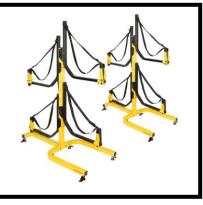
# 4-Boat Free-Standing Racks

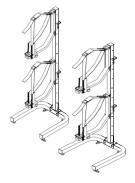
SKU: 30-0444

Updated November 2011

#### Contains:

- □ 2-Boat Free-Standing Racks (SKU 11-0203)
- □ 24" Back Legs (SKU 21-0401)
- □ 2 Sets of Deluxe Wall Mount Racks (SKU 11-0103)



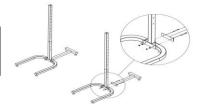


#### Box #1

2-Boat Free-Standing Racks	
Use Instruction Sheet in Box	1

#### Box #2

24" Back Legs	Qty
Use Instruction Sheet in Box	2





#### Box #3 & #4

Deluxe Wall Mount Arms for Back Side of Rack	Qty
Use Instruction Sheet in Box	2

#### Assembly Box #1:

Use 2-Boat Free-Standing Kayak Storage Racks (SKU 11-0203) Owner's Manual to assemble.

#### **Assembly Box #2:**

Use carriage bolts, washers & lock nuts from Free-Standing Floor Base & Base Post. Line up Back Leg to Free-Standing Floor Base; attach Back Legs. Use Back Legs (sku 21-0401) instruction sheet in box to assemble.

#### **Assembly Box #3 & #4:**

Place Deluxe Wall Mount Racks (sku 11-0103) on back side of rack. Use instruction sheet in box to help with arm placement.

#### Guarantee

All Suspenz products are guaranteed for one year for materials and workmanship. The guarantee is affective to the original owner and if the product was cared for and used in the manner it was intended. Contact Suspenz directly with any questions.

www.suspenz.com



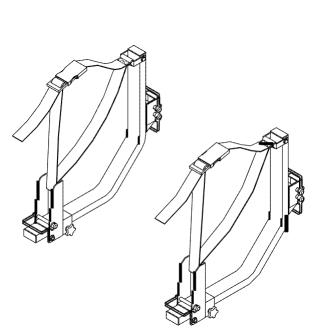
Suspenz Inc. 8725 Roswell Road #0-220 Atlanta GA 30350 770-518-0045



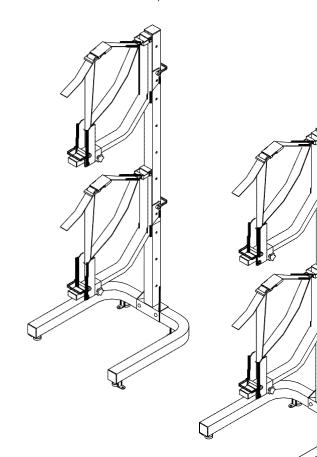


# **Kayak, Canoe & SUP Storage Racks**

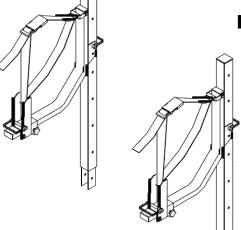
Standard Grade: SKU 11-0103, 11-0203 and 11-0303 Marine Grade: SKU 12-0103, 12-0203 and 12-0303







2-Boat Free-Standing



3<sup>rd</sup> Boat Expansion Rack

# Owner's Manual

Updated: October 2011

Suspenz™ Inc. 8725 Roswell Road #0-220 Atlanta, GA 30350 770-518-0045

web site: Suspenz.com

# **TABLE OF CONTENTS**

Important Satety Instructions Page 2 Warranty Information Page 3 Before Assembly Page 3 Free Standing Rack Assembly Page 4 Wall Mount Assembly Page 6 SPECIAL NOTE: **Expansion Rack Assembly** Page 7 Be sure to follow the "Rack Adjustment" section (pages 8-12) as this is where, **Rack Adjustment Instructions** Page 8 when done correctly, you will understand Page 12 Use Instructions and get the MOST out of these racks! Page 13 Safety Review Page 13 Strap Threading Page 14 Free-Standing Add-Ons

# **IMPORTANT SAFETY INSTRUCTIONS**

# Read all instructions before using this kayak storage rack.

- 1. Before using read <u>all</u> the; Assembly Instructions, Adjustment Instructions, Use Instructions, Caution Notes and Safety Notes.
- 2. Do not modify this kayak storage rack.
- 3. Refer to the manual whenever you have a question.
- 4. If the user needs more assistance, please contact Suspenz before attempting to use this rack.
- 5. Do not allow children to play on the rack with or without boats on it.
- 6. Inspect the rack on a monthly basis; make sure all the connections are tightly secured.
- 7. If the parts in the box do not match this Owner's Manual, do not assemble and contact Suspenz immediately for assistance. For more information go to SUSPENZ.com.
- 8. If the rack is not working properly contact Suspenz immediately.
- 9. If the user does not follow these warnings and instructions, it could result in serious injury, material damage (boat or anything nearby) or even death.
- 10. The intended use for these racks is to store kayaks.
- 11. Racks hold 1 to 3 kayaks that are up to 34" wide (beam), 23" deep and 100 lbs per kayak.
- 12. Store only one kayak per suspension bar.
- 13. If adding a 4<sup>th</sup> boat to the floor base rack, mount anchoring hardware to a wall stud at the top of the tower (post).
- 14. Safety straps are an integral part of the suspension straps they need to be fastened when the kayak is in storage.
- 15. Insert the locking pin into pivot arm when kayak is in storage, this is critical on all kayaks greater than 30 inches wide.

Suspenz can be reached by calling: 770-518-0045 Monday-Friday, 9:00 am to 6:00 pm (EST)

# **WARRANTY INFORMATION**

### **Limited Warranty**

**Suspenz, Inc** warrants your product against defects in materials and workmanship when used for the intended purpose of holding kayaks under normal use and conditions. Any unauthorized alterations or damage resulting from improper assembly will void this warranty.

This warranty is valid for one year on parts for the original owner only. The warranty begins from the date of purchase.

**Suspenz, Inc.** will provide a replacement part at no charge for any part found defective in material or workmanship during the warranty period. Under no circumstances will the manufacturer be responsible for damages or failures that occur as a result of improper assembly or failure to adjust and operate the storage racks correctly (per manual).

### **Return Policy**

30 day return policy with a 20% restocking fee. The original shipping and handling charges are non-refundable. User is responsible for Return Shipping costs. Or if bought from a retail store follow their policy.

Please contact Suspenz for a Return Authorization (RA) number before returning items, we will provide you with the shipping address at that time. 866-SUSPENZ (787-7369) or returns @suspenz.com

# **BEFORE ASSEMBLY**

Take a few moments to familiarize yourself with the specific parts hardware included with your product. Make sure all the parts and hardware are included in the cartons and examine them for any damage that may have occurred in transport. Some parts may be pre-assembled.

# **Tools Required for Assembly:**



Tape measure



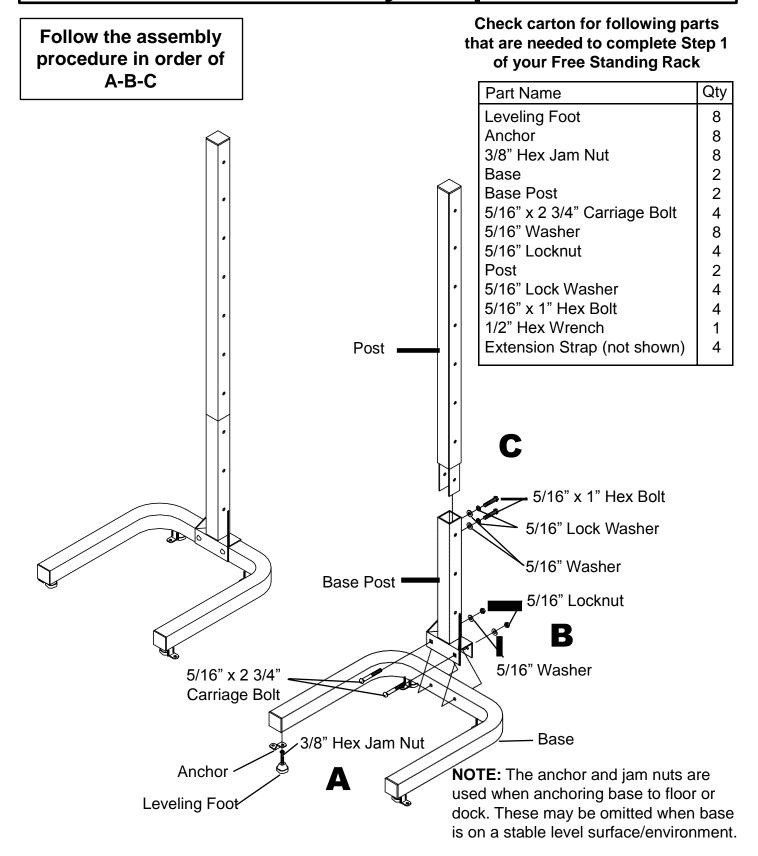
1/2" Wrench (supplied with Free-Stand Rack)



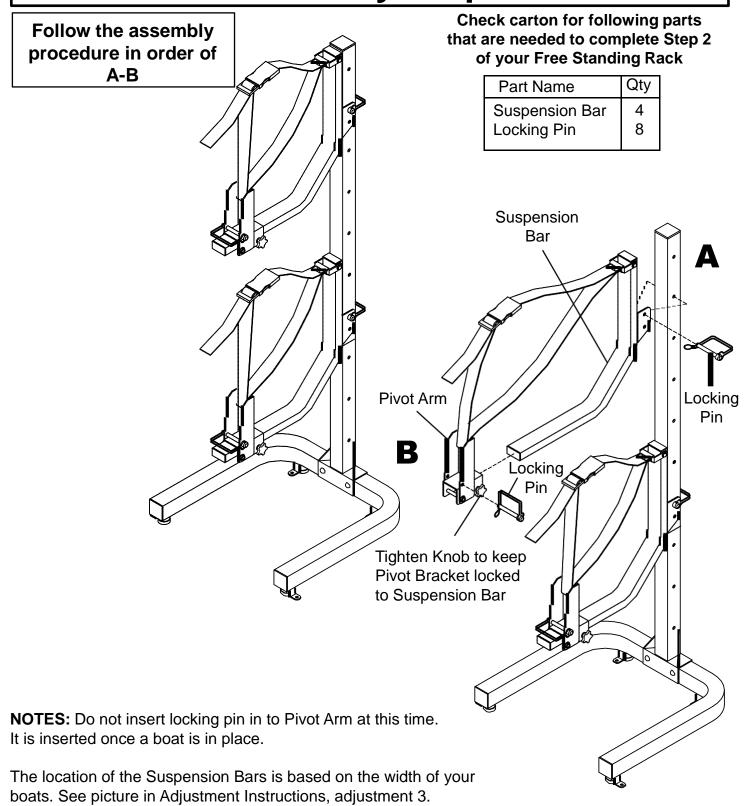
3/16" drill (for wall mount only)

Plus: A cold beverage of your choice

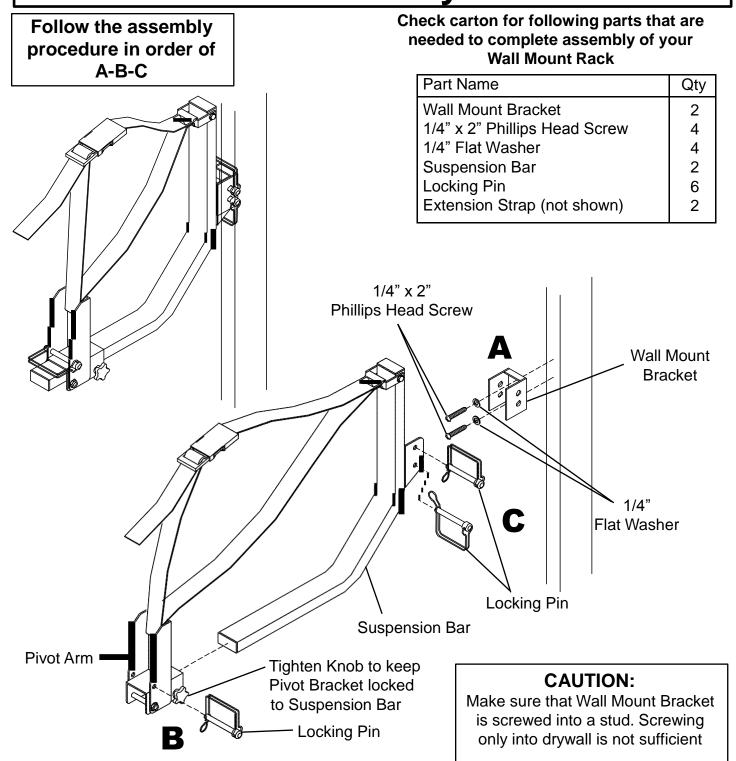
# FREE STANDING RACK Assembly Step 1



# FREE STANDING RACK Assembly Step 2



# WALL MOUNT RACK Assembly



**NOTES**: The horizontal distance between the wall mounts should be 40% to 50% of the length of the boat. (SEE CHART on page 8). Do not insert locking pin into Pivot Arm at this time. It is inserted once a boat is in place.

# **EXPANSION RACK Assembly**

Follow the assembly procedure in order of A-B-C

Check carton for following parts that are needed to complete assembly of your Expansion Rack

Part Name	
Post	2
5/16" Washer	4
5/16" Lock Washer	4
5/16" x 1" Hex Bolt	4
Suspension Bar	2
Locking Pin	4
1/2" Hex Wrench	1
Extension Strap (not shown)	2

2" Square Plug from Floor Rack

Locking Pin

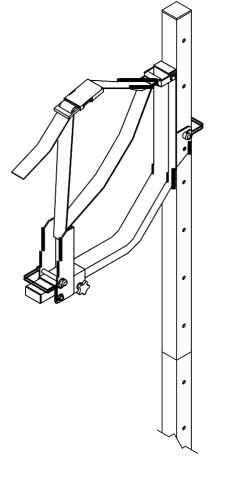
5/16" x 1" Hex Bolt

suspenz.com

5/16" Lock Washer

5/16" Washer

**Post** 



Suspension Bar Tighten Knob to keep Pivot Bracket locked to Suspension Bar

Locking Pin

**NOTES:** Do not insert locking pin into the Pivot Arm at this time. It is inserted once a boat is in place.

Remove the 2" Square Plug from the Floor Rack and insert into Post.

Page 7

# RACK ADJUSTMENT Instructions for All Boats

3 sets of adjustments are needed based on the length, width and depth of your boats:

A. LENGTH: The length of your longest boat

will determine the "tower" (or wall

mount) spacing.

B. WIDTH: The width of each boat defines

where the "suspension bar" is

placed on the post.

C. DEPTH: The depth of each boat defines the

position of the pivot arm and the length of the straps that your boat

is suspended on.

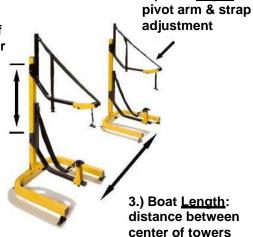
For WALL MOUNT RACKS skip adjustment 2.

Tower/Wall Mount Brackets Suspenz SPACING GUIDELINES®

Suspenz SPACING GUIDELINES®			
Boat Length	Ideal Tower (or wall mount bracket) Spacing (40%)	The min/max spacing for each kayak (35% / 50%)	
8'	3' 2"	2' 10" min. / 4' max	
8' 6"	3' 5"	3' min. / 4' 3" max	
9'	3' 7"	3' 2" min. / 4' 6" max	
9' 6"	3' 10"	3' 4" min. / 4' 9" max	
10'	4'	3' 6" min. / 5' max	
10' 6"	4' 2"	3' 8" min. / 5' 3" max	
11'	4' 5"	3' 10" min. / 5' 6" max	
11' 6"	4' 7"	4' min. / 5' 9" max	
12'	4' 10"	4' 2" min. / 6' max	
12' 6"	5'	4' 5" min. / 6' 3" max	
13'	5' 2"	4' 7" min. / 6' 6" max	
13' 6"	5' 5"	4' 9" min. / 6' 9"max	
14'	5' 7"	4' 11" min. / 7' max	
14' 6"	5' 10"	5' 1" min. / 7' 3" max	
15'	6'	5' 3" min. / 7' 6" max	
15' 6"	6' 2"	5' 5" min. / 7' 9" max	
16'	6' 5"	5' 7" min. / 8' max	
16' 6"	6' 7"	5' 9" min. / 8' 3"max	
17'	6' 10"	5' 11" min. / 8' 6"	
17' 6"	7'	6' 2" min. / 8' 9"max	
18'	7' 2"	6' 4" min. / 9' max	
18' 6"	7' 5"	6' 6" min. / 9' 3" max	
19'	7' 7"	6' 8" min. / 9' 6" max	
19' 6"	7' 10"	6' 10"min. / 9' 9" max	
20'	8'	7' min. / 10' max	
20' 6"	8' 2"	7' 2" min. / 10' 3"max	
21'	8' 5"	7' 4" min. / 10' 6" max	
21' 6"	8' 7"	7' 6" min. / 10' 9" max	
22'	8' 10"	7' 8" min. / 11' max	
22' 6"	9'	7' 11"min. / 11' 3" max	

# 3 Simple Adjustments to fit your kayak:

1.) Boat <u>Width</u>: vertical position of the suspension bar



2.) Boat Depth:

# A.) Adjustments based on boat LENGTH:

# Adjustment 1: Tower (or wall mount) Spacing:

Measure the length of your kayak. Position the towers (or wall mounts) so the length and weight of the boat are balanced equally on the suspension straps, meaning the distance between them is ~40% of the length of kayak.

Example: If your kayak is 16' (192") long, the center of the towers should be 77" apart.  $(192" \times .4 = 77" / 6'5")$ 

Here is a spacing guide line<sup>®</sup> chart to help you decide what will work best for you.

# **Adjustment 2: Level the Towers**

# a) Eliminate Rocking:

Rotate the leveling feet by hand so that all four feet make contact with the floor. It is important that the base does not rock.

# b) Side - Side Leveling:

If post is not vertical adjust both feet on one side of the base to make the post vertical (this is a good time to use the level).

## c) Fore - Aft Leveling:

Rotate the two front feet by a similar amount so that the post is vertical or has a slight backward lean (this is a good time to use the level). The post should not lean forward in the unloaded state. It is normal for the posts to tilt slightly forward when boats are loaded.

# B.) Adjustments based on boat WIDTH:



# Adjustment 3: Set the height of the lowest Suspension Bar

The lowest height for the bottom Suspension Bar is shown. The Locking Pin (11) goes through the lower hole of the Suspension Bar (10) and the **center hole** of the base post (2).

We suggest starting at this lowest position if one of the boats is wide (> 30 inches). If all of your boats are narrow, you can start with a higher bottom position.

The next suspension bar position should leave a 2"-6" gap above the lower boat. (See Adjustment 8)

**NOTE:** Place the widest boat on the bottom rack position. (this maximizes rack stability)

# C.) Adjustments based on boat DEPTH:

### Adjustment 4: Set the position of the Pivot Arm

Boats can vary greatly in their cross section. The next two adjustments are starting point adjustments that work well for an average boat. You may need to fine tune them once your boat is in place. Once the Pivot Arms and straps are adjusted, they will not need to be adjusted again for the same boats.

You will need to determine the depth of your boat at its' suspension points. Lay your boat flat on the ground centered in front of the towers as if you were getting ready to place it in the rack.

Now measure the depth of the boat at the points that line up with each tower. Write down these depths.

Adjust the Pivot Arm distance on each Suspension Bar so that it equals the depth of the boat + 4 1/2 inches. Tighten knob to lock pivot bracket in place.

**NOTE:** If knob doesn't tighten completely then unscrew knob and add a washer.

**Caution:** Do not exceed 18½" inches for the Pivot Arm Distance so that locking pin will engage.



# Adjustment 5: Set the Strap Length

Adjust the length of the support strap so that the Pivot Arm lays horizontal when the strap is tight, as show.

**NOTE:** Pivot arm should fall freely, If not, loosen hex bolt and nut (item 8 & 21) with hex wrench.

Page 9 **SUSPENZ.COM** 

Pivot Arm Distance

### **Adjustment 6: Verify Adjustments and Fine Tune**

Since boats can vary greatly in their cross section, you may need to fine tune adjustments 4 & 5. Set Pivot Arms in their horizontal (open) position. Place the boat in the rack to assess the fit.

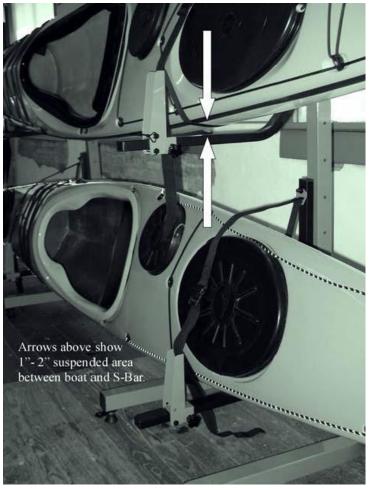
If you have not yet opened your cold beverage, this would be an appropriate time to do so.

a) Pivot arms are adjusted to "suspend" boat on its side so it is nearly at right-angle to the floor (be sure to tighten knob when adjusting Pivot arms).

Top of boat should lean slightly toward back of rack when on its side (this prevents the boat from falling forward).

There should be a small gap between the top of the pivot arm and the boat such that the pivot arm does not touch the boat.





b) There should be a gap of about 1-2 inches between the boat and the suspension bar. Adjust the length of the strap to achieve this.

**Caution:** The boat should be removed before adjusting the strap length (strap length is adjusted at the pivot arm).

# Adjustment 7: Adjust Safety Strap and Add Extension Strap if Needed

Verify that the safety strap can be connected over the top of the boat. For some larger boats, you will need to add the Extension Strap to have enough length.



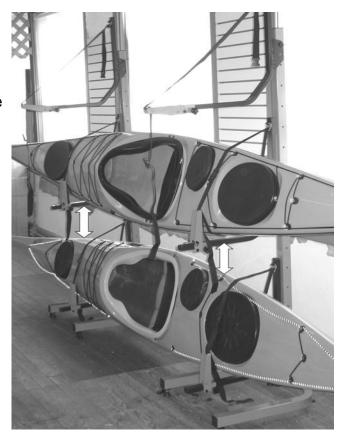


Adjust the safety strap length to achieve a snug fit.

# Adjustment 8: Configure For the Next Boat Add the Suspension Bars for the next boat then repeat adjustments 4 – 7 for this boat. Repeat again if you are using the Expansion Rack to hold 3 boats.

# **Next Suspension Bar Position:**

Position the next set of Suspension Bars to leave a small gap (2 - 6 inches) above the boat below.



# **USE INSTRUCTIONS**

### To load

Open pivot arms (horizontal) toward front of rack, this will give more clearance for boat and ease loading.

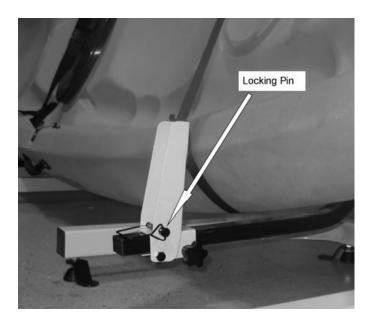
Center boat so same amount of the boat is "suspended" beyond each end of straps.

When boat is positioned on its side and lowered onto straps, the Pivot arms will snap up into vertical position... *The Magic Moment!* 

Adjust angle of boat to a secure resting position, fasten safety straps.



**NOTE**: top side of boat should lean slightly toward back of rack when boat is on its side. This prevents the boat from falling forward.



Insert locking pin into pivot arm to lock it in the closed position.

Important: This is a safety requirment to prevent pivot arms from opening unintentionally.

# To unload

Remove locking Pin (place locking pin in an empty post hole for safe storage) Release safety straps, lift boat slightly and move toward front of rack. You do not need to lift your boat over the pivot arms, they will fall forward automatically when weight of boat has been lifted.

# **SAFETY REVIEW**

- Allow enough time to set up racks properly. Make sure hardware is securely tightened. Install racks on a level surface.
- Once racks are set up, check for stability, secure (adjustment 2) or re-locate racks if necessary.
- Anchors on leveling feet should be secured with a screw (not supplied) to floor if additional stability is needed. This is a requirement if on a dock.
- Be sure to fasten safety straps and insert locking pins in pivot arms when storing boats.

# STRAP THREADING

The strap will be threaded through the pivot arm when received however, if you need to rethread it follow these instructions::

Step 1



Step 2



Step 3



Step 4



Step 5



Step 6



Page 13 **SUSPENZ.COM** 

# **Customize your Free-Standing Racks**

Add Any of These Parts...



# See our selection of Portable Boat Stands and Kayak & Canoe Carts

SUP Racks (1 or 2)



24" & 33" Portable Boat Stands





Smart SK Cart



Smart Sit-On-Top Cart

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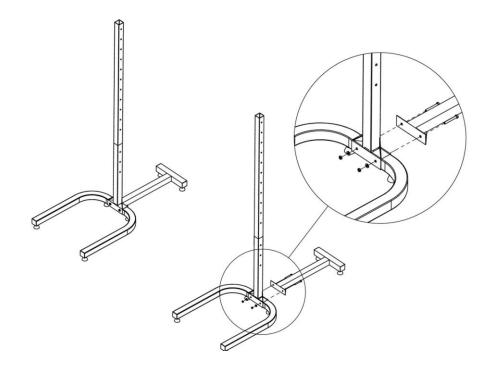


# 24" Back Legs

To be used with Free-Standing Rack

SKU 21-0401

Updated October 2011





Example of Back Leg in use.

# **Tools Required:**

1. Adjustable Wrench

Item #	Parts List	Qty
1	Yellow Back Leg	2
2	Leveling Foot	4
3	Anchor	4
4	Hex Jam Nut	8

### Assembly:

- 1. Remove the carriage bolts, washers & lock nuts from original Free-Standing Floor Base & Base Post.
- 2. Line up Back Leg to Free-Standing Floor Base; attach Back Leg using the original hardware.

**NOTE:** When putting attachments on the back-side of the rack, they should not extend more than 24". Currently the SUP Racks, EZ Racks and Deluxe Racks will work well on the backside. Cross-Bar is required when casters are used.

#### Guarantee

All Suspenz products are guaranteed for one year for materials and workmanship. The guarantee is affective to the original owner and if the product was cared for and used in the manner it was intended. Contact Suspenz directly with any questions.

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