

## **2010 Sundance Vacations Speedway FWD RULES:**

The intent of this class is to provide the entry level racer with the opportunity to compete in a Front Wheel Drive only division, in compact cars similar to many of the domestic and import autos found on the road today. Furthermore, this division will also be known as the "First Win Division", and provide all participants an opportunity to experience the thrill of competition and victory. This class will also familiarize drivers with the basic rules and race procedures that they can expect in all racing divisions.

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. Tech reserves the right to adjust the rules or allow/disallow any part or parts and take steps necessary to even competition.

### **BODY**

1. Any domestic or foreign FWD passenger 2 or 4 door car with a maximum wheelbase of 104 inches. No T-tops, sunroofs, convertibles, mini vans, or turbo charged vehicles allowed.
  2. No 2-seaters, No CRX/V-Tec/Z-Tec.
  3. All non-metal interior trim must be removed. Dashboard may remain, and can be covered with sheet metal.
  4. Bodies must be strictly stock with no excessive gutting of interior sheet metal, except for door bar installation.
  5. Doors must be welded or bolted shut.
  6. Hood and trunk/hatches must be secured with easy open fasteners or pins.
  7. Full stock floor, trunk floor, firewalls and rear wheel wells must remain intact. Holes may be covered with sheet metal. If fuel cell is mounted in trunk, must have rear firewall made of minimum 22 gauge sheet metal, to separate from drivers compartment.
  8. All glass must be removed except for front windshield which may be replaced with lexan or 1 inch maximum square wire screen. Must have (3) vertical support bars, minimum 1 inch by 1/8 inch, in center of windshield area and not less than 4 inches apart.
  9. Stock bumpers and bumper covers only. NO sharp edges on bumper ends.
  10. All plastic trim, moldings, and marker lenses must be removed.
  11. No inside or outside rear view mirrors.
  12. No excessive gutting of stock body components. (hood, hatch, doors, roof, etc.)
  13. Vehicle identification number (VIN) tag- MUST remain intact.
- NOTE: STOCK means the way it was originally equipped from the factory!

### **ROLL BARS**

1. Minimum 1 1/2" X .120" or 1 3/4" X .095" round steel seamless (or DOM) tubing mandatory. Roll cage must be attached to unibody with no less than 1/8 inch steel plate. Plates must be minimum of 8 inches x 8 inches.
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 (3) door bars on the left side and (2) 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.
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. Racing seat mandatory. Roll bars in the drivers' area must be padded.
18. Headrests and drop-down style window nets are mandatory.
19. Front hoop allowed and may attach to front strut towers with uprights. No bars in front of radiator. No exposed bars attaching bumper to front hoop.
20. Rear cage supports may extend into the rear of the frame.

21. Plating of driver side door bars HIGHLY RECOMMENDED.
22. Rear hoop required to protect fuel cell if cell is located in trunk area.

### RUB RAILS

1. Rub rails allowed between wheel base only.
2. Rub rails may not extend out more than tires.
3. 1 3/4 inch round tube maximum, no lower than center of hub and no higher than tire.
4. Nerf bars must be securely attached to roll cage.

### SUSPENSION

1. Suspension components and mounting locations must remain absolutely stock for year, make, and model of car being used, with the exception of front strut towers which may be slotted to obtain camber.
2. Heavy duty stock mount shocks or struts permitted.
3. Springs may be altered but must mirror each other from side to side.
4. Springs must mount in factory mounts with no spacers.
5. No cutting, heating, altering, or modifying of any other suspension parts allowed.
6. All cars must maintain a 5 inch frame height.

### TIRES AND WHEELS

1. Aftermarket steel wheels allowed. Maximum 7 inch width.
2. Minimum 2 inch backspace on any wheel. Must be same offset on all four corners.
3. No aluminum wheels allowed.
4. No wheel spacers permitted.
5. 1 inch lug nuts mandatory. Thread should be exposed on outside of lug nut.
6. 13 or 14 inch wheels only. Must have same size on all corners.
7. 13 or 14 inch track tire only. Hoosier track tire only.
8. No shaving or softening of tires allowed.

### ENGINE

1. Engine size and specifications must be stock for year, make, and model and utilize stock OEM engine mounts.
2. Absolutely NO aftermarket or high performance parts allowed with the exception of cold air intakes, which may be used but must remain in the engine compartment.
3. No machining, grinding, porting, gasket matching, etc. of any engine component.
4. Engine and engine components must be STOCK.
5. OEM fuel injection or carburetor for year, make, and model.
6. Engine computers must be stock for year, make, and model.
7. No carburetor spacers or adapter plates permitted.
8. Maximum compression of 175 PSI on any cylinder.

### FUEL SYSTEM

1. Fuel cells are mandatory if factory gas tank is mounted behind rear wheels.
2. 8 gallon maximum fuel cell permitted. Cell must be mounted on top of trunk floor, as far forward as possible and be centered in car. Cell should be secured with (4) one inch x 1/8 inch steel straps- 2 front to rear, and 2 left to right- with large washers or 1/8 inch thick plates on underside and minimum 3/8 inch bolts.
3. Fuel pump shut off switch MANDATORY. Must be accessible from both sides of car and be painted a bright color. Must be clearly marked FUEL ON-OFF. Fuel pump shut off switch MUST kill power to fuel pump AND ignition. Switch will be tested periodically during season. Carbureted engines must have a fuel shut off valve and be clearly marked.
4. Electric fuel pumps must match OEM specs for fuel pressure.

### DRIVE TRAIN

1. Stock automatic or standard transmission for year, make, and model.
2. Stock torque converter for automatic with stock steel flex plate.
3. Stock steel flywheel and clutch assembly for standard transmission.
4. No machining of any drive train parts.
5. One inch inspection hole required in bell housing.

### EXHAUST SYSTEM

1. Stock exhaust manifold only for year, make, and model.
2. Stock type muffler or 2" cherry bomb only.
3. Single exhaust only. Must exit behind driver.
4. Maximum pipe diameter- 2 inches.

### BATTERY

1. Battery may be located in drivers compartment but must be enclosed in spill proof container and be secure. Container must have spill or splash cover.
2. If battery is relocated, it must have a battery disconnect switch mounted in plain view, marked ON-OFF, and painted fluorescent orange.

### WEIGHT

Weight will be calculated using the following formula:

$$\text{cc}/2.377 \times \text{valve factor} + 1400$$

All 8 valve engines will have a valve factor of 1.0

All 12 valve engines will have a valve factor of 1.1

All 16 valve engines will have a valve factor of 1.2

All 20 valve engines will have a valve factor of 1.3

Example: Weight for a 1600 cc 16 valve car-  $1600/2.377 \times 1.2 + 1400 = 2208$  pounds

Example: Weight for a 2000 cc 16 valve car-  $2000/2.377 \times 1.2 + 1400 = 2410$  pounds

(Weight must be displayed on hood)

Maximum 55% left side weight.

Maximum car weight 2900 lbs.

Any lead ballast must be securely mounted within the wheelbase and painted white.

### ADDITIONAL

1. Aerodynamic enhancements will be permitted. Front air dam and side skirts allowed. Must be rubber or aluminum. (no fiberglass)
2. Rear wing or spoiler allowed. (Subject to tech approval)
3. Transponder location will be no less than 12" from centerline of rear end on the inside right rear of frame rail (except for FWD, legends and TQs, which will be determined by tech inspector).
4. Any driver winning second feature will be required to add an additional 50 pounds of weight to base weight of car. Base weight will be defined as weight recorded at scale after feature win. Driver will be required to add 50 pounds for each additional win thereafter. Penalty weight accumulated during regular season will not be required at King of the Mountain event.