



Official R/C Rock Crawling Competition Rules (2012)

Introduction:

This rulebook is intended to standardize the remote control rock crawling competitions that are held at various locations throughout the United States.

SECTION 1: Penalties

1.1- Points: Reverse: 1 point - Gate Marker: 10 points - Rollover: 5 points - Boundary Marker: 10 points
Vehicle Touch (Repair & Repositions): 10 points - Course Direction: 10 points

1.2 - Back Up/ Reverse: (1 pt) Point is given when a vehicle reverses course after making forward progress. Reversing is defined as any of the tires moving in the reverse direction, whether engaged or in freewheel and/or whether intentional or not. Once a reverse penalty is given, no further reverse penalty can be given until the vehicle makes forward progress. No penalty is given if the backward movement occurs while the vehicle is in the rollover position. (See Sec. 6.6 Rollover Position) If a driver begins a course in reverse, a reverse penalty will occur immediately. (See Reverse examples and explanations Sec. 7.1.)

1.3 - Rollover: (5 pts) Points are given when vehicles rollover, and cannot be corrected without touching. Once the vehicle has stopped it may be rolled over and the 5 point penalty shall be given. Vehicles that land back on their wheels are not penalized. No reverse penalties are given until vehicle is up righted and back on all 4 tires. Drivers must execute a legal roll over recovery, or they will be given a reposition penalty. (See Sec. 6.7 Legal Rollover)

1.4 - Vehicle Touch: (10 pts) All vehicle touches excluding "Rollovers" (See Rollover rule, sec 1.3), intentional or unintentional, are given an automatic 10 points. The judge then will stop time when either the driver calls for a vehicle touch or the judge calls a driver touch. The vehicle is then moved back by the driver to the previously cleared gate with the rear axle aligned to that gate. If the vehicle cannot be aligned to the gate due to course design, the judge will reposition the vehicle to the next stable location after the cleared gate. This location will be used for all drivers. Note: All gates for progress are still "live" unless a gate has already been deemed "dead".

- **1.4.1 - Vehicle Touches:** include but are not limited to: repairs, repositions, vehicle driving/falling into the driver.

- **1.4.2 - On Course Repairs:** Must be completed on course and in the spot of which the driver decided to take the repair. Repairs must be made within the course time, while the course timer will continue to run. If repairs are made within the course time the driver must return to the last previous gate cleared. If repairs cannot be made within the course time, the driver is given a DNF minus progress points for that course. There are no restrictions on whom or how the repairs are made.

▪ **1.4.3 - Off course repairs (Optional):** A driver can call time to make an off course repair. Repairs should be completed within 30 minutes, or the driver is given a DNF minus progress points. If the repair is made in the allotted time the driver must return to the last previous gate cleared. A 1 minute time penalty will be subtracted from the time that is left on that course, the timer will continue once the vehicle makes forward progress.

▪ **1.4.4 - Vehicle Out of Spec:** If the Judge has reason to believe a vehicle is out of spec during a course run, he may call time to stop. At that point no additional inputs may be given by the driver to the vehicle via touch or radio control. The Judge must mark the vehicle's location and perform a tech inspection in the specified tech area (same manner as all other tech inspections). If the vehicle has been deemed within spec, the driver and vehicle will return to the location marked by the judge and the clock will start once again. If the vehicle is now out of spec and the Judge has determined that the vehicle has gained an advantage, the driver must take a repair (see rule 1.4.3) to correct the problem. If the problem can not be corrected to bring the vehicle back within spec, the driver will receive a DNF for that course (see rule 1.8). If a vehicle falls out of spec due to breakage on course and the Judge determines the driver has not gained an advantage, then the driver may be allowed to continue on course without stopping time and requiring a tech inspection. Bodies, and body panels are not included in this exception, and must be replaced immediately, standard repair procedures and penalties apply.

1.5 - Gate Marker (10 pts each): each gate will be comprised of 2 gate markers. Points are given when 4 wheels do not travel between gate markers or any part of the vehicle touches a gate marker. A gate marker will remain "live" for the entire duration of the attempt on the course. Gate markers that are moved by anything other than the vehicles actions will be replaced immediately before the driver is allowed to continue. Once any gate marker has been touched or straddled by the vehicle, no more penalties will be given for that gate marker. Only when a gate penalty is assessed will that gate marker be deemed "dead". No further penalties will be assessed at this point for that gate marker. (See Gate Marker and Gate Clearing explanations, sec. 7.2 & sec. 7.3.)

1.6 - Boundary Marker (10 pts each): Points are given when any part of the vehicle touches a boundary marker. Once a boundary marker is touched the judge then will stop time, and the vehicle is then moved back by the driver to the previously cleared gate with the rear axle aligned to that gate. If the vehicle cannot be aligned to the gate due to course design, the judge will reposition the vehicle to the next stable location after the cleared gate. This location will be used for all drivers. A boundary marker will remain live (and will be replaced immediately if moved.) for the entire duration of the attempt on the course, and if they are moved out of position they will be replaced immediately before the driver is allowed to continue. Boundary markers are not required in the design of a course.

1.7 - Maximum Penalty Points:

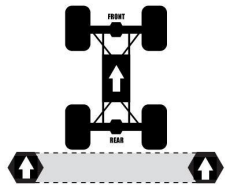
▪ **1.7.1** - The maximum points per course is 40. At that time the driver is given a DNF and the run is complete and the vehicle should be removed from the course.

▪ **1.7.2** - The maximum points per gate is 20. (Optional) Once a driver has reached the maximum of 20- penalty points for that gate they will be placed with the rear axle aligned to that gates exit. If the vehicle cannot be aligned to the gate due to course design, the judge will reposition the vehicle to the next stable location after the cleared gate. No progress points are given for the gates not cleared.

1.8 - DNF (Did Not Finish): (40 pts): are given anytime a driver cannot complete a course for any reason. (Time expired, Point-Out, Vehicle not Repairable, etc) Progress points are awarded for each gate completed.

1.9 - DNS (Did Not Start) (50 pts): are given anytime a driver cannot start a course for any reason. Vehicle must start course under its own power.

1.10 - Progress bonus (-2 progress point): shall be awarded to drivers for each gate after it has been cleared during the attempt of a course. All gate penalties are assessed and given before a progress bonus is awarded. Progress is awarded when during the same attempt and in the intended course direction at least one front and one rear tire passes completely through the gate and all four tires are past the gate (See Illustration



A). To receive the progress bonus without a gate penalty, all four tires must pass completely through the gate during the same attempt and in the intended course direction (See 1.5 for Gate penalties). Progress points are deducted from the total course score. Once a driver has pointed out, no further Progress points will be awarded.

Illustration A

1.11 Time Out: A driver may call for time to stop so that he or she may safely reposition themselves on the course. This time shall be used for the purpose of driver safety and may not be used to survey the course or for any other advantage. Once the competitor is repositioned the time will start, however the judge has the right to start time at any point.

1.12 - Course Direction (10 pts) Gates must be cleared in their intended direction and sequence. Any part of the vehicle entering an un-cleared gate in the wrong direction, or driven through out of sequence will result in a 10 point penalty. The judge will stop time. The vehicle is then moved back by the driver to the previously cleared gate with the rear axle aligned to that gate. If the vehicle cannot be aligned to the gate due to course design, the judge will reposition the vehicle to the next stable location after the cleared gate. This location will be used for all drivers. Once the gate is cleared and awarded progress it can be traveled in any sequence or direction.

SECTION 2: Vehicle Requirements

2.1 - General:

- **2.1.1** - Vehicles are limited to 4-wheeled vehicles only. These 4 wheels can be the only source of propulsion for the vehicle.
- **2.1.2** - All vehicle specifications regardless of class, body or bodiless the measurements are to be taken in the vehicle's ready to run condition while sitting on a flat surface (i.e. tech table).
- **2.1.3** - Wheelbase is measuring from centerline of front axle stub to centerline of rear axle stub.(See rule 6.4)
- **2.1.4** - Bodied vehicles: Any support chassis allowed.
- **2.1.5** - Bodiless vehicles: Must be a self-supporting, structurally complete, rigid frame. The roof must be raised a minimum of 1" from the main chassis to resemble a cockpit. The frame sides must be an overall minimum of 1" tall (The cockpit & frame side are to be measured vertically from where the hood intersects the cab). Bodiless vehicles should resemble a 1:1 vehicle.
- **2.1.5.1** - Bodiless vehicles must have solid hood panel, solid roof panel and a minimum of 2 solid side-panels.
- **2.1.5.1.1** - Hood, roof and side panels must be separate pieces of solid material installed onto the bodiless vehicle frame.
- **2.1.5.1.2** - All body panels are to be separate pieces from the complete structural frame.
- **2.1.5.1.3** - Body panels must be solidly installed in a manner that is representative of a 1:1 vehicle.
- **2.1.5.1.4** - All panels (roof, hood, and sides) must have at least 2x measurements greater than 1", and a minimum of 3.5 square inches of exposed solid surface area.
- **2.1.5.1.5** - Body panels must be fitted to the vehicle, and not be exaggerated in size or shape that intentionally

distorts the vehicles legal measurements.

- **2.1.5.1.6** - Shocks and fasteners (nuts, bolts, washers, or spacers) shall not be included in the measurements of the vehicle.
- **2.1.5.1.7** - Bodiless vehicles must reach a minimum of (A) width, (B) length, and (C) height. Measurements may include, but not limited to bumpers, stingers, frame-rails, side-rails, skid plates, roof, hood, and side panels. See Illustration B.

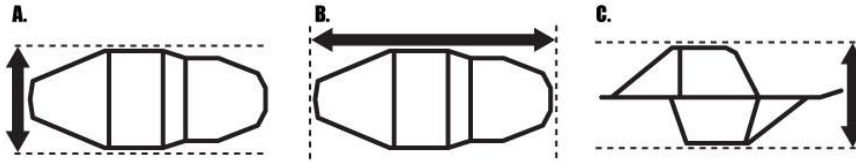


Illustration B.

- **2.1.6** - Unibody – Constructed of a single piece of solid material (fiberglass, aluminum, plastic, etc) and must be self supporting. A Unibody cannot be fastened together in any nonpermanent way such as, nuts & bolts, pins, rivets, zip ties, etc. The roof must be raised from the main chassis to resemble a cockpit and should resemble a 1:1 vehicle. Unibody vehicles run the same minimum dimensions as bodiless.
- **2.1.7** - Winching down of the axles is allowed. The winch line must be attached within a 1/2" of the center of the axle, and by a single attachment point only.
- **2.1.8** - There are no limitations on the amount of radio channels used on a vehicle.
- **2.1.9** - Active Suspension is allowed - A suspension that is interlinked (such as the 1:1 Scorpion, excluding the air bags used to raise and lower the vehicle) which by design moves part of the suspension in one direction when moved from another. This does not have any driver input.
- **2.1.10** - Forced Articulation is allowed – Forced articulation is the use of something such as hydraulics or electronics to literally force the suspension to move in a driver-controlled manner.

2.2 - Class 1 - Super Crawler Class:

- **2.2.1** - Vehicle wheelbase is limited to a minimum of 16 inches and a maximum of 18 inches.
- **2.2.2** - No limits to steering configuration.
- **2.2.3** - Bodied vehicles must be 3" minimum height on sides. No less than 12.5" total length and full original width, and no less than 5" in center.
- **2.2.4** - Super class bodiless 12" overall length, 3" overall width, and 3.75" overall height.
- **2.2.5** - Vehicle is limited to a minimum 3.2 inch wheels/rims or larger at the bead surface. Wheels may be modified provided that the tire bead surface is not less than 3.2 inches in diameter. Tires may be modified from other sized tires using only a pliable rubber.

2.3 - Class 2 – Class 2.2:

- **2.3.1** - Vehicle wheelbase is limited to a maximum of 12.5 inches.
- **2.3.2** - Vehicle track width is limited to a maximum of 12.5 inches. This is determined by measuring the bottom of the outer most edge of the front and rear tires while the vehicle is sitting on level ground.
- **2.3.3** - Vehicle is limited to 2.2 inch wheels/rims or smaller at the bead surface. Wheels may be modified provided that the tire bead surface does not exceed 2.2 inches in diameter. With a tire mounted no exterior component of the wheel including but not limited to the bead lock ring shall exceed 2.55". Tires may be modified from other sized tires using only a pliable rubber but must not exceed a total uncompressed outer diameter of 6 inches.
- **2.3.4** - Vehicles are limited to 2-wheel steering only.

- **2.3.5** - 2.2 Crawler class bodiless 8" overall length, 3" overall width, and 3.75" overall height.
- **2.3.6** - Bodied vehicles must be 3" minimum height on sides. No less than 12.5" total length and full original width, and no less than 5" in center.

2.4 - Class 3 – Class 1.9 :

- **2.4.1** - Vehicle wheelbase is limited to a maximum of 8.5 inches.
- **2.4.2** - Vehicle track width is limited to a maximum of 8 inches. This is determined by measuring the bottom of the outer most edge of the front and rear tires while the vehicle is sitting on level ground.
- **2.4.3** - Vehicle is limited to 1.9 inch wheels/rims or smaller at the bead surface. Wheels may be modified provided that the tire bead surface does not exceed 1.9 inches in diameter. With a tire mounted no exterior component of the wheel including but not limited to the bead lock ring shall exceed 2.2". Tires may be modified from other sized tires using only a pliable rubber but must not exceed a total uncompressed outer diameter of 4.25 inches.
- **2.4.4** - Vehicles are limited to 2-wheel steering on front axle only.
- **2.4.5** - Vehicles are limited to the use of 2 channels radio control (one for steering & one for throttle) only. Neither channel can be used to perform more than one function. Radio systems with more than 2 channels are allowed but only 2 channels can be used to control the vehicle.
- **2.4.6** - Vehicles are limited to 1 ESC & 1 servo only.
- **2.4.7** - Vehicles are limited to 1 motor powering both of the axles.
- **2.4.8** - No driver controlled devices, other than steering and throttle control, will be allowed. Independent throttle control to the front or rear axles ("burn" or "dig"), winching down the axles, and forced articulation are not allowed in this class.
- **2.4.9** - A battery is limited to 11.1 nominal voltage.
- **2.4.10** - 1.9 Crawler class bodiless 6.75" overall length, 2.5" overall width, and 3.25" overall height.
- **2.4.11** - 1.9 Class body must be 2.75" minimum height on sides. No less than 9" total length and full original width, and no less than 3" in the center. All bodies should resemble its original form (Jeep bodies look like a Jeep)

2.5- Class 4 – Class 2.2s:

- **2.5.1** - Vehicle wheelbase is limited to a maximum of 12.5 inches.
- **2.5.2** - Vehicle track width is limited to a maximum of 12.5 inches. This is determined by measuring the bottom of the outer most edge of the front and rear tires while the vehicle is sitting on level ground.
- **2.5.3** - Vehicle is limited to 2.2 inch wheels/rims or smaller at the bead surface. Wheels may be modified, provided that the tire bead surface does not exceed 2.2 inches in diameter. With a tire mounted, no exterior component of the wheel, including but not limited to, the bead lock ring shall exceed 2.55". Tires may be modified from other sized tires using only a pliable rubber, but must not exceed a total uncompressed outer diameter of 6 inches.
- **2.5.4** - Vehicles are limited to 2-wheel steering only.
- **2.5.5** - Bodied Vehicles only. (See Sec. 2.3.6) Bodiless vehicles are prohibited.
- **2.5.6** - Vehicles are limited to the use of 2 radio channels (one for steering & one for throttle) only. Neither channel can be used to perform more than one function. Radio systems with more than 2 channels are allowed, but only 2 channels may be used to control the vehicle.
- **2.5.7** - Vehicles are limited to 1 ESC, 1 Motor & 1 servo only.
- **2.5.8** - Bodied vehicles must be 3" minimum height on sides. No less than 12.5" total length and full original

width, and no less than 5" in center.

SECTION 3: General Event Rules & Event Management

3.1 - USRCCA recognizes that some clubs may need to amend the USRCCA Rules to accommodate their terrain and group size at a local level. These rules changes shall be posted in event notifications, and clearly communicated to all competitors prior to competition. Multi-Club events that are Non-USRCCA Events are encouraged to run as strict USRCCA Rules as possible. All USRCCA Sanctioned Events are required to strictly follow USRCCA Rules. Any rules exception for sanctioned events must be pre-approved by the USRCCA Rules Committee. All major events shall have a minimum of three (3) Marshals. These Marshals shall be announced at the drivers meeting before any courses are ran. Event Marshals *must* be whenever possible members of the USRCCA Rules Committee. *Event Marshals not on Rules Committee need to be approved by the USRCCA.* Marshals need to be in attendance for the duration of the event. Any rule changes necessary due to conditions specific to an event must be decided and voted upon by Event Marshals. Any questions on discrepancy of the rules or scoring shall only be handled and voted on by Event Marshals. All courses shall be inspected by all of the Event Marshals with the course designer prior to the start of the event. Courses may open after the Event Marshals have given approval.

- **3.1.1** - Any event in which a National Invite is awarded is deemed a Sanctioned Event. This includes major events, state championships, state crawl-offs, etc.

3.2 - Scores are ranked by the cumulative total of all course scores. Lowest total score wins..

- **3.2.1** - Finals course scores are added to total event scores. DNS (50 pts) is given to drivers that did not compete in the finals

3.3 - Tie Scores:

- **3.3.1** - Nationals Style: In the event of a tie score the competitor with the lowest score on the final course run is considered the winner. If both competitors are also tied on the final course then the second to the last course run will be used, and so on.

- **3.3.2** - Optional: In the event of a tie score the competitor with the lowest time on all courses will be chosen the winner over the other competitor(s) with the same score.

3.4 - No Pre-running Courses: Drivers that pre-run a course will receive a DNS (50pt) for that course.

3.5 - Course Cut Off Time: Courses not ran before designated cut off time will be scored as a DNS (50). Drivers in line to run their last course by the designated cut off time will be given the chance to run that course.

3.6 - Winching: (other than that done to the suspension) or ramping of any kind is not allowed. Using any device (other than the tires) such as ramps or other objects to make progress in any direction is prohibited and will result in a DNF for that course

3.7 - Multiple Class Vehicle: No vehicle may be run in more than one class at an event.

3.8 - Vehicle Exchange: Vehicles cannot be exchanged for another vehicle during the competition.

3.9 - Vehicle Sharing: Vehicle sharing is allowed. No more than two drivers can share the same vehicle. Drivers sharing a vehicle must notify event organizers during Tech Inspection or Check In. Event organizers or Marshals may make any changes to the running order of the drivers sharing a vehicle they deem necessary to avoid controversy.

3.10 - Changing Vehicle Specs (On Course): The vehicle must run a course entirely with the same wheelbase, track width, ride height, and tires it started that course with. Any changes to the vehicle (other than winching down the suspension or forced articulation) by the driver, another person, or any device, while on the course are prohibited.

3.11 - Changing Vehicle Specs (Off Course): Drivers may make changes to wheelbase, track width, ride

height, and tires between course runs, as long as the vehicle remains within the specs for it's class.

3.12 - Course Modification: No modification to the course is allowed by anyone. This includes, but not limited to, removing of rocks, stacking of rocks, purging a puddle of water, blowing/wiping dirt from rocks, removing of vegetation, or other types of modifications to a course that could gain a driver an advantage.

3.13 -Event Rule Violation: Any violations of event rules are subject to automatic disqualification by judges, event organizers, or USRCCA. If violation of rules is severe and/or reoccurring the USRCCA reserves the right to ban the violator from competition up to one year.

SECTION 4: Course Design

4.1 - Gates Construction: Gates consist of at least 2 Gate Markers.

4.2 - Gate Width (Minimum Width): Super Class = 20 inches, All 2.2 Classes = 16 inches and 1.9 Class = 12 inches. Measurements are from inside to inside of each gate marker.

4.3 - Gate Quantity: Recommended (3-10) Gates per course

4.4 - Course Quantity: A minimum of 3 Courses per event is recommended.

4.5 - Gate Distinction: that are in close proximity to each other should be distinguished by color or markings.

4.6 - Live Gates: Gate markers that are live and designed as part of the course that count for penalty must also have progress or bonus points awarded.

4.7 - Start Lines: Courses may consist of a start gate, chalk line or any other type of designated starting area. Start lines are only used to start the course clock.

- **4.7.1** - Scoring starts when time has started. Scoring stops when course is finished.

4.8 - Course Completion: The course is finished once the last gate is completed and progress has been awarded (see rule 1.10)

4.9 - Bonus (Optional): Bonuses are extra gates placed anywhere on the course by course designers for bonus credit.

- **4.9.1** - All penalties apply during the bonus attempt to the regular score even if the bonus is not completed or aborted.

- **4.9.2** - Course must be completed in order for bonus to be awarded.

- **4.9.3** - Bonus may consist of more than one gate.

- **4.9.4** - Bonus Gates are ran in the intended sequence set by the course designer.

4.10 - Alternate (Optional): Alternate gates are secondary gates placed anywhere on the course by course designers for bonus credit.

- **4.10.1** - All penalties apply during the alternate attempt to the regular score even if the alternate is not completed or aborted.

- **4.10.2** - Course must be completed in order for alternate to be awarded.

- **4.10.3** - Alternate may consist of more than one gate.

- **4.10.4** - Alternate Gates are ran in the intended sequence set by the course designer.

SECTION 5: Judging

5.1 - Judge Responsibilities: Judges are responsible for watching vehicles while on the course, and to penalize drivers that commit penalties while competing.

5.1.1 - Judges should call out penalties when they occur.

5.1.2 - Judges are responsible for keeping spectators at a safe distance from the course to avoid spectator interference.

5.2 - Judges Per Course: Whenever possible there should be done by at least 2 people per driver. One Judge to call out penalties and one Judge/Scorekeeper, to record penalties, tally maximum penalties, keep time (if

applicable), etc.

5.3 – Spectator Interference: If a spectator accidentally interferes with the vehicle the driver should be not penalized. If a fan intentionally interfered with the vehicle, and significantly changes the outcome to the driver's advantage then the driver should be penalized appropriately at the discretion of the judge. Intentional spectator interference includes but is not limited to if a fan stops a truck from falling in water, off a cliff, or other obvious hazard to avoid damage.

5.4 – Spotters (Optional): If spotters are permitted by event organizers drivers are responsible for identifying the driver's spotter. Only designated spotters shall be allowed on course with the driver and judges. All penalties committed by the spotter shall count towards the driver's total score. (i.e. touches, course modification, and etc.)

5.5 Stopping after Attempt: Once a driver has finished their attempt at a course, the driver must remove their vehicle from the course as quickly as possible, to allow the next driver to attempt the course. If a driver fails to adhere to the rule and continues to drive on the course, the driver may be subjected to a 50 point DQ for that course.

SECTION 6: Glossary of Terms

6.1 - Event/Competition: The coming together of drivers at a certain place and time to compete on single or multiple courses

6.2 - Course: A course is the terrain that consists of a start gate, an end gate, and all the terrain in between them. Every course has an intended direction of travel, or "flow", through the gates.

6.3 - Gate: A gate is used to mark an obstacle within a course and/or guide the vehicle through the course. A gate consists of 2 gate markers measuring no less than; 20" for the Super class, 16" for the 2.2 class, and 12" in 1.9 class from inside edge of one marker to the inside edge of the opposite marker. The gate is the entire area between the gate markers; determined by the size of the gate markers and the distance between them. See Illustration C . Every gate has an intended direction of travel, or "flow", through the gate. This direction will be marked, explained or implied by the course designers. All gate markers are "live" until touched or straddled.



Illustration C.

6.4 - Wheelbase: is measured from center of axle nut to center of axle nut. The vehicle should be set down on a flat surface by the driver. The front wheel on the side that is being checked, must be pointing straight forward. At that time, the driver will then cycle the suspension through it's complete extension and compression range while the judge measures the vehicle's maximum wheelbase. At any point the vehicle's wheelbase cannot extend beyond the maximum limit of it's class. All the above procedures must be duplicated on the opposite side. Note: All vehicles will be teched in the same ready to run condition, and set up as the vehicle will be run on the course. If the vehicles wheelbase is affected by radio control it must be cycled or activated during tech inspection.

6.5 - Vehicle track width: is measured from the outer most edge of a tire to outer most edge of a tire.

6.6 - Rollover Position: A vehicle is considered to be in the Rollover Position when both wheels on the same side of the vehicle break a 90 degree vertical plane from horizontal level (NOT the crawling surface)

6.7 - Legal Rollover Recovery: The vehicle must be completely at rest and may not have any transmitter input during the Rollover Recovery. The rig must be smoothly rolled over from driver or passenger sides, and

not from the front or back. The driver may only attempt to roll the vehicle in one direction. At no time during the Recovery can the vehicle slide in any direction or lose contact with the ground. Once the truck is rolled over it must be able to hold its position on its own long enough for the Judge to determine it is stable within the course boundaries. The course may be continued at this point. If any of above criteria is not met, a Reposition penalty (10 pts, see Vehicle Touch rule, sec 1.4) will be given instead of a Roll Over (5 pts).

6.8 - Straddle: A gate is considered straddled if at any time the axle of a vehicle (facing in any direction) passes over any part of a gate marker and both tires of that axle are touching the ground (or any object on the ground) on opposite sides of the gate markers, it is considered a straddle and a Gate Marker penalty is assessed.

SECTION 7: Penalty Examples and Additional Penalty Definitions

The examples and definitions used in this section are intended to help explain rules in previous sections not override them.

7.1 - Back Up/ Reverse Examples:

- **7.1.1** - If the driver intentionally drives the vehicle in reverse, a reverse penalty will occur.
- **7.1.2** - If the vehicle stops on an incline and then rolls backwards a reverse penalty will occur.
- **7.1.3** - If a vehicle is climbing an obstacle and is bounced backward by the terrain but the tires are still moving forward, no reverse penalty will occur.
- **7.1.4** - If a vehicle flips over backward, without the driver reversing, no reverse penalty will occur.
- **7.1.5** - Once a reverse penalty has been assessed, no further reverse penalty can be assessed until the vehicle makes forward progress.
- **7.1.5.1** - Example: Reversing, stopping, and then reversing again will only result in one reverse penalty.
- **7.1.6** - Reverse penalties are assigned at the Judge's discretion if the actions performed by the Vehicle/driver is not clearly defined by the rule.

7.2 - Clearing of a Gate Examples:

- **7.2.1** - A gate is considered cleared when at least one front and one rear wheel passes between the two gate markers, and all four tires are past the gate in the intended direction of the gate.
- **7.2.2** - All gates must be cleared in the intended sequence of the course layout (gate 1, then gate 2, then gate 3, and so on).
- **7.2.3** - A vehicle may travel through a gate while it is in reverse and still clear that gate as long as it only travels though in the intended direction (reverse penalty(s) will be assessed as necessary).
- **7.2.4** If all four wheels of a vehicle pass between two gate markers that gate is considered a cleared gate with no penalties and a gate progress bonus is awarded.
- **7.2.6** - If one wheel from the front axle and one wheel from the rear axle passes between two gate markers (vehicle straddles a gate), that gate is considered a cleared gate. This however will result in a Gate Marker penalty of 10 points and a gate progress bonus is awarded.
- **7.2.7** If one wheel only from the front axle or one wheel only from the rear axle passes between two gate markers (vehicle straddles a gate) that gate is not considered a cleared gate. This will result in a Gate Marker penalty of 10 points and no gate progress bonus is awarded.

7.3 - Gate Marker Penalty Examples:

- **7.3.1** - At any time a gate marker is touched by a vehicle, a Gate Marker penalty is assessed.
- **7.3.2** - A driver can only continue with the course when a gate is cleared or 20 pts (if optional by pass rules are

used) at that gate is accumulated.

•**7.3.3** - If a wheel floats above a gate marker, the driver must correct it before that gate is deemed clear and progress is awarded. If the driver fails to correct the position of the tire, such that it is not located above the gate

marker, and continues to clear the gate, a gate penalty will be assessed at that time in addition to the gate progress. All 4 tires must go between the gate markers to not receive a gate penalty.

Section 8: Sportsmanship

8.1 – Sportsmanship: Good sportsmanship is required at RC Rock Crawling Competitions. If a competitor or team member (including but not limited to spotters) promotes unsportsmanlike conduct, they and/or their team members may be penalized upon the Marshal's review of the incident. Unsportsmanlike conduct includes but is not limited to rude or abrasive actions towards officials or other teams or spectators, destroying property, displaying drunken or disrespectful behavior, use of excessive on course profanity or kicking/throwing their controller or rig. The violator(s) and/or their team members may be penalized upon the Marshal's review of the incident. Unsportsmanlike conduct may result in a 50 for the course, and/or disqualified from the competition.

8.2 - No alcohol: allowed on course during competition.

8.3 - Violation of Intent: The intent of a written rule may include areas not explicitly expressed or illustrated. *The USRCCA Rules Committee has the ability to define the intent of a rule. A violation of the intent of a rule may be considered a violation of the rule itself. **Rulings on Violation of Intent shall only be made by the USRCCA Rules Committee, without exception.**

Sportsman Class Rules Guidelines

Sportsman Class is a fun class intended for local drivers enjoyment.

- 1- Drivers are required to have fun!
- 2 - Vehicle wheelbase is limited to a maximum of 12.5 inches.
- 3- Vehicle track width is limited to a maximum of 12.5 inches. This is determined by measuring the bottom of the outer most edge of the front and rear tires while the vehicle is sitting on level ground.
- 4- Vehicle is limited to 2.2 inch wheels/rims or smaller at the bead surface. Wheels may be modified, provided that the tire bead surface does not exceed 2.2 inches in diameter. With a tire mounted, no exterior component of the wheel, including but not limited to, the bead lock ring shall exceed 2.55". Tires may be modified from other sized tires using only a pliable rubber, but must not exceed a total uncompressed outer diameter of 6 inches.
- 5- Vehicles are limited to 2-wheel steering only.
- 6 – The body and Bodiless vehicles same as Class 2 vehicle –2.2 (See Sec. 2.3.5 & 2.3.6)
- 7 - Vehicles are limited to the use of 2 radio channels (one for steering & one for throttle) only. Neither channel can be used to perform more than one function. Radio systems with more than 2 channels are allowed, but only 2 channels may be used to control the vehicle.
- 8- Vehicles are limited to 1 ESC & 1 servo only.
- 9 - (OPTIONAL) Vehicles are limited to 1 motor powering both of the axles.

October 30, 2012