



VESTIL MANUFACTURING CORP.

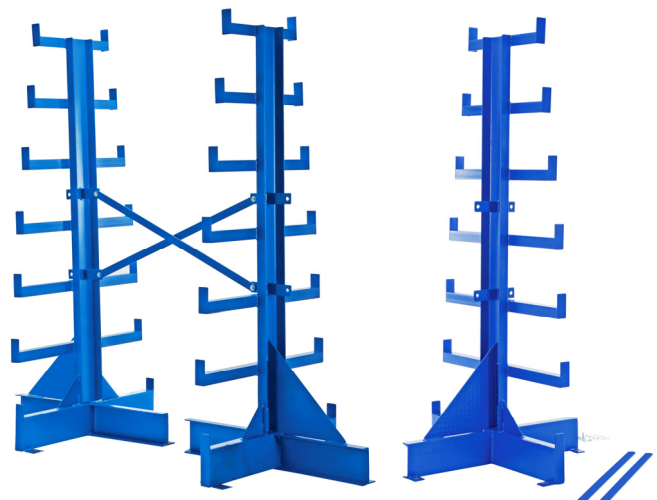
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BAR Series Warehouse Racks
 Assembly, Installation, and Maintenance Manual



BAR-R-84-S

BAR-A-84-S
(Add-on unit)



BAR-R-84-D

BAR-A-84-D
(Add-on unit)

Receiving instructions:

After delivery, IMMEDIATELY remove the packaging from the product. Then inspect the product closely to determine whether it sustained damage during transport. **If damage is discovered, immediately record a complete description of the damage on the bill of lading.** If the product is undamaged, discard the packaging.

NOTES:

- 1) Compliance with laws, regulations, codes, and non-voluntary standards enforced in the location where the product is *used* is exclusively the responsibility of the owner/end-user.
- 2) VESTIL is **not liable** for any injury or property damage that occurs as a consequence of failing to apply either: a) the instructions in this manual; or b) information provided on labels affixed to the product.

Vestil is not responsible for *any* consequential damages sustained while assembling, installing, using or maintaining this product.

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Signal words:

This manual uses “Signal words” to indicate the likelihood of personal injuries, as well as the probable seriousness of those injuries, if the product is misused in the ways described. Call attention to uses of the product likely cause property damage. The signal words used appear below along with the meaning of each word:



Identifies a hazardous situation which, if not avoided, **WILL** result in **DEATH** or **SERIOUS INJURY**. Use of this signal word is limited to the most extreme situations.



Identifies a hazardous situation which, if not avoided, **COULD** result in **DEATH** or **SERIOUS INJURY**.



Indicates a hazardous situation which, if not avoided, **COULD** result in **MINOR** or **MODERATE** injury.



Identifies practices likely to result in product/property damage, such as operation that might damage the product.

Safe use recommendations:

Vestil strives to identify all of the hazards associated with the use of its products. However, material handling is dangerous and no manual can address every risk. Ultimately, the most effective means for avoiding injury is for the end-user to exercising sound judgment during the assembly, installation, and use of this rack.



If this product is used improperly or carelessly, personal injury might result.

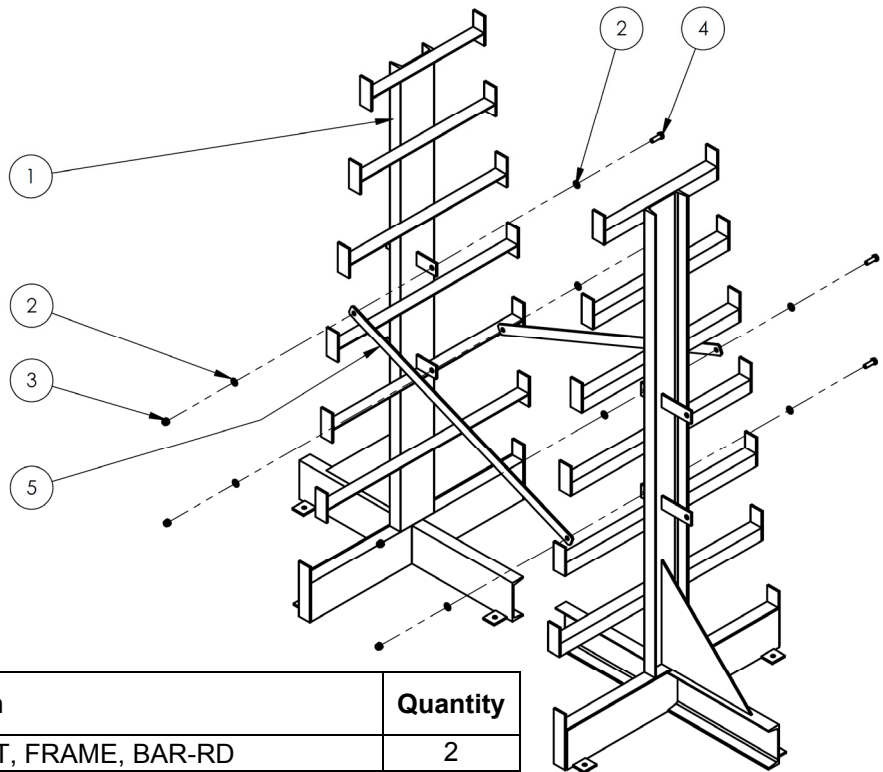
- **Failure to read and understand the entire manual before assembling, installing, loading or servicing the product constitutes misuse.** Read the manual to refresh your understanding of proper use and maintenance procedures as necessary.
- DO NOT exceed the maximum rated load.
- Inspect the rack periodically (AT LEAST once per month). DO NOT continue to use the rack if the inspection reveals structural damage. Examples of structural damage include: 1) warped, deformed, or damaged dividers or base frame; 2) cracked welds; 3) enlargement of bolt holes; 4) corrosion, severe wear, or other condition that affects the ability of the product to support weight; 6) damaged, deformed or cracked channels (for machined nuts). Immediately tag out the rack, unload it completely, and replace each part that fails to pass an inspection. DO NOT use the product until it is fully restored to normal condition. ONLY use manufacturer-approved replacement parts.
- DO NOT use the product if any unusual noise or movement is observed. If a malfunction occurs, remove the unit from service and notify your supervisor or maintenance personnel about the issue.
- All loads stored on the rack must fit within the dimensions of the rack. DO NOT store any load that hangs over the rack.
- DO NOT use the rack UNLESS it is securely anchored to the ground.
- ALWAYS evenly distribute and center loads applied to the rack.
- ONLY install this rack on even, level surfaces.
- DO NOT remove or obscure any label. All product labels must be readable and undamaged.
- DO NOT climb on the rack.
- DO NOT modify the rack in any way. Unauthorized modifications automatically void the limited warranty (see p. 6) and might make the rack unsafe to use.



Proper maintenance is essential for this product to function properly and to last as long as possible.

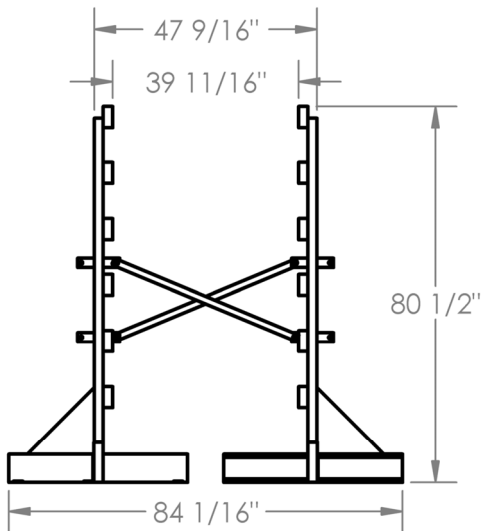
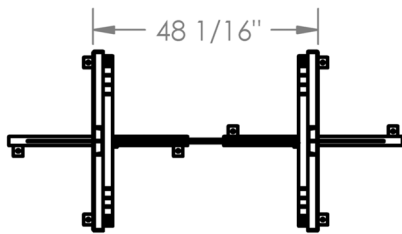
- Always use this product in accordance with the instructions in this manual and consistent with any training relevant to the storage of materials on racks.
- Keep the rack clean & dry.

FIG. 1A: BAR-R-84-D Exploded Parts Diagram and Bill of Materials



Item no.	Part no.	Description	Quantity
1	31-514-063	WELDMENT, FRAME, BAR-RD	2
2	33011	1/2 USS FLAT WASHER PLAIN	8
3	37030	1/2" -13 NYLON INSERT LOCK NUT	4
4	12209	1/2 – 13 GR. 5 X 1 1/2 LG.	4
5	31-017-017	BAR STIFFENER, UPRIGHT, BAR RACK	2

FIG. 1B: BAR-R-84-D dimensions and capacity



Overall width = $38\frac{1}{2}$ "
 Overall length = $84\frac{1}{16}$ "
 Overall height = $80\frac{1}{2}$ "
 Capacity = 500lb. per arm
 Storage bays = 6
 Bar stock stored on both sides of uprights.

Construction includes anchor bolt brackets for $\frac{1}{2}$ " anchor bolts of appropriate length as selected by your building engineer.

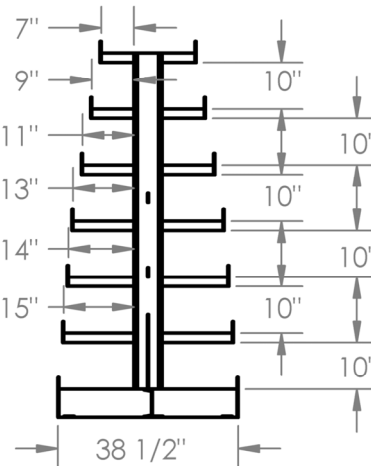
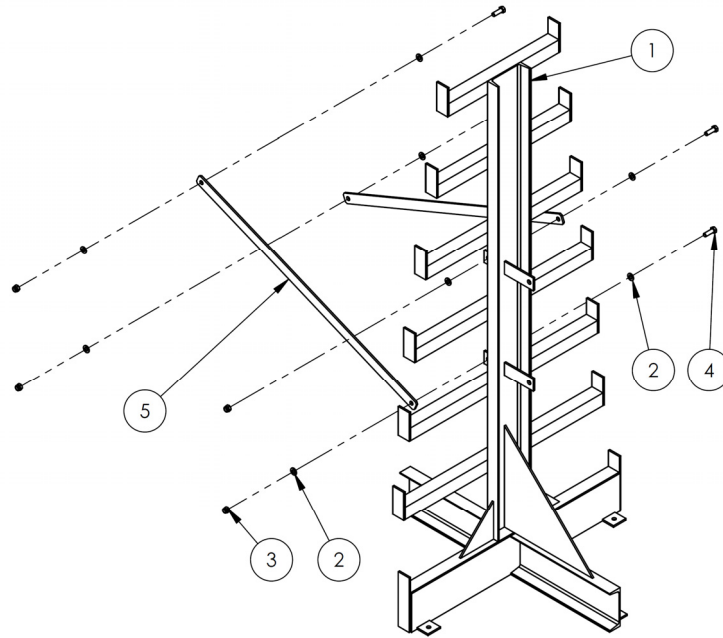
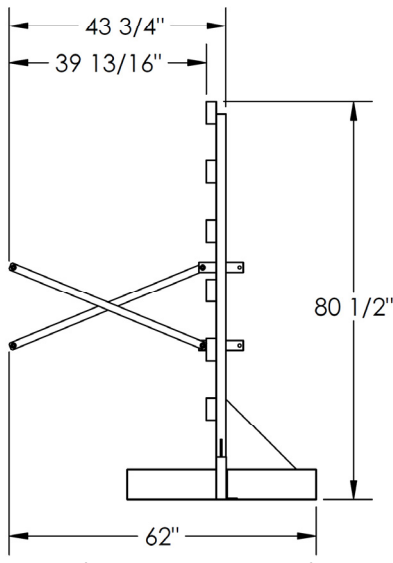
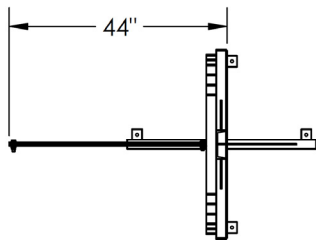


FIG. 2A: BAR-A-84-D (Add-on, Double Sided) Exploded Parts Diagram and Bill of Materials



Item no.	Part no.	Description	Quantity
1	31-514-063	WELDMENT, FRAME, BAR-RD	1
2	33011	1/2 USS FLAT WASHER PLAIN	8
3	37030	1/2" -13 NYLON INSERT LOCK NUT	4
4	12209	1/2 - 13 GR. 5 X 1 1/2 LG.	4
5	31-017-017	BAR STIFFENER, UPRIGHT, BAR RACK	2

FIG. 2B: BAR-R-84-D dimensions and capacity



Overall width = 38 1/2"
 Overall length = 62"
 Overall height = 80 1/2"
 Capacity = 500 lb. per arm
 Storage levels = 7
 Bar stock stored on both sides of upright.

Unit comes with 1 upright and 1 set (2 pieces) of cross bracing. Includes anchor bolt brackets for 1/2" anchor bolts of appropriate length as selected by your building engineer.

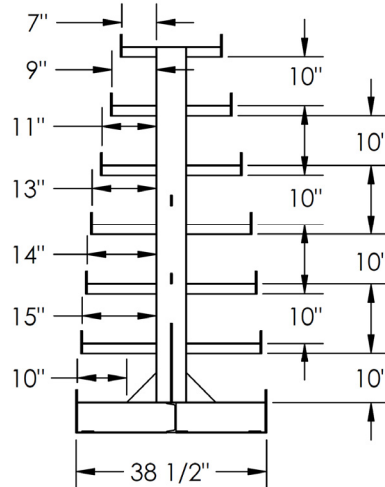
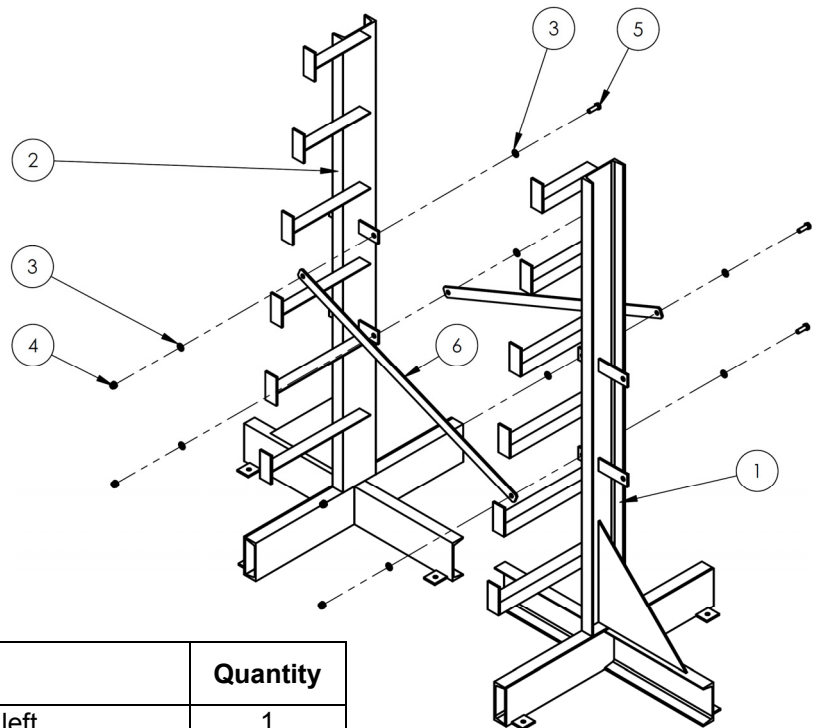
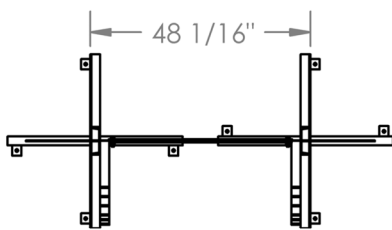


FIG. 3A: BAR-R-84-S Exploded Parts Diagram and Bill of Materials

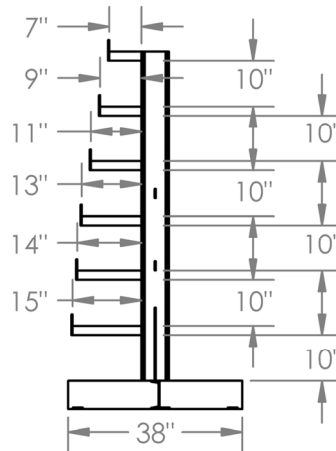
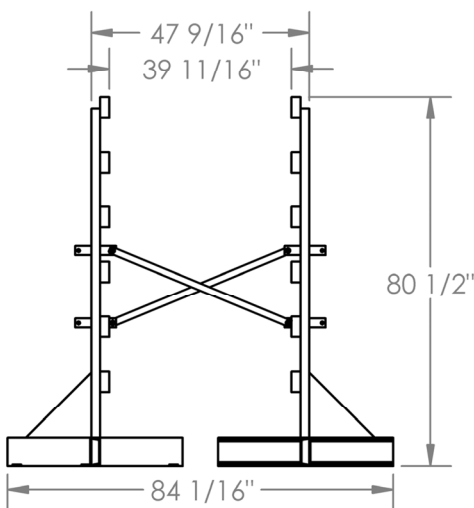


Item no.	Part no.	Description	Quantity
1	31-514-145	Weldment, frame, left	1
2	31-514-050	Weldment, frame, right	1
3	33011	1/2 USS plain flat washer	8
4	37030	1/2" -13 Nylon insert lock nut	4
5	12209	1/2 – 13 GR. 5 X 1 1/2 LG.	4
6	31-017-017	Bar stiffener, upright, bar rack	2

FIG. 3B: BAR-R-84-S dimensions and capacity

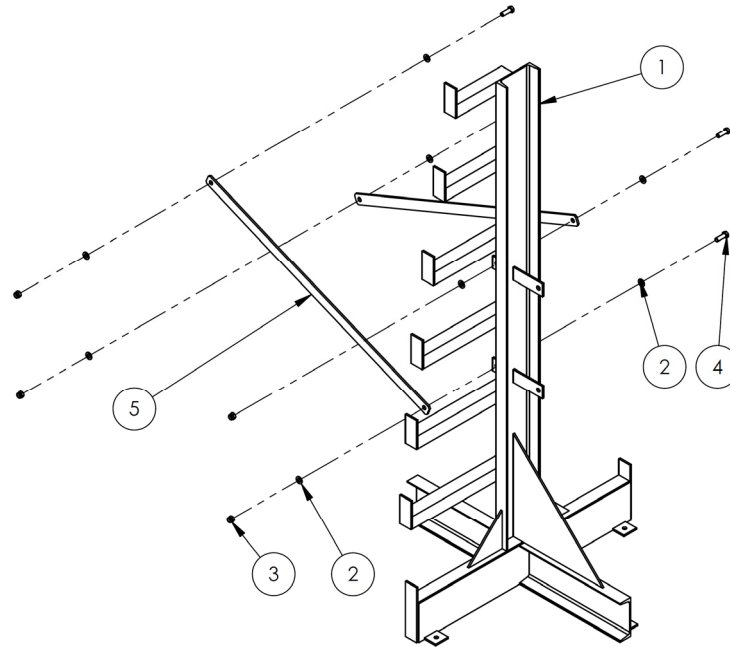


Overall width = 38"
 Overall length = 84 1/16"
 Overall height = 80 1/2"
 Capacity = 500lb. per arm
 Storage bays = 6
 Bar stock stored on one side of uprights.



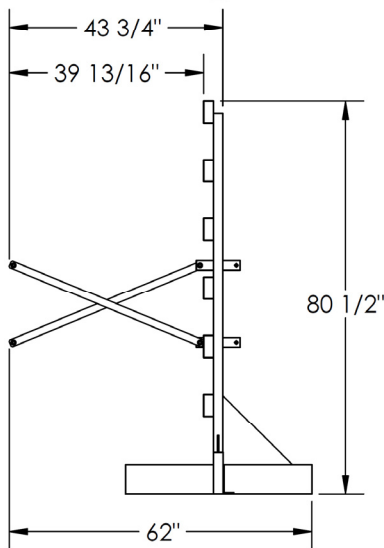
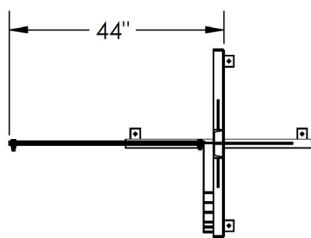
Construction includes anchor bolt brackets for 1/2" anchor bolts of appropriate length as selected by your building engineer.

FIG. 4A: BAR-A-84-S (Add-on, Single Sided) Exploded Parts Diagram and Bill of Materials



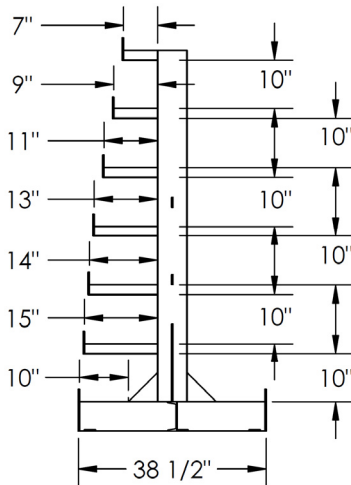
Item no.	Part no.	Description	Quantity
1	31-514-145	Weldment, frame, BAR-RD	1
2	33011	1/2" USS plain flat washer	8
3	37030	1/2" -13 Nylon insert lock nut	4
4	12209	1/2" - 13 GR. 5 X 1 1/2 LG.	4
5	31-017-017	Bar stiffener, upright, bar rack	2

FIG. 4B: BAR-A-84-S dimensions and capacity



Overall width = 38 1/2"
 Overall length = 62"
 Overall height = 80 1/2"
 Capacity = 500 lb. per arm
 Storage bays = 7
 Bar stock stored on one side of uprights.

Unit comes with 1 upright and 1 set (2 pieces) of cross bracing. Includes anchor bolt brackets for 1/2" anchor bolts of appropriate length as selected by your building engineer.



Assembly:

1. Position the frame pieces next to each other with gussets facing in opposite directions. Rack arms should be parallel. For BAR-R-84-S racks, arms must be on the same side (point in the same direction). Refer to figures 1B and 2B for appropriate spacing between the frame pieces.
2. Install the first bar stiffener. Attach one end of the stiffener to the front side of the upper stiffener bracket of rack #1 using the hardware shown in Diagram 1 below. Connect the other end of the stiffener to the front side of the lower stiffener bracket of rack #2. Do not tighten the nuts and bolts yet.
3. Attach the second stiffener to the frames. Attach it to the back side of the lower stiffener bracket of rack #1 and to the back side of the upper stiffener bracket of rack #2.
4. Tighten all connections.

Diagram 1:

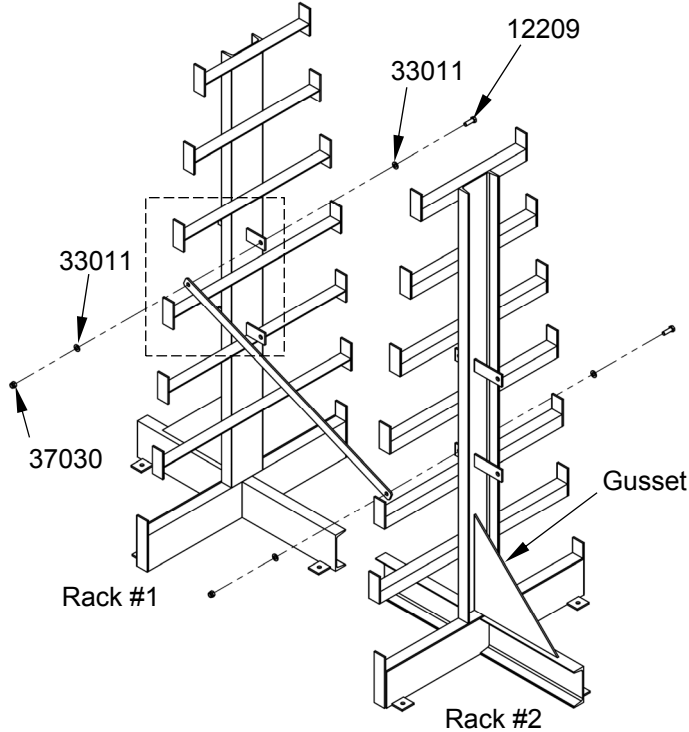
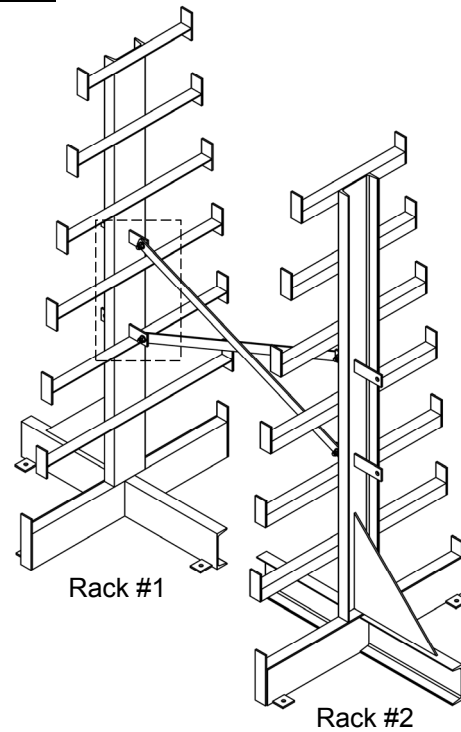
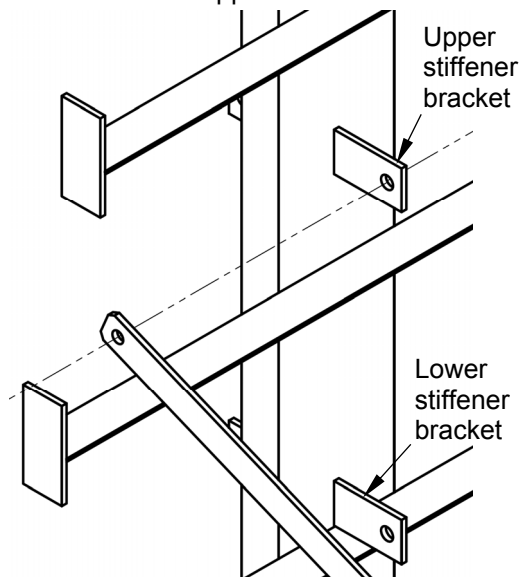


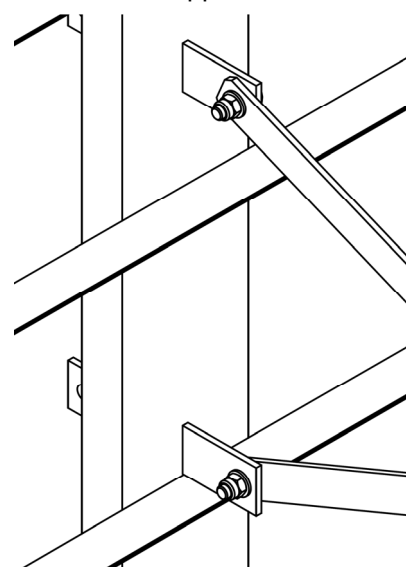
Diagram 2:



Attach stiffeners to opposite sides of brackets

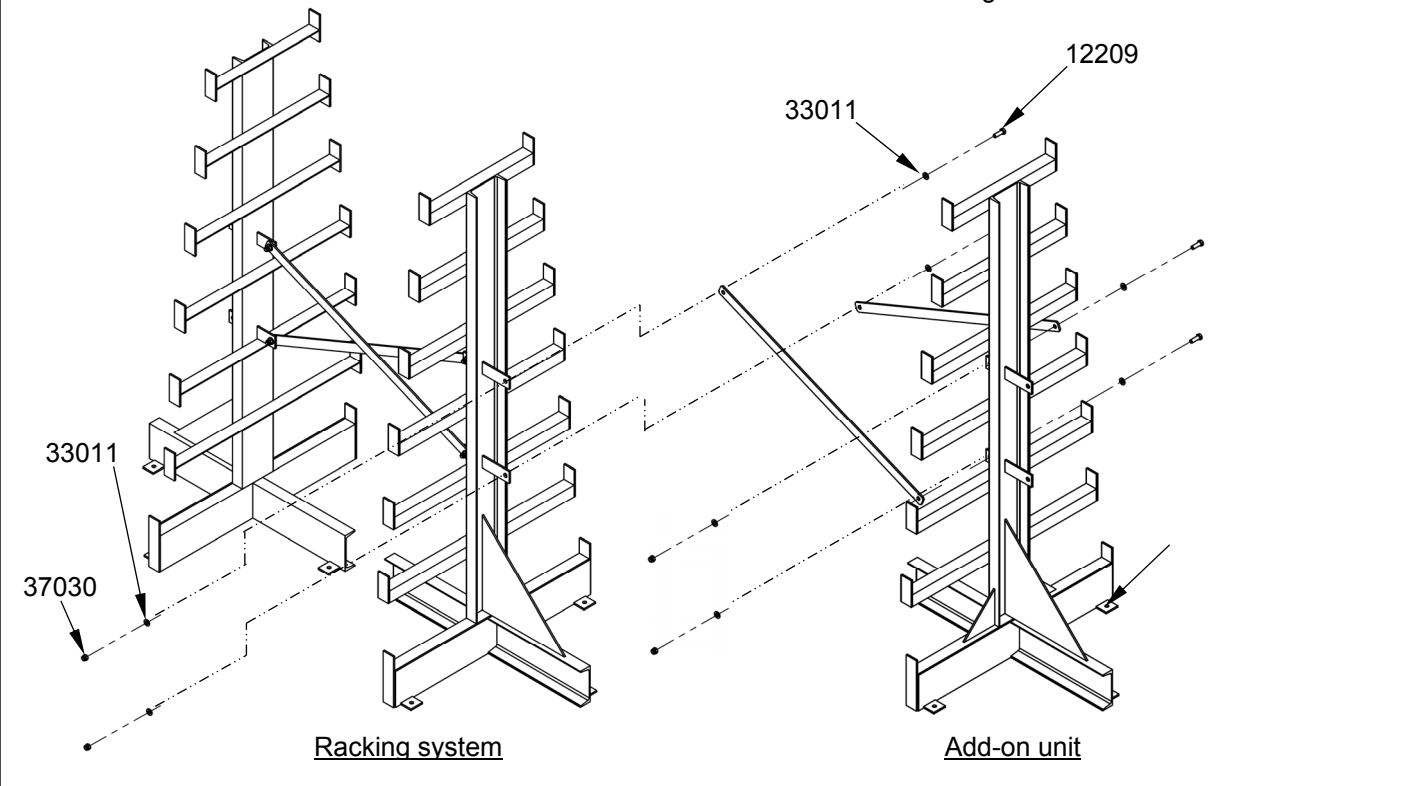


Attach stiffeners to opposite sides of brackets



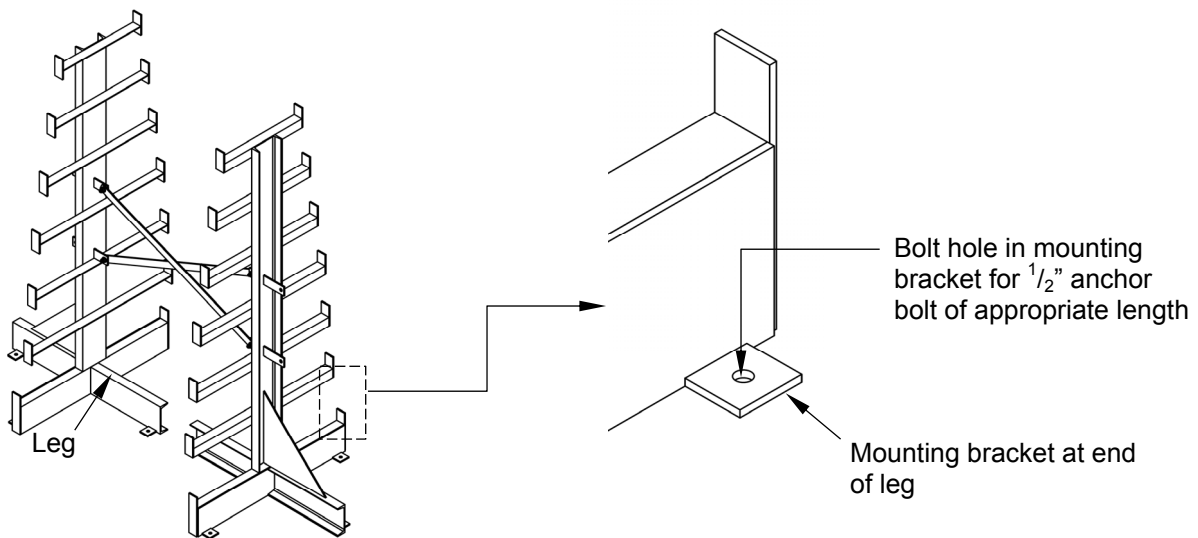
Assembling add-on units (models BAR-A-84-S or BAR-A-84-D):

Each frame unit has 2 pairs of brackets, which allow additional units to be attached to the rack system. Attach the stiffeners included with the add-on unit to the free brackets on the end of the racking system with 1/2" hardware as shown below. Follow the "Installation" instructions to anchor all add-on units to the ground.



Installation:

Make sure that the rack system and all add-on units are level. If necessary, shim and grout the bases to achieve levelness. Once leveled, anchor the entire rack system to the ground BEFORE loading it. Each rack unit and add-on unit includes 4 mounting brackets with anchor bolt holes—one at the end of each leg. Install a 1/2" anchor bolt of appropriate length—to be determined by your building engineer—through every bolt hole to securely fasten each unit to the ground.



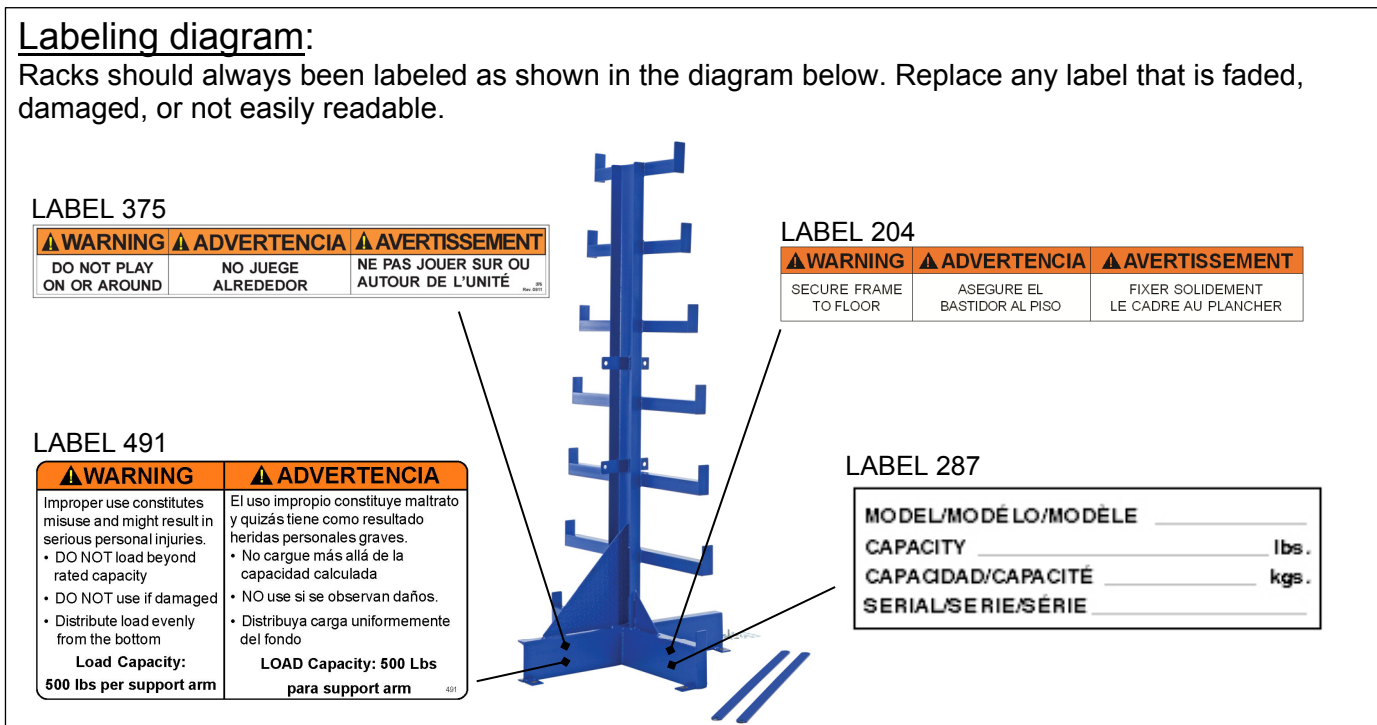
Maintenance:

At least once per month, inspect the rack:

1. Check all anchoring hardware/fasteners to verify that nuts, bolts and washers are in normal condition and are securely fastened together.
2. Look for damage or corrosion that might compromise the structural integrity of any leg, arm, upright, or gusset. If any structural damage is found, immediately tag the rack out of service and completely unload it. Do not use the rack again until it has been fully restored to normal condition.
3. Verify that all racks are level, plumb and square.

Labeling diagram:

Racks should always be labeled as shown in the diagram below. Replace any label that is faded, damaged, or not easily readable.



LIMITED WARRANTY

Vestil Manufacturing Corporation (“Vestil”) warrants this product to be free of defects in material and workmanship during the warranty period. *Our warranty obligation is to provide a replacement for a defective original part if the part is covered by the warranty, after we receive a proper request from the warrantee (you) for warranty service.*

Who may request service?

Only a warrantee may request service. *You are a warrantee if* you purchased the product from Vestil or from an authorized distributor AND Vestil has been fully paid.

What is an “original part”?

An original part is a part used to make the product as shipped to the warrantee.

What is a “proper request”?

A request for warranty service is proper if Vestil receives: 1) a photocopy of the Customer Invoice that displays the shipping date; AND 2) a written request for warranty service including your name and phone number. Send requests by any of the following methods:

Mail
Vestil Manufacturing Corporation
2999 North Wayne Street, PO Box 507
Angola, IN 46703

Fax
(260) 665-1339
Phone
(260) 665-7586

Email
sales@vestil.com

In the written request, list the parts believed to be defective and include the address where replacements should be delivered.

What is covered under the warranty?

After Vestil receives your request for warranty service, an authorized representative will contact you to determine whether your claim is covered by the warranty. Before providing warranty service, Vestil may require you to send the entire product, or just the defective part or parts, to its facility in Angola, IN. The warranty covers defects in the following *original* dynamic components: motors, hydraulic pumps, electronic controllers, switches and cylinders. It also covers defects in *original* parts that wear under normal usage conditions (“wearing parts”): bearings, hoses, wheels, seals, brushes, batteries, and the battery charger.

How long is the warranty period?

The warranty period for original dynamic components is 30 days. For wearing parts, the warranty period is 30 days. The warranty periods begin on the date when Vestil ships the product to the warrantee. If the product was purchased from an authorized distributor, the periods begin when the distributor ships the product. Vestil may, at its sole discretion, extend the warranty periods for products shipped from authorized distributors by *up to* 30 days to account for shipping time.

If a defective part is covered by the warranty, what will Vestil do to correct the problem?

Vestil will provide an appropriate replacement for any *covered* part. An authorized representative of Vestil will contact you to discuss your claim.

What is not covered by the warranty?

1. Labor;
2. Freight;
3. Occurrence of any of the following, which automatically voids the warranty:
 - Product misuse;
 - Negligent operation or repair;
 - Corrosion or use in corrosive environments;
 - Inadequate or improper maintenance;
 - Damage sustained during shipping;
 - Collisions or other incidental contacts causing damage to the product;
 - Unauthorized modifications: DO NOT modify the product IN ANY WAY without first receiving written authorization from Vestil. Modification(s) might make the product unsafe to use or might cause excessive and/or abnormal wear.

Do any other warranties apply to the product?

Vestil Manufacturing Corp. makes no other express warranties. All implied warranties are disclaimed to the extent allowed by law. Any implied warranty not disclaimed is limited in scope to the terms of this Limited Warranty.

