



**2017 I-80 Speedway  
NASCAR Grand National /  
Bragging Rights Late Model Rules**  
Revised 1/25/2017  
Revisions Underlined

**\*\*\* Warning \*\*\***

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.

**All Drivers are required to have a NASCAR License on SANCTIONED EVENTS**  
**RACEIEVERS & TRANSPONDER POUCHES MANDATORY – DRIVERS WITHOUT POUCHES ARE SUBJECT TO A FINE**  
**AND DQ**  
**TRANSPONDERS ARE TO BE MOUNTED AT BOTTOM OF THE REAR MOTOR PLATE IN AN ORANGE POUCH SECURELY**  
**ATTACHED WITH THE SILVER PLATE FACING THE TRACK SURFACE.**

**SAFETY/GENERAL RULES**

1. Helmets must be SFI 31.1/2005 or Snell rated Sa2005, SA2010 or SA2015 helmet required. (no open face helmets).
2. All drivers must wear approved fire retardant racing gloves SFI 3.3/5 at all times when the car is on the track.
3. Solid center steering wheels are highly recommended.
4. **Head and neck restraint devices are recommended such as a HANS or similar. A minimum of a full wrap around neck brace is required.**
5. All cars must have seat belts and shoulder harness securely fastened to the frame or roll bar. They must be of the approved racing type with quick release aircraft type hookups. NO stock type seat belts allowed. Shoulder harness must be securely mounted to the roll cage no higher than TWO inches above shoulder level. Sternum straps are highly recommended. All cars are required to have 3" lap belt, crotch belt and 3" shoulder harness recommended to be no more than one year old. Unless approved 2" shoulder harness while using a HANS device. Belts must be no older than 3 years on the production date.
6. **A Full containment racing seat is strongly recommended. All seats must be mounted properly & securely per the Technical Directors recommendations. The use of Grade 5 or better hardware is also required to attach the seat to the chassis with minimum four mounting bolts (3/8 inch or bigger). When not using a full containment seat you are required to use two head supports (left & right side) The left side may be shorter for egress only but cannot be trimmed any shorter than the distance of the face of the helmet.**
7. Fire suits of at least a fire-retardant material are mandatory. (SFI 5 is the recommended minimum.) Sleeves must be rolled down. Nomex underwear is highly recommended, including hood and socks. Race approved footwear (leather shoes) are highly recommended.
8. All roll bars within the driver's area must be padded with flame retardant foam roll bar padding.
9. **All cars are required to use a window net 16x20 rectangular shape mesh or ribbon style, must be mounted in accordance with the manufacturer's instructions and technical director's satisfaction, must latch at the top. Window net will not be required but recommended when using a full containment seat and a HANS (or similar) device.** Arm restraints highly recommended.
10. Ballast (extra weight) added to the car for weight rule conformance must consider all provisions of safety and must be securely fastened. Ballast must be bolted to the frame or cage only. No ballast may be mounted above the interior deck to rub rails or body mounts. Any ballast weight of 20 lbs or more must be drilled and mounted with two 1/2" studs through each weight. No ballast blocks less than 5 lbs nor more than 60 lbs will be allowed. No stacking of ballast. Ballast must be painted white and stamped with your car number (this is a maintenance item and must be maintained all year.)
11. **A fire extinguisher, in working order and up to date, will be required in your race car. Recommended when purchasing a new fire extinguisher to purchase the 10-pound fire bottle or safe craft suppression system with the thermal hoses running to the driver's cockpit and one to the fuel cell. (a 10-pound bottle may be required in the future)**
12. No unapproved cameras, listening or transmitting devices, timing retard controls, or digital gauges, digital tach is ok. No electronic monitoring computer devices capable of storing or transmitting information except analog tach. No electronic traction control devices.
13. **Eighteen gauge steel or one-eighth inch aluminum "cockpit tub" to protect front, sides and rear of driver is**

**highly recommended.**

14. No car covers or opening covers of any kind allowed. Exception: If rain or inclement weather occurs you may cover your car until the weather passes and/or the rain stops. Including tires.
15. **Fuel Cell see section-3 Rule 4**
16. **Window Bars see Section 4 – Number 2**
17. **Battery see section- 9 Rule 1 & 2**
18. **Wheel section – 15 Rule 2**
19. **All safety Rules must be followed or there will be a 50 lb penalty for each rule not followed. There will be a grace period of 3 bragging rights races that you can run with the weight penalty then the safety requirements will need to be installed.**

## **SECTION 1: WHEEL BASE, SHOCKS, SPRINGS & SUSPENSION**

1. The minimum average wheelbase is 103 inches. **With ¼” tolerance.**
2. Front suspension must be of A-frame type.
3. No cross connected shocks are allowed.
4. No “RodThrough” designs are allowed. (“RodThrough” shocks are defined as those shock absorbers in which the piston rod protrudes from both ends of the shock body.)
5. No Inerters are allowed
  - A.) No rotating parts inside the damper.
  - B.) No Inerter style dampers, either mechanical or hydraulic, or other type of primarily acceleration sensitive damping devices not permitted.
6. No Electrical adjusted or active dampers are allowed. No electrical wires, transmitting or receiving components will be allowed to be attached internally or externally to the dampers or mounted inside any component or dampers. No portion of the racecar including and not limited to shocks and spring components or chassis components may have the ability to communicate transfer/transmit/receive any type of digital or analog data or any language and or adjust or monitor in any way whatsoever including but not limited to a variation of a wireless remote device/phone/computer/tablet/ipad or a mechanical remote device.
7. Any new chassis design or component designs pertaining to and/or but not limited to shock absorber mounts must be submitted to I 80 Speedway for approval before they will be permitted for use in competition. Manufacturer and/or competitor may be required to disassemble for complete inspection before instatement of new part is permitted.
8. Only one coil spring permitted per wheel, **NO stack Springs** exception: a flat coil 10 lbs/inch max rate take-up spring allowed on left front and left rear only. Leaf Springs will be permitted on rear end only.
  - A.) Coil Springs must be made of magnetic steel. Leaf Spring must be made of magnetic steel of approved composite material.
  - B.) One traction spring and one brake spring mounted to the torque arm is permitted.
  - C.) Torsion bars are not allowed in rear of car.
  - D.) **Spring preload adjustments for coil springs must be made using mechanical adjusting nuts on the shock body.**
  - E.) **Spring preload adjustments for leaf springs must be made using a mechanical adjusting device such as an adjustable shackle or threaded rod type mount.**
  - F.) **Other than spring dampening by the shock absorber, hydraulic, pneumatic, or electrically controlled adjusting devices, (static or dynamic) that affect spring preload or race car heights will not be permitted.**
9. Shock Locations
  - A.) Shocks: Must be constructed of aluminum or steel. gas filled shocks will not be allowed. Adjustable shocks are legal. No shradder valves, bladder type valves, or gas relief/refill ports are allowed. No remote reservoir shocks. Exception: Limiting shock/shradder valve style allowed on left rear, front of axle tube only mounted to the bird cage. Any or all shocks can be claimed for \$200 per shock. One driver may claim up to six shocks per car per night, with no more than three shock claims during the season. Shocks claimed include: no coil over kit, and no springs.
  - B.) Only one shock per wheel is permitted at the left front, right front, right rear corners.
  - C.) If shocks are checked and it extends out automatically, they will be considered to be gas filled, this may cause for disqualification.
  - D.) Left rear must have one shock behind the axle tube and may have one traction (dummy) shock on the front side of axle tube. Must mount vertically to birdcage or clamp bracket.
  - E.) One 5th Coil Shock permitted.
  - F.) One 90/10 must be mounted above lift arm on upper lift arm plates. Must be mounted towards the front of the car lying parallel with the car. Shock must mount within 3” of the centerline of the rear ends center section.
10. Drop Chain (limiting chain) is permitted. Must Mount vertically between frame and a clamp bracket
11. Bump Stops and/or bump springs are permitted on drop chain.
12. Suspension covers are not allowed. Spring and/or shock covers are permitted, but must be fastened directly to the spring or shock.
13. A Swing Arm and/or Z Link suspension is permitted as long as the Top and Bottom solid links are mounted on hiems and run in the opposite directions of the bird cage. The Shock on a Swing Arm or Z Link rear suspension may mount to the bird cage or the bottom radius rod.

14. Suspension and/or rear end parts can be made of steel or aluminum. Aluminum mounting brackets are permitted. NO titanium suspension parts.
15. Frame and/or suspension mounts must be welded or bolted solid to the frame and not move. ie Floating, sliding, pivoting and/or rotating mounts and/or brackets of any sort are not allowed.
16. Bolted components must match the correct bolt size with the hole (for instance no 3/8 bolts in a 1/2 inch hole will be deemed illegal) and be torqued to a min of 40 foot pounds per inch
17. Rear Suspension Mounts.
  - A.) Single sheer mounts must be 1/4" minimum steel and/or 1/2" minimum aluminum.
  - B.) Double sheer mounts must be 1/8" minimum steel and/or 1/4" minimum aluminum.
  - C.) Sheer mounts must use minimum 5/8" rod ends with minimum 1/2" grade 8 bolts only.
  - D.) Double sheer mount must be no wider than 4 inches with a minimum 1/2" inch grade 8 bolt with steel or aluminum spacers only.
18. Only one (1) mechanical traction device is permitted. Only one (1) pull bar or one (1) lift arm is permitted. No other options are allowed. Covers of any sort in any relation to the lift arm or pull bar are not allowed.
19. Lift Arm & Pull Bar
  - A.) Floating, pivoting and/or rotating mounts and/or brackets of any sort (connected to and/or associated with the pull bar or lift arm) are not allowed.
  - B.) Lift arm is defined as a steel or aluminum triangulated bar that is connected at the top and bottom of the rear end housing, extending forward where it is connected to a shock, shock-spring-coil-over combination and a limiting chain. One stabilizer bar is permitted to locate the front of the lift arm from left to right in the car.
  - C.) 6th coil or braking spring assemblies are permitted, must be in front of 5th coil shock.
  - D.) Pull bar is defined as a continuous assembly that is connected to the top of the rear end and extends forward to a solid mounting point located on the chassis. The mounting location at both the front and rear of the pull bar may be adjustable but must remain constant during competition (cannot be adjustable from the cockpit).
20. Radius Rods
  - A.) All rear suspension radius rods must be of a fixed length. No hydraulic cylinders, torsion bars, bump rods, spring rods, slider rods, shock type, or rubber bushings. Radius rods are permitted.
  - B.) Radius Rods must be a minimum of 1" diameter OD. Rods can be round, square, or hex shaped. Rods must be a minimum of .095 steel or .120 aluminum in tubing thickness.
  - C.) Heim joints must be a minimum 5/8, and a maximum 3/4" steel heim. No rubber bushings.
  - D.) ONLY Two (2) radius rods per side.
    1. Radius rods must be spaced on the frame a minimum of 6"
    2. Radius rods must be spaced on the birdcage a minimum of 6" and a maximum of 12"
    3. Measurements will be made from center of each radius rod bolt.
21. Birdcages
  - A.) **Birdcages must be made of aluminum or magnetic steel, no exotic materials. Left and Right must be made of the same material.**
  - B.) Birdcages may consist of multiple barrels but must bolt or weld together to work as single barrel birdcage.
  - C.) Limited one birdcage (1) per side.
  - D.) Shock(s) and radius rods must mount to the birdcage.
  - E.) Floating, pivoting and/or rotating mounts and/or brackets of any sort are not allowed. All brackets or mounts attached to the birdcage must be bolted or welded solid.
22. Rear Suspension and Suspension Components:
  - A. **Axle Housing, Rear Differential**
    1. **The axle housing must be of the "closed tube" design utilizing "full floating" magnetic steel axle shafts.**
    2. **The center section of the axle housing must be manufactured of either aluminum or magnesium.**
    3. **Axle tubes must be one (1) piece. Axle tubes must be manufactured of aluminum or magnetic mild steel. Axle tubes manufactured of exotic, heavy materials will not be permitted. The outside diameter of the axle tubes must not exceed three (3) inches. Axle tube internal inserts or external sleeves will not be permitted. The addition of any ballast weight to the axle housing will not be permitted.**
  - B. **Axle Housing Mounts**
    1. **The only materials used to fabricate axle housing mounts (birdcages) that will be permitted is aluminum or magnetic mild steel. Axle housing mounts fabricated of exotic, heavy materials will not be permitted.**
    2. **When fabricating axle housing mounts detail must be paid to functionality. The completed axle housing mounts, when comparing the right and the left side, must be as similar in design as possible.**
  - C. **Rear Suspension Attaching (Radius) Rods**
    1. **The only materials used to fabricate attaching (radius) rods that will be permitted are magnetic steel or aluminum**
    2. **Aluminum attaching (radius) rods may be solid or tubular material. Magnetic steel attaching (radius rods) must be tubular with a maximum wall thickness of 3/16 inch.**
23. Shock, Spring, and Suspension Penalties and Infractions: If violations are found during prerace technical inspection: The driver and or team will receive a warning and must meet full compliance before being allowed to compete. If a violation is

found after qualifying has started technical inspection: No Winnings, Points, will be paid and a fine of \$1,000 may be assessed to the violating team and or driver.

## SECTION 2: ENGINES

1. Engine Set-Backs - All competing models are allowed a maximum engine set back of 8 inches. (To be measured from the center of the forward most spark plug hole to the center of the upper ball joint.)
2. **Any blocks that have been ground or lightened will have to add 30 lbs in front of the motor plate.**
3. Engine must be self-starting. Battery operated ignitions only, no magnetos. Must use only one 12 volt cell standard production design battery. Only one battery per car, used both for starting and ignition systems.
4. **Grand National Engine rules**
  - A) Engines must have the following specified stroke: GM 3.48", Ford 3.50" and Mopar 3.578". The maximum bore for any engine is 4.060". Crank and rod assy. must be steel. Stock or roller rocker arms optional. Screw in or pinned rocker studs are allowed. Flat tappet lifters only. Must be 100% steel. No roller, mushroom or radial lifters. GM may change to Ford lifter size (.874) only. No roller cams, no roller bearings for cam or crankshaft allowed. No external oil pumps, Barnes type pumps (wet pump feeding an external tank) or dry sump systems allowed. No engine may have more than 11.0:1 compression ratio. I-80 seals will be allowed or there will be a possible weight penalty
  - B) The specified (spec.) head will be the G.M. bowtie cylinder head, part number 10134392, 14011058 or 12480034 casting number 14011034 and **Chevy Vortec cylinder head with casting number 12039906 or casting number 12558062 that have a 64CC combustion chamber, a 170CC intake port, 1.940" Int/1.500" Exh valves Chevrolet Performance Part number 12558060 Must add 25 lbs. to total car weight Or Vortec bowtie head part number #25534351C small port only with Intake runner volume (cc): 185cc/Exhaust Runner volume (cc): 65cc Absolutely no large port Vortec bowtie part # 25534371. No porting and valves must remain 2.00 intake 1.550 exhaust must add 50 lbs.to total car weight. No alterations to the head including porting or polishing and valve size must remain stock. You must use intake manifold Edelbrock 2716.** Ford M-6049-N351. The Mopar/Chrysler spec head part numbers are P5249769 (cast. # 4532693) and P4529446. The only Chrysler "R" block that will be allowed is # 4876791AB. No modification, except surfacing and three angle valve job. Angle milling of heads not allowed. OEM tolerances only. Maximum valve size for all engines is 1.60" exhaust and 2.055" intake.
  - C) INTAKE: I-80 reserves the right to exchange intakes at any time. SPEC. INTAKE - The following intake manifolds, stock and untouched, will be mandatory on all engines. GM / CHEVY Edelbrock Torker II # 2701, #5001, or #2101 Performer; FORD WINDSOR Edelbrock Torker II # 5081 or # 2181 Performer; MOPAR / CHRYSLER P5249572
  - D) or P5249572AB. 302 FORD Edelbrock Torker II #5021 or #2121 Performer. D. Intake mounting bolt holes may be cut to match block deck angle only.

Note: Recommendation for all classes with compression limits: During any future head removal or rebuilds of your engine, please have 2 adjacent head bolts on the right and left head drilled with a 1/8th inch hole for safety wiring and sealing. If you should happen to be teched at the track as part of our normal inspection process and you passed, this will allow us to "seal" your engine. As long as the seals are place and not tampered with, we will know that engine is legal by removing the valve cover. We'd also like you to have 2 adjacent intake bolts on the right and left sides drilled for the same purpose. Our Tech Inspectors will be willing to come to your shop to "pre-tech" your engine subject to time and availability. If the inspector "pre- techs" your engine at your home, shop or engine builder's there will be a \$250.00 fee, payable to the inspector to compensate them for their time and travel. When the inspector arrives you should be ready to finish assembling your engine. You must have one cylinder head and the oil pan off the engine. Two adjacent head bolts (for each head), two adjacent intake bolts and two adjacent oil pan bolts should be drilled with 1/8th holes for the safety wire to pass through. The inspector will expect you to finish assembling the engine after the proper checks have been made. This pre-tech option is highly recommended. We as tech inspectors encourage this to help minimize at track tear downs and protest. Please exercise this option if you can. Rick Holling (402-515-1635) if you have questions.

### 5. Crate Engine Rules

- A.) The following engines will be legal at I-80 Speedway: GM crate engine #602, and GM crate engine #604.
  - B.) Engines may be interchanged within manufacturer's lines.
  - C.) All engine casting numbers stamped on the engine will be left on the block at the bell housing area.
  - D.) No epoxying of block numbers will be allowed. Block numbers will be stamped by inspector if needed.
  - E.) All GM rebuilt crate motors must be built to GM Specs, **limits and weights** not over .008 bore size. Recommended to use GM replacement parts.
  - F.) Cylinder Head valve job must remain stock, NO oversized valve jobs.
  - G.) I-80 Speedway has the right to impound or claim the crate engine of any competitor at any time. If the engine has non-approved modifications, the engine may be confiscated by I-80 Speedway and driver/owner fined.
  - H.) Anyone found altering or attempting to change a crate engines performance will be fined as follows: \$1,000 driver and \$1,000 owner or \$2,000 if owner and driver are same person. Fines must be paid to I-80 Speedway before driver and owner will be allowed to return and race at I-80 Speedway. On the second offense, fine will be \$2,500 driver and \$2,500 owner or \$5,000 if owner and driver are same person PLUS a one calendar year suspension.
5. IMCA Spec Motor
    - A.) Steel blocks only.

- B.) Maximum 361 c.i. (GM), 362 c.i. (Ford) 364 c.i. (Chrysler). Minimum four-inch bore. Minimum stroke: GM - 3.48 inch, Ford - 3.40 inch, Chrysler - 3.313 inch.
- C.) Maximum compression - 10.5 to 1, checked at any time with Whistler. No tolerance.
- D.) Brodix/IMCA spec cylinder heads only. No grinding, polishing or altering of any kind. No use of any substance that may change or alter shape or size of ports, runners or combustion chambers. Only alteration allowed to heads are for push rod clearance and to install shaft rocker system. Maximum valve sizes are 2.08 intake and 1.600 exhaust. Valve seats and guides to remain as manufactured and in as-cast positions. Minimum combustion chamber size to be 62 cc volume. Valve angle to remain as manufactured. Approved cylinder heads as follows:
- General Motors (i.e. small block Chevrolet) - Brodix # 46 221
  - Ford Motor Company (i.e. small block Windsor) Brodix #46 223
  - Chrysler Corporation - Mopar - Brodix #46 222
- E.) No modification to intake manifolds, must be used as produced by manufacturer. List of approved intakes as follows:
- General Motors - Brodix #HV100946
  - Ford Motor Company -Edelbrock #2981 or 2980 (351) or #2921 (302)
  - Chrysler Corporation- Edelbrock #2915
- F.) Camshafts may be of roller, flat tappet or mushroom design.
- G.) Crankshafts and connecting rods must be steel. One inch inspection hole required in pan - no obstructions to crank and rods. If obstructions are present, must remove pan for inspection.
- H.) Flat top pistons only.
- I.) All engines must run unaltered one inch carburetor spacer – Flow Design part #FD7060 with additional restrictor governor plate with (2) barrels at .950 and (2) barrels at 1.00.
- J.) 7800 RPM chip must be used.
6. Engine Claim Rules – All engines susceptible to claim
- A.) Grand National \$5,000.
- a. Claim includes: long block, intake, oil pan, valve covers, and harmonic balancer
- B.) GM Crate 602 will be \$2500. GM Crate 604 will be \$4500.
- a. Claim is for the original crate product purchased from the GM dealer, no extra components.
- C.) IMCA Spec Motor \$8,000
- a. Claim includes: long block, intake, oil pan, valve covers, and harmonic balancer
- D.) All carburetors are subject to a claim rule of \$800.00 for either a 2 barrel or 4-barrel carburetor.
- E.) All claims must be made in US cash in denominations no smaller than \$20.
- F.) Claimer must pay an additional \$50 US cash for removal fee to the claimer or for wrecker service.
- G.) Any driver, or their owner, or crew chief \* MUST BE IN GOOD STANDING WITH I80 SPEEDWAY\*competing in a feature event (A or B must take a lap) are eligible to claim engine (see above) Cars being claimed must have finished in the top 5 A feature positions. **Must be 13 cars or more starting the feature for an engine claim.**
- H.) Engine Claim notification must be done within 10 minutes of the drop of the checkered flag to one of the I-80 officials that is connected by radio to race director or tech officials. Money must be presented within 10 minutes after the notification of **the claim. Money does not have to be on the driver in the race car before the claim is in process.**
- I.) **DISCLAIMER:** If a car needs to compete the following night(s) in the Bragging Rights Championship or NASCAR event the motor will be taken out after the second or third night of competition. The engine will be marked, serial numbers, and pictures of seal bolt will be taken the night of the claim. After the conclusion of the event(s) The claimer can decide to cancel the claim if the claimer & I80 official agree the motor shows to have problems or sabotage.
- J.) If the driver denies the claim or the claimed engine shows any sabotage at any time during a claim the claimed driver will lose all points and earnings for that event and the previous event(s) in the claimed time period, a \$500 fine, will lose all points for the season and 3 nights of I80 competition (not to go over into the next year). You will not be able to receive any winnings or contingencies until the fine has been paid.
- K.) The claimer is not required to run this engine at any upcoming events.

### SECTION 3: FUEL AND FUEL CELL

1. Gasoline Only. (Preferred VP 110 or VP Late Model +) No propylene. Fuel testing with a digitron dielectric meter.
2. **E-85 is not allowed.**
3. All testing with the digitron dielectric meter is the responsibility of the driver or owner before the races if you are in question of your reading of rule #1.
4. **Commercially manufactured fuel cells mandatory, The only fuel cells that are approved are those that meet and/or exceed the FIA/FT3 specifications, NO alterations (example: alterations to top plate, removal of foam, etc.). fuel cell capacity may be from 5 to 32 gal including fill spout. You may purchase a kit to make existing fuel cells FIA/FT3 legal. Fuel cells that are not contained within a welded steel tubing "rack" must have two (2) equally spaced steel straps that measure two (2) inches wide by 1/8 inch in thickness that completely surround the fuel cell. The straps must be bolted to the frame. Longitudinal (front to rear) orientation is recommended for strap mounting. Fuel cell cannot extend below rear end tubes.**
5. Fuel cells must have non-vented caps, rollover valves in return and vent lines, must pick up from the top of the fuel cell.

**Willy's Carburetor roll over plate part #WCD4000 is approved for competition.**

6. Fuel cell guard must be made of at least 1" tubing and must extend to the bottom of the fuel cell.
7. No electrical fuel pumps allowed. (mechanical pumps will be permitted)

**SECTION 4: WINDSHIELD SCREENS ROLL CAGES. FRAMES.**

1. All main cage and door bars must be 1.5" od x .083 wall minimum.
2. **Bars in the windshield area will be required from left 1 ½ inch down tubes to right 1 ½ inch down tubes connecting roof hoop to the cowl area there must be ½ inch tubes (vertically mountes) spread a maximum of 6 inches. We also recommend a screen across the full area from left 1 ½ inch down tube to right 1 ½ inch down tubes, no bigger than 1x1 squares and no smaller than ½ x ½ squares across the whole front area.**
3. All cars are required to use a roll cage with at least 3 horizontal bars across the driver's door.
4. All competing models will be required to have a vent window bar and a bar in the center of the roll cage over the driver's head.
5. All cars will be required to have a bar to protect the driver's feet.

**SECTION 5: CARBURETORS, AIR CLEANERS AND AIR BOXES**

1. Any eligible carburetor may be used. Approval of carburetor means approval for all competitors within the same guide lines.
2. All competing, 602, 604, or 525 crate must run the Holley 4150 series carburetor. Must meet the Holley 4150 height specs, up to 850 CFM.
3. IMCA Spec Motors must run the Holley 4150 series carburetor. Must meet the Holley 4150 height specs up to 850 CFM with governor plate with (2) .950 and (2) 1.00 restrictors. Restrictor size may be changed to keep competition equal at the official's discretion.
4. Grand National Motor options:
  - A) The Holley 4150 series carburetor. Must meet the Holley 4150 height specs up to 850 CFM with governor plate with (4) 1.00 restrictors. . No Other spacer allowed except for 2 gaskets. Restrictor size may be changed to keep competition equal at the official's discretion.
  - B) The Holley 4412 with only the following alterations:
    1. Choke plate may be removed. Choke housing MUST remain in place.
    2. Jets and power valve may be changed. NO DIAL – A – JET
    3. No Vacuum leaks between air cleaner and cylinder head valves.
    4. The accelerator pump squirter may not extend into the area directly above the venturi (tech purposes)
    5. Adapter and/or spacer and gasket may not exceed 1 1/2". Carb must be mounted in stock configuration (Carburetor fuel bowl facing front). All carburetor spacers/adapters must be approved by track tech officials prior to use.
5. Carburetor for Grand National Motor option 2 will be the Holley 4150, with a 1" thick plate governor/restrictor with the 1.0 restrictors installed. No Other spacer allowed except for 2 gaskets. Restrictor size may be changed to keep competition equal at the official's discretion.
6. Any eligible dry element round air cleaner will be permitted. (Min.12" Max.17" in diameter and maximum 4" in height.
7. Only round metal air filter housing will be permitted. The top and bottom of the air filter housing must be solid and must be of the same diameter. A max. Of a 1" lip will be permitted from the air filter element to the top edge of the air filter-housing top and bottom. The air filter housing must be centered and set level on the carburetor. It is permissible to attach a shield to air filter housing. The shield can be no higher than the height of the air filter element. Tubes, Funnels or any device which may control the flow of air will not be permitted inside the of the air cleaner or between the air filter housing and carburetor.
8. Air box or cowl induction may be used as long as the air box is designed to draw air from under the hood. One side or end of the air box must be open. Hood scoops will be permitted to be open in the rear only. The air cleaner hole in the hood may be 2" in diameter bigger than the air cleaner.
9. No carburetor air dams or devices allowed increasing the airflow to the carburetor, either inside or outside air cleaner.

**SECTION 6: SPACER PLATES, AND IGNITION SYSTEMS**

1. A spacer plate may be used between the carburetor and the intake. May be a 1-hole or 4-hole spacer plate, with no taper, nothing inside of the spacer plate to enhance or increase the airflow to the engine. (Up to a 2" spacer on GM 602) (upto 1" spacer on GM 604)
2. 4412 carburetor spacer may not exceed 1 1/2" carburetor must be mounted in stock configuration with the carburetor bolt facing forward. All carburetor spacers/adapters must be approved by track tech officials prior to use.
3. No on board computers, micro-controllers, processors, automated electronics, recording devices, Electronic memory devices, memory chips, or digital readout gauges of any kind permitted. Digital Tachometers will be allowed.
4. Only one (1) electronic firing module amplifier is permitted, if used.
5. Only one ignition coil permitted.
6. NO Traction Control of Any Kind.
7. No crank triggered ignitions.

8. **Only one ignition allowed per car. No crank triggered ignitions.**
9. All cars must have 6 pin weather tight connector, No wires in looms or wires bunched up, No switches in wires, No shorts in wires, All wires must be in plain sight for inspection, It is also the drivers responsibility to set timing if an ignition box exchange occurs.

## **SECTION 7: CLUTCH, FLYWHEEL AND BELL-HOUSING**

1. High speed multiple disc clutches are permitted.
2. All cars must be able to be put in and out of gear with the engine running and the car sitting still.
3. All competing models must be equipped with a flywheel and an operable starter.
4. All cars with external clutch must have steel explosion proof bell housing or an aluminum bell housing with a 4" x1/8" 270 degree steel scatter shield around the clutch.
5. A production manufactured steel bell housing or a heavy duty explosion proof aluminum bell housing may be used on all models.

## **SECTION 8: TRANSMISSION, DRIVE-SHAFTS, AND REAR TREAD WIDTH**

1. OEM. Production manufactured 2 to 4 speed transmissions that are cataloged through dealer channels will be permitted. Bert, Brinn, and Falcon circle track transmissions are permitted.
2. All transmissions must have at least 2 speeds forward and one reverse.
3. No 5 speed, over drive or automatic transmissions allowed.
4. All transmissions must bolt directly to the rear of the bell housing which bolts directly to the rear of the engine block.
5. All drive shafts must be painted white.
6. All cars must have a 360-degree hoop toward front of drive-shaft, made of at least 1/4" by 2" steel strap.
7. It is recommended to have a drive-shaft safety hoop built out of 4 or 5-inch diameter by 6 inch long round tubing.
8. Full floating rear ends are compulsory. Rear end must be quick-change type and track approved.
9. Rear end coolers may be used, but cannot be mounted inside of the driver's compartment.
10. No open tube rear ends allowed.
11. No cambered rear ends permitted.
12. The rear tread width can be no wider than the front tread width. (Both sides)
13. Axles must be made of steel only. NO titanium.

## **SECTION 9: BATTERY, MIRROR, RADIATOR, FAN BLADE, AND WATER PUMP**

1. **(1) - 12-volt battery must be mounted between the frame rails with positive fasteners (not strapped or bungee cord). NOT in the driver's compartment. All Battery cables and battery cable ends must have a non-conductive covering to prevent electrical contact with any part of the race car creating electrical shortage.**
2. **(1) battery disconnect must be installed to the negative battery cable. Must be in reach of the driver near the shifter or on the deck behind the driver seat. Recommended: to have the disconnect mounted in both locations.**
3. No mirrors permitted inside or outside of car.
4. Only 1 radiator permitted for the purpose of cooling water. Radiator must be mounted in front of the engine.
5. Water pump must mount in stock location.
6. Water pumps must be of stock design steel or aluminum allowed.
7. No electric fans permitted. No flat bladed fans permitted. Cooling fan must be mounted on the water pump, enclosed in a 90-degree metal fan shroud.
8. No electric water pumps
9. Radiator overflow tube must exit towards the ground.

## **SECTION 10: ROOFS, BODIES, AND NOSE PANELS (See attached drawing for specs)**

1. Bodies must be mounted in a similar manner to stock appearing.
2. Aftermarket production manufactured nose panels must be mounted in approved manner. The length measurement of the nose piece for all models will be 51" from the center of hub to front edge of nose. The front and sides of nose panel cannot be cut or altered, with the sides mounted no lower than 4 inches from the ground with the car at racing height. The sides of the nose panel must be parallel to the ground.
3. The racetrack officials must approve any bars ahead of the nose panel.
4. Roofs may be made of fiberglass or aluminum, but must meet specifications as set forth in the rules and must be approved by the officials.
5. All roof panels must have front mounting posts and rear roof panels.
6. The front roof posts will be required to be a minimum of (1) one inch wide and a maximum of (2) two inches wide. Left and right side will be required to go to the outer rear corner of the front fenders.
7. **Roof Panels must be mounted directly to roll cage with no more than a half inch spacer.**
8. Rear roof panels will be required to extend out to the quarter panels.
9. The Rear of the base of the filler panels can be mounted no closer than 3 inches to the rear spoiler brace with a maximum length at the base of 43 inches forward. The top of the filler panel mounting point must start at the rear of the roof panel

and can be no longer than 17 inches parallel to the roof. The diagonal points of the rear filler panel can be bowed no more than 4" at the center of the panel from a direct line from both starting points (both of these points stated are the rearest points of the filler panel beginning) The front of the filler panel cannot bow forward from a straight line from the 17" to the 43" piece. If you are running open filler panels these pieces must be a minimum of 3 inches.

10. Left and right side rear roof panels must be the same length and design.
11. Car or opening covers are not permitted. Exception: In the event of rain or inclement weather you may cover your car until the weather passes or the rain stops

## SECTION 11: REAR SPOILERS AND REAR DECKS

1. All competing makes and models will be permitted to use a one-piece solid rear spoiler 8" in height. (602 crate motor cars may run a 12" spoiler)
2. All spoiler measurements will be made from the deck and will be a measurement of all spoiler material.
3. All competing models will have a maximum rear spoiler width of 72".
4. All competing models will be permitted to use 3 spoiler braces. Spoiler braces may be 18" maximum at base but cannot extend past the rear roof posts.
5. **All spoiler braces will be required to fit the tracks template, be no higher than 4" at the front of the base and can be no higher of extend rearward past the rear spoiler.**
6. Spoiler braces will be permitted to have up to a 1/2" break in them.

## SECTION 12: WEIGHT RULES: All weight rules are to be met after all races.

**Weight rules maybe changed at any time as determined by Track Officials to equal the competition.**

1. Crate Engines unsealed may race at the discretion of officials weight rules may be adjusted.
2. 602 Crate with factory GM bolts not a reman: 2250 lbs.
3. 604 Crate with factory GM bolts not a reman: 2350 lbs.
4. Grand National engine option: 2325 lbs. With a 7000 RPM maximum chip rule.
5. Grand National engine option: 2400 lbs. With no chip rule.
6. IMCA Spec Motor option: 2350 lbs. Wet Sump with 7800 chip. With (2) 1.000 and (2) .950 restrictor inserts inside a 1" thick governor plate. May also add a 1" IMCA spacer plate for a maximum of 2.050 inches total. 25lb of total weight must be mounted in front of the rear motor plate. \*Restrictors and Inserts available for purchase at the track. \*Dry\* sump engines must also add an additional 50 lbs to the total weight.
7. All weights must be in block form of no less than 5lbs and must be painted white with the car number on them.
8. All weight must be bolted to the frame of the car in a secure manner. Should use at least 2 half inch bolts for each weight that is bolted to the car. No stacking of weights permitted.
11. Any weight mounted behind the fuel cell must be mounted below the frame of the car.
12. Any mounting of weight inside of the driver's compartment or above the interior of the car is NOT permitted.

## Section 13: TIRE RULES

1. The track tire will be Hoosier WRS or WRS 2-D55.
2. 11.0/88, 11.0/90, or 11.0/92 only will be permitted.
3. The composition and character of the tire may not be altered from original. This includes NO soaking, softening, conditioning, chemicals of any kind or recapping. If any D-55 or LM40 tire is softer than 55 points on the durometer, warmers and/or any other means of artificially warming tires are prohibited.
4. Recommended washing tire with water only. Warning soaps and cleaning products may be detected as chemicals or altering the tires and is subject to disqualification, fines and suspension.
  - a) **1/25/17 – 6/1/17 : If any of the 4 tires are cut, grooved, needled, siped, or altered beyond 24 grit sandpaper in removing the glaze an additional 50lb must be added to your total weight rule. If cut tires are used in the heat they must be used in the feature also. If non-cut tires are used in the heat non cut tires must be used in the feature unless ok'd by official.**
  - b) **6/2/17 – foreseeable future: No tire can be cut, grooved, needled, siped, or altered beyond 24 grit sandpaper in removing the glaze. Any of these alterations will result in disqualification.**
  - c) **6/2/17 – foreseeable future: Option for Hoosier LM40 / WRS55 UNCUT on Right Rear only with Hoosier WRS55 UNCUT on all other corners.**
5. You may only use sandpaper up to and including #24 grit to remove the glaze on the top layer of tires. When you are completed with the sanding of the tires, the edges of the tread block must remain the same as the edge of the block next to it. You will only be able to create the look of a worn tire and not something of a different tire face appearance (example: no wavy tread pattern or deep grinding will be allowed). Metal grinding disks are not permitted
6. Tire protest: Any driver, owner, or crew chief competing in a feature event (A or B must take a lap) are eligible to protest tires for chemical compounds or conditioning. Cars being protested must have finished in the top 5 A feature positions. Protest fee will be \$300 for 1 tire – 1 test. All other tires on the same car can be tested for an additional \$250 per tire. Totaling \$1050 for all 4 tires on the same car being protested at the same event. Protest must be cash and bills must be in denomination of not less than \$20.
7. Tire protest and money must be presented within 15 minutes of the drop of the checkered flag to one of the I80 officials.



Winnings of the protested tire will be held until test comes back along with any other winnings made until the tests come back.

8. Tire Sample(s) will be cut with a blade/tool provided by the person being protested.
9. Denial Refusal of Tire protest will result in a Disqualification for that night (loss of both winnings & points) Loss of 100 additional points & a \$500 fine due before you can compete or receive any awards or points at I80 Speedway or Bragging Rights Championship again. Protester will receive his/her money back if protest is denied.
10. If testing proves tire sample to be illegal you will lose winnings for the night you were protested and all points accumulated in the season up to the protested date this includes loss of all bragging rights points. \$500 fine due before you can compete at I80 Speedway again. You will not be able to compete in the next 3 I80 events (not to roll over into the following season.)
11. If Protested tire comes back to be illegal the person who protested the tire(s) will receive the Protested drivers winnings for that event up to the amount that was used to protest. (2/4)

#### Section 14: HEADERS & EXHAUST

1. No Tri-Y headers allowed.
2. Round tube headers only. All primary tubes must enter directly into one collector at the same point at the end of the header. Must remain dual exhaust, no crossover or "Tri-Y" pipes. No exhaust through body panels or fenders. No 180 degree headers. No zoomies or side exhaust allowed.
3. All headers must have collectors on them and must exit under car and pointed toward the rear of the car. No Mufflers required.
4. Header tubes must be 1 5/8" to 1 7/8".
5. Absolutely nothing can be stuck in header tubes, collectors, or mufflers to increase or decrease flow.
6. 18" straight or up to 90 degree elbow allowed.
7. Mufflers at Off Road Speedway please call Jerry 402-841-0165

#### Section 15: WHEELS & BRAKES

##### 1. Brakes, Brake Components, Wheel Hub:

- a) Brake calipers must be manufactured of aluminum.
- b) The brake caliper including brake caliper pistons must be used as produced by the brake caliper manufacturer.
- c) Brake rotors must be manufactured of magnetic steel, stainless steel or cast iron.
- d) Brake rotors must be used as produced by the brake rotor manufacturer.
- e) Wheel hubs must be manufactured of aluminum or magnesium.
- f) Wheel hubs must be used as produced by the wheel hub manufacturer.
- g) The combined weight of the wheel hub, wheel bearings and seal, spindle nut and washers, brake rotor and attaching hardware, the axle cap, and the wheel spacer must not exceed 27 pounds.
- h) All brake lines must be metal. No plastic lines, Brake hoses must be steel braided.

##### 2. Wheel, Wheel Discs, Wheel Spacers:

- a) Only aluminum wheels will be permitted. Maximum wheel width 14". Bead locking devices permitted on all 4 corners.
- b) Only approved wheel discs will be permitted. No plastic covers. Approved wheel discs are wheel discs that are fastened to the wheel using a minimum of three (3), 1/4 or 5/16 inch diameter magnetic steel hex head bolts. Foam style mud plugs are permitted.
- c) Only aluminum wheel spacers will be permitted. Maximum 2 1/2".
- d) The combined weight of the wheel, wheel hardware, wheel disc and fasteners, and tire must not exceed 40 pounds\*. \*The maximum combined weight in this rule is based upon current tire rules and may need to be adjusted in the event of an alternate tire.

#### Section 16: CAR PROTEST RULES

1. All race protests must be placed with a tech official in writing at the scale or in the tech area no later than 5 minutes after the A feature.
2. Only drivers may make a protest and must have competed in the "A" feature. Track officials have the right to inspect any car at any time at no charge.
3. Track officials have the right to reject any protest.
4. Non-Engine or Non-Tire protests: The cash protest fee for all non-engine related protests is \$100. Only one item may be protested per event and the cash protest fee must be given to a Tech official along with a written protest. The car in protest will be checked after the main event. If the car in protest is found illegal, it will lose half the points and all money for that night and protester will be returned his/her protest fee. If the car is found to be legal the \$100 is given to the car in protest.
5. The cash protest fee for a DYN0 RUN PROTEST is the current cost of the dyno run (approx. \$350) + \$50 for the wrecker plus \$100 (approx. \$500 total). If the engine does NOT comply with the prescribed HP limits, the protestor receives all of his money back and the penalties will apply and the illegal driver is responsible for the wrecker and any dyno fees. If the engine does comply with the HP limitations, the dyno fee will be paid with the protestor's cash fee and protested driver

keeps \$100.

6. All illegal parts and/or illegal crate engines will be marked and kept by the track.

## **Section 17: APPEARANCE AND NUMBERS**

1. All cars must have bright paint jobs and bright numbers. No tape, shoe polish, or metallic tape can be used for numbers. Numbers colors must contrast with the body color, preferably with a high contrast outline.
2. Dark colors are not recommended.
3. Different color paint on each side of the race car is not recommended.
4. We strongly suggest that numbering and lettering be done by a sign painter or professional, as it makes your car look much better and more like a race car.
5. Grand National car numbers must be 24" tall and 3" wide, and located on both sides of the car. An 18" tall roof number with the base of the number on passenger side of roof is also required.

EIRI- (Except in rare instances) Decisions of officials are final and binding without exception! Any rule changes or clarifications during the course of the year will be published at [www.i80speedway.com](http://www.i80speedway.com) and will be considered as an official part of rules.

## **SECTION 18: LINE-POCEDURES FOR THE BRAGGING RIGHTS LATE MODELS**

1. All tracks will utilize a (1) week points average for all heat race line-ups.
2. Top 3 in all heats will qualify for invert. Invert for feature will also be based on a (1) week average.
3. Any cars that did not attend the previous points event will start the back of the heat and invert portion of the A if qualified.
4. All cars not qualifying for invert positions will be lined up according to their heat race finish.
5. Opening night & any specials tracks can utilize draw, redraw or a passing points system for qualifying.
6. In the event of a double feature the second feature must utilize a draw or requalifying for second feature no heads up.

**The owners, management and officials of I-80 Speedway wish to publicly state that ALL existing or future Race-class or Track Sponsors have NOT had any input on any rules changes to the existing or future classes.**

Numbers from the previous season will be held until March 1, 2016  
Grand National reserved numbers can be obtained by calling  
Lee Ackerman at 402-342-3453 or email: [lisa@kosiski.com](mailto:lisa@kosiski.com).

### **Tech Info:**

Rick Holling at 402-515-1635 or email [ricotech92@cox.net](mailto:ricotech92@cox.net)  
Lisa at 342-3453 or email [lisa@kosiski.com](mailto:lisa@kosiski.com)

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