

## 2021 Saratoga Speedway Hornet Rules

Any naturally aspirated 4 Cylinder car with a maximum wheelbase of 105.5”.

- No rotary engine cars, no mid or rear engine cars
- No 4-cylinder Ford Fairmont's
- No turbocharged/supercharged engines
- No All-Wheel Drives allowed
- Complete stock steel body, interior, frame, and suspension
- No bracing anywhere except inside the driver's compartment and door-bar
- No Vtec, VVT-I, variable cam/valve timing engines
- If the factory/OEM “block-stamp” on the engine is modified or tampered with in any way, the engine will be deemed illegal.

Hornets will be divided into two classes, Hornet A and Hornet B divisions.

- ‘A’ division will consist of cars with a manufacturer advertised horsepower of 134hp and more, to a maximum of 155 rated horsepower. Any Integra's will automatically be in the A division.
- ‘B’ division will consist of cars with a manufacturer advertised horsepower of 133hp or less. Honda Accords will be allowed in the ‘B’ division, but must use 14” steel rims. Chevrolet Cavaliers/Pontiac Sunfires are considered ‘B’ division cars.
- ‘A’ Division cars with a lap time lower than 17.800 seconds will be deemed illegal and disqualified with no points from the race/qualification session in which the time was achieved.
- ‘B’ Division cars with a lap time lower than 19.000 seconds

will be deemed illegal and disqualified with no points from the race/qualification session in which the time was achieved.

- Hornet 'B' Champions may continue to compete in the 'B' division.

## **PROTESTS**

Genuine safety concerns are encouraged. Safety suggestions and concerns can be sent to the Hornet Division Tech Director or Saratoga Speedway General Managers: [info@saratogaracing.ca](mailto:info@saratogaracing.ca)

Only racers and car-owners may dispute the legality of other cars through an official process outlined below. Any person who does not follow the protest procedures outlined herein to protest or complain about the legality of another car by directly approaching any official at any time may be penalized at the discretion of the General Managers. Penalties include fines; forfeiture of points/payout; expulsion from the pits and/or suspension.

Tech Director/Race Director or General Managers may overrule the directives laid out in this document at any time at their discretion in the interests of fair competition and speedway operations.

1. All protests and appeals shall be governed by this rulebook.
2. If a Driver or registered Car-Owner believes that another competitor in the same class is in violation of the rules, the member may protest suspected infractions individually (if there are two actions there must be two protests etc.) to the Technical Director or Race Director.

3. The protest must be made in writing by the Driver or Car Owner and must indicate the rule that is being protested within twenty minutes after the checkered flag is displayed signifying the completion of the race.
4. A \$200.00 protest fee shall accompany each separate protest regarding the drive-train.
5. A \$100.00 protest fee shall accompany each separate protest regarding any other component or system
6. The Race Director and/or Technical Director shall decide whether the protest is valid in accordance with the rules. If the Technical Director deems the protest ineligible for investigation, he/she will indicate their decision in writing on the protest slip and return it with the deposit to the protester.
7. If the protest is deemed eligible for investigation the driver in question will be informed of the protest immediately after presentations in the winners circle and will be directed to bring the car directly to the tech pad immediately where they will be informed of the nature of the protest and be allowed one assistant to remove parts if required.
8. Refusal to remove part(s) indicated by Tech Director for inspection purposes will result in that part/system being deemed illegal and appropriate action will be taken.
9. Only the driver and assistant of a protested team will be allowed into the tech pad area. Only Saratoga Speedway Officials will be permitted in the tech pad area with the driver and assistant of the car under protest.
10. If the Driver under protest does not proceed immediately and directly to the tech pad for inspection, they will automatically forfeit all points for

the race night and will forfeit any prizes for the race night/day; the protest will still be valid, and inspections will be carried out in accordance with the protest and rule book.

11. The tech director will direct removal of parts for inspection by driver and/or assistant if and as necessary, and will take images, measurements, utilize gauges and inspection tools as needed to thoroughly inspect the part/system in question in order to make an accurate assessment.
12. Tech director is the final authority of the legality of the part(s) or system in question and will inform the Race Director of the results of the inspection.
13. The Tech Director or Race Director will in private inform first the driver under protest then the person making the protest of the results of the inspection and recommended remedial actions or inform regarding confiscated parts deemed illegal if any.
14. All parts found to be illegal may become the property of Saratoga Speedway at the Tech Director's discretion and the protest deposit will be returned to the protester.
15. If the protested part(s) are found to be legal, the protest deposit will be given to the affected driver.
16. After deciding the protest, Saratoga Speedway Officials will take whatever action deemed appropriate to further the interests of fairness and finality in competition results. Such action includes, but are not limited to:
  - Revising the official race results
  - Disqualification
  - Suspension
  - Fines

- Loss of finishing position(s)
- Awarding or subtracting of points
- Forfeiture of prizes, tow dough
- Amending the rule
- Other actions deemed appropriate
- Or taking no action.

## **APPEALS**

Request to appeal a protest decision must be submitted in writing by the Driver or registered Car Owner in receipt of the decision in question to the General Managers of Saratoga Speedway within 24 hrs. of the official decision being levied. A \$200.00 non-refundable appeals fee must accompany appeals request. General Managers will review the merits of the appeal and will perform any research or consultations deemed necessary to effectively address the nature of the appeal. The decision of the General Managers is final and will be provided in writing to the appellant and track officials within 5 days of receipt.

- If the appeal is granted remedial actions and assessments will be included or in special circumstances will be researched further and all parties will be informed of outcomes.
- If the appeal is denied there are no further recourses.

## **CONSTRUCTION**

### **1. Structure**

Roll-Bars mandatory. Your cars are getting faster; the track now has a safety wall, there have been past mishaps resulting in injury. Through much discussion with racers, tech, insurance, and safety personnel it's obvious that Hornet cars in both classes need more protection for their drivers. We care about your safety and we know you do too. We have developed new requirements for both "A" and "B" classes that are simple to install and will not break the bank. These changes are required for both classes prior to getting on the track in 2021.

There are 500 ways to construct roll bars and cages but all of them have basic elements; attachment points to the chassis and/or body, cross bracing for strength and protection. We're not going to dictate every possible configuration for each body style but we are going to insist on some basic ideals listed below and the Hornet Class Tech Director will be the authority.

There are two drawings attached here that are a guide and not intended to be a definitive engineering drawing of mandatory requirements. The instructions in paragraph 1 and 2 below will explain the minimum requirements. If you have any questions or are unsure ask the Hornet Class Tech Director.

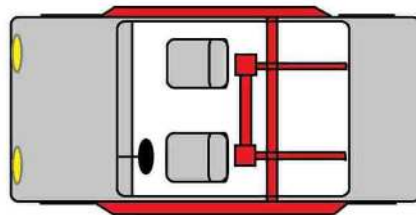
### **ROLL BARS** (all pipes and tubes are to be steel construction)

#### 1.Hornet "A"

- a) A single hoop rollover bar "HALO" of minimum 1.75 inch OD.

- b) Two 1.75 (min)" OD tube uprights spanning the interior of the car (ideally) directly over frame rails or stiffeners behind and within 12 inches of the back of the driver seat and welded to the hoop at the top and welded or bolted to the floor/frame rail/stiffener at the bottom using ¼ inch thickness steel mounting plates
- c) Two 1.75 (min)" OD tube diagonal back braces welded to the hoop at the top and spanning the distance from the hoop to a point at the rear of the compartment ideally terminating directly on a frame rail/stiffener, bolted or welded at the bottom using ¼ inch thickness mounting plates.
- d) Two 1.75 (min)" OD tube diagonal front braces welded to the hoop at the top and spanning the distance from the hoop to a point at the front of the compartment ideally terminating directly on a frame rail/stiffener, bolted or welded at the bottom using ¼ inch thickness mounting plates
- e) One 1.75 (min)" OD side-bar on each side spanning the distance between and welded to the front and rear hoops
- f) One 1.75 (min)" OD or equivalent steel crossbar behind the driver's seat spanning the distance between and welded to L/R rear hoop.
- g) Crossbar can be located between the hoops or welded behind the hoops and extended out to "butt-up" against the body at the same height and in-line with the door rub-rails
- h) If attaching crossbar between hoops attach at "door-bar rub-rails height and add an extension on each side from the crossbar terminus out to the inside body at the rub-rails

- i) Roll bars must be bolted with 4 or more ½” bolts with large washers per plate to the floor pan
- j) Driver’s door must be welded or chained shut. Must have driver’s side door reinforcement with a minimum of a 6” C-Channel or equivalent bolted to the outside of the door with ½” bolts and beveled ends; no sharp edges throughout
- k) Passenger door must be chained or welded shut. All sunroof openings must be covered over with 26-gauge or thicker sheet metal or mesh firmly welded/ riveted/bolted.
- l) Passenger door must have door reinforcement with a minimum of a 4” C-Channel or equivalent bolted to the outside of the door with ½” bolts and beveled ends; no sharp edges throughout



Saratoga Speedway Hornet / Figure 8 Structure Guideline

*This illustration is only a guide for Hornet construction. It does not show all required elements. The written descriptions are the minimum standard*

## 2.Hornet “B”

- a) We strongly recommend that Hornet “B” use same roll bar/cage specs as Hornet “A” above for enhanced safety; the next steps are minimum requirements



- b) Two 2" OD pipe uprights spanning the interior of the car left to right (ideally) directly over frame rails or stiffeners, behind and within 12 inches of the back of the driver seat and welded or bolted to the floor/frame-rail/stiffener at the bottom using ¼ inch thickness steel mounting plates and a minimum of 4-1/2 inch bolts and to the roof in the same manor
- c) Two 2" OD pipe diagonal back braces welded to the hoop at the top and spanning the distance from the hoop to a point at the rear of the compartment ideally terminating directly on a frame rail/stiffener, bolted or welded at the bottom using ¼ inch thickness mounting plates and a minimum of 4-1/2 inch bolts and large washers
- d) One 2 inch OD or equivalent steel crossbar behind the driver's seat spanning the distance between and welded to L/R uprights
- e) Crossbar can be located between the uprights or welded behind the uprights and extended out to "butt-up" against the body at the same height and in-line with the door rub-rails
- f) If attaching crossbar between uprights attach at "door-bar rub-rails height and add an extension on each side from the crossbar terminus out to the inside body at the rub-rails
- g) Driver's door must be welded or chained shut. Must have driver's side door reinforcement "rub-rail" with a minimum of a 6" C-Channel or equivalent bolted to the outside of the door with ½" bolts and beveled ends; no sharp edges throughout
- h) Passenger door must be chained or welded shut. All sunroof openings must be covered over with 26-gauge or thicker sheet metal or mesh firmly

welded/riveted/bolted

- i) Passenger door must have door reinforcement with a minimum of a 4" C-Channel or equivalent bolted to the outside of the door with ½" bolts, large washers and beveled ends; no sharp edges throughout

3. Steering and pedals must remain completely stock for make and model of car. All insulation under hood must be removed

4. A manufactured aluminum-racing seat is required.

5. Seat must be mounted with a minimum of 3/8-inch grade 5 bolts with large washers.

6. It is recommended that the seat also offer rib protection

7. Headrests recommended on both sides

8. Battery must be securely fastened at all times.

Batteries can be moved onto the front passenger floor, and must be mounted securely in a boat style battery box to prevent spillage, but an inactive battery must be mounted in stock location

9. Gas Tank

- a) If stock gas tank is ahead of rear axle, it may remain in place. A fuel cell or plastic boat tank (6.6 gallon maximum) is RECOMMENDED (Subject to tech)
- b) If stock gas tank is behind rear axle, it MUST be replaced with a fuel cell or plastic boat tank (6.6

- gallon maximum)
- c) Fuel cell/boat tanks must be covered, secured, and located in trunk, minimum 1" drain holes required in trunk pan
  - d) If stock gas tank is ahead of rear axle, it may remain in place. A fuel cell or plastic boat tank (6.6 gallon maximum) is RECOMMENDED (Subject to tech)
  - e) If stock gas tank is behind rear axle, it MUST be replaced with a fuel cell or plastic boat tank (6.6 gallon maximum)
  - f) Fuel cell/boat tanks must be covered, secured, and located in trunk, minimum 1" drain holes required in trunk pan

10. All glass (Except front windshield) must be removed

11. All flammable materials inside the vehicle must be removed. This includes headliner, carpets, inside door cards/panels, etc. The only interior material that may remain is the dashboard

12. Transponder mount – All cars must mount a bracket (MUST use a transponder bracket, no exceptions) on the side of the spare tire wheel well just behind the rear axle, or mount a strong "L" bracket to the frame behind the rear axle

13. Vehicle hood must remain on the car in the original form. Holes may be cut in to the hood to allow venting of air for overheating and to allow fire-extinguisher access in the event of a fire. Adding extra material with the intent of forcing air into the engine bay is prohibited

14. A manufactured aluminum-racing seat is required. Seat must be mounted with a minimum of 3/8-inch grade 5 bolts with large washers. It is recommended that the seat also offer rib protection and have leg extensions. Headrests recommended on both sides

## **Safety**

1. It is required that at all times the driver wear a driving suit and gloves of fire resistant material that effectively covers the body. Fire resistant shoes, socks, head sock and underwear are recommended. Driver's suits with rips, tears and holes will not be permitted
2. It is recommended that that the driver's suit be the best quality fire protection available
3. Recommend that drivers should wear a helmet carrying a least a valid SA 2000 standard Snell and/or SFI 31.1 or 31.2 sticker. M rated helmets will not be permitted
4. Full face helmets with Lexan face shield recommended. Nomex helmet skirt and Nomex covered chinstrap recommended
5. It is recommended that all drivers wear a neck and head restraint system (Hans or equivalent)
6. Neck brace (doughnut) mandatory if not using Hans or equivalent

## SEAT BELTS

1. It is highly recommended that the driver carefully review the seat belts manufacture's installation
2. Seat belts must be a five-point system
3. A Quick Release seatbelt no less than 2-inches in width is compulsory. Both ends of the lap belt must be fastened to the roll cage with high quality bolts, not less than 3/8-inch in diameter
4. Shoulder harness must be no less than 2-inches in width and must come from behind and below the top of the driver's seat. Where the harness crosses the roll cage, it must bypass through a steel guide welded to the cage in a manner that will prevent the harness from sliding side to side. No inertia reels are permitted
5. A center crotch belt must be used. It must be a minimum of 2-inches wide and mount to the roll cage seat mount
6. Where the belts pass through the seat edges the edge must have a grommet or be rolled to prevent the belt from being cut
7. All belts must connect in a single latch, at the lap belt. Latch must be approved quick release type
8. Belts older than 5 years must be approved by tech. No belts older than 10 years will be

allowed. Belt with manufacturer date stamp removed will not be accepted for use

## **WINDOW NET**

1. A window net is mandatory; rib style or mesh is allowed. The net must be permanently mounted at the bottom and have an approved quick release at the top
2. Window net must be within five years of manufactures date
3. Window net must have manufactures date and tag or it will not be permitted

## **General**

1. Car numbers on doors **MUST** be at least 20” tall in a highly contrasting color. Vertical roof numbers are to be removed for 2021 and replaced with decal or stenciled numbers, must be at least 20” in length on a contrasting background. If we cannot read the number, you will not be scored. Crude spray painted numbers are not acceptable. Car numbers must also be displayed on the upper right (passenger) side of the front windshield – this is to assist in lining up cars for races
2. Two-way radio communications of any sort are not

permitted.

3. Race receiver 1-way radios are mandatory and must be functioning at the start of the race. These radios will be used by the race director to organize starts, indicate problems and dangers, and to pass official information for operations and safety to the drivers. They are easy to get used to and will help everyone
4. Line-ups are at the discretion of Track Officials at all times. Line-ups will be the order as recorded on the last completed green-flag lap. If one full lap has not been completed before a caution/yellow flag, a complete double-file restart will occur
5. 'B' class cars MUST be equipped with a working 3rd brake light
6. All cars are to have no rear-view mirrors of any kind
7. Brake pads/rotors/calipers must be in proper working condition with acceptable life left. This rule will be policed on a case-by-case basis and is at the discretion of speedway officials

## **Drivetrain**

1. Stock carburetor or injection system to be used. Injectors must be factory/OEM specification. Both intake and exhaust manifolds must remain stock/factory/OEM casting

2. Factory/stock engine/transmission for the make and model of the car. (Ex. An Integra engine or transmission may NOT be run in a Civic chassis.) Engine swaps for engines originally not for the make and model car may be analyzed on a case-by-case basis by the Tech Director
3. Engine/Transmission internals must remain stock/OEM. Intake/exhaust porting and polishing NOT allowed
4. Stock exhaust system for that make/model. MUFFLERS MANDATORY. Car may not exceed 90db at 100' distance. All cars are to have mufflers, and exhausts must extend past the rear axle
5. Stock unaltered rear end or front wheel drive system. No locked traction or limited slip differentials allowed

## **Suspension/Tires**

### **Ride Height**

- Ride height is to be measured from any of the four jacking points (pinch-welds) with the driver inside the car
- These pinch welds must be stock, unaltered
- All four-pinch weld jacking points must be within 1" (one inch) difference. This difference is to give margin for different driver sizes and the potential for different suspension stiffness/tire pressures
- **'B' Class** ride height 5 ½" minimum
- **'A' Class using 14" American Racer tires** ride



- height 5" minimum
- **'A' Class using 15" American Racer tires** ride height 5 ¾" minimum

*Example: If your car is measured to be 5 ½" in the 'B' Class at your left front, the three other points of your car may not be above 6 ½". This is to prevent the staggering of suspension height.*

## **Suspension**

- Cutting or lowering of stock coil springs is allowed
- Springs must be equal length from side to side
- Aftermarket lowering springs are allowed
- NO coil-over suspension systems permitted
- Sway bars are permitted if the vehicle was supplied with them from the factory
- 'B' Division may camber the right front wheel 1" maximum
- 'A' Division may camber any wheel 2" maximum
- Strut tower cross-bracing not allowed

## **Tires**

- Both 'A' and 'B' division must use all 4 tires the same size
- 'B' Division must use factory steel rims up to 15", maximum 7" width, with DOT approved tires no wider than 185 with profile no lower than 60 series. Minimum 400 tread-wear rating
- Wheel spacers not allowed
- 'A' Division may use either steel or aluminum rims, with a maximum of 7" width
- Wheel offset must be factory specification, not to

be less than +40

- Modifying wheels to obtain a different specification is NOT allowed – must be original casting
- Wheel spacers NOT allowed
- All 'A' Division cars must run an American Racer tire which is available at Fountain Tire in Campbell River
- Maximum 6 tires per car per season, all tires must be the same size NO EXCEPTIONS

**The POC at Fountain Tire for purchase of these tires is Brad at 250-287-9291.**

See chart below for sizing.

Product Number	Size	Tread Pattern	Tread Width	Section Width	Circ	Rim	Weight
JSEYX	23.0/7.0-13	EE	7.0	8.3	73.75	6,7	12.5
JSELL	23.0/7.0-13 SH	EE	7.0	8.3	72.75"	6,7	12.5
JSELN	23.0/7.0-14 SH	EE	7.0	8.3	72.75"	6,7	12.5
JSEKD	24.0/7.0-15SH	EE	7.0	8.3	75.50"	6,7	13.7
JSEKH	24.0/7.0-15	EE	7.0	8.3	77.0"	6,7	13.7
JSEYT	23.0/7.0-14	EE	7	8.3	73.75	6,7	12.5