

E90 Cup Rules

A professional racing championship for E90/E91/E92 BMW models

1. INTRODUCTION

These rules and the NASA CCR specify the only modifications allowed. Where applicable, the E90 Cup rules supersede the CCR. If not specifically allowed, any other modification is prohibited. Occasionally, rules may be generically specified which are not legal for some cars.

2. INTENT

The E90 Cup is a championship series utilizing tracks in North America. The intent of the series is to provide a professional venue for drivers to test their skills and products in high exposure competitions.

3. ELIGIBLE MODELS

2006-2011 BMW E90 (4 door), E91 (wagon) and E92 (2 door) US spec 328i models are eligible. AWD and convertible models are not allowed.

4. DEFINITION

328i = 2007-2011 BMW 328i E90/E91/E92

Specified parts = The parts that are provided by series suppliers. These parts are the only choice for use on the cars other than the OEM parts. For example, JRZ is the damper supplier and competitors may use JRZ or OEM dampers. This does not apply to tires where the required tires are the only choice.

5. SAFETY

5.1. Safety Requirements

All vehicle and driver safety equipment must conform to NASA's *Club Codes and Regulations* (CCR). If the E90 Cup competes under another sanctioning body on a particular weekend, the operating rules for that sanctioning body may supersede the NASA requirements. The Race Director may exclude any car for any illegal or unsafe modifications. Where there may be a conflict between USTCC rules and NASA CCR, the USTCC rule shall supersede the CCR rule.

5.2. Roll Cage

All minimum cage requirements found in the CCR must be met. The following is permitted in addition to those requirements:

5.2.1. Any number of mounting points and/or tubes may be used. Tubes may be welded at any contact point, or be "seam welded" to the body structure. Chassis may be seam welded.

5.2.2. Side door bars may extend to the outer sheet metal (i.e. NASCAR style) per the CCR. If this door bar design is used, the factory side-impact beams may be modified or removed.

Note: Substandard tubing, welding, design, and/or installation of tubes that could present a hazard to the driver, should the tube(s) in question break loose and impale or crush the driver is prohibited.

5.3. Fuel Cell

A fuel cell meeting the specifications of the CCR may be installed. If a fuel cell is installed, the OEM tank may be removed.

5.4. Master Switch

An electrical master switch shall be installed per the CCR.

5.5. Drive shaft loops

Vehicles must use drive shaft loops (or chassis reinforcement bars or exhaust pipe) to hold the drive shaft in case of a U joint failure.

5.6. Sunroofs

Sunroofs may be removed and replaced with a cover piece securely covering the opening. Removal of the associated hardware is permitted. Roofs may be replaced with alternate material

5.7. Air bags

Air bags must be disabled or removed.

5.8. Driver's Seat

A driver seat suitable for competition and meeting the requirements of the CCR shall be used. The driver's seat may be moved back; however, the front edge of the seat (not including the cushions) in the new location cannot be behind the rear most stock mounting bolt hole in the floor. No part of the driver's seat may be moved across (left to right) the centerline of the car.

6. SERIES RULES and PROCEDURES

6.1. Cheating

Cheating and/or liberal interpretation of the rules is subject to harsh penalties. Typical penalties include, but are not limited to, the following: At first offense, there will be a one-race disqualification including loss of prizes. At second offense, there will be a two-race disqualification for the previous two races and a one-race suspension and loss of prizes. A third offense will result in permanent ejection from the series including a loss of all points and prizes.

6.2. Non-conforming equipment

Any equipment that does not conform to the rules must have prior approval. For consideration, a waiver request must be made, in writing, 30 days prior to the date of competition. It is the intention of the rules not to allow modifications that would increase the cost of competition. Any illegal, or illegally modified, part(s) will become the property of the series.

6.3. Performance Monitoring

6.3.1. Each competitor/team is required to have a data acquisition system installed in the car, and they are responsible for knowing how to operate their system. The current system is AIM system (Solo DL or better), and to data log engine speed.

6.3.2. The series will specify the method and location for the data upload prior to the first official session for each event. It is the competitor's responsibility to record data on their system and upload its data file from

each official session within 30 minutes (or 60 minutes after the last race) of the session's completion. Any driver failing to upload usable data by the deadline will receive a minimum one position penalty, and a maximum penalty of disqualification from that session

6.3.3. In addition to the competitor required systems, the series reserves the right to install performance-monitoring equipment at any time for the purposes of equalizing the competition. On track vehicle performance will be evaluated via the data collected by the specified systems. Data acquisition will be used to verify WHP, and vehicles will be found illegal if the measured WHP exceeds the declared WHP number.

6.4. Points/Teammates

6.4.1. A driver submitting a usable digital (1080p or better, preferably 60 fps) video from the race will earn 5 bonus points for that race. The car number must be visible in the video shot so that the viewer can see which car is being shown. Video must be physically provided, or uploaded using the designated Google form, no later than midnight of the 7th day following the race.

6.4.2. Fun Runs. Any competitor who is competing, as a "fun run" shall not be eligible for points, contingencies or other prizes. The Race Director reserves the right to place all "fun-runs" at the back of the starting grid.

6.4.3. Finishing Points. Points will be earned as follows for each class: 1st – 100, 2nd – 90, 3rd – 85, 4th – 80, 5th – 75, 6th – 70, 7th – 69, 8th – 68, 9th – 67, 10th – 66, and so on. As long as the driver takes the green flag in a race, he shall earn last place points for his class. A driver does not have to complete a certain number of laps to earn points.

6.4.4. Rookie Points. A driver must apply with the Series Director if they desire to participate in the Rookie Points Championship. Any competitor who has competed in more than 4 USTCC/E90 events is not eligible to apply. In general, only competitors who have less than 2 years of racing experience will be considered. There will be a separate Rookie Championship for each class and one rookie will be crowned as the Top Rookie from all classes. The points system to calculate will be based upon a combination of finishing points and an equalization factor. Finishing points will be the same as 5.5.3. The equalization factor will be as follows: Every eligible driver shall receive 10 base points and an additional 10 points per car shall be awarded for each car that you finish ahead of in class. For example, assuming a class has 5 cars the calculation would be as follows:
1st place 150 points (Base 10 points, 40 for beating 4 cars and 100 finishing points)

2nd- 130 (Base 10 points, 30 for beating three cars and 90 finishing points)

3rd- 115 (Base 10 points, 20 for beating two cars and 85 finishing points)

4th- 100 (Base 10 points, 10 for beating one car and 80 finishing points)

5th- 85 (Base 10 points and 75 finishing points)

Maximum equalization factor is 100 points. As an example, for a 12 car field the points will look like this:

1st place 200 points (Base 10 points, 90 for beating 11 cars [90 is the maximum] and 100 finishing points)

2nd- 180 (Base 10 points, 80 for beating 10 cars and 90 finishing points)

3rd- 165 (Base 10 points, 70 for beating 9 cars and 85 finishing points)

4th- 150 (Base 10 points, 60 for beating 8 cars and 80 finishing points)

5th- 135 (Base 10 points, 50 for beating 7 cars and 75 finishing points)

6th- 120 (Base 10 points, 40 for beating 6 cars and 70 finishing points)

7th- 109 (Base 10 points, 30 for beating 5 cars and 69 finishing points)

8th- 98 (Base 10 points, 20 for beating 4 cars and 68 finishing points)

9th- 87 (Base 10 points, 10 for beating 3 cars and 67 finishing points)

10th- 76 (Base 10 points, 0 for beating 2 cars and 66 finishing points)

11th- 75 (Base 10 points, 0 for beating 1 car and 65 finishing points)

12th- 74 (Base 10 points, 0 for beating no cars and 64 finishing points)

Finish Position	Number of cars in class (max 9)								
	1	2	3	4	5	6	7	8	9
1	110	120	130	140	150	160	170	180	190
2		110	120	130	140	150	160	170	180
3			115	125	135	145	155	165	175
4				120	130	140	150	160	170
5					125	135	145	155	165
6						130	140	150	160
7							139	149	159
8								148	158
9									157

6.4.5. Two drivers may declare a partnership, at any point in the season, to earn points as a single partnership entrant. Drivers may only be members of one partnership per class.

Either driver may practice, qualify or race the car; however, both drivers must be registered for an event where both drive. If both drivers want to drive different cars in the class of their declared partnership, in the same qualifying session or race, they must declare to the Race Director prior to each session which driver's performance will count toward the partnership. Any REWARDS weight earned by the partnership shall apply to whomever is the designated driver for the partnership.

6.4.6. Press releases. A driver (or team acting for a driver) uploading a usable press release, to the designated Google drive, up to 10 days prior to the race or no later than midnight of the 7th day after the race shall receive 5 bonus driver championship points. No more than 5 points per race, per car may be earned. When submitting the release, teams or drivers must include the recipient driver's name. Press releases must include a suitable high resolution (2560x1920 or better) photo. Usable in this context means that it must be written well enough to be published, following the AP stylebook. It must be without misspellings, grammatical errors, and explain the point without being too short or too long.

6.4.7. Drivers shall earn 5 points for earning pole position for their class, for each main race (qualifying races do not count).

6.5. Appearance requirements

6.5.1. All vehicles must have the required number panels and numbers on the front edge of the driver/passenger doors and 4 inch (minimum) tall numbers on the front of the car and on 4 inch (minimum) tall numbers on the rear of the vehicle. If the series does not supply the competitor with a number panel, numbers meeting the CCR must be used on the sides. The assigned REWARDS weight must be posted on the bottom passenger side of the windshield in two inch tall white letters (i.e. "+75").

6.5.2. All decals required by the organizers, sanctioning body and sponsors must be displayed in their appropriate positions. No decals from any company, organization, or manufacturer may be displayed that conflicts with any series title sponsors (excluding special awards sponsors) or NASA. Vehicles may be painted any color or combination thereof.

6.5.3. Vehicles must appear at the event with virtually no visible body damage or primer and look professional.

6.5.4. The driver(s)' last name must appear on the both rear side windows of the car. It is suggested, but not required that it be on the lower corner of the windshield as well. White block letters at least 1.5" tall should be used. The flag of the driver's nation of origin shall be next to the driver's name.

6.5.5. The driver's suit must have the required USTCC patch as well as the NASA patch on the front chest area. No conflicting sanctioning body or tire company patches may be present. Patches may NOT be held with tape. Appearing on the podium without the correct patches is an automatic \$400 fine.

6.5.6. The crew members on the team are required to wear team uniforms during the weekend's activities. The uniforms must be the same

color/pattern and must have the USTCC logo and the team's name and/or logo on the front chest area in at least 3 inch wide.

5.7.7. All cars must have class markings on the top right of the windshield and the top right of the rear window.

5.8 Changes to rules

The Race Director reserves the right to make changes in the rules and or penalties to ensure fairness of all aspects of competition with as much notice as possible. The Director will make every effort to correct problem situations to the fairness of the majority before invoking penalties in full or in part. A competitor will have 30 minutes to appeal a decision of the Race Director from the time it was imposed. That time will be increased to 3 days for rulings that were made after the event.

5.9 Parc Ferme/Impound

Following any timed sessions such as official qualifying sessions, qualifying races, or races, vehicles must go directly to the authorized impound area (Parc Ferme). No stopping in pit lane or paddock area is allowed after the session has ended, therefore cars must go directly to Parc Ferme area. Victory lane is considered an authorized impound area. No work on the car is allowed while in Parc Ferme, although tire temperatures and pressures may be recorded. Driver must stay close to the car. Infractions shall result in loss of qualifying times or disqualification from race. Once the checkered flag is displayed in a qualifying session all work on car must stop and a Parc Ferme situation will be in effect. Parc Ferme area is considered a private area. Only the driver and one team representative are allowed to be present.

5.10 Conduct

Participants (including all members of team) should be aware that comments made on the internet (including websites, Twitter, Facebook or others) may be considered public comment. Any comments which are deemed improper, bring the series into disrepute, or are threatening, abusive, indecent or insulting may lead to disciplinary action. Comments which are personal in nature or could be construed as offensive, use foul language or contain direct or indirect threats aimed at other participants are likely to be considered improper. Participants need to be warned that even though they believe their postings are only visible to a limited number of selected people they may still end up in the public domain.

5.11 Endurance Format Races

For races longer than 50 minutes, the NASA Enduro rules for classes E0 through E3 will be used for pitting purposes with the following exceptions/changes:

5.11.1 There are no required pit stops and no minimum number of stops.

5.11.2 The Race Director reserves the right to impose certain requirements on those cars with gas tanks (or fuel cells) larger than originally equipped. Teams that have installed tanks (or fuel cells) larger than stock, shall be required to drain the tank and fill it with the same amount of fuel that the original stock tank held.

5.11.3 All refueling must be done using NASA approved 5-gallon containers, which must be labeled "GASOLINE," "PETROL," or "GAS." Refueling is a big issue during pit stops. Spills will not be tolerated. All cars must place a large catch-pan, or mat to catch all accidental spills. All catch pan spills must be returned to closed containers. A gasoline spill will result in a five-lap penalty (or a five minute penalty, if using that system). See NASA Enduro rules for more details.

5.11.4 Refuelers must wear safety equipment equivalent to the driver as per the CCR (i.e. Nomex suit, gloves, shoes, and helmet) during refueling. See NASA Enduro rules for more details.

5.11.5 Cars are prohibited from using any type of "(re)fueling rig" or "quick fill method" and must follow NASA Enduro E0, E1, E2, E3 rules regarding refueling containers. See NASA Enduro rules for more details.

5.12 Saturday Races

The Saturday race format (during a two day event) may be one of four:

1. Top five drivers from the Saturday qualifying session will be racing in the Saturday race to determine the starting order of the main Sunday race. Positions 6 and lower will already be set by the qualifying times. The race will be a flying start format and there will be no points or prizes. Drivers from position 6 and lower can attend the session but their starting position for the race will not change.
2. All drivers will race on Saturday in a qualifying race. The start of the race shall be determined by the times set in the qualifying session. The outcome of the race shall determine the starting order of the main Sunday race. The race start will be a flying start and there will be no points or prizes.
3. All drivers will race on Saturday in a qualifying race. The start of the race shall be determined by the times set in the qualifying session. The race start will be a flying start and there will be no prizes but the race will award 25% of the points with the main Sunday race providing 75% of the points.
4. Race session is a practice race with no points or prizes.

5. Saturday races will generally be flying (rolling) start while Sunday races will generally be standing start.

5.13 Qualifying format

The qualifying format will be one of the following:

1. There will be one qualifying session and the best times from that session will determine the starting order.
2. There will be two qualifying sessions and the best combined time from the two sessions will be used to determine the starting order. A driver with no times shall receive a time of 4:00.000.
3. There will be two qualifying sessions and the best time from the two sessions will be used to determine the starting order.
4. There will be single car qualifying in which case the driver shall have one warm up, one timed lap and one cool down lap. The time from the one timed lap shall determine the starting order.
5. There will be a Saturday qualifying race (see 5.12)

Engaging or impeding another driver in a qualifying session shall result in penalties.

5.14 Right to the line

Note: This rule supersedes the NASA CCR Right To Line Rule (25.4.3 in 2023 version).

The driver in front has the right to choose any line, as long as the driver is not considered to be blocking. Blocking is considered to be making more than one change in direction in order to defend a position.

If there is any amount of overlap between two cars engaging in a battle for position, the lead car must leave room on the race track for the trailing car, (do not shut the door). Equally, the trailing car must leave room on the race track for the leading car, (do not push off track).

It is both drivers' responsibility to ensure a safe over-take is completed on the race track.

5.15 Contact

The drivers are expected to try to avoid contact with other cars at all times. Heavy penalties may be awarded for avoidable contact.

1. Any contact with no damage and no deviation: No penalty.
2. Any contact causing deviation, with no damage, but loss of a position: If the offending driver gives back the position within two manned turn

- stations, no penalty. Otherwise, the offending car will receive stop and go penalty or 60 seconds will be added to its time after the race.
3. Any avoidable contact resulting in damage as defined by CCR: Offending car will be classified as DNF, receive DNF points and receive a \$200 fine. In addition, driver will be on probation for the remainder of the season. The penalty can be adjusted by the Race Director based on the testimony of the drivers and witnesses. If the driver commits a second infraction while on probation, additional fines and suspensions will be added.
 4. Passing under a standing yellow, double yellow or gaining an advantage at a yellow: If the offending driver gives back the position (or advantage gained) before passing the next manned turn station, no penalty. Otherwise, offending car will be classified as last place among finishers. In addition, driver will be on probation for the remainder of the season. If the driver commits a second infraction while on probation, fines and suspensions will be added.
 5. Overdriving a standing or double yellow: The offending car will receive stop and go penalty or 60 seconds will be added to its time after the race.
 6. Passing under waving yellow and/or over-driving a waving yellow: Offending car will be classified as DNF and receive DNF points. In addition, driver will be on probation for the remainder of the season. If the driver commits a second infraction while on probation, fines and suspensions will be added.

These are general guidelines for standard penalties. They may be additive or multiplicative depending on the situation and the person's past record. The Race Director reserves the right to increase penalties for special circumstances up to and including disqualification and suspension. The above penalties could vary when USTCC is not the sole class on the track.

7. MODIFICATIONS

6.1. General

Other than those items specifically allowed by the rules, no other part or component may be modified, removed, or disabled. If there are any “questionable” or “gray” area modifications, the competitor should contact the series office for clarification before competition. Specified parts may not be modified.

6.2. Replacement Parts

All vehicles, engines and required OEM parts must have been offered for sale to the general public by the manufacturer in the United States and be available through normal distribution channels. Unless otherwise specified by these rules or VSS, replacement parts must be OEM or others matching the OEM configuration.

6.3. Repairs (other than body panels)

Any part of the car may be repaired provided that the repair is done so that the part or structure is restored to the factory specifications. Any “repair” that serves more than the intended purpose may be deemed illegal.

6.4. Allowed components

Limited production components and/or prototypes are not allowed unless specifically allowed by these rules. All aftermarket parts used must be available for purchase.

6.5. Body

6.5.1. Fender lips may be modified for tire clearance by rolling or cutting. Plastic interior wheel opening panels may be removed. The top center of the tire may not protrude beyond the fender when viewed from above.

6.5.2. A front spoiler (air dam) may be added, modified or replaced. A flat splitter plate may be installed provided it protrudes no further forward than 5 (five) inches past the front bumper, at each point perpendicular to its curve, when viewed from above. The plate, spoiler or attachments may not be wider than the body of the vehicle, not including the side mirrors. No part of the front spoiler, air dam or splitter may touch the ground.

6.5.3. The stock engine under-tray may be removed or modified.

6.5.4. The OEM or OEM replica rear spoiler lip may be installed .

6.5.5. Rear spare tire well may be removed as long as it is replaced with a replacement flat floor. The area and any floor behind it may be removed rearward ending at the vertical structure that houses the tail lights.

6.5.6. Making openings through the body below the bumper and/or through the air dam is permitted for the purposes of ducting air to the brakes, radiator or oil cooler. Ducting for the purposes of cooling is unrestricted providing that it does not violate any applicable rules or feed the intake system.

6.5.7. Windshield clips and rear window straps are allowed and recommended.

6.5.8. Hood and trunk pins may be fitted. Stock hood latches and/or hinges may be replaced with clips. The car must be run with hood, doors, and trunk completely closed and securely latched.

6.5.9. All chassis and structure repair must be done as close as possible to the factory specifications AND match the original configuration. Body repairs must maintain stock contours. Chassis may be seam welded.

6.5.10. Undercoating may be removed.

6.5.11. The hood and trunk lids' inside reinforcements may be removed or modified.

6.5.12. The door internal assemblies (i.e. windows, window mechanisms, etc.) may be removed. The passenger OEM side impact beams may be removed. No sharp edges may be left behind as a result.

6.6. Glass

6.6.1. The front windshield may be replaced with Lexan or comparable material. The minimum thickness is 3/16" and shall be properly supported from the inside. If the front windshield is replaced, windshield clips are required.

6.6.2. All window glass other than the windshield may be replaced with Lexan (or comparable material) of at least 1/8" inch thick. A maximum of six round vents total, no larger than 2.5" in diameter (each) may be located on the rear window. A maximum of two NACA ducts per side may be installed in the rear side windows for ducting air. The NACA ducts may not be larger than 100 square inches total, per side.

6.6.3. No tinted windows allowed other than factory OEM tints. Clear film may be used for the purpose of retaining broken glass in the event of an impact.

6.7. Interior

6.7.1. Any steering wheel or gearshift knob may be used. Steering wheel column may be replaced.

6.7.2. The throttle, brake, and/or clutch pedals may be modified or moved for comfort or added control. Heel stops and dead pedals may be added or modified.

6.7.3. Gauges may be replaced or added.

6.7.4. Any interior mirror may be used. Stock exterior mirrors must remain in place.

6.7.5. Other than the dash pad, the remaining trim pieces in the interior may be removed including the rear and passenger seat. No sheet metal shall be removed or deformed (except door panels) unless specified in the CCR, these rules, and any addendums. All holes resulting from removing the dash components (i.e. heater controls) must be covered by panel made of sheet metal, carbon fiber, or other similar material in good appearance. Tabs and studs may be removed.

6.7.6. The headlights and taillights must work as originally intended.

6.7.7. Electrical switches may be added, modified, or removed provided they do not perform an illegal function.

6.8. Ballast

Ballast is allowed anywhere in the car but must be securely fastened per CCR.

6.9. Wheel studs

Wheel studs and lug nuts are unrestricted. They may not be smaller than the stock diameter. Studs shall not protrude beyond the plane of the wheel thereby creating a hazard.

6.10. Alternators

The alternator must be working and must be charging according to the manufacturer's specifications. Any modification, or addition made to the

electrical system that causes the alternator to function improperly is illegal. Computer controlled alternators must be set to charge above battery voltage

6.11. Update / Backdate

Vehicles may update / backdate components provided the component comes from an eligible E90 Cup car. Parts from other E93, 335i, 335d or M3 cars are not allowed unless specifically allowed.

6.12. Engine

Engine rebuilding, blueprinting and balancing is allowed. No other internal engine modifications are allowed.

6.13. Engine Mounts

The engine may not be moved from its stock location.

6.14. Belt Pulleys

If a component that originally used a pulley such as the AC compressor is disabled or removed, the stock unit can be modified to work as an idler pulley or an idler pulley may be installed. No other mechanical or electrical components may be added to the component and it shall not have any other functions other than being an idler pulley.

6.15. Lubrication

Oil pans, windage trays, oil lines, and filters are unrestricted. A pressure accumulator such as an Accusump may be used. Any lines that pass through the passenger compartment must be metal or metal braided. All lines must be securely fastened and safely routed. Engine oil components must be separated from the driver by a non-flammable bulkhead (Accusumps and gauges are exempt).

6.16. Induction

6.16.1. No type of system that cools the air passing through the throttle body may be used,

6.16.2. Any BMW OEM intake manifold may be used.

6.17. Fuel system

6.17.1. Fuel pumps, fuel delivery rails, fuel pressure regulators, filters, and lines and hoses are unrestricted. Any fuel lines that pass through the interior

must be metal or metal braided. Fuel pumps may not be mounted inside the passenger compartment. All lines must be securely fastened and safely routed.

6.17.2. Allowed fuel options are:

- 100% petroleum based unleaded fuel. Maximum octane rating is 100 octane (R+M/2).
- E85

6.18. Electronics

Engine must be controlled by an MSV80 DME from a stock 328i. It may be reflashed using any tune.

6.19. Emissions equipment

All emissions equipment may be removed including the catalytic converter(s). Any equipment not removed must either be disabled or left to function as originally intended by the manufacturer. All disconnected ports and holes must be plugged.

6.20. Air filter

The air filter housing, intake tract from a 328i must be used. An OEM replacement air filter must be used.

6.21. Ignition

Any spark plugs and coil packs be used. Ignition timing is unrestricted.

6.22. Battery

The battery must be capable of starting the car at all times. The battery may be relocated to anywhere in the car provided it is in a marine type case. AGM or Lithium-Ion batteries need not be in a marine case. Regardless of location, the battery must be securely held with a metal hold down. The positive battery terminal shall be covered. The positive terminal on the starter solenoid shall be covered.

6.23. Exhaust

Any exhaust may be installed provided the exhaust exits behind the driver, directed away from the car. A muffler may be required to meet sound regulations. A header may be installed. Exhaust heat shields may be added or removed.

6.24. Engine Cooling

Any radiator may be used provided it fits in the stock location and requires no body modifications to install. Radiator fans may be removed or added. Thermostats are optional and unrestricted. A/C systems may be removed. Oil coolers may be added. The heater core may be bypassed or removed. No type of additional cooling is allowed including radiator sprayers.

6.25. Clutch

Any single clutch disc and/or pressure plate of the stock diameter may be used. SFI approved flywheels and scattershields are recommended.

6.26. Flywheel

Any flywheel may be used. If an OEM flywheel is modified or if an aftermarket flywheel that does not have SFI certification is used, a scatter shield must be incorporated to protect the driver should there be a failure of the flywheel.

6.27. Transmission

The stock 6 speed manual transmission from a 328i is the only manual transmission allowed. The allowed automatic transmission is the 6 speed from a 328i. Shift linkages may be modified for the purpose of installing short throw shifters and/or installing different material bushings. Transmission coolers are unrestricted.

6.28. Differential/ Final Drive

All vehicles may use any limited slip or welded differential provided it fits in the OEM stock housing. The required differential ratio is 3.73. Differential cooling is open.

6.29. Wheels/Tires

6.29.1. The required wheel diameter is seventeen (17) inches and maximum width is 8 inches.

6.29.2. All vehicles must run the approved spec tires in all official timed sessions. The approved tires are Hankook RS4 245/40R17.

6.29.3. Tires may not be altered in any way, shaved or grooved.

6.30. Brakes

6.30.1. Brake pads, linings, and fluid are unrestricted. Brake lines may be replaced with metal braided lines. Backing plates may be removed or modified.

6.30.2. The OEM ABS system must remain functioning and may not be modified.

6.30.3. Parking brakes may be removed along with the accompanying mechanisms.

6.30.4. Air ducts may be directed at the brakes. Liquid cooling and/or electric fans are prohibited.

6.30.5. Brake rotors, calipers and caliper mounts may be replaced with E90 BMW 335i units.

6.31. Suspension

6.31.1. The specified camber/caster plates must be used in the front. The rear camber arm may be replaced with the specified part.

6.31.2. There are three spring rate options available to drivers and the specified springs must be used. Bump stops are unrestricted.

6.31.3. The specified dampers must be used.

6.31.4. The specified anti roll bars and links must be used.

6.31.5. Stress bars may be added to stiffen the chassis.

6.31.6. There is a minimum ride height of 10 cm measured at the OEM jacking points on the rocker panels.

6.31.7. Suspension bushing material is limited to OEM. Specified front arms must be used.

6.32. Fasteners and Gaskets

Fasteners are unrestricted provided they serve the same function as originally intended. Gaskets other than head gaskets are unrestricted. Any gasket must serve its original purpose only and may not provide a competitive advantage.

7. WEIGHT

7.1. All minimum weight measurements will be made with driver and must meet this weight at all times during qualifying and race sessions. Minimum weight is 3150 pounds for E90 and E92 bodies and 3100 for E91 bodies.

7.2. Rewarding of Equalizing Weight Assigned to Reduce Driver Sensitivity (REWARDS) is a system used to provide tighter competition. Weight will be assigned to all participants who take the green flag for the main race. The change will be effective for the next round during the current season and apply to all sessions. It is the driver's responsibility to know their car's new minimum weight at each round of the series. A winner will be awarded 75 pounds, second place shall earn 50 pounds and third place shall earn 25 pounds. Once earned, the weight stays with the driver for the season.