
2014 SpecM3 ® Vehicle Preparation Rules

(updated 11/04/2011)

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Substantive changes since last revision are indicated in bold blue type and include:

- new regulations allowing brass brake caliper bushings (see Sec. 16)
- new regulations regarding vehicle appearance (see Sec. 26)
- new regulations regarding vehicle identification (see Sec. 27)
- new regulation regarding roll cage attachment points (see Sec. 28)
- comments regarding "hero weight" (see Sec. 29)
- Safety Equipment section has been renumbered (see Sec. 28)
- Minimum Weight section has been renumbered (see Sec. 29)

- clarification of allowance for convertible chassis (see Sec. 1) and requirement for OE hard top (see Sec. 25). <--NEW 8/19/2011
- clarification of definition of "OE" and "OEM." (See sec. 1.6) <--NEW 11/04/2011

The basic philosophy behind SpecM3® is to provide a cost-effective class that provides a higher level of performance than other currently available "spec" classes. The rules package is also intended to provide a natural progression for enthusiasts who have already prepared their street-driven M3's for autocross or track use and are looking to participate in competitive road racing. It is our goal that a SpecM3® can be purchased and made track-ready for under \$20k.

The base platform for a SpecM3® car is a stock US-Spec E36 M3. Changes and modifications to the stock platform will be considered for use if they meet one of three primary criteria: improve safety, markedly increase the vehicle's longevity, or offer a significant benefit-to-cost performance enhancement. SpecM3® is intended to be a grassroots, cost effective racing class more than a showcase for a professionally race car builder's skill or the size of anyone's wallet.

While we will require the mandatory use of a few specific components, we will not specify the mandatory use of one particular brand. Rather we intend to give racers greater freedom of choice than in other spec series, where competitors are required to purchase one specific tire or suspension package, by allowing them to hone their own tuning skills and develop their own arrangements with various manufacturers and tuners -- all keys to a successful long term racing program.

It should be emphasized that freedom given car owners is being done to allow for individual competitor's personal preferences and brand loyalty -- NOT to encourage teams to develop their own products to gain a significant competitive advantage.

to modify the rules as needed to make it easier for competitors to understand and comply with that vision. Toward that end, tortured interpretations of these rules or attempts by competitors to circumvent the spirit of the rules will not be tolerated.

Competitors who believe they've found a "loophole" in the rules through creative interpretation are strongly encouraged to check with Series Organizers BEFORE making any significant change. Exploring uncharted development territory should be done cautiously and at the competitor's risk and expense. Series Officials reserve the right to modify these preparation rules as needed throughout the 2011 season.

It should also be noted that SpecM3® Vehicle Preparation Rules are a "permissive" rule set, i.e. unless a specific modification is permitted by the rules, it is not permitted. In short, if the rules don't say you CAN do something, you CAN'T do it.

1. VEHICLES

- 1.1. Any E36 M3 standard chassis (**coupe, sedan, or convertible**) sold through the normal dealer network in the US. (no LTW, Canadian/Euro-spec, bodies in white, etc.)
- 1.2. Must have a legitimate VIN on the windshield panel and at least two other body panels. (Exemptions will be considered on an individual basis.)
- 1.3. All factory options that came on the car as it was delivered are permitted.
- 1.4. Dealer-installed option, unless available on the factory production line, are NOT permitted.
- 1.5. Unless specified elsewhere in these rules, updating and backdating of parts or components between vehicles of different years is NOT permitted.
- **1.6 Unless specified elsewhere in these rules, the terms "OE" or "OEM" refer to US-spec original equipment or replacement parts, e.g. Euro-spec parts are not permitted.**

2. ENGINE

- 2.1. Only 3.0 or 3.2 US-spec M3 engine (S50B32USA or S52, no Canadian or Euro-spec motors).
- 2.2. Internal modifications are NOT permitted (including coatings, plating, or impregnating) unless expressly permitted elsewhere in these rules.
- 2.3. rebuilds must be to OE specs using factory approved parts and materials.
- 2.4. If a spec is not provided in the factory or Bentley manual, no modification is permitted.
- 2.5. Fluid hoses, clamps, and belts, may be substituted.
- 2.6. OE water pump may be replaced with a high performance model (e.g. Turner PN STE30330 or similar).
- 2.7. Additional oil pan baffles (e.g. VAC-OPB-E36 or similar) may be added .
- 2.8. Oil pump nuts may be secured by non-OE methods.
- 2.9. Any engine oil and additives are permitted.
- 2.10. Underdrive water pump, alternator, and power steering pulleys are permitted. The main crank pulley may not be modified.
- 2.11. Aftermarket engine oil cooler may be added (e.g. Turner E36OILCOOLERKITST1 or similar).

NOTE: In an effort to discourage high-dollar engine rebuilds and modifications beyond the legal limit, competitors are advised that Series Officials may use on-board data logging devices to assess performance potential and that their cars may be impounded and the engine and

post-event dyno testing. Engines found with horsepower and torque exceeding accepted reasonable limits for a professional OE-spec rebuild will be penalized and given mandatory changes prior to further competition. Competitors are encouraged to have a preseason dyno test done to assure compliance.

3. COOLING SYSTEM

- 3.1. All components of the air conditioning system forward of the firewall may be removed. All components of the a/c system from the firewall back must remain.
- 3.2. Non-OE radiators constructed of alternate materials may be used (Ireland PN E36alumrad or similar) provided it fits in the OE location without modification.
- 3.3. A mesh radiator screen may be added in front of the radiator.
- 3.4. An aluminum thermostat housing (PN 11531722531 or equivalent) is ALLOWED.
- 3.5 The thermostat (PN 11537511580 or equivalent) may be removed or an alternate is ALLOWED provided no modification is made to the housing.

4. INTAKE SYSTEM

- 4.1. The airbox and intake system upstream of the air flow meter (HFM) may be modified. (e.g. Conforti CAI or similar is permitted)
- 4.2. The HFM and all other parts of the air and fuel intake system must remain unmodified and consistent with the engine for which it was originally designed.

NOTE: Euro HFM, big bore throttle body, larger injectors, swapped intake runners, or removal of the ASC+T unit are not permitted.

5. EXHAUST

- 5.1. OE headers/manifolds are required (no aftermarket headers).
- 5.2. The OE midpipe (OBD-I PN 18301728401, OBD-II PN 18301744162) is required.
- 5.3. Exhaust systems must maintain fully functional catalytic converters in the OE location. OE cats may be replaced with aftermarket units (including high-flow) provided they are installed in the OE location. The overall dimensions and flow pattern of the OE midpipe section must remain the same as the OE part.
- 5.4. The exhaust downstream of the midpipe/cat section is free provided that all exhaust gasses must pass through one or more mufflers and exit the car in the OE location.

NOTE: While we do not anticipate conducting emission or noise level tests at events, it is our intent that all SpecM3® cars emit low levels of pollutants and noise. Competitors are reminded that all cars must meet any sound restrictions imposed by the sanctioning body or event organizers.

6. ENGINE MANAGEMENT

- 6.1. Only the original ECU or a factory authorized replacement is permitted.
 - 6.2. Replaceable ECU chips and alternate flash programmable software is permitted provided it fits inside in the factory ECU without modification to the ECU case.
 - 6.3. Cockpit adjustable engine management systems are prohibited. Any changes to ECU parameters must be made while the car is stationary.
 - 6.4. Add-on or piggy-back systems are not permitted.
 - 6.5. Complete aftermarket engine management systems (Motec, Tek3, etc.) are not permitted.
 - 6.6. The factory ASC+T (traction control) system may be retained or disabled, but not otherwise modified.
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7. BATTERY & ELECTRICAL

- 7.1. Batteries may be replaced with those of an alternate manufacturer provided the replacement is of equal or greater size, weight, and amp-hour capacity.
- 7.2. Any spark plugs are permitted, but coil packs must remain stock.
- 7.3. All cars must be equipped with a master kill switch accessible from outside the car (by safety workers). It will be installed directly in either battery cable and will cut all electrical circuits except an on-board fire system. All terminals must be insulated to prevent shorting out. The switch must be clearly marked by the international symbol of a spark in a blue triangle clearly indicating its location. The OFF position must be clearly indicated.

8. FUEL TANKS AND FUEL

- 8.1. Only unleaded service station pump fuel, legal for use on public highways, is permitted.
- 8.2. Fuels on which no Federal Highway Taxes are paid, or which are labeled "For Off-Road Use Only," are NOT permitted.
- 8.3. Fuel cell foam may be used in the OE fuel tank.
- 8.4. A 2nd fuel pickup system (Turner PN TEN3630010 or similar) is permitted provided no other modification is made to the OE fuel tank.
- 8.5. The OE fuel tank may be replaced with a fuel cell that meets or exceeds FIA FT-3 standards with a maximum rated capacity of 20 gallons that is designed to mount in the OEM fuel tank location or is specifically designed to mount in the spare tire well (ATS "Well Cell" or similar) provided that it is not necessary to modify any bodywork to accomplish the installation other than for the purposes of fastening the cell securely in place.

9. TRANSMISSIONS

- 9.1. Only unmodified OE M3 (ZF Type C 5-speed) transmissions are permitted.
- 9.2. Gear ratios must remain stock: 4.20 (1), 2.49 (2), 1.66 (3), 1.24 (4), 1.00 (5)
- 9.3. Aftermarket short shift kits are permitted.
- 9.4. Any transmission fluid is permitted.

10. CLUTCH & FLYWHEEL

- 10.1. Only OE or OE replacement clutches (e.g. Sachs ST223.347 or similar) are permitted (no racing clutches).
- 10.2. Non-OE replacement clutches must be the same size, weight, and clamping force as OE and may provide no competitive advantage.
- 10.3. Only the OE flywheel is permitted and it may not be modified beyond factory specs.

11. DIFFERENTIALS

- 11.1. Only OE diffs with a 3.15 or 3.23 final drive ratio are permitted and may be used on any year vehicle.
 - 11.2. Only factory LSD units are permitted.
 - 11.3. Only factory approved rebuild methods may be used.
 - 11.4. Any diff fluid may be used.
 - 11.5. breakaway torque may not exceed 60 lb/ft as measured at a lug bolt at the 3 o'clock position on the hub.
 - 11.6. diff mounts must remain OE.
 - 11.7. Aftermarket finned differential covers are permitted (Rogue Engineering DC_E36 or similar) and the resulting increase in diff fluid quantity is allowed.
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- 12.1. Engine coolant is unrestricted before May 15 and after October 15 each year. Beginning May 15 and through October 15 each year engine coolant is restricted to water only or water with an approved wetting agent (Red Line Water Wetter or similar).
 - 12.2. Engine, transmission, and differential lubricants are unrestricted.
 - 12.3. Brake fluid is unrestricted.

13. ENGINE AND TRANSMISSION MOUNTS

- 13.1. Engine and transmission mounts of alternate material may be used provided the amount of metal is not increased over the OE mounts and the position of the engine or transmission is not changed. (Hard rubber, polyurethane, and Delrin are OK. Solid metal mounts are not permitted.)
- 13.2. Transmission mount "reinforcer rings" (UUC PN #TME or similar) are permitted.
- 13.3. Diff mounts must remain OE.

14. WHEELS

- 14.1. Any steel or alloy rim is permitted with a maximum width of 9".
- 14.2. Any diameter that fits over the stock brakes is permitted.
- 14.3. Wheels must be hub-centric (metal centering rings may be used).
- 14.4. Spacers may be used to achieve adequate offset for tire clearance. Spacers must be hub-centric or hub extenders (e.g. Turner PN TWH9905001 or similar) must be used.
- 14.5. The replacement of the OE wheel bolts with approved racing studs and nuts (e.g. TCKR StudStd44 and NutSt17 or similar) is highly encouraged and REQUIRED when spacers thicker than 5mm are used.
- 14.6. Minimum weight of any diameter wheels of 8"/8.5" width shall be 15 pounds. Minimum weight of any diameter wheels of 9" width shall be 16 pounds. There is no minimum weight for wheels narrower than 8".

15. TIRES

- 15.1. Any DOT approved tire (including rain tires) with a minimum "U" (124mph) speed rating is permitted.
- 15.2. Tires of any DOT treadwear rating may be used with a maximum section width of 245.
- 15.3. Tires with a DOT treadwear rating of 100 or more may use 255 section width.
- 15.4. Retreaded, recapped, or regrooved (including siped) tires are NOT permitted.
- 15.5. Otherwise legal tires that have had their tread depth reduced by "shaving" or "truing" are permitted.

16. BRAKES

- 16.1. Only OE calipers and mounting brackets are permitted.
 - 16.2. Only OE rotors or replacements of the same size and material as OE are permitted. (no Euro or alum. hats)
 - 16.3. Cross-drilling or slotting of rotors IS permitted.
 - 16.4. Dust shields and backing plates may not be modified or removed.
 - 16.5. Any non-metallic flexible brake lines may be replaced with Teflon lined stainless steel braided brake lines.
 - 16.6. Any brake pad material permitted.
 - 16.7. Any brake fluid may be used.
 - 16.8. No modification to the OE brake ducting is permitted.
 - 16.9. The OE ABS (antilock brake) system may be retained or disabled, but not otherwise modified.
 - **16.10 The OE rubber caliper bushings may be replaced with brass bushings (e.g. Turner**
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17. SHOCKS

- 17.1. Only OE or off-the-shelf single- or double-adjustable Koni, Bilstein, H&R, KW V1-3, or AST4100 front struts and rear shocks are permitted. (Koni 28-series not permitted. Other brands may be approved upon request.)
- 17.2. Must be mounted using OE attachment points.
- 17.3. Any rear upper shock mount that attaches the rear shock to the chassis using the OE attachment points is permitted (including monoball).

18. SPRINGS

- 18.1. Coil springs of any rate, diameter, and length are permitted.
- 18.2. Must mount in OE location. (coilover front OK)
- 18.3. Rear ride height adjusters permitted.
- 18.4. Ride height is free, except no part of the car (other than the exhaust system) may be lower than the lowest part of the wheel rims.

19. SWAY BARS

- 19.1. Only OE, H&R, UUC, Turner, Ground Control, or Racing Dynamics single-element solid or tubular bars are permitted. (Other brands may be approved upon request)
- 19.2. "Blade" style bars are not permitted.
- 19.3. Cockpit adjustable bars are not permitted.
- 19.4. Non-OE end links, including manually adjustable links, are permitted.
- 19.5. "Shock absorber" links or similar are NOT permitted.
- 19.6. Any sway bar bushing material is permitted.
- 19.7. Sway bar chassis attachment points may be reinforced provided such reinforcement serves no other purpose.

20. CAMBER/CASTER PLATES

- 20.1. Fixed or adjustable front camber/caster plates are permitted.
- 20.2. The use of "swapped" OE front upper strut mounts to achieve negative camber is permitted.
- 20.3. The OE upper strut mount mounting holes and center hole may not be slotted or otherwise modified.
- 20.4. Camber adjustment may only be achieved by using a camber plate in the front (no washers or eccentric bolts) and unmodified OE eccentric camber bolt (BMW PN 33326772698) in the rear.
- 20.5. Only OE rear lower arms are permitted (no non-factory camber adjustment in the rear) although they may be reinforced for track use. *NOTE: BimmerWorld lower arms PN BW.33321092237.WELDED or similar arms from other companies are considered reinforced OE arms and are permitted.*
- 20.6. The use of BMW factory upper strut tower reinforcement rings (BMW PN 31312489795 front, 51718413359 rear) is permitted and encouraged.

21. STRESS BARS

- 21.1. Front and rear bolt-in upper stress bars (also commonly called "strut braces") connecting the upper strut/shock towers are permitted, but may not triangulate to any other component or the body.
 - 21.2. The BMW chassis "X-brace" (BMW PN 51718410212) may be used in lieu of the factory trans tunnel cross brace, but not both.
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22. OTHER SUSPENSION COMPONENTS

- 22.1. Rear trailing arm bushing "limiters" (Vorshlag PN MF-SB-RTB36 or similar) are permitted.
- 22.2. Sway bar and rear trailing arm pickup points may be reinforced provided their position remains unchanged and the reinforcement serves no other purpose.
- 22.3. All other suspension components must remain OE or factory authorized replacements.
- 22.4. All other suspension and subframe mounts and bushings must be OE parts, attached in the OE location, and may not be modified in any way (e.g. slotting is not permitted).

23. INTERIOR

- 23.1. The driver seat **MUST** be replaced with an approved racing shell. (see Safety Requirements)
- 23.2. The OE passenger seat may be replaced with an approved racing shell designed for use by an adult, weighing at least 25 pounds with brackets and mounting hardware, and equipped with restraints comparable to and meeting the same safety requirements as the driver's restraints.
- 23.3. The entire rear seat may be removed.
- 23.4. Aftermarket steering wheels are permitted.
- 23.5. Quick release steering wheel mechanisms are permitted.
- 23.6. Additional/alternate gauges and warning lights are permitted.
- 23.7. Two way radios are permitted.
- 23.8. Gauges and Data Acquisition Systems are permitted for information gathering only (they do not make any changes, alterations, or calibrations to the car while it is in motion).
- 23.9. Sun visors, grab handles, and head rests may be removed.
- 23.10. The OE rear view mirror may be replaced with an aftermarket mirror. Additional rear-view mirrors are permitted.
- 23.11. The OE radio, speakers, and amplifier may be removed.
- 23.12. All tools and the plastic trunk mounted tool kit may be removed.
- 23.13. All loose items not held in place with factory fasteners (clips, screws, Velcro®, glue, etc.) may be removed.
- 23.14. All other OE interior components including headliner, door panels, carpeting, insulation, and sound deadening materials must remain in place and may only be modified the minimum amount necessary to permit the safe installation of the roll cage and other safety equipment.
- 23.15. If approved alternate driver and/or passenger restraints are used, the OE restraints and hardware may be removed.

24. GLASS

- 24.1. All window glass must remain OE, or OE replacement, and in place (no Lexan or polycarbonate windows).
- 24.2. Door glass may be removed only if needed for the installation of NASCAR-style door intrusion bars. (see Safety Requirements)
- 24.3. Headlights, tail lights, and turn signals may not be removed and must be in working order.
- 24.4. Fog lights must be removed and the resulting opening must be covered with factory fog light covers (BMW PN 51118122449/50).
- 24.5. Additional forward facing lights may be added above the bumper if approved by tech inspectors.

25. EXTERIOR AND BODYWORK

- 25.1. Only OEM or direct OE replacement (e.g. Certi-Fit) body panels may be used.
 - 25.2. An alternate lower front fascia/bumper cover with integrated spoiler lip may be used provided the overall shape and size of the fascia and all openings are the same as OE. OE mounting support parts may not be modified.
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- permitted, but NO alteration to the exterior profile or contour of the outer fender is permitted.
- 25.4. Plastic inner fender liners may NOT be modified or removed.
 - 25.5. Sunroofs must be in the closed position and their motors and operating mechanisms must remain in place. Panels of alternate material are not permitted.
 - 25.6. Non-OE aerodynamic aids (spoilers, splitters, wings, etc.) are NOT permitted.
 - 25.7. OE plastic undertray parts may be removed or strengthened provided the strengthening does not alter aerodynamic efficiency. Alternate panels which serve no other purpose (JT Design PN JTD907 or similar) are permitted.
 - 25.8. Front and rear towing eyes that meet the following minimum specifications (Turner PN TOW or TOW/E36/E46 or similar) are required to be in place at all times:
 - ~ must not protrude beyond the furthestmost portion of the bumper,
 - ~ minimum 2" inside diameter, and
 - ~ must be accessible without removing or otherwise manipulating any bodywork.
- NOTE: The factory BMW removable tow eyes do not meet these criteria and are not approved.
- **25.9 Convertible tops and associated hardware and operating mechanisms may be removed, but must be replaced with an OEM hardtop and OEM latches must be replaced with positive fasteners. Factory roll-over protection system may be removed to facilitate roll cage installation.**

26. VEHICLE APPEARANCE.

- 26.1. All vehicles must be in good mechanical condition, conform to all safety requirements, and not pose a safety hazard to other competitors.
- 26.2. Vehicles must be clean and maintain a professional appearance with no excessive body damage, primed body panels, or unprofessional or inappropriate graphics. The "50/50 Rule" (acceptable at 50mph at 50 feet) is considered the absolute minimum acceptable level of appearance.
- 26.3. Vehicles that are severely damaged and/or lose body panels at any time during the competition may be black-flagged and prohibited from further competition until adequate repairs are completed.

27. VEHICLE IDENTIFICATION.

- 27.1. Advertising and other graphics are permitted provided they are "professional" in appearance, in good taste, do not interfere with or obscure required identification, and do not conflict with any series sponsors. Graphics that do not meet these criteria must be removed or completely covered and compliance is subject to approval of the Series Steward.
- 27.2. Car numbers and class identification must be in contrasting color to the body or background and meet the criteria for the sanctioning body for which the logbook has been issued.
- 27.3. The vehicle must exhibit four (4) official SpecM3® decals in contrasting color to the body or background, minimum 2.5" in height, all on vertical surfaces with one each on the front, rear, and each side of the car. Decals may either be obtained from Series Organizers or competitors may produce their own using the official SpecM3® graphics file which can be downloaded free of charge from the SpecM3® Series website.

28. SAFETY EQUIPMENT

UNDER DEVELOPMENT -- It is our intent that all safety requirements will meet or exceed those of the NASA GTS, SCCA IT, and BMW CCA Club Racing Prepared. It is highly recommended that competitors review and evaluate the safety requirements from all three sanctioning bodies prior to building a car. At minimum, SpecM3® safety requirements

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- Roll Cage -- a 6-point **or 8-point** welded-in roll cage is required. Minimum 1.75" x .095" DOM tubing must be used for all required tubing on cars weighing less than 3000 pounds dry and without driver. Minimum 1.75" x .120" DOM tubing must be used on cars weighing 3000 pounds (dry and without driver) or greater. Cages must have door intrusion bars, padding, etc. in conformance with NASA, SCCA, and BMW Club Racing rules.
 - Driver Seat -- The OE seat must be replaced with an approved racing shell.
 - Seat-back brace required on the driver seat unless seat is FIA-approved.
 - Minimum 5-point Safety harness required.
 - Head and neck restraint systems meeting SFI 38.1 spec are required.
 - Minimum 2.5# fire extinguisher or full fire systems are required.
 - Window net and side net required.
 - Electrical master switch is required.
 - Airbags must be disabled and may be removed. If disconnected, they should be reconnected before driving the car on public highways.
 - Steering column locks **MUST** be disabled or removed.

29. MINIMUM WEIGHT

- 29.1. Cars will be impounded immediately following a race and weighed in the condition in which they finish the race. All published weights, unless otherwise specified, are WITH driver.
- 29.2 1994-1995 cars (3.0 OBD-I) must weigh a minimum of 3,100 pounds.
- 29.3.1996-1999 cars (3.2 OBD-II) must weigh a minimum of 3,250 pounds.
- 29.4. If cars must add ballast to meet minimum weight, it must be securely mounted in the passenger footwell forward of the passenger seat. Competitors are advised to seek the counsel of a professional racer experienced with adding ballast.

COMMENT: It is our intent to establish minimum weights high enough to encourage robust roll cage construction and discourage expensive weight reduction methods. Competitors are advised that minimum weights may be adjusted at the end of the season and comments and input regarding minimum weights are encouraged.

In an effort to further equalize competition, competitors (drivers) who finish on the podium at points races may be assessed "hero weight" which must be mounted as ballast before the next race and carried for the remainder of the 2011 season except as allowed below. **(Competitors are advised that "hero weight" will be suspended for the 2011 season, but will be used for the 2012 season.)**

- The winner of a race will be assessed 25#.
 - The 2nd place driver will be assessed 10#
 - The 3rd place driver will be assessed 5#.
 - The last three finishers of a race (or the bottom 50% of the field, whichever is greater) will not be assessed any "hero weight."
 - The maximum amount any driver must carry will be 150#.
 - A driver may remove one segment of "hero weight" for succeeding races after finishing out of the top three at a points race. Segments are to be removed in the reverse order of their assessment, i.e. "last on, first off."
 - Since "hero weight" is assessed to the driver, not the car, it must be transferred to any car piloted by that driver for succeeding races.
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Racing will be conducted under "Modified 13-13" rules as presented in the NASA GTS rules. (<http://www.gtschallenge.com/1313rule.htm>) Competitors are urged to read and thoroughly understand the Modified 13-13 mindset long before deciding to enter SpecM3® competition.

These rules are presented as FINAL although Series Officials reserve the right to change them as needed. Competitor comments are welcome. Please send your comments to:

Comments@SpecM3.com

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