



World Extreme Rock Crawling Championship Series

Rule Book 2009

Important notice

Rock Crawling is an inherently dangerous sport. Each competitor assumes that risk when he or she participates in an event. The risk of serious injury or death cannot be eliminated and, in fact, will always be present at a high level. Competitors are urged to advise their spouses and next of kin, if any, of this fact. By competing, all competitors, both spotter and driver, agree to the following.

In consideration of being permitted to participate in any event sponsored, promoted, or directed by W.E.Rock, World Extreme Rock Crawling Championship Series, the competitor for himself/herself, his/her personal representatives, heirs, and next of kin, hereby releases the corporation, and their respective officers, directors, promoters, sponsors, employees, agents and volunteers ("releasees") of all liability to the competitor, whether caused by negligent act or omission of releasees or otherwise while the undersigned is for any purpose participating in such event. It is fully understood by each of the competitors that there is some inherent risk associated with this event, including damage to vehicles and injury or death to the individual.

In addition, the competitor agrees to indemnify and hold harmless the releasees from any loss, liability, damage, or cost they incur due to such participation by the competitor, whether caused by releasees' negligence or otherwise, and agrees to assume full responsibility and risk for bodily injury, death, or property damage from releasees' negligence or otherwise while the competitor is participating in this event.

W.E.ROCK has taken several years to compile information using the input from our current Builders, outside resources, professional engineers, and W.E.ROCK Racers. These new rules are in line with the majority of race vehicles now competing in W.E.ROCK International events. It is not W.E.ROCK's intent to eliminate anyone from racing but just the opposite. It is our goal to continually uphold the highest standards of safety possible for our customers. Changes are always met with resistance; however, without them, progress will never happen. Please keep the big picture in mind--safety!

Each competitor acknowledges and represents the following while competing:

- 1 - That he or she has read the foregoing release and waiver of liability and indemnity agreement.
- 2 - That he or she does at all times, while riding in a vehicle participating in an event, wear his or her respective seat and shoulder belts and helmet.
- 3 - That the owner/driver certifies that he or she has inspected this vehicle and that the same certifies it to be in proper mechanical condition for participation in rockcrawling competition.

4 - That the owner/driver has informed himself/herself about the event, either by prior participation or by investigation into the sport and especially W.E.Rock events.

5 - That the driver or any other person(s) in a vehicle participating in any W.E.Rock event, may choose to bypass any obstacle and, therefore, assumes all risk and liability, as indicated above.

Please Be Aware:

Although safety is generally everyone's concern and certainly the highest priority of W.E.Rock, the final responsibility rests on the competitors. Competitors can, at any time, choose to bypass any obstacle or area where they feel uncomfortable or unsafe driving.

Vehicle Requirements and Limitations

Pro Modified

Pro Modified Class Goal:

W.E.Rock's Goal in the Pro Modified Class is to create a venue where all vehicles can be simply recognized through Manufacturer Association to bring Spectator Appeal. This class is based on the idea of classic competition between manufacturers. Example: NASCAR's Ford vs. Chevy vs. Dodge. Individual make and model identity will draw the audience to this class, therefore competition vehicles will have a minimum standard for resemblance of a certain production or recognizable specialty vehicle. To ease course design strategy and event flow as well as demonstrating the full abilities of this class, the Limited competition vehicles will compete amongst, but not against, the Unlimited class on the world's toughest obstacles. Where courses may pose extremely high risk of body damage, there is the possibility of a different line exclusive to Limiteds. As a comparison, these vehicles will be the "Funny Cars" of RockCrawling. A balance of recognition and performance is the central goal.

5.1: Axles

W.E.ROCK's Goal for the axle rule is to limit the use of axles to any production OEM axle to stray away from the overall goal of the class, simple recognition. Therefore many styles of axles will be permitted for use.

W.E.Rock considers axles to be the link between wheels on both front and rear ends. This application begins at the end of the drive shaft and ends at the flange for wheels. It does not include brake assemblies.

The following are axle guidelines for competition:

5.1.1: All axle widths, Live Axles, Solid axles, Independent, Military style drop in axles are acceptable. Portals are acceptable.

5.1.2: No manual change of axle wheelbase is allowed.

5.1.3: Differentials must have some form of 100% locking abilities.

5.1.4: Vent tubes must be attached to a fluid containment container **or contain 2 complete loops so that fluid discharge is kept at a minimal.**

5.1.5: Gear reduction may be prior to the axles or after the axles or a combination of both.

The Following 3 sections will encompass the same goal.

5.2: Body

W.E.ROCK's goal for the Body Rule in the Pro Modified Class is to create a venue where all vehicles can be simply recognized through Manufacturer Association to bring Spectator Appeal. This class is based on the idea of classic competition between manufacturers. Example: NASCAR's Ford vs. Chevy vs. Dodge. Individual make and model identity will draw the audience to this class, therefore competition vehicles will have a minimum standard for resemblance of a certain production or recognizable specialty vehicle.

W.E.Rock considers the body to be the vehicles outer layer and includes the floor, sides/door/doorskins, rear, hood, fender, grill, and firewall.

The following are body guidelines for competition:

5.2.1: Body panels must be made from the following materials: Steel, Fiberglass, LEXAN, Plastic, Aluminum, & Carbon Fiber. A W.E.ROCK official must clear any other materials.

5.2.2: All Pro Modified vehicles must have an outer front and rear fender that resemble a 3 dimensional OEM Body panel of proclaimed vehicle.

5.2.3: All Body panels must look like an OEM body panel of proclaimed vehicle.

5.2.4: Vehicles using an OEM or direct-replacement tub or cab may run without doors or doorskins. Any such vehicles will be held to strict adherence to cage rules regarding door bars.

5.2.5: Vehicles using non-OEM bodies must be equipped with doors or doorskins resembling the OEM doors of the claimed vehicle. Any body structure narrowed from OEM will be regarded as non-OEM even if the OEM tub/cab sides are retained, and required to run doorskins for occupant safety. **Example:** http://i37.photobucket.com/albums/e79/Dirtriot/3d_panel_rule_explanation-1.jpg

5.2.6: Teams that wish to not use OEM designed type bodies run a "Themed" vehicle with must contain 3 dimensional panels for the entire length of the vehicle and still adhere to all other Pro Modified Rules.

5.3: Hood/Grill

5.3.1: Must cover the top of the engine completely. Hood scoops and breather holes are acceptable.

5.3.2: Fully open space cannot exist beyond twelve (12) inches in diameter without a baffle.

5.3.3: All hood panels must look like an OEM hood of proclaimed vehicle.

5.3.4: All vehicles must maintain an OEM Type grill; Logo may be removed due to advertising and sponsor conflicts.

5.3.5: Head Lights, after-market lights, Off-Road Lights with same OEM-Orientation or graphics resembling headlights of proclaimed vehicle must be in place.

5.4: Fenders

5.4.1: All Body panels must look like an OEM body panel of proclaimed vehicle.

5.4.2: All Limited vehicles must have an outer front and rear fender that resemble a 3 dimensional OEM Body panel of proclaimed vehicle. **Example:** http://i37.photobucket.com/albums/e79/Dirtriot/bedrail_explanation.jpg

5.5: Tub/Cab

W.E.ROCK's goal for the Body Rule in the Pro Modified Class is to create a venue where all vehicles can be simply recognized through Manufacturer Association to bring Spectator Appeal. This class is based on the idea of classic competition between manufacturers. Example: NASCAR's Ford vs. Chevy vs. Dodge. Individual make and model identity will draw the audience to this class, therefore competition vehicles will have a minimum standard for resemblance of a certain production or recognizable specialty vehicle. Safety is also in concern; therefore width changes have been made to ensure a minimal safe distance, though the risk of injury is always present.

5.5.1: General condition must be in good shape without excessive rust that would warrant concern for safety.

5.5.2: Firewalls are required for fire safety and must be a minimum of forty-thousandths aluminum, 20-gauge metal, or 1/8" lexan. Plexiglas is not permitted.

5.5.3: Firewalls must be ran from the left outer panel to the right outer panel and separate fully, the driver from the engine compartment **or must "Doghouse" the engine compartment, see this link for examples:** http://i37.photobucket.com/albums/e79/Dirtriot/overhead_rules_firewall.jpg

5.5.4: Exposed transmission components must be covered with a safety shield to protect occupants from possible exposure to transmission fluids in the event of transmission case fractures or unforeseen fluid spills.

5.5.5: All Body panels must look like an OEM body panel of proclaimed vehicle.

5.5.6: All vehicles must have a floorboard running from under the control pedals, back to the forward edge of the seat. The floorboard must be a minimum of forty-thousandths aluminum, 20-gauge metal, 20-gauge expanded metal, or 1/8" lexan. Plexiglas is not permitted.

5.5.7: Vehicle must have two seats that sit side by side on the same horizontal plane from front to front and back to back mounting points.

5.5.8: Boat-siding and Dove-tailing is allowed

5.5.9: Vehicle must be 48 inches wide at the door bar junction to the B-Pillar. [See this link for visual example: http://i37.photobucket.com/albums/e79/Dirtriot/48inch_rule_explanation.jpg](http://i37.photobucket.com/albums/e79/Dirtriot/48inch_rule_explanation.jpg)

5.6: Brakes

W.E.Rock considers the brakes to be the source of control for slowing and stopping wheels.

The following are the brake guidelines for competition:

5.6.1: Mechanically operated brakes are approved.

5.6.2: Hydraulic assisted brakes are approved.

5.6.3: The brake pedal on the floor must operate all brakes.

5.6.4: Competitors may use secondary brakes for operating individual brakes on the vehicle.

5.6.5: A W.E.Rock official inspector must approve transmission or pinion brakes if they are the primary source of braking.

5.6.6: Emergency brake hydraulic locks or mechanical locks are approved for emergency brakes.

5.6.7: Emergency brake gears (mechanical type) must be in good shape and not worn to a point of possibly disengagement while under a load.

5.6.8: Brakes must be in good working condition with adequate pads. Brakes that are worn out or oil soaked will not pass.

5.6.9: Brake lines must be in good shape without leaks and ran in a safe route from cylinders to brakes.

5.6.10: Master and slave cylinders must be in good shape without leaks. Adequate braking resistance at the pedal is required.

5.7: Bumpers

W.E.ROCK's goal for the Bumper Rule is to keep any stinger, push bar, or bumper separated from the mainframe rails so that the Bumper is not confused with any frame height/width rule.

W.E.Rock considers the front bumper to be the foremost part of the chassis including push bars, stingers, etc. The rear bumper is considered to be the rearmost part of the vehicle.

5.7.1: Bumpers must connect the right and left frame rail.

5.7.2: A stinger is considered to be an up-swept bumper of an approximately "A" shape. It includes the top, sides, and any bends transitioning from its sides into other chassis components.

5.7.3: A bumper is considered to be the front most cross member at the end of the frame, including the actual lateral member, and any bends transitioning from that lateral member into other chassis components. [Example: http://i37.photobucket.com/albums/e79/Dirtriot/Image1.jpg](http://i37.photobucket.com/albums/e79/Dirtriot/Image1.jpg)

5.7.4: If no bumper is present, the ends of the frame rails will be considered the bumper.

5.7.5: The bumper may be detachable so teams may bounce from series to series. Bumpers may not be considered "Consumable" by having a thinner tubing wall construction of .095.

5.8: Cooling

W.E.Rock considers the following to be part of the cooling system: Radiators, hoses, engine ports, heater hoses, and coolant products.

The following are the cooling guidelines for competition:

5.8.1: Air Cooling is approved.

5.8.2: Water-cooled systems are approved.

5.8.3: Radiators must be securely mounted and covered so that, in the event of a break in the **Coolant Lines**, spectators, spotters and drivers are protected from the coolant spill.

5.8.4: Hoses and connections must be in good condition without cracks, all connections must have a tightening device that utilizes a mechanical means to secure the connection.

5.8.5: Top mount (roof mount) radiators are not approved.

5.8.6: Radiators must have an OEM or adequate sized aftermarket overflow bottle, securely mounted, and connected to the radiator by an overflow tube. Overflow bottles may not be mounted over or in the passenger compartment. Overflow bottles may not be beverage containers.

5.8.7: The use of Ethylene Glycol is not permitted.

5.8.8: Vent tubes must be attached to an adequate sized fluid containment container.

5.9: Drive shafts

W.E.Rock consider the drive shaft to be the working link between the transfer case and the axles. The following are approved for competition:

5.9.1: All mechanical drive shafts

5.9.2: All Driveline u-joints must be covered so that broken parts may not hit any occupants.

5.10: Electrical

W.E.Rock includes all wires, lights, batteries, and any other items controlled by or conducting electricity as its function to be part of the electrical system.

The following are electrical guidelines for competition:

5.10.1: Batteries must be in good shape with adequate mounting to keep the battery in place in the event of a roll.

5.10.2: All batteries must be of a non-spill type.

5.10.3: Mounting must be a clamp type mount that "cages" the battery in position. Foot-type clamp mounting is not approved.

5.10.4: A "Master" kill switch that shuts down every electrical system is required to be mounted on the dash, clearly labeled and in proper working order. This switch must kill the engine when switched to the "off" position.

5.10.5: Wires must be in a condition and position that is safe. Exposed or burned wires are not approved.

5.11: Engine/Motor

W.E.ROCK's goal for the Engine/Motor Rule is to encompass the OEM look and design so that fans can associate with the characteristics and handling of the Limited Class vehicles.

W.E.Rock considers the system designed to create torque and horsepower, including blocks, heads, valve cover, oil pan and all internals of such system to be classed as part of the engine.

W.E.ROCK Defines Automotive Based as: Having originated, or been designed for use, in a vehicle having not less than four wheels, intended primarily (more than 50% of engine production) for highway use in a passenger- or cargo- carrying motor vehicle. This does not include engines designed primarily for off-highway equipment or recreational use, aviation, marine, or stationary applications.

The following the engine guidelines for competition:

5.11.1: All engines of automotive based sizes and configurations are approved.

5.11.2: Engine must be free of leaks.

5.11.3: Engine mounts must be in good condition and of adequate material to support the engine.

5.11.4: Vent tubes must be attached to a fluid containment container.

5.11.5: Dipstick caps must be sealed.

5.11.6: The rearmost portion of the engine must be placed forward of the front of the driver passenger seats.

5.11.7: Electric Motors are not permitted.

5.12: Fuel System

The fuel system includes all components and connections used to store, deliver, and mix fuel and air on the vehicle. This includes the type of fuel used.

The following are fuel system guidelines for competition:

5.12.1: Carburetors are approved.

5.12.2: Fuel Injection systems that either injects fuel from a throttle body or thru ports is approved.

5.12.3: Non-vented gas caps are mandatory (Vented gas caps are not approved).

5.12.4: Unleaded, leaded, propane, natural gas, and diesel fuels are approved.

5.12.5: Alcohol is not approved for competition as a main fuel (see above).

- 5.12.6: Fuel systems must be sealed with a rollover valve installed in the fuel vent line.
- 5.12.7: Ball valves must be installed on all fuel lines including vent lines. Ball valves must be mounted **so that they can be easily accessible.**
- 5.12.8: Fuel lines must be ran from the fuel tank or cell to the engine in a safe route.
- 5.12.9: Fuel lines must be free of leaks or cracks in hoses.
- 5.12.10: Throttle assemblies must be in good order and work smoothly. Throttles that do not move smoothly throughout their entire range of motion will not pass.
- 5.12.11: Hand throttles are approved but must automatically return to the non-throttle position.
- 5.12.12: Vent tubes must be attached to a fluid containment container.
- 5.12.13: Fuel Cells of rubber (Bladder Type encased in a steel or aluminum case) and plastic construction will be the only approved fuel cells allowed from the beginning of the 2010 season and beyond.

5.13: Frame/Chassis

W.E.ROCK's goal for the Frame/Chassis Rule is to create a venue where all vehicles can be simply recognized through Manufacturer Association to bring Spectator Appeal. This class is based on the idea of classic competition between manufacturers. Example: NASCAR's Ford vs. Chevy vs. Dodge. Individual make and model identity will draw the audience to this class, therefore competition vehicles will have a minimum standard for resemblance of a certain production or recognizable specialty vehicle.

W.E.Rock considers the frame of a vehicle to be the two rails supporting the mounting of the body and drive train as the main frame, and connecting cross members as the sub frame.

The following are frame guidelines for competition:

- 5.13.1: Boxed, semi boxed, round tube, or unibody mainframe material must be made of a magnetic steel.
- 5.13.2: Frame must be similar to that of a ladder type or perimeter type mainframe consisting of two rails and attendant crossmembers. **Tubes considered the "Frame Rails" must sit under the top of the tire throughout the entire length of the frame. Length of the frame is determined in the rules: 5.13.3 This includes any diversions located in the main frame rails.**
- 5.13.3: In a round tube chassis, the frame rails will be considered the lowest tube running the entire length from the front of the front tire to the centerline of the rear axle.
- 5.13.4: Frame Rails cannot be any shorter than the front of the front tire. This can be achieved thru the use of a bolt on frame extension fabricated of like design elements so that it can withstand impact. Flimsy sacrificial extensions used to enhance approach angle on first impact are not permitted. The intent of this revision is to allow for better approach angles outside of WEROCK competition thru the removal of the frame extension portion. **Example:** <http://i37.photobucket.com/albums/e79/Dirtriot/Image1.jpg>
- 5.13.5: Frame Rails cannot be any shorter than the centerline of the rear axle.
- 5.13.6: Between the front of the front tire and the centerline of the rear axle, no point of the right and left frame rail may be any closer to each other than 16" measured horizontally.
- 5.13.7: Notching the frame for link arm mounting is legal. Notches are not required to meet rule 5.13.9. **Notching for any other reason in the main frame is not permitted.**
- 5.13.8: The frame rails must run within four (4) inches of vertical alignment in relation to each other for the entire length of these specifications. **This includes Diversions.**
- 5.13.9: The bottom of the frame rail may not be any higher than the top of the tire.
- 5.13.10: Frame material must be at least 1.5" external dimension (diameter or side measurement) magnetic steel, with a minimum of 0.120" wall thickness. Aluminum and other soft materials are not permitted. A W.E.Rock official must approve frames made of other material or in other wall thickness/diameters.
- 5.13.11: If round tubing is used for the main frame rails, it must extend from at least the front edge of the front tires, to the centerline of the rear axle, excluding any stingers, bumpers, etc (see 5.7 Bumpers). The bottom of the tube may not be higher than the top of the tire at any point along this path from front to rear.

5.13.12: Any bumpers or bends for bumpers attached to the frame rails, whether round or square tube, **must sit with 1.5" true measurement at the front of the front tire or further forward of the front tire. All bumpers and frame rails must be made of magnetic construction.**

5.14: Vehicle Numbers

Vehicle numbers must be displayed on the right, and left sides of the vehicle.

5.14.1: Numbers are to be no less than six 6" tall.

5.14.2: All numbers are to be the responsibility of the teams. If a team has a number preference, they must ask for that number to be assigned them, before the season starts. Numbers will be issued on a first come first served basis. If a number has been pre-assigned to another competitor, the second competitor will have to change their number. To request a number, the team must be signed up for the W.E.Rock Series.

5.14.3: W.E.Rock recommends a detachable number plate be used.

5.15: Roll bars/Cages

W.E.ROCK's Goal for the Roll Bars/Cages rule is to ensure safety while still incorporating

W.E.ROCK's central goal of vehicle recognition.

W.E.Rock considers the cage as the safety bars surrounding the driver. Cages must be designed to protect the occupant in the event of a rollover.

The following are roll bar/cage guidelines for competition:

5.15.1: Six (6) point mounting cages covering the driver are required.

5.15.2: OEM bars are approved for a portion of the roll cage.

5.15.3: Handles are required on the interior portion of the roll-cage or vehicle.

5.15.4: Round steel tubing (D.O.M Preferred) 1.5" O.D with 0.120" wall is compulsory for the basic roll cage. Aluminum and/or soft metals are not permitted. Roll bar construction must be welded. A W.E.Rock official must approve roll cages made of other material or in other wall thickness/diameters.

5.15.5: Connection positions of the roll cage must tie in to the frame of the vehicle; Body mounts are considered a tie in point.

5.15.6: The front-most position must be no farther toward the rear of the vehicle than fifteen (15) inches behind the throttle and brake pedals.

5.15.7: The Cage must have a space no wider than 24" above the driver's head, and at least 1 spreader bar between the front main bar and rear main bar are required.

5.15.8: Cage Top must at least 34" wide at the top portion of the B-Pillar **and be of symmetrical shape from driver's side to passenger side.**

5.15.9: Gussets must be welded in the four corners of the "halo". Gussets may be tubing or plate steel and may not be any smaller than 1"x1"

5.15.10: A minimum of .040 magnetic expanded or flat sheet metal, or 1/8" aluminum, must cover the area immediately over the driver seat and be welded or bolted to the roll cage. Steel tubing must surround the roof panel.

5.15.11: W.E.Rock recommends a spreader bar to be mounted under the dash area to connect the right and left "A" pillars.

5.15.12: If doors are not ran, a bar running from the "B" pillar, at approximately shoulder height, to the "A" pillar, at approximately shin height, must be ran. This can be a bolt in piece.

5.15.13: A "periscope bar" may be no longer than 12" above the "halo" bar. This may be used as an attaching position for tow straps.

5.15.14: Cage must be at least 48 inches wide at the door bar junction to the B-Pillar. Any add on tubing to meet the 48-inch wide rule may not be moveable so that it hits an object and slides forward or backward with ease. It may be a quick detachable system so that you may remove it for other events.

5.15.15: All cages must be equipped with at least one side shear diagonal brace from the top of the cage (roof level) at the B-Pillar to the opposite side of the chassis at the Door Bar Junction of the B-Pillar or the Rocker Junction of the B-Pillar.

5.15.16: Cage height must be a minimum of 3 inches from the entire helmet of the driver

******A cage height minimum of 3" from around the entire helmet of the drivers will be the Mandatory set standard from the 2007 season******

5.16: Seating

W.E.ROCK's Goal for the Seating rule is to ensure safety while still incorporating W.E.ROCK's central goal of vehicle recognition. Suspension Seats are considered seats that absorb impact through springs, a Sling Design, or Foam that helps inhibit spinal compression.

The following are seating guidelines for competition:

5.16.1: All seats must have padded rib protectors and lower torso containment on the left and the right side.

5.16.2: Adequately padded headrests or neck supports acceptable to W.E.Rock official inspectors are required.

5.16.3: Seats must be mounted to the roll cage. Mounting to the body is not permitted.

5.16.4: An approved Five-point harness is mandatory and must be worn at all times while on an obstacle.

5.16.5: Vehicle must have two seats that sit side by side on the same horizontal plane from front to front and back to back mounting points.

5.16.6: Seats must maintain the same size characteristics in comparison to each other. Ex. vehicles must use 2 adult sized seats or two kids sized seats, pending on the size and safety of the driver"

5.16.7: Comparing the left seat and right seat, seat corners must be mounted on the same horizontal plane, front to front and back to back

5.16.8: Left seat bottom must maintain the same degree of tilt at the main seat rails, front to back and side to side, as the right seat bottom.

5.17: Steering

W.E.ROCK's goal for the Steering Rule is to create a fairness to the addition of older style vehicle Tube Buggies against the current Legend Class to make a Pro Modified class.

W.E.Rock considers steering to be all components designed to turn the vehicle wheels to the left or right of the vehicle centerline.

The following are steering guidelines for competition:

5.17.1: All steering must contain the ability for Full Mechanical Steering. Through protest, disconnecting the ram and steering the vehicle will check this.

5.17.2: Hydraulic Assisted steering is permitted. Full Hydraulic Steering is permitted.

5.17.3: Rear Steering is not permitted. If the vehicle is equipped with rear steer, then teams must completely lock out the rear steer with welded on tabs and bolted fastening devices so that there is no question of rear steering movement.

5.17.4: Brake Steering (See Brakes).

5.17.5: All steering components, u-joints, and fittings must be in good working order as determined by a W.E.Rock official.

5.17.6: Hydraulic steering fluids must not leak.

5.17.7: Hydraulic lines must be steel braided or commercially sold hydraulic line in good shape. All lines must be run in a safe route.

5.17.8: Vent tubes must be attached to a fluid containment container.

5.17.9: All steering lines, which run through the cockpit, must be entirely shielded to protect all occupants.

5.18: Stickers

5.18.1: Teams may run their own stickers without restriction in size.

5.18.2: Stickers may not use profanity or be of a crude nature.

5.18.3: Contingency stickers must be run in accordance with the contingency sponsor's program. Contingency stickers are the responsibility of the competitor.

W.E.Rock will attempt to have every contingency sticker available.

W.E.Rock will ask that all competitors run the event sponsor stickers, though not required.

5.19: Suspension

The following are suspension guidelines for competition:

5.19.1: Reactive suspension systems are approved, .

5.19.2: Manual suspension controls (ie. Forced Hydraulics) are approved in this class but may not control individual tires. This may only be used to aid movement of the entire front or rear axle as a whole.

5.19.3: Suspension pivot points, connecting points must be free of cracks and in good physical condition as determined by a W.E.Rock official.

5.20: Tires

The following are tire guidelines for competition:

5.20.1: All factory built tires from any manufacturer.

5.20.2: All automotive-based tires. No agricultural tires are approved.

5.20.3: Tires are to be the only source of forward, side, or back movement of the vehicle. Any device used to move the vehicle in these directions other than the tires is considered a tool or winch and points will be assessed accordingly.

5.20.4: Maximum tire size of 37" is allowed by sidewall reading.

5.20.5: Tire Studs, screws, or anything added to the tire to aid traction will not be permitted

5.21: Transfer Case

The transfer cases transfers power to the front axle and rear axle of a vehicle.

The following are transfer case guidelines for competition:

5.21.1: All transfer cases are approved.

5.21.2: Vent tubes must be attached to a fluid containment container.

5.21.3: All Driveline u-joints must be covered so that broken parts may not hit any occupants.

5.22: Transmission

The following are transmission guidelines for competition:

5.22.1: All automatic or manually operated transmissions are approved.

5.22.2: Vent tubes must be attached to a fluid containment container.

5.22.3: Exposed transmission components must be covered with a safety shield to protect occupants from possible exposure to transmission fluids in the event of transmission case fractures or unforeseen fluid spills. The Transmission cover must be a minimum of forty-thousandths aluminum, 20-gauge metal, 20-gauge expanded metal, or 3/16" lexan. Plexiglas is not permitted.

5.23: Weight

Weight is the total vehicle weight.

5.23.1: The vehicle must weigh a minimum of 2500 without the driver while competing. A W.E.Rock marshal may approve weight reduction based on damage while competing

5.23.2: Use of environmentally damaging compounds, fluids, etc. is not permitted for weight in the tires. This includes Lead. Determination of this rule will be left to occurrences; therefore penalties will be issued once the tire has torn, broken, etc. and the environmentally damaging compounds or Fluids have been released.

5.24: Wheels

The following are wheel guidelines for competition:

5.24.1: All steel and aluminum wheels are approved.

5.24.2: Bead lock wheels with locks on both the inner and outer side of the wheel or any combination thereof are approved.

5.24.3: Wheels and bead locks must not interfere with the proper operation of brakes.

5.24.4: Wheels must be mounted onto the axle with a minimum of four lug studs.

5.24.5: All lug studs must have the proper nuts on them.

5.25: Winches

The following are winch guidelines for competition:

Winches in working order are required on the vehicle at all times while competing.

5.25.1: All professionally built and sold electric, hydraulic, and power take off winches, with a minimum capacity of 5000 pounds on the first wrap of cable, are acceptable.

5.25.2: Winches must use rope type cable substitute with minimum burst strength of nine thousand five hundred (9500) pounds (5/16 steel cable).

5.25.3: Rope must be in acceptable condition with minimal fraying or kinks.

5.25.4: Winch line hooks must be rated at ten thousand (10000) pounds.

5.25.5: Winch must be mounted using all factory-mounting positions on either the bottom or front and back.

5.25.6: All vehicles must carry an approved winch bag

5.25.7: Winch line hooks must have an attached strap, at least four inches in length.

5.25.7: Cable is not permitted for use as a Winch line.

5.25.8: Winch rope must be available for use during competition, may not be permanently attached to the axle.

5.25.9: Must be in working order and able to use (not tied to the axle) during the event in the case of an emergency or self extraction help

5.26 Window Nets

5.26.1: Safety nets are mandatory on all vehicles competing and must cover the complete open window areas where the driver can reach out. Wing Window areas included if drivers can reach any portion of their body out while fully belted in. This does not include the Windshield gap.

5.26.2: Window Nets should be tight, so that no occupant should push the net out more than 4 inches (recommended by DJ Safety, Simpson, Impact, and Crow)

5.26.3: Window nets should cover the entire main window area. Moreover that if a limb can come out in any way, the area must be netted.

5.26.4: Separation between the net and the cage may not be any greater than 2 inches at any point throughout the entirety of the design.

5.26.5: Nets must be secured by a positive locking mechanism and shall be installed so that the driver can release the netting and exit the vehicle unassisted regardless of vehicle position.

5.26.6: Netting must be installed on the inside of the roll cage bars so that it will not be damaged or come off the vehicle in the event of a roll-over or slide on the side.

5.26.7: The net's border or edge and mounting materials must be made of materials that are as strong or stronger than the netting itself.

5.26.8: "Zip tie", plastic fastener, or "Velcro" systems are not permitted. Acceptable methods of tying the nets into the vehicle include: Hose Clamps, metal hooks, and steel rods. Attachment points must be welded tabs, holes drilled in the cage material- will NOT be allowed.

5.26.9: Arm restraints will be allowed but must be in addition to the required safety nets.

5.26.10: Vehicles with "Wing Areas" (the area between the A pillar and A pillar support bar) may keep the area open without netting unless reachable for the occupant while harnessed inside of vehicle.

Additional Requirements

· Two Fire extinguishers must be securely mounted to the roll cage on both the right and left hand side of the vehicle. Mounting position must be on the vertical main bar immediately behind the driver on the left side and between the seats.

· Trucks: must be mounted on the vertical main bar behind the cab, behind the driver and

passenger seat, or in another suitable location, and approved by a W.E.Rock Official.

- Extinguishers must be easily removed without the use of tools.
- Extinguishers must be full and have Dial Indicators so that they are easy to read.

Additional Recommendations for Safety

It is recommend but not mandatory that the following items be considered as options when building a competition vehicle.

- Bead-lock rims.
- Neck supports.