

RA Racer Rules and Race Details –

1. **Car Width** - Overall width shall not exceed 2-3/4 inches.
2. **Car Length** - Overall length shall not exceed 7 inches.
3. **Overall Car Weight** - Weight shall not exceed 5 ounces. No loose materials (lead shot, mercury, etc.) of any kind are permitted in or on the car. The car may be hollowed out and built up to the maximum weight by the addition of wood or metal only, which must be securely built into or onto the body or chassis. All weights must either be internally secured within the car or super glued on. Any glued on weights must be completely dried prior to scheduled race time. Stick-on weights or other temporary adhesives are prohibited.
4. **Wheel Bearings** - Washers and bushings of any type are prohibited.
5. **Springing** - The car shall not ride on any type of springs.
6. **Details** - Details such as steering wheel, driver, decals, painting, and interior detail are permissible as long as these details do not exceed maximum weight allowed and are securely attached to the car.
7. **Attachments** - The car must be free wheeling, with no starting devices.
8. **Body** - No part of the car may protrude in front of starting device. No part (cheater bars, etc.) of the front of the car may rise above the normal body.
9. **Inspection** - Inspection will be made prior to running on the official track. All cars checked in to run on the official track will remain in possession of the officials until completion of all races on the official track with that particular car. Weight of each car will be checked prior to each "Registered" run. Race is timed electronically.
10. **Disagreements** - The race inspectors will be the final judge as to interpretation of the rules and adherence to them by participants.
11. **Wheels** – All wheels must adhere to the following regulations.
 - a. Wheels must be either official **unmodified** plastic Royal Racer or Official BSA wheels.
 - b. The car must have 1 3/4" clearance between the wheels.
 - c. Wheels may be sanded or polished to only to remove rough spots.
 - d. Filing, drilling, sawing or machining of wheels to alter shape (h cut, v cut, etc.) or profile is **NOT** permitted.
 - e. Wheel thickness can not be less than the factory width of .230 inches (No Exceptions).
12. **Axles** – Only separate nail axles or individual straight axles are permitted.
 - a. Needle axles, etc. are prohibited.
 - b. Axles may be polished to remove burrs and crimp marks only. The end of the nail may be filed flat as to permit removing the axle and wheel. No other modifications are allowed.
 - c. Reaming of the axle and head is prohibited other than to remove only burrs and crimps.

RACE PROCEDURE:

NOTE: THERE WILL BE TWO (2) TRACKS. One track will be for the boys to run their cars without being timed. These will be practice runs. The second track will be for the official "Registered" runs. All "Registered" runs will be timed.

A. Race - All cars may be run on the practice track without limit - no matter the age of the boy, as long as **adult supervision** is present. Each qualified car may be run on the official track twice consecutively, where lanes will be swapped for each consecutive race in order to keep race as fair as possible. Cars are running against time. Of the two "Registered" runs for each car, the faster time will be recorded as the official time for that particular car. Cars within divisions placing within top three fastest car times recorded in each respective division will be declared the winners, provided there are no disqualifications. Winners for 2nd and 3rd places will be awarded medallions and 1st place winners will be awarded trophies.

B. Starting - Cars must start by gravity from a standstill, at a starting line on the track or a special ramp, without any help. No pushing will be allowed.

C. Finish – In each division, the car whose race time is fastest over the electronic finish line is the winner if it has not been disqualified. Event is computer timed. In case of computer failure, the winners will be determined by single head to head elimination heats, where competitors will draw randomly for lane selections. In the case of computer failure, the car whose nose is first over the finish line is the winner if it has not been disqualified. For the contingent computer failure heats, the winning car in each race for that division will continue to be raced until it either loses or obtains the top winning position.

D. Exceptions – If a car leaves the track during an official "Registered" run, it may be run one additional time as a "Registered" run. If the same car, however, leaves the track on the second run, it is automatically disqualified and may not be rerun.

E. Weigh in and Inspection– All cars will be weighed on the official race scales and inspected by officials prior to the "Registered" run in order to be qualified. The cars upon passing inspection and weigh-in will be impounded until the car is raced. No one other than race officials is permitted to touch the cars after being impounded. Any car that is handled by anyone other than race officials after impoundment is disqualified and will have to go through inspection again. These cars will be rescheduled as time permits to race at the end of the scheduled event.

If your car fails inspection and can be corrected with minor repairs, your car will be given a Partial Pass and you will then be instructed to take your car to our Official Repair Table (Pit Stop), where a Race Official will help you repair the car so that it will meet Race Standards. Once the car is repaired, the car will be impounded by the "Pit Stop" Race Official

We will supply various materials deemed helpful, such as glue, clamps and various hand tools. to assist you in your repairs.