Alpha Murphy Bed



Assembly Instructions Face Assembled Questions call 501.753.9699

Designed to exceed International ISO 9002 Standards for Residential Specifications Revised 3/31/2021

Table Of Contents

Unpacking Your Bed
<u>Videos</u>
Installing The Springs
Mounting Lift Mechanism
Assemble the Bed Cabinet
Attach Bed Cabinet Securely to Wall
Install the Bed Face Panel Unit
Install Legs
Mounting the Face
Plug in the Lights:
Follow up to Initial Assembly
Additional Options
Bookcase Option
Desk Option
Desk Step D-1 Attach the Desk Riser to the Desktop
Desk Step D-2 Attach the Desk Mechanism to Desk
Desk Step D-3 Place Desk Hinge into Hinge Clip
Desk Step D-4 Reattach Base

Desk Step D-5 | Check Operation

Unpacking Your Bed

Remove all boxing, foam, and shrink wrap and make sure all components are there. Each customer piece will vary but in general you should have:

Do not throw away packaging until you are complete (smaller items could be lost in packaging)

Parts Provided	Tool Needed	
□ 2- Verticals □ 1-Top panel/Header □ 1-Headboard □ 1-Center Section □ Unassembled face may be 4 individual panels and the metal frame boxed □ Package of screws	Power drill 3/16" drill bit Phillips bit 1/2" wrench 7/16" wrench or nut driver Hammer Flathead Screwdriver Stud Finder	
 □ Extras may include: □ Crown or base molding □ Bookcases (adjustable shelves will be packed separately) □ Desk 	☐ Tape Measure ☐ ½" socket Additional tools if the Face isn't already assembled: ☐ 5/16" socket, wrench or nut driver ☐ #2 Square drive for your drill	

Videos

To make the assembly easier, we created a couple of video playlists. As with these instructions, the videos are generic and not all may apply to your specific set-up.

Play all Videos | Entire Playlist

Individual Videos

Parts

Tools Required

Adding Springs

Mounting the Lift Mechanism

The Cabinet Part 1

Lights

Cabinet part 2

Attaching to wall

Locking Spring

Frame Bolts and Straps

Legs

Mounting the Face

Finishing Up

Installing The Springs

Video: Adding Springs

NOTE: Some models may have the correct number of springs already installed. Check the chart and if your bed already has them installed then skip this section.

1-1. The Number of springs in the Lift Mechanism will vary by size and application of the Murphy Bed. Check chart below.

SPRING APPLICATION CHART

Please Note: These are recommendations only. Actual number of springs required will depend on the total weight of the bed face unit including the mattress

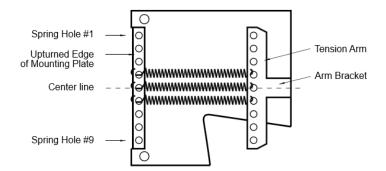
and all bedding

BED SIZE	STANDARD FACE (NO DESK)	STANDARD FACE (ADDED DESK)
Single/Twin	4 Springs Vertical (3 Horizontal)	5 Springs Vertical (3 Horizontal)
Double/Full	5 Springs Vertical (4 Horizontal)	6 Springs Vertical (4 Horizontal)
Queen	6 Springs Vertical (5 Horizontal)	7 Springs Vertical (5 Horizontal)
King	8 Springs Vertical	9 Springs Vertical

After you have completed installing and checking the operation of your bed, you may find it necessary to add or remove springs to achieve the correct lift effort of between 5 to 10 pounds.

- 1-2. 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) and work outward in both directions evenly.
- 1-3. Hook the springs so the open ends are facing outward. You may have to gently pry up the tension arm and slide the spring under and snap them into place in the proper hole, matching the same numbered hole from the top of the mechanism back plate. You should have an equal number of springs on each side of the center hole.
- 1-3. Repeat for the other Lift Mechanism.

 Use the same number of springs and the same layout on both Mechanisms



Mounting Lift Mechanism

Video: Mounting the Lift Mechanism

NOTE: Some models may have the Lift Mechanism already mounted to the verticals. If this is the case with your Murphy bed then you can skip this section.

- 2-1. The left and right Lift Mechanism hole pattern will line up with the hole pattern on the Side Panels (B). The bolts will be fed through the side that has the counter sink holes drilled.
- 2-2 Hole A will not have a standard nut. It is either a threaded hole or it will use a disk like bolt "Arm Lock Stop". Get Hole A started.
- 2-3 Insert the bolt in the other holes and loosely tighten onto the nuts.
- 2-4. Once all Bolts and Nuts have been started tighten all of them.

Assemble the Bed Cabinet

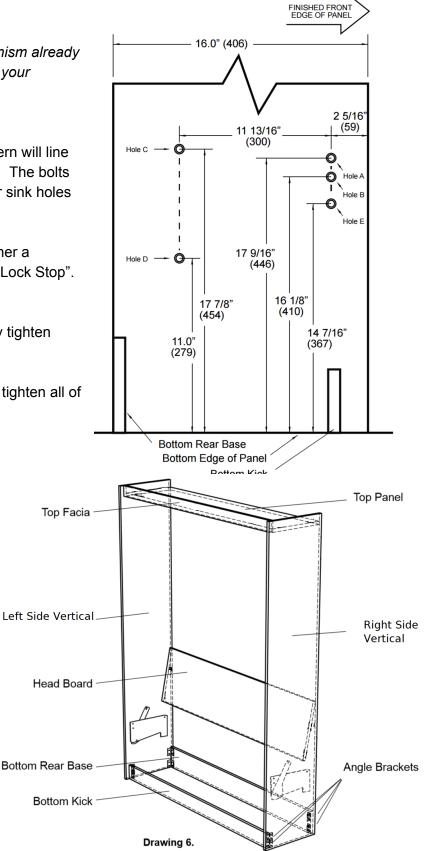
Video: The Cabinet Part 1

- If possible, the Bed Cabinet should be assembled in the room where it will be used.
- Be sure Lift Mechanisms are securely installed.

Headboard and Top Panel Installation

On a soft surface like a blanket lay out the verticals.

3-1. Insert the headboard dowels into the ends of the headboard (two on each side). No need to measure, The dowels will align the headboard to where it needs to be. With the pocket screw holes facing toward the back, insert the headboard dowels into the side of the verticals.



- 3-2. Lay the verticals on the floor with the mechanism facing up and the head of the bed toward the wall.
- 3-3. Place the dowels in the end of the headboard into the dowel holes in the vertical making sure the headboard screw pockets are facing toward the back and the finished edge of the headboard is facing what would be up (when lying on the floor, finished edge will be away from the wall)
- 3-4. Secure headboard to the verticals with 1 ½" screws (4 each side).
- 3-5. Carefully rotate the headboard and the one vertical so that the other end of the headboard/dowels can be inserted into the second vertical. The unit should now be face down.
- 3-6. Secure this other end of the headboard to the verticals with 1 ½" screws (4 each side).

Top Panel

- 3-7. With the bed still face down on the floor attach the top panel. Top panel should be flush with the top of the verticals and the front.
- 3-8. Secure each side with five 1-1/2" screws.

STOP IF YOU HAVE LIGHTS

(If you do not have lights skip to Step 3)

Video: Lights

IMPORTANT: If you have lights, you will want to make sure your wiring and control box are in place before mounting to the wall. These steps will be performed while the cabinet is face down.

Figure L-1a (Inset Lights)

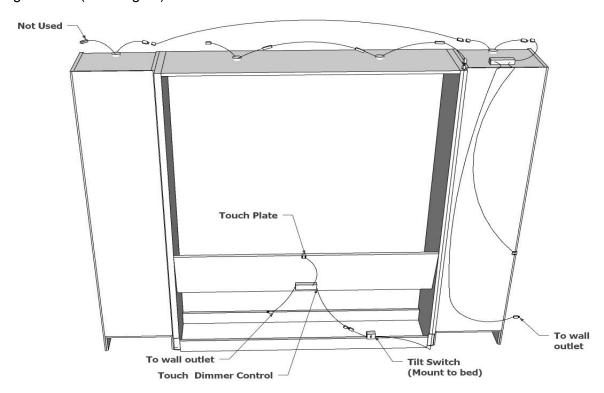
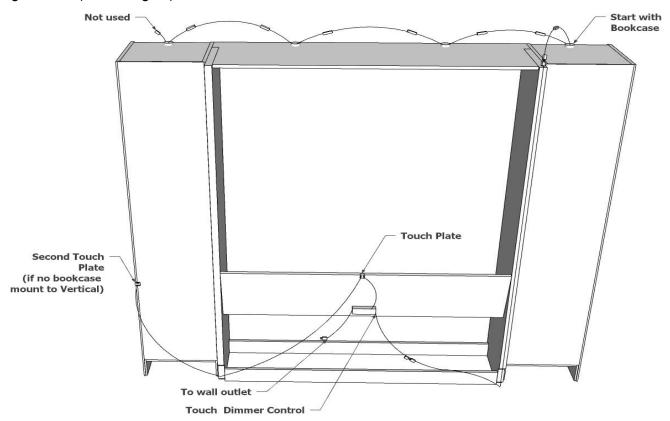


Figure L-1b (Outset Lights)



- L-1 Mount control box to the back of the headboard using 2" screws. Mount this centered and toward the bottom of the headboard.
- L-2. Mount the Touch Plate to the top/back of the headboard, centered, using a ¾" screw. **Note: drawing shows a knob instead of a plate. We now use a touch plate.**
- L-3. Run the thin single wire from the control box that has an Eyelet on the end, to the Touch Plate, and connect it with a 3/4" screw.

NOTE: If you have Outset lights there will be a second single wire connected to the back of the Touch Plate. This wire will be routed to the second Touch Plate Location. If there are no bookcases the location will be on the side of the murphy bed. If you have bookcases, the second Touch Plate location will vary depending on the type of bookcase you have, but normally on the side toward the back.

L-4. Plug the female wire coming out of the control box into the extension cord.

NOTE: With lights on the inside (Inset Lights) there will be a small control box inline on the extension cord. The small control box will be attached to the frame later. If your lights on Outset (designed to overhang on the outside of the cabinet, you will have a standard light duty extension cord. (see figure L-1a)

L-5. Starting from the top. Leave 3-4" of cord above, and insert the extension cord into the groove in the back of the Vertical. With a hammer, lay the cord flat and carefully tap it into place.

NOTE: Some pre-installed models may already have the cord installed in the groove.

- L-6. Plug the other side (top side) of the extension cord into the lights.
- L-7. Plug the control box that you connected to the headboard into into a wall outlet. Test the lights. With the outset lights the, lights should come on when the touch plate is touched on the headboard.

If your lights are on the inset style, you will have to also make sure the arrow on the small control box is pointing up. When the arrow is turned down the lights could go off.

BACK TO REGULAR INSTRUCTIONS

Video: Cabinet part 2

Stand the unit up and into its approximate place in the room. Check that the cutout made to clear your base molding is sufficient. If not make the height it needs to be. Lay the unit back down on the face, and adjust the cutout.

Bottom Rear Base and Bottom Kick

Bottom Rear Base and Bottom Kick will be the same width (4") Some drawings may show them different sizes.

If you have the added base molding this base molding may be attached to the Front Bottom Kick as in this example.

3-9 Prep the Bottom Rear Base and Bottom Kick by adding 2 brackets on each end.

(NOTE: Some models this step may be done for you or you may see where the brackets were once put on)

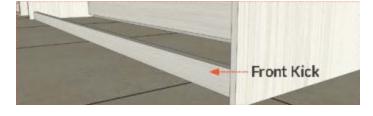
Lay both Bottom Rear Base and Bottom Kick face down on a clean soft surface. Mount the two brackets flush on each end (about ½"-¾" from the top and bottom edge). Secure with ¾" screws.

(NOTE: Face will be the best side. If you can not tell which side is the best, then it will not matter.)

3-10. Attach the Bottom Rear Base. Both the Bottom Rear Base and Bottom Kick will be the same height. You may want to use the better one for the front Bottom Kick. With the brackets facing toward the front, bring the Bottom Rear Base in so that it clears any cutouts that were made for the base molding

3-11. Attach the Bottom Kick by setting it back 1" from the front of the Side Panels. These brackets will face the wall/inside. Secure with 3/4" screws.

Special application: If you have added base molding, the Bottom Kick may be attached to that



base molding and may not have the 1" set back. Also in some cases the Bottom Kick will be replaced by added base molding.

NOTE: The small control box will be just sitting there and will be attached to the frame later. (See the section on lights)

Attach Bed Cabinet Securely to Wall

Video: Attaching to wall

4-1: Find Studs

Prior to placing the cabinet against the wall, locate 3-4 studs on queen size (4-5 on King) or other wall frame members at the level of the Top Panel (top of bed). Alert: The cabinet must be secured to studs or other wall structural members or injury and damage could occur. If the wall is not a wood stud wall, use metal stud screws, toggle bolts or concrete expansion bolts if necessary.

Tip: for help finding studs there are several websites of video available online, just do a google search. One example: https://www.lowes.com/n/how-to/how-to-find-studs-in-walls

4-2: Attach to wall

Now that the cabinet is square and plumb, pre-drill a hole in that backboard of the Top Panel/header at the stud location using a 3/16" drill bit. Only pre-drill that back board and not the entire depth into the stud. Fasten cabinet to wall using 3" screws. Repeat this for other stud locations.

If the wall is **CONCRETE, MORTAR OR BRICK** Construction, use masonry screws:
Drill three pilot holes through the rear rail of the bed header into the wall for a twin or full and four for a queen size bed. Using a 5/32" concrete drill bit, drill through the pilot holes into the wall 2" deep. Anchor the bed by screwing 3/16 x 2 ½" masonry screw through the rear rail of the bed header into the wall.



IMPORTANT:

After the cabinet is securely fastened to the wall, pull on the top of the cabinet. If any movement away from the wall is detected, repeat the previous steps.

Install the Bed Face Panel Unit

Lock the arm into place

Videos: Locking Spring and Frame Bolts and Straps

Caution: If possible have a helper assist in the setting of the mechanism and loading of the bed face panel. DO NOT reach behind the tension arm when you are doing the setting procedure. To avoid reaching behind the Tension Arm, use a pencil or screw driver to move the Arm Lock into place.

Holding one foot against the bottom front edge of the side panel and using the "Tension Arm Lever Tool", pull the tension arm out until you can set the arm lock to the hex nut at the hole A (see drawing 13.). This is the hex nut at the top front corner of the mechanism.

Tip: If you set the "Arm Lock" on top of the bolt before you pull the Tension

Arm back it will fall into place. Do not put your fingers back there while pulling it back!

Bolt in Hole #3 Drops into this slot when Bed Face Panel is loaded

Tension Arm

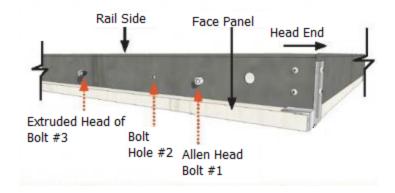
Bolt through Hole #2 to secure

Arm Lock

Hexagon Nut (Hole "A")

Notch to rest against head of Allen Bolt in Hole #1

5-1: Insert a Allen Head Bolt through Hole #1 (This hole should be the one about 6 3/4" from the end of the side frame) on both left and right side frames (see Drawing). NOTE: On some Models this Allen Head Bolt may already be installed.



NOTE: Holes shown in the video may be slightly different.

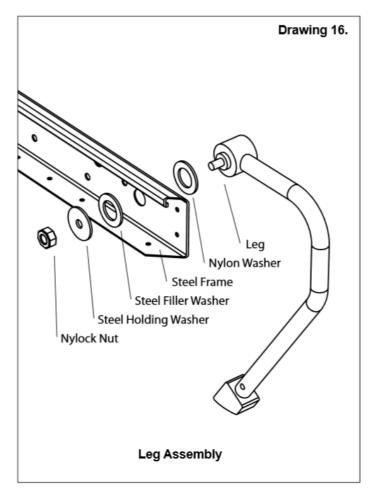
Hole #3 # Hole #2

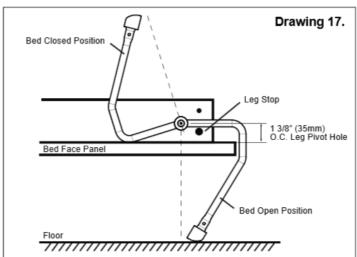
5-2 On each side, install 5/16" (M8x20mm) Hex Head Bolts from the outside of the frame through Hole #3. Only thread the nut until it is flush with the Nut end. Do not tighten.

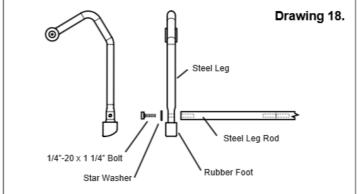
Install Legs

Video: <u>Legs</u>

7-1 Install legs with the washers on the inside of the Rails and the Nylon washer on the outside. Tighten nut to have a small amount of friction when leg assembly is rotated from the up to the down position.







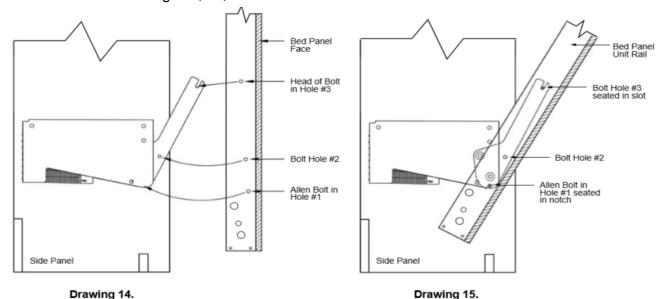
7-2 Install leg connector rod between legs and secure with 1/4"x1 1/4" (M4x32mm) Hex head bolts and star washers. Be sure they are securely tightened so as not to become loose.

Mounting the Face

Video: Mounting the Face

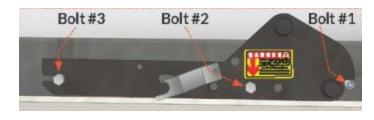
NOTE: Two people are needed for this step.

6-1. Lift the unit vertically to a height where the bolts in holes #3 are several inches above the top of the Tension Arms. Gently fit the unit between the arms, tilt it back approximately 10 degrees so that the head end of the until clears the Bottom Kick, then lower it so that the #3 bolts slide into the slots at the end of the Arms. Be sure the Allen Head cap seats at the bottom of the slots on the tension arm. Slowly tilt the panel unit back just enough to allow the #1 Allen Head Cap bolts to be fully seated in the notches at the bottom of the Mechanism. As in Drawings 14, 15, and 16.



6-2 Continue to tilt the Bed Panel Unit outward to an angle of about 45 degrees, during which action you will hear a click as the Arm Locks disengage. With your assistant holding the bed at roughly this angle, install the #2 bolts and Nuts. Still holding the panel unit at this angle securely tighten the #2 and #3 nuts.

6-3 When all bolts are securely tightened, you may tilt the panel outward to approximately 45 degrees to release the arm locks. You will hear a click as they disengage.



Caution:

Hold the Face Panel securely, Do Not let it slam shut. Balance is not achieved until the mattress is loaded in the bed otherwise it will not stay down. Also make sure the legs are folded around and above the mattress space.

Holding the upper edge of the Bed Panel Unit, gently let the bed close. If all is well, you should have even clearance between the side edges of the panel unit and the insides of the Side Panels.

If the Cabinet is not square and the Bed Panel Unit binds try the following adjustments.

- Nudge the Bed Cabinet along the floor, pushing from the base of the Side Panel
- Shim (or reshim the bottom of the Side Panels for floors that may be out of square.

Plug in the Lights:

Mount the small control box to the back of the "Frame and face Panel". Remove the tape backing and stick the control box to the back of the metal frame. **Make sure the arrow is facing up and toward the wall**.

Complete Bed Assembly

Follow up to Initial Assembly

Video: Finishing Up

Check that the Bed Cabinet is level and square so the Bed Face has equal clearance of the Cabinet on both sides, top to bottom. If the Cabinet is leaning to one side, nudge it at the floor level. If the top is uneven, place shims under the Side Panels. If bed is too heavy to operate easily or slams shut, remove the Bed Face Panel and add or subtract springs. At this time, you may decide to use one more or less spring(s) on the left or right side Lift Mechanism.

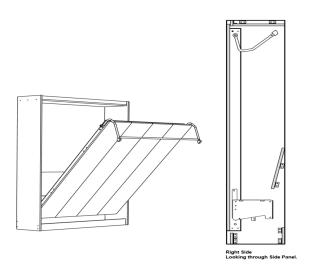
7-1 Add Cover Plates

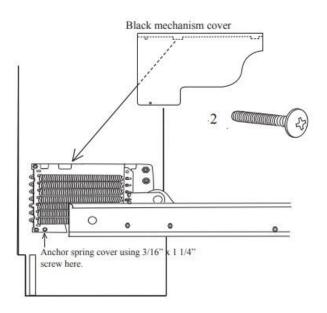
You should have a left and right cover plate and two $1-\frac{1}{2}$ " wood screws. The cover plates have tabs on them. Slide those tabs into the slot in the top if the mechanism.

Slip the Mechanism Cover over the Mechanism so that the tabs on the cover fit into the notches. Line up the hole with the barrel support and anchor in place using the 1-1/2" screw provided Repeat on the other Mechanism.

7-2 Load and strap the mattress into place. Two people are needed.

7-3 Add any accessories like crown or bookcases.





Additional Options

Bookcase Option

Most bookcases are not designed to be flush with the back wall. The bookcase will mount to the bed at the top using 1 ½" screws. You can also put one inside the lower section by pulling out a drawer. We may not have pre-drilled for these holes so you can place them anywhere.

All Bookcases are Custom, but a good rule of thumb is:

- 17 1/8" D Bookcases | Flush with LED Outset Lights or backset approximately 1" if there is Crown
- 13 1/8" D Bookcase | Flush with the Bed Verticals
- 11 1/8" Bookcases | Backset 2 1/2" from Murphy Bed Face

Desk Option

Note: On some applications we have put the screws back in on the face (right above the Desk Bracket) and also at the bottom, into the Side panels. If this is the case remove those screws and use them to assemble the desk. If not you should find them labeled in your hardware pack.

Desk Step D-1 | Attach the Desk Riser to the Desktop.

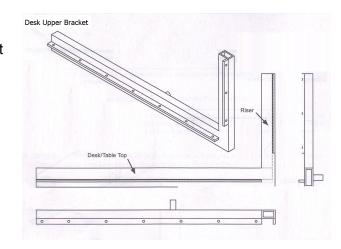
If they are not already inserted, insert the hardwood dowels into the bottom of the Desk Riser. The Desk Riser will attach to the Desktop by inserting the dowel side into the dowel holes on the Desktop. Keep in mind there is usually a front and a back to the Desk Riser. Make sure the good side is facing forward.



Note: the holes cut in the Desktop are elongated and allow left to right movement. Make sure the edges of the Desk Riser and Desktop are even and insert the $1 \frac{1}{2}$ " screws.

Desk Step D-2 | Attach the Desk Mechanism to Desk

The Desk Mechanism has holes in the Desk Upper Bracket that forms an "L". Attach the desk to the mechanism using 20 - 5%" pan head screws.



Desk Step D-3 | Place Desk Hinge into Hinge Clip

NOTE: Two people are needed for this step

With the Desk rotated 90° up, place the loose end of the hinge into the Hinge Clip and secure with 5%" flat-head screws.

Desk Step D-4 | Reattach Base

Rotate the desk back down and re-insert the 5%" pan-head screws that were removed from Step D-1.

Desk Step D-5 | Check Operation

Check the desk for level and open and close the bed to make sure the bed is operating properly.

Notes:



