



2023

Roadrunner Rules

An entry level stock class of Inexpensive and easy to build four cylinder cars.

All cars competing must meet these rules.

There are no grandfathered cars.

1. General

1.1 Glossary

Original Equipment Manufacturer: Manufactured by the original manufacturer. The part may not be modified in any way that affects the performance specifications.

1.1.2 Stock

OEM: Is the OEM Part. The part may not be modified in any way that affects the performance specifications.

1.1.3 Technical Discretion

Inspection and assessment according to the spirit and intended purpose of the rules. The spirit, intended purpose, and safety concerns will always override the current wording of the rules.

1.1.4 Abbreviations

OD Outer Diameter Tube or cross-section diameter measured from the inner edges.

1.1.5 Measurement Units

A double-quote(2") inches. , A single quote(2' feet, CI =volume in cubic inches PSI = pressure in pounds per square inch, RPM = revolutions per minute, A super script circle (90) degrees angle in degrees, sound level (90 dba) A weighted decibels A measure of sound weighted by how it affects the human ear.) dBA is barely not hearable in a quiet room, and 140 dBA will cause pain.

1.2 All rules are subject to Technical Discretion.

1.3 All parts must be OEM.

1.4 No traction control (TC/ETC) devices are allowed in any part of the car.

Models

2.1 Year- 1968 or newer Domestic or foreign, front or rear wheel drive passenger car or truck.

2.1.1 Includes; Station Wagons, Compact sedan, Two (2) or four (4) door passenger cars and **trucks**.

2.1.2 Excludes: Mustang II, Carmagia, Datsun 510, Exotic Sports Cars, all two seat only cars.

2.2 Wheelbase

All wheel bases shall be the stock length for the make and model.

3. Weights

3.1 Minimum Total 2,100 lbs.

3.1.1 Subject to technical discretion

3.2 Maximum Left Side weight shall be 52% or as adjusted by technical discretion.

3.3 Weights

3.3.1 Each 0-100 lbs of weights must be secured to the car with either two (2) ½" bolts or four (4) 3/8" bolts.

3.3.2 Must be painted white and clearly marked with the car number.

4. Chassis

4.1 Passenger cars must be unibody.

4.2 Uni-body sub-frames may not be altered or stretched.

4.3 The Uni-body may be reinforced with box tubing (maximum 2" and 0.095" thick) located in a straight line between the front and rear subframes.

4.4 Front and rear hoops are optional. If used, they must be made from material no larger than 1 ¾" OD 0.095" thick tubing and may not protrude past the bumpers.

5. Suspensions

5.1 All suspension mounting brackets must be of stock components and in stock location for the make and model.

5.2 Upper strut mounts cannot be moved. May brace from strut tower to strut tower.

5.3 All springs must be stock. Spring Rubbers Okay.

5.4 All shocks must be stock.

5.5 Sway Bar

5.5.1 Sway bar must be OEM stock and must be mounted in the stock location.

5.5.2 All thread is allowed to make adjustable.

6. Bodies

6.1 Manufacture

6.1.1 The body manufacturer must be the same as the chassis (Toyota to Toyota, Ford to Ford, etc)

6.1.2 No chopped tops.

6.1.2 Interchange of body parts within the manufacturer's line is allowed.

6.1.3 Parts may be fabricated, but must match the body type and retain stock appearance within the manufacturer's line.

6.2 Appearance

6.2.1 The body must maintain a stock appearance.

6.2.2 No chopped tops.

6.2.3 Anything that may shatter or break off during the normal course of racing, such as lights and their socket assemblies, all chrome and trim or plastic grill must be removed.

6.2.4 Track officials reserve the right to reject any exotic or non-stock appearing bodies.

6.3 All skin parts must be made out of same material with the same thickness as the OEM part.

6.4 Any open-able or removable part (hood, doors, trunk lid, etc.) must be secured to the car (chained, bolted or pinned, etc.)

6.5 Wheel openings may be cut a maximum of 2" from the tire and should be rolled under to avoid exposed edges.

6.6 After market rear spoiler okay

6.6.1 5" maximum height

6.6.2 Maximum width is equal to the width of the car body.

6.6.3 Subject to tech discretion.

6.7 Front and rear bumper are required and must be stock.

6.8 Side Rub Rails

6.8.1 Optional single horizontal 1-1/2" OD .095 thick square or round tube for each side to protect the bodywork.

6.8.2 Must be mounted flush to the body.

6.8.3 End mount points must be within 6" from the end of the bar.

6.8.4 Ends must be closed and angled or turned into the body.

6.8.5 No sharp edges or protruding ends that might be hooked>

6.9 Windows

6.9.1 All window openings must remain stock size.

6.9.2 Windshield

6.9.2.1 Must be safety glass, lexan or ¼" to 3/4 " metal screen mesh.

6.9.2.2 If Lexan, must be braced by an inside vertical metal strap at least 1" wide X 1/8" thick mounted as close as possible to the center of the windshield.

6.9.2.3 Safety glass or lexan must be additionally secured by 4 brackets a minimum of 1" wide X 4" high X 1/8" thick.

6.9.2.4 Rear-quarter widow openings may be covered.

6.9.2.5 Rear window of Lexan or ¼" to ¾" metal screen mesh is optional.

6.10 Paint

6.10.1 any images or content visible on the car is subject to the approval of the track officials.

6.10.2 The paint scheme, images, and lettering must be done in a neat and professional looking paint manner.

6.10.3 Car Numbers

6.10.3.1 Must be a contrasting color and easily readable by the track officials.

6.10.3.2 Top (oriented to the right side) and side numbers must be at least 18" high with a line width of at least 4".

6.10.3.3 Front and rear numbers are required and must be at least 6" high with a line width of at least 1".

7 Roll Cage

7.1 The purpose of the roll cage is to protect the driver from injury during a crash, and not to stiffen the chassis.

7.2 Material

7.2.1 Roll bar tubing at least 1-1/2" OD and .090 thick.

7.2.2 No galvanized or black pipe.

7.2.3 The design, materials, construction, and welds of each roll cage is subject to technical discretion.

7.3 Design

7.3.1 A full four-point cage over and around the driver.

7.3.2 One (1) dash bar.

7.3.3 Two (2) bars from the top rear of the car to the rear frame or trunk floor.

7.3.4 Any additional roll cage bars are optional, but the design, constructions, and materials are subject to technical discretion.

7.3.5 Door Bars

7.3.5.1 Three (3) horizontal and two (2) vertical bars on the driver door.

7.3.5.2 The door inner panels may be removed to fit the door bars, but the bars must be flush with the inside of the exterior skin.

7.3.6 Door Plates

7.3.6.1 The driver sides may have door plates installed between the door bars and the door skin, made from at least 1/8" (0.125 thick steel).

7.3.6.2 Must at least completely cover the door bar opening from the top to bottom door bar, and from the rear to the front upright posts.

7.3.6.3 If welded to the door bars, can be separate and must have 3" of weld for every foot.

7.3.6.4 If bolted to the door bars, must be a single plate and mounted with at least 6 grade 5-3/8" bolts.

7.3.6.5 Must be visible from the interior for inspection.

7.3.7 Gussets for all pipe and tubing angles are required, and subject to technical discretion.

7.4 Unibody Mounting.

7.4.1 Each upright post can be welded to a foot plate – minimum ¼” thick 4” square. The foot plate must be bolted through the pan to another foot plate underneath with a minimum of four (4) 3/8” (grade 5) bolts.

7.4.2 Each upright post can be welded to the stiffening box tubing between the subframes.

8. Engines

8.1 **Engine must be VIN specific to the Year, Make and Model of the car.**

8.2 Four (4) Cylinder only. No turbo engines.

8.3 All engine components must remain stock.

8.4 Engine must remain in the stock location for the make and model.

8.5 Firewalls may not be moved or altered.

8.6 Stock production cylinder head only. No shaving, enlarging, polishing or grinding of head ports. No aluminum heads other than stock.

8.7 Stock flywheel only.

8.8 Intake and exhaust manifolds must be stock, with no match porting, grinding or polishing the of head.

8.9 Fuel Delivery

8.9.1 Any OEM fuel delivery system. **(Carburetor or fuel injection)**

8.9.2 Must have at least two throttle return springs anchored in two different locations in opposite directions.

8.9.3 Must be stock or aftermarket fuel pump. NO performance pumps allowed.

9. Fuel and Fuel Systems

9.1 Fuel

9.1.1 Gasoline only.

9.1.2 No Nitrous (N2O), or any other fuel or combustion additive.

9.1.3 Aftermarket air cleaners ok.

9.2 The stock gas tank may be used in the stock location, but a fuel cell located in the trunk behind a firewall is strongly recommended. If stock fuel tank is located behind rear axle the stock fuel tank must be relocated to inside the car in the area behind driver and

enclosed in a steel can. It is preferred there be fire wall between the driver and the fuel tank.

9.3 The gas cap must be clearly marked with the car number.

10 Radiators/Cooling System

10.1 One radiator only, mounted in front of the car.

10.2 Adequate radiator catch tank mandatory. Minimum ½ gallon capacity, Plastic jug (ie) anti-freeze or detergent container not acceptable).

10.3 Positively no antifreeze or coolant. Water wetter is ok.

10.4 No cooling or filter systems allowed in the driver's area

11 Electrical Systems

11.1 Battery

11.1.1 Must be mounted in the driver's compartment, must be enclosed inside a covered and vented box that is mounted on the floor.

11.1.2 The battery box must be mounted with at least two

3/8" or larger bolts attached to a at least a 1-1/4"X 1/8" metal strap across the top.

11.3 Transponders

11.3.1 Must be located ten feet six inch (10' 6") from the front of car, subject to technical discretion.

11.3.2 To pass technical inspection, the transponder must be in place prior to inspection and must remain in working condition for the rest of the event.

Measure and adjust your transponder mount before every event.

11.3.3 If the bumper-to-transponder distance changes for any reason (like damage, repair, or modification), either the front nose or the transponder mount must be adjusted to re-establish that distance before every event.

12 Steering

12.1 Steering must be stock for the make/model of chassis.

12.2 Steering box must stock for make/model of chassis.

12.3 Must have the stock steering column with the steering lock removed. May have a quick disconnect installed for steering.

13 Drive Trains

13.1 Stock type clutch and pressure plate. No racing clutches or pressure plates.

13.2 Transmission um be stock for make and model.

13.2.1 Automatics OK.

13.2.2 Reverse gear required.

14. Rear Ends

14.1 Must be stock for the make and model.

15 Exhaust Systems

15.1 Tail pipe must extend past driver's seat and be securely fastened. No turn downs.
After market exhaust ok.

16. Wheels & Tires

16.1 Steel rims only

16.2 Each wheel must have stock brakes in good working order.

16.3 No wheel spacers.

16.4 **DOT tires required.**

16.5 **No wider than 185 Series**

16.6 **No Smaller than 60 Series**

16.7 **Tread wear will be 300 or harder.**

16.8 **Must be a S, T, U, or H Speed rating.**

16.9 No altering, conditioning or softening.

17 Safety

17.1 All safety equipment is subject to technical discretion.

17.2 Interior

17.2.1 Full stock firewall and fire shields to completely separate the driver from the trunk and engine compartment are required.

17.2.2 Full stock floor pan is required.

17.2.3 The interior compartment must be completely sealed from the track with no open holes in the floor.

17.2.4 All padding must be resilient and effective.

17.2.5 Roll cage bars around the driver must be padded.

17.2.6 The steering wheel center must be padded.

17.2.7 The driver window must have a SEMA approved window nets mounted securely and for quick and easy removal from either inside or outside.

17.2.8 Must have a fire shield between the driver's compartment and the fuel cell compartment made from at least 24 gauge sheet steel.

17.2.9 A motor kill switch must be installed, clearly marked, easily identifiable, and easily accessed by the driver or anyone reaching through from the driver or passenger window.

17.2.10 Must have at least ONE fire extinguisher of at least 2 lbs or a commercial fire system, mounted in easy access of the driver and passenger, and with gauges or status indicators readable from either the driver or passenger window.

17.3 Driver Equipment

17.3.1 Must have an aluminum racing seat with a padded head rest no more than 4" from the driver's helmet, and with the back secured to the roll cage.

17.3.2 Head and neck restraints are strongly recommended.

17.3.3 Must have a 5 point SEMA approved racing harness with at least a 3" wide lap belt, 2" wide shoulder harnesses, and a crotch strap. Must be directly secured to the roll cage. No chain extensions are allowed. The shoulder harnesses must be mounted with stress point at shoulder height.

17.3.4 All belts must have the manufacturer's date tag, be no older than five (5) years, and in good and serviceable condition.

17.3.5 The driver must wear a 1995 or newer Snell approved racing helmet with goggles or a face shield.

17.3.6 The driver must wear an SFI approved fire suit in serviceable condition. There can be no holes or rips.

17.3.7 Fire proof gloves and shoes are **REQUIRED**.

18 Policy Statements

18.1 Any modifications not covered in these rules will not be allowed unless approved by RAR Officials.

18.2 Equipment will not be considered legal simply because it went through inspection unobserved or because a rule has not been written against it.

18.3 Cars are subject to inspection at any time.

18.4 Officials reserve the right to confiscate and hold any parts and/or equipment not conforming to the rules.

18.5 Officials reserve the right to judge, decide and establish what constitutes a legal part of the car.

18.6 Weight may be added or adjusted at any time to benefit or equalize the racing program.

18.7 OFFICIAL'S DECISIONS ARE FINAL

19 Domination Rule

19.1 Any car is subject to adjustment by the officials to help equalize competition.

No cars from previous years are grandfathered. All cars competing must meet the above rules.

