# 4-Banger Rules:

### 1. ENGINE:

- a) Only three (3) or four (4) cylinder in-line engines permitted.
- b) All engine components must remain unaltered and OEM for the year, make and model.
- c) All valve-train components must remain unaltered and OEM including but not limited to crankshaft, connecting rods, valves, valve sizes, and the bore and stroke.
- d) Aftermarket and/or racing-type cylinder heads not allowed.
- e) High performance engines of any type not allowed.
- f) Turbo charged and/or super charged and/or rotary engines not allowed.
- g) Max HP allowed is 225 for all makes and models. (Per chassis dyno.)

### 2. ELECTRONICS AND IGNITION SYSTEM:

- a) All ignition components must be unaltered, OEM, and match the year, make and model. Only 12-volt ignition systems permitted.
- b) Ignition boxes and/or performance chips and/or any ignition enhancing devices not allowed.
- c) Traction control of any type not allowed.
- d) Only one twelve (12) volt battery, securely mounted with both terminals covered permitted. If battery is moved from OEM location, the battery must be mounted in a marine-type case.
- e) Only stock OEM starters in the OEM location permitted.

- f) Only one aftermarket tachometer, oil pressure and water temperature gauge(s) permitted.
- g) The vehicle computer (ECU) must be mounted in a visible location providing ease of inspection.

#### 3. EXHAUST SYSTEM:

- a) Exhaust manifolds and headers allowed on all cars.
- Removal of the catalytic converter, air conditioning compressor and smog pump permitted.

#### 4. ENGINE COMPARTMENT:

- a) The engine must be OEM and mounted in the stock OEM location for the make and model. Aftermarket radiators allowed.
- b) Solid engine mounts and/or safety chains permitted.
- c) Accumulators and/or accusumps not allowed.
- d) Reinforcing not allowed with the exception of the front strut bar and a bar across the front between horns to protect the radiator. It is not to extend in front of the bumper.

### 5. TRANSMISSION AND DRIVELINE:

- a) The transmission and/or transaxle must remain OEM and unaltered for the year, make and model.
- b) All forward and reverse gears must be operational.
- c) The flywheel, flex plate, clutch and/or torque converter and/or assembly must remain unaltered and OEM of the year, make and model. `
- d) Mini-type clutches and/or couplers not allowed. Inspection access

- is required. If not, disassembly may be required for inspection.
- e) Transmission coolers in the driver compartment not allowed.
- f) Torque dividing final drive systems not allowed.
- g) Locked differentials of any type not allowed.
- h) A minimum one (1) inch inspection hole must be located in the bell housing.

### 6. CHASSIS / FRAME:

- a) All chassis and frames must remain unaltered and OEM. Any front or rear wheel drive, compact car frame permitted.
- b) A maximum wheelbase of 107-inches permitted.
- c) The magnetic steel floor pan must remain unaltered and OEM. Any work that is done in the form of patches must be completed with magnetic steel.

### 7. WEIGHT:

a) Additional weight of any type not allowed. Any item(s) that are deemed to provide additional weight must be removed.

### 8. FUEL CELLS and FUEL:

- b) The fuel system must be complete, unaltered and OEM for the year, make and model.
- c) Only standard pump gasoline permitted for competition. A maximum of 93 octane. Performance additives not allowed.
- d) The gas tank/fuel cell may be mounted ahead of the rear axle with a minimum 1/8-inch shield mounted under it assuming it is an OEM install and separate from the driving compartment.

- e) If the gas tank/fuel cell is mounted behind the rear axle the gas tank/fuel cell must be replaced with a maximum eight (8) gallon fuel cell relocated to the trunk area only of the car. Must have fire wall in the trunk area spanning the width of the car separating the fuel cell from the interior of the car. Must have hole in trunk for fuel to escape in case of tank rupture. Hole can be no larger than eight (8) inches over the width and length of fuel cell. Hoop to protect fuel tank permitted. The cell must be mounted with two (2) solid magnetic steel straps around the entire cell two (2) inches wide and .125-inch thick. A magnetic steel or fuel cell cover must be between the driver and the fuel cell.
- f) A fuel cell vent, including cap vent, must have a check valve. If the fuel cell does not have an aircraft-type positive seal filler neck, then a flapper, spring and/or ball type filler roll-over valve is mandatory.
- g) External electric fuel pump wired to the ignition switch with aftermarket fuel cell permitted.
- h) Cool cans not allowed.
- i) No fuel lines allowed through the car interior.

### 9. BODY:

- a) Any front wheel drive or rear wheel drive compact car permitted. No trucks, station wagons, vans or convertibles.
- b) The body must remain unaltered and OEM in appearance. Replacing panels with steel bodies will be acceptable.
- c) The inner fenders must remain unaltered and OEM. Removal of

the inner fenders not allowed.

- d) The hood and trunk lid/hatchback must be securely fastened.
- e) All doors must be securely fastened.
- f) All glass, exterior lights, chrome and/or plastic trim and hood insulation must be removed.
- g) Dashboard may be removed.
- h) Front and rear bumpers must be securely fastened. Welded, chained and/or cabled to the frame permitted.
- i) A front and rear tow hook/chains must be easily accessible.
- j) The OEM bumper covers must remain on the vehicle, but may be altered to allow for tow hook.
- k) A maximum seven (7) inch sun visor permitted.
- 1) The opera windows may be closed and/or sealed.

### 10. SUSPENSION:

- a) All components and mounts must remain unaltered and OEM and must match the year, make and model.
- b) Weight jacks, modifications, racing components, aftermarket or homemade traction devices not allowed.
- c) The car must remain in alignment from front-to-rear and must track straight.
- d) A maximum of 5 degrees of camber permitted on any wheel.
- e) Center-mounted steering not allowed.
- f) A quick release, aftermarket steering wheel permitted. A collapsible steel steering shaft is recommended.
- g) Aftermarket remote reservoir power steering not allowed.

- h) All shocks and struts must remain unaltered and OEM in the OEM location.
- i) Spring rubbers permitted.
- j) Aftermarket hubs are legal if supplied from:

Campbell Race Technologies (570) 847-5358

Gordon Motorsports (618) 694-1212

### 11.BRAKES:

- a) All brake components must be unaltered, OEM, magnetic steel and operative on all four wheels.
- b) Disc and/or drum brakes permitted and must match the year, make and model.
- c) Only OEM master cylinders in OEM location permitted.
- d) Brake shut off and/or valve bias adjuster(s) not allowed.
- e) Only magnetic steel brake lines permitted.

# 12. WHEELS and TIRES:

- a) Only OEM DOT 13-, 14-, 15-, or 16-inch passenger tires permitted. Racing, mud and/or snow tires not allowed. M+S tires permitted.
- b) Alterations or any type including re-caps, softening, chemical alteration, conditioning, siping, and/or grooving not allowed.

- c) All wheels must be OEM steel or aluminum wheels with a maximum width of seven (7) inches and a standard bead. No beadlock allowed. Racing wheels may be ran with a maximum offset of one (1) inch either side of center.
- d) All tires must remain inside the body.
- e) Wheel spacers and/or bleeder valves not allowed.
- f) Wheel reinforcement is strongly recommended.
- g) One (1) inch outside diameter magnetic steel lug nuts on steel wheels are required.

### 13. SAFETY:

### **Personal Safety Equipment:**

a) It is the sole responsibility of each competitor for the effectiveness and proper installation, per the manufacturer's specifications to be adequate for competition at every event. Each competitor is expected to investigate and educate themselves for continuing improvement regarding their own personal safety equipment.

## Seat Belt/Restraint System:

- b) Each car should be equipped with an SFI 16.5 or SFI 16.1 approved seat belt restraint system until the date of the belt expiration (two years).
- c) Seat belts restraint systems shall be installed in accordance with the directions and application of the system supplier or manufacturer.
- d) Seat belt webbing that comes into contact with any sharp or unradiused metal edge should be protected from that edge by means of push-on grip vinyl trim.

- e) Seat manufacturers supply the seat with trim protecting the webbing from abrasion or cutting under impact conditions and should be used to their specifications.
- f) It is the responsibility of the driver, not the track officials or promoter, to ensure that his/her seat belt restrain system and all components are SFI approved, correctly installed, maintained and properly used.

### **Protective Clothing:**

- a) Each driver should wear a fire resistant uniform meeting the SFI 3.2A/5 specification and display a valid SFI 3.2A/5 label. Each driver should also wear fire resistant accessories that effectively cover the remaining parts of the body.
- b) Shoes and gloves should meet the SFI 3.3 specification and display a valid SFI .3 label.

#### Seats:

- a) An aluminum seat built specifically for the purpose of competition in auto racing events will be required.
- b) High-back aluminum (stockcar style) seats should be securely mounted to the frame as recommended/required by seat manufacturer and chassis manufacturer.
- c) Head rest (behind the head) should include padding. All areas surrounding the head should have padding.
- d) The seat must be mounted a minimum of thirty (30) inches from the center of the rear end, measured at the bottom of the seat.

#### Helmets:

a) Driver must wear a full face helmet, with at least a valid SA 2005 Standard

- Snell and/or a valid SFI 31.1, SFI 31.2, or SFI 31.1 2000 label.
- b) If a head and neck restraint system is connected it should conform to the manufacturer's mounting instructions.
- c) Neck collars are mandatory.

#### Other:

- a) No sharp or protruding edges in or around the cockpit, which would impede the driver's rapid exit from the car.
- b) Windshield screens with a minimum of .090 inch screens must be securely fastened.
- c) An electrical engine shut off switch is required. The switch must be clearly labeled and within the reach of the driver.
- d) A fuel shut-off valve is highly recommended. The valve must be clearly labeled and within reach of the driver.
- e) Flame retardant seat, roll bar, knee and steering pads or padding are recommended.

### **ROLL CAGE:**

- a) Unless otherwise noted all tubing utilized in the construction of the roll cage must be 1.50 inch outside diameter, .090 inch thick magnetic steel tubing. A four-point cage, full perimeter, using 1.50 inch outside diameter, .090 inch thick magnetic steel tubing is required.
- b) A six-point, full perimeter, using 1.50 inch outside diameter, .090 inch thick magnetic steel tubing is suggested.
- c) The rear hoop must have bracing that crosses in a "X"

- configuration. Rear kick up supports are highly recommended.
- d) A minimum 1.25 inch outside diameter cross bar is required across the top of the halo bar.
- e) The roll cage must be securely fastened (welding is required) utilizing a minimum of .250 inch plating to mount cage to the frame. Only magnetic steel permitted. Iron, galvanized pipe, fittings, square tubing, brazing and/or soldering not allowed.
- f) A minimum of three (3) door bars on the driver side and two (2) door bars on the passenger side mounted in a horizontal manner is required. Vertical bracing from the top to the bottom of the door bars on both sides is required.
- g) A minimum of three (3) windshield bars and protective screen is required in front of the driver.
- h) The driver's compartment must be sealed completely from the track, the engine and the fuel cell. The front and rear firewalls must remain and any holes must be patched with the magnetic steel.
- i) Mirrors not allowed.
- j) Gutting of the car not allowed with the exception of clearance for the roll and door bars.
- k) All material considered flammable including but not limited to the radio, airbags, etc. must be removed.
- 1) The interior must remain open.

#### 13. OTHER:

a) The Vehicle Identification Number (VIN) must remain clearly visible and unaltered in a minimum of one (1) of the OEM locations. Any

- car missing the VIN is not allowed to enter competition.
- b) RWD Ford Mustangs permitted to run a locked rear end and OEM carburetor/ or Holley 4412.

### 14. NUMBERING:

- a) Car number must be at least twenty (20) inches tall and be in a contrasting color on doors and roof. No duplicate numbers.
- b) No metallic paint or duct tape.
- c) All numbers and decals must look professional.

# 15. Age to Compete

a) Any competitor 13 years or older without a driver's license or rookie drivers must complete a rookie orientation test. (This can be done on raceday but preferred on practice day.)