

Create-A-Bed® *LLC*

NOTE: DO NOT deviate from these plans

These plans are for constructing an
ADJUSTABLE

FULL VERTICAL 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
3/4" 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

Chisel

Clamps

Straight Edge or Framing Square

Household Iron for Veneer Tape and Utility Knife

7/16" Socket, Wrench, or Driver

1/2" Wrench

Stud Finder

© *Create-A-Bed*® 2014, 2017, 2018, 2021

murphy bed mechanism

1800 Taylor Avenue Louisville, KY 40213

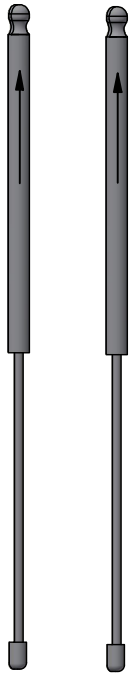
www.createabed.com

TOLL FREE: 1-877-966-3852

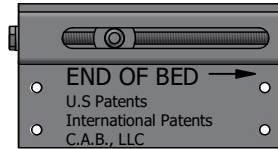
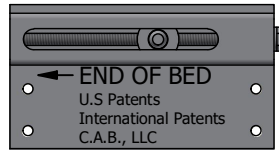
Create-A-Bed®

C.A.B., LLC

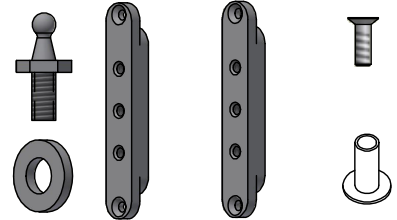
FULL VERTICAL (UPRIGHT) murphy bed mechanism PLYWOOD CONSTRUCTION



Two (2) GAS SPRINGS



Two (2) ADJUSTABLE LOWER PLATES
with Four (4) #10 x 1-5/8" screws
Four (4) "T" nuts with machine screws



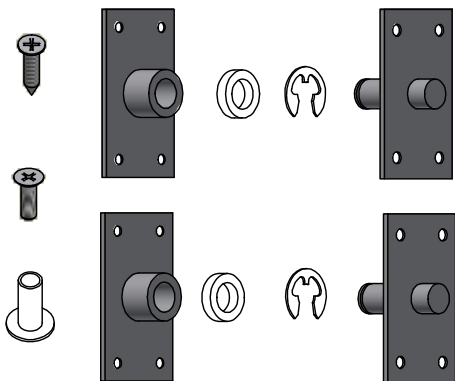
Two (2) ADJUSTABLE UPPER PLATES with
Four (4) "T" NUTS with MACHINE screws
Two (2) BALL STUDS
Two (2) BLACK BALL STUD SPACERS



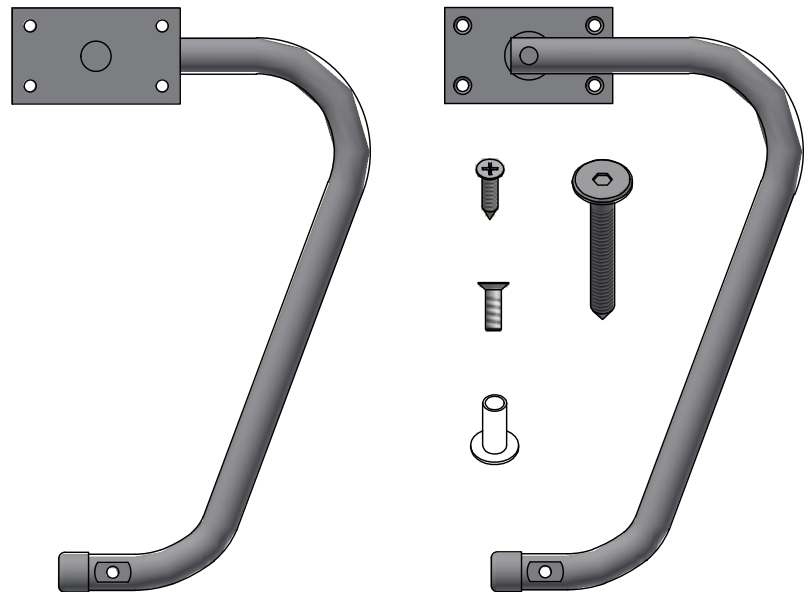
Two (2) BED STOPS with Two
(2) #10 x 3/4" black screws



Two (2) ELASTIC MATTRESS
RETAINING STRAPS



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

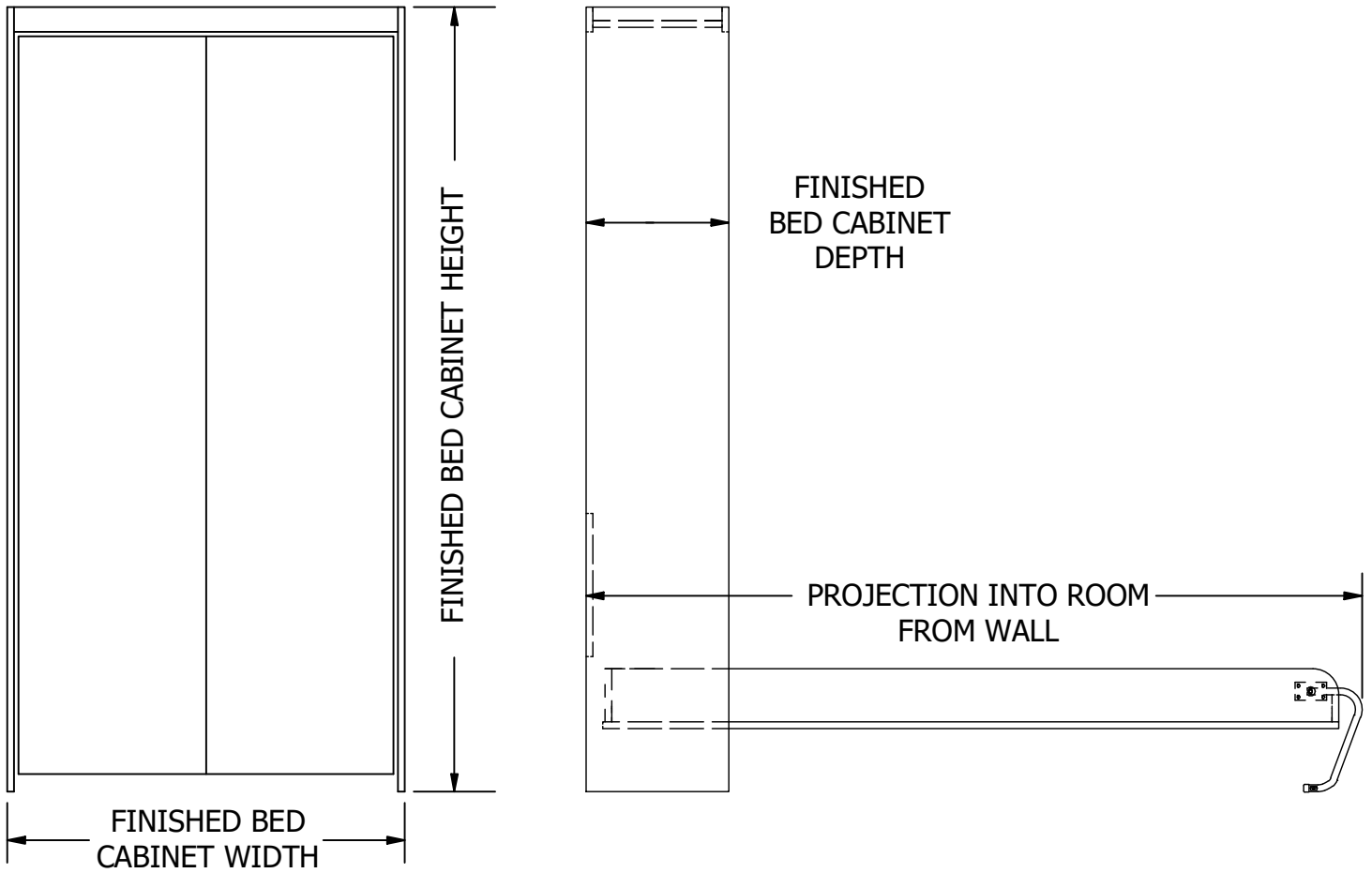


Two (2) Metal Pivoting Legs
Two (2) 1/4" x 2" Leg Support Rail screws
Four (4) Black #10 x 3/4" screws
Four (4) "T"nut with machine screws

One (1) CONSTRUCTION booklet
One (1) ASSEMBLY AND INSTALLATION booklet
Online Video: <https://bit.ly/AdjustableVertical>

Protected By U.S. Patents #8,850,637, #8,898,831
Protected By Canada Patents #2,871,969, #2,897,339
Protected By China Patent #ZL 201380032662.0
Protected By Mexico Patent #351674

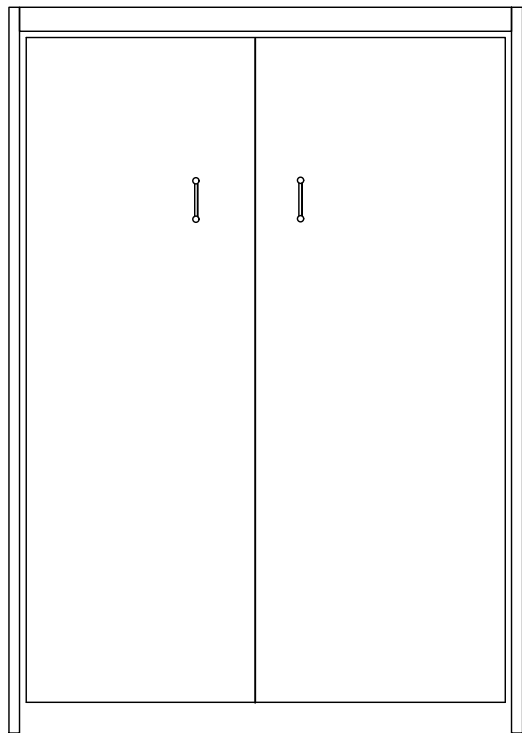
Out-to-out dimensions of **VERTICAL STYLE** murphy bed cabinet constructed using the *Create-A-Bed*[®] mechanism



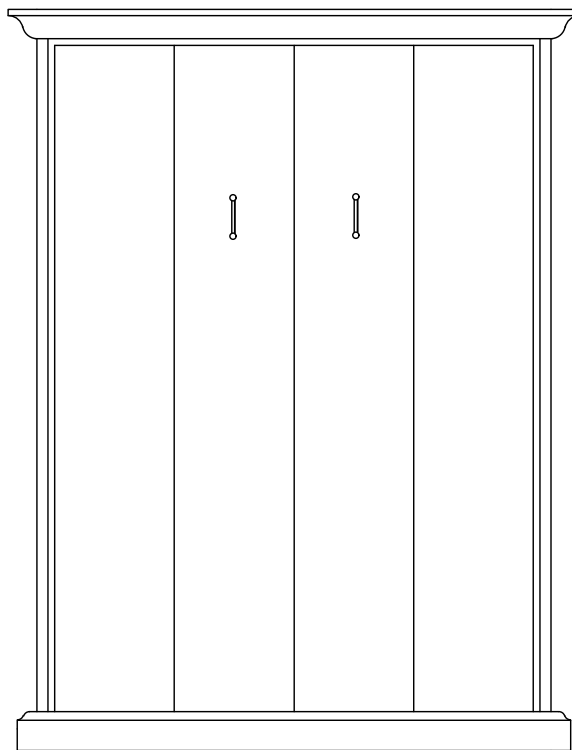
OUTSIDE-EDGE TO OUTSIDE-EDGE
FINISHED VERTICAL BED CABINET DIMENSIONS

SIZE	HEIGHT	WIDTH	DEPTH	PROJECTION
TWIN	82-1/8"	44-7/8"	15-7/8"	83"
FULL	82-1/8"	59-7/8"	15-7/8"	83"
QUEEN	87-1/8"	65-7/8"	15-7/8"	87"

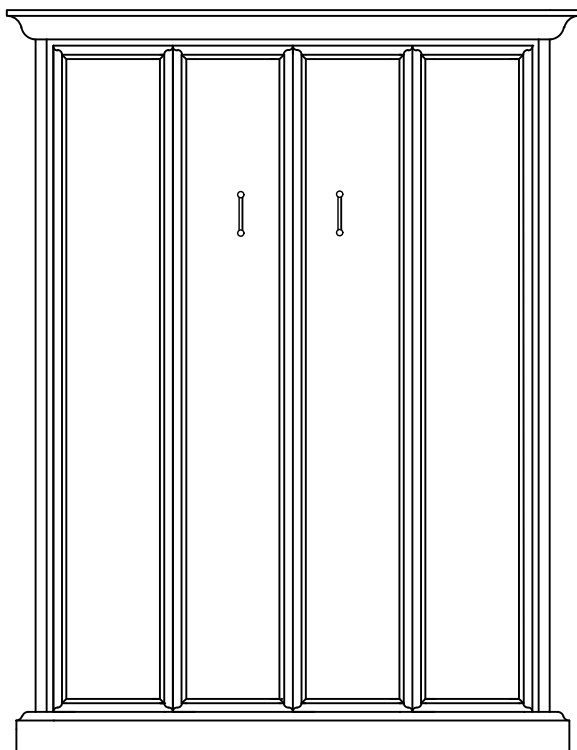
Some design options... or create your own!



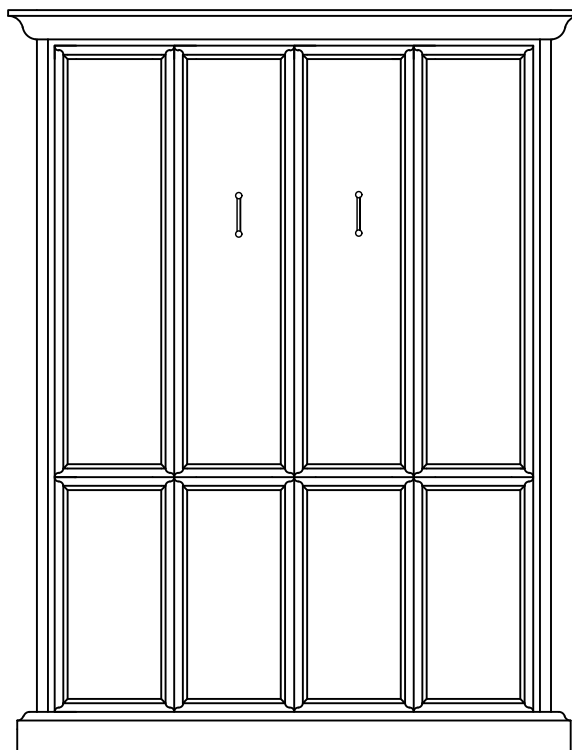
BASIC BED



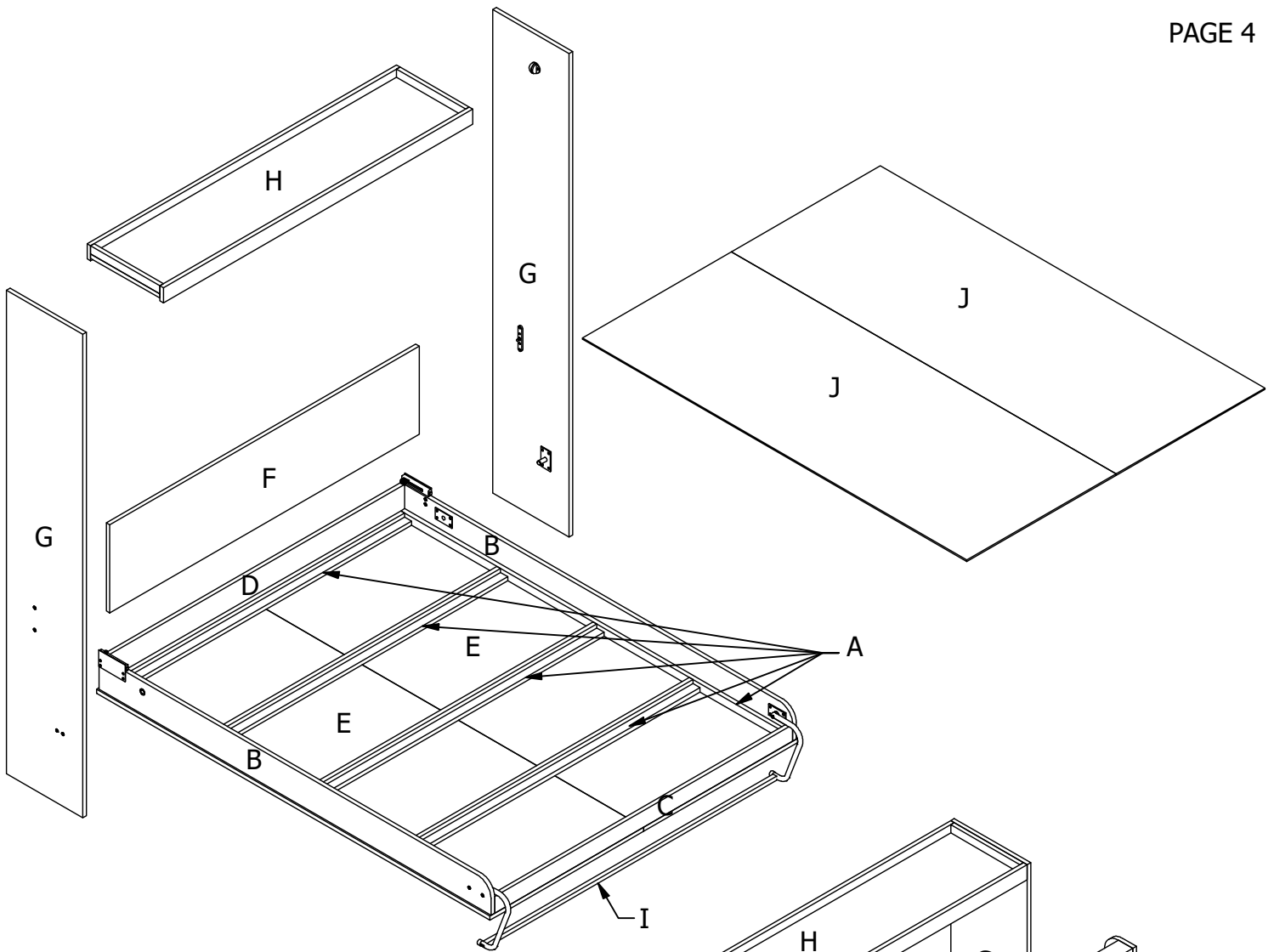
WITH CROWN
AND BASE MOLDING



WITH CROWN, BASE
AND FULL-LENGTH FACE
PANEL MOLDING

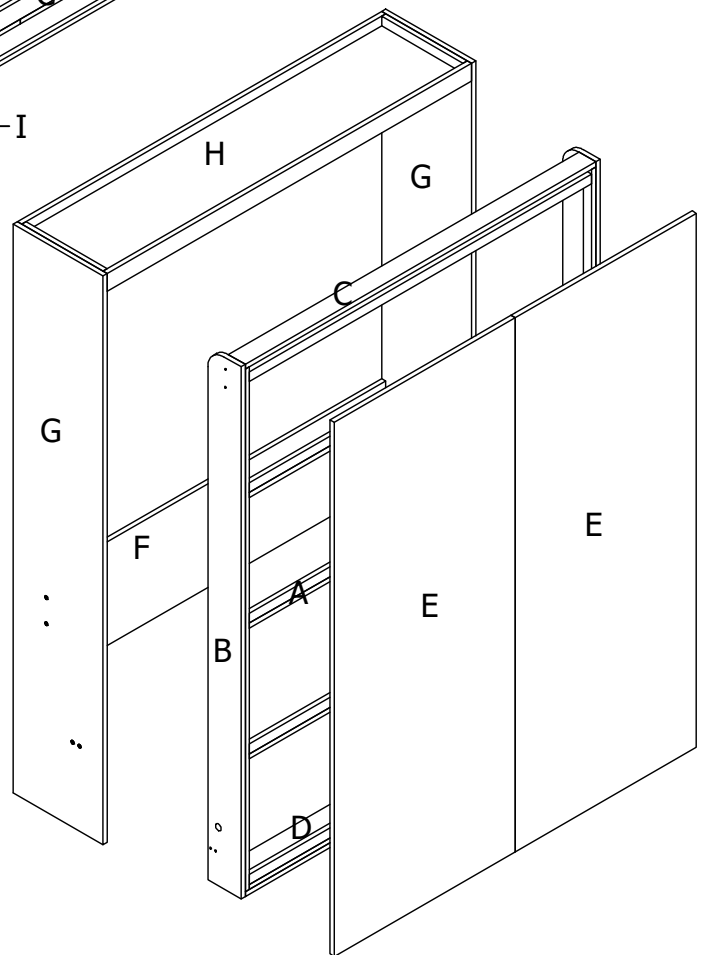


WITH CROWN, BASE
AND SPLIT
FACE PANEL MOLDING



COMPONENTS OF FINISHED MURPHY BED

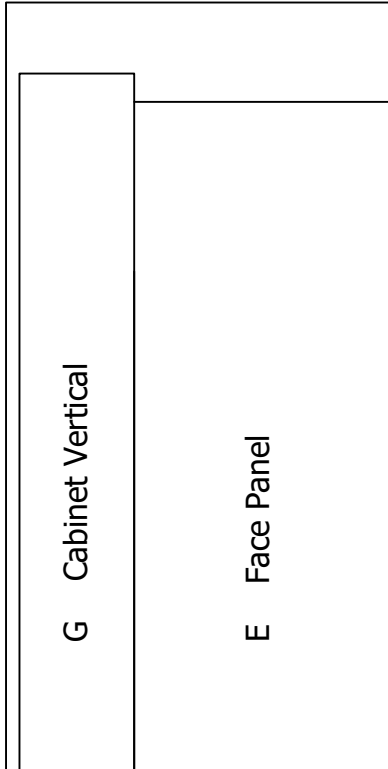
- A. INNER WOOD BED FRAME
- B. SIDE RAILS
- C. FOOT RAIL
- D. HEAD RAIL
- E. BED FACE PANELS
- F. BED HEADBOARD
- G. BED CABINET VERTICALS
- H. BED HEADER
- I. LEG SUPPORT RAIL
- J. 1/4" PLYWOOD MATTRESS SUPPORT



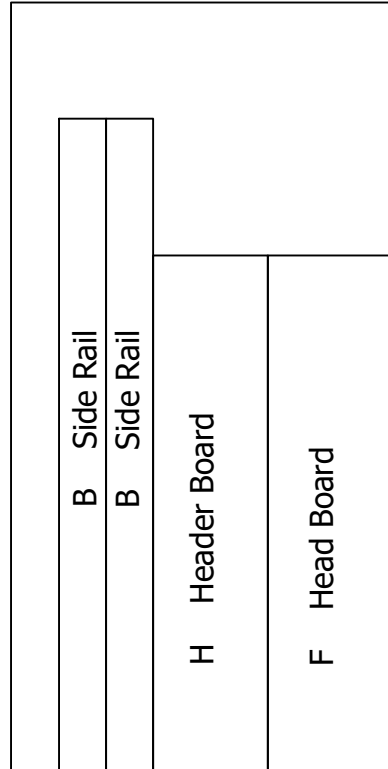
FULL Size Vertical Plywood Cutting Guide

Requires: 4 sheets of 3/4" x 4' x 8' and 2 sheets of 1/4" x 4' x 8'

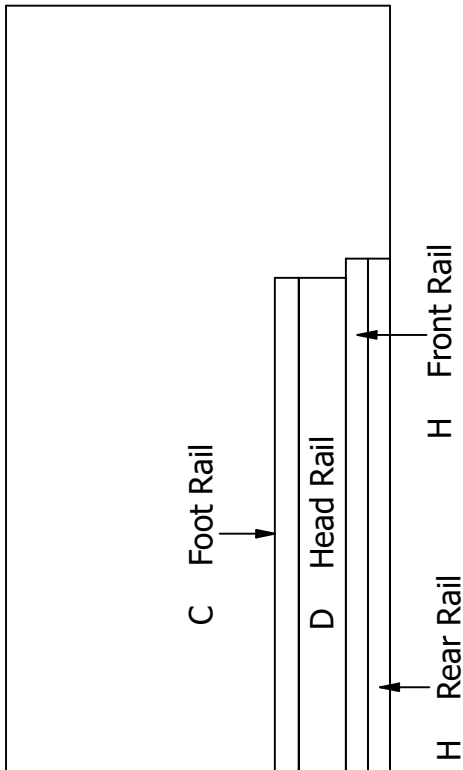
NOTE: Refer to page 6 for the cutting dimensions.



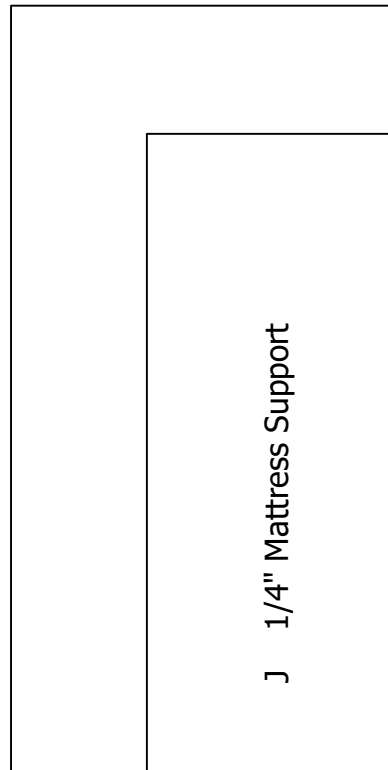
Requires 2 sheets 3/4"



Requires 1 sheet 3/4"



Requires 1 sheet 3/4"



Requires 2 sheets 1/4"

FULL SIZE (double) ADJUSTABLE KIT VERTICAL 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 54-1/2" 10 pieces

FRAME SIDES: ***SOLID WOOD*** 3/4" X 1-1/2" X 75" 2 pieces

IMPORTANT: PLYWOOD MUST BE USED FOR THESE PIECES:

__ B. SIDE RAILS: 3/4" X 5-7/8" X 76-1/2" 2 pieces

__ C. FOOT RAIL: 3/4" X 3" X 56" 1 piece

__ D. HEAD RAIL: 3/4" X 5-7/8" X 56" 1 piece

__ E. BED FACE PANEL: 3/4" X 29" X 76-3/4" 2 pieces

__ F. BED HEADBOARD: 3/4" X 15-7/8" X 58-3/8" 1 piece

__ G. BED CABINET VERTICALS: 3/4" X 15-7/8" X 82-1/8" 2 pieces

__ H. BED HEADER:
 HEADERBOARD: 3/4" X 14-3/8" X 58-3/8" 1 piece
 FRONT RAIL: 3/4" X 2-3/4" X 58-3/8" 1 piece
 REAR RAIL: 3/4" X 2-3/4" X 58-3/8" 1 piece
 MOUNTING CLEATS:***SOLID WOOD*** 3/4" X 1-1/2" X 14-3/8" 2 pieces

__ I. Leg Support Rail:***SOLID WOOD*** 3/4" X 3/4" X 54-1/4" 1 piece

__ J. 1/4" **PLYWOOD** mattress support: 1/4" X 28" X 75" 2 pieces

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

__ L. WOOD GLUE: One 8 ounce bottle

__ M. FINISH NAILS: 1-1/2" box of 50
 2" box of 25

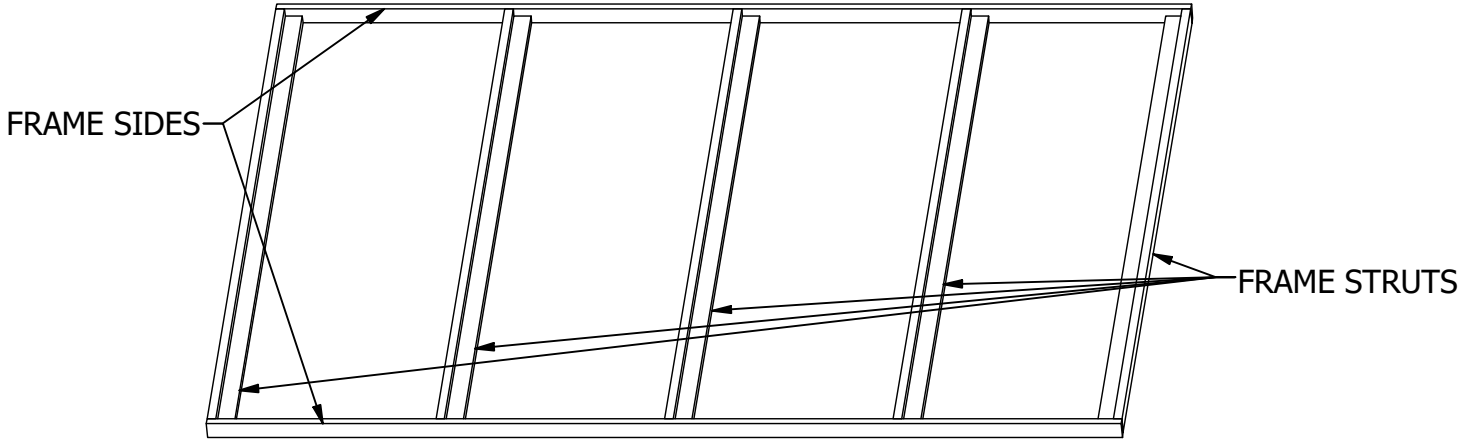
__ N. SCREWS: #8 1-1/4" coarse thread Box of 100
 #8 1-1/2" coarse thread Box of 30
 #8 2" coarse thread Box of 40

__ O. DESIRED CABINET HANDLES OR PULLS 2 HANDLES

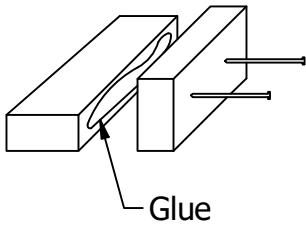
__ P. MATTRESS **MATTRESS MUST WEIGH between 50 - 65 pounds**
Your mattress dimensions must not exceed 54" x 75"
Mattress thickness CANNOT exceed 12" in thickness – including pillow top.

A. INNER WOOD BED FRAME

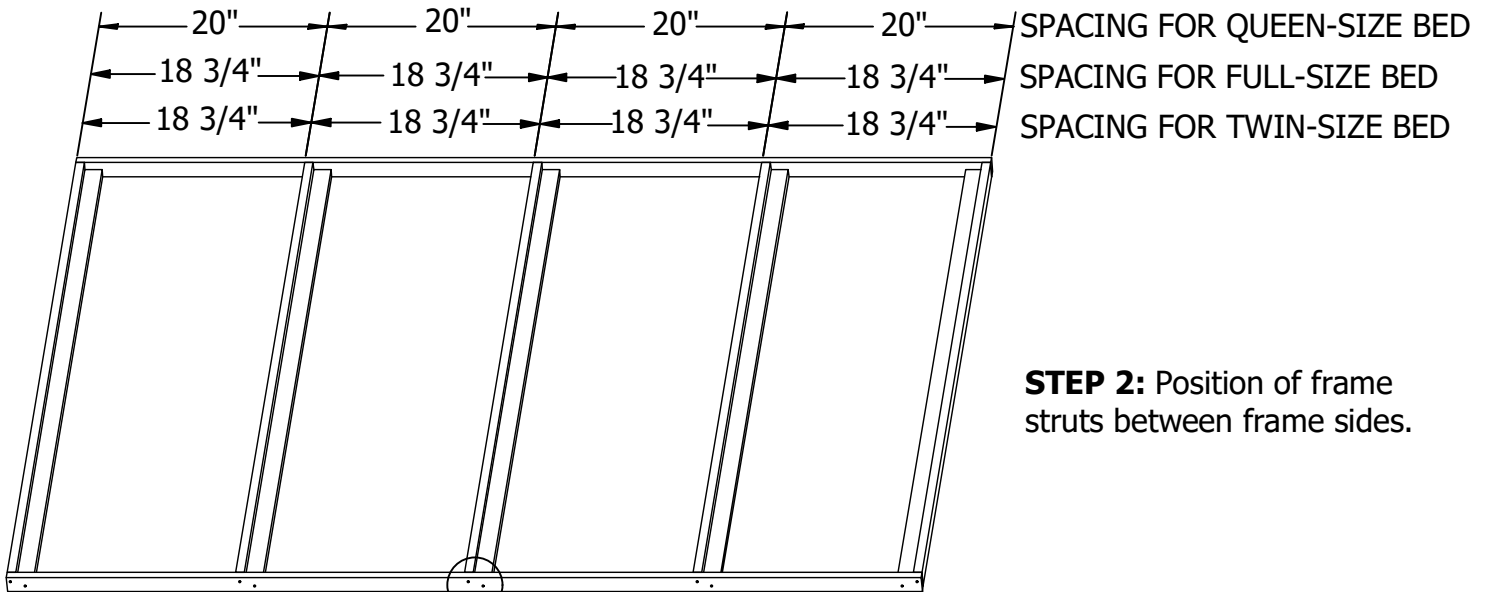
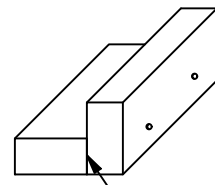
See Bill of Materials / Cut Sheet (PART A) for Twin, Full or Queen size frame struts and frame sides dimensions.



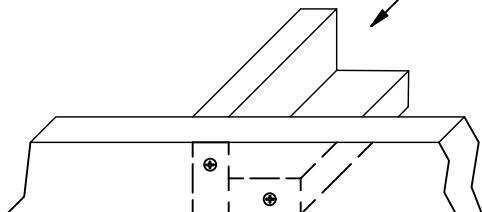
STEP 1: Construction of five (5) frame struts.



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.



STEP 2: Position of frame struts between frame sides.

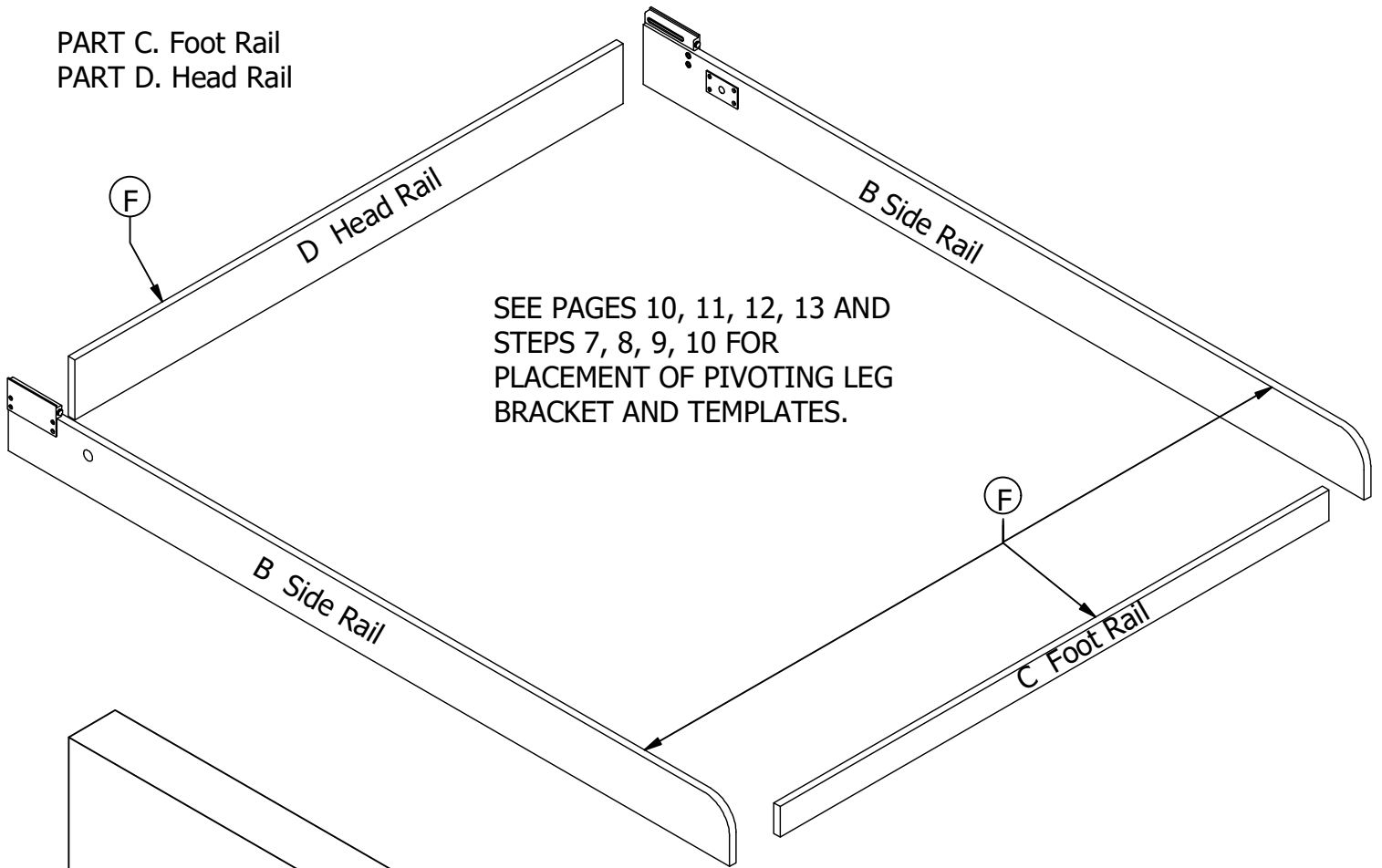


STEP 3: Mounting the frame struts between the frame sides. Using a 1/8" drill bit and countersink, drill pilot holes through the frame side into each end of the "L" shaped frame struts. Screw #8 x 2" wood screw flush.

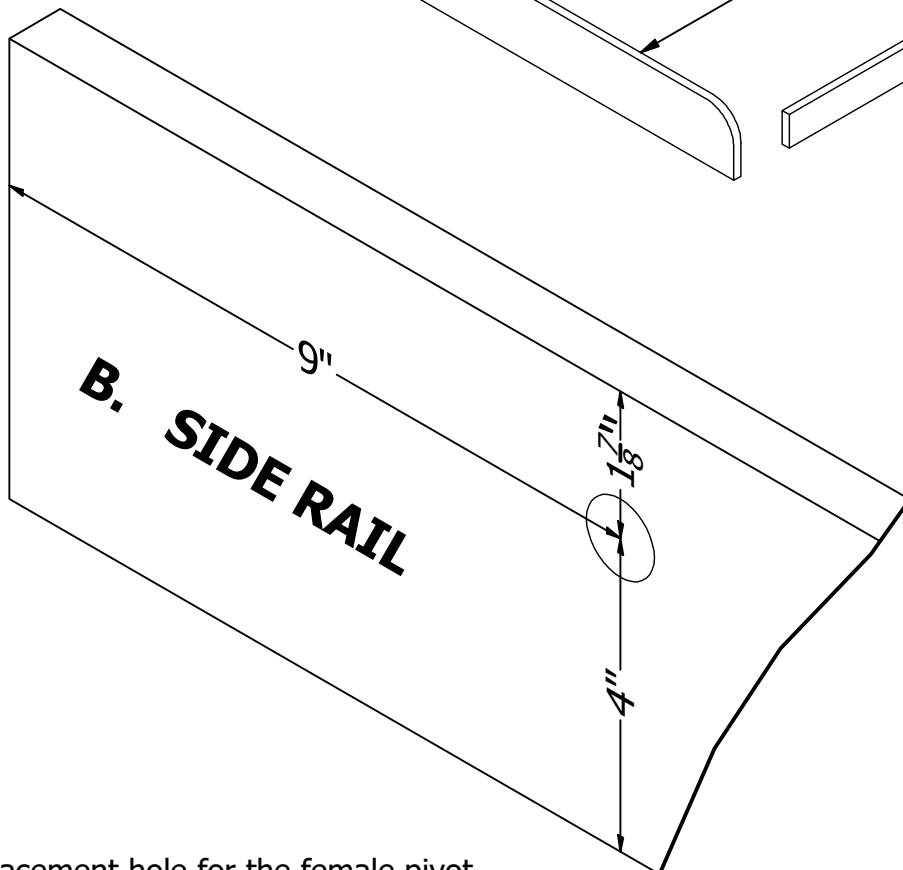
PART B. Side Rails: **MUST BE MADE OF PLYWOOD**

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



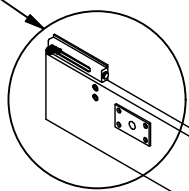
For a finished look, apply wood veneer or melamine edge banding tape to all edges marked **F**



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

HARDWARE PLACEMENT FOR B. SIDE RAILS

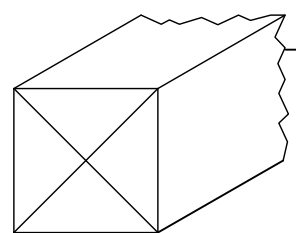
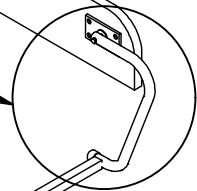
STEP 5: SEE PAGES 14, 15, 16, 17 AND STEPS 11, 12, & 13 FOR PLACEMENT OF **FEMALE PIVOT AND ADJUSTABLE LOWER BALL STUD PLATES.**



B. RIGHT SIDE RAIL

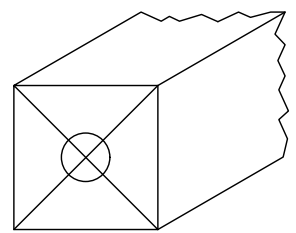
STEP 4: SEE PAGES 10, 11, 12, 13 AND STEPS 7, 8, 9, 10 FOR PLACEMENT OF **PIVOTING LEG BRACKET AND TEMPLATES.**

B. LEFT SIDE RAIL

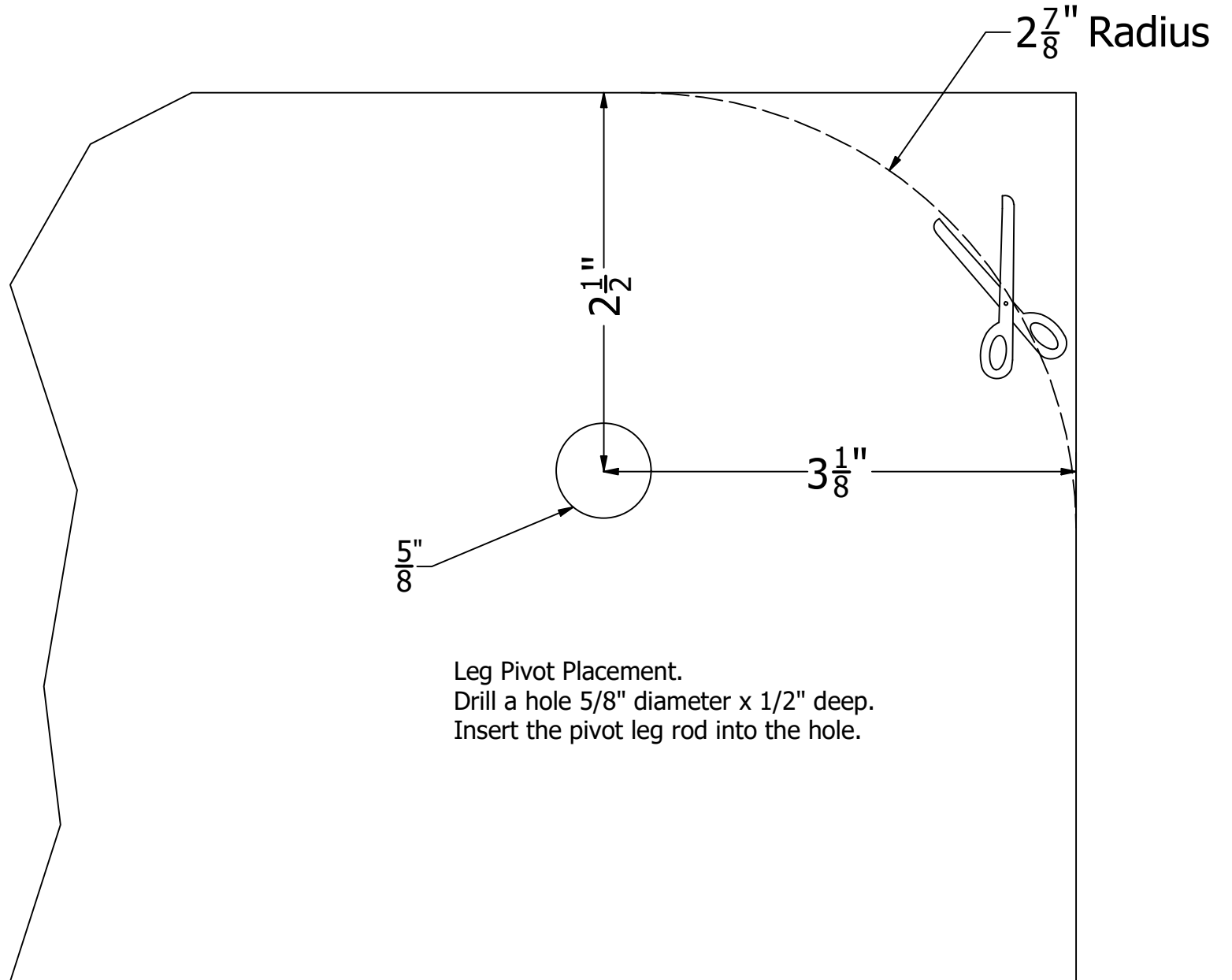


STEP 6: PART I. LEG SUPPORT RAIL
SEE PAGE 6 FOR CUTTING DIMENSIONS.

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.

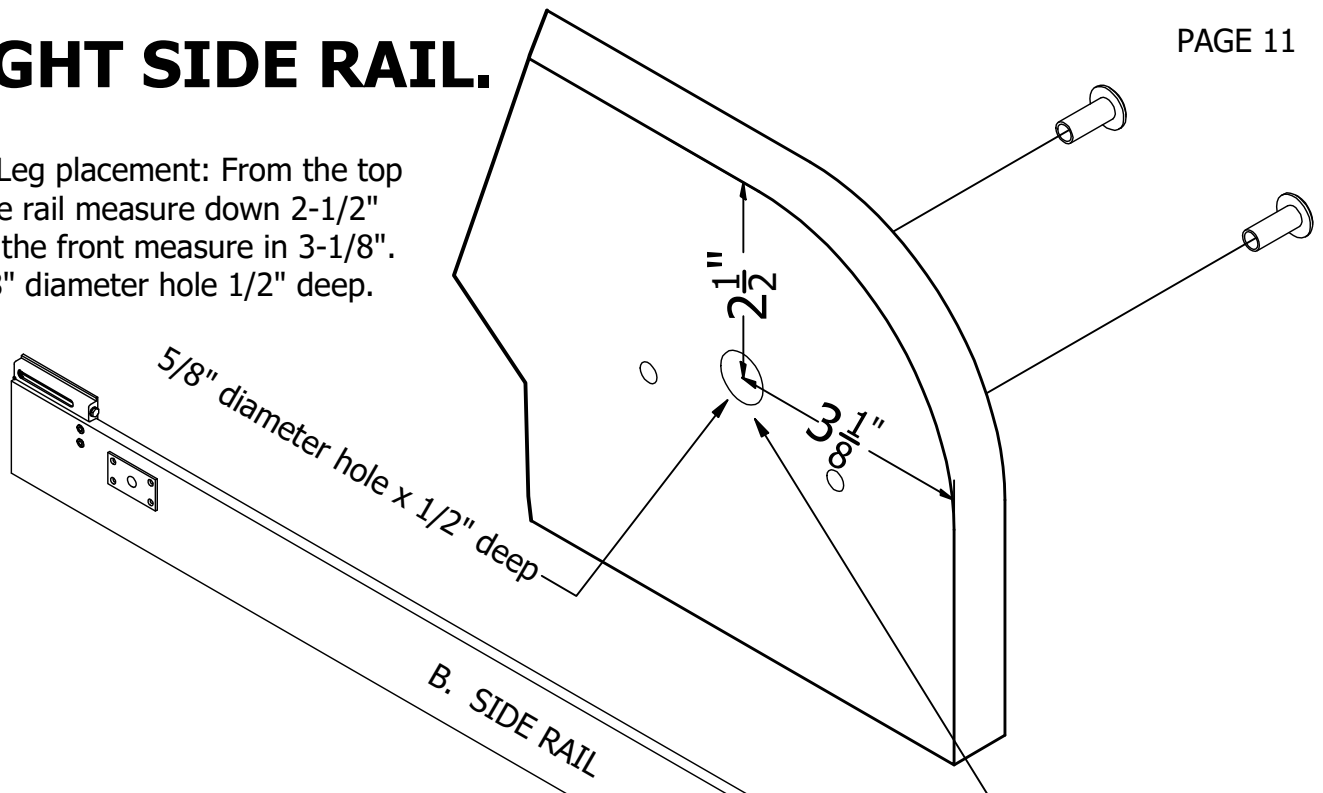


Leg Pivot Placement.
Drill a hole 5/8" diameter x 1/2" deep.
Insert the pivot leg rod into the hole.

RIGHT SIDE RAIL TEMPLATE

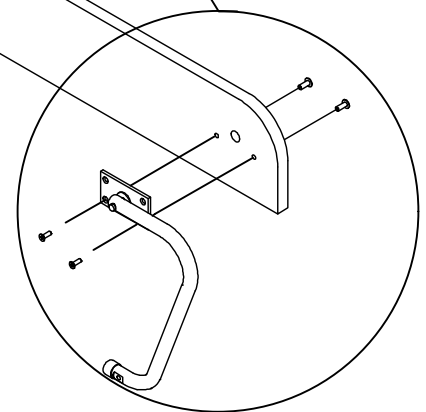
B. RIGHT SIDE RAIL.

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.

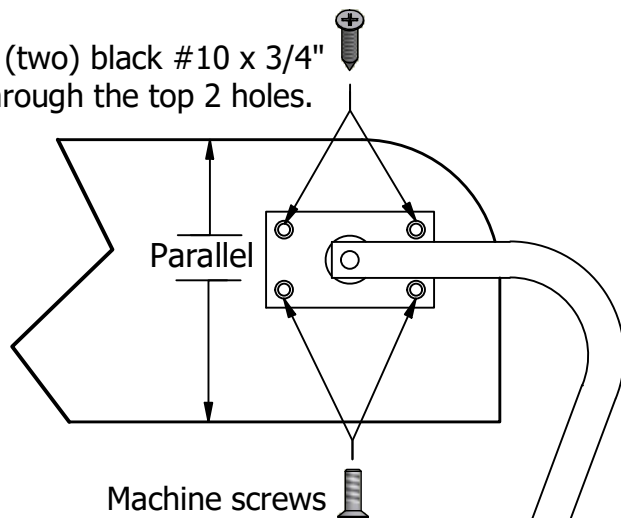


STEP 8: Place the leg pivot into the 5/8" hole. With the pivot plate parallel to the top and bottom of the side rail. Drill a 1/4" hole through the bottom 2 (two) holes in the plate through the side rails.

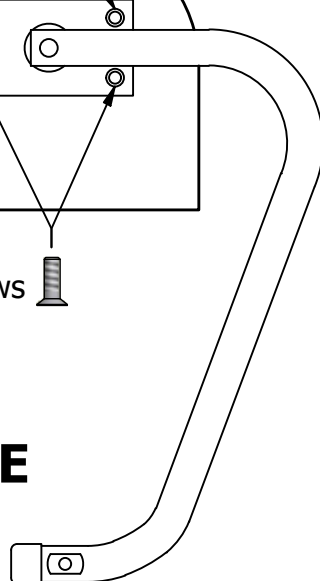
Note: to prevent tear out on the outside of the side rail, clamp a piece of scrap wood to rail while drilling.



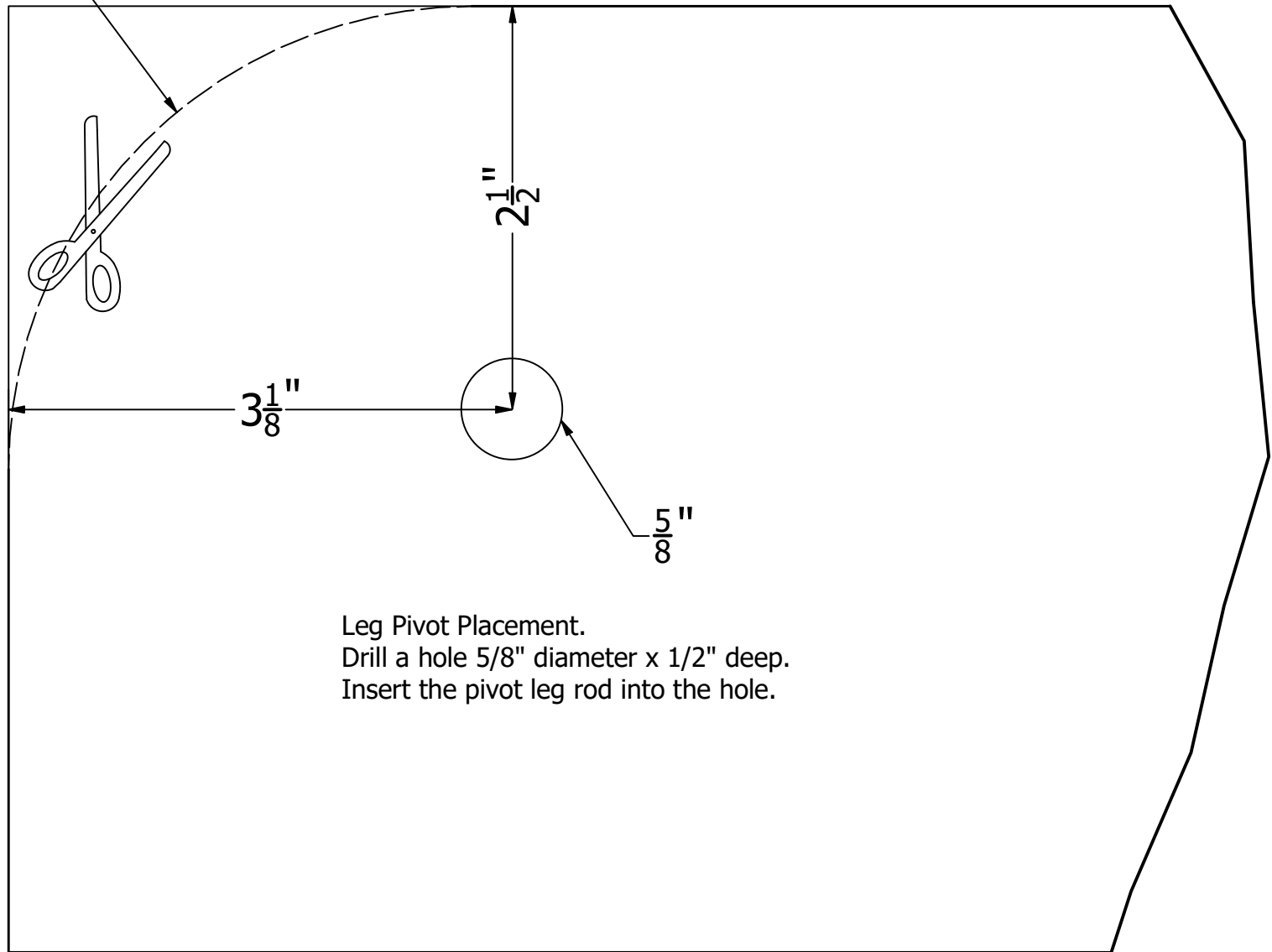
Screw 2 (two) black #10 x 3/4" screw through the top 2 holes.



**WHEN COMPLETED
REMOVE LEG HARDWARE**



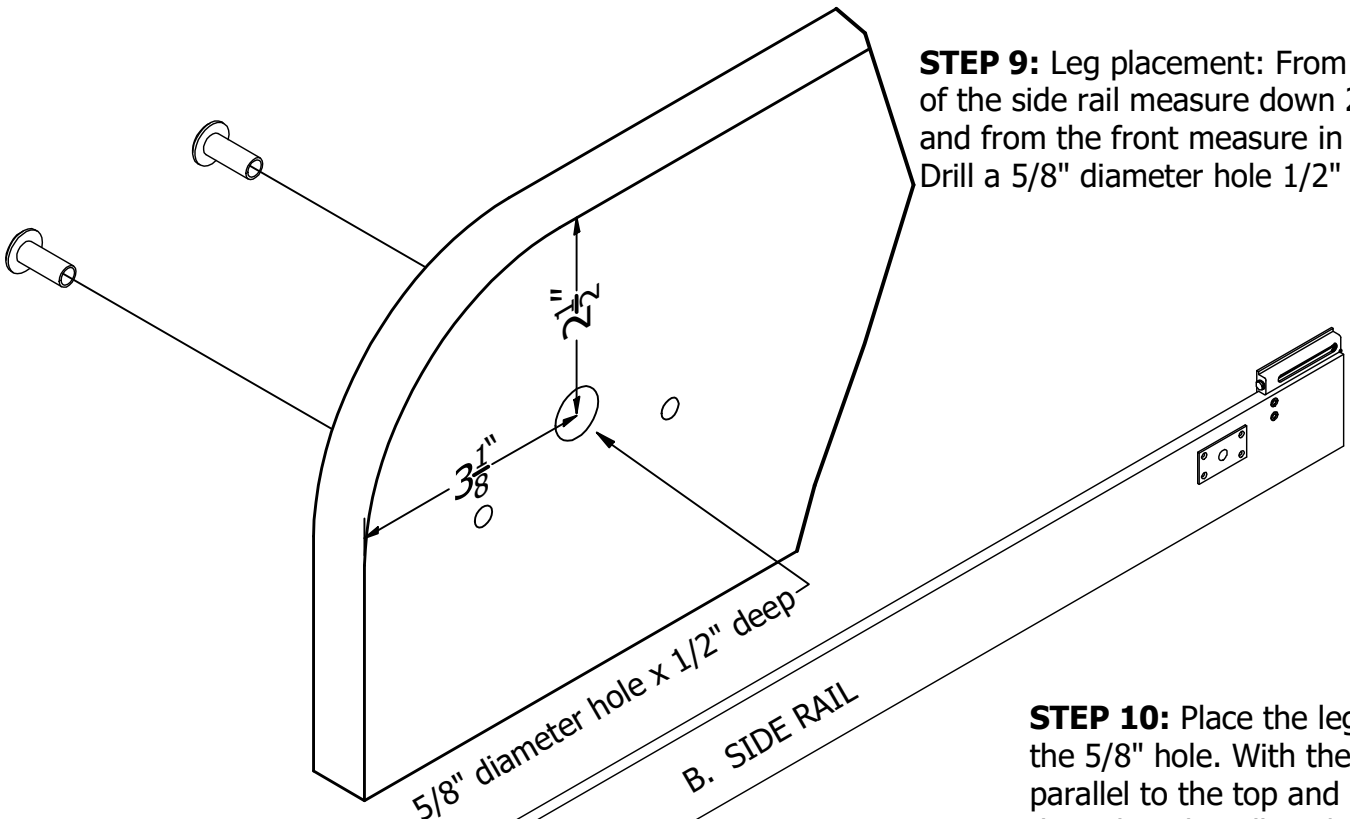
$2\frac{7}{8}$ " Radius



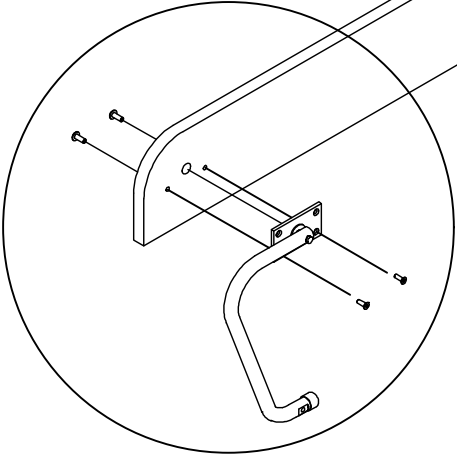
Leg Pivot Placement.
Drill a hole $\frac{5}{8}$ " diameter x $\frac{1}{2}$ " deep.
Insert the pivot leg rod into the hole.

LEFT SIDE RAIL TEMPLATE

B. LEFT SIDE RAIL.

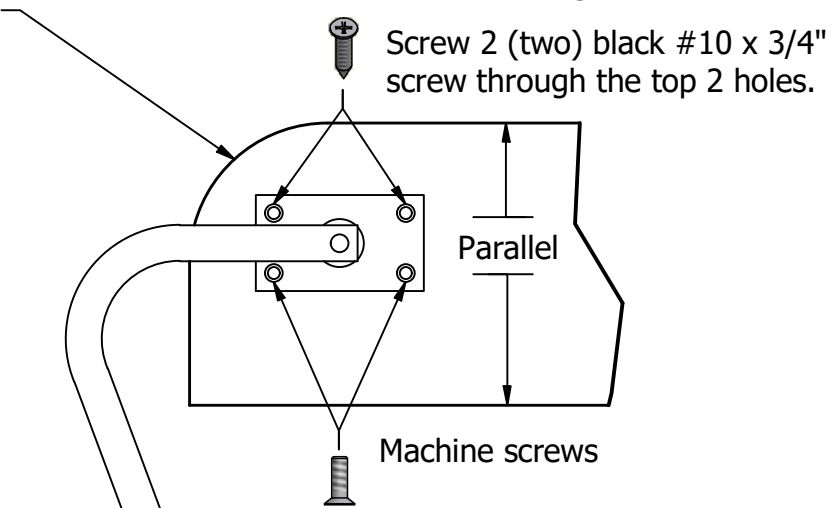


STEP 9: Leg placement: From the top of the side rail measure down 2-1/2" and from the front measure in 3-1/8". Drill a 5/8" diameter hole 1/2" deep.



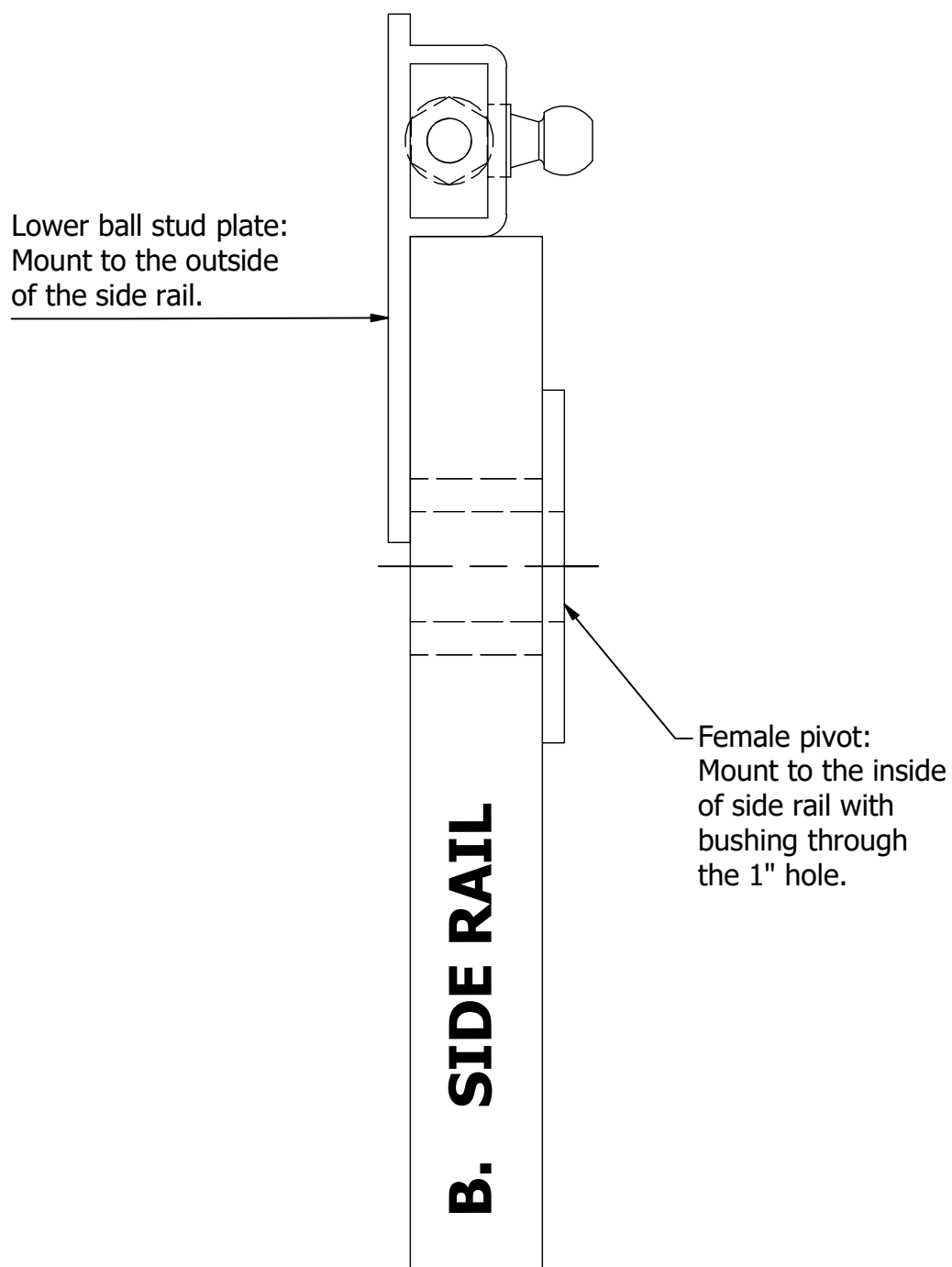
STEP 10: Place the leg pivot into the 5/8" hole. With the pivot plate parallel to the top and bottom of the side rail. Drill a 1/4" hole through the bottom 2 (two) holes in the plate through the side rails.

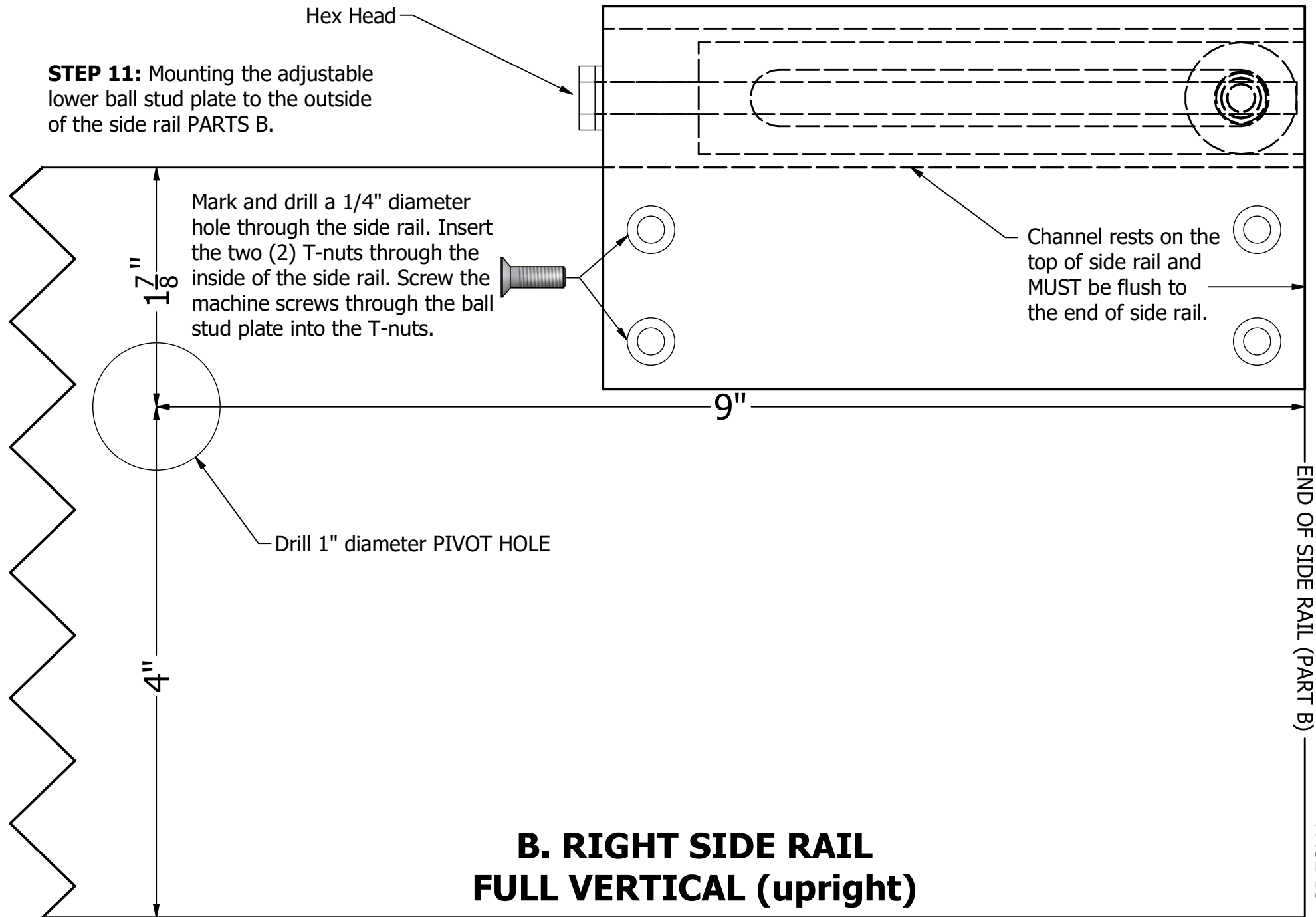
Note: To prevent tear out on the outside of the side rail clamp a piece of scrap wood to the rail while drilling.

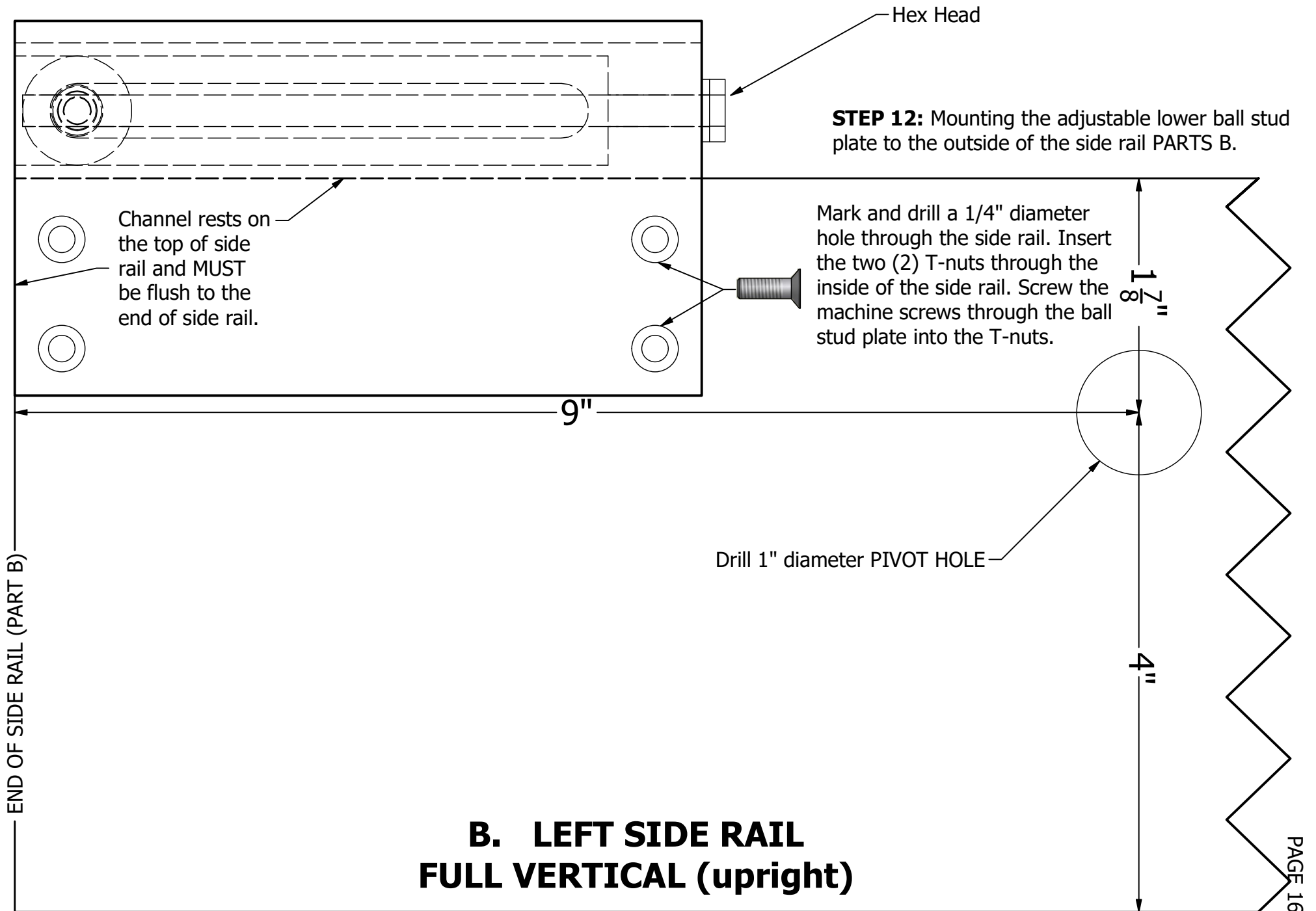


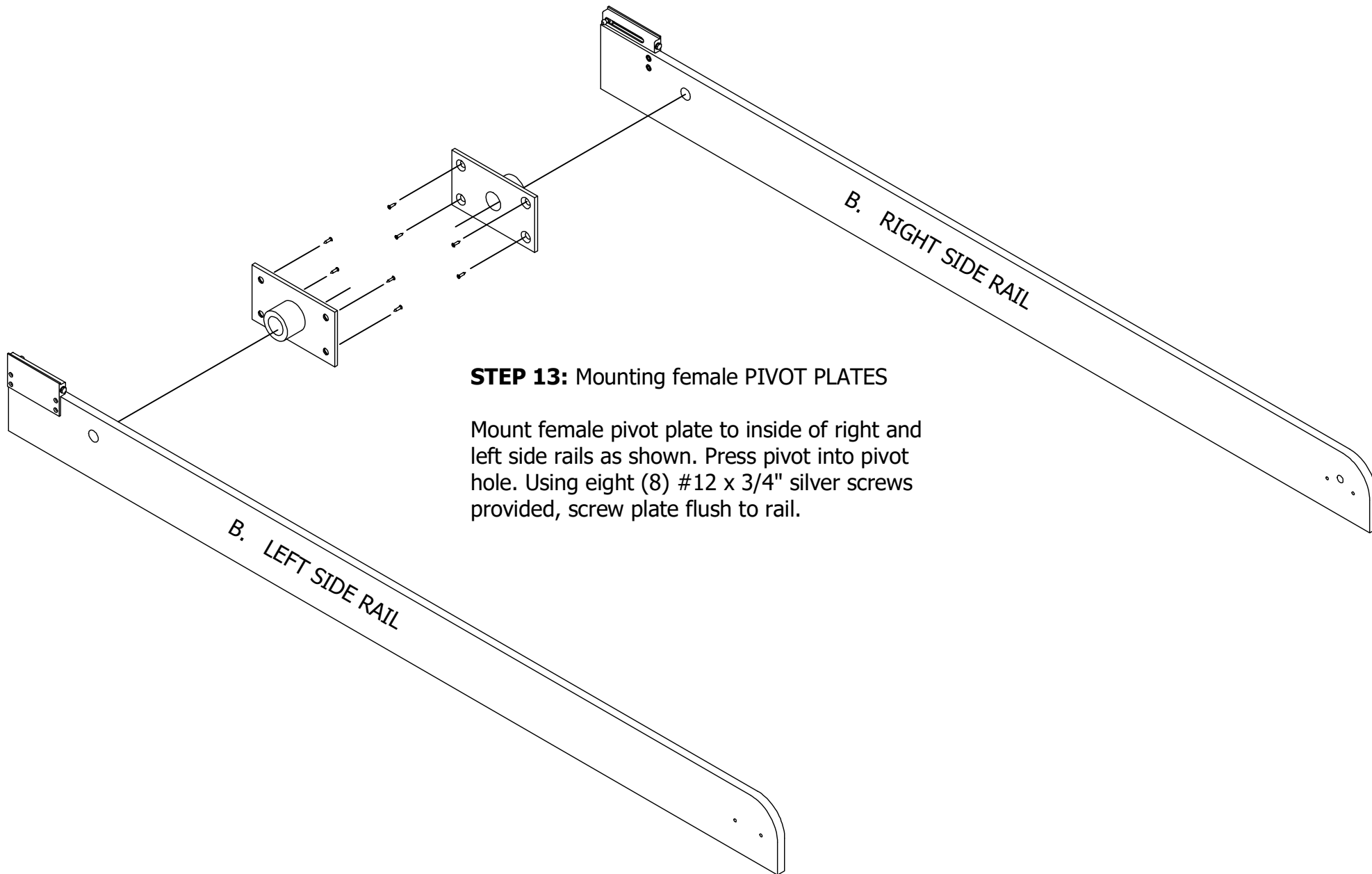
WHEN COMPLETED REMOVE LEG HARDWARE

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





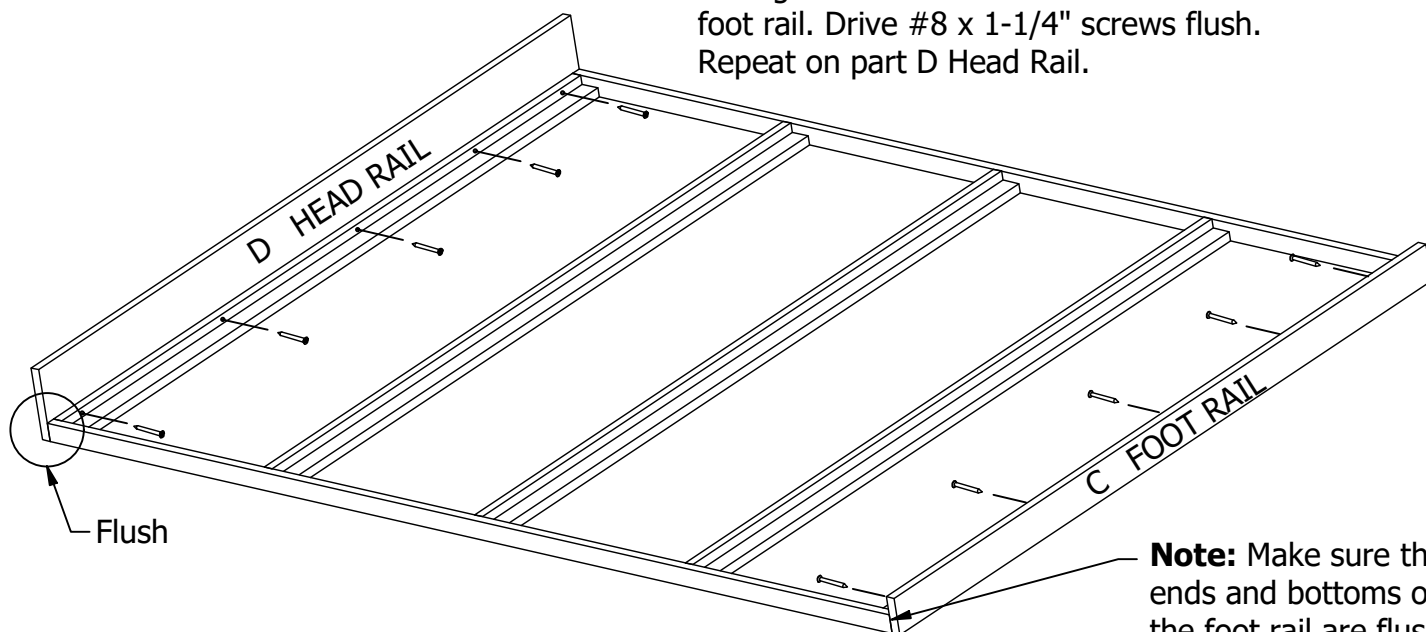




STEP 13: Mounting female PIVOT PLATES

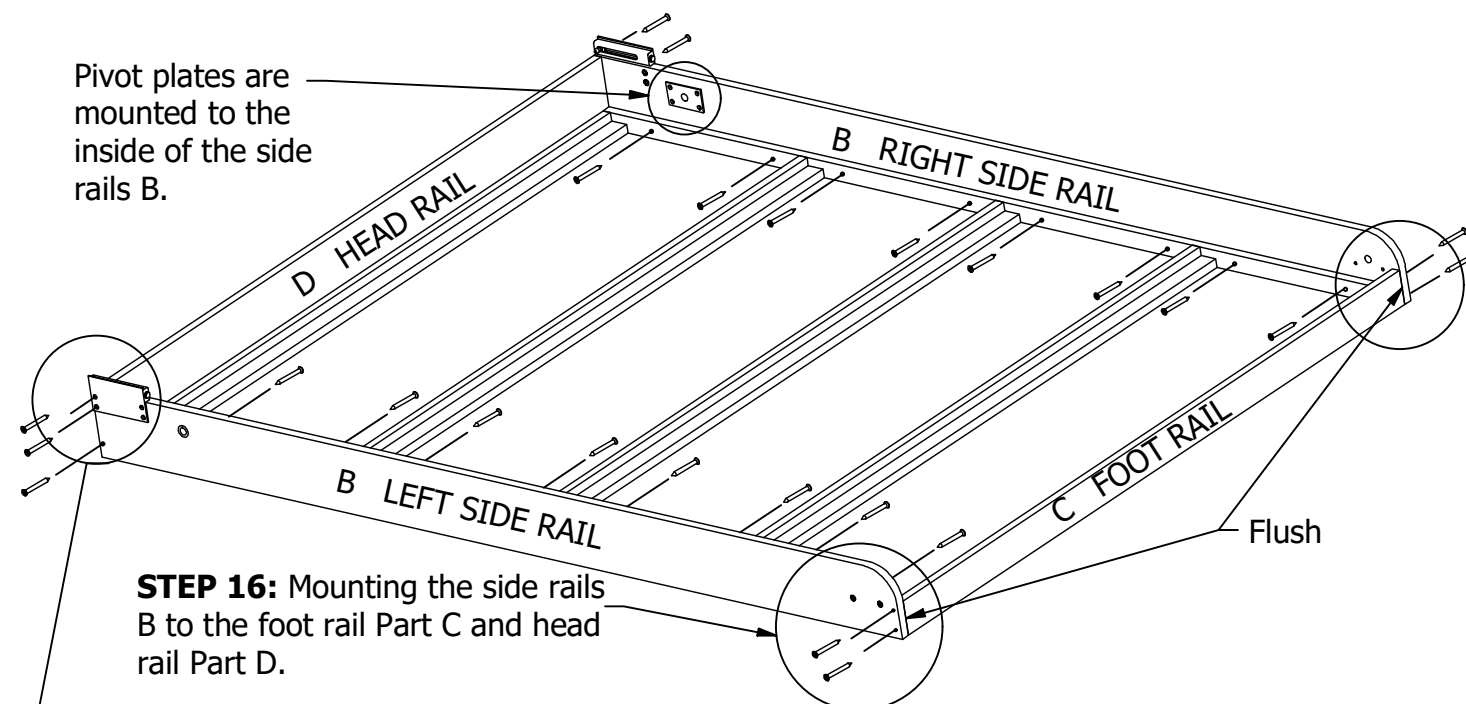
Mount female pivot plate to inside of right and left side rails as shown. Press pivot into pivot hole. Using eight (8) #12 x 3/4" silver screws provided, screw plate flush to rail.

STEP 14: Mounting the foot rail PART C and head rail D. Drill 1/8" pilot hole 1-1/4" deep through the inner wood bed frame into the foot rail. Drive #8 x 1-1/4" screws flush. Repeat on part D Head Rail.



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

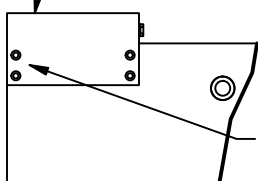
STEP 15: Mounting left and right side rail to inner wood bed frame. Using an 1/8" drill bit, drill two holes between each strut (total of 8 holes per rail) 1-1/4" deep through the frame side into the side rails. Drive #8 x 1-1/4" wood screws flush, snugging inner wood bed frame to the side rail.



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 side 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.



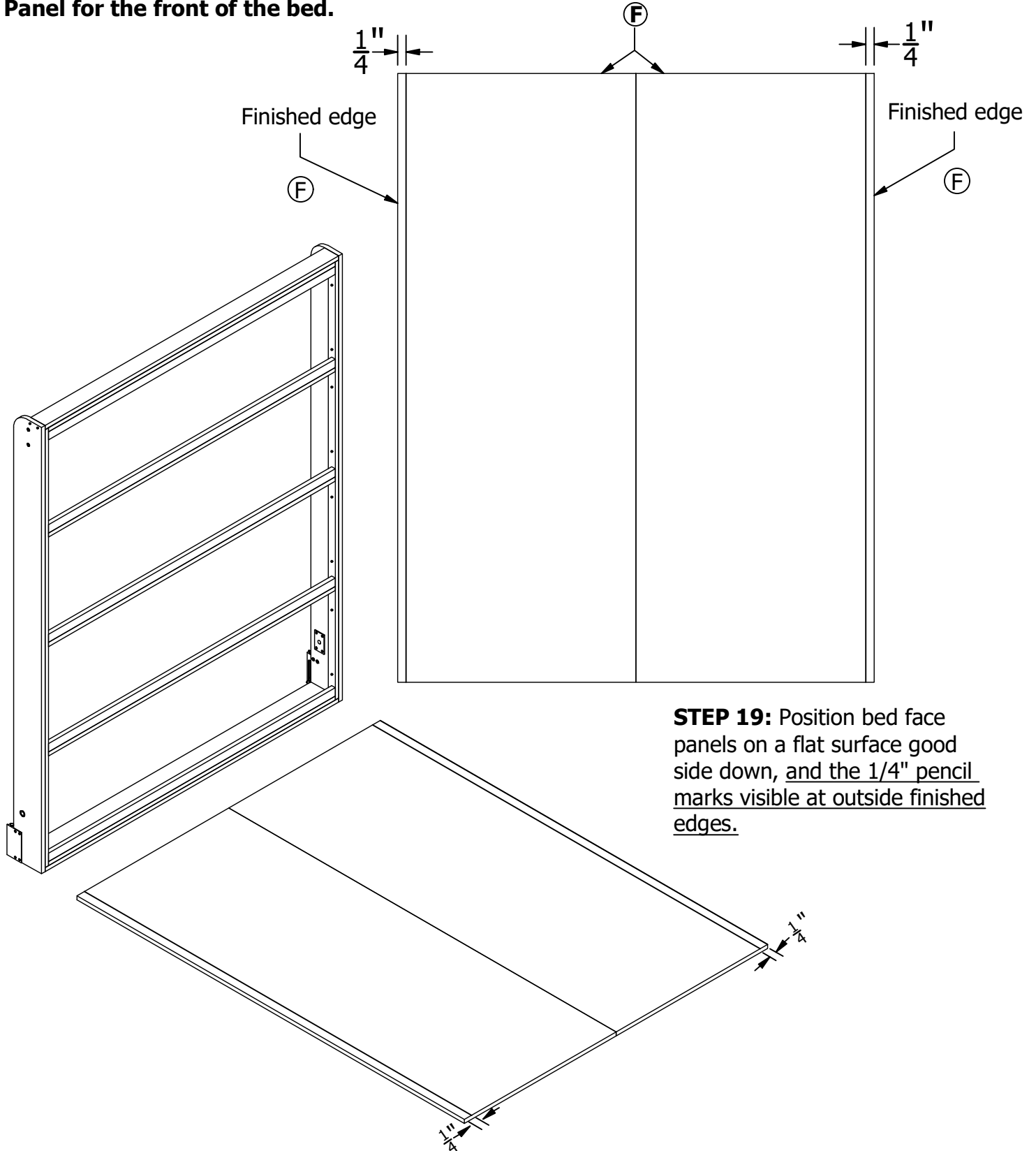
Screw two (2) #8 x 1-5/8" screws through ball stud plate into end of head rail. Repeat at other end of head rail.

STEP 17:

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

STEP 18: Turn face panels over. On back side, mark a 1/4" line the full length of the panel along finished long edge.

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

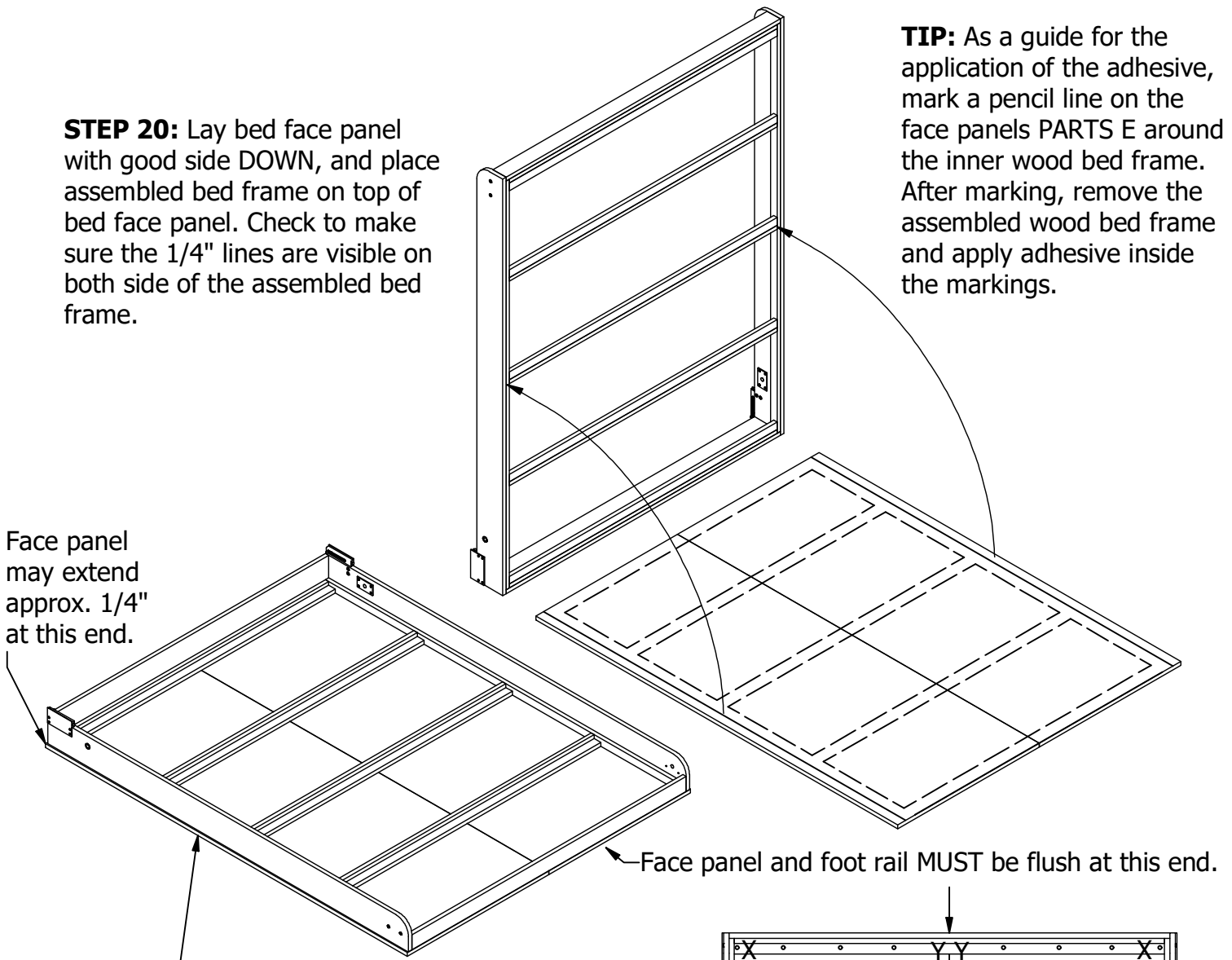


STEP 19: Position bed face panels on a flat surface good side down, and the 1/4" pencil marks visible at outside finished edges.

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 side 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.



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

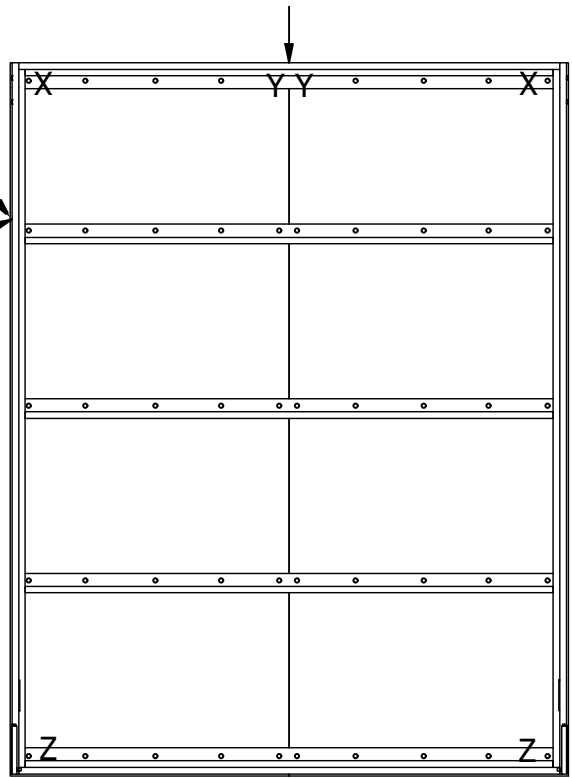
The face panel MUST extend 1/4" past edge of frame on long sides.

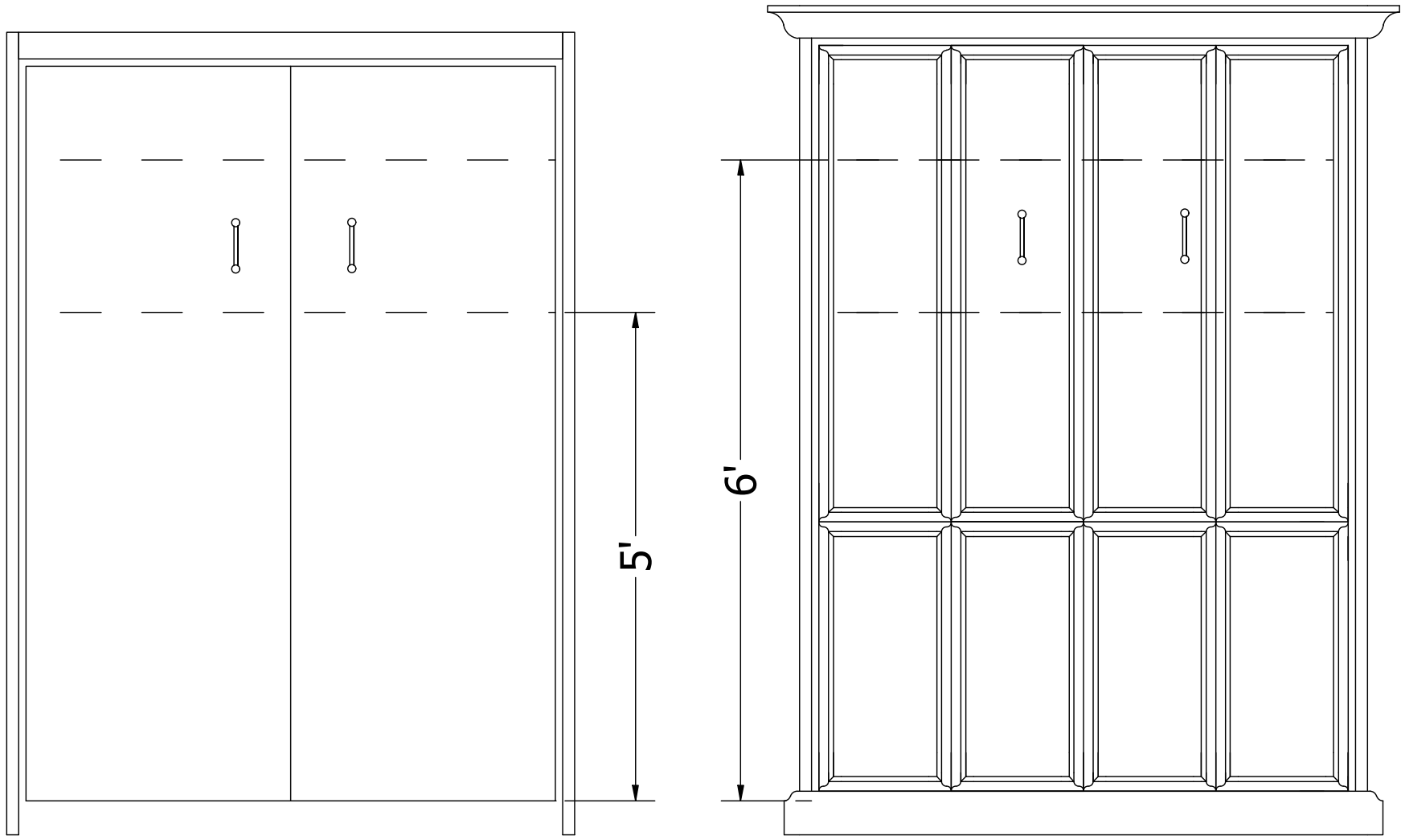
STEP 21: Make sure face panel and foot rail are flush and that face panel extends 1/4" past edge of wood bed frame on long sides.

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.

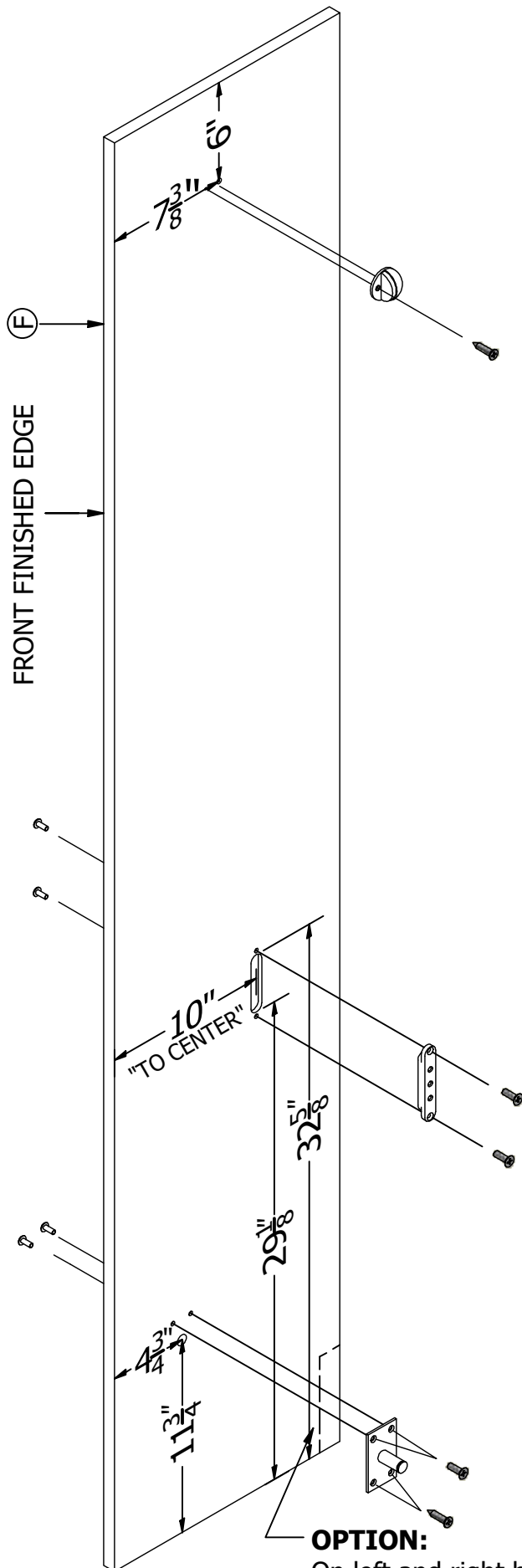
Screw remaining struts to face panel 6" apart.





Placement of cabinet handles for optimal leverage should be between 5' and 6' on face panel PART E.

PART G: BED CABINET VERTICALS
(LEFT) For Full Vertical (Upright).



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

STEP 22:

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

STEP 23:

ADJUSTABLE UPPER BALL STUD PLATE: Rout out $\frac{3}{4}$ " x $\frac{1}{4}$ " deep x $3\frac{1}{2}$ " long and insert the adjustable upper plate into hole. Drill $\frac{1}{4}$ " holes through the mounting locations and secure with "T" Nuts and machine screws.

STEP 24:

MALE PIVOT PLATE: Drill a hole $\frac{5}{8}$ " diameter x $\frac{1}{2}$ " deep. Insert the $\frac{1}{2}$ " end of rod into hole. Drill two (2) holes $\frac{1}{4}$ " 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 $\frac{1}{4}$ " machine screws through pivot plate into "T" Nuts. Screw two (2) #12 x $\frac{3}{4}$ " 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) For Full Vertical (Upright).

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

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.

STEP 26:

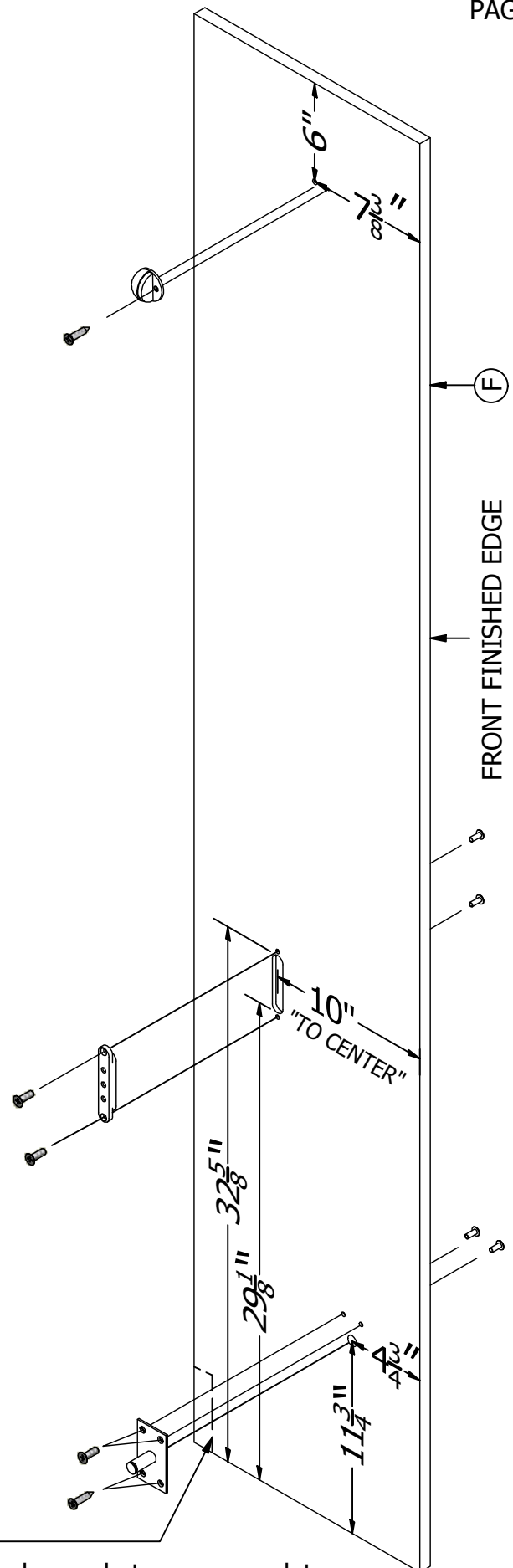
ADJUSTABLE UPPER BALL STUD PLATE: Rout out 3/4" x 1/4" deep x 3-1/2" long and insert the adjustable upper plate into hole. Drill 1/4" holes through the mounting locations and secure with "T" Nuts and machine screws.

STEP 27:

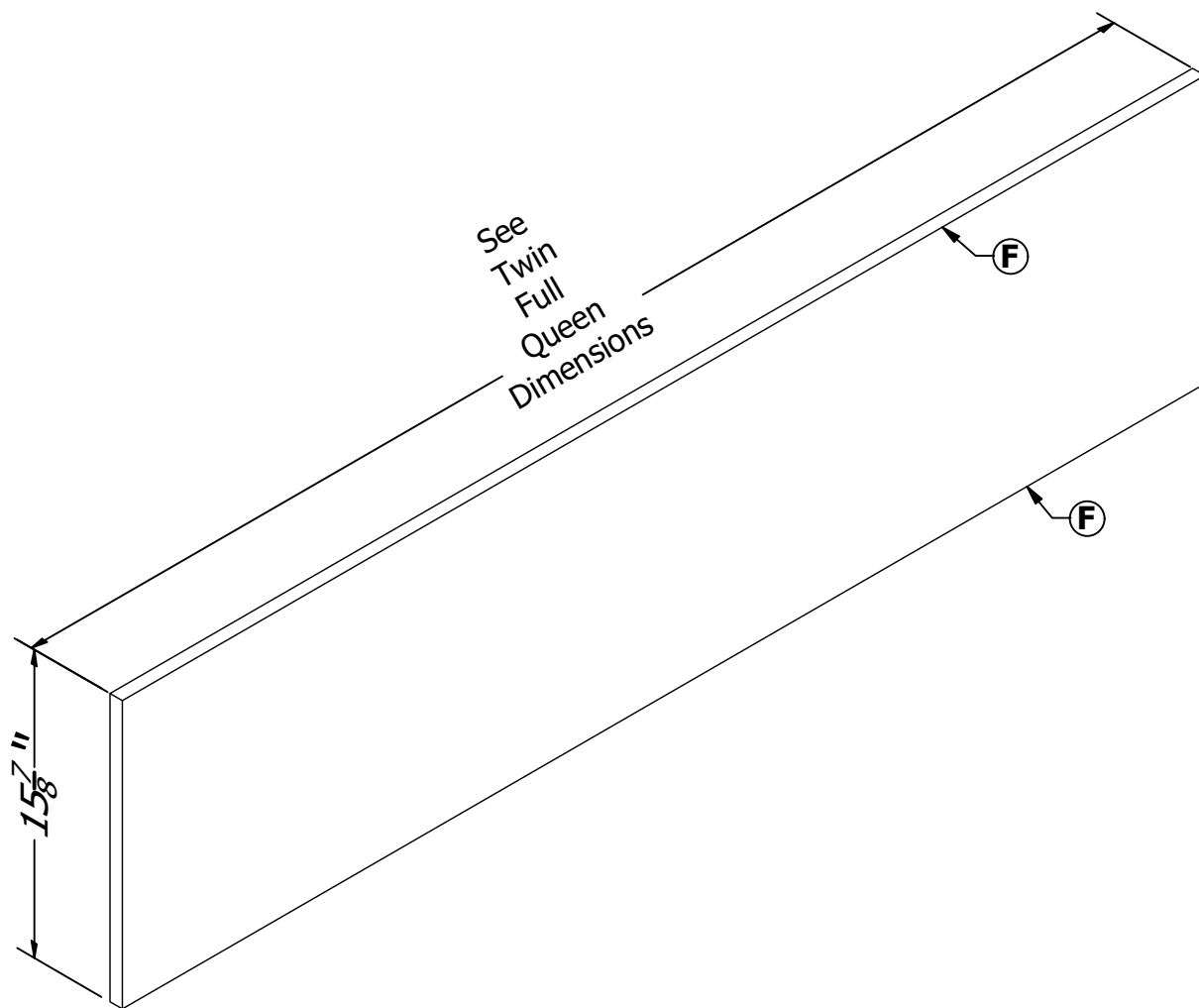
MALE PIVOT PLATE: Drill a hole 5/8" diameter x 1/2" deep. Insert the 1/2" end of rod into hole. Drill two (2) holes 1/4" diameter through the vertical using the upper holes in the pivot plate as a guide. Tap "T" Nuts into two (2) upper holes from outside, then screw 1/4" machine screws through pivot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

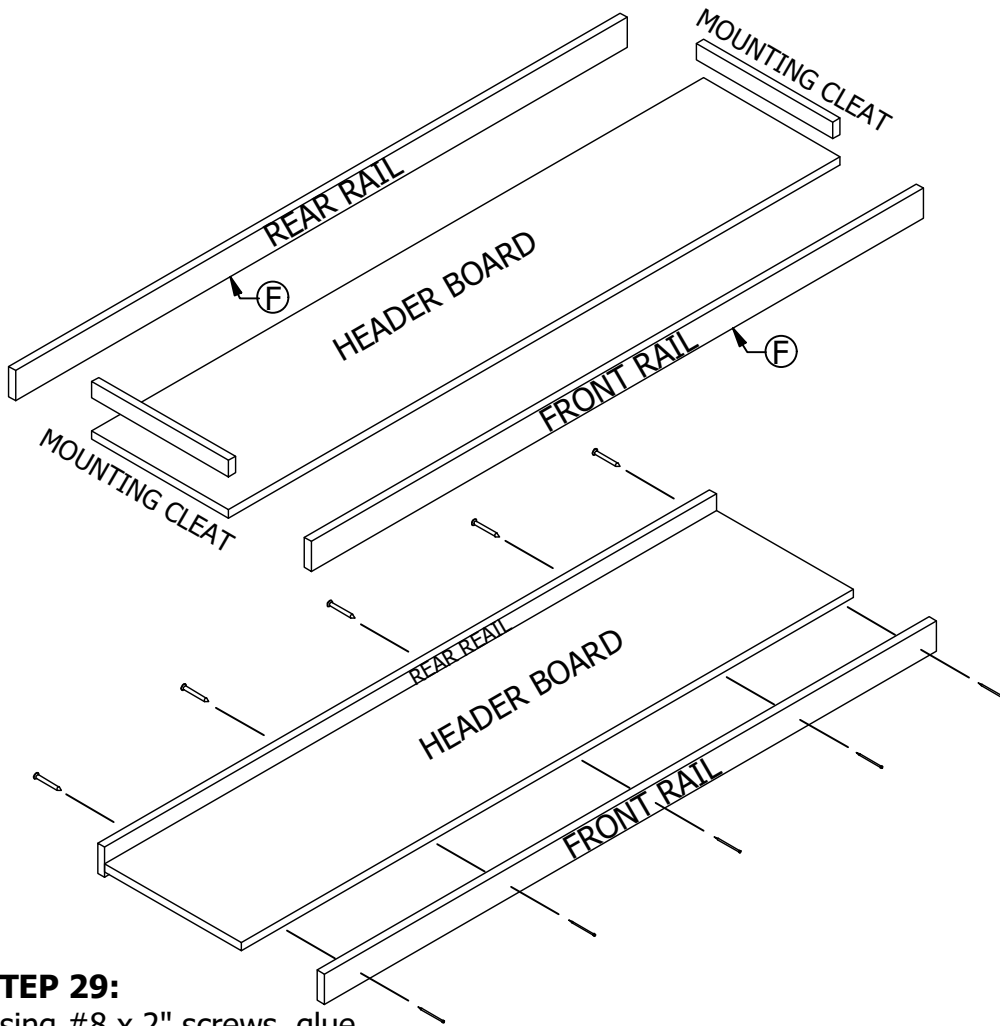


PART F: BED HEADBOARD



STEP 28:

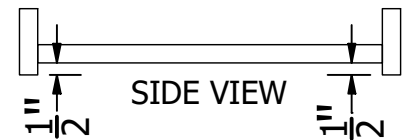
NOTE: For a finished look, apply wood veneer or melamine edge tape to all edges marked **F**.



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

STEP 30:

Using 2" finish nails, glue and nail front rail to header board, maintaining a 1/2" lip on underside lip of header board.



STEP 29:

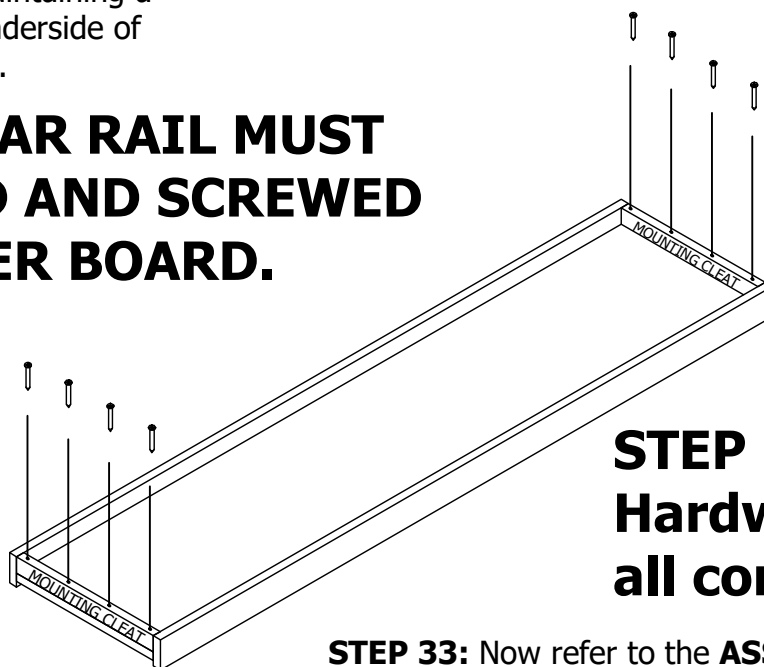
Using #8 x 2" screws, glue and screw rear rail to header board, maintaining a 1/2" lip on the underside of the header board.

NOTE: REAR RAIL MUST BE GLUED AND SCREWED TO HEADER BOARD.

STEP 31:

Using #8 x 2" screws, glue and screw mounting cleats to header board between front and rear rails as shown.

NOTE: Be sure to drill pilot holes and counter-sink screws flush with the wood.



STEP 32: Remove all Hardware, sand & finish all components!

STEP 33: Now refer to the **ASSEMBLY BOOKLET** for assembling and installing your murphy bed.