

ASN CANADA FIA NATIONAL SOLOSPORT REGULATIONS - AUTOSLALOM

ASN Canada FIA is the governing body of motorsport in Canada appointed by the Fédération Internationale de l Automobile

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ASN territories and regions may adopt these regulations for use within their jurisdictions if they choose to do so including the sole responsibility for the administration thereof.

These regulations are a guide to further general safety and in no way a guarantee against injury or death to participants, spectators or others. No express or implied warranties of safety or fitness for a particular purpose shall be intended or result from publication of or compliance with these Regulations.

ASN Canada FIA (ASN) reserves the right at any time and from time to time to alter these regulations. Such alterations or additions will be published in the form of revised regulations or bulletins. Changes to these regulations will become effective on the date issued unless amended or revoked by ASN. Questions concerning rule clarification should be directed to the ASN AutoSlalom Technical Sub-committee.

These regulations were established by the ASN and are intended to assist in the orderly conduct of SoloSport events and to further participant and spectator safety.

The text of these regulations was originally drafted in English and may be translated into other languages. In case of a dispute between the English text and that of any other translation, the English text shall prevail. In this rulebook, any reference to the masculine shall include the feminine, and references to the singular shall include the plural.

By participation in these events, all participants are deemed to have agreed to be bound by this rulebook. The interpretation and determinations of these regulations by ASN officials shall be final and binding. In order to maintain a sporting nature, to achieve prompt competition results, and in consideration of the benefits to them, all members, clubs, officials of ASN hereby agree that:

Determinations by ASN officials are non-litigable;

No litigation shall be initiated against ASN. ASN territories or their members and officials to reverse or modify results of such determinations, or to seek to recover damages or other relief allegedly incurred or required as a result of such determination; and

Where a person initiates or maintains litigation in violation of this provision, that person agrees to reimburse ASN for all costs associated with the legal action.

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TERMINOLOGY: The following definitions are adopted for use in ASN SoloSport Regulations, Appendices and Supplementary Regulations.

ASN:	ASN Canada FIA, the National Sporting Authority recognized by the FIA as sole holder of the sporting power in Canada.
Automobile:	A land vehicle with a minimum wheelbase (measured between front and rear wheel centres) of 152 cm (60 inches) propelled by its own means, running on at least four wheels not aligned, which must always be in contact with the ground; The steering must be ensured by at least two wheels and the propulsion by at least two of the wheels.
ASN National SoloSport Committee:	A group of nationally appointed individuals responsible for the administration of SoloSport events and enacting the policies adopted by ASN.
AutoSlalom Technical Sub- Committee:	A group of nationally appointed individuals responsible for the administration of these regulations and carrying out their mandate as determined by the ASN National SoloSport Committee.
CAC:	ASN Canada FIA Canadian AutoSlalom Championship.
Category:	Category is a grouping of cars based upon their degree of preparation as outlined in this rulebook. Categories shall be named Stock, Super Stock, Street Prepared, and Modified.
Class:	A Class is a grouping of cars within a Category that are deemed to have similar performance potential in that Category. Classes are named alphabetically according to the Vehicle Classification Schedule in this rulebook.
Club:	Any body recognized by ASN as a club. Clubs must be registered as societies in their provincial jurisdiction.
Competition:	A contest, governed by the applicable event regulations, in which an automobile takes part and which is of a competitive nature or is given a competitive nature by publication of results.
Competitor:	A person whose entry is accepted for any event or who competes in any event, whether as an entrant or as a driver.
Control Line:	A line, at the crossing of which a vehicle is timed: i) start line is the first control line, with or without timing; ii) finish line is the final control line, with or without timing.
Course:	The route to be followed by competitors in a competition.
Driver:	A person nominated as the driver of an automobile in any competition.
Entrant:	A person or organization whose entry is accepted for any competition.
Event:	(a) A non competition event is when an automobile takes part in a scheduled program and which has no competitive nature in that neither times are given or results produced.
	(b) A competition event is an event in which an automobile takes part and which has a competitive nature or is given a competitive nature by the publication of results (also see GCR 2.14).

FIA:	Fédération internationale de l'automobile, the international federation of National Automobile Clubs.
GCRs:	ASN Canada FIA SoloSport National General Competition Rules.
Licence:	A certificate of registration issued to any person or body (drivers, entrants, manufacturers, teams, officials, organizers, etc.) wishing to participate or taking part in competitions (also see GCR 2.16).
National Event:	A competition which is open only to competitors and drivers holding an appropriate licence issued or recognized by ASN and conducted under an organizing permit issued by ASN.
Organizer(s):	A person(s), approved by ASN or ASN territory, invested by the club of record with all necessary powers for the organization of an event and the enforcement of supplementary regulations.
Program:	A document prepared by the promoters and/or organizers of an event for the purpose of informing the participants and spectators about such a meeting.
SoloSport Event:	A SoloSport event is conducted on closed courses in which each competitor completes the course one car at a time. Jurisdiction over SoloSport Events is divided between SoloSprint and AutoSlalom Regulations (also see GCR 2.23).
Supplementary Regulations:	Compulsory official document issued by the promoters of a sporting competition with the object of laying down the details of a competition.
Territory:	A Canadian province or group of provinces under the authority of ASN Canada FIA. Currently, the Territories are: CACC (British Columbia), WCMA (Alberta, Saskatchewan, Manitoba), CASC-OR (Ontario), FAQ (Quebec) and ARMS (New Brunswick, Newfoundland, Prince Edward Island and Nova Scotia). The Territories' coordinates can be found in Appendix G

1. GENERAL REGULATIONS

The regulations contained in this section shall apply to all national AutoSlalom events. They were designed to assist in ensuring a safe and enjoyable event.

1.1.1. AutoSlalom Event

AutoSlalom: An event generally held on a paved, flat surface where the course generally consists of straight sections and connecting turns and corners, generally resembling a miniaturized road course. The course design shall be such as to emphasize car handling skill and maneuverability rather than car performance. The course is appropriately defined so that a test of memory is not required to remain on course. The course will not require the driver to stop and/or reverse between the start and finish box of a given run. Competitors may be required to possess a valid ASN competition licence. For the purposes of this rulebook, the terms AutoSlalom, Autocross, Parallel Solo shall mean the same.

Autocross: An AutoSlalom event generally held on graveled, dirt or ice/snow covered, closed courses.

1.1.2. Insurance

ASN Canada FIA requires that all sanctioned events be covered by public liability insurance. Details on policy coverage and application/report forms are available on the ASN Canada FIA web site www.asncanada.com. (Also see GCR 4.20).

1.1.3. Coverage

All competitors, officials, and workers will be covered against damage to third parties, but will be responsible for any deductible amounts. It is a condition of the ASN Canada FIA insurance policy that waivers in the form specified by the insurance company be signed by all persons who participate in an event as an official, instructor, worker, student, competitor, crew member or who are permitted to enter areas normally closed to the public or spectators. Property owners or sponsor names may be added to the event insurance certificate.

1.1.4. Disclosure

The organizer of an event must ensure that the insurance certificate is posted at the event.

1.1.5. Incident Reports

All incidents where damage/injury may have occurred must be reported by forwarding a completed incident report form to the ASN within (48) forty-eight hours of the conclusion of the event. The incident report form must be completed for all accidents whether or not a claim is anticipated.

1.2. EVENT PROCEDURES

1.2.1. Initial Notice

The organizer of a National event shall provide notice of a National event to ASN, all Territories and all members of the ASN National SoloSport Committee not later than 120 days prior to the event.

1.2.2. Form of Notice

Notification shall be given by mail or other means of physical or electronic distribution. The notice shall include information on at least the dates and location of the event, an outline of the main features and preliminary time schedule for the event, the opening date for receiving entries as well as a web site address for an active web site dedicated to the event.

1.2.3. Event Supplementary Regulations

A draft set of Supplementary Regulations shall be sent to all members of the ASN National SoloSport Committee for approval not later than 90 days prior to the event.

Upon approval by the Committee, the supplementary regulations shall be made available on the event web site not later than 60 days prior to the event. Copies of the approved supplementary regulations shall be sent to ASN, all territories and all members of the ASN National SoloSport Committee.

1.2.4. Event Documentation

All of the following are required to be posted on the event notice board:

- Event permit; Insurance certificate; Letter showing site authorization; Supplementary Regulations.
- 1.2.5. Adverse Weather Conditions

A national event shall proceed without consideration of weather conditions on the day of the event unless such conditions are severe enough so as to make it unsafe to conduct the event and warrant special consideration by the Organizer and the Event Steward. Such conditions may include, but are not limited to, flooding, earthquakes, lightning, etc.

1.2.6. Order of Running

The cars should run by class, the order must not be changed once such order is announced.

1.2.7. Impound

For national events, impound shall be applicable to all competitors. After each run group all competitor vehicles shall go directly to impound where they will be held for inspection. No work is to be performed on a car between the last run and impound. Stock, Super Stock and Street Prepared cars shall have hoods and trunks fully opened. Drivers may visually inspect each other's vehicles. The time limit for inquiries concerning eligibility of other entrants, drivers or their vehicles arising from Impound inspections is as per GCR 9.5.i. During impound, the following minimum procedures will be administered by the Chief Scrutineer, or his representative(s), on all potential award-winning cars (as per unofficial results).

Stock and Super Stock - Inspect for obvious illegalities. Any tires not previously inspected may be subject to inspection here.

Street Prepared - Validate Legality

Modified - Validate minimum weights (where possible) and legality. During weighing, if there is any question as to legality, the car must be weighed in both directions.

ASN reserve the right of its designated representatives to ensure the legality of competing cars.

A competitor risks disqualification if he does not follow impound procedures or if his vehicle fails to meet inspection requirements at impound.

1.3. COURSE DESIGN AND EVENT SAFETY

- 1.3.1. Minimum Standards & Guidelines
 - a) These are the minimum requirements only and the Steward(s) of the event may require more stringent requirements. The following standards of course design are provided to give organizers direction in designing or choosing a course and are also provided to ensure that safety precautions are in place.
 - b) Competitors are cautioned that participants in AutoSlalom events may not be covered by the participant's own vehicle insurance and are advised to check with their insurance providers.
 - c) Organizing an event that complies with these regulations, calls for the exercise of prudent, good judgment and common sense. The protection of participants and property should be the prime factor governing all decisions relating to course design and safety.
 - d) Caution and proper attention should be given to the location of property which might be subject to damage in the event of loss of control of a vehicle. Buildings, fences, utility poles, fire hydrants, and the like should all be carefully considered.
 - e) Surfaces must be paved and in good condition. Gravel or any type of non-stabilized, soft surface must not be used for an AutoSlalom event. Attainable speeds on the course should be taken into consideration. Courses with dips that get a car airborne are to be avoided.
 - f) Pylons should be used to mark unsafe track areas, such as wet or muddy apexes, broken track surface, etc. The installation of chicanes may be used to increase safety margins at certain points in the course. A series of time penalties should be elaborated for knocking over these marking cones or for failure to follow the chicanes.
 - g) Events that require the competitor to leave the car during a timed run or require the competitor to start the event from outside the car are not permitted.
 - h) The running of more than one car at a time is permitted, providing the cars are separated on the course by adequate time and distance to eliminate the possibility of a passing situation or of two or more cars racing with each other.
 - i) (It is highly recommended that course designers refer to the following guideline document on designing an AutoSlalom course: Solo2 Course Design by Roger Johnson: http://home.houston.rr.com/rogerthereal).

1.3.2. Demonstration

The course must be clearly defined so that all competitors understand the direction of travel through the course.

1.3.3. Surface Hazards

In laying out a course, care should be taken to avoid potholes, loose gravel, grates, curbs, oily spots or other dangerous features.

1.3.4. Buildings and Structures

At no time within thirty (30) meters should a course run toward any buildings or spectator areas.

1.3.5. Immovable Objects

The outside edge of a course should not pass closer than eight (8) meters from any permanent object such as a lamp post, planter, curb, or tree.

1.3.6. Off-Camber Turns

Negative camber turns should be avoided if at all possible.

1.3.7. Minimum Dimensions

Minimum gate width should be no less than four point six (4.6) meters wide as measured between the pylon bases. Minimum distance between cones in a linear slalom should be fourteen (14) meters as measured between the pylon bases. Minimum turn radius should be no less than ten (10) meters and the radius of one turn should not overlap the next turn.

1.3.8. Course Markers

All pylons should be of standard road type, distinctly colored and a minimum of 25cm (10 in.) in height. Pylons should be heavy enough to prevent movements other than those caused by contact with a competing vehicle. Pylon locations should be clearly marked around the entire base of the pylon to assure accurate replacement and assessment of penalties.

1.3.9. Spectator Safety

Spectator safety is a concern. Uninformed and misguided spectators are to be expected and adequate marshaling provisions should be made to avoid their intrusion onto the course. It is important that spectators be kept a safe distance from the course, particularly at the outside of turns and at the start/finish area. Unless protected by substantial barriers, spectator areas are to be roped off.

1.3.10. Passenger

Passengers are NOT allowed during official runs of an event.

1.3.11. Placement of Timers

Extreme Care should be taken in the location of the start/finish area. The timers should be placed well clear of the course in a safe area. The finish area shall be clearly marked ending in a box configuration. There should be an adequate shut down area.

1.3.12. Worker Stations

Adequate marshaling should be provided to ensure adequate and consistent policing of course infractions. Marshaling stations should be placed in appropriately safe sections of the course while allowing workers an unobstructed view of the pylons in their section as well as allowing for fast and easy access to replace pylons.

1.3.13. Visibility of Workers

Worker stations should be visible from the main timing and scoring area. Failing this, worker stations should be equipped with communications devices that allow the reporting of course hazards and infractions.

1.3.14. Noise Limit and Measurement

Noise limit is 96db. Event organizers may apply to ASN for alternate noise limits depending on event location, but such application must be approved by ASN prior to event Supplementary Regulations being published.

As a guideline, sound measuring meter should be set at a location deemed to be representative of the highest vehicle output while on the track in practice. The device, mounted on a tripod, is positioned 15 meters from the centerline of the track at a height of 1 meter. The meter is set to the A scale on fast response mode.

A log is kept showing weather conditions, time of day, car number, car class and noise measurement. Back-up measurement should be recorded when a car exceeds the allowable noise output.

Cole-Parmer offers their model RK-40425-32 Digital Sound Meter . It is an economical device, approximately \$100. Cole-Parmer Canada Inc. 210 - 5101 Buchan St. Montreal, QC H4P 2R9, Canada Phone: (514) 355-6100 or (800) 363-5900 Fax: (514) 355-7119 Email: info@coleparmer.ca

Tracks or venues allowing 103 decibels:

- Gimli Motorsport Park (Gimli, Manitoba)
- PMG Technologies (Blainville, Quebec)
- Sanair Superspeedway (Ste-Pie, Quebec)
- Slemon Park (Prince Edward Island)

Tracks or venues with specific limits:

Autodrome Saint-Eustache (Deux-Montagnes, Quebec): 90 decibels

1.3.15. Stop Box Requirement

All course finishes shall be constructed in the form of a box such that the competitor must come to a full stop before leaving the stop box. This finish must be constructed so that at least one marker must be removed to allow a vehicle to exit in a forward direction. The finish area must also be pointed away from all spectator, parking, and staging areas.

1.3.16. Stop Box Specifications

The end of the course must be made into a finish box consisting of at least nine (9) cones arranged in the following shape. Note: The minimum distance from the stop line to beginning of stop box is fifteen meters while the stop box must be a minimum of 6m by 4.6 m. The entry speed into the finish area shall not require vehicles to undergo "locking up" of the brakes in order to come to a complete stop."



The outer perimeter of the stop box is a line connecting the outside edges of the end and side pylons. The distance

1.3.17. Course Maps

At or prior to the event, the organizers shall issue a diagram of the course to the event to each competitor and should provide an enlarged diagram for easy viewing at the event.

1.3.18. Vehicle Restrictions

No motorized vehicle, bicycle or other such device may be used on the course so as to allow any competitor the advantage of seeing the course at a speed approaching that achieved in competition. The Steward may authorize the use of such a device to facilitate the rapid replacement of markers if deemed appropriate.

1.3.19. Maximum Speed Considerations

The course shall be designed such that maximum speeds on any straight section shall not normally exceed 110km/h for the fastest stock, super stock or street prepared category cars. The fastest portion of the course shall be the most remote from spectators and property. There should be no straight longer than one hundred (100) meters.

1.4. TIMING AND SCORING

1.4.1. Bumping

The following bumping order is recommended for events in cases where a class is to be combined with another class.

The progression of the ladies bumping order shall be: if there is only one competitor in a Ladies' Class, that competitor shall move to the parallel Open Class. If a class is still not formed, the competitor should then be bumped into the next appropriate Ladies' Class (see Examples below). If a

class has still not been formed, the competitor should again be bumped to the appropriate Open Class. This movement would continue until a class is formed.

Example: HSL bump to HS, then to ESL, then to ES, then to DSL, etc.

Example: If there is only one entrant in each of the three classes CS, DS and DSL, the entrant in DSL would be bumped into DS first to form a DS class and the CS entrant would then be bumped upward into BS (i.e., it would not be correct to bump the DS entrant into CS before considering the DSL entrant).

Proceed left to right following the arrows, until a class is formed. Where two bumping paths come together, including Ladies to-open bumps, all bumps up to the joining point should be done before continuing along the bump path.

STOCK CATEGORY

HS to GS to DS to ES to CS to BS to AS to SS to correct Super Stock class for bumped car

FS bumps directly to CS.

SUPER STOCK CATEGORY

ESS to BSS to ASS to correct Street Prepared class for each bumped car.

FSS to DSS to CSS to ASS to correct Street Prepared class for each bumped car.

STREET PREPARED CATEGORY

ESP to BSP to ASP to DM or CM whichever is appropriate.

FSP to DSP to CSP to ASP to DM or CM whichever is appropriate.

MODIFIED CATEGORY

DM to CM to BM to AM

1.4.2. Car Limits

A competitor may not register more than one car for each event and he may only total points for different cars when the vehicles are in the same class. A competitor experiencing a mechanical failure such that it renders his primary vehicle inoperable may petition the Steward(s) to compete in an alternate vehicle that can legally be run in the same car class as his primary vehicle.

1.4.3. Competitor Limits

There shall be not more than two drivers per car per class unless one of the drivers competes in the next higher category or Ladies class where applicable.

1.4.4. Official Number of Runs

There shall be a minimum of two (2) timed runs for each competitor at each event. There shall be no practice runs for any competitor entered in the event. Competitors shall have the opportunity to walk the course prior to commencement of the event.

1.4.5. Run Limits

No driver may drive the course more than the official number of runs allowed for any other single entry, so as to have an advantage over any other competitor.

1.4.6. Re-runs

Re-runs shall be granted only for timer failure (as described in 1.4.13), persons on course, or hazardous objects on course. The affected competitor shall be shown a red flag on course and shall stop and await the course marshal's instructions. Mechanical failures, failure to obey course marshals, and other competitor-related incidents are not eligible for re-runs and some competitor actions may be considered sufficient cause for disqualification by the steward(s). Any and all pylon penalties from the previous aborted run shall NOT carry over to the re-run. Any competitor executing a DNF prior to being 'red-flagged' is not eligible for a re-run.

1.4.7. Consecutive Runs

No driver shall make two runs back to back. There shall be a minimum five-minute or five car space between runs made by the same car either by two drivers or by the same driver. If a competitor is granted a re-run, it shall be administered in this manner also.

1.4.8. Scoreboard

The organizer should supply a scoreboard, which must list the driver's name, car number and class, with penalties and corrected times listed prior to the next run of the class.

1.4.9. Scoring Format

A competitor's score for each run shall be recorded as the total time in seconds plus penalties (number of pylons). The corrected time with pylon penalties translated into time shall also be calculated.

1.4.10. Down-and-Out Rule

If a pylon is not left standing in a vertical position, or is totally displaced outside its marker location, a two-second penalty shall be assessed for each such pylon during a competitor's run. No time penalties are assessed for pylons originally placed in a horizontal position.

Penalty Assessed:



1.4.11. Pylon Down on Course

A competitor encountering a downed or displaced pylon on course has the option of continuing the run or stopping as soon as possible, and pointing out the downed or displaced pylon to a course worker. If the competitor stops, he or she must proceed directly and slowly off course and will then be granted a rerun. However, if the competitor completes the run, the time will stand. The displacement of a pylon must be caused by a previous competitor or by a course marshal error.

1.4.12. Timer Specifications

Timing shall be by electronic, electromagnetic or mechanical methods, readable to one thousandths (0.000s) of a second. Digital readouts must be used in conjunction with the automatic start/stop equipment.

1.4.13. Timer Failure

In the event of a timer failure during a run, the effected competitor(s) shall be red flagged as soon as the timer failure is noticed and a re-run granted. If the regular, approved timing system should experience a comprehensive failure, any back-up system approved by the Steward may be used. All times recorded under the previous timing system shall stand.

1.4.14. Back-up Timing System

In the absence or failure of the timing system, any system using stopwatches shall have at least two watches, readable to at least one hundredths (0.00s), which shall be averaged to determine elapsed time. To reduce the chance of human error and variability, the same operator must be used throughout any run group.

1.4.15. Basis for Scoring

The fastest time recorded for each competitor shall be used as the basis for scoring. If a tie exists, event organizers may only break this tie for the purpose of awarding trophies.

1.4.16. Ties

If identical times are recorded for two or more vehicle in the same class, the competitor's second best times will be compared for the sake of breaking the tie for awarding trophies.

1.4.17. Did Not Finish (DNF)

Any competitor deviating from the prescribed course shall have that run scored as a DNF (Did Not Finish). An airport loop shall be considered sufficient correction of an off course excursion as long as the competitor enters the course in the same spot as he left the course. An airport loop will only be allowed if executed while the competitor is being timed. A DNF will be scored if a competitor executed an airport loop before his car passes the start line or after he passes the stop line.

1.4.18. Airport Loop

An airport loop is considered to have been executed when the vehicle having deviated from the prescribed course, re-enters the course at the point of deviation. Should a vehicle reverse (back-up) at any point between the start line and the stop line, this will be classed as an airport loop.

1.4.19. Complete Stop Requirement

Failure to come to a complete stop within the finish box shall be scored a DNF. The down and out pylon 2-second penalty rule will apply to each of the stop box cones.

1.4.20. Proper Exit from the Course

If a competitor fails to exit directly from the course via the end of the finish box after completion of the run, his run shall be recorded as a DNF.

1.4.21. Completion of Run

If a competitor fails to complete the entire run, his run shall be recorded as DNF.

1.4.22. Scoring a DNF

A competitor recording a DNF for every timed run will not be scored, but will be used in determining class size.

1.4.23. Did Not Start (DNS)

If a competitor fails to leave the start position, his run shall be recorded as a DNS (did not start). This shall be scored in the same manner as a DNF.

1.4.24. Points Calculation

In 2 day events, the best times from both days shall be added.

1.4.25. National Class Champion

The Competitor having the lowest time in his car classification shall be designated as National Class Champion.

1.4.26. Ladies Classes

For each car class, there will be a Ladies Class, identified by the letter "L" at the end of the class name. Ladies may choose to compete in the regular class or the Ladies Class, but not both at the same time.

1.4.27. Overall National Champion

The Overall Champion shall be determined by indexing each competitor's lowest time, using the PAF (Performance Adjustment Factors) found in separate document Appendix B. The competitor with the lowest time after indexing will be declared the Overall Champion.

1.5. NATIONAL EVENT RESULTS GUIDELINES

1.5.1. Results Format

All results for National events shall meet the following requirements:

Results should be structured in category (Stock, Super Stock, Street Prepared, Modified), with Classes listed alphabetically in each Category;

Class winners shall be listed in order of fastest to slowest. All times are to be displayed as the time plus the number of pylons, and the corrected time (e.g. –competitor A: 65.25 sec + 2 pylons = 69.25 sec);

Ladies Classes will be listed separately from each regular class;

Competitors with sponsors shall have their sponsor names listed alongside the competitor's name in the results under a heading of driver sponsors;

A separate heading shall be used to list the top 10 competitors overall;

A separate listing of all competitors w/ indexed times showing the Overall National Champion rankings.

An indication of the total number of competitors at the event.

1.5.2. Final Results -Presentation Format

All final results for National events shall meet the following requirements and shall be sent to ASN Canada FIA office, all territories, stewards, members of the ASN National SoloSport Committee, sponsors, etc.:

- i) Details concerning the event (name of event, name of organizing club, date of event, status of event, permit number);
- ii) Acknowledgement of sponsors, stewards, organizers, etc;

1.5.3. Championship Awards

The organizer shall provide appropriate event trophies according to the following basis unless otherwise provided by supplementary regulations:

1 trophy for 1 to 3 competitors in a class;

2 trophies for 4 to 6 competitors;

3 trophies for 7 to 9 competitors;

1 additional trophy for every four additional competitors.

1.5.4. Grievance Procedures and Sportsmanship

It should be remembered that SoloSport events are sporting events, to be conducted in a sporting manner and that all events are organized by volunteers who give of their time. Competitors should expect some imperfections of the organizers and fellow competitors and that, to a reasonable extent, these are part of the chances taken when entering a competition. Competitors are encouraged to discuss the problem with fellow competitors before lodging a formal protest. Inquiry, Protest, and Appeals procedures are outlined in the GCR's.

2. COMPETITOR ELIGIBILITY

2.1. Eligibility to Compete

To qualify for entry into an ASN sanctioned event, a competitor must:

Hold a current provincial or state Driver's Licence and,

Hold a membership or Licence from ASN or Territory that grants eligibility for AutoSlalom events and,

Have a current membership card of an ASN affiliated club.

The items listed above must be presented at the time of event registration and/or scrutineering inspection.

2.2. Underage Drivers

Competitors under the age of majority for the province in which the event is taking place must present both a completed Parental Consent Waiver and a Minor Participant Waiver. These waivers are available on the ASN Canada FIA web site (www.asncanada.com).

2.3. US Competitors

American residents holding an SCCA issued membership that grants eligibility for AutoSlalom events will have their memberships recognized for registration in Canadian AutoSlalom events. Additional entry requirements may be imposed, but these additional requirements must be outlined in the event's Supplementary Regulations.

2.4. Numbers

Each competitor entering a national AutoSlalom event must supply his own number. Each digit making up the number must be a minimum 15 cm high and 2.5 cm wide throughout and meet the approval of the organizers. The organizer should also have number digits for competitors who either do not have numbers or whose numbers do not comply with these regulations. One set of numbers must be clearly displayed on each side of the vehicle (the front doors are the preferred locations) and not more than one set of numbers may be visible at any time during a Competitor's timed run. Each competitor in a given car class must have a unique number. Numbers may be repeated for other car classes.



2.5. Helmets

Helmets may be either open faced or closed face. They must be in good condition both inside and outside and never subjected to a crash or other severe impact.

A Snell 2000M or newer M-rated helmet is acceptable, provided the car is not equipped with a roll cage or racing slicks. Helmets meeting the following FIA standards are also approved.

FIA 8860-2004

Snell 2000 SA or 2005 SA

SFI Foundation 31.1A or 31.2A

British Standards Institution BS 6658-85 type A/FR

The driver of a vehicle equipped with a roll cage or where the vehicle is classified as Modified requires a helmet which meets one of the FIA, Snell SA, SFI or BSI standards listed above.

Participants are advised that helmets meeting Snell standards will be accepted up until: 2000M, SA (expiry date to be determined) 2005M, SA (expiry date to be determined)

2.6. Footwear

All competitors, workers, officials and crew members shall wear appropriate footwear that fully covers the foot while driving and working on the course. Appropriate footwear does not include sandals, slippers, open-toed shoes, etc.

3. BASIC VEHICLE PREPARATION

3.1. Basic Vehicle Eligibility

To qualify as eligible to compete in a SoloSport event, each vehicle must comply with the following minimum requirements:

Have a minimum wheelbase (measured between front and rear wheel centres) of 152 cm (60 inches), a minimum front and rear track of 107 cm (42 in.), and a minimum wheel diameter of 25.4 cm (10 in.)

Be propelled by its own means, running on at least four wheels not aligned, which must always be in contact with the ground; the steering must be ensured by at least two wheels and the propulsion by at least two of the wheels;

Have a braking system that works on all four wheels simultaneously;

Have a structure and bodywork that surrounds and protects the driver at least to his waist level when seated in his normal driving position;

3.2. Unsuitable Vehicles

Vehicles having high centers of gravity and/or relatively narrow track may be excluded from competition. Such vehicles may include sport-utility classed light trucks, off-road vehicles, vans, or any vehicle deemed incapable of safely executing typical AutoSlalom maneuvers at speed.

3.3. Driver Restraints

All participants shall properly wear an approved seat belt (restraint system) during the event. The participant has the responsibility to ensure the seat belts in the vehicle are in good condition and properly installed.

An OE or DOT approved three point restraint system is acceptable for vehicles equipped with/without roll bars in all vehicles, excluding 'Modified' vehicles. The lap belt portion of a racing harness is permitted, in conjunction with the shoulder strap of the OE seatbelt. 'CG Lock' or other devices that lock the lap belt portion of the OE seat belt in place are also permitted.

A five or six point restraint system is required for all modified category vehicles equipped with a roll cage and running slick tires.

A safety harness must not be installed on a seat having no head restraint or having a backrest with integrated head restraint (no opening between backrest and head restraint).

If the seat does not provide lateral restraint, the mounting point on the vehicle structure shall be a minimum of 50 cm behind the seat back when measured along the belt.

The lap belt and crotch straps should not pass over the sides of the seat, but through the seat in order to wrap and hold the pelvic region over the greatest possible surface.

If used, the shoulder harness shall be a two strap over-the-shoulder type. In the downwards direction, the shoulder straps must be directed towards the rear and must be installed in such a way that they do not make an angle of more than 45 degrees to the horizontal from the upper rim of the backrest, although it is recommended that this angle should not exceed 10 degrees. The maximum angles in relation to the centre-line of the seat are 20 degrees divergent or convergent. Where appropriate, it is acceptable to mount the shoulder straps to the mounting points used for the factory rear seat belts.

Material for all straps in all cases shall be 2.75 inches or 70 millimeters (nominal) width or greater except anti-submarine straps which may be 44 millimeters wide.

Participants not using original equipment hardware shall use a minimum of 3/8" diameter SAE grade 5 bolts or better. All mounting points shall be either original equipment mounting points on the frame or the roll cage or an adequately reinforced point. Reinforcements shall be adequately large and of sufficient thickness to prevent distortion under extreme load.

3.3.1. Minimum Standards for Driver Restraints

If the harness is not homologated by the FIA, the minimum width of the crotch and pelvis straps shall not be less than 44 mm, the parts of the crotch straps which are not in contact with the user's thighs may have a minimum width of 25 mm and the width of the shoulder straps shall not be less than 70 mm. The material of all straps shall be Dacron or nylon and in new or perfect condition. All straps must be securely attached to the chassis, frame, or an equivalent structural part of the vehicle. For vehicles where such attachment is not practical, the straps shall be anchored through the metal floor using steel washers having a minimum diameter of 51 mm (2 in.) and a minimum thickness of 4 mm (0.6 in.).

The seat belt must be a minimum lap belt with a DOT or SFI approved metal to metal fastening mechanism.

The buckles must be of metal-to-metal quick release type except in the case of leg straps of a six (6) point system where they are attached to the seat belt or shoulder harness straps

The shoulder harness shall be the over-the-shoulder type. There must be a single release common to the seat belt and shoulder harness.

The shoulder harness shall be mounted behind the driver and above a line drawn downward from the shoulder point to an angle of forty (40) degrees with the horizontal. From the upper rim of the backrest, although it is recommended that this angle should not exceed 10 degrees. The maximum angles in relation to the centre-line of the seat are 20 degrees divergent or convergent.

For a four point harness, the shoulder harnesses must be installed crosswise symmetrically about the centre-line of the seat. The lap belt and crotch straps should not pass over the sides of the seat, but through the seat in order to wrap and hold the pelvic region over the greatest possible surface. The lap straps must fit tightly in the bend between the pelvic crest and the upper thigh. Under no circumstances may they be worn over the region of the abdomen. Holes may be made in the seat if this proves to be necessary in order to avoid such an occurrence. Care must be taken that the straps cannot be damage through chafing against sharp edges.

Only separate shoulder straps are permitted. "H" type configuration is allowed. "Y" type shoulder straps are not allowed.

3.3.2. Attachment Methods



The minimum acceptable bolt used in the mounting of all belts and harnesses is 7/16 inch UNF, SAE grade 8, or preferably, M12 8.8. Where possible series anchorage points is impossible for the shoulder and/or crotch straps, new anchorage points must be installed on the shell or the chassis, as near as possible to the centre-line of the rear wheels for the shoulder straps. The shoulder straps may also be fixed to the safety roll cage or to a reinforcement bar by means of a loop. If clip-in eyebolts are used, the locking bale must be secured with a cotter pin or lock wire to prevent accidental release.

Where it is not possible to mount belts and straps directly to the roll structure or frame of the car and they must be attached to a structural panel for example, the panel must be suitable reinforced in a workmanlike manner to prevent distortion under load. Steel reinforcing plates of at least 40 cm² and a thickness of at least 3 mm must be used.

If the manufacturer provides for safety wiring the locking bale to prevent accidental unfastening of the belts from their anchorage points, then it shall be necessary for all such components to be safety wired.

The restraint system installation is subject to approval of the scrutineer.

3.4. On-Board Starters

All vehicles must be capable of self starting. Starters shall be operable from the normal driving position by the driver of the vehicle, without requiring outside assistance under normal operation.

3.5. Fluid Containment

All vehicles must be equipped with containment devices for all fluids. Where OEM systems have been removed, approved minimum one litre catch tanks for all fluids must be used.

3.6. Scrutineering Inspection

All vehicles must be in a condition fit for use and pass a scrutineering ("Tech") inspection to be conducted prior to the event. Scrutineering inspection shall be mandatory.

3.7. Vehicle Preparation Checks

Each vehicle should be checked by the competitor prior to presentation for scrutineering. During Scrutineering, scrutineers may verify compliance with any of the following:

3.7.1. Brakes

Brake pedal has solid feel and does not sink to the floor. Brake (and clutch where applicable) fluid must be sufficient in the master cylinder reservoir and no leaks must be present when the system is pressurized. Brakes must operate on all four wheels.

3.7.2. Throttle

Confirm throttle return is positive. Where the throttle is electronic, the vehicle must demonstrate throttle return.

3.7.3. Engine Compartment

Engine compartment shall be in good working order. Belts and hoses shall be in serviceable condition. There are no excessive fluids (oil, water, brake) present or leaking.

3.7.4. Loose Items

Confirm loose items are removed from the interior of the vehicle. Driver's floor mat shall be removed or relocated so that it cannot possibly interfere with the operation of the pedals.

3.7.5. Road Wheels

Confirm the wheels are securely fastened with all studs/nuts present and functional. Wheels may not be reversed such that the lug hole taper does not mate with the nut/bolt. Wheels may not have missing spokes or cracks in the cast/forged units. Hubcaps, wheel discs, and trim rings that are not bolted, or otherwise permanently attached, to the wheel must be removed

Confirm wheel bearings and suspension components are functional and in good operating condition suitable of SoloSport event conditions.

3.7.6. Steering and Suspension

Steering system shall not display any evidence of excessive wear or free play when the steering wheel is turned.

3.7.7. Tire Condition

When inspected at a scrutineering inspection:

Each tire must have measurable tread depth as described in this provision. Measurable tread depth must be obtained at two points on the tread, which are 180 degrees apart around the tire's circumference, and within the center one-half of the tread surface that normally touches the ground, and;

The measurement points must be within tread grooves or measurement holes along a longitudinal or perimeter direction on the tire as typically found on road tires. On slick tires, the measurement points must be along a longitudinal or perimeter direction where measurement holes may be located. (Tread definition, see Section 4.1.7.)

Tires may not be re-grooved or recapped in any way. The Competitor is required to compete on the inspected tires. Failure to do so shall result in refusal of entry or disqualification. Tires may not have cord visible at any time during competition, even if previously approved at scrutineering inspection.

3.7.8. Swing Axle Vehicles

Vehicles with rear swing axles will be prohibited unless they are de-cambered at least to zero (0) degrees or have adequate provision for limiting axle travel or "jacking". Stock axle straps may not be considered adequate.

3.7.9. Tonneau Covers

Tonneau covers must be removed.

3.7.10. Batteries

Batteries must be securely mounted and must have the live terminal insulated with a non-conductive material. Batteries, wet cell or gel cell, moved from their original location must be housed in a non-conductive marine type container and be secured to the chassis or structure independent of the

container. NOTE: This would allow the use of gel cell batteries without requiring the marine type container.

3.7.11. Roll-over Protection

Roll-over protection is highly recommended for all open vehicles and is required for all A&B modified vehicles. Roll-over protection is required for C&D modified vehicles having 16 preparation points or more. All roll-over protection devices shall be constructed to the requirements outlined in Appendix C or D of these regulations (separate documents).

3.7.12. Closed Car Roll-over Considerations

Bolt-in or welded roll cages or bars are allowed. In Stock and Super Stock classes, the complete assembly must be contained in the passenger compartment.

Reasonable modifications will be allowed in the interior to facilitate installation (such as holes in carpets or trim panels). For the purposes of this rule, the area behind the rear seat in a hatchback or coupe is considered part of the passenger compartment.

3.7.13. Window Requirements

Side windows may be closed or open according to the competitor's preference.

- 3.7.14. On-board Cameras
 - a. The mounting of an image or sound recording device is permitted on condition that such devices when mounted present any danger to the participants of the event in the paddock or on the track.
 - b. The mounting of such devices including any and all apparatus such as battery packs, remote recording and/or transmitting devices must satisfy the following conditions:
 - c. The primary mounting for the device is secured to the vehicle at any point and is vibrationfree.
 - d. Separate from the primary mounting, additional measures must be employed to secure any camera device(s), be it inside or outside of the car.
 - e. Final approval of camera mounts rests with the chief scrutineer.
- 3.7.15. Vehicle Modifications

Modifications to the vehicle shall be properly installed or fabricated as per the respective manufacturer's instructions. Any modification shall be securely fastened so as to allow the proper function of both the modification and the vehicle itself-with no interference or potential interference with moving parts.

CAR PREPARATION REGULATIONS

- 4.1. General Definitions:
 - 4.1.1. Sedan

4.

A car capable of transporting four or more average sized adults in a normal seating position.

4.1.2. Model

A group of cars of a given manufacturer (make) which have virtually identical bodies, but are ready distinguished from other models of the same make by virtue of a major difference in body appearance and /or chassis design. The names by which a manufacturer designates these groups have no bearing in this definition even though two groups may be designated identically.

4.1.3. Standard Parts and Equipment

Standard parts and equipment is any item of standard or optional equipment which could have been ordered with the specific year, make and model of car, installed on the production line and delivered to a dealer in Canada. Dealer-installed options, except as required by factory directives, are not included in this definition no matter how common such equipment may be. Except for authorized modifications as listed for each vehicle category, the vehicle must compete as delivered from the manufacturer with standard equipment only.

4.1.4. Open and Closed Cars

Open cars are cars with a convertible top. Closed cars are cars having a fixed roof, a T-top or a Targa top with a full windshield.

4.1.5. Series Produced

Except for Modified Category, all vehicles that are not otherwise listed in the car classification lists must have been series-produced, in quantities of at least 1,000 units in a 12 consecutive month period for legal road use. The vehicle must have been equipped with normal road touring equipment and normally sold through manufacturer's retail sales outlets in North America.

4.1.6. Burden of Proof

The Competitor has the burden of proving that his car conforms to these regulations by his owner's manual, manufacturer's shop manual(s), manufacturer's catalogues, or any other official manufacturer's documentation, which the competitor must be able to present at the event. All manufacturers' documentation must be for non-competition purposes. Failure to provide the appropriate manufacturer's documentation may result in disqualification.

4.1.7. Tread

Tread is the part of the tire that makes contact with the road surface during normal driving conditions. When a straight-edged measuring device is placed across the running surface, 'tread' is defined as the area of the tire that is parallel to this straight edge (reasonable allowances made for the slight natural curvature of the inflated tire). Any other part of the tire that makes an included angle of not more than 45 degrees from the straight-edge is also considered tread. Parts of the tire making and included angle of 45 degrees or more from the straight-edge shall not be considered tread.

4.1.8. Special Considerations

Because of the variation in vehicle design and manufacturing, the ASN AutoSlalom Technical Sub-Committee may authorize specific, alternate specifications for specified models of cars under exceptional circumstances as they occur. Such instances may occur where the design or construction of a certain model of car may not meet the requirements of an item in this rulebook. Such specific authorizations will be published in future editions of this rulebook or as ASN competition bulletins.

4.2. Vehicle Modification and Preparation

4.2.1. General Modification Principles

With respect to the modifications and the applicable Preparation Points, the following general guidelines shall apply. There are three types of modifications outlined in this rulebook:

i. Authorized

These are modifications that are specifically listed in each car category description. Regardless of whether such a modification is listed in the Preparation Point Schedule, any authorized modification shall not incur preparation points;

ii. Restricted

These are modifications that are not specifically listed as authorized in each car category. Restricted modifications are those that are listed in the Preparation Point Schedule and are not specifically prohibited in the appropriate car category. If a restricted modification is made, the applicable preparation points must be incurred. If a modification is not authorized, nor listed in the Preparation Point Schedule, then it is prohibited;

iii. Prohibited

These are modifications that are specifically prohibited in a car category description, or are not authorized, nor listed in the Preparation Point Schedule. Regardless of whether preparation points are taken, a prohibited modification will render a car ineligible for competition under the category where such modifications are not allowed.

4.2.2. Substitution of Coachwork

Where substitution of coachwork is permitted (either with or without incurring preparation points), the replacement panel must completely replace the original panel and must be without holes or other interruptions in the continuity of the surface unless specifically listed in the authorized modifications of the category. Coachwork is defined as all external panels and pieces of the body exposed to the air stream. The material of replacement panels must be metal, glass-reinforced plastic, or other suitable fire-resistant material.

4.2.3. Substitution of Suspension

Except when the appropriate preparation points are assessed, standard equipment suspension, springs, and torsion bars must be used. They may not be modified in any way nor have their points of attachment modified. When an intermediary device is used between the spring/torsion bar and its point of attachment to the frame or body, this device also may not be modified in any way. Torsion bars must be set within the manufacturer's specifications for non-competition purposes.

For Stock, Super Stock, and Street Prepared category vehicles, the original system of suspension may not be changed to another system of suspension (i.e., A-arm to MacPherson strut).

4.2.4. Compliance with the Regulations

All modifications to the vehicles must be in compliance with all other applicable regulations. No modifications are allowed in S/SS/SP unless specifically authorized in this rulebook.

5. STOCK CATEGORY

Stock Category cars must be run as specified by the factory with only standard equipment as defined by these regulations. This requirement refers to individual parts and to combinations thereof which would have been ordered individually or together for a specific car. Option package conversions may be performed between specific vehicles of a particular make and model, but only between configurations from within a particular model year. Such conversions must be totally complete and the resultant car must meet all requirements of this section.

5.1. Authorized Modifications

The modifications detailed below are the only 'authorized' modifications in the Stock Category.

5.2. Allowable Preparation Points

The vehicle is permitted a maximum of two (2) preparation points under the preparation-point system detailed in 9.

5.3. Bodywork

- 5.3.1. The addition or use of alternate accessories, gauges, indicators, lights, mirrors, and other appearance, comfort, and convenience modifications which have no effect on performance and/or handling are permitted. A single wiper arm system may replace the original if operational. Foot pedal covers are allowed.
- 5.3.2. The shift knob may be modified or substituted. This does not include the shifter lever, handle, body or mechanism.
- 5.3.3. Substitution of steering wheels is allowed provided the new steering wheel does not differ in outside diameter by more than 26 mm from the original wheel. On cars equipped with air bag supplemental restraint systems, no substitution is allowed. Air bags, however, may be electronically disabled.
- 5.3.4. Any fuel-filler cap may be used. Monza style gas caps must be secured against accidental opening.
- 5.3.5. The folding, but not removal of the windshield and/or the convertible top is permitted, providing the mechanism is standard equipment. T-tops and Targa tops may be removed.
- 5.3.6. The removal of the spare tire(s), tools, and jack is permitted.
- 5.3.7. Any alternate front fender is permitted, providing it is the same size, shape, and at least the same weight as the original.
- 5.3.8. Any alternate restraint harness is permitted as long as it meets or exceeds the minimum standards as outlined in Section 3.3.

- 5.3.9. Any spoiler/air dam may be added or modified, provided it is at least the same weight as the original spoiler/air dam or the panel(s) it replaces.
- 5.3.10. Standard fuel tank must remain unaltered in dimensions and mounting.
- 5.3.11. Tow-bar brackets and hooks may be installed, and the appropriate modifications to the bumper and/or frame in order to install them are permitted, provided such modifications do not reduce the weight of the vehicle.
- 5.4. Shock Absorbers
 - 5.4.1. The make of shock absorber may be substituted providing that the number, type (e.g., tube, lever, etc.), system of attachment and attachment points are not altered. Substituted shock absorbers may provide no more than two external damping adjustments.
 - 5.4.2. The mounting hardware shall be the original type. To facilitate the installation of commonly available aftermarket shock absorbers, struts, or strut inserts whose shaft is larger than the center hole of an upper mount assembly, that hole may be enlarged by the minimum amount necessary to accommodate the shock shaft size, provided the following restrictions are met:
 - 1) The enlarged hole must remain concentric with that of the original configuration;
 - 2) The enlargement of the hole does not require modification of a bearing (as opposed to a washer, plate, or sleeve);
 - 3) Neither the hole enlargement nor the location of the shock shaft changes any alignment parameter.
 - 5.4.3. Bump stops installed externally and concentric with the shaft of a shock absorber may be drilled out to fit larger-diameter shock shafts. Bump Stops with similar characteristics to those of the original may be substituted for the purpose of installing aftermarket shock absorbers.
 - 5.4.4. The use of any shock absorber bushing material, including metal, is permitted. This does not permit the use of an offset shock absorber bushing.
 - 5.4.5. The interchange of gas and hydraulic shock absorbers is permitted. Electronically controlled shocks may not be used on vehicles not originally equipped with such units. Vehicles originally equipped with electronically controlled shocks may use non-electronically controlled alternatives.
 - 5.4.6. Shock absorbers with adjustable spring perches which have been welded in the stock position on the shock absorber are permitted.
 - 5.4.7. The dimensional characteristics of the shock and relative placement of the spring must remain as stock. If the spring perch on an aftermarket shock/strut is a small amount (e.g. ¼") lower than the standard part, but the shock/strut otherwise complies with the requirements of this section, a shim may be added to the spring perch to raise the spring base to the correct height. This shim must be permanently attached to the perch.

5.5. Suspension

- 5.5.1. The bushing attaching the end of the strut to the body or frame on a strut type suspension is a suspension bushing, not a shock absorber bushing. Suspension bushings, including but not limited to those which carry the weight of the car and determine ride height, may not be replaced with bushings of a different material or dimension.
- 5.5.2. Both the front and rear suspension may be adjusted through their designed range of adjustment by use of factory adjustment arrangements or by taking advantage of inherent manufacturing tolerances. However, no suspension part may be modified for the purpose of adjustment unless such modification is specifically authorized by the factory shop manual for non-competition purposes.
- 5.5.3. Replacement control arms for vehicles having integral bushing/arm assemblies must be standard factory parts. If authorized by the manufacturer, the use of shims, special bolts, removal of material to enlarge mounting holes, and similar methods are allowed and the resulting alignment settings are permitted even if outside the normal specification or range of specifications recommended by the manufacturer. If enlarging mounting holes is specifically authorized, but no material removal limits are specified, material removal is restricted to the amount necessary to achieve the maximum factory alignment specification
- 5.5.4. The steering system and its associated linkages will be considered as part of the suspension system.

5.6. Brakes

- 5.6.1. Any alternate make and material of brake shoe linings and brake pads is permitted.
- 5.6.2. The fitting of single cylinder dual circuit systems is permitted.
- 5.6.3. The addition of a brake cooling system is permitted. The brake backing plates may be modified or removed. Minor modification to the interior fender panels and interior front body panels are permitted in order to facilitate the installation of the brake cooling system, provided such minor modifications serve no other function. Water-cooled braking systems are prohibited.
- 5.7. Tires
 - 5.7.1. Any make, model and size of tire may be used, provided there is both a Department of Transportation (D.O.T.) approval stamp and approval number on the tire.
 - 5.7.2. R-compound tires may be used. If such tires are used, appropriate preparation points must be taken.
 - 5.7.3. Any tire used, when viewed from directly above the outermost edge of the fender opening (using the hub center-line as the viewing axis) from an angle perpendicular to the ground, no portion of the tread along a line drawn across the top of the tire (parallel to the hub center-line) may be visible. This assessment shall be performed with the vehicle parked on a level surface and tires inflated to a minimum of 20psi.and not more than the allowable maximum pressure as stated on the tire itself.
 - 5.7.4. Pre-heating of tires prior to competition by electrically heated covers or by similar means is prohibited.
- 5.8. Wheels
 - 5.8.1. Unless appropriate preparation points are taken for alternate sized wheels, any type wheel may be used provided it complies with the following: it is the same width and diameter as standard, and as installed (including wheel spacers if applicable) it does not have an offset more than +/- 0.25 inch from a standard wheel for the car. The resultant change in track dimensions is allowed. Vehicles originally equipped only with 12 inch diameter wheels, may use 13 inch diameter wheels of the same width as standard and offset within +/- 0.25 inch of standard. Vehicles normally equipped w/ rim less than 5"

wide may use 5" wide rims.

- 5.8.2. Wheel spacers are allowed provided that the resulting change in standard offset is not more than 0.25".
- 5.8.3. Wheel Studs or Bolts length and diameter may be changed. Wheel bolts may be changed to wheel studs.
- 5.8.4. No alterations to the vehicle are permitted for wheel installation or clearance.
- 5.8.5. Unless appropriate preparation points are taken for alternate sized wheels, vehicles with metric sized wheels may use alternate rims using the following sizing method:

Diameter- convert metric measurement to inches and round to the nearest lower inch measurement;

Width- convert metric measurement to inches and round to the nearest smaller $\frac{1}{2}$ inch measurement;

Offset- measurement remains the same based on the closest millimeter equivalent.

- 5.9. Electrical System
 - 5.9.1. The make of spark plugs, points, ignition coil, and high tension wires is free, providing the number of such items does not change from that originally installed in the car.
 - 5.9.2. On cars made before January 01, 1968, any ignition system using the standard distributor may be used.
 - 5.9.3. Ignition settings may not be adjusted beyond manufacturer's specifications for non-competition purposes.
 - 5.9.4. No changes are permitted to electronic engine management systems or their programming unless directed by the manufacturer.
 - 5.9.5. Any alternate battery may be used, provided the number, mounting, size/weight (plus or minus 20%) and location are the same (motorcycle and other weight saving batteries are not allowed).
- 5.10. Engine and Drive Train
 - 5.10.1. The carburetor metering rods and jets may be changed. The air/fuel mixture may be adjusted using the method authorized by the manufacturer for non-competition purposes.
 - 5.10.2. Any alternate fuel pump may be used, providing the number of fuel pumps remains as standard.
 - 5.10.3. Removal of or use of any alternate air filter element is permitted. No other part of the air cleaner may be modified to allow for this. The filter element must fit within the confines of the air cleaner assembly and not raise the top cover so as to provide additional air intake capacity.
 - 5.10.4. Any alternate exhaust system, with the exception of the exhaust manifold and emission control components, is permitted. Muffler systems are authorized, except that they must terminate behind the driver. Exhaust heat shields may not be removed. Exhaust systems must comply with CAC noise limits.
 - 5.10.5. Installation of vents, catch tanks, and oil coolers on the engine, transmission, or differential is permitted. If no vents or catch tanks are added, OEM systems must be in place.
 - 5.10.6. Normal maintenance machine work is permitted, provided that the service limits specified by the manufacturer are not exceeded.
 - 5.10.7. The use of alternate engine and drive train parts which are normally expendable, such as seals,

gaskets, bearings, valve seats, and valve guides, are permitted, provided they are of the same type, number, and dimensions as standard.

- 5.10.8. Cylinders and or liners may be overbored up to 0.040" over the nominal stock bore dimension, and appropriate standard oversized pistons may be used. Non-stock pistons of the same weight, dimensions, and configuration as the original may be used.
- 5.10.9. Locked differentials are prohibited. Limited slip differentials may only be those available as standard or optional equipment of the same modal year.

5.11. Fasteners

All fasteners including nuts, cap screws, studs, washers, etc., may be replaced by similar items of unrestricted origin provided the specifications of such replacements meet or exceed those of the OEM product.

6. SUPER STOCK CATEGORY

6.1. Authorized Modifications

The modifications detailed below are the only 'authorized' modifications in Super Stock category.

6.2. Lower Category Modifications

All Stock-category 'authorized' modifications are permitted.

6.3. Allowable Preparation Points

The vehicle is permitted a maximum of six (6) preparation points under the preparation point system detailed in Section 9.

6.4. Bodywork

- 6.4.1. In order to provide engine induction or ventilation, the addition of grills or air scoops is permitted. The removal, modification or substitution of hood liners permitted.
- 6.4.2. Cutouts for oil coolers are permitted.
- 6.4.3. Spoilers, body kits, rear wings, etc. are allowed. Only minor modification to the standard bodywork is allowable to fit an aftermarket body panel. Rear wings other than O.E.M. may not extend higher than the highest point of the roofline, may not extend rearward more than the rear most edge of the factory bodywork, and may be no wider than the widest point on the body not including side mirrors or aftermarket accessories. The intent of this rule is to allow as wide a variety of appearance kits as possible while maintaining some limits on wing/spoiler technology.
- 6.4.4. Any alternate steering wheel may be used.

6.5. Suspension

- 6.5.1. The standard suspension mounting points on the chassis may be reinforced, but their location may not be changed. Suspension geometry may not be altered through the modification of suspension mounting points on the chassis (e.g.: no filing or slotting of holes).
- 6.5.2. The cars suspension may be aligned anywhere within the full range of the manufacturer's stock, unaltered adjusting mechanisms.
- 6.5.3. The addition, substitution, or modification of any part of a front or rear suspension anti-sway bar system is allowed subject to the applicable preparation points.
- 6.5.4. If 'other suspension modification(s)' preparation points are taken in the Super Stock category, then the suspension MAY ONLY be modified as specified below:

- 6.5.5. Springs must be the same type as original (coil, leaf, torsion bar, etc.) and use the original attachment points. Ride height may only be altered by suspension adjustments, the use of spacing blocks, leaf spring shackles, torsion bar levers, adjustable coil spring perches, or modification of springs. The use of spacers to alter suspension geometry, can only be as specified in Section 8.5.
- 6.5.6. Suspension bump stops may be altered or substituted but not removed.
- 6.5.7. The following allowances apply to strut-type suspensions. Adjustable camber plates may be installed at the top of the strut and the original upper mounting holes may be slotted. The drilling of holes in order to perform the installation is permitted. The center clearance hole may not be modified. Any type of bearing or bushing may be used in the adjustable camber plate attachment to the strut. The installation may incorporate an alternate upper spring perch/seat and/or mounting block (bearing mount). Any ride height change resulting from installation of camber plates is allowed. Caster changes resulting from the use of camber plates are permitted
- 6.5.8. Camber bolts may be installed providing these parts use the original, unmodified mounting points and meet the restrictions specified in Section 5.5. Caster changes resulting from the use of camber bolts are permitted.
- 6.5.9. Camber kits, also known as camber compensators, may be installed. These kits consist of either adjustable length arms or arm mounts that provide an adjustment to the effective length of a control arm. Alignment outside the factory specifications is allowed. The following restrictions apply:

On double/unequal arm suspensions, only the upper arms OR lower arms may be modified or replaced, but not both.

On arm-and-strut (MacPherson/Chapman) suspensions, the lower arms may be modified/replaced OR other methods of camber adjustment as allowed by Section 6.5.7 or 6.5.8 but not both.

On swing or trailing arm suspensions, the main arms may not be modified but locating links/arms may be modified or replaced.

The replacement arms or mounts must attach to the original mounting points. All bushings must meet the requirements of Section 6.5.7. The knuckle/bearing housing/spindle assembly cannot be modified or replaced.

- 6.5.10. Suspension bushings may be replaced with bushings of any material (except metal) as long as they fit in the original location. In a replacement bushing, the amount of metal relative to the amount of non-metallic material may not be increased. This does not authorize a change in type of bushing (for example ball & socket replacing a cylindrical bushing);
- 6.5.11. Addition, modification or replacement of lateral locating devices (e.g.: Panhard Rods and Watts Linkage.) is permitted. Method of attachment and attachment points are unrestricted.

6.6. Brakes

- 6.6.1. Substitution of brake hydraulic lines with braided metal lines is permitted.
- 6.6.2.Alternate (cross drilled, vented or slotted) brake rotors of original material and diameter are permitted. No modification to existing brake system components is allowed to facilitate installation.

6.7. Tires & Wheels

- 6.7.1. Any make, model, or size of tire may be used provided there is both a DOT Approval stamp and approval number on the tire.
- 6.7.2. Any size and offset of road wheel may be used, providing the wheel/tire combination fits within the

standard wheel well opening.

- 6.7.3. When viewed from directly above the outermost edge of the fender opening (using the hub center-line as the viewing axis) from an angle perpendicular to the ground, no portion of the tread along a line drawn across the top of the tire (parallel to the hub center-line) may be visible. This assessment shall be performed with the vehicle parked on a level surface and tires inflated to a minimum of 20psi.and not more than the allowable maximum pressure as stated on the tire itself.
- 6.8. Electrical System
 - 6.8.1. Any ignition system or part may be used. Ignition settings and curves may be altered beyond manufacturer's specifications.
 - 6.8.2. Alternate ECUs /chips may be used on normally aspirated vehicles. Alternate ECUs/chips may be used on forced induction vehicles only if the ECU/chip does not DIRECTLY alter boost settings. <u>Turbocharger boost settings may not be specifically altered</u>.
- 6.9. Engine and Drive Train
 - 6.9.1. Exhaust emission control air pumps, nozzles, associated lines and fittings, EGR devices, and evaporator canisters may not be modified in any way except that they may be completely removed. Catalytic converters and thermal reactors may be replaced with aftermarket units or removed.
 - 6.9.2. The engine cooling fan(s) may be modified or substituted, but not removed.
 - 6.9.3. Removal of, or use of any alternate air cleaner assembly is permitted. Cold air induction upstream of the air cleaner is allowed. On vehicles so equipped, the duct between the air flow/mass sensor and the throttle body may be changed, the replaced duct work must serve no other purpose beyond that of a duct. This section of duct work is considered part of the air cleaner assembly.
 - 6.9.4. Installation of vents, catch tanks, and oil coolers on the engine, transmission, or differential is permitted. If no vents or catch tanks are added, OEM systems must be in place.
 - 6.9.5. Any clutch plate and friction disk that attaches to the stock unmodified flywheel is allowed.
 - 6.9.6. The transmission shifter and/or mechanism may be changed or modified.
 - 6.9.7. No "restricted" internal engine modifications may be made.

6.10. Body structure modifications

It is permitted to add or replace one lateral brace between any two suspension mounting points at either or both end(s) of the car. Strut bars are permitted with all types of suspension. Strut bars may be mounted only transversely across the car from upper right to upper left suspension mounting points or from lower right to lower left suspension mounting points. No other configuration is permitted. Additional holes may be drilled for mounting bolts. Only bolt-on attachment is permitted.

7. STREET PREPARED CATEGORY

7.1. Authorized Modifications

The modifications detailed below are the only 'authorized' modifications in Street Prepared category. JDM – Spec vehicles will be classified in Street Prepared Category upon reviewing modifications and specification differences according to the allowance in this section and Section 9.

7.2. Lower Category Modifications

All Stock and Super Stock category 'authorized' modifications are permitted.

7.3. Allowable Preparation Points

The vehicle is permitted a maximum of fifteen (15) preparation points under the preparation point system detailed in Section 9.

7.4. Bodywork

- 7.4.1. In order to provide clearance for tires and wheels, flares may be added and may be made of an alternate material. The exterior contour of the fenders may be altered, provided that the fender opening profile (approximate size, location, and shape) viewed from the side of the vehicle is unchanged.
- 7.4.2. Modifications to the interior fender panels are permitted in order to facilitate the addition of fender flares or the alteration of the exterior contour of the fenders, provided such modifications serve no other function. Fender panels may be modified or removed provided this change does not result in any openings between the wheel wells and the passenger, engine, or luggage compartments.
- 7.4.3. Where tires extend beyond bodywork, no modification to the fender opening profile may be performed to allow for this.

7.5. Suspension

- 7.5.1. If suspension points are taken in the street prepared category, then any suspension component may be altered or replaced in any way, provided that the configuration remains the same as the original manufacturer.
- 7.5.2. If the appropriate suspension points are taken, then the suspension mounting/pickup points may be modified or relocated.
- 7.5.3. The addition of/or modification of Traction Bars, Ladder Bars and Torque Arms is permitted. Mounting points and method of attachment are unrestricted.

7.6. Brakes

Any part of the braking system may be changed, provided it still operates simultaneously on all four wheels.

7.7. Tires & Wheels

Any make, model, and size of tire may be used, provided there is both a DOT approval stamp and an approval number on the tire. Wheel/tire combinations may extend beyond the original factory bodywork.

7.8. Engine and Drive Train

- 7.8.1. Substitution or addition of fuel pumps and pressure regulators, but not fuel distribution units, is permitted. Any other fuel system modification is subject to preparation points.
- 7.8.2. The clutch may be modified or substituted. The clutch is defined as the linkage, throw-out bearing, disc, pressure plate, and pilot bearing. This does not include the flywheel.
- 7.8.3. The transmission, differential, and transaxle may be modified or substituted, provided that neither the original suspension configuration, nor drive layout is changed. Modifications include any or all mechanical or hydraulic components relating to the transfer, application and distribution of power flow from the input shaft of the transmission up to and including the drive axle(s).
- 7.8.4. Radiator cooling fans may be removed, replaced, or added. The radiator may be modified or substituted.
- 7.8.5. Cooling, fans where originally equipped, may be modified or relocated anywhere within the engine bay, but may serve no other purpose. Such devices may not be substituted by larger capacity units
- 7.8.6. Any shift linkage may be used

7.9. Updating and Backdating of Parts

- 7.9.1. Interchange of components between various years of the same model or between various models produced by the same manufacturer under the same brand name is permitted.
- 7.9.2. The component must be standard equipment on the vehicle from which it was taken.
- 7.9.3. The vehicle from which the component is taken must be of the same body configuration and type and have the same drive train configuration as that on which the component will be installed. Same body configuration for the purposes of update/backdate is defined as a specific model generation of a vehicle where the body style remained nearly identical between years. The Street Prepared category vehicle listings shall define the model years eligible for update/backdate of a particular vehicle.
- 7.9.4. The updated/backdated part or the part to which it is to be attached may not be altered, modified, machined or otherwise changed to facilitate the updating/backdating allowance.
- 7.9.5. If modifications are made to any updated/backdated part, they must conform to the modification allowances in Street Prepared category and they will no longer be considered an update/backdate.
- 7.9.6. The updating and/or backdating of engines, transmissions or transaxles must be done as a unit; component parts of these units may not be interchanged. If modifications are made, they must conform to the modification allowances in Street Prepared category.
- 7.9.7. Where engines are interchangeable between models, the vehicle on which the component is installed must now compete in the same class as the vehicle from which the component was taken.

7.10. Body Structure Modifications

Any chassis, frame, or engine reinforcement is permitted. Method of attachment is unrestricted providing the original chassis and frame remain intact e.g.: no cutting or removal of the original structure. Frame connectors are allowed.

8. MODIFIED CATEGORY

8.1. Vehicle Eligibility

All production based cars prepared beyond the allowances of Street Prepared. All vehicles specifically constructed for competition in either autoslalom or in other racing series. Vehicles need not meet the requirements of Section 4.1.5

8.2. Authorized Modifications

There is no limit on the modifications to the vehicle, subject only to its compliance with all other applicable regulations.

8.3. Running Gear and Suspension

Any make and size of tire may be used, provided it passes the scrutineering inspection requirements.

8.4. Minimum Requirements

All vehicles in the Modified Category must conform to the minimum standards as defined under Vehicle Eligibility, plus at least two wheels must have suspension and be sprung from the chassis.

8.5. Bodywork

All vehicles in the Modified Category must conform to the minimum standards as defined under Vehicle Eligibility, plus there must be a firewall that completely separates the driver and engine compartments. Any holes used for the routing of linkages and/or hoses shall be adequately grommetted and any other openings not used shall be properly sealed with plugs, sealant, or plates.

8.6. Eye Protection

All drivers of open-wheeled cars and or open cockpit cars not having full windscreens shall wear adequate eye protection.

8.7. Roll-over protection

Roll-over protection is highly recommended for all vehicles and is required for A & B modified vehicles. All roll-over protection devices shall be constructed to the requirements outlined in Appendix C or D (separate documents).

PREPARATION POINT SCHEDULE – ALL CATEGORIES

9.1. Method of Assessment

A vehicle with modifications, except those permitted under Section 4 or those permitted under authorized modifications for the category in which the vehicle is entered, shall be assessed preparation points according to this section.

9.2. Negative Points

9.

The negative points assessed for roll-over protection and fire extinguishers may only be used to offset other points assessed in Section 9.3.

9.3. Weight Reduction

- ✓ Indicates the modification is permitted but may be subject to the applicable preparation points. See the Authorized Modifications of each category for further clarification on preparation point assessment.
- ✓ * Indicates the modification is **authorized**, with no preparation points assessed.

		Stock	SS	SP	Mod
Lightweight or removed panel. A panel is defined as a convertible top, trunk or hatchback (or similar) lid, door, fender, hood, grille, valance, or any other coachwork panel that may be unbolted or unfastened from the body structure.	1 pt. each		~	~	✓
Lightweight bumper assembly or part of the bumper assembly removed, including bumper hardware, brackets, and energy-absorbing devices.	1 pt. per front or rear		~	~	~
Removal of or lightweight windshield or rear window, including the window hardware and trim.	1 pt. each		~	~	~
Removal of or lightweight side windows, including the window hardware	2 pts. any or all		~	~	~
Removal of exterior light assemblies, including the light hardware and trim.	2 pts. any or all		~	~	~
Interior trim removal, defined as interior body panels, dashboard, headliner, sun visors, carpet, underpad, sound insulation, and any other interior dress-up or comfort items.	2 pts. any or all		~	~	~
Removal or substitution of a front seat or any/all of the rear seat(s). Removal of the seat also permits the removal of the seat belt(s) for that seat(s).	1 pt. each	~	~	~	~
Battery, change in location (and/or weight for Stock category)	1 pt. each	√	✓	✓	√
Installation of roll-over protection which meets all specifications contained in Appendices C and D If the roll-over protection is a roll cage, then the driver's side anti-intrusion tubes may extend into the door. The inner door structural panel may be modified, but not removed to facilitate this type of side protection. The stock impact beam and the outside door latch/lock operating mechanism shall not be removed.	-2 pts.	~	~	~	~
Installation of one (per vehicle) securely attached and fully charged 2.5 lb (5BC) or larger fire extinguisher. Fire extinguishing systems that meet the requirements of the GCR are also permitted.	-1 pt.	✓	~	~	✓

9.4. Running Gear and Suspension

		Stock	SS	SP	Mod
The addition, substitution, or modification of any part of a front or rear suspension anti sway bar system, per front or rear.	1 pt. each	~	✓	~	~
Any other suspension modification(s).	3 pts.		~	~	~

Wheels of other than stock diameter and/or width and or offset beyond +/- 0.25". (Applies to Stock category only) Vehicles with wheels less than 13" in diameter may use 13" with no changes in width or offset. Vehicles with metric sized wheels may use alternate rims using the following sizing method: Diameter- convert metric measurement to inches and round to the nearest lower inch measurement. Width- convert metric measurement to inches and round to the nearest smaller ½ inch measurement Offset- measurement remains the same based on the closest millimetre equivalent.	1 pt.	~	✓*	√*	√ *
R-compound tires (Stock Category only)	1 pt.	√	√*	∕*	√*

9.5. Engine and Drive Train

		Stock	SS	SP	Mod
Locked differential other than OEM (not permitted in Stock Category). All wheel drive vehicles will be considered as having 3 differentials, all of which shall be assessed points on an individual basis.	Single differential (1pt). Multiple differentials (2pts).		~	~	~
alternate exhaust manifold = (Stock and SS)	2 pts.		~	~	~
alternate non-OEM exhaust manifold = (SP)	- Pro-				
Turbocharger, supercharger (addition thereof)					
A Turbocharger system is defined as: turbine, wastegate, exhaust manifold, boost control valve/device, intercooler					
A supercharger system is defined as: compressor, compressor drive system, boost control valve/device, intercooler	4 pts. each			~	~
Relocation of accessory components to facilitate installation is allowed providing it serves no other purpose. Ducting/piping between components of this system is allowed.					
Carburetor/fuel injection*/induction system*: any unauthorized modification which does not increase the number of venturies/air throttles.	2 pts.		~	~	~
Carburetor/fuel injection*/induction system*: any unauthorized modification which results in an increase in the number of venturies/air throttles.					
* Definition of induction system: "All points that are exposed to air intake from the air inlet to the orifice of the cylinder head port face."	4 pts.		✓	✓	✓
* Definition of fuel injection system: fuel metering unit, fuel distribution unit, injection nozzle(s), air duct, air throttle					
Removal of any emission control equipment (stock category only).	1 pt.	 ✓ 	✓*	√*	✓*

Any other internal engine modification(s), subject to the restrictions below: Reciprocating engine: The cylinder bore diameter may be increased, provided the resulting increase can be achieved within the standard equipment block/barrels without the need to add material to the block/barrels. The number and location of the camshafts and valves may not be changed. The stroke may not be changed. Rotary engine: The capacity of the working chambers may be increased, provided the resulting increase can be achieved within the standard rotor housing without the need to add material to the housing. The rotor is free, provided the number of lobes and rotors is not changed.	4 pts.		¥	*
Flywheel change or modifications (except when part of engine modifications done as described in the above allowance).	2 pts.		~	~
Any modifications/substitution of turbo chargers (on vehicles already possessing factory turbochargers)	2 pts.		~	~
Any modifications/substitution of boost control devices	2 pts.	✓	✓	✓
Change of controller (ECM and/or management chip) where the ECM also controls boost and/or shift points as applicable.	4 pts.	~	~	~
Modification and/or substitution of any or all external engine components and/or accessories. Eligible components include: Any accessory pulleys and belts of the same type (e.g., V-belt, serpentine) as standard may be used. This allowance applies to accessory pulleys only (e.g. alternator, water pump, power steering pump, and crankshaft drive pulleys with or without pulley- damper/balancer assemblies). Camshafts and related parts must remain standard except that alternate cam drive pulleys or gears may be used to adjust cam timing if no variable cam and/or valve-timing system exists as standard. Type of cam drive (chain, belt, gear) must remain as standard. Alternate parts of the same general type (e.g. roller chain in place of "silent" chain) may be substituted. Mating parts (block, heads, covers, retainers, etc.) may not be altered. Vehicles equipped with a variable cam and/or valve timing system as standard may use alternate computer calibration to adjust cam and/or valve timing but may not change or substitute cam drive components (hardware). Supercharger drives are excluded from this allowance. Alternate pulley materials may be used. They may serve no other purpose. Any alternate water pumps, alternators, cooling and oiling systems (beyond allowable items). The original system (wet sump or dry sump) of engine oiling must be retained. Any oiling system component may be added modified or substituted	2pts (Super Stock, Street Prepared), unless the full 4pts (Street Prepared only) for internal engine items already taken.	V	V	*

10. VEHICLE CLASSIFICATION LIST

10.1. GENERAL CONSIDERATIONS

- 10.1.1. It is the responsibility of the competitor to correctly classify his vehicle. A competitor needing assistance in classifying his vehicle should ask the event organizer for help. A competitor incorrectly classifying his vehicle may be excluded by the steward(s).
- 10.1.2. Unclassified vehicles (those not listed in Appendix A (separate document) may be tentatively classified by the event organizer. The CAC Technical Sub-committee may reclassify tentatively classified vehicles.
- 10.1.3. A competitor or an official may submit a written classification request to the CAC Technical Subcommittee. All requests must include detailed vehicle information and are subject to the following timetable:

Prior to January 1 of the current year, a classification request for the addition or review of any eligible vehicle may be submitted;

After January 1 of the current year, a classification request must be limited to the following: An existing classified vehicle became available in a configuration, which may appreciably alter its performance potential; A new model vehicle became available which is not listed in Appendix A (separate

A new model vehicle became available which is not listed in Appendix A (separa document).

- 10.1.4. The committee shall endeavor to process requests within thirty (30) days of receipt. All classification and amendments shall be published as ASN bulletins.
- 10.1.5. A competitor must complete a preparation declaration if requested and declare all variations from authorized modifications or standard equipment. A false declaration, voluntary or not, may result in disqualification, even if the vehicle meets the preparation points limit.
- 10.1.6. The CAC AutoSlalom Technical Sub-committee may classify or reclassify vehicles during the year.
- 10.1.7. The CAC AutoSlalom Technical Sub-committee may correct improperly classified vehicles, subject to the grievance procedures contained in ASN Canada FIA SoloSport GCRs.

10.2. STOCK CATEGORY

For all Stock Category listings refer to 2008 CAC classifications in Appendix A (separate document).

10.3. SUPER STOCK & STREET PREPARED CATEGORY

For all Super Stock & Street Prepared Category listings refer to 2008 CAC classifications in Appendix A (separate document).

10.4. MODIFIED CATEGORY

For all Modified vehicles compliant to race and/or series regulations from other ASN Canada FIA or SCCA racing disciplines, exceptions to the race/series regulations requirements are as follows:

Homologation not required Alternate wheels are allowed Tires are unrestricted Fuel cell not required Fire suppression systems are not required Running lights, windscreens and mirrors not required Logbooks not required Fire retardant driving suits not required

10.4.1. A/Modified

A/Modified are all Formula Cars 2.5L and over, all non-compliant Formula cars and Sports Racers subject to the open wheel requirements listed below and all other open wheel vehicles not otherwise classified and meeting the following requirements: minimum weight of 318 kg (700 lbs) less driver; maximum wing area of 186 sq. cm. (20 sq ft.). Wing areas will be calculated as in a plan (top down) view.

Formula SAE cars shall compete in A Modified but must be prepared to Formula SAE rules of the year that the vehicle was last entered in the Formula SAE Competition.

10.4.2. B/Modified

B/Modified are all Formula Cars under 2.5L, specials, all Sports Racers and all other open wheel vehicles under 2.5L meeting the following requirements: minimum weight of 408 kg (900 lbs) less driver; minimum 2032 mm (80 in.) wheelbase.

All Formula cars/Sports racers in Modified classes must be compliant to their respective race/series regulations. For the purposes of these regulations, "Formula Libre" vehicles are NOT considered a "Formula car" and as such must compete under the wheel base/weight/engine formula.

10.4.3. C/Modified

C/Modified are all series-based/closed wheel cars with either a reciprocating engine or a rotary engine of 2.0L and under according to Section 10.4.5.

10.4.4. D/Modified

All other series-based/closed wheel cars with reciprocating engine(s) or rotary engine(s) of more than 2.0L according to Section 10.4.5.

10.4.5. Engine Sizing

Four-stroke cycle and two-stroke cycle, normally aspirated motors will be classified on the actual piston displacement.

Turbocharged or supercharged motors will be classified on the basis of 1.4 times actual piston displacement.

Rotary (Wankel) engines will be classified on the basis of a piston displacement equivalent to twice the volume determined by the difference between the maximum and minimum capacity of the working chamber times the number of rotors.

11. TOURING CATEGORY

The Touring category of vehicle modifications is meant to fit between the current Stock and Street Prepared categories. This category provides a natural competition outlet for auto enthusiasts using affordable sports sedans equipped with common suspension, engine, and appearance modifications that are fully legal and compatible with street use anywhere in the country. "Dress-up" items such as chrome dipsticks and non-standard filler caps are permitted, provided they serve no other purpose.

Vehicles eligible for this category include:

T1: All coupes/sedans with a minimum of four seats, four seatbelts; that are non-sports car based with maximum engine displacement of 3.1, normally aspirated and certain small displacement turbocharged sedans. No limited slip differentials are permitted except for factory standard viscous coupler type units. As a guideline, eligible cars would typically come from the D, F, G or H-Stock classes.

T2: Engine size allowance: up to 5.1 liters, normally aspirated and 2.0, forced induction (single turbo or supercharger). As a guideline, eligible cars would typically come from the A, B, C, or E-Stock classes. See Section 13.9 for further eligibility and modification parameters.

ELIGIBLE VEHICLES:

All vehicles meeting the above criteria Volkswagen Golf/GTi/Jetta/Beetle/Passat 1.8T Volkswagen Jetta TDI, Golf TDI Audi A4 1.8T and TT (Coupe and Roadster), non-Quattro Mazda 323 GTX (AWD) Mazda 323 GT Volvo S40 (except T5) and V40

SAMPLE EXCLUDED VEHICLES:

Porsche, all Datsun Z-car 2+2 Honda CRX MGB GT Triumph, all

11.1. AUTHORIZED MODIFICATIONS - T1

- 11.1.1. All CAC Stock and Super Stock Category allowances (excluding preparation points), plus all allowances contained in this section.
- 11.1.2. Air conditioning systems may be removed in whole or in part. This rule should not be interpreted to allow modification of the heater system.

11.2. BODYWORK

- 11.2.1. The driver and front passenger seats may be replaced, with the following restrictions: The seating surface must be fully upholstered: The top of the seat, or an attached headrest, may not be below the center of the driver's head. The seat, not including mounting hardware, must weigh at least 15 pounds. (subject to prep. points assessed)
- 11.2.2. Removal of factory trim (rub strips, emblems, mud flaps) is allowed.
- 11.2.3. Fenders may not be cut or flared but the inside lip may be rolled to gain additional tire clearance. Flares that are part of body kits may be attached to the stock fenders. The intention is to permit fitting the maximum allowable tire size. No other changes to the stock fenders or wheel wells are permitted. Wear marks on inside surfaces of the fender well from tire rub are permitted. However, wear holes or slots completely through a fender well surface (which, in effect, provide additional tire clearance) are not permitted.
- 11.2.4. Removal of interior trim is not allowed unless required for fitment of seats in Section 11.2.1.

11.3. TIRES

- 11.3.1. Tires up to and including a width of 225.
- 11.3.2. Tires must have a minimum tread wear rating of 140.

11.4. WHEELS

Any wheels up to 7.5" in width that fit over stock brakes and within the stock wheel opening.

11.5. SHOCK ABSORBERS

- 11.5.1. Any shock absorbers may be used. Shock absorber mounting brackets that serve no other purpose may be altered, added, or replaced, provided that the attachment points on the body/frame/ sub-frame/chassis/suspension member are not altered. This installation may incorporate an alternate upper spring perch/seat and/or mounting block (bearing mount). The system of attachment may be changed. The number of shock absorbers shall be the same as Stock.
- 11.5.2. No shock absorber may be capable of adjustment while the car is in motion, unless fitted as original equipment. MacPherson strut equipped cars may substitute struts, and/or may use any insert. This does not allow unauthorized changes in suspension geometry or changes in attachment points (e.g., affecting the position of the lower ball joint or spindle). It is intended to allow the strut length changes needed to accommodate permitted modifications which affect ride height and suspension travel

11.6. BRAKES

Original equipment ABS braking systems may be electrically disabled, but may not be removed or altered in any other way.

11.7. SUSPENSION

- 11.7.1. Differential mount bushings may be replaced, but must attach in the factory location(s) without additional modification or changes. Differential position may not be changed. The amount of metal in a replacement bushing may not be increased relative to the amount of metal found in a standard bushing for the particular application. Solid metal bushings are specifically prohibited.
- 11.7.2. Addition or replacement of suspension stabilizers (linkage connecting axle or De Dion to the chassis that controls lateral suspension location) is permitted. Traction Bars or torque arms may be added or replaced. A panhard rod may be added or replaced. Methods of attachment and attachment points are unrestricted. The addition, substitution, or modification of any part of a front or rear suspension anti-sway bar system is allowed.
- 11.7.3. Camber kits, also known as camber compensators, may be installed. These kits consist of either adjustable length arms or arm mounts that provide an adjustment to the effective length of a control arm. Alignment outside the factory specifications is allowed. The following restrictions apply:
 - 1. On double/unequal arm suspensions, only the upper arms OR lower arms may be modified or replaced, but not both.
 - On arm-and-strut (MacPherson/Chapman) suspensions, the lower arms may be modified/replaced OR other methods of camber adjustment as allowed by Super Stock category rules may be used, but not both.
 - 3. On swing or trailing arm suspensions, the main arms may not be modified but locating links/arms may be modified or replaced.
 - 4. The replacement arms or mounts must attach to the original mounting points. All bushings must meet the requirements of Section 11.7.1. The knuckle/bearing housing/spindle assembly cannot be modified or replaced.
- 11.7.4. Springs must be the same type as original (coil, leaf, torsion bar, etc.) and use the original attachment points. Ride height may only be altered by suspension adjustments, the use of spacing blocks, leaf spring shackles, torsion bar levers, adjustable coil spring perches, or modification of springs. The use of spacers to alter suspension geometry, can only be as specified in Section 6.5.
- 11.7.5. Changes in alignment parameters that result directly from the use of the allowed components are permitted. For example, the dimensional changes resulting from the use of a cylindrical offset

bushing that meets the restrictions of x.7.A are allowed, including those resulting from a change in the pivoting action to:

- (1) About the mounting bolt, or
- (2) About the bushing itself.
- 11.7.6. Sub-frame mount bushings may be replaced, but must attach in the factory location(s) without additional modification or changes. Sub-frame position may not be changed. The amount of metal in a replacement bushing may not be increased relative to the amount of metal found in a standard bushing for the particular application. Solid metal bushings are specifically prohibited.
- 11.7.7. Springs must be the same type as original (coil, leaf, torsion bar, etc.) and use the original attachment points. Ride height may only be altered by suspension adjustments, the use of spacing blocks, leaf spring shackles, torsion bar levers, adjustable coil spring perches, or modification of springs. The use of spacers to alter suspension geometry, can only be as specified in Section 6.5.

11.8. ENGINE

Engine and transmission must remain unmodified, including emissions equipment, except as noted below:

- 11.8.1. Original equipment traction control systems may be electrically disabled, but not removed or altered in any other way.
- 11.8.2. The air intake system up to, but not including, the engine inlet may be modified or replaced. For naturally aspirated engines, the engine inlet is the inlet to the throttle body or carburetor. For turbocharged or supercharged engines, the engine inlet is the compressor inlet. The existing structure of the car may not be modified for the passage of ducting from the air cleaner to the engine inlet. Holes may be drilled for mounting.
- 11.8.3. Exhaust manifolds and headers may be replaced with alternate units that are emissions-legal. Relocation of the oxygen sensor on the header is permitted. Alternate oxygen sensors, including heated types, are permitted.
- 11.8.4. The engine management system parameters and operation may be modified only via the methods listed below:
 - a. Any and all modifications must meet or exceed the applicable MOT emissions standards for the year, make, and model of the car.
 - b. These allowances also apply to forced induction cars, except that no changes to standard boost levels, intercoolers, or boost controls are permitted. Boost changes indirectly resulting from allowed modifications are permissible, but directly altering or modifying the boost or turbo controls, either mechanically or electronically, is strictly prohibited.
 - c. Reprogrammed ECU may be used in the standard housing. Traction control parameters may not be altered. Altered engine controllers may not alter boost levels in forced induction engines.
 - d. Electronic components may be installed in-line between an engine's sensors and ECU. These components may alter the signal coming from the sensor in order to affect the ECU's operation of engine management system. Example: fuel controllers that modify the signal coming from an airflow sensor.
 - Fuel pressure regulators may be replaced in lieu of electronic alterations to the fuel system. It is not permitted to electronically modify the fuel system AND replace a fuel pressure regulator.
 - f. Ignition timing may be set at any point on factory adjustable distributor ignition systems.
 - g. VTEC controllers and other devices may be used which alter the timing of factory standard electronic variable valve timing systems.
 - h. The mass airflow sensor must remain in its approximate original location.

- 11.8.5. All Touring Category vehicles must comply with the tailpipe emissions test requirements as a minimum.
- 11.8.6. Any accessory pulleys and belts of the same type (e.g., V-belt, serpentine) as standard may be used. This allowance applies to accessory pulleys only (e.g., alternator, water pump, power steering pump, and crankshaft drive pulleys). It does not allow replacement, modification, or substitution of pulleys, cogs, gears, or belts that are part of cam, layshaft, or ignition drive or timing systems, etc. Any crankshaft damper or pulley may be used. SFI-rated dampers are recommended. Supercharged cars may not change the effective diameter of any pulley that drives the supercharger.
- 11.8.7. Engine mounts may be replaced, but must attach in the factory location(s) without additional modification or changes. Engine position may not be changed. The volume of metal in a replacement mount may not be increased relative to the volume of metal found in a stock mount for the particular application. Solid metal mounts are specifically prohibited.
- 11.8.8. Any non-metallic inserts may be used. Hydraulic shock type rear engine locators, or bobble struts may be replaced by manufacturer's performance part, or aftermarket replacement part. This part must retain factory dimensions and attachment points, including factory design. (Example: If factory locator/bobble strut is gas or hydraulic piston type, replacement part must be gas or hydraulic piston type. No solid mounts may be substituted.)

11.9. Touring 2 (T2)

- 11.9.1. The T2 class expands the vehicle eligibility limits beyond those specified for T1, and adds a limited number of allowed modifications. The allowances are as follows:
- 11.9.2. All allowances in T1 carry over, including street tires, emissions, etc.
- 11.9.3. All restrictions regarding body type carry over.
- 11.9.4. Engine size allowance: up to 5.1, normally aspirated and 2.0, forced induction (single turbo or supercharger).
- 11.9.5. Rim restriction: maximum width of 8", diameter/offset unrestricted. Tire restriction: max width 245 mm. and fit within the stock wheel opening.
- 11.9.6. Only standard equipment limited slip differentials (LSD) are allowed on AWD vehicles. For AWD vehicles that did not come with any type of limited slip differential (including center differential or transfer case), a single aftermarket LSD may be added. 2WD vehicles may use any LSD unit.
- 11.9.7. High flow catalytic converters are allowed, but must attach within six inches of the original unit. A single unit may replace multiple catalytic converters. The inlet of the single replacement converter may be located no further downstream than 6" along the piping flow path from the original exit of the final OE converter.
- 11.9.8. Brake rotors may be replaced with any rotor of equal or larger diameter made from a ferrous or aluminum alloy. Calipers are unrestricted, but must mount to the original attachment points. Drum brakes may be replaced with disk brakes of a diameter equal to or greater than the inside diameter of the standard drum part. Brake backing plates (dust shields) may be modified the minimum amount necessary to accommodate allowed alternate rotors and calipers.
- 11.9.9. Original equipment traction control systems may be electrically disabled, but not removed or altered in any other way.
- 11.9.10. Additionally excluded cars: Audi S4 V8 ('04+), BMW M3 (E36 and E46), BMW M5 (all), Mazda RX-8, Mitsubishi Evo 8, Subaru WRX Sti.