

2019 NSR Nationals Racing Rules

There will be two races run. **Vintage Lemans** and **Modern GT**

GENERAL RULE:

1. **ANY CAR MODIFICATION NOT SPECIFICALLY PERMITTED IS PROHIBITED.**

ELIGIBLE CARS :

1. NSR Brand 1/32nd RTR and Painted Kit cars allowed.

Vintage Le Mans Cars

Ford P68
 Ford GT40 Mk I
 Ford GT40 Mk II
 Ford GT40 Mk IV
 Porsche 917k
 Porsche 908/3 Spyder

Modern GT

Audi R8
 Aston Martin Vantage (ASV)
 BMW Z4
 Chevrolet Corvette C6/C7
 Porsche 997
 Mercedes-AMG GT3

2. Future car releases may also be allowed and will be evaluated on a case by case basis.
3. NO Moslers
4. Cars must have ALL NSR ORIGINAL UNMODIFIED PARTS except as noted below.

BODY:

1. Must **not be** modified or cut in any way.
2. Must be completely painted in a realistic racing livery if not pre-decorated.
3. Must start each race with all parts intact except for mirrors, antennas and similar small protruding parts.
4. The REAR WING may be taped or glued in place as necessary but must remain in the original stock position.
Rear wing does not need to be replaced if it comes off during the race.
5. Windows must be transparent with the exception of tampo paint or decal headers.
6. Body screws may be run loose only if tape covers screw holes under chassis.
7. ANY brand body to chassis screw is permitted but only in stock locations.
8. **Fully stock, painted INTERIORS or NSR replacement LEXAN interior.**
9. In the vintage class if the car came with a spare tire it needs to be in the car (e.g. Porsche 917).
10. EXCEPTIONS:
 - 10.1. Interior may be modified to allow proper clearance for the motor if necessary.
 - 10.2. Rally type GT cars may have the navigator figure removed.
11. **Body must have a number (the same number...) in at least three (3) locations.**

CHASSIS:

1. Any stock NSR (Original, updated or replacement) chassis main plates, motor pods and drop arms are allowed.
2. Only minor flash removal is allowed on the chassis and motor pod.
3. No modifications to the axle or bushing mounts are permitted.
4. Bushings may be glued in place.
5. Suspensions are Optional, but ONLY NSR parts are allowed.
6. Any brand axle spacers or stoppers are allowed
7. Ballast may be used. **If present, ONLY Lead or Tungsten are allowed.** Ballast must not offer any support to the chassis or motor pod. Ballast cannot be placed on the underside of the chassis plate or motor mount.
8. Any NSR Brand motor pod to chassis screws may be used but only in stock locations.
9. Any stock NSR axles may be used.
10. The use of tape on the chassis to hold the motor pod in place is approved.
11. **You are NOT allowed to retrofit NSR motors or motor mounts with holes for motor screws if they do not already have them. You are allowed to secure the motor using screws only if BOTH of the following conditions are met:**
 - 11.1. The NSR motor you plan to use has FACTORY pre-drilled and tapped holes to accept the screws, AND
 - 11.2. The NSR motor mount you plan to use has FACTORY pre-drilled holes to accept the screws

2019 NSR Nationals Racing Rules

12. You are allowed to use any combination of glue, tape or screws (subject to "Chassis – 11") to secure your motor to the motor pod.

13. EXCEPTIONS:

13.1. Any Brand of Adjustable Front Axle Ride Height screws may be used.

WHEELS AND TIRES:

1. REAR WHEELS-MODERN GT RACE: Only unmodified NSR Brand 16x10mm or 17x10mm wheels are allowed.
2. Legal wheels part numbers.
 - 2.1. NSR5004 Air System Large Diameter Extra Wide (Scale 17") 10mm wide
 - 2.2. NSR5009 NO-AIR system DRILLED 16.5 x 8.3mm aluminum front wheels - for 3/32" axle - Ultralight 0.9g
 - 2.3. NSR5015 Air System "Ultimate" 16" x 10mm wide aluminum rear wheels
 - 2.4. NSR5016 Air System (Scale 16") 10mm wide 0.9 grams / wheel aluminum wheel
 - 2.5. NSR5017 Ultimate Drilled (Scale 17"X 10mm) Spanish Rear Aluminum Wheels
 - 2.6. NSR5018 Ultimate Drilled (Scale 16") Spanish Rear "Air System" Aluminum Wheels
 - 2.6.1. EXCEPTION: NSR5017 Spanish Wheel: the center rib (Spike) is approximately 0.3mm taller than on a standard 17X10 wheel. So, when using required Quick Slicks Tire the tire patch is proud in the center of the tire patch. To improve tire fit you can:
 - 2.6.1.1. Use tape to build up the outer shoulder of the wheel
 - 2.6.1.2. Sand down the center rib to reduce the diameter so that the tire contact patch is flat across.
3. REAR WHEELS-VINTAGE Le Mans RACE: Only unmodified NSR Brand 15x8 wheels are allowed.
4. REAR TIRE TREATMENTS: None are allowed. Acceptable tire cleaning methods will be discussed during the pre-race driver's meeting.
5. FRONT WHEELS: Only unmodified NSR wheels with original stock wheel diameter are allowed.
6. FRONT TIRES: Any NSR correctly sized front tire may be used. Front tires may be glued and trued (diameter only) with no visual evidence of significant front tire taper allowed. Front tires may be coated in CA Glue or Nail Polish.
7. WHEEL INSERTS: NSR wheel inserts appropriate to the car model are required (can be glued in place).
8. TIRE/WHEEL POSITION: tires may not extend past body more than 1mm per side when viewed from above.
9. WHEEL SET SCREWS: Any Brand and Hollow setscrews are allowed
10. HAND OUT REAR WHEEL TIRES: **Quick Slicks** silicone tires are required and will be handed out at the race. Driver's will be allowed to choose from the following Quick Slick tire sizes in Firm or Extra Firm compound:
 - 10.1. **Modern GT Race:** CB41, CB42, CB43, CB43, CB57, CB58, CB59, TS43 or TS44
 - 10.2. **Vintage Le Mans Race:** CB32, CB33, CB34, or CB35.

GUIDE FLAG BLADES, BRAID, WIRE and SHIMS:

1. All readily available 1/32nd scale use intended brands are permitted without Chassis or Body modifications.

MOTOR :

1. Modern GT:

- 1.1. Any currently available unmodified NSR motor rated up to 25K RPM is allowed, below are a list of legal motors for the race.
 - 1.1.1. NSR3001 SHARK standard Mabuchi can sized motor 22,400 RPM 168 g-cm Torque
 - 1.1.2. NSR3003 SHARK Balanced standard Mabuchi can sized motor 25,000 RPM 176 g-cm Torque
 - 1.1.3. NSR3004 SHARK standard Mabuchi can sized motor 20,000 RPM 164 g-cm Torque
 - 1.1.4. NSR3013 "King" balanced long form factor motor - 25,000 RPM, 270 g-cm torque.
 - 1.1.5. NSR3022 KING Evo 2 Motor - 21,400 RPM 322 g-cm Torque LONG CAN "Magnetic Effect
 - 1.1.6. NSR3023 KING Evo 3 Magnetic Effect Motor 21,400 RPM 350 g-cm Torque
 - 1.1.7. NSR3024 "BABY" KING Evo 3 Magnetic Effect 17,000 RPM

2019 NSR Nationals Racing Rules

1.1.8.NSR3025 "Spanish" KING Balanced Motor 19,000 RPM 250 g-cm Torque

1.1.9.NSR3026 KING EVO Balanced Motor 25,000 RPM 350 g-cm Torque Magnetic Effect

1.1.10. NSR3031 KING EVO Balanced Motor 19,500 RPM 271 g-cm Torque Magnetic Effect

1.1.11. NSR3032 SPANISH KING Balanced Motor 19,500 RPM 270 g-cm Torque

1.1.12. NSR3041 SHARK Balanced standard Mabuchi can sized motor 21,900 RPM 164 g-cm Torque

1.1.13. NSR3043 SHARK Balanced standard Mabuchi can sized motor 25,000 RPM 180 g-cm Torque

1.1.14. Sidewinder or Anglewinder motor pod configuration is allowed.

1.1.15. King Motors required for Anglewinder configuration.

2. Vintage GT:

2.1. Only Sidewinder configuration with unmodified NSR3004 or the new NSR3041 Shark Motor.

LUBRICATION:

1. Lube may be applied prior to tech submittal but NO further addition of any fluids is allowed during competition.

GEARING:

1. Only NSR Brand Gears and Pinions allowed. No restrictions on gear combinations (i.e. ratios).

LIGHTING:

1. OPTIONAL, May be added with minimal body modifications to place lights.