

2004

**BRADDOCK TRAIL
DISTRICT**

**PINEWOOD DERBY
ASSEMBLY RULES**

I. SCOPE:

This specification describes the official rules governing the assemble and allowable modifications of Pinewood Derby cars for the Braddock Trail District Pinewood Derby Race. All cars competing in the Braddock Trail District Pinewood Derby race must adhere to these rules. Also it is suggested that all Cub Scout Packs in the Braddock Trail District follow these rules for their respective den and/or Pack races.

II. GENERAL:

A. BODY:

The body for the Pinewood Derby car must be made from the wood block that is supplied with, or of the same style as is supplied with the official BSA kit.

B. WHEELS:

The wheels for the Pinewood Derby car must be the wheels that are supplied with, or of the same style as are supplied with the official BSA kit.

C. AXLES (nails):

The axles for the Pinewood Derby car must be the axles that are supplied with, or of the same style as are supplied with the official BSA kit.

III. ASSEMBLY:

A. BODY:

The body may be cut and shaped to the racers desired configuration so as long as it does not deviate from these specifications.

1. Overall length must not exceed seven (7) inches, when measured from the front most part of the car to the rear most part of the car with the wheels installed.
2. Overall height must not exceed four (4) inches, when measured from the track surface to the top most part of the car with the wheels installed.
3. Overall width must not exceed two and seven eights ($2 \frac{7}{8}$) inches when measured from the outermost part of the car. (Includes wheels, fenders, additional weights, etc.)
4. Overall wheel base (length between the center of the front wheel and the center of the rear wheel) shall be no less than four and three eights ($4 \frac{3}{8}$) inches, or no greater than four and five eights ($4 \frac{5}{8}$), when measured from the center of the front axle and the center of the rear axle.
5. The wheel base must be the same on both sides of the car.

WHEELBASE MAY NOT BE ALTERED IN ANY WAY.

The slots cut in the supplied block must be used.

6. Overall track (width inside of the wheels) one and seven eights ($1 \frac{7}{8}$) inches minimum, two (2) inches maximum, when measured from the innermost part of the wheels, with the wheels installed.
7. Overall ground clearance, three eights ($\frac{3}{8}$) inches minimum, one half ($\frac{1}{2}$) inches maximum, when measured from the track surface to the lowest part of the car, with the wheels installed.

B. WEIGHT:

1. Maximum weight of car five(5) ounces total. (car body, wheels, axles, etc.)
2. Additional weight may be added, not to exceed five (5) ounces total.
3. Additional weight must be solidly mounted to the car.
4. Sliding, rolling or moving weights will not be accepted.

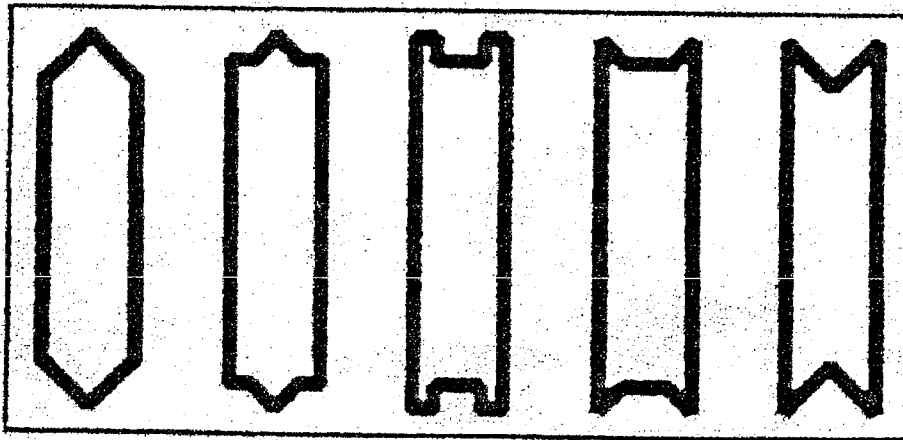
ABSOLUTELY NO MERCURY MAY BE USED FOR ADDITIONAL WEIGHT.

5. Weight may be added to the car in any of the following manners.
 - a. Hollowing or drilling of body.
 - b. Surface mount, bolt on, screw on, and/or glue/tape on.
6. Additional weight may be mounted anywhere on the car so as long as it does not alter any critical dimension (overall length, overall width, overall height, or ground clearance).

C. WHEELS:

1. Wheels used must be those supplied with or be of the same type as those supplied with the official BSA kit.
2. Wheels must be of all plastic construction.
3. Wheels with any type of bearing will not be accepted.
4. Hub Caps (stick on dots) will not be accepted.
5. All four wheels must touch the track surface and be free wheeling.
6. Truing, polishing, balancing and slight rounding of the wheel edges will be accepted.
7. Wheels with any type of suspension will not be accepted.
8. Weighted wheels will not be accepted.
9. Wheels showing any type of lathe turning will not be accepted. (see examples below).

WHEELS WITH THESE TREAD PROFILES WILL NOT BE ACCEPTED



D. AXLES (nails):

1. The axles used must be those supplied or of the same style as those supplied with the official BSA kit.
2. Polishing and truing of the axles will be accepted.
3. Axles with any type of bearing will not be accepted.
4. Axles with any type of suspension will not be accepted.

E. LUBRICATION:

1. Any dry powdered lubricant may be used for axle lubrication. (powdered graphite, dry Teflon, etc.)
2. Liquid or spray on lubricants will not be accepted. (WD40, etc.)

F. MISCELANEOUS:

1. Cars equipped with spring type starting devices will not be accepted.
2. cars equipped with electric motors will not be accepted.
3. Cars equipped with model rocket engines will not be accepted.
4. Cars from previous years will not be accepted.
5. Wheels and or axles from previous years cars will be accepted, so as long as they do not deviate from provided specifications. (see section III C. WHEELS)
6. All cars raced at the 2004 Braddock Trail District Pinewood Derby must be the same car raced at the participants Pack 2004 Pinewood Derby, without any modifications or changes.