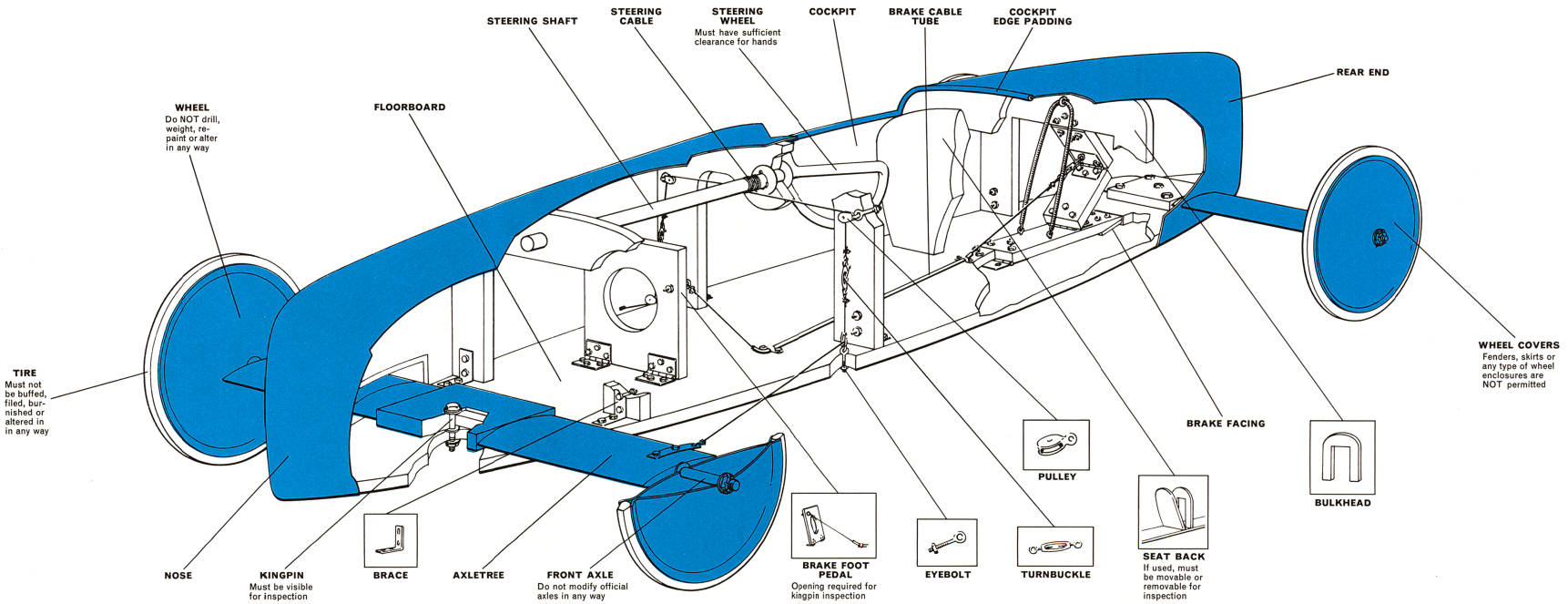
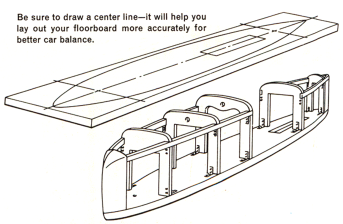


You must build your own car:

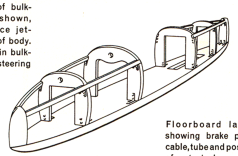
Official Soap Box Derby Rules Books are available NOW from sponsoring Chevrolet Dealers in cities where authorized races are held. This chart shows some of the basic construction features of a Soap Box racer. After you have registered and received a '66 Official Rules Book, you can hang this chart on your wall and use it as a reference.

Be sure to draw a center line—it will help you lay out your floorboard more accurately for better car balance.



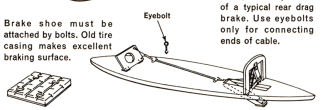
This design uses five bulkheads with nose and end pieces. Connecting ribs and metal braces give sturdy support to framing.

Rounding of bulkheads, as shown, will produce jet-plane type of body. Note holes in bulkheads for steering shaft.

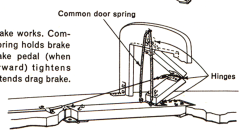


Floorboard layout showing brake pedal, cable, tube and position of a typical rear drag brake. Use eyebolts only for connecting ends of cable.

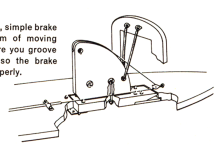
Brake shoe must be attached by bolts. Old tire casing makes excellent braking surface.

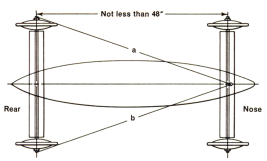


How rear brake works. Common door spring holds brake up until brake pedal (when pushed forward) tightens cable and extends drag brake.

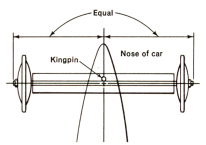


Here is a strong, simple brake with a minimum of moving parts. Make sure you groove the top piece so the brake cable seats properly.

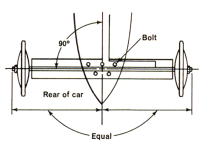




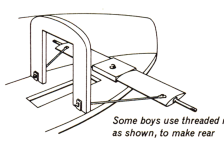
First, draw the center line on the floorboard. Then locate and mark where your axles will be placed. When wheels are properly aligned, dimension "a" will equal "b."



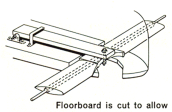
When you drill your front axletree for the kingpin, be sure the hole is drilled exactly in the center, equidistant from each end.



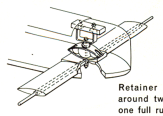
When you mount your rear axle, make sure it is centered and exactly 90° to the center line. This is very important.



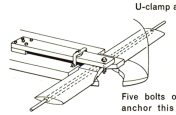
Some boys use threaded rods, as shown, to make rear axle adjustable.



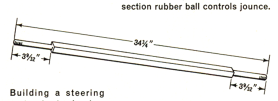
Floorboard is cut to allow space between axletree and springboard. Pillow block holds springboard at rear and retainer clamp mounted in rubber is used to control movement.



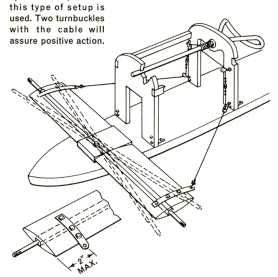
Retainer clamps are hinged around two half-sections and one full rubber ball. Kingpin is attached to top of racer body by U-clamp and square block.



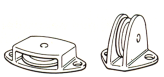
Five bolts on raised springboard anchor this suspension system. Retainer clamp with pinned half-section rubber ball controls jounce.



Building a steering system is simple when this type of setup is used. Two turnbuckles with the cable will assure positive action.

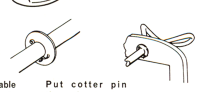


Turnbuckles or other adjusting devices must be used to remove slack from steering cable.

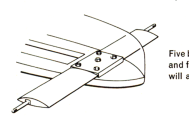


Pulleys like these three will guide your steering cables without binding.

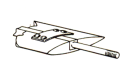
Thread steering cable through hole in shaft; then wrap around.



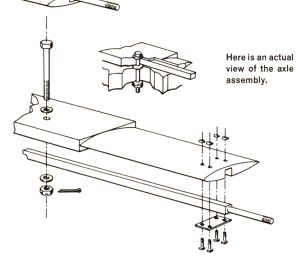
Put cotter pin through steering shaft against washer to hold shaft in position.



Five bolts through axletree and floorboard, as shown, will anchor rear axle.

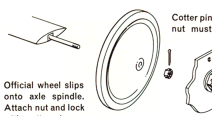


Top and bottom views of axle in axletrees.



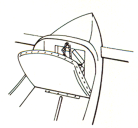
Here is an actual view of the axle assembly.

This expanded view of the axletree assembly shows the axle, top and bottom parts of axletree, kingpin, washer, nut and cotter pin. Note the kingpin does not go through the axle.



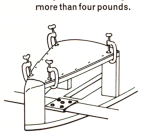
Official wheel slips onto axle spindle. Attach nut and lock with cotter pin.

Cotter pin through axle nut must be spread.

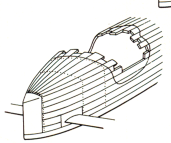


Seat backs may be used and, if used, must be removable or tilt forward for inspection. They should not weigh more than four pounds.

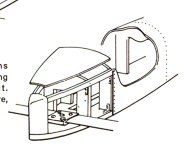
Use C-clamps to hold wood in position while inserting screws.

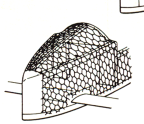


Strips of wood make good body covering; or car body may be laminated. Watch car weight if you use laminated body.



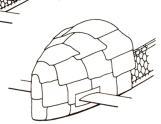
Cardboard patterns will help you in cutting body pieces to fit. Cover car with care, then paint.



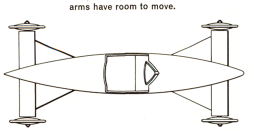


Chicken wire applied to body frame, then covered, is popular method.

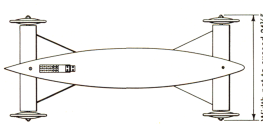
Paper or cloth, applied with lacquer-like sizing, makes durable body.



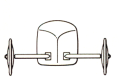
Direct side view of racer. Keep cockpit open so arms have room to move.



Top view of racer. Simple body lines encourage good streamlining. Nothing shown here disturbs slipstream while racing.



Bottom view of racer. Floorboard is smooth, and brake (pulled up) does not extend below floorboard surface.



Nose-end view of car. Rounded corners will give car less resistance to air.

Rear-end view. Check your car for proper wheel alignment.

Look over this chart ★ See how easy it is to build a racer!