

# HARFORD DISTRICT

## 2018 PINWOOD DERBY RULES & REGULATIONS

The following rules and regulations are designed to provide an equal opportunity for all youth. It is important to understand that cars must meet these basic requirements to be eligible to race in the competition. The youth must be present at the race for the car to race in the event. Following the event and construction rules will ensure that your car is race-worthy! Thank you for your participation and we look forward to a great event!

### A FAIR PLAYING FIELD: CONSTRUCTION RULES!

The car must be built from parts of the Boy Scouts of America {BSA} & friends "Official Cub Scout Grand Prix Pinewood Derby Kit." *Car kits from other retailers are not acceptable.*

#### Width:

- Width shall not exceed 2 3/4"
- Front & center area of car must be at least 3/8" wide for starting bar
- The minimum width between the wheels is 1 3/4". This is to ensure clearance of the lane guides.

#### Length:

- Overall length may not exceed 7". This includes any weights, decorative tail pipes, wheels etc.

#### Height:

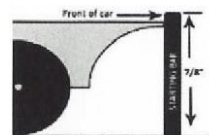
- Overall height shall not exceed 2 3/4" so as to clear the scoring board.

#### Weight:

- Total weight is not to exceed 5 ounces {141.7grams}. The car may be built up to a maximum weight by the addition of wood and/or types of metal, provided it is securely attached to the car body.
- Mercury or other liquid **may not** be used as a weight.
- Weight fastened to the car held by masking or scotch tapes is not acceptable.
- Loose materials of any kind are not permitted on or in the car.

#### Clearance:

- Minimum bottom clearance is 3/8" {including weights} to ensure clearance of the lane guides.
- Front of car must be no higher than 7/8" for starting bar



#### Wheels:

- Rounding of the wheels surface, drilling holes or altering the original composition of the wheels is not allowed.
- Washers, bushings, sleeves or any types of wheel bearings and connecting axles are prohibited.
- No starting devices, springs or "Hub Cap" style wheel coverings are allowed.
- The BSA wheels and axles can be smoothed by sanding the surface to remove molding imperfections. However, the smoothing process must not remove any BSA markings on both the inside and outside of the wheels. This includes the dotted treads around the entire circumference of the outside edge of the tires. Wheels surface must remain flat with full tread surface. All cars must have four wheels and all wheels must make full tread contact with the track.

### Axles & Axle slots:

- The BSA axel grooves cannot be moved or modified in any way and must be used. These grooves should not be covered in any manner. (e.g. axle fasteners or axle guides)
- Only BSA stock axles can be used. Each wheel will have one independent axle.
- The axles should not be mounted at an angle or deliberately bent in order to tip any of the wheel treads to an angle.
- Axles may be lubricated with only dry powder (e.g. Graphite) or Krytox oil lubricant.

### Detailing:

- Details such as steering wheel, driver, windshield, decals, painting, and other interior/exterior items are allowed as long as they do not cause the car to exceed any of the width, length, weight or clearance specifications.
- No "Hub Cap" style wheel coverings are allowed.
- Wheel wells that fully or partially cover the wheels May cause interference with the track, and may not be allowed

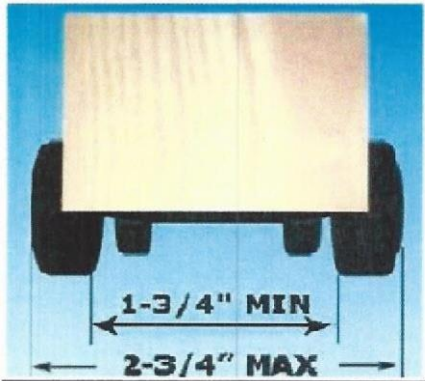


### RACE DAY RULES

- Cars must be registered a MINIMUM 30 minutes prior to race time.
- Cars will be inspected and weighed during the registration period. Cars weighing too much will be allowed to remove weight. Cars weighing light will be allowed to add weight securely attached or imbedded weight. Lubrication must be added before entering facility. After any modification, the car will be re-inspected and re-weighed.
- Once the car passes inspection and weighing the car will be impounded until after the race is over. Only official personnel will handle the cars during the race. Neither youth or unauthorized adults will be allowed to touch/handle cars during the races.
- If, during the race, the car becomes damaged, then the youth may, to the best of his ability perform repairs. An emergency repair or pit crew area will be on-site to assist.
- If a car is damaged due to track fault or due to fault of another car or youth, then the track chairman, at his sole discretion, shall allow additional repair assistance.
- If a car leaves its lane, at his sole discretion, before crossing the finish line, the car will be penalized and register a time of the maximum time allowed by the track chairman.
- The track chairman shall inspect the track and, if a track fault is found which probably caused the initial violation; the race chairman shall order the race to be rerun after the track is repaired.
- Should the car be disqualified, the car shall race but the results will not be counted in the official race record for award, trophy, or placing.

# CONSTRUCTION RULES EXPLANATIONS:

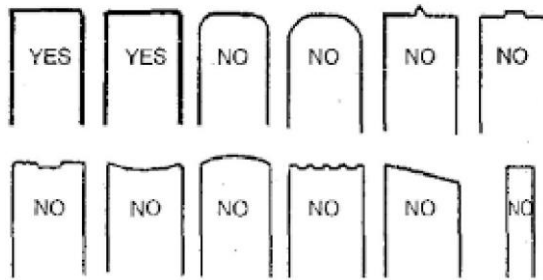
Block Dimensions: Only the original BSA Pinewood Derby Car Kit Block may be used.



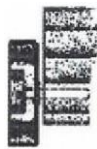
Wheel Modification Explanation: Refer to "Wheels requirement on previous page.

These are examples of unacceptable wheels.

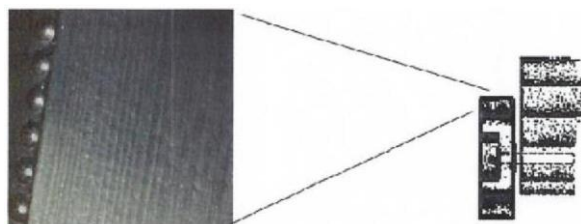
Wheel Profile Illustration:



The wheel surface must be flat as demonstrated below. Rounding, thinning the tread thickness from the interior or exterior of the interior or exterior of the tread wall or any other or modification of the wheel will result in disqualification.



Imperfections on the wheel surface may be sanded out, however, the extreme caution not to bevel or round the wheel surface in any way. The perimeter beading surrounding the circumference of the wheel as seen in the picture below may not be diminished or modified in any way. All original BSA Wheel markings must be present. Use extreme caution in any wheel sanding.



Beading Must Stay intact!