

# **CAR SPECIFICATIONS (A)**

## **FLOORBOARD**

- Floorboards may be of (2) 2"X 6" joined together or (1) 2"X 12".
- The Length of the floorboard may be a minimum of 5' or 6' maximum.

## **CRATE ASSEMBLY**

- The crate shall resemble an Orange packing crate, made all in wood to the specifications provided (23 1/2"X 19"X 15") using the OD outside dimensions with the slats on. The framework shall be 1 1/2"X 1 1/2" and the slats shall be 23 1/2"X 3"X 3/8". You may use 1/2" instead of 3/8" but make sure to adjust to the dimensions provided. (There will be no exceptions)
- The crate will be made sturdy and open in all areas shown in the crate illustrations.
- The bottom of the crate at the floorboard will be completely enclosed.
- The crate will be flush with the front of the floorboard.
- The driver's legs and feet are to be contained within the crate.

## **AXLES ASSEMBLY**

- The axles are of two sections. A. 2"X 4"X 29 3/4" (wood) B. 1/2" only X 36" length threaded (steel) rods.
- The threaded rods are to be inserted into the wood axle by means of a 1/4" groove routed into the bottom and held into place using (4) mending plates for each axle
- The front axle will have the threaded axle offset in the wood to cover for the axle bolt system. You can have the axle in front or back of the bolt your choice but again allow 6" from center of threaded axle to front of floorboard so that the front wheels do not go past the front of the crate.

- The rear axle can be offset in the wood and must have (2) 1/2" bolts to hold together or you can center the axle and use (4) 3/8" bolts to hold the axle in place. Remember the wheels cannot go past the rear of the car.
- There will be a stop block 2"X 4"X 10" screwed to the bottom of the floorboard back of the front axle leaving enough clearance only to allow the axle having a turning radius of 3" (1 1/2" of travel from center of threaded axle in either direction).

## **BRAKE ASSEMBLY**

- The brake assembly shall be a scissors type, made with 2"X 4" material.
- The upper pieces are 2"X 4"X 8" and the bottom piece is 2"X 4"X 14 1/2".
- The rubber brake pad must be a minimum 3" square, which must strike the ground flat when braking is applied. (No steel wire showing)
- The brake pedal made of plywood measuring 3/4" X 8"X 10" allows for using both feet to stop the car.
- The brake cable or wire must be of 1/16" or 1/8" non-coated and shall be connected from the brake pedal to the brake assembly directly using eyebolts or pulleys and wire clamps to hold cable wire. The brake cable will follow the center of the floorboard making holes in proper places to allow free flow of the cable. No hand brakes allowed.
- If you do not have 10" diameter wheels you can use blocks of 4 3/4" in height to make proper adjustments for brake stopping.

## **STEERING ASSEMBLY**

- Each car shall have an 8" minimum diameter, non-metal steering wheel attached to a 1" diameter steering shaft (either hardwood dowel or steel pipe, no broomstick). That goes through a 2"X 6" wood frame assembly.
- The wire rope 1/16" or 1/8" non-coated shall pass through the steering shaft with a minimum of (3) tight turns around the shaft in both directions then through the pulleys to the steering axle.
- The attachment of the cable should connect to a turnbuckle using wire clamps to hold wire. The turnbuckle will hook onto a threaded eyebolt going through the wood axle from back to front holding with double nuts. After tightening use stranded safety wire making figure 8 through each end to insure that the turnbuckle does not turn.
- The center top slat from the crate should rest on the top 2"X6" plate of the steering frame when attached.

## **DRAWINGS**

The drawings attached are a guide to follow in making the racecar. The measurements provided are as if the wood used were of actual size (example 2"X 4"X 36") the length should remain the same but the width and height will vary about  $\frac{1}{2}$ " (2"X 4" is the normal size, 1  $\frac{1}{2}$ "X 3  $\frac{1}{2}$ " is actual size). Make sure that you allow for this in making, as the measurements in length will not proceed what is stated. Again the Orange Crate Committee will make final approval of the car passing inspection.

**Good luck!**