



No. California & Nevada District

Royal Rangers

N C N

Royal Rangers

PINEWOOD

DERBY RULES

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Pinewood Derby Rules

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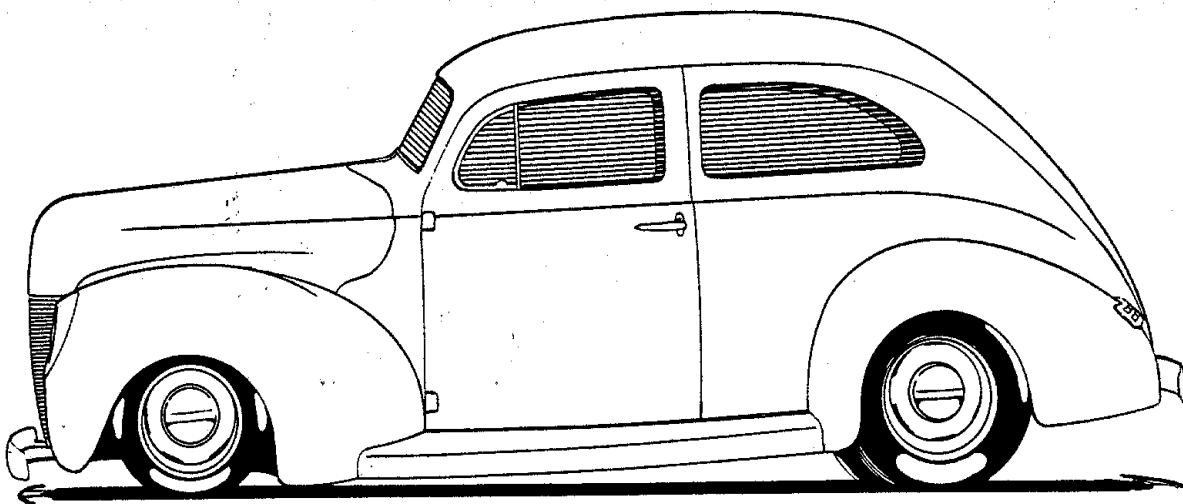
Racing Score Sheet.....Contact the Northern California & Nevada District RR Office

The Official Rules

Northern California and Nevada District Council

Pinewood Derbies

following are the OFFICIAL RULES of the Pinewood Derbies.



These rules are to be used at the *Outpost, Section, Division (Region) and District levels.*

Each car that is entered in competition **must** abide by these rules!

There are NO EXCEPTIONS without permission of District Staff.

LEVELS OF COMPETITION

OUTPOSTS:

1. Each outpost will build their own cars and conduct elimination races to determine the outpost winners of each class. Ribbons should be awarded to 1ST through 10TH place winners of each race and 1ST through 6TH place in the workmanship class. All cars may go on to the Section Run-Offs. Outpost Run-offs must take place before the scheduled Section Run-off. In some Sections there are no Run-Offs, therefore the Outpost's will go on to the Division (Region) Run-Offs. If no Division Run-Offs contact the District Royal Rangers office.

SECTION:

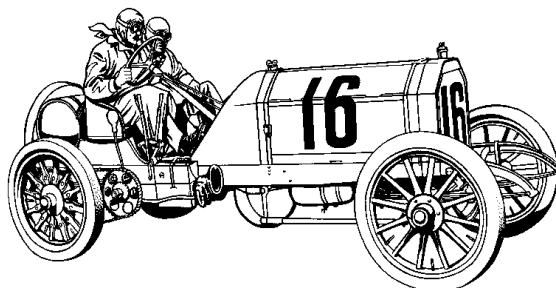
1. Each Section Commander will be responsible for conducting a Section Pinewood Derby. Trophies should be awarded to 1ST place winners of each race and ribbons to 10TH place. Trophies should be awarded to 1ST place winners of each Workmanship class and ribbons to 6TH place. All cars may go on to the Division (Region) Run-Offs. The Section Run-Offs must take place the first Saturday in February.

DIVISION (Region):

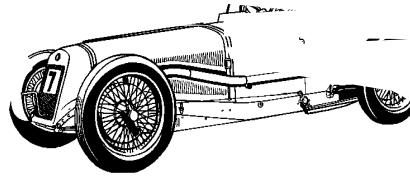
1. Each Division Commander will be responsible for conducting a Division Pinewood Derby. Trophies should be awarded to 1ST place winners of each race and ribbons to 10TH place. Trophies should be awarded to 1ST place winners of each Workmanship class and ribbons to 6TH place. All cars may go on to the District Run-Offs. The Division Run-Offs must take place the Third Saturday in February.

DISTRICT:

1. The Royal Rangers District Pinewood Derby Run-Off will be held the First Saturday in March. The District Pinewood Derby Registration opens at 8:00 a.m. Racing will begin after all the registration has been completed and the workmanship judging completed. Please make your parents, commanders, and boys aware that you need to register as early as possible, and to be patient as the judging, weighing, and registration are under way prior to racing.
2. All run-offs will start after the workmanship judging is complete.



Race Car Specifications



These guidelines may be used as a handout for the boys.

1. All cars used within the Northern California/Nevada District Pinewood Derbies shall be of the same type; that is, the standard, approved kits used by the Royal Rangers; no other kits will be acceptable (*Rule adopted at RR District Council 2000*). All Pinewood Derby kit parts must be original - **no substitutions**.
2. All cars entered into competition, including workmanship, must fit on and roll down the track without interfering with any other car. All cars shall not exceed the following:
 - A. A car will not be more than 7-1/2" in length.
 - B. A car will not be more than 2-3/4" in width.
 - C. A car will not be more than 3" in height.
 - D. A car will not weigh more than **6 ounces (170 grams)**.
 - E. There must be a minimum of 3/8" – clearance from the bottom of the tires to the lowest part of the car body, whether it be the wood block, weights, decorations, etc.
3. Lubrication is permissible (any lubricant) but it is best not to use one that is petroleum based.

NOTE: Weights must be an integral part of the car. Weights will not be allowed taped or set on a car. If weights or any part of a car comes off, there is no contest. The heat will be re-run. If the same car or parts leave the track again the car will be disqualified from racing. No heat or race will be held up while repairs are made.

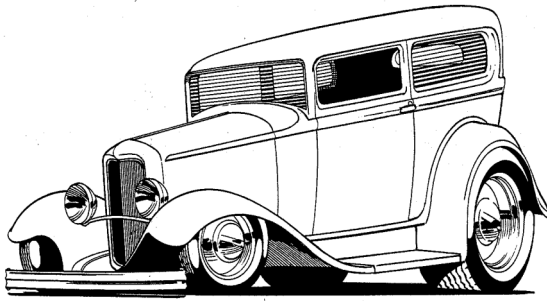
NO-NO'S:

- A. No bearings or bushings of any type on the car except in the super-modified class.
- B. No metal-to-metal contact on the car is allowed except in the super-modified class.
- C. No starting devices are allowed. (Ref.: Race Procedures #C.)
- D. No lubing or working on cars after they have been registered. (Ref.: Race Procedures #A.)

NOTE: You may use any lubricant you feel is best for your car. If a car needs to be lubed or worked on before it is registered, there will be a designated pit area set up for that purpose.

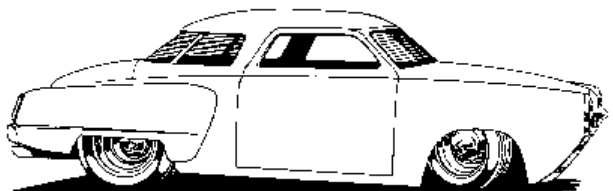
SUGGESTIONS:

- To Shape: Use tools or make your own shaping stick by gluing a strip of sandpaper to a strip of wood.
- To Finish: Sand smooth, seal the wood with wood sealer, then paint.



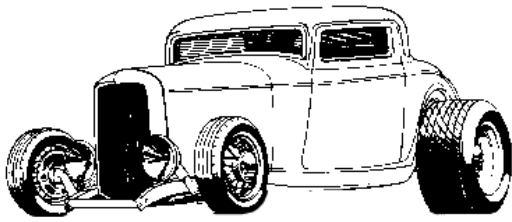
RACE PROCEDURES

- A. All Cars will be registered for competition. When registered, the car will be assigned a number. The number shall be affixed to the car for identification. The car must be ready for competition at this time.
- B. All roll-offs will be run on a system to find the fastest car.
- C. Cars will start and roll by gravity from a standing start at the starting line of the track.
- D. The car whose nose crosses the finish line first wins the heat.
- F. If either a car or its parts leave the track before crossing the finish line on the first heat, there is no contest. The heat will be re-run. If the same car or parts leave the track again the car will be disqualified from racing.
- G. Only a car's owner and the starter are allowed to handle a car after it has been registered. Handling will not go beyond that which is necessary to keep a car in running order. No heat will be held up for a car/cars being repaired. If a car is unable to run when its turn comes, it will be disqualified.



WORKING SCORE SHEET

THERE IS A WORKING SCORE SHEET THAT SHOWS HOW THE ROLL-OFF IS TO BE CONDUCTED TO FIND 1ST THROUGH 10TH PLACE. ONE SHEET WILL BE NEEDED FOR EACH CLASS. THE 1ST THROUGH 10TH PLACE WINNERS MUST BE LISTED ON THE OFFICIAL SCORE SHEET AND GIVEN TO THE PERSON IN CHARGE OF THE NEXT ROLL-OFF BEFORE REGISTRATION STARTS FOR THAT ROLL-OFF. PLEASE MAIL OR FAX THE OFFICIAL SCORE SHEETS TO THE PERSON IN CHARGE OF THE NEXT LEVEL OF COMPETITION AS SOON AS POSSIBLE. THEY WILL NEED IT BEFORE ANY CARS CAN BE REGISTERED AT THE NEXT LEVEL.



CLASSES

THERE ARE SEVEN CLASSES:

- A. Ranger Kids (K-2) See Race Car Specifications, Page #6.
- B. Discovery Rangers (3-5 grade) See Race Car Specifications, Page #6.
- C. Adventure Rangers (6-8 grade) See Race Car Specifications, Page #6.
- D. Expedition Rangers (9-12 grade) See Race Car Specifications, Page #6.
- E. Commanders (18+) See Race Car Specifications, Page #6.
- F. Super-Modified - See additional class information, below.
- G. Open - See Race Car Specifications, Page #6, and the additional class information, below.

Additional class information:

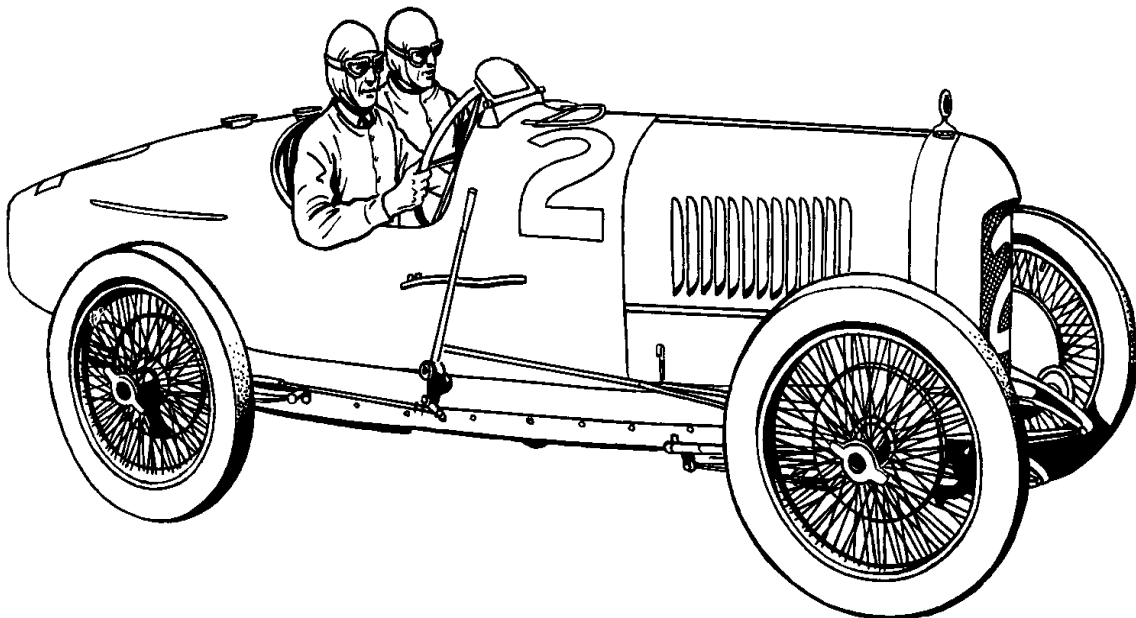
SUPER-MODIFIED CLASS: This is just what the name implies, a class where you can use all your ingenuity and imagination, however you must use the parts in the kit for their designed purpose. The class is open to anyone who enters any of the other six classes at the outpost level. There are a few simple rules (*Revised by RR District Council 2004*) to follow. They are:

- A. To enter the Super-Modified Class a person must have entered one of the other six classes.
- B. Wheels are to be used for proper intent and purposes and for the function for which they are intended. Super-Modified class cars shall be made from official Pinewood Derby kits.
- C. The car entered in the Super-Modified Class must be a different car than the one entered in the other class.
- D. A car shall not be more than 6 inches tall and 3 inches wide.
- E. No car shall weigh more than 32 oz. (908 grams).
- F. No car shall exceed 12 inches in length.
- G. Metal to metal contact including any type of bearings or bushings is allowed in the Super-Modified Class.
- H. All other rules of the *Northern California/Nevada District Official Pinewood Derby Rules* apply.

OPEN CLASS: This class is open to any Missionette, friend or family member of Royal Ranger boys and Commanders. All rules of the *Northern California/Nevada District Official Pinewood Derby Rules* apply. (*Rule revised by RR District Council 2000*)

WORKMANSHIP:

- A. The judges will not converse while judging.
- B. Any comments will be in writing and will consist of the car number and score using the Workmanship Judging Score Sheet.
- C. Score Sheets will be given to the officer in charge as soon as a judge has completed judging.
- D. There are three areas to judge. They are:
 - 1. **ORIGINALITY:** The idea of the artist himself. You must take into account how much creative thought went into the design.
 - 2. **WORKMANSHIP:** The skill the workman shows in cutting, carving, sanding and detailing out the car. Consider: Are the cars extra ornaments made by the owner or something bought and attached?
 - 3. **COLOR AND APPEARANCE:** Use of color and outward appearance. Take into account the painting of the car. It's overall texture, the color and paint
- E. **QUALIFICATIONS:** Each contestant may enter one car in this event per class they enter. It does not have to be the same car entered in the race, but must meet the same qualifications (fit on and be able to roll down the track) as cars entered in the race classes.
- F. The first through sixth winners must be listed on the official score sheet given to the person in charge of the next roll-off.
- G. Each Pinewood Derby Car being judged in the Workmanship Class, may have a 3"x5" card next to the car giving a brief description of the work completed by hand and parts used indicating which were handcrafted and which were store-bought. Store bought parts, such as



RIBBONS, PLAQUES & TROPHIES

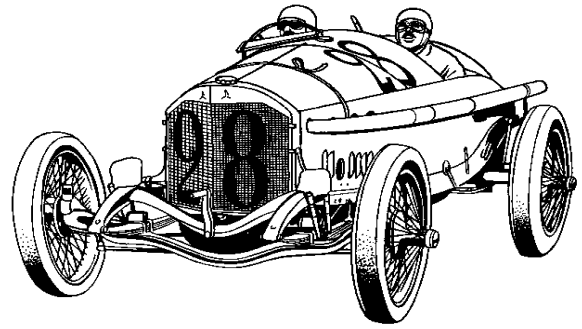
pipes, decals, etc., generally would not be given any extra points.
These guidelines should be observed.

ROLL OFFS:

- A. **OUTPOST** will award ribbons for first through tenth place in race and first through sixth in workmanship. **NOTE:** If trophies are used at the outpost, it is recommended that you do not use larger than 12” and size down accordingly per place.
- B. **SECTION** will award plaques or trophies for first place, not to exceed 14” in height for race and workmanship. Ribbons for second through tenth place race and second through sixth place workmanship. and Section has the option to give a *Section Pinewood Derby Patch* at their event, but it is not required. If a patch is given then participation ribbons are not necessary for participation, as the patch is sufficient. This patch can be worn on the uniform as an activity patch. This patch may be produced by the Section. Size not to exceed 2 1/2 “ or purchased from the Royal Rangers District Office.
- C. **DIVISION (REGION)** will award plaques or trophies for first place, not to exceed 16” in height for race and workmanship. Ribbons for second through tenth place race and second through sixth place workmanship. The Division has the option to give a *Division Pinewood Derby Patch*, purchased from the Royal Rangers District Office at their event. If a patch is given then no participation ribbons are necessary. This patch can be worn on the uniform as an activity patch.
- D. **DISTRICT** will award trophies for first through tenth place in both racing and workmanship. No participation ribbons will be given, as the *District Pinewood Derby Patch* will be given to each participant at registration. The patch can be worn on the uniform if you participated in the *District Pinewood Derby*. Patch size not to exceed 3”.

- **PLAQUES & TROPHIES:** All plaques and trophies will be made up ahead of time with the roll-off level and class on them. The Outpost may have the winners name engraved on the plaque or trophy if they want. It is requested that if the outpost uses trophies, the size be smaller than the Section.
- **PATCH DESIGNS:** Designs for the upcoming season for Division (Region) and District patch consideration must be submitted to the District Office by September 1st .
- **ENTRÉE FEES:** It is understood that patches increase the cost of registration at the Section, Division (Region) and District levels. No fees have been established in order to allow each coordinator or director to determine their event’s registration cost.
- Due to the high volume of participation , the following system will be used to expedite the roll-off. This system is used on a four-lane track. Section, Division (Region),

THE COMPETITION



- ◆ And District roll-offs shall be exempt from the following rule if electronic timing tracks are used:
 - Cars #1 and #2 will race on lanes 1 and 2. Then cars #1 and #3 will race on lanes 1 and 2. As car #1 races #4 on lanes 1 and car #2 begins the rest of its races by going against car #3 on lanes 3 and 4. As soon as car #1 has completed all its races, car #3 takes over lanes 1 and 2 for its races. When car #2 has completed all its races, car #4 takes over lanes 3 and 4 for its races etc..

NOTE: Due to possible differences in lanes, cars will alternate lanes after each heat.

NOTE: There are two types of ties in Pinewood derby and each is handled differently.

They are:

- (1) Two cars cross the finish line and the judge is unable to distinguish the winner. The cars are rerun, alternating lanes each time until a winner is declared.
- (2) Two or more cars win the same number of heats. The winner of this type of tie is the car that won when they raced against each other. In the case of three or more cars winning the same number of heats and there is no clear placement (they beat each other), run them all at the same time and place them as they cross the finish line.

Racing score sheets can be obtained from the Northern California/ Nevada District Office. Please allow time for the score sheets to be mailed.

Only the cars owner may enter a car in competition. The owner of the car must be present. The officer in charge of a roll-off has the right to allow a car to be entered without the owner being present if he feels the owner has a legitimate reason for his absence. The owner must request permission 24 hours before the start of the roll-off.

All Pinewood Derby kits used within the Northern California/ Nevada District shall be of the same type; that is, the standard approved kits used by Royal Rangers; no other kits will be acceptable. *(Rule adopted by RR District Council 2000)*

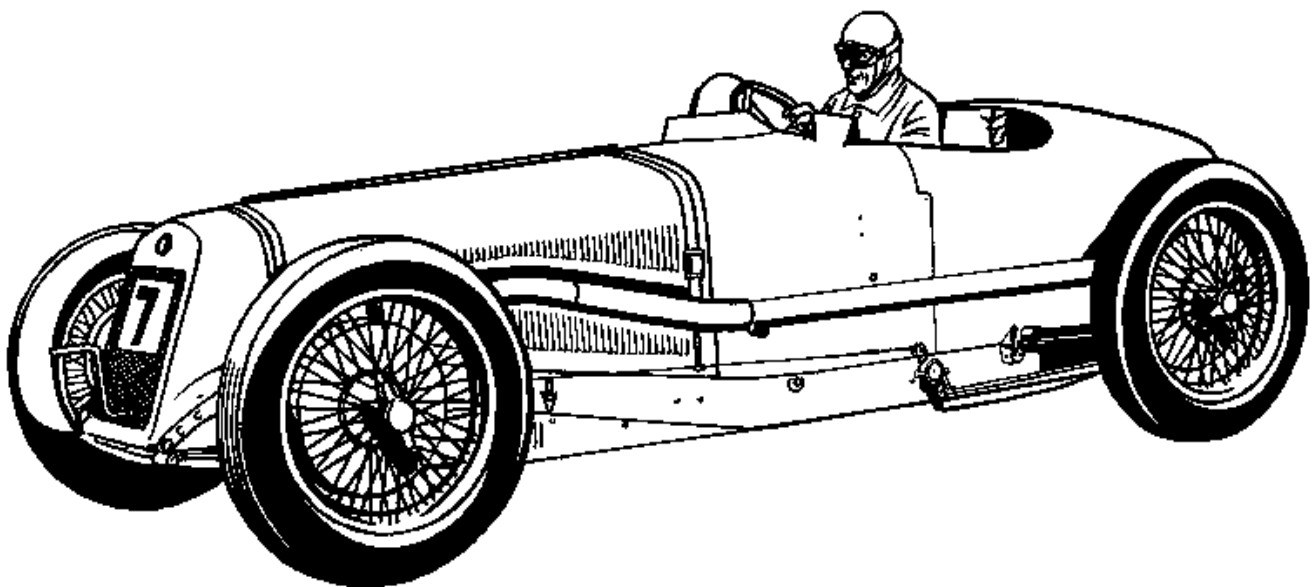
- ◆ *Cars entered into competition* must be a car not entered in a previous year. Only

Continued on Page #12

- ◆ one car per person per classification may be entered; i.e. Discovery Ranger racing classification can only have one car entered per person.
- ◆ Where there is no competition, no ribbons, plaques or trophies need to be given. However, contestants may move up to the next level of competition.
- ◆ **ANYONE NOT ADHERING TO THE ABOVE RULES MAY BE DISQUALIFIED.**
- ◆ The Pinewood Derby Director at that event is the final judge. Remember your sporting competition attitude and conduct should be that of a Christian. Poor sportsmanship could eliminate you from competing for one year.

NOTE: There must be adequate help at each level of roll-offs to both supervise the boys and help officiate. Your help would be greatly appreciated.

NOTE: Because Pinewood Derby has grown in participation it is suggested you either bring lunch or make arrangements for lunch during roll-offs. Section, Division (Region) and District Derbies may have a food and drink snack bar at the location.



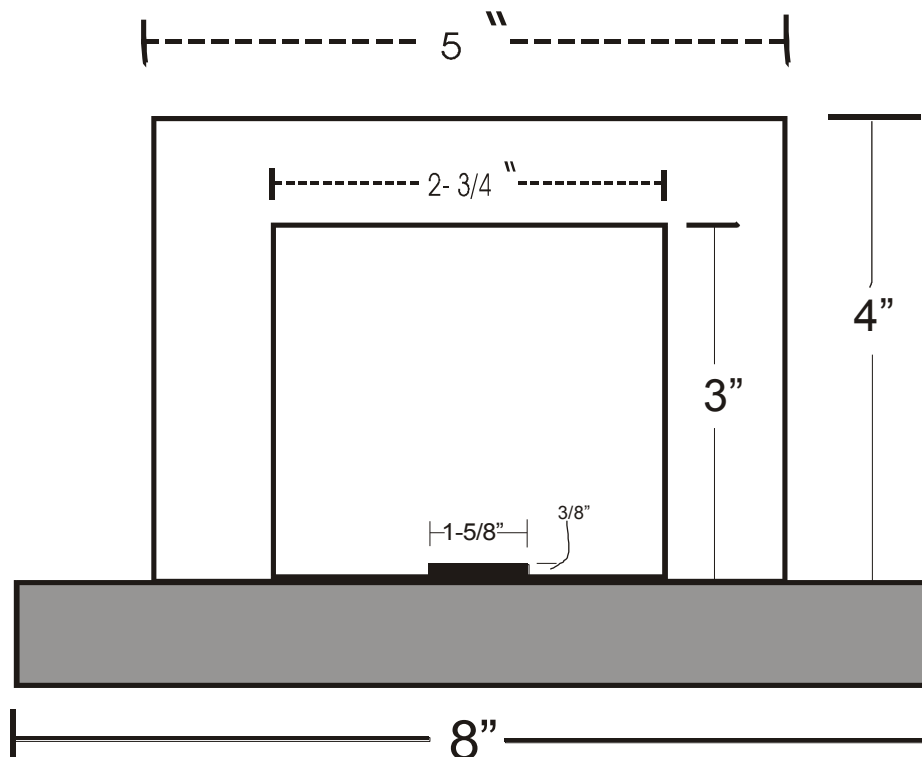
Weights and Measurements

Scale For Weighing

It is recommended that an “Electronic” Scale be used to weigh the cars at the outpost level. Most Section, Region, and District Levels will be using the Electronic Scale to measure 170 grams. It is much harder to accurately weigh a car on a postage scale for 6 ounces. The use of a 6 ounce (170 gram) standard should be used whenever possible.

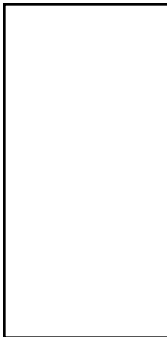
Jig For Measurements

It is recommended that a “Measurement Jig” be used to qualify the cars at the outpost level. Most Section, Region, and District Levels will be using a Measurement Jig to verify the dimensions of the cars. It is much harder to accurately verify a car with a ruler or tape measure. The following diagram illustrates a simple jig that can be used to measure most of the car’s dimensions. An additional measurement would be needed for the car’s length.



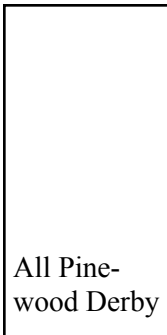
Pinewood Derby Registration Layout

Recommended Example for
SECTION, DIVISION (REGION) and DISTRICT



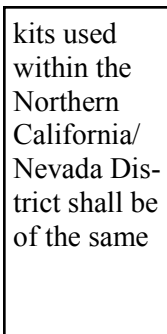
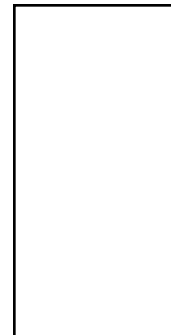
Area #1

Check car for weight and put through
measurement jig.
(Be sure registration slip is completed.)



Area #2

Verify registration of entry with previous
race results supplied by Section or
Region (must have been submitted to
Pinewood Coordinator prior to race).



Area #3

Collect money
Put on car tag information

Give car to assistant to take to car
holding/display area.

(Note: No one allowed in this area except
Pinewood staff and appointed judges
when needed. This area must be roped
off so cars can't be handled. Organize
according to classes.)



Registration Procedures

1. Ensure that the car meets all the physical requirements for size, weight and wheel assembly:

Maximum Specifications:

Length: 7-1/2" Height: 3" Width: 2-3/4"

Bottom clearance minimum: 3/8"

All Pinewood Derby kit parts must be original—**no substitutions**

2. Check to make sure that the registrant is qualified to register by checking the Official Score Sheets as provided from any previous races. Only the first through tenth places in racing and first through sixth place in workmanship may register.
3. If the car is for **racing only**, so indicate on a sticker on the bottom of the car by placing an "R-#" where "#" is sequential in the order registered. (See figure "A" below.) This is the "car #" as referenced on the registration sheet.

If the car is entered in **racing and workmanship**, place a "RW-#" on the tag on the car, where "#" is sequential in the order registered. (See figure "B" below.) This is the "car #" as referenced on the registration sheet.

If the car is competing in **workmanship only**, place a "W-#" on the tag on the car, where "#" is sequential in the order registered. (See figure "C" below.) this is the "car #" as referenced on the registration sheet.

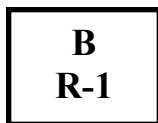


Figure "A"
Class B—Racing only



Figure "B"
Class B—Racing & Workmanship



Figure "C"
Class B—Workmanship only

4. Fill out the registration sheet (form on page 13) **clearly printing** the name, outpost number, section and class, using a separate sheet for each class.

