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 <u>WEIGHT</u> and <u>THICKNESS</u> specifications:

SIZE OF BED	THICKNESS (including any pillow top)	WEIGHT
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

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

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

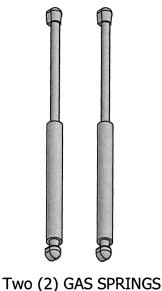
1800 Taylor Avenue Louisville, KY 40213

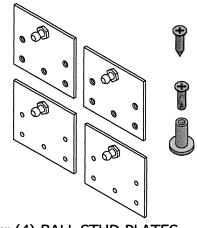
www.createabed.com

TOLL FREE: 1-877-966-3852

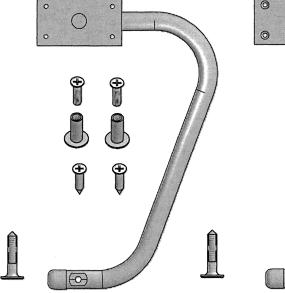
Create-A-Bed ®LLC

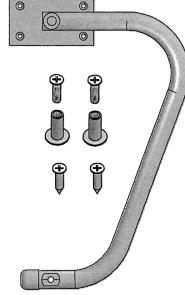
FULL VERTICAL (UPRIGHT) murphy bed mechanism PLYWOOD CONSTRUCTION





Four (4) BALL STUD PLATES with twelve (12) black #10 x 3/4" SCREWS and eight (8) "T" nuts with machine SCREWS







Two (2) 1/4" x 2" Leg Support Rail SCREWS

Four (4) Black #10 x 3/4" SCREWS

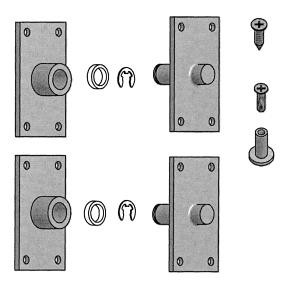
Four (4) "T" Nuts with machine SCREWS

One (1) Green PLYWOOD CONSTRUCTION booklet

One (1) Purple ASSEMBLY AND INSTALLATION booklet

Online Video: bit.ly/deluxeverticalvideo

© CREATE-A-BED LLC 2012, 2018, 2021



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





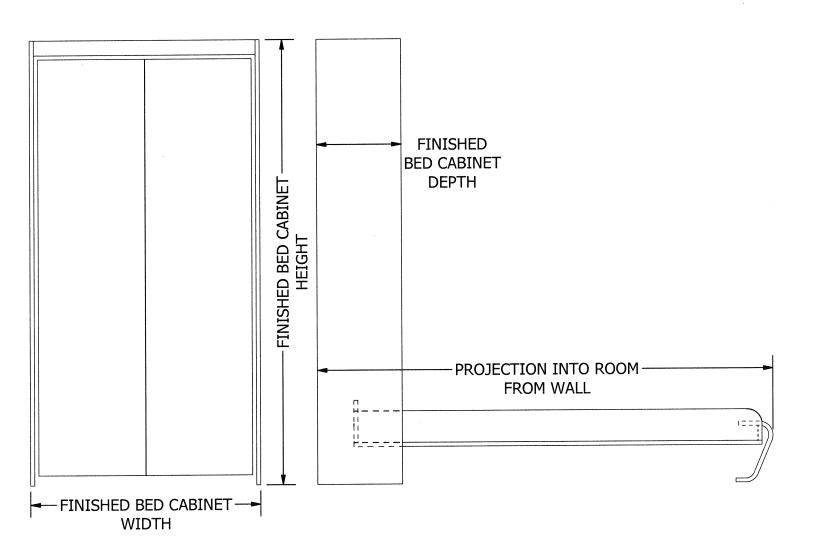


Two (2) BED STOPS with two (2) #10 x 3/4" black SCREWS



Two (2) ELASTIC MATTRESS RETAINING STRAPS

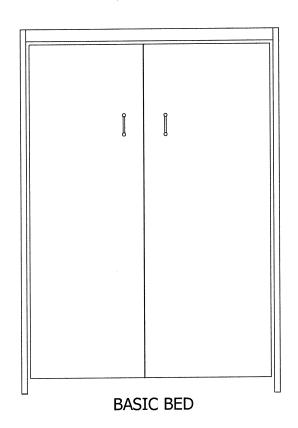
Out-to-out dimensions of **VERTICAL STYLE** murphy bed cabinet constructed using the $Create-A-Bed^{\, @}$ mechanism

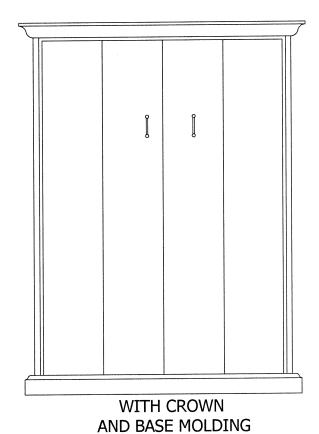


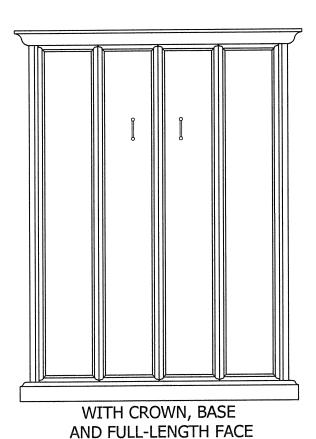
OUTSIDE-EDGE TO OUTSIDE-EDGE FINISHED VERTICAL BED CABINET DIMENSIONS

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

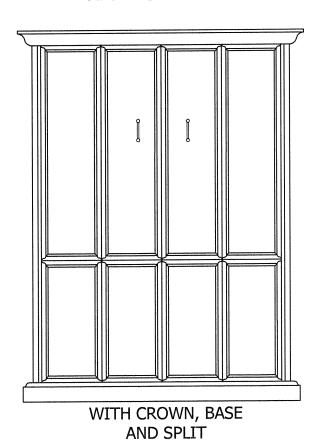
Some design options... or create your own!



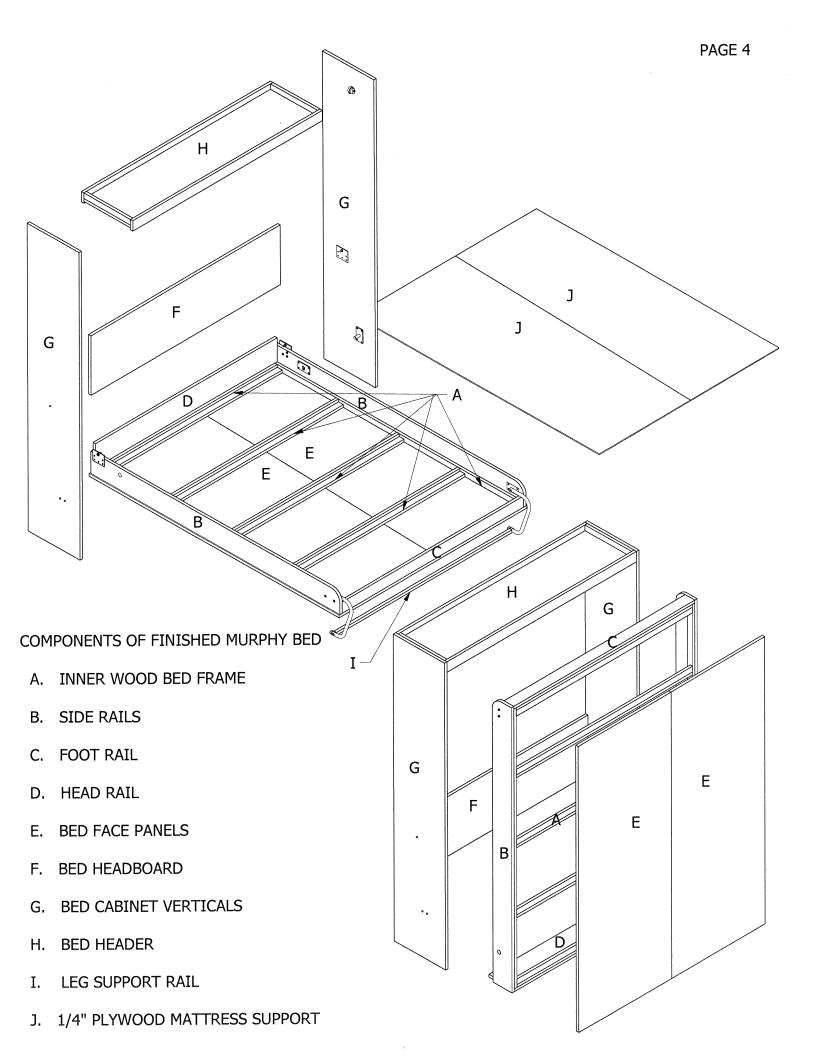




PANEL MOLDING



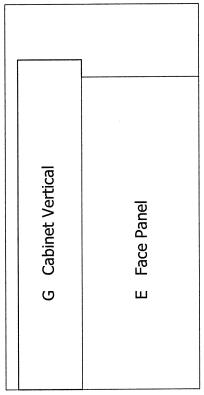
FACE PANEL MOLDING



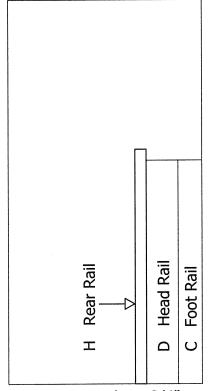
Full Size Vertical Plywood Cutting Guide Requires: 4 sheets of 3/4" x 4' x 8' and

2 sheets of 1/4" x 4' x 8'

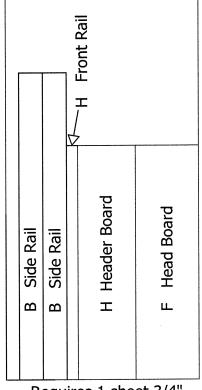
NOTE: Refer to page 6 for the cutting dimensions.



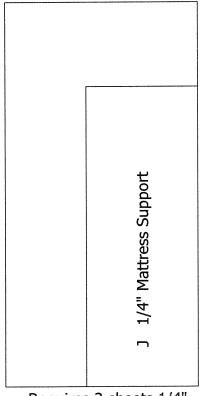
Requires 2 sheets 3/4"



Requires 1 sheet 3/4"



Requires 1 sheet 3/4"



Requires 2 sheets 1/4"

FULL SIZE (double) DELUXE KIT VERTICAL BED WITH 3/4" PLYWOOD FACE PANEL BILL OF MATERIALS / CUT SHEET

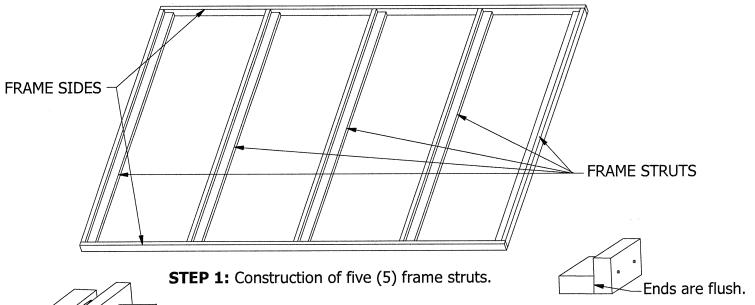
DO NOT SUBSTITUTE OTHER MATERIALS without calling Create-A-Bed toll-free FIRST

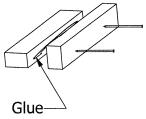
check off as completedA. INNER WOOD BED FRAME: *To be cor	nstructed of solid wood: poplar, c	lear pine, maple, etc 10 pieces
FRAME STRUTS: *SOLID WOOD* FRAME SIDES: *SOLID WOOD*		2 pieces
IMPORTANT: PLYWOOD No. 1. SIDE RAILS:	<u>IUST</u> BE USED FOR THESE PIE 3/4" X 5-7/8" X 76-1/2"	
C. FOOT RAIL:	3/4" X 3" X 56"	1 piece
D. HEAD RAIL:	3/4" X 7-7/8" 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: FRONT RAIL: REAR RAIL: MOUNTING CLEATS:* SOLID WOOD *	3/4" X 14-3/8" X 58-3/8" 3/4" X 2-3/4" X 58-3/8" 3/4" X 2-3/4" X 58-3/8" 3/4" X 1-1/2" X 14-3/8"	1 piece 1 piece 1 piece 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	One box of 1-1/2"	
N. SCREWS:	#8 1-1/4" coarse thread #8 1-1/2" coarse thread #8 2" coarse thread	Box of 100 Box of 30 Box of 40
O. DESIRED CABINET HANDLES OR PU	LLS	2 HANDLES
P. MATTRESS	MUST weigh between 50 - 65	pounds

Your mattress dimensions must not exceed 54" x 75"

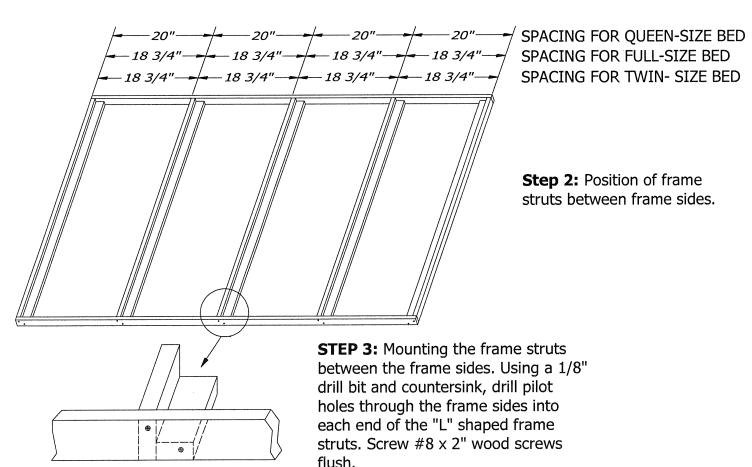
Mattress thickness CANNOT exceed 12" in thickness – including pillow top.

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





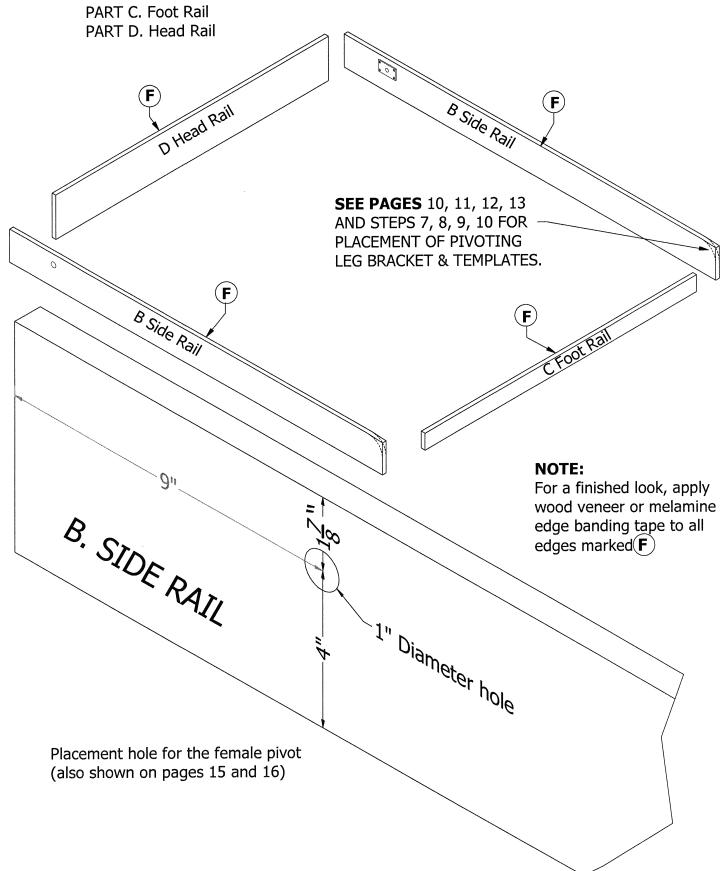
Run a bead of wood glue along inside edge. Making sure ends are flush, drill pilot holes approximately 8" apart and nail with 1-1/2" finish nails, or you can use $\#8 \times 1-1/2$ " screws.



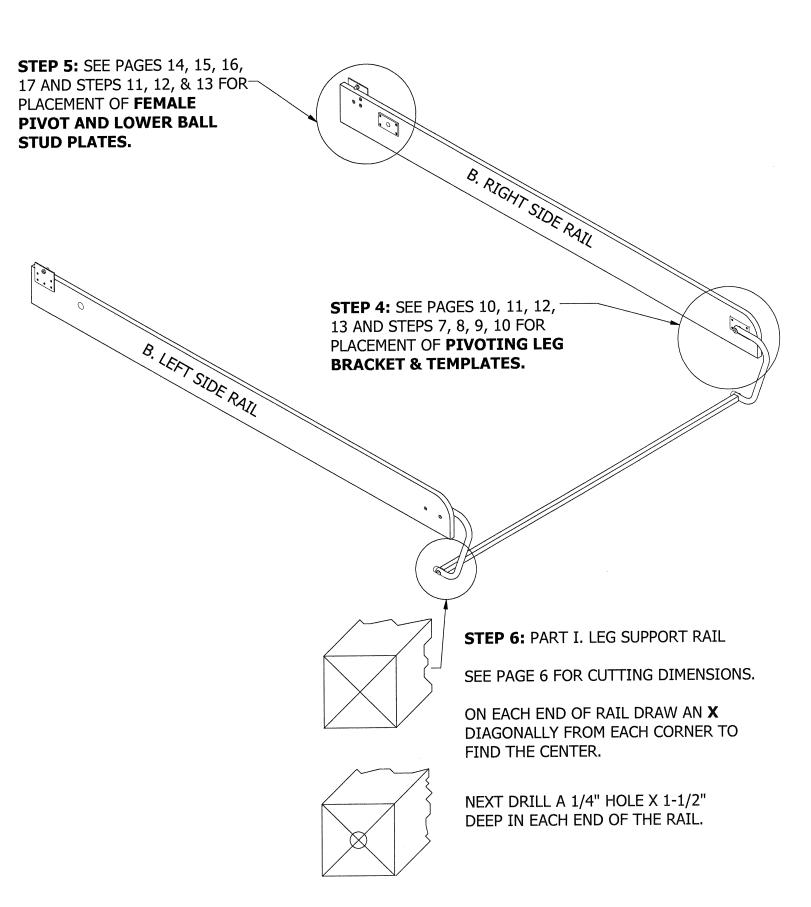
PART B. Side Rails: (MUST BE MADE OF PLYWOOD)

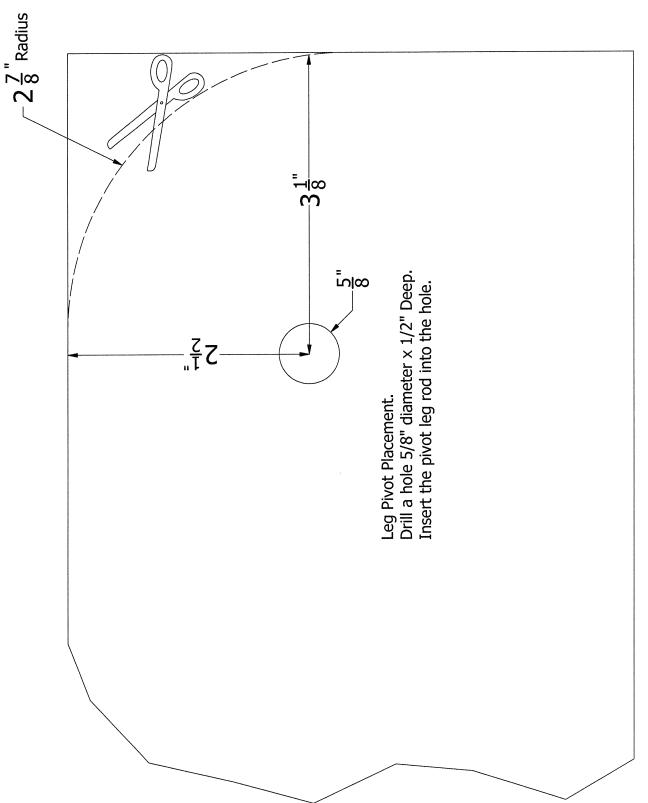
Why?.. This is where the stress takes place. Plywood is stronger than solid wood.

YES EVEN SOLID OAK......



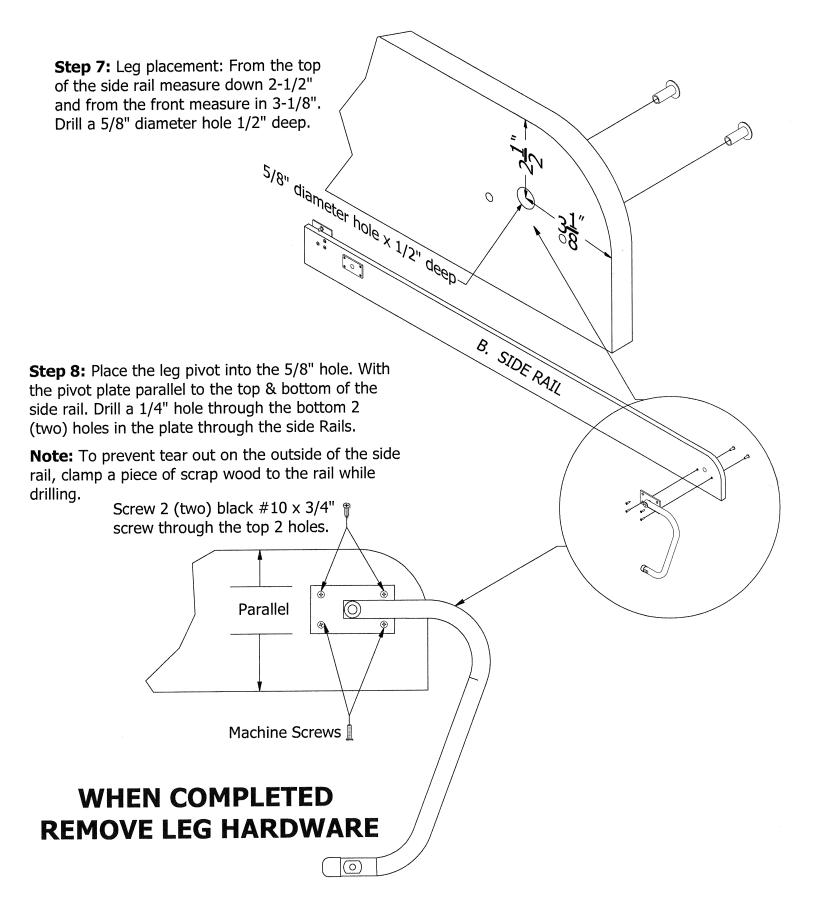
HARDWARE PLACEMENT FOR B. SIDE RAILS

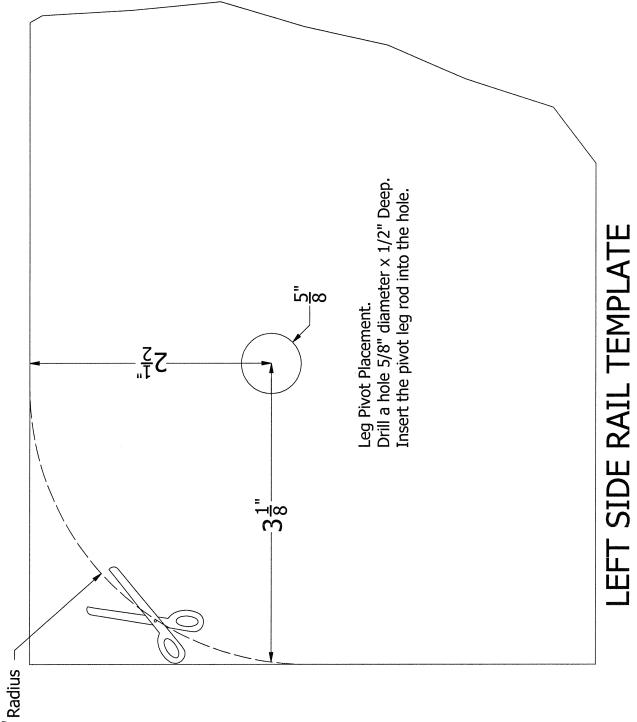




RIGHT SIDE RAIL TEMPLATE

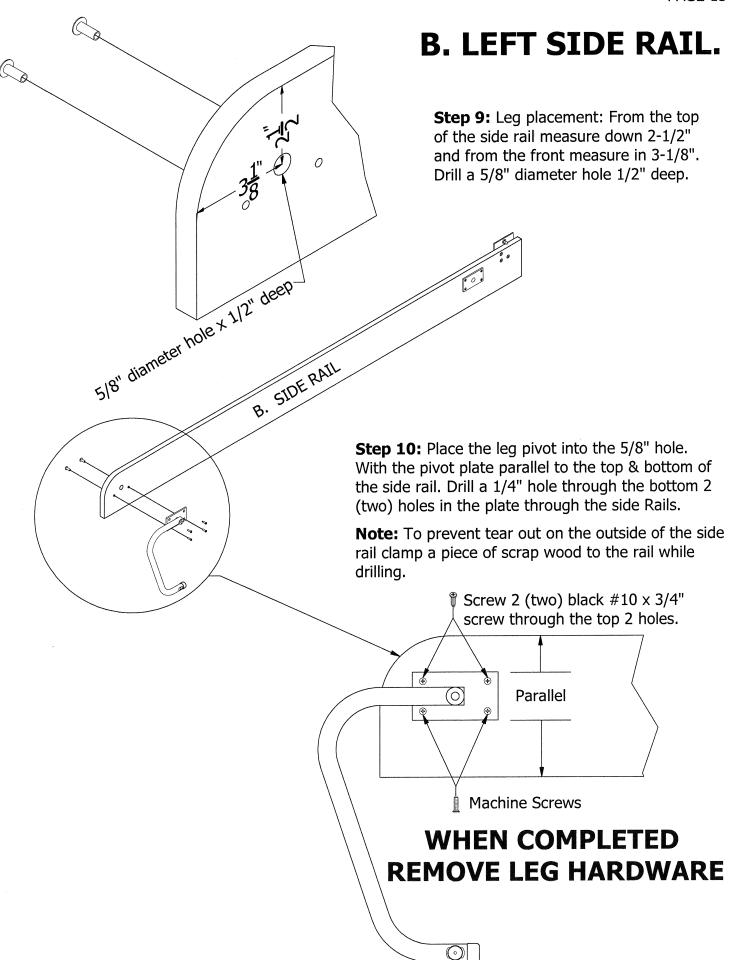
B. RIGHT SIDE RAIL.



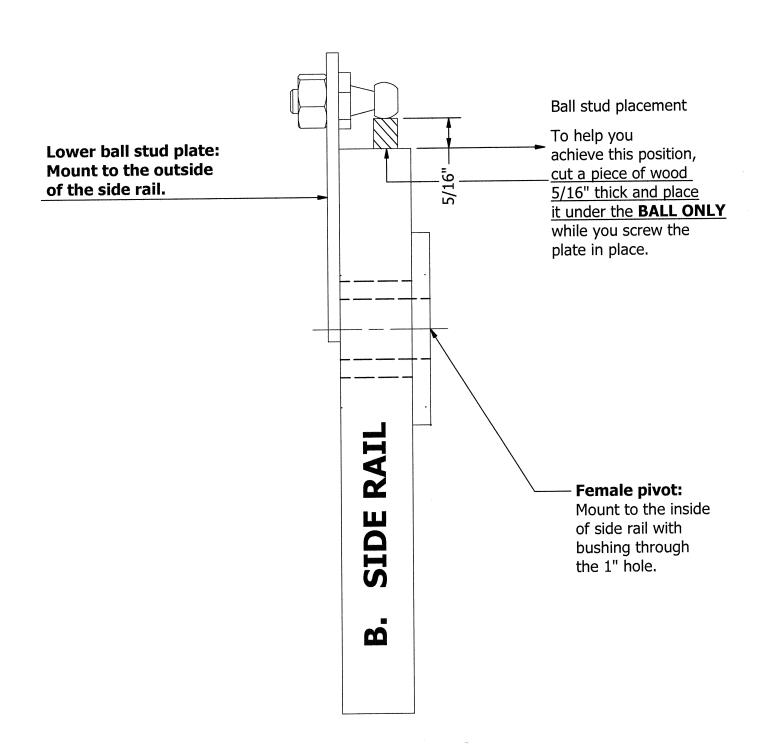


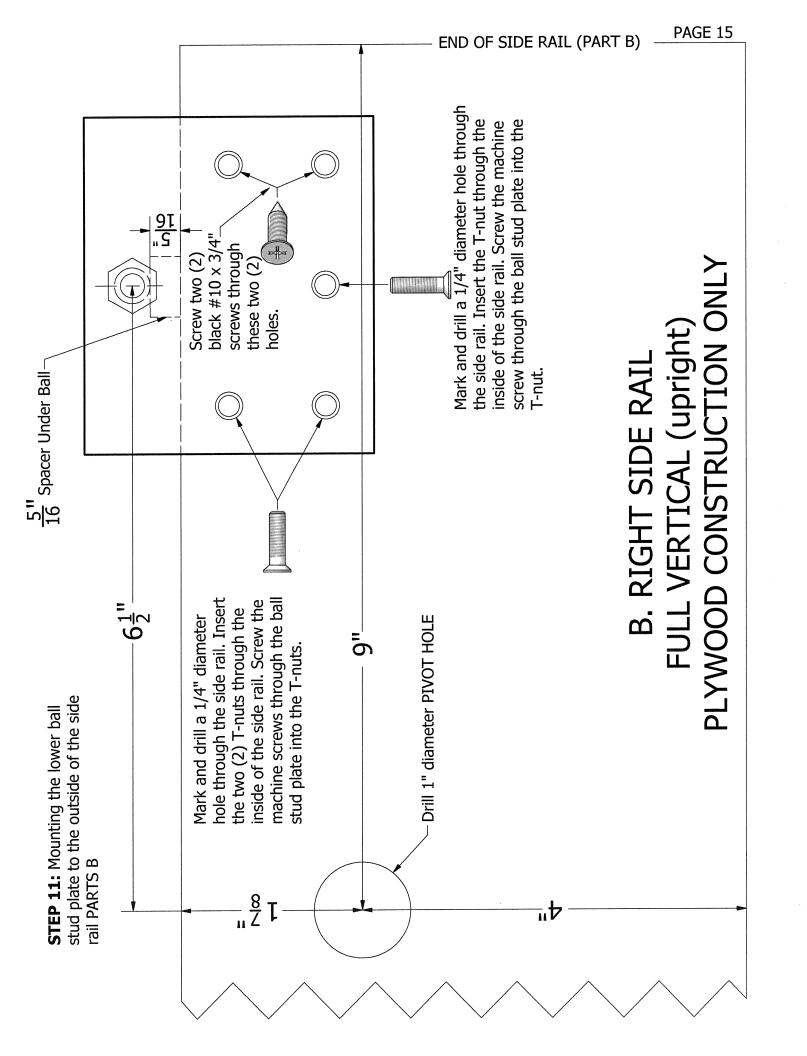
 $2\frac{7}{8}$ Radius

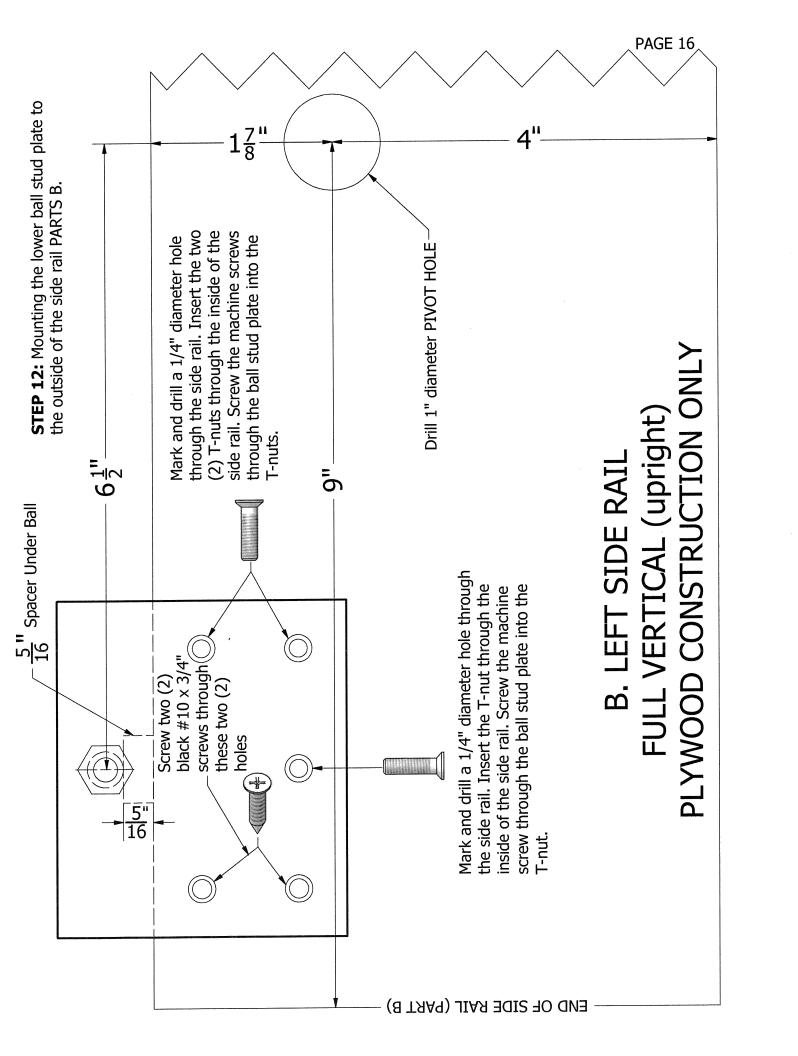
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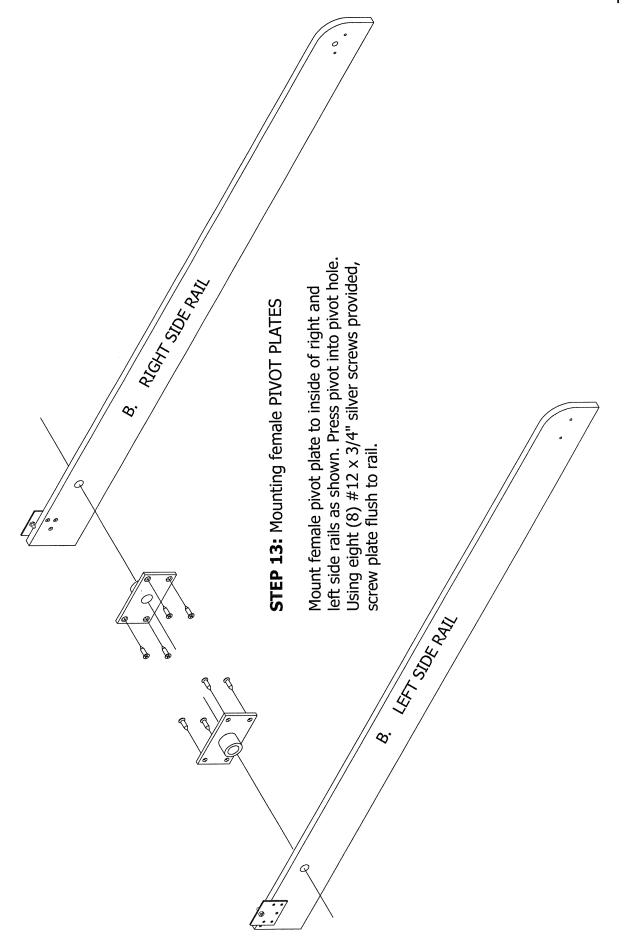


This page pertains to the orientation and mounting positions of the lower ball stud plates and female pivots, USE WITH PAGES 15, 16, & 17









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



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 $\#8 \times 1-1/4$ " screws flush. Repeat on part D Head Rail.

STEP 15:

D HEAD RAIL

Flush

Mounting left and right side rails 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.

B RIGHT SIDE RAIL

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 $\#8 \times 2$ " screws flush.

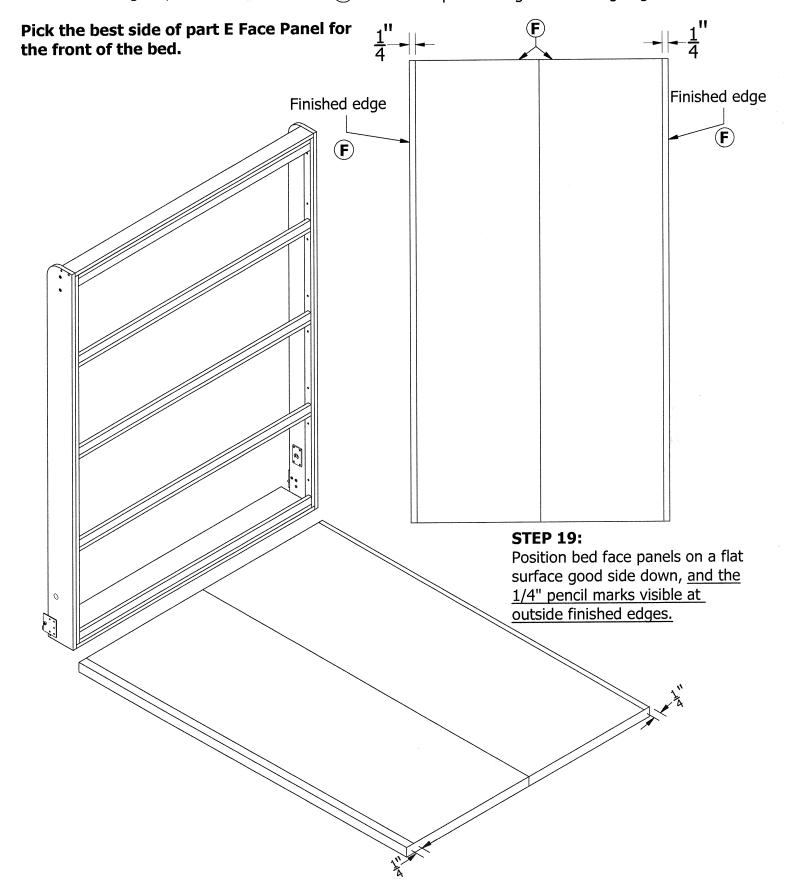
NOTE: Remove Pivot Leg Hardware.

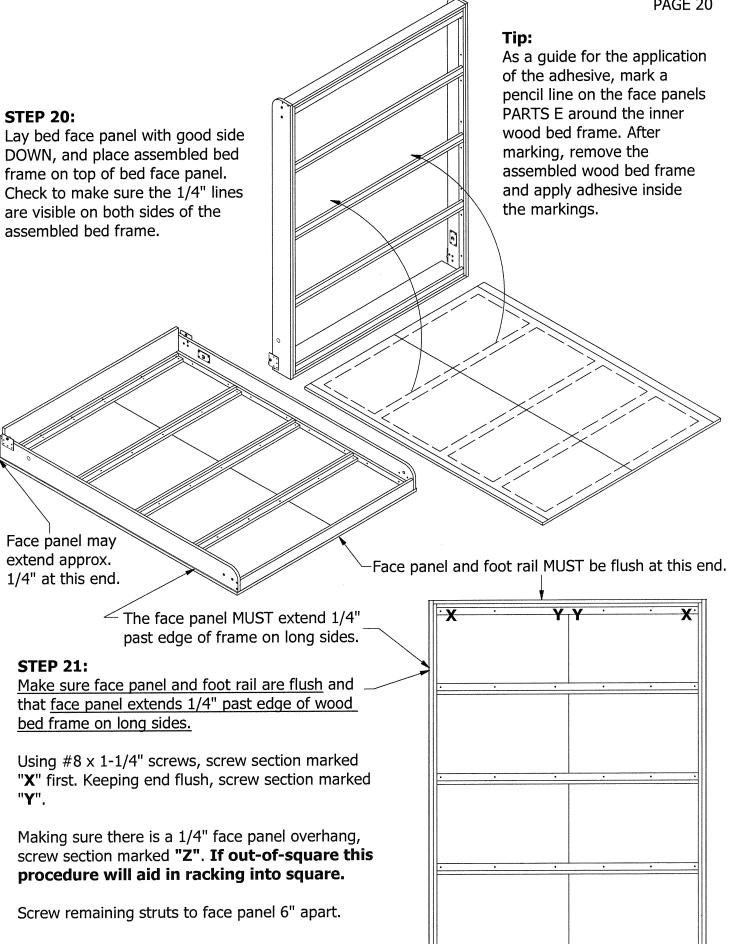
STEP 17:

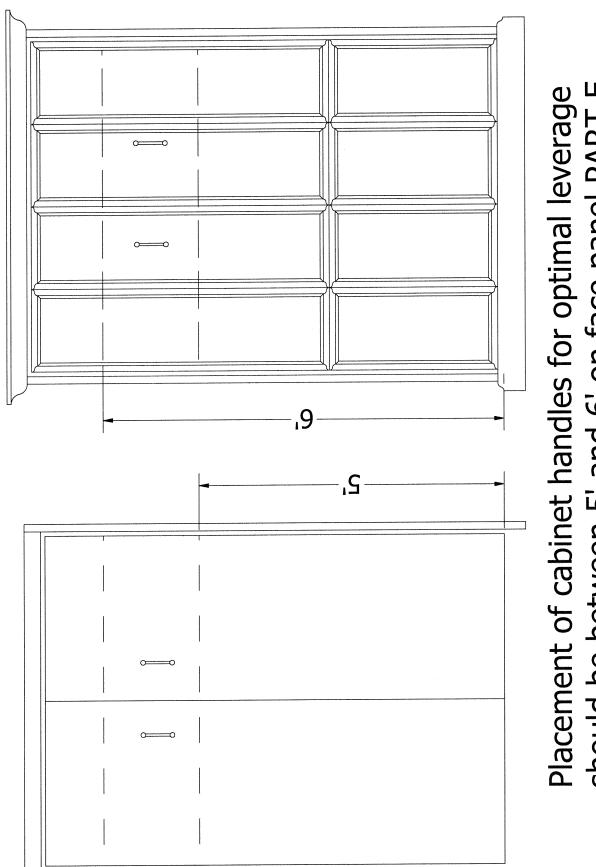
NOTE: For a finished look, apply wood veneer or melamine edge tape to all edges marked (**F.**)

STEP 18:

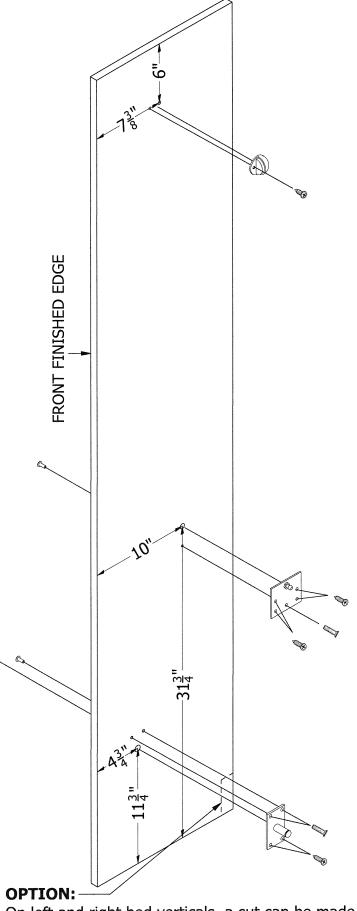
Turn face panels over. On back side, mark a 1/4" line the full length of the panel along finished long edge.







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



PART G: BED CABINET VERTICALS **(LEFT)** Measurements For Full Vertical (Upright) 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 $#10 \times 3/4$ " black screw.

Note:

Ball stud nut fits in the hole.

STEP 23:

UPPER BALL STUD PLATE:

Drill a hole $5/8" \times 1/2"$ deep and insert nut into hole. Mount plate to the vertical with four (4) $#10 \times 3/4"$ 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.

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 Full Vertical (Upright) ONLY Using 3/4" Plywood Face Panel.

STEP 25:

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

Note:

Ball stud nut fits in the hole.

STEP 26:

UPPER BALL STUD PLATE:

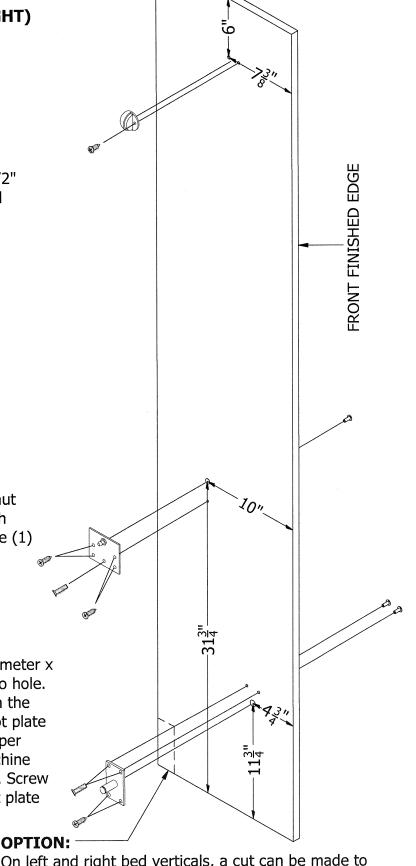
Drill a hole $5/8" \times 1/2"$ deep and insert nut into hole. Mount plate to the vertical with four (4) $#10 \times 3/4"$ black screws and one (1) "T" Nut and machine screw.

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) $\#12 \times 3/4$ " screws through pivot plate holes into vertical.

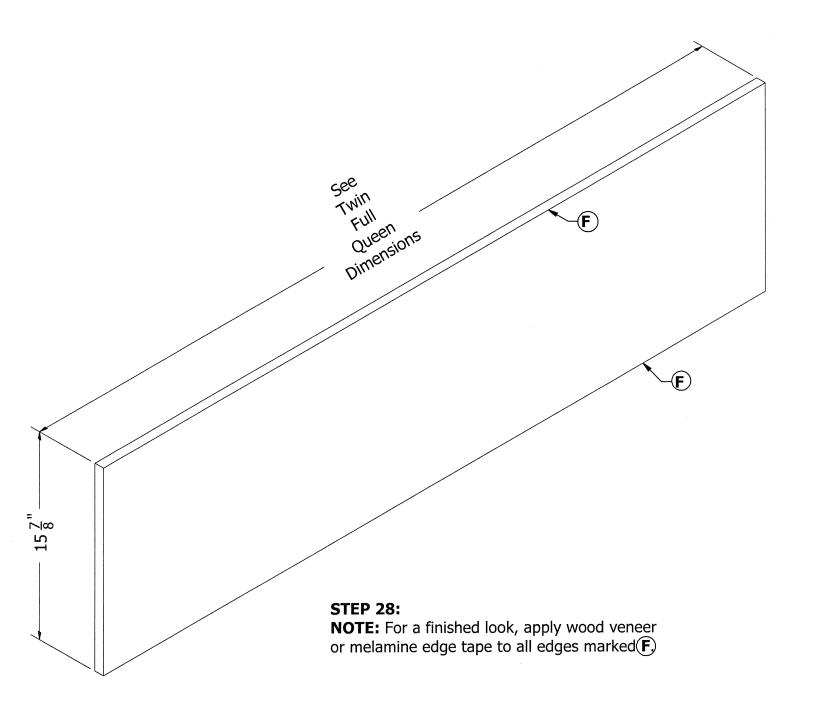
On left and right bed verticals, a cut can be made to accommodate existing base molding so cabinet will

fit flush against the wall.

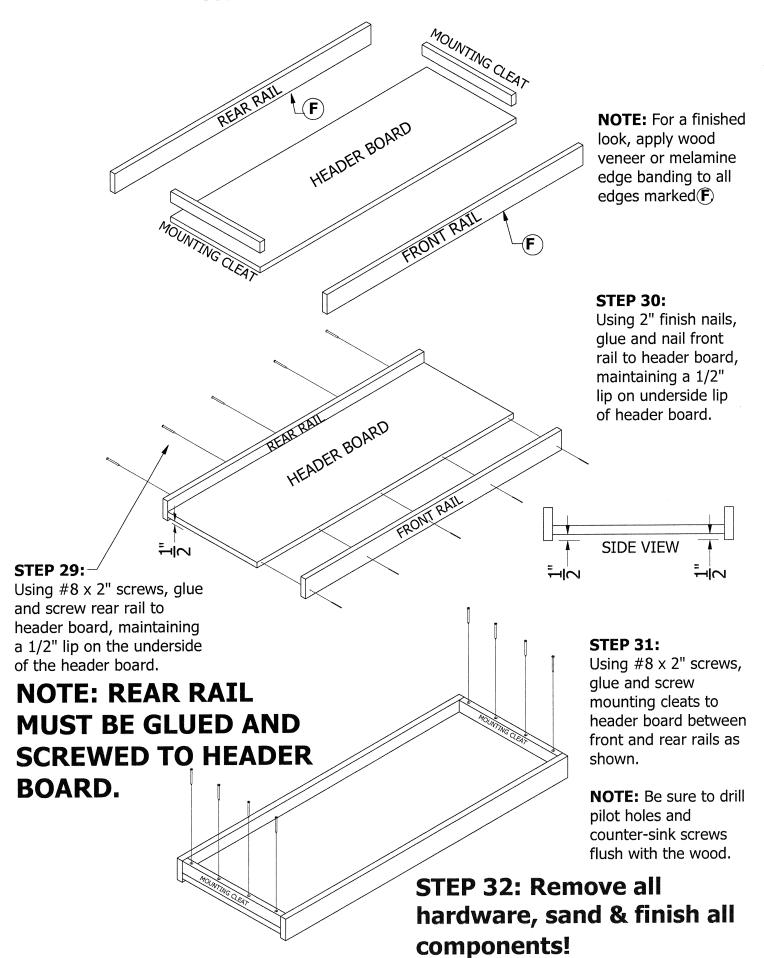


PAGE 23

PART F: BED HEADBOARD



PART H: BED HEADER COMPONENTS



ASSEMBLY INSTRUCTIONS FOR THE **VERTICAL** (upright)

Create-A-Bed®

MURPHY BED

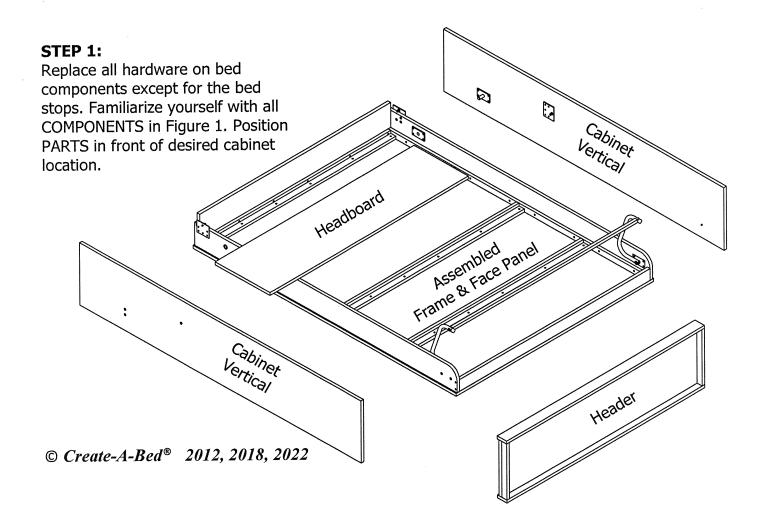
WARNING!

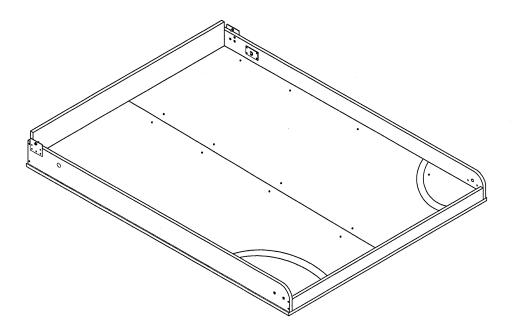
This bed contains stored mechanical energy which can cause serious injury if improperly handled. Your bed MUST! MUST! be securely anchored to the wall! READ INSTRUCTIONS AND WATCH THE ONLINE VIDEO THOROUGHLY BEFORE

ASSEMBLY AND DISASSEMBLY!

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

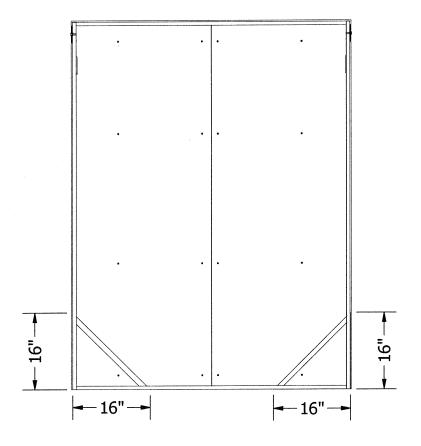
Tools needed: Power Drill, Stud Finder, Tape Measure, Phillips-head Screwdriver, Flat-Head Screwdriver, #4 Allen Wrench, Clamps and Drill bits appropriate for your mounting surface see step 16 on page 8.





STEP 2:

Lay 1/4 inch 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 inch plywood (PART J) into inner wood bed frame, 16 (sixteen) inch from front corners of face panel as shown.

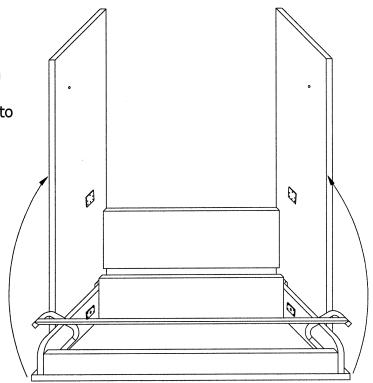


STEP 3: Lav assembled FRAME and Cabinet FACE PANEL face-down on a padded surface i.e., blanket or rug. Assembled Frame & Face Panel **STEP 4:** Cabinet Lay CABINET VERTICALS on Vertical finished (front) edge as shown. STEP 5: Slide PLASTIC SPACERS onto PIVOT BARS. STEP 6: Slide PIVOT BARS into PIVOT HOLES in bed frame Assembled Frame & Face Panel until no gap remains between bed frame and verticals. **STEP 7:** Snap the E-Clips in the grooves on both pivot bars. **STEP 8:** Measure up and mark a reference point 15 inches from the end of the vertical. Measure up 18 inches and 28 Headboard inches, mark and drill two pilot holes. Screw the headboard into place as shown using #8 x 2 inch screws.

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.

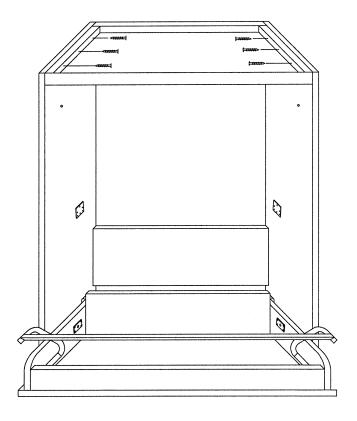
NOTE: To prevent damage to the legs be sure they are in the closed position when rotating the bed into the upright position.



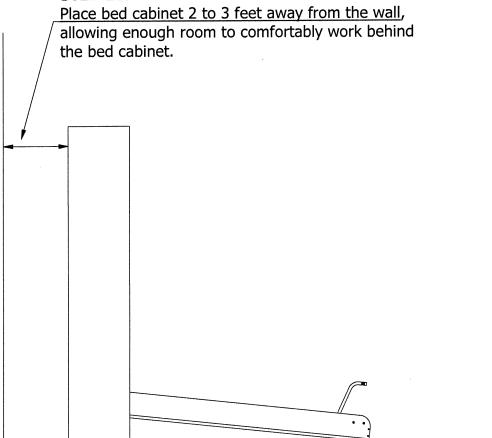
STEP 10:

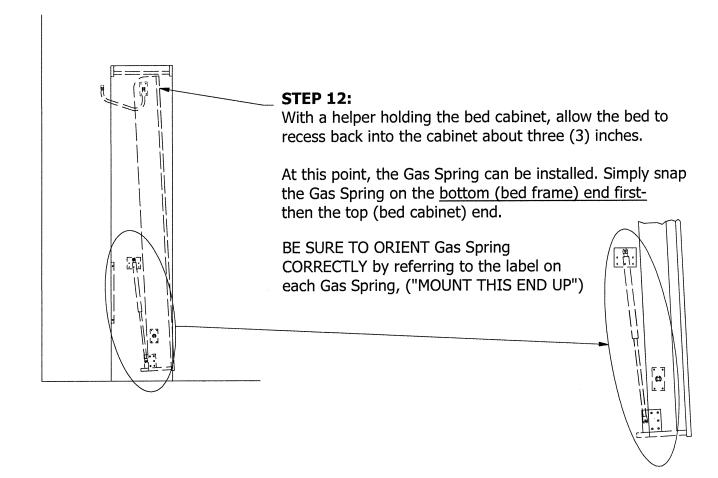
Place the header between the bed verticals, making sure the nailed rail is in front, and the screwed rail is in the rear. Be sure top front and top rear of the header is FLUSH with the top front and top rear of the bed verticals. Using $\#8 \times 1-1/4$ inch screws, drill and screw through mounting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

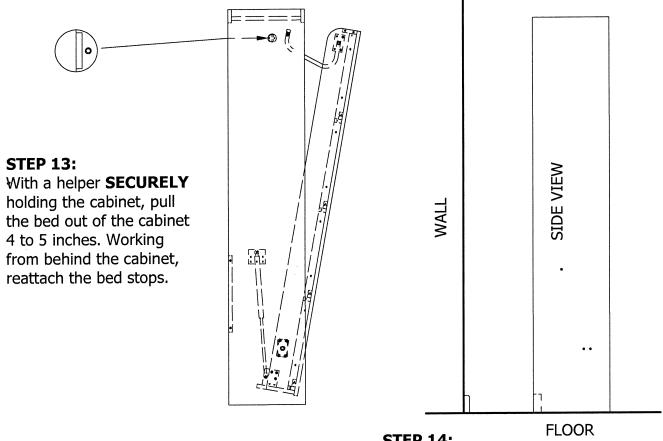
NOTE: Clamps may be very helpful to hold the bed header between the bed verticals.



STEP 11:





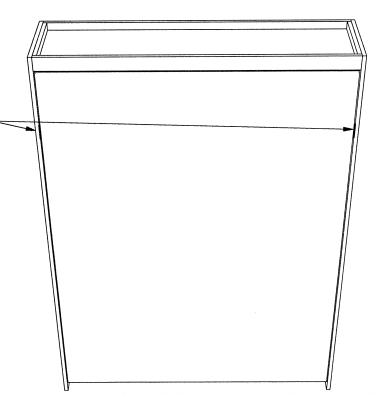


STEP 14:

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 <u>VERY, VERY IMPORTANT</u>!!! YOUR BED <u>MUST</u> 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 of 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.

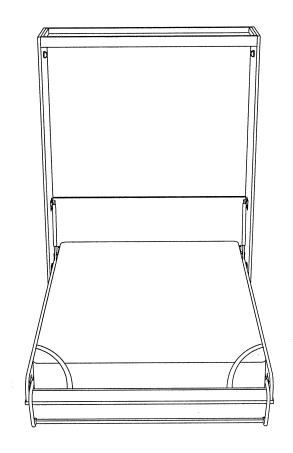
Drill three (3) pilot holes through the back rail of the Bed Header into the wall for a twin or full size bed and four (4) for a queen size bed. Using a 9/16" drill bit, drill holes at the pilot holes through the metal studs. Be sure you drill through the studs. Insert the toggle bolt screws through 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 innersping mattess 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.

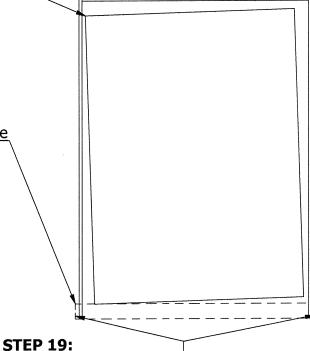
If the mattress is lightwight and the bed has a tendency to float off the floor, simply add some weight-i.e.a piece of particle board, wood, etc. inside the bed frame at the end of the bed to counter-balance.



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.



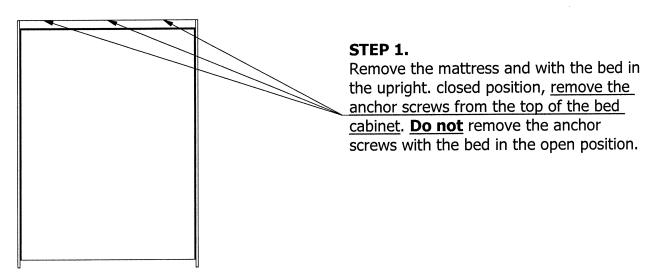
Close bed. Apply base molding (if applicable) from oustide of vertical to outside of vertical.

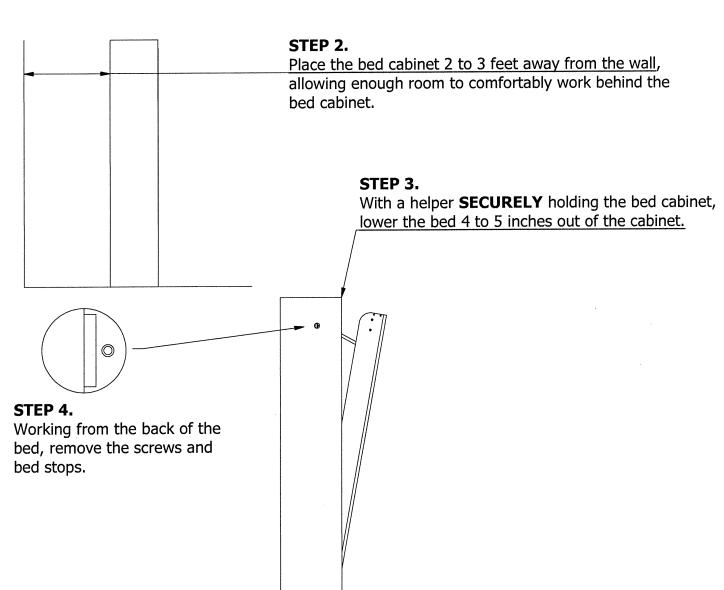
PROBLEM SOLVING

- 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 gas spring contains a significant amount 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 gas spring.
- 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

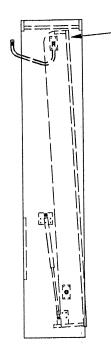
DO NOT ATTEMPT To Compress the by any other means than the one described in the step below.





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.

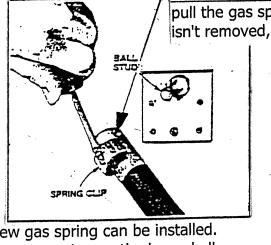


STEP 6.

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.**