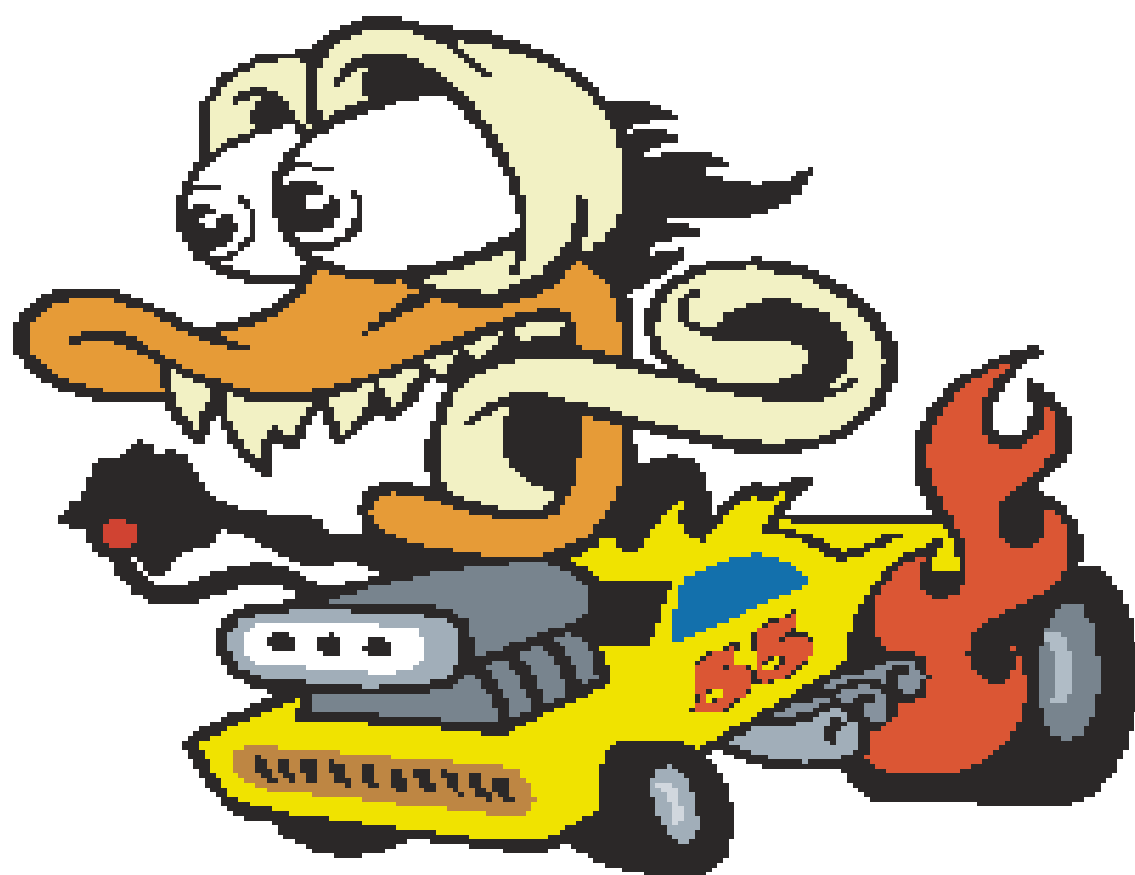


Hopkins Raspberry Racers

Soapbox Derby



Car Build Instructions

Tools Required:

The following tools will be needed to construct this kit.

- Safety Glasses
- Work Gloves
- Tape Measure
- Pencil
- Drill
- Drill & Screw Bits
- Socket Set
- Adjustable Wrench
- Pliers

Notes:

Components:

The following components are included in the kit. You will have extra hardware left after you complete the kit







Wood Parts


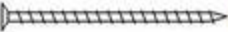
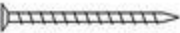



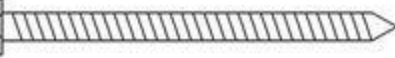
2 - 2"x4" @ 23"	1 - 3/4" Plywood @ 12"x14"
2 - 2"x4" @ 5"	1 - 2"x2" @ 5"
1 - 2"x4" @ 52"	1 - 2"x2" @ 14"
1 - 1"x4" @ 14"	1 - 2"x2" @ 21"
1 - 3/4" Plywood @ 14"x14"	2 - 1"x2" @ 12"

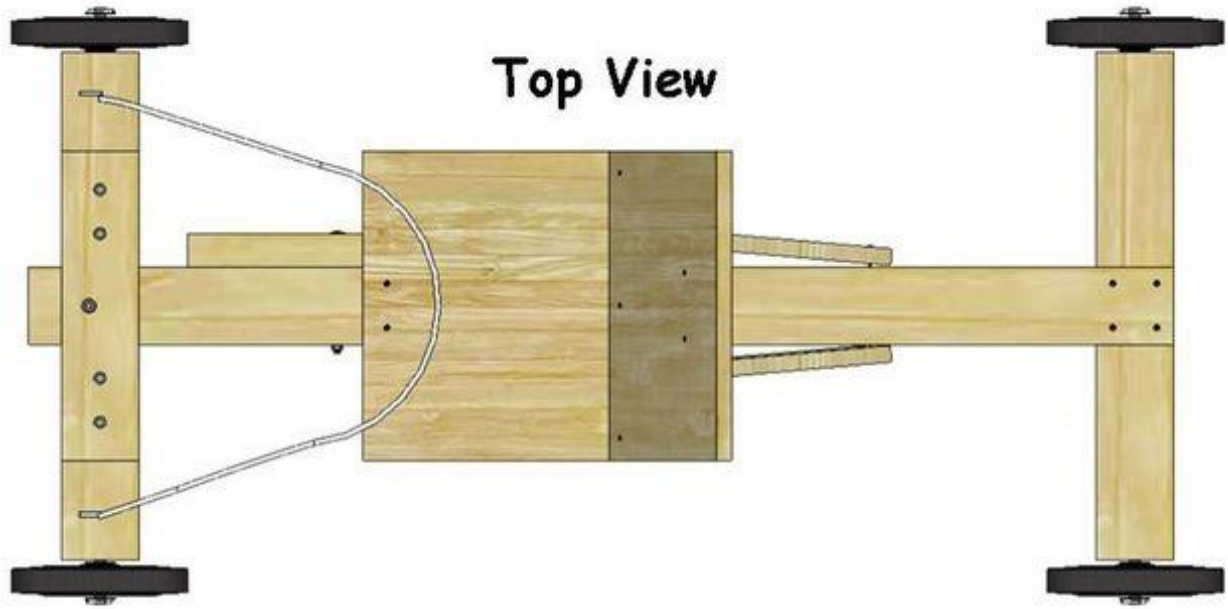
Hardware

4 - 1/4" x 3-1/2" Lag Bolts	20 - 1/2" Copper Pipe Holders
4 - 1/4" Fender Washers	40 - 1-1/4" Screws
1 - 5/16" x 5" Carriage Bolt	8 - 1/2" Fender Washers
1 - 5/16" x 5-1/2" Carriage Bolt	4 - 1/8" x 1-1/4" Cotter Pins
3 - 5/16" Fender Washers	2 - 1/2" x 28" Steel Axles
2 - 5/16" Stop Nuts	4 - Wheels
4 - 2-1/2" Screws	2 - #4 2-5/16" - 5/8" Eyebolts
3 - 2" Screws	1 - Section of Rope
15 - 1-5/8" Screws	

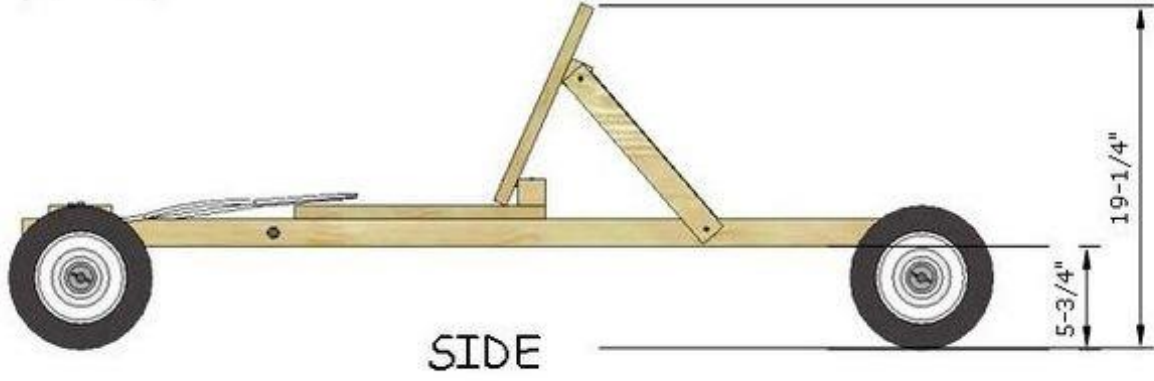
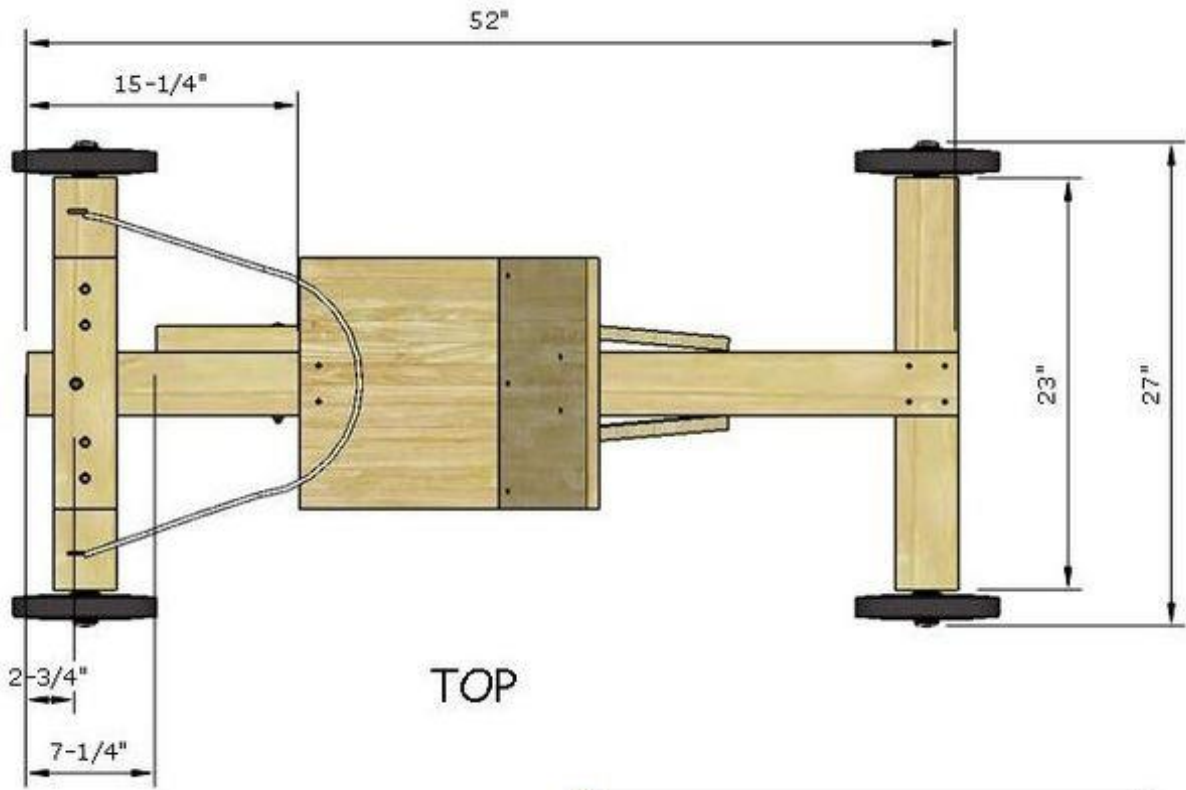
Hardware Reference Sheet

- 2 - 5/16" Stop Nuts  N1
- 4 - 1/4" Fender Washers  W1
- 3 - 5/16" Fender Washers  W2
- 8 - 1/2" Fender Washers  W3
- 2 - #4 2-5/16" - 5/8" Eyebolts  H1
- 4 - 1/8" x 1-1/4" Cotter Pins  P1

4 - 2-1/2" Screws	S1		<p>Note: The screws are printed at actual size. You can lay hardware on the sheet to confirm correct size.</p>
3 - 2" Screws	S2		
15 - 1-5/8" Screws	S3		
40 - 1-1/4" Screws	S4		
1 - 5/16" x 5" Carriage Bolt	C1		
1 - 5/16" x 5" Carriage Bolt	C2		
4 - 1/4" x 3-1/2" Lag Bolts	B1		



Soap Box Derby

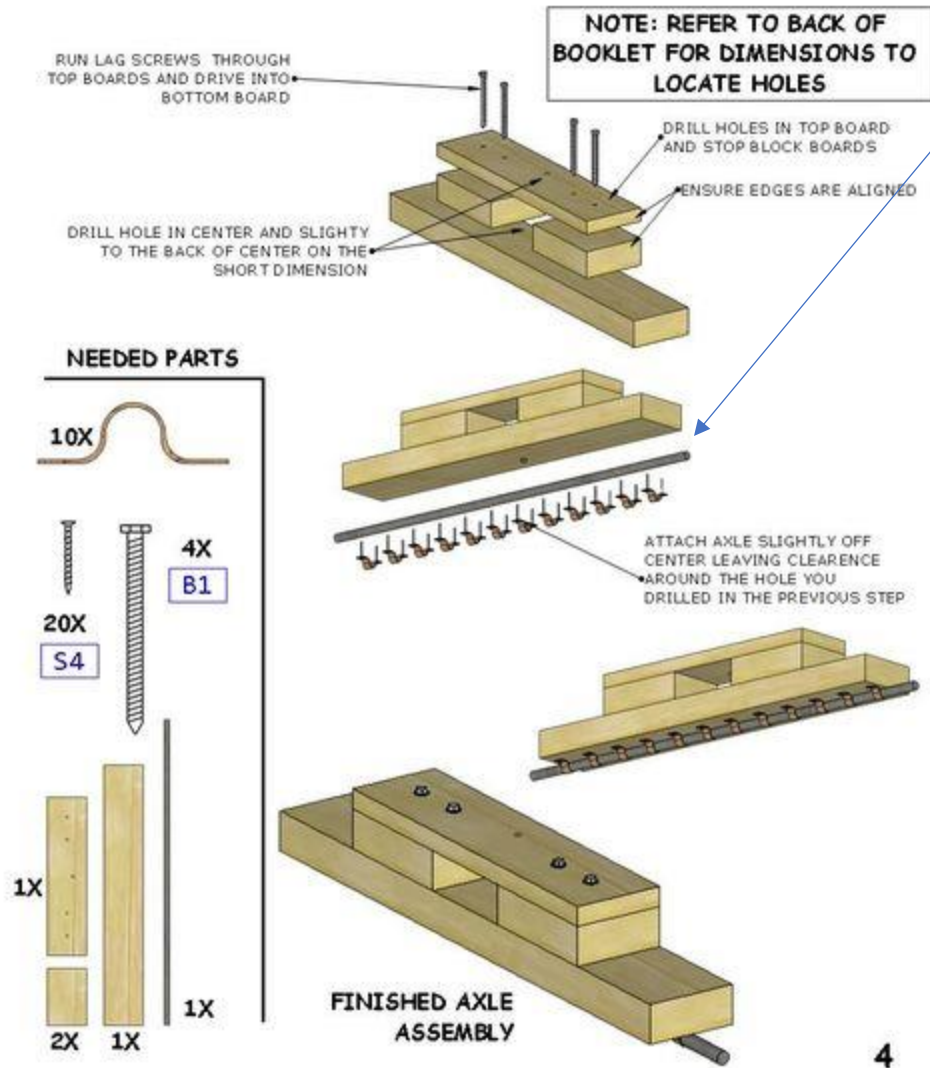


PRE-STEP 1.

Drill holes through axles 1/8 Inch Minimum to fit cotter pin

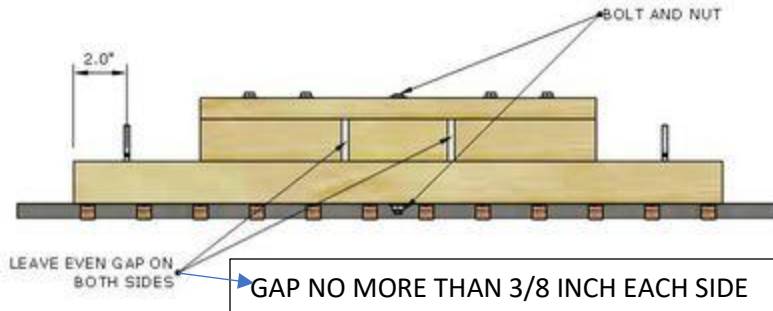
Step #1

In this step you will be assembling the front axle assembly.

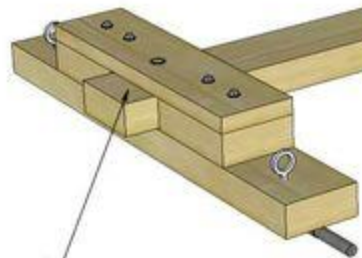
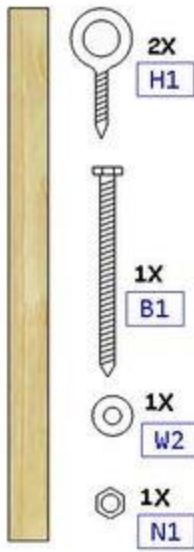


Step #2

In this step you will be attaching the front axle assembly to the frame board and the eye hooks to the axle.



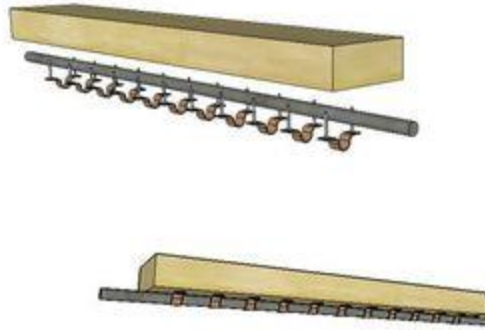
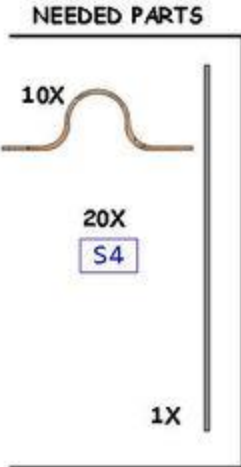
NEEDED PARTS



NOTE: TO DRILL HOLE THROUGH FRAME BOARD. SLIDE BOARD IN AXLE ASSEMBLY AND ALIGN WHERE YOU WANT IT. CLAMP IT DOWN TO AND DRILL HOLE.

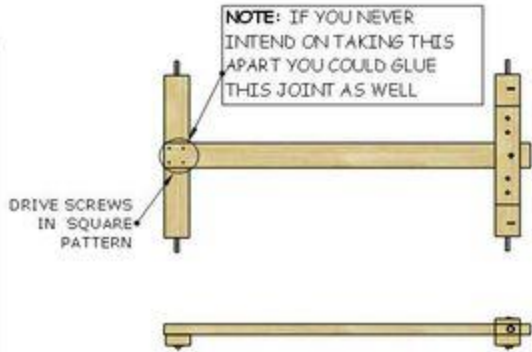
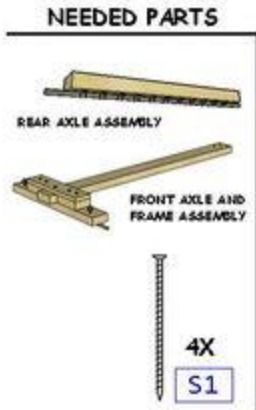
Step #3

In this step you will be creating the rear axle assembly.



Step #4

In this step you will be attaching the rear axle assembly to the frame board.



Step #5

In this step you will be building the seat on the frame.

** FOLLOW STEPS IN ORDER**

SCREW THIS BOARD AT THE DESIRED ANGLE TO THE 2X2 BLOCK ON BASE BOTTOM

4

1) SCREW THIS BOARD ON FIRST HAVE DRIVER SIT ON SEAT BASE (UNATTACHED) AND REST FEET ON FRONT AXLE TO FIND APPROPRIATE LOCATION

1

3) IT MAY BE EASIER TO ATTACH THIS PIECE TO THE SEAT BACK PRIOR TO INSTALLING SEAT BACK

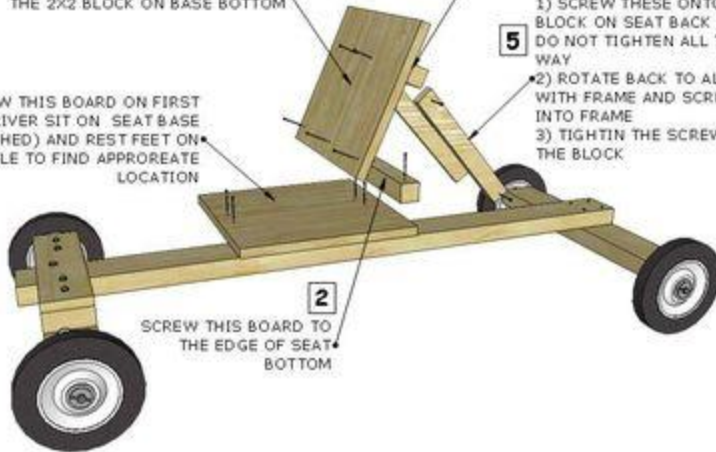
3

1) SCREW THESE ONTO BLOCK ON SEAT BACK BUT DO NOT TIGHTEN ALL THE WAY

5

2) ROTATE BACK TO ALIGN WITH FRAME AND SCREW INTO FRAME

3) TIGHTEN THE SCREW ON THE BLOCK



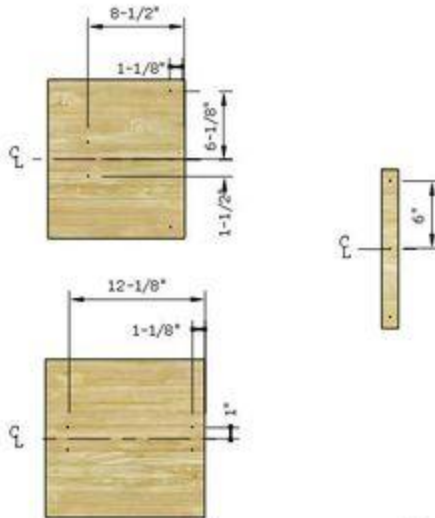
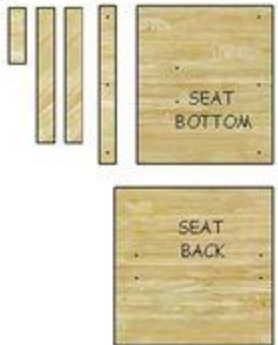
2) SCREW THIS BOARD TO THE EDGE OF SEAT BOTTOM

2

NEEDED PARTS

3X S4

13X S3



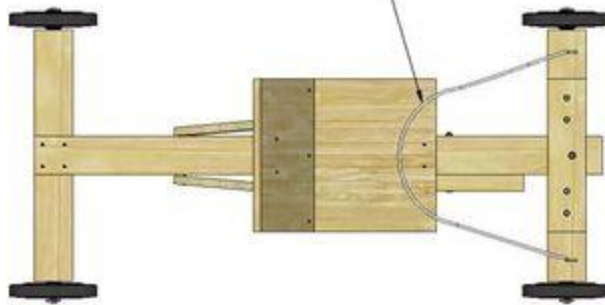
Step #6

In this step you will be attaching the steering rope, brake and the wheels.

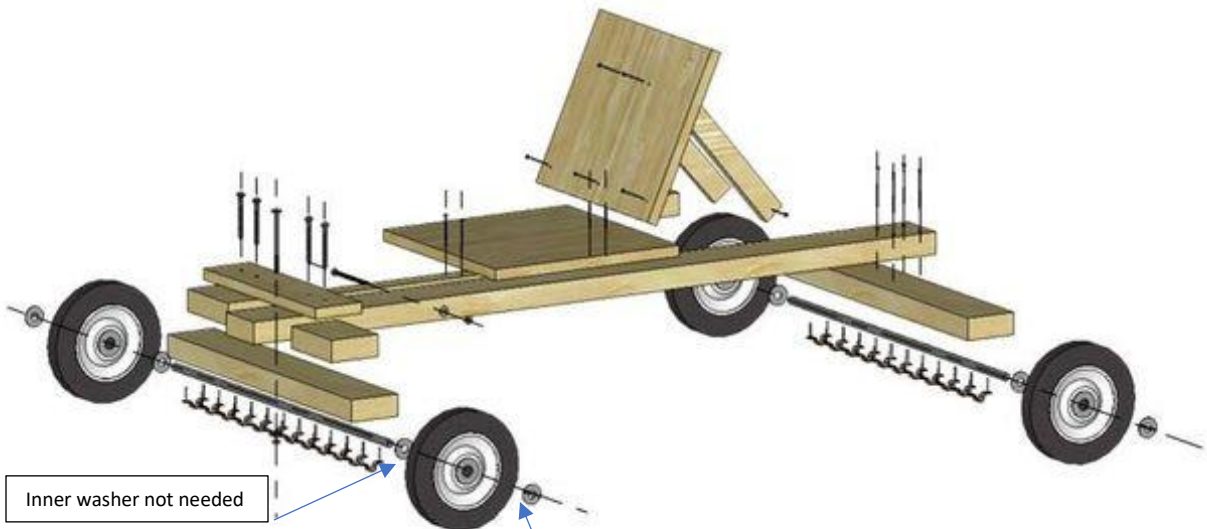


FOR THE BRAKE YOU WANT TO HAVE THE PIVOT SLIGHTLY INFRON OF THE SEAT FOR EASE OF USE DRILL THE HOLE SLIGHTLY OFF CENTER ON THE BRAKE BOARD

THIS IS APPROXIMATLLY WHERE THE ROPE SHOULD SIT ON THE SEAT. HAVE DRIVER SIT ON SEAT TO GET A CUSTOM FIT.



REFER TO FOLLOWING PAGE FOR WHEEL INSTALL



Inner washer not needed

Wheel Installation

Attach wheels as shown with washer on the outside of wheel with 1/8 cotter pin through pre-drilled hole.