Create-A-Bed®
C.A.B., Inc.

NOTE: DO NOT deviate from these plans.

These plans are for constructing an
ADJUSTABLE
QUEEN 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:

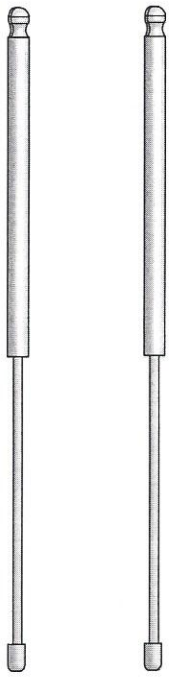
Power Drill
Drill Bits: 1/8" 1/4" 5/16", 1" Forstner Bit, 5/8" Forstner Bit
Power Saw, Table Saw or Circular Saw
Jigsaw or Coping Saw
Phillips-Head and Flat-Head Screwdrivers or Driver Bits for Drill
Tape Measure
#4 Allen Wrench
Hammer
Clamps
Straight Edge or Framing Square
Household Iron for Veneer Tape and Utility Knife
7/16" Socket, Wrench, or Driver
1/2" Wrench

© *Create-A-Bed®*
murphy bed mechanism
C.A.B., Inc. 2014
1800 Taylor Avenue Louisville, KY 40213
www.wallbed.com
TOLL FREE: 1-877-966-3852

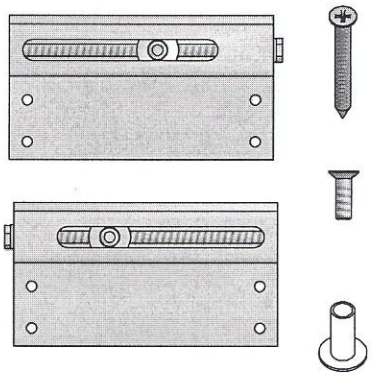
Create-A-Bed ®

C.A.B., Inc.

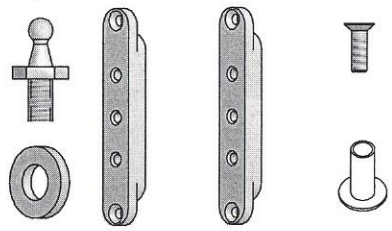
QUEEN HORIZONTAL (SIDEBED) murphy bed mechanism
PLYWOOD CONSTRUCTION



Two (2) GAS SPRINGS

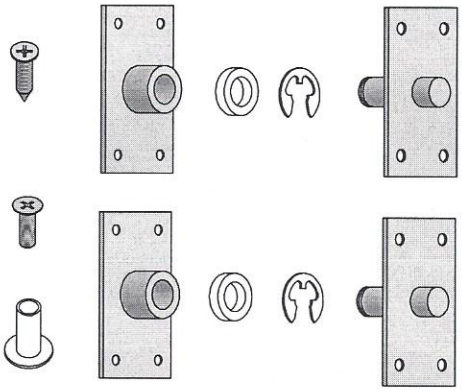


Two (2) ADJUSTABLE LOWER PLATES
with four (4) #10 x 1-5/8" screws
four (4) "T" nuts with machine screws

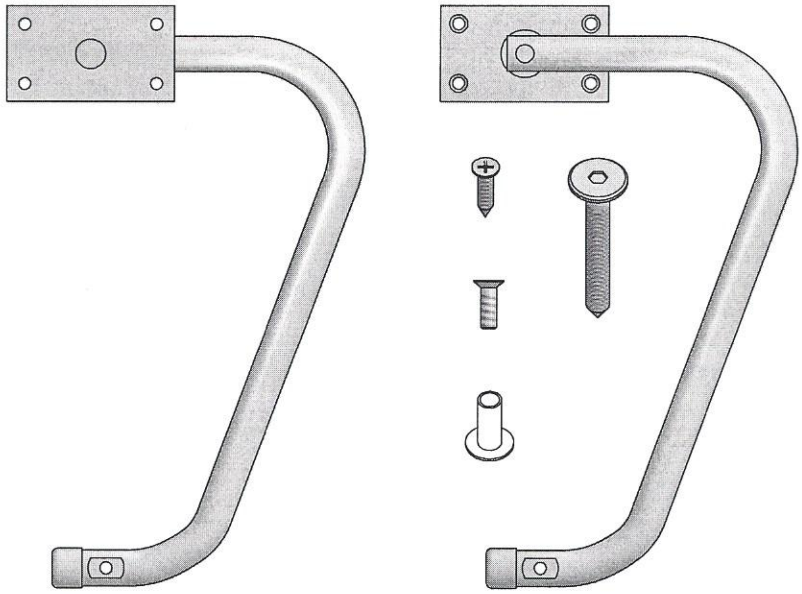


Two (2) ADJUSTABLE UPPER PLATES with
four (4) "T" NUTS with MACHINE screws
two (2) BALL STUDS
two (2) BLACK BALL STUD SPACERS

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



Two (2) 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
One (1) Construction / Assembly / Installation DVD

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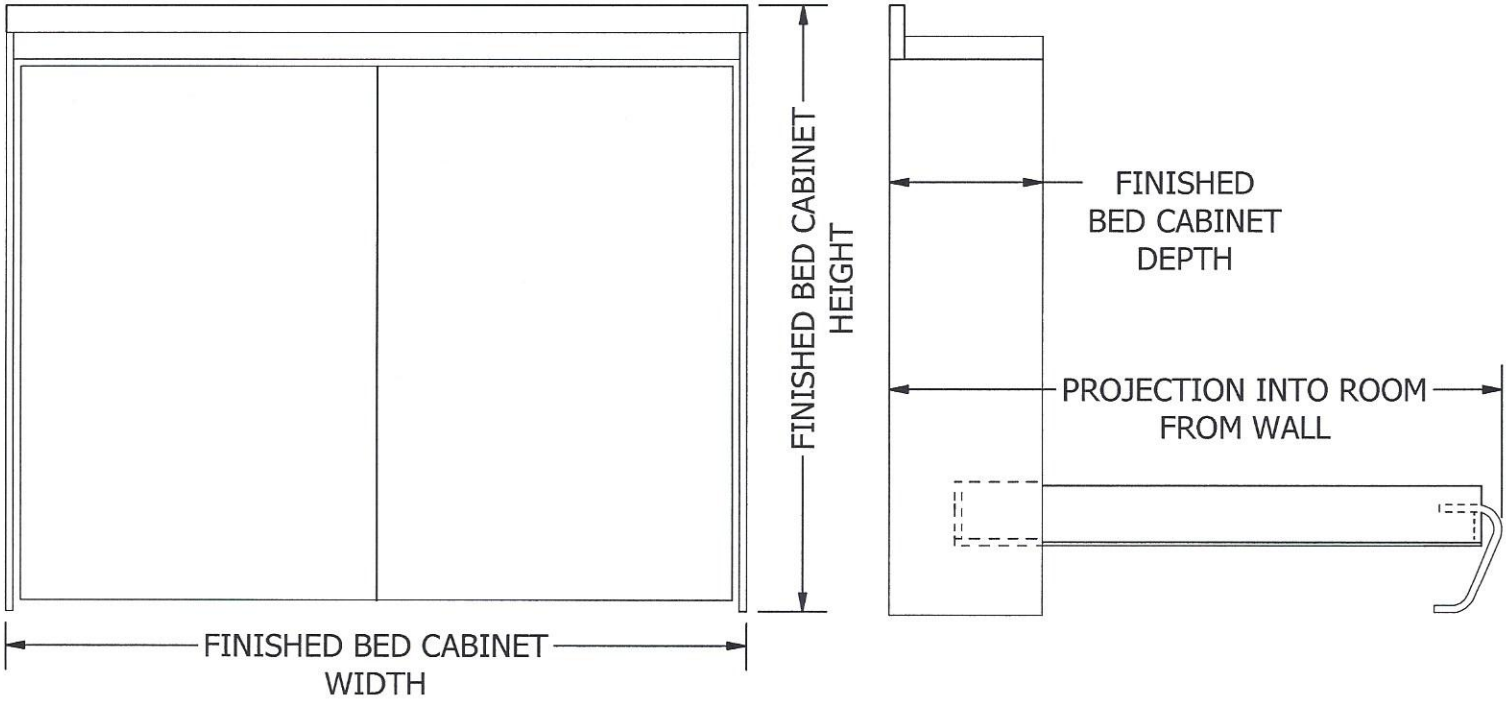
Protected By U.S. Patent #8,850,637 , #8,898,831
& International Patents Pending

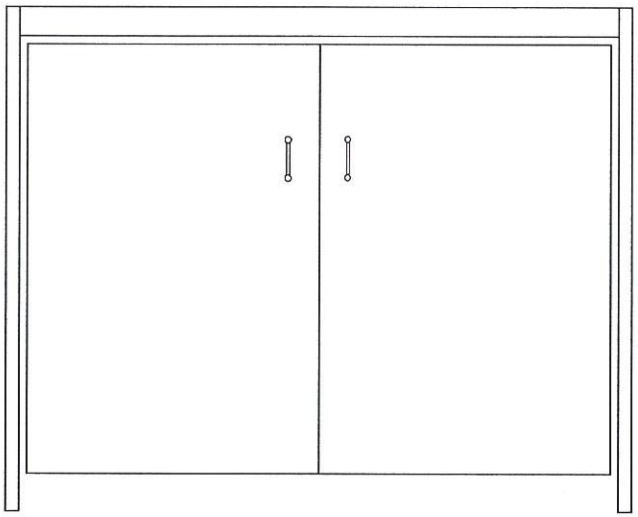
Out-to-out dimensions of **HORIZONTAL STYLE** murphy bed cabinet constructed using the *Create-A-Bed®* mechanism



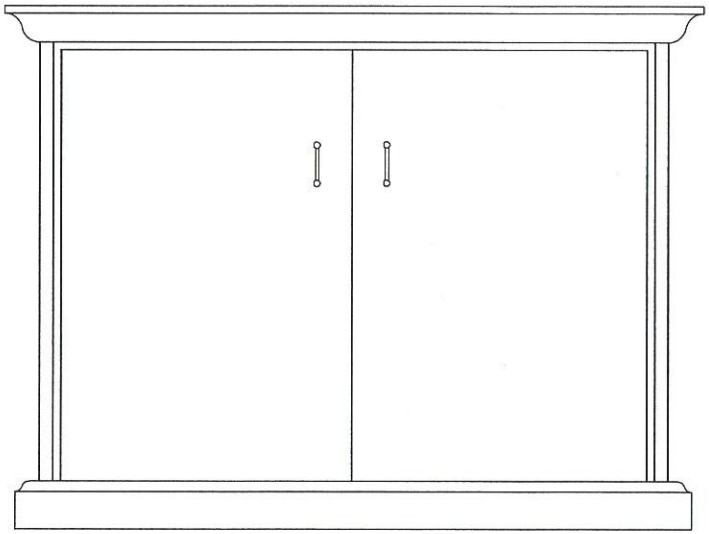
OUTSIDE-EDGE TO OUTSIDE-EDGE
FINISHED HORIZONTAL BED CABINET DIMENSIONS

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

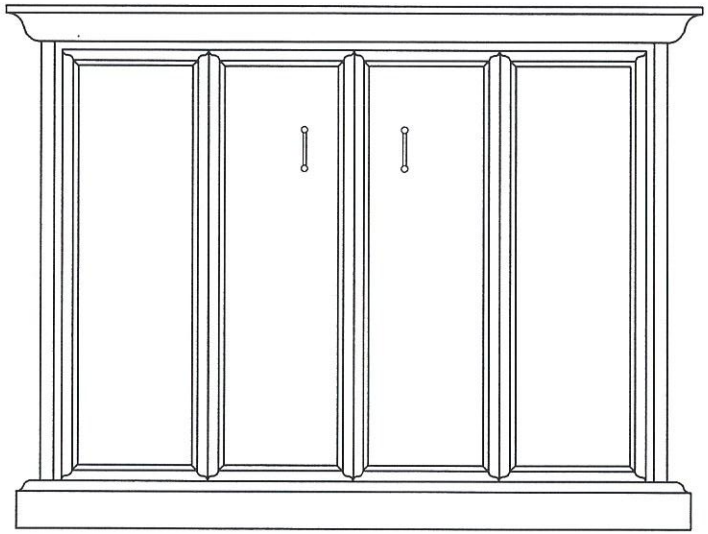
Some design options... or create your own!



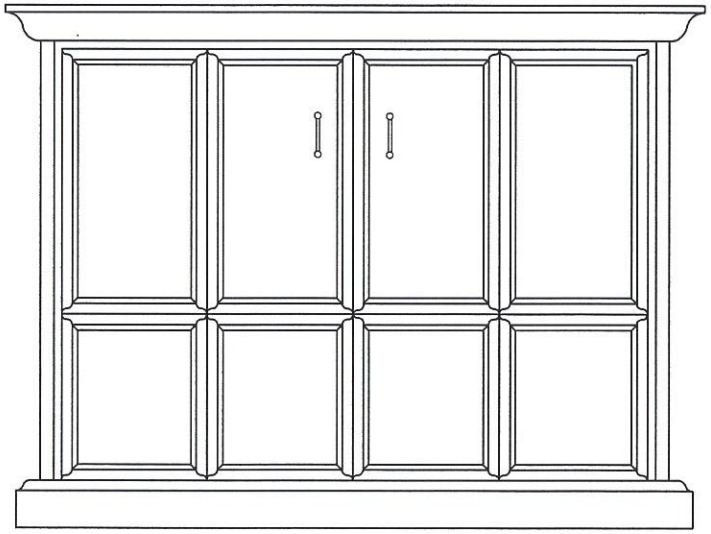
BASIC BED



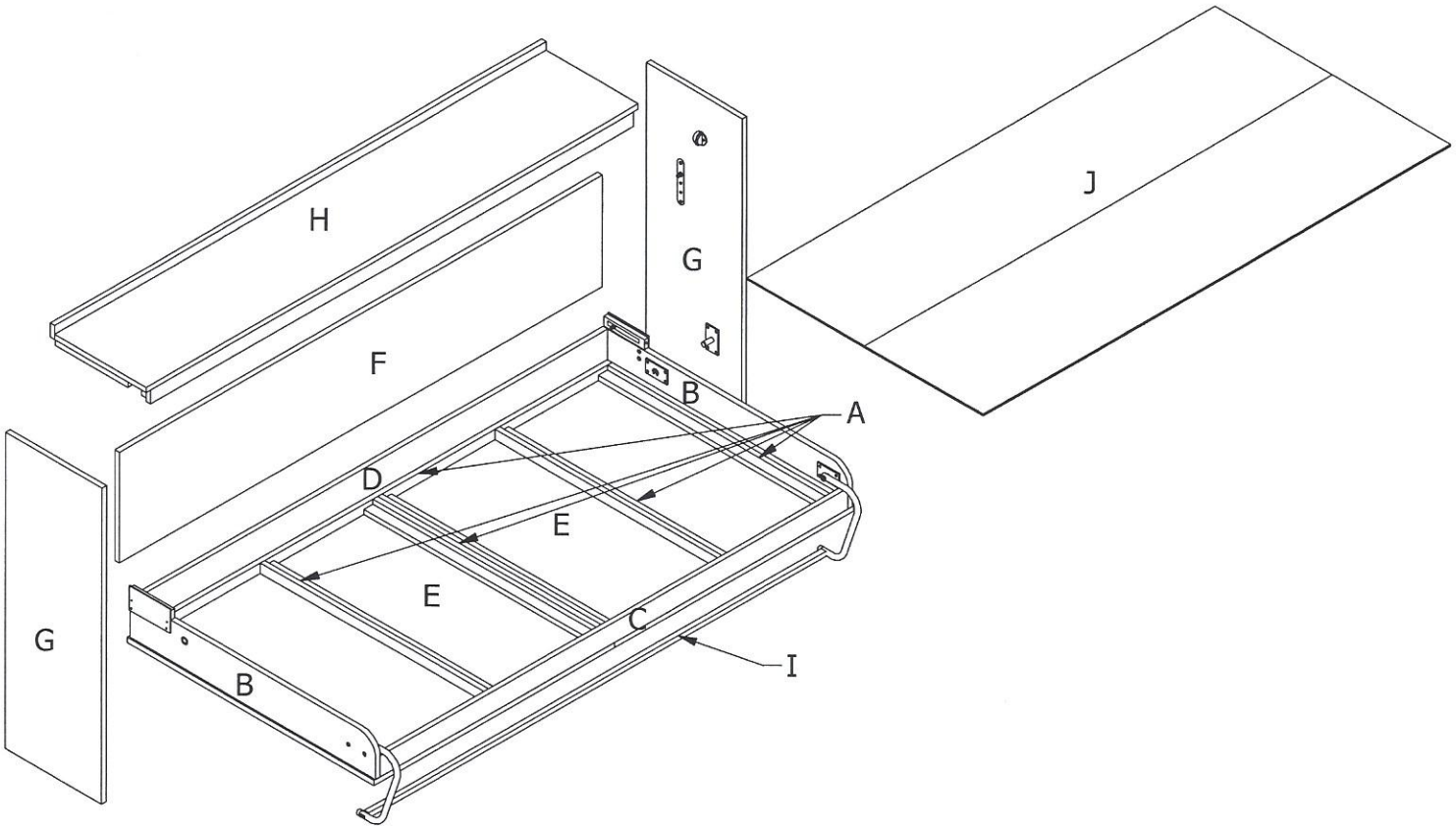
WITH CROWN
AND BASE MOLDING



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

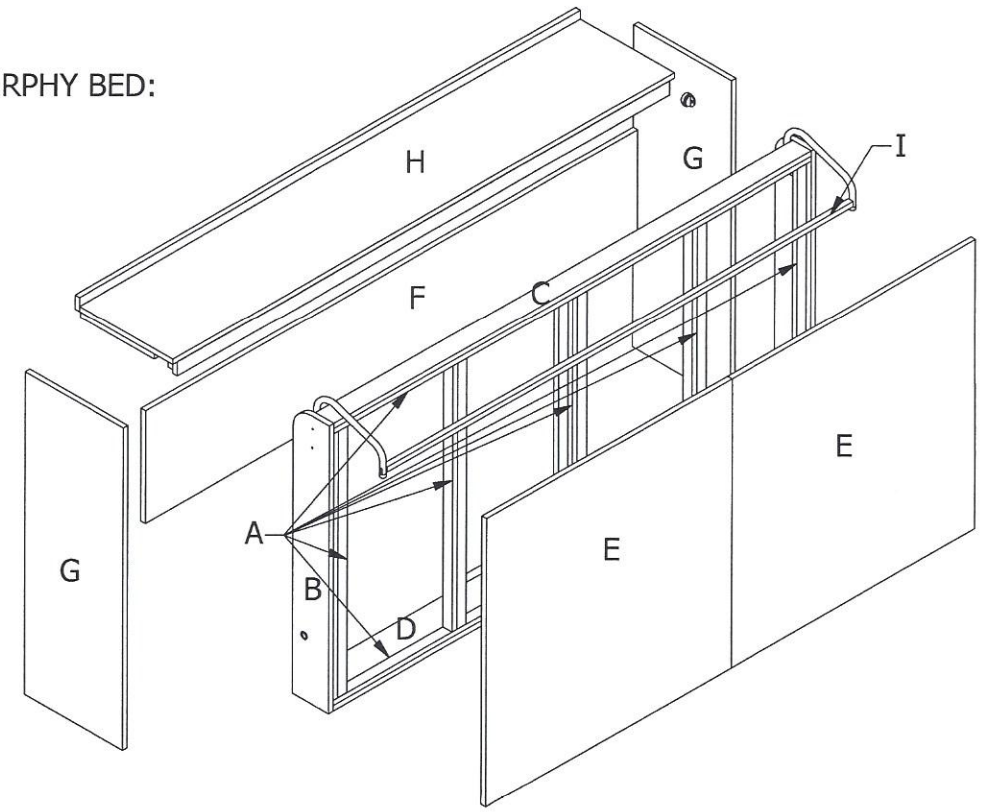
F. BED HEADBOARD

G. BED CABINET VERTICALS

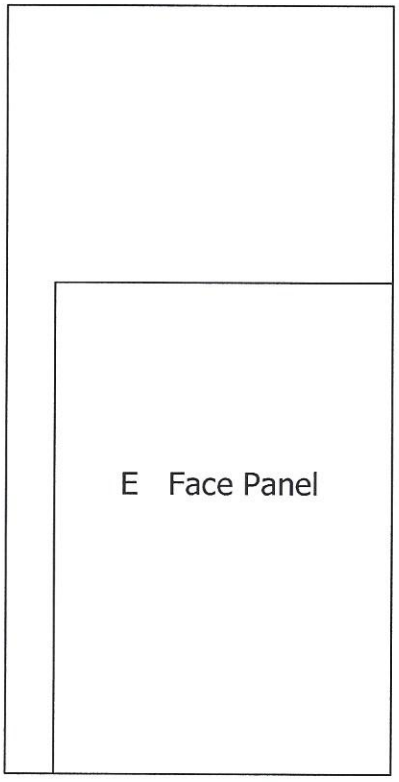
H. BED HEADER

I. LEG SUPPORT RAIL

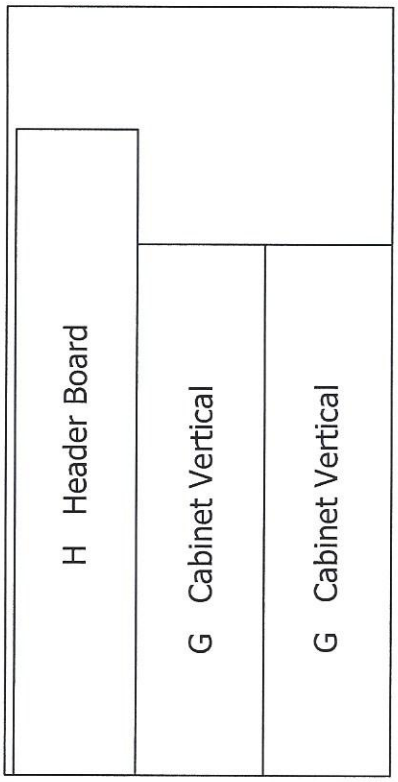
J. 1/4" PLYWOOD MATTRESS SUPPORT



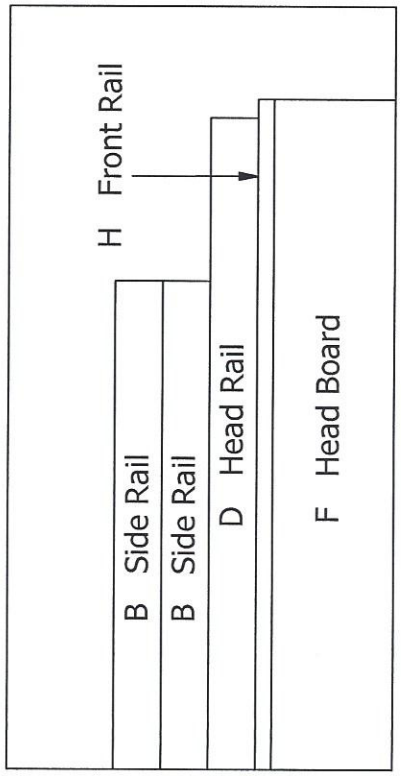
QUEEN SIDEBED (HORIZONTAL) PLYWOOD CUTTING GUIDE
Requires 4 sheets of 3/4" x 4' x 8' and 2 sheet of 1/4" x 4' x 8'
NOTE: Refer to page 6 for the cutting dimensions.



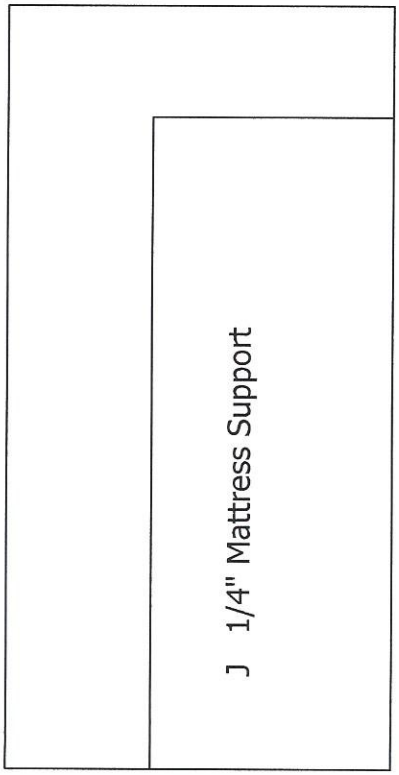
Requires 2 sheet 3/4"



Requires 1 sheet 3/4"



Requires 1 sheet 3/4"



Requires 2 sheet 1/4"

QUEEN SIZE HORIZONTAL (side) BED WITH 3/4" PLYWOOD FACE PANEL
BILL OF MATERIALS / CUT SHEET

__ 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 58-1/2"	12 pieces
FRAME SIDES:	*Solid wood:	3/4" X 1-1/2" X 82"	2 pieces

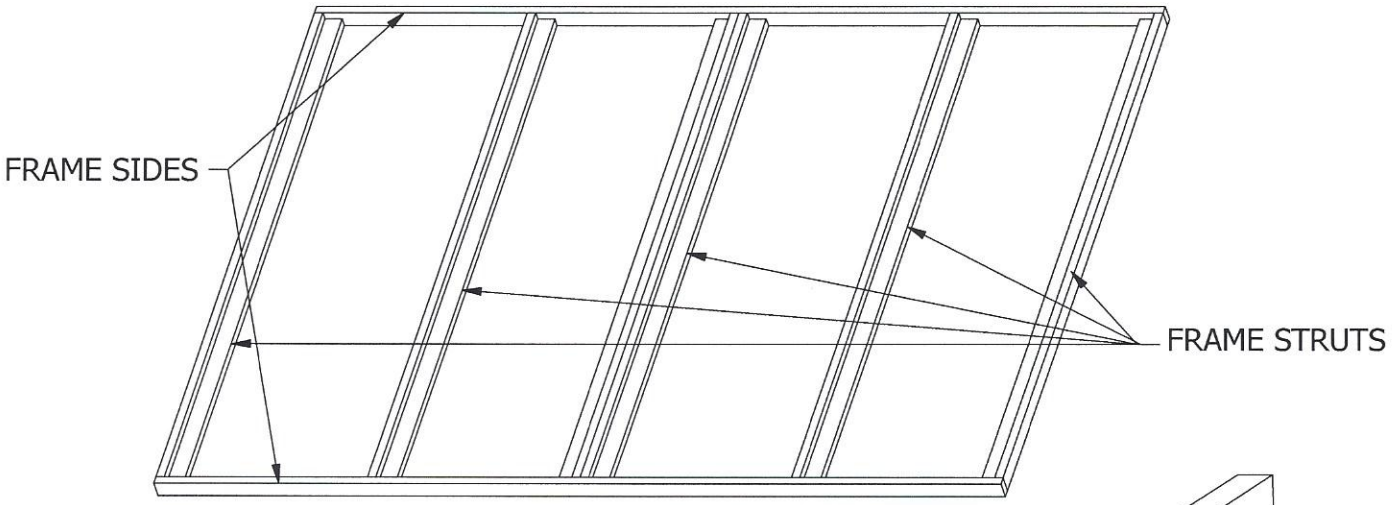
IMPORTANT: PLYWOOD MUST BE USED FOR THESE PIECES:

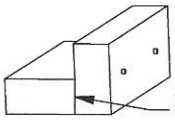
__B. SIDE RAILS:	**3/4" X 5-7/8" X 61-1/2"**	**2 pieces**

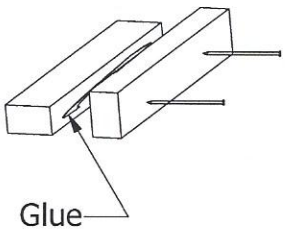
__C. FOOT RAIL:	*Solid wood:	3/4" X 3" X 82" — 1 piece
__D. HEAD RAIL:		3/4" X 5-7/8" X 82" — 1 piece
__E. BED FACE PANEL:		3/4" X 42" X 61-3/4" — 2 pieces
__F. BED HEADBOARD:		3/4" X 15-7/8" X 84-3/8" — 1 piece
__G. BED CABINET VERTICALS:		3/4" X 15-7/8" X 66-7/16" — 2 pieces
__H. BED HEADER:		
HEADERBOARD:		3/4" X 15-1/8" X 85-7/8" — 1 piece
FRONT RAIL:		3/4" X 2" X 84-3/8" — 1 piece
FRONT RAIL SUPPORT:	*Solid wood:	3/4" X 1-1/2" X 84-3/8" — 2 pieces
REAR RAIL:	*Solid wood:	3/4" X 2" X 85-7/8" — 1 piece
MOUNTING CLEATS:	*Solid wood:	3/4" X 1" X 12" — 2 pieces
__I. Leg Support Rail (wood or metal):		3/4" X 3/4" X 80-1/4" — 1 piece
__J. 1/4" PLYWOOD mattress support:		1/4" X 30" X 82" — 2 pieces
__K. VENEER or MELAMINE TAPE:		13/16" X 80 feet
__L. WOOD GLUE:		One 8 ounce bottle
__M. CONSTRUCTION ADHESIVE:		One 10 ounce tube (NOT NEEDED IF USING PLYWOOD INSTRUCTION)
__N. FINISH NAILS:		One box of 1-1/4" One box of 1-1/2"
__O. SCREWS:		#8 1-1/4" coarse thread Box of 100 #8 1-1/2" coarse thread 30 #8 2" coarse thread 40
__P. DESIRED CABINET HANDLES OR PULLS		2 HANDLES
__Q. INNERSPRING MATTRESS		**Weighing between 65-80 pounds**

Your mattress dimensions must not exceed 60"X 80"
Mattress thickness CAN NOT exceed 12 inches 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.

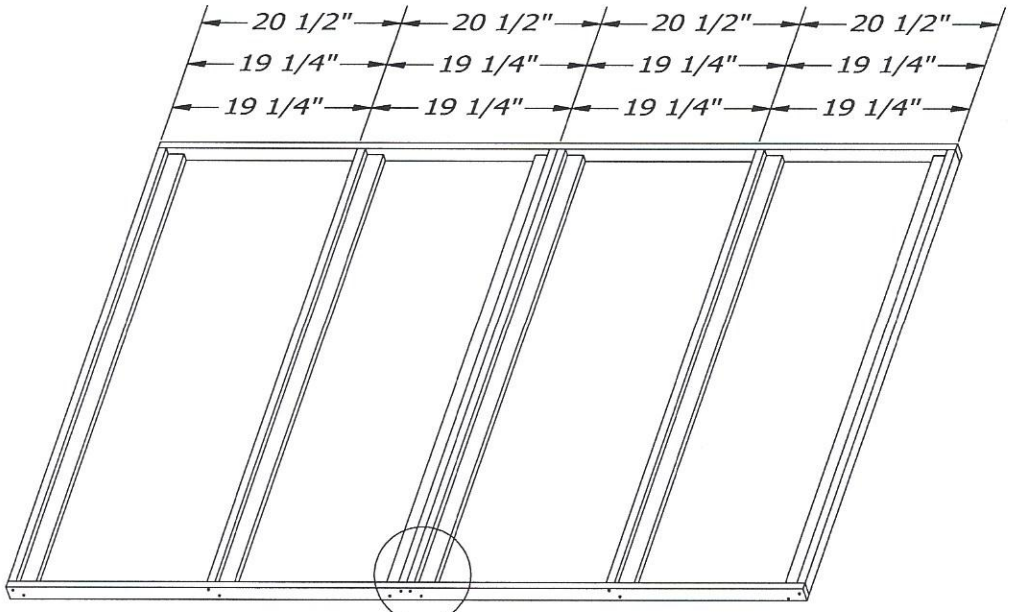






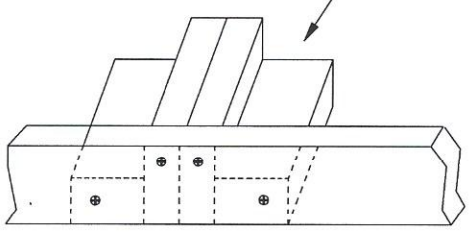
STEP 1: Construction of Six (6) frame struts.

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.

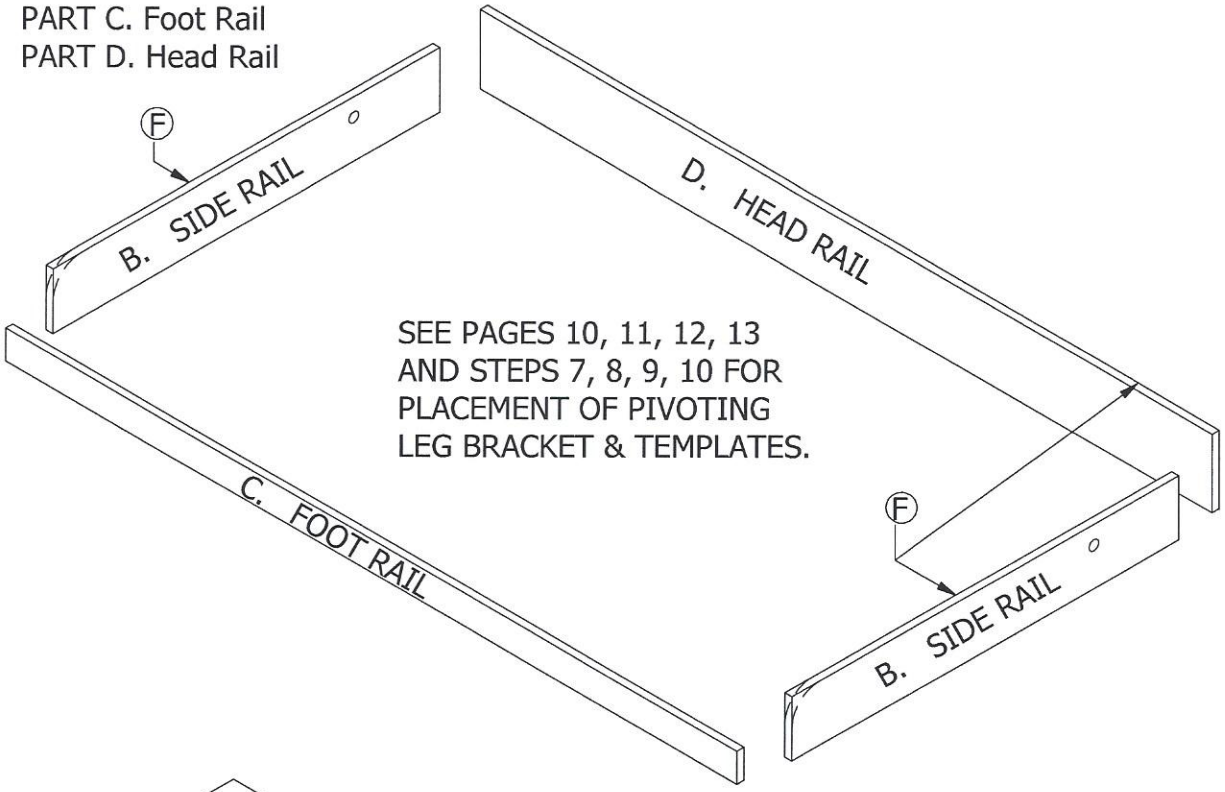


STEP 3: Mounting the frame struts between the frame sides. Using a 1/8" drill bit and countersink, drill pilot holes through the frame sides into each end of the "L" shaped frame struts. Screw #8 x 2" wood screws flush.

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

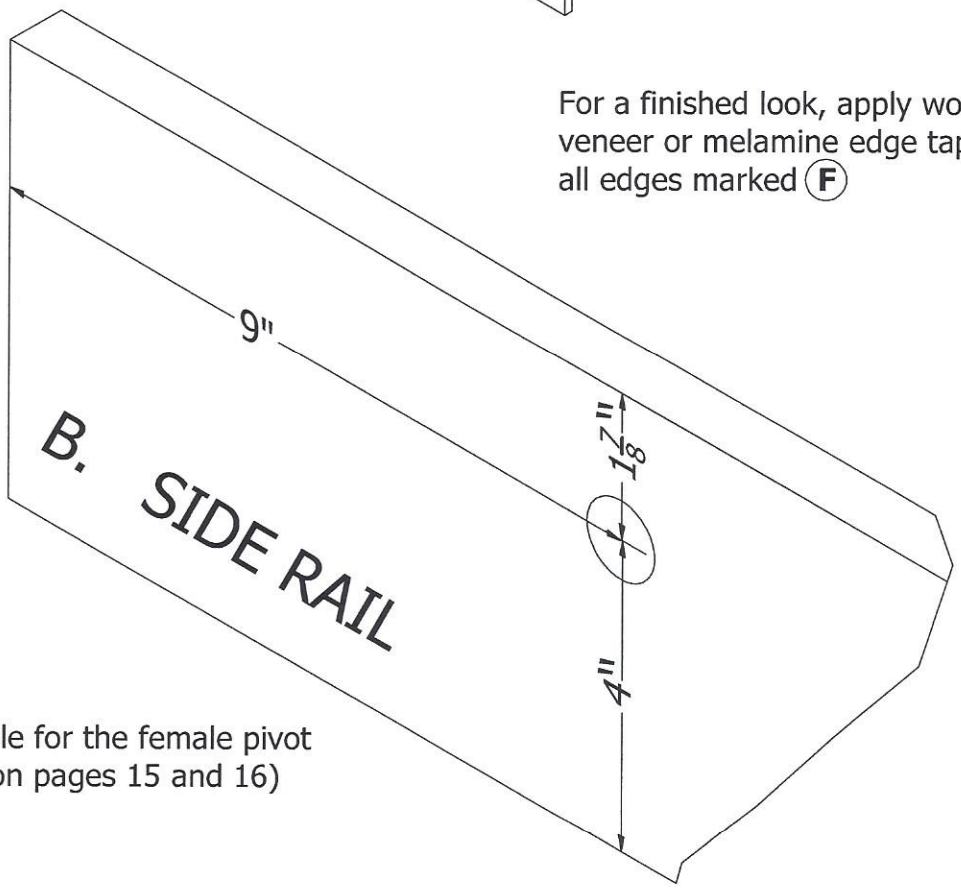
Why?.. This is where the stress takes place.
Plywood is stronger than solid wood.
YES EVEN SOLID OAK.....

PART C. Foot Rail
PART D. Head Rail



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

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

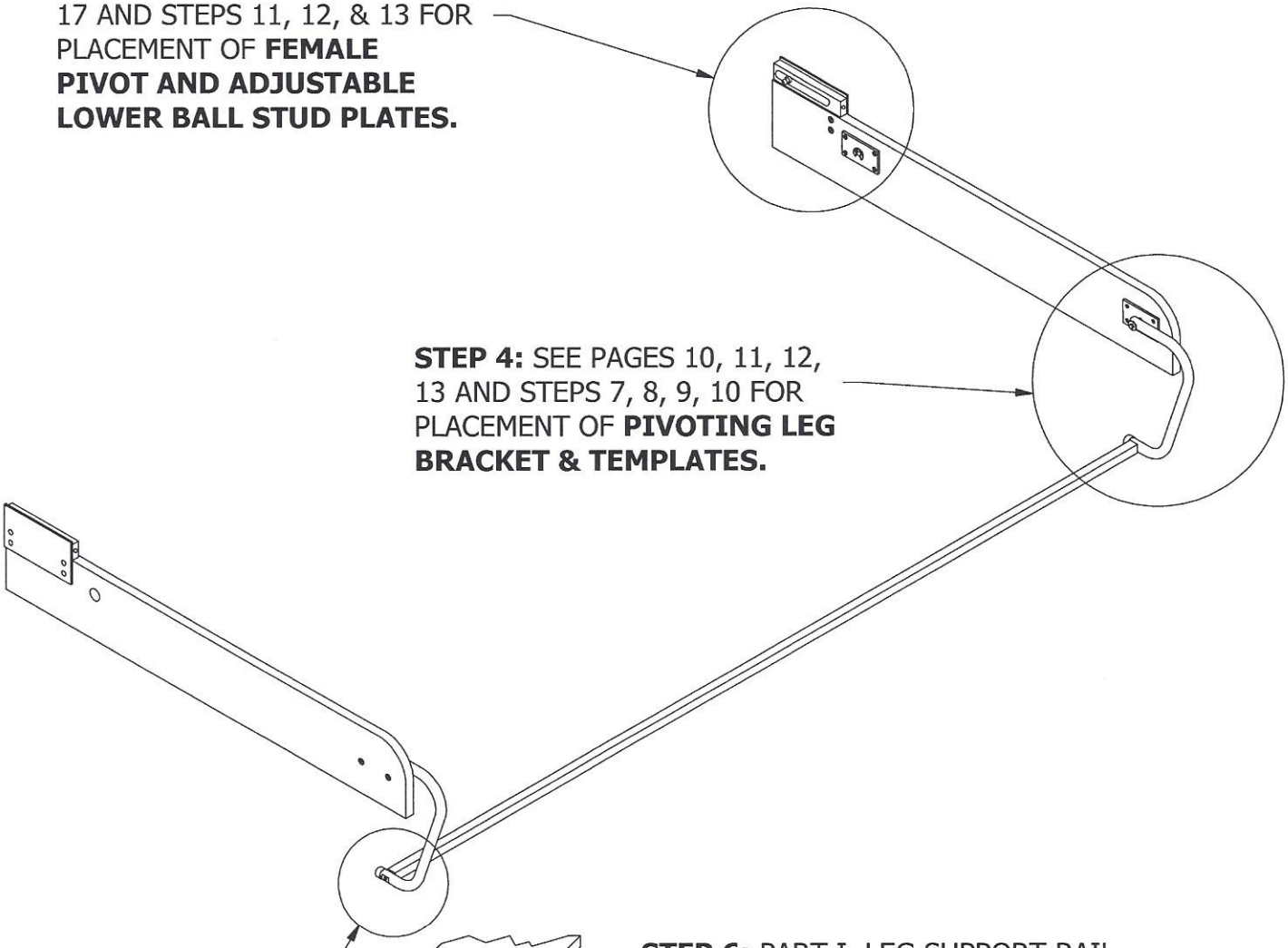


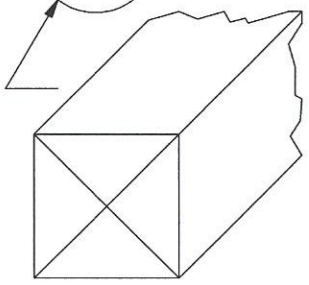
Placement hole for the female pivot
(also shown on pages 15 and 16)

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 ADJUSTABLE 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.**

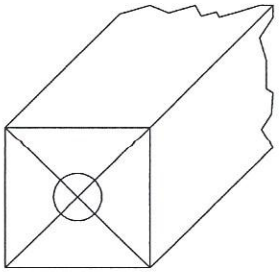




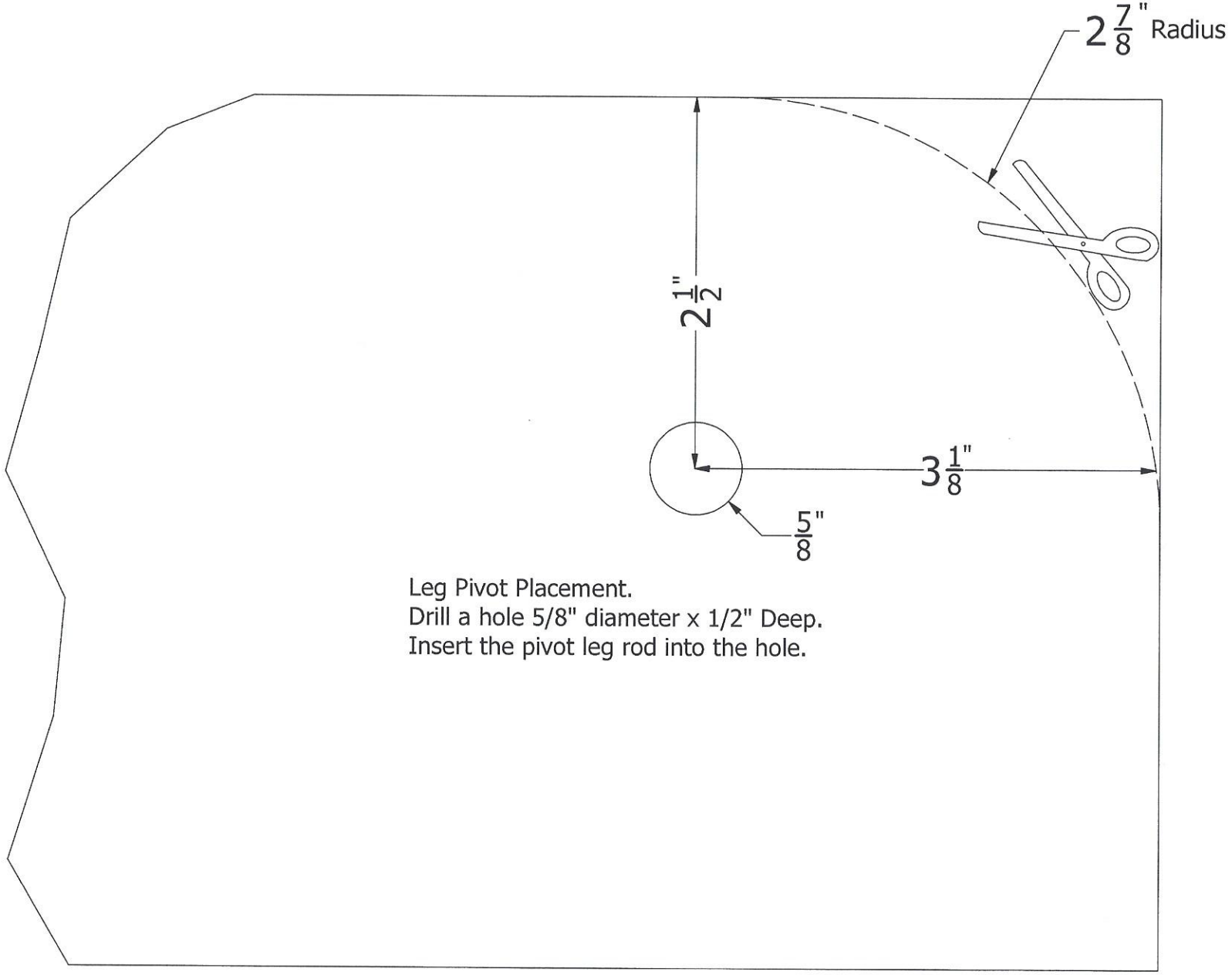
STEP 6: PART I. LEG SUPPORT RAIL

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.

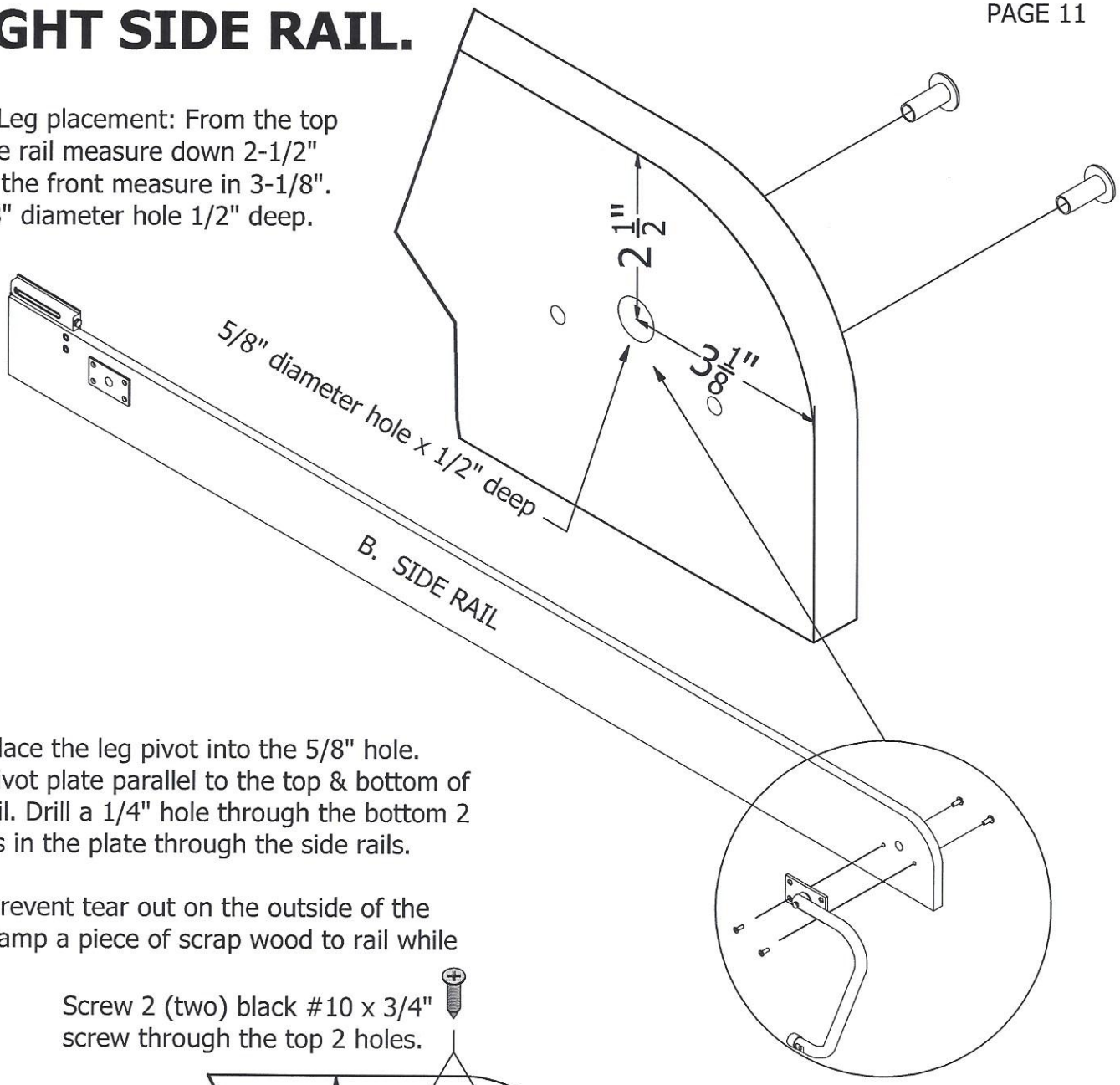


Leg Pivot Placement.
Drill a hole 5/8" diameter x 1/2" Deep.
Insert the pivot leg rod into the hole.

RIGHT SIDE RAIL TEMPLATE

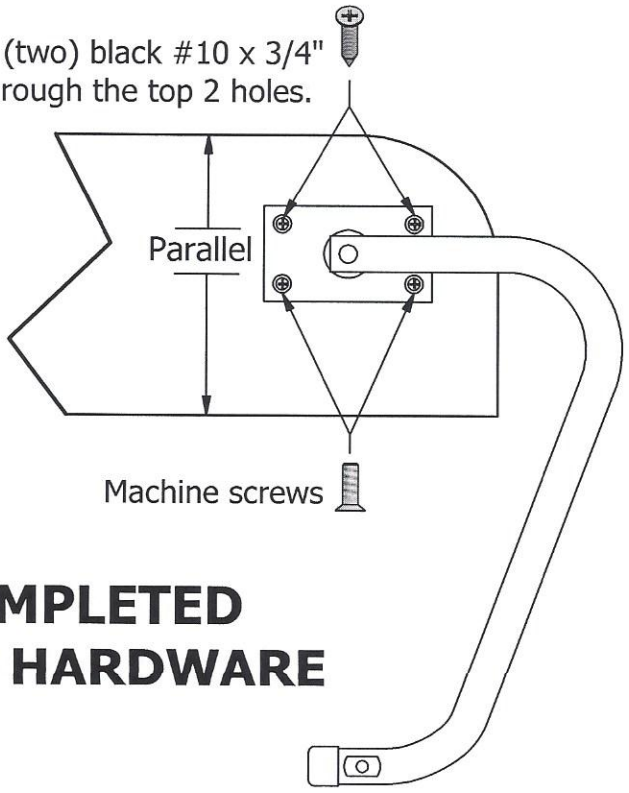
B. RIGHT SIDE RAIL.

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.

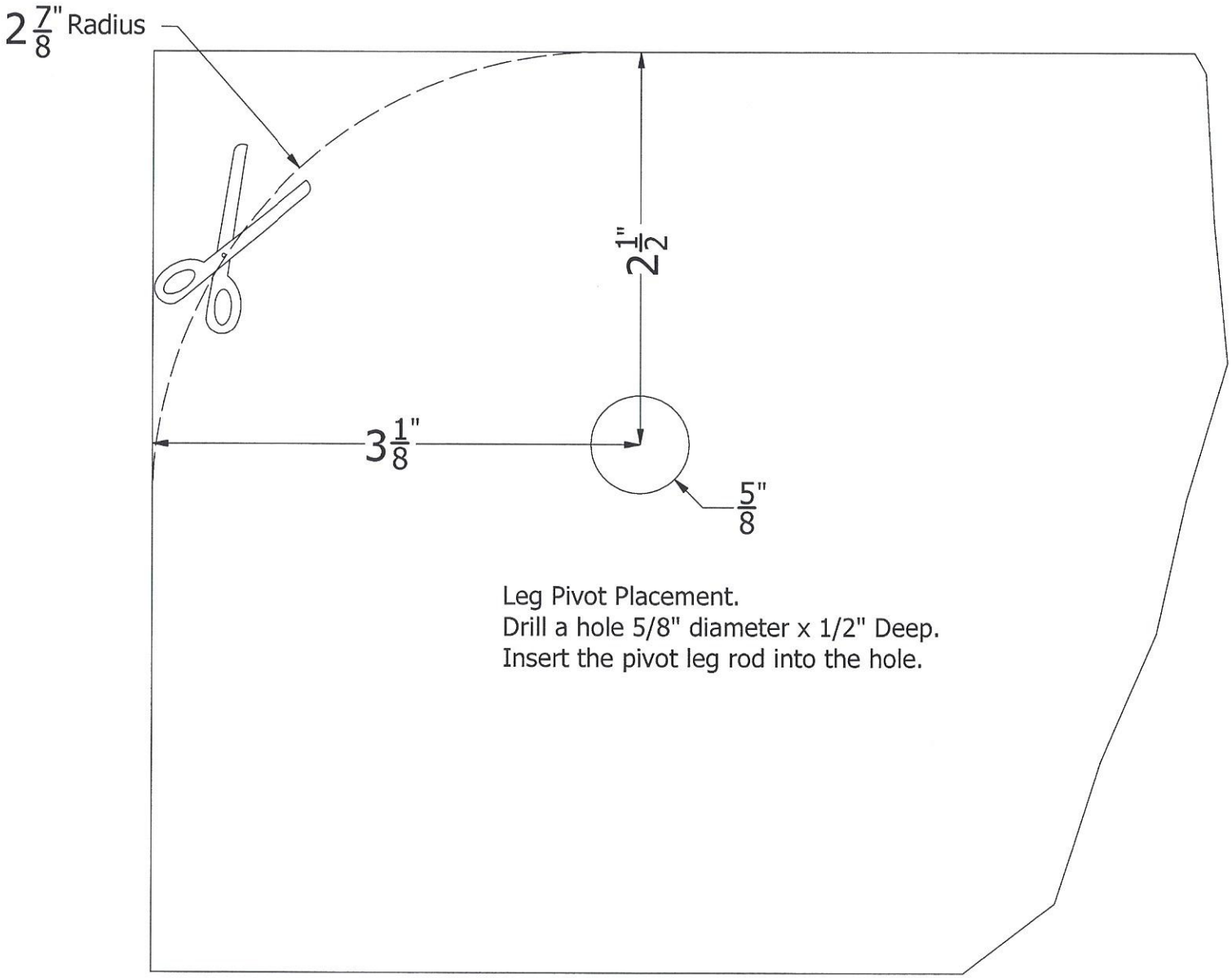


STEP 8: Place the leg pivot into the 5/8" hole. With the pivot plate parallel to the top & bottom of the side rail. Drill a 1/4" hole through the bottom 2 (two) holes in the plate through the side rails.

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



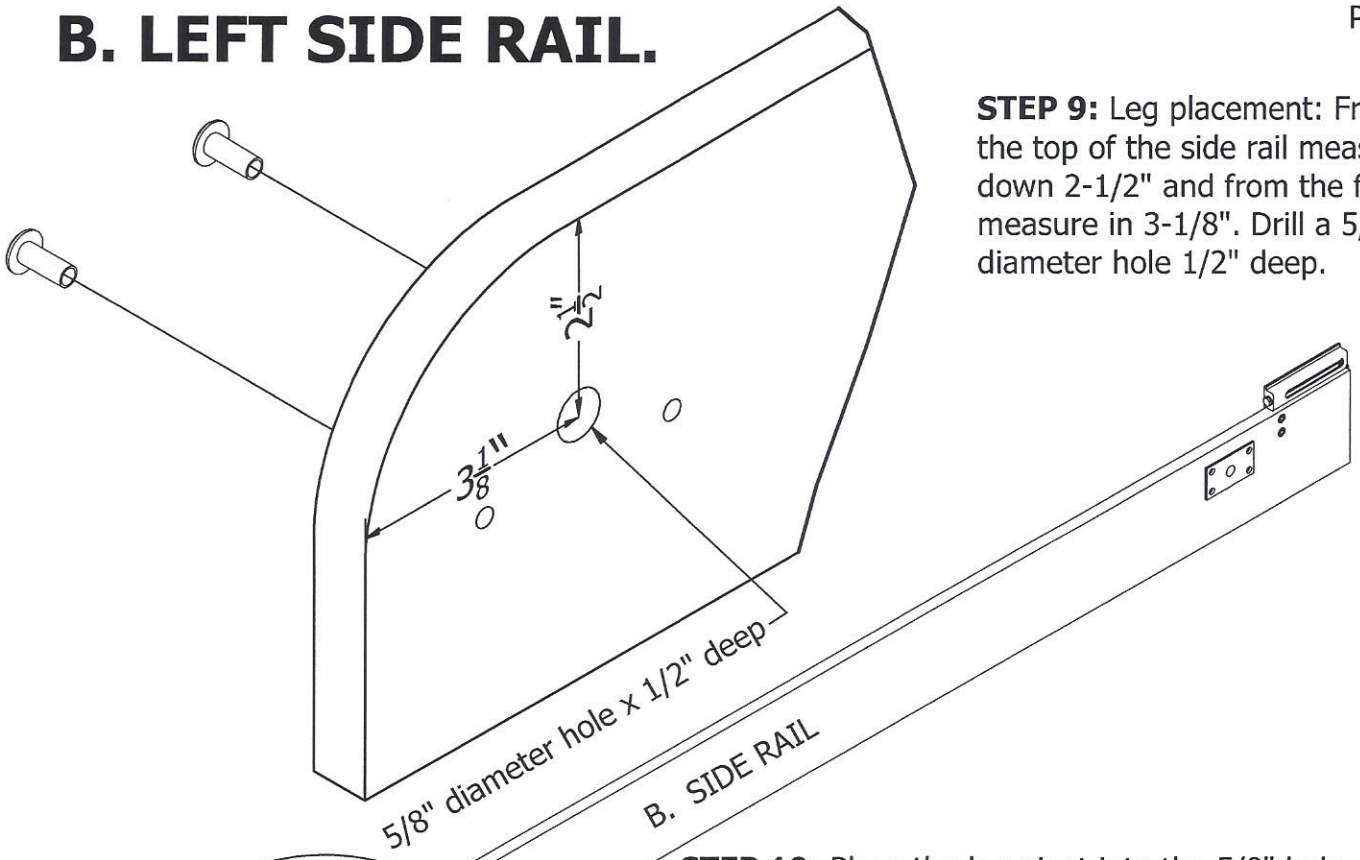
WHEN COMPLETED REMOVE LEG HARDWARE



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

LEFT SIDE RAIL TEMPLATE

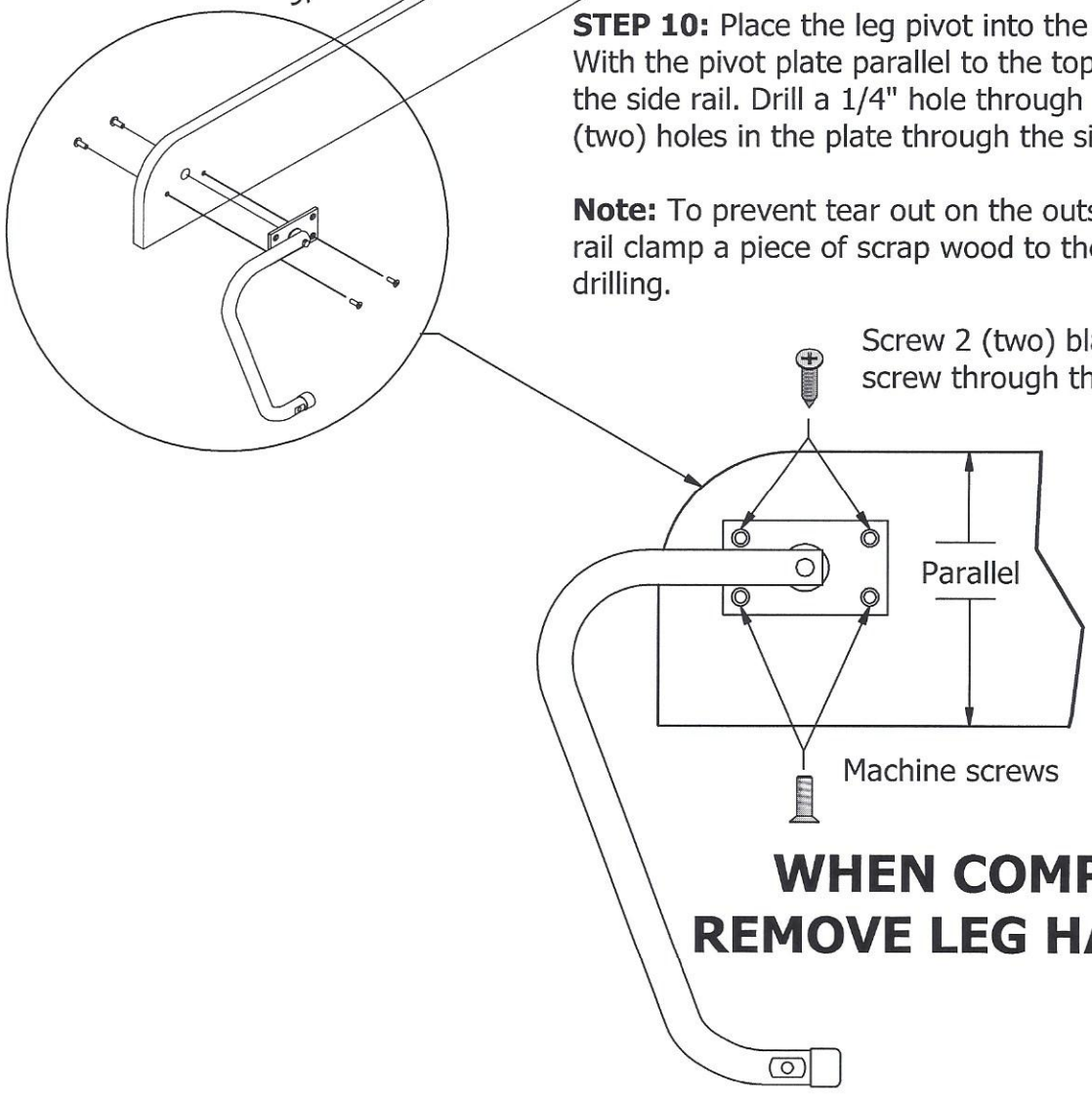
B. LEFT SIDE RAIL.



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.

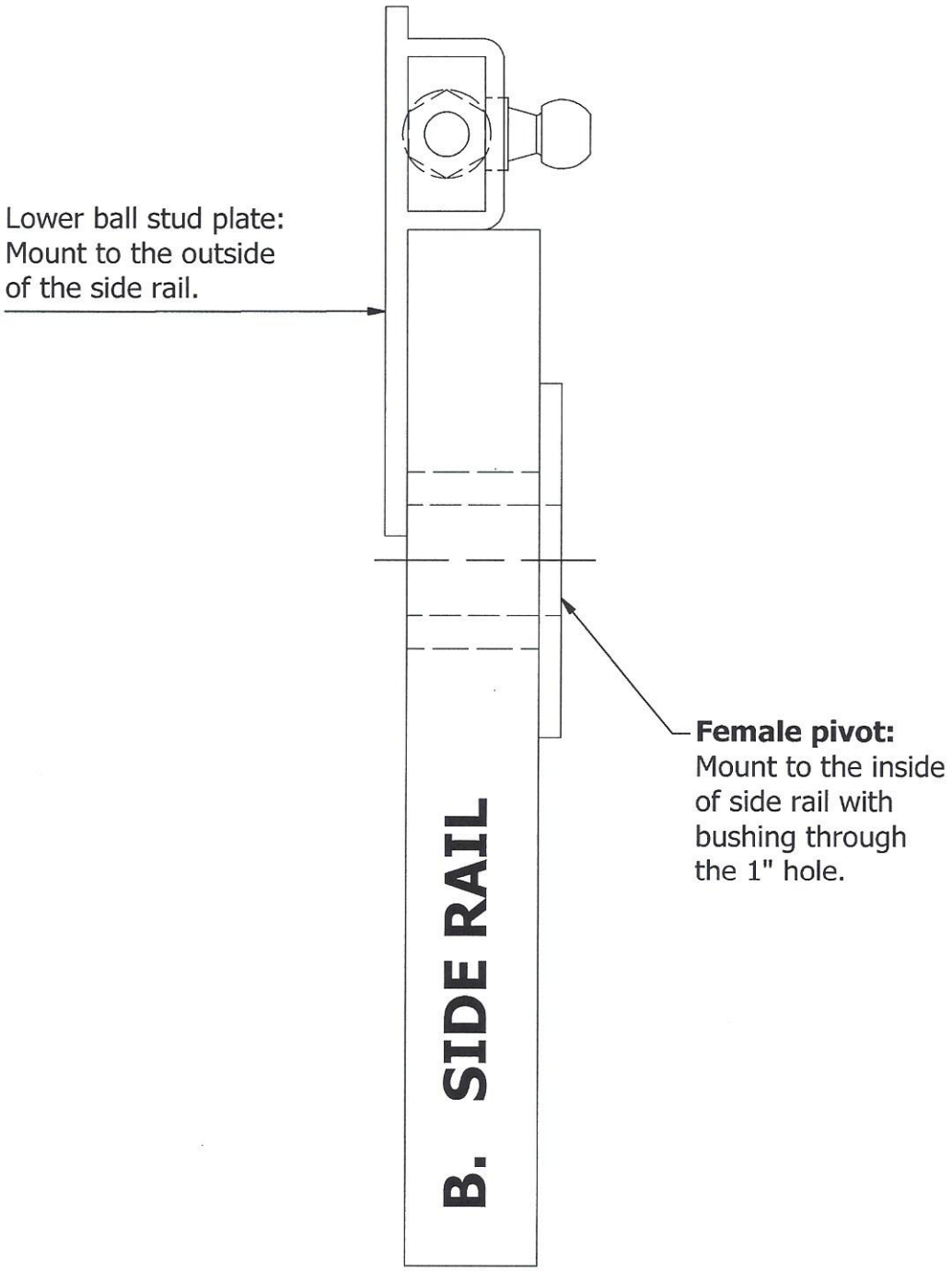
STEP 10: Place the leg pivot into the 5/8" hole. With the pivot plate parallel to the top & bottom of the side rail. Drill a 1/4" hole through the bottom 2 (two) holes in the plate through the side rails.

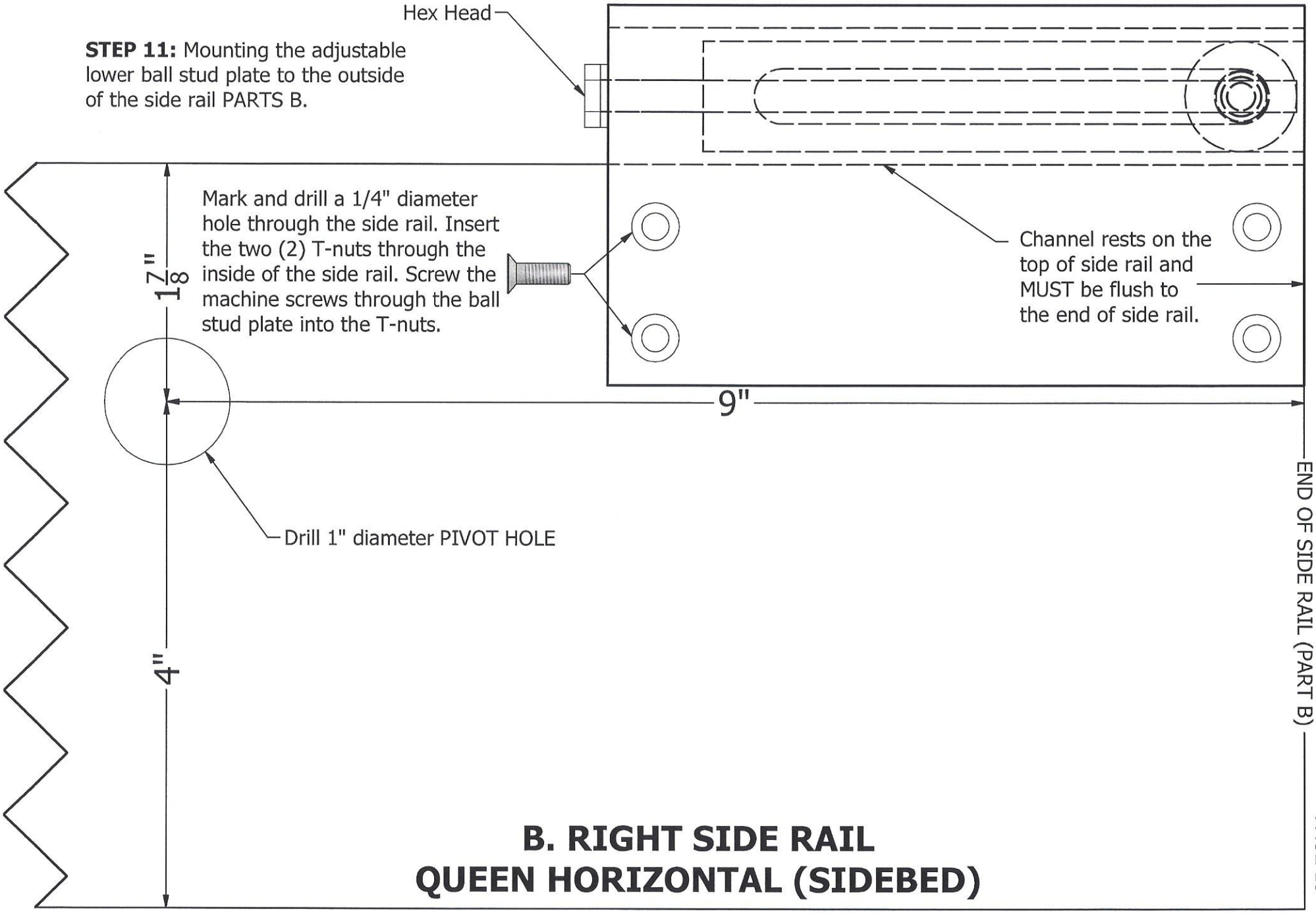
Note: To prevent tear out on the outside of the side rail clamp a piece of scrap wood to the rail while drilling.



WHEN COMPLETED REMOVE LEG HARDWARE

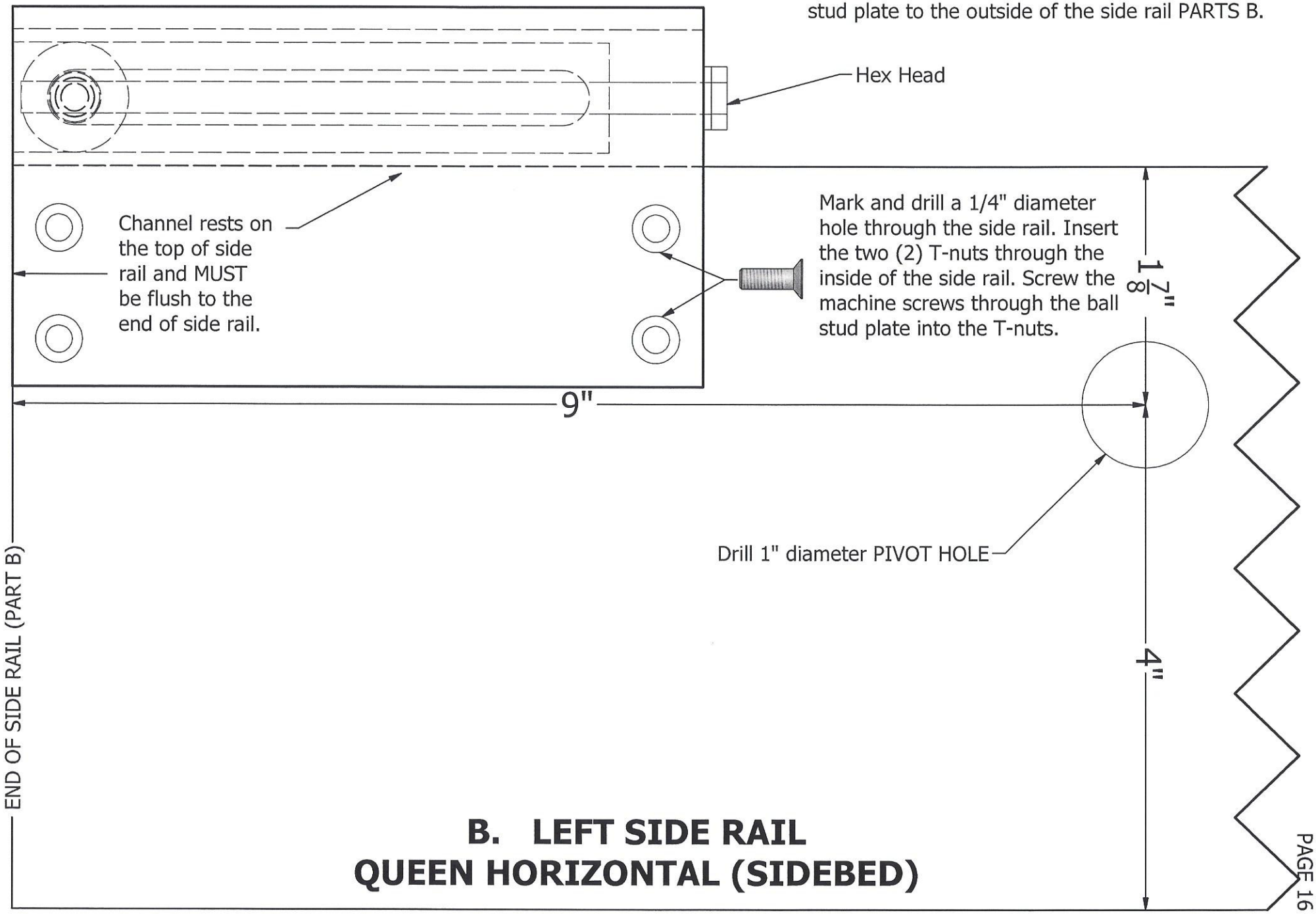
This page pertains to the orientation and mounting positions of the lower ball stud plates and female pivots, **USE WITH PAGE 15, 16, & 17**



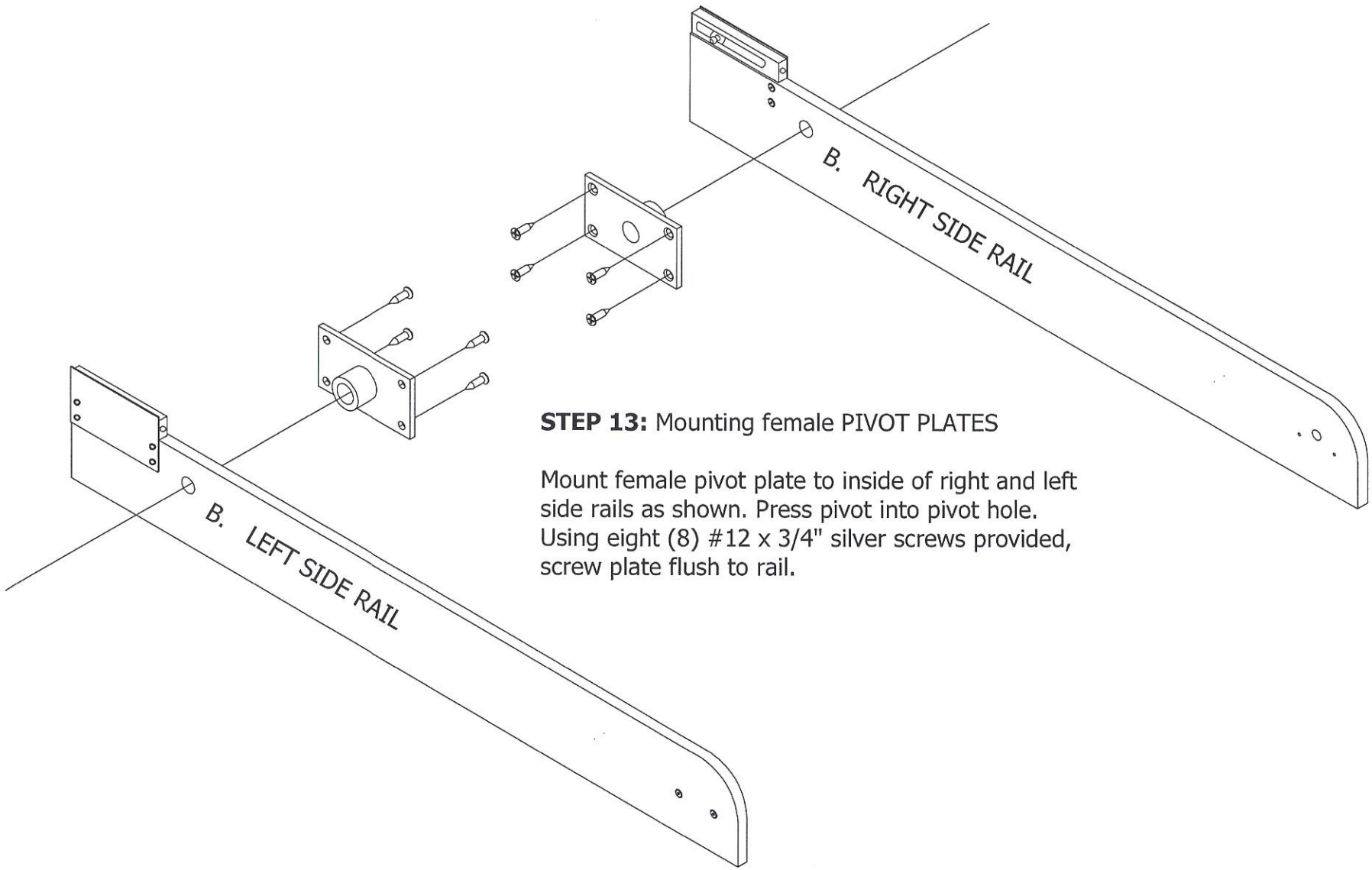


B. RIGHT SIDE RAIL
QUEEN HORIZONTAL (SIDEBED)

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



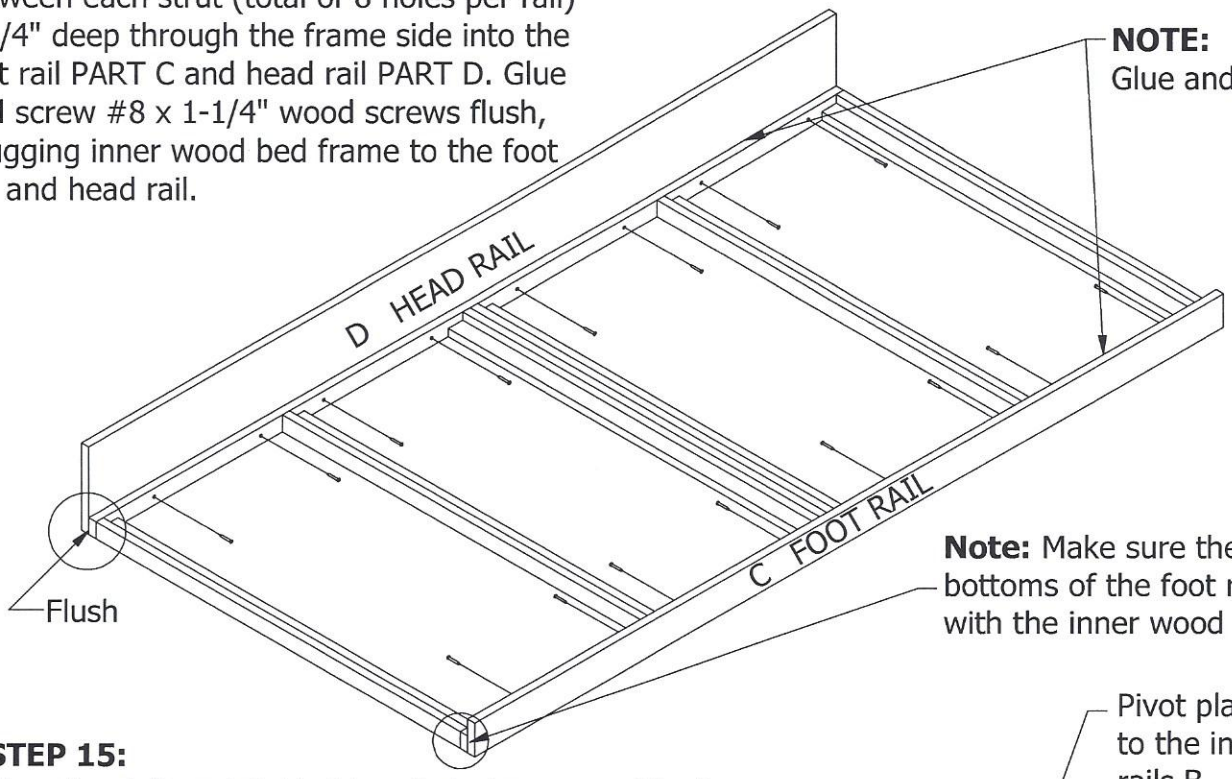
B. LEFT SIDE RAIL
QUEEN HORIZONTAL (SIDEBED)



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.

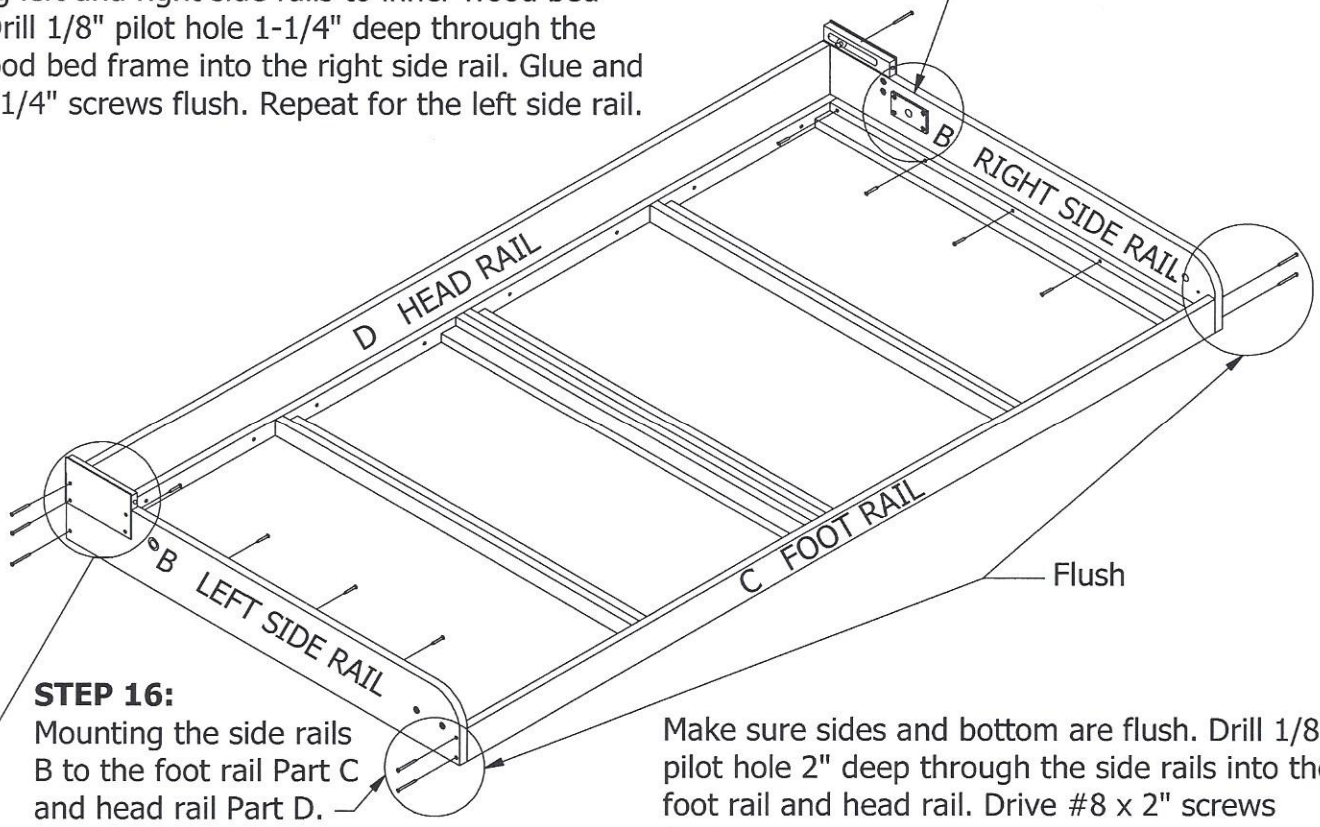


NOTE:
Glue and screw

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

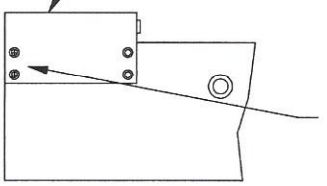
STEP 15:
Mounting left and right side rails to inner wood bed frame. Drill 1/8" pilot hole 1-1/4" deep through the inner wood bed frame into the right side rail. Glue and screw 1-1/4" screws flush. Repeat for the left side rail.

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.

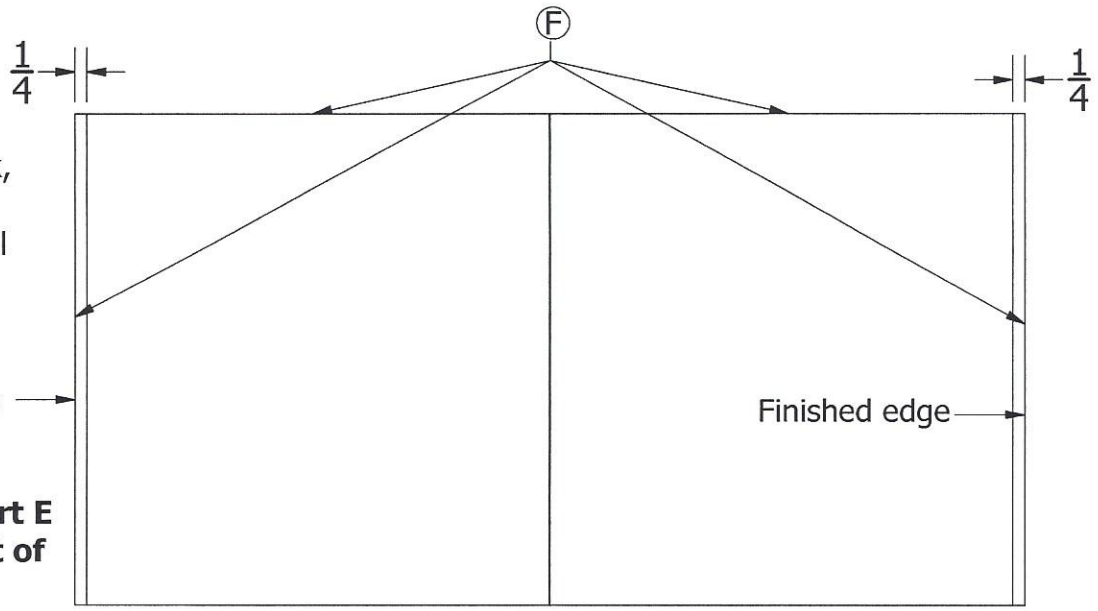
Make sure sides and bottom are flush. Drill 1/8" pilot hole 2" deep through the side rails into the foot rail and head rail. Drive #8 x 2" screws flush.



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.

NOTE: Remove Pivot Leg Hardware.

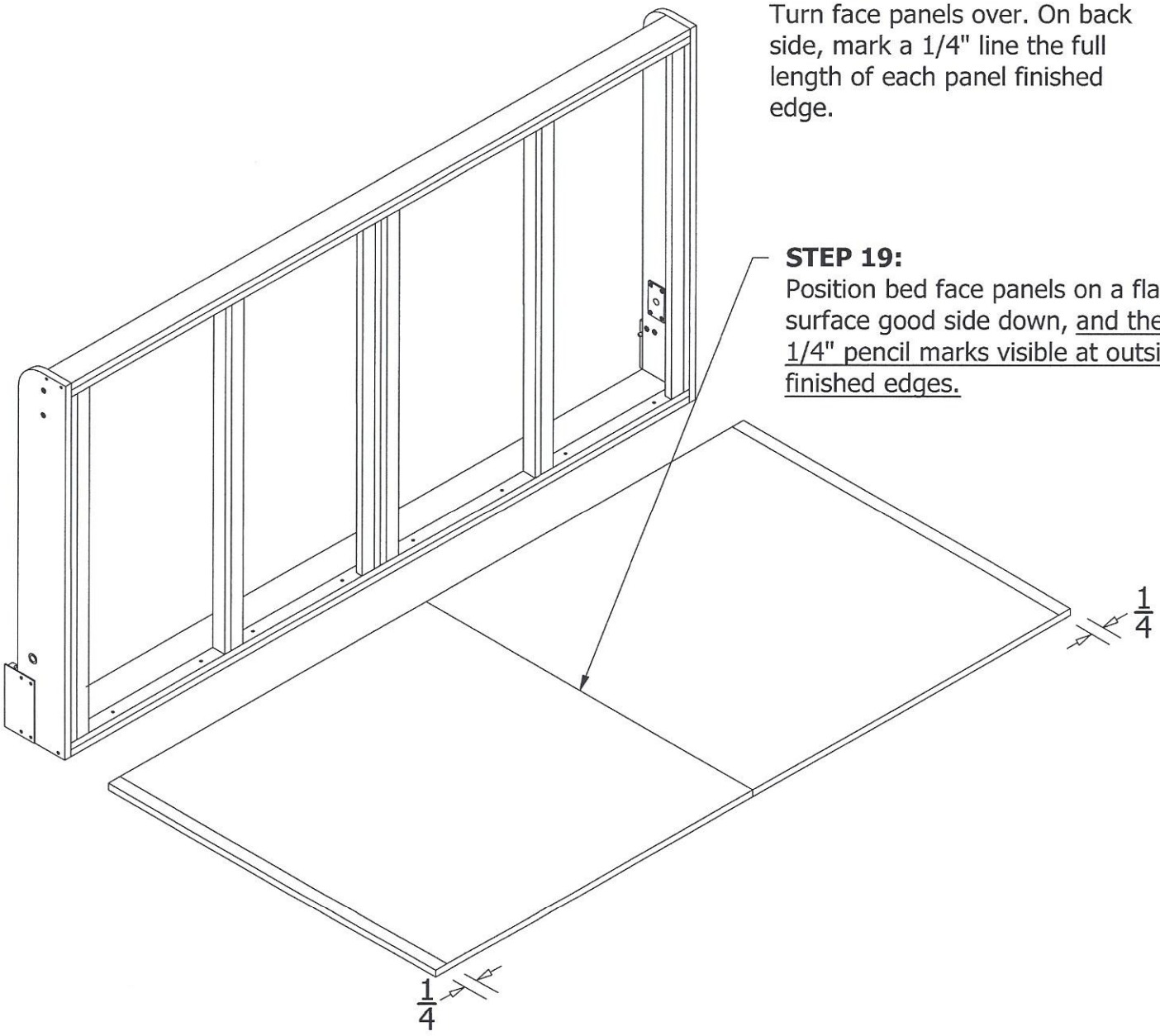
STEP 17:
NOTE: For a finished look, apply wood veneer or melamine edge tape to all edges marked (F).



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

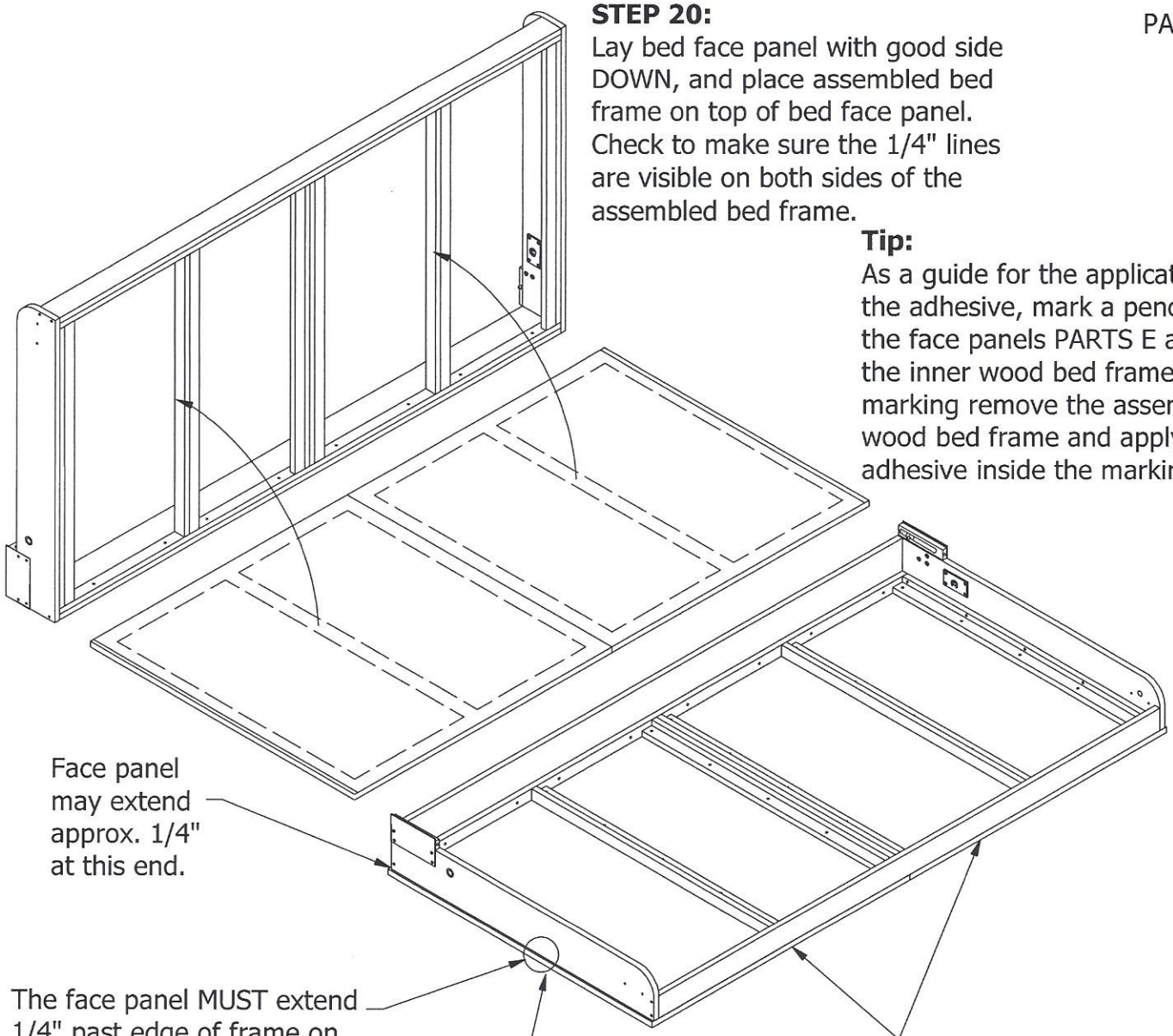
STEP 18:
Turn face panels over. On back side, mark a 1/4" line the full length of each panel finished edge.

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

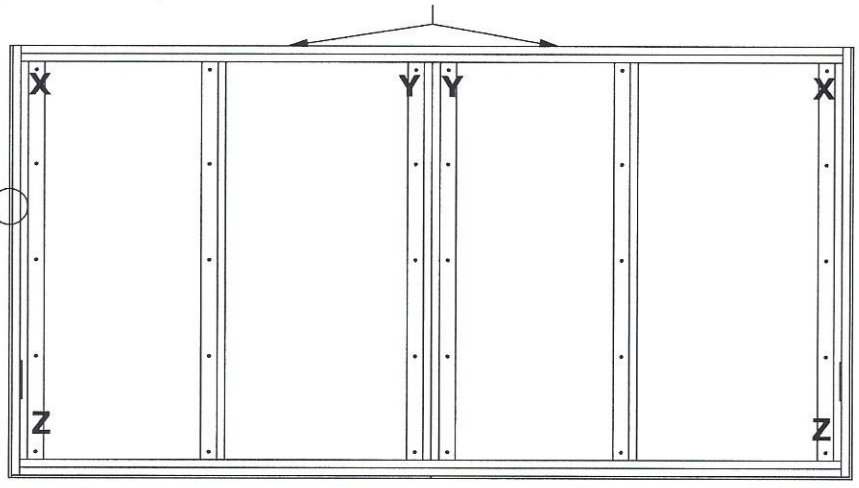


STEP 20:
Lay bed face panel with good side DOWN, and place assembled bed frame on top of bed face panel. Check to make sure the 1/4" lines are visible on both sides of the assembled bed frame.

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.



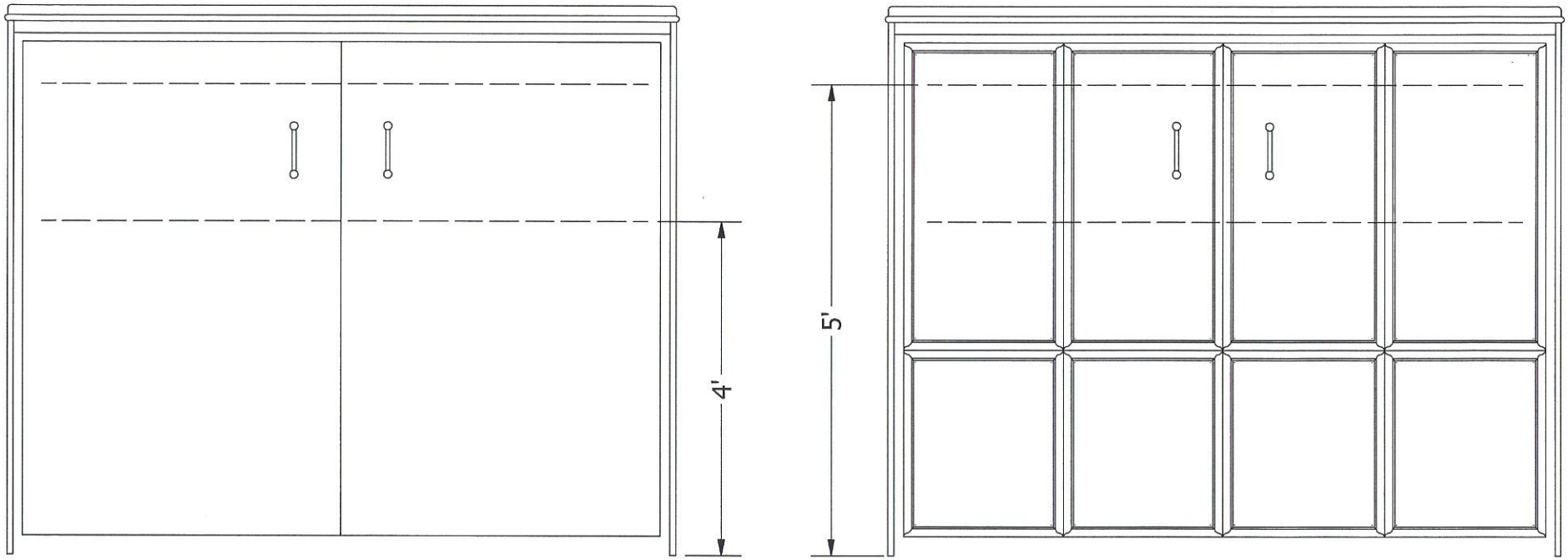
STEP 21:
Make sure face panel and foot rail are flush and that face panel extends 1/4" past edge of wood bed frame on each side.



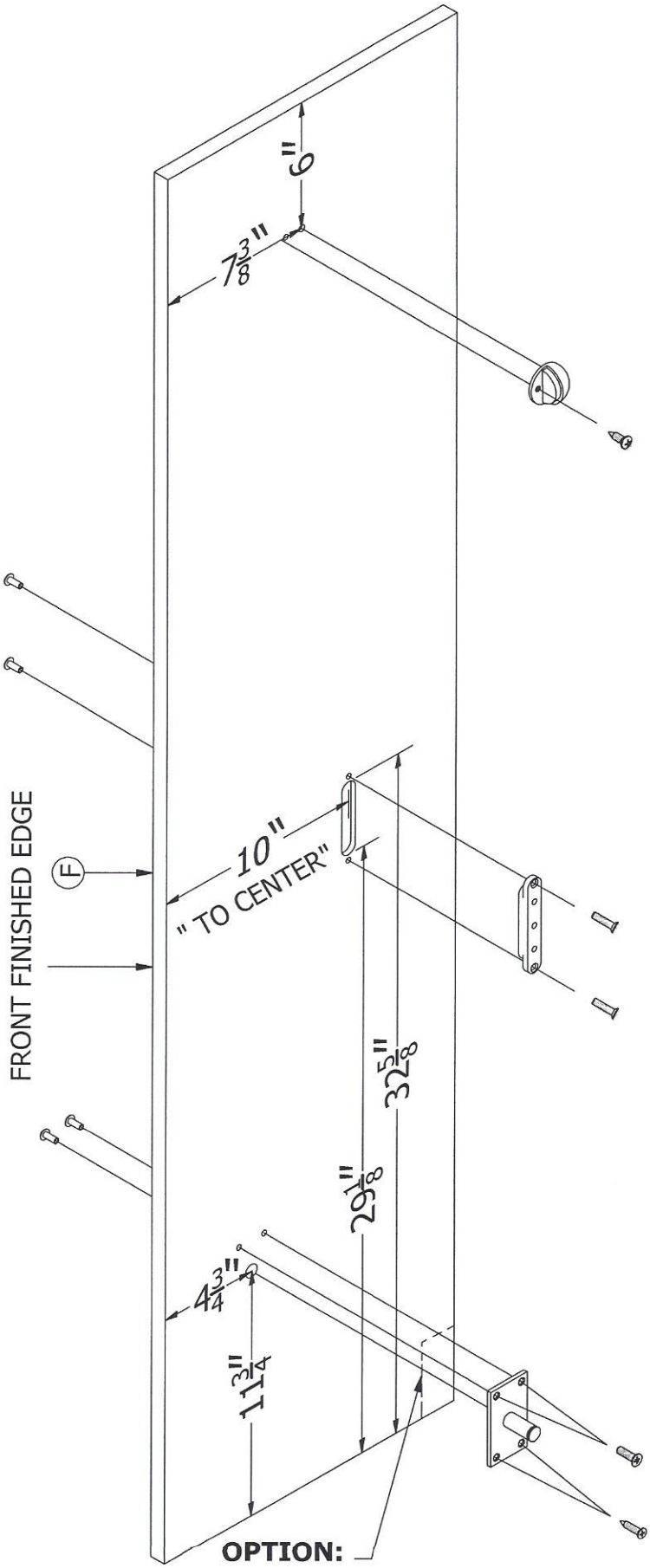
Using #8 x 1-1/4" screws, screw section marked **"X"** first. Keeping end flush, screw section marked **"Y"**.

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 QUEEN 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.

STEP 23:
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 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.

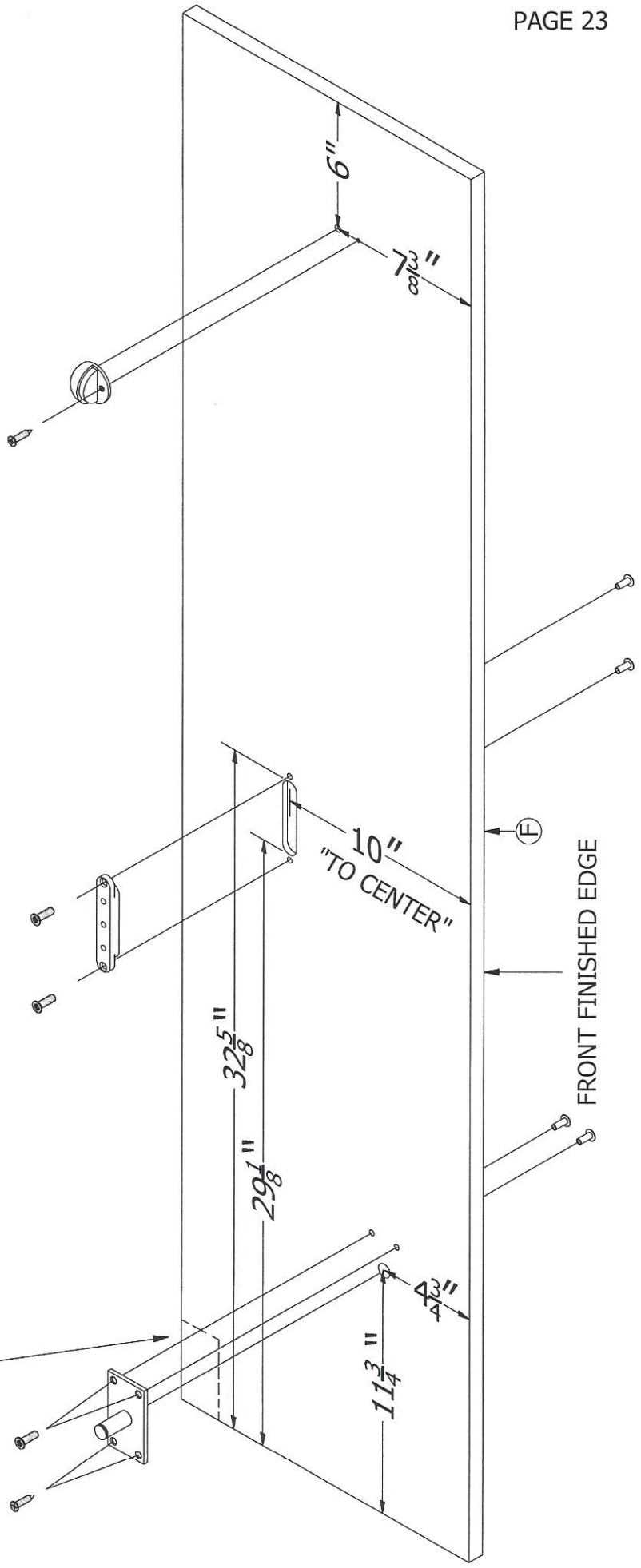
PART G: BED CABINET VERTICALS (RIGHT) Measurements for QUEEN HORIZONTAL (Sidebed) ONLY Using 3/4" PLYWOOD Face Panel.

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.

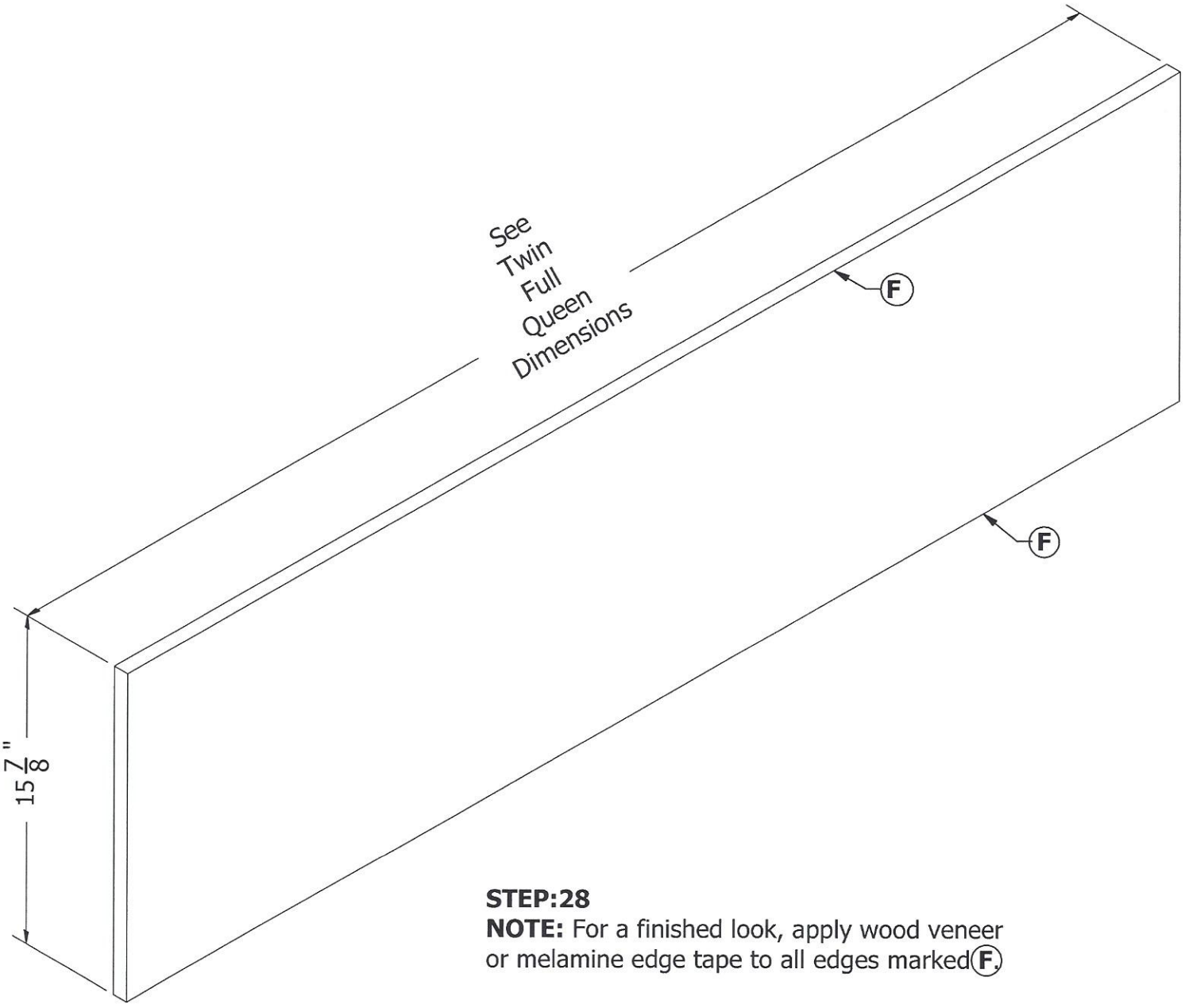
STEP 26:
ADJUSTABLE UPPER BALL STUD PLATE: Rout out 3/4" x 1/4" deep x 3-1/2" long and insert the adjustable upper plate into hole. Drill 1/4" holes through the mounting locations and secure with "T" Nuts and machine screws.

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.

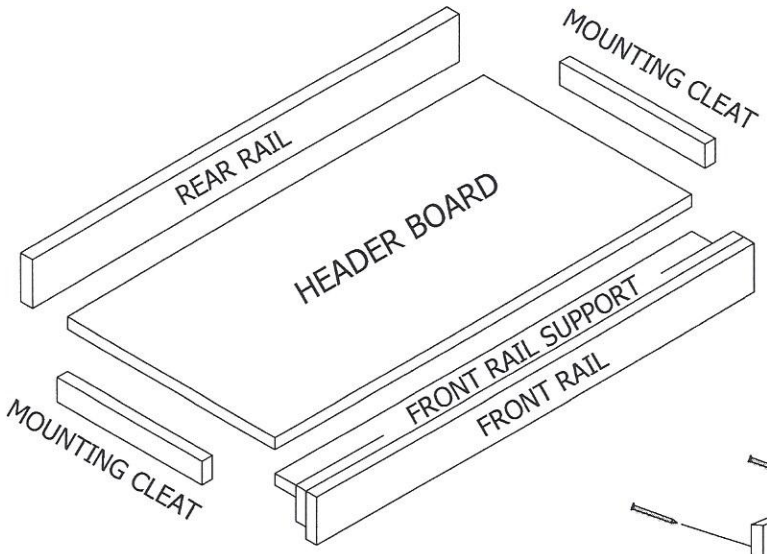
OPTION:
On left and right bed verticals, a cut can be made to accommodate existing base molding so cabinet will fit flush against the wall.



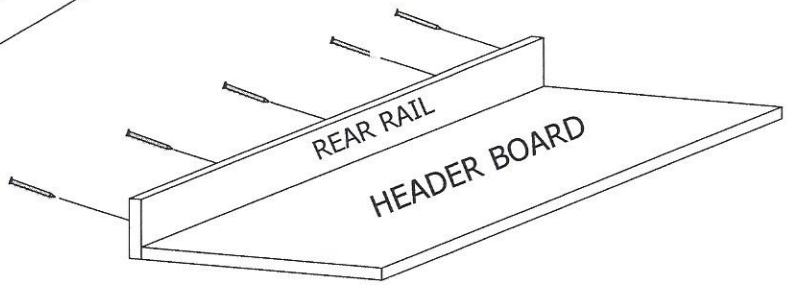
PART F: BED HEADBOARD



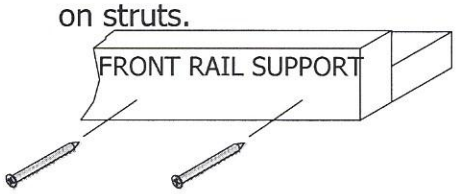
STEP:28
NOTE: For a finished look, apply wood veneer or melamine edge tape to all edges marked (F).

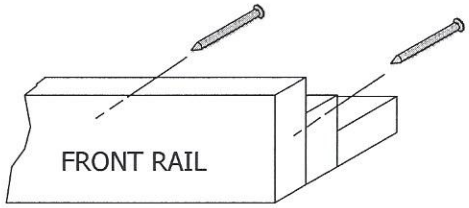


STEP 29:
Drill five (5) pilot holes through rear rail. Glue and screw rear rail to header board with #8 x 2" screws.

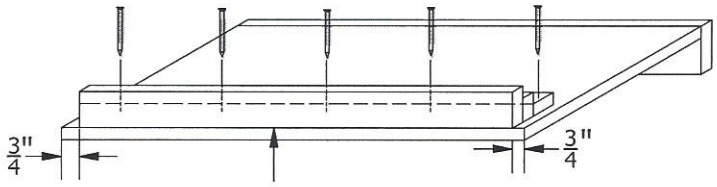


STEP 30:
Drill six (6) 1/8" pilot holes in front rail support, then glue and screw togrther with 1-1/2" wood screws or nails. This the same operation as performed on struts.





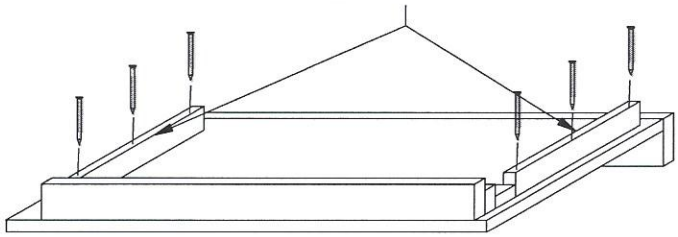
STEP 31:
Attaching the front rail to the front rail support: Drill six (6) pilot holes 1-1/4" deep through rear of support into rear of front rail, then glue and screw together with 1-1/4" wood screws.



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.