# 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<sup>®</sup>LLC

# NOTE: <u>DO NOT</u> deviate from these plans. These plans are for constructing a DELUXE FULL HORIZONTAL BED using PLYWOOD material

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

# TOLL FREE 1-877-966-3852

## TOOLS NEEDED:

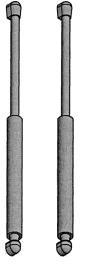
Power Drill

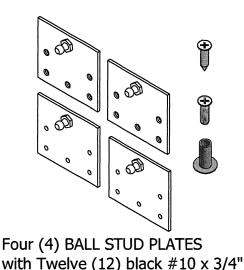
Drill Bits: 1/8" 1/4" 5/16", 1" Forstner Bit, 5/8" Forstner Bit Power Saw, Table Saw or Circular Saw Jigsaw or Coping Saw Phillips-Head and Flat-Head Screwdrivers or Driver Bits for Drill Tape Measure #4 Allen Wrench Hammer Clamps Straight Edge or Framing Square Household Iron for Veneer Tape and Utility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

# © Create-A-Bed<sup>®</sup>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 BLLC** PAGE 1 FULL HORIZONTAL (SIDEBED) murphy bed mechanism PLYWOOD CONSTRUCTION





screws and Eight (8) "T" nuts

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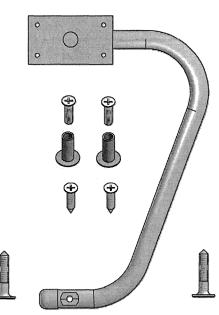
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6

with machine screws

Two (2) GAS SPRINGS

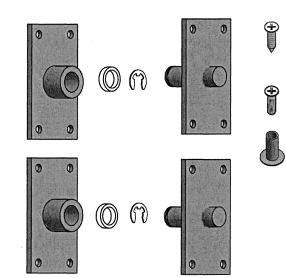


Two (2) Metal Pivoting Legs Two (2) 1/4" x 2" Leg Support Rail screws Four (4) Black #10 x 3/4" screws Four (4) "T" Nuts with machine screws

Four (4) "1" Nuts with machine screws

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

© 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

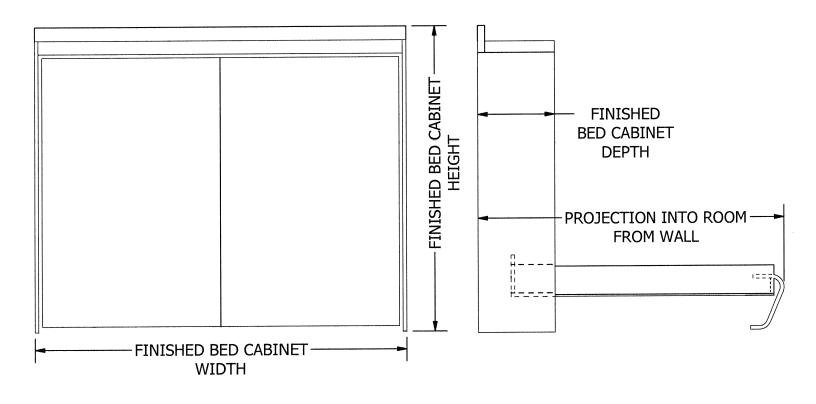


Two (2) BED STOPS with two (2) #10 x 3/4" black screws



Two (2) ELASTIC MATTRESS RETAINING STRAPS

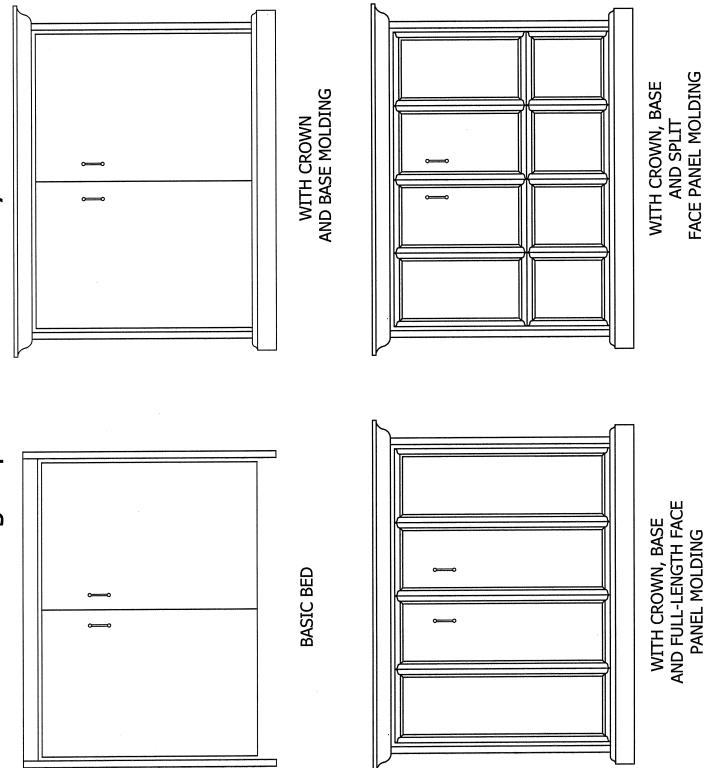
Out-to-out dimensions of HORIZONTAL STYLE murphy bed cabinet constructed using the *Create-A-Bed*<sup>®</sup> mechanism

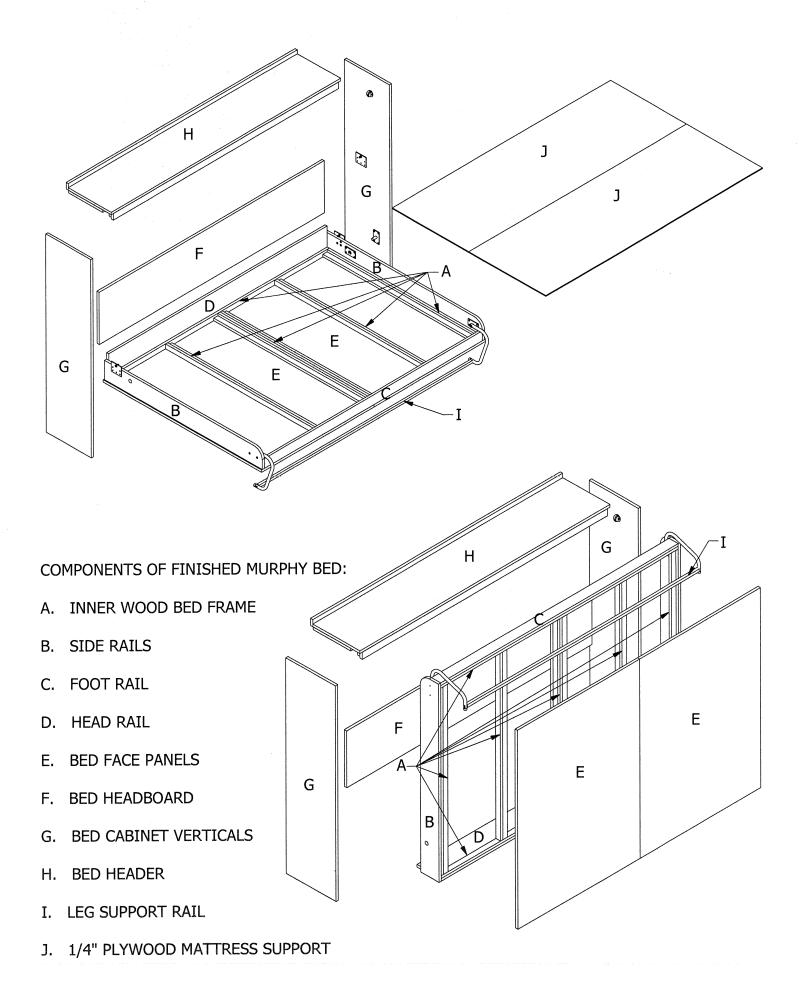


OUTSIDE-EDGE TO OUTSIDE-EDGE
FINISHED HORIZONTAL BED CABINET DIMENSIONS

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

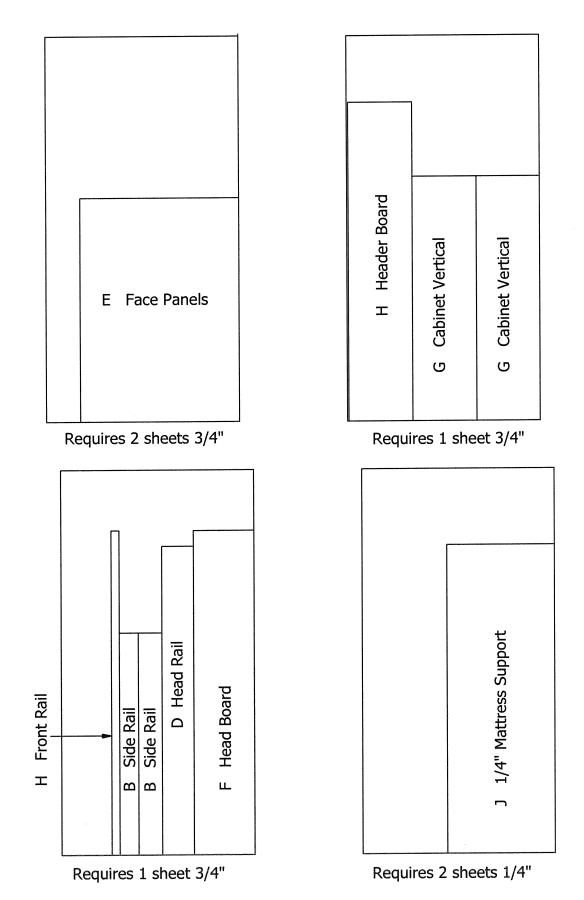
Some design options... or create your own!





## FULL SIDEBED (HORIZONTAL) 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.



PAGE 5

#### FULL SIZE DELUXE KIT HORIZONTAL BED WITH 3/4" PLYWOOD FACE PANEL BILL OF MATERIALS / CUT SHEET

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

<ul> <li> check off as completed</li> <li>A. INNER WOOD BED FRAME: *To be cons</li> <li>FRAME STRUTS: *SOLID WOOD*</li> <li>FRAME SIDES: *SOLID WOOD*</li> </ul>	3/4" X 1-1/2" X 52-1/2"	ar, clear pine, maple, e 12 pieces 2 pieces			
IMPORTANT: PLYWOOD <u>MUST</u> BE USED FOR THESE PIECES: B. SIDE RAILS: 3/4" X 5-7/8" X 55-1/2" 2 pie					
C. FOOT RAIL:* <b>SOLID HARDWOOD</b> *	3/4" X 3" X 77"	1 piece			
D. HEAD RAIL:	3/4" X 7-7/8" X 77"	1 piece			
E. BED FACE PANEL:	3/4" X 39-1/2" X 55-3/4"	2 pieces			
F. BED HEADBOARD:	3/4" X 15-7/8" X 79-3/8"	1 piece			
G. BED CABINET VERTICALS:	3/4" X 15-7/8" X 60-7/16"	2 pieces			
H. BED HEADER: HEADERBOARD: FRONT RAIL: FRONT RAIL SUPPORT:* <b>SOLID WOOD</b> REAR RAIL: : * <b>SOLID WOOD</b> * MOUNTING CLEATS:* <b>SOLID WOOD</b> *	3/4" X 2" X 80-7/8"	1 piece 1 piece 2 pieces 1 piece 2 pieces			
I. Leg Support Rail:* <b>SOLID WOOD</b> *	3/4" X 3/4" X 75-1/4"	1 piece			
J. 1/4" PLYWOOD mattress support:	1/4" X 27" X 77"	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:	<ul><li>#8 1-1/4" coarse thread</li><li>#8 1-1/2" coarse thread</li><li>#8 2" coarse thread</li></ul>				
	10	2 ΗΔΝΟΙ Ες			

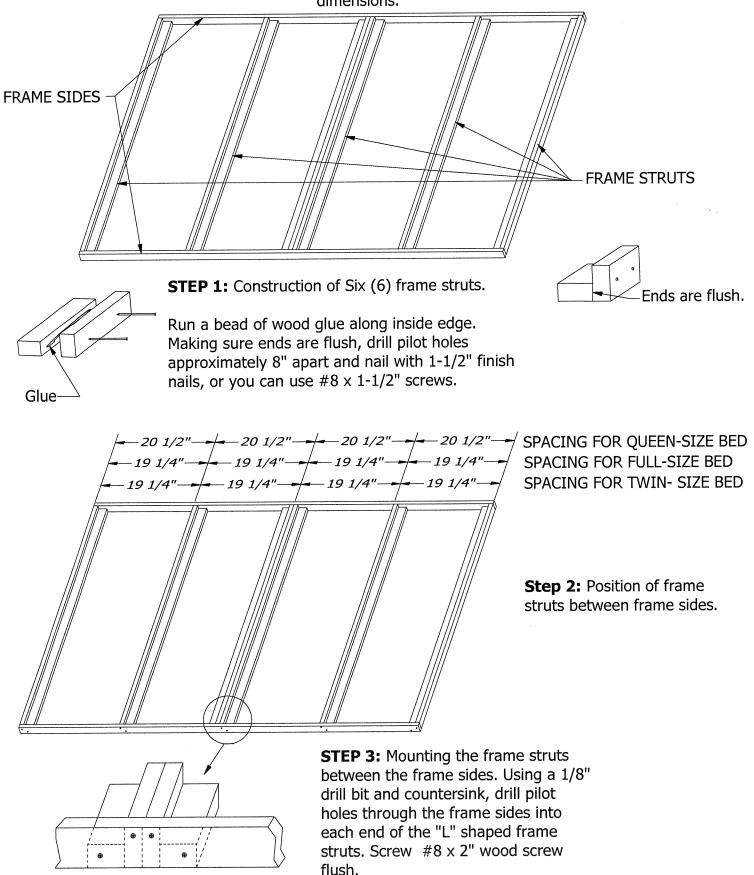
\_\_\_O. DESIRED CABINET HANDLES OR PULLS

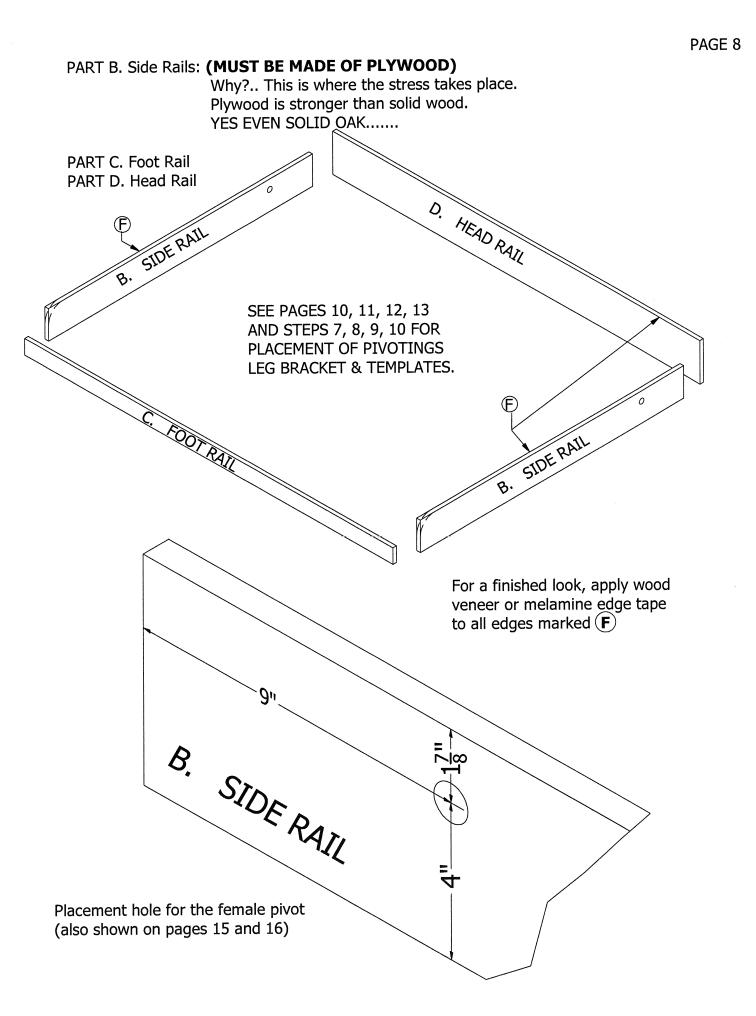
2 HANDLES

\_\_\_P. MATTRESS

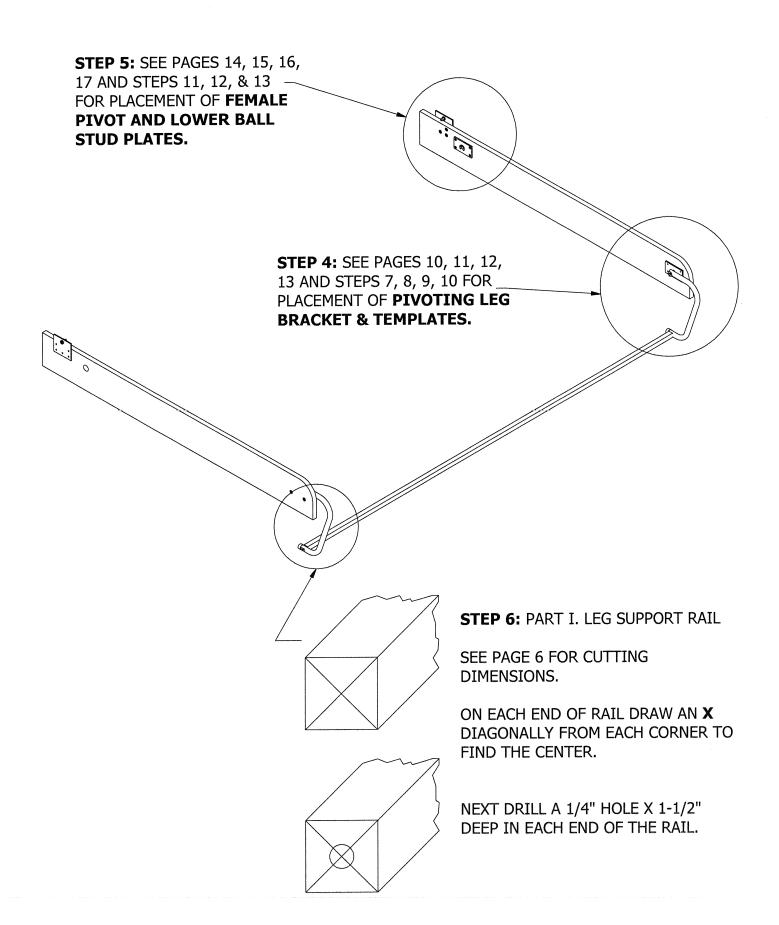
MUST weigh between 50 - 65 pounds

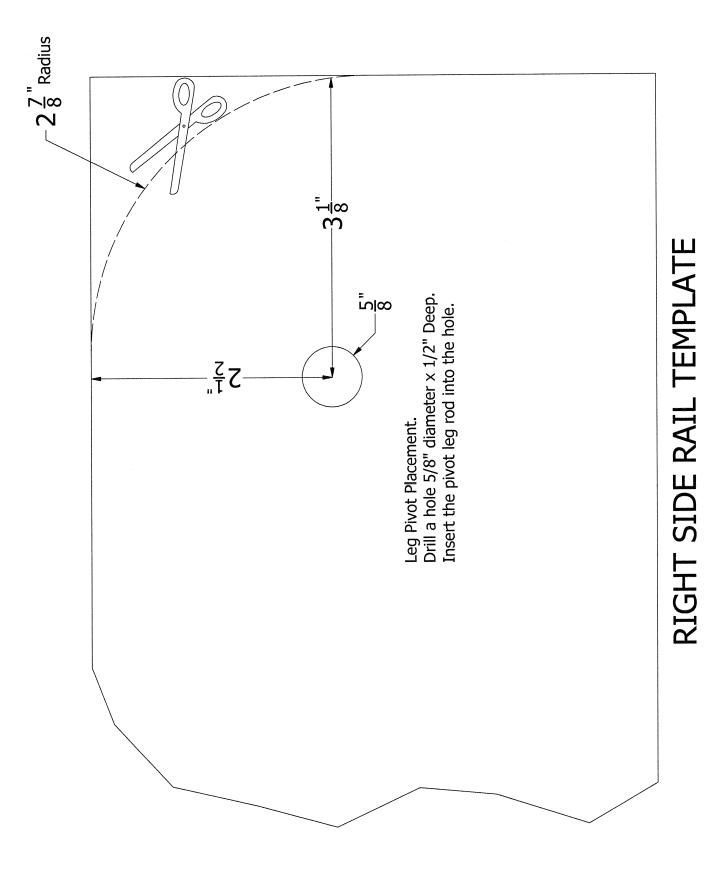
Your mattress dimensions must not exceed 54" x 75" Mattress thickness CANNOT exceed 12" in thickness – including pillow top. See Bill of Materials / Cut Sheet (PART A) for Twin, Full or Queen size frame struts and frame sides dimensions.





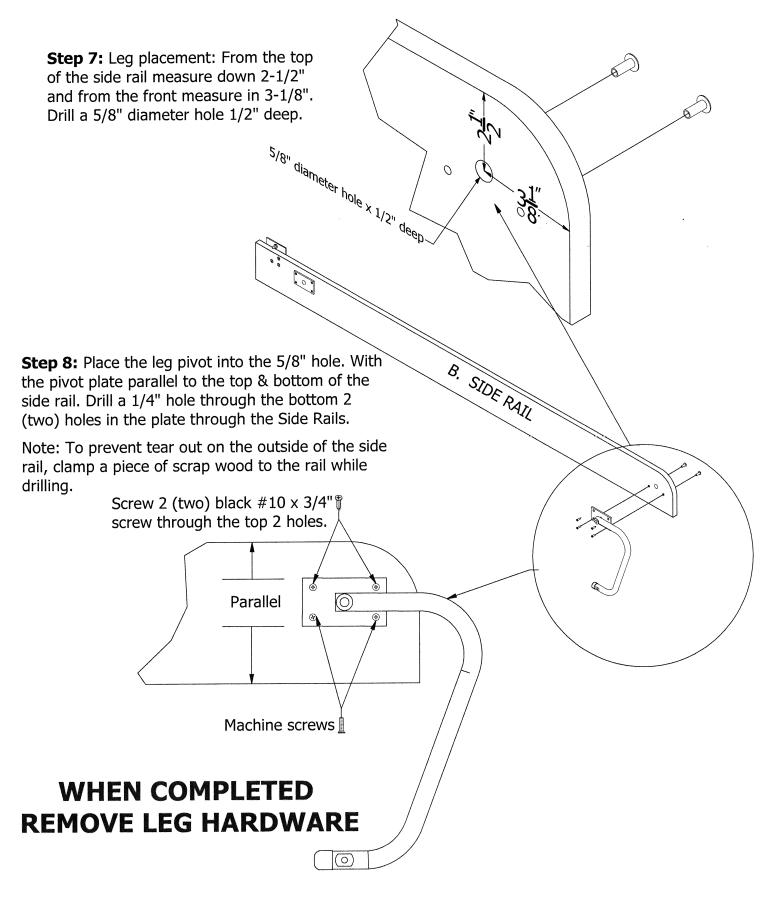
## HARDWARE PLACEMENT FOR B. SIDE RAILS

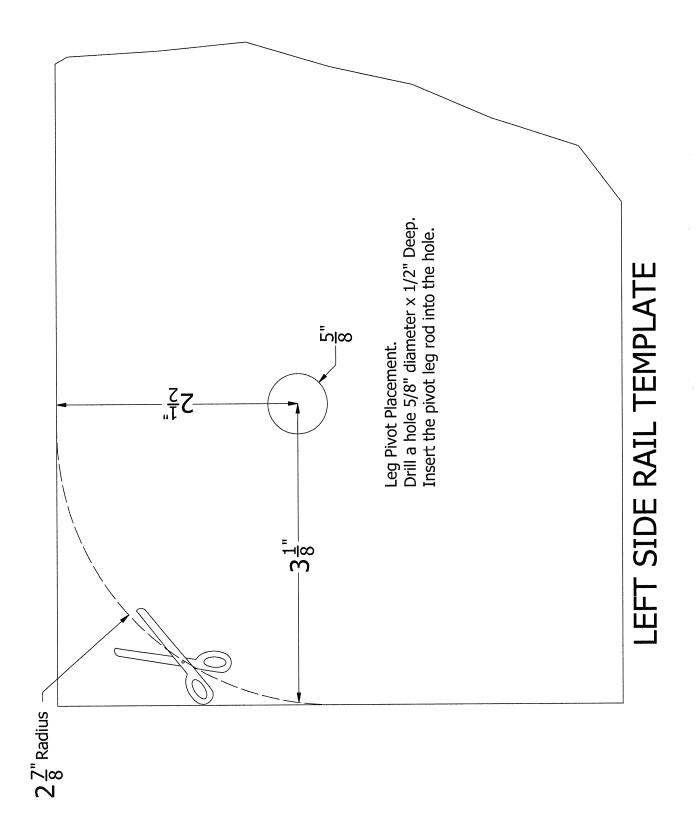




# **B. RIGHT SIDE RAIL.**





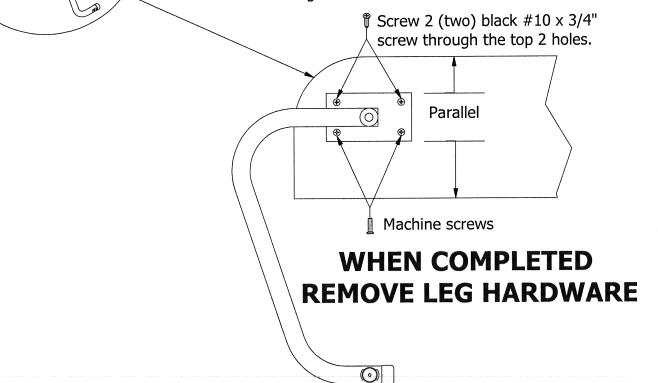




**Step 9:** Leg placement: From the top of the side rail measure down 2-1/2" and from the front measure in 3-1/8". Drill a 5/8" diameter hole 1/2" deep.

**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.



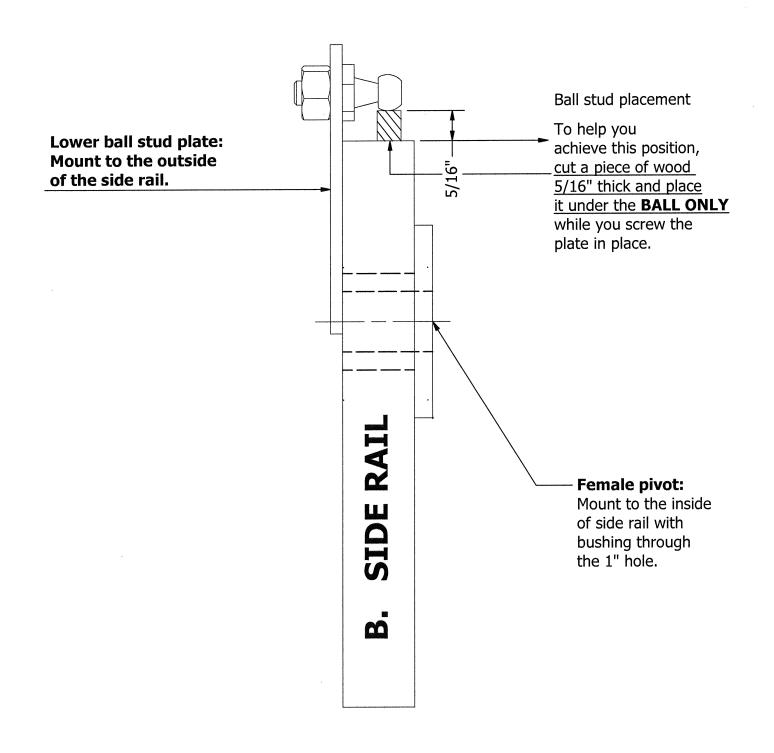
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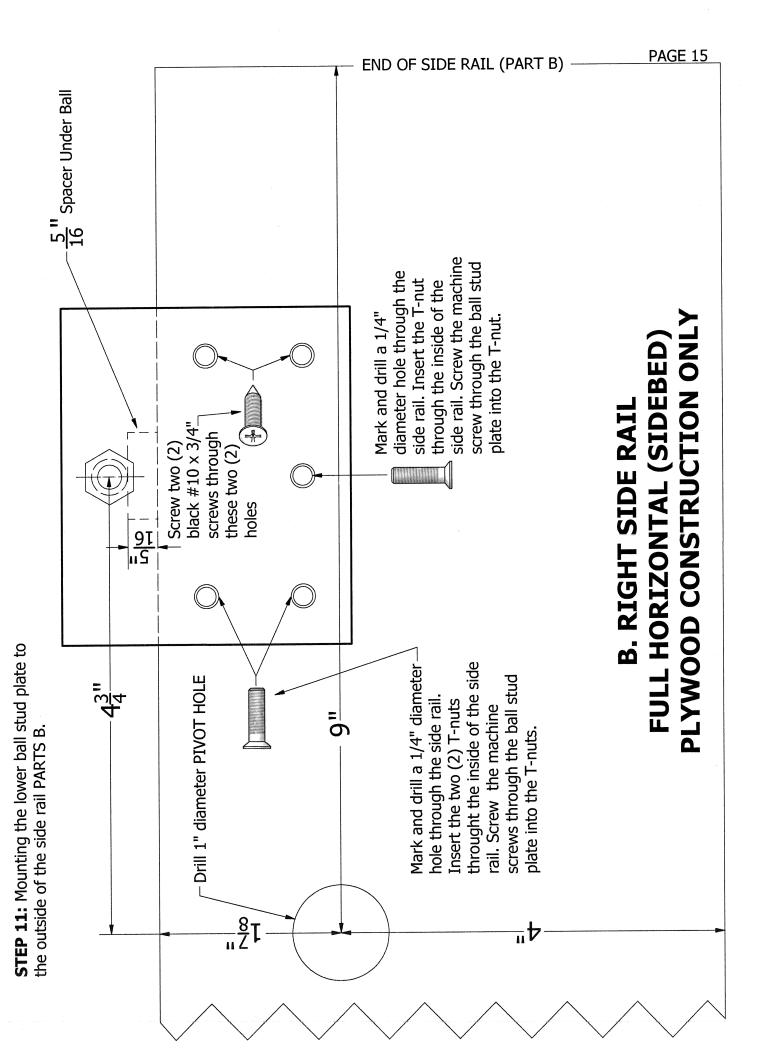
B. SIDE RAIL

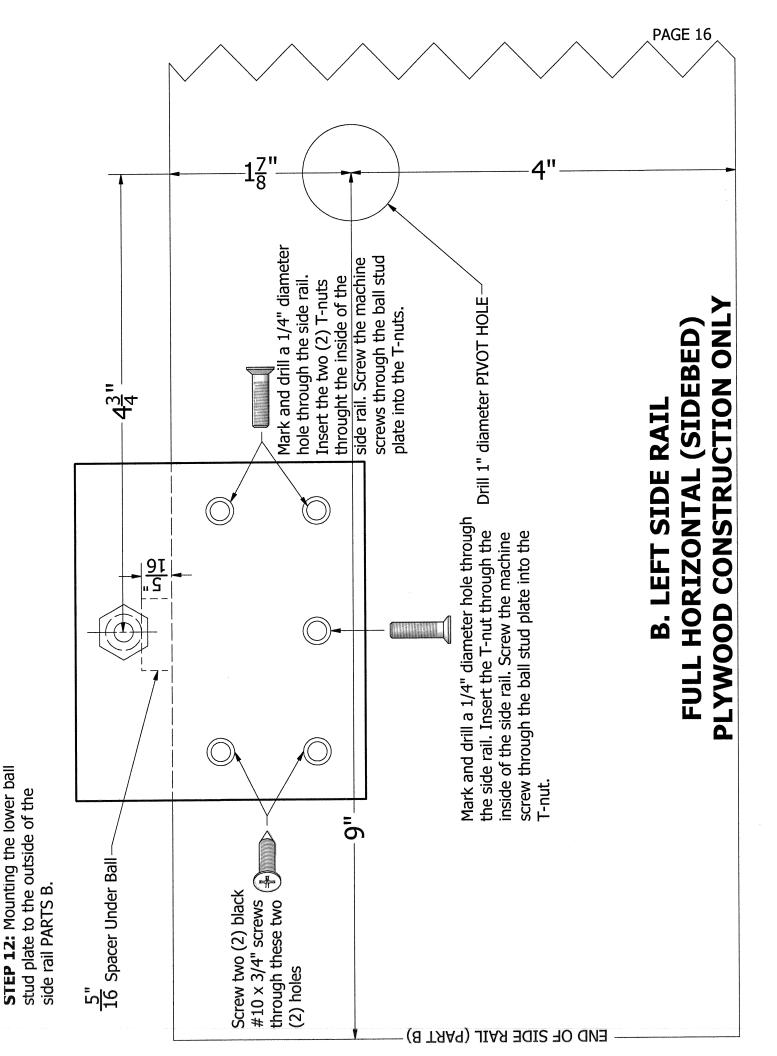
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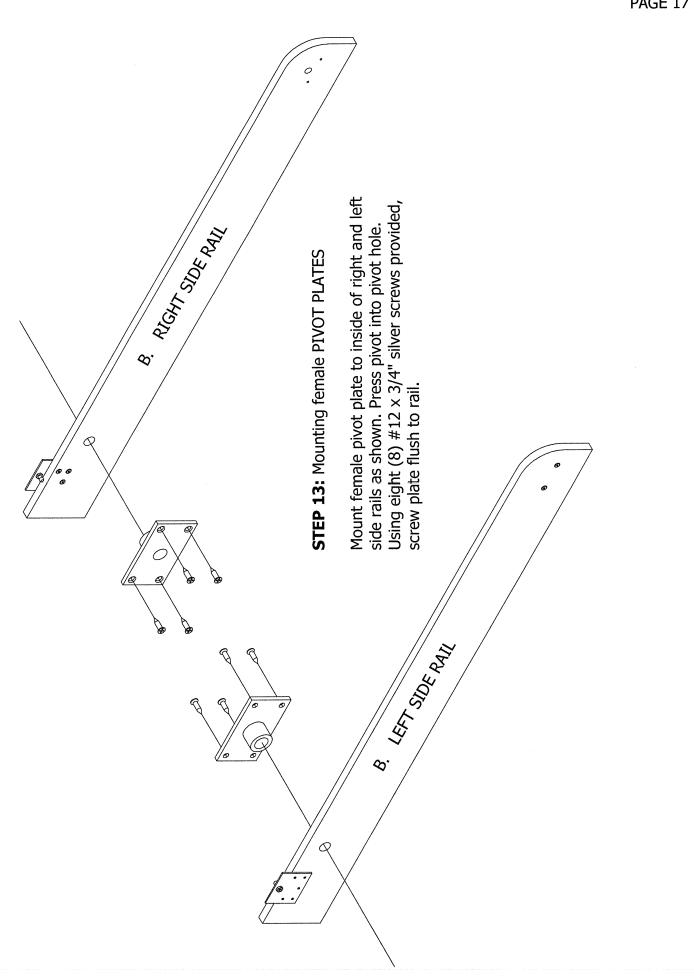
5/8" diameter hole x 1/2" deep-

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

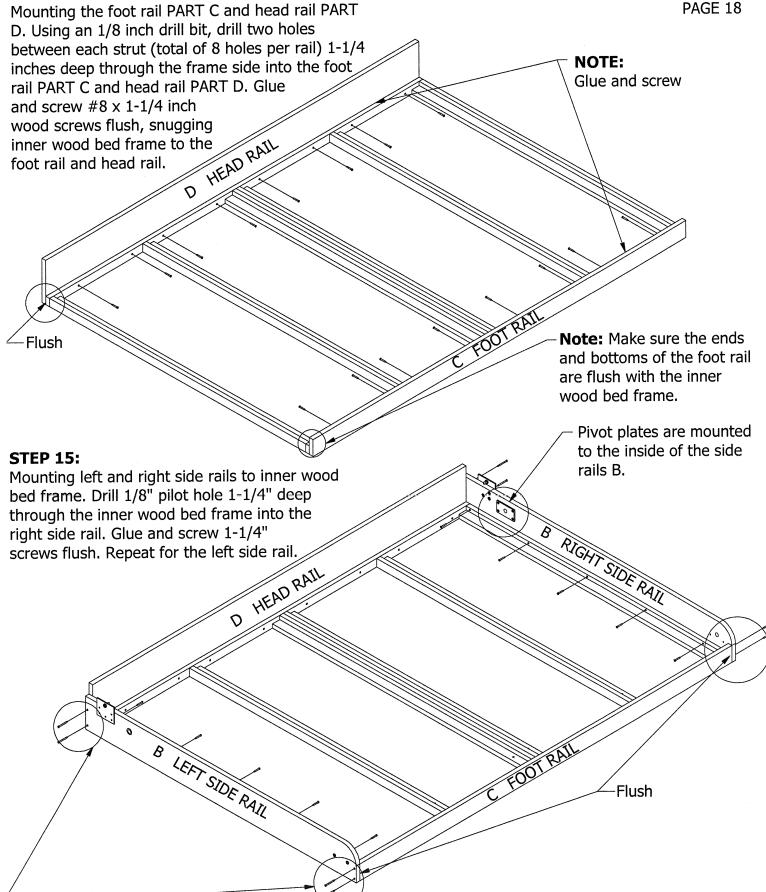








PAGE 17



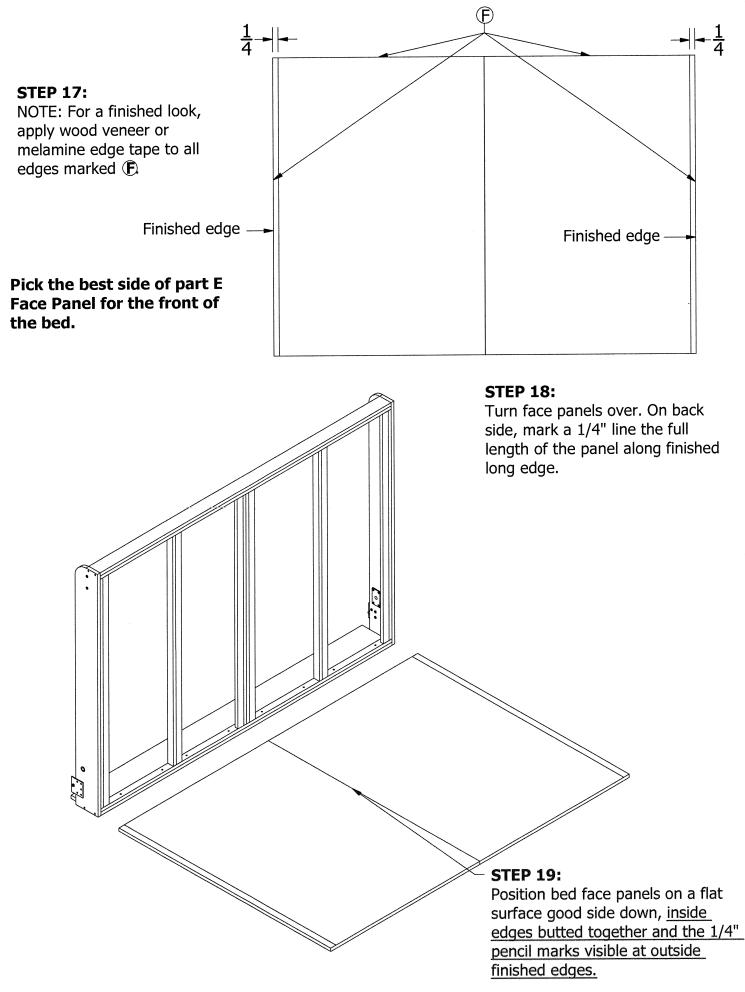
#### **STEP 16:**

**STEP 14:** 

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

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

**NOTE:** Remove Pivot Leg Hardware.



#### **STEP 20:**

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

#### Tip:

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

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

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

#### STEP 21:

Q

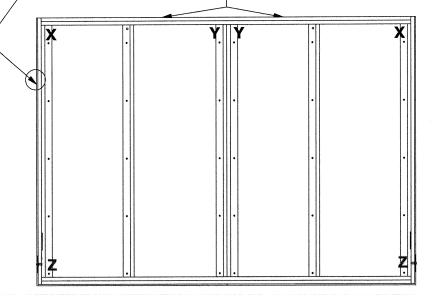
Make sure face panel and foot rail are flush and that face panel extends 1/4" past edge of wood bed frame on long sides.

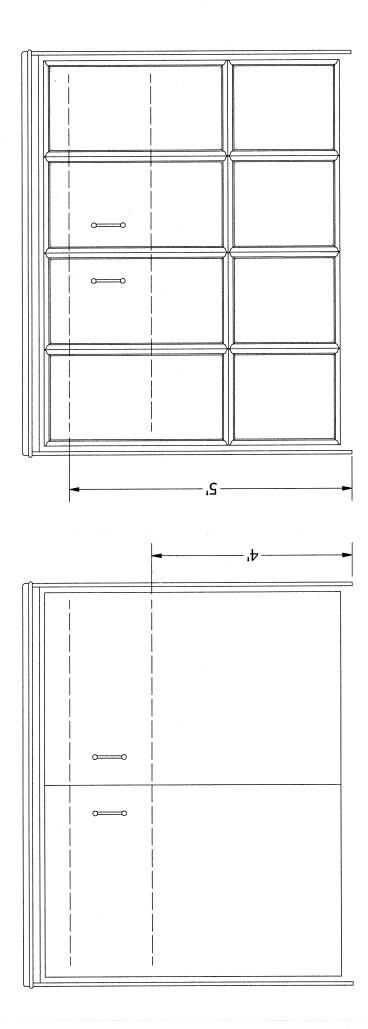
Using #8 x 1-1/4" screws, screw section marked **"X"** first. Keeping end flush, screw section marked **"Y"**.

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 inches apart.

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





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 FULL HORIZONTAL (Sidebed) ONLY Using 3/4"

#### **STEP 22:**

PLYWOOD Face Panel.

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

#### Note:

Ball stud nut fits in the hole.

#### **STEP 23:**

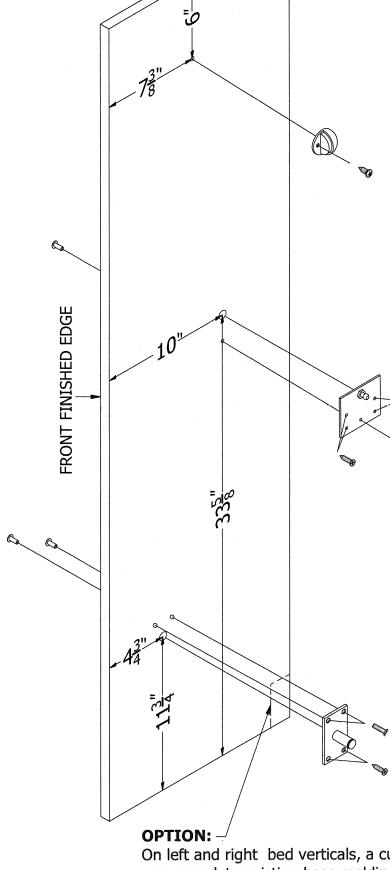
UPPER BALL STUD PLATE: Drill a hole 5/8" x 1/2" deep and insert nut into hole. Mount plate to the vertical with four (4) #10 x 3/4" black screws and one (1) "T" Nut and machine screw.

#### **STEP 24:**

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

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

**OPTION:** 



**PART G:** BED CABINET VERTICALS (RIGHT) Measurements for FULL HORIZONTAL (Sidebed) <u>ONLY</u> 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  $#10 \times 3/4$ " black screw.

#### Note:

Ball stud nut fits in the hole.

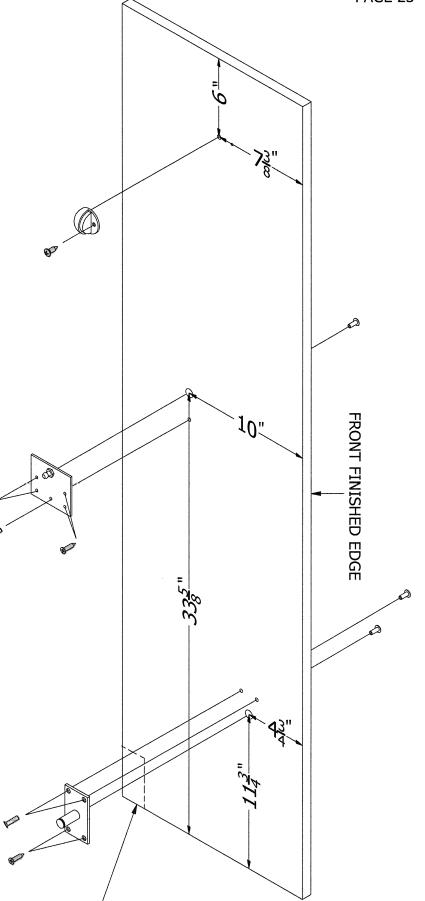
#### **STEP 26:**

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:**

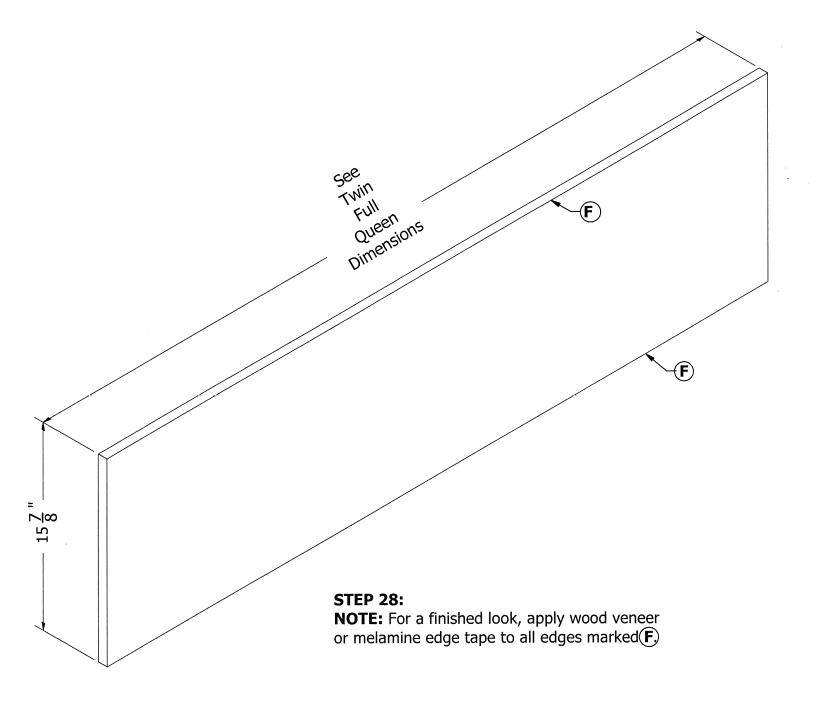
PIVOT ROD AND PLATE: Drill a hole 5/8" diameter x 1/2" deep. Insert the 1/2" end of rod into hole. Drill two (2) holes 1/4" dia through the vertical using the upper holes in the pivot plate as a guide. Tap "T" Nuts into two (2) upper holes from outside, then screw 1/4" machine screws through pivot plate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

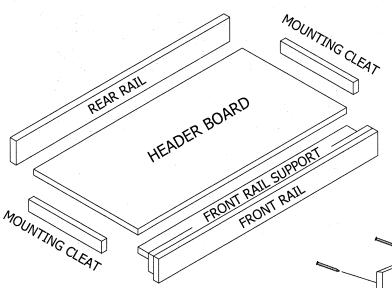


#### **OPTION:** –/

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

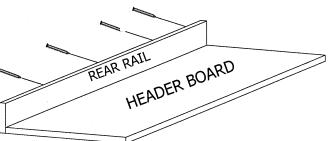
## PART F: BED HEADBOARD





#### **STEP 29:**

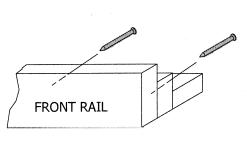
Drill five (5) pilot holes through rear rail. Glue and screw rear rail to header board with  $#8 \times 2"$  screws.



#### **STEP 30:**

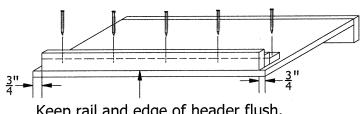
Drill six (6) 1/8" pilot holes in front rail support, then glue and screw together with 1-1/2" wood screws or nails. This the same operation as performed on struts.

FRONT RAIL SUPPORT



#### **STEP 31:**

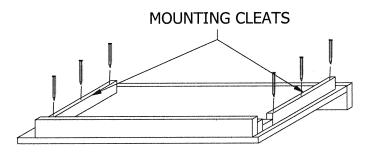
Attaching the front rail to the front rail support: Drill six (6) pilot holes 1-1/4" deep through rear of support into rear of front rail, then glue and screw together with 1-1/4" wood screws.



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.



#### **STEP 33:**

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

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

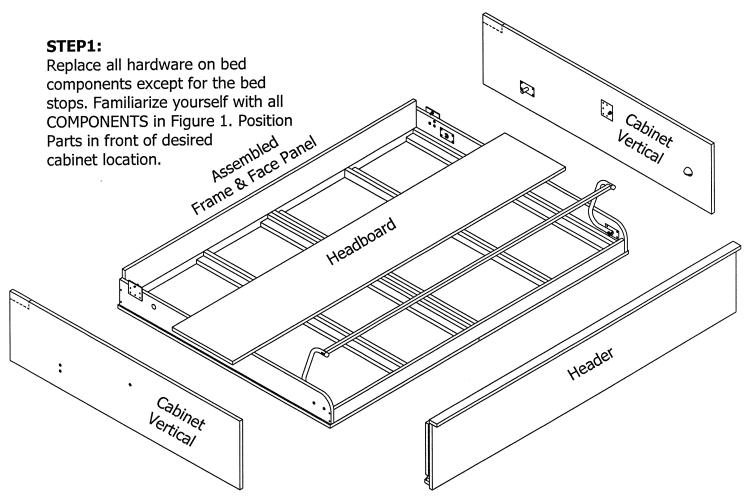
MURPHY BED

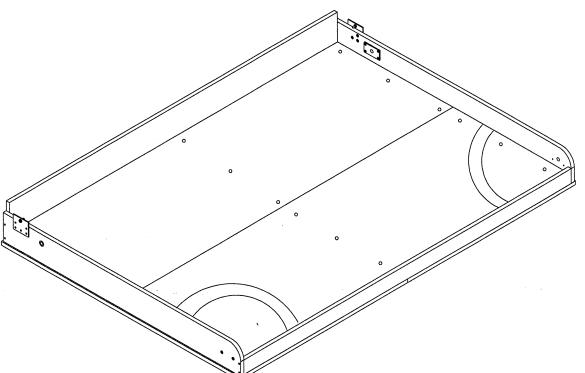
# WARNING!

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

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

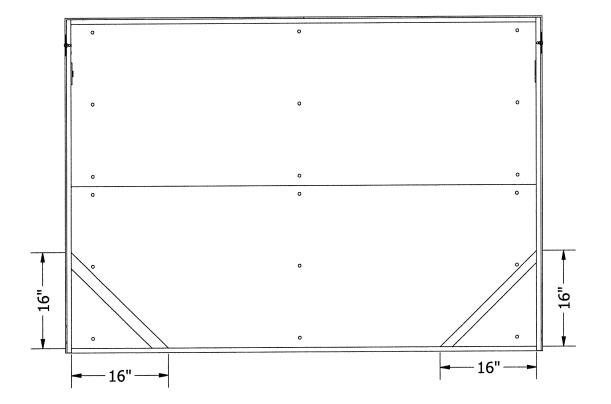
Tools needed: Power Drill, Stud Finder, Tape Measure, Phillips-head Screwdriver, Flat-head Screwdriver, #4 Allen Wrench, Clamps and Drill bits appropriate for your mounting surface see step 16 on page 8.

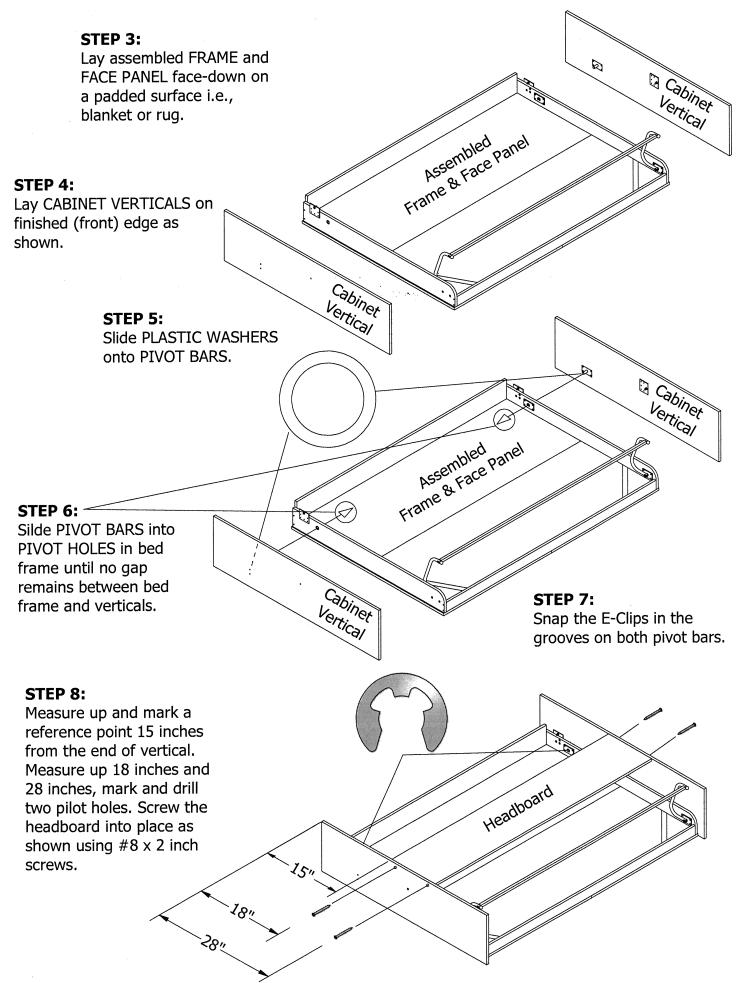




#### Step 2:

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

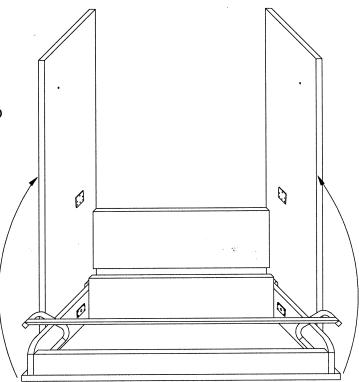




#### STEP 9:

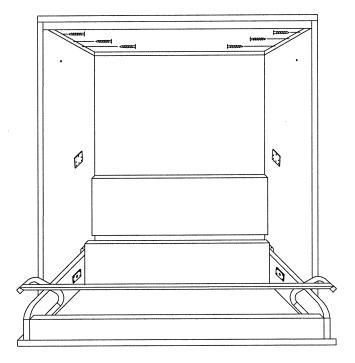
With the BED FACE PANEL remaining face-down on padding, **and legs in the closed position** slowly and carefully rotate the CABINET VERTICALS & the HEADBOARD assembly into its upright position.

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

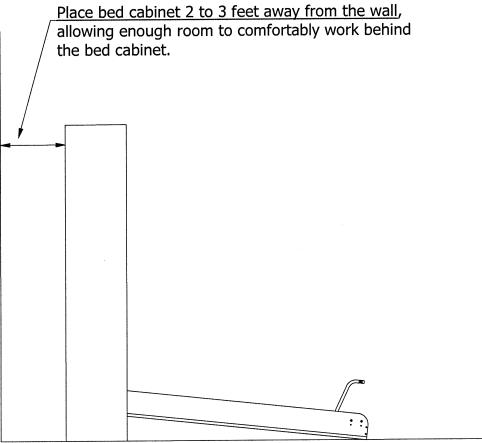


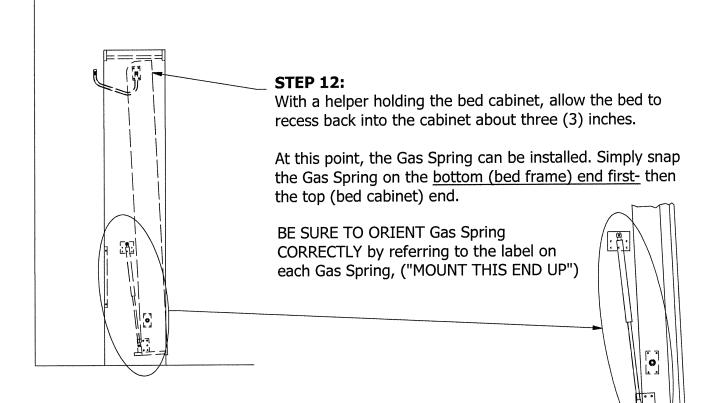
#### **STEP 10:**

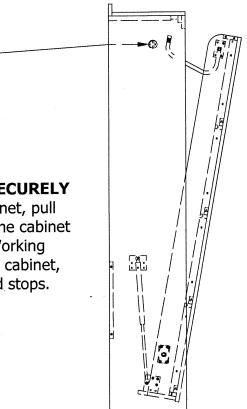
Place the header between the bed verticals, making sure the nailed rail is in front, and the screwed rail is in the rear. Be sure top front and top rear of the header is FLUSH with the top front and top rear of the bed verticals. Using  $#8 \times 1-1/4$  inch screws, drill and screw through mounting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



#### STEP 11:







#### **STEP 13:**

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

# WALL SIDE VIEW

#### STEP 14:

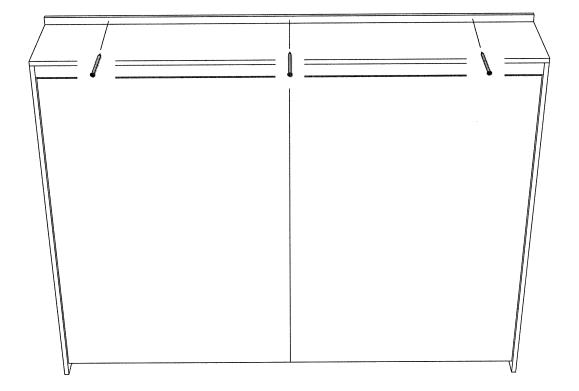
If the room has existing base molding, make a cut at the bottom rear of the cabinet verticals to accommodate the existing base molding. If room does not have base molding, simply place cabinet flush against wall.

### 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.

FLOOR

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 or wall.



See STEP 16 on PAGE 8 for Anchoring Instructions —

#### **STEP 16: MOUNTING THE BED CABINET TO THE WALL**

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

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

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

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

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

If the wall has **METAL** studs, use 3/16" x 4" toggle bolts: Locate and mark the centers of the studs in desired wall location using a good studfinder.

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

#### **STEP 17:**

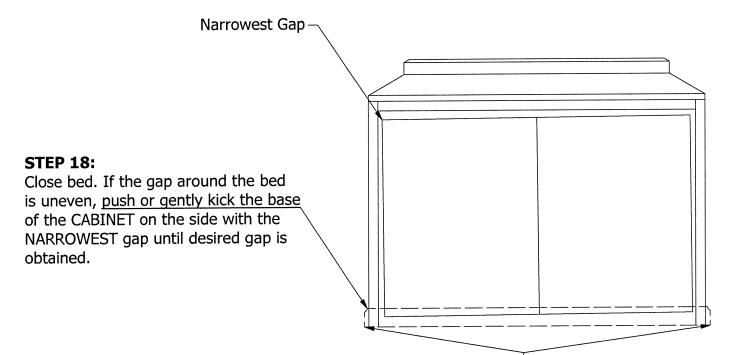
Holding the BED FACE PANEL in the down position, place the innerspring mattress on the bed and secure with ELASTIC RETAINING STRAPS.

#### NOTE:

When lowering the bed without the counter balance of the mattress it may seem very diffcult.... 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.





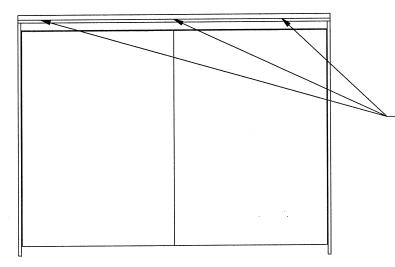
# **STEP 19:** Close bed. Apply base molding (if applicable) from outside of vertical to outside of vertical.

# PROBLEM SOLVING

- Q: The gas spring won't hand-compress... has it "frozen up?
- A: The design and construction of the gas spring's internal parts won't allow it to "freeze up." Each piston contains as much as 240 pounds of pressure, so they cannot be compressed by hand. Please refer to ASSEMBLY BOOKLET, page 5 step 12.
- Q: The bed is very hard to open and it wants to spring closed.
- A: Your mechanism is designed to have the optimum mechanical leverage to comfortably raise and lower the bed. Place the mattress on the bed. The mattress is the counter-balance, i.e., this is what offsets the force of the piston.
- Q: I've assembled the bed and attached it to the wall, but the bed face panel sags out of the cabinet... what do I do now?
- A: The mounting positions of the upper or the lower ball stud plates are incorrect. Check your measurements on PAGES 15, 16, 22 and 23. Remember... the measurements in the Orange (particle board) book ARE DIFFERENT from the measurements in the Green (plywood) book. If the face panel sags out of the cabinet and you FORCE it closed you will damage the head of the gas spring.

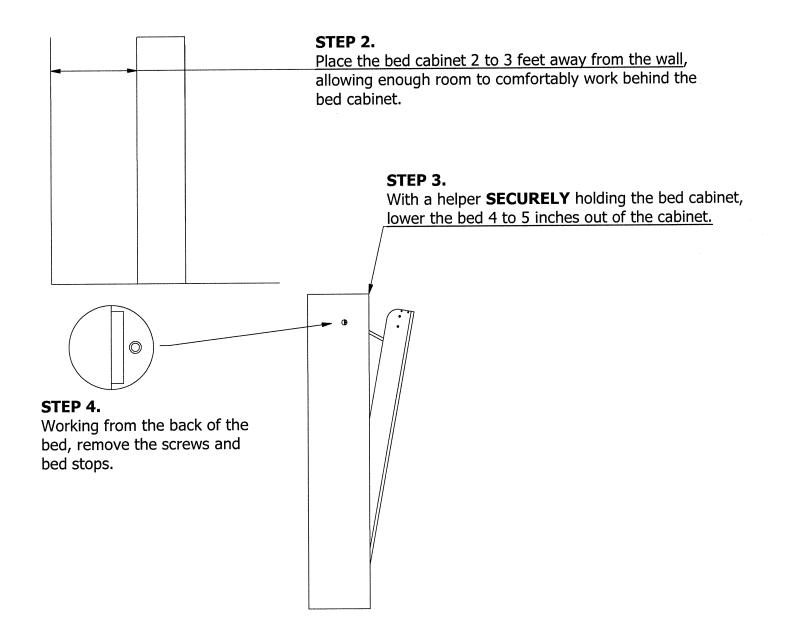
## REPLACING THE COUNTER BALANCE GAS SPRING

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



#### STEP 1.

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



#### STEP 5.

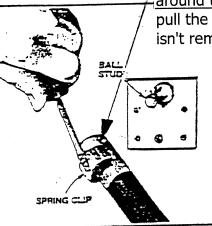
With your helper STILL HOLDING THE BED CABINET, allow the bed to pull back into the bed cabinet. It will recess about 3 inches into the bed cabinet.

#### 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 <u>snap the new gas spring on the lower ball</u> <u>stud</u> 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.**