

Create-A-Bed[®] *LLC*

NOTE: DO NOT deviate from these plans

These plans are for constructing an
ADJUSTABLE

KING 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

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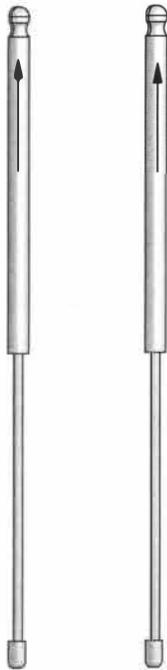
murphy bed mechanism

1800 Taylor Avenue Louisville, KY 40213

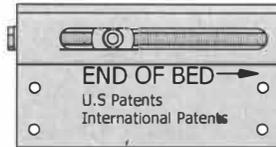
www.createabed.com

TOLL FREE: 1-877-966-3852

KING VERTICAL (UPRIGHT) murphy bed mechanism PLYWOOD CONSTRUCTION



Two (2) GAS SPRINGS



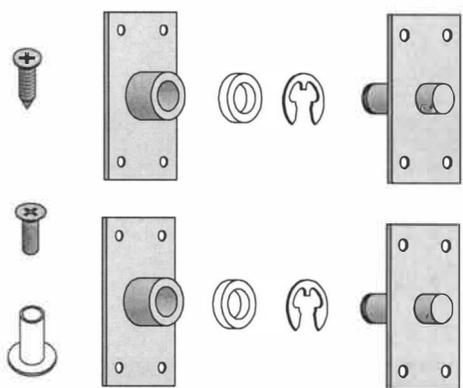
Two (2) ADJUSTABLE LOWER PLATES with four (4) #10 x 1-5/8" screws
four (4) "T" nuts with machine screws



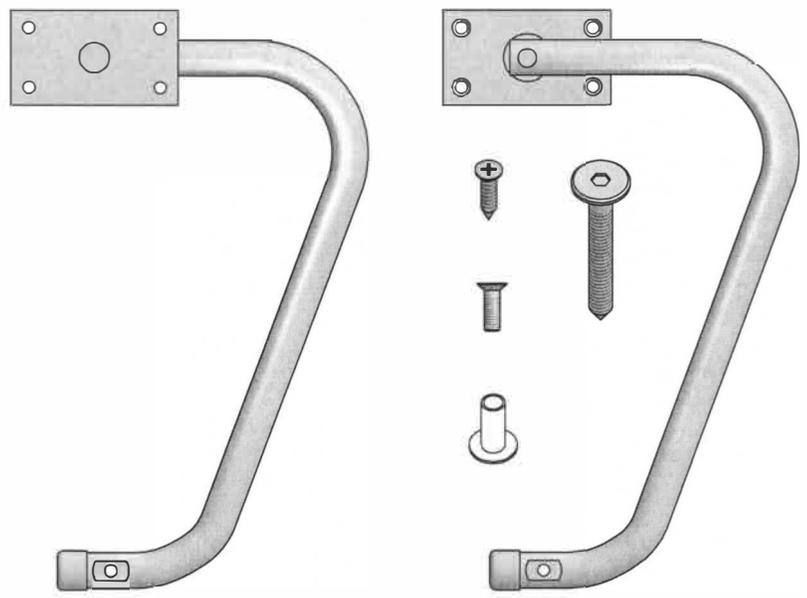
Two (2) ADJUSTABLE UPPER PLATES with four (4) "T" NUTS with MACHINE screws
two (2) BALL STUDS
two (2) BLACK BALL STUD SPACERS



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



Two (2) 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

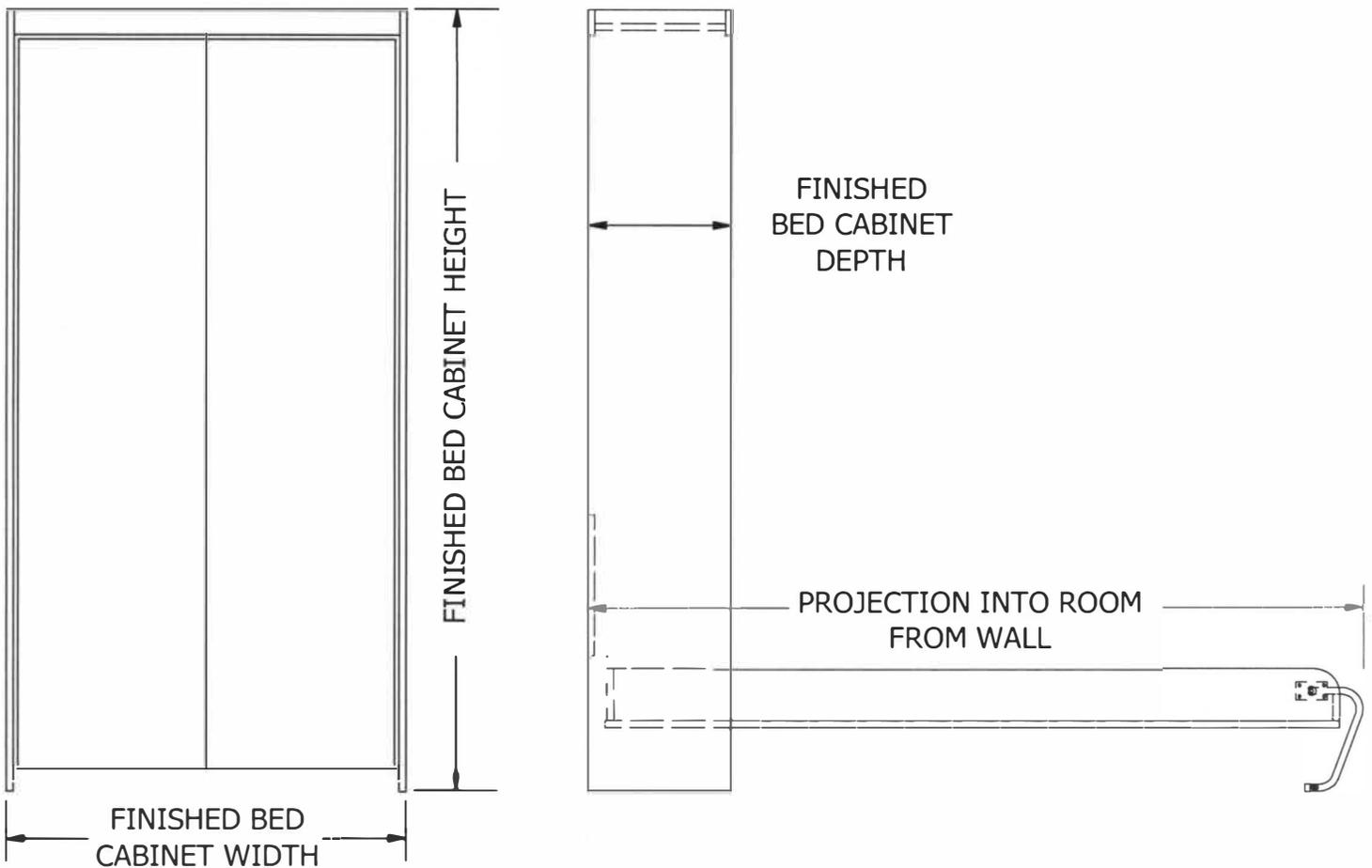


Two (2) Metal Pivoting Legs
Two (2) 1/4" x 2" Leg Support Rail screws
Four (4) Black #10 x 3/4" screws
Four (4) "T"nut with machine screws

One (1) CONSTRUCTION booklet
One (1) ASSEMBLY AND INSTALLATION booklet

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

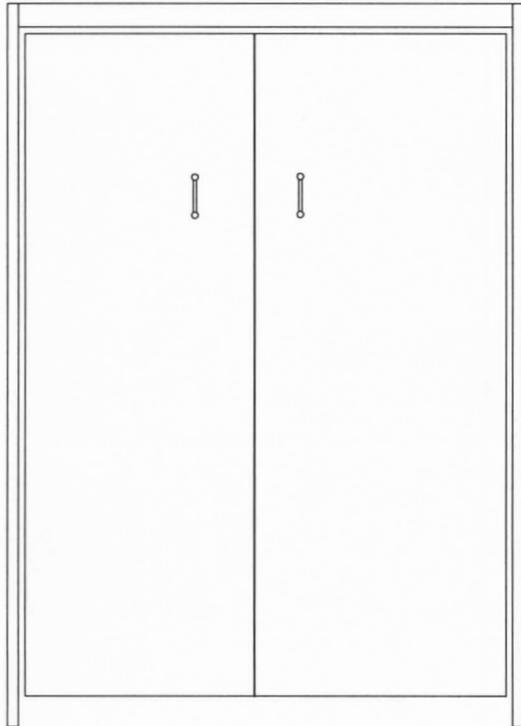
Out-to-out dimensions of **VERTICAL STYLE** murphy bed cabinet constructed using the *Create-A-Bed*[®] mechanism



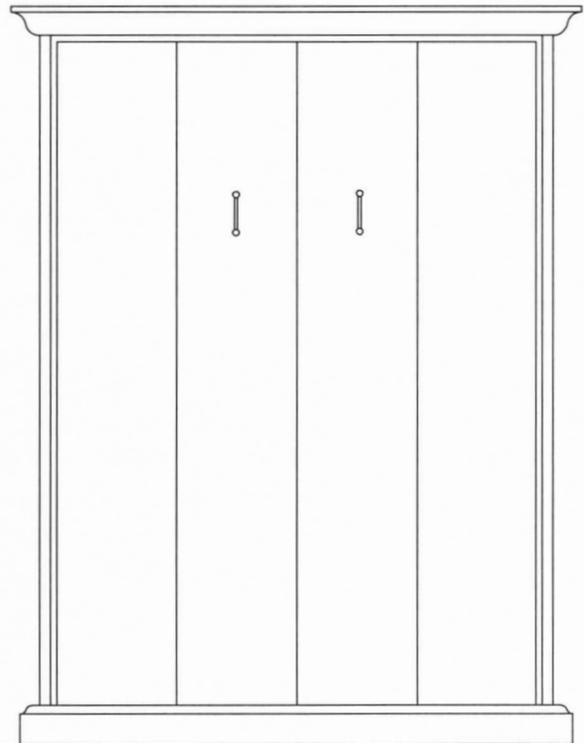
OUTSIDE-EDGE TO OUTSIDE-EDGE
FINISHED VERTICAL BED CABINET DIMENSIONS

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"
KING	87-1/8"	81-7/8"	15-7/8"	87"

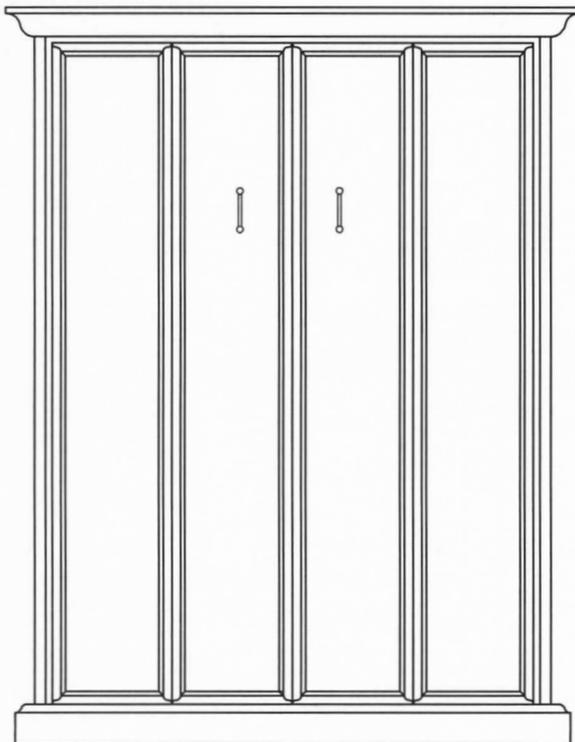
Some design options... or create your own!



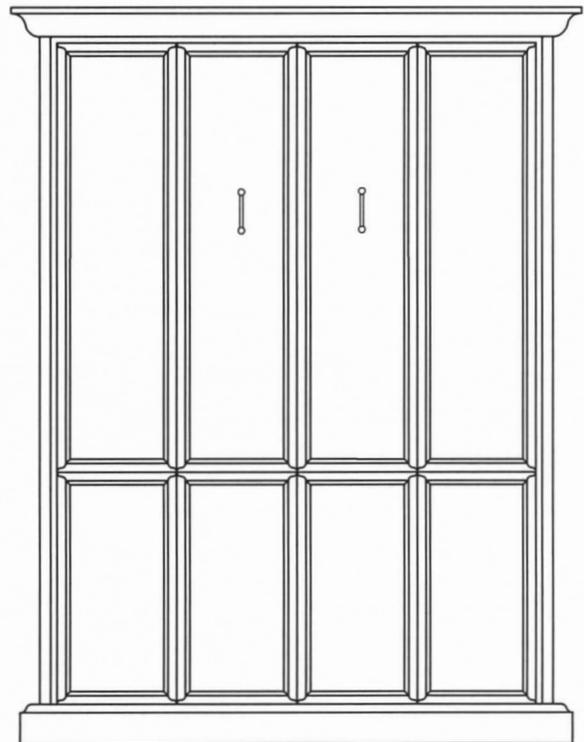
BASIC BED



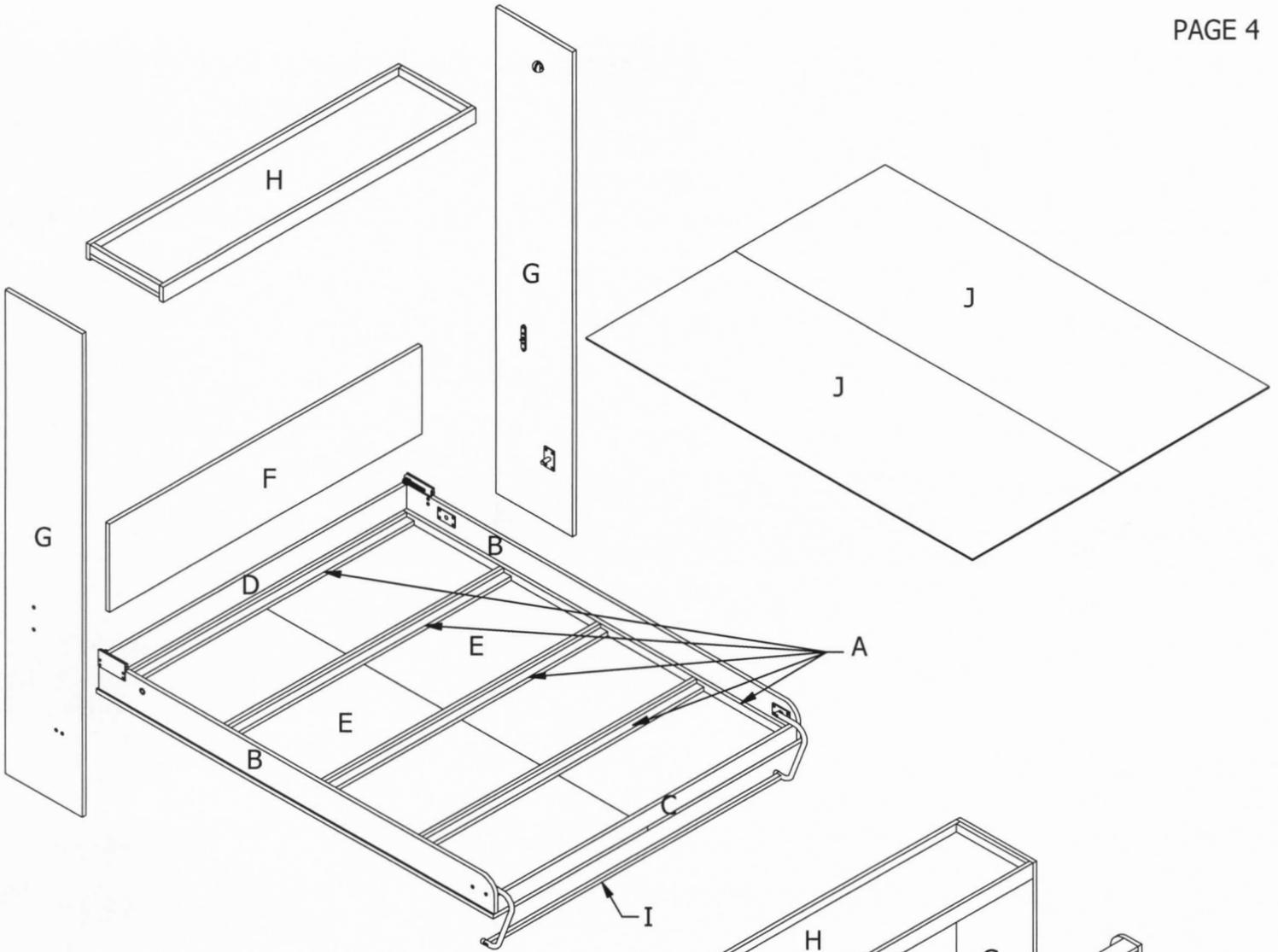
WITH CROWN
AND BASE MOLDING



WITH CROWN, BASE
AND FULL-LENGTH FACE
PANEL MOLDING

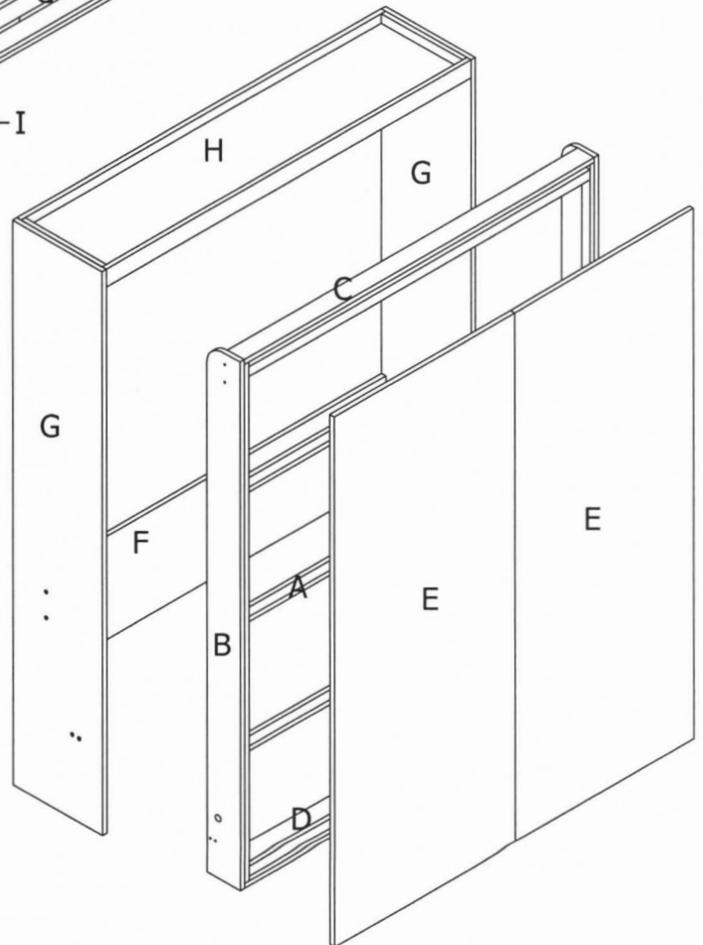


WITH CROWN, BASE
AND SPLIT
FACE PANEL MOLDING



COMPONENTS OF FINISHED MURPHY BED

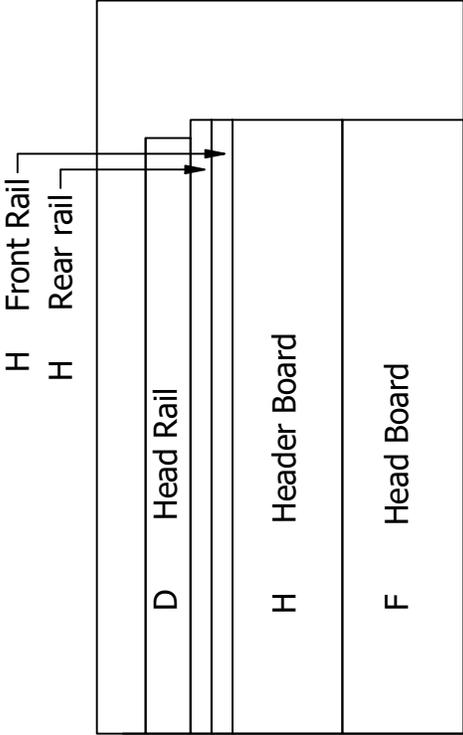
- A. INNER WOOD BED FRAME
- B. SIDE RAILS
- C. FOOT RAIL
- D. HEAD RAIL
- E. BED FACE PANELS
- F. BED HEADBOARD
- G. BED CABINET VERTICALS
- H. BED HEADER
- I. LEG SUPPORT RAIL
- J. 1/4" PLYWOOD MATTRESS SUPPORT



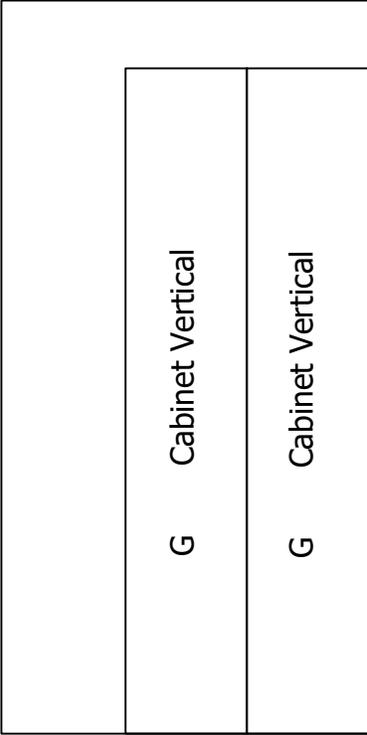
KING Size Plywood Cutting Guide

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

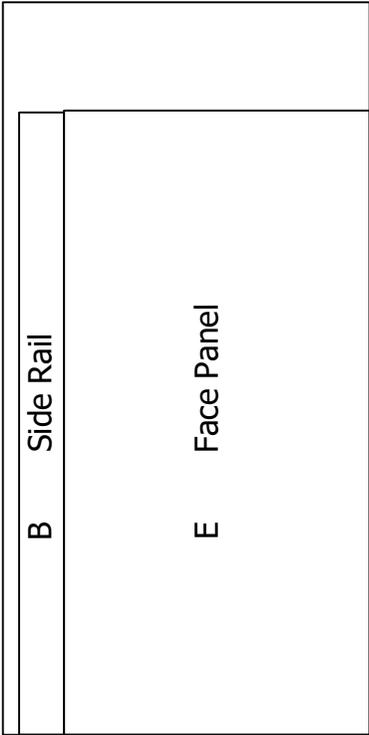
Note: Refer to page 6 for cutting dimensions



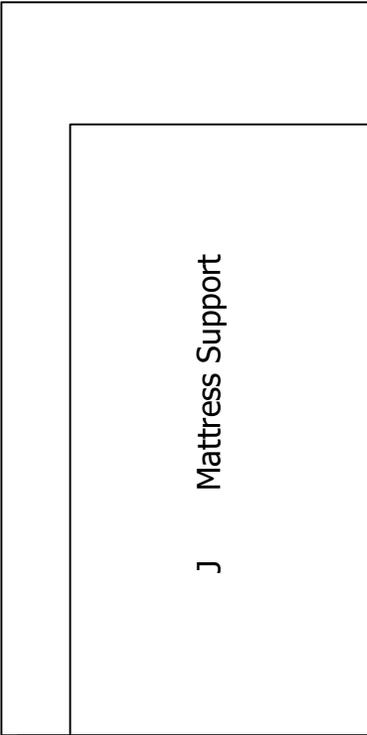
Requires 1 sheet of 3/4"



Requires 1 sheet of 3/4"



Requires 2 sheets of 3/4"



Requires 2 sheets of 1/4"

King Size ADJUSTABLE DELUXE 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 37-1/2"	20 pieces
FRAME SIDES: *SOLID WOOD*	3/4" X 1-1/2" X 80"	4 pieces

IMPORTANT: PLYWOOD MUST BE USED FOR THESE PIECES:

__ B. SIDE RAILS:	3/4" X 5-7/8" X 81-1/2"	2 pieces
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__ C. FOOT RAIL: *SOLID WOOD *	3/4" X 3" X 78"	1 piece
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__ D. HEAD RAIL:	3/4" X 5-7/8" X 78"	1 piece
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__ E. BED FACE PANEL:	3/4" X 40" X 81-3/4"	2 pieces
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__ F. BED HEADBOARD:	3/4" X 15-7/8" X 80-3/8"	1 piece
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__ G. BED CABINET VERTICALS:	3/4" X 15-7/8" X 87-1/8"	2 pieces
------------------------------	--------------------------	----------

__ H. BED HEADER:		
HEADERBOARD:	3/4" X 14-3/8" X 80-3/8"	1 piece
FRONT RAIL:	3/4" X 2-3/4" X 80-3/8"	1 piece
REAR RAIL:	3/4" X 2-3/4" X 80-3/8"	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 76-1/4"	1 piece
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__ J. 1/4" PLYWOOD mattress support:	1/4" X 39" X 80"	2 pieces
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__ K. VENEER or MELAMINE TAPE:	13/16" X 80 feet	
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__ L. WOOD GLUE:	One 8 ounce bottle	
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__ M. FINISH NAILS:	One box of 1-1/2"	
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__ 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
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__ P. MATTRESS	MUST weigh between 65 - 80 pounds	
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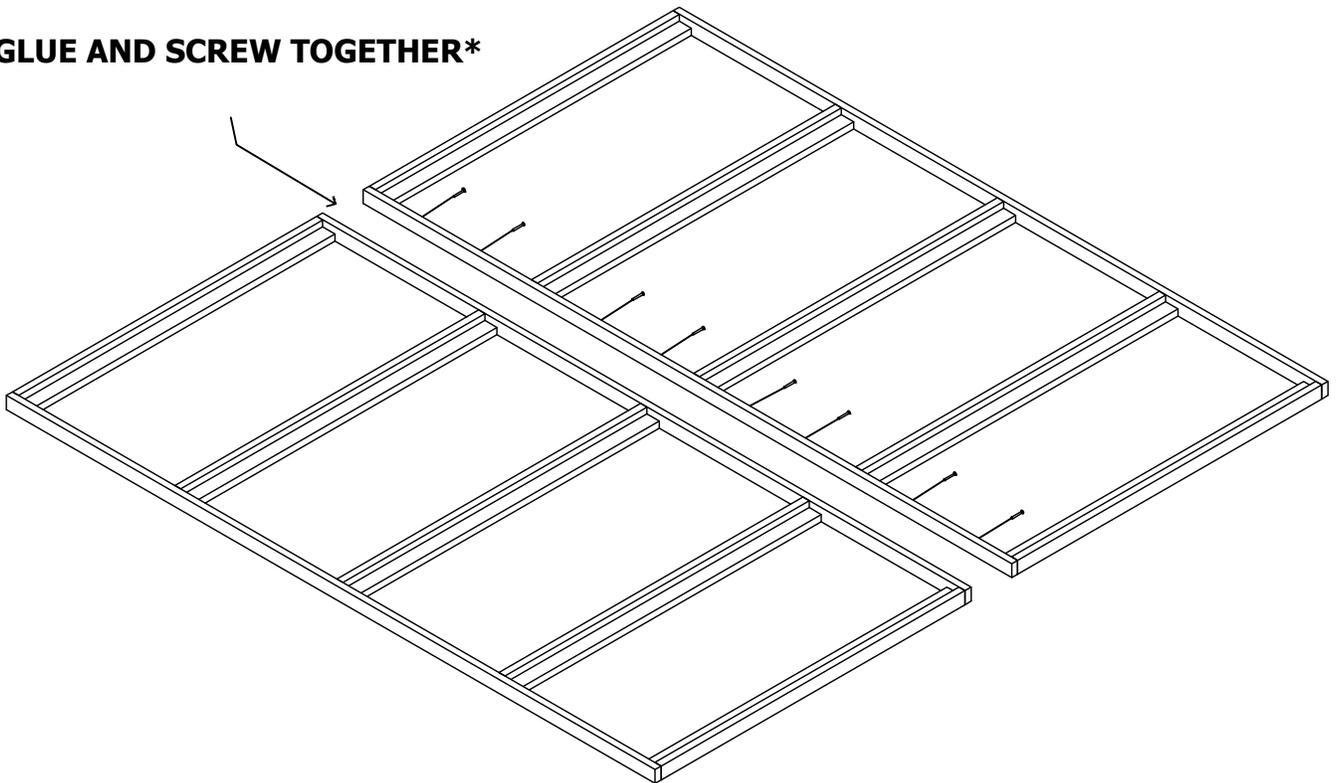
Your mattress dimensions must not exceed 76" x 80"

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

King Size Inner Bed Frame

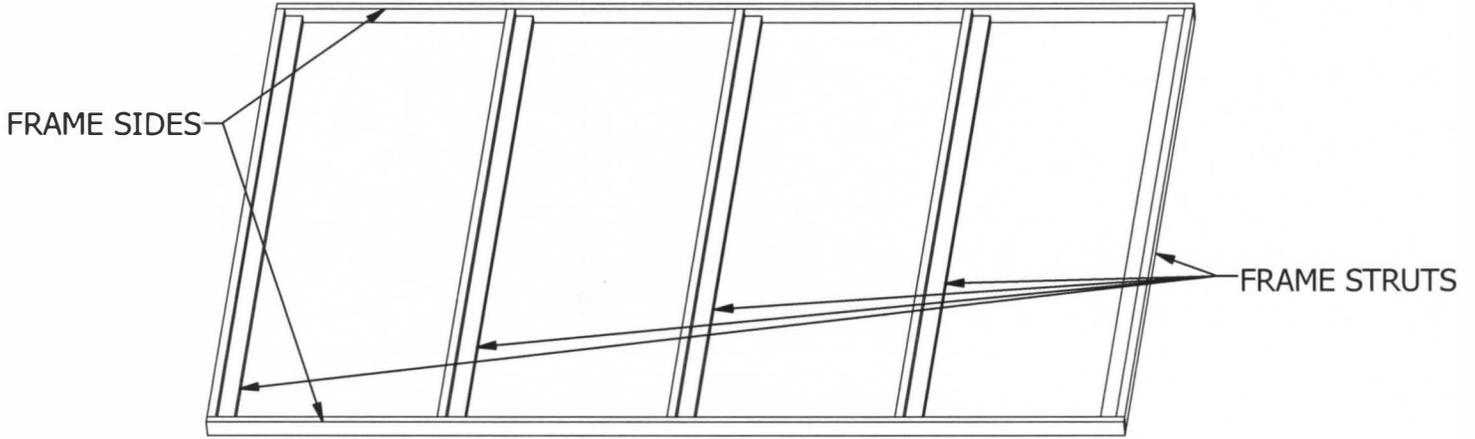
- Build Two Frames per instructions on page 7.
- After constructing the (2) inner wood bed frames(part A), glue and screw them together using 1-1/2" screws.

GLUE AND SCREW TOGETHER

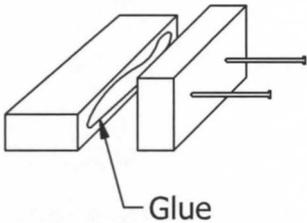


A. INNER WOOD BED FRAME

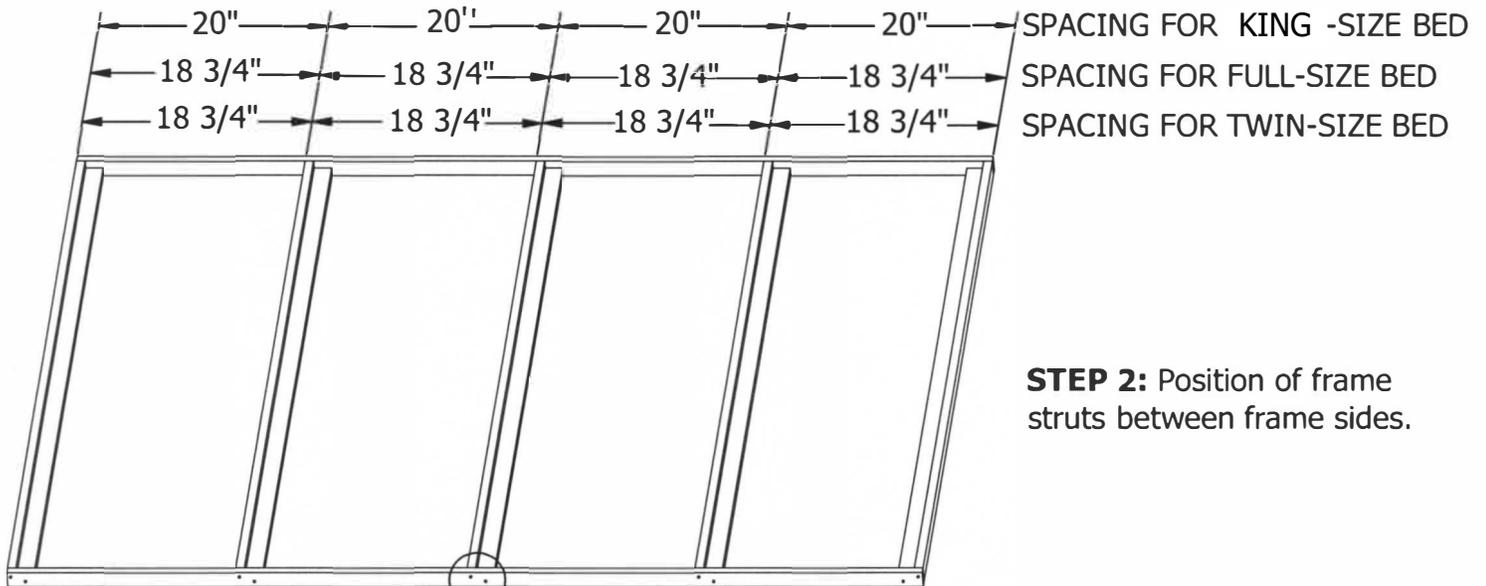
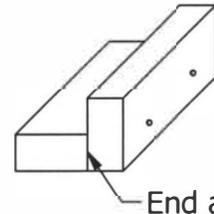
See Bill of Materials / Cut Sheet (PART A) for Twin, Full or King size frame struts and frame sides dimensions.



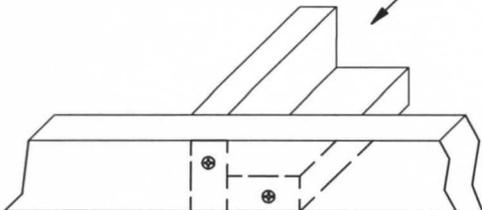
STEP 1: Construction of five (5) frame struts.



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.

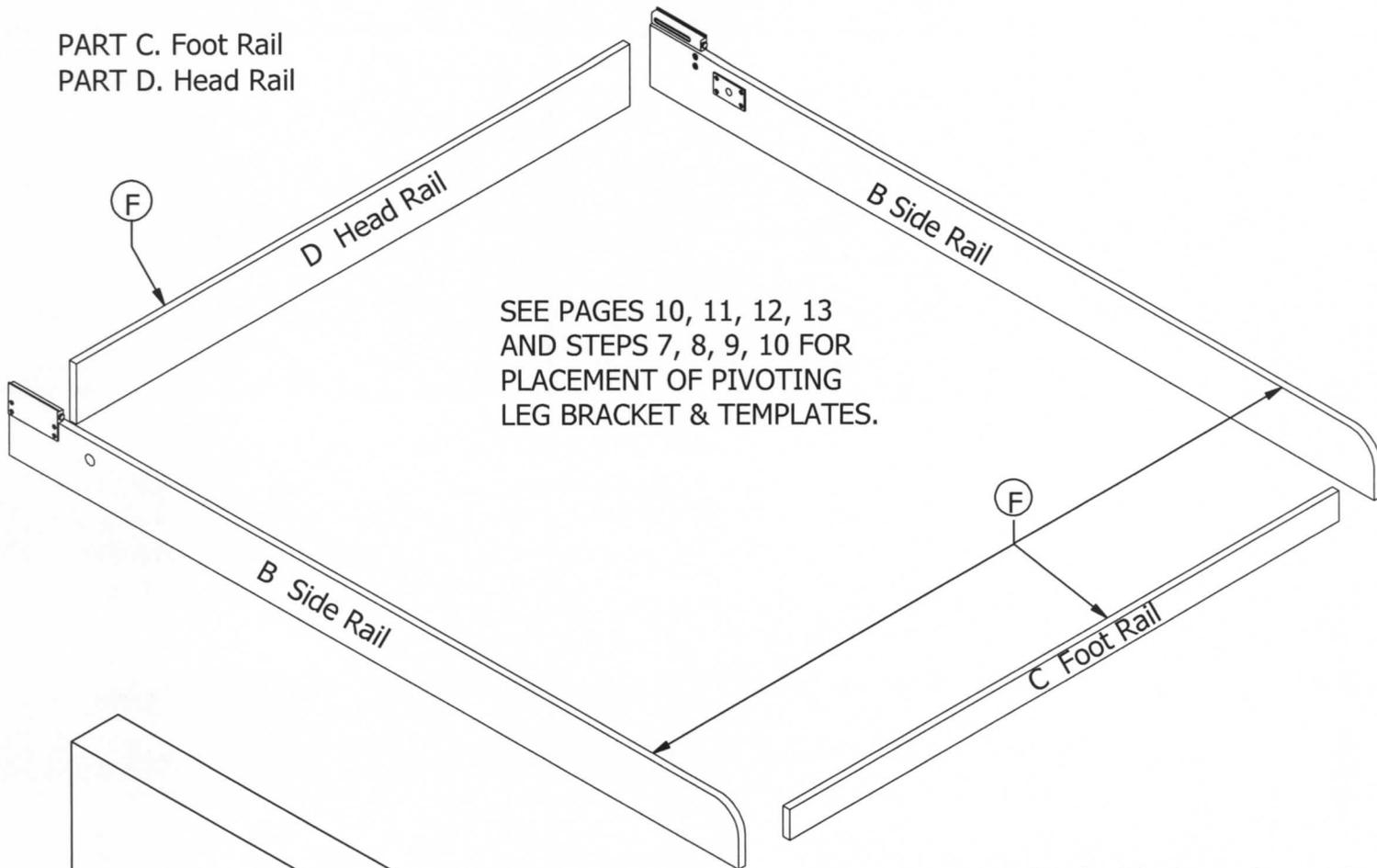


STEP 3: Mounting the frame struts between the frame sides. Using a 1/8" drill bit and countersink, drill pilot holes through the frame side into each end of the "L" shaped frame struts. Screw #8 x 2" wood screw flush.

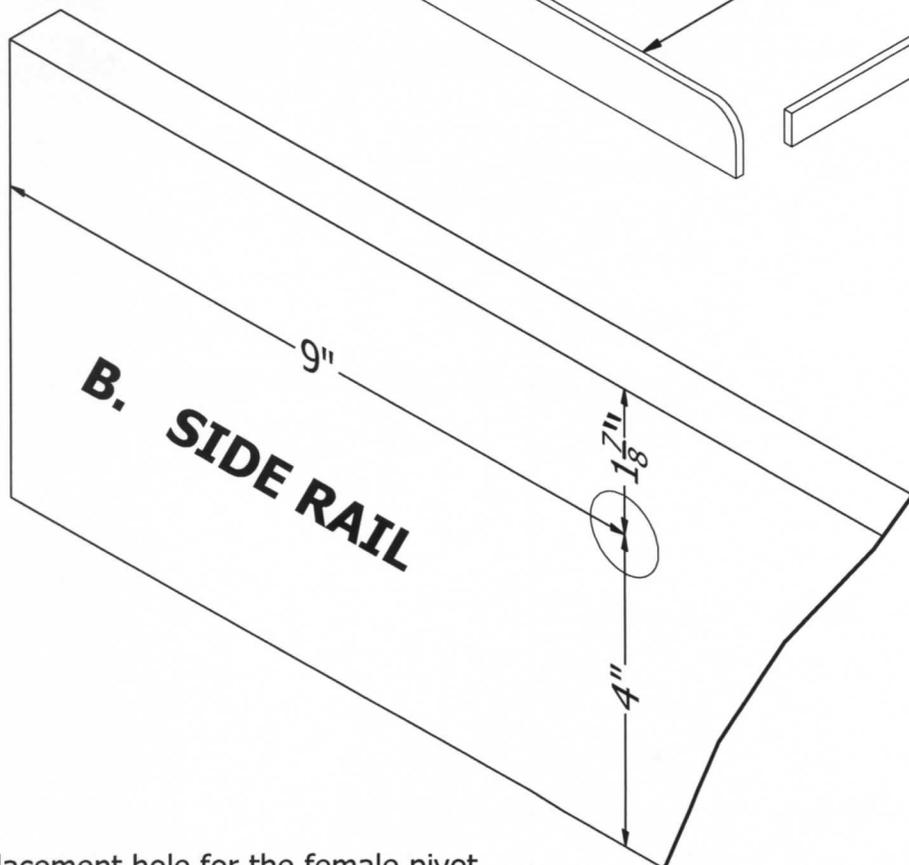
PART B. Side Rails: **(MUST BE MADE OF PLYWOOD)**

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



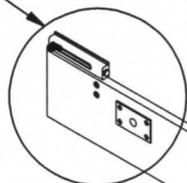
For a finished look, apply wood veneer or melamine edge banding tape to all edges marked **F**



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

HARDWARE PLACEMENT FOR B. SIDE RAILS

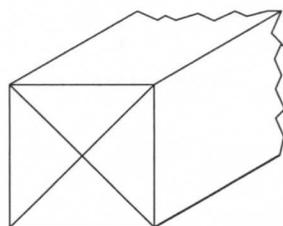
STEP 5: SEE PAGES 14, 15, 16, 17 AND STEPS 11, 12, & 13 FOR PLACEMENT OF **FEMALE PIVOT AND ADJUSTABLE LOWER BALL STUD PLATES.**



B. RIGHT SIDE RAIL

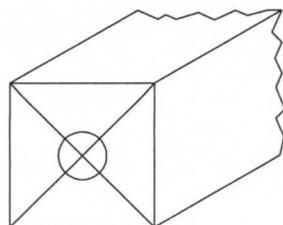
STEP 4: SEE PAGES 10, 11, 12, 13 AND STEPS 7, 8, 9, 10 FOR PLACEMENT OF **PIVOTING LEG BRACKET & TEMPLATES.**

B. LEFT SIDE RAIL



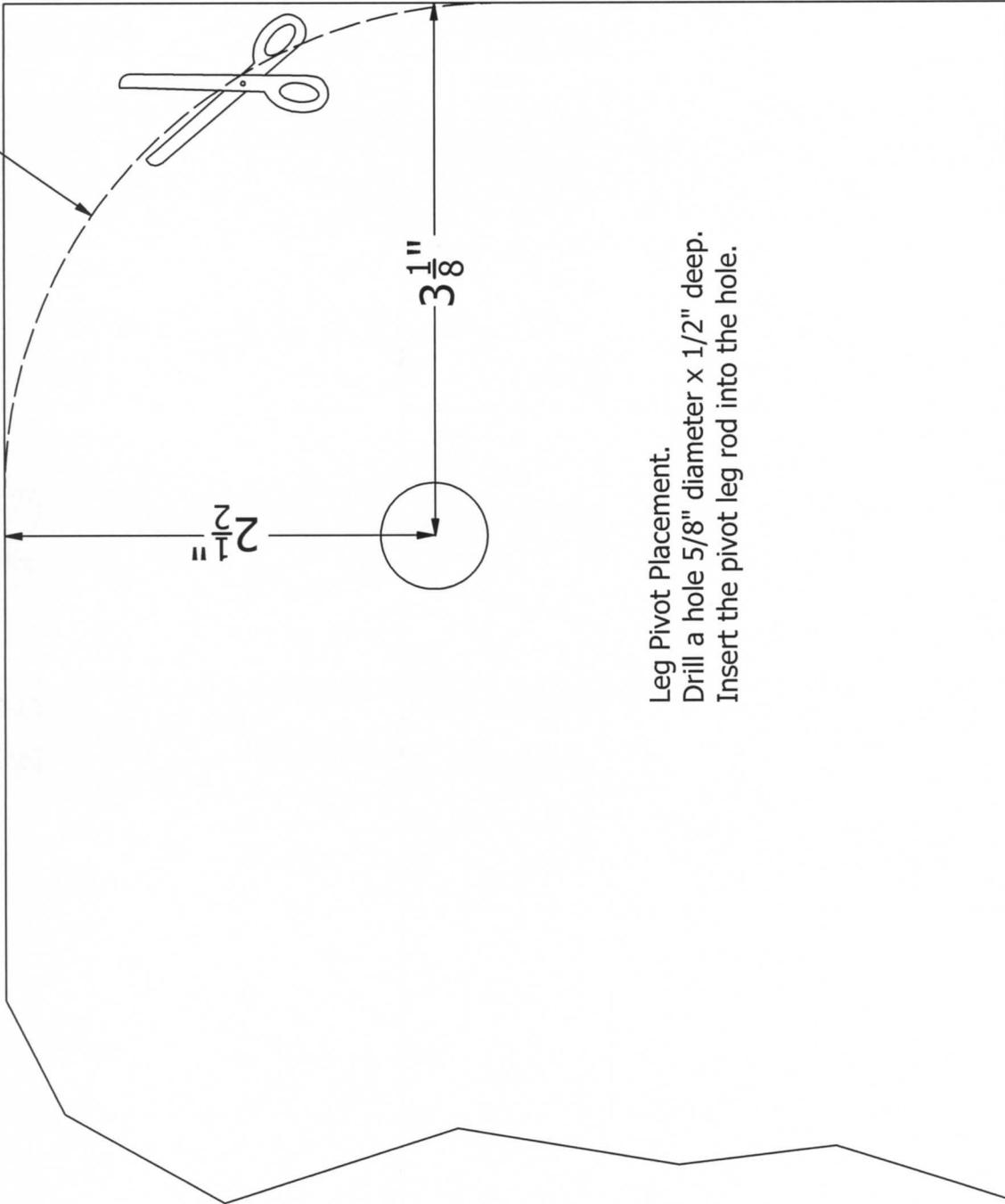
STEP 6: PART I. LEG SUPPORT RAIL SEE PAGE 6 FOR CUTTING DIMENSIONS.

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.

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

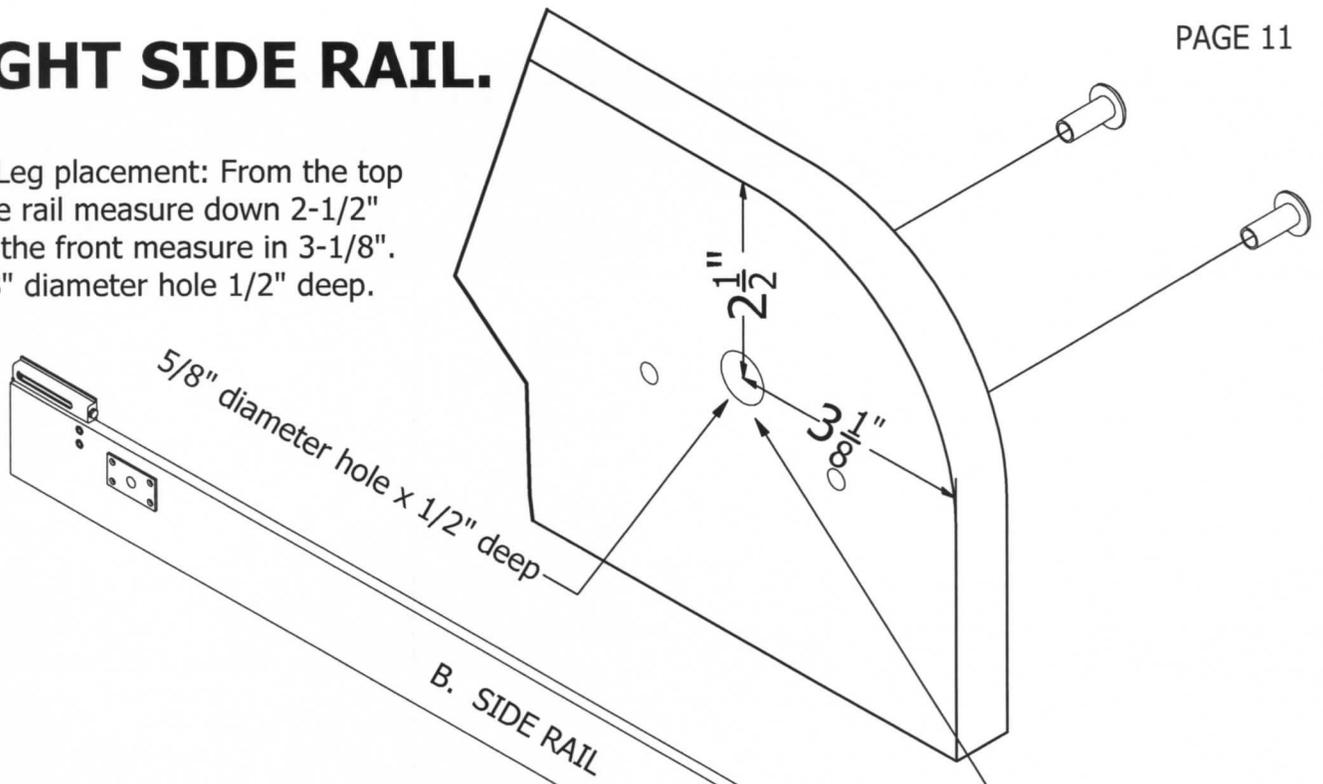


Leg Pivot Placement.
Drill a hole $\frac{5}{8}$ " diameter x $\frac{1}{2}$ " deep.
Insert the pivot leg rod into the hole.

RIGHT SIDE RAIL TEMPLATE

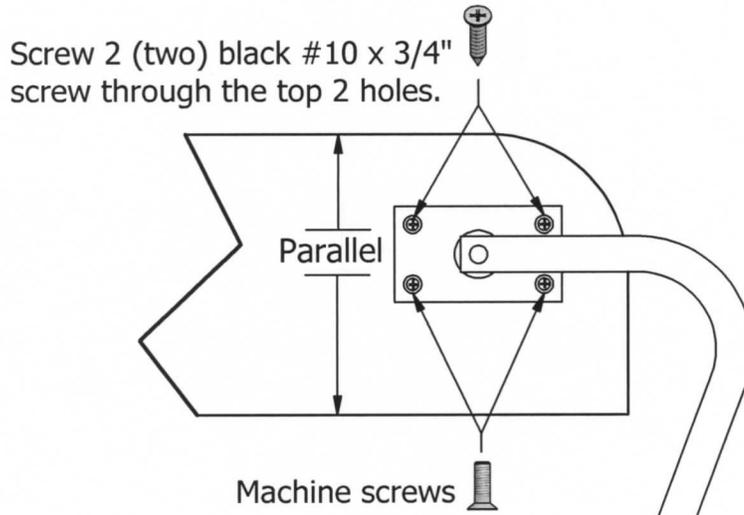
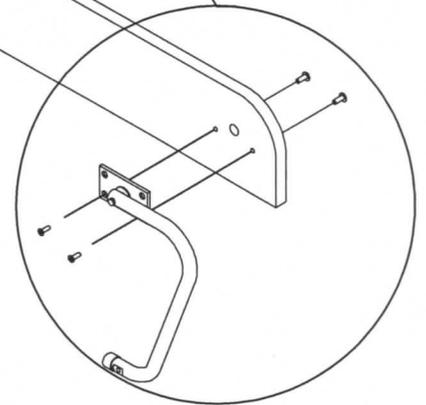
B. RIGHT SIDE RAIL.

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.

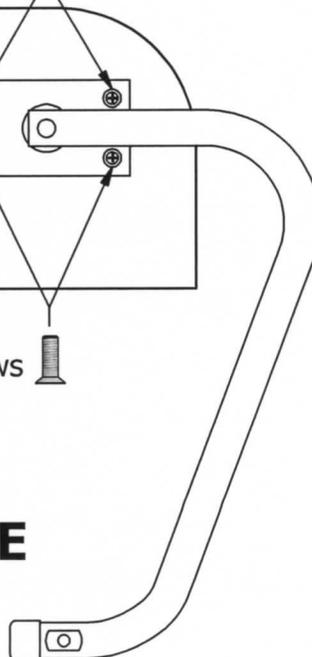


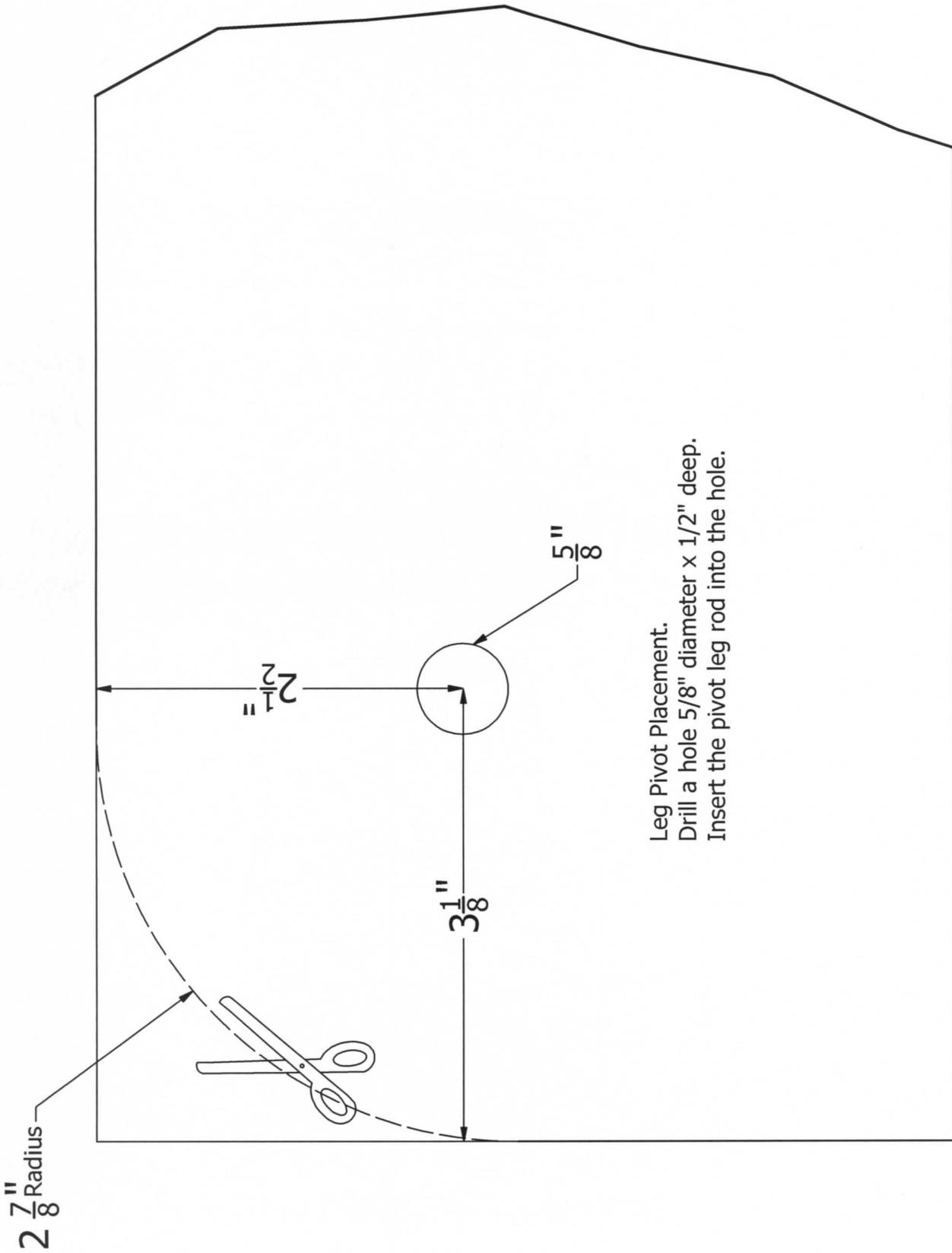
STEP 8: Place the leg pivot into the 5/8" hole. With the pivot plate parallel to the top & bottom of the side rail. Drill a 1/4" hole through the bottom 2 (two) holes in the plate through the side rails.

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**

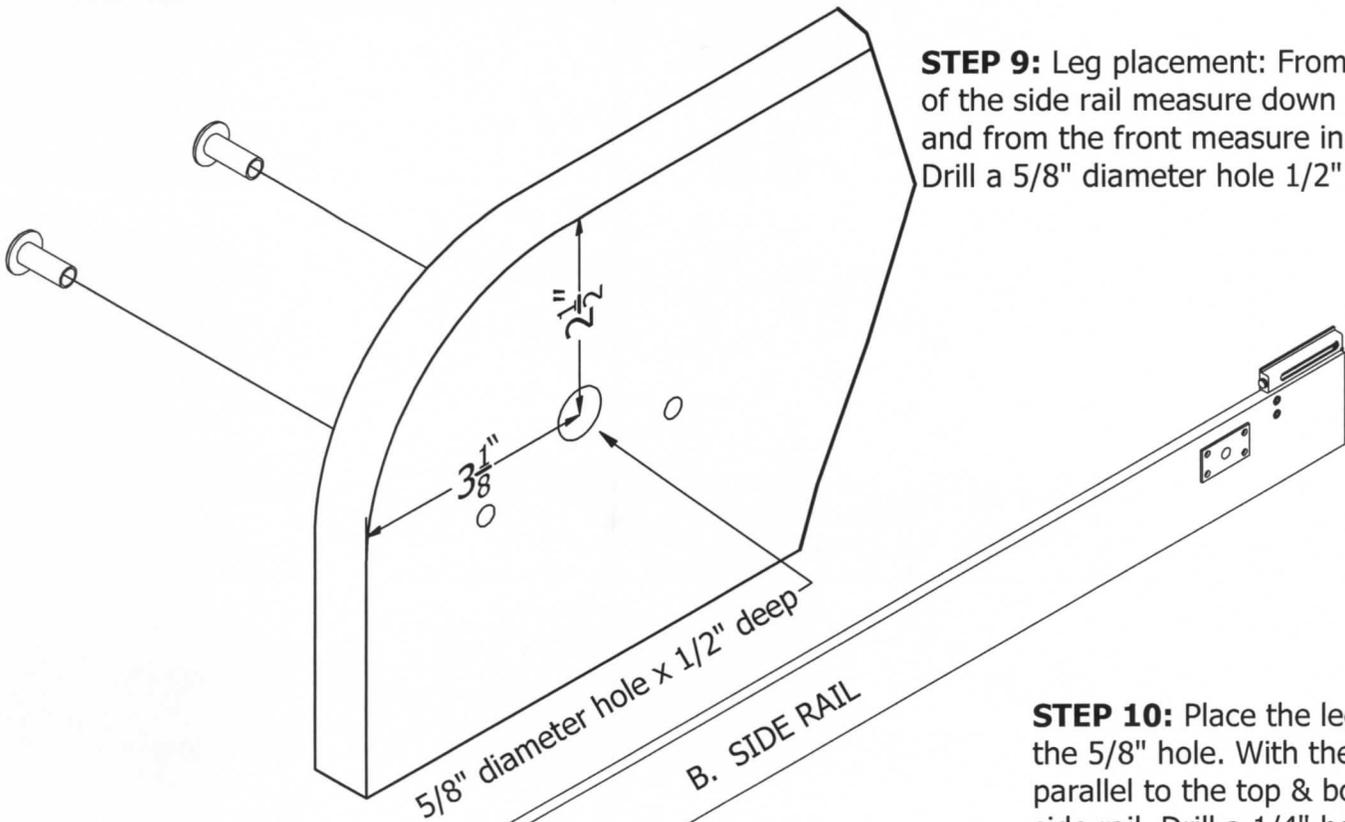




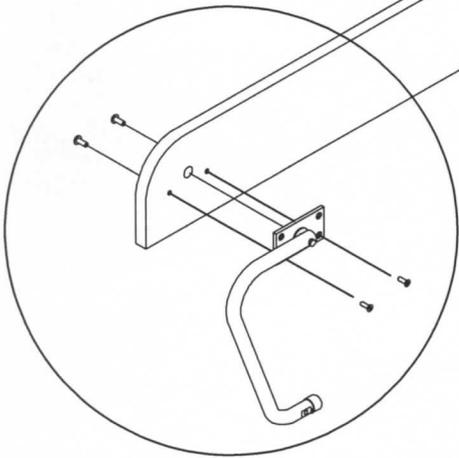
Leg Pivot Placement.
Drill a hole 5/8" diameter x 1/2" deep.
Insert the pivot leg rod into the hole.

LEFT SIDE RAIL TEMPLATE

B. LEFT SIDE RAIL.

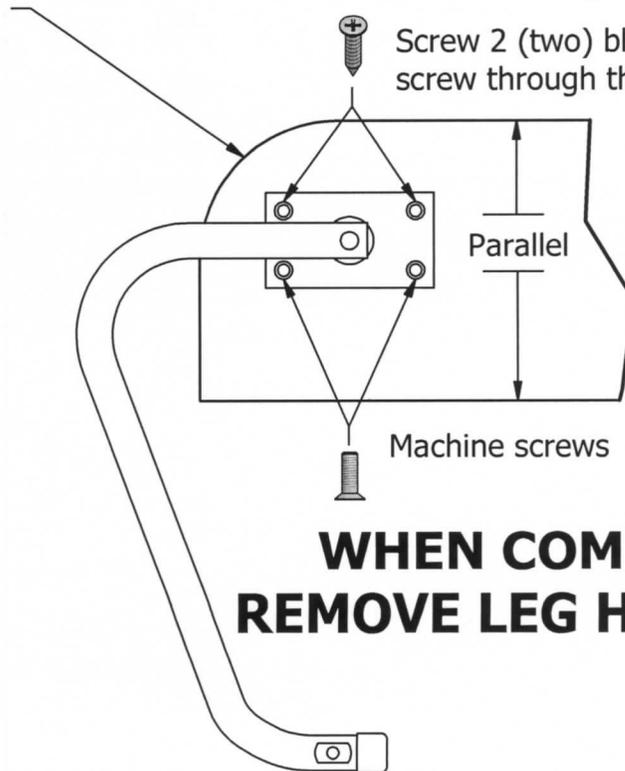


STEP 9: Leg placement: From the top of the side rail measure down 2-1/2" and from the front measure in 3-1/8". Drill a 5/8" diameter hole 1/2" deep.



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.

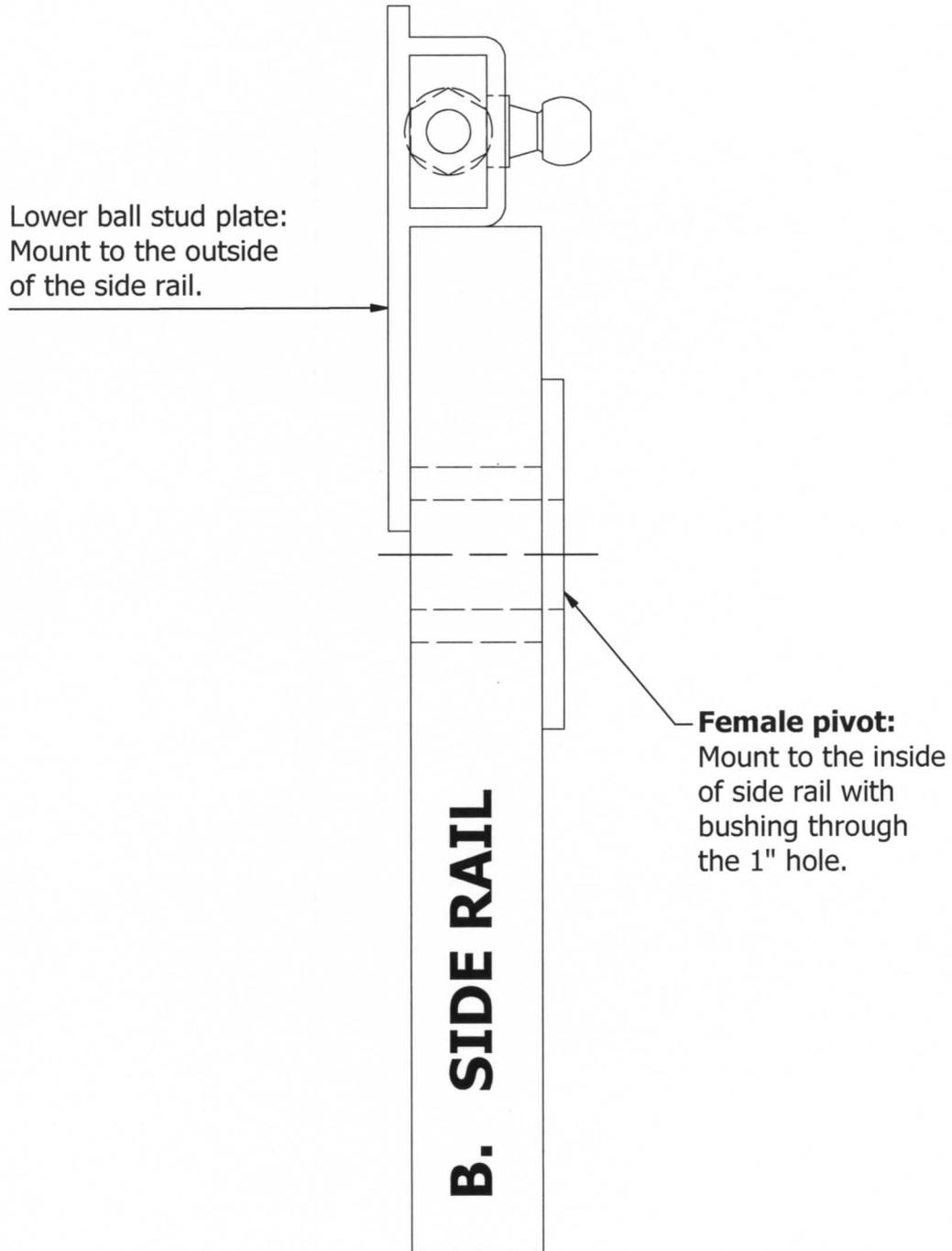


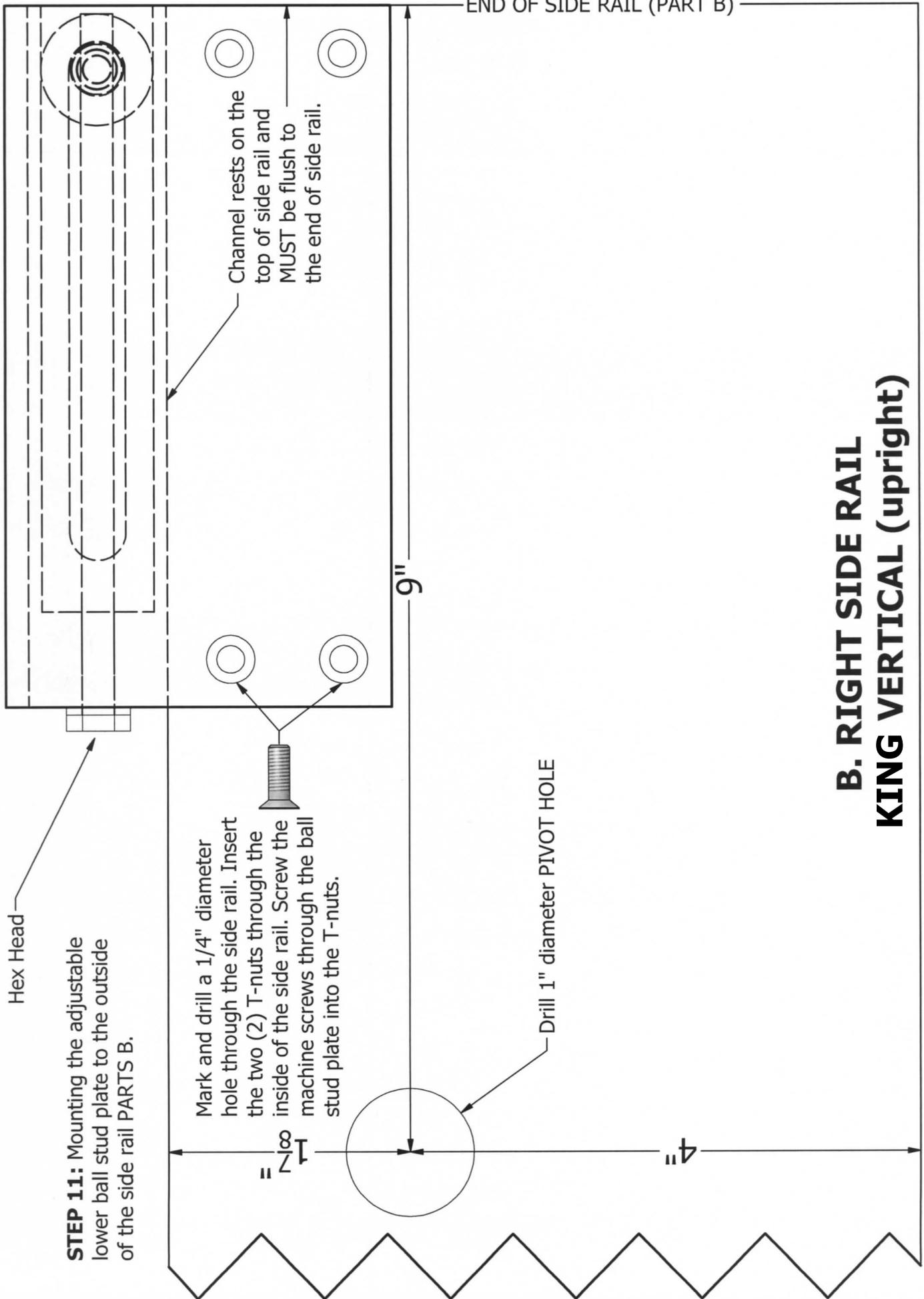
Screw 2 (two) black #10 x 3/4" screw through the top 2 holes.

Machine screws

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 KING VERTICAL (upright)

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

Hex Head

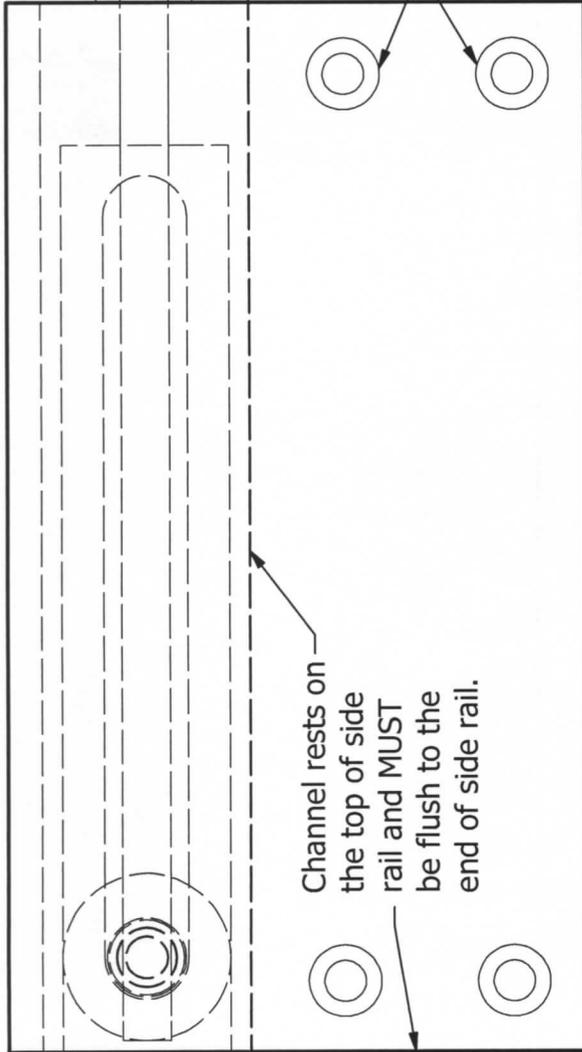
STEP 12: Mounting the adjustable lower ball stud plate to the outside of the side rail PARTS B.

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 ball stud screws through the ball stud plate into the T-nuts.



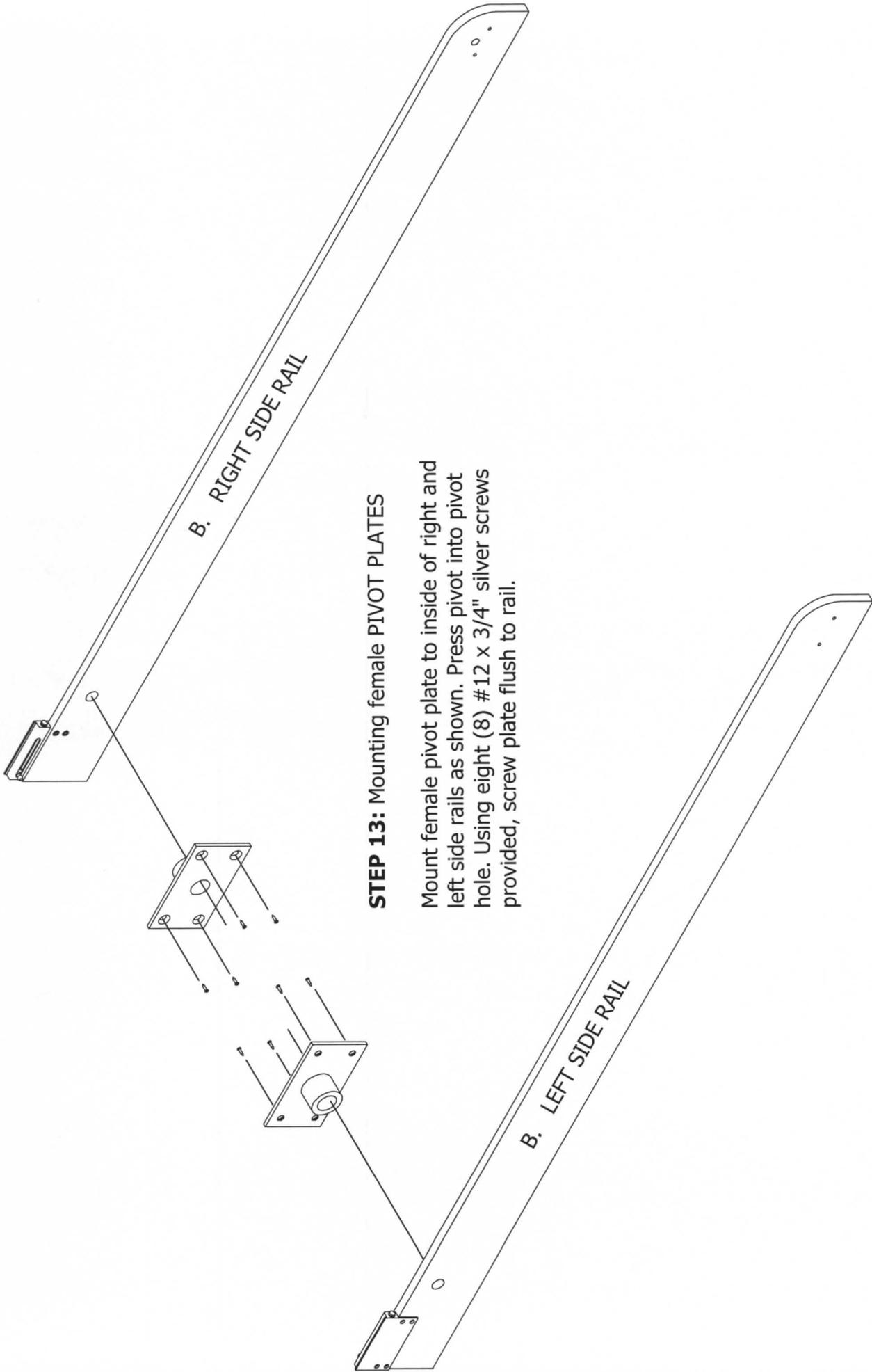
Drill 1" diameter PIVOT HOLE

Channel rests on the top of side rail and MUST be flush to the end of side rail.



END OF SIDE RAIL (PART B)

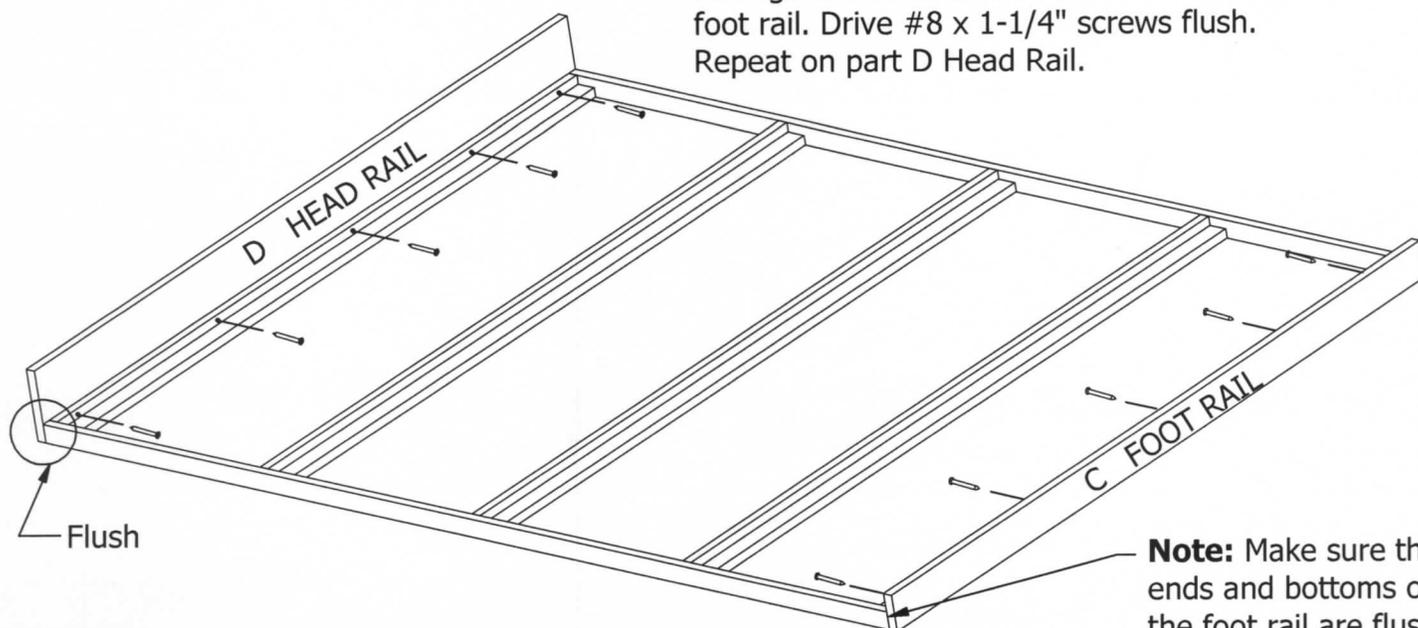
B. LEFT SIDE RAIL KING VERTICAL (upright)



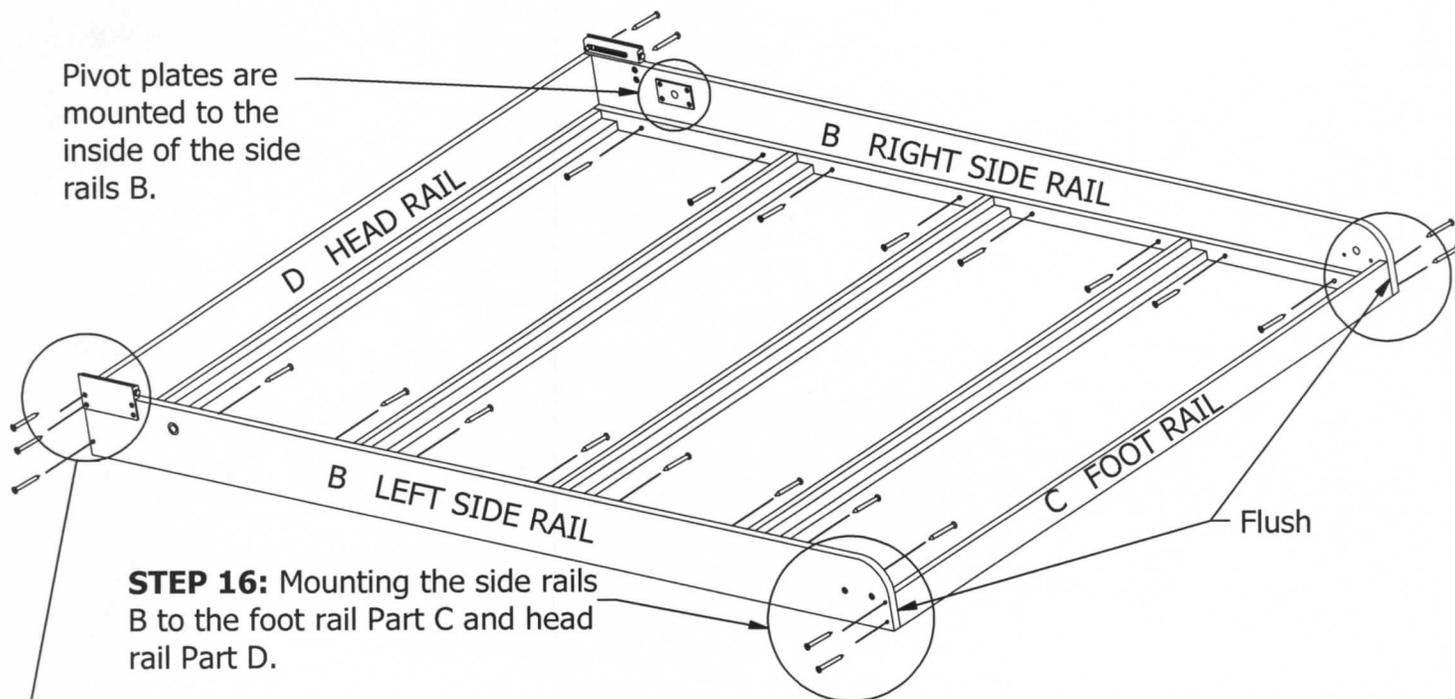
STEP 13: Mounting female PIVOT PLATES

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.

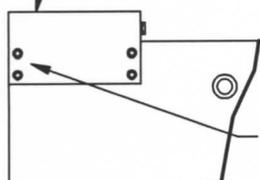


STEP 15: Mounting left and right side rail to inner wood bed frame. Using an 1/8" drill bit, drill two holes between each strut (total of 8 holes per rail) 1-1/4" deep through the frame side into the side rails. Drive #8 x 1-1/4" wood screws flush, snugging inner wood bed frame to the side rail.



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.



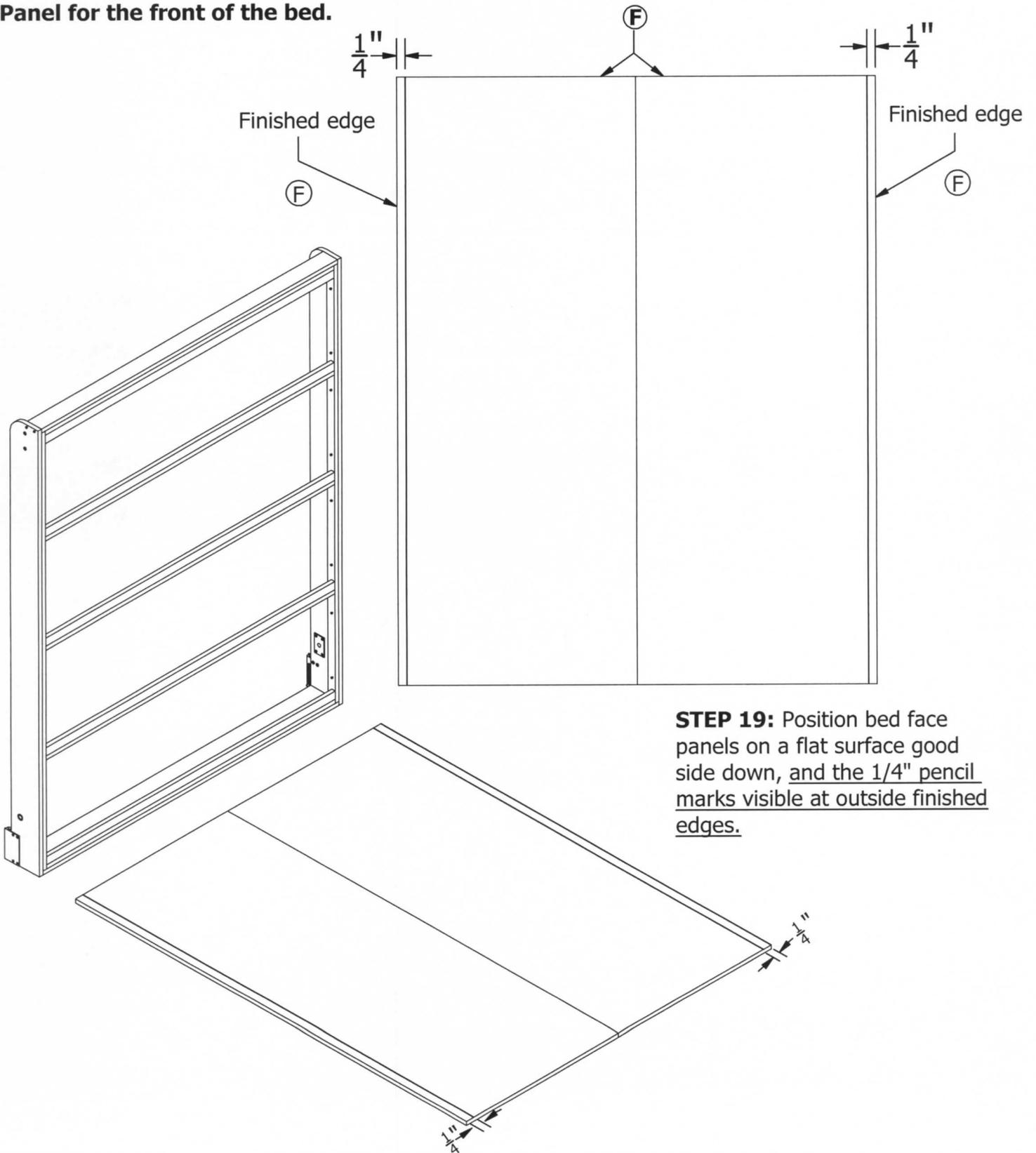
Screw two (2) #8 x 1-5/8" screws through ball stud plate into end of head rail. Repeat at other end of head rail.

STEP 17:

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

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

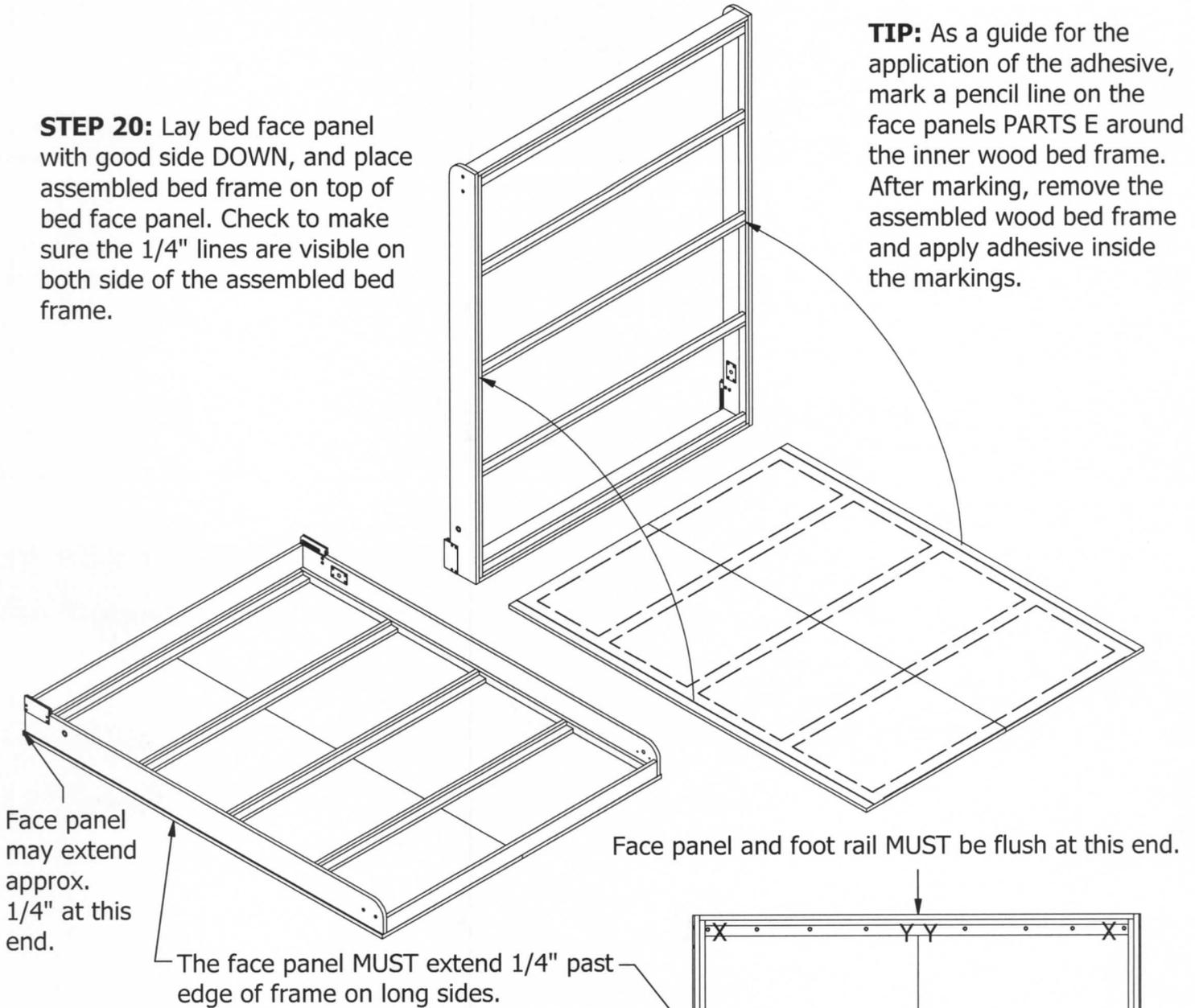
STEP 18: Turn face panels over. On back side, mark a 1/4" line the full length of the panel along finished long edge.



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 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.

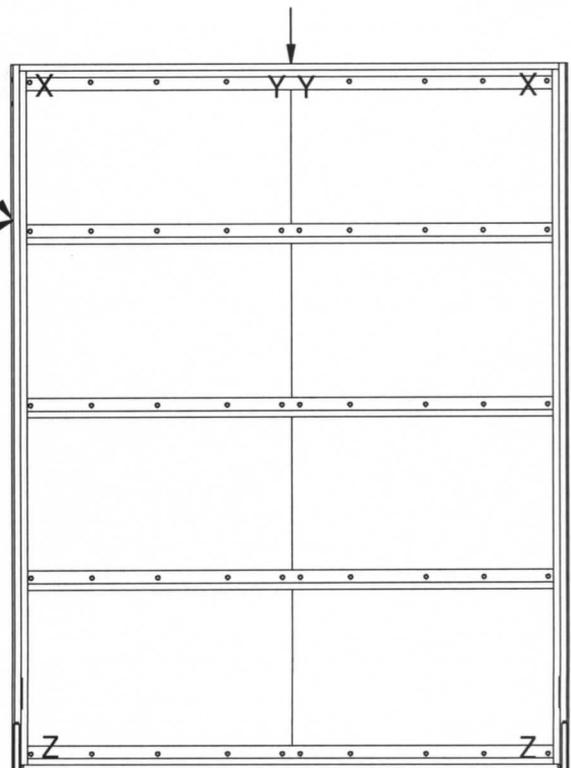


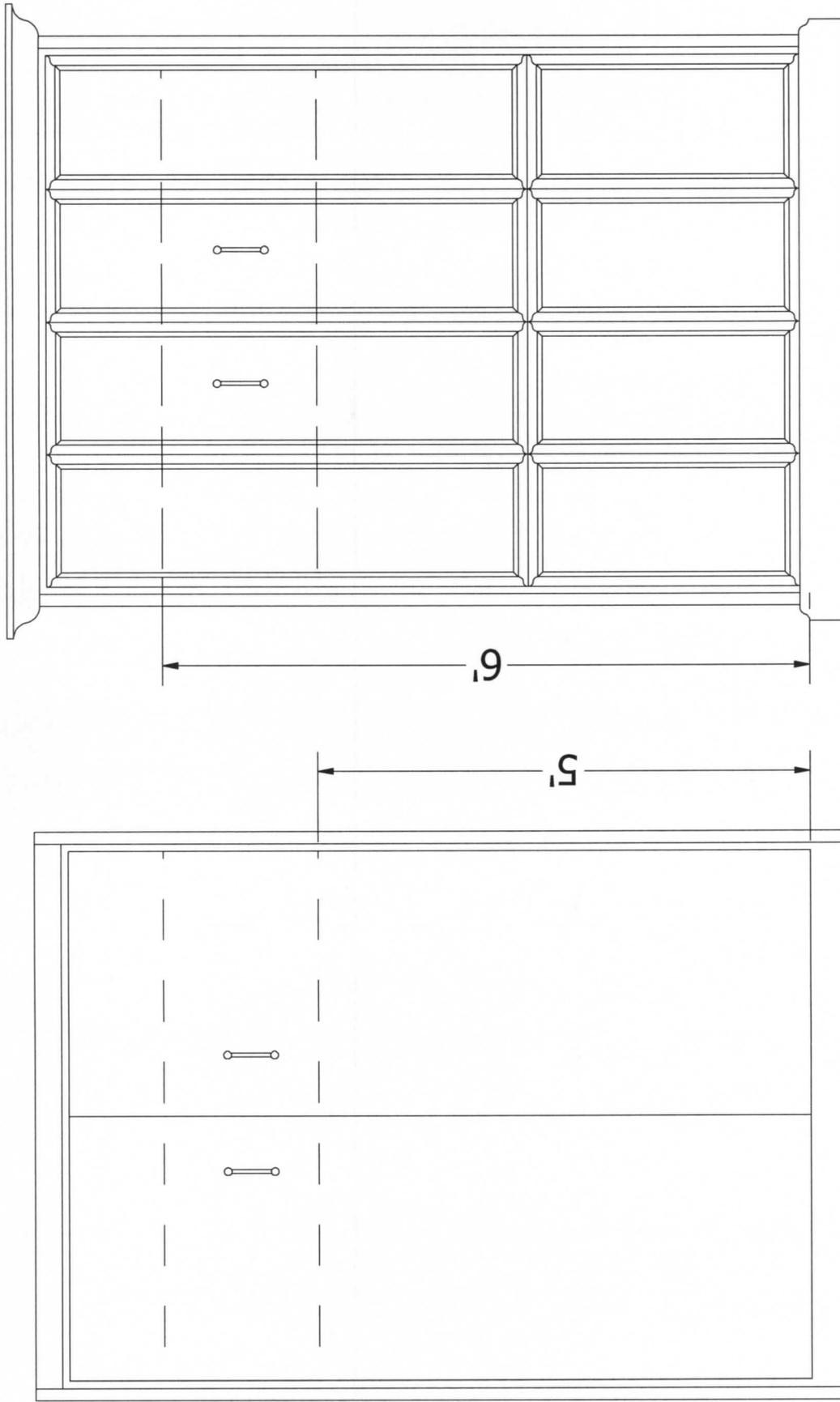
STEP 21: Make sure face panel and foot rail are flush and that face panel extends 1/4" past edge of wood bed frame on long sides.

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.

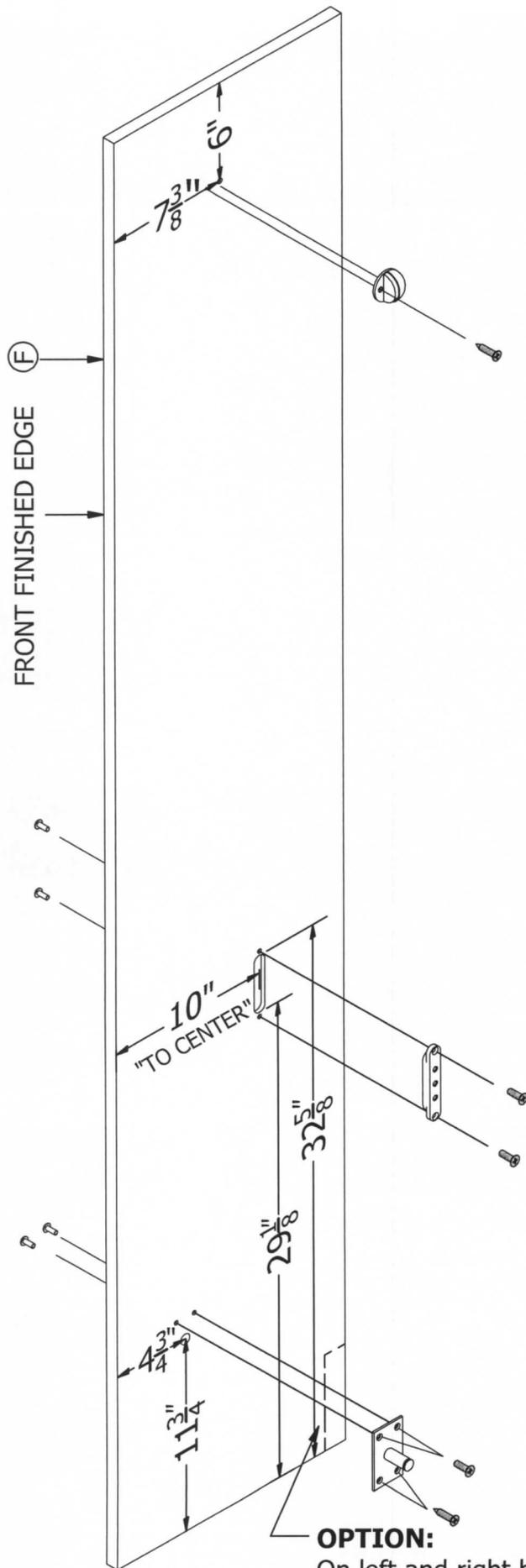
Screw remaining struts to face panel 6" apart.





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 King Vertical (Upright).



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 King Vertical (Upright).

STEP 25:

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 26:

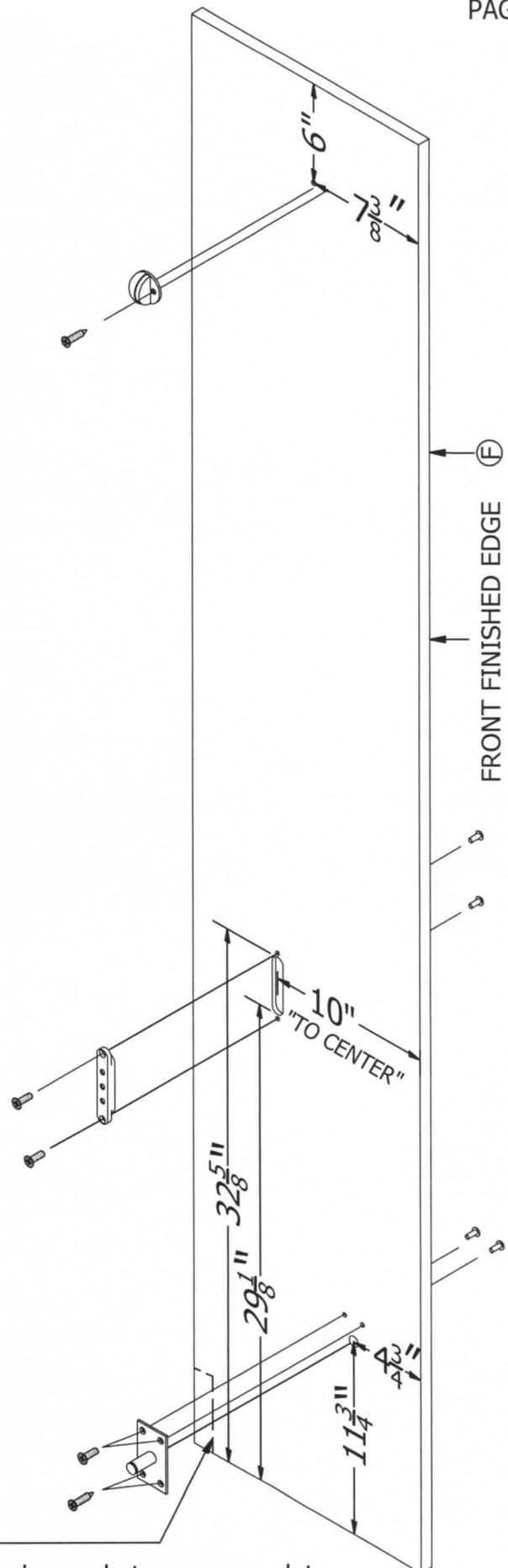
ADJUSTABLE UPPER BALL STUD PLATE: Rout out $\frac{3}{4}$ " x $\frac{1}{4}$ " deep x $3\frac{1}{2}$ " long and insert the adjustable upper plate into hole. Drill $\frac{1}{4}$ " holes through the mounting locations and secure with "T" Nuts and machine screws.

STEP 27:

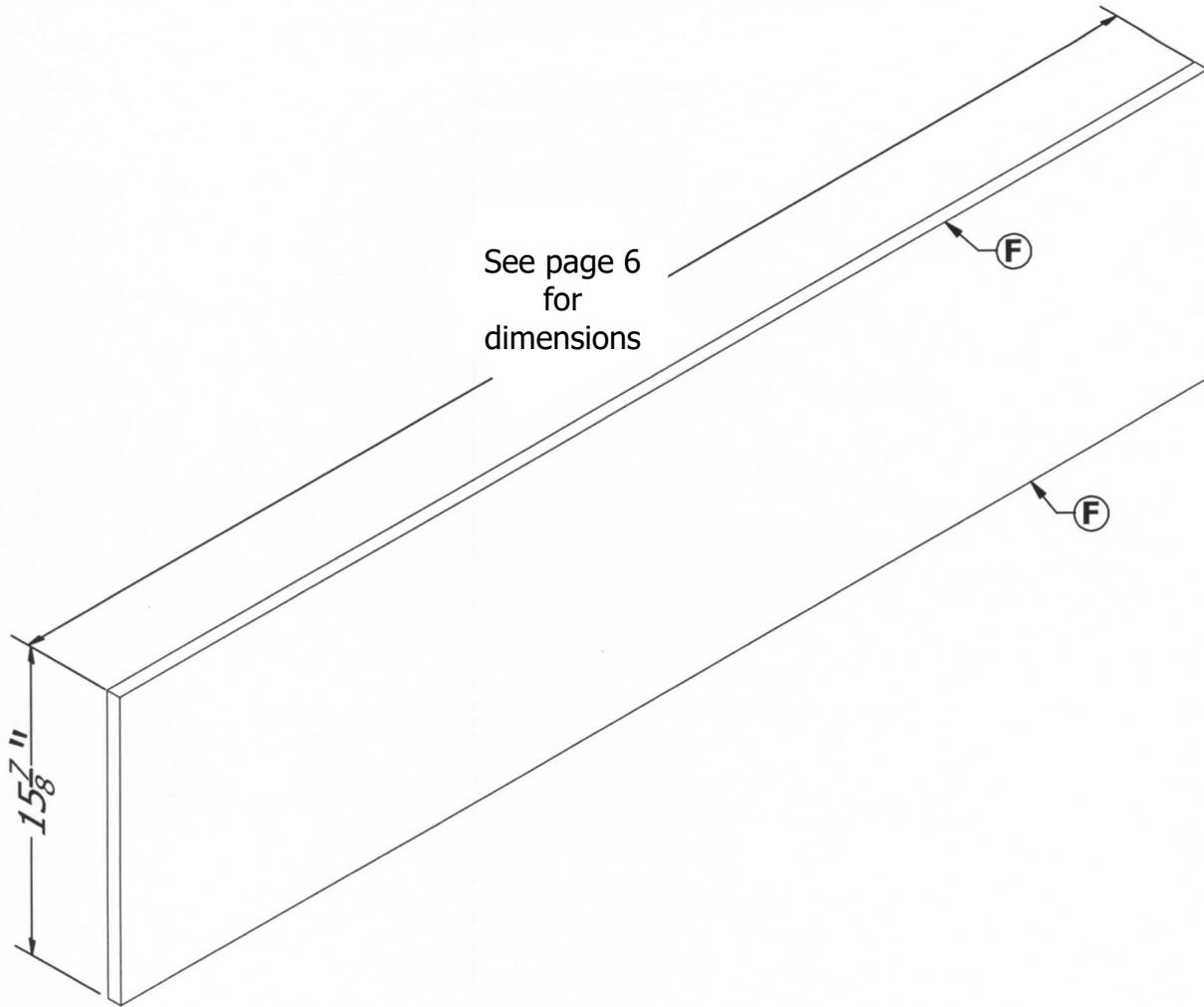
MALE PIVOT PLATE: Drill a hole $\frac{5}{8}$ " diameter x $\frac{1}{2}$ " deep. Insert the $\frac{1}{2}$ " end of rod into hole. Drill two (2) holes $\frac{1}{4}$ " diameter through the vertical using the upper holes in the pivot plate as a guide. Tap "T" Nuts into two (2) upper holes from outside, then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



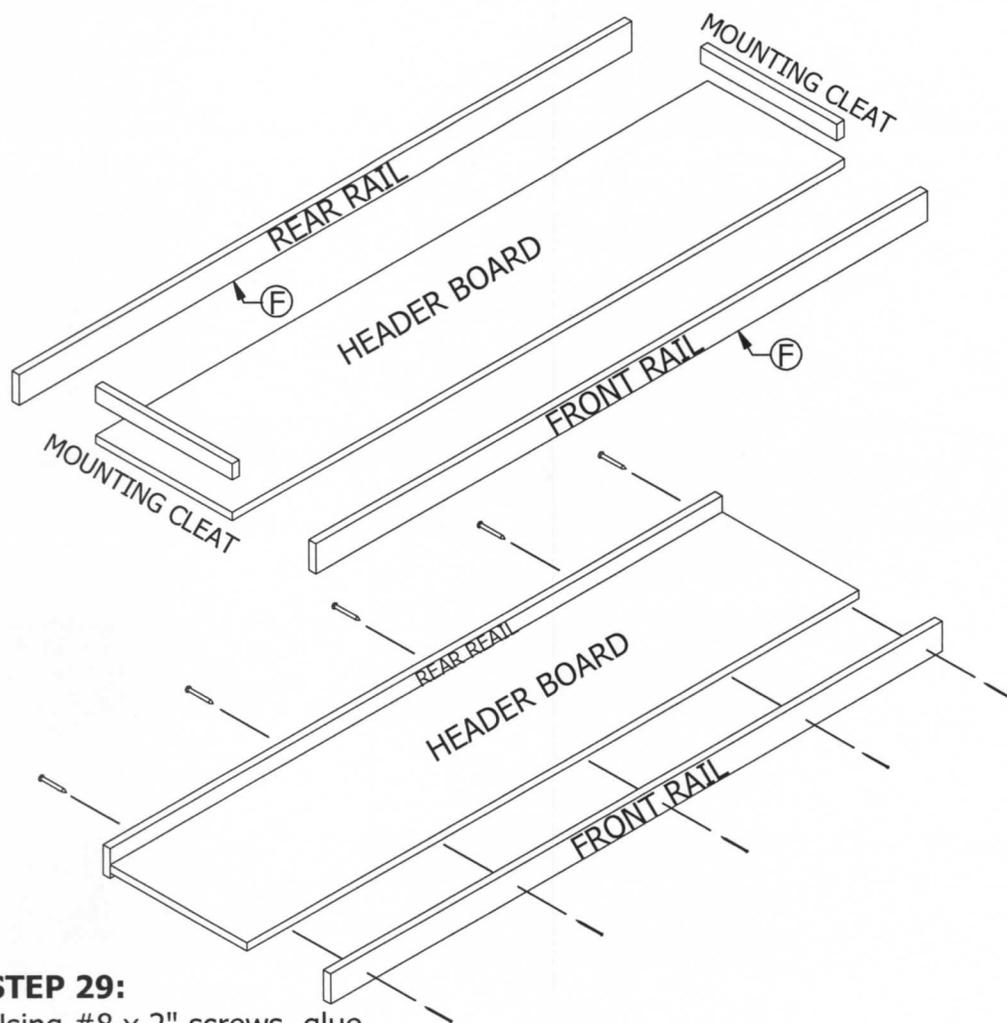
PART F: BED HEADBOARD



STEP 28:

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

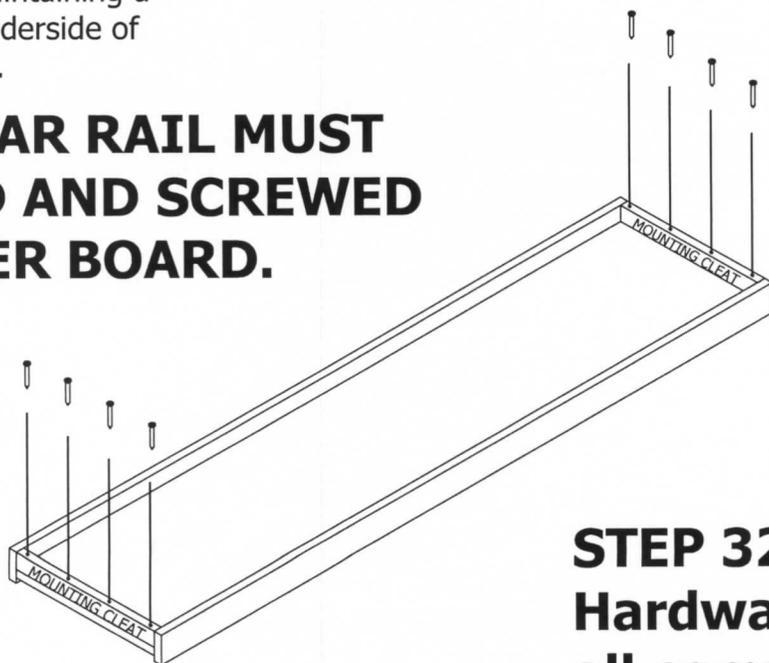
PART H: BED HEADER COMPONENTS



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.

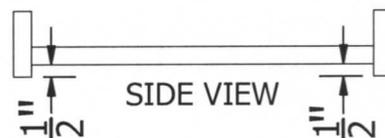
NOTE: REAR RAIL MUST BE GLUED AND SCREWED TO HEADER BOARD.



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 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!