



## Brushless Mafia CarbonX 4.5" Race Car Series

### 3.0 General Car Class Guidelines

Commercial Availability: All products requiring series approval (chassis, motors, bodies) used in the Series must be available from EITHER a Major Wholesaler OR through Manufacturer Direct Sale TO RACEWAYS at the start of the season. No component without WHOLESale availability will be considered for future legality.

### 3.1 Guidelines for All Car Classes

- a. **All decisions and rulings of the Tech Director will be final.**
- b. Non-metallic Lane Change cards or position markers are to be used to mark a car's position on the track between heats.
- c. Drivers are responsible for keeping their cars legal at all stages of a race. At any point of the race or following the race, cars are subject to Tech inspection. Failure to pass a Tech inspection will result in disqualification.
- d. No modifications may be made to any manufactured part except where specified in the individual class specifications
- e. Bearings, oilite, bronze or brass bushings only
- f. No hollow axles
- g. Cars must use a single guide flag
- h. Weighted guide flags are allowed
- i. The overall rear tire width of the car must not exceed 82.55mm (3.25")
- j. Chassis width is 79.4mm (3.125") maximum
- k. Body width is 84mm (3.307") (not including body clips or pins) maximum
- l. Tire width is 12.7mm (0.500") maximum
- m. Track clearance of 1.575mm (0.062") minimum under the entire car.
- n. No reinforcement may be added to the chassis in the rear uprights, front uprights, and motor mount.
- o. Bushing/bearing holes may not be modified to adjust ride height.
- p. KCR spacers beneath the axle uprights to adjust axle height are permitted.
- q. No grinding or cutting of the chassis or removal of weight is allowed.
- r. May add KCR bolt in ballast or lead weight to the top of the chassis to affect handling.
- s. Tape may be added to the top the chassis.
- t. Pin tubes and/or floating pin tubes or Velcro may be added to the chassis to facilitate body mounting.
- u. For all classes, minimum body thickness: Must be sold as .007".
- v. Body must have windshield and side windows clear where applicable; rear windshields may be painted over where applicable
- w. Body must completely cover chassis when viewed from directly above
- x. Body must be painted a minimum of one (1) opaque color
- y. No body air dams/spoilers/wings may be added to the body
- z. May reinforce the body with tape
- aa. Body must have three (3) numbers a minimum of one-half inch (0.5") tall
- bb. Body may have one (1) sponsor a minimum of one-quarter inch (0.25") tall
- cc. Paint Scheme and/or Sponsor may not be political, obscene, or profane
- dd. For all car classes, it is illegal to cut into the top of the body.

- ee. Racers may tech only one car per car class
- ff. No rear tire changes are permitted during a race unless the tire/wheel is damaged beyond repair
- gg. No motor changes during the race
- hh. **If it is not listed, it is illegal**

### 4.5" RACE CAR

#### Minimum weight

78.5 grams at all stages of the race

#### Motor

DoSlot 1105.3000Kv (9N12P rotor configuration)

KC Racing 1106.3200Kv (9N12P rotor configuration)

Brushless Mafia 1106.3200Kv (9N12P)

Motors must not have been tampered with in any way.

#### ESC/eCom

DoSlot v2 – White – Double Sided

Brushless Mafia X89LC

Capacitors are not allowed to be added on the track side power of the ESC

#### Chassis

KCR-CFR4.5 with KC Racing OEM mounts for body, guide, axle(s) and motor.

#### Tires

Front – .875" x .500" - ProTrack #227 N252 (any color wheels)

Rear – .910" x 800" - ProTrack #N252 227 (any color wheels)

This is a fixed gear ratio class and not to be played with by tire diameter.

#### Axles

Front and Rear axles must use a 1/8" diameter steel axles.

#### Gears

48 Pitch - 7T Pinion and 30T Crown

48 Pitch – 9T Pinion and 32T Crown

Either combination, no other gear combinations

#### Body

Must use one of the following approved series bodies. See approved body list. All bodies must have a minimum of 1/16" front bumper (or splitter where applicable) and 1" of material across the back.

#### Approved 4.5" Body List

JK Products – Chevy (BP125), Ford (B126), Toyota (B123)

Ralph Thorne Racing – Titan XL 4.5" Stock Car Body

#### Interior

Must use an appropriately painted 3D vacuum formed interior. No holes or cutouts are allowed in the interior. Chassis or track may not be seen when viewed directly from above.



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### Revisions

A – March 29, 2025 - Initial Release

B – April 3, 2025 – Corrected tire and wheels