



## Orange County Speedway 2010 Modified Rules

**ORANGE COUNTY SPEEDWAY GENERAL RULES WILL ALSO APPLY FOR THIS DIVISION.**

**RULE BOOK DISCLAIMER:** *The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all events, and by participating in these events, all participants are deemed to have complied with these rules. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATIONS OF OR COMPLIANCE WITH THESE RULES AND OR REGULATIONS. They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator, or official. The race director shall be empowered to permit reasonable and appropriate deviation from any of the specifications herein or impose any further restrictions that in his/her opinion does not alter the minimum acceptable requirements. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATION OF SPECIFICATIONS. Any interpretation or deviation of these rules is left to the discretion of the officials. Their decision is final.*

1. **ELIGIBILITY:** OCS Officials in charge have the right to refuse any entry.
2. **COMPETING MODELS:** Pontiac: J2000, Grand Am, Grand Prix; Chevrolet: Cavalier, Beretta, Lumina, Celebrity, Monte Carlo; Buick: Skyhawk and Regal; Ford: Thunderbird, Probe and Mustang; Dodge: Charger and Daytona.
3. **CAR WEIGHT**
  - A. All cars with 2" frame height must weigh a minimum of 2800 pounds with the driver in the car. The minimum right side weight is 1260 pounds.
  - B. All cars with 4' frame height must weigh a minimum of 2700 Pounds with the driver in the car. The minimum right side Weight is 1215 pounds.
  - C. Added weight must be in block form of no less than five (5) pound blocks (no pellets). Added weight must be painted white and lettered or stamped with the number of the car that it is used in. Added weight must be securely bolted in place. Weight may not be added outside of the frame rails or ahead of the front spindles or behind the rear axle or inside the driver's compartment. Dislodged weight cannot be returned to the car for weighing after race.
  - D. Car weight must be posted on left side.

#### 4. CAR BODIES

- A. General Body Requirements - Car body must meet the following requirements;
  - Cars must be neat appearing.
  - All bodies must be installed on frame in a manner acceptable to the Track Officials.
  - The floor area directly beneath the seat forward to the front engine firewall must be made using a minimum of 1/8inch magnetic steel. The remainder of the floor area to the right and rear of the seat must be made from a minimum of 22gauge magnetic steel. All floor area panels must be welded together.
  - All interior sheet metal must be a minimum of 22 gauge magnetic steel. All interior sheet metal panels must be welded together. All interior sheet metal is subject to Track Officials approval.
- B. General Spoiler Requirements - All spoilers must be approved by Track Officials before installation.
  - An approved spoiler must be a non-adjustable part of the body which controls the flow of air over one (1) surface only. Spoiler sizes can be reviewed as testing and /or race competition dictates.
  - Front Air Dam - An approved front air dam may be mounted underside of the cars. The optional metal or vinyl front air dam must be mounted perpendicular to the ground and no more than three (3) inches behind the front edge of the nose panel. Front nose panel and air dam must not extend past the rear edge of the front bumper and must maintain four (4) inches ground clearance. Nose panel and air dam must not extend past outside edge of the frame rails. All support brackets must be mounted to the rear of air dam.
  - Rear Spoiler and Rear Panel - All rear spoilers and spoiler mounting must be approved by Track Officials. A solid rear spoiler of clear LEXAN glass only may be installed at the rear deck lid and meet the requirements that follow:
    - 1: The maximum spoiler size permitted shall be eight (8) inches high by 48 inches wide. The rear spoiler must not be wider than the standard width of the rear quarter panels, measured across the top and shall not extend rearward past the trailing edge of the rear bumper.
    - 2: A maximum of two (2) one (1) inch wide adjustable supports are permitted on the front of the spoiler.

- 3: A maximum of three (3) supports may be attached to the rear of the spoiler. The supports, front or rear, may be attached to the spoiler using a piece of one (1) by one (1) inch aluminum angle one (1) inch long.
- 4: A maximum of 37 inches measured from the ground to the spoiler mounting point is permitted.
- 5: .An approved spoiler must have a minimum thickness of 0.125 inches.
- 6: Rear body panel must be solid, and must be mounted solid to the car, not hinged. Rear body panel must extend to the bottom of the rear bumper.
- C. Windshield - A LEXAN glass windshield must be used on the driver's side. A complete windshield screen must be installed on the right side of the windshield opening. If a full windshield is used, the screen may be omitted. The windshield may be installed using two (2) pieces of LEXAN glass. The top portion must extend across in front of the driver. The bottom portion must extend from the top of the dash or cowl upward behind the top portion in front of driver.
- D. Rear Window - Rear window is optional. Rear window must be installed in original position. Only clear polycarbonate glass may be used in the rear window opening. The polycarbonate glass must be the same thickness and formed to the same shape as the original equipment glass. No tint permitted. The rear window must be secured with a minimum of two metal straps on the outside not less than 1/8 inch by one inch wide evenly spaced, and bolted to the roof at the top and the deck support panel at the bottom. The inside of the rear window must be supported by at least two (2) metal braces permanently mounted without any adjustments.
- E. Side Window/Window Screen - All side window glass must be removed. A nylon mesh screen must be installed in the left side door glass opening. The window screen must be a rib type made from 3/4inch wide, maximum one (1) inch nylon material with a minimum one (1) inch square opening between the ribs. The minimum window screen size shall be 22 inches wide by 16 inches high. All window screen mounts must be a minimum 1/2 inch steel rod on the bottom and a minimum one (1) inch wide by 3/16 inch flat steel or a minimum 1/2 inch diameter steel rod on the top with mounts welded to the roll cage. The window screen, when in the closed position, must fit tight and be secured with a quick release type latch at the top in front only. The minimum side window opening on all models shall be 13 1/2 inches when measured from the top of the door panel to the roof drip rail.
- F. Rear View Mirror - Rear view mirror will be permitted. Wink type three- dimensional mirror permitted with a maximum width of 26 inches. Rear view mirror cannot extend outside of the car.
- G. Dashboard - All dashboards are subject to approval by Track Officials.
- H. Firewall - A front and rear fire wall of not less than 22 gauge magnetic steel must separate the driver from the engine compartment and fuel cell. The front firewall must be positioned below the leading edge of the windshield. The firewalls must be sealed and welded in place.
- I. Doors - All door panels must be constructed of either aluminum or sheet metal and mounted in a manner acceptable to the Track Officials. Any seams creases or accent lines fabricated in the doors shall be parallel with the top of the door. A minimum distance of 72 inches up to a maximum distance of 78 inches is permitted when measured from the center of the rear axle housing forward to the front of the door. A minimum of 43" or a maximum of 45 inches is permitted when measured across the car at the front outside edge of the front door panel.
- J. Quarter Panels - Quarter panels must be constructed of either aluminum or sheet metal and meet the following requirements:
- All cars must have rear wheel openings on the right side a minimum of 11 inches and a maximum of 14 inches radius measured from the center of the rear axle housing.
  - A minimum distance of 34 inches and a maximum distance of 42 inches measured from the center of the rear axle to the rear of the body is permitted. A maximum distance of 60 inches is permitted between the top of the quarter panels measured across the body at the rear axle housing.
  - The maximum height of the rear quarter panel measured from the ground to the rear of the quarter panel will be 37 inches.
  - The rear quarter panel must maintain a minimum of eight (8) inch ground clearance behind the rear wheels. A maximum distance of 60 inches is permitted when measured across the top at the rear of the quarter panels.
- K. Grilles – The air intake housing at the radiator must maintain a rectangle shape across the front of the nose with the opening being at least as wide as it is high and covering a minimum of 130 square inches. Only screen will be permitted in the opening to allow for proper cooling. All air that enters the grille area must pass through the radiator core. No fiberglass air intake housings are permitted. Grille may be taped for qualifying.
- L. Hood/Roof –
- All cars must be equipped with a hood manufactured from a single piece of metal or fiberglass.
  - The hood must be manufactured so that it will completely cover the engine compartment from the left side to the right side, turn down a minimum of four (4) inches on each side and cover (if used) engine side panels. No part of the hood at the side panels except at the "A" post, shock and master cylinder covers may be higher than the lowest

part of the hood. Only openings for the air cleaner and distributor will be permitted. No portion of the hood may be higher than the bottom of the air cleaner. Hoods must be fastened with positive fasteners.

- All hoods must be acceptable to Track Officials. Roof must be stock appearing for make and model of body used. Roof support posts must maintain the same angles as stock production car. The front post (“A” post) must be mounted to the top front of the door panel. The rear post must be anchored to the rear quarter panel. If a fiberglass roof is used, a 22 gauge magnetic steel plate, located at the center of the roll bars (from top to bottom), must be welded to the roll cage above the driver’s head. Material and installation must be acceptable to track officials.

M. Rear Deck Lid - Rear deck lid must be constructed of either aluminum or sheet metal.

N. Bumpers - The bumpers and side rails must meet the following requirements:

- Front bumpers must be made of two (2) pieces of 1-1/2 inches minimum to 1-3/4 inch maximum tubing four (4) inches to six (6) inches apart center to center mounted to the front frame rails, at spindle height with a minimum of four (4) vertical connectors, if four vertical connectors are used, two (2) would have to be welded to the radiused corners.
- Front bumper must be convex in shape with rounded corners, and mounted to the outside edge of the front frame rails, but no wider. The maximum distance from the center of the front spindle to the front of the front bumper can be no more than 30 inches.
- Rear bumpers must be made from an “I” beam extruded from aluminum and must be mounted at spindle height. The minimum width, when measured across the rear of the car will be 57 inches, and the maximum width permitted will be 66 inches. Each end of the rear bumper must (from the mounting side) cut on an angle and capped with a minimum 0.125 inch in aluminum. All sharp edges must be filed. Bumper must be mounted at axle height. A maximum distance of 46 inches measured at the center of the rear axle to the rear edge of the bumper is permitted.
- No weight reducing holes permitted in bumper. Any inappropriate bumper will be disallowed.

O. Side Rails –

- All cars must be equipped with rear corner rails and side rails. All rails must be constructed using a minimum of .083inch thick steel seamless tubing with an outside diameter of a minimum 1-1/4 inches and a maximum of 1-3/4 inches.
- Side rail bars should be constructed using the following guidelines:
  - 1: Right side rails shall be constructed by using two pieces of steel seamless tubing. The bottom bar shall attach to the rear frame rail and extend upward and outward even with the outside of the tires, or up to a measurement 1/2 inch maximum outside the tires. The bottom side bar shall extend forward parallel with the frame rail and roll cage and angle in to the front sub frame with minimal tire clearance. The bottom bar will be mounted centerline with the rear axle and front spindle. The top side bar shall be attached centerline with the rear hoop cross bar extending outward and forward to the forward most point of the bottom bar. An additional support bar must be added to the center. The bar must be attached the frame rail and side bar. Two additional vertical support bars should be added one at the rear and one in the center of the side rail. The distance measured at the front, center to center, of the top and bottom bar at the turn down area shall be a minimum of six inches. The distance measured at the rear center to center shall be nine inches and a minimum of six inches. No car will be allowed in competition without side rails.
  - 2: Left side bars shall be constructed using the same guidelines described above except that the rear support bar may be a radiused bar that attaches to the rear hoop bar centered on the cross bar and extending down and attaching to the frame rail. Left side rail bars must be mounted by centering the two parallel bars with the center of the rear axle and front spindle or left side may be raised a maximum of two inches from center.
  - 3: Rear corner must be constructed using two pieces of steel seamless tubing a minimum of 1-1/4 inches and a maximum 1-3/4 inches in diameter. Both pieces of tubing shall be identically formed and welded to a steel bumper bracket welded to the rear. The tubing shall angle out and upward even with the outside of the tires, or up to a maximum of 1/2 inch outside the tires, and maintain a six inch dimension measured center to center. The corner bars shall then turn in with a minimal tire clearance to the rear quarter panels. Additional support bars must be installed behind the body panels to the rear frame rails and/or roll cage.

## **5. ENGINE**

A. Engine Location - Maximum 18 inch set back measured from the center of the top ball joint to the #1 cyl. spark plug. 2” car minimum 10” crank shaft height –4” car minimum 12” crankshaft height. Measured at the center of crank.

B. Engine Displacement - Chevrolets 362 cubic inch max. Ford 362 cubic inch max. Mopar 360 cubic inch +.030.

C. Engine Block - Block must be standard factory production with standard external measurements in all respects. Internal polishing, porting and/or relieving will not be permitted (except for oil return) No aluminum blocks permitted.

D. Cylinder Heads –

- Heads must be cast iron, stock production only. No aftermarket cylinder heads allowed.

- Two valves per cylinder.
- No titanium valves or springs. Only steel springs allowed.
- No port matching or flow work permitted.
- Three angle valve job are permitted.
- When cutting the valve angles no stone or grind marks are permitted above the bottom of the valve guide.
- All cutting in reference to the valve job and bowl area of the head must be centered off the centerline of the valve guide.
- Upon completion of the valve job the bowl area under the valve seat must be the same configuration as from the manufacture. Surfaces where the cutter or stone have touched must not be polished.
- All valves must be similar to OEM in application and construction. Stainless steel valves permitted with a minimum stem size of .304 allowed.
- Minimum 62cc combustion chamber. All work in the combustion area of the head must be off the centerline of the valve guide. No grinding or polishing allowed.
- Maximum valve size: Exhaust Intake Chevrolet 1.625 2.023 Ford Cleveland 1.656 2.046  
Ford Windsor 1.5469 1.8437 Mopar 1.625 2.020

E. Crankshaft - Only standard steel or cast iron production crankshafts permitted. If after market crankshafts are used, they must be identical in appearance and construction to an OEM crankshaft balancing is permitted. Counterweights must be the same shape, they may be polished but they cannot be knife edged, undercut or drilled to lighten the crankshaft. The rod bearing holes may be drilled. The main bearing holes may not be drilled. When weighing the crankshafts, the minimum weights listed below shall include the timing chain sprocket. The minimum crankshaft weight is 48 pounds. Only standard OEM steel elastomer type harmonic balancers allowed.

F. Pistons - Only flat top pistons permitted. No portion of any piston may extend above the block. Pistons must have a minimum of three ring grooves. Piston rings must be in all three grooves. Only steel piston pins maintaining a minimum diameter of .927 allowed.

F. Rods - Rods may be stock or forged steel, provided all measurements are identical for make and model of the engine. This includes journal size. Rod length allowed - Chevrolet 5.700 inch; Ford Windsor 5.954; Ford Cleveland 5.778; Mopar 6.000 . Only stock rods may be polished. Rods must be solid with no holes.

G. Camshaft - Only steel camshafts permitted. No belt drive camshafts permitted.

H. Lifters - Solid or hydraulic steel lifters permitted. Lifter diameter and height must be standard for make of engine being used. No roller or mushroom type lifters allowed.

I. Rocker Arms - Roller rocker arms permitted. Rocker arms must be independent stud type. Stud girdles are permitted.

J. Intake Manifold - Listed below are the only eligible intake manifolds for competition. These manifolds must remain as manufactured. No port matching or flow work permitted. Manifolds must not be painted. All part numbers are current design Edelbrock Performer series intake manifolds. Older design manifolds with the same part number are not permitted. They are as follows: Chevrolet - # 2101 Chrysler - # 2176

Ford -Cleveland 48L heads - # 2665 Cleveland 28L heads - # 2750 Windsor - # 2181.

NOTE: On the Chrysler manifold #2176 and part number 45292095, casting number 8015 it is permissible to weld a maximum of 1/2 inch from the bolt on flange surface up into the intake port to match the W -2 port design. Ports may be welded only. No grinding or polishing permitted.

K. Carburetor - The only approved carburetors are: Holley 4150 Series, model number 6895, and 4150HP Series, list number 80507. Choke horn (Model Number 6895) may be removed with a square cut, no taper or bevel, but may not be cut into the body of the carburetor. The air cleaner gasket ring must remain standard. All parts not covered in the preceding rework guidelines must remain stock, this includes metering blocks and fuel bowls. All boosters must be safety wired.

L. Carburetor Spacer Place - Only a one (1) piece solid aluminum carburetor spacer, one (1) inch in thickness, may be installed between the intake manifold and carburetor. Any open or four (4) hole spacer may be used, but the spacer opening must be perpendicular to the base of the carburetor with no taper or bevel. Outside configuration of the space must conform to the shape of the base of the carburetor. One (1) (and no more than one (1)) one (1) piece paper gasket, maximum 0.065 inch thickness, must be installed between the carburetor and spacer plate. One (1) (and no more than one (1)) one (1) piece paper gasket, maximum 0.065 inch thickness, must be installed between the spacer plate and the intake manifold. The gasket must be no larger than the top of the intake manifold.

M. Air Cleaner and Air Filter - Only a round dry type paper air filter element maintaining a minimum of 12 inches and a maximum of 17 inches in diameter will be permitted. The air filter element must maintain a minimum of 1-1/2 inch and a maximum 4 inches in height. All air shall be filtered through the element. The air filter elements may not be sprayed or soaked with any type of chemicals or liquids. Only a round metal type air filter housing is permitted. The top and bottom of the air filter housing must be solid and the same diameter. No lips or rounded edges are permitted. The air filter housing must

be the same size as the air filter element. The air filter housing must be centered and level on the carburetor. The bottom of the air filter housing must be lower than the top of the carburetor choke horn. No tubes, tunnels or any device which may control the flow of air is permitted inside of the air cleaner or between the filter housing and the carburetor.

N. Water Pump - Only mechanical water pumps, in the stock location, turning in the same direction of crankshaft rotation, are permitted. Water pump impellers may be altered but coolant flow must be in the same direction as the production engine. Only standard production V-type or serpentine belt and metal pulleys are permitted.

O. Fan - Engine mounted fans, if used, must be operational and belt driven from the crankshaft. Free spin or clutch type fans will not be permitted. Electric cooling fans are optional. If an engine driven fan is used, it must be a standard magnetic steel fan with a minimum of four (4) blades. Removal of the fan blades or fan belt will not be permitted. The minimum diameter of the fan must not be less than 14 inches. The fan blades must be a minimum of 3.5 inches wide. Flat fans will not be permitted. The installation and location of the fan must be acceptable to Track Officials.

P. Radiator - Radiator must remain stock appearing and remain in front of the engine. Radiator dust screens permitted. Radiator installation must be acceptable to Track Officials Radiator overflow pipe may be relocated to the rear of the car.

Q. Engine Oiling System - The oil pans must be a wet sump type and manufactured using a stock production type pan with only a sump reservoir added to the bottom. All bolt holes and bolt flange must be visible. No kick outs are permitted between the bolt on the flange and the top of the added sump. No external oil pumps allowed. Oil coolers are allowed and must be mounted in a location approved by the track Officials.

R. Exhaust System - No 180 degree exhaust system permitted. Exhaust pipes must extend a minimum of 6 inches past the cowl. Right exhaust pipes may run beneath the car, but must turn down and out toward the bottom of the right side frame rail. No two into one exhaust system allowed. E: No thermal wrap allowed on exhaust system.

## **6. ELECTRICAL**

### **A. Ignition System :**

- Electronic distributors are permitted. All electronic distributors must be stock type housings, equipped with a magnetic pickup, gear driven, and mounted in the stock location.
- Single or dual point camshaft driven distributors are permitted.
- Only one (1) ignition coil is permitted and it must be mounted on the engine side of the firewall.
- Only one (1) electronic firing module amplifier box is permitted (if used), and it must be mounted on the right hand side of the dash panel. Ignition amplifier boxes and RPM limiters that are analog only which do not contain programmable, computerized, or memory circuits will be permitted in standard ignition systems.
- Computerized, multi-coil, dual electronic firing module amplifier box, or crank trigger systems are not permitted. Magnetos are not permitted. All ignition systems are subject to approval by Track Officials.
- Adjustable timing controls are not permitted. Retard or ignition delay devices will not be permitted.
- External RPM limiters will be permitted.
- Accessories to regulate the power supply will not be permitted.
- The ignition amplifier must have a six (6) pin female connector attached to its output leads of the Packard Electric type (MSD part #8170) to facilitate manual operation and testing of the ignition components during inspection. The wiring sequence must be the same as the General Motors or Ford amplifier.
- A heavy red wire (positive to the battery) and a heavy black wire (negative to the ground) will be permitted. Any other wires will not be permitted to enter or exit the amplifier box.

B. Battery - One (1) standard automotive 12 volt battery, not to exceed 13.5 volts, will be permitted. Accessories to regulate the power supply will not be permitted. The battery must be located between the frame rails. The battery must be located under the hood or floor of the car. If located under the floor, the battery must be completely encased. If located under the hood, the battery must have a suitable cover. The battery must not be forward of the radiator or rear of the rear end housing of the car. The battery location must be acceptable to Track Officials.

C. Electrical Systems - All electrical switches must be operable and must be located within reach of the driver except the labeled on off master switch which must be located on the front of the dash panel in the center. The on-off master switch must be wired to the battery cable in a manner that would cut off all electrical power to the car.

## **7. DRIVE LINE**

A. Clutch - Multiple disc clutch allowed. The disc clutch housing assembly or cover may be made from aluminum or steel. Only magnetic steel disc and pressure plates allowed. Minimum diameter 7 1/4 inches. No direct drives allowed.

B. Flywheel - Only magnetic steel flywheel is allowed. The minimum starter ring gear outside diameter permitted will be 12-7/8 inches for General Motors and Chrysler models and 13- 1/4 for Ford models.

- C. Starter - The self-starter must be in working order and in the stock location. Only standard factory OEM type starters will be permitted.
- D. Bell Housing - Only special production all steel clutch housings permitted. Bell housing must be same design as an OEM production bell housing. No weight reducing holes are permitted in the bell housing A 2 inch hole must be drilled in bottom for inspection.
- E. Transmission - Only standard production 3 and 4 speed transmissions allowed. All forward and reverse gears must be in working order. 5 speed transmissions with gears removed not allowed. No quick change transmissions allowed. No automatic transmissions allowed. Final drive from transmission must be 1 to 1.
- F. Drive Shaft - Drive shaft and universals must be standard production type. Drive shaft must be magnetic steel and painted white. Only one piece drive shafts allowed. Minimum diameter 2 3/4 inches. It is mandatory that two 360 degree magnetic steel brackets, no less than 2 inches wide and 1/4 inch thick be placed around the drive shaft and fastened to the cross member of the car, one in the front 1/3rd of the drive shaft and one in the rear 1/3rd.
- G. Rear Axle - Quick change rear ends allowed. Only magnetic steel axle housings allowed. Aluminum drive plates allowed. Rear ends may be interchanged between automobile manufacture. No cambered rear ends allowed.

## **8. FRAME**

### A. General Frame – Specifications:

- All frames are subject to Track Officials approval. A minimum ground clearance of 4 inches must be maintained on any part of the frame. All frame components must be made of steel and welded.
- Side frame rails and kick up must be constructed with .120 inch minimum thickness, and be a minimum of 2 inches wide and 3 inches high steel box tubing. The distance from the centerline of the drive line to the left side frame rail measured anywhere along the frame, must be within 6 inches (8 inches on 1989 and newer models with the frame rail and roll cage extension) of the distance from the centerline of the drive train to the right frame rail. A minimum width of 34 inches, and maximum 46 inches, measured from center of left frame rail to center of right frame rail, must be maintained in the driver's compartment. A minimum width of 31 inches and a maximum of 46 inches, measured from center of left frame rail to center of right frame rail, must be maintained on the rear kick up, with exception for suspension and tire clearance. All rear kick ups must maintain a minimum of 18 degrees from side frame rails to top of kick up.
- Fuel cell protector bar, using a minimum 1-1/2 inches seamless steel tubing, must be installed behind the fuel cell. This protective bar must be as wide as the fuel cell and as low to the ground as the fuel cell with a minimum of 2 uprights from the protective bar to the rear frame cross-member, evenly spaced behind the fuel cell. An X cross-member made of 1 inch steel tubing must be installed beneath the fuel cell from corner to corner. The X cross-member must be welded or bolted to the rear frame rails in a secure manner. 2 additional support bars, 1 at each corner of the protective bar, must extend forward and be welded to the rear frame assembly.
- The front sub-frame assembly must be constructed using a minimum .083 inch thickness, 2 inches wide, and 3 inches in height steel tubing. A minimum of 27 inches, and a maximum of 32 inches, measured from center of right frame rail to center of left frame rail, must be maintained from the mounting point of upper control arms forward. All front subframe assemblies must maintain a minimum of 30 degrees angle from side frame rails up to the top of the sub-frame. All sub-frame assembly support bracing shall be a minimum .090 inch by 1-3/4 inches round steel seamless tubing. Frame support bars, left and right, must be extended from the roll cage to the sub-frame and must have a downward radius bent into the bars before they are welded to the sub-frame. The left and right support bars must not have any additional braces added between the front leg bars and where they attach to the front sub-frame assembly. A flex support tube may be added to the front support bar at the radius and extend forward and be attached to a cross-member. Any frame rejected by Track Officials for showing poor workmanship will not be approved until necessary corrections have been made.
- In order to increase the driver compartment area, the left side frame rail and roll cage may be moved out a maximum of 2 inches. This rule applies to all cars being constructed for 1989 or later.

## **9. SUSPENSION**

- A. Coil Springs - Coil overs, coil springs or leaf springs permitted. Coil overs must mount to lower control arms. Strut bars will not be permitted for mounting of coil overs. Rear spring position may be changed, but both rear springs must be located either inside or outside of frame rails.
- B. Sway Bars - Only magnetic steel front sway bars are permitted. No rear sway bars (anti-roll bars) will be permitted.
- C. Shock Absorbers - Coil over shock absorbers may be used. Shock absorbers and coil over shock and spring, by visual reference, must remain within the outline of the body and no holes can be cut in the outer body for the mounting of shocks. No remote adjusters for shocks.

D. A-Frames - The upper A-frames and lower control arms must meet the following requirement: Upper A-frames and lower control arms must be approved by Track Officials.

E. Spindles, Wheel Bearings and Hubs - Heavy duty magnetic steel spindles and wheel bearings are compulsory. Aluminum hubs are permitted. Spindles and hubs must be approved by Track Officials.

F. Tread Width - Maximum tread width is 68 inches. Tread width must agree with in 1/2" front and rear. Magnetic steel spacers allowed, maximum 1/2 inch to achieve maximum tread width.

G. Wheelbase - The minimum wheelbase that will be allowed for either side of the car is 107 inches. The maximum wheelbase that will be allowed for either side of the car is 108 inches.

H. Ground Clearance Requirements - Minimum fuel cell height 8 inches.

#### **10. STEERING**

A. Rack and pinion steering permitted.

B. All cars must be equipped with a magnetic steel steering shaft.

C. Center top of steering post must be padded with at least 2 inches of resilient material.

D. A quick release metal coupling acceptable to Track Officials on steering wheel is mandatory.

E. The use of universal joints and collapsible steering section in steering shaft must be acceptable to Track Officials.

**11. BRAKES COMPONENTS-** Any disc brakes with stock type calipers will be allowed on front and rear, with single or four piston calipers. Brakes must be installed on all four wheels. Only round cast type or steel rotors, minimum 3/4 inch thick allowed. Break Adjuster in drivers compartment okay.

**12. WHEELS -** Steel wheels only. Maximum 10 inches wide. No bead locks or bleeders allowed.

#### **13. TIRES**

A. Only Hoosier F45 Racing Tires will be posted before first event date.

B. You may purchase one new tire per racing event but that tire must be run in the race that night.

C. New tires, once they have been mounted, may be aired to your pressures using the air at the tire shop only.

#### **14. FUEL SYSTEMS**

A. Fuel Cell - The use of an approved fuel cell is mandatory. The maximum fuel cell capacity, including the filler spout and overflow shall be 22 gallons. No material other than standard foam supplied by the fuel cell manufacture is permissible to make the fuel cell meet the 22 gallon capacity.

B. Fuel Cell Container - The use of a fuel cell container is mandatory. The fuel cell container must meet the following requirements. Fuel cell must be encased in a container not less than 22 gauge steel. Fuel cells must be fitted in the container so that the maximum capacity including the filler spout does not exceed 22 gallons.

C. Fuel Cell and Container Installation - The fuel cell and the fuel cell container shall be installed in accordance with the following requirements.

- Fuel cell must be installed as far forward as possible in trunk compartment equal distance between frame rails.
- Fuel cell installed in a recessed well must be secured with steel tubing not less than 2 lengthwise and two crosswise evenly spaced across the top. Tubing must be made of 1 inch by 1 inch square steel tubing bolted flat to the floor pan with no spacers. A reinforcement support frame must be constructed using 1 inch by 1 inch by .065 inch square steel tube. The support frame must be constructed using 2 tubes that are welded to and extend from the left side to the right side frame rails. Three tubes must be equally spaced across the recessed well. These tubes must be welded to the cross support tubes and extend down the front sides, rear sides and under the fuel cell container and recessed well.
- A (1) one inch square steel tubing reinforcement frame must be welded to the floor pan from frame rail to frame rail. The bottom of the fuel cell container must have a minimum ground clearance of 8 inches.
- A protective bar, minimum 1-1/2 inches in diameter and .083 inch wall thickness must enter below the rear frame section behind the fuel cell. This protective bar must be as wide as the frame rails and extended as low the bottom of the fuel cell with 2 vertical uprights evenly spaced between the frame rails and attached to the rear cross member. Two support bars one located on each corner must angle upwards and be welded to the rear frame rails.
- Firewall of steel not less than 22 gauge steel thickness must be located between trunk and driver.

D. Fuel Pump - Electric fuel pumps will not be permitted. Cooling of the fuel pump will not be permitted. Only mechanical, lever action, camshaft actuated fuel pumps in the stock location will be permitted.

#### **15. SEATS AND SEAT BELTS**

*Modified Rules*

- A. Seat Belts - A quick release belt no less than 3 inches wide is mandatory. Both ends of lap belt must be fastened to the roll bar cage with high quality bolts not less than 3/8 inch in diameter. Shoulder harness must be no less than 3 inches wide and must come from behind the driver's seat. Where the harness crosses the roll cage, it must pass through a steel guide welded to the roll cage that will prevent the harness from sliding from side to side. A center (crotch) belt must be securely mounted to the lower seat frame at the bottom and to the lap seat belt on the top. Where the belts pass through the seat edges, it must have a grommet installed, be rolled, and/or padded to prevent cutting of the belt. All seat belts and shoulder harness must connect at the lap belt with a NASCAR approved quick release buckle. Harness assembly must be 5 years old or newer.
- B. Seats - Bucket seat with headrest is mandatory. Seat must be factory manufactured. Seat must be aluminum a minimum of 1/8 inch thick. Lightening of the seat in any way will not be allowed. Seat must be properly installed and acceptable to Track Officials. Adequate padding for the seat and headrest is mandatory.

**16. ROLL BARS**

- A. Round magnetic steel tubing 1-3/4 X .090 inch seamless roll over bars are compulsory for the roll cage and must be acceptable to Track Officials. Aluminum and/or other soft metals are not permitted.
- B. Roll bar connections must be welded.
- C. A magnetic steel plate, 1/8 inch thick must be installed over the left side door bars and welded or bolted in place using a minimum of four (4) 1/2 inch magnetic steel bolts. The plate must begin in line with the back edge of the driver's seat, and extend forward a minimum of six (6) inches beyond the front edge of the driver's seat not including any add-on leg supports. The plate must extend from the top left side door bar to the top of the left side frame rail.

**NOTE: ORANGE COUNTY SPEEDWAY GENERAL RULES WILL ALSO APPLY FOR THIS DIVISION.**