

DO NOT DEVIATE FROM THESE PLANS!

**If you want to modify these plans IN ANY
WAY, please CALL US FIRST toll-free:**

1-877-966-3852

**Unapproved changes can cause your
Murphy bed to NOT WORK CORRECTLY
and will VOID your warranty.**

PLEASE NOTE:

**This kit is engineered to work with
ANY mattress that meets
these WEIGHT and THICKNESS
specifications:**

<u>SIZE OF BED</u>	<u>THICKNESS (including any pillow top)</u>	<u>WEIGHT</u>
TWIN	Up to 12 inches	35 to 50 pounds
FULL	Up to 12 inches	50 to 65 pounds
QUEEN	Up to 12 inches	65 to 80 pounds

Create-A-Bed[®] *LLC*

NOTE: DO NOT deviate from these plans.

These plans are for constructing a
DELUXE
TWIN HORIZONTAL BED
using **PLYWOOD** material

If you are missing any parts or have ANY questions pertaining to materials or construction please phone the manufacturer.

TOLL FREE 1-877-966-3852

TOOLS NEEDED:

Power Drill

Drill Bits: 1/8" 1/4" 5/16", 1" Forstner Bit, 5/8" Forstner Bit

Power Saw, Table Saw or Circular Saw

Jigsaw or Coping Saw

Phillips-Head and Flat-Head Screwdrivers or Driver Bits for Drill

Tape Measure

#4 Allen Wrench

Hammer

Clamps

Straight Edge or Framing Square

Household Iron for Veneer Tape and Utility Knife

Stud Finder

© *Create-A-Bed*[®] *LLC*

murphy bed mechanism

2012, 2018, 2021

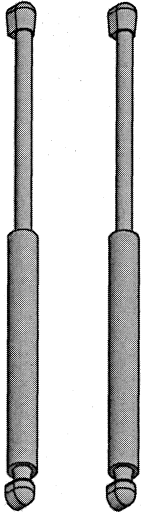
1800 Taylor Avenue Louisville, KY 40213

www.createabed.com

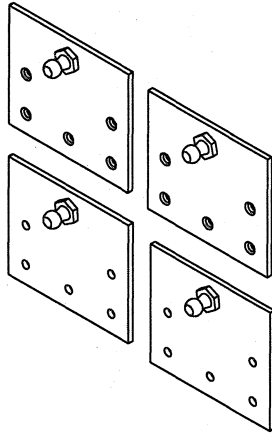
TOLL FREE: 1-877-966-3852

Create-A-Bed[®] LLC

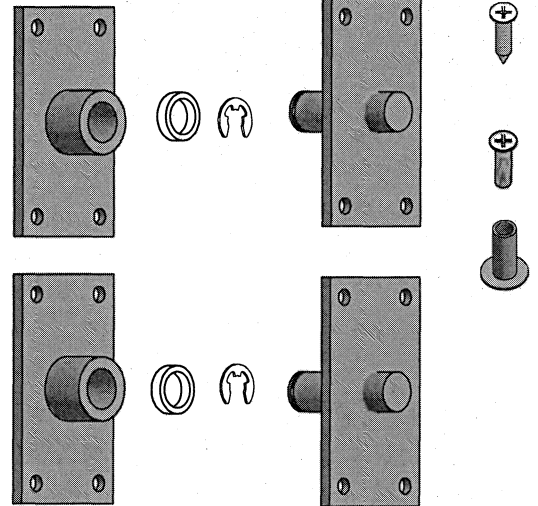
TWIN HORIZONTAL (SIDE BED) murphy bed mechanism PLYWOOD CONSTRUCTION



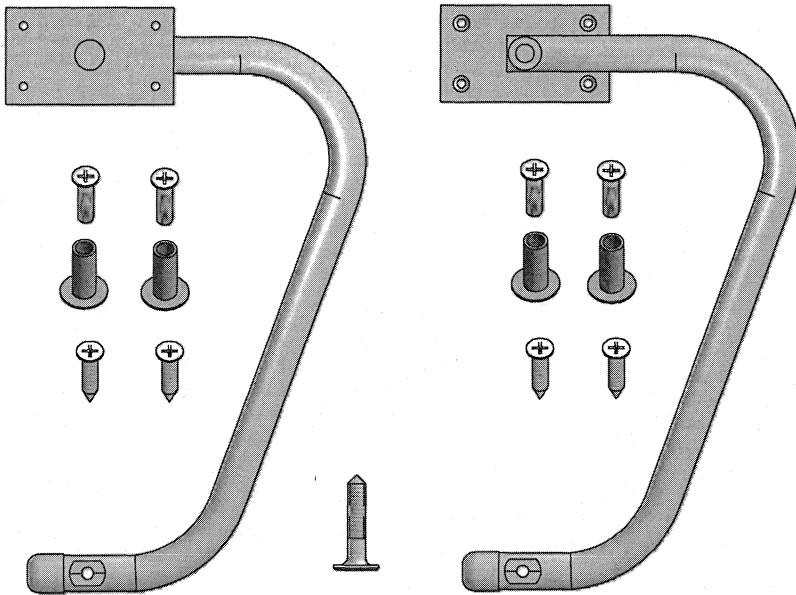
Two (2) GAS SPRINGS



Four (4) BALL STUD PLATES with Twelve (12) black #10 x 3/4" screws and Eight (8) "T" nuts with machine screws



Two (2) pair of METAL PIVOTS with Two (2) plastic spacers
Two (2) "E" CLIPS
Four (4) "T" nuts with machine screws
Twelve (12) #12 x 3/4" silver screws



Two (2) Metal Pivoting Legs
Two (2) 1/4" x 2" Leg Support Rail screws
Four (4) Black #10 x 3/4" screws
Four (4) "T" Nuts with machine screws



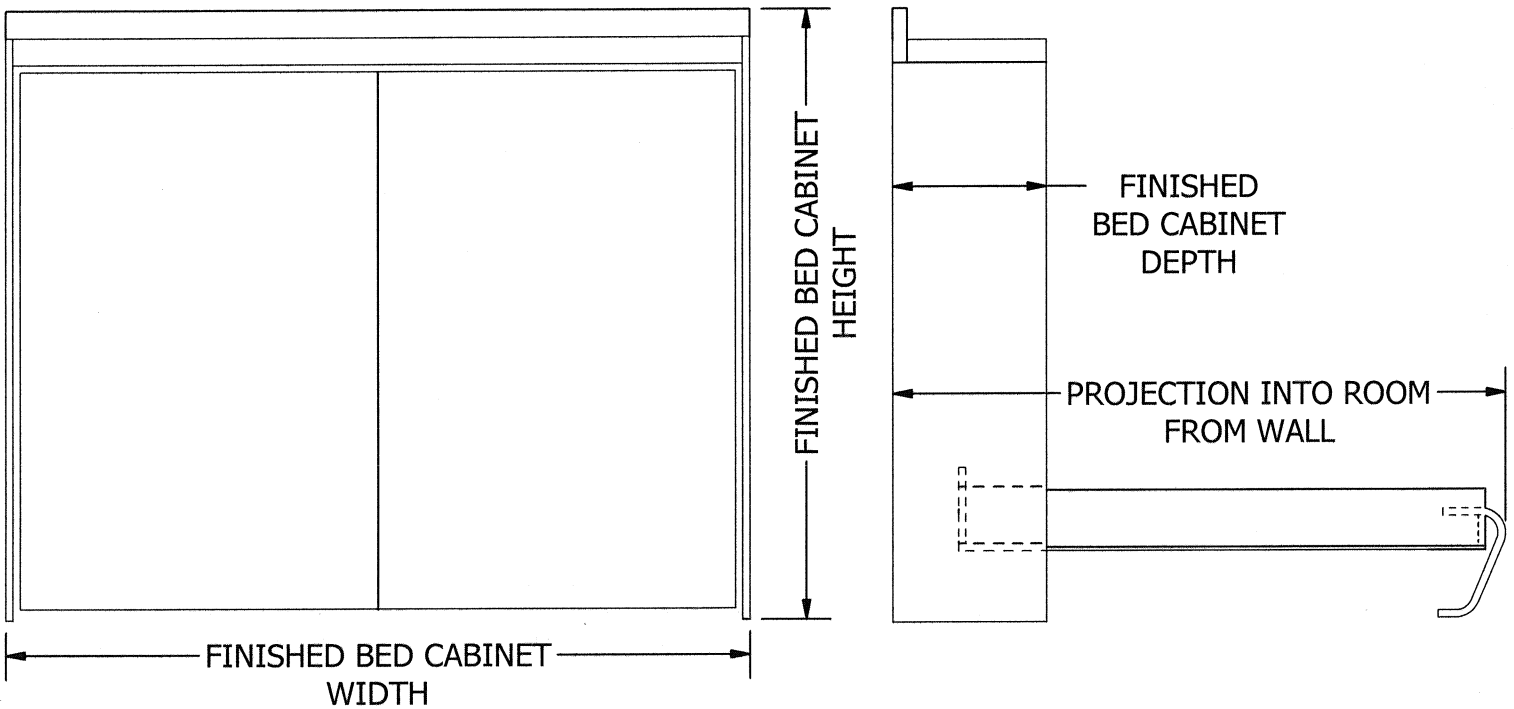
Two (2) BED STOPS with Two (2) #10 x 3/4" black screws



Two (2) ELASTIC MATTRESS RETAINING STRAPS

One (1) Green PLYWOOD CONSTRUCTION booklet
One (1) Purple ASSEMBLY AND INSTALLATION booklet
Online Video: bit.ly/deluxehorizontalvideo

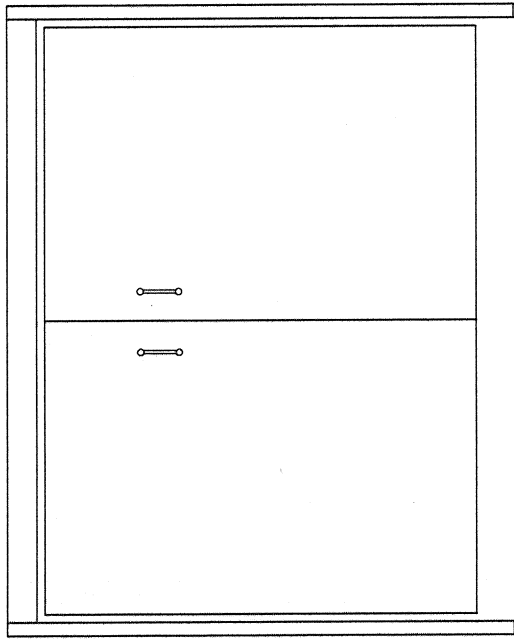
Out-to-out dimensions of **HORIZONTAL STYLE** murphy bed cabinet constructed using the *Create-A-Bed*® mechanism



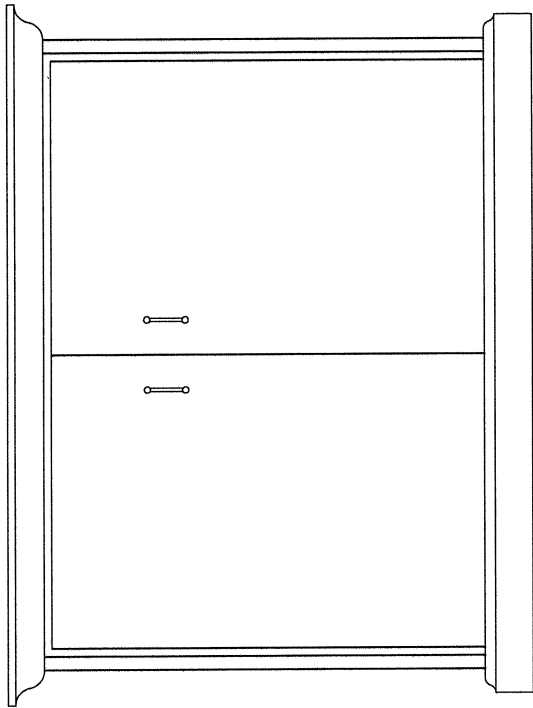
OUTSIDE-EDGE TO OUTSIDE-EDGE
FINISHED HORIZONTAL BED CABINET DIMENSIONS

SIZE	HEIGHT	WIDTH	DEPTH	PROJECTION
TWIN	47-3/8"	81"	15-7/8"	46"
FULL	62-5/16"	81"	15-7/8"	61"
QUEEN	68-5/16"	86"	15-7/8"	67"

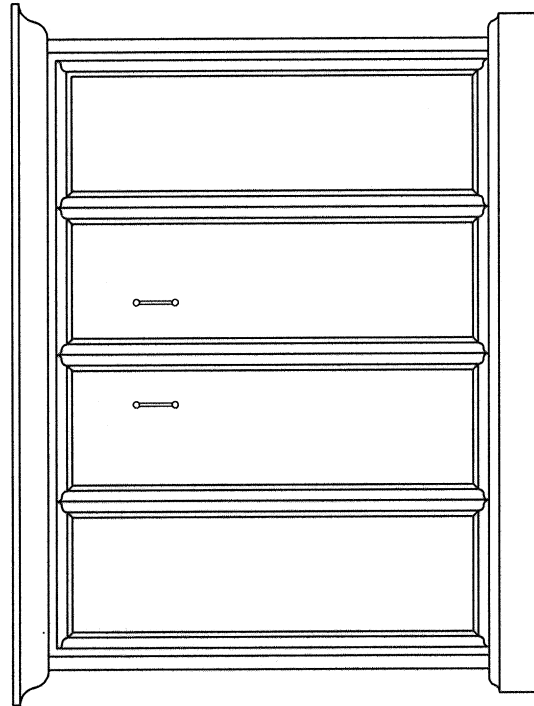
Some design options... or create your own!



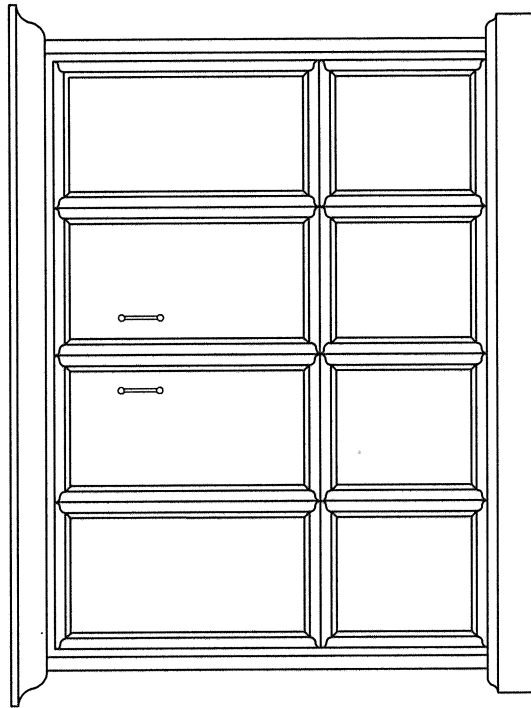
BASIC BED



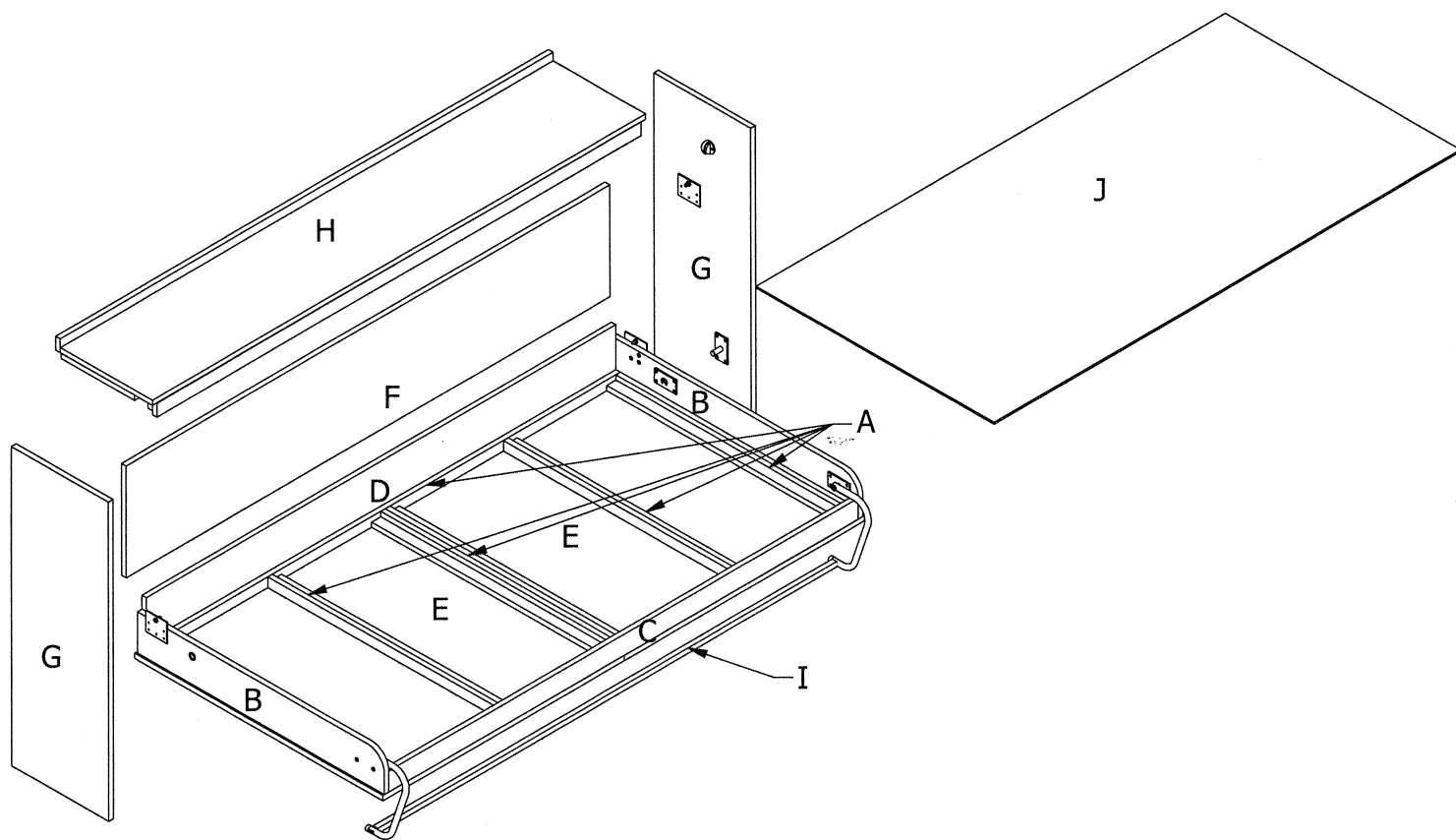
WITH CROWN
AND BASE MOLDING



WITH CROWN, BASE
AND FULL-LENGTH FACE
PANEL MOLDING

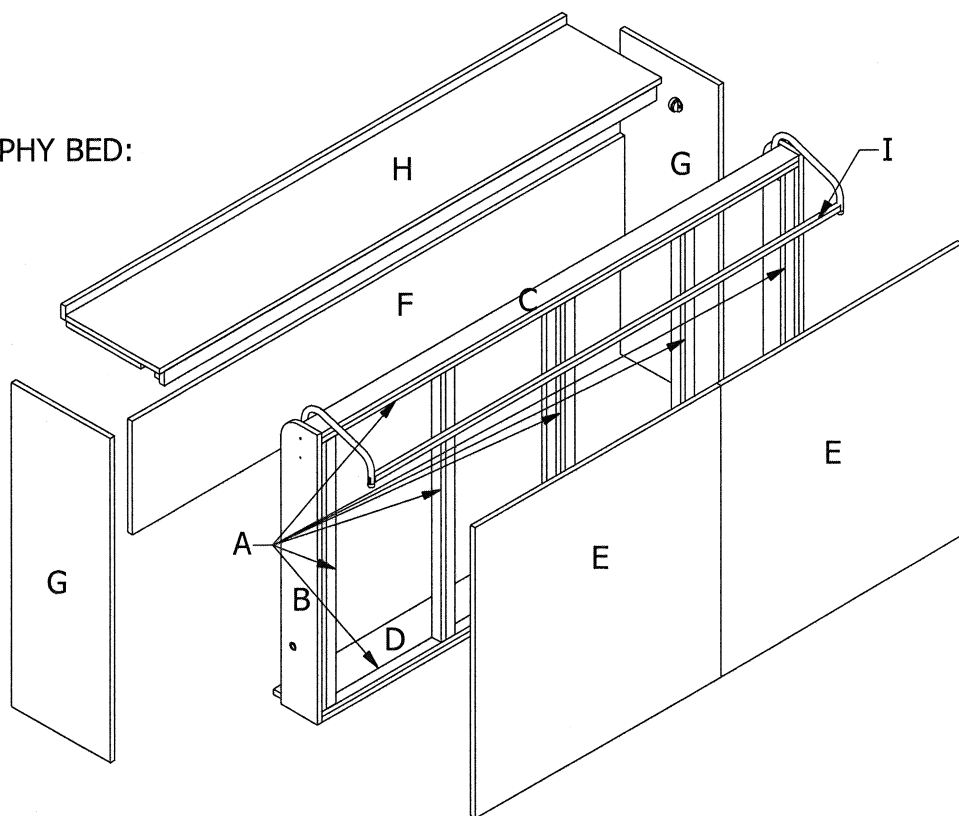


WITH CROWN, BASE
AND SPLIT
FACE PANEL MOLDING

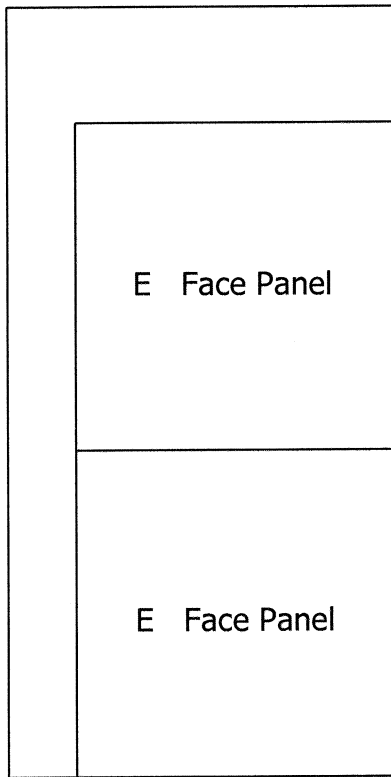


COMPONENTS OF FINISHED MURPHY BED:

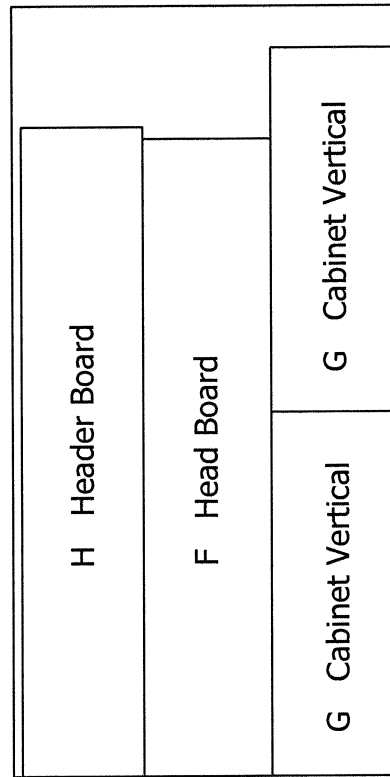
- A. INNER WOOD BED FRAME
- B. SIDE RAILS
- C. FOOT RAIL
- D. HEAD RAIL
- E. BED FACE PANELS
- F. BED HEADBOARD
- G. BED CABINET VERTICALS
- H. BED HEADER
- I. LEG SUPPORT RAIL
- J. 1/4" PLYWOOD MATTRESS SUPPORT



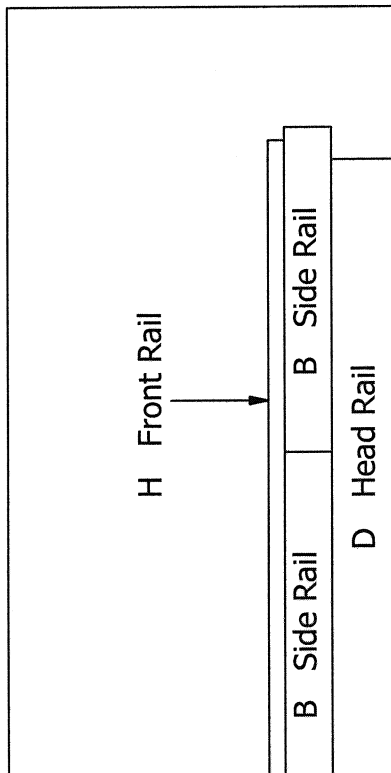
TWIN SIDEBED (HORIZONTAL) PLYWOOD CUTTING GUIDE
Requires 3 sheets of 3/4" x 4' x 8' and 1 sheet of 1/4" x 4' x 8'
NOTE: Refer to page 6 for the cutting dimensions.



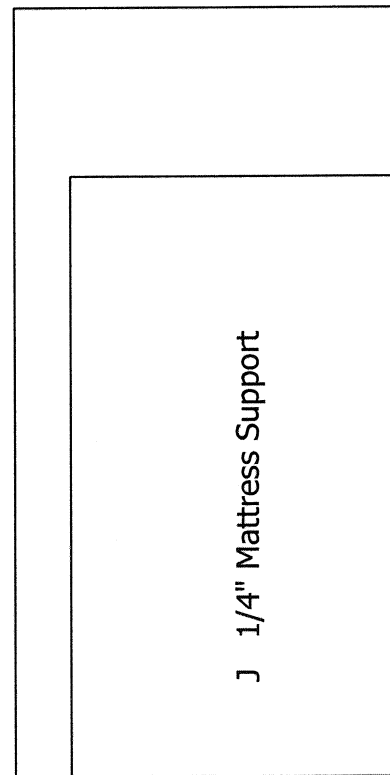
Requires 1 sheet 3/4"



Requires 1 sheet 3/4"



Requires 1 sheet 3/4"



Requires 1 sheet 1/4"

TWIN (single) SIZE DELUXE KIT HORIZONTAL BED WITH 3/4" PLYWOOD FACE PANEL
BILL OF MATERIALS / CUT SHEET

DO NOT SUBSTITUTE OTHER MATERIALS without calling Create-A-Bed toll-free FIRST

___ check off as completed

___ A. INNER WOOD BED FRAME: *To be constructed of solid wood: poplar, clear pine, maple, etc.*

FRAME STRUTS: ***SOLID WOOD*** 3/4" X 1-1/2" X 37-1/2" 12 pieces

FRAME SIDES: ***SOLID WOOD*** 3/4" X 1-1/2" X 77" 2 pieces

IMPORTANT: PLYWOOD MUST BE USED FOR THESE PIECES:

___ B. SIDE RAILS: 3/4" X 5-7/8" X 40-1/2" 2 pieces

___ C. FOOT RAIL: ***SOLID HARDWOOD*** 3/4" X 3" X 77" 1 piece

___ D. HEAD RAIL: 3/4" X 7-7/8" X 77" 1 piece

___ E. BED FACE PANEL: 3/4" X 39-1/2" X 40-3/4" 2 pieces

___ F. BED HEADBOARD: 3/4" X 15-7/8" X 79-3/8" 1 piece

___ G. BED CABINET VERTICALS: 3/4" X 15-7/8" X 45-3/8" 2 pieces

___ H. BED HEADER:
 HEADERBOARD: 3/4" X 15-1/8" X 80-7/8" 1 piece

FRONT RAIL: 3/4" X 2" X 79-3/8" 1 piece

FRONT RAIL SUPPORT: ***SOLID WOOD*** 3/4" X 1-1/2" X 79-3/8" 2 pieces

REAR RAIL: : ***SOLID WOOD*** 3/4" X 2" X 80-7/8" 1 piece

MOUNTING CLEATS: ***SOLID WOOD*** 3/4" X 1" X 12" 2 pieces

___ I. Leg Support Rail: ***SOLID WOOD*** 3/4" X 3/4" X 75-1/4" 1 piece

___ J. 1/4" **PLYWOOD** mattress support: 1/4" X 39" X 77" 1 piece

___ K. VENEER or MELAMINE TAPE: 13/16" X 75 feet

___ L. WOOD GLUE: One 8 ounce bottle

___ M. FINISH NAILS One box of 1-1/2"

___ N. SCREWS: #8 1-1/4" coarse thread Box of 100
 #8 1-1/2" coarse thread Box of 30
 #8 2" coarse thread Box of 40

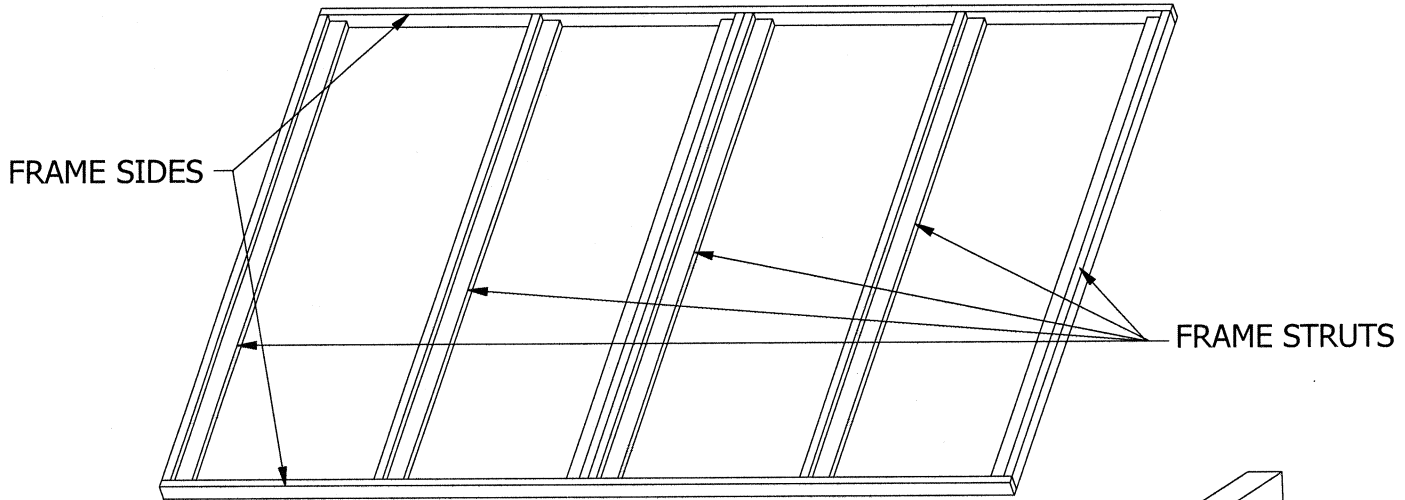
___ O. DESIRED CABINET HANDLES OR PULLS 2 HANDLES

___ P. MATTRESS **MUST weigh between 35 - 50 pounds**

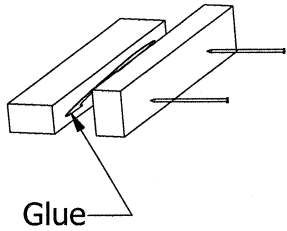
Your mattress dimensions must not exceed 39" x 75"

Mattress thickness CANNOT exceed 12" in thickness – including pillow top.

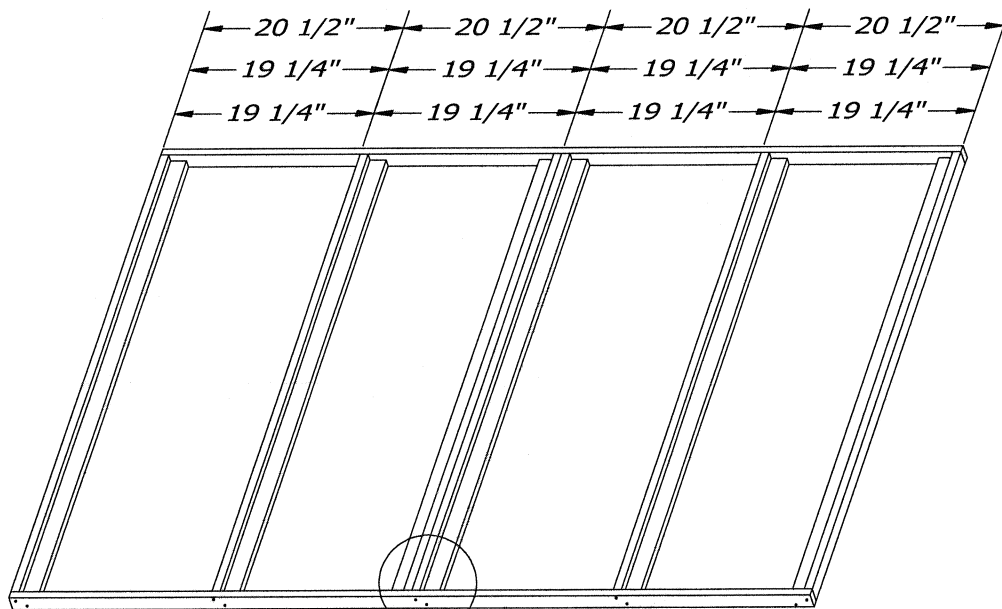
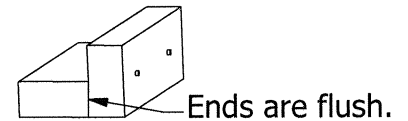
See Bill of Materials / Cut Sheet (PART A) for Twin, Full or Queen size frame struts and frame sides dimensions.



STEP 1: Construction of Six (6) frame struts.



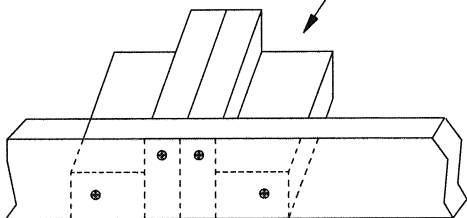
Run a bead of wood glue along inside edge. Making sure ends are flush, drill pilot holes approximately 8" apart and nail with 1-1/2" finish nails, or you can use #8 x 1-1/2" screws.



SPACING FOR QUEEN-SIZE BED
 SPACING FOR FULL-SIZE BED
 SPACING FOR TWIN-SIZE BED

Step 2: Position of frame struts between frame sides.

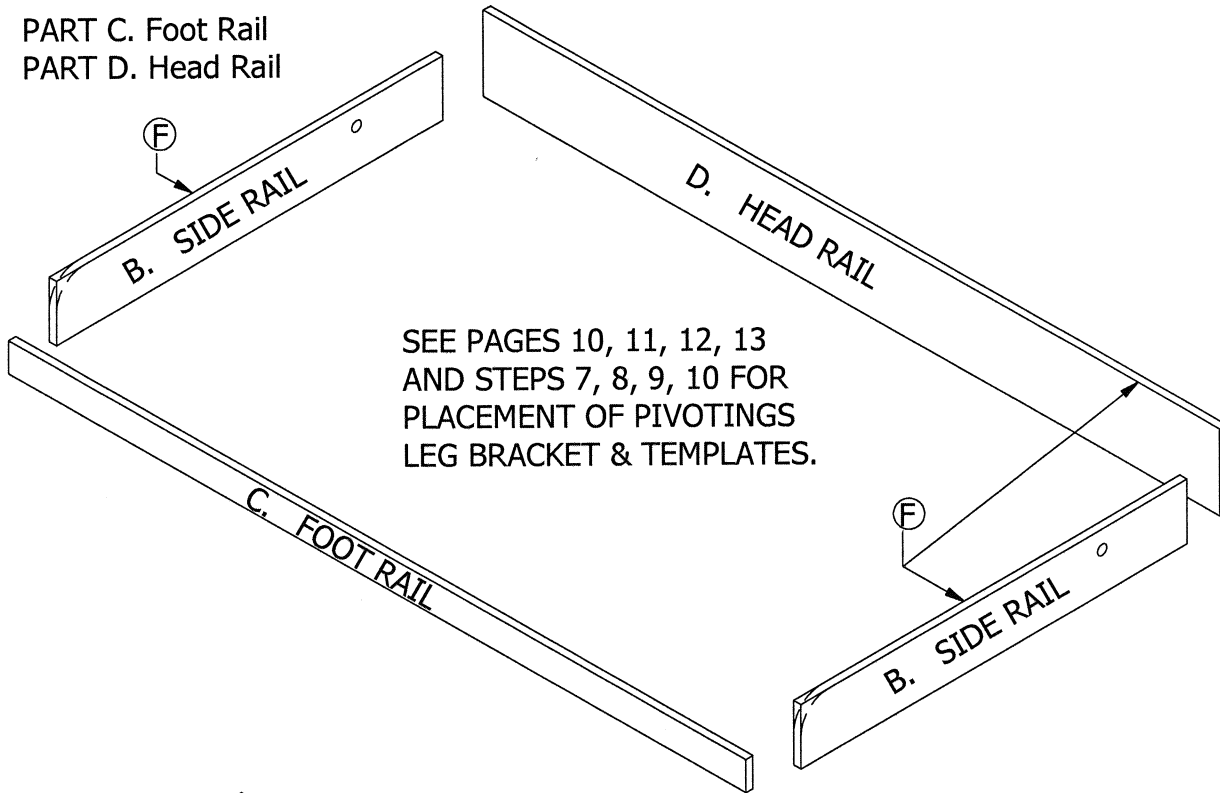
STEP 3: Mounting the frame struts between the frame sides. Using a 1/8" drill bit and countersink, drill pilot holes through the frame sides into each end of the "L" shaped frame struts. Screw #8 x 2" wood screws flush.



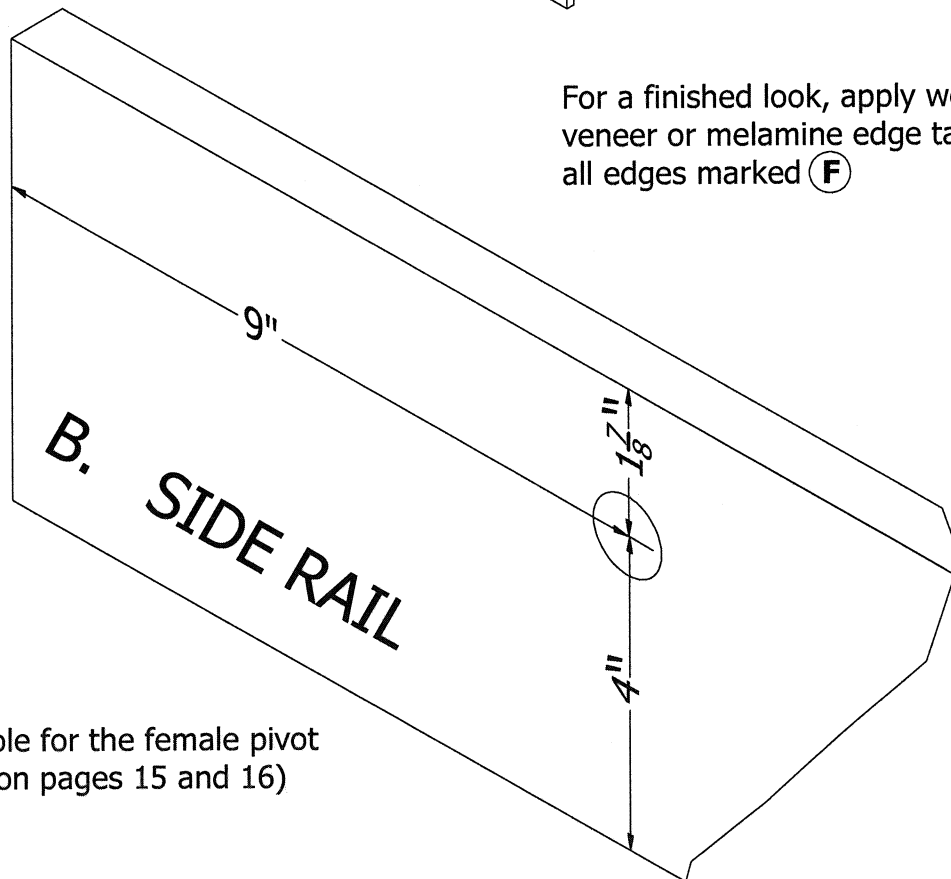
PART B. Side Rails: (MUST BE MADE OF PLYWOOD)

Why?.. This is where the stress takes place.
Plywood is stronger than solid wood.
YES EVEN SOLID OAK.....

PART C. Foot Rail
PART D. Head Rail



For a finished look, apply wood veneer or melamine edge tape to all edges marked **F**

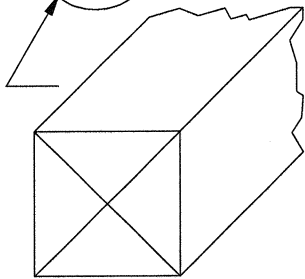
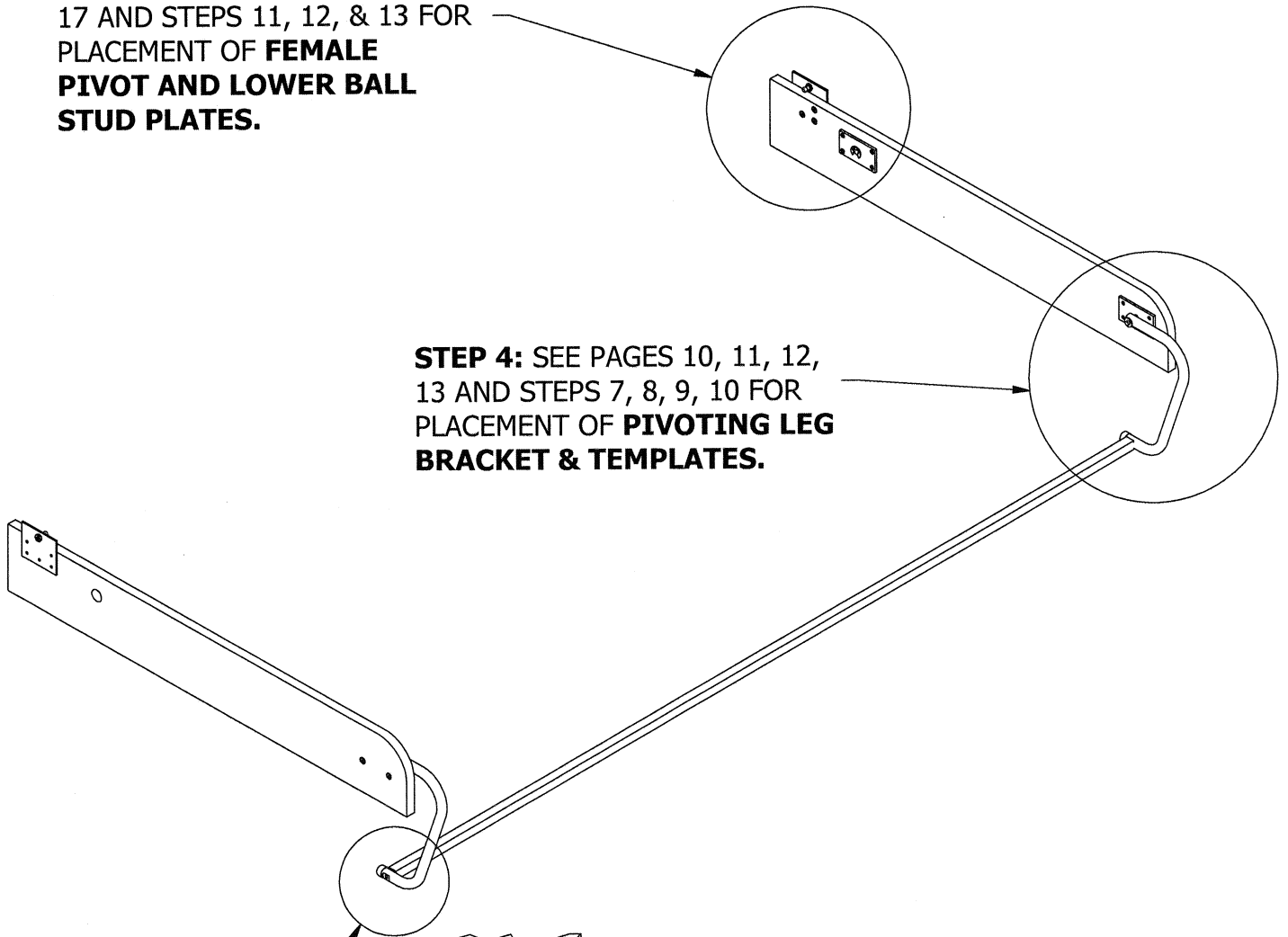


Placement hole for the female pivot
(also shown on pages 15 and 16)

HARDWARE PLACEMENT FOR B. SIDE RAILS

STEP 5: SEE PAGES 14, 15, 16, 17 AND STEPS 11, 12, & 13 FOR PLACEMENT OF **FEMALE PIVOT AND LOWER BALL STUD PLATES.**

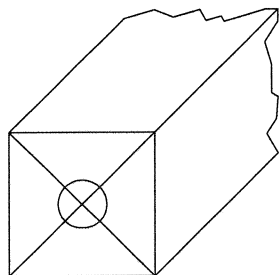
STEP 4: SEE PAGES 10, 11, 12, 13 AND STEPS 7, 8, 9, 10 FOR PLACEMENT OF **PIVOTING LEG BRACKET & TEMPLATES.**



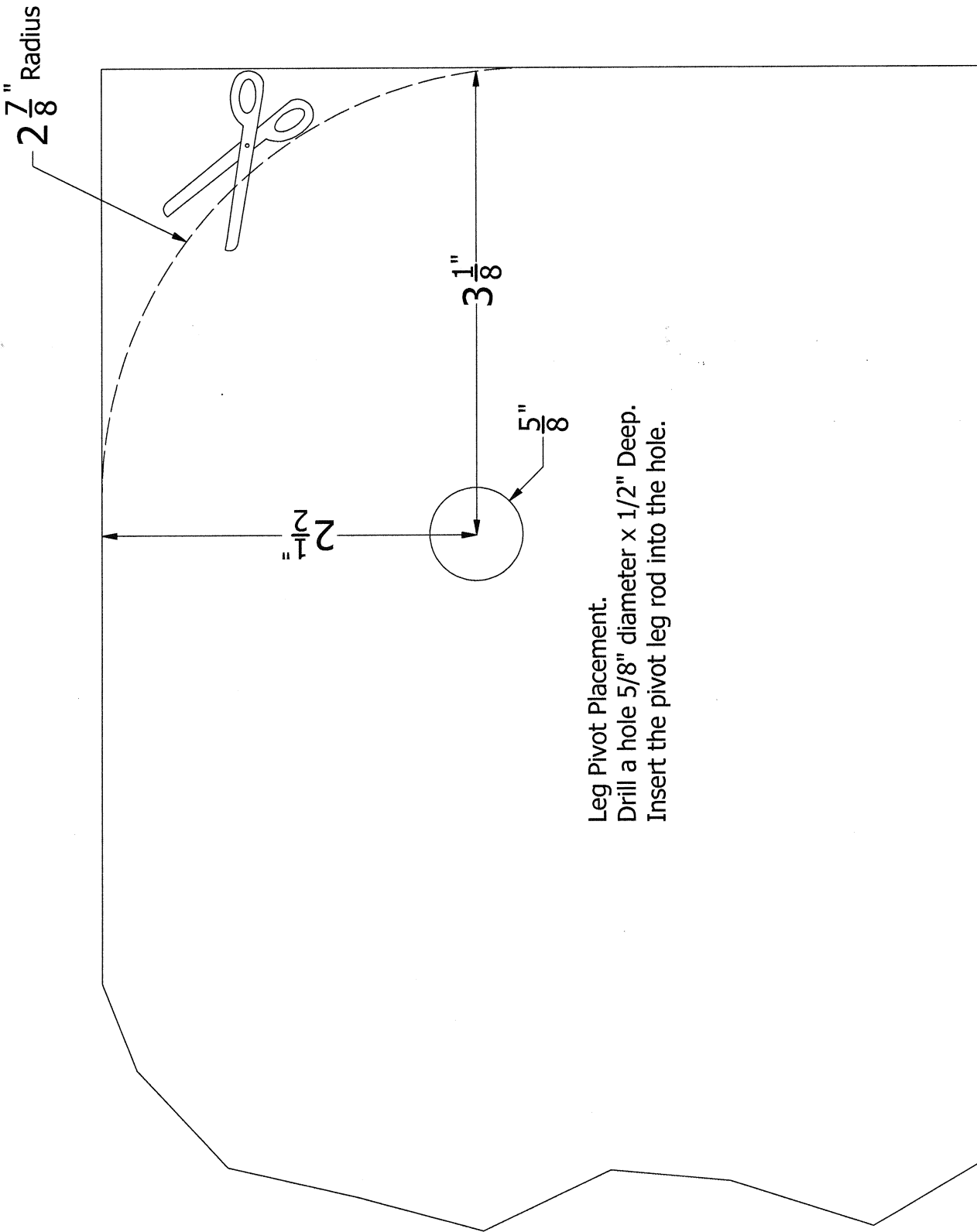
STEP 6: PART I. LEG SUPPORT RAIL

SEE PAGE 6 FOR CUTTING DIMENSIONS.

ON EACH END OF RAIL DRAW AN **X** DIAGONALLY FROM EACH CORNER TO FIND THE CENTER.



NEXT DRILL A 1/4" HOLE X 1-1/2" DEEP IN EACH END OF THE RAIL.

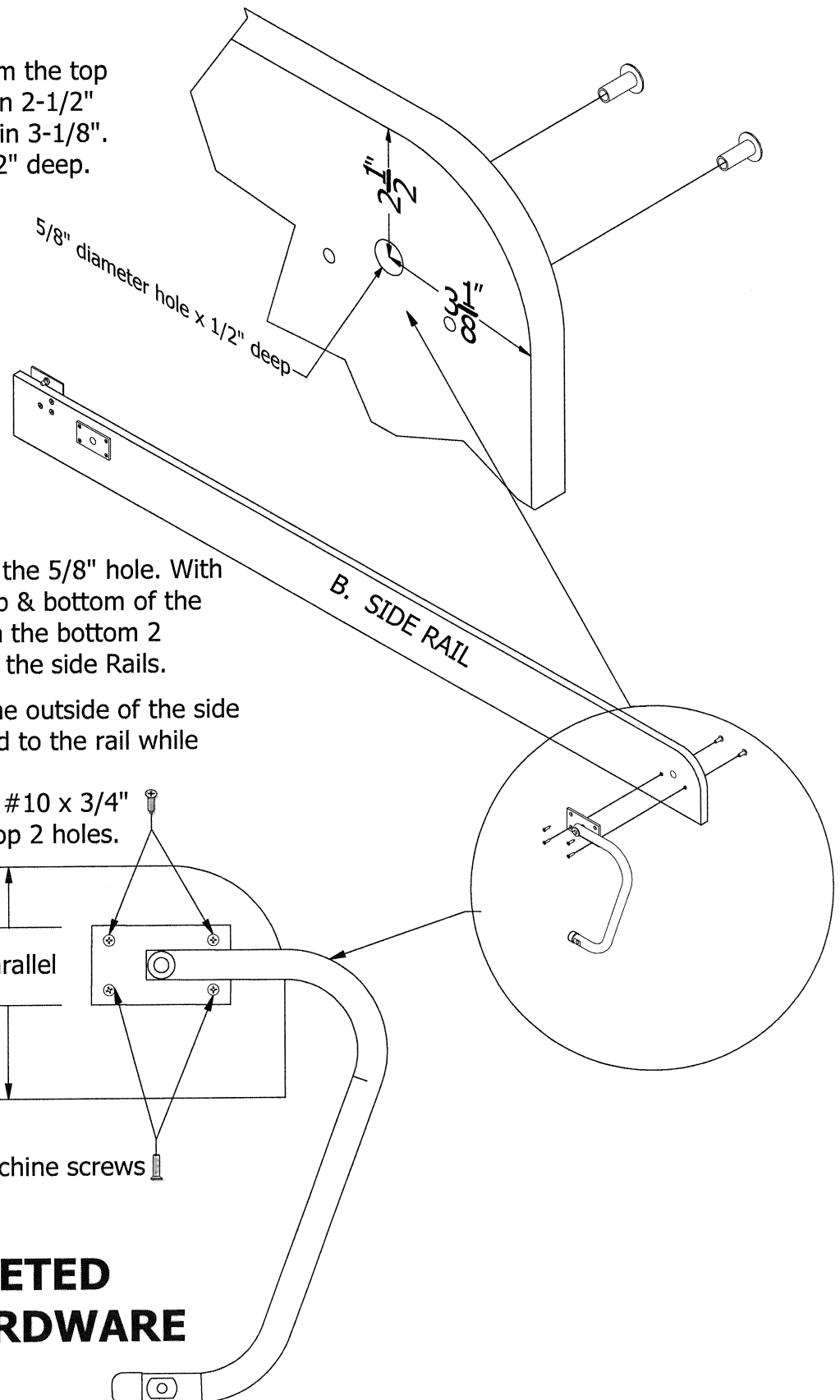


Leg Pivot Placement.
Drill a hole 5/8" diameter x 1/2" Deep.
Insert the pivot leg rod into the hole.

RIGHT SIDE RAIL TEMPLATE

B. RIGHT SIDE RAIL.

Step 7: Leg placement: From the top of the side rail measure down 2-1/2" and from the front measure in 3-1/8". Drill a 5/8" diameter hole 1/2" deep.



Step 8: Place the leg pivot into the 5/8" hole. With the pivot plate parallel to the top & bottom of the side rail drill a 1/4" hole through the bottom 2 (two) holes in the plate through the side Rails.

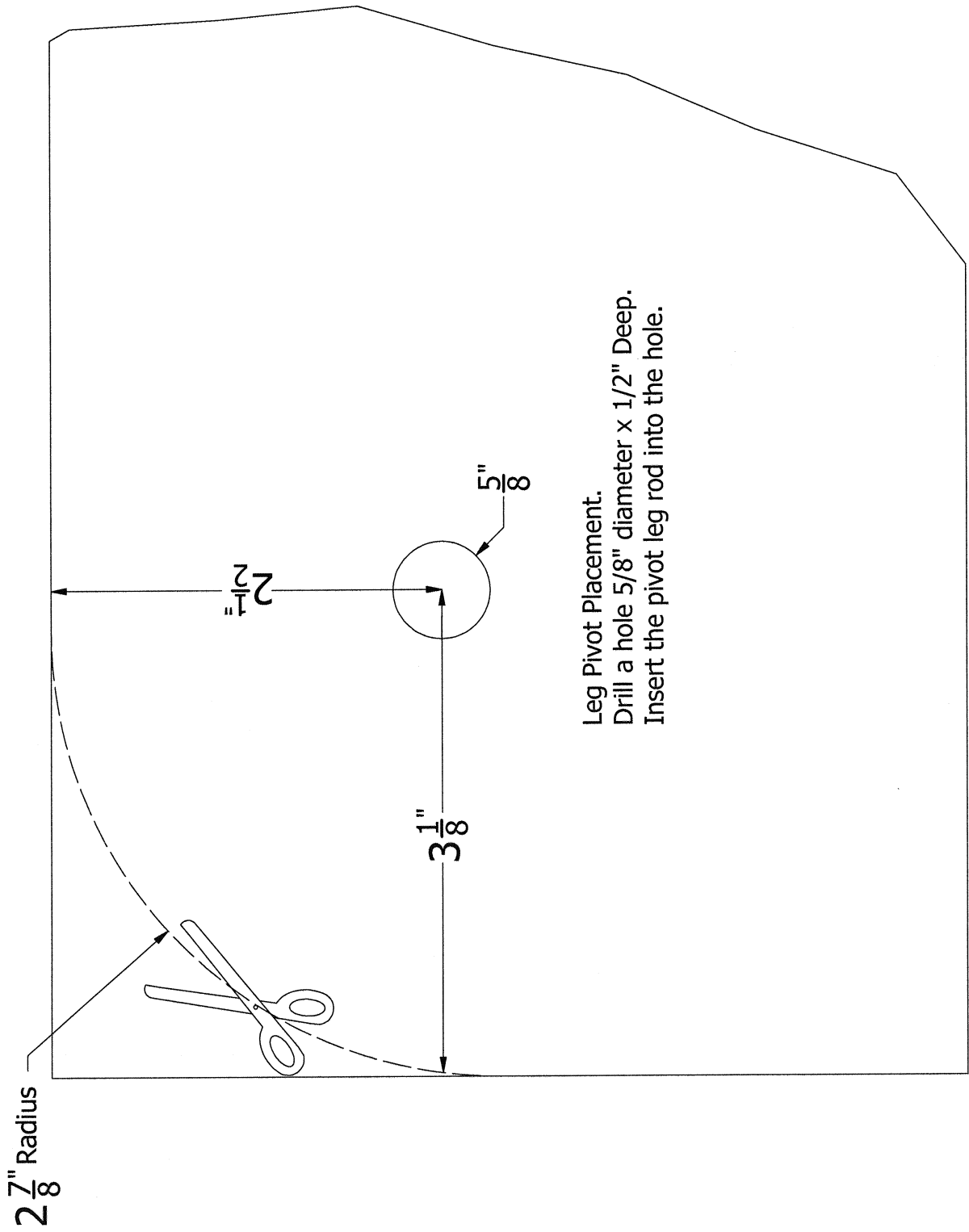
Note: To prevent tear out on the outside of the side rail, clamp a piece of scrap wood to the rail while drilling.

Screw 2 (two) black #10 x 3/4" screw through the top 2 holes.

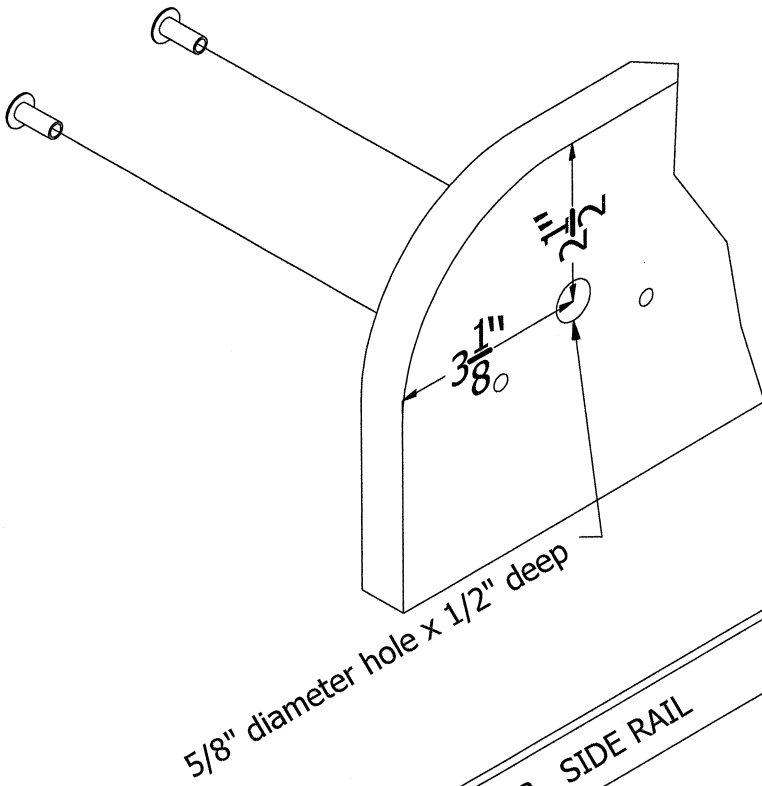
Parallel

Machine screws

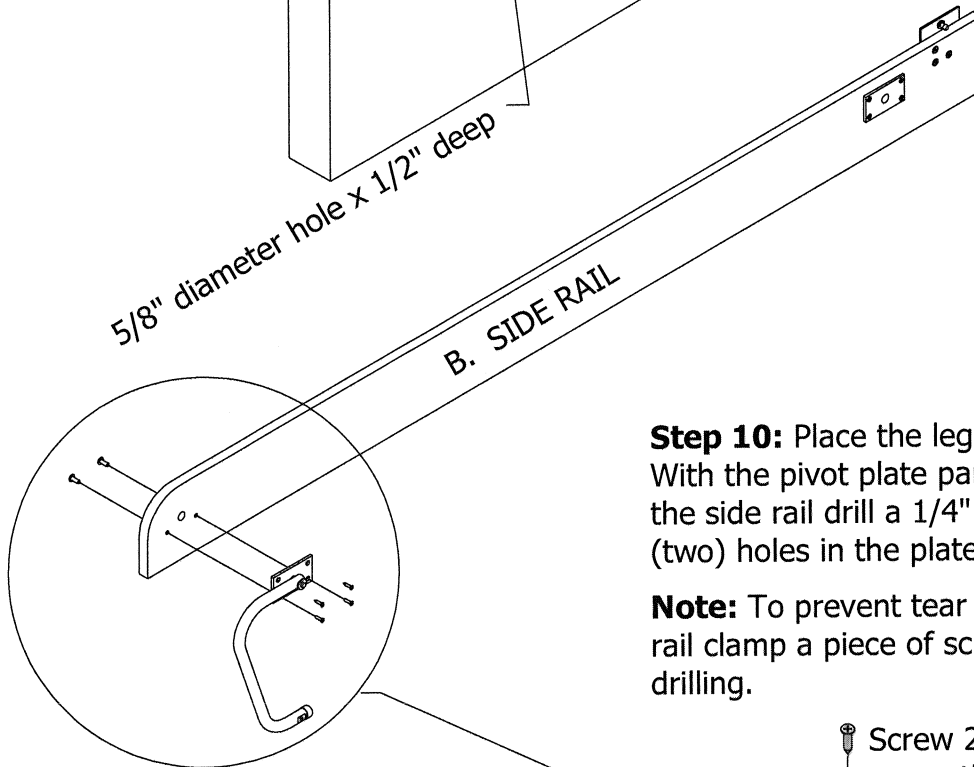
**WHEN COMPLETED
REMOVE LEG HARDWARE**



B. LEFT SIDE RAIL.

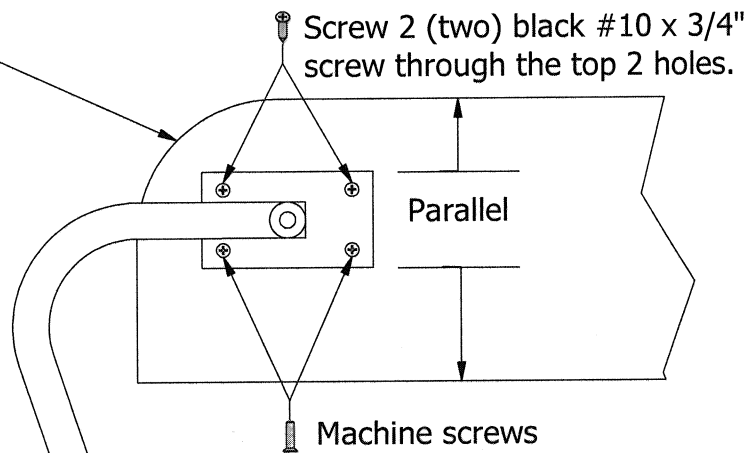


Step 9: Leg placement: From the top of the side rail measure down 2-1/2" and from the front measure in 3-1/8". Drill a 5/8" diameter hole 1/2" deep.



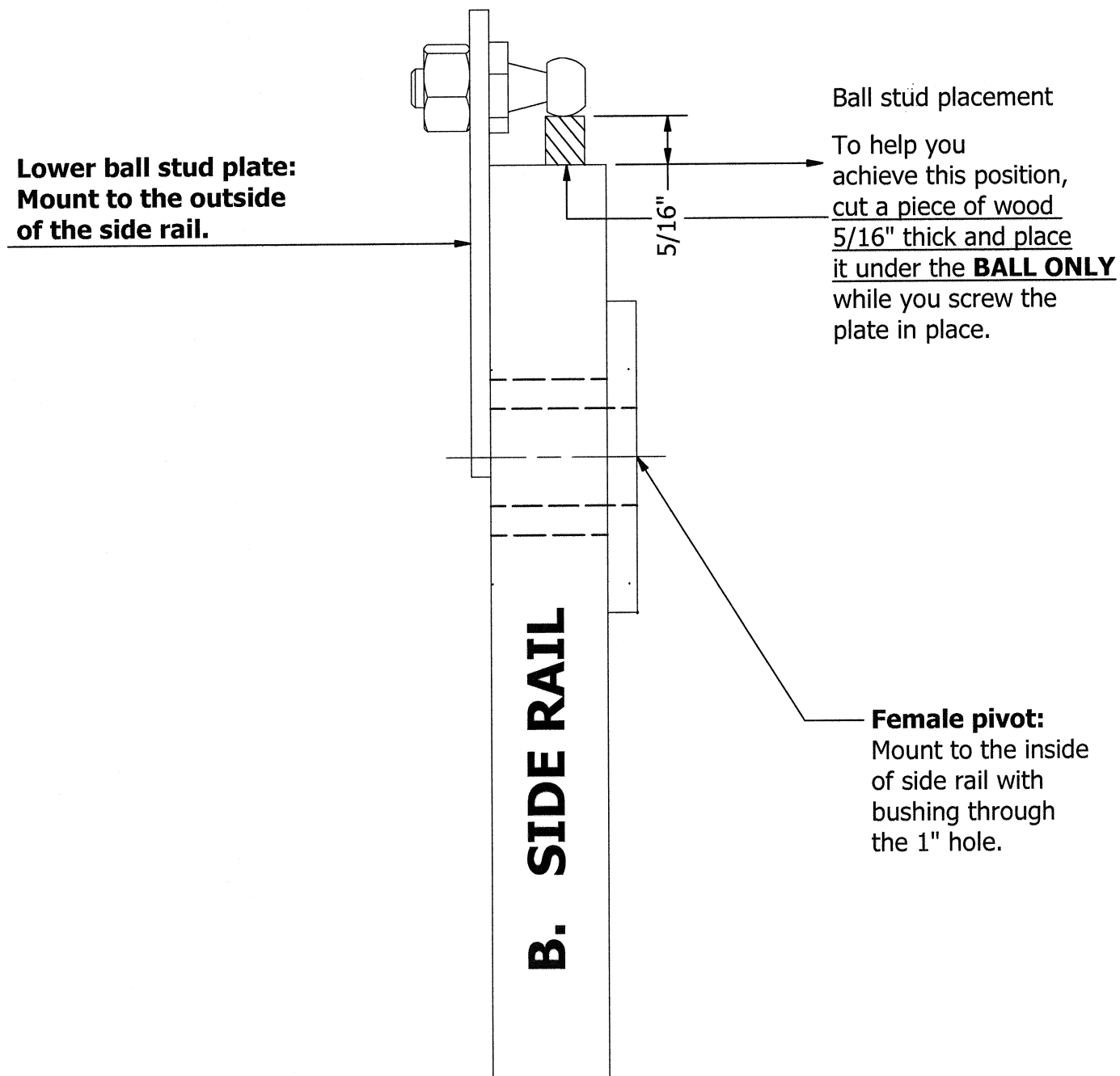
Step 10: Place the leg pivot into the 5/8" hole. With the pivot plate parallel to the top & bottom of the side rail drill a 1/4" hole through the bottom 2 (two) holes in the plate through the side Rails.

Note: To prevent tear out on the outside of the side rail clamp a piece of scrap wood to the rail while drilling.



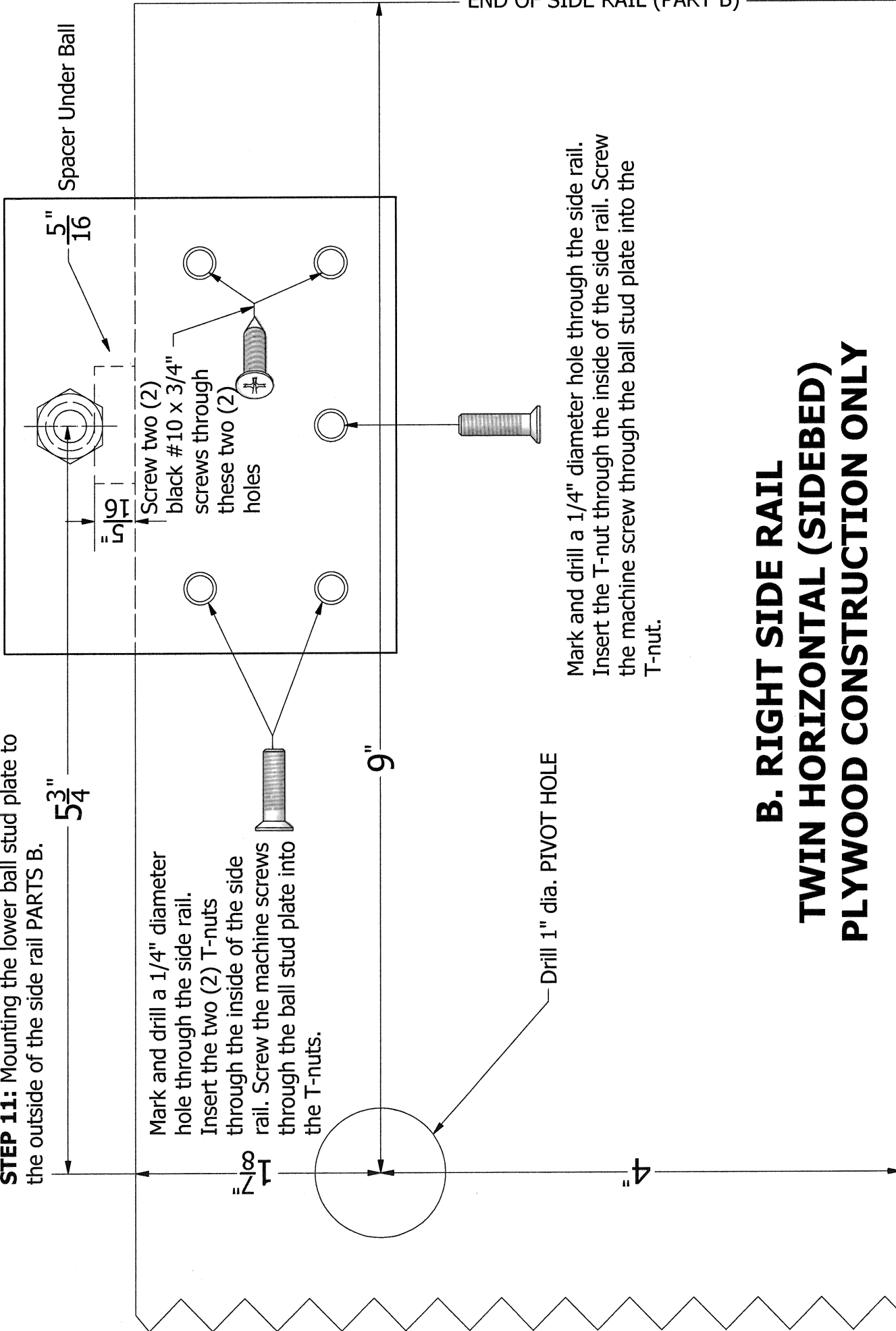
**WHEN COMPLETED
REMOVE LEG HARDWARE**

This page pertains to the orientation and mounting positions of the lower ball stud plates and female pivots, **USE WITH PAGES 15, 16, & 17**



END OF SIDE RAIL (PART B)

STEP 11: Mounting the lower ball stud plate to the outside of the side rail PARTS B.



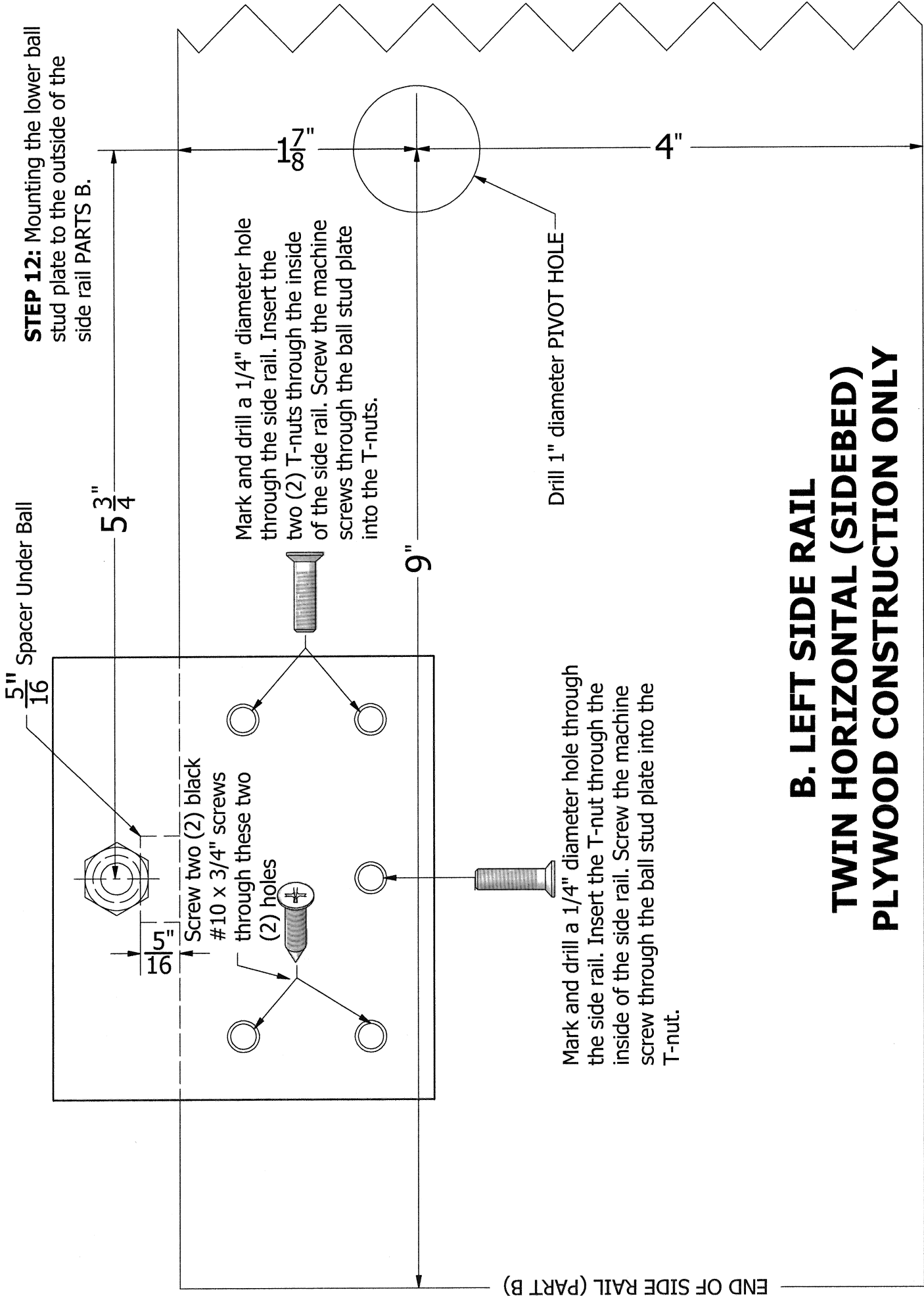
Mark and drill a 1/4" diameter hole through the side rail. Insert the two (2) T-nuts through the inside of the side rail. Screw the machine screws through the ball stud plate into the T-nuts.

Drill 1" dia. PIVOT HOLE

Mark and drill a 1/4" diameter hole through the side rail. Insert the T-nut through the inside of the side rail. Screw the machine screw through the ball stud plate into the T-nut.

**B. RIGHT SIDE RAIL
TWIN HORIZONTAL (SIDE BED)
PLYWOOD CONSTRUCTION ONLY**

STEP 12: Mounting the lower ball stud plate to the outside of the side rail PARTS B.

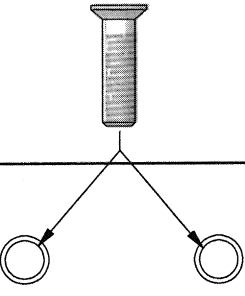


5" Spacer Under Ball
 $\frac{5}{16}$

$5 \frac{3}{4}$ "

$\frac{5}{16}$ "

Screw two (2) black #10 x 3/4" screws through these two (2) holes



Mark and drill a 1/4" diameter hole through the side rail. Insert the two (2) T-nuts through the inside of the side rail. Screw the machine screws through the ball stud plate into the T-nuts.

9"

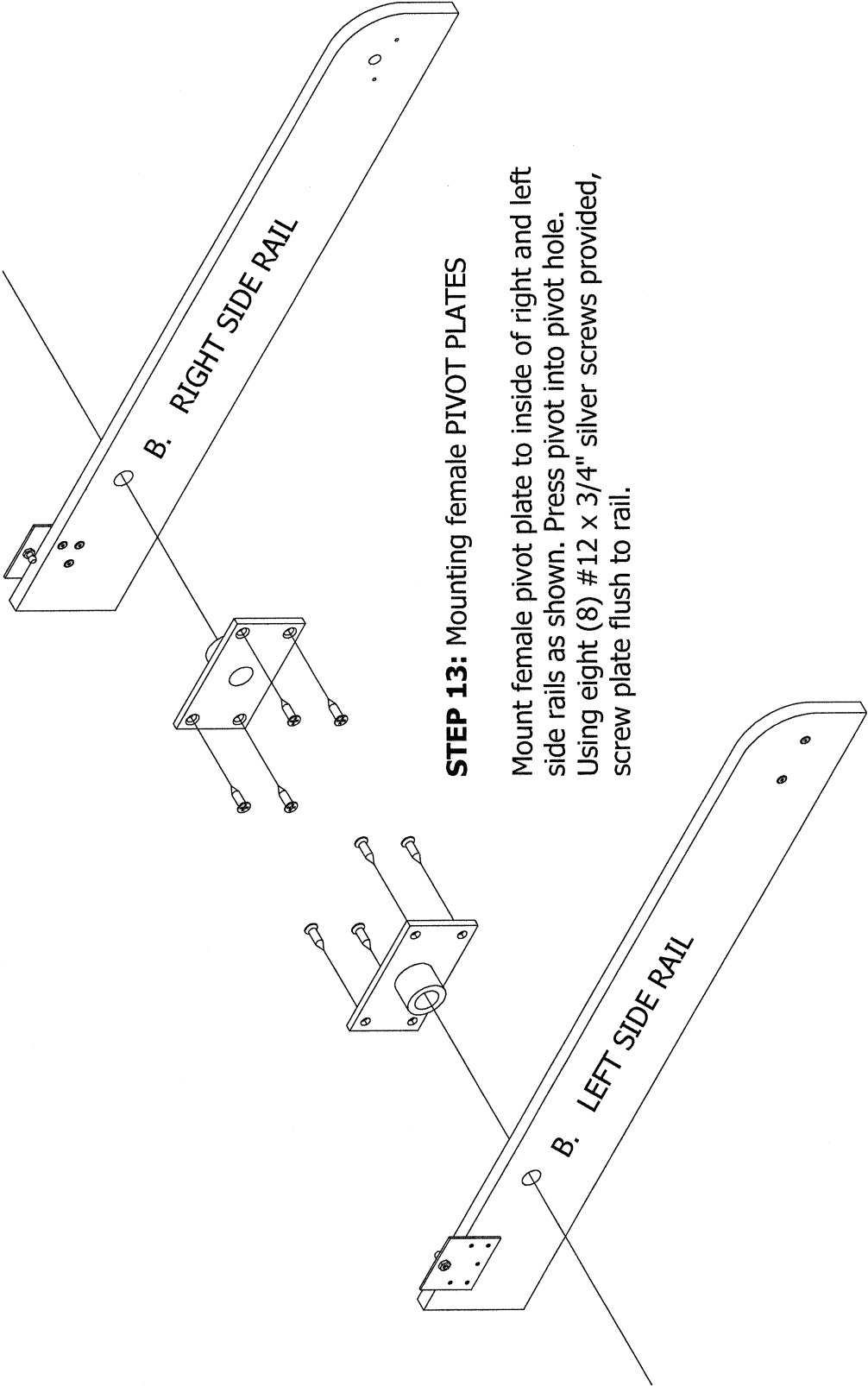
Drill 1" diameter PIVOT HOLE

Mark and drill a 1/4" diameter hole through the side rail. Insert the T-nut through the inside of the side rail. Screw the machine screw through the ball stud plate into the T-nut.

4"

END OF SIDE RAIL (PART B)

**B. LEFT SIDE RAIL
TWIN HORIZONTAL (SIDE BED)
PLYWOOD CONSTRUCTION ONLY**

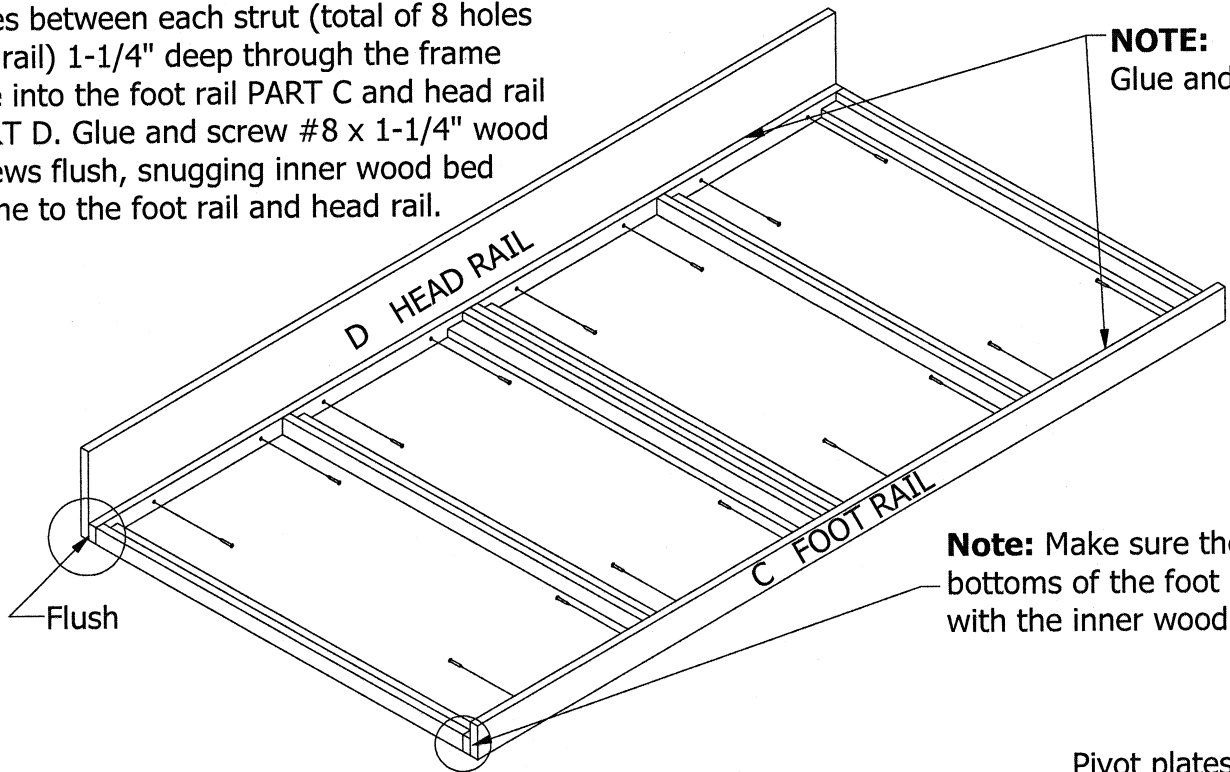


STEP 13: Mounting female PIVOT PLATES

Mount female pivot plate to inside of right and left side rails as shown. Press pivot into pivot hole. Using eight (8) #12 x 3/4" silver screws provided, screw plate flush to rail.

STEP 14:

Mounting the foot rail PART C and head rail PART D. Using an 1/8" drill bit, drill two holes between each strut (total of 8 holes per rail) 1-1/4" deep through the frame side into the foot rail PART C and head rail PART D. Glue and screw #8 x 1-1/4" wood screws flush, snugging inner wood bed frame to the foot rail and head rail.

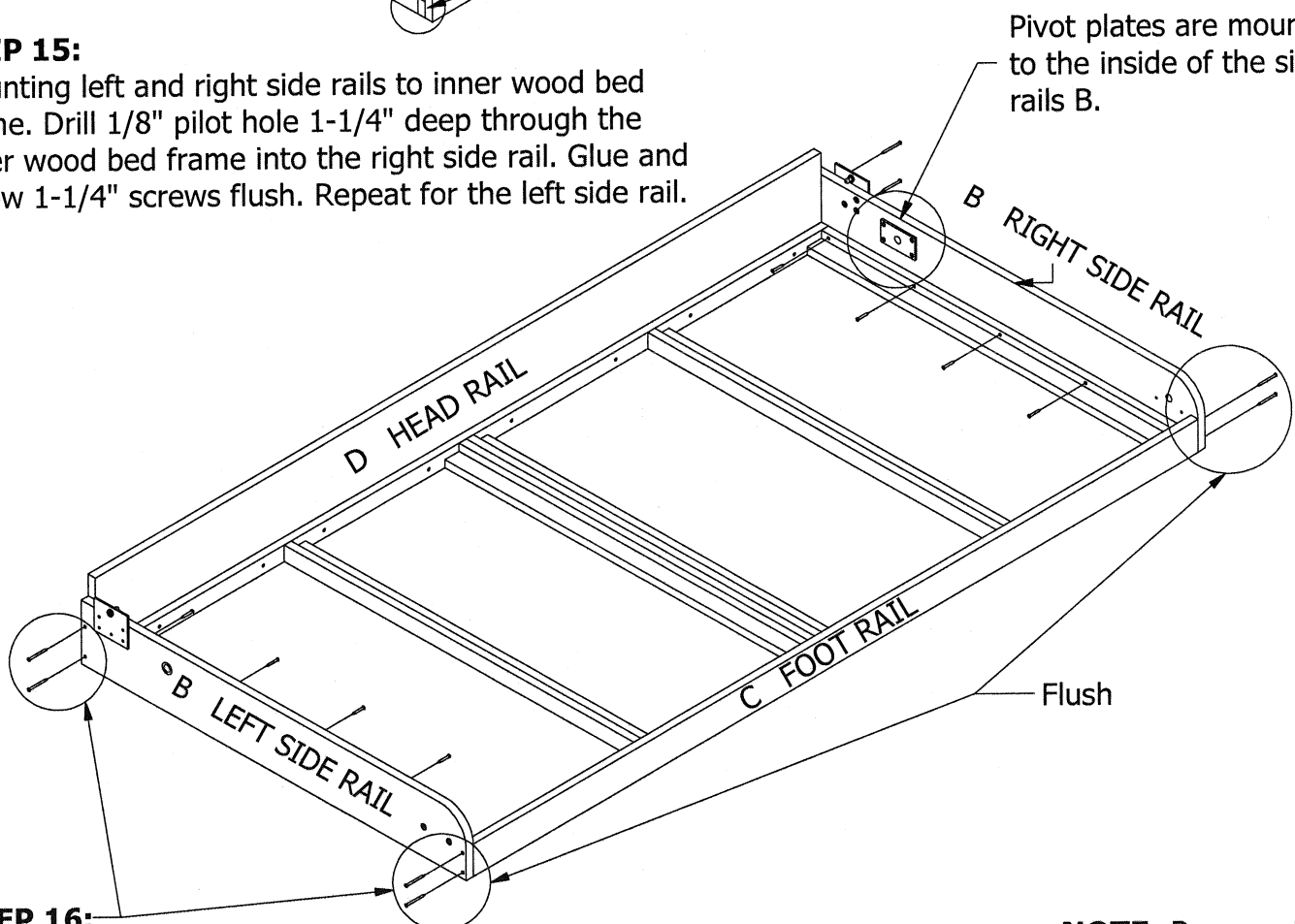


NOTE:
Glue and screw

Note: Make sure the ends and bottoms of the foot rail are flush with the inner wood bed frame.

STEP 15:

Mounting left and right side rails to inner wood bed frame. Drill 1/8" pilot hole 1-1/4" deep through the inner wood bed frame into the right side rail. Glue and screw 1-1/4" screws flush. Repeat for the left side rail.



Pivot plates are mounted to the inside of the side rails B.

STEP 16:

Mounting the side rails B to the foot rail Part C and head rail Part D.

Make sure sides and bottom are flush. Drill 1/8" pilot hole 2" deep through the side rails into the foot rail and head rail. Drive #8 x 2" screws flush.

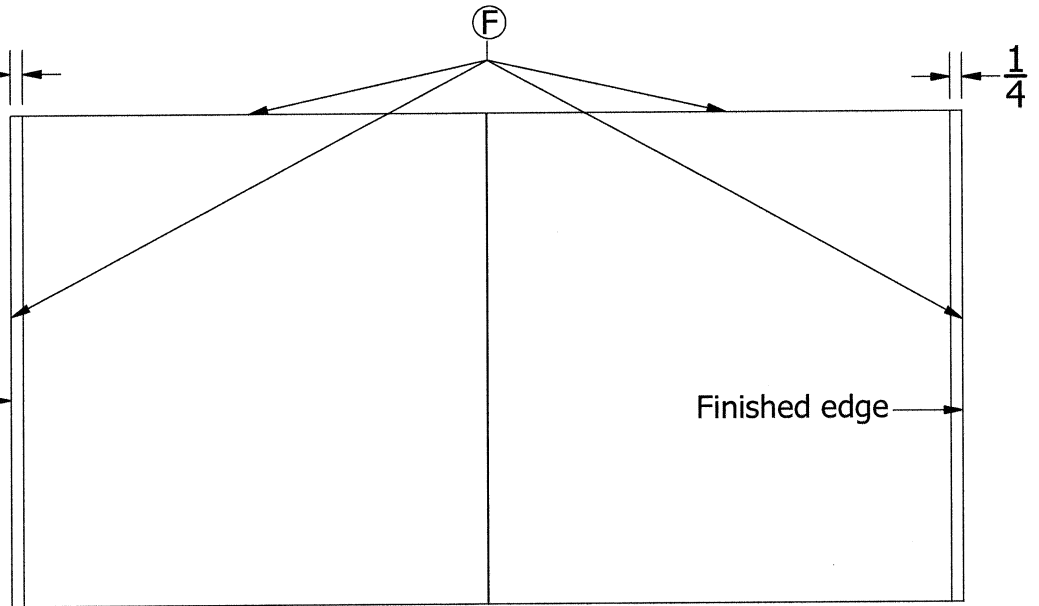
NOTE: Remove Pivot Leg Hardware.

STEP 17:

NOTE: For a finished look, apply wood veneer or melamine edge tape to all edges marked **F**

Finished edge →

Finished edge →



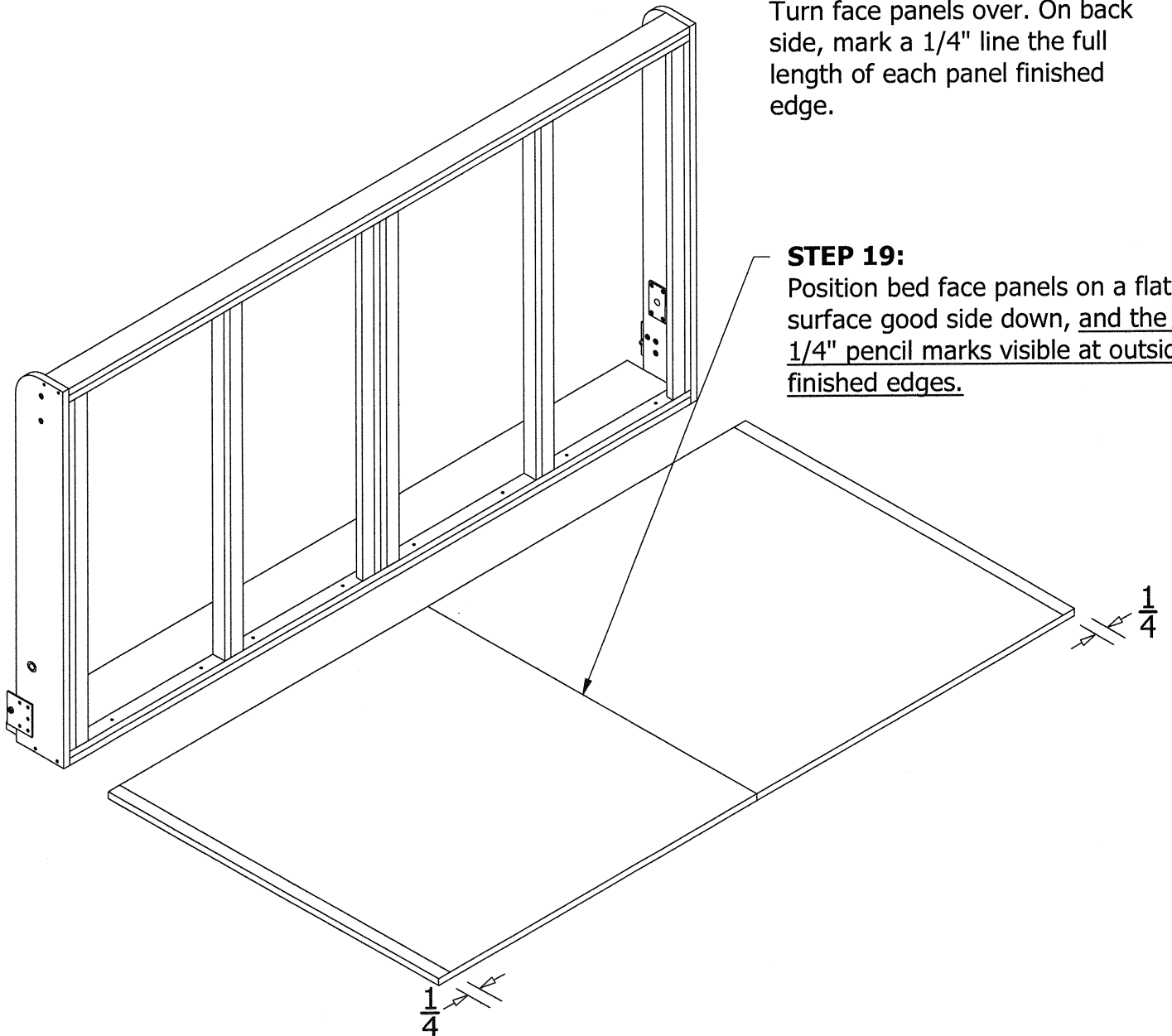
Pick the best side of part E Face Panel for the front of the bed.

STEP 18:

Turn face panels over. On back side, mark a 1/4" line the full length of each panel finished edge.

STEP 19:

Position bed face panels on a flat surface good side down, and the 1/4" pencil marks visible at outside finished edges.

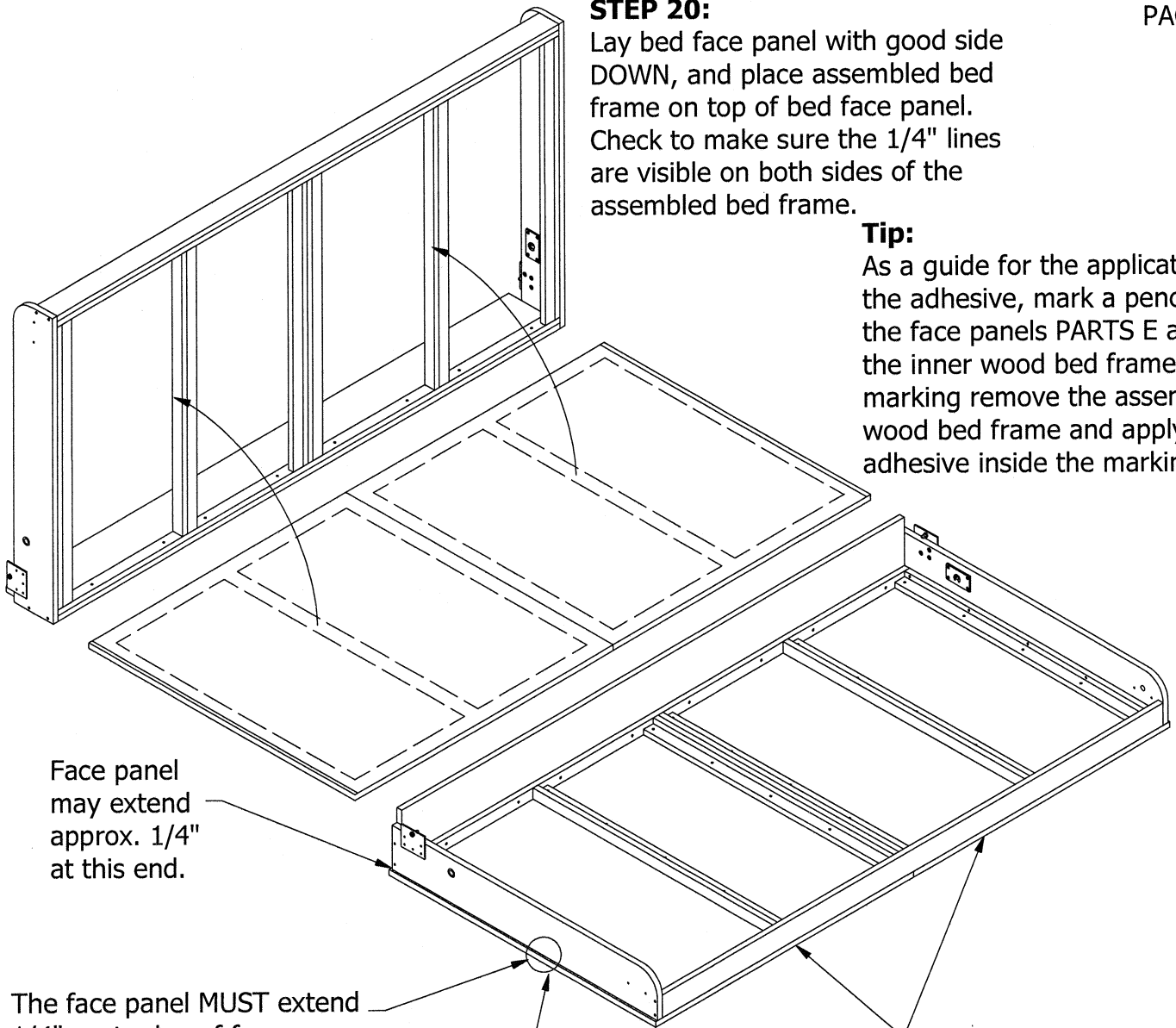


STEP 20:

Lay bed face panel with good side DOWN, and place assembled bed frame on top of bed face panel. Check to make sure the 1/4" lines are visible on both sides of the assembled bed frame.

Tip:

As a guide for the application of the adhesive, mark a pencil line on the face panels PARTS E around the inner wood bed frame. After marking remove the assembled wood bed frame and apply adhesive inside the markings.



Face panel may extend approx. 1/4" at this end.

The face panel **MUST** extend 1/4" past edge of frame on each side.

Face panel and foot rail **MUST** be flush at this end.

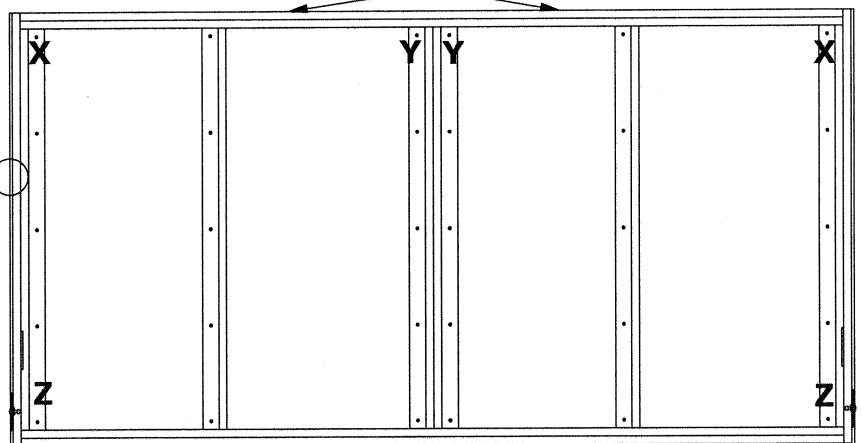
STEP 21:

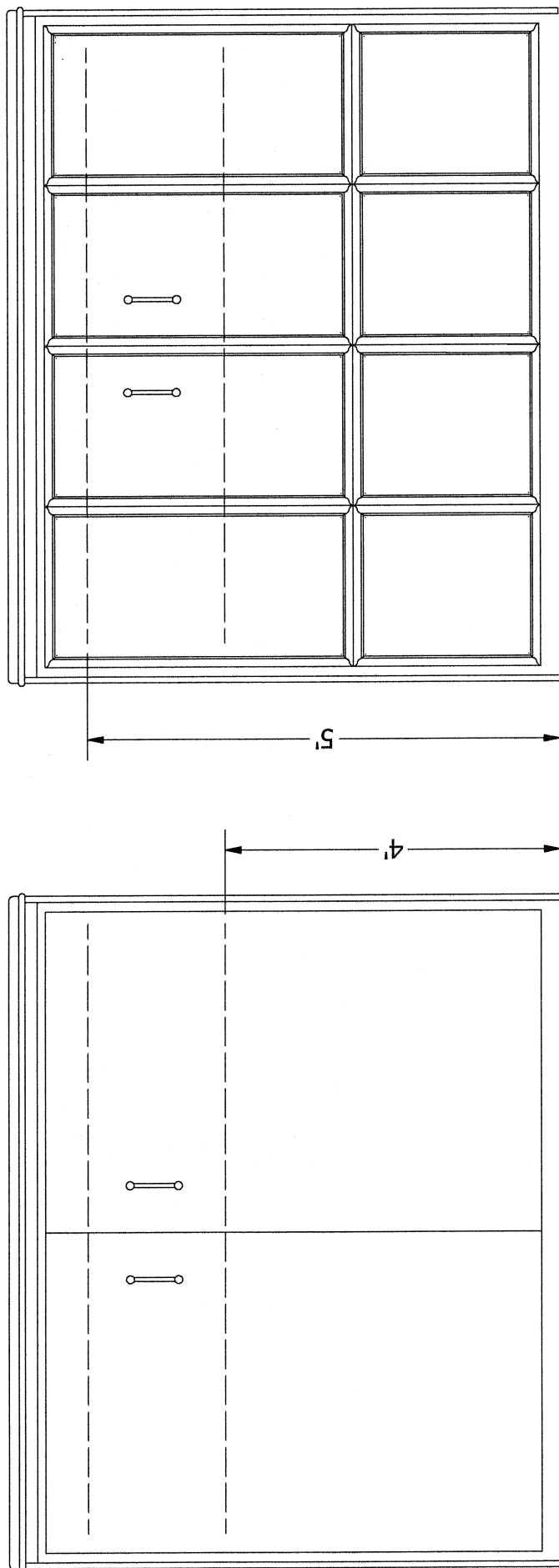
Make sure face panel and foot rail are flush and that face panel extends 1/4" past edge of wood bed frame on each side.

Using #8 x 1-1/4" screws, screw section marked "X" first. Keeping end flush, screw section marked "Y".

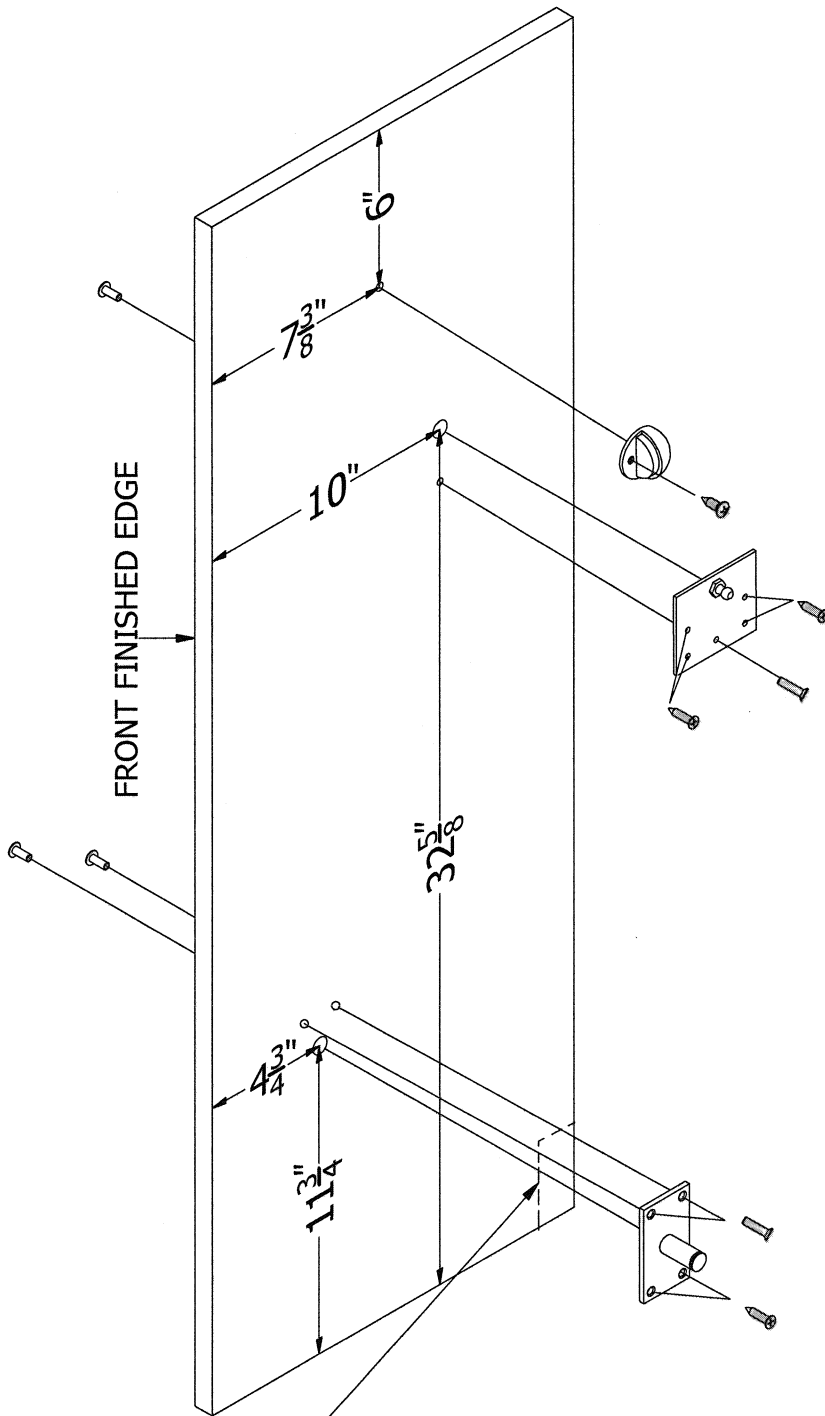
Making sure there is a 1/4" face panel overhang, screw section marked "Z". If out-of-square this procedure will aid in racking into square.

Screw remaining struts to face panel 6 inches apart.





Placement of cabinet handles for optimal leverage should be between 4' and 5' on face panel PART E.



PART G: BED CABINET VERTICALS (LEFT)
 Measurements for TWIN HORIZONTAL
 (Sidebed) ONLY Using 3/4" PLYWOOD Face
 Panel.

STEP 22:

BED STOP: Drill a hole $5/16$ " diameter x $1/2$ " deep. Insert the bed stop pin into hole and attach with a #10 X $3/4$ " black screw.

Note:

Ball stud nut fits in the hole.

STEP 23:

UPPER BALL STUD PLATE:

Drill a hole $5/8$ " x $1/2$ " deep and insert nut into hole. Mount plate to the vertical with four (4) #10 x $3/4$ " black screws and one (1) "T" Nut and machine screw.

STEP 24:

MALE PIVOT PLATE: Drill a hole $5/8$ " diameter x $1/2$ " deep. Insert the $1/2$ " end of rod into hole. Drill two (2) holes $1/4$ " diameter through the vertical using the upper holes in the pivot plate as a guide. Tap "T" Nuts into two (2) upper holes from outside, then screw $1/4$ " machine screws through pivot plate into "T" Nuts. Screw two (2) #12 x $3/4$ " screws through pivot plate holes into vertical.

OPTION:

On left and right bed verticals, a cut can be made to accommodate existing base molding so cabinet will fit flush against the wall.

PART G: BED CABINET VERTICALS
(RIGHT) Measurements for TWIN
HORIZONTAL (Sidebed) ONLY Using 3/4"
PLYWOOD Face Panel.

STEP 25:

BED STOP: Drill a hole 5/16" diameter x 1/2" deep. Insert the bed stop pin into hole and attach with a #10 X 3/4" black screw.

Note:

Ball stud nut fits in the hole.

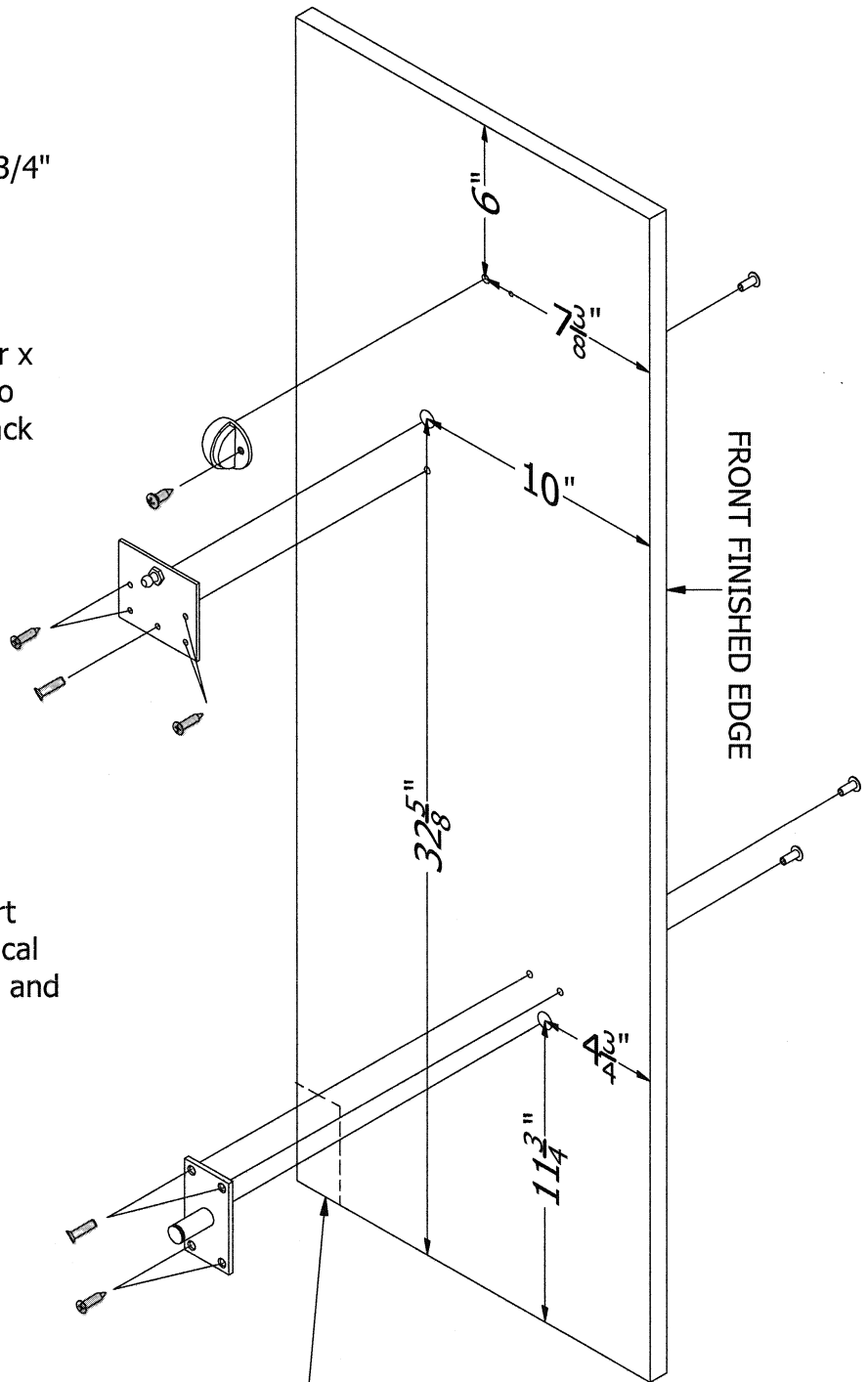
STEP 26:

UPPER BALL STUD PLATE:

Drill a hole 5/8" x 1/2" deep and insert nut into hole. Mount plate to the vertical with four (4) #10 x 3/4" black screws and one (1) "T" Nut and machine screw.

STEP 27:

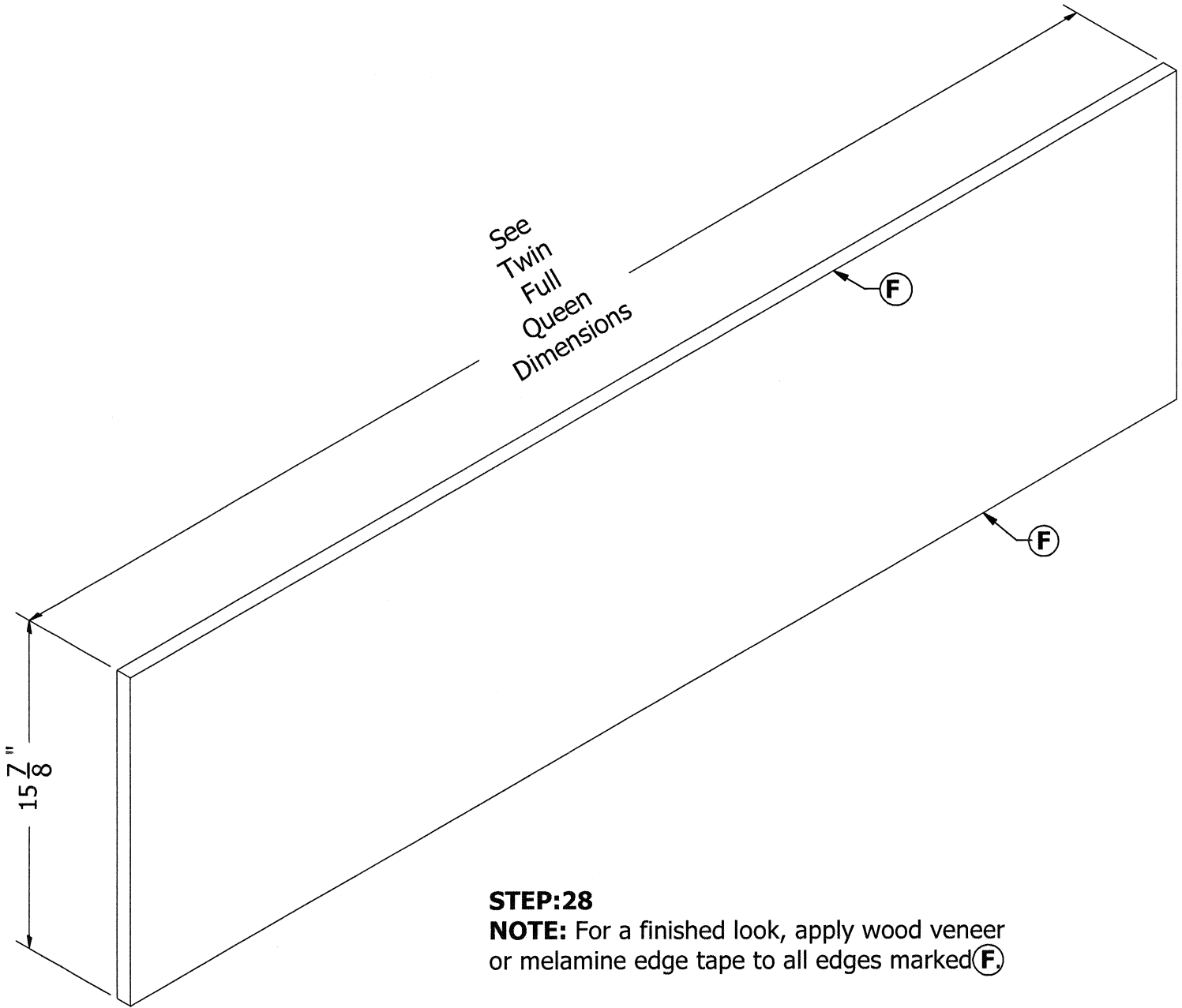
MALE PIVOT PLATE: Drill a hole 5/8" diameter x 1/2" deep. Insert the 1/2" end of rod into hole. Drill two (2) holes 1/4" diameter through the vertical using the upper holes in the pivot plate as a guide. Tap "T" Nuts into two (2) upper holes from outside, then screw 1/4" machine screws through pivot plate into "T" Nuts. Screw two (2) #12 x 3/4" screws through pivot plate holes into vertical.

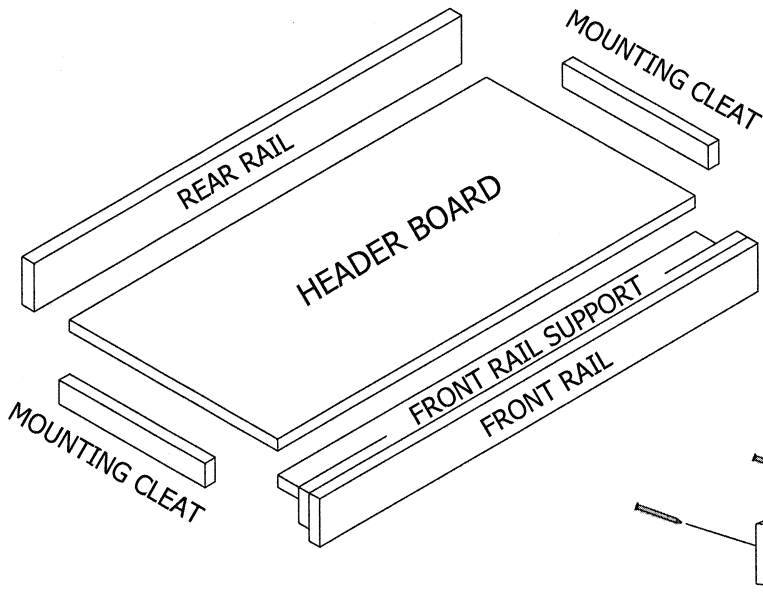


OPTION:

On left and right bed verticals, a cut can be made to accommodate existing base molding so cabinet will fit flush against the wall.

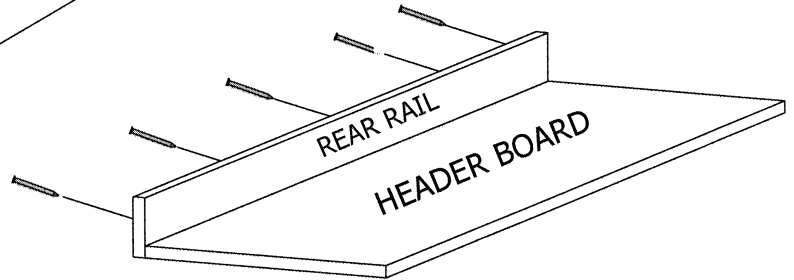
PART F: BED HEADBOARD





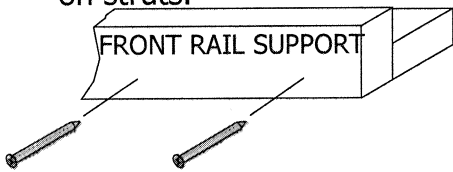
STEP 29:

Drill five (5) pilot holes through rear rail. Glue and screw rear rail to header board with #8 x 2" screws.



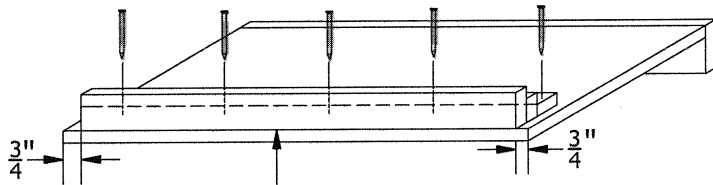
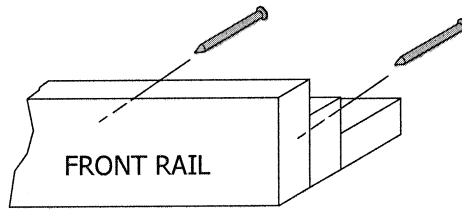
STEP 30:

Drill six (6) 1/8" pilot holes in front rail support, then glue and screw together with 1-1/2" wood screws or nails. This the same operation as performed on struts.



STEP 31:

Attaching the front rail to the front rail support: Drill six (6) pilot holes 1-1/4" deep through rear of support into rear of front rail, then glue and screw together with 1-1/4" wood screws.

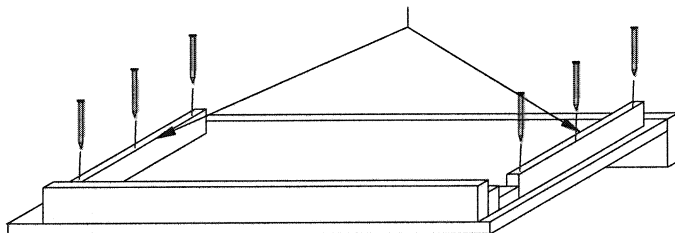


Keep rail and edge of header flush.

STEP 32:

Turn header board over (top down) and position assembled rail and supports 3/4" in from each side of header board. Being sure to keep rail and edge of header board flush, drill five (5) pilot holes 1-1/4" deep in front rail support into header, then glue and screw to header board with 1-1/4" wood screws.

MOUNTING CLEATS



STEP 33:

Cut two (2) mounting cleats to fit between front rail and back of header board and attach to header board with 1-1/4" wood screws 3/4" from edge of header.

ASSEMBLY INSTRUCTIONS FOR THE
HORIZONTAL (Sidebed)
Create-A-Bed®
 MURPHY BED

WARNING!

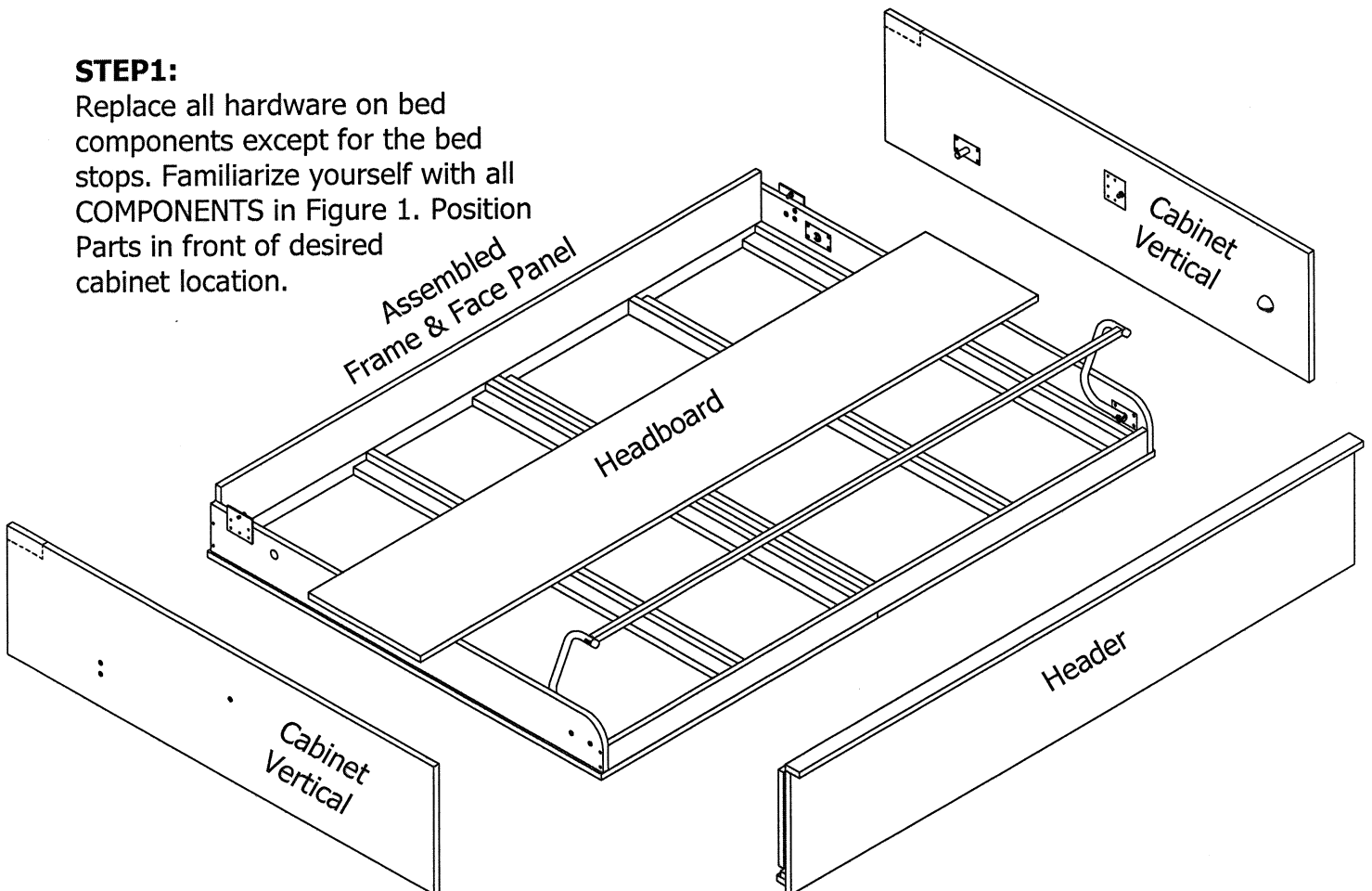
This bed contains stored mechanical energy which can cause serious injury if improperly handled. Your bed MUST! MUST! be securely anchored to the wall! READ INSTRUCTIONS AND WATCH THE ONLINE VIDEO THOROUGHLY BEFORE ASSEMBLY AND DISASSEMBLY!

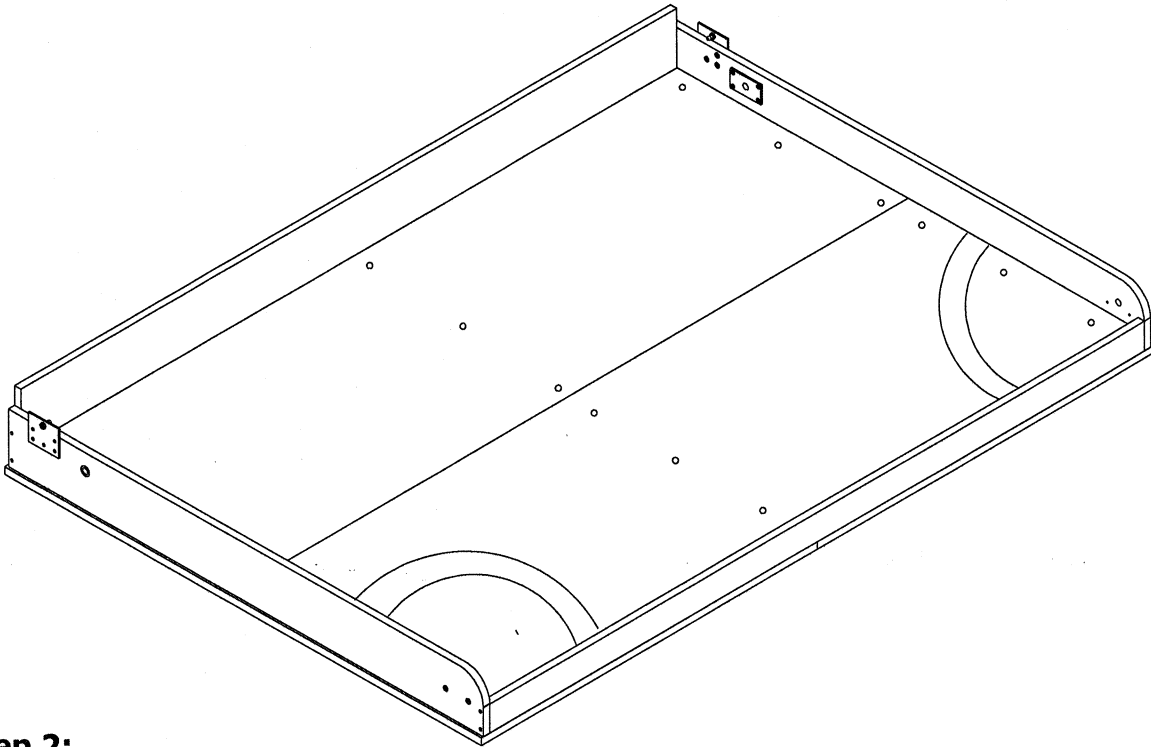
If you have ANY questions, call **TOLL FREE** (877) 966-3852

Tools needed: Power Drill, Stud Finder, Tape Measure, Phillips-head Screwdriver, Flat-head Screwdriver, #4 Allen Wrench, Clamps and Drill bits appropriate for your mounting surface see step 16 on page 8.

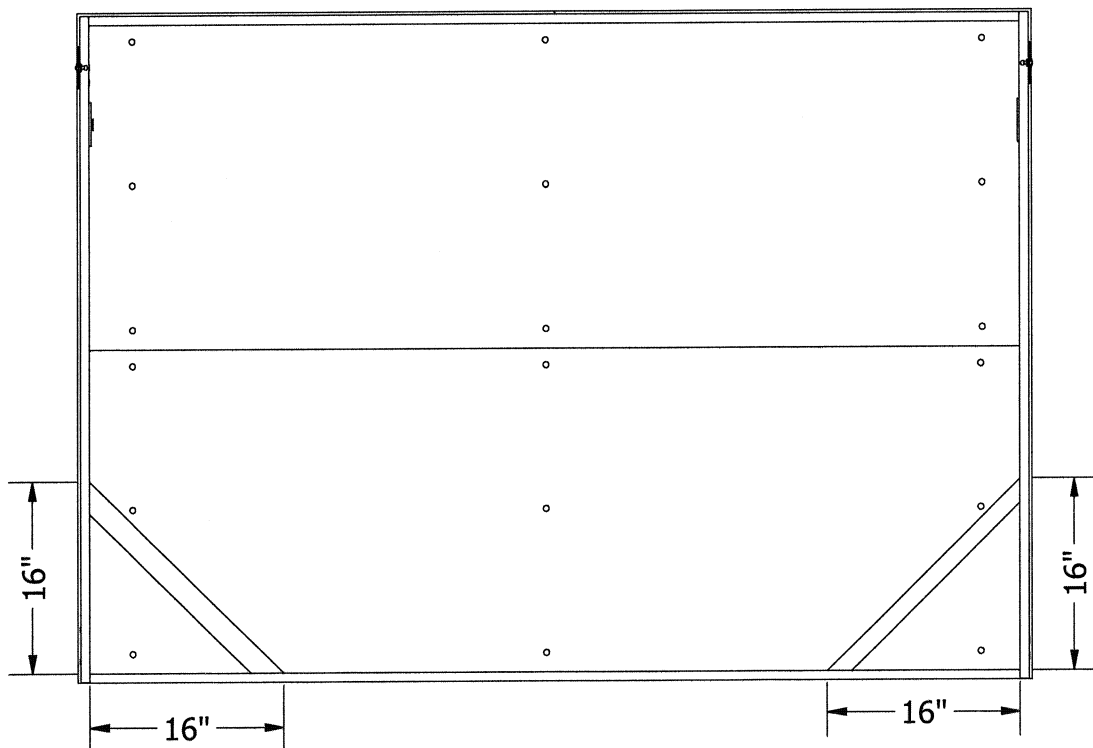
STEP1:

Replace all hardware on bed components except for the bed stops. Familiarize yourself with all COMPONENTS in Figure 1. Position Parts in front of desired cabinet location.



**Step 2:**

Lay 1/4" plywood mattress support (PART J) on inner bed frame and attach with screws do not glue. Screw ends of both mattress retaining straps thru 1/4" plywood (PART J) into inner wood bed frame, 16 (sixteen) inches from front corners of face panel as shown.



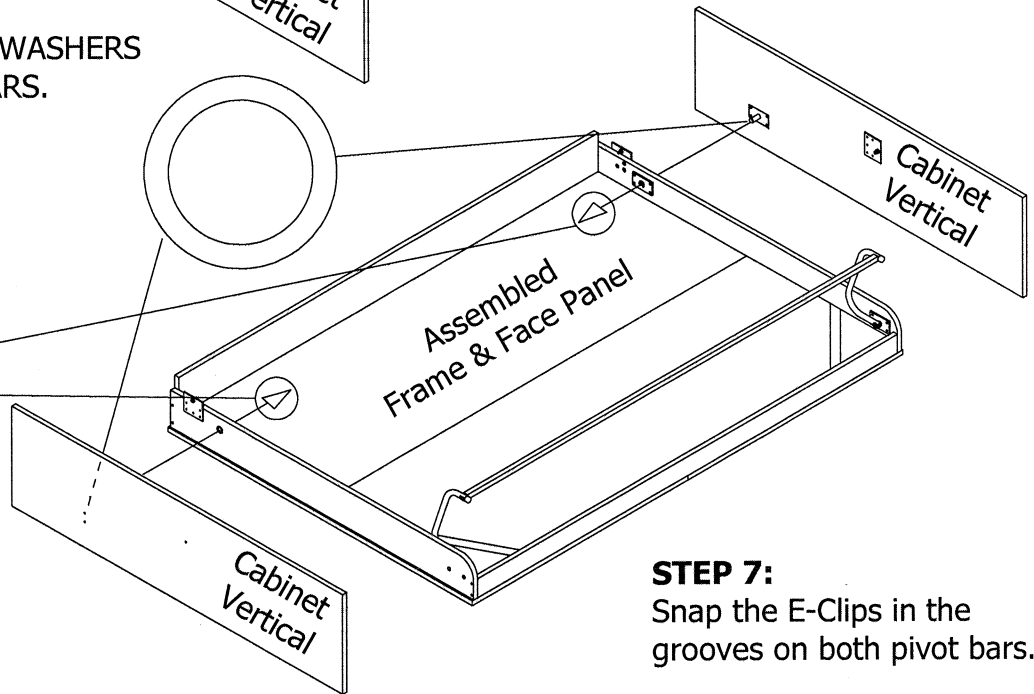
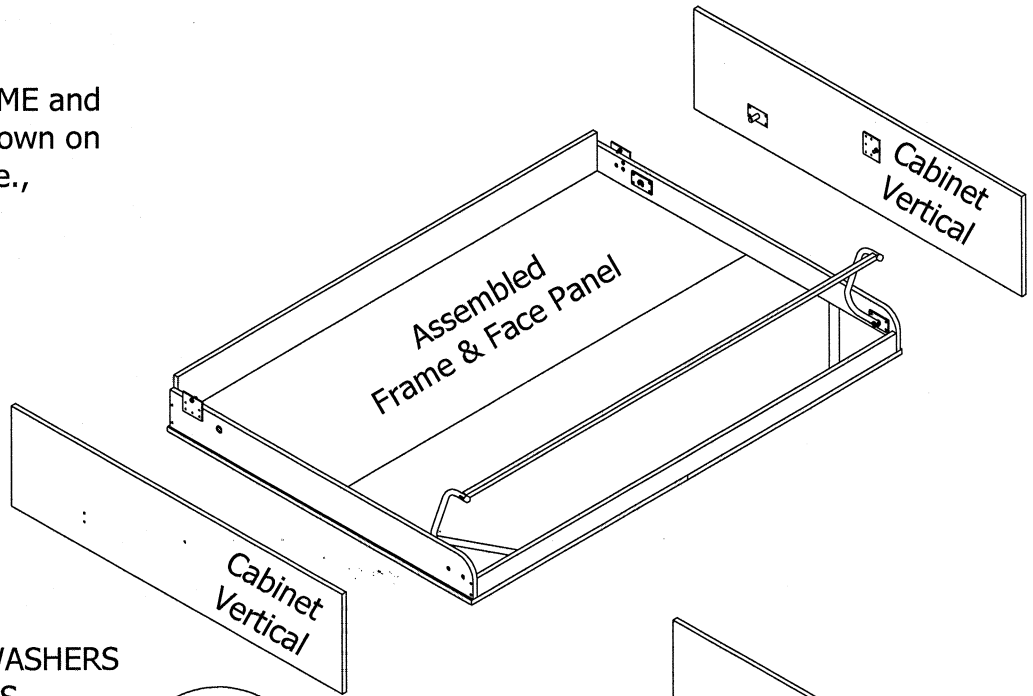
STEP 3:
Lay assembled FRAME and FACE PANEL face-down on a padded surface i.e., blanket or rug.

STEP 4:
Lay CABINET VERTICALS on finished (front) edge as shown.

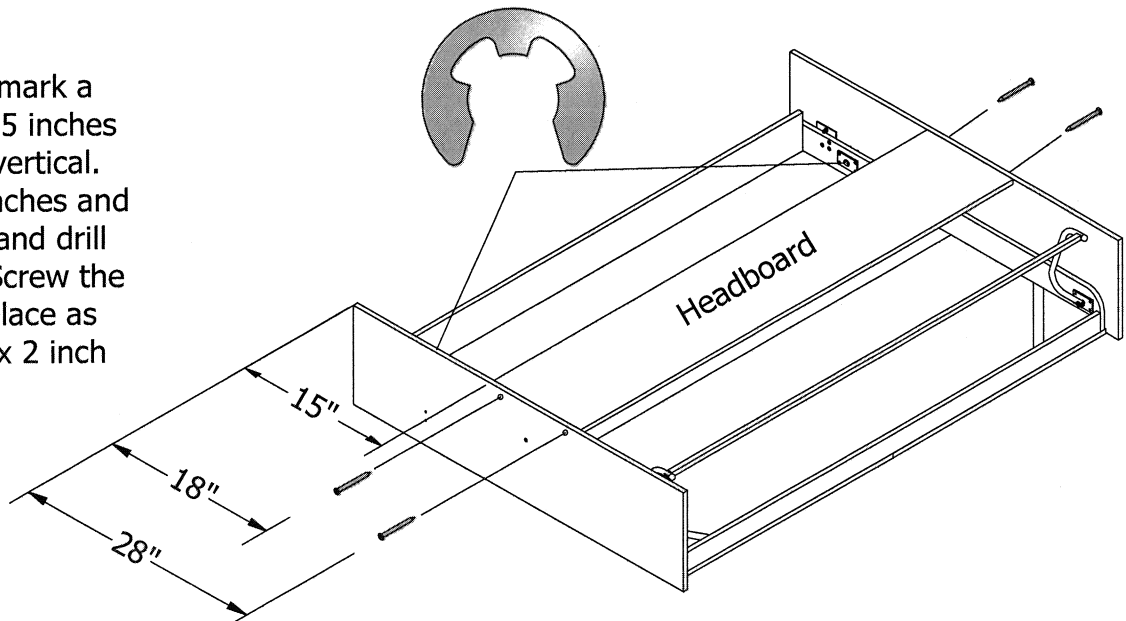
STEP 5:
Slide PLASTIC WASHERS onto PIVOT BARS.

STEP 6:
Slide PIVOT BARS into PIVOT HOLES in bed frame until no gap remains between bed frame and verticals.

STEP 8:
Measure up and mark a reference point 15 inches from the end of vertical. Measure up 18 inches and 28 inches, mark and drill two pilot holes. Screw the headboard into place as shown using #8 x 2 inch screws.

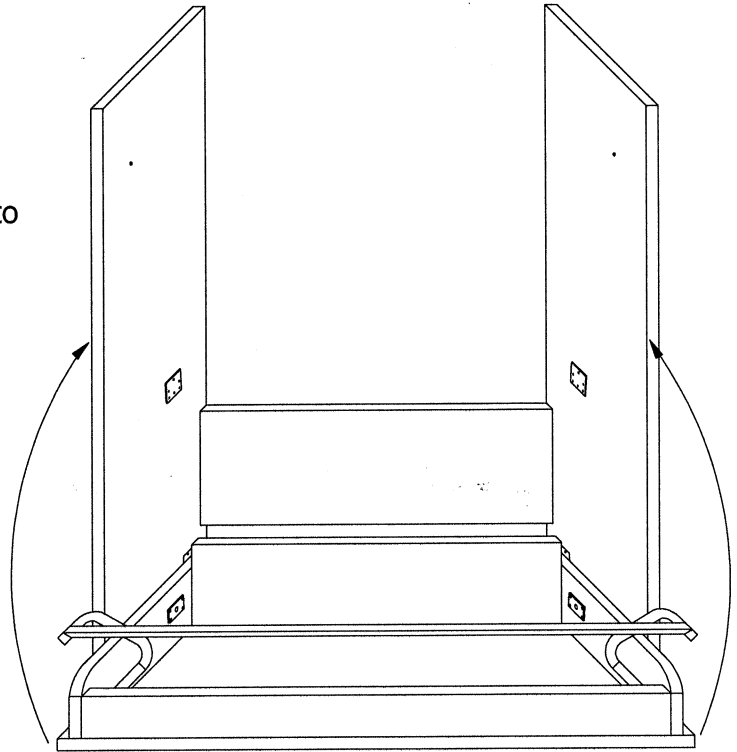


STEP 7:
Snap the E-Clips in the grooves on both pivot bars.



STEP 9:

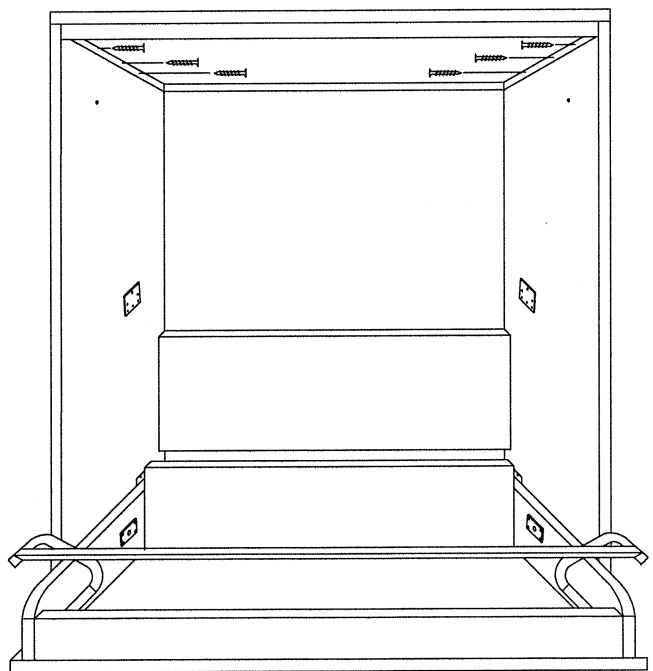
With the BED FACE PANEL remaining face-down on padding, **and legs in the closed position** slowly and carefully rotate the CABINET VERTICALS & the HEADBOARD assembly into its upright position.



NOTE: To prevent damage to the legs be sure they are in the closed position when rotating the bed into the upright position.

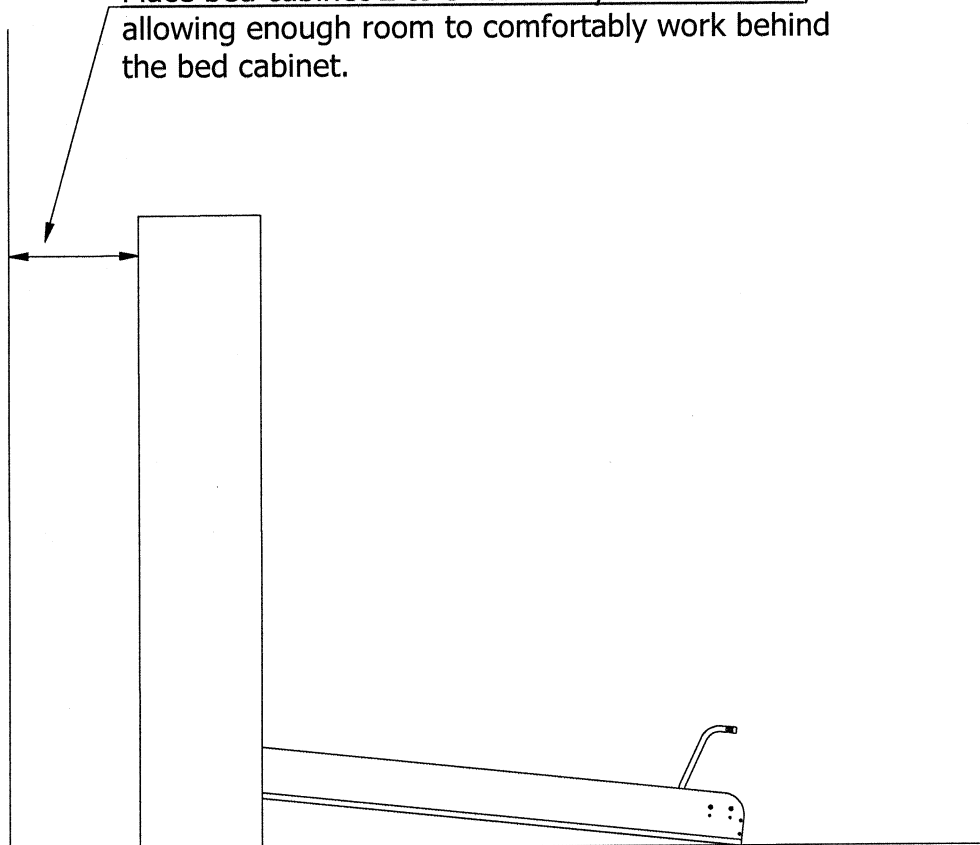
STEP 10:

Place the header between the bed verticals, making sure the nailed rail is in front, and the screwed rail is in the rear. Be sure top front and top rear of the header is FLUSH with the top front and top rear of the bed verticals. Using #8 x 1-1/4 inch screws, drill and screw through mounting cleats into the bed verticals, three (3) on each side.



STEP 11:

Place bed cabinet 2 to 3 feet away from the wall, allowing enough room to comfortably work behind the bed cabinet.

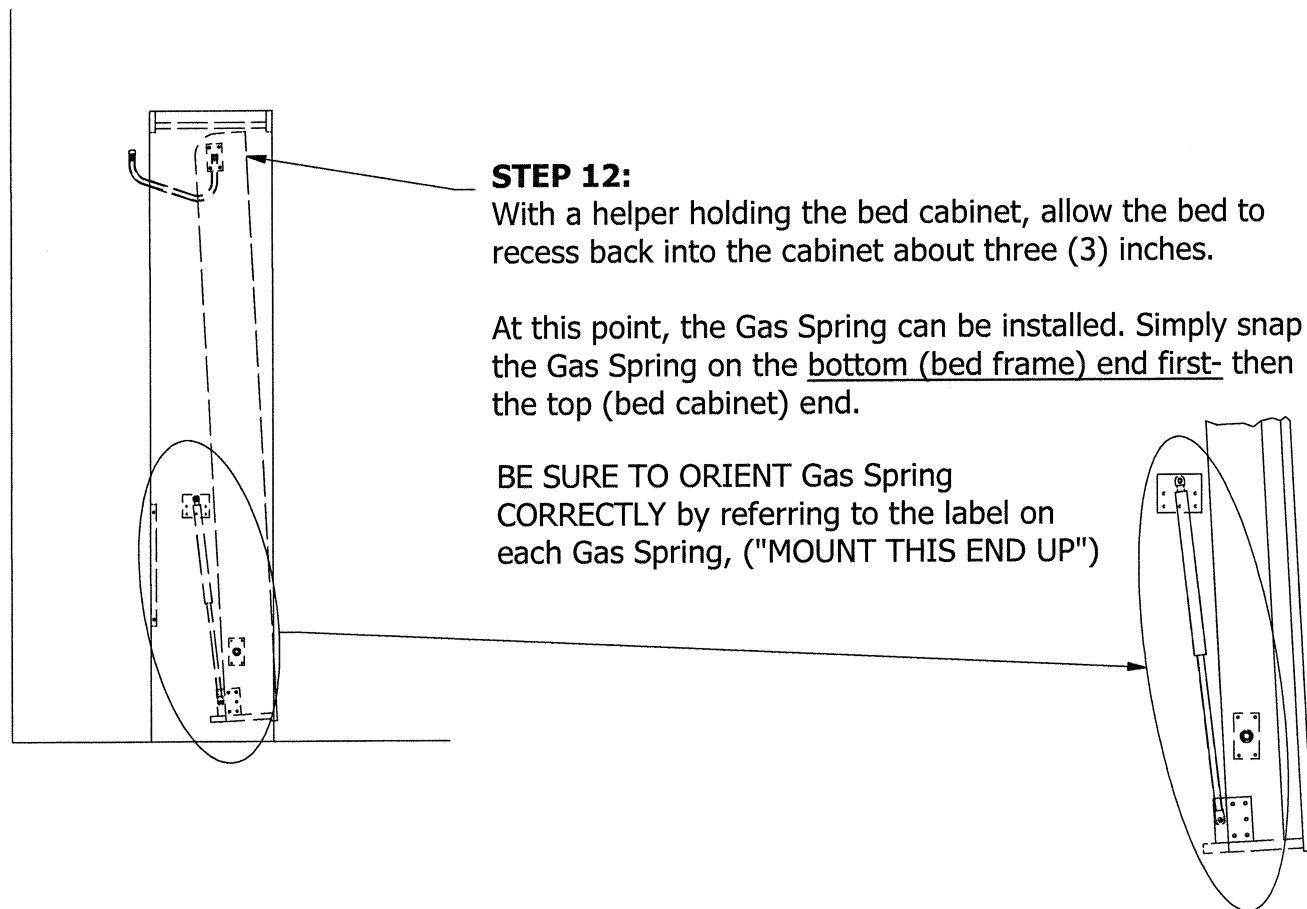


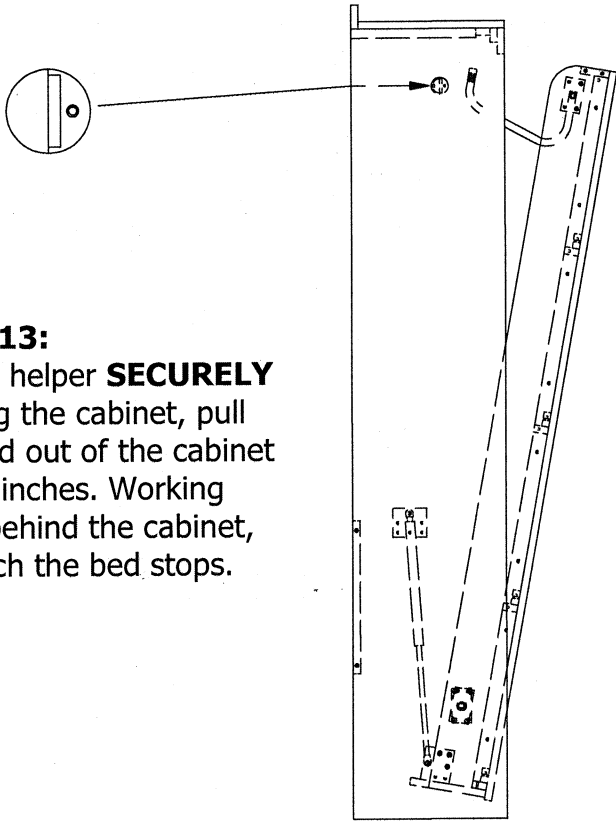
STEP 12:

With a helper holding the bed cabinet, allow the bed to recess back into the cabinet about three (3) inches.

At this point, the Gas Spring can be installed. Simply snap the Gas Spring on the bottom (bed frame) end first- then the top (bed cabinet) end.

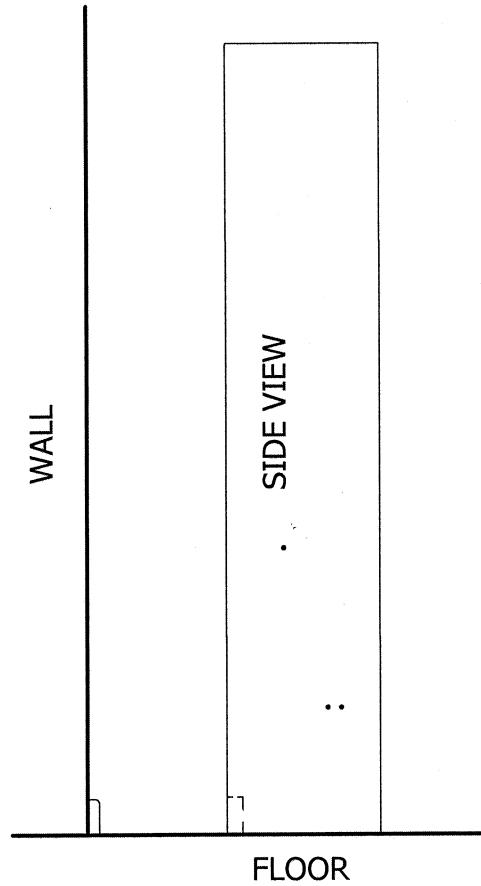
BE SURE TO ORIENT Gas Spring CORRECTLY by referring to the label on each Gas Spring, ("MOUNT THIS END UP")





STEP 13:

With a helper **SECURELY** holding the cabinet, pull the bed out of the cabinet 4 to 5 inches. Working from behind the cabinet, reattach the bed stops.

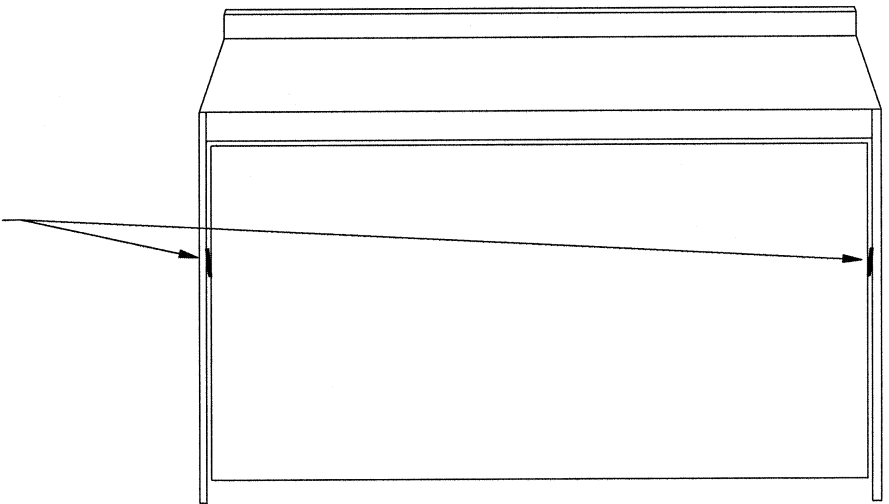


STEP 14:

If the room has existing base molding, make a cut at the bottom rear of the cabinet verticals to accommodate the existing base molding. If room does not have base molding, simply place cabinet flush against wall.

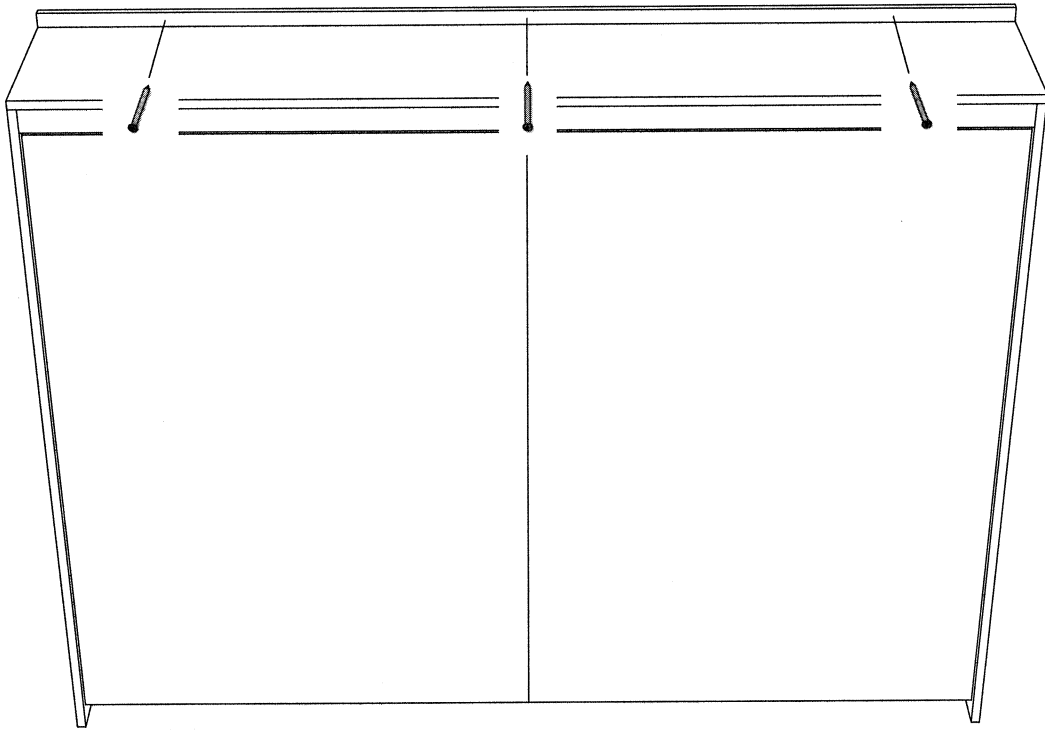
STEP 15:

After assuring that the top and bottom of the bed cabinet are against the wall, center the face panel between the verticals by placing a piece of folded cardboard between the face panel and each of the two verticals as illustrated.



STEP 16 IS VERY, VERY IMPORTANT!!! YOUR BED MUST BE SECURELY AND CORRECTLY ANCHORED TO THE WALL to assure proper operation and to avoid possible injury.

NOTE: When the bed is lowered, it wants to pull the bed cabinet down with it, so the bed cabinet **MUST** be securely anchored to the wall using the correct fasteners for your type or wall.



See STEP 16 on PAGE 8 for Anchoring Instructions —→

STEP 16: MOUNTING THE BED CABINET TO THE WALL

If the wall has **WOOD** studs, use 3" COARSE THREAD drywall screws or 3" lag screws:

Locate and mark the centers of the studs in desired wall location using a good studfinder.

Drill three (3) pilot holes through the rear rail of the Bed Header into the wall for a twin or full size bed and four (4) for a queen size bed. Drive three (3) 3" drywall screws or lag screws through the rear rail of the Bed Header into the studs for a twin or full, and drive four (4) screws for a queen size bed.

If the wall is **CONCRETE, MORTAR OR BRICK** construction, use masonry screws:

Drill three (3) pilot holes through the rear rail of the Bed Header into the wall for a twin or full size bed and four (4) for a queen size bed. Using a 5/32" 4" concrete drill bit, drill through the pilot holes into the wall two (2) inches deep. Anchor the bed by screwing 3/16" x 2-1/4" masonry screws through the rear rail of the Bed Header into the wall.

If the wall has **METAL** studs, use 3/16" x 4" toggle bolts:

Locate and mark the centers of the studs in desired wall location using a good studfinder.

Drill three (3) pilot holes through the back rail of the Bed Header into the wall for a twin or full size bed and four (4) for a queen size bed. Using a 9/16" drill bit, drill holes at the pilot holes through the metal studs. Be sure you drill through the studs. Insert the toggle bolt screws through the pilot holes in the rear rail of the Bed Header. Now thread the toggle wings on the screws. Fold the wings back completely and push the wings through the metal studs until the wings spring open. Pull the Header Rail back to hold the wings against the inside of the stud and tighten the screws with a screwdriver.

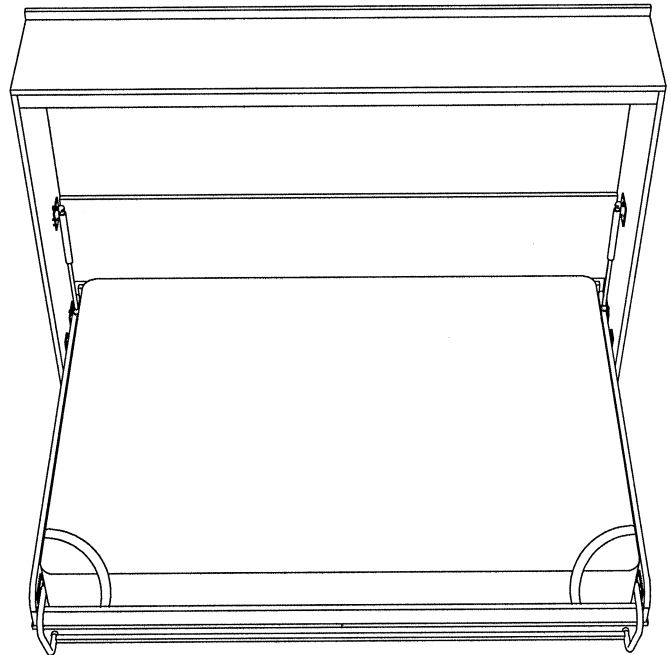
STEP 17:

Holding the BED FACE PANEL in the down position, place the innerspring mattress on the bed and secure with ELASTIC RETAINING STRAPS.

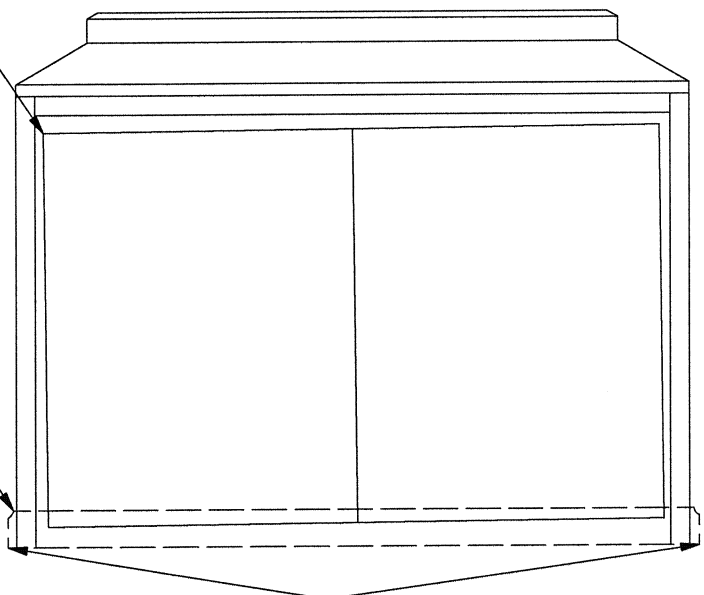
NOTE:

When lowering the bed without the counter balance of the mattress it may seem very difficult.... do not be concerned, once the mattress is placed on the bed it will function easily.

If the mattress is lightweight and the bed has a tendency to float off the floor, simply add some weight-i.e.- a piece of particle board, wood, etc. inside the bed frame at the end of the bed to counter-balance.



Narrowest Gap



STEP 18:

Close bed. If the gap around the bed is uneven, push or gently kick the base of the CABINET on the side with the NARROWEST gap until desired gap is obtained.

STEP 19:

Close bed. Apply base molding (if applicable) from outside of vertical to outside of vertical.

PROBLEM SOLVING

Q: The gas spring won't hand-compress... has it "frozen up?"

A: The design and construction of the gas spring's internal parts won't allow it to "freeze up." Each piston contains as much as 240 pounds of pressure, so they cannot be compressed by hand. Please refer to ASSEMBLY BOOKLET, page 5 - step 12.

Q: The bed is very hard to open and it wants to spring closed.

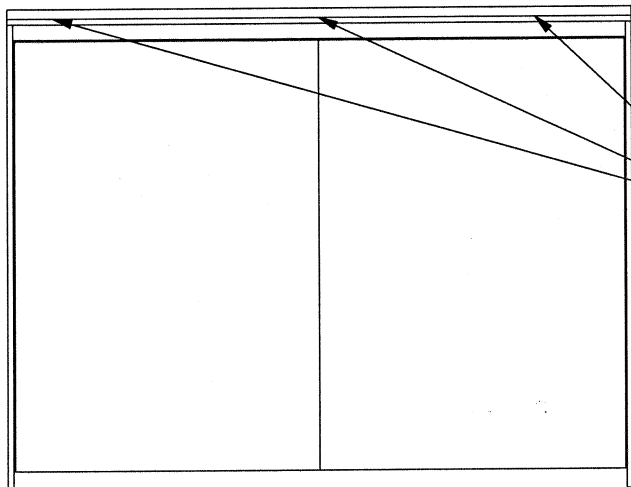
A: Your mechanism is designed to have the optimum mechanical leverage to comfortably raise and lower the bed. Place the mattress on the bed. The mattress is the counter-balance, i.e., this is what offsets the force of the piston.

Q: I've assembled the bed and attached it to the wall, but the bed face panel sags out of the cabinet... what do I do now?

A: The mounting positions of the upper or the lower ball stud plates are incorrect. Check your measurements on PAGES 15, 16, 22 and 23. Remember... the measurements in the Orange (particle board) book ARE DIFFERENT from the measurements in the Green (plywood) book. If the face panel sags out of the cabinet and you FORCE it closed you will damage the head of the gas spring.

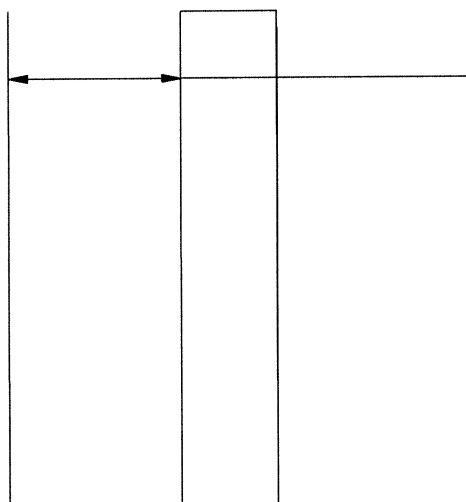
REPLACING THE COUNTER BALANCE GAS SPRING

DO NOT ATTEMPT To Compress the gas spring by any other means than the one described in the step below.



STEP 1.

Remove the mattress and with the bed in the upright, closed position, remove the anchor screws from the top of the bed cabinet. **Do not** remove the anchor screws with the bed in the open position.

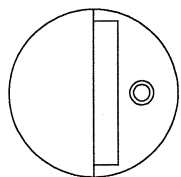


STEP 2.

Place the bed cabinet 2 to 3 feet away from the wall, allowing enough room to comfortably work behind the bed cabinet.

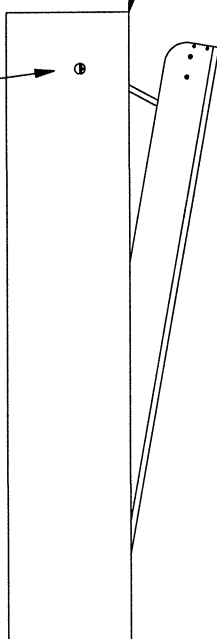
STEP 3.

With a helper **SECURELY** holding the bed cabinet, lower the bed 4 to 5 inches out of the cabinet.



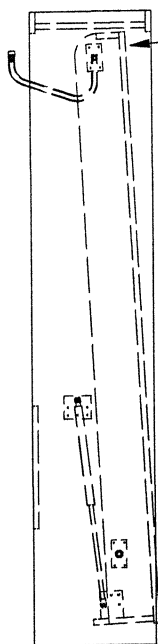
STEP 4.

Working from the back of the bed, remove the screws and bed stops.



STEP 5.

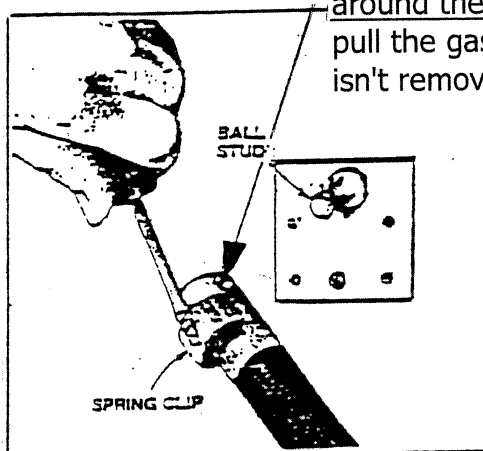
With your helper **STILL HOLDING THE BED CABINET**, allow the bed to pull back into the bed cabinet. It will recess about 3 inches into the bed cabinet.

**STEP 6.**

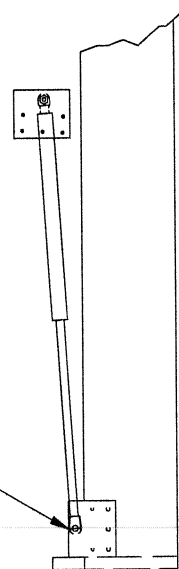
At this point, the gas spring can be removed and replaced **ONE AT A TIME**.

STEP 7.

With the tension off of the gas spring -i.e.- with the gas spring fully extended and using a flat blade screwdriver, gently pry up on the spring clip located around the plastic head of the gas spring. Now just pull the gas spring off - **REMEMBER** the spring clip isn't removed, just opened.

**STEP 8.**

At this point, the new gas spring can be installed. Simply snap the new gas spring on the lower ball stud located on the bed rail - then the upper ball stud located on the bed vertical. **BE SURE TO ORIENT THE GAS SPRING CORRECTLY** by referring to the label on the gas spring. (**MOUNT THIS END UP**)

**STEP 9.**

Repeat on the other side of the bed.

STEP 10.

Replace both bed stops and screws.

STEP 11.

Place the bed cabinet back against the wall and replace the screws, **MAKING SURE THE BED IS SECURELY FASTENED TO THE WALL**.