WALLBEDS Australia

Reclaim Your Space

Safety Advice Sheet PLEASE READ BEFORE YOU BEGIN:

Read and understand instructions before beginning to reduce the risk of severe or fatal injury. The instructions do not intend to address every possible contingency encountered during assembly or installation.

- WallBeds Australia recommends two people to safely assemble and install all cabinetry.
- All additional cabinetry must be securely fasten to the Wall Bed cabinet or suitable wall studs. Failure to do so may cause damage to the cabinet or serious personal injury.
- Assembly and cabinetry installation can be daunting it is recommended to use a qualified trades person if you are not comfortable with the assembly and installation of these products.
- Due to the size and weight of the cabinetry, DO NOT install cabinets by yourself. It is recommended that there are two people when assembling and installing the cabinetry.

Safety and Liability Disclaimer- WallBeds Australia is not responsible for self-installation or third-party installation. The individuals conducting the assembly and installation are solely responsible for all safety measures, responsibilities, and liabilities. WallBeds Australia hereby disclaims all warranties and all liability for any claims for severe or fatal injury related to or based upon the use of these instructions.

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Alpha Steel Frame Assembly Instructions and Cabinetry Cut List Information

Stocked in: Single Double
Queen King

One universal bed frame which can be used to construct a Single, Double, Queen or King Wall Bed.

The Alpha Steel Frame can be used to make either a vertical or horizontal wall bed.

A lightweight universal structural steel bed frame with double overlap steel stiffeners completed with a fold-away leg system.

The frame is designed to exceed the strength of wood or aluminum. The Alpha frame may be used in residential and commercial applications.

Designed to Exceed International ISO 9002
Standards for residential specifications

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Alpha Wall Bed Project Start-Up

Familiarise yourself with all the components in the both the Alpha Bed Steel Frame and SBLM mechanism cartons, as well as thoroughly study this manual so you can plan the steps required to complete this project.

Study all illustrations and plan drawings. Make sure that the space available is adequate for the specified dimensions of the bed cabinet both in the open and closed positions (see cut list pages to cross check dimensions).

All cut list information pertains to using 16mm board. If using a thicker board then some adjustments will need to be made to some of the cut list measurements.

There are various hardware items and assembly instructions highlighted in **RED** in this project please ensure you familiarise yourself with these as they are critical to the project when using 16mm material.

Steps to Complete Project

1. Prepare all cabinet components.
2. Install springs into SBLM Lift Mechanisms.
3. Mount Lift Mechanism.
4. Assemble the Bed Cabinet.
5. Attach Bed Cabinet to wall.
6. Assemble Steel Bed Frame to Face/Base Panels.
7. Install the Face/Base Panel in Cabinet.
8. Install Handles, Leg Assembly, Mechanism Covers, Mattress

Refer to pages 21 & 22 of this booklet for more visual references for various steps of Cabinetry and Hardware assembly.

You Tube tutorials are available from Murphy Bed for the Frame & Spring assembly.

These clips are a visual guide on how to assemble the Steel Frame and SBLM components of the wall bed which is universal worldwide.

Any cabinetry assembly shown in these clips DO NOT relate to WallBeds Australia Cabinetry instructions.

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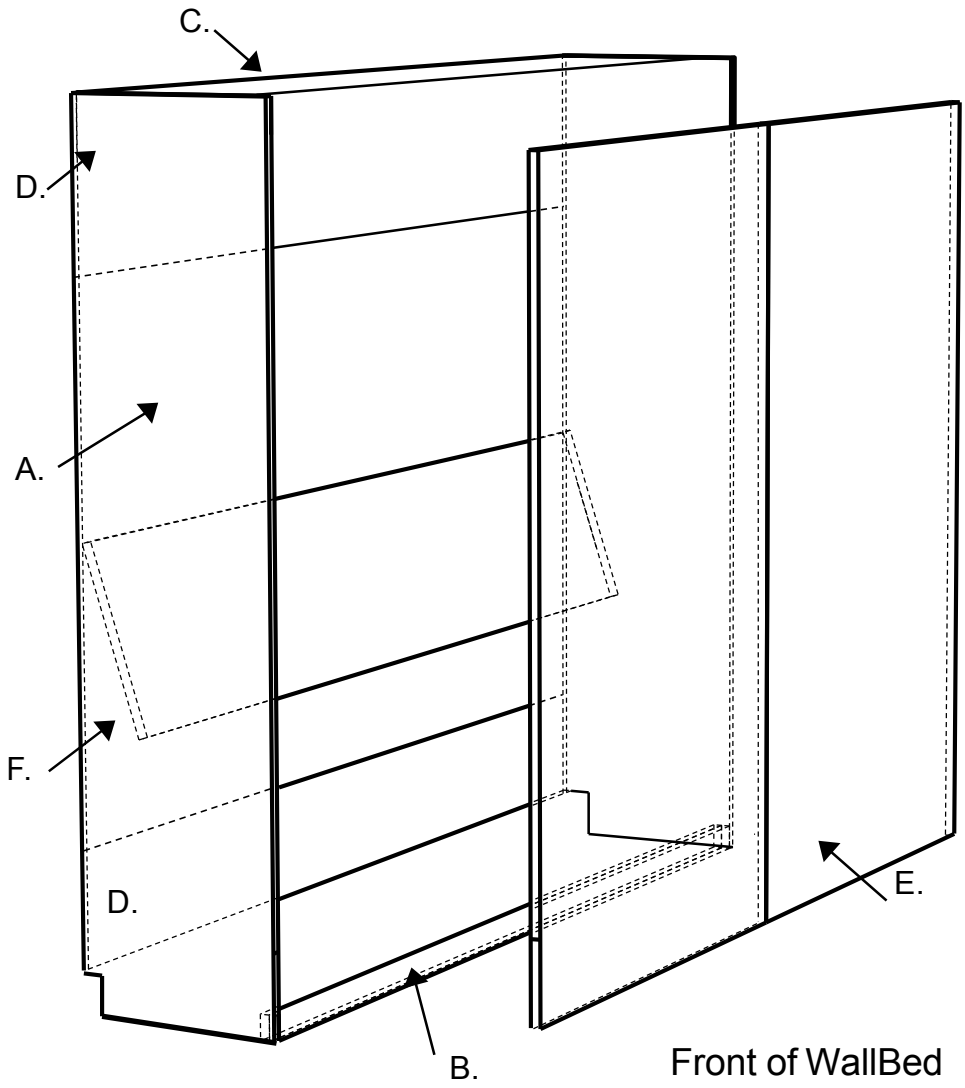
Alpha Wall Bed Cabinet Components



Drawing 1

Cabinet Components Description

E. Face/Base Panels
A. Side Panels
C. Top Panel
D. Back Panels
B. Kick
F. Head Board

Alpha Bed Carton Contents

Each Steel Frame Carton contains one Single, Double, Queen or King Steel Bed Frame complete with leg assembly, PS-1 Panel Savers and necessary hardware. SBLM Mechanism components are in separate carton.

Note: If you are making a Horizontal Bed, you will require a longer Leg Connector Rod from your supplier.

Qty.	Steel Frame Carton Items	Comments	✔
2	Frame End Sections	Identical Head & Foot	☐
2	Frame Side Sections	Identical, Right or Left	☐
3(5)	Stiffeners - Bed Face (King Size)	Space evenly between Frame Sides	☐
2	Fold-away Legs	One Left - One Right	☐
1	Leg Connector Rod	Stabilizes and Eases Leg Operation	☐
	Hardware Card #3		
14	Bolt 10-24x1/2" (M6x12mm) Black	Bolt Frame corners	☐
2	Bolt 10-24x1 1/4" (M6 x 32mm) Black	Bolt Leg Stop Foot corners	☐
16	Nut 10-24 (M6) Nylock	Use with M6x12mm & 32mm	☐
4	Angle 1"x1"x1 3/4" (25x25x44mm) Black	Use inside Frame corners	☐
2	1/2"x3/4" (13x19mm) Round Black Cylinder	Use with #1213 as Leg Stop	☐
	Hardware Card #4		
2	1 1/2"x5/16" (T1.5x40mm) Black Washer	Secure Leg inside Frame	☐
2	1 1/2"x.765" (T2.5x40mm) Black Washer	Secure Leg inside Frame	☐
2	1 1/2"x.765" (T2.5x40mm) Black Nylon Washer	Between Leg & outside of Frame	☐
2	Nut 5/16" (M8) Black Nylock	Secure Leg inside Frame	☐
2	Bolt 1/4"-20 Black Hex Head	Attach Leg to Leg Rod	☐
2	Star Washer for #1210	Attach Leg to Leg Rod	☐
	Hardware Card #5		
1	Nylon Web Strap with Buckle	Secure Mattress to Bed	☐
2	3/4"x1/4" (T1.5x25mm) Washer	Secure Mattress Strap to Frame and Bed	☐
2	#8x5/8" (M4x15mm) Wood Screw	/Face Panel under Mattress	☐
	Hardware Card #7 - *SEE ATTACHING FACE/BASE INSTRUCTIONS*		
110	#8x5/8" (M4x**15mm**) Wood Screw	Attach Steel Bed Frame to Bed Face	☐

Qty.	SBLM Mechanism Carton Items	Comments	
2	Spring Plate Covers	Cover Springs	
1	Lift Mechanism - Right Side	Attach to Right Side Panel	☐
1	Lift Mechanism - Left Side	Attach to Left Side Panel	☐
1	#1 Bags containing 9 Springs	Install correct number in each Mechanism	☐
1	13" Pipe	Used to set the Lift Mechanisms	☐
	Hardware Card #2 - *SEE ASSEMBLING CABINET INSTRUCTIONS*		
10	Cone Allen Bolts 5/16-18 x 1 1/4 *(32mm)*	To attach Lift Mechanisms to Side Panels	☐
4	Hex Head Bolt 5/16-18 x 1"	Attach Mechanism to Frame Side section	☐
2	Round Allen Head Bolt 5/16-18 x 1"	Position Mechanism Arm on Frame Side	☐
16	Hex Head Nylock Nut	section Secure Bolts and Screws	☐
1	Allen Wrench 5/16"	For Allen Head bolts	☐
2	Black Wood Screws	For Attaching Spring Plate Covers	☐

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Alpha Bed Steel Frame - **Vertical** Bed Cabinet Cut List

Single – Finished Size

Mattress size 920cm x 187cm

30cm max thickness

Overall Cabinet Dimensions: 1123 w x 2087 h x 410 d
Protrusion from wall to foot bed: 2150mm
Cabinet Material: 16 MDF or Particle Board

Quantity	Description	Width	Length	Finish (Tape) Edges
1	Face/Base Panel	1085	1962	EAR
2	Side/ End Panels	410	2087	1 Long
1	Headboard	370	1091	2 Long
1	Top Panel	390	1091	1 Long
1	Kick	100	1091	1 Long
2	Back	350	1091	1 Long

Double – Finished Size

Mattress size 137cm x 187cm

30cm max thickness

Overall Cabinet Dimensions: 1505 w x 2087 h x 410 d
Protrusion from wall to foot bed: 2150mm
Cabinet Material: 16 MDF or Particle Board

Quantity	Description	Width	Length	Finish (Tape) Edges
2	Face/Base Panel	732	1962	EAR
2	End Panels	410	2087	1 Long
1	Headboard	370	1473	2 Long
1	Top Panel	390	1473	1 Long
1	Kick	100	1473	1 Long
2	Back	350	1473	1 Long

Queen – Finished Size

Mattress size 153cm x 203cm

30cm max thickness

Overall Cabinet Dimensions: 1658 w x 2215 h x 410 d
Protrusion from wall to foot bed: 2285
Cabinet Material: 16 MDF or Particle Board

Quantity	Description	Width	Length	Finish (Tape) Edges
2	Face/Base Panel	809	2090	EAR
2	End Panels	410	2215	1 Long
1	Headboard	370	1626	2 Long
1	Top Panel	390	1626	1 Long
1	Kick	100	1626	1 Long
2	Back	350	1626	1 Long

King – Finished Size

Mattress size 183cm x 203cm

30cm max thickness

Overall Cabinet Dimensions: 2066 w x 2215 h x 410 d
Protrusion from wall to foot bed: 2285
Cabinet Material: 16 MDF or Particle Board

Quantity	Description	Width	Length	Finish (Tape) Edges
2	Face/Base Panel	1012.5	2090	EAR
2	End Panels	410	2215	1 Long
1	Headboard	370	2034	2 Long
1	Top Panel	390	2034	1 Long
1	Kick	100	2034	1 Long
2	Back	350	2034	1 Long

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Alpha Bed Steel Frame - **Horizontal** Bed Cabinet Cut List

King Steel Frame is not suitable for a Horizontal Bed

Single – Finished Size
Mattress size 92cm x 187cm
30cm max thickness

Overall Cabinet Dimensions:1187 h x 2028 w x 410 d
Protrusion from wall to foot bed: 1141mm
Cabinet Material: 16 MDF or Particle Board

Quantity		Width	Length	Finish (Tape) Edges
1	Face/Base Panel	1062	1990	EAR
2	Side End Panels	410	1187	1 Long
1	Headboard	370	1996	2 Long
1	Top Panel	390	1996	1 Long
1	Kick	100	1996	1 Long
1	Back	1051	1996	1 Long
1	Additional Stiffener	75	940	2 Long

Double – Finished Size
Mattress size 137cm x 187cm
30cm max thickness

Overall Cabinet Dimensions:1567 h x 2028 w x 410 d
Protrusion from wall to foot bed: 1637mm
Cabinet Material: 16 MDF or Particle Board

Quantity	Description	Width	Length	Finish (Tape) Edges
2	Face/Base Panel	994	1442	EAR
2	End Panels	410	1567	1 Long
1	Headboard	370	1996	2 Long
1	Top Panel	390	1996	1 Long
1	Kick	100	1996	1 Long
2	Back	350	1996	1 Long
1	Additional Stiffener	75	1320	2 Long

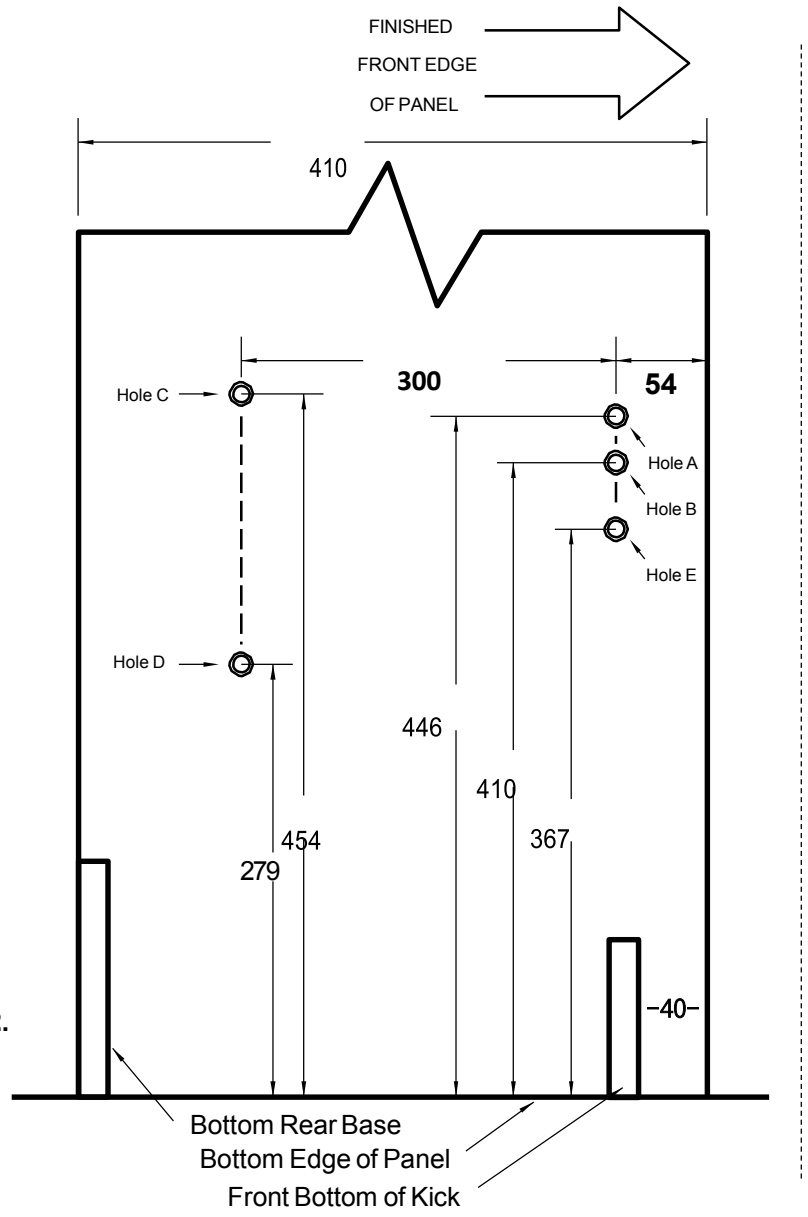
Queen – Finished Size
Mattress size 153cm x 203cm
30cm max thickness

Overall Cabinet Dimensions:1721 h x 2155 w x 410 d
Protrusion from wall to foot bed: 1791mm
Cabinet Material: 16 MDF or Particle Board

Quantity	Description	Width	Length	Finish (Tape) Edges
2	Face/Base Panel	1058	1596	EAR
2	End Panels	410	1721	1 Long
1	Headboard	370	2123	2 Long
1	Top Panel	390	2123	1 Long
1	Kick	100	2123	1 Long
2	Back	351	2123	1 Long
1	Additional Stiffener	75	1470	2 Long

Alpha Balance Lift Mechanism #SBLM - Drill Pattern

Mounting Holes for the Spring Lift Mechanism



Drawing 2.

1. Mark the mounting holes on the inside of each side panel.
2. Drill a 1/16” pilot hole for each mounting bolt. Drill the final hole with a 5/16” bit.
3. Counter sink 5/8” on the outside of the panels just deep enough for the 5/16” x 1 1/4” Cone Allen Bolts to be flush with the panel. *Hardware card #2*
   NOTE: All location measurements are from the front edge of the Cabinet End Panels. *Refer to Drawing 2.*

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Spring Application Chart

Note: Studio Desk- One additional spring per side is required as per the chart below.

BED SIZE	BED ORIENTATION	
	VERTICAL	HORIZONTAL
Single	4 - 5 springs per side	2 - 3 springs per side
Double	6 - 7 springs per side	4 - 5 springs per side
Queen	7 - 8 springs per side	5 - 6 springs per side
King	9 springs per side	NOT AVAILABLE

The Spring Guide is based onthe following mattress weight;

Single- 24kg **Double**- 38kg **Queen**- 42g **King**- 47kg

Once you have installed and tested your bed, you may need to adjust the amount of springs to achieve proper counterbalance.

There are nine locations for springs. If the bed requires an even number of springs, do not use the center hole (#5 from the top). If the bed requires an odd number of springs, start with the center hole (#5 from the top)

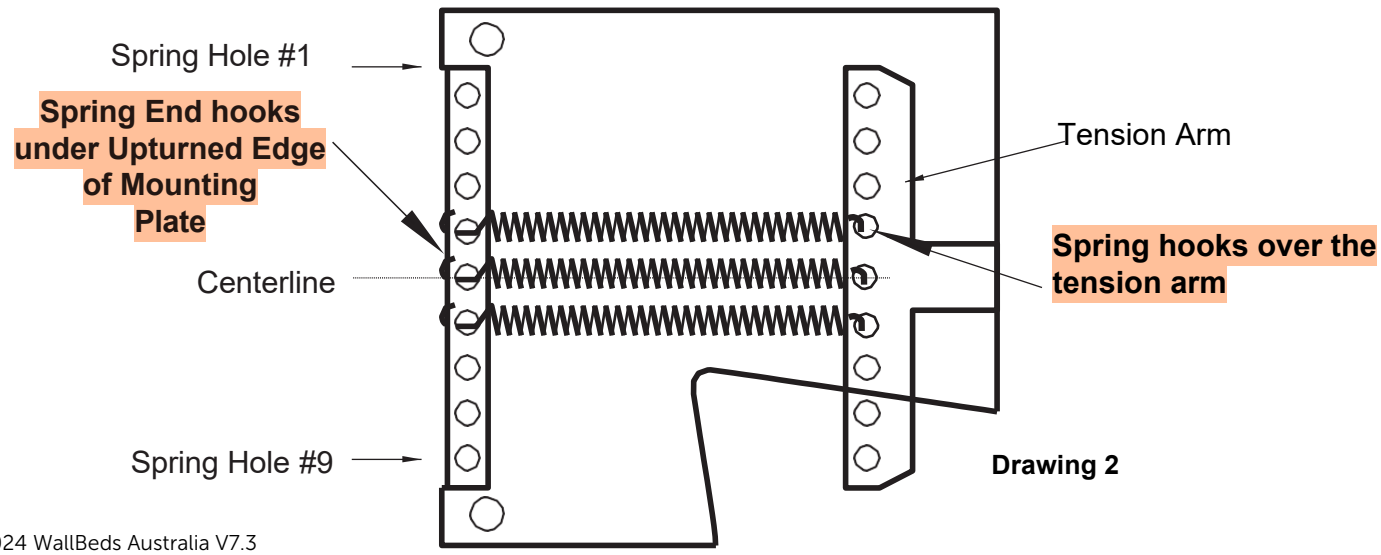
Start by unhooking any factory pre-loaded springs and then add springs towards the top of the Tension Arm (Hole #1) Then add springs to lower section of the tension arm (Hole#9)

Start by hooking the open end of the springs into the holes of the upturned edge of the mounting plate.

Hook the open end facing downward into the same numbered hole on the tension arm bracket. You should have an equal number of springs on each side of the center hole.

Use the same number of springs and the same layout on both the left and right spring arm mechanisms.

Reverse Spring Ends Application



Drawing 2

Wall Bed Cabinet Assembly and Attaching Spring Lift Mechanism

For easier final wall mount, assemble wall bed bed cabinet in the room where it will be used.

Please also refer to pages 21 & 22 of this booklet for more visual references for various steps of Cabinetry and Hardware assembly.

Assembling the Wall Bed Cabinet

1. Attach the 2 x Side / End Panels (A) to the Top Panel (C) the back edge of the Top Panel should be set flush with both the top & back of each Side/End panel.
2. Top Panel will be back 20mm from the front edge of the side panels.
3. Attach the Kick (B) to Side/End Panels
4. Attach the lower Back Panel (D) 30mm up from the top of the skirting cut out.
5. Attach the upper Back Panel (D) to Side/End panels and Top Panel (C)
6. Attach the Bed Head Board (F) to Side/End Panels using angle brackets 2 each side (*angle brackets and fixing screws not supplied*) as per *drawing 3 Be sure the angle brackets do not protrude beyond the back of the cabinet.*

The measurements for the headboard height in *drawing 3* are for a mattress depth of 25cm - 27cm. You will need to increase or decrease the height and angle measurement depending on the mattress depth.

Tip: Reduce the angle measurement when using a thicker mattress

IMPORTANT- When attaching the Spring Lift Mechanism using 16mm board, you will need to replace the front 3 per side of the 32mm supplied Cone Head Allen Bolts with 25mm bolts. *25mm bolts are not supplied.*
Failure to do this will result in not being able to set the Tension Arm as per instructions on page 17 drawing 9.

Attaching Spring Lift Mechanism

1. Fit the springs to both Spring Lift Mechanisms as per instructions on page 9.
2. Attach to the Side/End Panels (A) by using the Cone Head Allen Bolts (*Card#2*) Tighten with the nylon nuts also supplied in hardware *card #2.*
3. Repeat for both sides.

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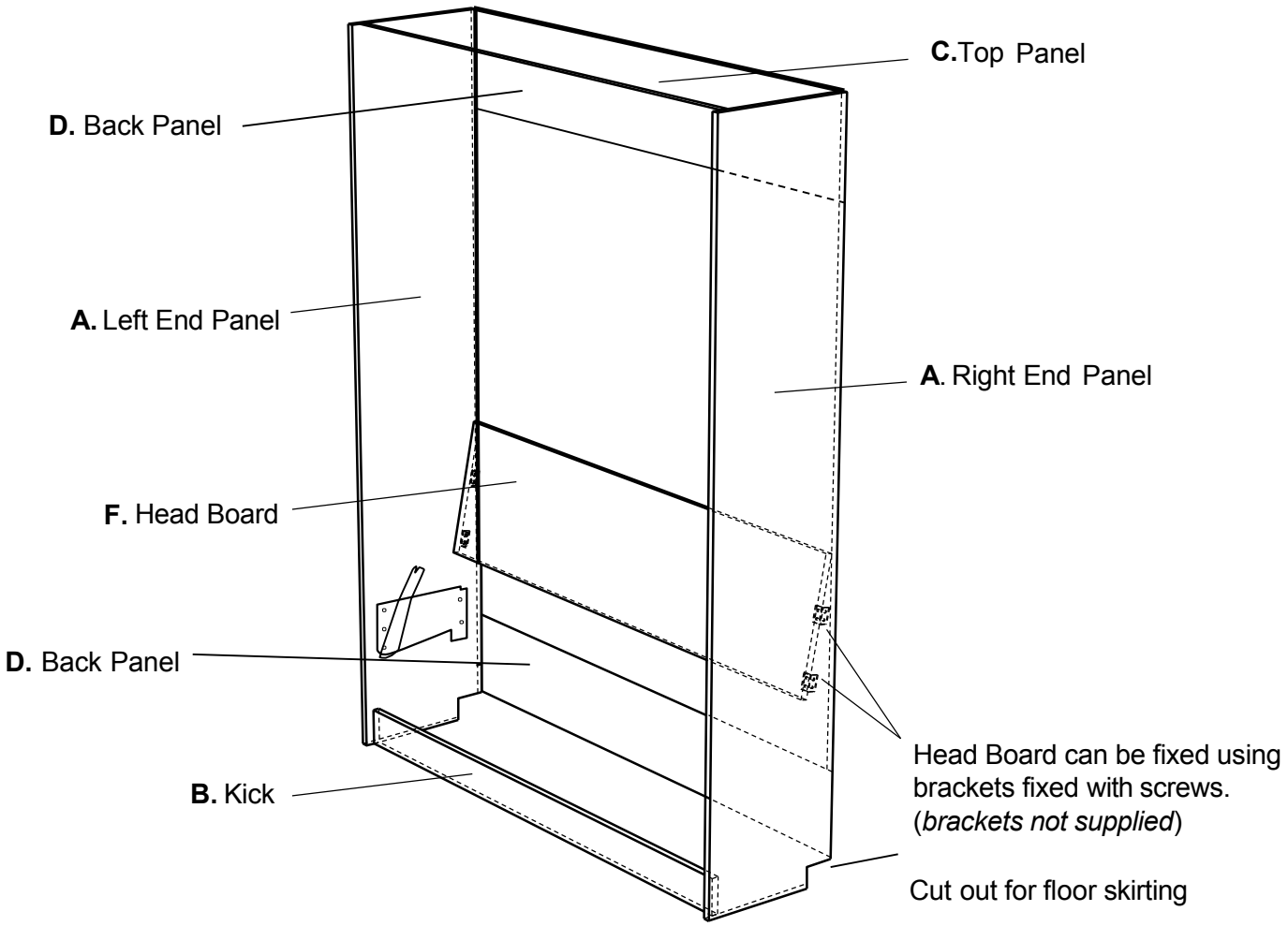
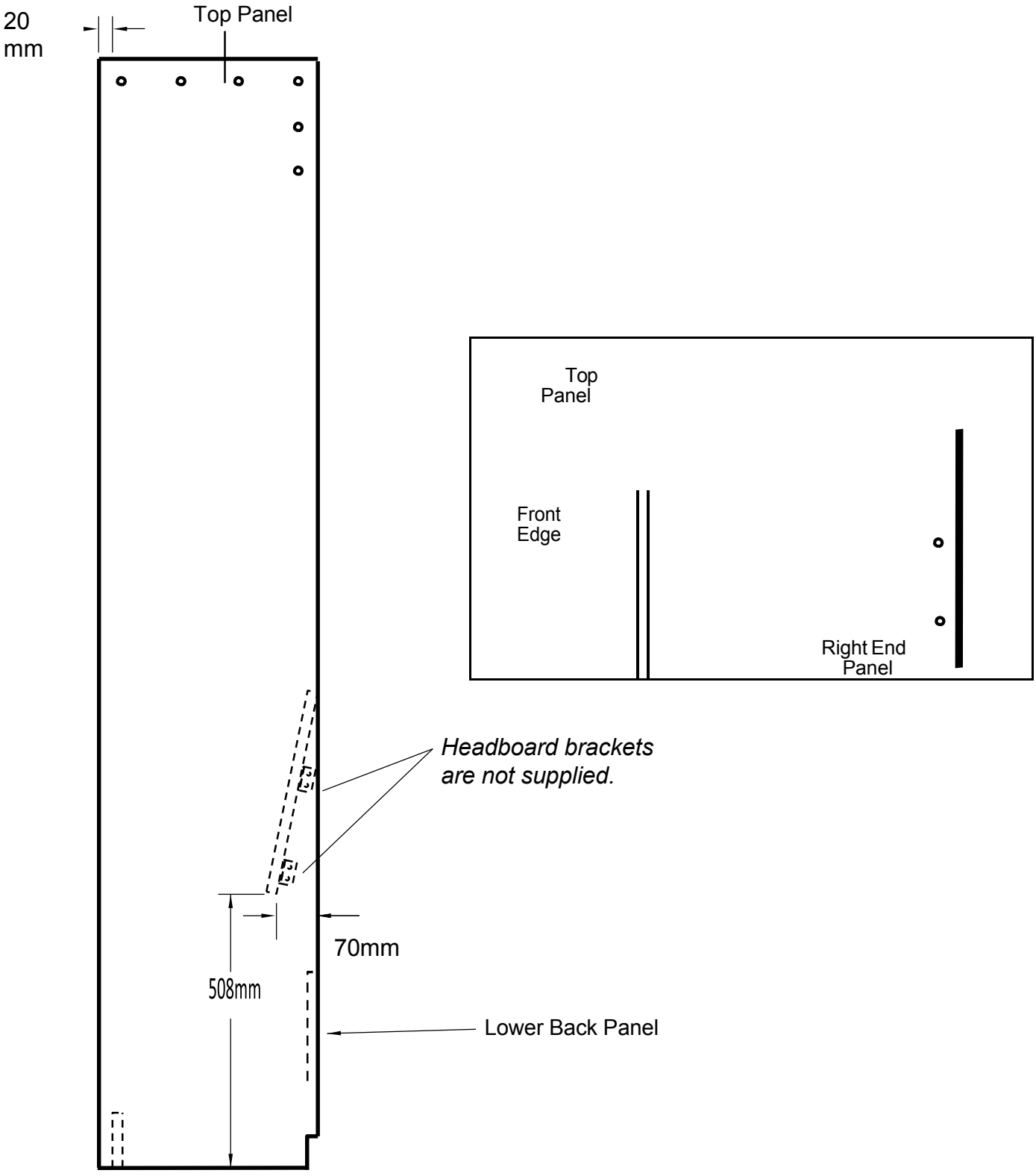
Alpha Bed Cabinetry



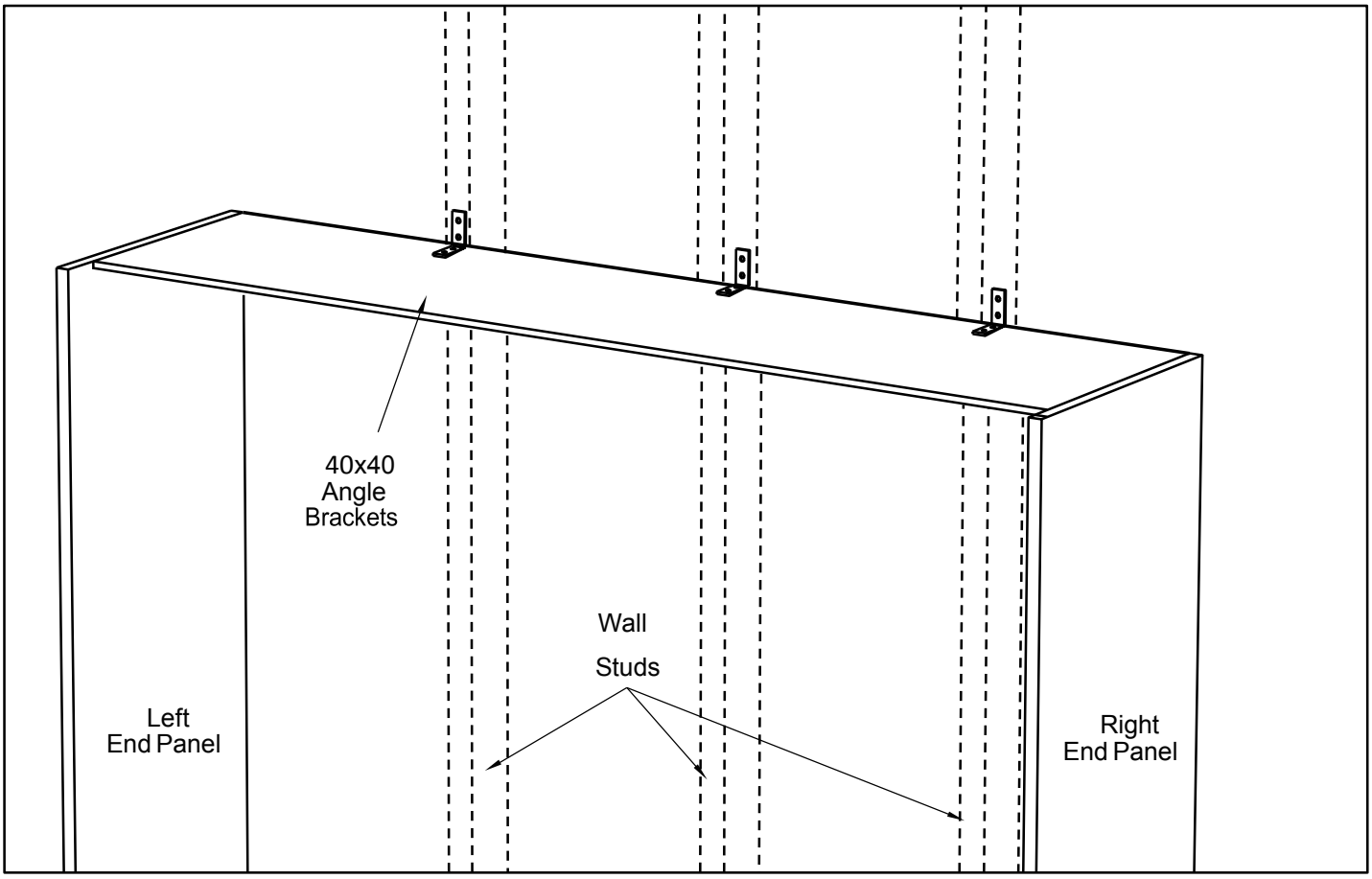
Assembling the Bed Cabinet and Headboard Location Measurments



Drawing 3

Attach Wall Bed Cabinet Securely to Wall

1. Prior to placing cabinet against the wall, locate 3 wall studs or other suitable wall frame members at the level of the Top panel (*Drawing 4*)
2. The cabinet must be secured to wall studs or other wall structural members, using 40mm x 40mm L-Brackets & suitable wall fixing screws. **Alert:** If the wall is not a wood stud wall, then you will need to use metal stud screws, toggle bolts or concrete expansion bolts as necessary. WALL FIXINGS ARE NOT SUPPLIED.
3. Place wall bed cabinet against the wall. Level and square the wall bed cabinet. The wall bed will not operate correctly if cabinet is not square.
4. Once the cabinet is level and square, attach the wall bed cabinet to the wall studs using L brackets. *(brackets and fixings not supplied in hardware cards)*
5. Attach the L bracket to the wall first then re-check the wall bed cabinet is level and square. Then secure L-Brackets to the Top panel (C)



Drawing 4

Steel Frame Assembly

The Alpha Steel Frame is adaptable as vertical or horizontal bed.

Note: *A leg connector rod extension bar is required for a horizontal bed.*

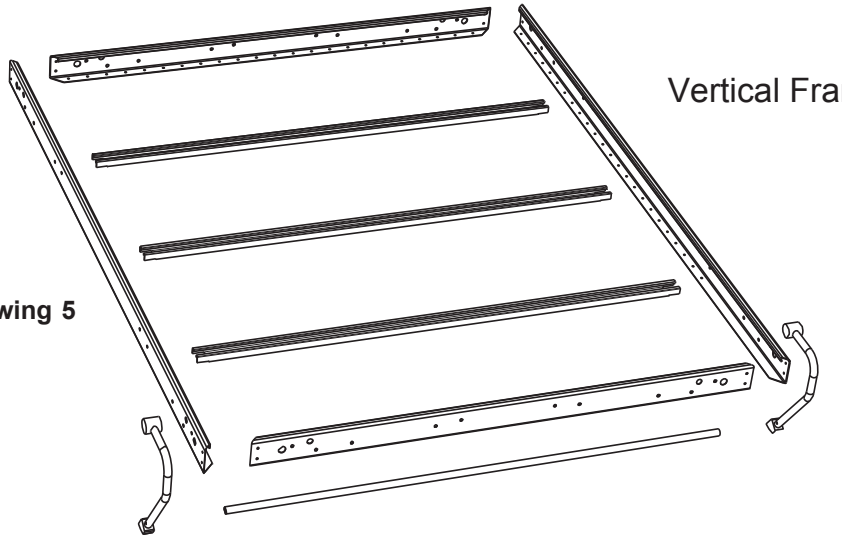
Hardware Card #3 is used for Steel Frame Assembly

1. **FRAME ASSEMBLY** - Using the 4 small corner brackets and 14 of the M6x12mm bolts and M6 Nylock Nuts completely assemble the Steel Bed Frame by joining the 4 rails together.
2. **LEG STOP** - Using the 2 x M6x32mm bolts plus M6 Nylock Nut along with the 2 x 1/2” x 3/4” Round Black Cylinders to create the Leg Stop. Place these 2 bolts at outer right and left bottom holes at the foot of the bed frame. *Drawing 6 page 16*

Stiffener bars are shown in Drawing 5 for reference only.

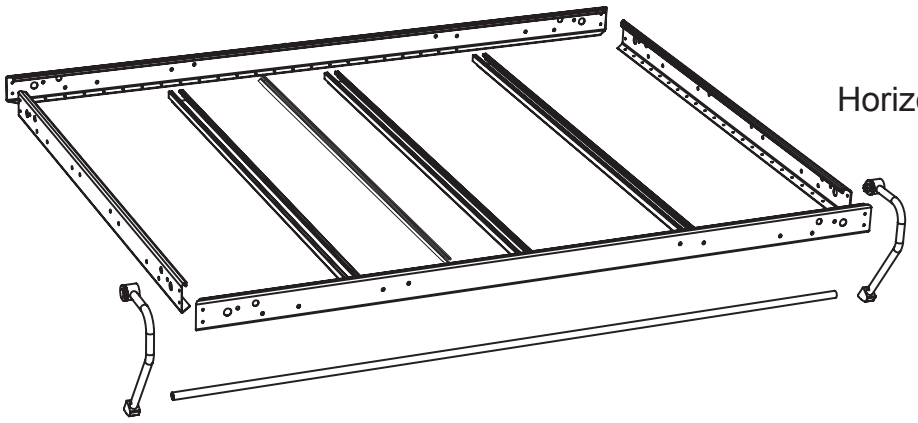
Stiffener Bars are not used until Attaching Face/Base instruction step.

There are three steel stiffeners provided for all beds with the exception of the King frame (5 stiffener bars for the King bed). These notched stiffeners will be attached to divide the Bed Face/Base length into four equal sections.



Vertical Frame Assembly

Drawing 5



Horizontal Frame Assembly

Attaching Steel Frame to Bed Face/Base

Important: *If 16mm board is being used for the Base/Face panels it is recommended that you replace the Steel Frame Fixing supplied in hardware card #7 with 10g 1/2" dome head screws (not supplied). It is also recommended that you pre-drill the holes for all the steel frame fixing screws.*

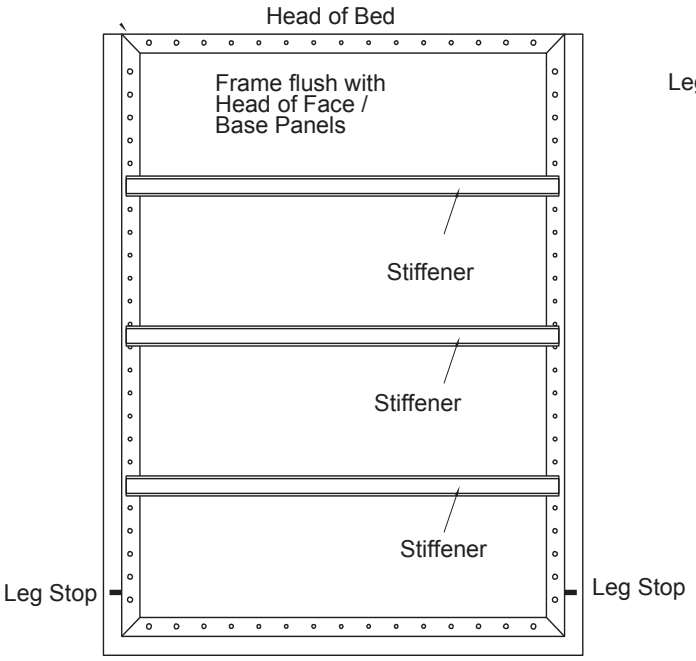
1. Place the Bed Face/Base Panels down on a non-scratch surface such as a carpet or blanket. To create an equal gap between the door panels, use a small washer or 5c piece. Position one near the top and one near the bottom of the Face/Base panels. Ensure you remove these once you have secured the steel frame in place.
2. Lay the Steel Bed Frame on the Bed Face/Base panels ensuring the Steel Bed Frame flush with what will be the bed head end of the Face/Base (pillow end). Ensure the Steel Bed Frame is centered on the Bed Face/Base Panels; you will have approximately 25mm space from the Steel Bed Frame to the right and left edges of the Face/Base panels. *drawing 7*
3. Once you have checked the measurements and the frame is still square, attach two screws to each side of all four corners. To ensure the Steel Bed Frame remains square, start fixing the frame to the Face/Base panel in each corner first at the head of the frame and then followed by middle on both sides of the steel frame. Remove the two washers / spacers then continue to fix in all the Steel Bed Frame screws.
   Note: It is very important to have the Steel Frame centered on the Face/Base panels. Any error will be noticed in the vertical sight lines and may interfere with the operation of the Face/Base.
4. Space the Stiffener Bars over the Face/Base panels. These notched stiffeners should be located and attached to divide the Steel Bed Frame length into four equal sections. Use caution not to damage Bed Face/Base panels by putting screws in too far into the recessed areas.
5. Attach the two Panel Savers (PS-1) as per instructions on page 21.

For all horizontal beds you will need to reinforce the vertical seam where the Face/Base panels meet. Place one of the supplied stiffener bars close to the seam, then place the additional wood *(not supplied)* stiffener over the vertical seam. *See drawing 8* place the remaining steel stiffener bars equally in the remaining space.

Attaching the Nylon Mattress Strap - Use one of the existing Steel Frame Screw Locations. At approximately 457mm from the foot of the bed, remove a screw that fixes the steel frame to the Base/Face panel. Then using the removed screw and a washer supplied in *card#5* re-attach the screw through the strap back into the Face/Base panel.

Attaching Steel Frame and Stiffener Bars to Face/Base

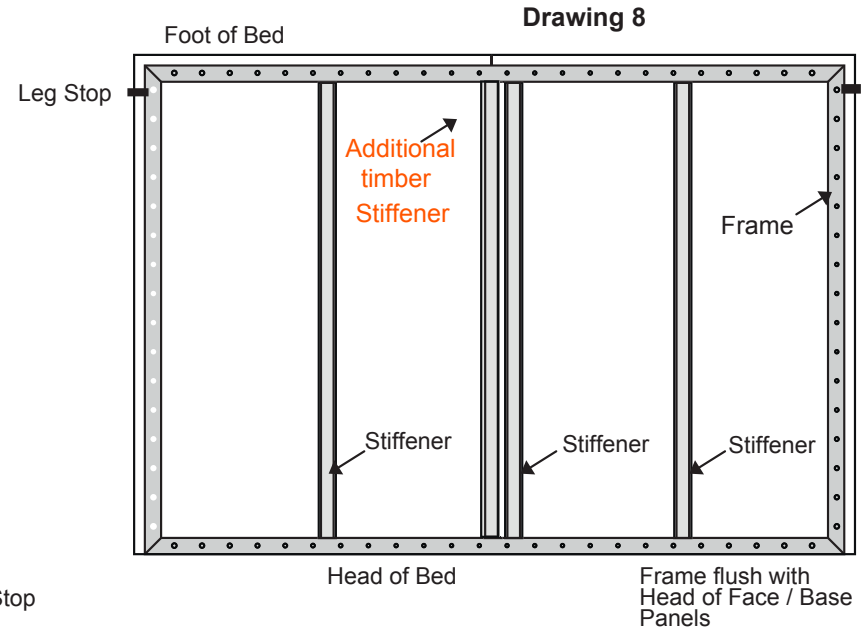
Vertical Frame Assembly

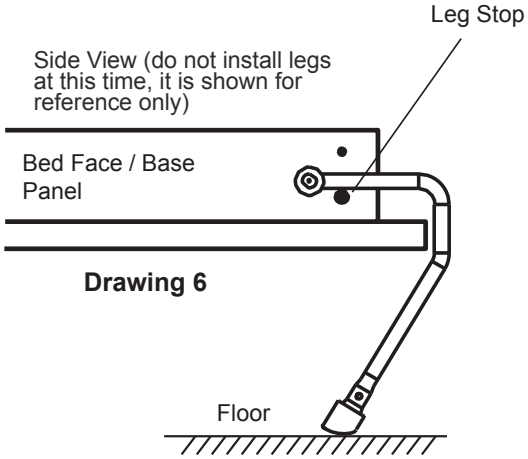


Drawing 7

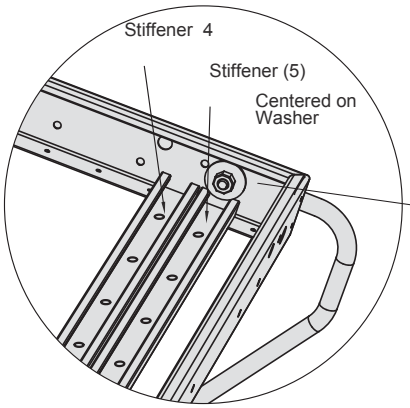
Horizontal Frame Assembly

Drawing 8

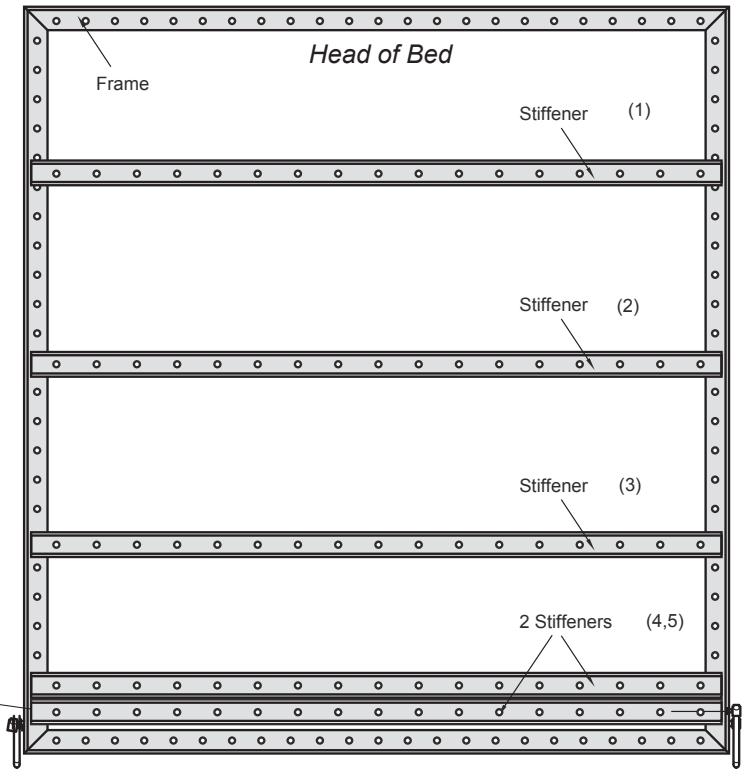




Drawing 6



Vertical **KING** Bed Stiffener Placement Only



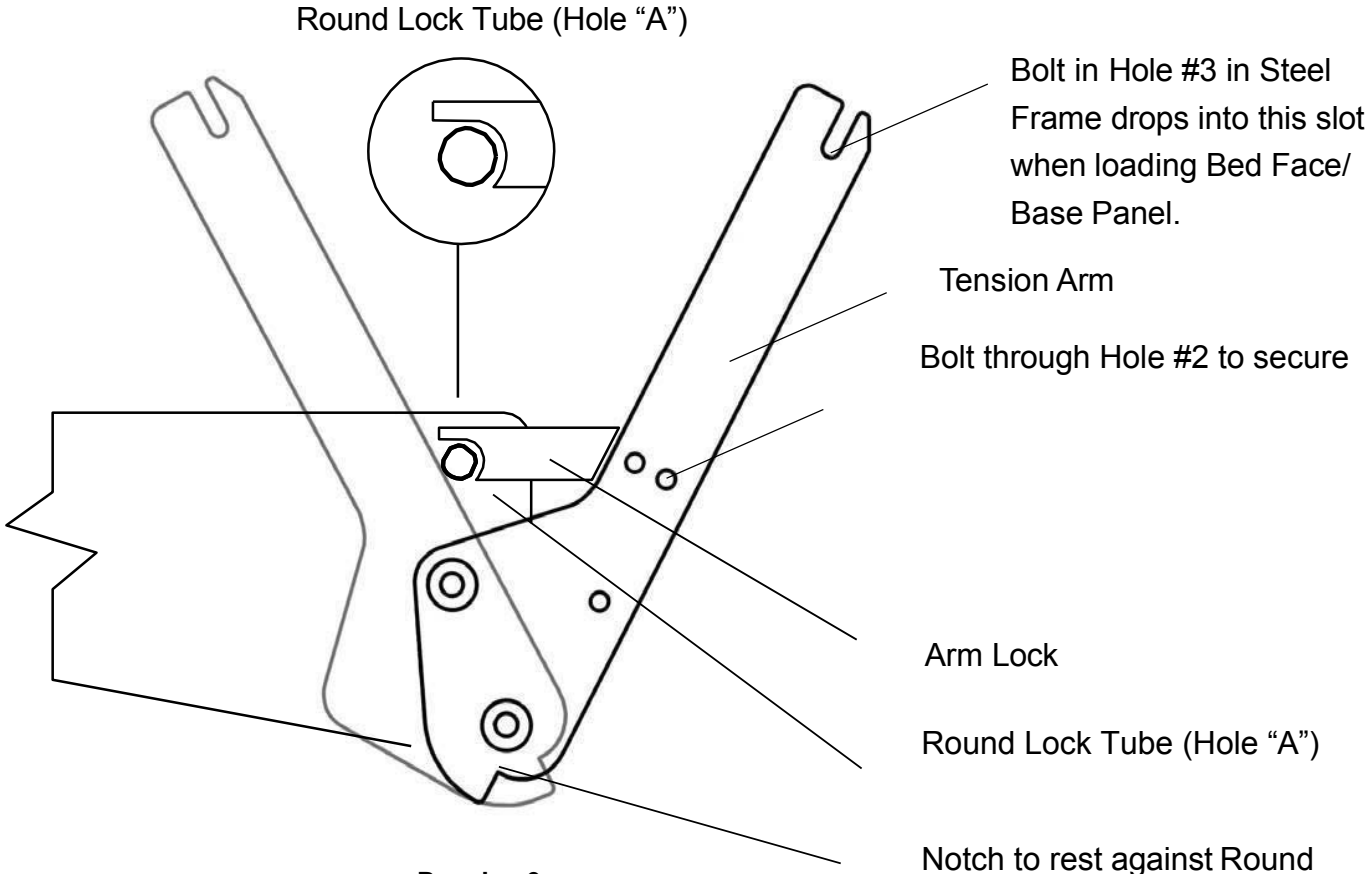
Setting the Spring Lift Mechanism

WallBeds Australia recommends eye protection is worn whilst setting the Spring Lift Mechanism

1. Place the PVC tube supplied over the Spring Lift Arm. Placing one foot against the bottom front edge of the Side/End panel of the wall bed. Lever the tension arm downwards until you can set the silver arm lock to the round lock tube (hole A) *see drawing 9*. This is the position of the top cone bolt that was used to attach the Spring Lift mechanism. This may also require the assistance of a helper to achieve this step.

Caution: Do not reach behind the tension arm when you are setting the Tension Arm.

Tip: *A longer pipe or similar could be used providing it is not fragile and of similar or stronger construction. This will allow for extra leverage when engaging the Tension Arm.*



Drawing 9

Installing the Face/Base Panel onto the Spring Lift

Hardware from Card #2 in the SBLM carton is used in these steps.

1. On the Steel Frame insert two 5/16” x 3/4” Hex Head Bolts from the outside through Hole #3 *see drawing 10a* put the 5/16” Nylock nuts on these bolts only until the nut is flush with the bolt end. **DO NOT TIGHTEN AT THIS STEP.**

2. Insert the two Round Allen Head Bolts from the outside of the Frame through Hole #1 *see drawing 10a* use 5/16” Nylock nuts and securely tighten.

3. Stand the Face/Base panel to a vertical position between the tension arms. Lift and tilt back evenly until the two hex head bolts in Hole #3 on either side of the Steel Frame drop into the notched end of Tension Arm *(see drawing 10 page 19)*. **NOTE**: When installing the Face/Base panel the bottom edge of the Face/Base panel must be placed OVER and BEHIND the kick panel.

4. Once the Bolts in Hole #3 are completely seated in the bottom of the notch in both of the Tension Arms. Lower the Face/Base until the Allen Head Bolts are seated into the lower notch *see drawing 9* **Important:** Do not twist the Face/Base panel as it is being lowered as the Round Allen bolts will come unseated. If this occurs then you will need to lift the Face/Base back up and re lower back into position.

5. Gently lower the Face/Base downwards to insert the 2 remaining 5/16” x 3/4” Head Bolts in Hole #2 on both sides *drawing 10* You may need to tilt the panel downward to approximately 45 degrees to reveal the bolt holes. This will also release the Arm Locks, you will hear a click as they disengage.

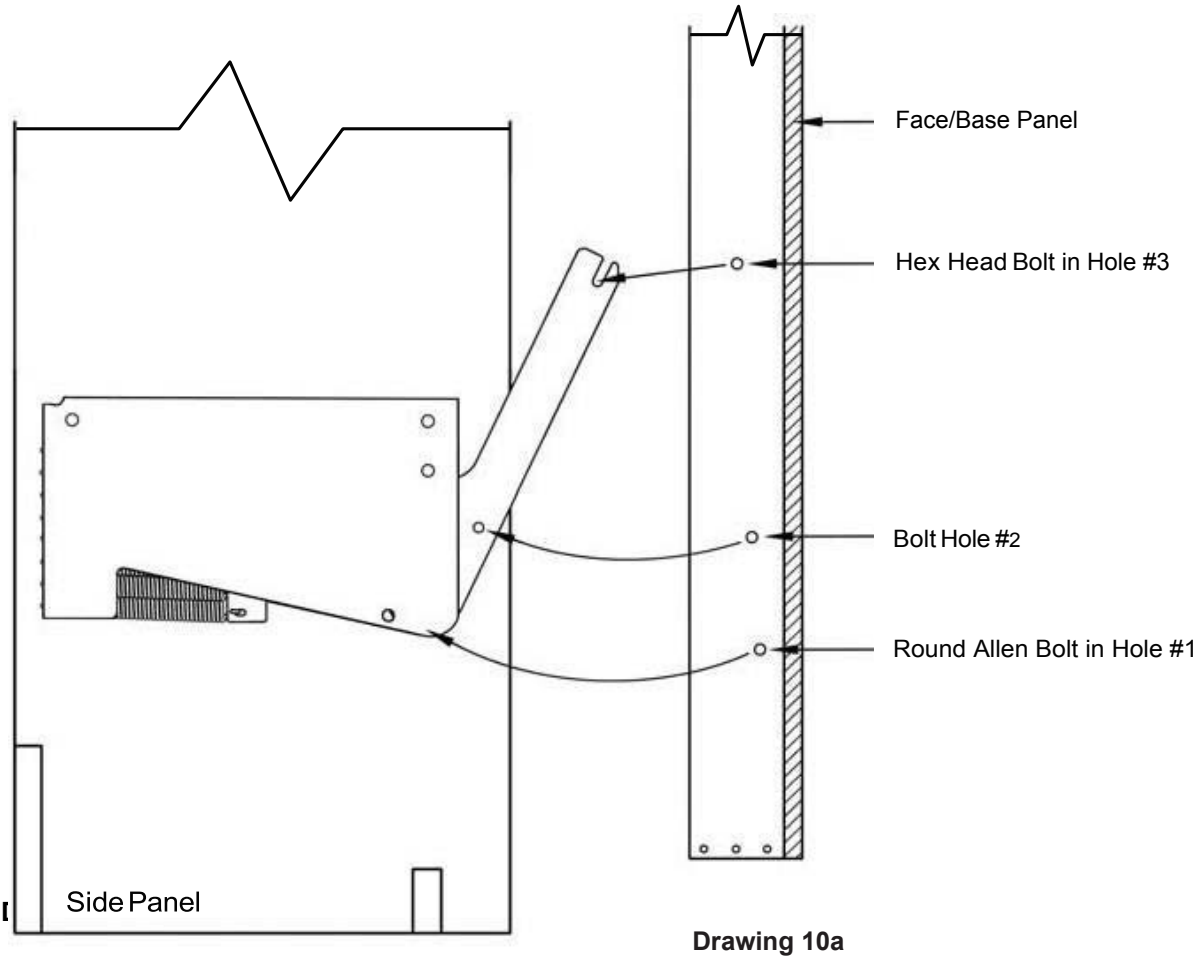
6. Hold the Face/Base panel securely and tighten the 4 x bolts in Holes #2 and #3.

7. Once all 4 Nylock nuts have been tightened gently close the Face/Base panel. Do Not let it slam shut as the bed cabinet may have moved out of square whilst loading the Face/Base panel and the leg may strike on a top edge of an end panel on the wall bed unit.**

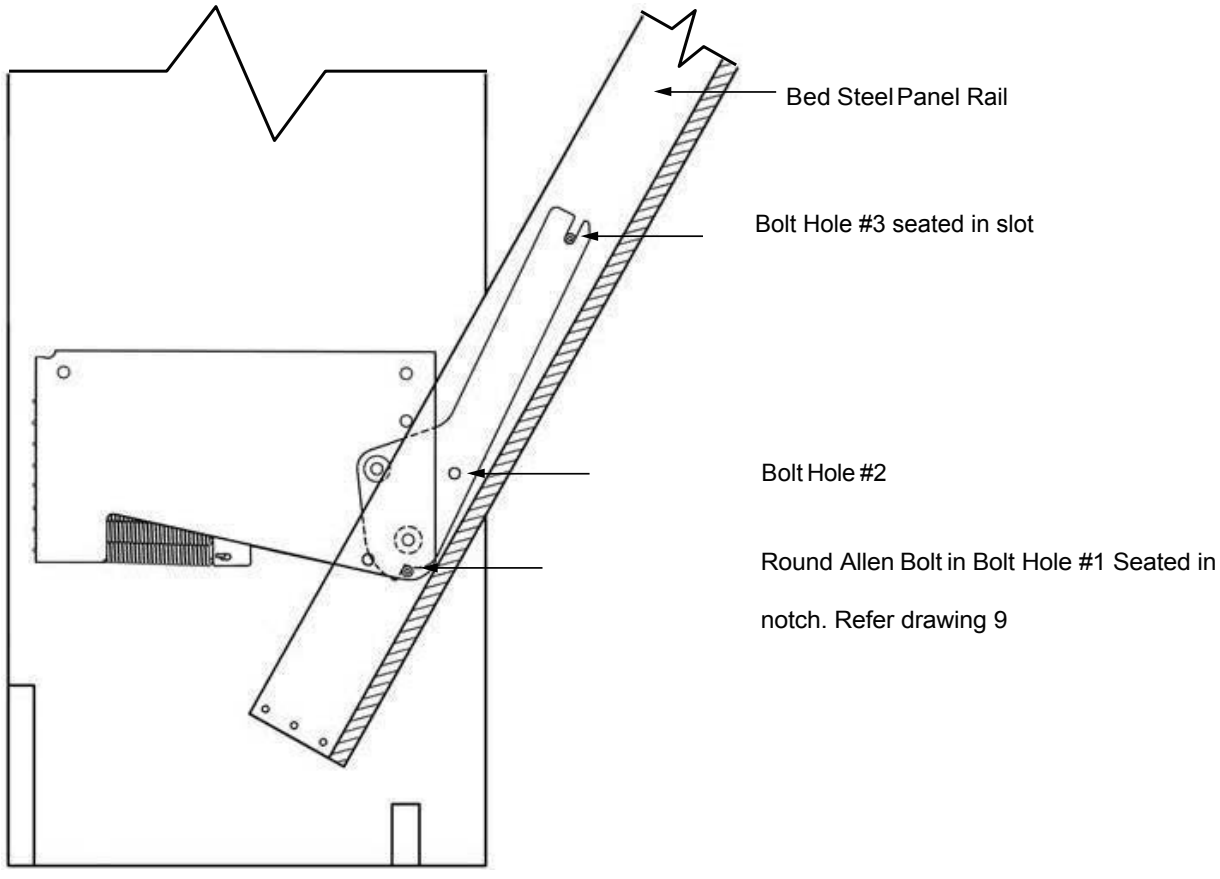
IMPORTANT - *The Face/Base will NOT stay in the open or the down position until the mattress has been loaded onto the Face/Base panel, the weight of the mattress is needed to counter balance the Spring Lift Mechanism.*

**If the Face/Base panel is hitting the top on one side of the wall bed End Panel when closing, the wall bed may be now out of square. To fix this, nudge the bottom of the End Panel that the door is hitting on towards the opposite side. You will then see the gap of the Face/Base open and no longer strike the End Panel.

Tip*:* Once the door panel no longer strikes on the End Panel and the gap on either outer edge of the Face/Base panel is even. You can also secure the Lower Back Panel (D) to the wall studs, this will prevent any further cabinet movement.



Drawing 10a



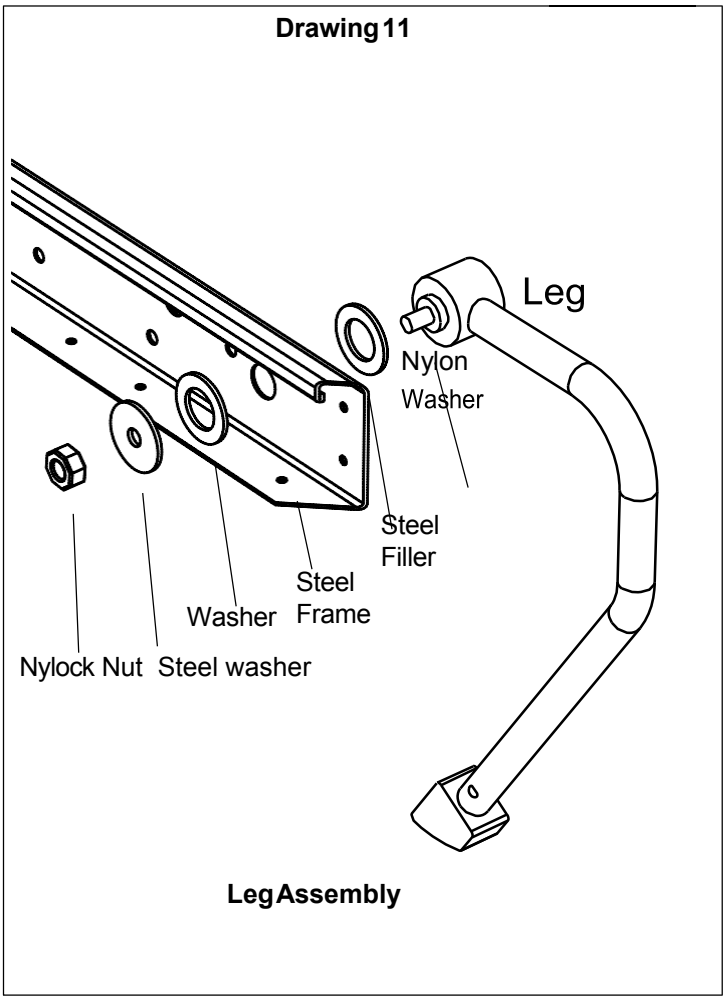
Drawing 10

Install Handles, Legs, Spring Lift Mechanism Covers & Mattress

Hardware Card #4 is used for this step

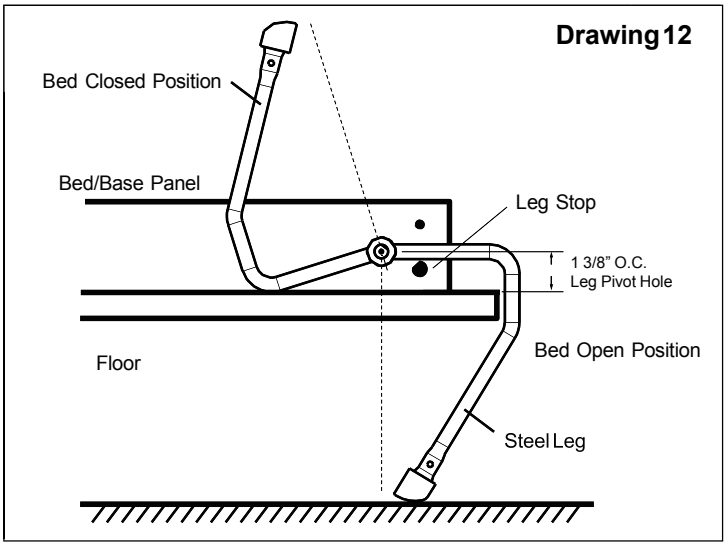
1. Install legs with the nylon washers on the inside and outside of the steel rails. *See drawing 11*
2. Tighten the nylon nut to have a small amount of friction when leg assembly is rotated from the up to down position.
3. Install leg connector rod between legs and secure with 1/4” x 1 1/4” Hex head bolts and star washers *see drawing 13* Be sure they are securely tightened so not to become loose. If they are too loose then the legs will twist as you open and close the legs.
4. Position and secure the handle for ease of operation at your preferred height.
5. Attach the powder coated spring mechanism covers in place *SBLM Carton*.- Secure these with #8 x 1 1/4” black wood screws through the hole in each of the cover plates *hardware Card #2* These screws will fix into the timber side panels of the bed.
6. Install mattress and secure with previously installed mattress strap.

Drawing 11

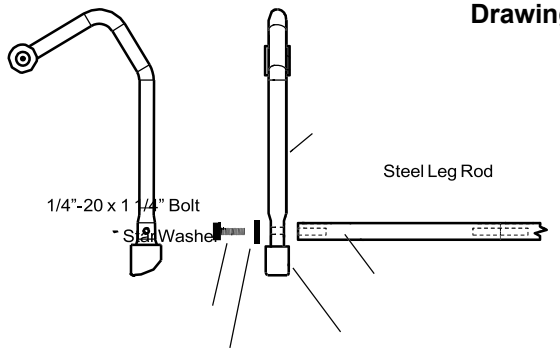


Leg Assembly

Drawing 12



Drawing 13

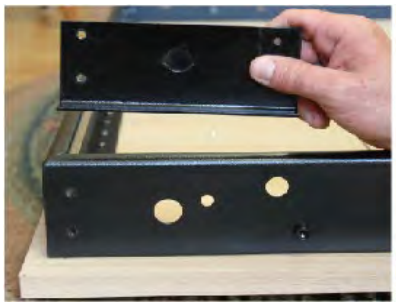


Fitting Instructions for the Alpha Bed Steel Frame PS-1 Panel Saver

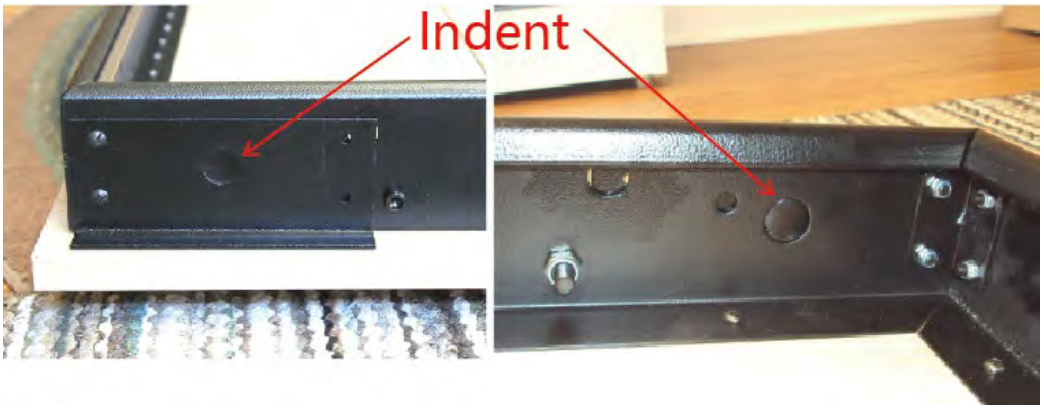
What does the PS-1 Do?

The PS-1 can be fitted to protect the upper back face of the door panel if the user forgets to lower the legs to the ground when opening the wall bed. Significant damage can be caused to the wall bed face panels as it passes from the horizontal point and goes to the floor. The PS-1 will reduce damage to the face panels but will not protect against possible damage to the Spring Lifting Mechanism by overstretching the springs.

The PS-1 is attached at the bed head of the bed, not at the foot end of the bed where the leg is mounted.
There is no left or right - the unused holes are for the opposite side.



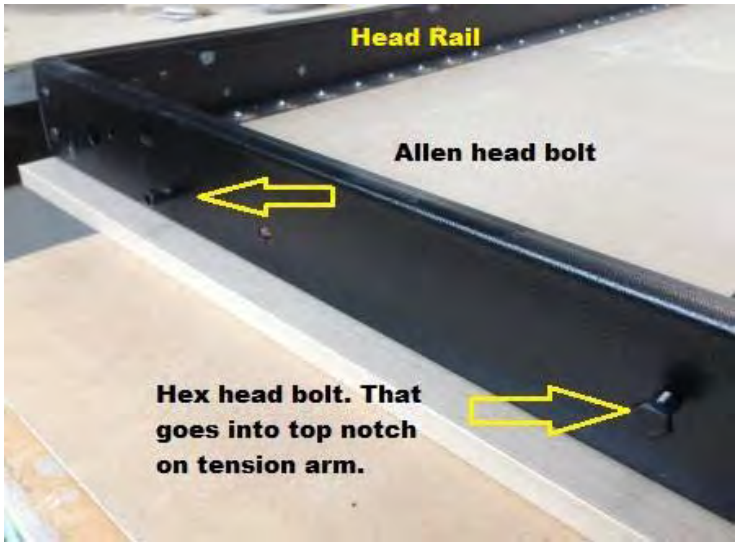
Insert the indent on the PS-1 into the large hole in the frame closets to the corner angle bracket. Secure the PS-1 into position by using the two (M6x12mm) Black bolts that hold the frame corner brackets. The remaining two smaller holes in the PS-1 are there, as they are reversible and interchangeable with either side of the frame.
Repeat this step for the opposite side.

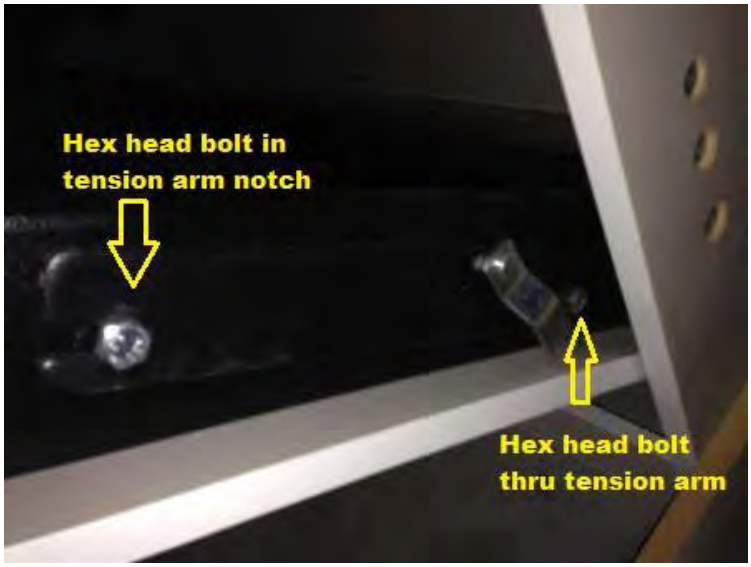


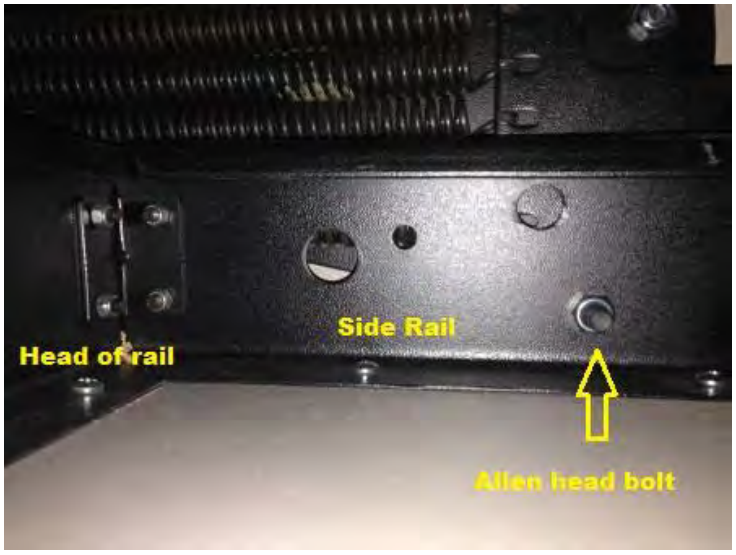
Assembly Images

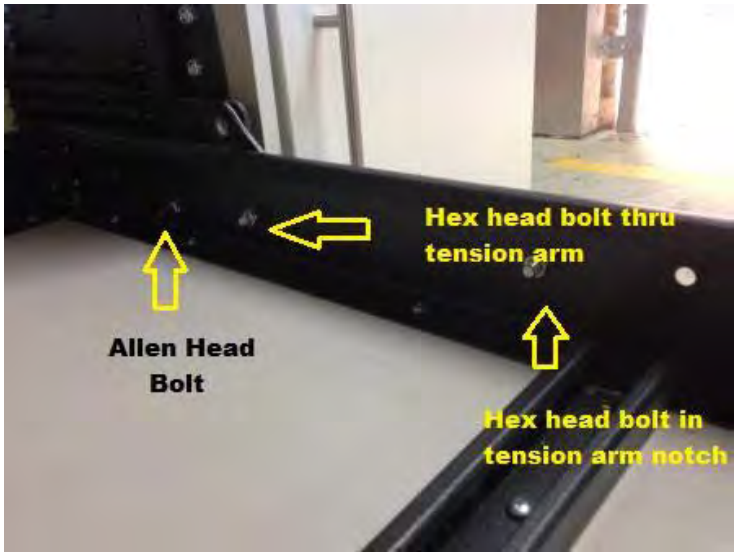
Spring Mech
Attached to Side Panel

Spring Mech Under Tension With
Silver Locking Arm In Place


Head Rail
Allen head bolt
Hex head bolt. That
goes into top notch
on tension arm.


Hex head bolt in
tension arm notch
Hex head bolt
thru tension arm


Head of rail
Side Rail
Allen head bolt


Hex head bolt thru
tension arm
Allen Head
Bolt
Hex head bolt in
tension arm notch