



Orange County Speedway 2008 Grand Stock Rules (also refer to the OCS general rules)

1.0 Eligibility: The Grand Stock Division is designed to promote interest in stock car competition and to enable new and inexperienced drivers and car owners to compete at a lower cost. Grand Stock races will be open only to drivers who have not competed in what is considered a higher division than Grand Stock. Track Officials have the right to refuse entry. Some drivers, at year's end, may be asked to move up to Limited Sportsman. If the same driver wins three (3) races in a row, that driver will start his next race no better than 5th, regardless of qualifying position.

2.0 Competing Models

1972-2004 models of U.S. Domestic automobiles with standard wheelbase of 105" or more.

3.0 Car Bodies General

- i) All bodies must appear stock.
- ii) Five Star or other approved after market sheet metal is allowed as long as body remains stock appearing.
- iii) All body panels must be magnetic steel except approved rubber-type noses and bumper covers.
- iv) Inner body panels on stock bodies may be removed or altered for roll bar installation. Inner body reinforcements may be removed.
- v) Manufacturer of body and engine must remain the same. (GM in GM, Ford in Ford).
- vi) All ground clearance and height dimensions are with the driver in normal driving position.

4.0 Weight

- i) All weight penalties are for qualifying and race. Any component subject to a weight penalty will be added together for a total right side weight. All weights are subject to changes as competition requires.
- ii) All cars running 350-351 engines must be 3,225 lbs with right side minimum weight of 1,475 lbs. 302 and 305 must weigh a minimum of 3,125 lbs with a minimum right side weight of 1,430 lbs.
- iii) If stock clutch is used, car may be eligible for weight break allowance (40 lbs off right side weight).
- iv) All add-on weight must be in blocks of no less than 5lbs and must be painted white with car numbers painted in black. All weight 4" or more must be secured with 2 Grade 8, 3/8" minimum bolts. NO unattached weight. A fine of \$50 will be imposed for any weight lost on racing surface.
- v) Any unattached weight found in a car after qualifying, will result in automatic disqualification of times and car will start in the rear of field.
- vi) Car weight (total and right side) must be prominently lettered on the left side of the hood.

5.0 Detailed Car Body Requirements

5.01 Spoilers

- i) Front spoilers must maintain a minimum ground clearance of 5".
- ii) Rear spoilers can be a maximum 5" high, not be wider than 54", and centered on the trunk lid. Maximum overall height of 40" measured from the ground to the top of spoiler. No lips or bends allowed on top edge of spoiler.
- iii) Any bracing installed must be on the backside of spoiler.

5.02 Windshields, Rear Windows, Mirrors

- i) Windshield must be replaced by clear polycarbonate, minimum 1/8" thick.
- ii) Full windshield and rear window required in stock location.
- iii) Three (3) support bars, minimum 1" wide and 1/8" thick must be installed behind and in center of windshield and be made of metal. These bars must be a minimum of 6" apart, center to center, and must be bolted, top and bottom.
- iv) Clear polycarbonate must be used as rear window. Minimum thickness of 1/16".
- v) Two metal straps 1" wide must be installed on the outside of the rear window. These straps must be bolted, top and bottom.
- vi) Quarter windows can be covered in CLEAR polycarbonate only.
- vii) Only one rear view mirror will be permitted and it must be mounted at the top, center of windshield. Wink-type, three-dimensional mirror is permitted with a max. width of 26 inches. Mirror cannot extend outside the car.

5.03 Dashboard: All cars must have a full dashboard approved by track officials.

5.04 Firewalls:

- i) Full firewalls (front, rear, and trunk), must be made of magnetic steel, minimum 22-gauge.
- ii) **Firewall panels must be welded, NOT POP RIVETED.**
- iii) Front firewall must be in stock location.
- iv) All holes in firewall must be sealed in a manner approved by track officials.
- v) Stock floor pans may be replaced by fabricated floor pan made of minimum 22-gauge sheet magnetic steel. Again, floor pan panels must be welded, not pop riveted.
- vi) The floor pan on the left side must be mounted no lower than the top of the frame rail except when directly under the seat. The floor under the seat may be dropped no lower than 1" above the bottom of the left frame rail. The floor pan on the right side may be raised a maximum of 8" to the top of the drive shaft tunnel and extend to the right side frame rail. All bars welded to the frame rails must be visible for inspection by officials. The floor on the right side can be no lower than the top of the frame rail.

5.05 Doors: Doors must be attached in an approved manner. Doors must follow same contour and accent lines as original stock door.

5.06 Quarter Panels, Rocker Panels

- i) Quarters may be altered for tire clearance, but original tire opening contours must be followed.
- ii) Maximum width between rocker panels at any given point will be 68".

5.07 Grilles: Grilles and noses must be stock appearing.

5.08 Hoods, Deck Lids, & Trunk

- i) Hoods may be made of reinforced fiberglass but must maintain stock appearance.
- ii) Hood must lay flat and fit without bowing. No openings in hood or cowl permitted.
- iii) Hoods and deck lids must be equipped with a complete set of approved pins and/or fasteners.
- iv) Trunk around fuel cell must be complete. When deck lid is raised, the perimeter around the fuel cell (or trunk) must be enclosed with magnetic steel sheet metal, minimum 22-gauge.

5.09 Bumpers: Bumpers must maintain stock appearance for make and model being used. Bumper bars may be used with noses and bumper covers, but cannot be outside the body. No nerf bars or push bars permitted.

5.10 Identification: OCS will follow NASCAR rules on identification. See General Rules for additional identification information.

6.0 Engines : Generally stock equipment allowed. Performance equipment allowed only where specifically noted in the rules below. Although we have taken precautions there may be items that have been omitted due to lack of information or oversight. In either case, the omission of any items, specifications or other interpretations not specifically listed within the rules does not constitute legality.

6.01 Engine location

- i) The first spark plug hole on the right side must be within ½” of the centerline upper ball joints.
- ii) Engines must be located in the center of the front frame rails within 1/8” maximum offset.
- iii) Minimum ground clearance will be 13” measured at the center of the crankshaft pulley to the ground with the driver in the car.

6.02 Engine Displacement

Only the following engines will be allowed:

GM: 305-350 Cu. In. plus a .040” overbore max. (no bowtie blocks)

Ford: 302-351 Cu. In. plus a .040” overbore max. (No Boss engine/components allowed)

Chrysler: 318-360 Cu. In. plus a .040” overbore max.

6.03 Engine Blocks

- i) Blocks must be standard factory production with standard external measurements in all respects. No aluminum blocks permitted.
- ii) Internal polishing, porting, or relieving of engine block is not permitted.

6.04 Cylinder Heads

- i) Cylinder heads must be standard production. No aluminum, no Boss, Bowtie, W-2 Chrysler, or Hi-Performance heads allowed. No Vortex heads.
- ii) No angle plug GM heads allowed.
- iii) No angle milling of head allowed.
- iv) Minimum combustion chamber for all engines is 62CCs
- v) Maximum valve sizes for all 302, 305, 318 engines: Intake: 1.940; Exhaust: 1.600
- vi) Stainless steel valves allowed. NO TITANIUM or modified valves permitted.
- vii) Screw in studs and guide plates allowed.

Note: See maximum Cam Lobe Lift rule under “Camshafts”

- viii) Maximum valve sizes for 350-351-360 engines: intake 2.020; exhaust 1.625

6.05 Crankshaft/Balancer

- i) Only standard factory or OEM production magnetic steel or cast crankshafts with strokes permitted.
- ii) Counterweights may be polished but they cannot be knife-edged, undercut, or drilled to lighten crankshaft. Bearing journals may not be drilled.
- iii) Journal size of main bearing and rod journals must be standard for make and model of engine used with .030” tolerance.
- iv) Only standard magnetic steel elastomoeer-type balancers may be used. Stock appearing fluid dampener OK.

v) Minimum weight – 50lbs.

6.06 Pistons

- i) Only flat top pistons permitted. No portion of the piston may extend above the block, i.e. zero (0.00”) deck height.
- ii) All pistons must have three (3) ring grooves with a ring in each groove.
- iii) Wrist pin size must remain stock.

6.07 Connecting Rods

- i) All rods must be made of magnetic steel or cast and be stock length for engine being used.
- ii) Journal size must be stock for make and model of engine being used.
- iii) Any after market rod used must meet OEM measurements.
- iv) Rods must be solid (no holes or hollow beams).

6.08 Camshafts

- i) Only magnetic steel camshafts permitted.
- ii) No belt driven camshafts allowed.
- iii) Any valve lift permitted.

6.09 Lifters

- i) Solid or hydraulic lifters permitted.
- ii) Lifter diameter and height must remain standard for make and model of engine.
- iii) No roller or mushroom-type lifters allowed.
- iv) Magnetic steel flat tappet only.

6.10 Rocker Arms

- i) Stock, OEM, or Roller Rocker arms permitted.
- ii) Rocker arms must be independent stud type except for Chrysler engines, which must operate as manufactured.
- iii) Stud girdle permitted.
- iv) Listed below are the only intake manifolds eligible for the Grand Stock V-8s. 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.

GM #2101 Ford #2121 Chrysler #2176

6.11 Carburetors/Spacers

- i) All Grand Stock cars must run the Holley 2300 (LMSC LEGAL) carburetor; Model 7448 with the ventura size of 1 3/16” and maintaining a throttle bore size of 1 1/2”. All car makes in this division will run the same carburetor (including Ford and Chrysler products).
- ii) A one-piece solid aluminum spacer, .700” min. and .750” max. thickness must be installed between the intake and carburetor.
- iii) Spacer must be centered on the intake manifold and have two holes with a 1 1/2” opening located in the center that match the base of the carburetor. No taper or bevels or any modifications permitted.
- iv) Slotted, elongated, or oversize mounting holes are not permitted in the spacer.
- v) A one-piece paper gasket, maximum .065” thick must be installed between the carburetor and spacer. A one-piece paper gasket, maximum .065” thick, must be installed between the spacer and the intake manifold.

6.12 Air Cleaner

- i) Air cleaners can not be removed during practice or competition.
- ii) Only a round, dry type, rigid paper air cleaner maintaining a minimum 12" and maximum 14" diameter will be permitted. The air filter element must maintain a minimum of 1 ½", maximum 4" in height. All air must be filtered through the element. The air filter elements must not be sprayed or soaked with any type of chemicals or liquids.
- iii) Only a round metal air filter housing will be permitted. The top and bottom of the air filter housing must be solid and must be the same diameter. Lips or expanded edges will not be permitted. The center stud hole in the top of the air filter housing must not be recessed more than 1". The bottom of the air filter housing must be set level on the carburetor. Tubes, funnels, spacers, or any other device which may control the flow of air will not be permitted inside of the air cleaner or between the air filter housing and the carburetor. Moroso Offset Base Air Cleaner part #65925 and #65926 OK.

6.13 Electrical Systems

- i) All electronic distributors must be stock type housings, equipped with a magnetic pick-up, gear driven, and mounted in the stock location.
- ii) Single or dual point camshaft driven distributors will be permitted.
- iii) Only one (1) ignition coil will be permitted and it must be mounted on the engine side of the firewall.
- iv) Amplifier box will not be permitted.
- v) MSD box will not be permitted.
- vi) Magnetic pick-up type distributor allowed. (2 wire only ignition to coil, 1 distributor to coil)
- vii) No REV limiters permitted or provision for REV limiters permitted.
- viii) Each car must be equipped with a MASTER CUT-OFF SWITCH located in the center of the car within reach of the driver and emergency personnel. NO EXCEPTIONS. ON/OFF positions must be prominently labeled.
- ix) Battery must be enclosed and mounted in a manner approved by Track Officials.

6.14 Engine Cooling System

- i) Stock, OEM, and OEM Aluminum-type water pumps allowed.
- ii) Only standard production v-type or serpentine type belts and pulleys permitted (No cog belts).
- iii) Standard production magnetic steel fan allowed with a minimum of 4 blades and minimum diameter of 14". Minimum width of each fan blade is 3 ½". Electrical fans permitted.
- iv) No flat, freewheeling fans permitted.
- v) Fan used in qualifying must be used in race.
- vi) A fan shroud must be installed and extend one inch (1") behind the fan blades.
- vii) **No icing, Freon-type chemicals or refrigerants may be used in or near the engine compartment.**

6.15 Engine Oiling System

- i) Approved after market oil pans permitted provided oil pan bolts on outside of pan are clearly visible. (No power pans allowed.) No kick outs are permitted between the bolt on flange and the top of the added sump.
- ii) Only wet sump oil systems allowed.
- iii) No accussump systems allowed. No external oil pumps permitted.

7.0 Exhaust System

- i) Stock cast iron exhaust manifolds or LMSC type headers are allowed. Maximum header pipe size is 1 5/8". Refer to NASCAR LMSC rules for header specifications.
- ii) No equalizer or crossover exhaust pipes permitted.
- iii) Exhaust pipe must exit down and to the outside of the car behind driver and in front of the rear wheels.
- iv) All exhaust pipes must exit to the outside of the car, behind the driver and in front of the rear wheels.
- v) Minimum ground clearance of 3" on exhaust system.
- vi) Maximum diameter of exhaust system is 3" (4" after 2 into 1 connector).

8.0 Drive Train

8.01 Clutch Assembly

- i) Clutch assembly may remain stock and be normal customer OEM production type in all respects. If stock clutch is used, car may be eligible for weight break allowance.
- ii) Only diaphragm type pressure plates permitted. No aluminum pressure plates or clutches allowed.
- iii) Minimum clutch disc diameter – 10".
- iv) Hydraulic slave cylinder and release bearings permitted.
- v) Optional 7 1/4" aftermarket magnetic clutch assembly may be used.

8.02 Flywheel

- i) Flywheel must be magnetic steel or cast iron (14lbs minimum). No aluminum flywheels permitted.
- ii) Flywheel must maintain standard OEM configuration in all respects.
- iii) Flywheel can not be drilled to lighten.

8.03 Starter: Only standard OEM type starters may be used and must mount in original position.

8.04 Bell Housing

- i) A magnetic steel scatter shield must be installed over the flywheel and clutch assembly.
- ii) Clutch-flywheel flexible housing safety shield is also permitted if installed in the approved manner.
- iii) Bell housing must have a 2" minimum inspection hole drilled in the bottom. Cutting the bottom off of a bell housing is not permitted.

8.05 Transmission

- i) Only standard production of OEM type 3 and 4 speed manual transmissions allowed. No special after market transmissions permitted (Quickchange, Jerico, etc.)
- ii) All forward and reverse gears must be in working order.
- iii) No 5-speed transmissions, with or without gears removed, will be permitted.
- iv) No automatic transmissions permitted.

8.06 Drive Shaft

- i) Drive shaft and universals must be standard OEM type.
- ii) Drive shaft and yoke must be magnetic steel and painted bright white.
- iii) Only one-piece drive shafts permitted.
- iv) Minimum diameter of drive shaft is 2 3/4" outside diameter.

v) It is mandatory that two (2) 360 degree magnetic steel brackets, no less than 2" wide and 1/4" thick be placed around the drive shaft and be fastened to the cross members to prevent drive shaft from becoming dislodged and dropping to track surface.

8.07 Rear End & Axles

- i) Basic rear end housing must retain standard production design.
- ii) Locked rear ends permitted.
- iii) Rear ends may be interchanged between manufacturers.
- iv) Only magnetic steel axle housing and axles permitted.
- v) Center of rear housing must be within 1/2" of the centerline of the tread width front and rear.
- vi) No cambered rear axle housings permitted.
- vii) Crown spline axles are not permitted.
- viii) Only one-piece drive plates permitted.
- ix) Quick-change rear ends permitted – must run as is (no changes race day)

8.09 Wheels

- i) All wheels must be a maximum of 10" in width.
- ii) All wheels must be the same width and offset at all times.
- iii) Maximum offset (backspacing) will be 2".
- iv) No bead blocks or bleeder valves permitted.
- v) Heavy-duty 5/8" magnetic steel lug bolts and nuts must be used.
- vi) All wheels must be wheels designated for racing. No homemade wheels allowed.
- vii) Car number must be painted or marked on the wheel next to the valve stem. Track Officials must approve wheel changes.

8.10 Tires

- i) All cars must run Track Tires purchased at Orange County Speedway.
- ii) Soaked or altered tires not permitted. No substance of any kind may be used on tires. A \$500 fine will be imposed on violators.
- iii) Tires determined by the track officials to be altered will be confiscated. Driver may lose qualifying position, finishing position, and/or points. Repeat offenses of tire altering may result in suspension, loss of points, or fines.
- iv) A pill must be purchased for each race to receive 4 tires.

9.0 Frames

- i) Note: No holes may be cut into frame to lighten. All frames are subject to Track Official's approval. Any frame rejected by officials for poor workmanship will not be approved until necessary corrections have been made.
- ii) Frames may only be altered for the installation of springs, shocks, and for tire/wheel clearance.
- iii) Full tubular chassis permitted.
- iv) A tubular welded magnetic steel frame may be used except that the sub-frame, beginning a minimum of 22" rearward of the centerline of the front spindles and extending forward to in front of the radiator, must be a product of the automobile manufacturers. Front sub-frames may be interchanged from one manufacturer to another (such as Ford to GM). Sub-frame must remain stock. The only modifications permitted are for spring buckets and the bottom of the cross member may be cut for oil pan clearance. Cross member cannot be moved from original location. No offset frames. Rear sub-frame rails must angle upward from the frame side rails, turn rearward extending across the rear axle housing, angle down and turn to the rear of the car. NASCAR Guidelines will be used as the standard for frame construction.
- v) Frames may be interchanged within the manufacturer's line (GM to GM, Ford to Ford, etc.).

- vi) No pre-1965 frames can be used.
- vii) If a utilized body car is being used, the front clip and rear clip must be tied together with a minimum 2"x3" magnetic steel squared tubing, .120" thick, from outside of kick-out at front clip to the control mounts for the rear assembly.
- viii) If full frame is being used, side rails may be installed to existing frame to mount roll cage to frame. Side rails must be made of minimum 2"x3" squared tubing, .120" thick.
- ix) The distance from the outside edge of the frame rails left and right must be the same measured from the centerline of the tread width, front and rear.
- x) No weight boxes may be added to the outside of the frame rails. All ballast must be bolted inside the frame rails.
- xi) Minimum ground clearance of 5" must be maintained on any part of the frame and sheet metal at all times.
- xii) Maximum tread width, 64 ½".

10.0 Suspension

10.01 Springs and Shocks

- i) Heavy duty springs optional as long as springs fit into original position.
- ii) Heavy duty or racing type shocks permitted, but only one per wheel.
- iii) No coilover suspension or coilover eliminators permitted.
- iv) CV shock must be closed assembly.
- v) No gas pressurized shocks permitted.
- vi) Only solid body non-adjustable shocks permitted.

10.02 Front Suspension

- i) Front-end suspension parts may be after market, but must be stock appearing for makes and models used.
- ii) Stock lower control arm (A-frames), with magnetic steel or aluminum bushings permitted.
- iii) Stock ball joints may be replaced with heavy-duty screw-in type. No other modifications permitted.
- iv) After market upper control arms (A-frames) may be used; however, no adjustable rod end, or turnbuckle types permitted.
- v) Upper and lower control arms must be the same lengths on both left and right sides.
- vi) No rack and pinion steering components permitted. No rod ends permitted on steering components.
- vii) Stock type sway bars permitted. Rod ends may be used for connections to ends of sway bar.
- viii) No aluminum spindles allowed. Tubular spindles permitted. Any stock OEM type or after market magnetic steel spindle permitted. NO homemade spindles.
- ix) After market heavy duty hub and rotor permitted.
- x) Magnetic steering boxes only.
- xi) Modifications on frame permitted at spring bucket.

10.03 Rear Suspensions.

- i) On leaf spring cars, jackscrews allowed only at rear of leaf springs on each side.
- ii) On full frame cars with coil springs, rear suspension may be changed to 3-link suspension.
- iii) Cars with original 4-link suspension may be changed to 3-link suspension or long truck arm. Long truck arms permitted, but must not vary in length.
- iv) Top link on 3-link cars may not exceed the length of the rear trailing arms.
- v) On 3-link suspensions, there will be no extra adjustment holes on the frame or rear end housing for trailing arms or top link bars.

- vi) Panhard or track bars with adjustable rod ends are allowed. Adjustment holes for the panhard bar are permitted. Serrated mounts permitted.
- vii) Stock trailing arms are permitted. One adjustment cam is allowed on the right side trailing arm only. After market trailing arms permitted, 22" center to center.
- viii) No spring loaded or rubber bushing links.

10.04 Jack Screws

- i) Only aluminum or magnetic steel jack screws are allowed.
- ii) All jack screw plates and retainers must be magnetic steel.
- iii) Ground Clearance (all measured with driver in car)
- iv) Front Air Dam = 5" minimum.
- v) Frame and all sheet metal = 5" minimum.
- vi) Exhaust pipe = 3" minimum.

11.0 Brake Components

- i) Any interchangeable brake, drum/rotor assembly may be used.
- ii) Disc brakes using OEM type steel or cast iron, single piston calipers allowed on all four wheels.
- iii) Dual master cylinders allowed. All master cylinders must be mounted outside the driver compartment (on the engine side of the firewall).
- iv) No brake proportioning systems may be installed inside the driver compartment.
- v) No drilled brake rotors. No Scarlett Rotors (must be round).

12.0 Fuel Systems:

12.01 Fuel Tanks

- i) The use of a commercially manufactured fuel cell is mandatory and it must contain the standard foam supplied by the fuel cell manufacturer.
- ii) Fuel cell capacity cannot exceed 22 gallons.
- iii) Filler neck and vent line must be equipped with approved valve or flapper valve.
- iv) Fuel cell must be in the center of the frame rails.
- v) Loop bar is required on top and bottom of the frame located behind the fuel cell. NASCAR Guidelines must be followed for fuel cell installation.
- vi) All fuel lines running from back of car to engine compartment must be enclosed in steel conduit.
- vii) No electric fuel pumps or pressure type system allowed.
- viii) **Fuel cell must maintain 8" ground clearance.**
- ix) No icing, No freon type chemicals or refrigerants may be used on or near any portion of the fuel system or fuel lines.

12.02 Fuel

- i) Regular pump or racing fuel allowed.
- ii) **No fuel additives will be permitted.**
- iii) 5 gallons of fuel should be purchased at Orange County Speedway.

13.0 Safety:

13.01 Roll Bars: NASCAR Guidelines are recommended for roll bar installation.

13.02 Seats

- i) Factory aluminum racing seats are required. Seats must be installed in a manner approved by track officials.

- ii) Absolutely NO homemade seats permitted. Solid construction seats only, no holes other than those allowed for seat belts; no lightening holes.
- iii) Seat Belts/Helmets
 - 1) Quick release seat belts and shoulder harnesses no less than 3” wide are required. Crotch belt is required.
 - 2) All seat belts must be mounted in a manner approved by track officials, bolted to roll cage (not to the floor pan) using no less than 3/8” Grade 8 quality bolts. No “Y” belts, single belts only.
 - 3) Seat belts must retain the original manufacturer label showing the date of manufacture. Seat belts must be within 3 years of the date of manufacture.
 - 4) It is recommended that helmets meet the specifications set forth in the Federal Motor Vehicle Standard Regulations or meet the specifications set forth by the American National Standards Institute, Inc.
- iv) Steering Wheels
 - 1) All cars must be equipped with a quick release steering wheel. NO aluminum collars on quick release. Quick release collars must be magnetic steel.
 - 2) Center of steering wheel must be padded in a manner approved by track officials.
 - 3) Only magnetic steel steering wheels permitted. NO ALUMINUM.
- v) Window Net
 - 1) A rib type, nylon mesh window net must be installed on the driver’s side door glass opening and is subject to approval of track officials. NASCAR Guidelines will be used as the standard.
 - 2) Window net must release from the top with an approved quick-release fastener (no push button type allowed), lever type only.
 - 3) Fastener must be readily accessible to the driver.
 - 4) Window net must be within 3 years of manufacture date.
- vi) Fire Control
 - 1) All cars must be equipped with an approved working fire extinguisher, installed in an approved manner.
 - 2) Extinguisher gauge must be accessible for inspection by track officials.
 - 3) All drivers will be required to wear approved fire resistant driving suit. This will be strictly enforced. Fire resistant shoes, gloves, and full-faced helmets are also highly recommended.
 - 4) Additional fire extinguishers must be readily available at the trailer when car is unloaded from trailer. All entrants must have in their pit area as part of their equipment, at all times, a fully charged 10-pound or larger dry chemical, Halon, or its equivalent working fire extinguisher in addition to the extinguisher in the car.

14.0 Protests and Appeals - See OCS General Rules.