



Radio Control Micro Crawler Competition Association



2024 Rulebook





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*Cover photo courtesy of Zachery Mays*

Revised January 12, 2024

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# TABLE OF CONTENTS

About RCMCCA .....	3
Competition Classes .....	4
Class 1 .....	5
Class 2 .....	8
Class 3 .....	10
Class 0 .....	12
Hardbody .....	15
Course Rules .....	18
Resources .....	24

# ABOUT RCMCCA

The Radio Control Micro Crawler Competition Association is a group focused on growing and developing micro RC crawler competitions.

The RCMCCA was born out of the desire to increase the opportunity of micro scale crawler owners to be able to use their vehicles for competition. The end goal of the RCMCCA is to create an organization that helps promote and grow the hobby and offers people in all areas the chance to come together for friendly competition with other RC enthusiasts.

In researching micro scale crawling across the country we found that there was not a consistent rule set being used. We felt that in order to grow the hobby we should first develop a set of rules that can be used by any club holding competitions, and by having universal rules, it makes it possible for competitors to be able to build their vehicles to meet the requirements of any RCMCCA-affiliated competition they attend no matter where in the world it may be.

# COMPETITION CLASSES

RCMCCA has developed 3 main competition classes with two additional classes (Class 0 and Hardbody) intended to be optional classes for clubs wanting to run it. The following pages outline the classes and the rules and restrictions that apply to those classes.

Before competing, all vehicles will pass through a tech inspection to assure that the vehicle conforms to the rules of the class it is to be run in. If a vehicle is found to be out of compliance with the class rules, the driver will be notified and will need to make whatever changes necessary to be legal for the intended class before they are allowed to compete.

Vehicles may compete in more than one class provided the driver makes whatever changes necessary to be legal for all intended classes. Vehicles that are legal for lower classes are also considered legal for higher classes so they do not need to go through tech inspection again. For example, a Class 1 legal vehicle will also be legal for Class 2 and Class 3. A Class 2 vehicle will be legal for Class 3 but may need to have changes made to it to be legal for Class 1.

Anything not covered in this rulebook such as but not limited to scale appearance items, lights, sound systems, etc. are considered legal in all classes.

# CLASS 1

## 1.01 | Body

Bodies may be constructed of any material (lexan, ABS, 3d printed, etc.). The width of the body at the doors of the cab must be wider than the inside edge of all four tires. Bottom edge of front grill and rear tailgate/trunk must be below the top edge of all four tires when the vehicle is at rest on flat ground. Bottom edge of bodies must be at a height where the transmission is not seen when viewed from the side. Front and rear of body must extend past the front edge of the front tires and rear edge of the rear tires. This may be accomplished with chassis mounted bumpers if the body itself does not meet requirements. Lexan bodies must have a front windshield and rear window. Bodies with roll cages instead of cabs (such as the Axial Deadbolt) do not need to have windshields or rear windows.

## 1.02 | Chassis

Must use a chassis that consists of two vertical rails or bars in similar configuration as stock chassis. Rails may be carbon, aluminum, titanium, 3d printed, etc. No tube chassis or stick style chassis. Chassis must use a 0 degree skid plate. No angled skid plates. Chassis rails must extend past the centerline of both front and rear axles.

## 1.03 | Bumper

All vehicles must run a front bumper that is wider than the widest part of the frame rails. Bumper must extend past the front edge of the front tires and mounted in such

# CLASS 1 (CONTINUED)

a way that the lower edge of the bumper is no higher than the lower edge of the front of the body. Lights not required.

## 1.04 | Motor

Brushed or brushless motors allowed. Single motors only.

## 1.05 | Battery

Any lipo battery up to 3s. Battery may be relocated but must be attached to chassis and must stay under the body.

## 1.06 | Electronics

No electronics limitations.

## 1.07 | Wheels

Any wheel with maximum diameter of 1.0". One piece wheels or beadlocks allowed.

## 1.08 | Tires

Any tire with 57mm maximum outside diameter. Tires must be constructed of a single piece of rubber as originally manufactured. Tires must retain stock markings on sidewall including brand, model, size, etc. Tire tread may be trimmed/removed. Tires may be vented.



# CLASS 1 (CONTINUED)

## 1.09 | Drivetrain

Full time 4WD only. No 6x6 or dually setups. Front wheel steering only. Vehicles with 4 wheel steering may compete in this class as long as rear steer is not used during the run. Use of rear steer will be considered a disqualification.

## 1.10 | Suspension

Aftermarket shocks allowed. Must use 4 shocks - 1 per tire. Suspension links may be changed.

## 1.11 | Gate Width

Minimum 6.5"/165mm

# CLASS 2

## 2.01 | Body

Any lexan or hard plastic body that resembles a full size, highway-capable vehicle. No tire coverage rule. Tube and flat beds are allowed. Bottom edge of bodies must be at a height where the transmission is not seen when viewed from the side. When viewed from above, bodies, beds, etc. must extend past the centerline of the front and rear axle and must cover motor, receiver, speed control, and battery. Lexan bodies must have a front windshield. Bodies with roll cages instead of cabs (such as the Axial Deadbolt) do not need to have windshield.

## 2.02 | Chassis

Must use a chassis that consists of two vertical rails or bars in similar configuration as stock chassis. Rails may be carbon, aluminum, titanium, 3d printed, etc.

## 2.03 | Bumper

No bumper requirements

## 2.04 | Motor

Brushed or brushless motor allowed. Single motor only.

## 2.05 | Battery

Any lipo battery up to 3s. Battery may be relocated but must be attached to chassis.

# CLASS 2 (CONTINUED)

## 2.06 | Electronics

No electronics limitations.

## 2.07 | Wheels

Any wheel with maximum diameter of 1.3". One piece wheels or beadlocks allowed.

## 2.08 | Tires

Any tire with 64mm maximum outside diameter. Tires must be constructed of a single piece of rubber as originally manufactured. Tires must retain stock markings on sidewall including brand, model, size, etc. Tire tread may be trimmed/removed. Tires may be vented.

## 2.09 | Drivetrain

Full time 4WD only. No 6x6 or dually setups. Front wheel steering only. Vehicles with 4 wheel steering may compete in this class as long as rear steer is not used during the run. Use of rear steer will be considered a disqualification.

## 2.10 | Suspension

Aftermarket shocks allowed. Must use 4 shocks - 1 per tire. Suspension links may be changed.

## 2.11 | Gate Width

Minimum 7"/178mm

# CLASS 3

## 3.01 | Body

No body requirements.

## 3.02 | Chassis

No chassis requirements.

## 3.03 | Bumper

No bumper requirements.

## 3.04 | Motor

Brushed or brushless motor allowed. Single motor only.

## 3.05 | Battery

Any lipo battery up to 3s.

## 3.06 | Electronics

No electronics limitations.

## 3.07 | Wheels

Any wheel. One piece wheels or beadlocks allowed.

## 3.08 | Tires

Any tire

# **CLASS 3 (CONTINUED)**

## **3.09 | Drivetrain**

Dig or 4WS permitted, but not both.

## **3.10 | Suspension**

No suspension limitation.

## **3.11 | Gate Width**

Minimum 7"/178mm

# CLASS 0

*Class 0 is an optional class intended as an entry-level class. Local clubs may choose to run it at their events but it will not be included at regional and national level RCMCCA events. It is suggested that clubs running a Class 0 have a policy that once a driver wins twice in Class 0 they need to move up to a higher class.*

## **0.01 | Body**

Any lexan or hard plastic body that resembles a full size, highway-capable vehicle. Bodies must cover battery, receiver, speed control, and motor when viewed from above, and must extend past the front edge of the front axle and rear edge of the rear axle. No tube chassis. Body must be trimmed along stock cut lines. The widest part of the body must be wider than the entire inner edge of all 4 tires.

## **0.02 | Chassis**

Must use stock chassis rails at stock length.

## **0.03 | Bumper**

Must run front and rear bumper. Bumpers may be changed but must be mounted in stock location and must be wider than frame rails, and must be mounted in such a way that the lower edge of the bumper is no higher than the lower edge of the body. Bumpers must extend past the front edge of front tires and rear edge of rear tires. Lights not required.

# CLASS 0 (CONTINUED)

## 0.04 | Motor

Stock motor

## 0.05 | Battery

2s lipo battery only. Battery may be relocated but must be attached to chassis and must stay under the body.

## 0.06 | Electronics

Stock radio and ESC/receiver only. Servo and servo horn may be upgraded. Axial vehicles may run any transmitter/receiver that came stock on any Axial 1/24 scale vehicle.

## 0.07 | Wheels

Stock wheels or 1.0" plastic or metal wheels (aluminum or steel only, no brass wheels, rings, etc.) One piece wheels or beadlocks allowed. No wheel weights allowed.

## 0.08 | Tires

Any tire with 54mm maximum outside diameter. Tires must be constructed of a single piece of rubber as originally manufactured. Tires must retain stock markings on sidewall including brand, model, size, etc. Tire tread may be trimmed/removed. Tires may be vented.

## 0.09 | Drivetrain

Stock axles, transmission, and driveshafts. Full time 4WD only. No 6x6 or dually setups. Front wheel steering only. Vehicles with 4 wheel steering may compete in this class

# CLASS 0 (CONTINUED)

as long as rear steer is not used during the run. Use of rear steer will be considered a disqualification

## 0.10 | Suspension

Must use stock shocks and suspension links. Springs may be changed or removed. Suspension links must be stock.

## 0.11 | Misc

No added weight to vehicle. No winches allowed. Steering link may be upgraded to aluminum link (no brass links).

## 0.12 | Gate Width

Minimum 6.5"/165mm



# HARDBODY

*Hardbody class is an optional class intended as a class that is more focused on scale appearance. Local clubs may choose to run it at their events but it will not be included at regional and national level RCMCCA events.*

## 4.01 | Body

Any hard plastic body that resembles a full size, highway-capable vehicle. Body may be injection molded, 3d printed, etc. No lexan bodies. No buggy style bodies. Interiors and windshields are encouraged but not required (windshields may be made of lexan). The widest part of the body must be wider than the entire inner edge of all 4 tires. Tube and flat beds are allowed. Bottom edge of bodies must be at a height where the transmission is not seen when viewed from the side. When viewed from above, bodies must extend past front and rear axle and must cover motor, receiver, speed control, and battery. Electronics may be visible through windows, doors, etc. but must be mounted on the chassis so that all electronics are within the outside edges of the body when viewed from above.

## 4.02 | Chassis

Must use a chassis that consists of two vertical rails or bars in similar configuration as stock chassis. Rails may be carbon, aluminum, titanium, 3d printed, etc.

## 0.03 | Bumper

No bumper requirements.

# **HARDBODY (CONTINUED)**

## **0.04 | Motor**

Brushed or brushless motor allowed. Single motor only.

## **0.05 | Battery**

Any lipo battery up to 3s. Battery may be relocated but must be attached to chassis.

## **0.06 | Electronics**

No electronics limitations.

## **0.07 | Wheels**

Any wheel with maximum diameter of 1.0". One piece wheels or beadlocks allowed.

## **0.08 | Tires**

Any tire with 57mm maximum outside diameter. Tires must be constructed of a single piece of rubber as originally manufactured. Tires must retain stock markings on sidewall including brand, model, size, etc. Tire tread may be trimmed/removed. Tires may be vented.

## **0.09 | Drivetrain**

Full time 4WD only. No 6x6 or dually setups. Front wheel steering only. Vehicles with 4 wheel steering may compete in this class as long as rear steer is not used during the run. Use of rear steer will be considered a disqualification.

# **HARDBODY (CONTINUED)**

## **0.10 | Suspension**

Aftermarket shocks allowed. Must use 4 shocks - 1 per tire. Suspension links may be changed.

## **0.11 | Gate Width**

Minimum 6.5"/165mm

# COURSE RULES

## 5.01 | Progress (-2 points)

Progress points are given when vehicles pass through a gate with the vehicle traveling in the direction indicated on the gate. Progress points are awarded even if a driver touches one or both gate markers. Once a driver has passed through a gate and progress points are awarded the driver may then pass through that gate in any direction without penalty, but gate markers remain live until touched and will incur a penalty if the vehicle touches them.

## 5.02 | Gate Marker (+10 points)

Points are given if any part of a vehicle touches a live gate marker, or passes outside the gate markers in an attempt to clear the gate. Gate markers that have not been touched by a vehicle are considered to be live. A gate is comprised of two separate live gate markers. Touching a live gate marker at any time during a run will incur a +10 penalty. Touching a gate marker with a winch line is considered a gate touch.

## 5.03 | Rollover (+5 points)

Points are given any time a vehicle rolls over and cannot be corrected without the driver touching the vehicle. To perform a rollover the vehicle may not leave the ground. The vehicle must be rolled either left or right until it is upright on all four wheels. If the vehicle must be picked up off the ground it is considered a Vehicle Touch.

# COURSE RULES (CONTINUED)

## 5.04 | Vehicle Touch (+10 points)

Points are given any time a vehicle is picked up off the ground. When a vehicle is picked up, it must be placed with its back axle in line with the last gate numbered passed (not bonus gate).

## 5.05 | Gate Skip (+30 points)

Points are given if a driver cannot progress through a gate. In order to perform a gate skip the driver must attempt to pass the gate. The vehicle must cross the center line of the gate with at least one wheel to be considered an attempt. If the driver declares a gate skip, the driver will pick up the vehicle and place it down with the rear axle in line with the center line of the gate. This does not incur a Vehicle Touch penalty. If time expires, any gate that has not been successfully cleared counts as a skipped gate. When skipping a gate, drivers must move to a numbered gate, not a bonus gate.

## 5.06 | Bonus Gate (-10 points)

Points will be given when a vehicle passes through the bonus gate in the same manner as a standard gate. Bonus gates are not numbered and may be attempted at any time during the run - after the vehicle crosses the start gate, but before they cross the finish gate. After the bonus gate attempt the driver must then pass through the next lowest numbered live gate. Bonus gates will not

# COURSE RULES (CONTINUED)

incur Gate Marker penalties if they are touched. They will just not award bonus points. Courses should have a minimum of 2 bonus gates and a maximum of 3 bonus gates per course. Unless a driver finishes the course in the allotted time, bonus points do not count towards their score.

## 5.07 | Self Winch (+2 points)

Winch must be attached to vehicle the entire run. Retractable, dynamic, and electronic winches allowed. Drivers may winch off of course terrain such as a rock, tree root, etc. Winches attached to something other than terrain (held by hand, winch stick, etc.) are considered to be a Winch Stick penalty. This does not incur a Vehicle Touch penalty. Winching not allowed in Class O.

## 5.08 | Winch Stick (+5 points)

Points are given when a driver uses the winch attached to the winch stick, or uses a vehicle mounted winch which they attach to the winch stick. Drivers winching to something other than the terrain of the course are considered to be a winch stick penalty. Drivers must provide their own winch stick, and must designate someone other than score keeper or time keeper to carry and position the winch stick, or may do so themselves. Winch sticks are not allowed in Class O. Winch sticks are encouraged for all clubs but are not a requirement.

# COURSE RULES (CONTINUED)

## 5.09 | On course repair (+10 points)

Points are given when a driver repairs their vehicle on the course. Time does not stop while the driver performs repairs. This does not incur a vehicle touch penalty. Once the repair is completed, time will be stopped and the driver must move their vehicle so that the back axle is even with the last gate cleared. The driver will continue their run when the timer instructs them to continue and continues the timer.

## 5.10 | Off course repair (+10 points)

Points are given when a driver needs to make repairs that they cannot make on course. The driver will tell the timekeeper and judge that they need to make an off course repair. The time will be stopped and the driver allowed 30 minutes to make the repair. Other drivers may start their run while the driver makes the repairs. Once the driver is done making the repair and the course is clear, they will start with their rear axle even with the last gate cleared. They will be assessed a 1 minute time penalty as well.

## 5.11 | Reverse (N/A)

There are no penalties for rolling backwards or using reverse.

# COURSE RULES (CONTINUED)

## Other Course Rules

- Course attempts will have a 6 minute time limit. Any driver who does not finish their attempt before time expires will receive a +50 point penalty.
- Course attempts will start with the vehicle's front axle in line with the start gate and will finish when the vehicle's rear axle crosses the center line of the final gate. Gates must be completed in numerical order from lowest to highest, and must be completed with the vehicle moving through the gate in the direction indicated on the gate. Any gate passed through out of order or in the wrong direction will incur a +30 point gate skip penalty.
- Recommended course length is 10 numbered gates, 3 bonus gates, and start and finish gates. These numbers may be modified to work for individual club requirements. Gates should be made of two separate markers and each gate should be numbered and also have an arrow or other symbol indicating the correct direction through the gate. It is recommended that bonus gates be a different color than standard gates when possible.
- The start gate does not count for Progress or Gate Marker points. Time will start when the scorekeeper announces "Go" and will stop when the vehicle's tires are completely through the final gate.
- If a driver accumulates a total of 50 penalty points in a run, they will "point out" and their course attempt



## COURSE RULES (CONTINUED)

will end. They will receive a score of 50 in addition to whatever progress points they received during the run.

- If a gate marker is moved during the run, the scorekeeper will instruct the driver to stop driving, stop the clock, and replace the gate marker. The scorekeeper will then announce “Go” and the driver will continue driving.
- If at any time during the run, a vehicle becomes illegal for the class (i.e. body coming unattached, bumper coming off, etc.) the vehicle must stop and the driver must perform at their discretion either an on course or an off course repair to bring the vehicle back into a legal condition for the class.
- Drivers and scorekeepers will follow the vehicle during the course attempt. Any time during the run a driver may announce “Safety” and the clock will be stopped to allow the driver to move their standing position to a safe position. This is used to allow the driver to avoid a potential safety hazard (large rocks, trees, puddles, etc.) that would require them to take their attention away from driving their vehicle. The vehicle must be completely stopped during a safety stop. When the driver has repositioned themselves they will announce “Ready”. At that point the scorekeeper will announce “Go” and the clock will restart and the attempt will continue.
- Winching is allowed in all classes except class 0. When self winching you must be attached to a natural object such as a rock, tree, root, or winch stick. Winching off

# COURSE RULES (CONTINUED)

of a person (shoe, hand, etc.) is not permitted. Winch sticks are not required to be provided by the club hosting the event, but are strongly encouraged.

- The winner of each class is the driver with the least total number of points. Drivers will run 3 courses attempts with their 3 course scores combined counting as their final score. In case of a tie, the driver with the fastest course time will be the winner. Number of course attempts may be modified to suit the time and space requirements of individual clubs but the minimum number of course attempts should be no less than 2 per driver.
- The decisions of scorekeepers and race officials is final.

# RESOURCES

Please visit our web site at [www.rcmcca.org](http://www.rcmcca.org) for downloadable score sheets, tire size reference list, and more.





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**[rcmcca.org](http://rcmcca.org)**