

# HART™



## Sports Equipment Organizer

# PROJECT PLAN

**Finished Dimensions:** 48"h x 36"w x 24"d

**Skill Level:** Intermediate

# Materials

Item	Qty
2" x 4" x 8' Stud*	8
1/4" x 4' x 8' Plywood Board	1
Casters with 2" Swivel Plate and Screws	4
36" Bungee Cords	6
1/4" x 3- 3/4" Lag Thread Screw Eye	12
1" Brad Nails	1 Pack
2-1/2" Square Drive Round Head Pocket-Hole Wood Screws	
Drill Bits: 3/16"	
Sand Paper**: 150g, 220g & 320g	

\* Board Dimensions are "nominal". Actual dimensions are smaller due to lumber industry standards. Cuts are actual length.

\*\* Starting grit will depend on board surface condition, a rough surface will require starting with a coarse grit first.

Grit is measured in the coarseness of the particles on the sandpaper. The lower the grit number, the coarser the paper. Heavy sanding would require 60 to 80 grit, medium sanding would require 120 to 220 grit, and finish sanding would require 320 to 400 grit. Super fine sanding would be 600 grit and higher.

A select/premium board or plywood comes with a smoother surface finish. It is clear or has very few tight knots, and it will have straight and sharp edges. This grade of wood pairs well with other boards or panels better and requires less time to sand and finish.

# Tools Used



Miter Saw



Circular Saw



Drill/Driver



Jig Saw



Orbital Sander



20V 1.5Ah Battery



20V 4.0Ah Battery



Charger



18 GA Brad Nailer



Tape Measure



Safety Glasses



#2 Square Dr. bit



Drill Bits



Univ. Socket Set

Also Needed:  
Pocket Hole Jig,  
Clamps

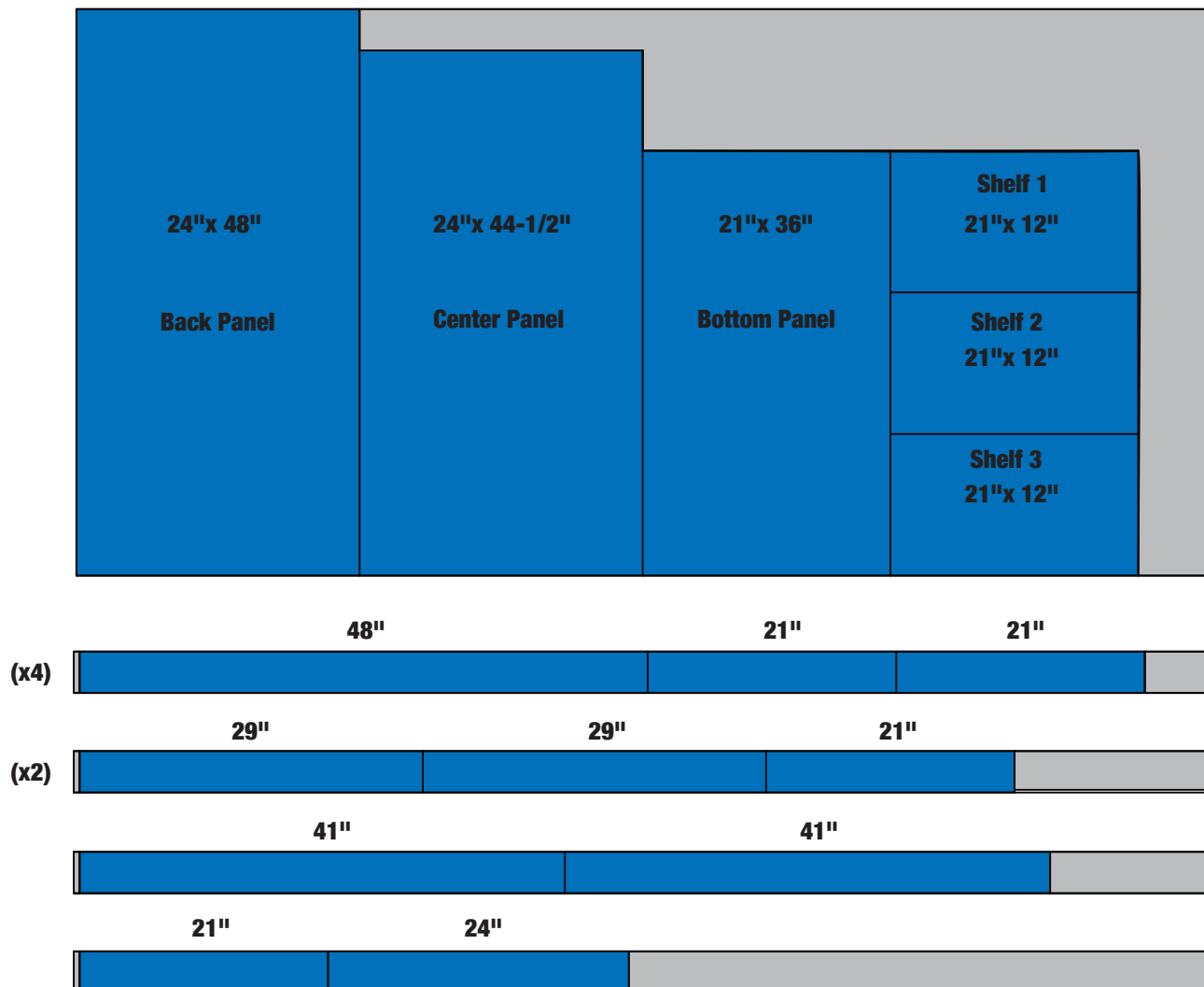
Battery Tip: A 4.0 Ah battery is recommended to be paired with high amp draw tools for maximum efficiency.

# Lumber Cut List

Board	Cut to	Qty
1/4" Plywood (Back Panel)	24" x 48"	1
1/4" Plywood (Bottom Panel)	21" X 36"	1
1/4" Plywood (Center Panel)	24" x 44.5"	1
1/4" Plywood (Shelves)	21" x 12"	3
2" x 4" Stud* (Corner Legs)	48"	4
2" x 4" Stud* (Top & Bottom rails)	29"	4
2" x 4" Stud* (Side Supports)	21"	11
2" x 4" Stud* (Center Supports)	41"	2
2" x 4" Stud* (Equipment Rack)	24"	1

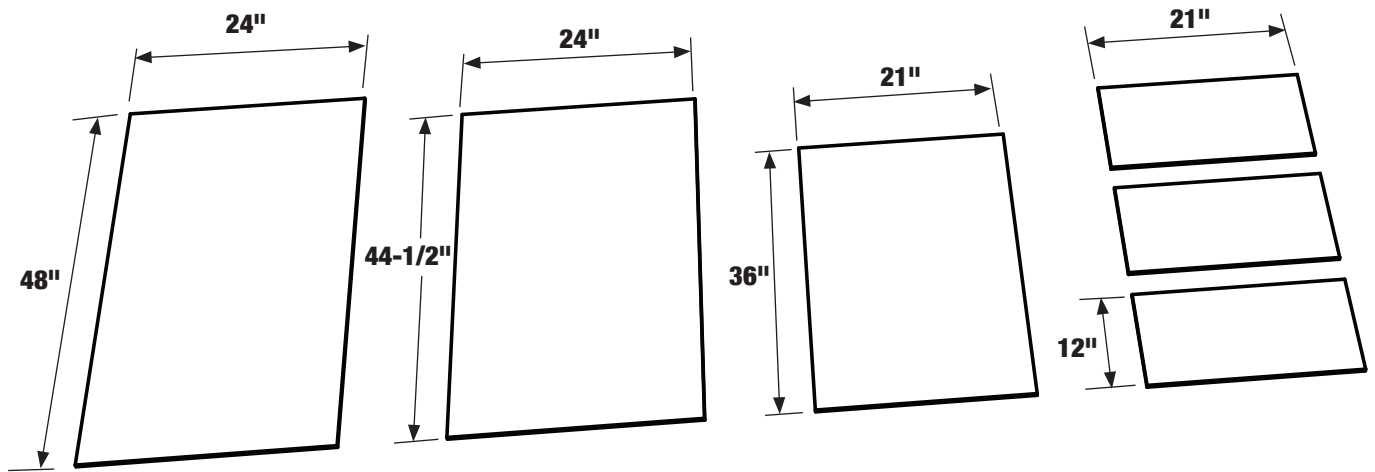
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## Lumber & Sheet Layout Guide

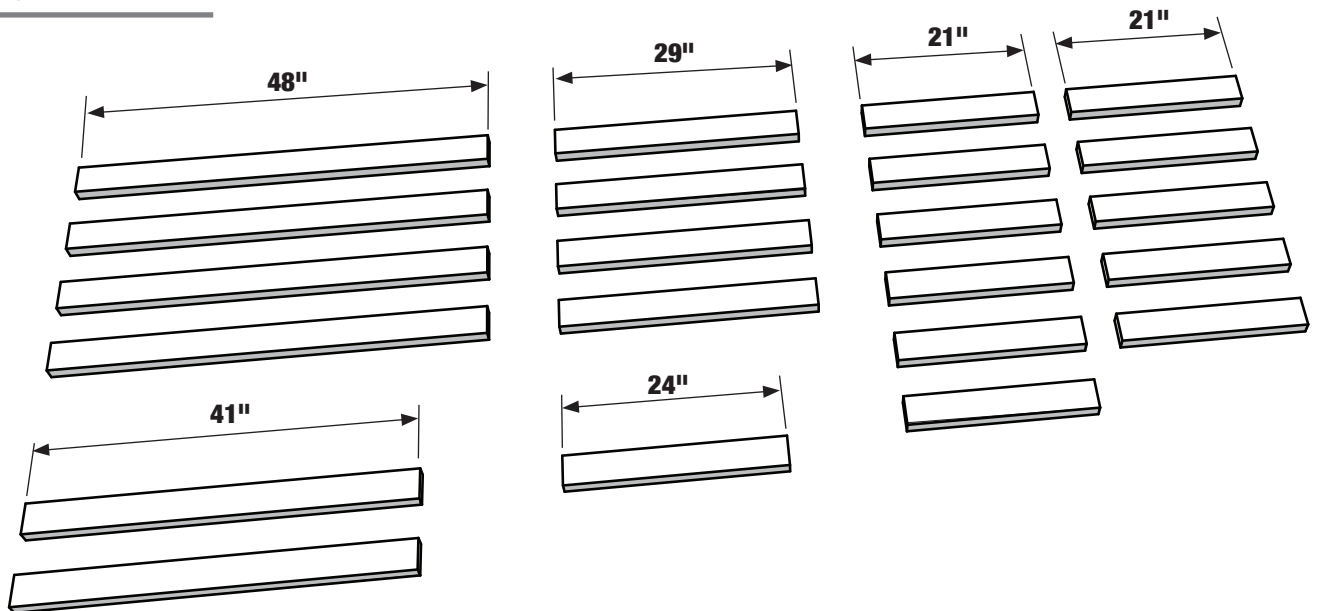


# Lumber & Sheet Cut Layout Guide

## Plywood Panels



## 2 x 4 Frames





# Assembly Instructions

## Step 1

Cut out all material using the Lumber & Sheet Cut Layout Guide.

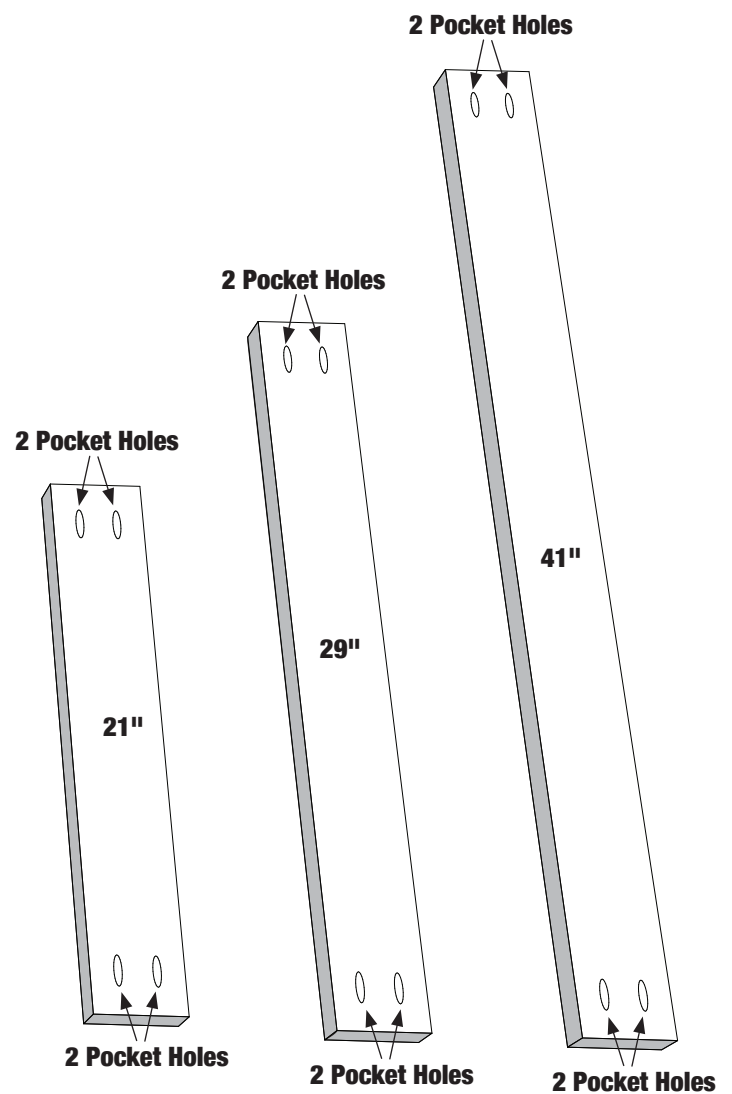
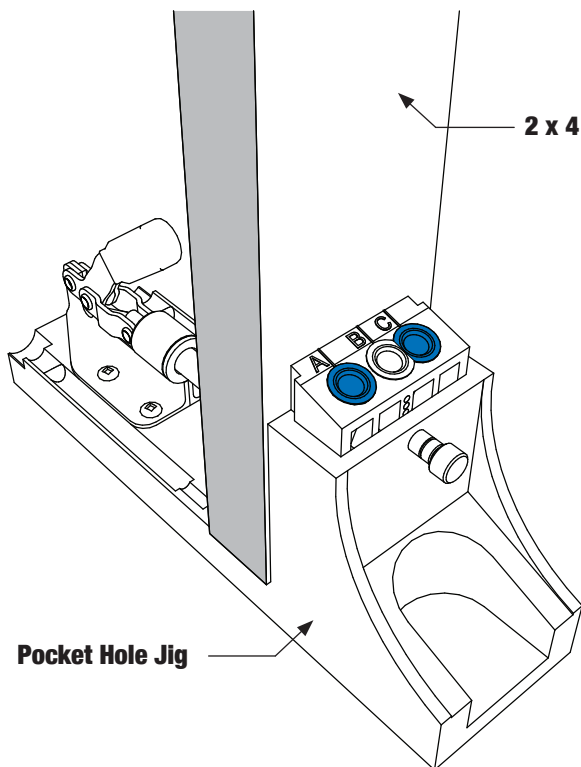


## Step 2

(2) pocket holes will be drilled into one side of each end of the 21", 29" and 41" rails and support boards.

Place the end of each board in the Pocket Hole Jig and center it. Clamp board to secure.

Use the (A&C) guide hole combination to drill pocket holes. Follow Jig instructions for depth of hole.



## Step 3

Take (2) Corner legs and (2) Top & Bottom Rails and attach together with the 2- 1/2" pocket screws to create a face frame.

Measure over 12" from one side and install a Center Support using Pocket Screws.

Repeat this entire Step 3 to create the other side of your Ball Storage Cart.

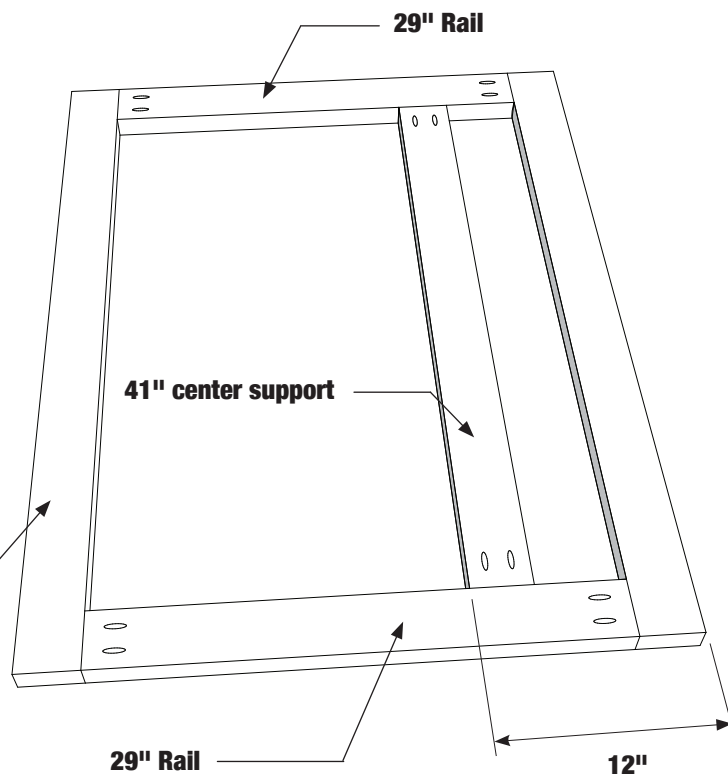
48" Corner Leg

29" Rail

41" center support

29" Rail

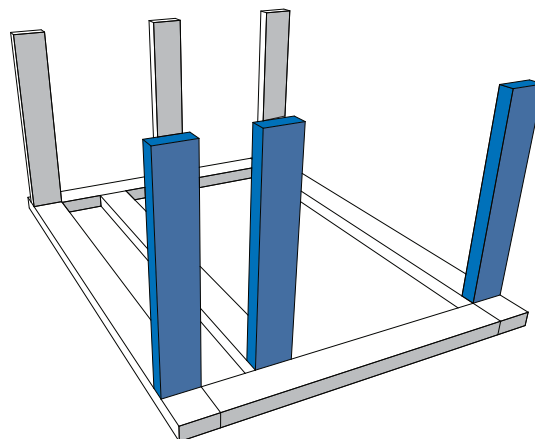
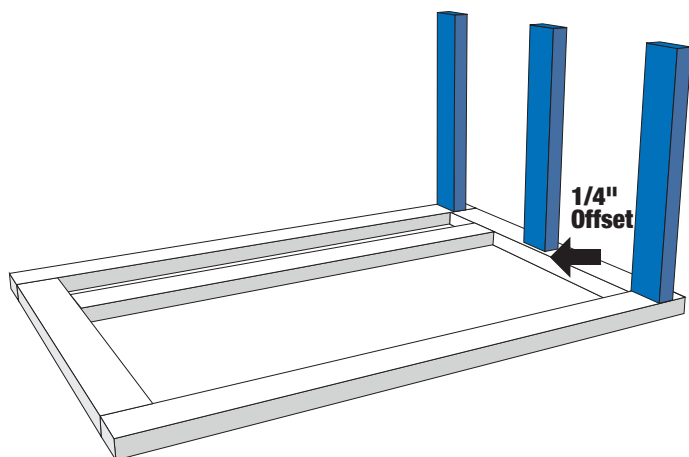
12"



## Step 4

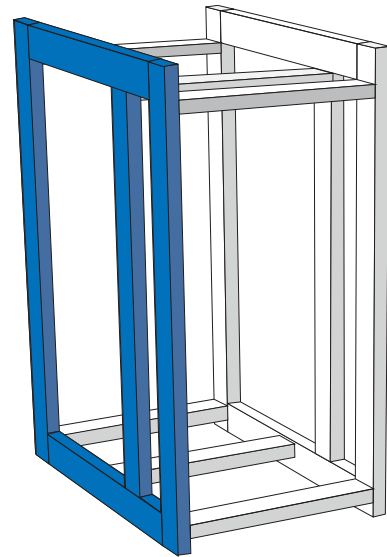
At the bottom of (1) face frame, attach (3) of the 21" Side Supports using pocket screws. Attach (1) Side Support on each corner and (1) in the center. Offset all 3 side supports by 1/4" from the inside edge of the 29" rail board. See diagram below.

Repeat Step 4 for the Top of the Sport Equipment Organizer. This time, make sure the middle Rail Support is directly in line with the top of the Center Frame Support. Align the other (2) 21" Side Supports with the Center Side Support. Follow diagram below.



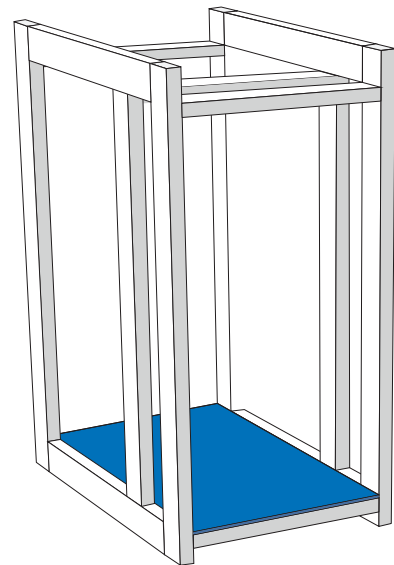
## Step 5

Now install the other Face Frame and additional side braces using pocket hole screws.



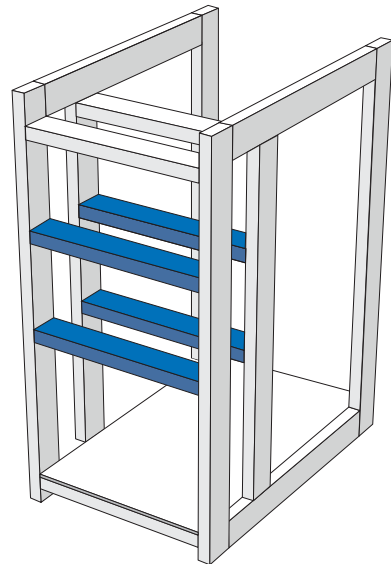
## Step 6

On the bottom of the organizer, install the 21" x 36" piece of plywood using finish nails.



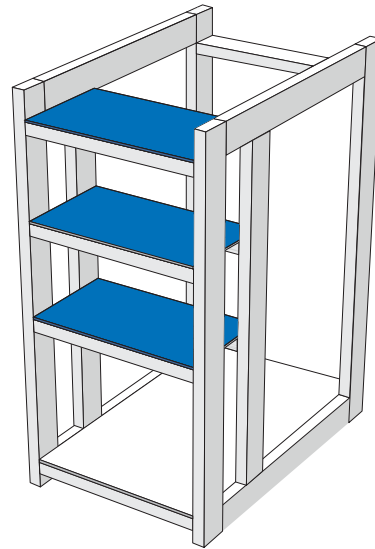
## Step 7

To create the shelves on the Sports Equipment Organizer, measure (3) equal spaces up the side of the cart. Install the side supports in the marked locations. Secure supports with pocket screws.



## Step 8

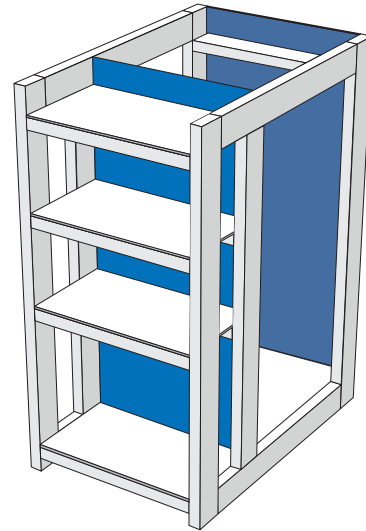
Place the 21" x 10 ½" pieces of plywood on top of the side supports. Secure shelves with brad nails.



## Step 9

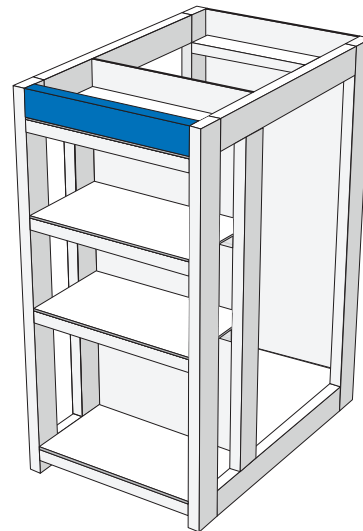
Using brad nails, install the 24"x 44 ½" plywood board on the Back Side of the Center Supports.

On the opposite side of the shelves, install the 24" x 48" plywood board on the outside of the cart.



## Step 10

Place a 21" stud as shown in the diagram below to enclose the top shelf. Secure the 21" stud with pocket screws.

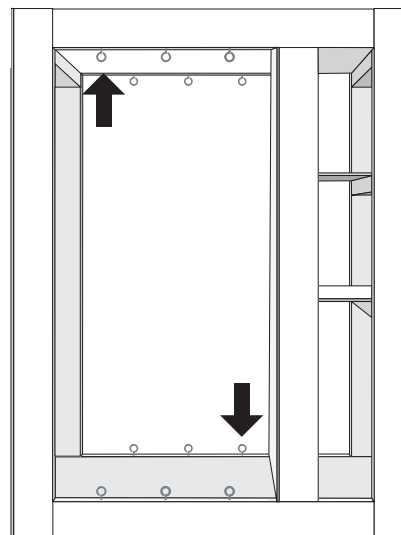
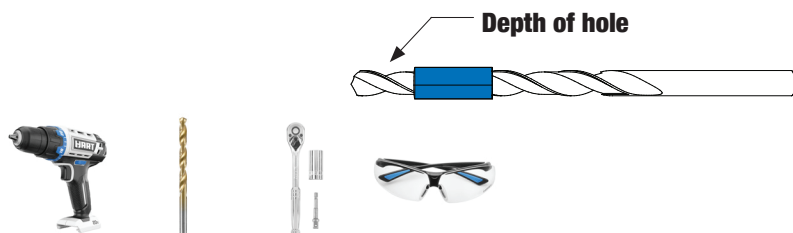


## Step 11

Drill (3) holes equally spaced with a 3/16" Drill Bit. Hole depth should match length of the thread on screw eyes.

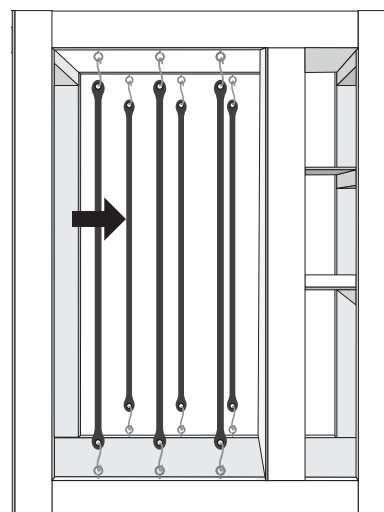
Install screw eyes inside the Sports Equipment Organizer using a Drill/Driver and Universal Socket.

**H** Tip -Wrap masking tape to set the depth of the hole. When the tape meets the wood, stop drilling.



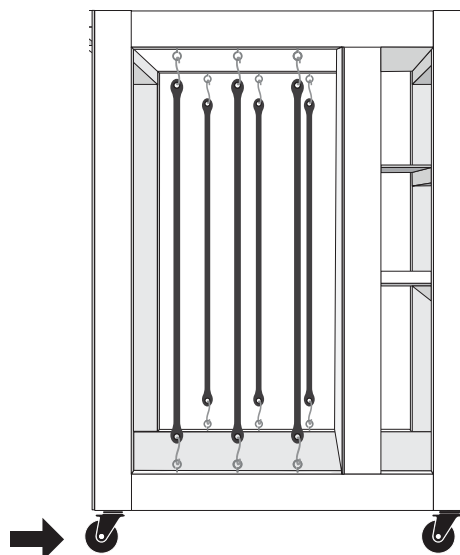
## Step 12

Connect Bungee Cords.



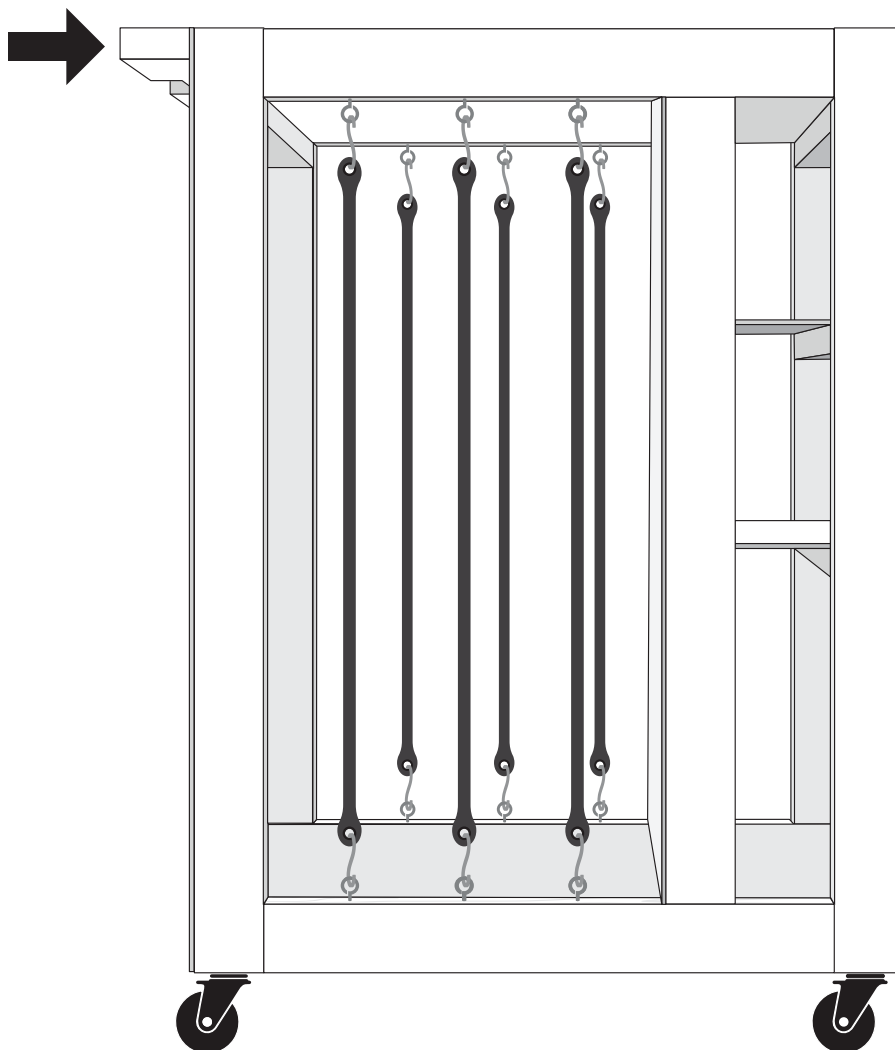
## Step 13

Flip cart over. Install casters.



## Step 14

To create baseball bat/hockey stick/etc storage, use the 24" stud. Cut holes for your desired equipment using a Jig Saw. Then attach to the cart on the opposite side of your shelf storage.



Sand and Finish to your desire.

**Rougher finish** – Use 60-80 grit sandpaper to hand sand with the grain of the wood.

**Smoother finish** – Use 60-80 grit sandpaper to remove scratches & imperfections.

Followed by using 120-220 grit to smooth.

**Finish Sanding** – Use 320-400 grit sandpaper

**Super fine sanding** – Use 600+ grit sandpaper