



1 Fair Skies Drive Ona, WV 25545 Tel: 954-881-4271 Fax: 954-771-9809 email: lynnz@onaairpark.com

2018 CLASSIC RULES

February 7, 2020

Classic Car Rules

NOTE: An overbore up to 0.060 is allowed on 305 cu in engines with 3.736 bore x 3.480 stroke. The driver of any engine found larger than the allowed maximum will be fined \$300 and loss of all points. Only 5.7 GM rods are allowed.

CAR BODIES:

- A. All bodies must be positioned on the frame in the exact location as designed and the front firewall of body will be located at overlap seam on frame rails.
- B. All fiberglass bodies must have a neat appearance and must maintain its original configuration, size and shape.
- C. The body must maintain standard windshield opening.

FIREWALLS and FLOORS:

- A. The floors must be complete, and the floor must be steel and extend from the left side to the right side.
- B. A steel firewall must separate the driver from the engine.
- C. A steel firewall not less than 24 gauge thick must separate the driver from the fuel tank and must be sealed on top, bottom and sides. It is permissible to RIVET, bolt or weld the firewall into position.
- D. A master switch assembly must be Ona Speedway approved.

DASH & GAUGES

- A. The dash panel must be installed. A water temperature gauge, oil pressure gauge, RPM tech and a vision light can be incorporated in the dash panel. A tachometer is a permitted option.
- B. A switch and starter button must be installed close to the driver in easy reach and must be grounded to metal.
- C. PLEASE NOTE: Switch assembly must be approved.

REARVIEW MIRROR

- A. A rearview mirror is optional
- B. No rearview mirrors are permitted outside the car.

RADIOS

- A. RACEivers ONLY, tuned to 454 mhz. No 2-way radios

WINDSHIELD

- A. A full Lexan FMR-104 windshield must be used. FULL means covering the complete windshield opening.



2018 CLASSIC RULES

February 7, 2020

Page 2 of 11

SIDE WINDOW

- A. A racing approved nylon mesh screen in the left window on the driver's side is required.

GRILLES

- A. Screen wire fastened to the inside of the grille.

HOODS

- A. A hood is required and must remain to actual configuration at purchase.
- B. Hood pins or fasteners may be used on both, front and rear hood. No cars will be allowed to start a race minus the hood. PLEASE NOTE: If a hood is lost in a racing accident it is excused and may re-enter the race.
- C. A repair or replacement of the body parts or pans must be completed by the next race.
- D. Standard front - back up to 1 3/4 and hollow

BUMPERS

- A. No reinforced battering rams will be permitted.

REAR TRUNKS/DECK LIDS

- A. Cars that have rear deck lids must use positive fasteners at the original hinge line, rear on both right and left sides. Positive fasteners must be used at standard locking area, both right and left sides.

ENGINE RULE

- A. Only 305 cu in Chevrolet (GM) engines permitted. An overbore up to 0.060 is allowed on 305 cu in engines with 3.736 bore x 3.480 stroke.
- B. The driver of any engine found larger than the allowed maximum will be fined \$300 and loss of all points.
- C. Only 5.7 GM rods are allowed.

ENGINE:

- A. No porting of manifold or polishing of intake manifold is permitted. No matching of manifold to heads.
- B. Valve springs- must be stock GM Chevrolet or equivalent. They cannot exceed #115 on the seat when tested on the engine.
- C. Stock #4412 two-barrel Holley carburetor required. No modification. All air leads must be sealed.
- D. Choke butterfly may be removed.
- E. No vacuum leaks between intake valve and the top of the carburetor.



- F. Adapter Plate
- Adapter plate and gaskets cannot exceed 1 ½” in thickness.
 - Adapter plate may be metal or fiber.
 - Adapter plate between intake manifold and carburetor must be in the center of the intake manifold.
 - The hole in the adapter plate must be straight bore.
- G. Intake Manifold: Stock GM spread pattern Quadra jet manifolds only cast iron or aluminum low rise. PLEASE NOTE: No bow ties high performance not after market manifolds are allowed. Quadra jet carburetor attaching bolt pattern is a rectangle with dimensions of 4 1/4 x 5 5/8.
- H. Cylinder Heads: No special after market cylinder heads are permitted. Only GM stock 305 CT cylinder heads are permitted. No Vortec heads. Only 2 valves per cylinder. Intake valve maximum of 1.840 permitted. Exhaust valve is limited to 1,500. No special valve or valve sizes are permitted. Cylinder heads are limited to a minimum of 55 CC’s. No interior debarring or polishing is permitted. Studs may be pinned, poly-locks and screws in studs are permitted. The GM part number on heads must end with the number 601 or 450.
- I. Crankshaft Pistons and Rods: Only stock 3.48 cast iron crankshaft are allowed, no racing cranks will be allowed. Only stock 5.7 GM rods are allowed. Aluminum rods and steel racing rods are prohibited. Either flat top or dished pistons are allowed. Wrist pins must remain stock GM position. Forged pistons or cast type piston are allowed. Flat top pistons must have four valve reliefs in each piston. PLEASE NOTE: Engine block permitted minimum of .0” deck clearance.
- J. Crankshaft: Any flat tappet, hydraulic cam is acceptable as long as its lift does not exceed 0.280” when measured at the push rod socket. This translated to 0.420” lift at the valve. Cam may be indexed.
- K. Valve Lifter: Lifter must be hydraulic, no Rhodes type of anti-pump lifter, no oversize lifters.
- L. Rocker Arms: Rocker arms of stock configuration only of 1.5 or 1.6 allowed.
- M. Engine Location: Engine must sit in the middle of the frame rails. Setbacks and offsets from radiator to fuel cell will not be tolerated. Drive shaft must measure from coupler to coupler 49 ½ +/- ½”.
- N. Engine Mounts: Engine Mounts must conform to the original standard location. Only approved reinforced engine mounts are allowed. All engine mounts must be securely bolted.



2018 CLASSIC RULES

February 7, 2020

Page 4 of 11

- O. Engine Displacement: Formula for determining cubic inches bore x bore x .7854 x stroke x number of cylinders = cubic displacement. PLEASE NOTE: Any engine exceeding maximum allowable cubic inch displacement limit will cause the race driver and the car owner to be disqualified and fined. Only 305 cu in Chevrolet engines is permitted. Maximum overbore is 0.060.
- P. Oil Pans: Modified or stock GM pan ONLY. Baffles may be added.
- Q. Air Cleaner: Only a round air cleaner element is permitted. A minimum of twelve (12) inches, a maximum of 20 inches in diameter and a maximum of five inches in height. No holes are permitted in the top cover of the air cleaner. It is permissible to shield the frontal area of the air cleaner. Top and bottom of the air cleaner must be the same diameter. Any attached tubes or other induction system used to flow extra air into the air cleaner will not be allowed.

ELECTRICAL SYSTEM:

- a) No aftermarket type distributor permitted. Only stock OEM HEI distributor is permitted.
- b) No MSD hot boxes allowed.
- c) Generator/Alternator system, if used, must be working with charge.
- d) Self-starter must be operative. All race cars must start under their own power once the race is underway.
- e) The car may be pushed by hand pushing in the pit area and down pit road only, but under no circumstances is any car to be pushed onto the track from the pit area.
- f) Aftermarket coil is allowed as long as it matched dimension of stock coil and mounts in the original location.
- g) Battery must be located under the hood behind the seat or under the floor of the car. If the battery is located under the floor, the battery must be fully encased. Battery mounting positions must be approved by Ona Speedway.

COOLING SYSTEM:

- A. Water pump impellers may be altered
- B. Type of fan is optional
- C. Fan shroud may not exceed more than two inches after the fan blades.
- D. Radiator must remain standard appearing and remain in approved position

PLEASE NOTE: All cars should be equipped with an overflow tank securely mounted as a permanent installation. Factory installed catch pans are permitted.



AIRPARK & SPEEDWAY

2018 CLASSIC RULES

February 7, 2020

Page 5 of 11

OILING SYSTEM:

- A. Dry sump oiling systems are not allowed. Only standard engine oil pans are permitted.
- B. Oil pan baffles preventing oil from flowing away from the oil pump pickup are allowed and fully
- C. recommended.
- D. A minimum clearance from the bottom of the oil pan to the ground is four inches with the driver in the car at the end of the race.
- E. Any engine oil is permissible.
- F. Any oil filter cataloged for standard American manufactured automobile engines and cataloged as
- G. acceptable filters at service centers are permitted.
- H. Remote pre pump oil systems are permissible.

EXHAUST SYSTEMS:

- A. Any header permitted.

TRANSMISSION:

- A. Only standard production 350 turbo automatic transmission which are cataloged are available through regular dealer channels are permitted.
- B. No shift or ranges are allowed to be blocked out. Reverse and three forward gears must be in working order. Manual valve body kits are permitted.
- C. Transmission cooler is permitted.
- D. Stock torque converter designed only for 350 Turbo trans only.
- E. Vega torque converter are prohibited.

REAR AXLE

- A. No front wheel or four-wheel drive trains are permitted.
- B. Only steel rear end assemblies are permitted. Only GM 10 bolt Chevy (7 1/2" Gear) rear end permitted. Standard equipment on metric frames.
- C. Locked rears, welded, Detroit locker, limited slip differentials are allowed. PLEASE NOTE: No quick-change center sections or full floating rear hubs are permitted.
- D. Rear Axle ring and pinion may be any gear ratio.
- E. Hollow rear axles are not permitted.
- F. The allowable thread width on rear axle assemblies measured from the center of the right tire to the center of the left tire can be no more than sixty-one +/- 1/2 inch.

DRIVE SHAFTS and UNIVERSALS

- A. Drive shafts and universals must be similar in designed to standard production type and must be made of steel.
- B. It is mandatory that two steel brackets, no less than one inch wide and 3/16 inches thick be placed around the drive shaft and fastened to the cross member or chassis brace to keep the drive shaft from becoming dislodged.
- C. All drive shaft must be painted white.



February 7, 2020

Page 6 of 11

WHEELS

- A. The wheels must be approved for racing and must not exceed fifteen inches.
- B. An offset of three inches is approved for all four wheels.
- C. Only reinforced steel wheels are permitted. All four wheels must be fifteen inches in diameter and all four wheels must be the same size at all times. Maximum rim width is eight inches.
- D. Heavy duty lug nuts and bolts must be used.
- E. For body clearance an exception of a two-inch offset wheel may be used on the right rear only. The maximum tread width of 61" +/- 1/2"

TIRES

- A. Only 8" American Racer 970's may be used.
- B. All tires must have baby powder and tech official may ask you to remove any tire to have it checked for soaking.

FRAME

- A. The frame must maintain its stock dimensions when measured between the existing frame rails.
- B. Holes may not be cut in the frame rails to lighten.
- C. Front suspension wedge bolts are permitted. PLEASE NOTE: Only stock GM metric frames are
- D. permitted. NO special frames are allowed. 1978-1985 Chevy Malibu, Monte Carlo, Pontiac Grand Prix, Oldsmobile, Cutlass or Buick Regal (GM Frame Metric Only).
- E. No boxing or plating of the frame unless it is damaged, the frame must still maintain its original contour in all respects.
- F. An X may be installed into the frame connecting the four dogleg corners of the frame. If X is used, it must be a minimum of 1 1/2" round or square steel tubing with a minimum thickness of .080.
- G. Original transmission cross member may be removed if X is installed.

SUSPENSION

- A. Front suspension components must remain stock for manufactures original frame being used. GM Metric Frame Only.
- B. Aftermarket parts may be used as stock components as long as they remain the same size and they mount in stock locations.
- C. No helm joints are permitted.
- D. After marker tubular upper A frames are allowed, using OEM ball joint and spindles original to chassis.
- E. Lower A frames must be General Motors stock Metric Frame. Springs must mount in the standard location. Front shocks must mount from upper hood bar to the lower A frame. Only one stock wheel is permitted.
- F. Upper A frames must be approved by Ona Speedway.
- G. Front sway bars must consist of a one-piece standard General Motors sway bar.



- H. Rear coil springs must mount in the original spring mounting location. Rear sway bars must be General Motors stock.
- I. Both front and rear coils are classified as heavy-duty racing springs.
- J. No tubular GM sway bars are allowed. Must be GM solid stock.
- K. Rear shocks must mount in stock location.
- L. Rear trailing arms must be stock and mount in stock original mounting brackets.
- M. Only one shock per wheel. No coil over shocks are permitted. Only welded bearing shocks are permitted.
- N. Coil spring rubber inserts are permitted. No leaf spring or torsion bars are permitted.
- O. Must use stock type bushings- no mono-ball set ups are allowed.
- P. Front shock must be mounted in approved mounting position behind the spindle and the A frame.

SPINDLES, WHEEL BEARING, BALL JOINTS and HUBS

- A. All spindles must be GM stock only.
- B. Right front rotor can be replaced with a Coleman Steel two piece rotor #140-750-1 for small bearing or #140-750-2 for large bearings.
- C. Only steel hubs are permitted.
- D. No steel sleeves are permitted over the spindle.
- E. Offset spindles are not permitted.
- F. Wheel bearings must be standard type.
- G. Upper ball joints must be of the same specs as MOOG #K5208 or MOOG #6024.

THREAD WIDTH REQUIREMENTS

- A. All cars must maintain a maximum allowable thread width; front 62 inches, rear 61 inches + on half inch measured at the center of the tire, zero toe in at the spindle height.
- B. Steel or aluminum spacers are permitted to utilize the maximum allowable thread width.

WHEELBASE REQUIREMENTS

- A. All cars must maintain a 108" wheel base.
- B. When measuring wheelbase, one side measurement must be the allowable wheelbase. Maximum allowable tolerance cannot exceed one inch on the other side.

GROUND CLEARANCE REQUIREMENTS

- A. Frame rail and body clearance rocker panels will be six inches with driver in car at the end of the race upon inspections.



STEERING COMPONENTS

- A. Stock Metric Frame Steering box cannot be moved from the original GM factory stock location on the frame.
- B. All race cars must be equipped with a steel rod. SPECIAL NOTE: No rack and pinion steering allowed.
- C. Only stock tie rods, drag links and component parts must be GM Metric Stock.
- D. Spring loaded pin allowed in joints in steering shaft are permitted. Not more than two universal joints permitted in steering shaft.
- E. The use of universal joints in steering shaft are permitted. Not more than two universal joints permitted in steering shaft.
- F. The use of Heim joint may be incorporated in the steering shaft.
- G. Interchangeable pitman arms may be used.
- H. 17" race steering wheels are permitted.
- I. Center top of steering post may be padded.
- J. After market power steering kits or quickeners may be used.
- K. Collapsible steering shafts are allowed.

BRAKE SYSTEM

- A. Disc brakes are permitted on front wheels only. Only stock type front wheel brakes are allowed.
- B. Rear wheel brakes are drum type brakes with standard brake shoes. Positively no disc brakes are permitted on the rear of the vehicle. Brake components must be stock GM or comparable aftermarket replacement parts.
- C. Double reservoir master cylinder required. Brake pedal may be either floorboard type or hanging pedal.
- D. After market brake pedal assembly permitted. Master cylinder must be mounted in an approved manner.

FUEL SYSTEM

- A. All race cars competing in this division are required to have a commercially manufactured fuel cell. The fuel cell must be encased in a metal container of not less than 20 gauge steel. The fuel cell is limited to only eight gallons including vent and fuel neck.
- B. The fuel cell is required. It can be no more than eight gallon capacity and outside dimensions exceed 2312 cubic inches displacement. Fuel cells must be mounted above the rear spring buckets. Fuel cells must
- C. be equipped with a check valve at filler entrance to fuel cell. This will keep fuel from spilling in case of upset.
- D. Either or both right or left side pickup in fuel cell may be used.
- E. Only one fuel line permitted to transport fuel from the fuel cell to fuel pump.
- F. When fuel line is located on top of floorboard, the fuel line must be encased in a steel pipe. It is recommended that the fuel line run beneath the floorboard.



- G. No additional lines may be used on fuel systems. Extra fuel cells or fuel lines concealed or hidden is strictly prohibited. PLEASE NOTE: To properly mount the fuel cell between the rear spring buckets, the first step is to incorporate a box like base constructed of 1" square tubing welded to existing steel metal bars.
- H. Race fuel shall be automobile gasoline or track fuel only.
- I. Gasoline must comply with ASTM D4814 entitles and Standard Specifications for Automotive SPARKS
- J. IGNITION ENGINE FUEL and except limited to liquid hydrocarbons only, Class A through E, free of regards to area or seasonal limitations.
- K. Gasoline shall not be blended with aniline or its derivatives- Alcohol or other nitro compounds, no nitrogen compounds.
- L. No pressure systems allowed. Any concealed pressure type containers, fuel fill lines, or actuating mechanism will not be permitted.

FUEL PUMPS

- A. Electric fuel pumps are not permitted.
- B. Only stock standard side block mounting mechanical fuel pump permitted.
- C. After market fuel pump permitted. Provided they are the exact same size and mount in the standard mounting brackets as the original fuel pump.

OVERALL CAR WEIGHT

- A. For all Classic Race Cars competing, all cars must weigh a minimum of 2400 pounds before and after the race with the driver. No fluids for fuel loss or sold weight may be added after the event.
- B. No more than 55% of the total weight may be used as left side weight.
- C. Added weight required to bring the car weight to allowable legal minimum must be a block form with no less than five pound blocks. All added weight must be securely bolted to frame rail. Weight blocks must be painted white. No added weight will be permitted inside the race car. Dislodged weight cannot be added to race car after the event.
- D. Cars will be weighed with the driver.

PLEASE NOTE: The reason for painting added blocks white is to make them visible to the other competitors when they become dislodged and may be laying on the track.

IDENTIFICATION AND MARKING

- A. Numbers must be at least 18" high and on both sides of car on center of door. A number 24" tall must be on roof, reading from passenger side.
- B. 4" legible numbers must be on front and rear of car.
- C. Color of number must contrast with body color. No reflective numbers allowed.



DRIVER HELMETS

- A. Driver Helmets must meet all specifications set forth by the American National Standard Institute including SNELL.

SEAT BELTS and SHOULDER HARNESS

- A. A quick release belt no less than three inches wide is compulsory. Shoulder harness and additional v-type seat belts are compulsory. Shoulder harness must be no less than three inches in width. No inertia reel permitted on shoulder harness.
- B. Both ends must be fastened to roll cage using only aircraft bolts not less than 3/8 inch in diameter.
- C. Seat belt and shoulder harness must come from behind the driver.

RACE CAR SEATS

Aluminum racing seats are mandatory.

Aluminum seats inserted within a steel frame will be permitted.

All seat must have padded rub protectors.

Seats are not allowed to be further back than the rear hoop bar mounted 22" in front of the center line of the rear axle.

ROLL BARS

- A. A round steel tubing 1 3/4 x .095" rollover bars are compulsory and must be acceptable to Ona Speedway officials. Aluminum and/or other soft metal are NOT permitted.
- B. Roll bars must be welded.
- C. All cars are required to have a rear vertical hoop behind the driver's head connected to the left and right front roll bar legs at the roof hoop. The front roll bar legs must follow the contour of the windshield post and cowl.
- D. The rear vertical hoop must be supported by a diagonal bar from top left to bottom center or top right to center left. A roll bar must connect the left and right of the rear vertical hoop at seat height and across the floor pan near the bottom. An additional roll bar must be installed across the bottom of the dashboard, extending from the left and right must extend from the top of the rear vertical hoop to the rear of the frame in the trunk compartment. The front leg bars and rear vertical hoop must be connected with horizontal bars on the left side. The left side door bars must be convex in shape and spaced from the top to the bottom as equal as space permits and must have vertical studs equally spaced. Two angular studs must be attached from the next to the bottom door bar to the main frame rail. Right side door bars must have at least two door bars configured in an X or Y design. A vertical bar to protect drivers' legs roof wedge bar, transmission hoop and drive shaft hoop are required. Left side door must have a minimum of three bars. PLEASE NOTE: Additional bars may be added in the cage at the owners option.
- E. Roll bars must be padded from top of frame on the left side to the center of the top.
- F. Front and rear bumper supports must be 2"x 3" material.
- G. Roll bar installation and workmanship must be professionally constructed.



- H. Only four uprights are allowed in front hoop section one each in front and behind upper control arm mounts on each side of the car.
- I. Rear vertical hoop measured from the center line of the rear axle must be no less than 22 inches.

FIRE CONTROL

- A. Race car must have an approved fire extinguisher securely mounted within reach of the driver. The fire extinguisher must be mounted on an approved bracket designed strictly for the installed extinguisher. No fire extinguisher will be allowed to be taped to the roll bar.
- B. It is recommended that at all times driver wearing driving suits and gloves of fire-resistant materials that effectively cover the body.

PLEASE REMEMBER: SAFETY FIRST!!

WINDOW SCREEN

- A. The safety window screen must be rib type made from $\frac{3}{4}$ " wide nylon material.
- B. Minimum window screen size will be 22" by 16"

NOTICE:

Anything not covered by the following rules, abuse of the rules, and a creative interpretation of the rules should be checked with through the ONA SPEEDWAY TECH INSPECTORS before proceeding. Any decision on questionable items about rules is up to the EVENT DIRECTOR and the TECH INSPECTOR, and our decision is FINAL!

The above rules and specifications 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 speedway events. By participating in these events, all speedway entrants 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 specifications. They are intended as a guide towards the sport and are in no way a guarantee against injury or death to participants, spectators, or others.

Note: RULES may be CHANGED as deemed necessary for the FAIR SPORT of racing.