Read Below! Read Below! Read Below! Read Below! Read Below! Read Below!

Here are some guidelines to help make assembling your unit much easier:

-Read and follow step exactly as they appear in attached instructions. Skipping steps or changing the order will most likely cause you to have to start over, become confused and frustrated, and may result in damage to your unit.

-If you ordered a hood or stand, start with this unit first. They tend to be smaller, more simple, and easier to manage. The assembly is very similar to cage assembly. Once you assemble a hood or stand you will understand the basic structure and be able to assemble your cage more easily.

-Large units require several people to put together. As a rule, multiply the height times length times depth of your unit in feet to get the cubic feet of your unit. For 0-32 cubic feet it should require 1 person. 32-96 cubic feet it should require 2 people. For anything 96-192 cubic feet it takes at least 3 people, and even more makes it easier. DO NOT ATTEMPT TO ASSEMBLE CAGE WITHOUT ADEQUATE AMOUNT OF HELP. It is not that assembly is excessively complicated, it just takes enough hands to hold things in place. You will become very frustrated if you try to do too much yourself and you may end up damaging your unit if you do not handle it properly during assembly. Once assembled, you will be glad you did it properly!

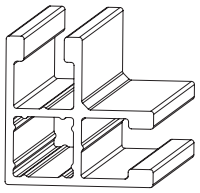
-Secure each panel individually with masking or duct tape as soon as you slide it into place. This will prevent them from popping out part way through assembly. It can get difficult coordinating many panels at once and this will make it much easier.

-Do not be alarmed if you have extra hardware left over when you are done. We include extra in case of a miscount, defect, or if some parts get lost or broken.

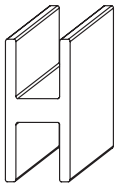
-If you have problems with assembly, of if you think you are missing parts, you can call (920) 886-1220 x 15 or email CustCagesContact@aol.com. We are open from 9:00 a.m. through 5:00 p.m. CST Monday through Friday. Please be aware that our average call lasts about an hour because we take great care to make sure every customer is set up adequately when ordering, and we also take whatever time is needed to help customers with assembly issues. Because of this, we may not be able to pick up the phone on your first attempt. It is very important that you leave a message and we will get a hold of you as soon as possible. We usually make at least 1 or 2 attempts each each business day to get back to every customer. Please bear in mind Mondays are always our busiest day and may take a little longer to reply.

H2 Hybrid™ Enclosure List of Parts

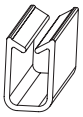
Below is a list of parts for our entire cage system. Your unit(s) might not necessarily have all the parts shown below. Please refer to your packing list to see the parts and quantities that are included with your order. Please note that the 22C, UFD, and "U" channel shown below are small cross sections of the actual parts you will receive. The actual parts will be longer in length.



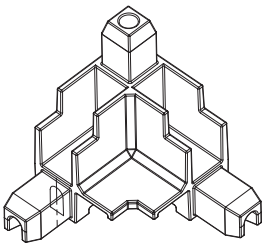
22C (Aluminum)



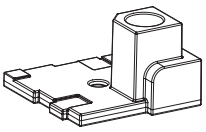
UFD (Aluminum)



2UC "U" Channel (Plastic)

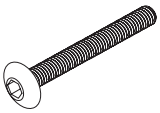


Corner Joint

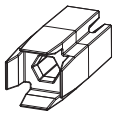


Corner Cap

#4 x 3/8" Flat Head Screw



#8 x 1.5" Truss Head Machine Screw

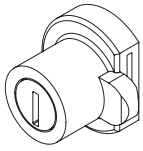


Draw Wedge

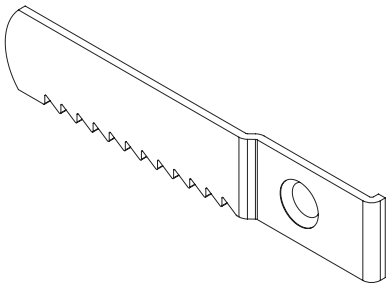
#1 Phillips Head and T15 Torx L-Key

Threaded "T" Nut for Lock

8-32 x 1/4" Machine Screw For Lock



Door Lock Drum



Door Lock Slide

Stacking Pin

Assembly Instructions Version A (for Cage, Hood, or Stand)

Taking Inventory

Make sure you have all of your packages. The Fed-Ex ground label on your packages will say how many packages come with your shipment. It is not unusual for packages to arrive separately, sometimes a few hours apart and sometimes a day or two apart.

Once you have established you have all your packages, take an inventory of all your parts. You should have all the parts listed on your packing list enclosed with your unit. If you ordered a cage, hood, stand, pull out tray, removable floor, or removable divider, each unit you ordered will have it's own packing list. If you think you are missing parts, look closely at the list of parts above and make sure you are clear what the part looks like. Some drawings of parts in the first row shown above are small sections of the actual part, the actual parts are often much longer. Also, make sure you thoroughly unpack all boxes. Often times similar parts are packaged in separate boxes. Small parts can also be easily lost in the packaging, so thoroughly look through all packaging. If you think you are still missing parts after thoroughly searching all boxes, email CustCagesContact@aol.com or call our customer service number (920) 886-1220 to determine if you need replacement parts. We are open from 8:00 a.m. - 5:00p.m. CST Monday through Friday.

Separating Your Parts

Cages, hoods, stands, and pull out tray parts are often shipped together in the same package(s). These instructions are intended for constructing one unit at a time. Make sure you separate all parts for each unit before assembling. These instructions are only intended for construction of one cage, one hood, or one stand. Each unit you ordered will have it's own packing slip. If any combination of the three were ordered you must follow these instructions from start to finish for each unit separately. This is why it is important to separate all parts ahead of time. **If you ordered a pull out tray, pull out floor, or removable divider, separate instructions will be included for each type of option. Follow pull out tray instructions after completing step 3 for the assembly of your cage.** Some small parts are easy to lose and will make cage assembly impossible if lost, so keep them in a container in a safe place until needed.

Corner Joint / "U" Channel Assembly

Corner Joint Assembly

To the right are 2 illustrations to help you understand how to assemble the frame of your unit. These illustrations will be referred to in following steps of the assembly instructions.

Attaching Corner to Aluminum Frame Members

As shown in illustrations 1 and 2, the corner joint is connected to the aluminum frame members using #8 x 1.5" truss head machine screws and draw wedges.

1) Insert the truss head screw into the corner joint as shown in illustrations 1 and 2. Notice the horizontal members insert a little differently than the vertical members.

2) Screw the draw wedge onto the end of the truss head screw 2-3 turns. It is easiest to hold the truss head screw in place with an L-key while twisting on the draw wedge. An L-key is included with your hardware kit.

3) Once you have the draw wedge started onto the truss head screw (2-3 turns), insert the draw wedge and tongue of the corner joint all the way into the aluminum frame member. Tighten the truss head screw with an L-key. It takes about 25 turns and fair amount of force to tighten. You should see a slight bulge in the aluminum when it is fully tightened.

4) Once cage is completely assembled, insert the corner caps into each corner and secure with #4 x 3/8" flat head screws (1 per corner joint). If you ordered a pull out tray you should have pull out tray corner caps with legs that go on the bottom of your cage, see pull out tray instructions.

The draw wedge has 2 functions. First, when the truss head screw engages with the back end of the draw wedge, the draw wedge expands, drawing the corner tightly to the aluminum frame member. Once the corner joint is drawn tightly into the aluminum frame member, the front end of the draw wedge engages with the tongue of the corner joint creating an expanding wedge effect. The tighter you tighten the truss head screw, the harder it is to remove the corner from the aluminum frame member. Once you see a slight bulge in the aluminum it should be tight enough. You may tighten the part quite firmly without stripping, however there is a possibility of over tightening and stripping the draw wedge if an extreme amount of force is exerted. We have included several extra draw wedges in case this happens. If so, just discard the stripped draw plug and start over with

2UC "U" Channel Assembly

Each acrylic, stainless steel, or glass panel should be framed with 2UC "U" channels before sliding panels into aluminum frame members as shown in illustrations 3 and 4. See your packing list to see what length "U" channel corresponds with each panel. 2UC "U" channels are not necessary for laminate or moistureproof panels.

Illustration 1

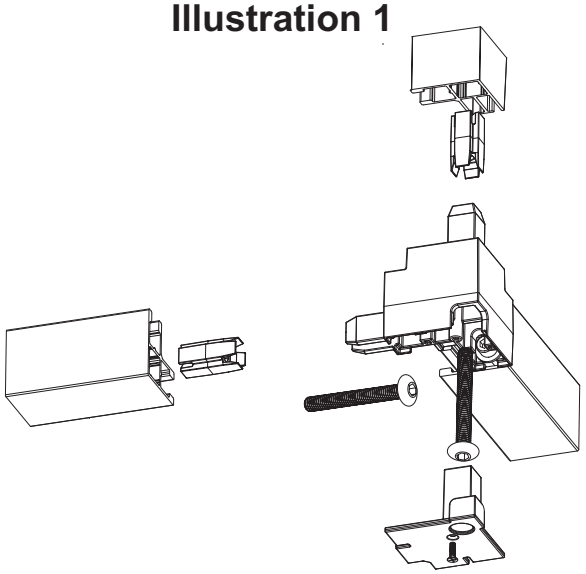


Illustration 2

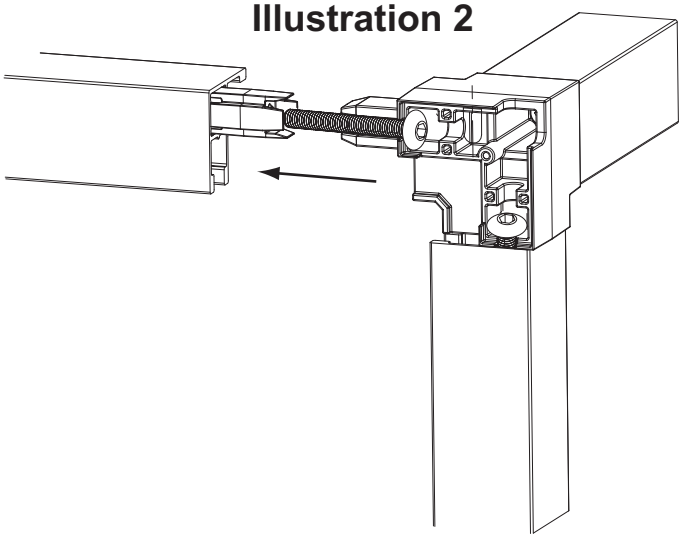


Illustration 3

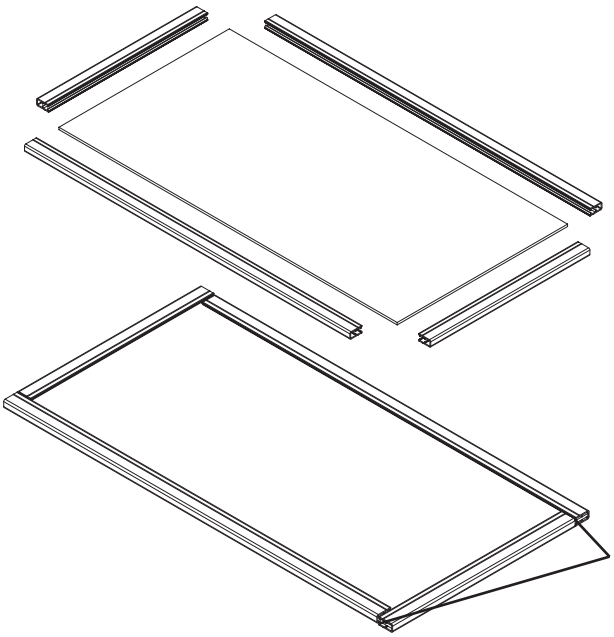
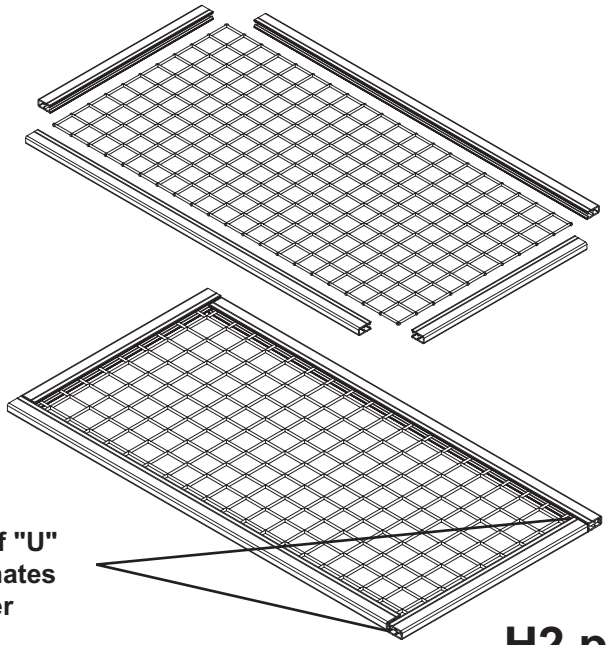


Illustration 4



Notice how overlapping of "U" channel alternates on each corner

NOTICE: The best way to assemble the unit is to assemble the entire unit on it's back and tip it upright when complete. That is the way these assembly instructions will guide you through assembly. If the orientation of the illustrations are confusing, remember the cage is being assembled on it's back (back is flat on the floor).

Step 1- Assembling Back of Cage

Make sure you read the "Taking Inventory" and "Separating Your Parts" sections listed on page 1 before proceeding with instructions. These are important steps and will make assembly of your unit much easier. Illustration 5 and 6 show assembly of a single panel back, illustrations 5 and 7 show assembly of a multiple panel back. Refer to your packing list to see how many back panels are required for your unit and to see the exact dimensions of your various parts.

1.1 Parts used for this step

- 1 or 2 back panels (see packing list)
- 2 parts 22C for the height of your unit
- 2 parts 22C for the length of your unit
- 4 corner joints, 8 #8 x 1.5 truss head machine screws, 8 draw wedges
- 2UC "U" channels if applicable (see step 1.2 below)
- Part UFD for the back of your unit if applicable (see packing list)

1.2 Assembling "U" Channel

For any acrylic, stainless steel wire, aluminum laminate, or glass panel you must frame the panel with the 2UC "U" channel extrusions before sliding into your aluminum frame. Illustrations 3 and 4 of these assembly instructions show how this is done. The 2UC "U" channel takes away excess space and reduces rattling of the panels, as well as provides increased shock absorption for animals striking the panels.

2UC "U" channel parts are found on your packing list for cages. Hoods and stands do not require any 2UC "U" channels as they do not come with acrylic, stainless steel wire, aluminum laminate, or glass.

1.3 Assembling Frame of Back

Assemble frame of back as shown in illustration 5, leaving one 22C member off until step 1.4. Refer to illustration 1,2, and 3 for corner assembly instructions.

1.4 Sliding Back Panel into Back Frame

Your back panels are shown on your packing list. If your unit has one panel for the back you need to follow illustration 5 and 6. If you unit has more than one panel for the back, then you will need to follow illustrations 5 and 7. Slide the panel into place and tighten with truss head screws and draw wedges as shown. See illustrations 1,2, and 3 for corner joint assembly instructions.

Illustration 5

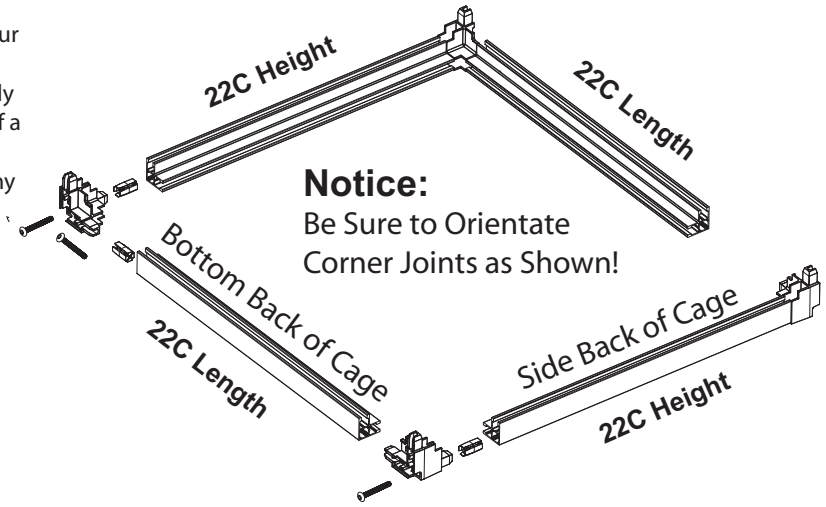


Illustration 6

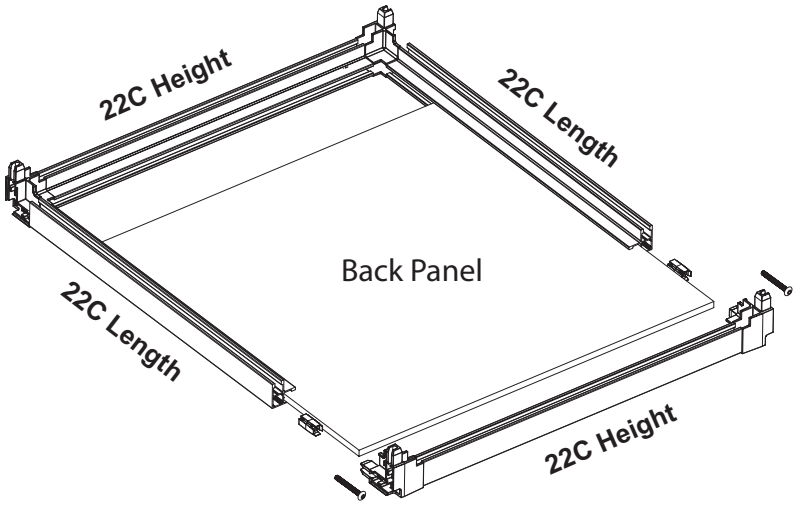
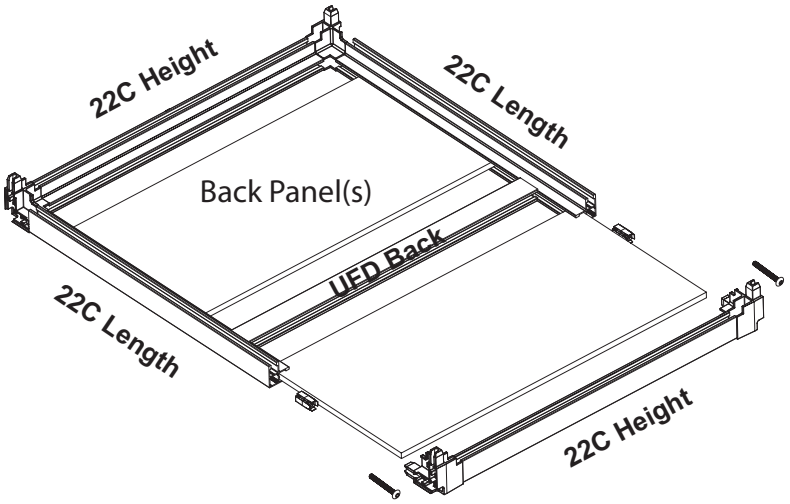


Illustration 7



Step 2- Assembling Front of Unit

In step 1 of these assembly instructions you assembled the back of your unit. In this step, you will assemble the front of your unit. The assembly of the front is very similar to assembly of the back. See your packing list to determine what material the front doors of your unit have.

2.1 Parts used for this step

- 2 front door panels (see packing list)
- 2 parts 22C for the height of your unit
- 2 parts 22C for the length of your unit
- 4 corner joints, 8 #8 x 1.5" truss head machine screws, 8 draw wedges
- 1 door lock drum, door lock slide, threaded "T" nut for lock, 8-32 x 1/4" machine screw for lock

2.2 Assembling Door Lock

One of your door panels will have a 1/4" hole in one of the aluminum frame members. This hole is for fastening the door lock slide. Using a threaded "T" nut for lock, an 8-32 x 1/4" machine screw for lock, and a door lock slide, assemble the door lock slide to the aluminum frame member as shown in illustration 8.

2.3 Assembling Aluminum Frame for Front of Cage

Assemble the frame for the front of your cage as shown in illustration 8, 9, 10, and 11. See corner joint assembly instructions for details on assembling corner joints. It may take 2 people to assemble the front of your unit to prevent the panels from coming out while you are assembling corner joints.

*NOTICE: For best results with most animals, the doors should be assembled with the thinner part of the corner spacer facing towards each other. This will create a slightly larger gap between the doors than if they were assembled the other way. This decreases the chance of the door lock scratching the acrylic panels when sliding. However, if you have very small animals or use crickets for food you may want the doors facing the opposite direction which will create a smaller gap between doors. However, this may increase your chances of the doors rubbing together and creating scratches on the acrylic, particularity on taller cages where the doors may want to flex more. We do not send free replacements for scratched acrylic, so you will be trying this method at your own risk. Another solution is to assemble the doors as shown above with a wider gap between the doors and use a piece of weather stripping which you can find at any local hardware store to shore up the gap you want to fill to prevent crickets or very small animals from escaping. For further explanation, please call one of our customer service representatives and they will be happy to help you over the phone.

Illustration 8

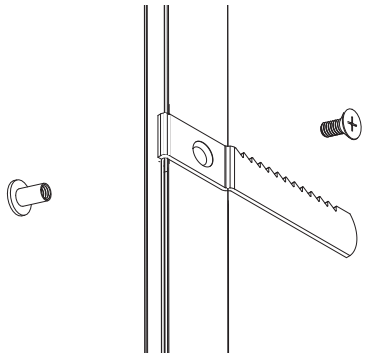


Illustration 9

Make sure thinner side of door frame corners are facing each other when door panels are slid into front frame. See notice on lower left of page for exceptions.*

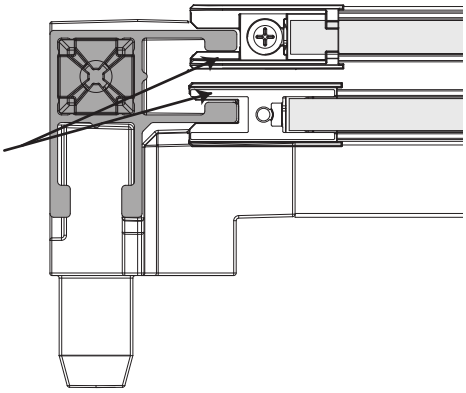


Illustration 10

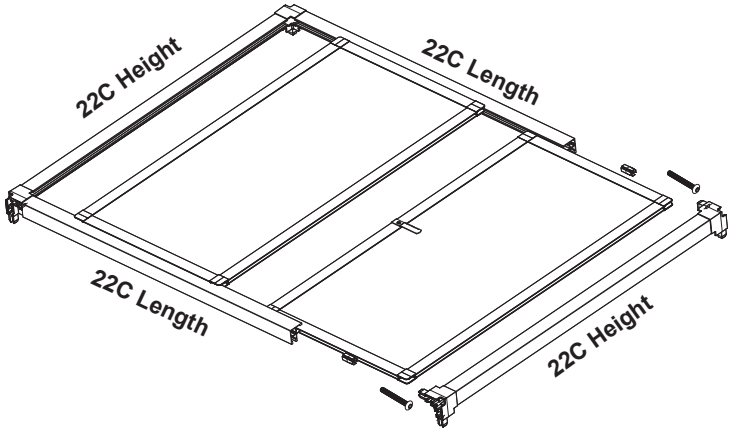
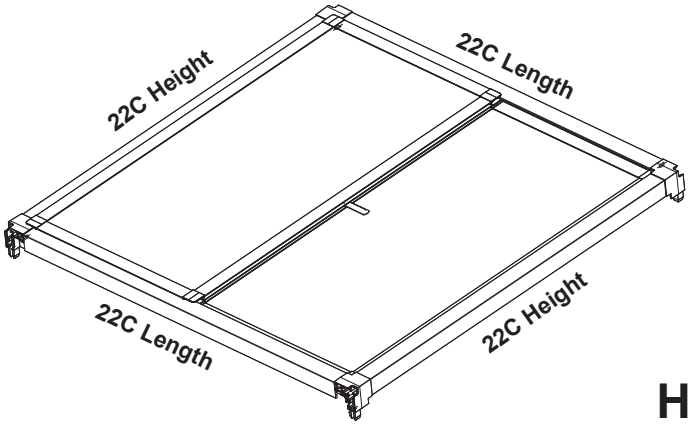


Illustration 11



Step 3- Assembling Back, Front, Top, Bottom, Sides of Unit

In this step you will be connecting the back panel assembly you created in step 1 and the front frame assembly you created in step 2. Some side, bottom, and top panels are one piece and some are multiple pieces. You can refer to your packing list to see what type of panels you have and how many pieces there are. Illustration 13 shows assembly of one piece panels and illustration 14 shows assembly of multiple piece panels. Your unit may have a combination of the two.

3.1 Parts Used for this Step

-1 or more bottom and 1 or more top panels (see packing list)
-2 or more side panels (see packing list)
-1 Back frame assembly from step 1
-1 Front frame assembly from step 2
-4 parts 22C for depth of cage
-8 #8 x 1.5 truss head machine screws, 8 draw wedges
-2UC "U" Channel if applicable (see step 3.2)
-Part UFD for sides if applicable (see packing list)
-Parts UFD for bottom and top if applicable (see packing list)

3.2 Assembling "U" Channel

For any acrylic, stainless steel wire, aluminum laminate, or glass panel you must frame the panel with the 2UC "U" channel extrusions before sliding into your aluminum frame. Illustrations 3 and 4 of these assembly instructions show how this is done. The "U" channel takes away excess space and reduces rattling of the panels, as well as provides increased shock absorption for animals striking the panels.

2UC "U" channel parts are found on your packing list for cages. Hoods and stands do not require any 2UC "U" channels as they do not come with acrylic, stainless steel wire, or glass.

3.3 Assembling Entire Unit

Make sure the back frame assembly from step 1 is laying flat on the floor as shown in illustration 12 and13. Assemble parts 22C for the depth of the cage to the back panels. Slide your bottom, top, and side panels into the frame of your cage as shown in illustrations 12 and 13.

If you have a removable floor or pull out tray system do not install any floor panels, follow separate instructions after cage is completely assembled.

Fasten the front frame assembly to the rest of the assembled unit. Instructions on corner joint assembly are found in illustration 1 and 2.

After completion of this step your entire unit should be assembled laying on it's back. If you have a pull out tray or casters they should be assembled now. Refer to step 7 for caster assembly. You will have separate instructions for installing your pull out tray option if you ordered it. Tip unit upright only after following step 4 (corner joint cap assembly) and your pull out tray instructions. After corner joint caps, pull out tray, and casters are installed, tip unit upright and continue. Some larger units **WILL** require several people, do not attempt to lift upright without an adequate amount of help.

Notice:
Be Sure to Orientate Corner Joints as Shown!

Illustration 12

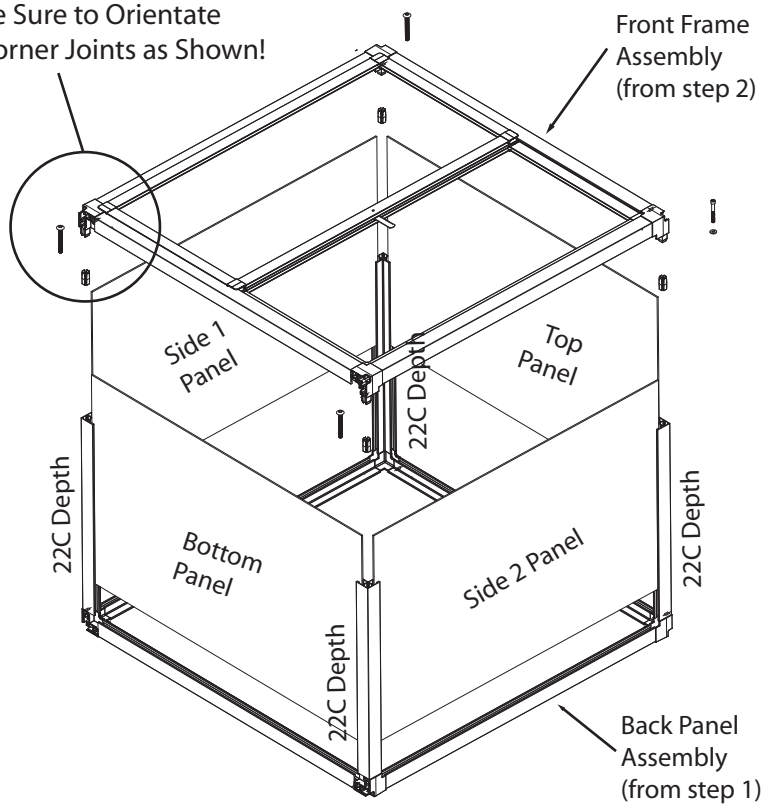
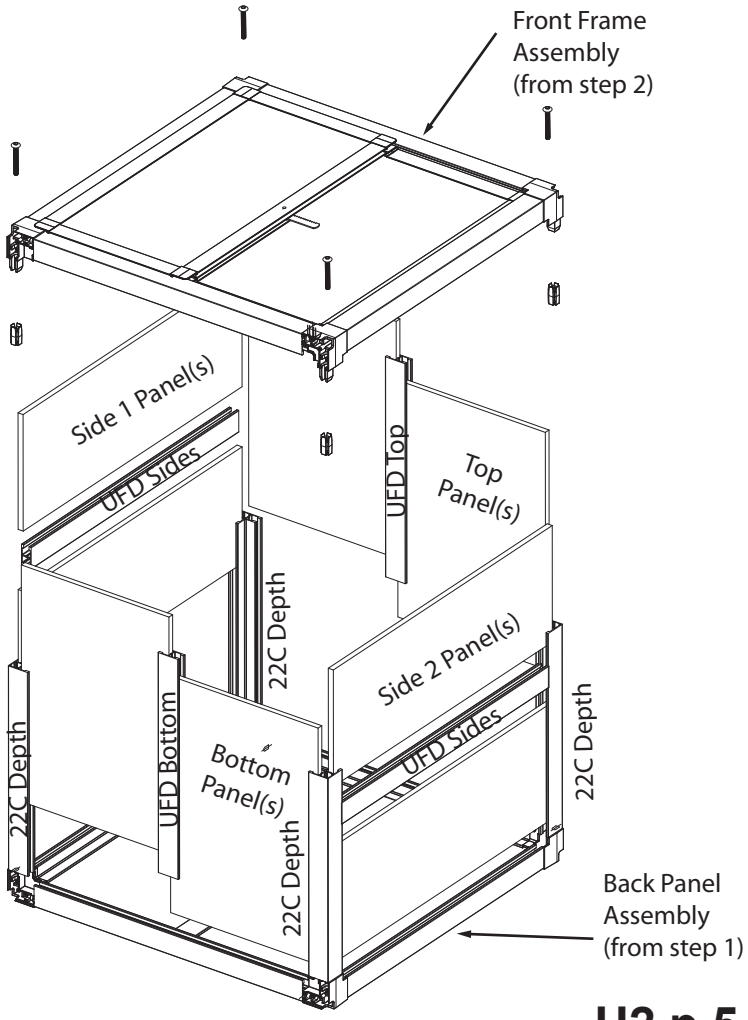


Illustration 13



Step 4- Assembling Corner Caps

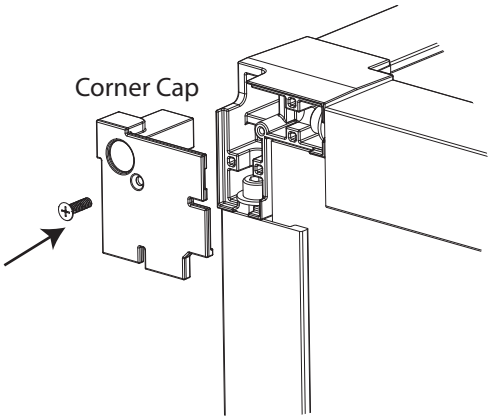
4.1 Parts Used for this Step

-4 Corner Joint Caps
-4 #4 x 3/8" black sheet metal screws

4.2 Attaching Corner Caps to Top of Unit

Insert corner joint cap into corner. Fasten securely with #4 x 3/8" black sheet metal screws as shown in illustration 18. Use a #1 Phillips head screw driver to avoid stripping the heads of the screws. Do not over tighten. Fasten all corner joint caps before tipping cage upright.

Illustration 14



Step 5- Assembling Door Lock Drum

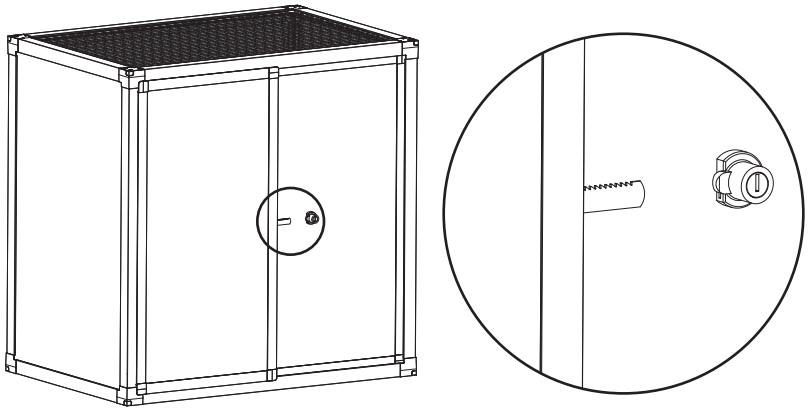
5.1 Parts Used for this Step

-1 Door lock drum
-1 Door lock key

5.2 Sliding Door Lock Latch on to Door Lock Slide

Slide the door lock drum over the door lock slide as shown in illustration 15. The tounge on the latch should pin the 2 doors together making it extremely difficult, if not impossible, for anything to squeeze between the doors of the cage and escape when properly used. If a taller cage is being used with escape prone animal (such as a small snake) where you think there may be a possibility of escape, door panels with multiple locks can be ordered to create several areas where doors are pinned together making escape more difficult. Please call for details or pricing.

Illustration 15



Step 6- Stacking Cages, Hoods, and Stands

Once you have gone through assembly instructions for each cage, hood, or stand completely you can stack them as shown in this step.

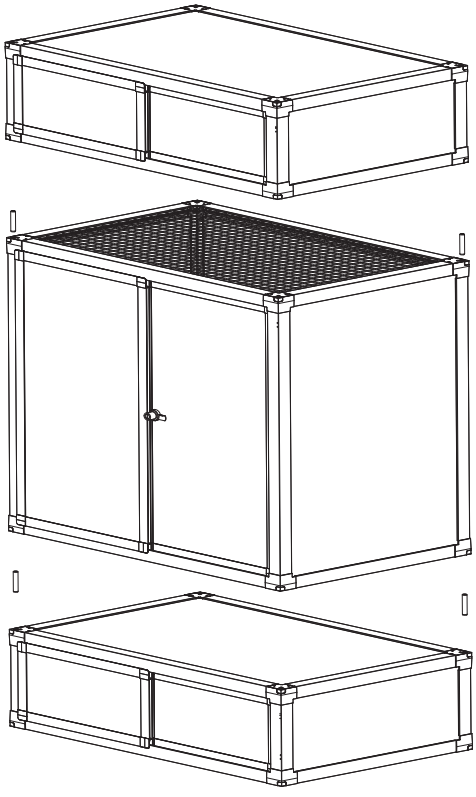
6.1 Parts Used for this Step

- All applicable assembled cages, hoods, stands
- 2 Stacking pins per stacked unit

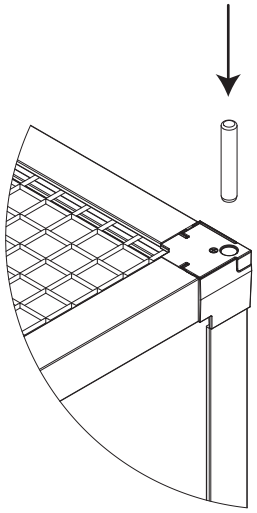
6.2 Inserting Stacking Pins into Stand, Cage, or Hood

Insert 2 stacking pins on diagonal corners for whatever unit you want another unit stacked on top of. You do not need one for every corner, 2 placed diagonally will provide sufficient structural integrity. You will receive 2 pins per stacked unit

Illustration 16



Notice: The unit in this illustration shows a wire top. Our cages do not come with a wire top, that option must be ordered separately. Since the best practical use for this situation is a wire top we included it in the illustration.



Miscellaneous Hardware Installation Instructions

Below are instructions to install casters, internal mounting hardware, and 3" air flow vent/cord grommet. These items do not come with the basic cage configuration and are sold separately. Only follow instructions if you ordered them with your unit.

Step 7- Assembling Casters

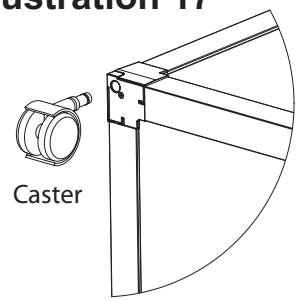
7.1 Parts Used for this Step

-4 Casters (6 casters for 2 section version B unit, 8 casters for 3 section version B unit)

7.2 Inserting Casters Into Corners

While cage is laying flat on it's back, insert casters into each of the 4 corners of the cage (and into 2 into middle corner joints for 2 section version B, etc.). For multiple section units, only one of the adjoined corner joints requires a caster. If there are multiple stacked units, insert casters into the bottom most unit.

Illustration 17



Step 8- Assembling Internal Mounting Hardware

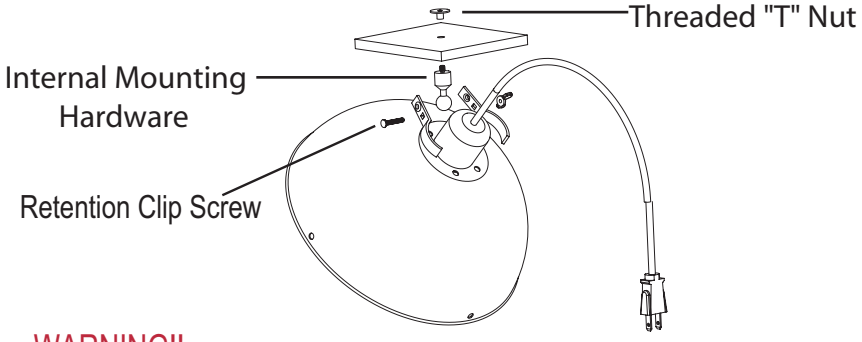
8.1 Parts Used for this Step

- Internal mounting hardware, quantities vary depending on how many you ordered

8.2 Assembling Internal Mounting Hardware

Insert the threaded "T" nut through the pre-drilled hole at the top of the cage and screw the internal mounting hardware into the threaded "T" nut from the inside of the unit. Then, assemble dome fixture as shown in illustration 18 by tightening clamp around internal mounting hardware.

Illustration 18



WARNING!!

Pliers and scew driver must be used when tightening the retention clip screw (see above). Hand tightening is NOT sufficient as the dome fixture may release from the clip and possibly injure your animal and / or create a fire hazard. This dome fixture is rated for bulbs and emitters up to 200 watts. Do not exceed this 200 watt rating as it may pose a fire hazard.

Step 9- Assembling 3" Adjustable Air Flow Vent / Cord Hole Grommet

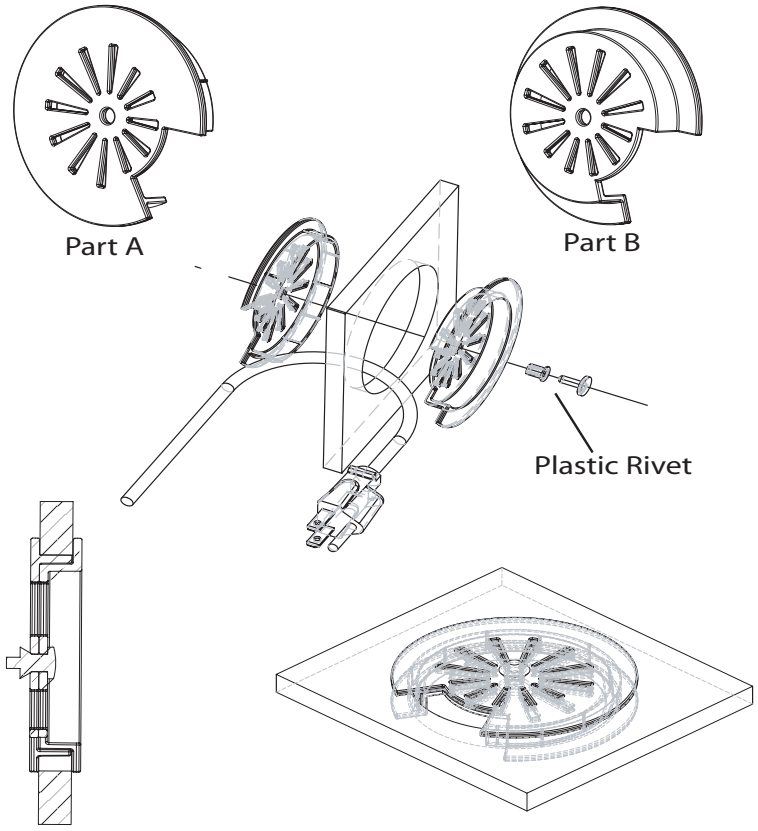
9.1 Parts Used for this Step

- 1 Part A and 1 part B shown in illustration 23
- 1 Removable plastic rivet

9.2 Follow steps A through G below:

A) Identify parts A, B, and plastic rivet.
B) After you have chosen the location(s) for your electric device(s) feed the cord through the pre drilled opening in your unit.
C) Before proceeding, realize that part B is the part which controls airflow and needs to be accessible. Depending on your unit's location you may choose to put part B on the inside or outside of your unit.
D) Insert part A into pre drilled opening, your cords will now end up in the notched portion of part A. Note: Part A does not rotate and should fit snugly into pre drilled opening.
E) Insert part B into part A, again aligning cords in notched potion. Insert plastic rivet in center hole and press firmly in the middle as shown in illustration 23.
F) You can now rotate part B to achieve desired air flow setting or adjust for the amount of cords you are using. There should be a setting for 0 to 5 cords as well as closed to maximum air flow.
G) Should there be a need to remove the vent, you will need to pop out the core of the plastic rivet with a flat head screw driver and pull part A and B apart. This rivet is reusable.

Illustration 19



Pull Out Floor Clip(s) and Latch Installation Instructions

Pull out floor panels should come pre assembled (with the exception of special circumstances). However, some pull out floors come in 2 or more panels and may require connector(s) to join the two panels together. For any pull out floor, a clip can be connected to the front to help support the floor from sagging. Below are instructions for assembling the connector(s) and clip.

Step 20 - Assembling Pull Out Floor Connector(s)

20.1 Parts Used for this Step

-Pull out floor panel(s) (quantity varies, see packing slip)
-Pull out floor clip(s) (quantity varies, see packing slip)

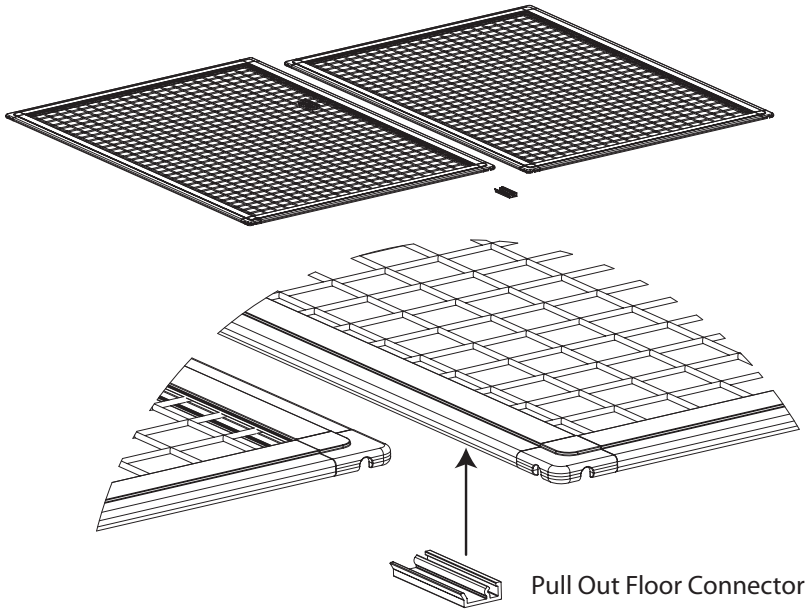
20.2 Installing Pull Out Floor Connector(s)

Any pull out floor consisting of 2 panels requires 2 pull out floor connectors. Check your packing list to see how many pull out floors your cage comes with. If it comes with one, skip this step and go to step 21 below.

These connectors permanantly attaches to one panel and temporarily attaches to the other panel. These connectors will allow you to pull out both panels at the same time from the front without having to reach inside the cage.

Press fit the pull a pull out floor connector into the bottom of the aluminum frame approximately 3" from each side on the length member of ONE your pull out floors panels as shown in illustration 20. The floor with the connectors attached should slide into the top channel of the pull out tray track first. Lower the second floor onto the exposed lip of the pull out floor connectors and then slide it into the same track.

Illustration 20



Step 21 - Assembling Pull Out Floor Clip

21.1 Parts Used for this Step

-1 Pull out floor clip per pull out floor

20.2 Installing Pull Out Floor Clip

For any pull out floor over 36" in length we include an optional pull out floor clip to help prevent the floor from sagging. Press fit the clip into the under lip of the front of the pull out floor frame as shown in illustration 21. Then, pull upward on the top of the clip and hang the upper part of the clip onto the aluminum frame of the cage. To remove the panel or open the front door, left upward on the top of the clip and pull away from the cage. You may need to pull the pull out floor an inch away from the front of the cage in order to slide the front door. The back door should slide comfortably with the clip still in place.

If your floor did not come with a clip because it is 36" in length or less, and you have special needs where you require a clip, you can call and order a clip and attach it at any time after assembly.

Illustration 21