Pack 608 requires that all cars comply with the **San Diego 500 Car Specifications** listed below. The winner of the Pack 608 Pinewood Derby will by invited to compete against other Cubs from all over San Diego and Imperial Counties in the San Diego 500, held during the **Scout Fair at Qualcomm Stadium**.

1. **WIDTH:** Overall width of the car, including wheels, shall not exceed two and 3/4 inches (2.75"). The body width where the axles attach to the wheels shall not be less than one and 3/4 inches (1.75").

2. **LENGTH:** Overall car length may not exceed seven inches (7.00"). The kits often supply wood blanks longer than 7 inches.

3. **HEIGHT:** Overall car height may not exceed three inches (3.00").. This prevents tall cars from crashing into the finish line and electronic lane judge.

4. **WEIGHT**: Total weight of the car shall not exceed five (5.000 oz) ounces. (Verified by certified scale)

5. WHEELS: Only official Boy Scout Grand Prix racing wheels are allowed. All four (4) wheels must be used. Wheels may not be altered (rounded, narrowed etc.) except for the removal of burrs. Wheels may not be lathe-turned, thinned, sawed, perforated or machined in any way. Outside wheel diameter should be no less than 1.180". Ready-made modified wheels are not allowed. Wheels must be attached so that there is a minimum of .375" (3/8") between the car bottom and the rolling surface to provide track lane guide clearance.

6. **AXLES:** Only official BSA Grand Prix Pinewood Derby metal "nail" type axles Kits are allowed. All specifications listed in the kits (as to height of axles for track clearance) must be followed. Axles may be lubricated but the use of wheel bearings, washers or bushings is strictly prohibited. Paper label 'hubcaps' may be used but the head ends of the axles must be available for judging when requested.

7. Lubricants. Dry lubricants such as graphite or BSA "AXLE LUBE" are allowed. Oils or other wet lubricants are not permitted.

8. SPRINGS: The car shall not ride on any type of spring or other suspension.

9. The car must be freewheeling and may not contain any type of auxiliary propulsion or utilize any type of starting device. (No jets, rubber bands, magnets, hooks, adhesives, springs, motor etc.)

10. **DECORATIVE DETAILS** may be added provided they do not exceed the maximum weight and dimensions for the car. (Decals, trim, characters and decorations are allowed if they meet the finished car size and weight rules.)

11. NO LOOSE MATERIALS: The car may be hollowed out and built up to maximum weight by the addition of wood or metal. Any additional materials must be securely built into the body or chassis. Mercury shall not be used for weight addition or other construction purposes, as it is a health hazard.

12. Cars must be built using the **Grand Prix Pinewood Derby Car Series Kits**. Additional metal must be used **only** for weight addition. Axles must be mounted into the wood body. No portion of other kits will be allowed except for decorative purposes. Structural strength is gained only from the wood body. No metal frames or metal axle support is permitted

These racing specifications provide a standard test for all cars to comply. The requirements are designed to give Cub Scouts, with their parent's help, an equal opportunity to design and construct cars while still providing enough freedom to create unique and competitive cars.

## Please don't submit cars for inspection with wet paint.

## Please don't submit cars with excessive graphite on the wheels or body.

Each car will be weighed and inspected by the official inspection team before it competes. A work area and limited tools will be provided to make adjustments to cars that don't comply. The inspection team may disqualify any car that cannot meet the racing specifications. Once a car is officially checked in, no further lubrication, adjustments or work may be performed on it.

## All Cars will be weighed by the same pack scale. Only this weight will be accepted as the official weight! NO EXCEPTIONS!

Regardless if the pack scale is or is not equivalent to other scales participants have access to, this scale is used for ALL cars and therefore all cars are assessed equally. Tools, weights, and reweighing are provided to give all participants equal consideration during the check-in process. Failure to accept this or demonstration of un-sportsman like conduct will be grounds for disqualification. Again, NO EXCEPTIONS! Thank you for leading by example!