

# **NYSS Rules - 2021**

## **Table of Contents**

<b>SECTION 1: Transponders.....</b>	<b>2</b>
<b>SECTION 2: Competing Models, Years, Appearance .....</b>	<b>2</b>
<b>SECTION 3: Aftermarket Bodies .....</b>	<b>3</b>
<b>SECTION 4: Engines.....</b>	<b>3</b>
<b>SECTION 5: GM Crate Engines.....</b>	<b>4</b>
<b>SECTION 6: Carburetor .....</b>	<b>5</b>
<b>SECTION 7: Exhaust System .....</b>	<b>5</b>
<b>SECTION 8: Transmission .....</b>	<b>5</b>
<b>SECTION 9: Rear Axle &amp; Rear Suspension.....</b>	<b>6</b>
<b>SECTION 10: Front Suspension &amp; Steering .....</b>	<b>6</b>
<b>SECTION 11: Shocks .....</b>	<b>7</b>
<b>SECTION 12: Camano Type Cars.....</b>	<b>8</b>
<b>SECTION 13: Brakes .....</b>	<b>8</b>
<b>SECTION 14: Wheels and Tires.....</b>	<b>8</b>
<b>SECTION 15: Fuel &amp; Fuel Cell .....</b>	<b>8</b>
<b>SECTION 16: Weight .....</b>	<b>9</b>
<b>SECTION 17: Safety/General .....</b>	<b>9</b>
<b>SECTION 18: Tech .....</b>	<b>9</b>

# **NYSS Rules - 2021**

## **SECTION 1: Transponders**

MyLaps transponders are now required. Transponders are to be mounted on the right side of the car, between 12 and 15 inches rearward of the centerline of the rear axle, and no more than 18 inches above the track surface. Transponders must be mounted with an unobstructed view of the track surface (no metal underneath). It is the driver's responsibility to be sure that their transponder is charged and functioning properly. If you have a question about whether your transponder is functioning properly, it is YOUR responsibility to ask track staff to check your transponder during hot laps, and track staff will make every reasonable effort to alert you to any issue with signal strength or charge. If a driver's transponder ceases to work during the course of an event, the car will only be scored until the point that their transponder stops reading. Any driver caught improperly mounting their transponder in order to gain an advantage will have their finish position be disqualified from the event (including forfeiture of points and prize money. If you have a question regarding the mounting location of your transponder, it is your responsibility to verify it with speedway officials prior to competition. Cars equipped with scoring transponders may, or may not, be tracked for lap time purposes. **TRANSPONDER MUST BE IN WORKING ORDER, ON THE CAR FROM PRACTICE THROUGH FEATURE, OR YOU MAY BE ASKED TO LEAVE THE TRACK.** Make sure your transponder is charged, your subscription is up to date, and firmware is updated.

## **SECTION 2: Competing Models, Years, Appearance**

**Open to any North American built car from 1965-2010.**

1. Spoilers allowed with a maximum 6 inch height.
2. No cold air boxes permitted.
3. Stock appearing aftermarket bodies allowed (i.e. ABC, S2, LMSC, and ARP Muscle Car). Bodies must look like stock bodies. No wedge or dirt late model style bodies. No down force noses.
4. Steel, aluminum, fiberglass, and composite bodies allowed.
5. Rear Bumper cover required, No holes or cutting for air flow.
6. Frame must remain stock from front to rear. Frame behind suspension may be replaced with 2x3 inch box tubing. Johnson Chassis metric frame, clip & components allowed.
7. Johnson frames & Johnson clips MUST meet the lower points of the Johnson template.
8. Windshield must be replaced with Lexan. Must be a full windshield.
9. Doors must be securely fastened front and back.
10. Body molding, including door handles, must be removed.
11. Driver must sit in stock position. Seats, make sure the driver can see over the dash board properly.
12. Front firewall must be 20 gauge steel.
13. All unibody cars must have a minimum two inch by three inch sub-frame. The sub- frame must be no less than .120 wall thickness.

## **NYSS Rules - 2021**

14. Side bars allowed with no sharp edges. One bar only. Cars with bars that can "hook" will be asked to fix them. Side bars must be flush (tight) with the body. Door side bars or the door if not using a door side bar, must be a minimum mounted out to the end of the tire thread (recommend to the outside of the tire bulge).

15. All personal, general & construction safety to be approved by the hosting Race Track.

16. Drive shaft hoop mandatory, two hoops recommended.

17. All bodies, No roof or rear window spoilers, No passenger or driver windows, No window deflectors. Quarter windows and rear window allowed. No vent windows (A-Pillar).

18. No hole in hood for air cleaners.

19. No Traction Control Devices. No electronic control device.

20. Engine and frame must match type of manufacturer. Example: Chevrolet engine in a GM frame, or Ford engine in a Ford or Mercury frame, or Dodge engine in a Mopar Frame. NO Cross breeding.

### **SECTION 3: Aftermarket Bodies**

1. Aftermarket bodies allowed: ABC, LMSC, AR Street Stock/Sportsman, AR Muscle Car, S2 Sportsman, other bodies may be allowed with NYSS written approval. Subject to all the same body's rules except the following. ABC Gen 6 body is not allowed.

2. Aftermarket bodies cannot be lower than their published spec measurements. If higher the body needs to be in proportion of its heights.

3. Aftermarket bodies have a minimum ground clearance of 5" (nose & rockers).

4. Aftermarket bodies rear spoiler max height of 3".

5. Aftermarket bodies cannot subtract material from their body panels.

6. Aftermarket bodies can add to the rocker panels and nose to get a 5" ground clearance if the body is mounted higher.

7. Aftermarket bodies cannot have additions to rear lower quarter panels.

8. ABC Gen 6 bodies are not allowed. ABC Gen 6 noses are not allowed.

9. Performance Bodies 2019 Street Stock Camaro, Mustang & Camry (2) piece plastic nose & tail are allowed.

### **SECTION 4: Engines**

Maximum engine displacement as follows:

- GENERAL MOTORS 350 CU. INCHES
- FORD 351 CU. INCHES
- MOPAR 360 CU. INCHES

# **NYSS Rules - 2021**

- Maximum of .060 over bore
1. Engine location. For all frames, maximum engine set back #1 spark plug hole in line with the lower ball joint center line.
  2. Intake manifolds allowed: Edelbrock Chevrolet 2101, 7101; Chevrolet Vortec 2116, 7116; Ford 351c 2750/7183, Ford 351w 2181/7181, Ford #M9424 C358; Chrysler 2176 or any dual plane non-air gap intake manifold with approval from NYSS (picture and part# submitted for approval). No port work, no blending, no coatings.
  3. All engines must use flat top pistons or dish pistons.
  4. Stock OEM production block only. No racing blocks. Dart part #3116111 SHP is allowed.
  5. Sportsman rods 5.7 length or 6.0 inch.
  6. Forged crank shaft legal. Minimum crankshaft weight is 48 lbs. Counterweights may not be altered in any way. No pendulum & No undercut counter weights. No gun drilled cranks. Normal balancing only. Crank shafts must be stock stroke for the block. Rod and main bearings must be stock size (will allow up to .050 for clean-up).
  7. Cylinder heads must be OEM production or World Products S/R # 42660 or # 42670. Chevrolet OEM #10239906 & #12558062 Vortec Heads allowed. No boss Ford or Chrysler Hemi or Pontiac ram air heads allowed. Chevrolet Bow tie & Vortec Bowtie heads Not Allowed. 2.02 maximum intake valve and 1.6 maximum exhaust valves allowed. Cylinder heads cannot have any port work done. No Titanium parts allowed anywhere on the engine. No crossbreeding of manufacturers' parts allowed. Cast Iron heads only.
  8. Any hydraulic or solid camshaft permitted. 1.5 and/or 1.6 roller rockers allowed. No roller lifters. Stud girdles allowed.
  9. Only stock type or HEI ignition permitted. Rev limiters allowed: MSD Soft touch rev control 8728, MSD Circle track RPM Control 8727CT, and MDS Ignition module w/rev limiter 83647.
  10. Car must have working self-starter.
  11. No battery within driver's compartment. Battery must be 12 volts.
  12. Maximum compression ratio 10.0:1. To be checked with NYSS approved whistler.
  13. Pre-tech engines @ ambient temperature will be 10.0:1 no tolerance. Post-race engines will have an allowance to 10.2:1 for heat "NOT" any higher. Any reading that flickers to the next highest number will be viewed as being the higher number.

## **SECTION 5: GM Crate Engines**

1. GM Crate engine 88958602 allowed.
2. Holley 4412 Only, no chip rule, can change valve springs, can use 1.5 or 1.6 roller rockers, race fuel allowed.

## **NYSS Rules - 2021**

3. Crate engines are subject to same rules & inspections as the open engines.
4. Engines do not have to be sealed.

### **SECTION 6: Carburetor**

1. One stock unaltered two-barrel carburetor. Holley 500 Carburetor #4412 only. No HP carbs.
2. Stock 4412 fuel bowls only. No H.P. or aftermarket.
3. No billet, No aftermarket, No H.P. metering blocks.
4. Only one solid Carburetor Spacer made of aluminum or phenolic plastic of a maximum height of one (1) inch permitted. Only one .075 maximum gasket per side. NO wedge shaped mounting surfaces, both top and bottom surfaces must be parallel. Spacer must have 2 holes maximum size 1.750 straight bore and match the base of carburetor. No air flow modifications. No alterations allowed to carburetor spacer. No beveling, tapering, grooving or flaring of port holes. Spacer may not be stepped or undercut. Or Unaltered Mr. Gasket Adapter kit #1933 is allowed.
5. Air filter housing may be offset for clearance of the distributor only. No tubes, funnels or any other device which may control the flow of air is permitted inside the air filter housing or between the air filter housing and the carburetor. Max of (1) 14" x 4" air filter.

### **SECTION 7: Exhaust System**

1. Street headers & Standard Crossover headers only. Maximum collector size 3". No merge collectors.
2. Exhaust system may use H pipe or X pipe.
2. Exhaust pipes must extend under car and exit behind driver.
3. Mufflers are mandatory. Maximum allowable noise decibel to be 95db. Maximum muffler inlet and outlet size is 3.5" (adapter from 3.0" to 3.5" is allowed).
4. Maximum diameter exhaust pipe allowed 3 inch. Tail pipe maximum size is 3.0".
5. Adjustable exhaust headers, try-y type, collector type, 180 degree, merge type, pyramid type, exhaust headers will NOT be permitted.

### **SECTION 8: Transmission**

1. Only stock OE production manual transmissions are allowed. Three/Four speed standard transmissions are permitted. Aluminum or steel case only.
2. Only stock OE production Two or Three speed automatics transmissions allowed.
3. No direct drive set ups. No drop out clusters. No trick parts.
4. Internal Parts must be OE stock parts, or stock replacement parts.
3. Steel or Aluminum Bell housings permitted.
4. Removal of gears permitted. (automatic or manual)

# **NYSS Rules - 2021**

5. Clutch must be a single disc (10.5 inch GM, 10 inch Ford) diameter min. Stock type flywheel. Clutch, pressure plate & flywheel 30lb min. No High performance ultra-light clutch.

## **SECTION 9: Rear Axle & Rear Suspension**

1. GM 10 bolt 7.5 inch, GM 10 bolt 8.5 inch and Ford 9 inch rear ends allowed. Full floater rear ends allowed, Locked rear ends only. No ratchets, gold track, Gleason's or Detroit Lockers allowed. Steel spools only.

2. No Gear Rule.

3. All rear ends must be a leaf spring or four link suspension. Adjustable rear upper & lower control arms allowed. Rear arms stock length +/- 1.00". NO truck arm style arms.

4. No track bars or panhard bars. No connecting bars to the frame other than the four control arms.

5. Aftermarket axles allowed.

6. Steel drive shafts only.

7. Steel, rubber or mono ball bushings allowed. Heim ends allowed in place of rear control arm bushings. Rear lower frame mount must remain stock. Rear lower housing mount must remain stock width. Hiems must be centered in mounts. Rear upper control arm mounts maybe moved and fabricated as long as you meet rule 3 above.

8. Rear frames must go over the axle. No underslug frames allowed

## **SECTION 10: Front Suspension & Steering**

1. Stock type stamped steel or Johnson Chassis Lower control arms.

2. No Rack & Pinion Steering.

3. Racing springs may be used. Jacking bolts allowed. No coil over springs. No coil over eliminators. No bump stops.

4. Stock OEM style sway bar or Howe Sway Bars allowed. No rear sway bar. No Spine Bars.

5. A minimum of 5 inch frame ground clearance measured at the frame rail behind the front wheel and in front of the rear wheel.

6. Tubular front upper control arms permitted. No heims.

7. Fabricated or stock upper control arm mounts.

8. Spindle's - GM on GM, Ford on Ford only. No racing spindles, no drop spindles. (i.e.: Impala spindle's on a metric chassis is OK). Also allowed is Speedways GM metric 3-piece spindle part # 910-34501 (Short steering arm not allowed).

9. No wide five hubs and/or spindles.

10. Heim ends allowed for inner and outer tie rods only.

## **NYSS Rules - 2021**

11. Minimum wheel base is 108 inch for all cars. Wheel base will be determined by center line of the rear axle housing to the center line of the front lower ball joint (grease fitting) at ride height. There will be ½" allowance for leading of the rear ends. NO tolerance beyond this rule.

### SECTION 11: Shocks

1. To help control the cost that can be spent on shocks with the new technology that is coming available we are initiating the following shock parameters. These rules are to keep cost down so no one gains an unfair advantage over the competition.

2. Must be a mass produced steel body shock.

3. Shock must run stock box standard pistons. No adjustable rate piston you can fine tune. No modifying of piston. Standard linear, digressive or COB. This means no additional bleeds or checks are allowed. No cross breeding of brand parts.

4. No external schrader valves are allowed. Hyper nut is allowed to repair or revalve shock.

5. Maximum rebound and/or compression shock valving allowed is a (12). Split valves are allowed.

6. Shocks may be impounded after the race & sent out for testing. If the shock is found illegal, the shock will be forfeited & racer disqualified.

7. No bump stops, no packer shims, no bump springs, no bump rubbers & no internal modifications of shock to limit travel.

8. See the list of shocks that are deemed legal in stock configuration. If you choose something other than listed please check with NYSS Series for approval.

➤ Approved 2021 NYSS brand & Series:

- a) Bilstein SL Series.
- b) Bilstein SZ Series.
- c) Bilstein SLS Series.
- d) QA1 51 Series.
- e) QA1 26 Series
- f) Pro WB Series.
- g) Pro TA Series.
- h) Afco 12 Series.
- i) Afco 19 Series.
- j) Afco 24 Series.
- k) Afco 147 Series.
- l) Integra 421 Series.
- m) Fox 2.0 Evolution for 2020 only.

9. Any shock questions or clarifications can be directed to David Surace at Eagle One. He will be working with the series on shock teching. He will also have shocks available to series members at a discounted price that will be serial numbered & dynode for future easy of shock teching. He can be reached at: (315) 804-5278

# **NYSS Rules - 2021**

## **SECTION 12: Camano Type Cars**

1. Camaro's are allowed, leaf spring cars. NOT a 3 link and/or panhard bar rear suspension.
2. Regular front springs, a-arms, standard stock spindles and leaf springs
3. Camaro's still have to follow the other chassis rules.

## **SECTION 13: Brakes**

1. After market OEM Style Calipers allowed (aluminum or cast iron). No Late Model, No Modified style calipers allowed. Brakes are mandatory on all four wheels and must be in 100% working order. Dual master cylinders & disk brakes on the front and/or rear.

## **SECTION 14: Wheels and Tires**

1. Steel wheels must be used and have a maximum width of eight inches. Racing wheels only. One inch difference allowed. Example 2 inch on lefts and 1 inch on rights is OK. ½ inch spacer is allowed on rights if the offsets on the car are all the same.
2. All wheels must be fifteen inches.
3. Maximum width measured at outside of tire at spindle height: 80 inches. No 0" offset wheels.
4. Definition: "Unregistered" is a new or used 1070 tire from where ever. If a team is able to get used tires from a sportsman team, those tires will be considered new to them. This being said you can get & use take off tires in place of the new tire.
5. 2020 Tire Rule/Tire Limits. 10 inch Hoosier 1070 only. The first series race of 2021 teams are allowed a maximum of (4) unregistered tires. The second series race of 2021 teams that didn't attend the first will be allowed a maximum of (2) unregistered tires. All other 2021 races the teams will be allowed a maximum of (1) unregistered tire.
6. All used registered tires will come from NYSS Official Tire supplier. Used tires will be available at the tire truck. Used & new orders must be called into Chris Vogler to insure enough tires are brought to the track. Used tires are to get cars on the track. Example: a team shows up week 3, they get to use (1) unregistered tire & need (3) used NYSS tires.
7. The unregistered tires need to be checked in race day before the heat races begin. All tires need to be stamped by a NYSS Official. Call Chris Vogler @ (585) 727-1354 for tire information.
8. No soaking or treating tires. Tires must meet durometer specs cold & hot.

## **SECTION 15: Fuel & Fuel Cell**

1. All cars must have a fuel cell, 22 gallons maximum, must be in an enclosed steel container. Fuel cell must be no lower than the centerline of the rear axle housing with the car at ride height.
2. Fuel rule: Sunoco 110 Standard Race Fuel only or 91 octane non ethanol pump gas only.
3. Fuel shut off clearly marked in reach of driver.

# **NYSS Rules - 2021**

## **SECTION 16: Weight**

1. Weight of all cars: 56% max left side, 3150 lbs. minimum with driver in seat, before & after the race with no allowance for fuel or fluids.

## **SECTION 17: Safety/General**

1. For races that include prerace inspections, cars must be in the inspection line during posted times. Failure to be on time will prohibit car from racing in that event.
2. Racecar construction & driver safety equipment: Participating drivers must comply with all safety regulations of any and all participating tracks. All drivers are responsible for reading and complying with all safety regulations. Any track safety crew has the right to inspect and require a modification to comply with all safety codes.
3. All cars must have a working fire extinguisher and fuel shut off in easy reach of the driver.
4. Radiator must have an overflow can, one gallon minimum.
5. Oil coolers and transmission coolers are allowed.
6. All roll bars, side bars, or other protrusions that drivers may come into contact with must be properly padded. Roll bar padding must be approved by officials.
7. Full containment seats are highly recommended.
8. No air boxes of any kind.
9. Throttle-mechanical linkage only with double return spring.

## **SECTION 18: Tech**

1. Following each heat, b main and or feature race, the top five (5) finishing cars will proceed to the scales for weighing unless notified by the series. Wheel marks may be checked at this time.
2. Following all feature events, the top five (5) finishing cars will proceed directly to designated area for post race inspections.
3. Prior to any race, both rear wheels will be marked with tape or paint line for a "locker check". It is the driver's responsibility to ensure that rear wheels are marked. Failure to mark the wheels prior to a heat race will result in losing your heat finishing position. Any non marked cars competing in a feature race, will require their team to disassemble the rear end following the race for inspection of gears and spool; and shall result in a \$100.00 fine.
4. Mirrors: One (1) 2" round mirror is allowed in driver side "a pillar" area. One (1) 7" X 3" interior mirror allowed. We will allow teams to tape a bigger mirror to required size. If a driver is accused of mirror blocking, officials will research it. The driver will get a warning and will be on the watch list. If driver is found to be abusing the mirror after the warning they will lose their
5. Tech refusal is an automatic disqualification and suspension. Driver and car will be suspended until illegal part/s are removed from the car and inspected by the series. Also the car will be inspected prior to racing again in the series. Illegal parts will be forfeited to the series. Failure

## **NYSS Rules - 2021**

to turn over the illegal part will lead to a fine and/or suspension. Drivers that get disqualified are subject to a fine, point penalty, and/or suspension depending on severity.

6. Protest rules: The protest must be discussed & submitted to the NYSS race director 15 minutes prior to the feature starting. Must be written of what you specifically want checked. Protestor has to finish in the top 10 in order to protest. If twin features, car will be taken apart after the last feature.
7. Engine in car protest rule: The protesters car and protestee's car will both be checked. During inspection, tech has the right to visually check anything else in that area. The fee is \$500.00. \$175.00 of that is non-refundable. If the protestee is found legal he or she gets \$325.00, if the car is found illegal the protester gets \$325.00 back.
8. Engine removed protest rule: If an engine has to be removed from the car from a protest the fee is \$1,000.00. \$300.00 of that is non-refundable. If the protestee is found legal he or she gets \$700.00, if the car is found illegal the protester gets \$700.00 back. Time and place to be determined by end of that night.
9. Soft Protest rule: This protest does not cover the engine rules. Examples of what this protest covers: whistle, wheel base, frame height, engine placement, clutch, carburetor, wheel width, rear end locker check, etc. The protesters car and protestee's car will both be checked. The fee is \$200.00. \$100.00 of that is non-refundable. If found legal the car being protested gets the \$100, if car is found illegal the protester gets the \$100 back

**Note: Anything not covered in these rules will be considered illegal if not exempted by NYSS officials. These rules were written to be inclusive but not costly. If you have concerns, please contact a NYSS official at: (585) 943-4587 (Bobby) or (585) 727-1354 (Chris).**