



# NATIONAL CASEGOODS

## INSTALLATION INSTRUCTIONS -VERTICAL BEDS-

BEFORE YOU BEGIN, PLEASE TAKE A FEW MOMENTS TO FAMILIARIZE YOURSELF WITH ALL OF THE PARTS AND CONFIRM THAT ALL OF THE HARDWARE IS INCLUDED. ALSO, READ THESE INSTRUCTIONS THOROUGHLY BEFORE STARTING THE ASSEMBLY AND INSTALLATION.



**WARNING**

**FAILURE TO PROPERLY SECURE THE BED TO THE WALL  
CAN CAUSE SERIOUS INJURY! READ ALL SAFETY  
INSTRUCTIONS BEFORE INSTALLATION.**

**ASSEMBLY AND INSTALLATION REQUIRES TWO PEOPLE!**

**You will need to have these tools to install the wall bed:**



**Drill**



**Phillips  
Screwdriver**



**Stud Finder**



**1/8" Wood or Masonry  
Drill Bit (per wall type)**



**Ladder**

Version RO-8.22.11











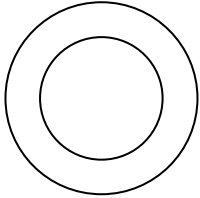





## **IMPORTANT SAFETY INFORMATION!**






- It is extremely important that the bed be properly and securely affixed to the wall. Failure to do so can cause serious injury or death.
- The wall bed should be securely fastened to wall studs, concrete, block, brick or other wall type using the proper fasteners.
- When affixing the header to wall studs, the fasteners should be inserted into the center of the wall stud.
- The proper tools need to be utilized in installation of the bed. These are listed in the Installation Instructions.
- Installation of the bed should be performed by two people. Attempting to install the bed alone can cause injury.
- The wall bed should sit flush against the wall for secure installation.
- Never attempt to unscrew the wall bed from the wall while it is open.
- If you are using lighting, you should keep covers, comforters, and other bedding away from the bed when you close the bed. You should tuck any bulky bedding tightly between the mattress and the frame rails of the wall bed. Also, make sure no wires are being pinched at any location.
- Walls other than Wood Stud walls will require alternate fasteners (not provided) for installation. These may include molly/hollow wall anchors, toggle bolts (suggested for metal stud walls), Tapcons®, or other fastener types. Please consult your local home improvement store for recommendations.

## HARDWARE INCLUDED

(Additional hardware/screws are included for beds with side cabinets and/or lighting kits)

Part	QTY.	Description	Color	Actual Size (most parts)
<b>A</b>	2	Pistons	Black	 (not actual size)
<b>B</b>	2	Upper Plates	Black	 Upper Plate  Pivot Pin Plate
<b>C</b>	2	Pivot Pin Plates	Black	
<b>D</b>	14	3/4" T-Nut	Black	
<b>E</b>	14	5/8" Machine Screw	Silver	
<b>F</b>	4	3/4" Wood Screw	Silver	
<b>G</b>	10	3/4" Wood Screw	Black	
<b>H</b>	2	Bed Stopper	Black	<b>1/2 SPHERE WITH RUBBER BUMPER</b>
<b>I</b>	2	E-Clip	Black	  <b>I</b> <b>J</b>
<b>J</b>	2	Nylon Washer	White	
<b>K</b>	16	3/4" Cam Dowel	Silver	
<b>L</b>	4	1 1/2" Pocket Screw	Silver	
<b>M</b>	4	1 1/2" Wood Screw	Black	
<b>N</b>	6	1 1/4" Wood Screw	Silver	
<b>O</b>	4	3" Wood Screw	Black	

**CONTINUED ON NEXT PAGE**

<b>P</b>	4	Plastic Dowels	Clear	
<b>Q</b>	4	Plastic Base Clip	Clear	
<b>R</b>	4	5/8" Flat Head Screw	Silver	
<b>S</b>	2	Swing Leg	Black	See Page 5 (Figure 1a)

### **HELPFUL HINTS:**

1. Unless you requested to have your wall bed without a notch for the base molding at the bottom of your wall, a 5 inch tall by 1 inch notch is included on your wall bed Cabinet Verticals. This is necessary for the wall bed to sit flush against the wall for a secure installation. If you ordered your wall bed without a notch because you want to make a different size notch, you should do this first, **BEFORE** any other step.
2. Do not install any part where the unfinished sides or edges would be exposed after installation. The unfinished side of a header should point to the ceiling; the unfinished side of a headboard should be against the wall, etc.
3. If you ordered your wall bed **UNFINISHED**, there are some very important details to consider. They are as follows:
  - a. All pieces should be individually finished before you assemble the bed. You will not be able to completely finish all necessary surfaces after assembly.
  - b. If you are applying paint to finish your wall bed, please make sure to prime all parts with a good quality primer before painting.
  - c. **DO NOT APPLY FINISHES TO THE PISTONS, PIVOT PLATES, OR LEG MECHANISM!**
  - d. Always check to make sure all parts are completely dry before you assemble the wall bed.

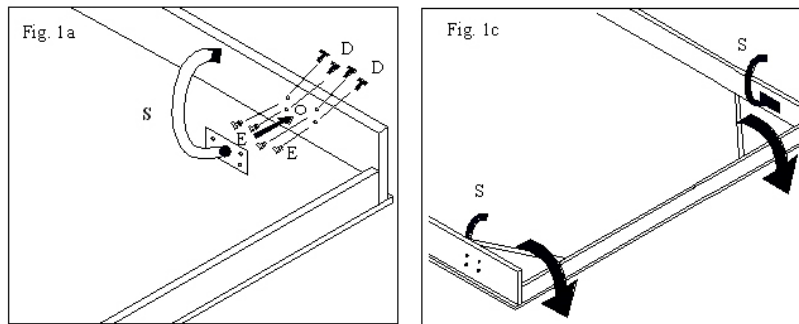
## **LEG ASSEMBLY**

### **Leg Assembly STEP 1:**

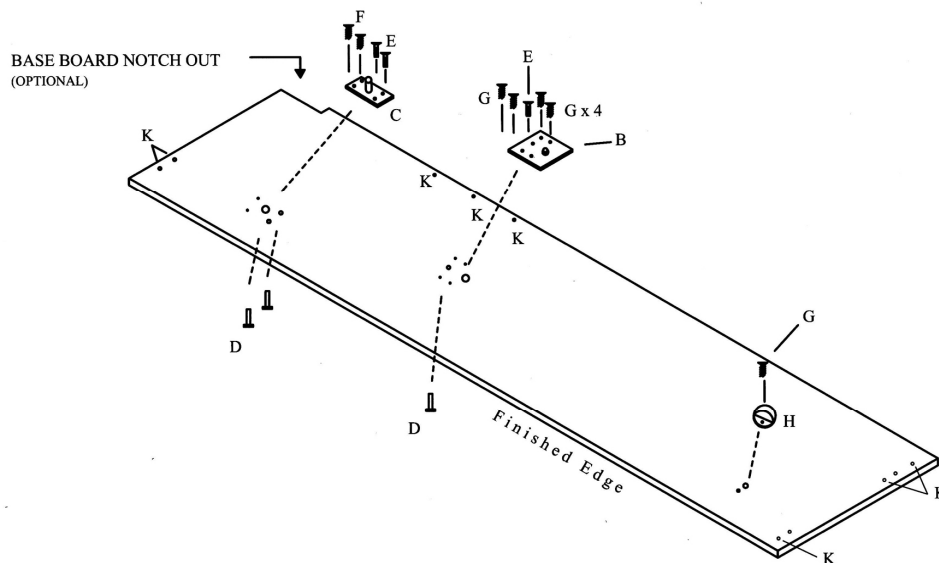
Making sure that the Swing Leg is facing the proper direction (see Figure 1a), insert the 1/2" rod into the 3/4" hole at the end of the Assembled Face. Insert four 3/4" T-Nuts (D) in the four through holes from the outside of the Assembled Face. Insert a 5/8" Machine Screw (E) through the plate of the Swing Leg and thread into each of the 3/4" T-Nuts (D). REPEAT THIS STEP FOR THE OTHER SWING LEG ON THE OPPOSITE SIDE.

### **Leg Assembly STEP 2:**

Make sure the Swing Leg System is properly installed by rotating it downward. It should be able to rotate all of the way around and under the Assemble Face once the bed has been fully installed (it will not go all of the way around while the Assembled Face is lying on the floor). Reference the diagram (Figure 1c) to make sure you have installed the Swing Leg System properly and that both Swing Legs are facing the right direction.



The Cabinet Verticals are precisely machined for the parts you are about to install. Based on the machined holes in the Cabinet Verticals, you will very easily determine the location of the plates. The diagram also indicates the direction and position of these parts, as well as the proper fastener to use for each.



## **STEPS FOR INSTALLING PARTS ON YOUR CABINET VERTICALS**

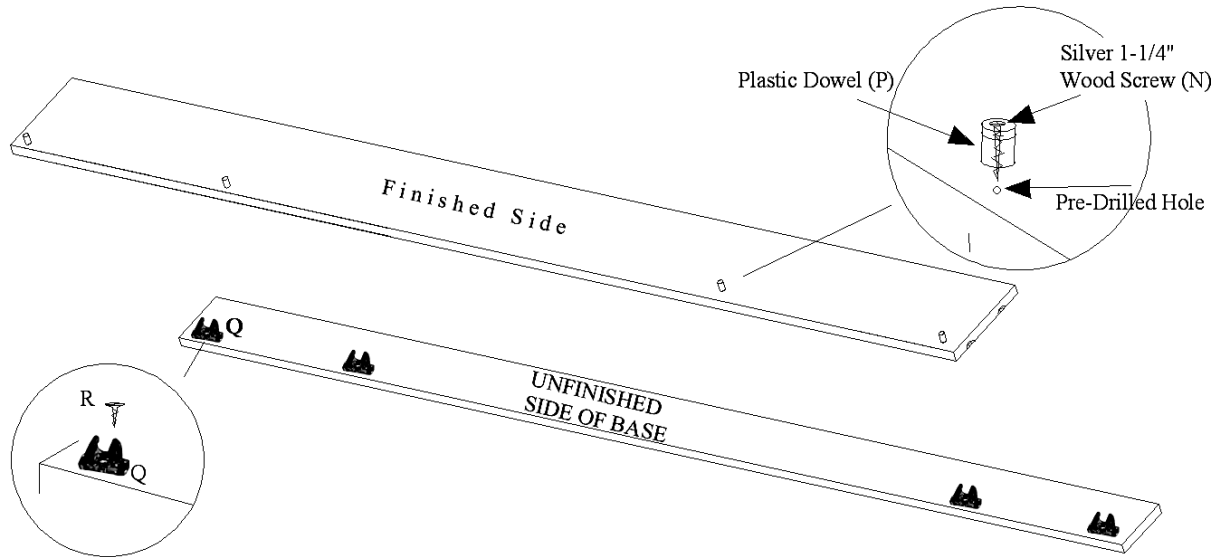
**STEP 1:** With one Cabinet Vertical lying on its side and several holes facing up, position one Upper Plate (**B**) with the nut on the back of the plate inserted into the upper most  $\frac{3}{4}$ " hole. Insert a  $\frac{3}{4}$ " T-Nut (**D**) in the through hole from the *back side* of the Cabinet Vertical. Insert a  $\frac{5}{8}$ " Machine Screw (**E**) through the Upper Plate (**B**) and thread it into the  $\frac{3}{4}$ " T-Nut (**D**). Finish by inserting four Black  $\frac{3}{4}$ " Wood Screws (**G**) in the remaining holes. The pre-marked holes ease installation. **REPEAT THIS STEP FOR THE OTHER CABINET VERTICAL.**

**STEP 2:** Position one Pivot Pin Plate (**C**) with the  $\frac{1}{2}$ " end of the rod inserted into the lower most  $\frac{3}{4}$ " hole. Insert two  $\frac{3}{4}$ " T-Nuts (**D**) in the two through holes from the *back side* of the Cabinet Vertical. Insert a  $\frac{5}{8}$ " Machine Screw (**E**) through the Pivot Pin Plate (**C**) and thread into each of the  $\frac{3}{4}$ " T-Nuts (**D**). Finish by inserting two Silver  $\frac{3}{4}$ " Wood Screws (**F**) in the remaining holes. The pre-marked holes ease this installation. **REPEAT THIS STEP FOR THE OTHER CABINET VERTICAL.**

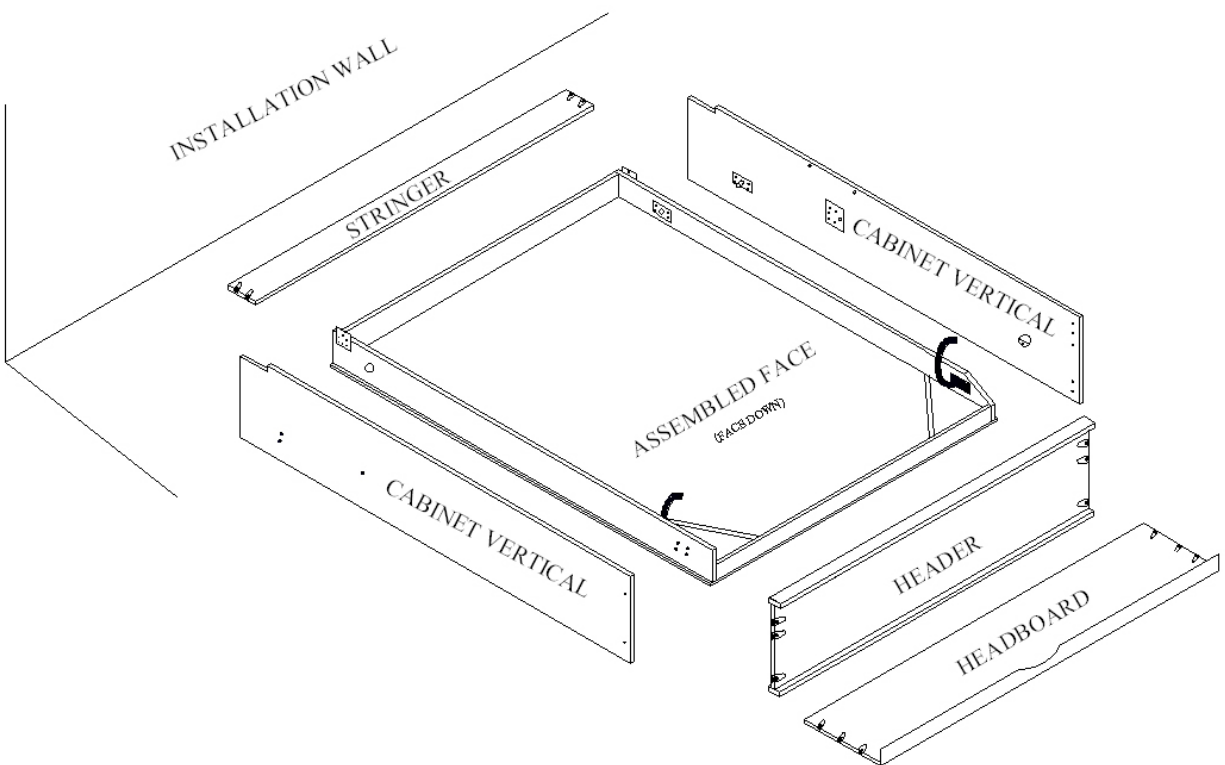
**STEP 3:** Position one Bed Stopper (**H**) with the pin on the back inserted into the  $\frac{1}{4}$ " hole near the top. Position the Bed Stopper (**H**) as to line up the hole with the pre-marked hole on the Cabinet Vertical. Secure this with a  $\frac{5}{8}$ " Pan Head Screw (**G**). **REPEAT THIS STEP FOR THE OTHER CABINET VERTICAL.**

**STEP 4:** In the remaining holes **NOT** covered with a round sticker, screw a  $\frac{3}{4}$ " Cam Dowel (**K**) in each; **3** at the top of the Cabinet Vertical, **3** mid-ways down one side, and **2** at the bottom edge. Be sure to screw them in all of the way, but be careful not to over tighten them. Then, remove the stickers from the remaining holes. **REPEAT THIS STEP FOR THE OTHER CABINET VERTICAL.**

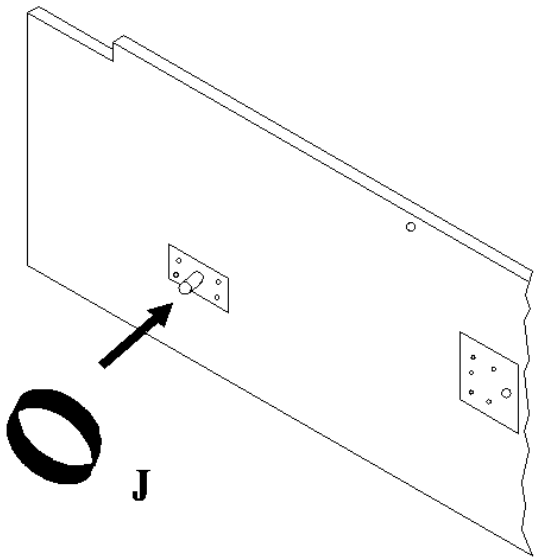
**STEP 5:** Insert a 1¼" Wood Screw (N) into each Plastic Dowel (P) and screw into the four predrilled holes on the finished side of the Stringer. Insert a ⅝" Flat Head Screw (R) into the each Plastic Base Clip (Q) and screw into the four predrilled holes on the unfinished side of the base molding. This will be installed in a later step.



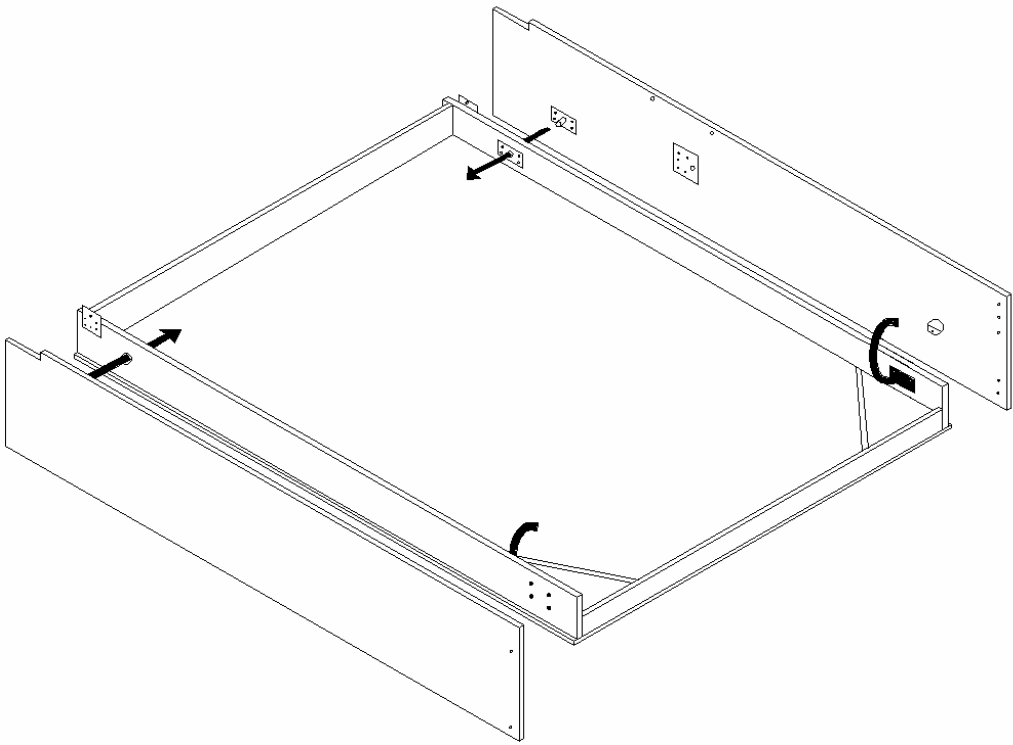
**STEP 6:** Position all of the parts approximately 24 inches from the wall where you plan to install the bed. Lay them out as shown below.



**STEP 6:** Place a Nylon Washer (**J**) on the Pivot Bar on each Pivot Pin Plate (**C**) and stand the Cabinet Verticals on their finished (front) edge.

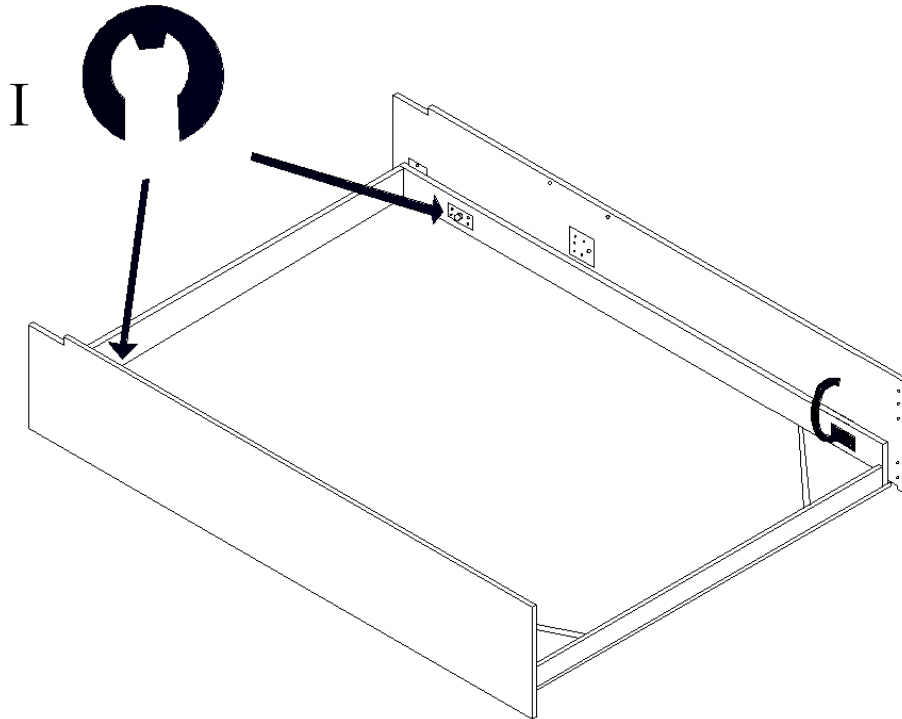


**STEP 7:** Slide the Pivot Bars all of the way into the Pivot Holes in the Assembled Face. The Nylon Washer (**J**) will establish the spacing needed between these pieces.

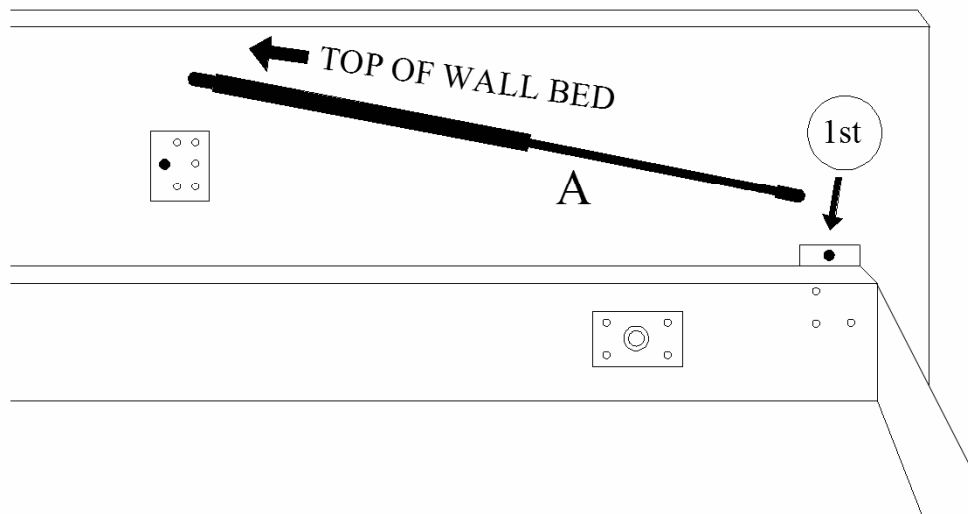




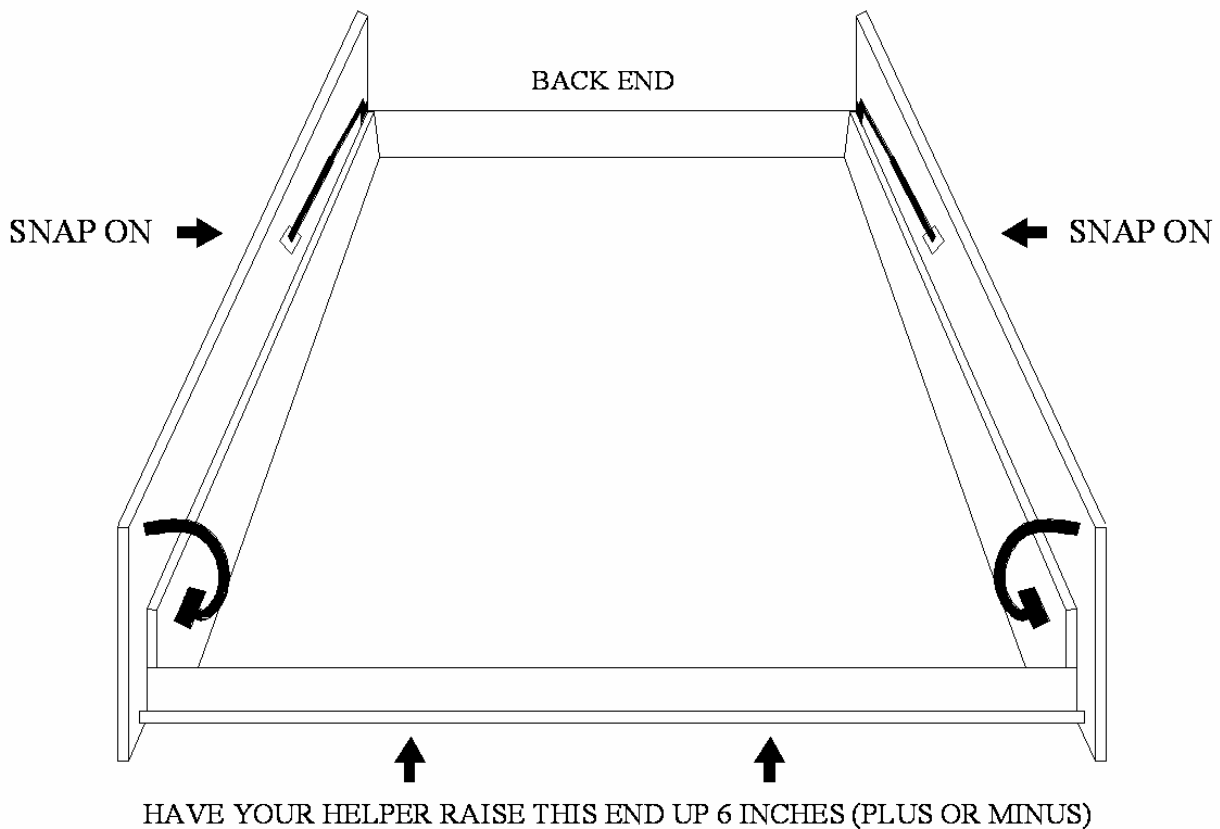
**STEP 8:** Snap one E-Clip (**I**) into the groove on each of the Pivot Bars locking the Cabinet Verticals to the Assembled Face.



**STEP 9:** Next, snap the smaller end of one Piston (**A**) onto the ball receiver on the Assembled Face. The arrow should be pointing to the top of the wall bed and away from the wall. REPEAT THIS STEP ON THE OTHER SIDE OF THE ASSEMBLED FACE.



**STEP 10:** In order to attach the pistons to the Cabinet Verticals, you must make sure that the Bed Stopper (**H**) is not resting on the Assembled Face. If it is, simply slide it off of the Assembled Face and let the Cabinet Vertical rest on the floor. Now, having already attached both pistons to the ball receiver on the Assembled Face in **STEP 9**, have one person gently lift the Assembled Face about 6" off the ground while the second person snaps the larger end of the Piston (**A**) onto the ball receiver of the Upper Plate (**B**) on the Cabinet Vertical. ***You may need to move the Assembled Face up and down slightly to perfectly align the ball receiver and the head of the Piston (A).*** REPEAT THIS STEP ON THE OTHER SIDE OF THE ASSEMBLED FACE.

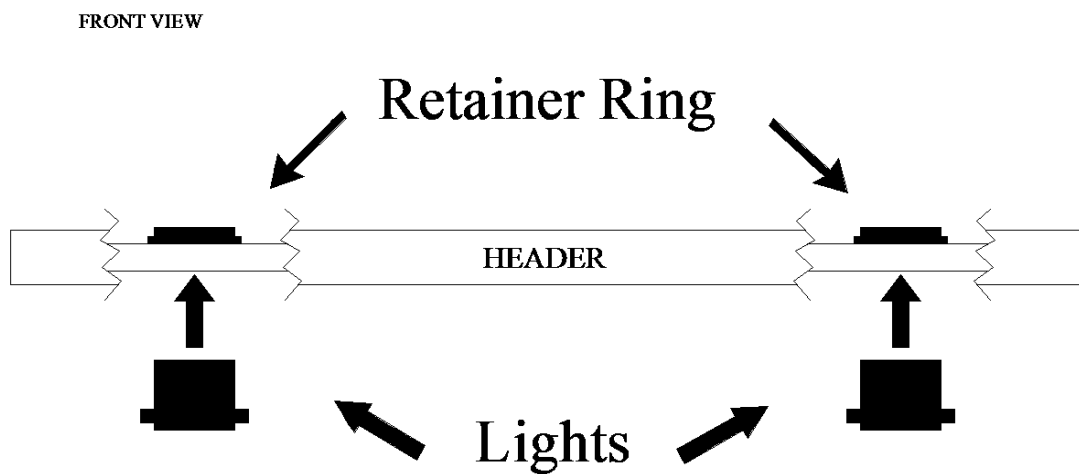


**STEP 11:**

The lights have been pre-installed in the Header for you; however, they have since been removed for shipping purposes. You will need to re-install them into the header and secure them with the pre-installed retainer ring. You will connect the wiring in a later step; you are only installing the lights in the Header in this step.

### **INSTALLING THE LIGHTS IN THE HEADER:**

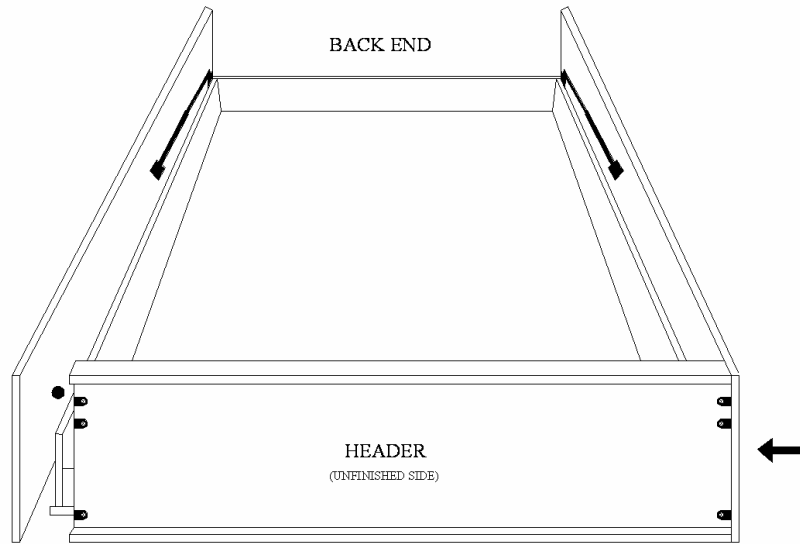
Making sure that the light with the single cord is installed first, at the left side of the header, *furthest* from the pre-installed transformer; push the light through the header from the finished side up until the trim ring is flush with the finished side of the header (**Figure A**). Then, using a screwdriver, tighten the screw on the retainer ring, securing the light. Repeat this for the remaining light.



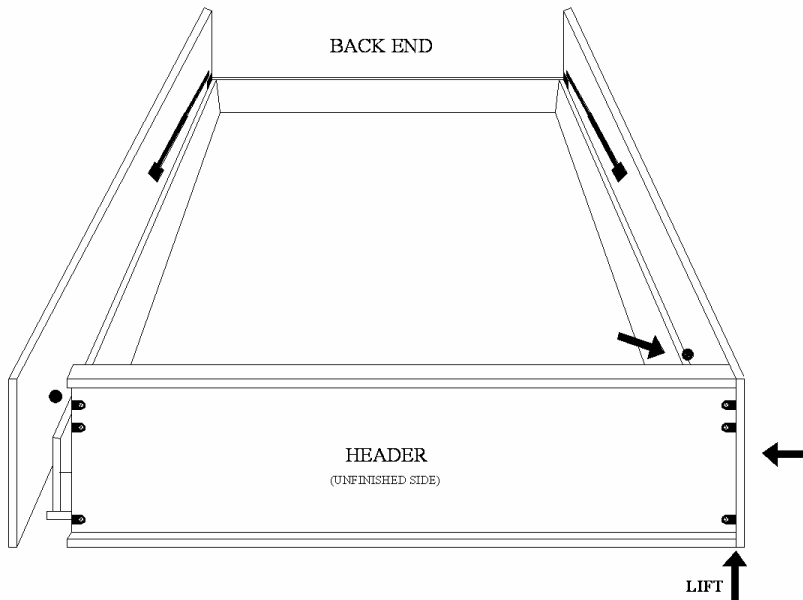
**Figure A**

**STEP 12:** With the unfinished side of the Header facing into the room and the finished side facing into the bed cabinet, attach the Header. Because of the position of the Cam Dowels, this piece can only be installed in one direction. Allow the Cam Dowels (**L**) to slip into the Cam Housings on one side. Secure this side of the Header by tightening the Phillips head within

each Cam Housing using a screwdriver, not a drill. This is done by twisting the Phillips head approximately 180° until it is tight. You must finish the next step before attaching the remaining side.

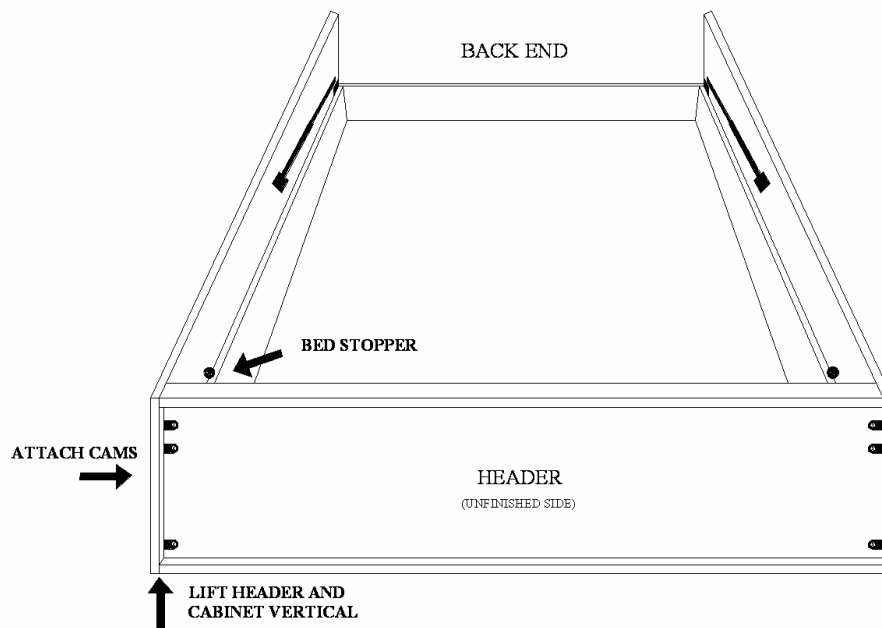


**STEP 13:** Place the attached side of the Cabinet Vertical on the Assembled Face using the Bed Stopper (H).



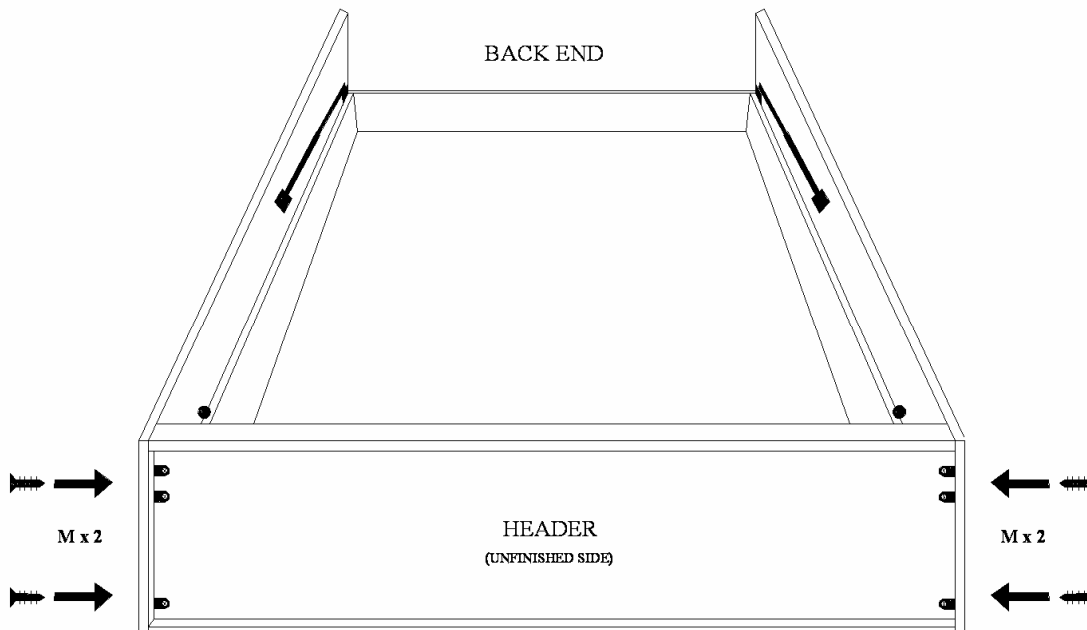
**STEP 14:** While lifting the unattached Cabinet Vertical and the Header slightly above the Assembled Face, allow the Cam Dowels (K) to slip into the Cam Housings. Secure this side of the Header by tightening the Phillips head within each Cam Housing using a screwdriver, not a drill. This is done

by twisting the Phillips head approximately 180° until it is tight. Allow this Cabinet Vertical to rest on the Assembled Face using the Bed Stopper (H).



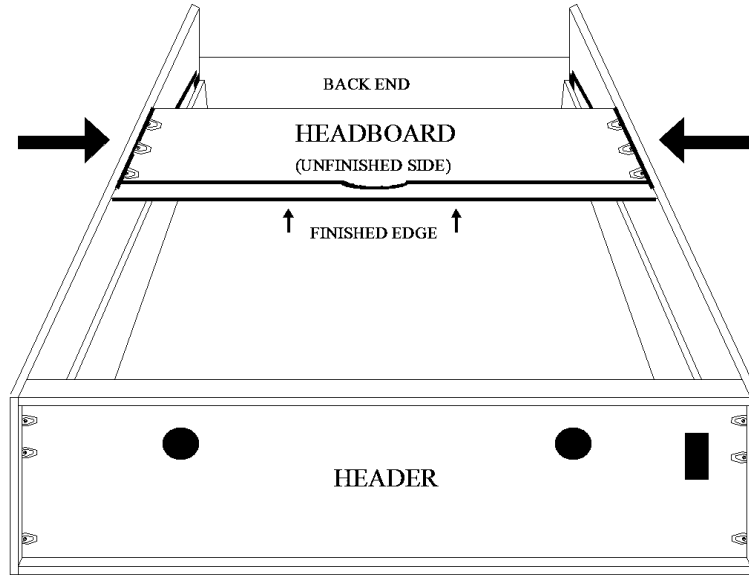
**STEP 15:**

Drive two Black 1½" Screws (M) into each side of the Header using the through holes. Make sure to do this on both sides of the Header.

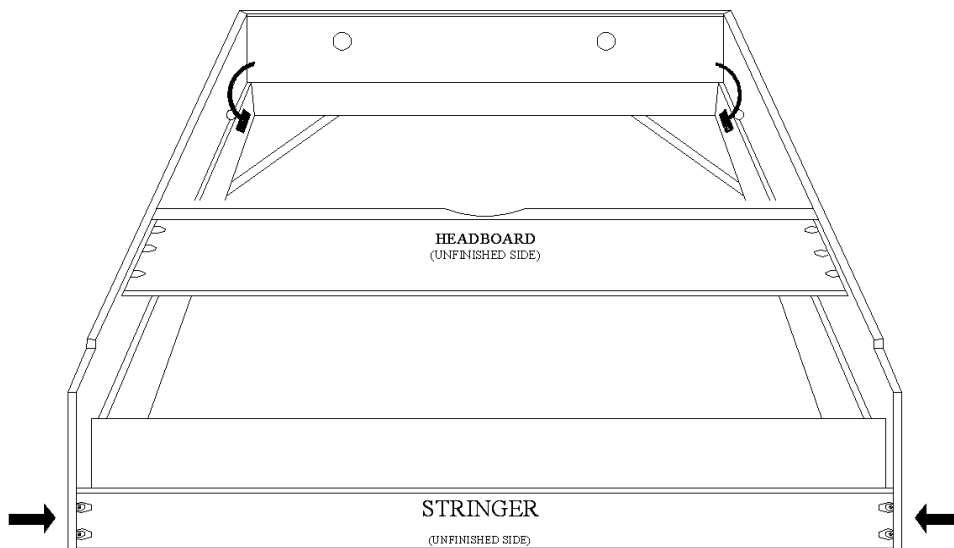


**STEP 16:** With the unfinished side of the Headboard facing up and the shelf facing toward the top of the wall bed, attach the Headboard. Follow the same Cam fastening procedure as with the Header. You will also screw

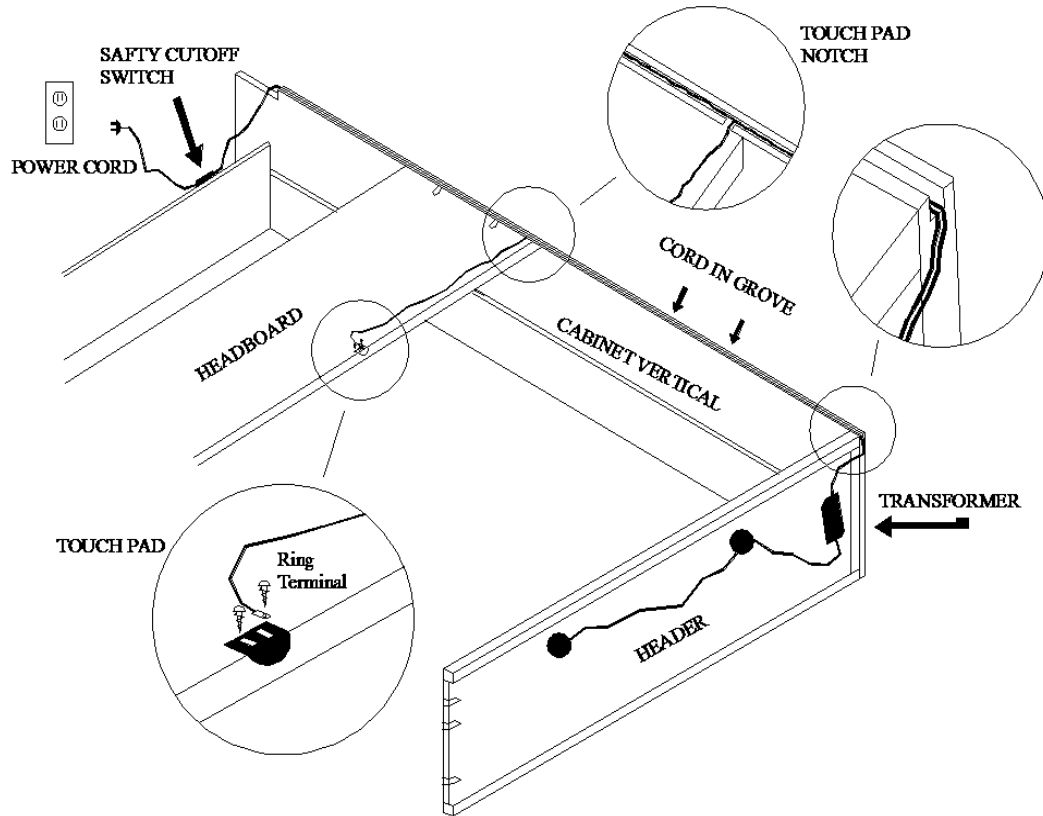
in two Silver 1½" Pocket Screws (**L**) into the pocket holes on each side of the Headboard shelf. Be careful not to drive these too far.



**STEP 17:** With the unfinished side of the Stringer facing the wall (and you), the finished side facing into the bed cabinet, and the attached Plastic Dowels (**P**) towards the floor, attach the stringer using same Cam fastening procedure as with the Headboard. (Notice this view is rotated 180° from the view above.)



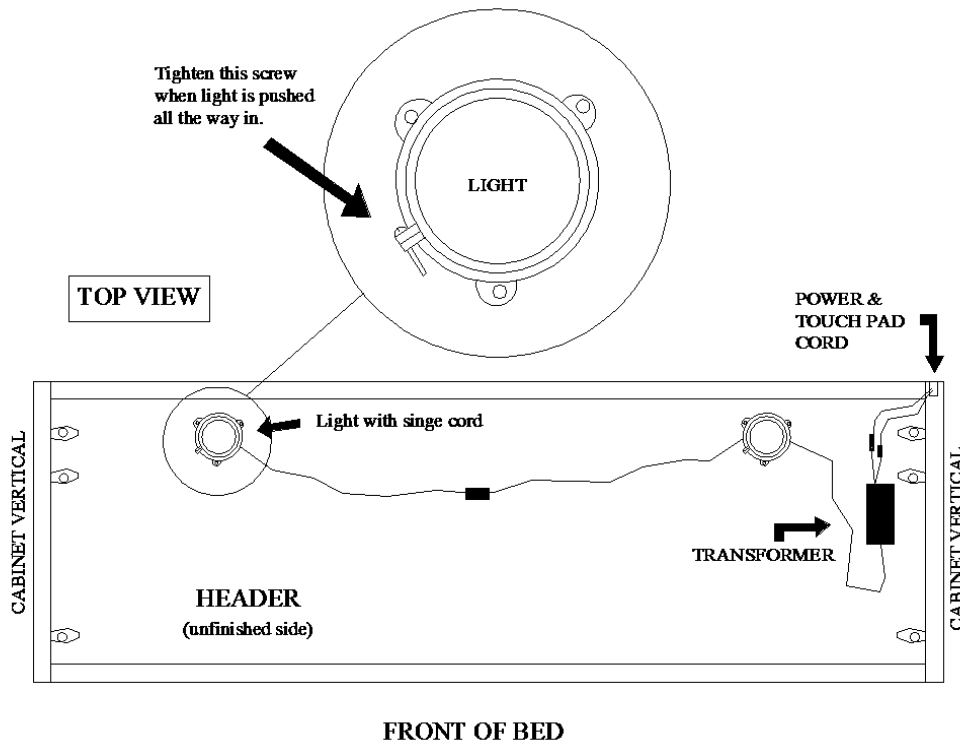
The wires need to be routed through the full length notch on the RIGHT CABINET VERTICAL and out of the baseboard notch. Finally, the quick connections will be made to the Transformer and the Safety Cutoff Switch. Simply follow the steps below and refer to the diagrams.



**Figure B**

- a.** First, route the 60 inch long dimmer wire (pre-installed at the Touch Pad) through the smaller notch on the Cabinet Vertical and into the larger notch on the Cabinet Vertical. Run this wire all the way up to the Header and plug the male end into the female end on the Transformer. (**Figure B**).
- b.** Then, route the long extension cord in the notch on the Cabinet Vertical gently pushing it as far in as it will allow. Make sure the female end is toward the top of the bed and the male end (normal plug end) is at the Stringer and through the baseboard notch (**Figure B**).
- c.** Next, plug the male end of the long extension cord into the female end of the pre-installed Safety Cutoff Switch installed on the Assembled Face – at the bottom of the bed closest to the Stringer (**Figure B**).
- d.** Next, connect the female end of the long extension cord to the male end of the wire exiting the Transformer (**Figure C**).

- e. Next, plug the male end of the light into the female end of the wire exiting the Transformer. Make sure these are completely together before continuing.
- f. **PLEASE NOTE:** The Transformer is installed in such a way as to minimize extra wire from sticking above the Header once the bed is installed. Therefore, the wires coming out of and going into the Transformer may appear to be reversed. This is NOT the case; simply plug the wires into its proper match.



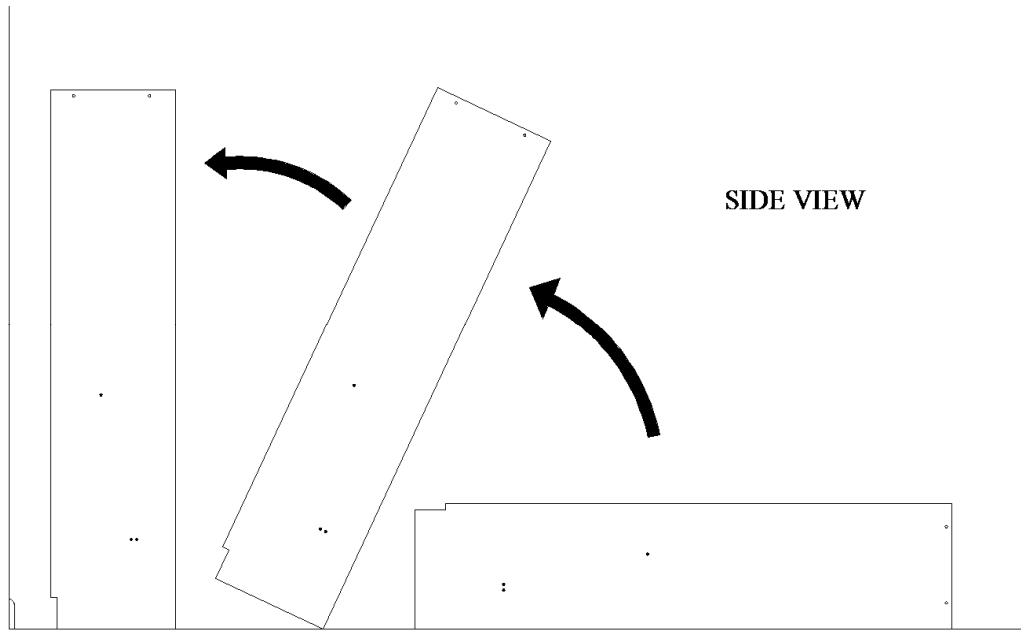
FRONT OF BED  
Figure C

- g. Plug the wire from the Safety Cutoff Switch into an outlet. This is also a good time to test the lights to ensure they are working properly. Also, make sure that no wires are being pinched at any location. With the lights plugged in and completely connected, and while the bed is still lying flat on the floor, test the lights by touching the ring terminal on the dimmer wire (**Figure B**). It will dim from low to medium to high and then off again. Once the bed is installed, the Safety Cutoff Switch will operate as specified, cutting power to the lights once the bed is half way closed. This will ensure the lights will not come on with the bed in the closed position.

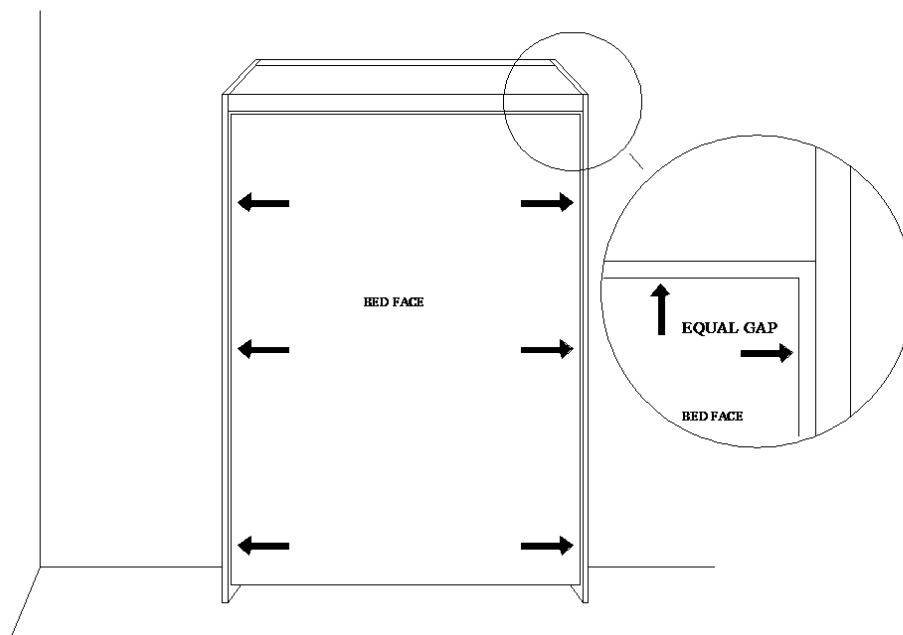
**STEP 18:** With the bed fully assembled, CAREFULLY lift the bed upright and push / slide it flush against the wall. **IF YOU HAVE LIGHTING, PLEASE BE SURE TO CONSIDER THE LOCATION OF YOUR OUTLET**



**AND HOW YOU WILL RUN THE WIRE TO THE OUTLET BEFORE YOU PUSH THE BED AGAINST THE WALL.**

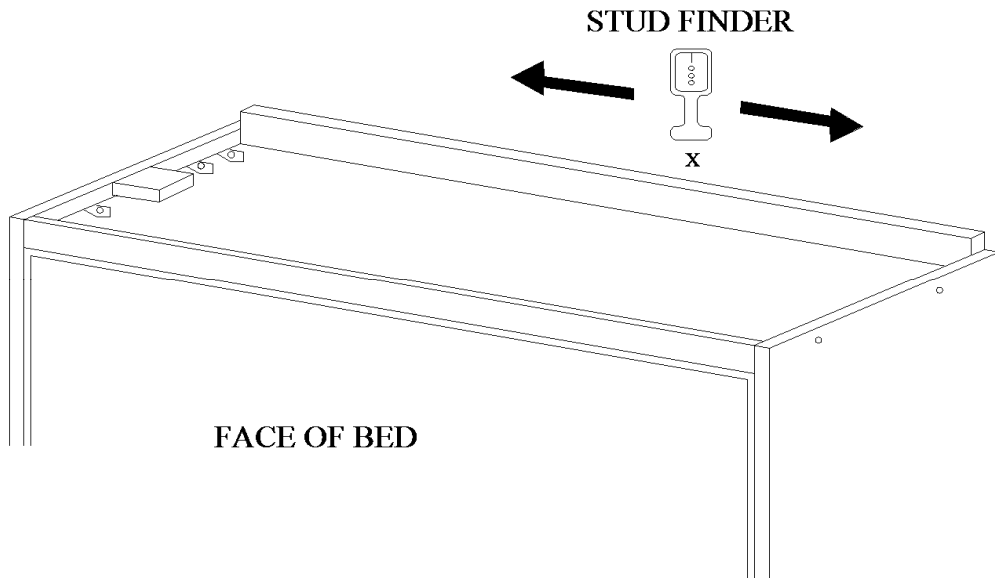


By gently tapping the Cabinet Verticals (as needed) to the right or left, adjust the bed so that the gap between the Assembled Face and the Cabinet Verticals is equal all the way around.

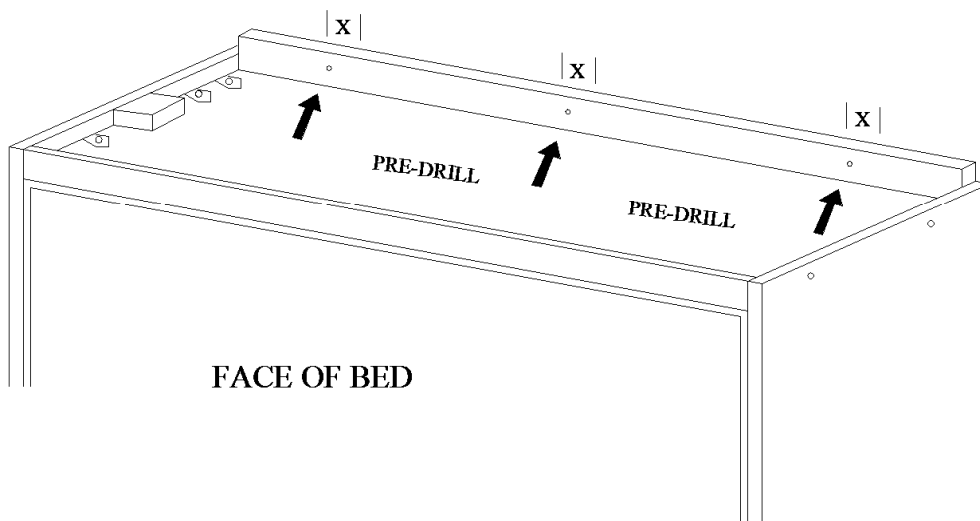


**YOU ARE NOW READY TO MOUNT THE BED TO THE WALL!**

**STEP 19:** Using an electronic stud finder and following the manufacturers instructions for use, locate the studs in the wall as shown. Mark an "X" to indicate the **CENTER** of the stud. Locate as many studs as you can within this space (minimum of 3). This will vary for concrete, brick, or lathe and plaster walls.

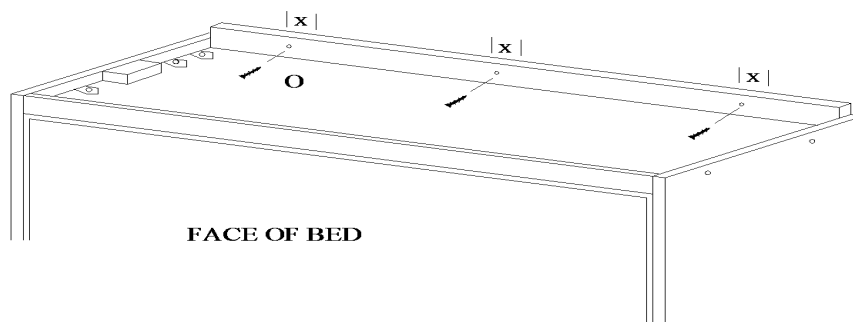


In the locations where you have located and marked the center of the studs, drill a 1/8" pilot hole through the back of the Header. Do not go all the way into the stud with this hole, just into the wood strip.

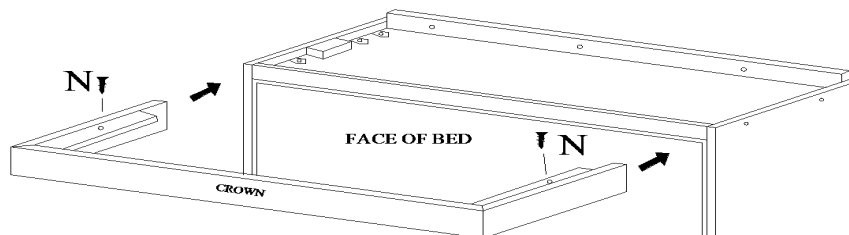


Finally, making sure that the gap around the bed is equal, drive a Black 3" Wood Screw (O) into each predrilled hole and into the wall studs. You may consider different fasteners for different wall types. **MAKE SURE THAT THE SCREWS ARE IN THE STUD AND THAT THE HEADER IS TIGHT TO THE WALL.** You will know you have hit the studs if it's more difficult to turn the screw. If not, you are into the drywall only. You will need to try to locate the studs again. To test this, pull on the Header a few times to make sure it does not come away from the wall.

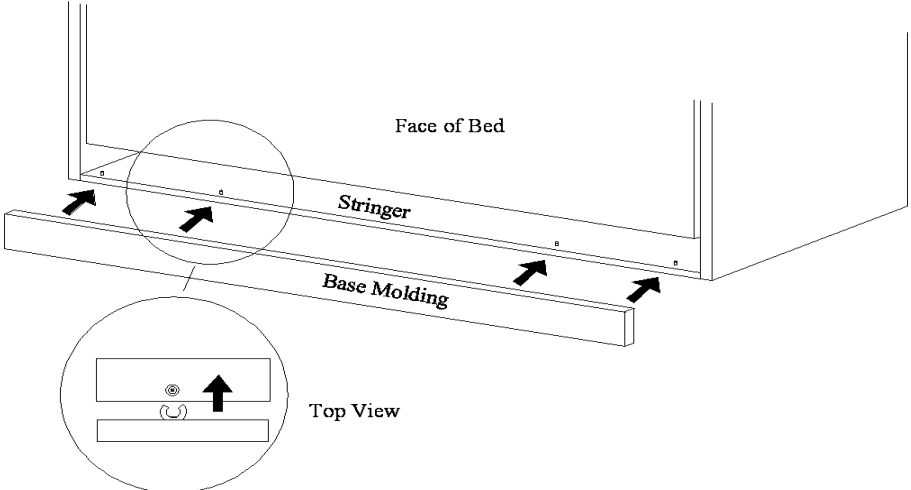
**⚠ WARNING** IT IS EXTREMELY IMPORTANT THAT THE BED BE PROPERLY AND SECURELY AFFIXED TO THE WALL. FAILURE TO DO SO CAN CAUSE SERIOUS INJURY OR DEATH!



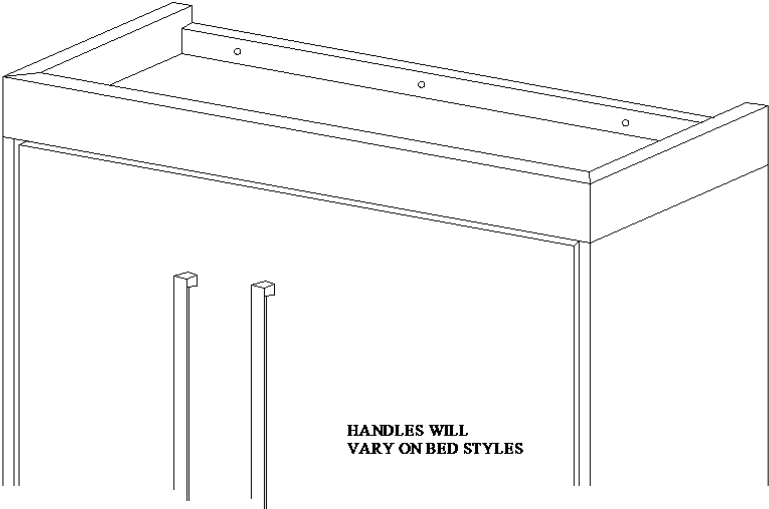
**STEP 20:** Once the bed is securely fastened to the wall, you are ready to install the crown molding. Simply slide the pre-fabricated crown molding all of the way onto the Header using the attached cleats for support. Finish the crown molding installation by installing two Silver 1¼" Screws (N) into the predrilled holes on the top of the cleats.



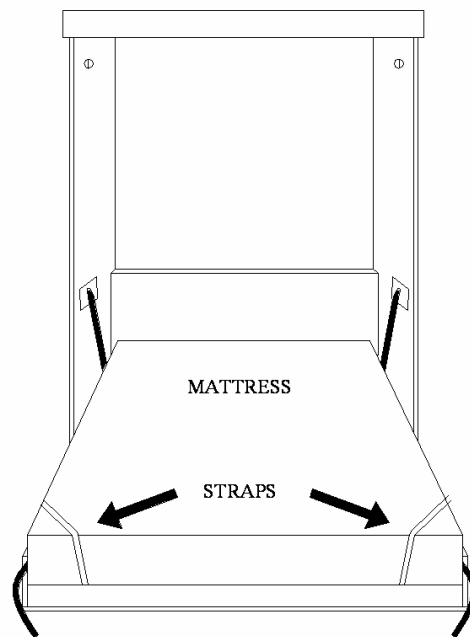
**STEP 21:** To attach the base molding, simply line up the Plastic Base Clips (R) on the base molding with the Plastic Dowels (P) on the Stringer and push them firmly on. You will hear and feel them snap in place.



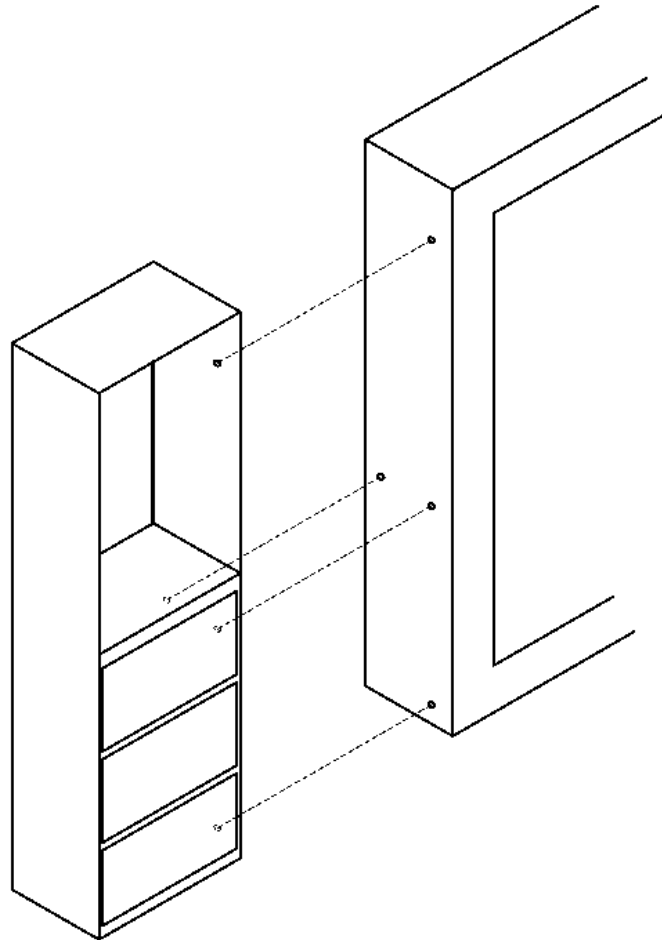
**STEP 22:** To install your mattress, you must first open the bed. Using the upper most handles (depending on style), pull the bed down into the open position. The weight of the mattress will hold the bed down. However, one person will need to hold the bed down during this step.



**STEP 23:** To keep the mattress in place when the bed is closed, simply pull the elastic straps at the bottom of the Assembled Face over the end of the mattress. These straps fit nicely under the fitted sheets and out of plain view.



**STEP 24:** If you have side cabinets, these can be installed once the bed is fastened to the studs in the wall. Push the cabinet against the bed making sure that the crown molding and the base molding on the front of the cabinet line up with the front edge of the bed. Once you are happy with the way the cabinet fits, drive screws from the side cabinet into the Cabinet Vertical of the bed as shown below. Be careful not to drive the screws too far and through the Cabinet Verticals!



**YOU HAVE SUCCESSFULLY FINISHED THE  
INSTALLATION OF YOUR NEW WALL BED!**

**CONGRATULATIONS!**