

# 2020 OBS Pro Stock Rules

## 2020 Changes in Red

**"EXHISTING" Late Model cars will be given special allowances not covered by this rules pack to keep them competitive. Cars may need to be grandfathered in on an individual basis.**

### 1. GENERAL

**1.1** These rules have been written with three goals in mind; promote safety, ensure fair competition and help control costs. No set of rules can encompass all eventualities so there will be times when officials and drivers will have to work together to find an appropriate response to unforeseen developments. OBS officials reserve the right to amend any rule with prior (fair) notice to competitors. Regardless of all else OBS officials will be the final authorities in interpretation and application of these rules and the equipment used to enforce these rules.

**1.2** Compliance with these rules is expected of all participants in our racing events. When building, setting up, or operating a racecar, participants should always bear in mind that many of the specifications in these rules are minimums, or maximums, not the normal state for racing. As an example: the expected ground clearance of the car would be 4" as per the Five Star specs; the rules however make an allowance for the unexpected suspension setup problem by permitting a ride height as low as 3½" at pre-race tech. This in turn lowers the minimum roof height. Problems arise if the car is set up without considering all aspects of the situation; a car set up with the crankshaft at 10" at 4" ride height and then suspension set up for 3½" will put the engine ½" low. Such a car may have to have its engine mounts adjusted before it could race.

**1.3** When a car is found to be non-compliant in pre-race tech, efforts must be made to bring it within the rules; if this is not possible and the difference may affect the fairness of competition (in the opinion of officials), the tech staff will propose an offsetting adjustment to eliminate any perceived advantage. These adjustments could be related to the area of non-compliance, and might involve extra weight, aerodynamic changes or weight distribution changes. For example, if a rear deck was too high, modifying the height of the spoiler could be in order. In the case of an engine mounted too low, as discussed in 1.2 above, the lowered centre of gravity could be offset by adjusting left side weight bias. No hard and fast rules can be listed to cover all possible situations but the intent and spirit of the rules will guide all decisions. Adjustments made to OBS cars under this rule are good only for that race meet; correction of the problem is expected for the next meet entered.

**1.4** Cars with frequent or multiple compliance problems may be considered evidence of intentional cheating. In that case the competition director could be

asked to determine if a penalty is in order.

**1.5** Cars found non-compliant post race could be subject to penalties up to and including disqualification.

**1.6** Tech inspection centers on the pre-race formal check; however, the car is subject to inspection at any time from the start to finish of a race meet. Although the pre-race check often focuses on a specific theme at each meet to ensure all items get checked in the course of a season, there is no restriction on what is checked on a given car, nor is it required that the same item be checked on every car.

**2. SAFETY** will continue to be our number one priority – i.e. belts, fuel cell, on track.

We will be working to ensure safety continues to be a non issue. On track safety improvements are being considered with all current policies under review i.e. fire rescue, staff training. Correct mounting of fuel cell, mounting seat belts

**2.1 Safety:** In the pits and on the track takes precedence over all else.

**2.2 Pit Safety:**

In the pits, safety will be greatly enhanced by attention to the basics including the wearing of protective clothing and eye wear at appropriate times; fire safety practices and the presence of an extinguisher; proper storage and disposal of flammables, chemicals and wastes; elimination of distractions and horse play and safe working practices such as the use of jack stands. **Fire Extinguisher must be present while fueling the car.**

**2.3 Driver Protection:**

**Snell (SA or SAH) approved helmets only may be used. 2010 or newer fullfaced**

**helmets are mandatory, as required by the Tracks.** This will be enforced with no exceptions. Full fire suit with a minimum SFI rating of 3.2A/1, in good condition, is mandatory and must be used whenever the car is on the track.

Fireproof gloves are mandatory. Fireproof shoes recommended. OBS cars are recommended to have an on board fire system. All entries must at least have a CSA approved fire extinguisher of 5 BC rating, dated for the current year, which accompanies the car at all times. Fire Extinguishers, whether a suppression system or a stand-alone extinguisher, must be mounted in such a manner so the gauge is visible when looking in from outside the car. **An industry accepted head and neck restraint system is required.**

**2.4 Driver's Compartment:**

All cars must have a safe roll cage, constructed of 1 3/4" o.d. 0.090 wall steel tubing. The base of the upright members must be solidly welded to the frame and side-to-side members must reinforce the cage. Four sidebars on driver's side are mandatory. A plate of 16 gauge metal approximately 15" x 30" must be mounted on driver's door between door skin and roll cage. Plate may be integrated into the roll cage structure. All roll bars within drivers' helmet area must be padded with high density offset hole or SFI approved roll bar padding.

## **2.5 Seating Area/Interior:**

A complete steel firewall (front and rear), floorboards, and area surrounding the driver are mandatory. Interior metal from right side door must slope (*no shelf*) toward floor sufficient to allow access to lap belt through the passenger side window. The floor plate must be a minimum of 1/8" metal and should cover the entire floor area including under seat. (This and other rules are not to be interpreted as permitting aerodynamic enhancement in the name of safety). An aluminum-racing seat properly mounted to the cage is mandatory. All cars must have an SFI 27.1 rated window net, properly installed in the left front window opening with a quick release at top. Quick release must be located top left corner toward the "A" pillar –this is necessary so when fire rescue crews arrive on scene, it provides a standard location for them to be able to quickly extricate the driver. All cars must be equipped with a quick release steering wheel. Centre of the wheel must be padded.

**2.6 Seat Belts:** Must be securely installed as per manufacture's instruction and approved by OBS Tech Officials. Seat belts must meet SFI16.1 standard. Four point seatbelts are mandatory. The fifth point crotch strap is recommended. Seat belts must be dated no more than three years old.

**2.7 Battery:** Must be mounted securely outside of driver's compartment.

## **3. FRAMES**

**3.1** Frames must be 2"x 3" fabricated steel tubing or larger, minimum wall thickness of .083".

**3.2** No ride height rule. However, a car that continues to bottom out or rub the track will be sent to the pits to raise the car so as not to damage the track's racing surface.

**3.3** Minimum wheelbase is 102", measured from the center of the rear axle to the center of bottom ball joint.

**3.4** Track width maximum is 66", minimum 64".

**3.5** Jack positioners on cars must be set flush with or hidden beneath the door skin.

Bumpers may be a maximum 2" diameter pipe or tubing.

## **4. BODIES**

**4.1** Bodies must be of original manufacturers design, stock appearing made of plastic, steel, fiberglass, or aluminum (no carbon fibers or similar exotic materials) with a minimum 102" wheelbase. Flat rub rails allowed, but must be no larger than 1/4 inch thick by 2 inches wide. Square tubing not allowed.

**4.2** Bodies to be installed as per FIVESTAR short track style guidelines (2000 or newer catalogue) A.B.C. bodies must be mounted to A.B.C. guidelines.

**4.3** All measurements will be made with driver in car

**4.4** Roof height must be a minimum of 46" Measured 10" from the top of the windshield on center.

**4.5** Door shelves cannot exceed 2 1/2" on the left side, and 3 1/2" on the right side

**4.6** MAX deck height will be 36" from the ground to the top of the deck at the base of the spoiler

**4.7** Rear deck lid must NOT be riveted to the body. Must be hinged or made EASILY removable. Rear deck must not be dished or raked side to side. The deck lid opening must be a minimum of 36" by 12". This will allow easy access to the fuel cell area in case of fire.

**4.8** You are allowed a 6 1/2" high by 60" wide rear spoiler (measured across front) with no side boxing. No wings, ground effects, belly pans, or tubs permitted

**4.9** No carbon fiber hoods allowed.

**4.10** No Iceman quarters, cut down fenders, or cut down bumper covers.

**4.11** Must run a rear window with appropriate bracing as to prevent bowing at speed.

**4.12** 4" Minimum clearance under front nose cone.

**4.13** Floor plate must be minimum 1/8" thick steel

**4.14** The Fivestar "MOTHER OF DOW NFORCE" High Performance Monte Carlo and any other similar bodies are NOT permitted for competition.

**4.15** No external strips allowed. Any bodies that appear to be mounted in a

manner

that could put more air on the rear spoiler such as but not limited to sucked down rear

roof, window alterations, or the front area of the car fashioned in such a way as to be sloped downward excessively could be required to make changes such as trimming or removing the rear spoiler, removing hood, or other adjustments to compensate for any possible advantages in the opinion of Tech.

**4.16** Passenger and drivers side windows are permitted of clear lexan only. They are

NOT to be longer than 12" from the bottom corner of the "A" pillar rearward. Rear of window must be straight up, and not bow out.

**4.17** The following body styles manufactured by "Five-Star Race Car Bodies" are approved for competition

2004 - 2015 Chevrolet → Monte Carlo, Impala

2004 -2015 Dodge → Charger, Avenger

2004 -2015 Ford → Taurus, Fusion

2004 -2007 Pontiac → Grand Prix

2008 - 2015 Toyota → Camry (subject to ABC Approval)

The 2004 - 2015 Monte Carlo, Fusion, Charger "AR" bodies are approved for competition.

**4.17.1** Bodies will be standard weight fiberglass quarter panels, and fenders.

Hood and roof may be

lightweight but weight will be added to the car. Fenders can be replaced with "Five-Star" or

"AR" plastic fenders. Doors and deck lid will be "Five-Star" or "AR" aluminum.

Rocker panels

may be plastic or aluminum. Bumper cover and nose will be plastic.

Manufacturer's part

numbers and identification labels must be visible and NOT PAINTED OVER. All glass areas will

be "Five-Star" or "AR" molded polycarbonate.

**4.17.2.** All body panels must be mounted as produced by "Five-Star Race Car Bodies" or "Aluminum Racing Products". Modification or alteration of panels will not be allowed (**no "sucking" in or out of any body panels**). . Panels may not be mounted in such a manner to allow air to escape from beneath the car.

**4.17.3.** All body panels and windows must be mounted and properly braced on the chassis to prevent deflection under racing conditions. Bracing under car may not exceed  $\frac{3}{4}$  inch, maximum width flat material, which cannot be "stacked or placed" to obtain panning of underside of the car.

**4.17.3** The maximum tread width will be 66", measured with the driver in of

**the car.**

**4.17.4.** The allowable range of wheelbase will be 102" to 105"

**4.17..5.** Minimum of 4" ground clearance at all points on body. **No lift allowed.**

## **5. WEIGHT**

**5.1 option # 1** Conventional Engine (steel head) minimum 2800 LB W/7200 chip

**option # 2** GM sealed crate engine 88958604 minimum 2750 LB W/6400 chip

**option # 3** Ford sealed crate engine D347SR minimum 2775 LB W/6400 chip

**option # 4** Ford sealed crate engine McGunegill MEP425LM minimum 2800 LB W/6400 chip

**option # 5** Dodge sealed crate engine ASA75360 minimum 2775 LB W/6400 chip and

1.5 rocker arm ratio must be used.

**option # 6** Late Model cars with Camaro style front clip and lower A arms W/Max 600

final drive ratio minimum 2700 LB and 60% left side

**5.2** All cars are permitted a **maximum 58%** left side weight.

**5.3** All cars will carry a maximum 52.5% rear weight (at all fuel levels).

**5.4** Cars will be weighed with drivers in position using OBS approved scales and wheels pointed in a straight ahead position.

**5.5** Cars must be full of fuel for all heat races and features (regular or special events).

**5.6** Solid ballast only. No ballast adjustment devices permitted. All ballast must be painted white, securely installed, and identifiable by car number. **All ballast used must be lead or steel only.**

**5.7** A team will be allowed to change from a "crate" to an "open" engine once during the season and back to "crate" or vice versa. Any subsequent change will see the team remain with "open" weight rules and percentages for the remainder of the season.

## **6. ENGINE**

**6.1** Engine must be 360 cubic inch (*Mopar 372 with 360 (A) 9.5" block and crank, 360(R) 9"block, GM 350, 9" block and crank, Ford 302 or 351 block*) or less (measured with volume pump) cast iron blocks, with a maximum compression of 10.99 checked with a whistler. Measurement of whistler will be final.

**6.1.1** The lead cylinder head must touch a string line between stock location grease fittings of upper ball joints.

**6.1.2** The minimum crankshaft height is 10" (except "crate engines").

**6.1.3 Ford and Mopar are allowed a dished piston.**

**6.1.4** No external oil pumps allowed except dry sump. An approved test engine *may* be permitted.

**6.2** *Mopar* engine with 360 (A) block can be bored .040. Mopar with shorter (R) block (9") and *casting # P4532693 W2 heads will be no more than 360 cu. in. and must meet conditions listed in section 6.3 below.*

**6.3** *Heads* must be of cast iron. No exotic heads allowed. Approved heads include *Chevrolet* (23) SB Bowtie, Vortec, Dart Iron Eagle 180, 200, 215 or 230; World Product SR Torquer, Sportsman 11 Motown 220; *Ford* (20°) GT40, Windsor, Windsor Jr.; *Mopar* W2 (old- style 18°).

**6.3.1** The bowl and short turn on the intake side, below the valve seat, may be reworked in as far as the head bolt. Maximum volume of any intake runner is plus 5cc. from manufacturers listed specifications for that head. Bowl blending below the valve seat on the exhaust side is limited to one- inch. Port matching allowed in maximum 1/2". Multi angle valve jobs accepted.

**6.3.2** *Ford* M6049-N351 head and *Mopar* W2 (*casting # P4532693*) heads are permitted under the following conditions. Head must remain as produced except gasket matching which is allowed 1/2 in on the intake ports only. Bowl blending is allowed on intake and exhaust to a maximum of 1/2" below the valve seat. No port matching allowed on exhaust ports. Intake runners must not exceed manufacturers' listed specifications. Multi angle valve jobs accepted.

**6.3.3** No head other than those listed is approved. No 14°(or less) heads.

**6.4 Roller rockers** are allowed with a flat tappet camshaft only. No mushroom lifters, no aluminum rods permitted.

**6.5 Radiator:** Any radiator allowed (only one permitted and must be ahead of the engine). Only water is to be used as a coolant. No antifreeze or cooling products allowed.

**6.6 Carburetor/fuel pump/plumbing:** Any 2 or 4 barrel intake of cast iron or aluminum is allowed.

Carburetor allowed is the Holley 4412 500 CFM. Must pass OBS no-go gauges (including booster height). Only the choke flap may be removed. Jets and power valves may be changed. Throttle shaft can be spot welded to linkage. No other modifications allowed. Air entering the combustion chamber must be through the carburetor only. No air passages below the venturi. A four-barrel to two-barrel

adapter may be used. Must have two return springs on separate brackets. No electric fuel pumps. Must run air breather. No carbon fiber valve covers or breathers. No nitrous oxide or nitrous plumbing allowed. Fuel cell must have a Maximum 22 U.S. gallons capacity, must be in a steel box, and have at least 8" ground clearance. There must be steel tubing in trunk area. Fuel cell must be fully contained and secured with steel tubing or flat strap. Proper mounting of fuel cell will be at the discretion of OBS Officials. Mandatory SFI approved fuel cell only. **Fuel cell must be filled from outside the trunk area through a filler neck, either through the quarter panel at the side or base of the rear window. Fuel cell vent must have a check-ball to prevent fuel leakage in the event of a roll over. Vent must exit the rear of the car on the left side, under the spoiler.**

**6.7 Exhaust:** No stainless steel or carbon fiber headers, mufflers, pipes, etc are permitted. If exhaust pipes exit along the body they may not extend out past body panels and must be flanged. The bottoms of exhaust pipes are not to exceed ten inches from ground at exit. Maximum exhaust pipe beyond the muffler is one 5" Outside Diameter (OD) (maximum) or two 3.5" OD (maximum) pipes. Exhaust must exit behind driver and in front of the rear wheels. If exhaust exits under car, exit must point toward ground.

Recognizable MUFFLERS are mandatory (Recommended Howe 3002, 3015, 3018, 3044) No internal inserts. Regardless of make or model of muffler, the maximum decibel reading permitted will be 95 decibels at 100 feet. Cars exceeding the decibel limit will be given that race to fix the problem. In the meantime, they will see their allowable rev limit reduced by 400 rpm. Crate motors and "open" motors may require different decibel readings

## **6.8 Crate Engines**

**6.8.1** All "crate engines" must be approved by OBS officials and tagged for identity purposes before they can enter competition. All **OBS , MPST & NBIS** seals will be honored

**6.8.2** Tampering with a sealed crate engine will not be tolerated. Anyone caught tampering with a sealed crate engine (Ex: seal tampering, engine repairs by Non Authorized repair facility, non-spec parts in engine, etc.) will be suspended for one year from the date the infraction is found.

**6.8.3** General Motors "crate engine" P/N 88958604 is allowed, complete with a Holly 650 carburetor 4150HP # 80541. Carburetor will bolt directly to the intake using a maximum .065" gasket only. No spacer plate is allowed. Carburetor must pass OBS No-Go gauges. These engines are sealed at the intake manifold, cylinder head, front cover and

oil pan with specialtwist off bolt heads.

The fuel pump pushrod may be replaced with a COMP CAM P/N 4607.

Original timing cover and harmonic balancer must remain as produced.

Headers must be a 1 5/8" OD to a 1 3/4" OD stepped header with a 3" OD collector.

Maximum RPM is 6400.

**6.8.4** Ford sealed "crate engine" D347SR is allowed, complete with Holly carburetor model 4150HP# 80541.

Carburetor will bolt directly to the intake using a maximum .065" gasket only. No spacer plate is allowed.

Carburetor must pass OBS No-Go gauges.

Headers must be 1 5/8" OD to a 1 3/4" OD stepped header with a 3" OD collector.

Maximum RPM is 6400.

**6.8.5** MOPAR ASA75360 sealed "crate engine" (wet sump only permitted) with a Holly Carburetor model 45150HP # 8054 is allowed.

Carburetor will bolt directly to the intake using a maximum .065" gasket only. No spacer plate is allowed.

Carburetor must pass OBS No-Go gauges.

Headers must be 1 5/8" OD to a 1 3/4" OD stepped header with a 3" OD collector.

Maximum RPM is 6400.

Sealed "crate engine" combinations could be subject to weight penalties.

Combinations (e.g. "crate engine" lower RPM) could be subject to weight variations to ensure fair competition.

**6.8.6** "Crate engines" will maintain a minimum crank height of 11".

## **7. DRIVE TRAIN and SUSPENSION**

**7.1** Shocks and springs: One *shock and spring* per wheel. Any steel body non adjustable , non rebuildable shock with numbers VISIBLE is allowed. Any shock with numbers not visible ,or appears altered in any way may be deemed illegal.

**7.1.1** No Penske or similar brand shocks allowed at any time for any races.

**7.2** Shock may have stock welded end removed and threaded rod end installed. If rod end removed, must have rod machined to accept threaded rod end.

Extended stock length must be within 1" of stock length. All subject to OBS official inspection.

**7.3** Spring must be linear (single rate) magnetic steel only. Extra clearance springs are allowed. No Progressive (variable rate) springs. Right rear spring may use one take-up spring (zero rate) and spring guide to prevent the main spring from coming loose at full drop (e.g. AFCO AFC27005, AFC20183-1,

Eibach eibhelper250, eibspacer 250, Hypercoil CS100). No other spring helper or spacer is allowed.

Hydraulic spring perches are not allowed. Spring rubbers with two ends are allowed. No on-board coil-over spring adjusters allowed.

**7.4** On shock bump stops are permitted. Bump stocks must be rubber/poly only, with steel or plastic shims.

Suspension travel can only be controlled by one shock, one spring and sway bar combination. No travel limiting devices such as chains, cables, bolts, etc. subject to technical discretion.

**7.5** Coil over eliminators are permitted. They are only to hold the spring and not to act as a shock, a bump stop or a travel limiting device in any way.

**7.6** A car that finishes in the top five in the Main Feature may have a shock or shocks (up to four, on the car at the end of the race) claimed by any other OBS driver who finishes behind him/her in the top ten and on the lead lap. Any person wanting to claim must have \$125 cash (per shock) delivered to the Pit Steward within fifteen minutes of the finish of the Main Feature. The claimers' car must go directly to the tech area from the racetrack before making a claim. The person whose shocks are being claimed (claimee) may either take the money or trade shocks (must come off the claimers' car) with the person wanting to make the claim (claimer). This claim includes the shock(s) only and no hardware. Claimed shocks must be removed before the car leaves the race meet, unless authorized by OBS officials.

**7.7 All claimed shocks** must be used on claimers car at his next event  
Officials may hold claimed shocks until next event, as determined by officials.

**7.8 Claim Refusal** Anyone who refuses a claim will not be able to compete at OBS  
without applying in writing and meeting certain requirements. A claimed shock under this rule may not be sold or transferred without applying in writing and meeting certain requirements. Test shocks may be permitted under the direction of officials.

**7.9 Steel wheels** only with a maximum width of ten inches measured bead set to bead set. Tire relief valves must be self-releasing only and remain independent from the rest of the car. No center reliefs, remote pressure bleeders or any other remote assembly is allowed. Lug nuts must be steel only.

**7.10 Clutch and Flywheel:** Any safe clutch and flywheel may be used. Minimum diameter of clutch discs is 5½". A scatter shield is mandatory with an open clutch. Metallic discs only. No carbon fiber.

**7.11 Drive shaft:** Steel or aluminum drive shaft only. Drive shaft must be surrounded by two ¼" (minimum thickness) safety hoops. Steel drive shaft must

be painted white.

**7.12 Rear end:** Solid spool or permanently locked quick change rear ends only. Matching white lines are to be painted on each hub to indicate the relationship of one axle to the other. These lines are to be positioned so that they are lined up exactly the same on each side - i.e. both lines would run from the 3 to the 9 o'clock position. Quick-change gears must be on rear of housing only. No "front quick changes".

Lower arms and the single panhard bar on the rear suspension will be solid with heim joints on both ends, solidly mounted to the frame on both sides. **Axels must be steel only and must pass magnet test.**

**7.13 NO titanium bars, or arms.** No Watts Link, torque absorbers or similar configurations.

Outboard solid drive flanges on rear end may be replaced with rubber drive plates only.

The third link should be a single solid bar with one connecting point (heim joint) on each end which can be adapted to a single torque device between the two connecting points. The third link assembly unit must have no more than one bar, one single linear spring, or one bar, one linear spring and one neoprene or rubber biscuit, or one bar and no more than two biscuits. No "dual action", "right foot", "pull bars", "two way" or similar assemblies. No gas or liquid pressure devices allowed. No shock, torque arm, 6<sup>th</sup> coils, extra bars, etc.

**7.14 Transmission:** Any manual transmission with operating reverse may be fitted. All transmissions will have final drive at 1:1 ratio. Transmissions may have no other gear closer to 1:1 than 1.23:1.

**7.15 Brakes:** Functional four-wheel brakes with a working caliper on each wheel are mandatory. Calipers may be made of steel, cast iron, or aluminum only. Cast iron brake rotors only, they cannot be steel or cast iron faced aluminum. No carbon fiber material is allowed. Maximum four pistons per caliper.

Maximum one caliper per wheel. Maximum of two brake cooling fans and two cooling hoses permitted for front brakes.

Cooling hoses must be directed at the brake rotor. Air inlet for hoses must come from the nose or radiator duct work only. Electronic wheel speed sensors or brake activators will not be permitted. An on-board pressure adjustor is allowed.

**7.14 Plugs:** Oil pan, rear end and transmission plugs must be wire locked.

**7.15 Traction aids:** No electronic or mechanical traction devices. Should an ultrasonic

listening device detect power being degraded (in the opinion of officials), to possibly assist traction, the car could be subject to penalties up to and including disqualification. No onboard wedge, panhard, sway bar or other suspension adjustment devices permitted. No hydraulic or electric suspension adjusters allowed. OBS officials must approve any new technology equipment before it can

be used.

**7.16 Front Sway Bar:** One magnetic steel front sway bar with a maximum diameter of 2" is allowed.

**8: IGNITION Boxes**, modules, external "soft touch" rev limiters and rev limiter chips may be subject to trade with OBS for the day, or longer, at the discretion of officials.

**8.1** A Master Shut-off Switch must be mounted in the middle of the car, such that the driver can reach the switch while belted in the car. The location must be assessable to safety workers outside of the car, regardless of how the car is sitting. It must be fluorescent orange to ease finding it during an emergency.

**8.2 MSD** ignitions only. *No HEI ignitions.* No magnetos. Only one ignition box is allowed.

It must be mounted as far to the right as chassis permits. Competitor may be required to adjust location as directed by OBS official. It is suggested the coil (only one allowed) accompany the box on the same bracket, or in the same area. All wiring from the box to the distributor and coil must be entirely accessible, top surface mounted and able to be unattached for easy tracing by officials. Officials have to be capable of completely surrounding the wires from start to finish. They must be able to follow wires to a firewall and push through to continue their trace. Wire ties, wire loom, protective heat shields, convoluted tubing, clamps, or ducts must be removed, replaced, opened, and/or closed by the competitor at the request of officials.

**8.3 Box** must be one of the following: MSD analog 6-series (6T, 6TN, 6AL, 6ALN) 6400, 6401, 6402,,6403, or GM 10037378 . Other MSD analog boxes may be approved if declared clean and acceptable by MSD technicians. No digital or externally programmable boxes will be allowed regardless of series number.

**8.4 MSD Rev limiters** (chip type only) must be used. External rev limiters must be MSD part number 8738 or GM 10037379 (6400, 6401 and GM 10037378) only. External rev limiters must be approved following the same procedures as MSD boxes. Units must be placed out of reach of the driver with all wiring exposed. All chips are subject to testing, exchanging, and sealing by OBS officials.

**8.5** All car wiring harnesses must be capable of plugging into an MSD 6ALN box with a weather tight connector (MSD part # 8170). Solenoid (Battery +) must be within a

36" wire run of box. Ground (Battery -) termination must be within 12" wire run of box. It is mandatory that all car wiring must conform to MSD wiring diagram 8170 connector will be wired as follows:

- Terminal A - Red wire ( 12 volt ignition )
- Terminal B - Brown wire ( tach )
- Terminal C - Black wire ( coil negative )
- Terminal D - Orange wire ( coil positive )
- Terminal E - Green wire ( distributor mag - )
- Terminal F - Violet wire ( distributor Mag + )

The female connector with the male pins is installed on the box end. The male connector with the female inserts goes on the car chassis end. . It is recommended a Blue-Point PWC 47 or MSD 8175 crimping tool (or equivalent) be used to attach wires to the MSD connector. Non-6ALN or non-6TN boxes may require the distributor wires and tachometer wire to be brought from the other end of the box and into the 8170 connector .

**8.5** The tach wire can remain plugged into the box and will become part of the 8170 connector. Within the first foot of wire going from the 8170 connector and the tachometer, there must be a minimum of 8" of (straight, top mounted) wire that is totally removable from the 8170 connector end. The eight inches of wire will be removed prior to the car taking its first lap of competition and remain that way for the remainder of the event. If the tachometer is within reach of the driver, with his belts disconnected, the last foot from the tachometer end will also be removed.

**8.6** No rev-limiting tachometers allowed. No digital gauges or electronic monitoring computer devices capable of storing or transmitting information (except analog tachometer) are permitted.

**8.7** Box should have permanent markings identifying the car it belongs to.

## **9. COMMUNICATIONS**

Teams **MUST** provide track officials with all their frequencies.

All cars must have one person in a specified area monitoring the race director and scoring officials with the ability to relay messages to their driver.

**No scrambling allowed and all frequencies must be able to be monitored by the official's multi-channel scanner without modification to the scanner.**

**100, 400, and 800 frequencies only. No 900 frequencies allowed.**

**In the event of a conflict with OBS frequencies, OBS takes precedence.**

## **10. NUMBERS**

Numbers must be on the roof, readable from the right side of the car and both doors, at least **20" high and 4" wide.**

All numbers must be dark on a light background, or light on a dark background.

No gold, silver, metal flake or trick numbers.

The car must have a 6" number on the top passenger corner of the windshield, and on the rear window, painted white.

## 11. TIRES

**11.1** Tires will be the HOOSIER SPEC TIRE

**11.2** Teams are permitted a MAXIMUM of 32 registered tires for the year.  
This will be a total of all new and used tires.

**11.2.a** Teams will be allowed to register 2 new tires on the first race day of the season.  
This will be the first race date of the year and not just the first day the car is at the track. Teams will be allowed to register 1 new tire on every race date with the exception of the 100 lap invitational race.  
New tires can only be registered when car is present at track.

**11.2.b** For the 100 lap invitational, race teams will be allowed a MAX of 2 new tires. Used tires **for this race only** can be from current year OR last years inventory. All tires for this race MUST be registered at Pre Race Tech **BEFORE** car goes on track for practice.  
For any violation of this rule, cars used tires will be limited to previous years tires or car will be sent home.

**11.3** New tires must be used on the day they are registered.  
Used tires can be registered and used at any time.

**11.4** Teams are allowed to run used tires . Used tires can not be from current year. Current year tire numbers will not be accepted as used regardless of tire wear. Current year tire numbers can only be registered as new.  
Used tires can be registered to a teams inventory on any race date.

**11.4a** All tires should come from MPST's last years inventory and will be verified from master list from MPST.

**11.4b** Anyone with USED tires that did not come through MPST the tire numbers "**MUST**" be registered on or before **April 30th**. After that date the only tire numbers that will be accepted as being **USED MUST** be on last years master list.

**11.5** All tires NEW and USED must be registered .

**11.6** It will be the teams responsibility to have all tires registered with TECH before all

races . Unregistered  
tires will be deemed illegal.

**11.6a** When tire lists are submitted to TECH "ALL" tires MUST be clearly marked as being NEW or USED.

**11.7** All races will be on registered tires .

**11.8** Racers can practice on unregistered tires.

**11.9** Any tires with missing or unreadable numbers will be deemed illegal.

**11.10** Registered tires may not be transferred to another competitor unless officials approve them  
for transfer.

**11.11** Durometer rule of 52 minimum reading

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