

VISION CAGE SHELVES ASSEMBLY INSTRUCTIONS

GETTING ORGANIZED

Video: [Vision Cage Shelves Assembly https://youtu.be/V26G9iVKTHc](https://youtu.be/V26G9iVKTHc)

Basic Tips and Advice

- Thoroughly read through the instructions and watch the entire video before starting.
- Your shipment may arrive in either a single shipment on a pallet, or in a multiple-box shipment. If your shelves are shipped in multiple boxes, make sure that you have the entire shipment before trying to assemble the unit.
- The packing slip will list the number of each part shipped for your shelving unit. Unpack the shipment and make an inventory of all the parts before starting the assembly. If there are any missing parts, contact customer service right away. **DO NOT TRY TO ASSEMBLE SHELVES IF PARTS ARE MISSING.**
- Complete the assembly steps in the order they are presented.
- The top spacers may be a different length than the rest of the spacers and will be the last spacers used... So set them aside.
- **TWO PEOPLE** are necessary to assemble the unit.

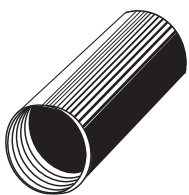
Tools needed:

- 9/16" wrench or small crescent wrench
- Step ladder
- Small level

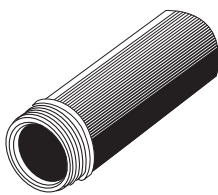
If you have problems with the assembly or are missing parts, call (920)v886-1220 ext. 15 or email sales.support@customcages.com. Customer service representatives are available from 9AM to 4:30PM CST Monday through Friday.

Vision Cage Shelves List of Parts

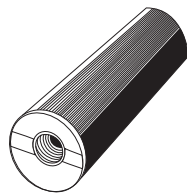
Below is a list of parts for a shelving unit. The numbers and sizes will be different for each shelving unit configuration, so the pictures below may not match your specific shelves exactly.



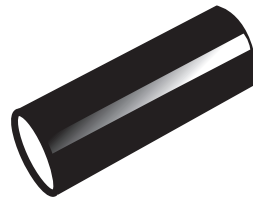
Vertical Riser Pole - 22mm Female



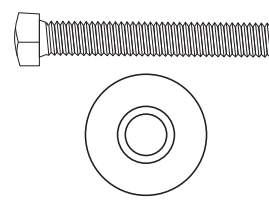
Vertical Riser Pole - Male



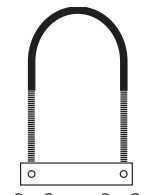
3/8" Female Vertical Riser Pole



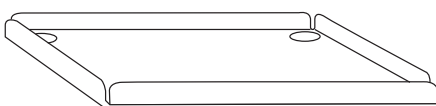
Spacer



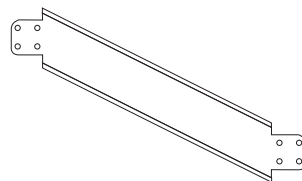
Tightening Bolt & Washer



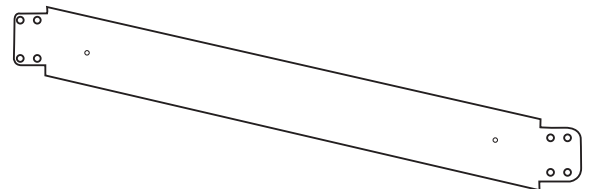
Brace U-bolt w/ wingnuts



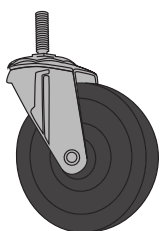
Shelf



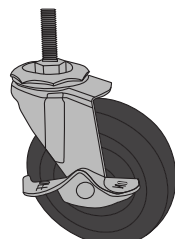
Side Brace



Back Brace



Caster Wheel - Non-locking



Caster Wheel - Locking

STEP 1: Lower Poles, Casters & the Bottom Shelf

- Place one of the cages on the floor. It will be used to support the bottom shelf during the first part of the assembly.
- Set one the shelves on top of the cage. The bent edges of the shelf should be facing up. *Illustration 1*
- The six-foot long shelves will have five vertical riser poles (three in the back and two in the front). All of the other shelves will have four vertical riser poles. Locate the correct number of poles that have a 3/8" female threaded insert in one end and 22mm female threads on the other end (no insert).
- Slip the end of a riser pole with the 3/8" female threaded insert through a hole in the shelf from the top and thread the bolt from a caster wheel into the threaded insert. Make sure that the locking casters are installed on the front corners of the shelf. *Illustration 1*
- There is no difference in the edges of the shelves under 6ft long. The 6-foot shelves have three holes in the back and two holes in the front, and a reinforced flange along the front edge of the shelf. Install all of the lower riser poles and casters in this way.
- At this point there will be a shelf on a cage with a riser pole with caster wheel attached extending from the floor up through the holes in the bottom shelf.

Illustration 1

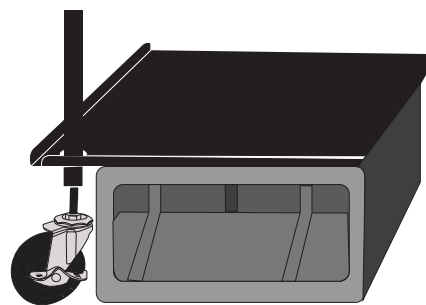
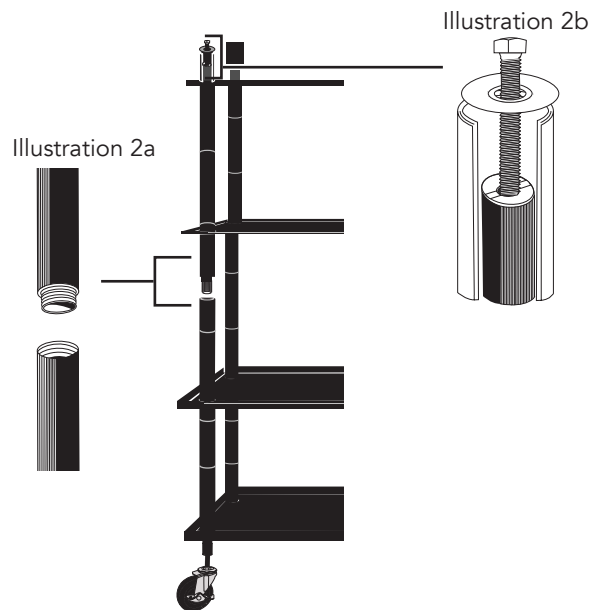


Illustration 2



STEP 2: Spacers, Upper Poles & Remaining Shelves

- There may be a set of spacers that are shorter than the rest (one spacer for each pole) which will be used at the top of each pole. Set those spacers aside.
- Refer to the spacer chart to determine the number of spacers between each shelf.
- Slide the correct number of spacers down each pole onto the top of the bottom shelf.
- Slide the second shelf into position on top of the installed spacers. This step will require two people. One person will need to hold and support the shelving unit until the braces have been installed *Illustration 2*
- The 22mm male end of each upper pole will thread into the 22mm female end at the top of each bottom pole. Install all of the top poles *Illustration 2a*
- If your shelves are for cage models 222, 322, 415 or 433 there will only be three levels in your rack. Before installing the second shelf install the upper poll sections (illustration 2a) and then lift the rack off of the support cage so the bottom shelf can rest on top of the casters. After removing the cage one person will have to hold the rack stable. Then continue with instructions for installing the remaining shelves and spacers.
- Install a set of spacers onto the poles above the second shelf, and then a third shelf over the spacers. *Illustration 2*
- Lifting from the poles on both ends of the unit, raise the shelves enough to pull the cage out from under the bottom shelf and lower the unit so that the casters are resting on the floor. This will require two people. One person will need to hold and support the shelving unit from this point forward until the tightening bolts are installed.
- Install the spacers over the third shelf, and then lift the fourth shelf onto the poles and lower it on top of the spacers. If there are more than four shelves, repeat the sequence of spacers and shelves until all of the shelves are on the unit. *Illustration 2*

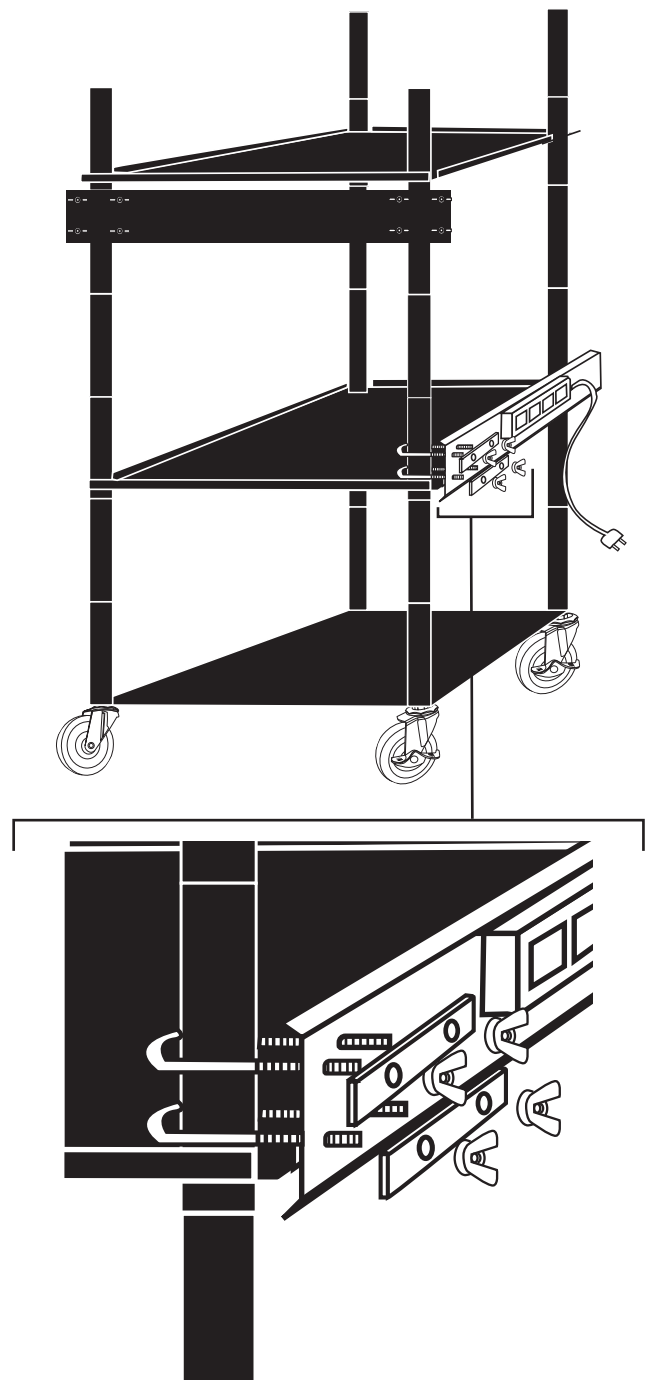
Spacer Chart

Vision Cage SKU Number	Length of each spacer	Number spacers BETWEEN each of the shelves
622	5.375"	4
600	3.5"	5
433	3.5"	8
422	5.375"	4
415	5.375"	5
400	5.375"	3
332	5.375"	4
322	3.5"	7
222	5.375"	5
221	3.5"	4
215	5.375"	4
211	5.375"	3
111	3.5"	5

STEP 3: BRACES

- Shelving units for the model 600 and 622 cages will have two back braces. All of the shorter units will only have one back brace. Illustration 3 (this should be the illustration of the braces on the back of the rack... current illustration 6)
- Attach all of the braces to the vertical poles. The flat side of the braces will face out. When looking at a side or the back of the shelves the braces will always angle down from the upper left to lower right. It is not possible to install the braces in another orientation.
- The bends of the u-bolts will be against the inside of the poles. The threaded ends of the u-bolts will pass through the pre-drilled holes in the ends of the braces, and then through the support plate for the u-bolts' wing nuts. Thread the wing nuts onto the ends of the u-bolts, but **DO NOT TIGHTEN THE WING NUTS**. Illustration 4 (this should be the illustration of the u-bolt assembly on the brace and pole... current illustration 7)
- The person holding the shelves steady will hold the poles as vertically straight as possible while the other person tightens the braces.
- Start with the right-side brace (the side with the top end of the brace on the front pole). Hold the poles attached to that brace as vertically straight as possible while the brace is lifted up off of the bottom shelf and the wingnuts tightened to finger tight (no need to over-tighten).
- Move to the back brace (or braces) and repeat the process to tighten them while the poles are held in a vertical position.
- Tighten the remaining side brace last. The poles may not be perfectly straight, but they will be adjusted later. The shelving unit is now stable enough to complete the assembly without needing to be held.

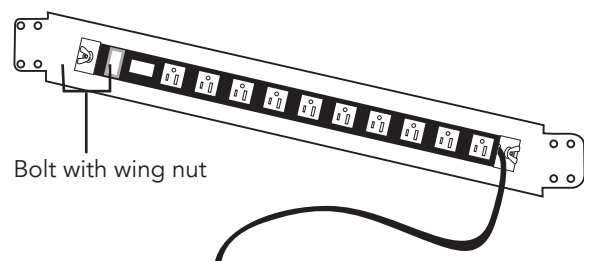
Illustration 4



STEP 4: UPPER POLES & REMAINING SHELVES

- The 22mm male end of each upper pole will thread into the 22mm female end at the top of each bottom pole. Install all of the top poles Illustration 4 (this should be the drawing of the poles being connected... current illustration 3)
- Install a set of spacers onto the poles above the second shelf, and then a third shelf over the spacers. Illustration 5 (current illustration 4... I am not sure this illustration is necessary, so if space is an issue let's delete it)
- If your cage only has three shelves you can go on to Step 5. If your cage has more than three shelves, install the spacers over the third shelf, and then lift the fourth shelf onto the poles and lower it on top of the spacers. If there are more than four shelves, repeat the sequence of spacers and shelves until all of the shelves are on the unit.

Illustration 5



STEP 5: Top Spacers & Tightening Bolts

- While one person continues to support the shelving unit, the other will install the remaining spacers on top of each pole over the top shelf. If your shelving unit has a set of spacers that are different than the rest of the spacers, place those different spacers at the top. *Illustration 2b*
- Thread a tightening bolt with a washer into the 3/8" threaded insert in the top of each pole and tighten them to finger tight. Use a wrench to tighten the bolts to the point where it is not easy to rotate a spacer around the pole. Once all of the bolts are tightened the shelving unit will be able to stand unsupported. *Illustration 2b*

OPTIONAL BRACES & POWER STRIPS

- If you ordered optional braces they will be installed after the shelving unit has been tightened. There will be two side braces that are shorter than the one long back brace.
- The back brace will be installed immediately above the second shelf from the bottom. The side braces will be installed immediately below the third shelf from the bottom.

Illustration 4.

- The inside of each brace will be installed against the out-facing side of the poles. The u-bolts will surround the pole from the in-facing side of the pole. The threaded ends of the u-bolt will pass through the holes in the brace, the holes in the support plate and be secured in place with wing nuts.

Illustration 4

- If you ordered the optional power strip with the braces there will be holes in the back brace to mount the power strip onto using bolts and wing nuts. Insert the bolts through the holes in the brace and the ends of the power strip from inside the brace and secure them with the wing nuts. *Illustration 5*