

## Cub Scout Pack 19 Pinewood Derby

## 2024 Rules & Regulations (No Exceptions)

Each Cub Scout, under the guidance of parents/adults and den leaders, must build his own car.

A Cub Scout may not use a car from a previous year.

Pack 19 follows BOTH the District and our Pack rules to ensure a fair and fun race. **Make sure you also read the District Rules (v. 2020)** 

The car must be provided by Pack 19 or purchased from the Doylestown Scout Shop, or the official kit at Scoutshop.org. Warning - cars at other stores sometimes don't qualify, even if they say BSA on the box.

#### Specifications:

- Overall length: not to exceed 7"
- Overall Width: not to exceed 2-3/4"
- The car must have 3/8" clearance underneath the body so it does not rub on the track.
- The inside wheel to wheel clearance must be at least 1-3/4"
- Overall car weight: not to exceed 5.0 ounces.

#### Wheels:

- All 4 wheels must be in contact with the track, touch at the same time and roll freely when pushed.
- Wheels may not be cut, drilled, beveled or rounded. The tread must remain flat.
- You may sand or remove mold seams and imperfections from the wheels.
- Wheel modification may not result in substantial removal of mass or reduce the wheel width.
- The car shall not ride on any type of springs. The car must be freewheeling.

#### Axles:

- Only the axles/nails furnished in the kit are allowed.
- No axle modifications, other than removing burs and metal mold imperfections near the head.
- No wheel bearings, bushings or washers are allowed
- Only the location of the original pre-cut axle slots may be used.
- Altering the wheelbase is not permitted.
- Axles must be fully visible from underneath (use clear epoxy if you glue them in).
- Powdered graphite is the only lubrication allowed.

#### Weights:

- "Weight" is considered any material added to the car, that was not provided in the car kit.
- May be added to the car and will be considered part of the car for purposes on all final measurements.
- All weights must be securely fastened to the car.
- Weights must be passive, non-moveable and non-magnetic.
- The car may be hollowed out and built up to the maximum weight with the addition of solid materials.

#### Shaping:

- At least 50% of the shaping and all the painting/decorating is to be completed by each Cub Scout.
- No part of the car may extend beyond the front bumper, which rests against the starting pin.
- Decorative details must be fastened to the car and cannot exceed the limits for car size and weight.

#### Inspection and Check-In:

Each car must pass inspection by the race officials, who have the right to disqualify cars that do not meet rules & regulations. All cars must meet weight specifications on the official scales provided during **the day of the race**.

Once the car is weighed in and accepted for competition, it will be placed in the custody of racing officials and will not be taken out until the car is scheduled to run. Cars will remain in custody of racing officials during the course of their racing day.

# Final Rules and Regulations 2020 Tamanend District Pinewood Derby

These are the Official Tamanend District Rules. They apply to Pack 19's race other than some modifications have been made for Pack 19's race as noted by comments in bold and brackets below:

- 1. The Cub Scout must be in uniform to race. (Uniform Shirt).
- 2. The Cub Scout must do at least 50% of the work on their car including all painting.
- 3. The Cub Scout's Name, Rank and Pack must be clearly marked on the bottom of the car. [You can ignore this rule as Pack 19 will place a sticker on the bottom of each scout's car with this information upon check-in].
- 4. Official Cub Scout Pinewood Derby kits must be used.

### 5. Car Specifications - [VERY IMPORTANT]

- a. Dimensions Width 2¾", length 7", width between wheels 1¾". Cars should allow 3/8" bottom clearance between car and track. All strip weights and accessories must be permanently attached to the car as must any decorations like Lego drivers, steering wheels, pipes, or people. Glue additions in place; nothing may move.
- b. Weight– Total weight of car may not exceed 5.00 ounces as determined at the race by the official district scale which will be standardized to a certified reference mass before each use. No weight may be added at the race. Cars may not have internal or external moveable weights. Weights on the bottom must be recessed.
- c. Axles Axle slots may not be moved. Only official car axles supplied with the box may be used. No continuous axle rods, bearings, or bushings are permitted. Axels must be visible. The official BSA axle guards may be used.
- d. Wheels Only official BSA wheels are allowed. This includes the Official Pinewood Derby colored wheels available at the Doylestown Service Center or through BSA directly. The only allowed wheel modification is removing burrs. No additional sanding of the wheel surface or shaping of the wheel, either on the wheel surface, or where the wheelcontacts the car, is allowed. All 4 wheels must be in contact with the track surface. No purposeful misalignment of the axles is allowed.
- e. Lubricant **Only powder lubricants are allowed**. No oil or liquid lubricants. Lubricant must be added before car is impounded. No lubricants may be added at the race site.
- 6. All entries shall be impounded by their respective Packs after the Pack has had their Pack-wide race. [NOTE: This rule requires Pack 19 keeping the top finishing cars after the Pack race, for the district race. The rest of this rule is intended for the Pack Race Committee to follow after the race, so you can ignore it] The

cars are to be individually marked in a box marked with the Pack #. Mark the outside of any wrapping or containers. Individual cars may be wrapped with Scout's name and rank. Package the cars by rank with Arrow of Light cars on the bottom and Lion cars on the top. All official paper work must be into the Washington Crossing Council office prior to the day of the race and must have all proper signatures and payments.

- 7. No substitute cars will be accepted at the event [NOTE: This rule applies to the District race. It means the car that ran in the Pack race must be the same car raced in the District race].
- 8. [Note: This rule applies to the district race, it is not applicable to the Pack 19 Race] If a winning Scout from your unit cannot attend he may be replaced with the next highest placing Scout for his rank. So if your 1st and 3rd place Tiger winners cannot attend you may send your 2nd, 4th, and 5th. Our goal is to make sure the most kids possible can race but no substitutions may be made at the event.
- 9. [Note: This rule applies to the district race, it is not applicable to the Pack 19 Race] The impounded car may only be picked up by the racing Scout and checked in to make sure the district has the proper spelling of the Scout's name and a complete inspection done; weight, length, bottom clearance, etc. If an adjustment does need to be made, a parent will be asked to come into the official pit area to make the adjustment (usually the weight).
- 10. Cars that violate these rules may have access to a pit area which may have the appropriate tools to correct the infraction. This access and these tools are not guaranteed.
- 11. A car that violates any of the above rules when the race starts will be disqualified.