2014 SPORTSMAN RULES

RULE BOOK DISCLAIMER

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all events, and by participating in these events, all participants are deemed to have complied with these rules. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATIONS OF OR COMPLIANCE WITH THESE RULES AND OR

SHALL RESULT FROM PUBLICATIONS OF OR COMPLIANCE WITH THESE RULES AND OR REGULATIONS. They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator, or official.

The race director shall be empowered to permit reasonable and appropriate deviation from any of the specifications herein or impose any further restrictions that in his/her opinion does not alter the minimum acceptable requirements. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATION OF SPECIFICATIONS. Any interpretation or deviation of these rules is left to the discretion of the officials. Their decision is final.

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This class of Race cars is designed to be a lower budget V8 class with some exceptions.

- 1. Roll Cage
- 2. Fuel Cell
- 3. Window Net
- 4. Seatbelts
- 5. Fire Control
- 6. Racing Seat
- 7. Brakes

SECTION #2 - COMPETING MODELS

1968 OR NEWER AMERICAN MADE TWO DOOR CARS LISTED BELOW:

| General Motors | Ford | Mopar | |
|----------------|-------------|-----------|--|
| Monte Carlo | Taurus | See Track | |
| Camaro | Thunderbird | | |
| Lumina | Mustang | | |
| Cutlass | Fusion | | |
| Regal | | | |
| Firebird | | | |
| Grand Prix | | | |

SECTION #3 - CAR BODY REQUIREMENTS

- 1. Aftermarket bodies are allowed.
- 2. You must have Front and Rear Fire Walls. No Holes

- 3. Front Firewall maybe reworked to allow exhaust to cross over to right side.
- 4. Full Stock Type Windshield must be retained, Lexan or Plexiglas permitted.
- 5. Windshield must have two 1" support in center of windshield
- 6. Rear Window Optional approved by Track Official, if used.
- 7. Trunk Floor Pan Optional.
- 8. Interior Floor Pan can be raised a Maximum 10" on the right side to allow exhaust system to be installed.
- 9. Trimming of Fenders permitted to clear tires, ONLY.
- 10. Spoiler on Rear Deck lid permitted 5" (five Inches).
- 11. Hood No Airflow Enhancement devices of any kind.
- 12. Car Weight must be 3100lbs. With Driver after Race with a minimum of 1300 pounds Right Side. (Any car that wins 3 races is subject to a 50lb weight increase by the track). Cars with Coil Overs must weigh 3250lbs.
- 13. Dashboard can be modified to accommodate racing gauges, Made of Aluminum or Steel. Offset Dash Allowed.
- 14. Carburetor or Breathers cannot be seen above hood.

Foot Note – Car's must be neat in appearance at ALL Times with in reason – you know what we mean!

SECTION #4 – GENERAL ENGINE REQUIREMENTS

| Gen | eral Motors | Ford | Mopar |
|-----|--------------------|-------------|-----------|
| 350 | 602 Crate Optional | 351 Windsor | See Track |

1. Engine Displacement and Engine Stroke will be Stock for Engine being used with a Maximum allowed Overbore of Sixty Thousandths (.060) of an inch.

2. The Engine Block MUST be Stock Cast Iron Block with OEM Part Numbers. No aftermarket, GM Performance, or Ford VSO/SVT Racing Blocks allowed. No cutting of Block Deck.

3. Cast iron or steel cranks can be used no Stroker Cranks allowed. Crankshaft maybe turned (.020) maximum on rod and main journals.

4. Connecting Rods and Pistons

- A. Stock Rod length for motor used. No cross breeding Ford parts.
- B. Stock Factory connecting Rod only
- C. Rod can be polished for strength.
- D. Combination of Rod, Pin, Rings & Piston must weigh a minimum of 1000 Grams in Race ready condition.

5. Cylinder Heads Allowed

GENERAL MOTORS

- A. Any GM small valve head.
- B. Only use of World Products brand head permitted:

1. 58cc Bare Part #955-042650

2. 58cc Assembled Part #955-042650-1

In Competition Products Catalog -

- 1.94 X 1.500 with 170cc runner
- C. GM angle plug head allowed.
- D. GM Vortec Head Allowed.

FORD

- A. Any Stock production head offered on a 2-barrel version of the motor used.
- B. Only use of World Product brand head permitted

3. 58cc Bare Part #955-053030

4. 58cc Assembled Part #955-053030-1

In Competition Products Catalog -

1.94/1.680 with 180 CC intake runner.

6. Pistons must be Flat Top Aluminum with two (2) or four (4) valve relief permitted. Mist have full-side skirt pin in stock location.

7. Cam Shaft

- A. Roller Rocker Arms are permitted, no Stud girdles.
- B. Any hydraulic cam shift and hydraulic lifter permitted.
- C. No mushroom lifter.
- D. No collapsible lifters.
- E. No Roller Cam.

8. Intake Manifolds

Any Low Rise aluminum intake permitted.

- 9. GASKETS General Motors and Ford
 - A. One piece Two (2) hole paper gasket maximum 0.065" thick, that matches exterior of carburetor throttle base plate installed between carburetor and 1" metal spacer with **1.50**" holes. Must use same size gasket for Plate & Intake manifold.
- 10. Matched porting on Intake & Heads are NOT allowed. Removal of Material Inside runners is NOT permitted if Cast marks are gone- IT IS ILLEGAL.
- 11. Carburetors General Motors and Ford A. Holley 500 CM Bad Boy 2BBL #510-0-4412C.
- 12. Engine Location -
 - A. <u>General Motors</u> engine must be located so that center of No. 2 spark plug hole is in line with upper ball joint +/- one inch.
 - B. <u>Ford</u> engine must be located so that Front face/edge right cylinder head is in line with right upper ball joint +/- one inch.

SECTION #5 ENGINE/CAR ELECTRICAL SYSTEM

- 1. All Ignition System must be acceptable to Track Officials.
- 2. MSD Box can be used.
- 3. Spark Plugs Any make or brand may be used.
- 4. Alternator system must be mounted on Front of engine in stock location.
- The self-starter must be in working order. Once race is underway, cars can be started by hand pushing in **Pit Area** Only. Pushing on to the **Race Track** from Pit Area IS NOT Permitted.
- 6. Battery must be located in front of the rear axle housing behind the Driver's set. Mounted in a Marine or Steel Box and securely mounted.
- 7. All Electrical Switches must be located on the Dash Panel. Main power switch mounted so that rescue personal and driver can reach it.

8. <u>SECTION #6 – ENGINE COOLING SYSTEM</u>

1. The Engine cooling system must remain stock

2. Only stock mechanical water pumps allowed, it must turn in the same direction as the crankshaft.

3. Engine driven fans must be operational and belt driven from crankshaft. Free spin or clutch type fans will not be permitted.

4. Engine driven fan must be standard magnetic steel fan with a minimum of Four (4) blades. Minimum diameter of fan must not be less fan 14". Fan blades must be minimum of 31/2 "wide. Flat fan blades are NOT permitted.

5. Electric Engine cooling fans are allowed.

6. Aluminum Radiators permitted – Water ONLY, NO Antifreeze.

7. The fan shroud must follow the entire circumference of Fan and extend no more that 1'' rearward of trailing edge of fan blade.

SECTION #7 – ENGINE LUBRICATION

- 1. Oil Any type of oil is allowed.
- 2. Stock or Oval track pan are allowed
- 3. Dry Sumps are NOT permitted.

SECTION #8 – ENGINE EXHAUST SYSTEM

- 1. After Market headers are permitted.
- 2. Tail pipe must be turned down under car.
- 3. Any muffler allowed that does not exceed 80 decibels at the property line. (Per County Regulations)

SECTION #9 - DRIVE TRAIN

Transmissions Allowed

- 1. 3 or 4 speed stock transmissions. No after market allowed.
- 2. Automatic transmissions allowed. You MUST use a torque converter 10" minimum diameter.
- 3. Bell housing must be a "Lakewood" type 360 degree drag racing style that is blow-proof. The bottom may be cut out for inspection.
- 4. Any aluminum or steel flywheel is permitted. No cast iron flywheels.

- 5. Must have stock appearing clutch, pressure pleated, and throw out bearing. Must have same appearance as a stock manufactured OEM clutch disc, pressure plate, and throw-out bearing.
- 6. Clutch assembly must be at least a 10" OEM type.
- 7. No couplers, clutch can. If you have to ask it is wrong. After market flywheel cannot have weight removed.
- 8. Only Stock Drive shaft permitted, minimum of 3" diameter. No aluminum drive shafts. Drive shafts must be painted WHITE
- 9. Drive shaft loops are to have two (2) 360 degree, 1/4 inch thick and One inches wide solid steel required. Must be located six (6) inches to twelve (12) inches from each universal joint.
- 10. All added weights must be painted, numbered with car number and secured, with Tech Officials approval.
- 11. <u>Rear ends 9" Ford/ 10 or 12 Bolt General Motors</u>
 - A. Mini spool or full spool allowed. Detroit Lockers are permitted.
 - B. 3 Link suspension permitted
 - C. Right and Left trailing arms must be same length.
 - D. Top bar must be steel, and can be adjustable. No spring-loaded bars.
 - E. Pan hard bar must be of steel material.
 - F. Quick Change Rears are allowed.
- 12. Wheels
 - A. Only 15-inch diameter five lug magnetic steel wheels with a 10inch rim width and a reinforced center will be permitted.
 - B. All wheels must be same width and offset (back spacing)
 - C. Solid heavy-duty magnetic steel lug bolts and nuts must be used.
 - D. Bleeder valves will not be permitted.
 - E. Tires must not be more than 6"inches (+/-) $\frac{1}{2}$ inch outside of body.
 - F. Wide Five or five on five permitted.

<u>SECTION #10 - FRAMES</u>

- 1. Minimum wheelbase 105. Longer wheel base vehicles can be shortened to 105 inches (+/-) $\frac{1}{2}$ inch.
- 2. General Motors or Ford stock frames can be switched.

- 3. Rear clip can be replaced from bottom kick up to rear bumper with box tubing.
- 4. <u>Clarification:</u> You can use a stock front frame clip or a uni-body frame and complete the chassis with an after market tubing. The only portion of stock frame that can be replaced is the Rear Clip and the Area in Front of the Front spring pockets to the Front bumper.
- 5. Frame height must be no Less than 5 $\frac{1}{2}$ inches for Full frame cars. And 5 $\frac{1}{2}$ inches under the body panel on Sub frame cars.
- 6. X bracing of Frame Allowed.

SECTION #11 - SUSPENSION

<u>SHOCKS</u>

- 1. One shock per wheel, maximum shaft diameter of 5/8". All four shocks must have the same diameter shaft. Stock shocks or after market can be used. Steel bodied coil over shocks permitted with use of a coil over kit. No aluminum bodied coil over shocks permitted
- 2. Rear Shocks must be mounted straight up, not angled.
- 3. Tubular magnetic steel upper A-frames will be permitted, but must be mounted in stock location.
- 4. Lower A-frames must be stock from the type frame being used.
- 5. Both Lower and Upper A-frames must be the same length.
- 6. Ball joints must be stock appearing, non-adjustable, heavy duty magnetic steel construction and must be acceptable to Track Officials.
- 7. Front and Rear Jack bolts are allowed.

SECTION #12 - BRAKES

- 1. Front Disc brakes are Mandatory
- 2. Rear brakes can be Drum or Disc.

- 3. A maximum of Two (2) master cylinders and reservoirs will be allowed. Mount on Engine side of Firewall.
- 4. Only one (1) brake caliper per wheel using two (2) brake pads per caliper.
- 5. Proportioning system allowed in Driver compartment.
- 6. Steel braided brake hose may be used.

SECTION #13 - FUEL

110 Racing Fuel from Track.

SECTION #14 - FUEL SYSTEM

- 1. Maximum 22 gallon Fuel Cell.
- 2. Fuel Cell must be enclosed in a steel container including top.
 - 2. Fuel cell must be secured to frame rails.
 - 3. External Fuel Filter unit permitted.
 - 4. Fuel lines that pass through driver's compartment must be enclosed in steel tubing from trunk area to engine compartment.
 - 5. Fuel cell must be located center of frame rails.
 - 6. Fuel cell cannot be mounted below frame rails.

SECTION #15 – SAFETY EQUIPMENT REQUIREMENTS

- 1. Racing seat with headrest required, one-piece seat.
- 2. Racing seatbelt 3" with 2" shoulder harness and submarine belt required. Belts must have visible date, no older than 5 years.

- 3. Approved Racing helmet required.
- 4. Fire Proof drivers suit required.
- 5. Neck collar required
- 6. Fire Proof gloves required.
- 7. Fire extinguisher mounted in driver's reach 2 ¹/₂ pounds.
- 8. Driver side window net required.
- 9. All cars must use approved Nascar or NHRA maximum 22 gallon fuel cell and acceptable to Track Officials.
- 10. Full Roll cage required.

SECTION #16 - TIRES

- 1. Track Tires Mandatory.
- 2. F45 Hoosiers
- 3. Tire schedule: 2 new for first race, 1 new for races 3,5,7,9 and 11

Any questions ask before doing!!! All general Shenandoah Speedway Rules apply to this class.... Shenandoah Speedway Officials decisions will be final.....