International Soap Box Derby Mission

The International Soap Box Derby® is a non-profit youth education and leadership development organization whose mission is to build knowledge and character, and to create meaningful experiences through fair and honest racing competitions, STEM curriculums, and other community-focused activities.
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**RALLY CHAMPS**
**SUNDAY - REPAIR DAY**

**Parent & Driver Information**

**Registration Information**
Champs and Car Handlers must have ID badges on to check out a car. Rally Champ's cars will be stored in the White Building Topside. Car covers have been placed in all cars. Champ will need to pull out one t-shirt from their Champ Bags for photos. The rest can be taken to the family vehicle for safe keeping.

1. **King Pin Drop** - Only needed if you are one of the random cars drawn. A torque wrench will be allowed.

2. **Non-VIP Repairs** - All work must be signed off by a Racing Commission Official before car prep work is done.

3. **Car Prep General inspection** - KP torque, rear axle triangulation, steering check, shell reattached, spindle alignment, wipe and wax car. Before leaving the tent, the shell will be checked for correct mounting: nose tight to the front of floorboard and flush. If you are a VIP we expect this to all be done in 1 hour.

4. **Safety Break, Helmet, Shoes Check, Line of Sight and Masters Taping** - Masters hatch and helmet taping will be at the starter's discretion for safety only. (3 2'x3' pcs).

5. **Official Check off Station**

6. **Official Photos** - Champ t-shirt required!

7. **Trial Run** - Car handlers will return to Topside arch and help unload their returning car. *Required

8. **Scales** - Official Weigh-In See Scales Procedures on page 6

9. **FINISHED**! Return car back to same building and leave helmet and car cover in the car. All cars are subject to re-inspection & scales all week.
Local Champs
Sunday - Repair Day

Parent & Driver Information

Registration Information
Champs and Car Handlers must have ID badges on to check out a car. Rally Champ's cars will be stored in the Blue Building Topside. Car covers have been placed in all cars. Champ will need to pull out one t-shirt from their Champ Bags for photos. The rest can be taken to the family vehicle for safe keeping.

#1 King Pin Drop - Only needed if you are one of the random cars drawn. A torque wrench will be allowed.

Tent Area Car Prep and Repairs - Items allowed in your assigned work area: Two car handlers, driver, a small toolbox, saw horses, cordless drill, alignment and triangulation equipment, wiping rags, spindle cleaning and oil material and wax.

#2 Non-VIP Repairs - All work must be signed off by a Racing Commission Official before car prep work is done.

#3 Car Prep General inspection - KP torque, rear axle triangulation, steering check, shell reattached, spindle alignment, wipe and wax car. Before leaving the tent, the shell will be checked for correct mounting: nose tight to the front of floorboard and flush. If you are a VIP we expect this to all be done in 1 hour.

#4 Safety Break, Helmet, Shoes Check, Line of Sight and Masters Taping - Masters hatch and helmet taping will be at the starter's discretion for safety only. (3 2'x3' pcs).

#5 Official Check off Station

#6 Official Photos - Champ t-shirt required!

#7 Trial Run - Car handlers will return to Topside arch and help unload their returning car. *Required

#8 Scales - Official Weigh-In See Scales Procedures on page 6

#9 FINISHED! Return car back to same building and leave helmet and car cover in the car. All cars are subject to re-inspection & scales all week.
ENTRANCE TO TOPSIDE

1. Champ and handler must enter topside through man-gate on West side of Blue Building.
2. Access to Topside will be limited Race Week activities.
3. Champ and handler must have a pass.

TOOLS FOR SUNDAY VIP SHELL INSTALLATION

- Saw horses
- Wrenches - Sockets, torque
- Battery powered and manual screwdriver*
- Triangulation tools
- 2 wheel car dolly only
- Spindle alignment equipment

TOOLS FOR SUNDAY REPAIRS

- Saw horses
- Tools that fit into a milk crate size box or crate*
- Battery powered and manual screwdriver*
- Triangulation tools
- 2 wheel car dolly only
- Spindle alignment equipment

TOOLS FOR FRIDAY ALIGNMENT

- Alignment equipment tools
- Cleaning and waxing supplies
- 2 wheel car dolly only
- No power tools

Note: No lubricants and power tools other than the above mentioned are permitted. Also, tools must fit in a milk size crate.
* All electrical tools must be battery operated.
SCALES

Scale Locations:

1. Weight Distribution Scales- Champ with handler will have the opportunity to check and adjust weight distribution.

2. Official - Rally Scales - White Building

3. Official - Local Scales - Blue Building

Scale Procedures (Rally and Local):
- Loosen wingnuts before entering scales
- Supply your own weight
- Tighten wingnuts after you weigh-in
- Tail weight will be measured
- Rain cover may be in the car
- Must have helmet and racing shoes

Weight:

1. Sunday - Keep your own weight. The ISBD is not responsible for weights that are left behind.

2. Friday - Keep your own weight. Weights must not be taken with Champ when placing the car in the building. Weights may be placed over the fence or laid against the building. The ISBD is not responsible for weights left behind. No weight may go past the end of the scales.

3. Saturday - Race Day - No weight will be returned to Champ if a weigh-in is required.
STARTING LINE

1. Helmets to be in place, on and buckled
2. Car covers may be in cars.
3. Acceptable footwear must have sole.
4. Racer and car handler only.
5. Champ cars will be placed on starting ramps by regional directors with the nose of car centered on the paddle.
6. Car handler must place the rear wheel on the line.
7. Break to slow car after you pass the finish line.
8. Stop car when you reach the last line across the track in run out.

RACE DAY GUIDELINES

1. Keep your car cover in the car at all times.
2. Acceptable footwear must have a sole.
3. One Champ and one handler only in the building.
4. No carts in building at any time.
5. No spinning of the All-American wheels.
6. Remember to HAVE FUN!
CHALLENGE RULES AND PROCEDURES

About the Race:
The 2019 Challenge Races are a single elimination, three lane, and wheel swap race. Each heat has three phases (unless there are only 2 cars in the heat after the first round) and competitors will race in each of the 3 lanes of Derby Downs within a heat. All 4 wheels will be swapped after each phase. An electronic timer measures the time lapse for each racer in each phase of the heat. The racer with the fastest overall time for all three phases is declared the winner of the heat and will move on in the race bracket. Each driver will have at least 3 trips down the hill. Racers will have inspections prior to the race and there is a specific time scheduled after the Challenge race for competitors to re-align and weigh in preparation for Saturday’s championship race.

Race:
1. The Challenge races are a 3-lane, wheel swap, lane swap race.
2. All races will consist of 2 or 3 phases per heat and single elimination format.
3. All racers will experience a 3 phase race in the first round. Subsequent rounds may have only two racers due to the size of the field. 2 racer heats after the first round will have only two phases utilizing lanes 1 and 3.
4. All American Race rules apply.
5. No separate entry fee is required for the Challenge Races.
6. All AASBD Rally and Local Champions are qualified to participate in the Challenge Races.
7. Challenge racers need to confirm their registration online when registering for the AASBD Championship race week.

Race Format:
1. Challenge racers will follow the AASBD race week schedule for inspections and weighing cars. Once inspections and weight are complete, the Challenge cars will be stored in a barn at Topside.

2. On Challenge race day, racers and one handler will be asked to roll their car out of the barn and into the Challenge Pit area. This one handler will also accompany the driver and car to the starting ramps, assist with wheel swap, and assist racer at Topside after the completion of the heat. Any other family, friends, or handlers must stay away from the pit area, starting line area, and wheel swap pavilion.
3. A wheel bank will be used for the Challenge races. When instructed, racers will remove their own wheels from their car, put their wheels in a crate or box and place their wheels in a designated area.

4. When called for a heat, racers will check-in with the Topside Administrator who will provide racers with a ticket for lane assignments. This ticket must remain with the Racers for the duration of the heat for lane verification.

5. Racers will obtain a set of wheels from the wheel bank. After wheel bank wheels are on the car, racers will set their car on the ground until instructed to proceed to the hill.

6. Racers need to stay in their assigned lane as they proceed down the hill to the starting line.

7. Regional Directors will place the nose of the car on the starting gate paddle. Handlers can set the back end of the car. Wheels on the left side of the car must be on the painted ramp line.

8. Once the first phase of the race is completed, racers will be directed to a staging area for the return trailers. Heat participants must stay together. There is no wheel swapping done in the staging area at the bottom of the hill or on the return trailer.

9. Phases 2 and 3 will be transported to the starting line pavilion where they will swap wheels in the designated wheel swap area. Racers may have an additional handler to help lift cars off of the trailers.

10. Once the wheel swap is complete for phases 2 and 3, drivers and their cars can proceed back to the starting line as long as all heat participants are together.

11. When all heat phases are completed, drivers and cars will be transported back to Topside.

12. At topside, once in designated area, wheel bank wheels are to be returned to the wheel bank.

13. Volunteers in the run out area are always encouraged and appreciated.
Wheels:
1. All Challenge racers will be issued wheels from a wheel bank.
2. After each phase, a 4-4-wheel swap will take place. DO NOT swap wheels on the trailer or in run out.
3. Challenge Race officials will observe the wheel swap and check wheel positions before racers can move to the next phase.
4. The wheel swap is non-progressive. All wheels need to be returned to the wheel bank after each heat is completed. New wheels will be issued for each heat.
5. All wheel stickers and markings face the outside. Wheel stickers indicate the placement of wheels on the car spindles, RF=right front, LR=left rear, etc. Race officials will be available to assist racers with proper placement of the wheels on the car.
6. Up to 2 washers are allowed on each spindle. It is the racer/handler’s responsibility to insure washers are in place and to have a supply of additional washers if needed.
7. Wheel pins can be pushed into the first or second click.
8. No races will be rerun due to incorrect wheel swap.
9. Spinning, lubing or juicing wheels is prohibited at any point of the Challenge race or in the pits. No cleaner or lubricant can be applied to the wheels.
10. No wiping the wheels, no spotting or setting wheels at any time.
Drivers:
1. Drivers must remain in race position during the race. Any driver scooting, ducking, rocking, bobbing or changing race position during the course of the race will be disqualified.

2. Each driver needs to wear their AASBD issued Champ shirt during the Challenge race.

3. Drivers are responsible for wearing appropriate race gear including shoes, helmet and optional gloves.

4. Each racer is responsible for having a car handler at the starting gate.

5. No loose articles are allowed in the car, except for a back cushion for the masters division.

6. No electronic devices are allowed inside race cars.

7. Drivers need to stay with their cars. Any driver that is called for a heat and does not respond within 5 minutes will forfeit the heat.

Weight:
1. Each racer will weigh before the Challenge race during the inspection process. Once across the scales, weight will be recorded. No weight change will be allowed at any time. Officials can check weight at any point before or after a heat is completed.

2. The top 3 finishers for each division will be required to weigh before the final race.

3. Tail and nose weight max are per AASBD rules.
Post-Race:
1. If a competitor is eliminated and does not move on within the bracket, the driver and car will be transported back to Topside and they will be directed to place their car back in the barn.

2. The racer’s own wheels will go back on their car once they have completed the Challenge race and have returned the wheel bank wheels.

3. Time has been allotted in the race week schedule after the Challenge races for participants to align and weigh in preparation for Saturday’s Championship race.

4. Immediately following the Championship Heat in each division, the three Contestants will be directed to the Champion’s platform outside the All American office for pictures.

Other:
1. All cars must remain in the pit area between heats.

2. No tools or working on cars is allowed at any point during the Challenge race.

3. Assistance loading cars on the return trailers will be provided. Racers can load their own cars or have a race handler assist loading their car at the bottom of the hill.

4. All questions and concerns should be addressed to the Race Director.

5. Please do not approach people working the charts at the starting line or on the bridge as well as timing officials. Charts will be available for viewing at Topside, at the Bridge, and the starting line for racers and handlers to track race progress.

6. Awards for the Challenge races will take place on Saturday evening.

7. All decisions on rule interpretation and race procedure are by the Race Director.

8. Food, drinks or gum are allowed only in designated areas.

9. Food will not be supplied to racers during the Challenge races. It is recommended that racers bring their own food/drinks or purchase from vendors located at the race track.
WHEEL SELECTION AND INSTALLATION - FRIDAY

This procedure has been put in place to treat all participants equally from the first champ to select a set of wheels to the last champ to select a set of wheels. One set, and only one set, will be issued. Thank you for your cooperation.

1. Champ picks out their box of Championship Wheels. Wheel set # will be recorded. Move to the installation area.
   DO NOT OPEN THE BOX UNTIL GIVEN PERMISSION AT THE INSTALLATION STATION.

2. At the installation area, remove personal wheels, washers and clips. Your spindles will be wiped clean.

3. When directed, take one wheel at a time and place them on a spindle. Location and directions of the wheel is your choice. NO SPINNING! The arrow on the wheels are the direction the wheels were tested. Once a wheel is placed on a spindle, it must stay there for the duration of the race. You are allowed a maximum of two (2) washers per wheel. All clips must be all the way in and down.

4. Place car on the ground and move directly to the scales. Leave the car on the ground.

5. Remove all personal wheels from pit area.

REMEMBER: No spinning of wheels. No lubrication or any substances allowed on the wheels or threads. Any failure to follow this procedure could result in a disqualification. GOOD LUCK!