

Official Makahiki Pinewood Derby Outlaw Rules

Construction Rules

The main body structure of the car must be made of wood. Cars must be **NEWLY** constructed since the 2012 Makahiki Pinewood Derby race. The Inspection Committee will be the final judge and has the responsibility to disqualify those cars that do not meet these specifications.

1. Overall **WIDTH** shall not exceed 2 $\frac{3}{4}$ inches. The front end should be at least **one inch wide** in order to trip the finish line sensor.
2. Overall **LENGTH** shall not exceed seven inches. No part of the car may protrude in front of the starting peg.
3. Overall **HEIGHT** is not to exceed 2 $\frac{3}{4}$ inches.
4. **Center Rail Width Clearance** shall be at least 1 $\frac{3}{4}$ inches minimum along entire center length of car.
5. **Bottom Clearance** shall be at least $\frac{3}{8}$ inches from track. Fender flairs with less clearance are acceptable as long as the center rail width clearance is the same as above.
6. The car body must have no moving parts.

Weight and Appearance

1. **Weight shall not exceed 5 ounces or 141.85 grams.** State of Hawaii scales and weight standards apply.
2. No loose materials of any kind, such as lead shot, may be used.
3. The car may be hollowed out and built up to the maximum weight by the addition of weights provided they are secured into the body by design with epoxy, cement or screws.
4. To prevent the possibility of objects coming off the car, weights or objects must be firmly glued, taped, or otherwise attached or affixed to the finished car. **Hot glue is not reliable and should not be used.**

5. If the inspection committee deems that the weights or objects are not firmly attached to the car, the car will be declared ineligible to race until it is satisfactorily repaired.
6. Each racer is responsible for bringing whatever supplies/tools necessary to meet these specifications.

Details

1. Body design may be enhanced by adding other stable materials such as plastic or metal.
2. All additions must be firmly attached and conform to the size specifications.
3. Details such as steering wheels, decals, painting, and interior details are permissible as long as the inclusion of these details does not exceed the maximum size and weight specifications.

Wheels

Modified wheels must conform to the following specifications:

1. The overall wheel diameter may not be less than 1.150" or 29.21 mm with a maximum diameter of 1.200".
2. Wheels must be constructed of plastic, rubber, or polyurethane.
3. Wheel hubs may be made of metal, but may never come in to direct surface contact with the track.
4. There must be at least four wheels on the car, however, it is not required that all four wheels make contact with the track surface.
5. Wheels must be attached directly to axle and spin freely.

The following items are PROHIBITED

1. Electronic or lighting devices
2. Liquids, wet paint, oil, sticky substances, or powders of any kind (other than
3. Glass or excessively fragile parts
4. Wheel bearings, washers or bushings are prohibited – no object is to be placed between the wheel hub and the body.
5. Loose objects on car.

6. The car shall not ride on any type of springs.
7. Cars must be freewheeling with no starting device or other propulsion.
8. Magnets.

Axles (nails)

1. The axles must not be attached to any device that mechanically alters rotation and spin.

Lubrication

1. Dry, fine powdered lube is permissible. Liquid oil, WD-40, silicone spray, etc. **MAY NOT BE USED.**
2. **Over-application of lubricant which results in excessive shedding onto the track is not allowed and must be corrected before the car will be allowed to race.**

Inspection

1. Each car must pass inspection by the official inspection committee before a car can compete.
2. The Inspection Committee has the responsibility to disqualify those cars that do not meet these specifications.
3. In all cases, the Official 2010 Makahiki Outlaw rules take precedence.
4. The decision of the Inspection Committee is FINAL

Protests

1. Any protest of a car's compliance with the Construction rules must be filed with Race organizers before registration closes in order to allow time for re-inspection.
2. All rules will be interpreted in consideration of the Scout Oath and Scout Law.
3. Any participant or their guardian may appeal to the Race organizers for interpretation or clarification of these rules.
4. Any decision by the Race organizers as to clarification or revised interpretation will be considered binding and final.
5. All disputes as to rules conflicts, interpretation, or the specifics of any race event shall be referred to the Arbitration Committee for final determination

Maintenance

1. Once the Pinewood Derby car has been accepted by the inspection committee, no maintenance of any kind is permitted, including additional lubrication.

Other Rules

1. If, during a race, a car leaves the track without interfering with its opponent, it shall be considered to have ended its heat at that point.
2. If a car leaves its lane, at his sole discretion, the track chairman may inspect the track and, if a track fault is found which probably caused the initial violation; the track chairman may order the race to be rerun after the track is repaired.
3. If, during a race, no car reaches the finish line on the track, the car which went the farthest in its lane shall be declared as the heat winner.
4. If, during a race, a car leaves its lane and, in so doing, interferes with another racer, then the car at fault shall be declared to have lost the race heat.
5. Only one car may be registered by any person in the Pinewood Derby.
6. The track chairman has the discretion to re-run any race for any reason.
7. In the case of technical or mechanical difficulties the race can be terminated and no winners will be declared.

Disclaimer: Volunteers are not responsible for damages to vehicles incurred through normal handling during the course of the race. Special handling at the request of the cars owners will not be given.