

# SOUTHWEST FLORIDA COUNCIL PINWOOD DERBY RULES

## GENERAL

All registered Cub Scouts in the SWFL Council from Tiger Cub to 2nd Year Webelos; including those 2nd year Webelos that have crossed over to a Troop after their pack race are eligible.

All cars must be newly built this year, using the materials from the **Official Grand Prix Derby Racing Car Kit (part\* 17006)** and/or the Official Wheel/Axle Kit. These kits now come with colored wheels (Red, Orange, Yellow and Blue). Replacement parts of the same part numbers can be used.

Cars and Kits bought online are strictly prohibited. Hobby shop parts such as pre-cut car bodies, aftermarket axles or wheels, are also prohibited.

**Cars must be BUILT by the Scout and his adult partner.**

## LENGTH, WIDTH AND CLEARANCE

The maximum length of the car or any part of the car shall not exceed 7 inches.

The maximum width (including wheels and axles) shall not exceed 3 inches.

The maximum height shall not exceed 4 inches.

The minimum clearance between the bottom of the car and the bottom of the wheels shall be at least 3/8 inch.

The minimum width between the inside surfaces of the wheels shall be 1-7/8 inches.

Wheelbase may be modified by re-cutting axle slots or drilling axle holes.

## WEIGHT AND APPEARANCE

The maximum weight of the car shall not exceed 141.7 grams (5 ounces). Car designs that require weight to be placed underneath the car, should have it recessed in the bottom of the car to insure 3/8 inch clearance.

Items such as steering wheels, model drivers, spoilers, fenders, decals, painting and other details are permissible as long as these details do not exceed the maximum length, width, height and weight specifications. Loose materials of any kind are not permitted on the car.

## WHEELS AND AXLES

Truing the wheels round by sanding or latching is allowed. Be careful not to reduce the wheel diameter or round the tread face.

Wheel treads / contact surface must remain flat and parallel to the wheel bore. Reducing the tread width of the wheels is strictly prohibited.

The wheel diameter cannot be reduced past the ridge (rippled) edge and the ridge (rippled) edge must remain intact on the entire wheel.

Wheel treads may not be rounded, beveled, tapered, grooved, h-cut, v-cut, shaped positioned at any angle.

Removal of any material from the wheel sidewalls or face is not allowed. The front outside wheel sidewalls & face must remain intact. All Wheels must have the "BSA" "Pinewood Derby" on the sidewall completely intact.

Removal of material from the inside of the wheel that does not effect the outside diameter or reduce the original width of the tread is allowed.

Additional items such as wheel bearings, washers, bushings, magnets, axle tubes, spacers, wheel and hub covers are also prohibited.

The wheels must be attached directly to the axle and spin freely on the side of the car body.

Wheels may not extend past the front or back of the car body.

It is not required that all four wheels make contact with the track surface.

Axles that are not supplied by BSA in the original car kit or BSA wheel /axle kit are prohibited.

Removing the pinch marks and mold ridges on the axles by sanding and polishing the axles is allowed.

The Axle head diameter may not be reduced.

Axle holes may be drilled, because axle slots may not be square to body. Axles may be angled (canted) or bent in the car body.

## LUBRICATION

Graphite, Dry White Teflon or Krytox Racing Lubricant are all acceptable. All lubricants must be dry at the time of inspection and races.

***Absolutely, no WET or sticky substances are allowed on any part of the car.***

IMPORTANT: DO NOT LUBRICATE YOUR CAR INSIDE THE RACING FACILITY; EXCEPT IN THE DESIGNATED AREA. DO THIS PRIOR TO CHECKING IN AT REGISTRATION.

## MISCELLANEOUS

The body of the car, the wheels or any attachment may not extend beyond the starting pin. The front of the car must not be smaller than 3/8 inch in width or a cutout notch.

Attachments must not have the effect of a starting or accelerating device.

The car shall not ride on any type of springs and the car must be free-wheeling with no starting device or other propulsion.

## DISQUALIFYING RULES

The Pinewood Derby Officials will disqualify any car that does not comply with ALL of these rules. If a car is disqualified, the Scout will be allowed to race the car during the "Elimination" phase of the races, but the Scout will not be able to advance. During any race, if a car leaves its lane and interferes with another car or suffers any mechanical problems, the racer will be given a chance to repair the car, and the race will be re-run. If the same car causes interference or breaks down again, the race will be re-run but without the offending car.

ALL DECISIONS BY RACE OFFICIALS ARE FINAL.