

## **2010 Sundance Vacations Speedway FACTORY STOCK RULES:**

The intent of this class is to provide the entry level or novice racer with the opportunity to compete and develop skills which may be used to move up to a higher racing class. Any driver who demonstrates a level of talent and ability beyond the intent of the class will be subject to additional restrictions, described in detail, in the rulebook. The rulebook addresses the only permitted deviations from stock allowed. Any item not specifically addressed, must remain stock and unaltered.. No part may be modified, moved, or altered in any way unless specifically allowed in the rulebook.

### **BODIES AND FRAMES**

1. American made cars 1965 to present with minimum wheelbase of 100".
2. No trucks, sport utility vehicles, station wagons, or front wheel drives.
3. No chopping, channeling, or interchanging of bodies.
4. Frame must remain stock and unaltered.
5. Stock manufactured bodies only. Steel replacement fenders, door skins and quarter panels permitted. Must be identical to factory panels. Internal support structure must remain intact on doors, fenders, quarter panels, hoods, roofs, and trunk lids. Inner body may be gutted only where roll cage will protrude into doors.. Full stock floor pan required. Full trunk floor including wheel wells, is required. Front wheel wells may be removed but front fenders must remain stock and unaltered. Front and rear firewall shall remain stock with all flammable material removed and all holes covered with sheet metal. Stock or aftermarket front and rear bumper covers may be used if for year, make, and model. No spoilers, air dams, skirts, or ground effects permitted. All glass, chrome, and taillights must be removed. Doors must be welded or bolted shut.
6. Cars must have a wire screen or lexan windshield supported inside at center by (3) vertical steel bars minimum 1 inch by 1/8 inch, not less than 4 inches apart. No other windows permitted. No part of front or rear windshield opening may be obstructed.
7. All cars must maintain a 6 inch frame height at all times with driver buckled in seat.
8. A two inch high non-functioning hood scoop is permitted for air cleaner clearance. May be fabricated or a stock item.

### **WEIGHTS AND PERCENTAGES**

1. All cars must weigh 3100 pounds minimum, after race-with driver.
2. Any add-on weight must be an integral part of the car and must be within the wheelbase.
3. Maximum of 56% left side and no rear weight rule for coil spring cars except for coil spring Camaros and Firebirds which may have a maximum of 54% left side weight and 47% rear weight. All leaf spring Camaros and Firebirds may have a maximum of 55% left side weight and 47% rear weight.

### **ROLL BARS**

1. Minimum 1 ½" X .120" or 1 ¾" X .095" round steel seamless (or DOM) tubing mandatory.
2. All cars are required to have a rear vertical hoop behind and above the drivers' head, connected to the left and right front roll bar legs by a roof hoop.
3. The front roll bar legs must follow the contour of the windshield post and cowl.
4. Maximum distance from the windshield to the rear of the roll bar should be no more than 4".
5. A diagonal bar from the top left to the bottom right must support the vertical rear hoop.
6. A roll bar must connect the left and right of the rear vertical hoop at seat height and across the floor pan at the bottom.
7. An additional bar must be installed at dashboard level, extended from the left front roll bar leg to the right front roll bar leg.
8. Roll cage must be full perimeter, no offsetting of cages.
9. A minimum of three door bars on the left side and two door bars on the right side must be used.
10. Door bars must be convex in shape, and extend into the door panels.
11. Door bars must be attached to each other and the frame with vertical bars. Minimum of 1/8" X 1" gussets must be welded into all main cage joints and drivers' door bars.
12. Minimum 1" diameter steel tubing welded directly to the cage must support the drivers' seat. RACING SEAT MANDATORY.
13. 3" lap belts and 3" shoulder harnesses are mandatory.
14. Crotch belts are recommended.
15. All belts and harnesses must be securely fastened to the cage (harness must be attached below shoulder lever).
16. All belts must be un-frayed and in good appearance.
17. Roll bars in the drivers' area must be padded.
18. Headrests and drop-down style window nets are mandatory.
19. A radiator hoop may be utilized in the front of the cage with upright supports.
20. Rear cage supports may extend into the rear of the frame.

21. Plating of driver side door bars HIGHLY RECOMMENDED.

### RUB RAILS/BUMPERS

1. Rub rails allowed.
2. The top edge of the rub rail is to be no higher than the top of the tire, and no lower than the hub center height.
3. Rub rails must be made out of round tubing max. 1 3/4" O.D. and will be tight from the inside of rail to the body.
- 4.. One single rub rail per side between wheels.
5. NO other exposed bars allowed.
6. Ends must not be exposed to outside of body skin.
7. Bumpers must be securely safety chained to each frame rail to prevent them from dropping onto the raceway.
8. A flat piece of metal must be welded or bolted from outside edge of bumper flush to rear quarter panel and front fender if not using a rubber nose.
9. Tow hooks required on both frame rails, front and rear.
10. No sharp edges or cut-off ends.
11. Ends of bumpers must be turned in and sheet metal must be flush to the body to prevent hooking.

### SUSPENSION

1. Suspension must remain stock and unaltered..
2. Suspension components must be stock to the year, make and model of car being used, with the exception of the sway bar links. They may be all thread or fastened any other way to top of lower A arm.
3. NO ROD ENDS ALLOWED, MUST BE STOCK IN LOCATION.
4. No aluminum suspension components.
5. Stock mount non-adjustable racing shocks permitted. Only one shock per wheel.
6. Only stock steel springs are permitted.
- 7.. Springs must remain stock type and be mounted in stock location. Spring rates may be altered. All cars must maintain a 6" ground clearance at all times, measured from lowest part of frame.
8. Up to 1" Factory rubber spring spacer allowed on top of springs. If used, must be on both sides and be same size.
9. Minimum of at least one pig-tail required on rear coil springs.
10. Front strut cars may slot holes to obtain more camber.
11. Stock unaltered sway bars only. May use threaded rod for sway bar links.
12. All cars must use a retaining hoop at the front and rear of the drive shaft.
13. Drive shaft must be painted white or yellow for visibility if lost on the track.
14. No heim joints permitted, magnetic drive shafts only.
15. Locked rears only.
16. Welded spider or mini-spools permitted.
17. Torque arm cars may mount front of torque arm to frame. Must use stock mount and remain in stock location.

### BRAKES

1. Four-wheel hydraulic brakes in working order are mandatory.
2. No balance bars or adjustable proportioning valves permitted.
3. OEM master cylinders only.
4. No aftermarket master cylinders permitted.
5. OEM calipers and wheel cylinders only.
6. Brake system must be stock for year, make and model.

### ENGINE

All engines must be sealed within 3 races from start of season. Cubic inches, compression, carburetor, and engine components will be checked and verified. Seal will not guarantee that engine will not be rechecked additionally, at anytime during season. It is the driver's responsibility to have engine sealed. Tech sessions will be scheduled before the season begins and during the season, as necessary. All seals will be installed at track or at scheduled sessions only. A small fee for seals and drilled bolts will apply.

1. Engine must match manufacturer of car being used (General Motors in General Motors, Ford in Ford, Mopar in Mopar).
2. All engines will be 358 cubic inch maximum with a stock stroke and a stock bore (+.040 maximum).
3. Maximum compression will be 9.0:1.
4. Unaltered OEM cast iron 2 or 4 bbl intake manifold only. No marine or bowtie manifolds permitted.
- 5.. Stock unaltered cast iron production cylinder heads only. (No angle plugs or Vortec heads).
6. Stock OEM crankshaft, connecting rods, and stock type replacement pistons only. Eagle "SIR" connecting rods permitted. (Part # SIR5700BBLW and SIR5700BPLW for Chevrolet engines. SIR5956FB and SIR5956FP for Ford engines. SIR6123CB for Mopar engines)
7. Stock harmonic balancer only. Stock type aftermarket replacement balancer allowed.

8. Aftermarket oil pan, valve covers, and timing cover allowed.
9. Box stock Holley 4412 on Mr Gasket adapter plate part # 1937 (2 barrel manifold) or part number 1929 (4 barrel manifold) allowed.
10. Hydraulic camshaft and working hydraulic lifters mandatory. Factory type hydraulic roller camshafts permitted. Must use OEM factory hydraulic roller lifters. No retro-fit lifters allowed. Hydraulic lifters may not be modified whatsoever. This includes no spacers or shims.
11. Stock stamped steel rocker arms only. Stock rocker ratio must be maintained. No roller or roller tip rocker arms. No stud girdles.
12. Stock diameter valve springs only.
13. Stock unaltered OEM ignition system only.
14. Stock unaltered cast iron rear dump exhaust manifolds only.. No tubular steel factory headers allowed.
15. Engine must be in stock location. Aftermarket motor mounts allowed (Must be exact replacement for stock mounts). May be solid steel, rubber, or polyurethane.

#### ADDITIONAL RULES

1. All cars will use a stock unaltered standard or automatic transmission.
2. Standard transmission cars must use a stock steel flywheel, clutch, and pressure plate and have a blow proof steel bell housing.
3. Automatic transmission cars must have a stock working torque converter. Torque converter must be stock diameter and stock stall speed.
4. Two-inch maximum diameter exhaust and two Dynomax #24200 track mufflers are mandatory on all cars.
5. No "H" or "X" pipes are permitted.
6. System must be securely fastened, leak free, and must exit behind the driver.
7. Mechanical throttle linkage with toe strap and double return springs required.
8. Stock type aftermarket aluminum radiator permitted. Radiator must mount in stock location. Transmission coolers must be mounted in engine compartment only.
9. All cars must carry a securely fastened and leak free one-gallon coolant overflow tank. NO ANTIFREEZE PERMITTED!
10. No rear view mirrors, radios, or any other form of driver/crew communication. Driver MUST monitor one way track scanner and obey and respond to race director's instructions.
11. Any driver who wins three feature events will be issued a carburetor restrictor plate. This restrictor plate will be mandatory on any car used by that driver until the end of the season. If the driver in question wins two additional features, a smaller restrictor plate will be issued along with a reduction in maximum allowed left side weight, by 1%. These restrictions will be required on any car used by that driver, at all times, for the remainder of the season. All restrictions will be removed for the King of the Mountain (final points show) and any non-points events. Installation and removal of restrictor plates must be supervised by a tech inspector. Any modifications or unauthorized removal of restrictor plate, will result in the loss of ALL accumulated points for the year. Restrictor plate(s) shall remain property of Sundance Vacations Speedway.

#### WHEELS AND TIRES

1. Steel wheels must be used, maximum 7" wide.
2. Wagon wheels and racing wheels are allowed. Minimum 3.5" back spacing for Camaros and Firebirds. Back spacing shall be defined as the distance between the extreme back edge of the rim, not bead seat, to the mounting pad. Any back spacing is allowed for metric cars. No 2" or 3" back spacing is allowed on Camaros or Firebirds.
3. 15" wheels only.
4. Track tire only.
5. Same offset must be used on all four wheels.
6. No wheel spacers allowed.
7. No use of tire softener permitted.
8. 1" lug nuts on all four rims are mandatory.
9. Wheels and tires must not extend past fenders and quarter panels on Camaros and Firebirds. Metric and full size cars may trim fenders and quarter panels for tire clearance.
10. Metric and full size cars may use any offset 15 X 7 inch wheel.. Must be same offset all around.

#### FUEL CELLS

1. Encased fuel cell (maximum of 16 gallons) mandatory.
2. Fuel cell must be centered between rear drive tires mounted as far forward as possible on trunk floor.
3. A minimum 1 ½" bar will be mounted behind fuel cell to ward off puncture.
4. Fuel cell shut off valve must be in plain view, within drivers' reach. Shut off valve must be painted fluorescent RED or ORANGE and must be clearly marked "ON" and "OFF".
5. No electric fuel pumps.

6. No glass or plastic fuel filters.

#### BATTERY

1. Battery may be located in the drivers' compartment.
2. Must be enclosed in a spill-proof container securely fastened to the floor behind driver.
3. All batteries must have a spill or splash cover.
4. A battery shut off switch is mandatory and must be in plain view, painted fluorescent ORANGE or YELLOW, and be clearly marked "ON"/"OFF".