DB and -/PCB** Custom Frames permitted.

**Frames -/AB**

**Foot pegs** – Foot pegs and foot controls may be lowered and / or rear set.

**Steel tube frames**- Engine cradle must be stock. Onus of proof on entrant. On frames using multiple tubes behind the head stem the uppermost tube may be replaced with a section of larger diameter for use as a fuel tank or breather tank.

Frame modification for clearance of ancillary components (e.g., fuel injection, carbs, fuel tank etc permitted material moved does not detract from the strength or street appearance of the machine and is not removed or relocated for purposes of weight redistribution. Wheelbase may be increased to a maximum of 72" for bikes fitted with wheelie bars or 75" if not. Steering head may be raked to any angle taking into account the above rule for wheelbase. Frame geometry, headset or other structural modifications must be performed by a competent person. Entrant may be required to produce evidence. Any welding done on new frames or as part of major structural modifications should not be ground and must be tech inspected prior to painting.

It is mandatory that the angle of rake (the angle between the steering head and a vertical line through the steering head) should not be decreased from stock as this reduces trail which may cause instability.

**Swing arms** - may be lengthened or modified provided the basic street appearance is maintained. Fully welded "Back halve" conversions are allowed for the fitment of wider rear tyres. Suspension dampener units may be replaced with bolted or welded struts and linkages may be replaced with suitable replacements for the purpose of lowering. Swing arm pivot point must be retained, and swing arms must not be welded to the frame.

**Aluminum Alloy frames**- Duplex cradle type frames must retain stock cradle; Perimeter type frames must be stock with the exception of the rear sub frame. Onus of proof on entrant.

Minor frame modification for clearance of ancillary components (e.g., fuel injection, carbs, fuel tank etc permitted material moved does not detract from the strength or street appearance of the machine and is not removed or relocated for purposes of weight redistribution. Wheelbase may be increased to a maximum of 72" for bikes fitted with wheelie bars or 75" if not. Steering head may be raked to any angle taking into account the above rule for wheelbase. Frame geometry, headset or other structural modifications must be performed by a competent person using TIG welding process. Entrant may be required to produce evidence. Any welding done on new frames or as part of major structural modifications should not be ground and must be tech inspected prior to painting.

It is mandatory that the angle of rake (the angle between the steering head and a vertical line through the steering head) should not be decreased from stock as this reduces trail which may cause instability.

**Handlebars** – Must be mounted in stock location, clip on bars allowed only if factory original.

**Bodywork** – fairings not permitted unless factory original, may be reproduced in fiberglass etc but must retain original appearance.

Models that have a fairing and screen fitted as standard must use them or replicas. Fairings may be trimmed for ground clearance, or to clear the exhaust. Screens must be thin and flexible for safety reasons (i.e., polycarbonate). Front and rear lights must be fitted and in stock location but may be cosmetic only.

**Suspension** – (front and rear) Front forks may be extended a maximum of 300mm. No bolt on extensions permitted. Machines running without wheelie bars may have forks shortened but must retain 25mm of travel. External straps or devices used to limit fork extension must be recognizable as fit for purpose. No metallic tie rods to be used. Fork assembly may be exchanged for another non-rigid type assembly, which may be of sufficient size, strength and length to adequately support machine and rider for normal street riding. Minimum fork diameter of 35mm.

## General-Applicable to all classes

**Ground Clearance** - Minimum of 50mm with Rider in position on machine.

**Guards** - Rear wheel guard or road racing type seat required. Exposed flywheels must be fitted with a guard to prevent rider's legs or body from coming into contact with it in any circumstances.

**Chain guard** - Mandatory. Minimum 5mm thick aluminium or 3mm thick steel. Must cover top run of chain and extend to vertical tangent from rear of sprocket, if doing so does not conflict with rear slick.

**Steering** - Steering damper highly recommended. **Mandatory** on all bikes capable of exceeding 100mph.

**Tyres** - All tyres on all motorcycles will be visually checked for condition, pressure, etc. and must be considered safe by the Scrutineer prior to any runs by the motorcycle.

Up To 210 km/h Motorcycles - Must use a minimum of H rated tyres.

Up To 260 km/h Motorcycles - Must use minimum of V rated tyres.

Over 260 km/h Motorcycles - Motorcycle racing tyres cleared marked "For Racing Purposes only" will be accepted.

80/90/100 wide x 16inch front tyres may be used but must be available for visual inspection on request.

An overview of Motorcycle Tyre Speed Ratings can be seen here:

Rating	F	J	L	M	P	R	S	H	V	Z	W	(W)
MPH	50	62	75	81	93	106	112	130	150	150+	167	167+
KM/H	80	100	120	130	150	170	180	210	240	240+	270	270+

**Wheelie Bars** - Where permitted, May be adjustable, but must be fixed during run. any movement or adjustment during run prohibited. Wheelie-bar wheels must spin freely on start line. Preloading prohibited, No metallic wheels.

**Wheelie Bars -/AB** Permitted provided wheelbase does not exceed 72".

**Wheels** - Must be automotive - type wheels suitable for use, all spoke holes in rim and hub must be properly cross-laced to provide maximum strength.



## RIDER / SAFETY

**Brakes** - Mandatory. Must be fitted with operative brakes, front and rear.

**Helmet** - Refer to Safety Regulations 3.57. for helmet requirements.

**Protective Clothing:** Rider must wear an approved full-face helmet, visor, full **bike** boots extending at least 270mm from the base of the heel. Full finger leather **bike** gloves with knuckle armour and palm reinforcement, one piece or full circumference zippered leather suit with knee, elbow and shoulder armour or reinforcement. Back Protector mandatory for bikes capable of exceeding 150 MPH.

**Tow Vehicles** - Permitted

**Electrification Safety Shutoff System** see safety regulations 3.59:1

**EJECT HELMET REMOVAL SYSTEMS** see safety regulations 3.57

## V-Rod Destroyer (VRD/B)

**Engines:** Must carry racing engine VIN code from Harley Davidson Motor Company.

Bike and engine must be stock, as supplied from Harley Davidson, except for those exemptions listed below.

**Transmission:** Spur type second gear upgrade is allowed.

Aftermarket billet clutch baskets or alterations to the OEM basket are allowed providing that they do not give a performance advantage and are only to improve reliability.

**Suspension:** Internal modifications are legal.

A single hydraulic steering damper may be fitted in a manner which does not substantially modify the frame or forks.

**Frame:** Only Destroyer OEM frames supplied by Harley Davidson are allowed. No modifications allowed except for those required to add ballast. Ballast must be secured by a minimum of one 3/8" bolt per 5-pound weight.

**Weight:** Bike and rider must be a minimum of 325kg.

**Ground Clearance:** Minimum of 50mm with rider on motorcycle.

**Seat:** Stock OEM seat with a step to prevent the rider from sliding backwards and a minimum height of 20inches.

**Computers:** Only data gathering computers or data boxes are allowed. No traction control or RPM shifted solenoids are allowed.

**Rider Safety/Support:** See above.

**Tow Vehicles:** Not permitted.

## GROUP ONE – HEADS UP RACING

**TOP DOORSLAMMER BRACKET** – T/D and all Super charged, Turbo and Nitrous T/S sedans eligible. 8 car field

**TOP ALCOHOL BRACKET** – TA/D, TA/A, TA/FC, A/FD and all non EFI Supercharged Comp vehicles eligible. 8 car field

**TOP FUEL** - T/F

**TOP FUEL MOTORCYCLE** – TF/DB

**PLEASE NOTE:** To claim an IHRA NZ record in TA/ or T/D the vehicle must be classified as such. Also note that any Comp/T/S vehicle records can only be claimed when running in the Comp/T/S division.

### LICENCE REQUIREMENTS:

**Top Doorslammer Bracket:** TDS must have Pro Mod Licence. IHRA USA Medical Mandatory

**Top Alcohol Bracket:** must have a minimum of a Top Dragster licence. IHRA USA Medical Mandatory

**Top Fuel Dragster, Funny Car and Motorcycle:** must have a Top Fuel licence. IHRA USA Medical Mandatory

## 5.12 TOP DOORSLAMMER

This class is designed for the best in mechanically super-charged, nitrous oxide or turbo-charged cars whilst still maintaining the resemblance to a full-bodied streetcar complete with operational doors. Top Doorslammer is one of only two classes that run on a heads-up format of racing.

Qualifying: Based on ET – quickest to slowest.

Field size will be Eight-Car field running on a .4 Pro Tree.

Turnaround: 60minutes from last pairing

### WEIGHT BREAKS

Vehicles using screw type superchargers, 145 kg per litre.

Minimum weight 1224.7 kg (2700 lbs)

Vehicles using roots type superchargers, 137.5 kgs per litre.

Minimum weight 1159 kg (2550 lbs)

Vehicles using Turbochargers, 145 kgs per litre.

Minimum weight 1159 kg (2550 lbs)

Vehicles using nitrous oxide Minimum weight 1088.6 kgs.

(2400 lbs) No cubic inch limit.

Vehicles using a centrifugal supercharger, 145kg per litre.

Minimum weight 1224.7 Kg (2700lbs)

### ENGINE

**Carburetion** - Any carburettor allowed. Refer to Safety Regulations 3.01.

**Catch Can** - Required when using radiator. Refer to Safety Regulations 3.10.

**Cooling System** – Optional. Refer to Safety Regulations 3.03.

**Electrical** - Refer to Safety Regulations 3.04.

**Traction/Slew Control**

The use or fitment of any programmable multi-point rev limiter and/ or a rate of acceleration rpm limiter, either by themselves or integrated into the ignition systems are prohibited. See General Regulations 1.07

**Engine:** One internal combustion engine allowed with any modifications; Engine set back no more than 10 percent of wheelbase as measured from front spark plug to front spindle. Aluminum engine blocks and billet cylinder heads permitted. Engine specifications may be adjusted if an unfair advantage exists. Centrifugal Supercharged limited to maximum 526ci

**Lower Engine containment device (Nappies):** Refer to Safety Regulations 3.05.

**Exhaust System:** Competition type exhaust systems required. Exhaust gases must be directed out of the car body, rearward, away from driver and fuel system. Refer to Safety Regulations 3.06.

**Fuel** - Gasoline or Methanol (Alcohol S/G @15Ç .794) – the addition of substances to Methanol for the purpose of lubrication is permitted where the specific gravity is not adversely affected, all other substances are prohibited. VP racing M5 is not permitted. Nitro additives will be classified as per running Nitro methane. The use of propylene oxide is prohibited in all categories. Test samples may be sent to testing laboratories for further analysing. Nitrous Oxide permitted.

**Fuel Injection** – mechanical allowed, EFI allowed only on Turbo, Nitrous Vehicles and Centrifugal supercharged.

**Fuel System:** After-market fuel cell recommended. All fuel cells must have positive-locking caps. Front mounted fuel systems must be mounted between frame rails and protected by 1 1/4" x .065 CM tubing to protect from front impact. Maximum two cells or tanks. On-board cooling or recirculating systems prohibited. All fuel systems must have ground wire connected to chassis.

**Harmonic Balancer** - Refer to Safety Regulations 3.08.

**Ignition** - Refer to Safety Regulations 3.09.

**Nitrous Oxide** – Unlimited stages permitted, considered one form of supercharging. Refer to Safety Regulations 3.11.

**Starter** - On Board starters or Remote starters permitted. No body panels may be removed to accommodate starting. Plug in auxiliary batteries allowed.

**Supercharger** - Supercharger Overdrives; Roots type maximum limited to 70%. Centrifugal Supercharger overdrive 1.40:1

D series PSI screw type only with rotor diameter 8.5 inches or less 108% maximum. Screw type with rotor diameter greater than 8.5 inches 47% maximum. The rounding up of overdrive calculations will not be permitted. Refer to Safety Regulations 3.15. One form of supercharging only permitted.

**Throttle** - Refer to Safety Regulations 3.16.

**Turbo Charging** – Permitted, twin Turbos considered one form. One form of supercharging only permitted (no N2O).

Note: Diameter of Turbo inlet may be restricted to maintain parity at a later date.

**Vent Tube Breathers** - Refer to Safety Regulations 3.18.

### BODY / CHASSIS

**Ballast** - Permitted - Refer to Safety Regulations 3.20.

Shot bags must be contained in a weight box. Any car found with unsecured or illegal ballast following a run will be disqualified from the event at discretion of IHRA Technical Department.

**Batteries** - Optional. Refer to Safety Regulations 3.21

**Body:** One piece or funny car bodies prohibited. Front overhang not to exceed 45" forward of front spindle. If front end overhang for the selected body is less than the maximum of 45 inches, an IHRA accepted extension may be added to reach the maximum length. All models must be accepted prior to competition and must be within all ground clearance parameters. Light weight aftermarket replica body components permitted as long as same appearance is retained for body being used. Windshield angle must appear stock. Driver must sit to either right or left of centre line. Roof chop allowed but must retain no less than half the window height of any stock window. Pre-1970 bodies maybe sectioned to a wedge shape on any plane, a maximum of 100 mm (horizontally, and/or vertically. No other radical modifications for aerodynamic purposes). Bonnet (hood) is required. Four fenders are required, no non -stock bubbles or bulges are permitted in front. Rear guards may be raised to facilitate slick clearance. Grille must be retained or reproduced. Grille angle may be either stock or raked to a maximum of 10° from vertical, whichever is greater.

**Doors:** Must be functional from inside and outside. Exact duplicates in fiberglass or carbon fibre permitted.

**Chassis –** All new chassis teched from 1/01/2011 must be fabricated to SFI 25.1H (Chrome moly/Docol R8). Refer to Safety Regulations 3.23.

**Competition Numbers** - Refer to General racing Regulations 1.06.

**Fire Wall** - Refer to Safety Regulations 3.24.

**Floor Pan** - Refer to Safety Regulations 3.25.

**Ground Clearance** - 75mm to insure proper operation of timing beams. Refer to General Racing Regulations 1.13.

**Hood & Hood Scoop:** Permitted, one opening only. A minimum of four fasteners must be used on the leading edge of all removable hoods. Burst panel on top of hood scoop permitted. Refer to Safety Regulations 3.27.

**Street Equipment** - Must have the appearance of stock type headlight and taillight lenses in stock location and may be painted on. A minimum of one operative tail lamp required for night racing.

**Wheelbase** - 100 inches (2540mm) minimum, 115 inch (2921mm) maximum or standard wheelbase for body used where longer.

**Windshield & Windows** - Must be retained but may be replaced with Lexan or other shatterproof material permitted. Refer to Safety Regulations 3.30.

**Wings** - Rear wing and spoilers permitted Refer to Safety Regulations 3.32.

## DRIVE LINE

**Anti-Blowback Device** - Refer to Safety Regulations 3.33.

**Clutches** - Any clutch permitted. Refer to Safety Regulations 3.34.

**Flex-plate Shield** - Refer to Safety Regulations 3.36.

**Flywheel** - Refer to Safety Regulations 3.38.

**Flywheel Shield** - Refer to Safety Regulations 3.37.

**Rear end** - Automotive type required. Aftermarket axles required with 5/8-inch stud bolts and axle retention device. Full floating or live axle assembly is highly recommended. Refer to Safety Regulations 3.42.

**Steering** - Refer to Safety Regulations 3.43. **New builds from 2023 mandatory to have a Steering Wheel Extension to aid driver removal, recommended for all existing TDS.**

**Suspension** - Full automobile aftermarket systems required. One hydraulic shock absorber per wheel minimum. Rigid mount suspensions prohibited. Minimum travel 1" per wheel. Lockup shocks prohibited. Refer to Safety Regulations 3.44.

**Transmission** - All transmissions must have neutral position and be covered by a one-piece SFI 4.1 shield. Automated shifters, electronic timed shifters, automatic transmissions are accepted. Aftermarket planetary converter drive units accepted. Refer to Safety Regulations 3.45.

**Tyres** - Automotive type specifically designed for racing. Location cannot be outside of body line. All tires must have manufacturer, model and size information clearly designated if used in competition. Refer to Safety Regulations 3.48.

**Wheelie Bars** - Refer to Safety Regulations 3.49.

**Wheels** - Refer to Safety Regulations 3.50.

## DRIVER SAFETY / SUPPORT

**Brakes** - Four-wheel hydraulic brakes and Dual master cylinder mandatory. See Safety Regulations 3.52.

**Fire Extinguisher System** - Required, See Safety Regulations 3.55.

**Head Protection** - See Safety Regulations 3.56

**Helmet** - Required, See Safety Regulations 3.57.

**Parachute** - Required. See Safety Regulations 3.59.

**Protective Clothing** - Required, See Safety Regulations 3.60.

**Rollcage** - See Safety Regulations 5.62.

**Safety Harness** - **Quick** release 5-point mandatory. See Safety Regulations 3.63.

**Seats** – New builds from 2023 mandatory to have a poured seat with wrap around SFI45.2 head protection/pads or Race style seats that have the head restraint built into the seat e.g Racetech, Kirkey or Sparco, recommended for all existing TDS.

**Tow Vehicles** - Permitted

**Window Net** - See Safety Regulations 3.64

**Electrification Safety Shutoff System** see safety regulations 3.59:1

**EJECT HELMET REMOVAL SYSTEMS** see safety regulations 3.57

## 5.13 TOP ALCOHOL

The Top Alcohol class incorporates the elite in supercharged dragsters, funny cars and altered vehicles built especially for the sole purpose of drag racing.

This class runs on a heads-up format of racing.

Qualifying: Based on ET – quickest to slowest

Field size will be Eight-Car field running on a .4 Pro Tree.

Turnaround: 60minutes from last pairing

### CLASS REQUIREMENTS

These requirements must be read in conjunction with safety Regulations 3.0 and safety reference chart.

### LICENCE

All competitors must hold a minimum of a restricted civil driver's licence; and must have an IHRA or recognized Drag Racing Licence.

#### Top Alcohol Dragster

##### Weight breaks

114.85 Kgs or more per Litre, (4.15 or more lbs per cubic inch) Supercharged single engine, with Roots-type supercharger. Methanol-minimum weight 771.2 Kgs (1700lbs minimum weight)

120.38 Kgs or more per litre, (4.35 or more lbs per cubic inch) Supercharged single engine, with Screw-type supercharger, Methanol-minimum weight 771.2 Kgs (1700 lbs minimum weight)

Supercharger - Overdrives: Roots type 70% max, Screw type supercharger less than 8.5 125% max, Screw type larger than 8.5 60% max.

#### For Top Alcohol Funny Car/Top Alcohol Altered

##### Weight breaks

.110.7 Kgs or more per Litre, (4.0 or more lbs per cubic inch) Supercharged with Roots-type supercharger. Methanol - minimum weight 816.5 Kgs (1800 lbs minimum weight).

117.62 Kgs or more per litre, (4.25 or more lbs per cubic inch) Supercharged with Screw-type supercharger. Methanol - minimum weight 816.5 Kgs (1800 lbs minimum weight).

Supercharger - Overdrives: Roots type 70% max, Screw type supercharger less than 8.5 125% max, Screw type larger than 8.5 60% max.

## ENGINE

**Electrical Components** – See Safety Regulations 3.09

### Traction/Slew Control

The use or fitment of any programmable multi-point rev limiter and/ or a rate of acceleration rpm limiter, either by themselves or integrated into the ignition systems are prohibited. Refer to Safety Regulations 3.09.

**Engine** - Any internal combustion reciprocating automotive type engine permitted. Aftermarket aluminium blocks and billet cylinder heads permitted. Maximum three valves per cylinder. Maximum two spark plugs per cylinder. Refer to Safety Regulations 3.05

**Lower Engine containment device (Nappies):** Mandatory. Refer safety Regulations 3.05

**Exhaust Systems** - Refer to Safety Regulations 3.0. TA/A and TA/FC double pipe insulated headers mandatory. Double tube must extend to start of bend at bottom of chassis rail.

**Fuel System** - Maximum two fuel pumps. Electronic controlled fuel system (EFI) prohibited. Refer to Safety Regulations 3.07

### Fuel

Methanol (Alcohol S/G @15°C .794) – the addition of substances to Methanol for the purpose of lubrication is permitted where the specific gravity is not adversely affected, all other substances are prohibited. VP racing M5 is not permitted. Nitro additives will be classified as per running Nitro methane. The use of propylene oxide is prohibited in all categories. Test samples may be sent to testing laboratories for further analysing.

**Ignition** - Each car in competition must have a positive-action on/off switch, capable of de-energizing the entire ignition system, in good working order, located in easy reach of the driver. Refer to Safety Regulations 3.09

**Magnetos** - Maximum two magnetos.

**Supercharger** - All supercharged restraint straps must be covered with a fire-resistant material. Screw-type superchargers must comply with SFI Spec 34.1. Manifold burst panel complying with SFI Spec 23.1 (in addition to panel in supercharger) plus restraint system complying with SFI Spec 14.21 mandatory. Refer to Safety Regulations 3.15

**Throttle** - Refer to Safety Regulations 3.16

**Valve Covers** - Cast or fabricated metal valve covers using all attachment bolt holes mandatory.

**Vent Tube Breathers** - Refer to Safety Regulations 3.18

**Warm-ups** - Refer to Safety Regulations 3.0

## BODY / CHASSIS

**AIRFOILS/WINGS:** A positive locking device to prevent accidental movement must be used on any air foil. Side mounted. No part of wing may be within 150mm of tire. Prohibited in TA/FC. Refer to Safety Regulations 3.32.

**Ballast** - Permitted. Refer to Safety Regulations 3.20 if used.

**Battery** – Not Mandatory Refer to Safety Regulations 3.21 if fitted.

**Body –TA/D** Body and cowl must be metal or fiberglass/carbon fibre. Driver compartment, frame structure, roll bars and body must be designed to prevent driver's body or limbs from contact with track surface. Sub-flooring inside but independent of body, mandatory where driver's legs rest on belly pan or chassis. Front overhang not to exceed 1016mm, measured from centre line of front spindle to forward most point of the car.

**Body-TA/A** Must have an originally produced body by an automotive manufacturer or replica of it, Bodies may be constructed of Fibre glass/carbon fibre. Bodies may be modified but may not be excessively narrowed or sectioned. Bonnet and fender optional. Front overhang not to exceed 1016mm (40in). Must be equipped with a simulated grille surround as per the original body.

**Body- TA/FC** Must be coupe or sedan of type originally mass produced by an automobile manufacturer. Body must have originally measured 1448mm wide or more at narrowest point. Minimum body width 1148mm when mounted. Fender flares or lips not on original factory produced bodies will not be considered in any width measurement. One inch lip around car body allowed. Duplications of production bodies made of fiberglass or carbon fibre allowed. Body may be lengthened or shortened no more than 10%. Tops may be chopped, maximum 50mm. Front fender bubbles may not exceed 65mm as measured from flat portion of fender line to top of bubble. Holes in top of fenders prohibited. Complete removal of top prohibited. A working escape hatch must be installed in top of body to permit easy driver exit. Minimum size, 457mm x 431mm. Roof hatches must be permanently attached, i.e., hinged at front. Must have single release mechanism operable from inside and outside. Front overhang not to exceed 1016mm. Enclosing the wheel wells or the use of wheel fairings is prohibited. Drilling or cutting the rear window for air passage is not allowed.

**Competition Numbers** – Refer to General racing Regulations 1.06.

**Firewall** - Must be aluminium or steel, magnesium prohibited. **TA/FC** Must be equipped with "fire windows" measuring no greater than 161.29 square mm on either side of firewall in vicinity of valve covers to warn driver of fire. Best results are obtained from laminated safety glass or fire-resistant plastics such as Lexan MR 4000. Refer to Safety Regulations 3.24

**Front-Wheel Fairings** – Prohibited

**Ground Clearance** - 75mm to insure proper operation of timing beams. See General Racing Regulations 1.13.

**Sheet Metal** - Driver's compartment interior, firewall, etc must be aluminium or steel. Magnesium prohibited. Seat maybe carbon fibre in TA/D.

**Spoilers** - Permitted front and rear in TA/D and TA/A. TA/FC rear spoiler may not be moulded into body. Maximum rear spoiler width, including spill plates and attachment points 1372mm. Rear spoiler spill plates cannot be located forward of the centreline of the rear axle. The trailing edge of rear spoiler may not extend more than 1524mm past the centreline of the rear axle, may not be over 127mm above the roof line and the forward edge may not be mounted to simulate a "wing" configuration. The installation of vortex generators is permitted on the spoiler assembly only, not allowed on car body. Any adjustment or movement during run prohibited. Air flow through spoiler or pass underside of spoiler other than hinged taillight area prohibited.

**Upholstery** – Optional. If used fireproof material mandatory.

**Wheelbase & Track** Maximum wheelbase variation from left to right, 50mm.

**TA/D** - Minimum 3.8 metres; maximum 7.6 metres on long side. Minimum front tread width 660mm.

**TA/A** - Minimum 2.5 metres; maximum 3.175 metres on long side. Minimum track 1200mm as measured from centre of tyre tread must be maintained on at least one axle.

**TA/FC** - Minimum 2.5 metres; maximum 3.175 metres on long side. Rear tyres cannot be outside of body line, nor more than 150mm inside body, measurement will be taken from outside edge of tyre to inside edge of the body.

**Windshield** - Mandatory, Minimum size on dragster class cars is 150 x 40 mm, Refer to Safety Regulations 3.31

**Windows TA/A and TA/FC-** Windows optional. If windows are used, they must be clear. If fully covered, side windows must have one 150mm hole per side.

**Wings & Support TA/D and TA/A** - Dual element rear wings up to 0.48m<sup>2</sup> and single element wings from 0.48m<sup>2</sup> to 0.65m<sup>2</sup> must have TAD supports complying with SFI Spec 2.3H. Dual element wings exceeding 0.48m<sup>2</sup> and/or single element wings exceeding 0.65m<sup>2</sup> must have Top Fuel supports complying with SFI Spec 2.3H. Maximum size for any rear wing (total of all stages) is 0.97 m<sup>2</sup>. Maximum height of any wing as measured vertically from the trailing edge of wing to ground is 2300mm.

No part of the wing or wing supports may attach to any engine or driveline components. Attaching bolts must be M10, Grade 8 bolts. Pit pins prohibited for attachment. Any adjustment or movement during run prohibited. Pressurisation of wing struts, up to 1380 kPa (200 psi), acceptable. Refer to Safety Regulations 3.32

## DRIVE LINE

**Anti- Blowback Device** - Mandatory. Refer to Safety Regulations 3.33

**Clutch, Flywheel, Flywheel shield** – Refer to Safety Regulations 3.34 and 3.38

**Driveline** – Refer to Safety Regulations 3.0

**Rearend** - Aftermarket full-floating or live axle mandatory. Refer to Safety Regulations 3.42

**Steering** - Commercially available quick-disconnect steering hub mandatory. Refer to Safety Regulations 3.43

**Suspension** - Front suspension optional. Refer to Safety Regulations 3.44

**Transmission** - Transmissions limited to up to 3 speeds + reverse, Refer to Safety Regulations 3.45 and 3.46

**Tyres** - Refer to Safety Regulations 3.48

**Wheelie Bars** - Permitted. Refer to Safety Regulations 3.49

**Wheels** - Must be completely isolated from driver's compartment. Refer to Safety Regulations 3.50

## DRIVER SAFETY / SUPPORT

**Arm Restraints** – Mandatory Refer to Safety Regulations 3.51

**Brakes** - Dual system recommended, Refer to Safety Regulations 3.52

**Deflector Plate** - Refer to Safety Regulations 3.53

**Fire Extinguisher System - Fire Extinguisher System** -

Mandatory when driver sits behind engine and on rear-engine cars with an enclosed cockpit, See Safety Regulations 3.55

**Helmet** - Refer to Safety Regulations 3.57

**Parachute** - Dual parachutes mandatory. Refer to Safety Regulations 3.59

**Protective Clothing** - Refer to Safety Regulations 3.60

**Rollcage – TA/D** Chassis fabrication to SFI Spec 2.3H (rear-engine cars) or SFI Spec 2.2A (front-engine cars) is mandatory and should be accompanied by chassis tag stating manufacturer's name, serial number, material and date.

Cars without cross member above driver's legs must have a strap or device to prevent legs from protruding outside chassis.

**TA/A and TA/FC** chassis fabrication to SFI spec 10.1C is mandatory and should be accompanied by chassis tag stating manufacturers name, serial number, material and date.

In all classes wiring must be external of the frame rails; the routing of cables, hydraulic or pneumatic lines inside the chassis is acceptable. Pressurisation of frame rails in lieu of air bottles is prohibited.

**Safety Harness** - Quick release 5-point mandatory. Belts must be covered with a fire-resistant covering in front engine vehicle. Refer to Safety Regulations 3.63

**Tow Vehicles** - Permitted

**Electrimation Safety Shutoff System** see safety regulations 3.59:1

**EJECT HELMET REMOVAL SYSTEMS** see safety regulations 3.57



## TOP FUEL

TF preceded by car number. Nitromethane burning dragsters, vehicles built specifically for all-out drag racing competition. Push starts prohibited. Tow vehicles permitted. 2,200 lbs. minimum weight.

### Requirements & Specifications

**AIRFOIL:** Front positive-locking device to prevent accidental movement required. Side mounted canard-type units permitted, securely mounted. No part of wing to be within 6" of front tire.

**BODY:** Body and cowl must be metal, fiberglass or carbon fibre/Kevlar extending forward to firewall. Driver compartment, frame structure, roll bars and body must be designed to prevent driver's body or limbs from contact with wheels, tires, exhaust system, or track surface. Sub-flooring, inside but independent of body, required where driver's legs rest on belly pan or chassis. Front overhang not to exceed 30", measured from centreline of front spindle to forward most point of car. Ground effects prohibited and include rocker skirts, belly pans, or any configuration under the body that creates a tunnel for the passage of air. Air deflector plates located behind the driver are restricted to a maximum 17" x 17".

**FRONT WHEEL FAIRINGS:** Prohibited.

**WINDSCREENS:** Required.

**WINGS & SUPPORTS:** Rear wing supports must meet SFI Spec 2.3K. Wing configuration limited to one only with maximum three elements. Maximum area of rear wing (total of all stages and/or elements), canards and air foils mounted behind front spindles restricted to 1500 square inches. Trailing edge of wing may not extend more than 50" behind centre line of rear axle. Maximum height of any wing as measured vertically from the trailing edge of wing to ground is 90". Strut mounting points may not be forward of motor plate. Distance from main to secondary mounting points must be 30" minimum. No part of the wing or wing supports may attach to any engine, bellhousing, or transmission components. Attaching bolts to be 7/16" grade 8 bolts. Ballock pins prohibited. Any adjustment or movement during run prohibited. Pressurization of wing struts, up to a maximum of 200 psi, is permitted. Spill plates must be flat, vertical, and parallel. Spill plate must attach to wing at right angle. Maximum spill plate dimensions 1/4" x 22" x 22". Front wing (element) may not exceed 66.5" in total width including spill plates. One inch off set from vehicle centreline permitted.

**BALLAST:** Permitted. See Safety regulations 3.20.

**BRAKES:** Dual spots or equivalent mandatory; minimum two-rear-wheel hydraulic brakes. Hand brake, if used, must be located inside body or driver compartment. Steel brake lines required. Brake lines passing engine or blower drive on any rear-engine car must be shielded. Automated and or secondary braking systems prohibited.

**CHASSIS:** All cars must meet SFI 2.3, 2.2 Spec. Plating of chassis prohibited. Chassis must have a current Chassis Certification prior to Competition. Cars without cross member above driver's legs must have a device to prevent driver's legs from projecting outside chassis.

**DEFLECTOR PLATE:** The minimum thickness of the deflector plate must be 1/8 inch 6061 T6 aluminium or 1/16" steel or titanium. If this thickness listed above is used, the plate must be clearly stamped by manufacturer to certify that the correct material was used. Deflector plate must be installed between roll cage and engine extending from 1" above top blower pulley to 1" below bottom pulley and no less than 1" wider than each pulley. On any enclosed engine/driver configuration, a full bulkhead must be installed to completely seal the driver from the engine. Minimum attachment for any plate is four 5/16" bolts. All competitors in Top Fuel must incorporate roll cage shielding in addition to the existing deflector plate. The shield must be, at a minimum, higher than the top of the driver's helmet and must be shaped to conform to the roll cage.

**GROUND CLEARANCE:** Minimum 3" from front of car to 12" behind centreline of front axle, 2" for remainder of car, except oil pan and exhaust headers.

**PINION SUPPORT:** Rear axle and/or pinion housing anti-rotation device mandatory.

**SKID PLATE:** Skid plates mandatory minimum 3 square inches must make contact before frame and oil pan.

**STEERING:** A device must be used to prevent a long steering shaft from injuring driver in case of frontal impact. Quick disconnect steering wheel meeting SFI 42-1 spec mandatory.

**THROTTLE:** Throttle actuating method on rear-engine cars must be protected where it passes blower-drive section. Electronic operation prohibited.

**WHEELBASE:** Minimum 250". Maximum 300" to long side. Maximum wheelbase variation from left to right: 2 inches. Minimum front tread width is 26".

**WHEELS & TIRES:** Wire wheels prohibited. Front wheels meeting SFI 15.2 mandatory. Minimum diameter of front wheels is 17". Rear-wheel discs or covers prohibited. Tires must be automotive type recommended by manufacturer for Top Fuel racing. Bead lock rear wheels meeting SFI 15.3 mandatory. Maximum width of wheels 16".

**WHEELIE BAR:** Mandatory. Wheels must be non-metallic.

**ENGINE:** Any internal combustion, reciprocating, 90-degree, single camshaft automotive engine permitted. Any configuration totalling 500 ci. Limited to one engine only. No electronic or electronically controlled fuel injection permitted. Must be equipped with SFI 7.1 engine containment device. Maximum bore centre spacing 4.900". All engines must be IHRA accepted prior to competition.

**EXHAUST SYSTEM:** Competition exhaust permitted. Exhaust must be directed out of car to rear, away from driver and fuel system.

**FUEL:** Nitromethane mandatory, maximum 90% at 60 degrees.

**FUEL INJECTOR:** Maximum allowable injector opening is 65 square inches excluding cross shaft in fully open position. Maximum height is 46" measured from crankshaft centreline.

**FUEL SYSTEM:** Fuel lines must be isolated from driver's compartment by a subfloor or be braided steel where engine is located in rear and fuel tank is in front of driver. Fuel tanks must be mounted above bottom frame rail. Fuel cells accepted. All fuel inlet fittings must be double barb or double bead design and secured with double clamps. Fuel block, down nozzle and manifold lines must be positioned to not obstruct the exit of manifold pressure from burst panel. No fuel may be routed through the frame on any chassis constructed after 1/1/02.

**IGNITION:** All system and related allowance must be IHRA approved. Limited to a maximum of 2 magnetos with output of 44 amps or less. The use of micro-processor battery-related ignition systems and accessories is prohibited. Must be equipped with a functional on/off switch that will de-energize the system inside the driver's area. See General Regulations.

**OIL LINES:** Oil pressure lines must pass a minimum pressure test and be clearly labelled as passing the testing process. If the filter or dry sump tank are not mounted directly to the engine, 1 inch of free travel is mandatory on all lines.

**OIL PAN:** Steel reinforced oil pan gaskets mandatory. Dry sump oil system permitted. (Carbon Fibre prohibited). All pans and dry sump systems must be IHRA accepted.

**Belly Pan:** An aluminium catch can is mandatory on all entries. Designs must not extend forward of the driver's seat cross member or rearward of the pinion flange. The unit must incorporate a minimum of 4" high bulkheads for oil retention. All units must extend up the outside of the frame to the top frame rail on the sides and both in front and behind the motor plate. If the rear portion is multi-piece, the side panels must affix inside the lower unit to direct oil back into the catch pan.

**SUPERCHARGER:** Supercharger manifold burst panel meeting SFI 23-1 mandatory. 19" rotor length maximum, 1 1/4" case width, 5.840 rotor cavity diameter. Restricted to roots type rotor helix angle not to exceed that of standard 71 series GM-type rotor. Variable speed devices prohibited. All entries must utilize a belt guard designed to shield both fuel and oil lines. See General Regulations.

**SUPERCHARGER RESTRAINT:** SFI 14-3 Mandatory.

**VALVE COVERS:** Cast or billet metal valve covers using all attachment bolt holes mandatory (Carbon Fibre prohibited). Steel reinforced valve cover gaskets mandatory.

**VALVE COVER RESTRAINT:** SFI 14-4 Mandatory.

**VENT TUBES:** Minimum two vent tubes with 1.250 inside diameter mandatory. Tubes must connect to an IHRA accepted overflow tank. Minimum capacity is 8 quarts. All hose connections must be double clamped. All entries must utilize a secondary attachment method for the hardware that connects the valve covers to the vent tubes. All tubing material must be flame resistant and be IHRA accepted prior to use.

**CLUTCH/FLYWHEEL SHIELD:** Flywheel and clutch meeting SFI 1.3 mandatory. Flywheel shield meeting SFI Spec. 6.2 mandatory. Maximum depth 9.4 with four .750 diameter bolts securing bellhousing to motor plate, with two bolts above and two bolts below the crankshaft centreline. All other fasteners must be .4375 diameter. See SFI spec. 2.3K for specific requirements. See General Regulations.

**TRANSMISSION:** Prohibited. Positive system to disengage engine from final drive required. Clutch hold-down device recommended. Minimum requirement for reverser is a ballistic shield meeting SFI 4.1 spec. See General Regulations.

**REAR END:** Full-floating or live axle assembly required. Periodic Magnaflux check of axles recommended. Rear-end ratio of 3.20:1 mandatory on supercharged entries. Non-supercharged entries may run any desired rear-end ratio provided it is utilized in an IHRA accepted housing.

**ARM RESTRAINTS:** Mandatory. Must meet SFI 3.3.

**DRIVER RESTRAINT SYSTEM:** A minimum of a 5-point SFI 16.1 with five-year expiration from date of manufacture mandatory. All belts and harnesses must be covered with fire-resistant material. Abrasion plates mandatory on seat belts if wrapped around frame and exposed to abrasion should the frame contact the ground. The system must maintain proper alignment in the direction of pull. All tabs and brackets must be in double shear and mounted in a way that will permit the system to pivot. See General Regulations.

**ENGINE CONTAINMENT:** Must be equipped with SFI 7.1 engine containment device. The containment system must include the oil pump and related components.

**FIRE EXTINGUISHER SYSTEM:** Required when driver sits behind engine. Rear engine cars with an enclosed cockpit require a minimum 5 lb. fire extinguisher system. Safety pin must be red flagged.

**HELMET:** SA-2005 or newer or SFI 31.2 mandatory.

**HEAD AND NECK RESTRAINT:** SFI 38.1 mandatory.

**PARACHUTES:** Dual parachutes required. Two separate shroud line mounting points with sleeved 1/2" bolts required. Shroud lines from mounting point to parachute pack must be covered with flame retardant material. Safety pins must be red flagged.

**PROTECTIVE CLOTHING:** Driver's suit meeting SFI Spec 3.2A/15, gloves 3.3/15, boots/shoes 3.3/15, and head sock 3.3. mandatory. Drivers in front-engined cars must use suit meeting SFI Spec 3.2A/20, gloves 3.3/20, boots 3.3/20, and head sock 3.3. A head sock is not mandatory when helmet is manufactured with a skirt labelled as meeting SFI Spec. 3.3. Neck collar meeting SFI 3.3, must be a complete circle.

**ROLL BAR PADDING:** Additional roll bar padding mandatory anywhere the drivers head may contact the cage. SFI 45.1 may be used in other areas as well.

**SEAT:** See General Regulations.

**CREDENTIALS:** Valid IHRA Competition License required. IHRA USA medical mandatory

**DATA RECORDERS:** See General Regulations.

**ELECTRONIC DEVICES:** See General Regulations.

**WARM-UPS:** When starting the vehicle, it must be fully within the competitors pit space.

**Electrification Safety Shutoff System see safety regulations 3.59:1**

**EJECT HELMET REMOVAL SYSTEMS see safety regulations 3.57**

## 5.21 TOP FUEL MOTORCYCLE

### REQUIREMENTS & SPECIFICATIONS

**ENGINE:** Engines (pushrod, 45-degree to 90- degree V-Twin). Carburetted or fuel-injected engines with a maximum displacement of 3.3L (200 cid). Engines (pushrod, 45-degree to 90- degree V-Twin) with maximum of 2 forms of supercharging with a maximum displacement of 2.0L (122 cid) An SFI-accepted engine restraint system mandatory.

Multi cylinders maximum 2 forms of supercharging 1.7L (104 cid)

**BELLY PAN:** Mandatory. Must have absorbent pads.

**CYLINDER HEAD:** Any aftermarket heads (including 4-valve) permitted.

**FUEL:** All fuels other than Nitromethane and methanol prohibited.

**SUPERCHARGER:** Permitted. All units must have rubber manifold connections or some form of "sneeze" valve to relieve pressure.

**VENT TUBES:** Crankcase and all tanks containing fluids must have vent tubes routed to catch can or have a non-spill breather system on motorcycle.

### DRIVETRAIN:

**CHAIN GUARD:** Mandatory on all motorcycles. Chain guard must be 3mm steel or aluminium. Chain guard must cover the width and at least the top run of the chain, from centreline to centreline of sprockets.

**CLUTCH:** Any type of clutch, including multi-stage setup, permitted. Clutch must have a protective guard made of 3mm steel or aluminium.

**TRANSMISSION:** Any transmission or high-gear-only system may be used.

**PRIMARY DRIVE:** All primary drives must have adequate guards. All chain or gear driven drives requires oil bath lubrication.

**BRAKES:** Hydraulic type, front and rear, mandatory. Steel-braided brake lines mandatory. Brake lines must be routed and mounted to ensure no contact with moving parts. Two-rotor front brakes permitted. Minimum size: 280mm diameter, 4.7mm thickness for single rotor; 228mm diameter, 3.12mm thick with dual rotor brakes. Parachutes are mandatory on all bikes.

**CONTROLS:** Handlebar controls must be located in safe, workable position. Foot pegs and foot controls must be located in safe, workable position and must be mounted in an accepted manner. Rider must be able to shut off fuel without removing hands from handlebars. A secondary shut off device must be attached to rider in the event of a premature exit from motorcycle. This device must control the fuel valve. Handlebar push back safety pin to lock throttle required if bike is to be pushed back while running.

Dual cable push-pull throttle assembly is mandatory. Lanyard for secondary shut off must be run through eyelet, allowing the lanyard to be pulled in any direction to force shut off.

**SUSPENSION:** Front suspension minimum size: 32mm. Minimum travel: 50mm. Steering dampeners mandatory and must not act as a steering stop. Rear suspension permitted. Fork stops required; must limit the turning arc to 28 degrees.

**WHEELIE BARS:** Wheelie bars mandatory. Maximum length is 3050mm from centreline of rear axle. Must be securely cross-braced and be capable of supporting the weight of the bike with the rider in position.

**FRAME:** Aftermarket frames permitted. All frame components, except braces (all reinforcing tubes must be minimum 3/4 inch with 0.049inch wall thickness 4130 chrome moly tubing), brackets, and gussets, must be manufactured from minimum 1 1/8-inch x .065-inch 4130 chrome moly tubing. All welding must be done by approved heliarc process. Rake angle must be at least 40 degrees. All butt welds must have visible reinforcement. Plating of frame prohibited. Painting permitted. Frames constructed before 1999 and approved for competition may use 1-inch x .58-inch tubing.

**GROUND CLEARANCE:** Minimum of 50mm with rider on bike with 10 psi in rear tire (includes exhaust and kickstand).

**WHEELBASE:** Minimum 85 inches.

**TYRES:** Must be specified for racing use by manufacturer. Any rear-tire size permitted.

**WHEELS:** Rear-wheel minimum: 15-inch diameter; maximum, 18-inch diameter. Dual rear wheel bead locks or a minimum of six bead fixing screws per side required.

Front-wheel minimum: 406mm (16-inch) diameter; maximum, 457mm (18-inch) diameter with a minimum nominal section width of 75mm

**SEAT:** Seat, tail section, and rear fender may be incorporated as one unit and must include a step to prevent rider sliding backward.

**BODY:** No body parts are necessary, except rear fender that must cover the width of the tire and extend past the rear axle.

**FAIRINGS:** Permitted. All units must be solidly mounted to frame.

### ELECTRICAL:

**CHARGING SYSTEM:** Permitted.

**CONTROL SWITCHES:** Must be mounted and constructed in an accepted manner. Must have an emergency fuel and ignition kill switch.

**IGNITION:** Any ignition system permitted.

**STARTING SYSTEM:** Must be electric external starter. Battery top covers required. No push starts. Jack stands mandatory for starting V twins.

**COMPUTERS/DATA RECORDERS:** Can be used for information gathering only.

**Traction/slew control** prohibited see general racing regulations 1.07.

### RIDER:

**CREDENTIALS:** Valid IHRA competition license mandatory. IHRA USA medical mandatory

**HELMET:** Full-face helmet with a Nomex helmet sock/balaclava meeting SN 2005 or newer mandatory.

**PROTECTIVE CLOTHING:** Full all-leathers or SFI Spec 40.1/2 suit, leather boots that completely cover the ankle with toe-area reinforcement, and full-finger leather gloves are mandatory. Gloves must be Kevlar-lined or equipped with slide buttons and have knuckle armour and palm reinforcement. Suits may be one-piece design or joined with a zipper at the waist. Reinforcement and/or armour in the knee, elbow, shoulder, and knuckle areas required. Spine/back protector mandatory. Nomex under cloths mandatory (sweater and long johns) to protect the legs and chest. Ballistic chest protector mandatory on V twins. **Electrimotion Safety Shutoff System see safety regulations 3.59:1**

**EJECT HELMET REMOVAL SYSTEMS see safety regulations 3.57**

## 5.22 JET-POWERED DRAGSTER / FUNNY CAR

### REQUIREMENTS AND SPECIFICATIONS

#### ENGINE:

**AFTERBURNER-TAILPIPE:** For butts, seams must be on bottom; overlap seam placement will be at the discretion of the technical inspector. Dump valve on afterburner manifold mandatory; valve to be actuated with primary chute lever (to prevent shutoff smoke).

**AIR INTAKE:** All air intakes must be totally and securely screened (1/8-inch minimum, 3/8-inch maximum or equivalent). Such screening must be securely attached to the engine.

**CATCH CAN:** Fuel-overflow catch tanks of sufficient capacity to accommodate excess fuel on shutdown and adequate tank venting (approximately 1 quart) required on all vehicles. Use of hose clamps or tie wraps prohibited.

**CONTROL CABLES:** Manual afterburner control valve cable, minimum 3/16-inch. Electronic control accepted. Fuel control cable must be minimum 3/16-inch. Must have secondary shutoff on main fuel line. Emergency shutoff on burner shutoff line mandatory. Emergency shutoff on manually controlled afterburner system mandatory. See PARACHUTES for additional details.

**ENGINE:** Maximum of one thrust-driven engine permitted. Engine attitude must have down thrust; minimum -1-degree angle. No internal modifications permitted. All engines must be run within manufacturer's maximum allowable limits. Engine make, type, and model must be IHRA-accepted. Current engines are J-33, J-34, J-60 (JT-12), J85-5 (CJ-610), and Rolls Royce Viper 522 and 622. Any other engines must be accepted prior to running.

**FILTER:** Filter on hot streak inlet mandatory.

**FUEL:** Approved jet-type fuel only (Jet A, Jet-1, kerosene, diesel). Only diesel fuel additives permitted. Separate water and methanol injection systems permitted. Racing gasoline permitted for starting purposes only.

**FUEL TANK:** Maximum 30 gallons. Must be securely mounted to frame, with appropriate baffling (welding or equivalent). If pressurized, tank must be round. Mechanism to release fuel-tank pressure mandatory. If electrical device, switch must be "normally open" type.

**INSTRUMENTS:** All instruments, gauges, and metering devices must be fully functional. The following instruments must be visible from the cockpit of each vehicle: tachometer (percent of rpm); exhaust-gas-temperature gauge (EGT); oil-pressure gauge/light (taken off pump outlet housing).

#### BRAKES & SUSPENSION:

**BRAKES:** Calliper-type disc brakes required on all four wheels. Two separate hydraulic systems required; may be front/rear or double system.

**SUSPENSION:** Functional front and rear suspension optional. Rear shocks, if used, must be installed in such a manner as to retain integrity of suspension in case of failure.

#### FRAME:

**GROUND CLEARANCE:** Minimum 3 inches from front of car to 12 inches behind centreline of front axle, 4 inches for remainder of car.

**PARACHUTES:** Dual parachutes mandatory. Primary parachute must be on a control system that will shut off engine when parachute is released. Secondary parachute must be used as an independent backup system with engine-shutdown capabilities (secondary fuel shutoff bypass valve on main fuel line to work with secondary parachute). Must have at least two ways to positively shut off jet engine. Parachute mount must be substantially bolted and/or welded in place. Minimum parachute connection spool diameter: 1 inch. Funny Cars required to have a minimum 10-foot bridle cord to attach pilot parachute. Chutes and shroud lines must be mounted in such a position as to be protected from tailpipe heat. All unpacked shroud lines must be covered with 1/16-inch leather or IHRA-accepted material (silver tape prohibited). Steel, aluminium, or carbon-fibre parachute tubes only. Parachute packs prohibited.

**ROLL CAGE:** Dragster chassis must meet SFI Spec 2.3K; Funny Car chassis must meet SFI Spec 2.2B, 2.3K, or 10.1D. Plating of chassis prohibited; painting permitted. Chassis must be inspected every two years by IHRA and have serialized sticker affixed to frame before participation. Roll-cage padding meeting SFI Spec 45.1 mandatory anywhere driver's helmet may come in contact with roll-cage components.

**WEIGHT:** Minimum 1,250 pounds; maximum 2,500 pounds. All weights include driver and fuel.

**WHEELBASE, DRAGSTER:** Minimum 180 inches; maximum 300 inches.

**WHEELBASE, FUNNY CAR:** Minimum 125 inches; maximum 135 inches.

#### TIRES & WHEELS:

**TIRES:** Tires to be automotive type represented by manufacturer for racing use. Minimum front-wheel diameter on jet Funny Cars, 14 inches.

#### INTERIOR:

**SHEET METAL:** All sheet metal within driver compartment must be aluminium or steel; magnesium prohibited.

#### BODY:

**BODY, FUNNY CAR:** Driver must be isolated from engine compartment and fuel system with minimum 3/16-inch Lexan. Firewall must provide a bulkhead between the engine or fuel tank and driver compartment. All openings must be sealed with metal. Minimum .032-inch 6061 T6 aluminium or .024-inch steel; use of magnesium prohibited. Must have at least one way to easily and quickly exit the car with the body down (roof hatch or removable windshield), with release operable from inside and outside of vehicle. Exit from car with body down must be demonstrated during the inspection process.

#### SUPPORT GROUP:

**FIRE-EXTINGUISHER SYSTEM:** Funny Cars: minimum 10-pound, IHRA-accepted fire-extinguisher system. Enclosed cockpit dragsters: minimum 5-pound, IHRA-accepted fire-extinguisher system. See General Regulations 9:3 for IHRA-accepted fire-extinguishing agents.

**DRIVER:****ARM RESTRAINTS:** Mandatory.**CREDENTIALS:** Valid jet license mandatory. IHRA USA medical mandatory**DRIVER LOCATION:** Driver must be sealed off from intake by firewall of at least shoulder height. If located next to compressor section, driver must be totally isolated from compressor by 3/8- inch 7075-T6 aluminium shield. J-85 Funny Cars must be additionally equipped with a minimum 360-degree .050-inch stainless-steel shield encompassing combustion can. Driver insulation must be used to protect driver from engine heat.**DRIVER RESTRAINT SYSTEM:** Three-inch driver restraint system meeting SFI Spec 16.1, including crotch strap, mandatory. Restraint system must be updated at two-year intervals from date of manufacture.**HELMET:** Full Face Helmet meeting Snell SA 2005 or newer mandatory. Eject Helmet Removal Systems part # SDR 890-01-30 mandatory and must be installed as per manufacturer's instructions.**HEAD AND NECK RESTRAINT:** SFI 38.1 mandatory.**PROTECTIVE CLOTHING:** Drivers of dragsters must wear a suit meeting SFI Spec 3.2A/15; drivers of Funny Cars must wear a suit meeting SFI Spec 3.2A/20. All drivers must wear SFI 3.3/5 gloves and SFI 3.3/5 boots/shoes.**Electrification Safety Shutoff System see safety regulations 3.59:1****EJECT HELMET REMOVAL SYSTEMS see safety regulations 3.57**

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## 5.23 ELECTRIC-POWERED VEHICLE

**Requirements and specifications for Electric-Powered Vehicle as per Safety Regulations 3.0 vehicles with the following exceptions.****MOTOR:** Electric motor(s) only permitted. Maximum height of electric-motor output-shaft centreline: 36 inches on OEM trucks, 24 inches on all others. Vehicles with exposed motors must have a shield of .024-inch steel, .032-inch aluminium, or .120-inch Lexan.**FUEL SYSTEM:** All conversion vehicles must remove fuel tanks and fuel system, including vapor storage equipment, from vehicle.**CLUTCH, FLYWHEEL, FLYWHEEL SHIELD:** Flywheel and clutch meeting SFI Spec 1.1 or 1.2 (two-disc maximum) mandatory on any car running 11.49 (\*7.35) or quicker. Flywheel shield meeting SFI Spec 6.1, 6.2, 6.3, or 9.1 mandatory on all cars running 11.49 (\*7.35) or quicker. Exposed-motor electric-powered vehicles with open-frame, vented, or brush replacement window motors must install a motor shield, minimum .024-inch steel or .032- inch aluminium, 360 degrees to provide protection from flying commutator bars, molten copper, plasma, etc. in event of motor overload. A motor plate, minimum 1/4-inch steel or 1/2-inch aluminium may be used to adapt traction motor to conventional transmission.**DRIVELINE:** Driveline loop mandatory on any non-OEM vehicle running 16.00 seconds or quicker.**REAR END:** Chain-drive vehicles must be equipped with a chain guard constructed with minimum .125-inch steel or .250-inch aluminium covering width and top run of chain to centreline of sprockets.**SUSPENSION, STOCK-BODIED VEHICLES:** OEM three-wheeled vehicles permitted.**DEFLECTOR PLATE, OPEN-BODIED VEHICLES:** Each vehicle must have protection for driver from traction motor overload. Must protect driver from motor plasma, flying commutator bars, molten copper, bursting batteries, and spraying electrolyte.**WHEELBASE:** Minimum 90 inches, unless car has original motor or is a conversion electric-powered vehicle with motor in original (internal combustion) location. For vehicles with a wheelbase shorter than 90 inches but greater than 40 inches, vehicle cannot exceed 50 mph at any point on the racetrack.**BATTERIES:** Must be securely mounted and outside driver compartment. Batteries must be installed so as to withstand a force four times (vertical) and eight times (horizontal) the weight of the battery pack, and each battery or battery pack must be secured with bolts and straps commensurate with the size and weight of the battery. Battery may not be located above the top of rear or drive tires in open-wheeled cars, nor outside body lines in bodied car, except for OEM-production-line electric-powered vehicles. Battery(s) must be completely sealed from driver compartment. All open-bodied vehicles must use ABSORBED GLASS MAT, STARVED ELECTROLYTE, SEALED VENTED NICAD, or LITHIUM batteries for power source. Traction-motor and/or high-current wiring may not be located in driver's compartment. Instrumentation wiring permitted. All traction motor wiring must be isolated from vehicle chassis.**FUSING OF BATTERIES:** All battery packs must have over-current protection. Circuit breaker(s) or fuse(s) permitted. Such protection devices must have a DC voltage rating equal to or greater than the nominal pack voltage. Current rating must be lower than a short-circuit current that pack can produce without damage. Battery sub-packs must be individually fused.**RECHARGING:** Batteries may be recharged in pits or other designated areas only. All vehicles must be connected to AC power-supply (earth) ground when charging. All battery chargers must be equipped with an output fuse rated for 600 volts and a current capacity at least 125 percent of maximum charger DC output.**IGNITION:** All vehicles must have a visible indication of a "live" car, except OEM. An externally activated switch or switch control must be installed on the outside of the vehicle and clearly marked to indicate OFF position. A RED triangle must be clearly visible whenever power



system is turned ON. This may be a light or a mechanical indicator. Traction battery pack must be physically disconnected when switch is in the OFF position.

**MASTER CUTOFF:** All vehicles except OEM must incorporate a master electrical disconnect switch that must disable all electrical functions. Switch must disconnect traction-motor battery-pack section of the circuit, and if the switch is a push-pull design, push motion must be "off" function.

Battery in rack/box or with cleats		Battery on flat plate with strap only	
Bolt size	Battery weight (pounds)	Bolt size	Battery weight (pounds)
#8	15	#8	6
#10	19	#10	7.5
1/4	36	1/4	14
5/16	57	5/16	23
3/8	83	3/8	34
7/16	114	7/16	46
1/2	152	1/2	61
9/16	195	9/16	78
5/8	243	5/8	96

**WIRING:** All high-voltage wiring must be located and secured to prevent contact by driver and/or spectators. Any wiring with voltage higher than 24 volts must be completely covered.

#### ELECTRIC-POWERED MOTORCYCLE

**Requirements and specifications for Electric-Powered Motorcycle as per safety regulations/Mod & Comp Bike - and Electric-Powered Vehicle - with the following exceptions:**

**MOTOR:** Electric motor(s) only permitted.

**BATTERIES:** Wet (free liquid) battery prohibited.

**MASTER CUTOFF:** All electric motorcycles must be equipped with a switch, attached to rider with a lanyard, capable of shutting off all power to electric traction motor.