NATIONAL AUTO SPORT ASSOCIATION

Official 2024 National Rules

(Rules subject to change)

Nov 20, 2023, Version 1.0

(Note: Latest revisions are in blue font; previous revisions are in green font)

1. Introduction

1.1 These regulations govern Spec3 Series racing events held throughout North America.

1.2 The Spec3 Series is a competitive, fun, safe, affordable racing series, focused on road racing with limited modifications and specified required components. The series showcases the driver's skills and the specified required components manufacturers, distributors, and dealers.

1.3 Only modifications specifically authorized are allowed; and competitive adjustments are not allowed. **Other than the modifications specifically allowed in these Rules, every part of the car must remain as it came from the factory.**

1.4 These regulations are 'living' and subject to changes at any time. The stability of these rules allows for this provision as opposed to the typical annual rules update with wholesale changes that occurs on a calendar year basis.

2. Sanctioning Body

The National Auto Sport Association (NASA) sanctions Spec3 competitions exclusively. All events are governed by these Regulations, applicable addendums, as well as those found in the latest version of the *NASA Club Codes and Regulations* (CCR). All decisions made by the series administration are final, except under certain conditions, as specified by the CCR.

3. Classification

3.1 The Spec3 Series has one preparation level with one class.

4. Series Championship

4.1 The provisions of the NASA CCR Section 22.0 shall apply.

5. Rules Compliance

5.1 Cheating and non-compliance will be subject to harsh penalties and by act of registration, each driver agrees to the following:

5.1.1 At first offense, there will be a disqualification from the previous two races, and a loss of Championship points from those two races. At a second offense, the penalty will be at the discretion of the Regional Race Director and may include up to a twelve-month suspension from all NASA events.

6. General Rules

6.1 **Competitive Format**

6.1.1 The Spec3 Competitive Format regarding body contact conforms to CCR Section 25 "On Course Conduct."

6.2. **Driver Eligibility**
6.2.1 A driver shall possess a valid NASA Provisional or Competition License.

6.3 **Eligible Vehicles**
6.3.1 Eligible vehicles are listed in Appendix A. Vehicles with automatic transmissions or four-wheel drive are not eligible.

6.4 **Vehicle Numbers, Class Identification, Decals**
6.4.1 Each car shall exhibit its assigned car number and class designation on both sides, front, and rear of the car. The side numbers must be at least ten (10) inches tall with a one and a half (1.5) inch stroke and be of a contrasting color. The front and rear numbers, and class designations must be at least three (3) inches tall. Car numbers and class designations must be legible and readable at speed. Numbers should not be part of the vehicle's graphics unless permitted by the Chief of Timing and Scoring. In addition, class identification, "SPEC3", shall be displayed near the side numbers a minimum of three inches high.

6.4.2 Manufacturer stickers from Koni, Hawk, & RRT Racing must be displayed on each vehicle's front left and right fenders as shown (arrowed) in Appendix B. Manufacturers are responsible for supplying said stickers.

6.4.3 Four "Toyo Tires" decals must be on the car in conformance with the Toyo Tires Contingency Program Decal Guidelines for the E36 chassis. See Appendix B. (https://community.drivenasa.com/topic/58119-2021-toyo-tires-contingency-program-decal-guidelines-spec-tire-classes-only/)

6.4.4 The driver's or drivers' last name shall be placed in block print letters three inches tall centered on each rear quarter panel window and on the lower passenger side front windshield.

6.4.5 Series or NASA officials may require series and sponsor identification (decals) in specific size, contrast and placement to be displayed on cars before being allowed to race.

6.4.6 NASA decals as specified in the CCR are required

6.5 **Appearance**

6.5.1 Cars shall be neat and clean, and shall not be dirty externally or in the engine or passenger compartments.

6.5.2 Cars shall not show bodywork damage outside of CCR 50/50 compliance, and shall not be presented for competition totally or partially in primer.

6.6 **Repairs**
6.6.1 All chassis/structural repairs, if performed, shall be in concurrence with factory procedures, specifications, and dimensions. Unless specifically authorized by the manufacturer for repair or

allowed by these regulations, no reinforcement, e.g. seam welding, material addition, repositioning or “bending” of shock towers etc., is permitted.

6.6.2 Body repair shall be performed using every reasonable effort to maintain stock body contours, lips, etc.

6.7 **Fuel**
6.7.1 Permitted fuel is unleaded pump gasoline, with a maximum octane of 93.

6.7.2. Fuel additives, other than stabilizers (i.e. Sta-Bil), are prohibited.

6.8 **Data Acquisition**
6.8.1 Data acquisition devices are permitted but may not perform a secondary function.

6.9 **In-Car Adjustments**
6.9.1 No car is permitted any cockpit adjustable system or component, except as specifically allowed in the preparation rules.

7. Safety Equipment

7.1 **Safety Requirements**
7.1.1 All vehicles and drivers shall conform to NASA’s Club Codes and Regulations (CCR) that are in effect as of the date of the competition. If in conflict, these regulations supersede the CCR.

7.2 **Tow Eyes**
7.2.1 Tow eyes or straps, front and rear, are required. Recommend using straps or folding rings rather than the OEM tow eyes to eliminate protrusions that might cause injury in the pits/paddock.

7.3 **Fire Systems**
7.3.1 All cars shall have an on board fire system in conformance with CCR Section 15. Outlets shall be directed to driver, engine and fuel delivery components.

7.4 **Roll Cages**
7.4.1 All roll cage requirements in the CCR shall be met, except for the following:

7.4.2 Carpet/padding may be removed. Braces may pass thru interior trim panels.

7.4.3 Dashboard may be cut solely to allow passage of roll cage front down tubes.

7.4.4 All interior trim may be removed.

7.5 **Window Tinting**
7.5.1 Tinted REAR windows are specifically disallowed in all classes, and non-OEM tinting is discouraged in all windows. OEM window tinting is allowed.

7.6 **Airbags and Steering Wheels**
7.6.1 Non-stock (except wood rim and chain) steering wheels are allowed. Airbags shall be disconnected or diffused during on track sessions and may be removed.

7.6.2 Quick release mounting hubs are permitted.

7.6.3. Steering wheel locks shall be disabled.

7.7 **Lug Nuts**
7.7.1 Lug bolts may be Upgraded to wheel studs and such Upgrade is highly recommended. It is recommended that wheel studs be replaced every two years.

7.8 **Oil Lines**
7.8.1 All oil lines on the pressure side of the oil pump shall be thread-on connections equal to or better than the factory, (i.e. NO slip-on oil lines to coolers, gauges, etc).

7.9 **Master Switch**
7.9.1 A master electrical kill switch is required and must be accessible by a harnessed driver as well as rescue personnel.

7.10 **Catch Tank**
7.10.1 A catch tank for radiator overflow may be installed, but must not perform a secondary function. If a catch can is installed, the factory overflow tank may be removed.

7.11 **Engine Coolant**
7.11.1 Use of an ethylene glycol (coolant) is prohibited. Substitute coolants (e.g. “Water Wetter”) are highly encouraged for all competitors.

7.12 **Sunroof Clips**
7.12.1 Sunroof clips are required.

7.12.2 Glass roof tops shall be removed or completely taped over. Use of clear tape is recommended.

7.13 **Cool Suits & Other Driver Cooling**
7.13.1. Cool suits and associated equipment, properly secured, are permitted; providing that the cooler, suit, and associated equipment serve no other purpose than to cool the driver. Cool suit coolers and associated equipment may be mounted anywhere in the passenger compartment or trunk. For the purpose of driver cooling only, one NACA duct may be installed within a door window opening or, in the case of a coupe, within one of the rear side windows so long as said window has been Upgraded per rule 9.3.13.20.1. Associated hoses, blower, and switches for the driver cooling system shall be installed within the cabin.

8. Definitions and Application of the Regulations

8.1 "Original," “OEM,” and “stock” mean "as originally fitted for the chassis, model and year of the car."

8.2 "Substitute" or "Substituted" means that original OEM equivalent items may be used.

8.3 "Upgraded" means that the item may be replaced with items meeting or exceeding OEM specifications.

8.4 "Modified" means that the item may be Upgraded, machined, welded, ground, cut, or removed

8.5. The interpretation and application of the Spec3 Series Regulations by Spec3 or NASA officials is final and binding. In order to promote the sport of automobile competition, to achieve prompt finality in competition results, and in consideration of the numerous benefits to them, all members, including competitors and officials, expressly agree that:

8.5.1 Determinations by Spec3 or NASA officials shall not be subject to litigation, and they may not initiate or maintain litigation of any kind against Spec3 or NASA or anyone acting on behalf of Spec3 or NASA to reverse or modify such determinations, or seek to recover damages or other relief allegedly incurred or required as a result of such determination.

8.5.2 If a driver, entrant, crew member, guest, or official initiates or maintains litigation in violation of this provision, that person agrees to indemnify and reimburse the National Auto Sport Association for all costs of such litigation, including travel expenses, court costs, witness and filing fees, and reasonable attorneys’ fees.

8.5.3 All drivers agree to abide by all applicable rules.

8.5.4 All drivers agree that their likeness or car likeness may be used by Spec3 or NASA in any manner for promotional benefit. Furthermore, all drivers agree that no residuals or payments of any type will become due to them for use of their likenesses

9. Specifications

9.1 **General**

9.1.1 All cars in this category shall compete with full road equipment, except as allowed by these regulations.

9.2 **Weight**

9.2.1 The minimum weight, with driver, for each eligible car is listed in Appendix A. The cars may be weighed at any time during the event.

9.2.2 A car found to be underweight after a qualifying session shall have securely mounted ballast installed in the passenger compartment to meet the minimum weight requirement without exceeding the maximum ballast weight allowed. Alternatively, a spare tire, as defined in 9.3.9.7, may be placed in the spare tire well and appropriately secured. The car shall start at the back of the grid for the race if it meets the minimum weight requirement.

9.2.3 A car found to be underweight after a race session shall be disqualified from the race results and a notation shall be made on the current event page of the car's logbook. The driver shall have the car weighed at the next race or event before qualifying, and shall ensure it meets minimum weight requirements.

9.3 **Modifications**
9.3.1 **Engine**
9.3.1.1 **Induction System**
9.3.1.1.1 Air filter elements may be Upgraded with Green Filter USA Product #2038 (www.greenfilterusa.com), or Upgraded with K&N Product #33-2070.

9.3.1.1.2 Except as otherwise described in this section 9.3.1.1.2., the stock intake airbox assembly shall be retained unmodified in its original mounting position. The exception to the previous statement within this section shall allow the removal of the oval-shaped inlet snorkel from the air box assembly.

9.3.1.1.3 Removal of the driver's side headlight assembly is permitted if Upgraded with either "S3 Air Duct" sold by Zygmunt Motors (www.bimmerparts.com; cmuzyy@aol.com; (215) 348 3121; eBay seller "cmuzyy") or the RaceGerman E36 Headlight Duct, race version (www.racegerman.com/Spec3). If an Upgraded headlight air duct is fitted it must be used only to duct air into the stock intake airbox assembly. A hose or duct may be installed to connect an Upgraded headlight air duct to the factory intake airbox.

9.3.1.1.4 Engine (block and head) may be painted for cosmetic purposes only (for example, heat resistant products are forbidden).

9.3.1.1.5 The ASC or ASC+T system may be disabled and the secondary throttle body, secondary throttle actuator, and secondary throttle cable may be removed. If the secondary throttle body is removed, Part 13541703588 shall be installed. A 10ohm resistor may be installed in the wiring for the secondary throttle actuator to prevent the ASC dash light from illuminating.

9.3.1.2 **Component Modification**
9.3.1.2.1 Machining for balancing purposes only is allowed.

9.3.1.2.2 All pistons, including aftermarket Upgrades, must be factory replacement spec and match factory dome, dish, valve relief depth, ring groove placement, weight and wrist pin height; compression must meet factory replacement specifications. The maximum allowable overbore is limited to the largest available factory replacement piston, not to exceed .025 inch.

9.3.1.2.3 Rings may be substituted.

9.3.1.2 Engine Bearings and bushings may be substituted.

9.3.1.2.5 Valve guides may be substituted.

9.3.1.2.6 No engine component may be modified in any manner not specifically permitted or authorized by the Factory Service Manual or Factory Technical Bulletins. All competitors are required to maintain, and present upon request, the factory manual, and/or Technical Bulletins that show the modification in question.

9.3.1.2.7 Overhaul procedures, which in any way increase performance beyond factory specifications that are not specifically authorized by these regulations, are prohibited.

9.3.1.3 **Fuel System**
9.3.1.3.1 Fuel filters may be Upgraded.

9.3.1.3.2 Any commercially available fuel pump(s), hoses, and fuel tank baffles are allowed. A secondary fuel pump may be installed within the tank with the sole purpose of providing fuel to the primary fuel pump.

9.3.1.3.3 A fuel pump shall not be located in the driver/passenger compartment.

9.3.1.3.4 The stock fuel pressure regulator must be used.

9.3.1.3.5 Fuel lines may be Upgraded. BMW part #16131180886 (activated charcoal filter) may be removed.

9.3.1.3.6 Fuel lines shall not exceed three-eights of one inch inside diameter.

9.3.1.3.7 Fuel lines that pass through the driver/passenger compartment shall be metal or metal braided and securely fastened.

9.3.1.4 **Camshaft and Valve Gear**
9.3.1.4.1 All valve sizes, seat dimensions and angles, etc., shall conform to factory specifications.

9.3.1.4.2 All cam dimensions, lift, duration, etc., shall conform to factory specifications.

9.3.1.5 **Block**
9.3.1.5.1 Compression ratio may be changed only within the tolerances affected by resurfacing for trueness and within factory tolerances or as allowed by these regulations.

9.3.1.6 **Oiling System**

9.3.1.6.1 Engine oil may be substituted.

9.3.1.6.2 Engine oil filter may be substituted.

9.3.1.6.3 A pressure accumulator/"Accusump" is permitted, and the location of the accumulator within the bodywork is unrestricted, but it shall be securely mounted.

9.3.1.6.4 Oil lines that pass through the driver/passenger compartment shall be metal or metal braided and securely fastened.

9.3.1.6.5 Oil pans, pan baffles, scrapers, windage trays, and oil pickups are unrestricted.

9.3.1.6.5.1 Dry sump systems are prohibited.

9.3.1.6.6 Oil coolers may be added or Upgraded, and their location within the bodywork is unrestricted so long as they are not mounted within the driver/passenger compartment.

9.3.1.6.7 Oil lines and oil filter housing may be Upgraded.

9.3.1.7 **Engine Management System**
9.3.1.7.1 The engine management computer or ECU shall be modified to include required part #Chip_BWS3 from Bimmerworld (Bimmerworld.com or 877-639-9648). No other changes or modifications are allowed to the ECU or the aftermarket chip.

9.3.1.7.1.1 All cars shall use an E36 325i(s) ECU (DME) Bosch part number 0-261-200-413 or 0-261-203-506.

9.3.1.8 **Other Engine Related Items**
9.3.1.8.1 Alternate, non-solid, motor mounts, providing the same height as original, are permitted.

9.3.1.8.2 Engine belts may be substituted.

9.3.1.8.3 Hardware items (bolts, nuts, etc.) may be Upgraded with similar items performing the same fastening function.

9.3.1.8.4 Head gasket(s) may be Upgraded with any gasket(s) having the same or greater compressed thickness as stock.

9.3.1.8.5 Other engine gaskets may be Upgraded.

9.3.1.8.6 The application or use of any painting, coating, plating, or impregnating substance (i.e. anti-friction, thermal barrier, oil shedding coatings, chrome, anodizing, etc.) to any internal engine surface, including intake manifolds, is prohibited.

9.3.1.8.7 Cruise control mechanism may be removed.

9.3.1.8.8. The main chain tensioner may be upgraded to part number 11317838675 from an S52 motor.

9.3.1.9 **Engine Performance Specifications**
9.3.1.9.1 Engine Performance Specifications as outlined in Appendix C shall apply.

9.3.2 **Engine Swapping**
9.3.2.1 Use of any 1992-1999 E36 chassis is permitted so long as a 2.5L single VANOS motor, engine wiring harness, engine accessories, and associated hardware are used from a 1993-1995 production vehicle.

9.3.3 **Ignition/Starter/Electrical Systems**
9.3.3.1 Spark plugs, coils, and coil extensions may be substituted.

9.3.3.2 Batteries may be Upgraded.

9.3.4 **Exhaust System**
9.3.4.1. The exhaust system downstream of the Y-pipe may be Upgraded to steel or stainless steel tubing, 2.5 inch outer diameter, 14 gauge (wall thickness range 0.075 inches - 0.085 inches).

9.3.4.1.1. The Upgraded exhaust tubing shall consist of a single pipe (i.e. dual exhausts are not permitted) and shall utilize the OEM exhaust hangers and follow the stock exhaust routing.

9.3.4.1.2. A threaded bung accepting the OEM oxygen sensor (M18 x 1.5) shall be placed in the stock location.

9.3.4.2. The specified muffler, Magnaflow 12616, shall be used in the stock location.

9.3.4.3. All exhaust components upstream of the Y-pipe shall remain stock or OEM.

9.3.4.4. A compliant exhaust kit may be purchased from Spec3 preferred supplier: Mitchum Enterprises, Richmond, VA. (804) 402 1239 (text message preferred); richard.mitchum@gmail.com

9.3.4.4.1. Minor adjustments may be made to the Mitchum Enterprises exhaust system to help with fitment. Any adjustment made can serve no secondary purpose.

9.3.4.3 Original exhaust system heat shields may be removed provided any fuel tank is shielded.

9.3.4.4 The exhaust system may be wrapped in heat shielding to reduce cockpit temperatures. Alternatively, heat shielding may be installed on the chassis immediately adjacent to the

specified exhaust system to reduce cockpit temperatures. For clarity, this rule is applicable to the exhaust system and is not applicable to the exhaust manifold.

9.3.5 **Cooling Systems**
9.3.5.1 **Radiators**
9.3.5.1.1 Any radiator may be used, provided it is mounted in the original location, maintains the same plane as the original core, and requires no body or structure modification to install.

9.3.5.1.2 Mechanical cooling fan and associated assembly (fan, fan clutch, and fan shroud) may be removed or Upgraded.

9.3.5.1.3 Electronically operated fans with manual or automatic actuation may be added.

9.3.5.1.4 Thermostats may be modified, removed, or Upgraded. Thermostat housings may be Upgraded with an aluminum housing that is otherwise identical to the OEM plastic thermostat housing.

9.3.5.1.5 Water hoses, water pump, and BMW part #17111723520 Radiator Expansion Tank may be Upgraded.

9.3.5.1.6 Ducting, shielding, or shrouding solely for the purpose of directing air through the radiator, oil cooler, and power steering cooler is permitted. Radiator ducting, shielding and/or shrouding otherwise permitted under this rule shall not inhibit the flow of air from the bumper and/or kidney grills through the radiator. The alternator air duct may be removed.

9.3.5.2 **Air Conditioners**
9.3.5.2.1 Air conditioning belts may be removed.
9.3.5.2.2 Air conditioning systems may be removed in whole or in part including all non-functioning brackets and bracing.

9.3.5.3 **Heaters**
9.3.5.3.1 Heater hoses may be plugged.

9.3.5.3.2 Heater water control valve(s) may be added, Upgraded, or removed.

9.3.5.3.3 Heater core and hoses may be removed or modified.

9.3.6 **Drive Line/Drive Shaft**
9.3.6.1 Drive shaft may be substituted but must retain all factory specifications (i.e. weight).

9.3.7 **Steering**
9.3.7.1 Steering components may be substituted but must retain all factory specifications.

9.3.7.2 Power steering pump and associated plumbing may be removed.

9.3.7.3 Power steering hoses may be Upgraded.

9.3.7.4 Power steering belts may be removed.

9.3.8 **Suspension**
9.3.8.1 Vorshlag Motorsport camber plate part number VM-CP-SPEC3 and spring perches part number VM-SP-96S-14 shall be used.

9.3.8.2 BMW 1996-99 M3 front control arms and front control arm bushings shall be used. Specified part numbers are as follows:

Control Arm Right: 31-12-2-228-462
Control Arm Left: 31-12-2-228-461
Control Arm Bushings (sold as set): 31-12-9-069-035

9.3.8.2.1 Front control arm ball joints may be Upgraded by pressing in part numbers 31121126254 (E30 outer ball joint) and 31121126253 (E30 inner ball joint) into the 1996-99 M3 control arms specified in Rule 9.3.8.2. Please note that the E30 ball joints referenced herein are directional and must be installed in the appropriate orientation.

9.3.8.3 **Rear Shocks**
9.3.8.3.1 Koni- part number 8240-1115 shall be used. In addition, BMW (OEM) Bump Stop Rear 33-53-1-138-109 shall be installed.

9.3.8.3.2 No custom shock valving is permitted.

9.3.8.4 **MacPherson front strut inserts.**
9.3.8.4.1 Koni insert - part number 8641-1342 shall be used. In addition, BMW (OEM) Bump Stop Front 31-33-2-225-377 shall be installed.

9.3.8.4.2 No custom shock valving is permitted.

9.3.8.4.3 The following new or used strut housings shall be modified to Koni part number 8641-1342S3 installation specifications:

BMW part 31312228007 (Drivers side 1996-99 M3) or Substitute
BMW part 31312228008 (Passenger side 1996-99 M3) or Substitute

Additionally, it is recommended that but not required that Front shock bolts be replace with the parts:

Front shock “fit” bolt BMW part 07-11-9-905-853
Front shock nut for fit bolt BMW part 31-33-1-094-516
Front shock washer BMW part 07-11-9-931-021

9.3.8.5 Any suspension setting (toe, caster, camber) not requiring machining or modification to factory parts is allowed.

9.3.8.6 The maximum track width shall be determined based upon the total combined offset of the wheel and, if utilized, spacers. The minimum allowable combined offset shall be 20 millimeters for each of the four corners of the vehicle. For example, if a competitor utilizes a 30mm offset wheel with a 5mm spacer, the combined offset shall be equal to 25mm and the measurement would be deemed to be legal. Should that same competitor have utilized a 15mm spacer, the combined offset would be 15mm and the measurement would be deemed to be illegal.

9.3.8.7 **Springs**
9.3.8.7.1 Swift Race Springs - part "NASA Spec3" shall be used. Springs may be purchased from RRT in Sterling, VA. (703) 661-4222; rrtautomotive.com.

9.3.8.7.2 Spring pads may be removed; if retained, a maximum of two pads per spring shall be used.

9.3.8.8 Competitors shall use the components from either H&R anti-roll bar kit 72910 or Eibach anti-roll bar kit 2033.32. Both anti-roll bars do not need to be from the same manufacturer.

9.3.8.8.1 Front and rear anti-roll bar end-links may be Upgraded.

9.3.8.8.2 Disconnecting the front or rear anti-roll bar is permitted.

9.3.8.9 Unless specified, suspension bushing material may be substituted.

9.3.8.9.1 Rear subframe bushings may be replaced with non-metallic commercially available alternatives if they are 1) marketed as OEM replacement and 2) designed to be installed without modification to the rear sub-frame or subframe attachment stud. If OEM rubber bushings are retained, non-metallic inserts (such as Powerflex Rear Subframe Bushing Insert) may be utilized for reinforcement.

9.3.8.10 Any bolt-in strut or shock tower brace is permitted, unless specified in these regulations.

9.3.8.11 Additional reinforcement of rear anti-roll bar pick-up points, rear sub-frame attachment points, front sub-frame engine attachment points, rear trailing arm pockets, front subframe inner ball joint attachment points, and rear lower control arms is permitted and highly recommended.

9.3.8.12 Upgrade of rear upper shock mounts is permitted and highly recommended. If Upgraded, the following part shall be used: BMW part 33-52-6-754-096

9.3.8.13 It is suggested but not required that front shock tower reinforcement BMW part 31-31-2-489-795 AND rear shock tower reinforcement BMW part 51-71-8-413-359 be used. If installed, material may be removed from the front shock tower reinforcement plates to facilitate alignment settings.

9.3.8.14 It is suggested that BMW part 51-71-8-410-212 front sub-frame cross reinforcement (aka, x-brace) be used.

9.3.8.15 All cars shall install BMW part Ball Joints 33-32-1-140-345 into the rear trailing arm upper and lower ball joints. Additionally, BMW part Rear Trailing Arm Bushings 33-32-6-770-817 shall be installed. Rear trailing arm bushing shims, from respected vendors such as Vorshlag, Ground Control, RRT, Turner Motorsports, etc, are permitted and highly recommended.

9.3.8.16 Up to a 0.13" shim (or washers) may be inserted on each side of the vehicle between the front king pin (part number right: 31211092080 and left: 31211092079) and the front strut housing (see rule 9.3.8.4.3.). If a shim is installed, BMW part number 31311136465 (hex bolt) may be Upgraded (recommended Upgrade to be at least Class 10.9 steel hardware).

9.3.9 **Tires and Wheels**
9.3.9.1 Competitors shall use either 235/40/17 Toyo Proxes RR or 225/50/15 Toyo Proxes RA-1. All four tires must be of the equivalent size and product type.

9.3.9.1.1 Commercial tire shaving to any depth is allowed. Tires shall not be modified in any other way.

9.3.9.2 Tires must not have cords showing at any time.

9.3.9.3 Wheels shall be either 17 inches by not more than 8.5 inches with a minimum weight of sixteen and one half (16.5) pounds or 15 inches by 7 inches with a minimum weight of fifteen and one half (15.5) pounds.
9.3.9.3.1 All four wheels shall be the same diameter and width.

9.3.9.4 Wheel bearings may be substituted.

9.3.9.5 Wheel bearing lubricant may be Upgraded.

9.3.9.6 Wheel spacers are permitted.

9.3.9.7. An unmodified spare tire/wheel combination, filled only with air, intended for an E34/36/46/38, with only typical commercial balancing weights attached, and weighing no more than 50 lbs. total may be placed in the stock spare tire well. It must be securely mounted with the stock or similar mounting apparatus (i.e. mount cannot appear to be designed to add weight).

9.3.10 **Brakes**
9.3.10.1 The make and material of brake pads must be Upgraded with the following Hawk part numbers:

Front Pads - NBS3F or HB136G.690
Rear Pads - NBS3R or HB227G.630
Pads are available from Spec3 preferred supplier: www.Andrew-Racing.com

9.3.10.2 Brake rotors may be substituted provided they match OEM specifications for the E36 non-M3 application.

9.3.10.3 Cross drilling, grooving, and slotting of rotors is permitted.

9.3.10.4 Rotors may be cryogenically treated.

9.3.10.5 Removal of dust shields (backing plates) is permitted.

9.3.10.6 Brake fluid may be Upgraded.

9.3.10.7 Flexible rubber brake lines may be Upgraded with Teflon lined, metal braided hoses.

9.3.10.8 Metal brake lines may be substituted.

9.3.10.9 Parking brake and associated mechanisms, including the parking brake console, may be removed.

9.3.10.10 BMW brake Guide Bushing part #34216869617 may be Upgraded.

9.3.11 **Differential**
9.3.11.1 The final drive ratio for each eligible car is specified in Appendix A.

9.3.11.2 Factory limited slip differentials are permitted, but must retain all factory specifications.

9.3.11.3 Finned, larger capacity differential covers may be used.

9.3.11.4 Differential lubricant and external differential bushings may be replaced.

9.3.11.5 If a limited slip differential is fitted, it must breakaway at 70lb-ft. or less. The lockup will be checked at Impound and within 30 minutes of the conclusion of the race. It will be tested at the center hub nut, using a 30mm socket and commercially available ½" torque wrench. The car will be placed on solid pavement, the right side of the car will be jacked up until the right rear tire is free from the pavement, the transmission will be placed in neutral, and the parking brake, if present, will be released. The torque wrench will be placed at the nine o'clock position with the socket on the center nut. The torque wrench will be set at 70lb-ft. and pushed down. If the differential does not breakaway, a second and impartial similar style torque wrench shall be used in a second test, immediately following the first test. If the differential does not breakaway using the second torque wrench, the car will be disqualified from the preceding race and the DQ will be noted in the car's logbook.

9.3.11.6 One hose may be attached to the factory differential vent pipe/fitting and must be connected to a catch tank.

9.3.12 **Transmission/Flywheel Assembly**
9.3.12.1 Transmission shall be an unmodified factory standard five speed manual designated for the U.S. E36 318 or 325 models.

9.3.12.1.1 Engine swap cars assume the characteristics (model/year) of the donor car.

9.3.12.2 Transmission lubricant may be Upgraded.

9.3.12.3 The external shifter mechanism may be modified or Upgraded.

9.3.12.4 Shift knobs may be Upgraded.

9.3.12.5 Upgraded, non-solid, transmission mounts, providing the same height as original, are permitted.

9.3.12.6. The OEM dual mass flywheel is permitted. In addition, Upgraded single mass flywheels of the same diameter as OEM and not less than 23 pounds are permitted. Permitted single mass flywheels include, without limitation, Valeo 52281208 Solid Flywheel Conversion Kit.

9.3.12.7 Any clutch disc and pressure plate of original diameter may be used provided that they bolt directly to an unmodified flywheel permitted under these rules.

9.3.12.8 Balancing of the flywheel/clutch/pressure plate assembly is permitted.
9.3.12.9 One hose may be attached to the factory transmission vent pipe/fitting and must be connected to a catch tank.

9.3.13 **Body/Chassis/Interior**
9.3.13.1 Driver and passenger seats must be Upgraded with any race seat in compliance with the CCR. Front passenger and rear OEM seats may be removed.

9.3.13.2 Ballast is permitted, and shall be securely mounted in the passenger foot well, aft of the firewall, and shall be forward of the rear seat riser.

9.3.13.2.1 Ballast shall be in segments no heavier than fifty (50) pounds.

9.3.13.2.2 Ballast may not exceed one hundred (100) pounds maximum. Spare Tire weight per 9.3.9.7 is considered separate from this rule and may be added in addition to the allowed 100 pounds.

9.3.13.2.3 Each segment shall be fastened with a minimum of two (2) one-half (1/2) inch bolts and positive lock nuts of SAE grade 5 or better unless the ballast is mounted using the four (4) passenger seat mounting points and replacement bolts, and shall utilize large diameter, load distributing washers.

9.3.13.2.4 Holes may be drilled in the passenger footwell floor pan for purposes of mounting the ballast and the floor pan may be reinforced for the same purpose.

9.3.13.3 Modifications to the underside of the vehicle for the purpose of improving aerodynamics are not allowed.

9.3.13.4 Engine and front bumper under-tray panels may be removed. OEM front bumper under-tray panel and supports may be Upgraded with an aftermarket or fabricated replacement which when viewed from above does not protrude from the front or sides of bumper cover outline, when viewed from the side when the vehicle is on the ground (not on a lift or jack stands) does not protrude below the bumper cover outline and terminates a minimum of 2 inches from the foremost leading edge of the front anti-roll bar when measured with the car in the air (aka on jackstands or a lift).

9.3.13.5 Ducting to the brakes is permitted, and two openings in the front valance to allow the passage of up to a three (3) inch diameter duct leading to each front brake are permitted for this purpose. Openings for brake ducts and or fog lights, whether installed or part of the original bumper design, may be partially or fully covered.

9.3.13.6 Ducting to the oil cooler is permitted, and openings in the front valance to allow the passage of up to a three (3) inch diameter duct leading to the cooler is permitted for this purpose.

9.3.13.7 Fender and wheel openings shall remain unmodified.

9.3.13.7.1 It is permitted to roll under or flatten any interior lip on a wheel opening for tire clearance.

9.3.13.7.2 Non-metallic inner fender liners may be removed.

9.3.13.8 Tools and other 'loose' items must be removed.

9.3.13.9 A driver's side dead pedal/foot rest may be added.

9.3.13.10 Pedal covers may be added.

9.3.13.11 Screening of one-fourth (1/4) inch minimum mesh may be added over all openings in the front of the vehicle, contained entirely with the bodywork of the vehicle.

9.3.13.12 Water temperature, oil temperature, fuel pressure, oil pressure, exhaust temperature, engine RPM speed (tachometer), lap timing instrumentation, and mixture gauges are permitted, but shall be securely mounted and may perform no secondary function.

9.3.13.13 Interior mirror(s) may be Upgraded with multi-panel, flat panel, or parabolic type mirrors, so long as they do not extend beyond the confines of the interior of the vehicle.

9.3.13.14 Driver's side outside mirror glass may be modified. Mirror housing must remain stock.

9.3.13.15 Two-way radios may be used.

9.3.13.16 Antenna for two-way radio may be added and necessary modifications to the vehicle are allowed to accommodate the installation. Such modifications shall not serve any other purpose nor provide any competitive advantage.

9.3.13.17 Trunk compartment trim panels may be removed.

9.3.13.18 On board timing receivers are permitted.

9.3.13.19 Windshield washer fluid reservoirs and associated plumbing (but not including the washer nozzles) may be removed.

9.3.13.20 The interior, including carpeting, seats, headliner (to include the leading plastic panel), console, radio/cd/cassette/navigation systems/trip computers, OEM seat belts, speakers, glove box door, panels under the dash, grab handles, driver and passenger door (front and rear) window glass and mechanisms, heating and cooling system interior ducts, excess interior wiring, and sun visors, may be removed. Headlight, turn signal, windshield wiper, and ignition switches may be relocated within the interior and modified with alternative switches for actuation.

9.3.13.20.1 Rear side and/or rear passenger door window glass may be Upgraded with polycarbonate cut to fit in the stock location and secured. Windshield and rear window must remain glass of OEM specification.

9.3.13.20.2. Non-structural interior door skin may be cut to remove weight provided that the door latch mechanism is easily operable from both the interior and exterior of the vehicle. OEM crash bars must be retained.

9.3.13.21 Door panels may be Upgraded with 0.060-inch aluminum or comparable material, securely attached to the door.

9.3.13.22 Any door adjacent to a seat equipped with seat belts or harness must be capable of being opened from both inside and outside the car.

9.3.13.23 The sunroof cassette mechanism may be removed so long as the sunroof panel is secured in compliance with 7.12.1 and the CCR.

9.3.13.23.1 The panel shall be flush with the roofline and of the same material as original.

9.3.13.24 Any sound-deadening/insulation and protective materials may be removed from the interior of the passenger, engine, and trunk compartments.

9.3.13.25 Any undercoating or other protective materials may be removed from the underbody.

9.3.13.26 Hood and trunk pins, clips, or positive action external latches are permitted.

9.3.13.26.1 If pins, clips or latches are used the stock releases and components may be removed.

9.3.13.27 Side moldings, side reflectors, etc., may be removed and attachment holes and channels may be filled. BMW part number 51121960727 (rear trim) may be removed.

9.3.13.28 Except as otherwise specified within the rules, other E36 vehicle parts are not permitted (i.e. M3 components are illegal).

9.3.13.29 One welded jack plate may be added per side of the vehicle and serve no other purpose than support the load of the vehicle. The plate shall be rectangular, not greater than one-quarter (0.25) inch thick, not greater than forty-eight (48) square inches, and have no dimension in excess of eight (8) inches. The plate shall be located in between but not less than twenty (20) inches from the wheel wells and not more than three (3) inches from the side (edge) of the vehicle.

9.3.13.30 OEM front bumper cover - part number 51118132414, 51118122312, 51118122313, or equivalent - may be Upgraded with BMW E36 M3 front bumper cover – part number 51112252253, 51112264370, or equivalent. All associated bumper trim parts may be Upgraded in conjunction with this rule.

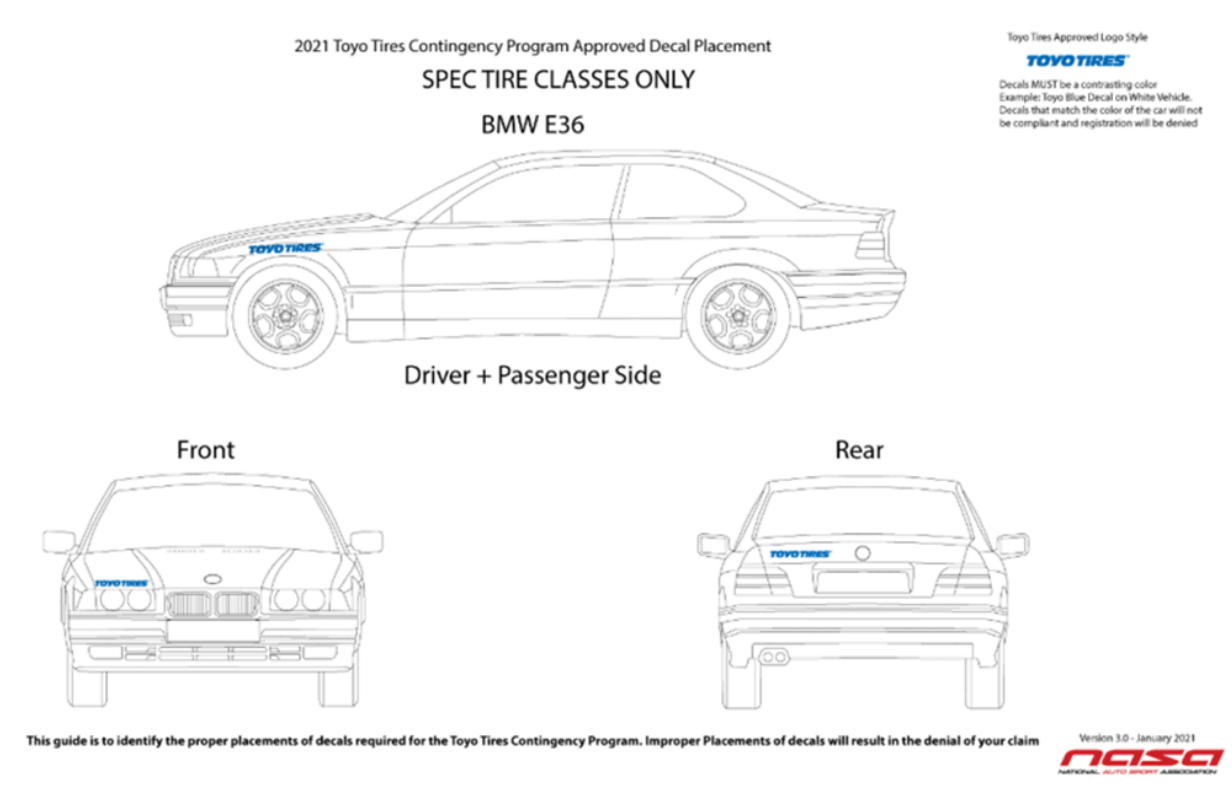
9.3.13.31 OEM heater panel part number 51712250462 may be modified or removed.

APPENDIX A

MODEL	FACTORY CODE	ELIGIBLE PROD. YEARS	FACTORY BHP	FACTORY WEIGHT	MINIMUM WEIGHT (LBS)	FINAL DRIVE RATIO
325i & 325is	E36	1993-1995	189	3090	2825	3.15:1

APPENDIX B


Required Decal Placement
TOYO TIRES
HAWK
19
SPEC3
S. O'HARA


2021 Toyo Tires Contingency Program Approved Decal Placement
SPEC TIRE CLASSES ONLY
BMW E36
Toyo Tires Approved Logo Style
TOYO TIRES
Decals MUST be a contrasting color
Example: Toyo Blue Decal on White Vehicle.
Decals that match the color of the car will not be compliant and registration will be denied
TOYO TIRES
Driver + Passenger Side
Front
Rear
TOYO TIRES
TOYO TIRES
This guide is to identify the proper placements of decals required for the Toyo Tires Contingency Program. Improper Placements of decals will result in the denial of your claim
Version 3.0 - January 2021
nasa
NATIONAL AUTO SPORT ASSOCIATION

APPENDIX C

Spec3 Engine Performance Specifications:

To verify compliance and to provide maximum parity in the class, NASA may employ chassis dynamometer testing as an additional means of engine inspection for the Spec3 Series. Engine horsepower and torque curve shapes should generally match the shape of the curves as illustrated in Figure 1 below with emphasis on the 3000 to 6500 RPM range. The maximum allowable horsepower value for the class is set at 195.9 HP and 179.9Tq and an engine that exceeds the RPM limiter shall be deemed illegal.

Engine Dynamometer Testing Protocols:

To ensure objectivity, a Spec3 Series official, an appointed official (NASA or otherwise), or an approved technician will operate any cars being inspected on the chassis dynamometer. Three consecutive "official" dyno pulls must be performed and the average result of the three pulls in each category of HP and Torque (rounded to the nearest tenth) will be used for compliance. NASA, its officers, officials, and assignees are not responsible for any mechanical failures or damage otherwise while the dyno runs are being performed. The following shall be the testing protocols:

1. A DynoJet brand is the required type of dyno for testing and inspection. All dyno readings must be corrected to SAE J1349 Rev JUN901 and the dyno's smoothing function set to 5. The location of the dyno shop should be recorded.

2. Prior to the chassis dynamometer inspection, the competitor may request to top off any fluids needed to ensure the engine and drive train are not damaged during testing. If allowed by the Series Director, NASA Compliance Director or Race Director, the fluids must be added with a NASA Technical Inspector present and no other modifications or adjustments may be made to the car.

3. All dyno pulls will be made with the hood open.

4. Prior to the first official run, an official or technician will confirm that the accelerator pedal opens the throttle completely and that the wide open throttle switch is properly connected.

5. Dyno pulls will be made in 5th gear or at a 1:1 ratio.

6. During an official dyno test, the car must be fitted with the tires used on the car in the previous session with the rear tire pressures set at 33 psi.

7. Electric engine fans and or external cooling fans may be used while the car is on the dyno.

8. Dyno runs shall be made with water temperature in the normal operating range of 165F-200F. Should the water temperature exceed 200F during any pull, that pull is void and shall be repeated once the engine has cooled enough to operate within the specified range. Water temperature may be verified using external temperature measurements such as an infrared temp gun at the thermostat housing

9. Three consecutive runs shall be made under full power. The RPM range shall be consistent for all three runs. Starting RPM shall be no higher than 2500. Ending RPM shall be when the rev limiter engages.

10. Should any run result in an erratic or non-repetitive result, series officials may dismiss the result or request another dyno pull.

11. The NASA Compliance Director may also make adjustments to the official maximum horsepower and torque numbers if he/she feels that the dyno is reading unusually high or low.

12. Additional runs may be performed using NASA compliance parts such as ECU and AFMs.

13. Multiple dynos may be in use at any given time. If so, using a reference car, the % difference between the facilities highest and lowest reading will be used to satisfy CCR 28.1.11. (1/2 of a tool's measurement). The competitor has no choice of dyno to be measured on, and will not be re-measured on another dyno without a completed appeal.

Figure 1