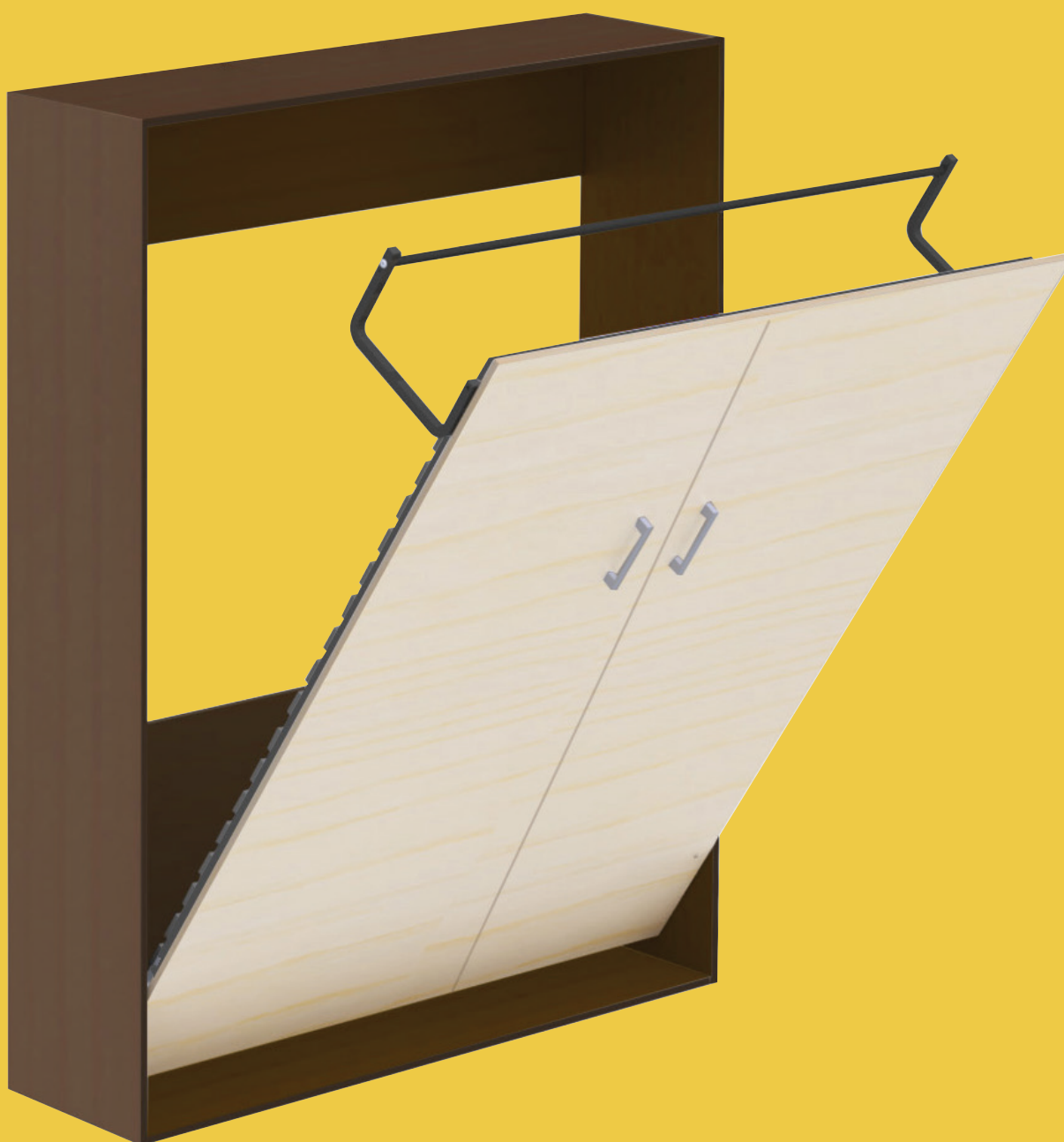




## VERTICAL MURPHY BED HARDWARE KIT INSTRUCTIONS

Effective December 2018

Review instructions fully prior to use for important safety information. Always check [Rockler.com](http://Rockler.com) to confirm that you are using the most recent version for your product.



## GENERAL SAFETY WARNINGS

This product is designed only for specific applications as defined in the instructions and should not be modified or used for any manner not described in these instructions. Use only recommended accessories. Before using the Vertical I-Semble® Murphy Bed Hardware Kits: **READ, UNDERSTAND** and **FOLLOW ALL INSTRUCTIONS AND SAFETY WARNINGS. KEEP THESE INSTRUCTIONS READILY AVAILABLE FOR FUTURE REFERENCE.**

- > Always confirm that you are using the most recent version of the Instructions and safety warnings for your product (see the Instructions link on the product page at Rockler.com).
- > Before using another tool with this product, always read, understand and follow the instructions and safety warnings in the owner's manual for that tool. If you do not have the owner's manual, obtain one from the tool's manufacturer before using it with this product.
- > Before using any chemical with this product, always read, understand and follow all safety warnings and guidelines in the manufacturer's Safety Data Sheet (SDS; formerly called "MSDS"), especially regarding:
  - How to safely use the chemical, including potential hazards and recommended first aid measures;
  - Personal safety equipment required to safely use the chemical (e.g. gloves, eye protection, mask/respirator, etc.);
  - Proper and safe handling, storage and disposal of the chemical.
- > Before using this product, review and verify that all tools to be used with it have safety equipment installed and are in proper working order as defined by the tool's owner's manual.
- > Do not use this product until you have read and are confident you understand:
  - Product Specific Safety Warnings (p. 3);
  - Parts List (pp. 4-5);
  - Cabinet Parts (Not Included) (p. 6);
  - Required Tools (Not Included) (p. 7.);
  - Required Hardware (Not Included) (p. 7.);
  - Bracket Installation (p. 8);
  - Recommended Cabinet Assembly (Parts Not Included) (pp. 9-10);
  - Secure the Cabinet to the Wall (p. 11);
  - Install the Wall Brackets (p. 12);
  - Assemble the Bed Frame (p. 13);
  - Install the Slats (p. 14);
  - Install the Frame into the Cabinet (pp. 15-16);
  - Attach the Door Panels (pp. 17-18);
  - Final Touches (pp. 18-19);
  - Using the Murphy Bed (p. 20).
- > The user assumes all risk and responsibility for the proper and safe use of this product and for ensuring product suitability for the intended application.
- > It is the sole responsibility of the purchaser of this product to ensure that any anyone you allow to use this product reads and complies with all instructions and safety precautions outlined in this manual prior to use.
- > Follow all standard shop safety practices, including:
  - Keep children and bystanders away from the tool operating area;
  - Do **NOT** use power tools in explosive environments, or in the presence of flammable liquids, fumes or dust;
  - **TURN OFF AND UNPLUG** all power tools **BEFORE** making any adjustments or changing accessories;
  - Remain alert and use good judgment. Do not use this product if you are in any way impaired by medications, alcohol, drugs or fatigue;
  - Keep your work area well lit and clean;
  - Dress appropriately. Secure loose clothing, remove all jewelry and tie up long hair before using this product;
  - **ALWAYS** wear safety glasses, hearing protection and respiratory protection that complies with NIOSH/OSHA/ANSI safety standards;
  - Use dust collection tools and dust face masks to reduce exposure to dust;
  - Use safety equipment such as featherboards, push sticks and push blocks, etc., when appropriate;
  - Maintain proper footing at all times and do not overreach;
  - Do **NOT** force woodworking tools.
- > These warnings and instructions do **NOT** represent the total of all information available regarding tool safety, use and technique. Always seek out opportunities to learn more and improve your skills and knowledge.

**⚠ WARNING:** Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to [www.P65Warnings.ca.gov/wood](http://www.P65Warnings.ca.gov/wood).

- ⚠ DANGER** Danger indicates a hazardous situation that, if not avoided, will result in death or serious injury.
- ⚠ WARNING** Warning indicates a hazardous situation that, if not avoided, could result in death or serious injury.
- ⚠ CAUTION** Caution indicates a hazardous situation that, if not avoided, may result in minor or moderate injury or property damage.
- NOTICE** Notice indicates important or helpful information and/or user tips.

## ⚠ WARNING

### PRODUCT SPECIFIC SAFETY WARNINGS

- > **TO AVOID THE RISK OF SERIOUS INJURY, DO NOT ALLOW CHILDREN TO PLAY ON THE BED UNIT OR OPERATE IT WITHOUT ADULT SUPERVISION.**
- > You **MUST** have another **ADULT** help you while installing your I-Semble® wall bed unit to make sure the bed doesn't close inadvertently while you are working. Failure to do so increases the risk of serious injury.
- > You **MUST** install **ALL** 1/4" x 3" Washer Head Lag Bolts into 2 x 4 or larger wooden wall studs. Failure to secure the unit into wooden wall studs increases the chance that the bed cabinet will detach and tip over, potentially resulting in serious injury.
- > Cabinets for vertical Twin and vertical Full beds **MUST** be secured, using all required hardware, to at least two (2) wall studs; cabinets for vertical Queen beds wall beds **MUST** be secured to at least three (3) wall studs.
- > Wall Bracket (HH) and lag bolt placement on images in these instructions is for illustration purposes only. To avoid the risk of serious injury, you must correctly place and securely attach Wall Brackets and lag bolts to wooden studs in your wall.
- > The bed will not stay down without the weight of a mattress. Operating the bed mechanism without a mattress in place increases the risk of sudden closing, entrapment and serious personal injury.
- > Do **NOT** use wall anchors or drywall anchors.
- > Do **NOT** install against brick or masonry walls or walls with metal studs.
- > Do **NOT** use an impact driver to drive fasteners; the added torque increases the risk of stripping the pilot holes and weakening connections. Do **NOT** overtighten screws.
- > Do **NOT** stand on the bed without an adult helper holding it down to prevent it from lifting up.
- > Do **NOT** deviate from the required interior cabinet opening dimensions listed for the bed size you will be building. An improperly sized bed cabinet could create a safety hazard and result in serious personal injury.
- > Do **NOT** modify the recommended design of the bed cabinet to eliminate an Upper and/or Lower Headboard. Such modifications could allow it to more easily detach from the wall, causing serious injury.
- > Do **NOT** construct the cabinet from MDF, particleboard or melamine-coated MDF or particleboard. The decreased screw-holding ability of these materials increases the risk of cabinet joint failure and serious personal injury.
- > Do **NOT** use a foam or very light mattress with this product. See required weight specifications below.

## ⚠ WARNING

To avoid the risk of serious injury and ensure proper bed unit functioning, your wall bed components **MUST** conform to the following weight specifications:

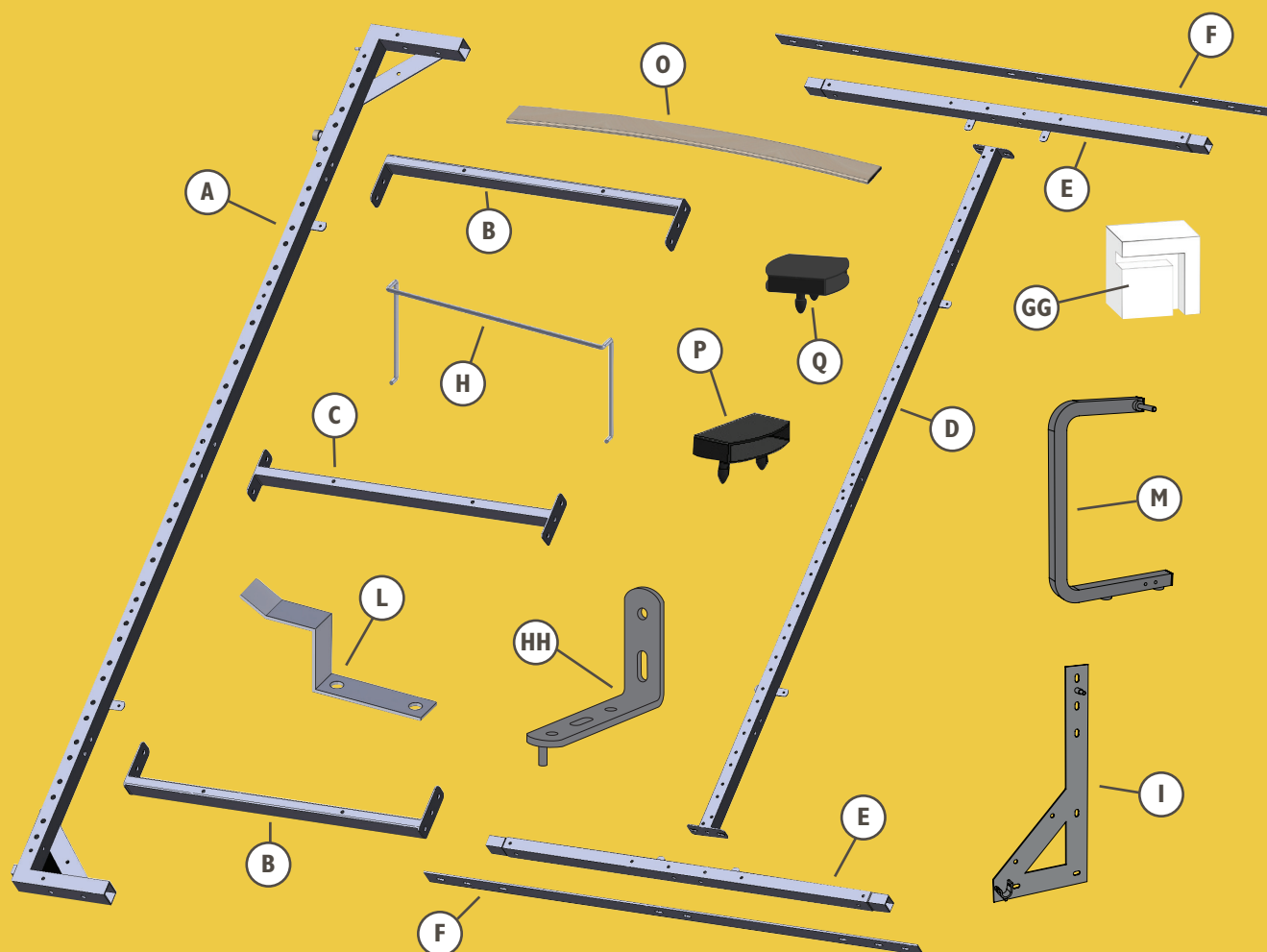
Bed Size	Max. Mattress Size	Max. Mattress Weight (lbs.)	Max. Mattress Thickness	Max. Load Rating (lbs.)		Suggest. Dynamic Weight*** (lbs.)
				Dynamic*	Static**	
Twin	39" x 75"	66	10"	300	1000	225 - 300
Full	54" x 75"	99	10"	345	1000	265 - 345
Queen	60" x 80"	132	10"	395	1000	280 - 395

\* Includes weight of bed cabinet door panels, mattress, hardware and bedding

\*\* Includes weight of cabinet doors, mattress, hardware, bedding and users

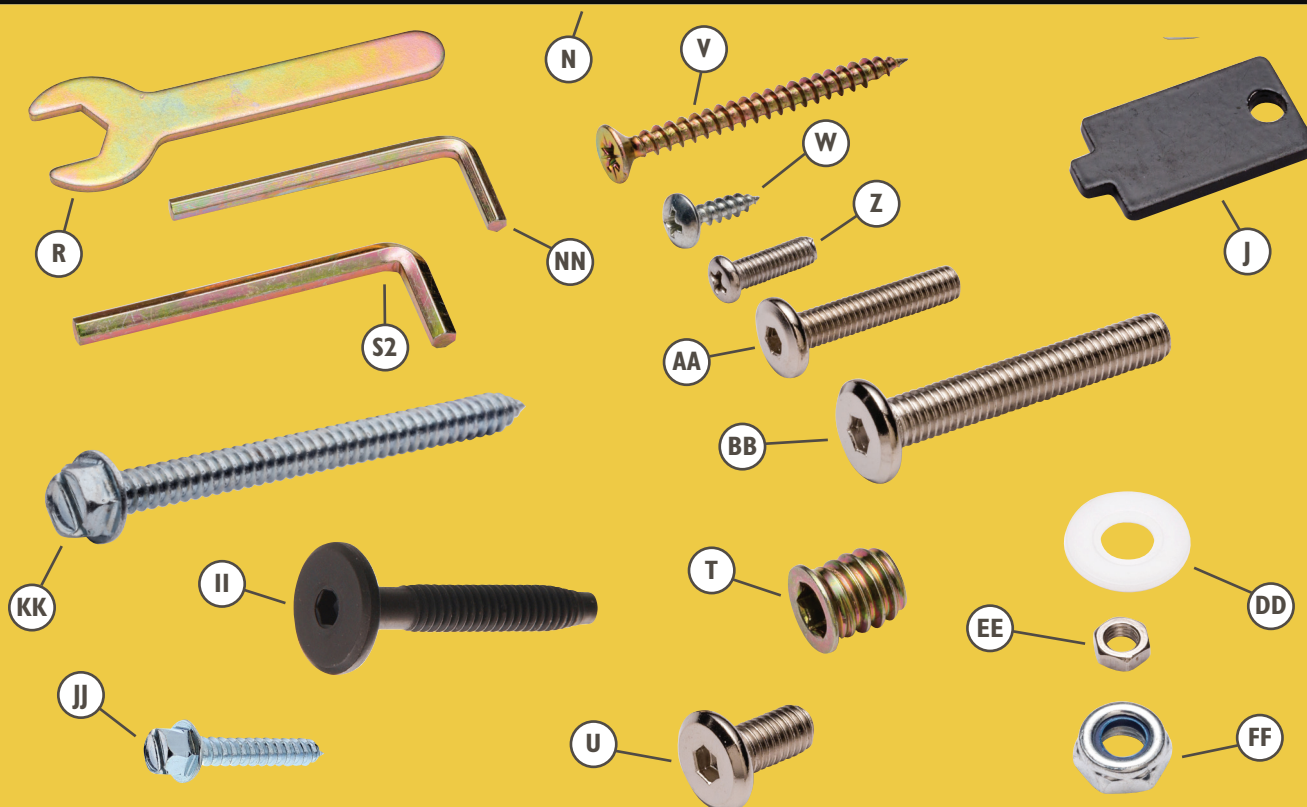
\*\*\* Based on cabinet door weight of 2.5 to 4.8 lbs. per board foot

## PARTS LIST



	Twin Qty.	Full Qty.	Queen Qty.
<b>A</b> Left and Right Frame Sides (with Pivot Points)	2	2	2
<b>B</b> Upper and Lower Half Frame Supports	4	4	4
<b>C</b> Middle Frame Supports	2	2	2
<b>D</b> Long Center Frame Support	1	1	1
<b>E</b> Upper and Lower Frame Supports	2	2	2
<b>F</b> Flat Bars	2	2	2
<b>G1</b> Pistons	2	2	2
<b>H</b> Mattress Supports	1	2	2
<b>I</b> Mounting Plate (Left and Right)	2	2	2
<b>J</b> Saddle Locking Plates	2	2	2
<b>L</b> Door Brackets	6	12	12
<b>M</b> Legs (Left and Right)	2	2	2
<b>N</b> Leg Tube	1	1	1
<b>O</b> Slats	40	40	42
<b>P</b> Slat Caps	40	40	42
<b>Q</b> Double Slat Caps	20	20	21
<b>R</b> Wrench	1	1	1





	Twin Qty.	Full Qty.	Queen Qty.
<b>S2</b> #5 Allen Key	1	1	1
<b>T</b> Threaded Inserts	16	16	16
<b>U</b> M8 x 16mm Hex Head Screws	16	16	16
<b>V</b> #10 x 55mm Flathead Screws	26	26	26
<b>W</b> #8 x 15mm Washer Head Screws	28	48	48
<b>Z</b> M5 x 15mm Machine Screw	2	2	2
<b>AA</b> M6 x 30mm Bolts	4	4	4
<b>BB</b> M8 x 50mm Bolts	34	34	34
<b>DD</b> Nylon Washers for Legs	4	4	4
<b>EE</b> M5 Nuts (for Saddle Lock)	2	2	2
<b>FF</b> M8 Lock Nuts	40	40	40
<b>GG</b> Temporary Stop (styrofoam)	2	2	2
<b>HH</b> Wall Brackets	2	2	3
<b>II</b> 1/4"-20 Allen Head Screw	2	2	3
<b>JJ</b> #12 x 3/4" Washer Head Screw	4	4	6
<b>KK</b> 1/4" x 3" Washer Head Lag Bolt	8	8	12
<b>NN</b> #4 Allen Key	1	1	1

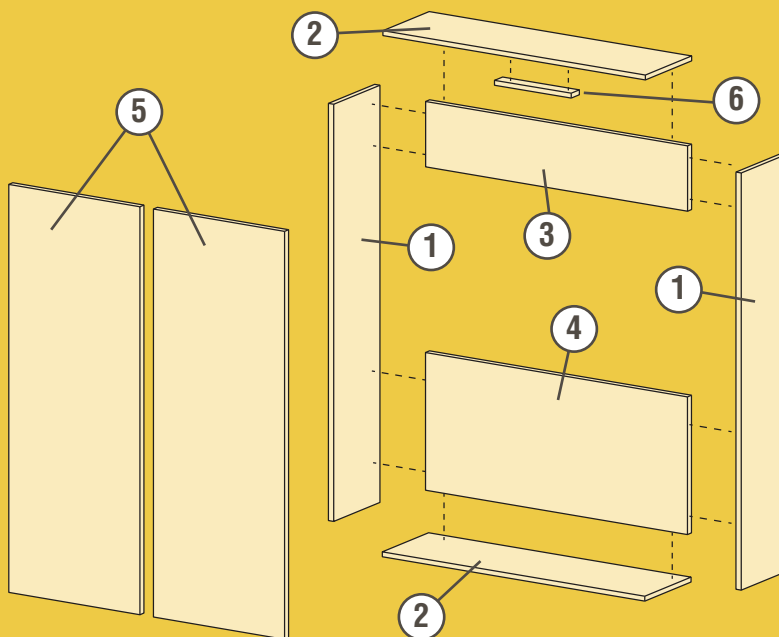
## CABINET PARTS (NOT INCLUDED)

### ⚠ WARNING

- > Do **NOT** construct the cabinet from MDF, particleboard or melamine-coated MDF.
- > Do **NOT** modify design to remove Upper and Lower Headboards (3 and 4) These parts serve an important safety function.

### MINIMUM INTERIOR OPENING SIZES

	Width	Height	Depth
Twin	41¼"	77⅝"	15½"
Full	57¼"	77⅝"	15½"
Queen	63¼"	84⅛"	15½"



### TWIN BED (Mattress Size 39" X 75" X 10")

	Dimensions (T x W x L)	Quantity
1 Sides	3/4" x 17" x 79⅞"	2
2 Top and Bottom	3/4" x 17" x 41¼"	2
3 Upper Headboard	3/4" x 13" x 41¼"	1
4 Lower Headboard	3/4" x 26" x 41¼"	1
5 Door Panels	3/4" x 40⅝" x 77⅝"	1
6 Permanent Stop	5/8" x 3" x 18"	1

### FULL BED (Mattress Size 54" X 75" X 10")

	Dimensions (T x W x L)	Quantity
1 Sides	3/4" x 17" x 79⅞"	2
2 Top and Bottom	3/4" x 17" x 57¼"	2
3 Upper Headboard	3/4" x 13" x 57¼"	1
4 Lower Headboard	3/4" x 26" x 57¼"	1
5 Door Panels	3/4" x 28⅝" x 77⅝"	2
6 Permanent Stop	5/8" x 3" x 18"	1

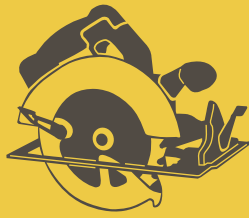
### QUEEN BED (Mattress Size 60" X 80" X 10")

	Dimensions (T x W x L)	Quantity
1 Sides	3/4" x 17" x 85⅞"	2
2 Top and Bottom	3/4" x 17" x 63¼"	2
3 Upper Headboard	3/4" x 13" x 63¼"	1
4 Lower Headboard	3/4" x 26" x 63¼"	1
5 Door Panels	3/4" x 31⅝" x 83⅜"	2
6 Permanent Stop	5/8" x 3" x 18"	1

## REQUIRED TOOLS (NOT INCLUDED)



Drill



Circular Saw  
or Table Saw



Stud Finder



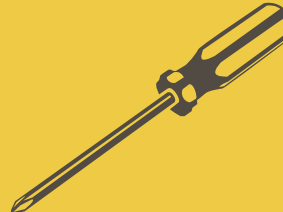
Tape Measure



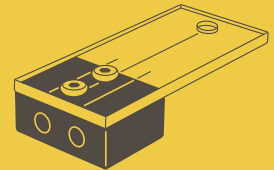
Pencil



3/8" Nut Driver or  
Socket Wrench



Phillips Screwdriver



Doweling Jig



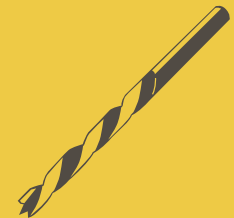
13/64" Drill Bit



5/16" Drill Bit



3/16" Drill Bit



5/32" Drill Bit



3/8" Drill Bit

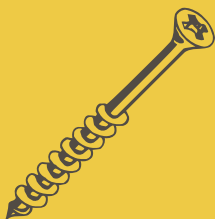


7/64" Drill Bit



#8 Countersink Bit

## REQUIRED HARDWARE (NOT INCLUDED)



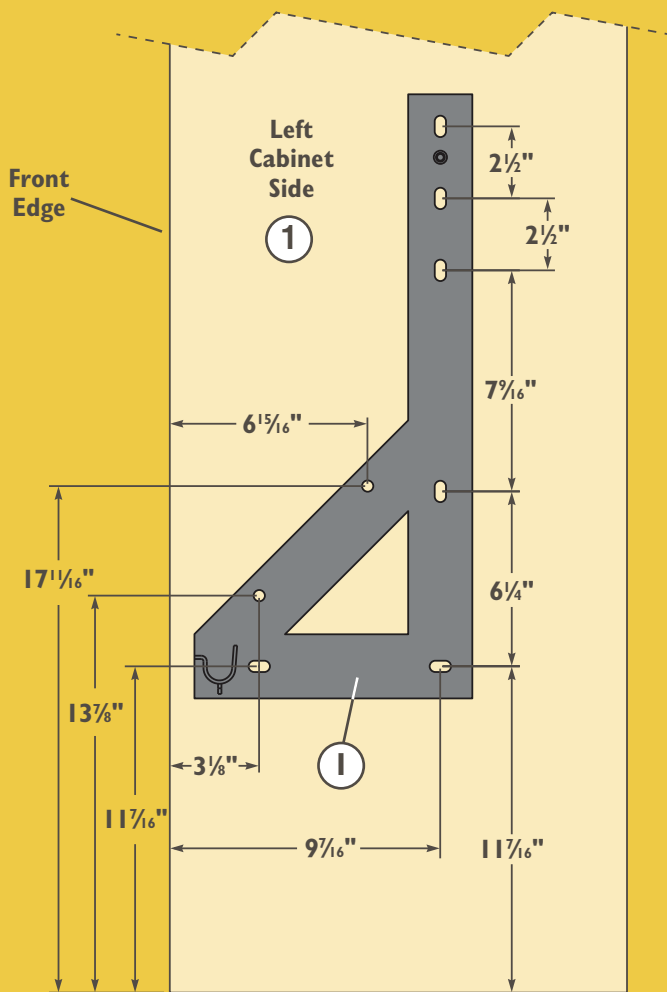
#8 x 2" Screws



3/8" x 1½" Dowels



Wood Glue



Drilling Guide

## Bracket Installation

1. Cut all pieces to the dimensions listed for your bed size.
2. Mark the drilling locations on the right and left cabinet Sides (1) for the Threaded Inserts (T) that will be used to attach the Mounting Plates (I). **Drilling Guide.**

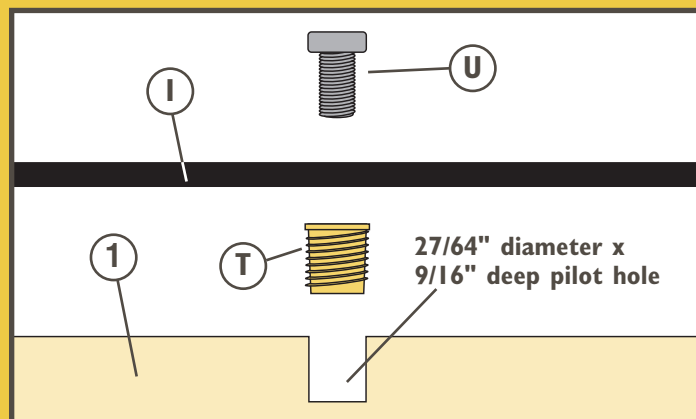
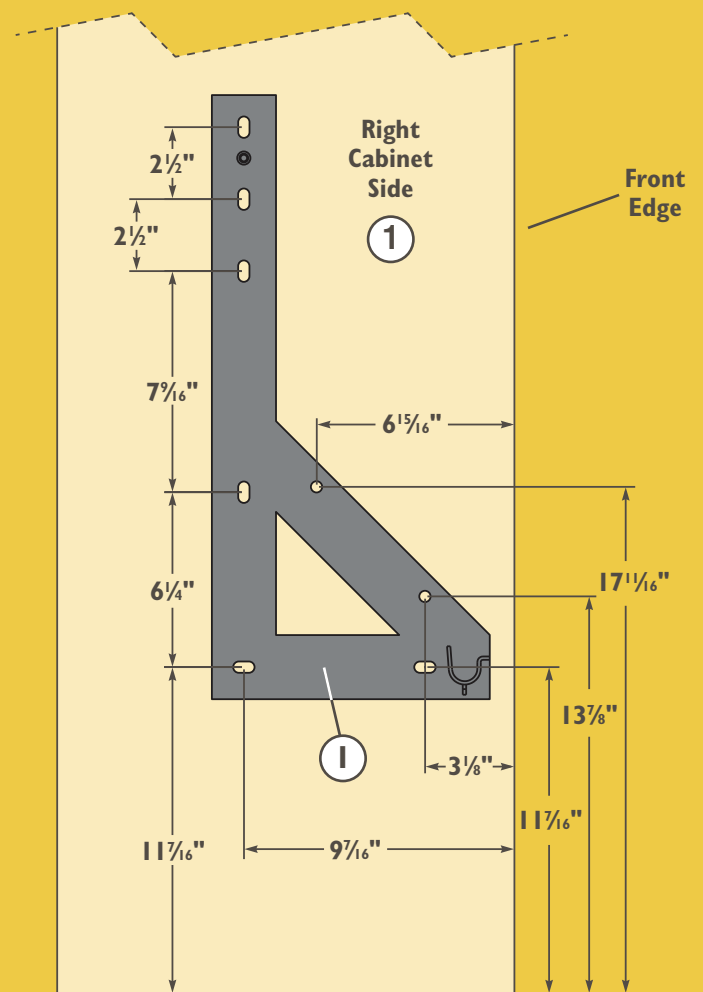


Fig. 1



3. Drill a 27/64" diameter x 9/16" deep pilot hole at each location. **Fig. 1.**

### ⚠ WARNING

Do **NOT** use other fasteners, such as standard wood screws, to attach the Mounting Plates (I) to the Sides (1). The forces involved in the operation of the bed mechanism could cause less robust fasteners to fail, potentially resulting in serious personal injury.

4. Use an 8mm Allen Key (not included) to drive the Threaded Inserts (T) into the pilot holes. Drive the inserts flush to the surface of the Sides, but take care not to strip the hole by driving too far. **Fig. 1.**
5. Using the #5 Allen Key (S2), attach the Mounting Plates (I) to the Sides (1) with M8 x 16mm Screws (U) threaded into the Threaded Inserts (T). Wait until you have installed all screws to fully tighten. **Fig. 1.**

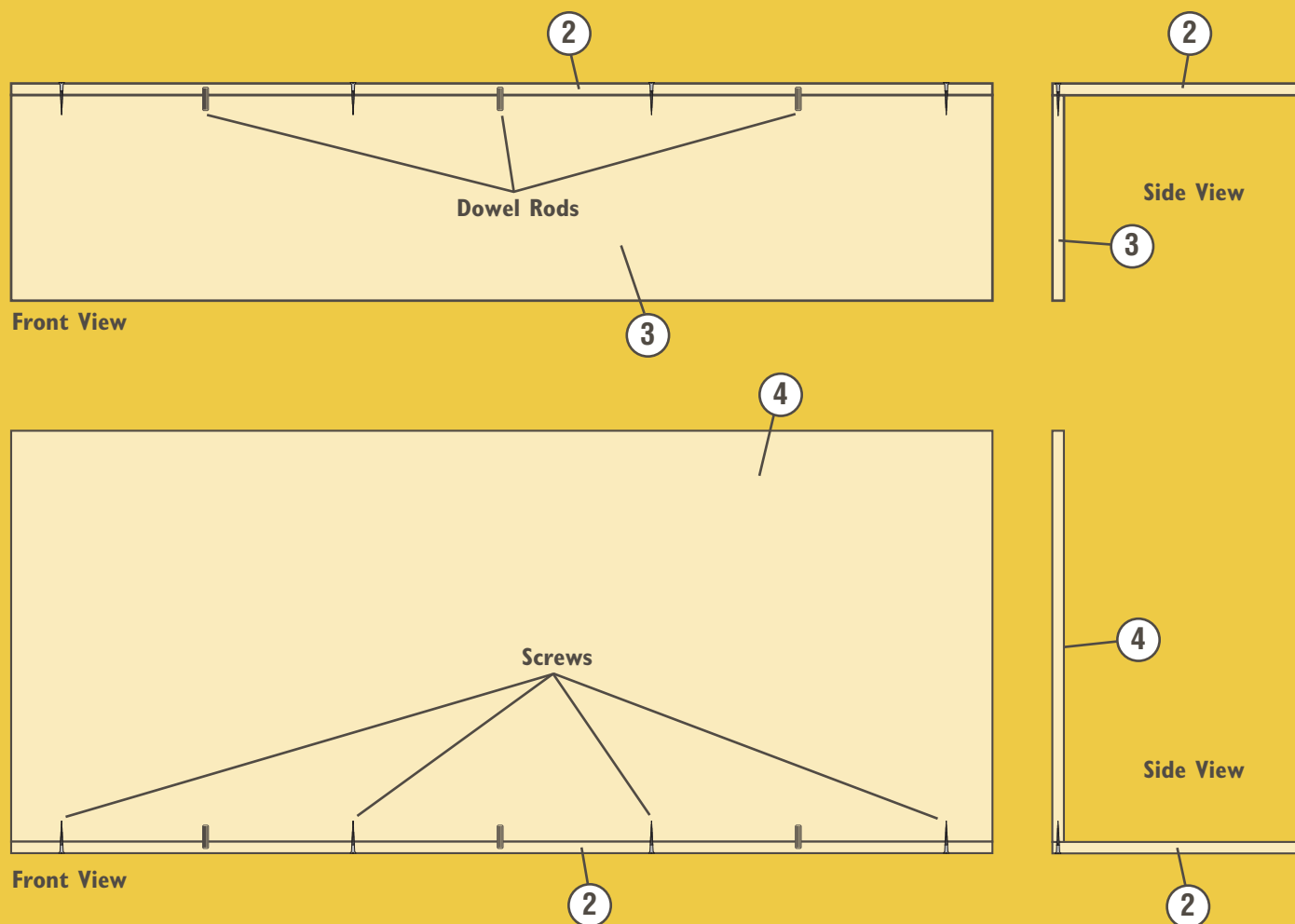


Fig. 2 - Top and Upper Headboard/Bottom and Lower Headboard Assemblies

### Recommended Cabinet Assembly (Parts Not Included)

#### **⚠ WARNING**

- > Failure to use appropriate fasteners and construction practices could undermine the structural integrity of your cabinet, potentially leading to cabinet failure and serious injury.
- > Do **NOT** use an impact driver to drive fasteners; the added torque of an impact driver increases the risk of stripping the pilot holes and weakening connections. Do **NOT** overtighten screws.

1. Place the Top (2) on a work surface so that its inside face is oriented up. Position the Upper Headboard (3) on edge on the inside face of the Top (2) so the pieces form an "L." Clamp in place and mark locations for three joint-reinforcing dowels across the back edge of the Top (2) and back face of the Upper Headboard (3). Also mark drilling locations for four screws on the top face of the Top (2). **Fig. 2.**

2. While the Top (2) and Upper Headboard (3) are clamped in place, drill and countersink (if desired) pilot holes for #8 x 2" Screws (not included). **Fig. 2.**
3. Release the clamps to separate the parts. Use a doweling jig and 3/8" drill bit to bore 3/8" x 5/8" deep holes in the inside face of the Top (2) and 3/8" x 1" deep holes in the top edge of the Upper Headboard (3). You will join these pieces with 3/8" x 1 1/2" dowels and wood glue (not included). **Fig. 2.**
4. Repeat Steps 6-8 for the Bottom (2) and Lower Headboard (4), drilling for dowels and screws at the same intervals. **Fig. 2.**

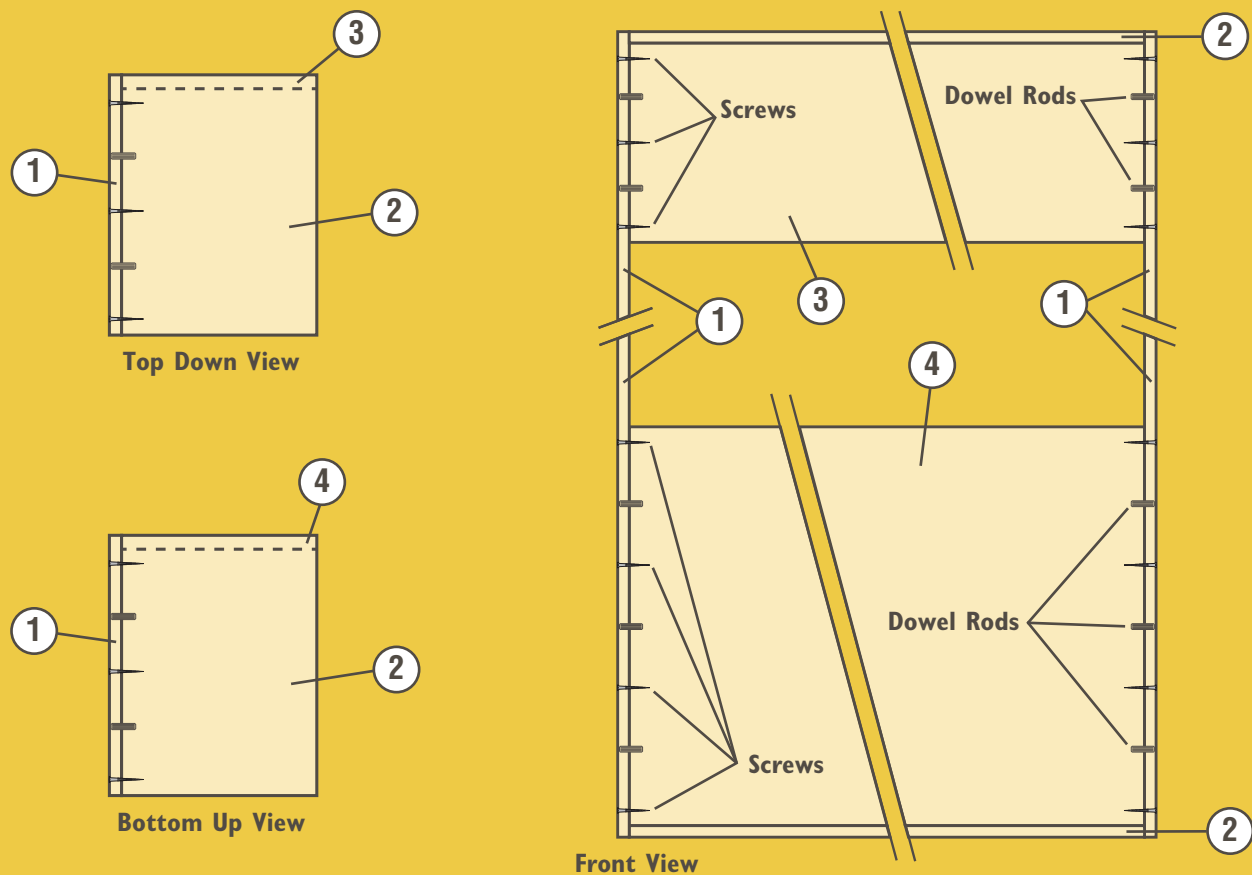


Fig. 3

5. Assemble the Top (2) with the Upper Headboard (3) and the Bottom (2) with the Lower Headboard (4). Spread glue on the edges of the headboards that join with the Top and Bottom, as well as in the dowel holes. Bring the pieces together, make sure the joint is square and secure by driving #8 x 2" screws (not included) in the pilot holes. Wipe away any excess glue with a damp cloth.
6. To be able to mark screw and dowel drilling locations, position the two assemblies so that the front edge of the Top (2) and Bottom (2) are resting on the floor. (You will need to prop up the Upper and Lower Headboard [3 and 4] to keep them up.)
7. Position the right cabinet Side (1) so that its top edge is flush with the Top (2) and its bottom edge is flush with the Bottom (2). **Fig. 3.**
8. Clamp in place and mark locations for two joint-reinforcing dowels across the top edge of the right Side (1) and top face of the Top (2). Mark drilling locations for three screws on the outside face of the right Side (into the Top). Also mark locations for two dowels across the back edge of the right Side (1) and the back face of the Upper Headboard (3), as well as three screws on the outside face of the right Side (into the Upper Headboard). **Fig. 3.**
9. Move to the bottom of the right Side (1) and mark locations for two dowels across the bottom edge of the right Side and bottom face of the Bottom (2). Mark drilling locations for three screws on the outside face of the right Side (into the Bottom). Also mark locations for three dowels across the back edge of the right Side (1) and the back face of the Lower Headboard (4), as well as four screws on the outside face of the right Side (into the Lower Headboard).
10. While the parts are clamped in place, drill and countersink (if desired) pilot holes for #8 x 2" Screws (not included).
11. Repeat Steps 12-15 for the left Side (1).
12. Release the clamps to separate the parts. Use a doweling jig and 3/8" drill bit to bore 3/8" x 5/8" deep holes on the inside faces of the Sides (1) and 3/8" x 1" deep holes in the edges of the cabinet Top (2), Bottom (2), Upper Headboard (3) and Lower Headboard (4). You will join these pieces with 3/8" x 1 1/2" dowels and wood glue (not included).
13. Attach the Sides (1) to the Top and Bottom assemblies with dowels, wood glue and screws driven fully to secure all pieces together. Check to make sure corners are square as you go. Screw holes can be concealed with wood filler in painted applications or with screw plugs or buttons in stained or clear-coated projects.



**⚠WARNING**

To avoid the risk of serious injury, you **MUST** locate wooden studs in your wall using a stud finder and install lag bolts securely into them.

Stud and lag bolt locations in this image are for illustration purpose only.

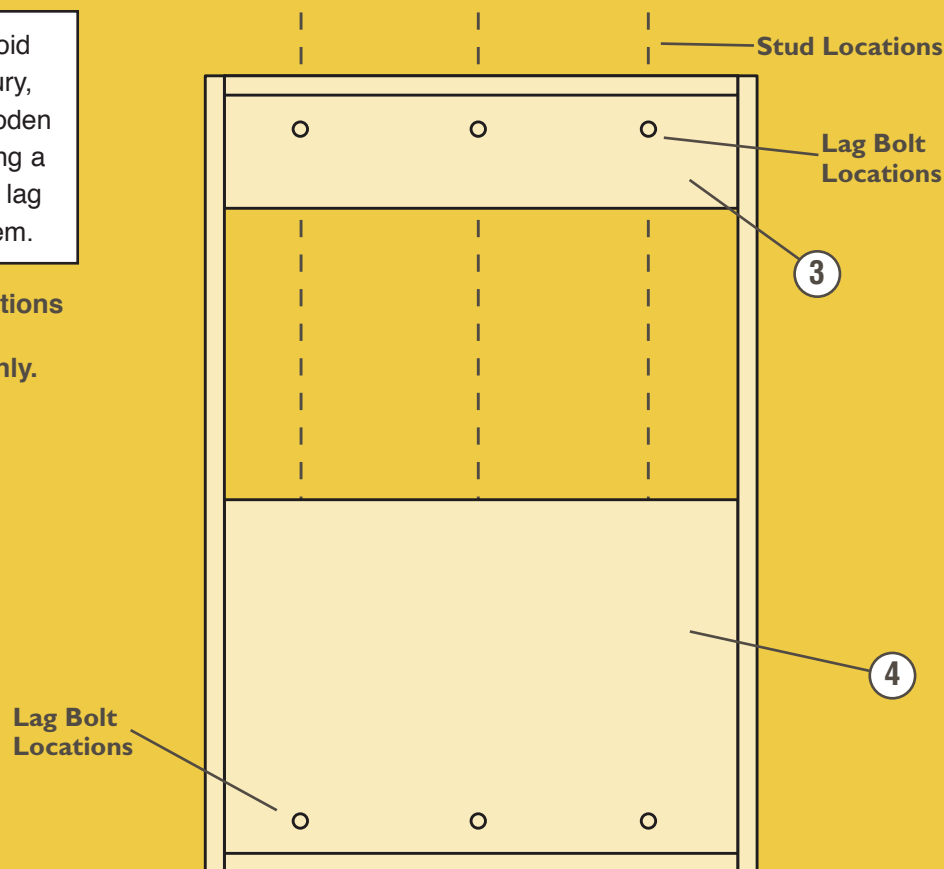


Fig. 4

**⚠WARNING**

- > Cabinets for Twin and Full beds **MUST** be secured, using all required hardware, to at least two (2) wall studs; cabinets for Queen beds **MUST** be secured to at least three (3) wall studs.
- > All 1/4" x 3" Washer Head Lag Bolts (KK) **MUST** be secured into wooden wall studs. Failure to secure the unit into wooden wall studs increases the chance that the bed cabinet will detach and tip over, potentially resulting in serious injury.
- > Do **NOT** use wall anchors or drywall anchors.
- > Do **NOT** install against brick or masonry walls or walls with metal studs.
- > Do **NOT** use an impact driver to drive fasteners; the added torque of an impact driver increases the risk of stripping the pilot holes and weakening connections. Do **NOT** overtighten screws.
- > Wall Bracket placement on images in these instructions is for illustration purposes only. To avoid the risk of serious injury, you **MUST** correctly locate and securely attach brackets to studs in your wall.

**Secure the Cabinet to the Wall**

1. With the help of another adult, move the bed cabinet to the installation site. If the wall where you want to install the cabinet has base molding, cut the molding to allow the cabinet to sit flush to the wall.
2. Position the bed cabinet up against the wall.
3. Determine and mark the locations of wall studs using a stud finder on the Upper and Lower Headboards (3 and 4). (Mark at least two stud locations for Twin and Full beds and at least three for Queen beds.)
4. Make a cross mark at each stud location 3" down from the top of the Upper Headboard (3) and 3" up from the bottom of the Lower Headboard (4). Drill 3/16" diameter pilot holes through the headboards and into the wall and studs. **Fig. 4.**

**NOTICE**

Check the front edges of the bed cabinet with a level to be sure they're plumb. If they aren't, use shims behind the cabinet on both sides to make them plumb.

5. Drive 1/4" x 3" Washer Head Lag Bolts (KK) through the pilot holes and into the wall studs to fully secure the headboards.

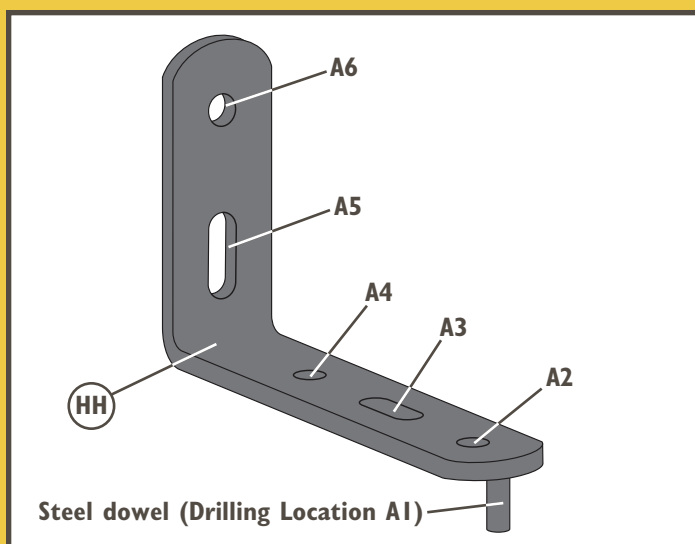


Fig. 5 - Wall Bracket Hole Drilling Locations

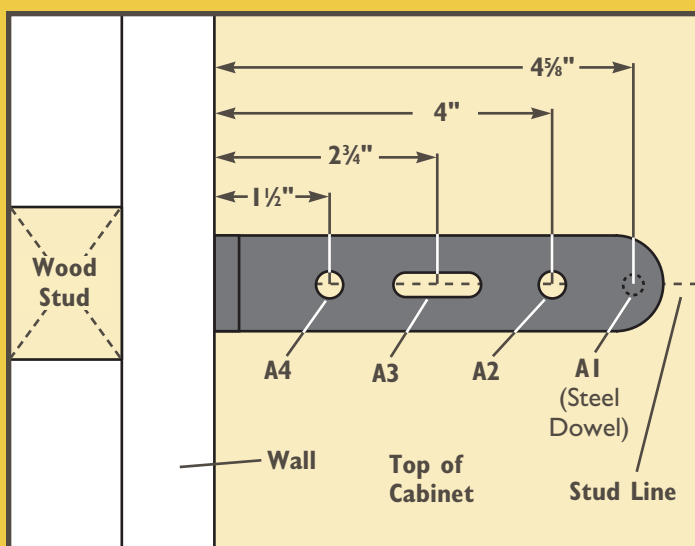


Fig. 6 - Top View

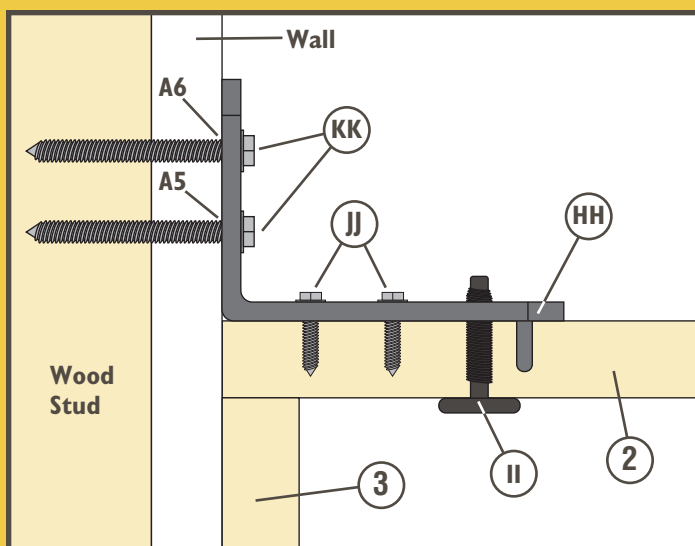


Fig. 7 - Side View of Lag Bolts and Screws Installed

## Install the Wall Brackets

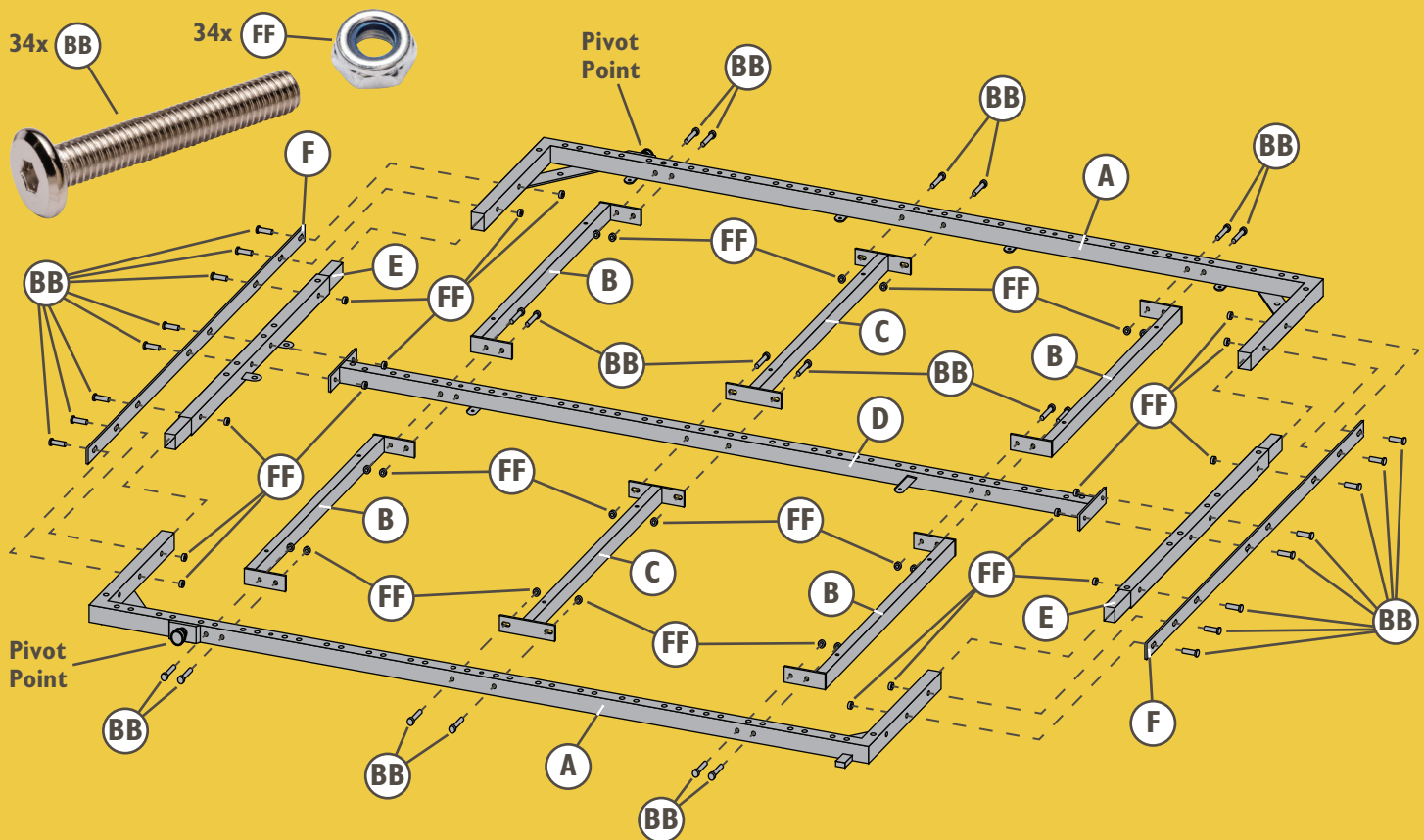
### ⚠WARNING

> Each Wall Bracket (HH) **MUST** be mounted flush on the cabinet top and flush to the wall with no gap with all six screws. Failure to do so increases the risk of cabinet failure and serious personal injury.

1. Carefully working from a step stool or ladder, determine and mark the centerlines of the wall studs above the cabinet and extend the marks 90° out onto the bed cabinet Top (2). (Mark at least two stud locations for Twin and Full beds and at least three for Queen beds.)
2. Along each stud centerline drawn in Step 1, mark Drilling Location A1. **Fig. 5.**
3. Drill a 13/64" diameter x 5/8" deep hole at each A1 location, taking care not to drill all the way through the bed cabinet Top (2).
4. Position a Wall Bracket (HH) at each location, inserting the steel dowel in the hole. Mark Drilling Locations A2, A3 and A4 on the bed cabinet Top and Drilling Locations A5 and A6 on the wall. **Fig. 5.**
5. Drill a 5/16" diameter hole through the bed cabinet Top (2) at Drilling Location A2 on each centerline. **Fig. 6.**
6. At Drilling Locations A3 and A4 on each stud centerline, drill a 5/32" diameter x 5/8" deep pilot hole, taking care not to drill all the way through the cabinet Top (2). **Fig. 6.**
7. At Drilling Locations A5 and A6 on the wall, drill 3/16" pilot holes for the 1/4" x 3" Washer Head Lag Bolts (KK). Remember, each Wall Bracket (HH) **MUST** attach to the wall with **TWO** lag bolts. **Fig. 7.**

**⚠WARNING** Do **NOT** use an impact driver to drive fasteners; the added torque of an impact driver increases the risk of stripping the pilot holes and weakening connections. Do **NOT** overtighten screws.

8. Return the Wall Brackets (HH) onto the bed cabinet Top. Secure each bracket to the Top with two #12 x 3/4" Washer Head Screws (JJ). Secure each bracket to the wall by driving two 1/4" x 3" Washer Head Lag Bolts (KK). **Fig. 7.**
9. Working from inside the bed cabinet, insert a 1/4"-20 Allen Head Screw (II) into the hole on the underside of the cabinet Top at each bracket location and thread it into the tapped hole in the Wall Bracket (HH). Tighten the bolt with the #4 Allen Key (NN). **Fig. 7.**



**Frame Exploded View**

### Assemble the Bed Frame

All steps in this section use **Frame Exploded View**.

#### NOTICE

Make sure that the mounting plates of the Upper/Lower Half Frame Supports (B) are pointing toward each other. Also make sure that the tabs and corner braces on the Left/Right Side of the Frame (A) are at the bottom.

1. Attach Upper/Lower Half Frame Supports (B) to one Left/Right Side of the Frame (A), using M8 x 50mm bolts (BB) and M8 Lock Nuts (FF).
2. Attach a Middle Frame Support (C) to the Left/Right Side of the Frame (A), using M8 x 50mm bolts (BB) and M8 Lock Nuts (FF).
3. Repeat Steps 1 and 2 for the other Left/Right Side of the Frame (A), Upper/Lower Half Frame Supports (B) and Middle Frame Support (C).

#### NOTICE

Make sure that the metal tabs protruding from the Upper/Lower Frame Supports (E) and the Long Center Frame Support (D) are at the bottom.

4. Attach a Flat Bar (F) and an Upper/Lower Frame Support (E) to each end of the Long Center Frame Support (D), using M8 x 50mm bolts (BB) and M8 Lock Nuts (FF).
5. Position the Long Center Frame Support assembly between the two side frame assemblies, making sure that all tabs are at the bottom.

#### NOTICE

Make sure that the Flat Bars (F) bolted to the Upper/Lower Frame Supports (E) remain on the outside of the Left/Right Sides of the Frame (A).

6. Bring the assemblies together, fitting the narrowed ends of the Upper/Lower Frame Supports (E) into the open ends of the Left/Right Sides of the Frame (A).
7. Attach the side assemblies to the Long Center Frame Support (D) with M8 x 50mm bolts (BB) and M8 Lock Nuts (FF).
8. Complete the frame by installing M8 x 50mm Bolts (BB) through the Flat Bars (F) and the Left/Right Sides of the Frame (A) near the corners and securing with M8 Lock Nuts (FF).

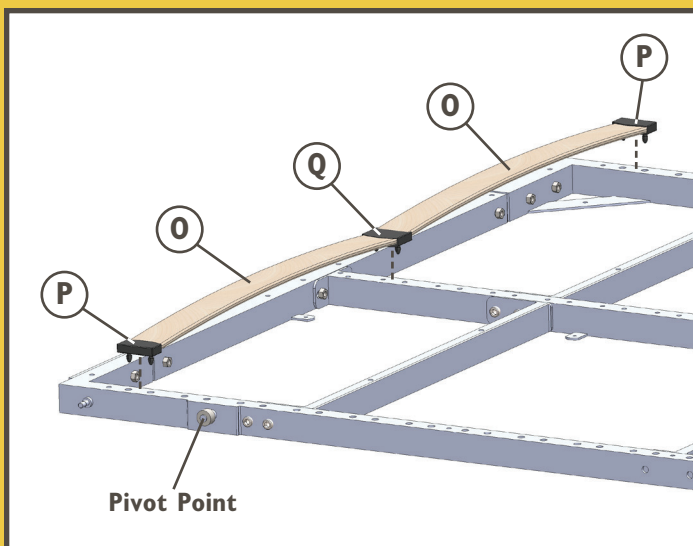


Fig. 8

## Install the Slats

1. Start at the head of the bed, nearest the pivot points on the Left/Right Sides of the Frame (A).
2. Take two Slats (O) and place a Slat Cap (P) on one end of each. Connect them by inserting the other ends in a Double Slat Cap (Q).
3. Install the slats on the frame by inserting the pins on the Slat Caps (P) and Double Slat Cap (Q) into the corresponding mounting holes in the frame. You might need to bend the Slats slightly and use a rubber mallet to tap the Slat Caps and Double Slat Cap into place. **Fig. 8.**
4. Repeat to install all Slats, except those in Rows 8 and 20 in Twin and Full beds and Rows 8, 11 and 20 in Queen beds. **Fig. 9.** You will install these Slats later.

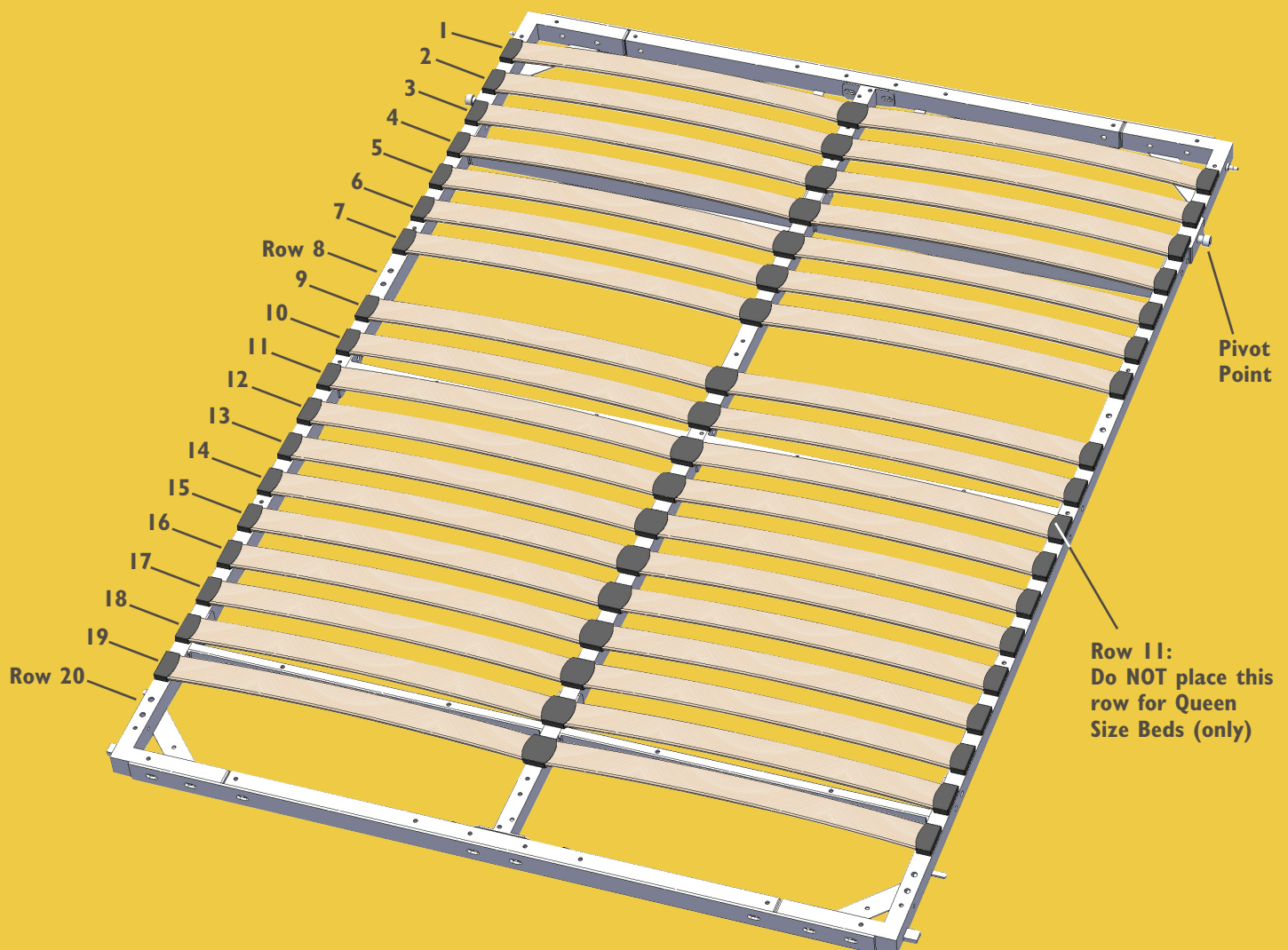


Fig. 9



## Install the Frame in the Cabinet

### ⚠ WARNING

> To avoid the risk of serious injury, Do **NOT** unscrew the bed cabinet from the wall once the pistons are in place.

1. Attach the Pistons (G1) to the bed frame on each side by fitting the opening on the end with the internal rod onto the threaded stud beyond the pivot point at the head of the frame. Secure the Pistons to the frame with M8 Lock Nuts (FF). **Fig. 10.**
2. Install the frame in the Mounting Plates (I) by positioning the bearing of the pivot point on the Left/Right Sides of the Frame (A) in the saddle of each plate.
3. Secure the bearing on each side in place with a Saddle Locking Plate (J). The tab at the front of the plate fits into an opening in the saddle, and the plate is secured to the saddle with an M5 x 15mm Screw (Z) and M5 Nut (EE). **Fig. 11.** Tighten the Screw fully.

### NOTICE

The application of a thread-locking liquid to the M5 x 15mm Screw (Z) is recommended to ensure the M5 Nut (EE) remains securely tightened.

### ⚠ WARNING

Once the pistons are attached to the Mounting Plates, the unit is under pressure. Do **NOT** let go of the mechanism if you have pulled the bed frame down; the bed frame could snap up suddenly, possibly causing serious injury.

4. Carefully tilt the frame upward past the front edge of the cabinet and hold it there. **Fig. 12.** On each side, fit the end of the Piston (G1) onto the threaded stud on the Mounting Plate (I) and secure with an M8 Lock Nut (FF). **Fig. 13.**

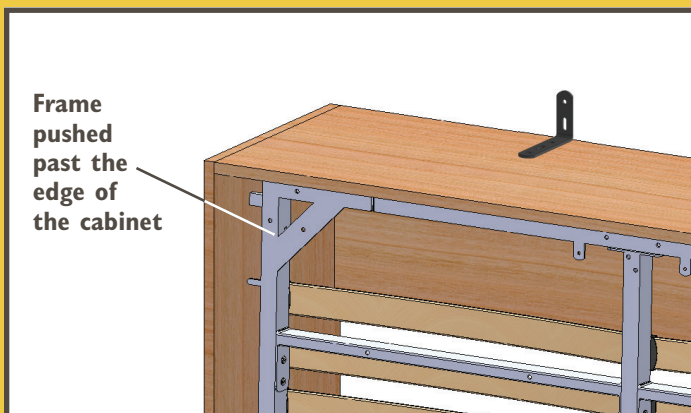


Fig. 12

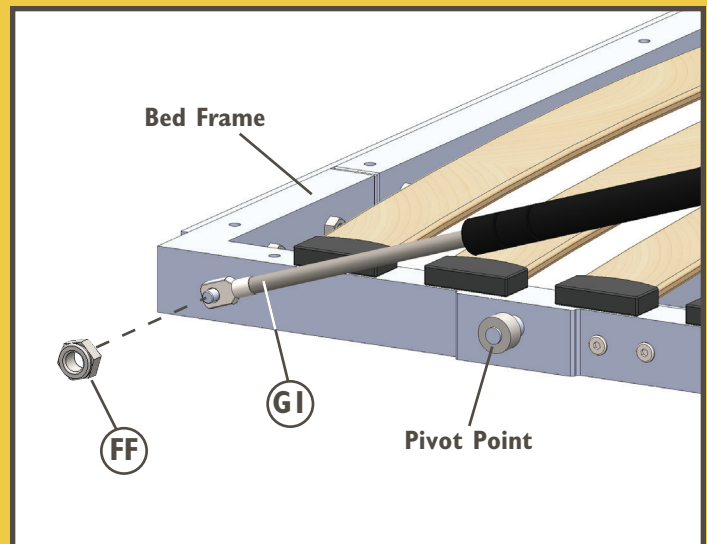


Fig. 10

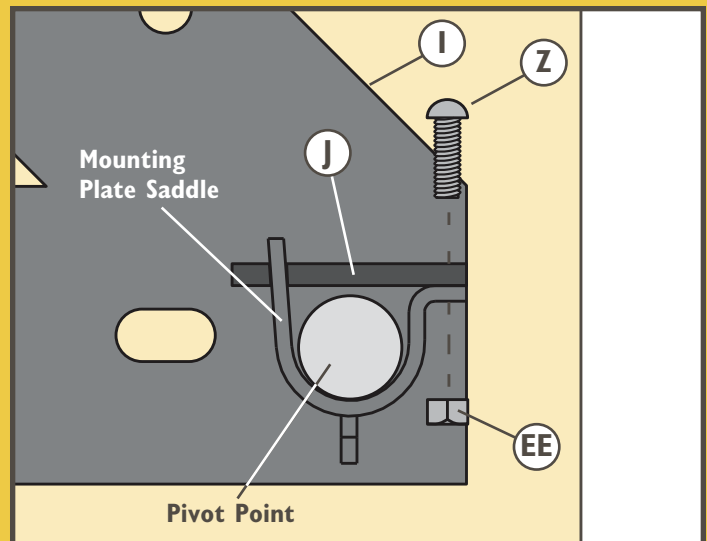


Fig. 11

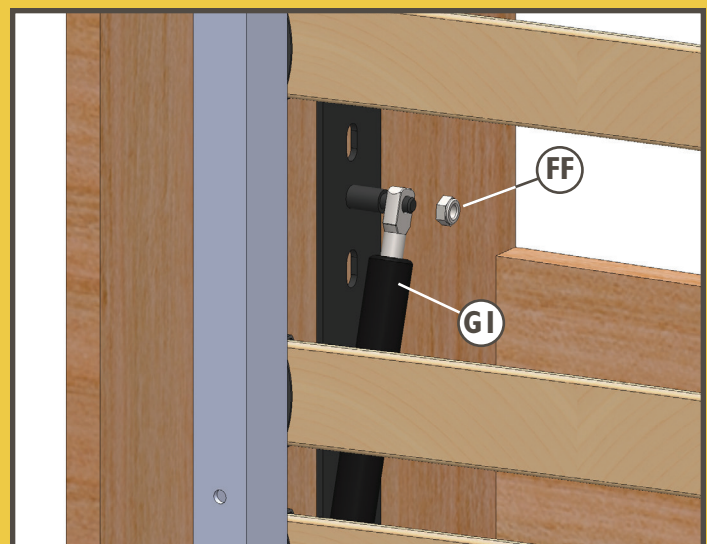


Fig. 13

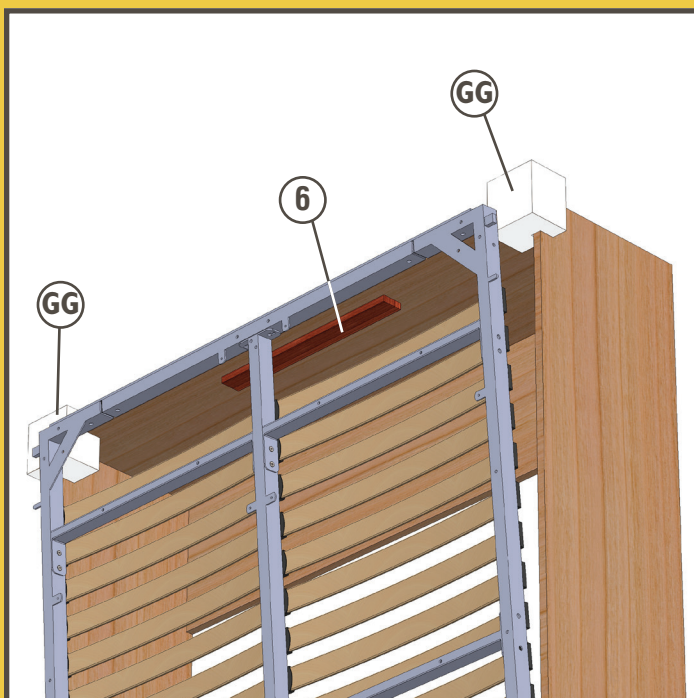


Fig. 14

5. Pull the top of the bed frame out beyond the front of the cabinet and install the Temporary Stops (GG) on the top corners of the cabinet. **Fig. 14.**
6. Position the Permanent Stop (6) where you want to install it. Make sure that it's centered and set back from the front edge far enough that the frame will be plumb when closed. Drill pilot holes and secure with three #8 x 1½" screws (not included). **Fig. 14.**
7. With the Temporary Stops (GG) still holding the top of the frame out from the cabinet, fit a Nylon Washer (DD) onto the threaded stem of the left Leg (M) and fit the threaded stem into its hole in the frame. Fit another Nylon Washer onto the stem and secure with an M8 Lock Nut (FF). Do not overtighten, or the leg might not pivot correctly. **Fig. 15.**
8. Repeat Step 7 for the right Leg (M).
9. Attach the Leg Tube (N) to the Legs (N) with four M6 x 30mm Screws (AA), driven with #4 Allen Key (NN). Drive the Screws through the Legs into tapped holes in the Leg Tube. **Fig. 15.**

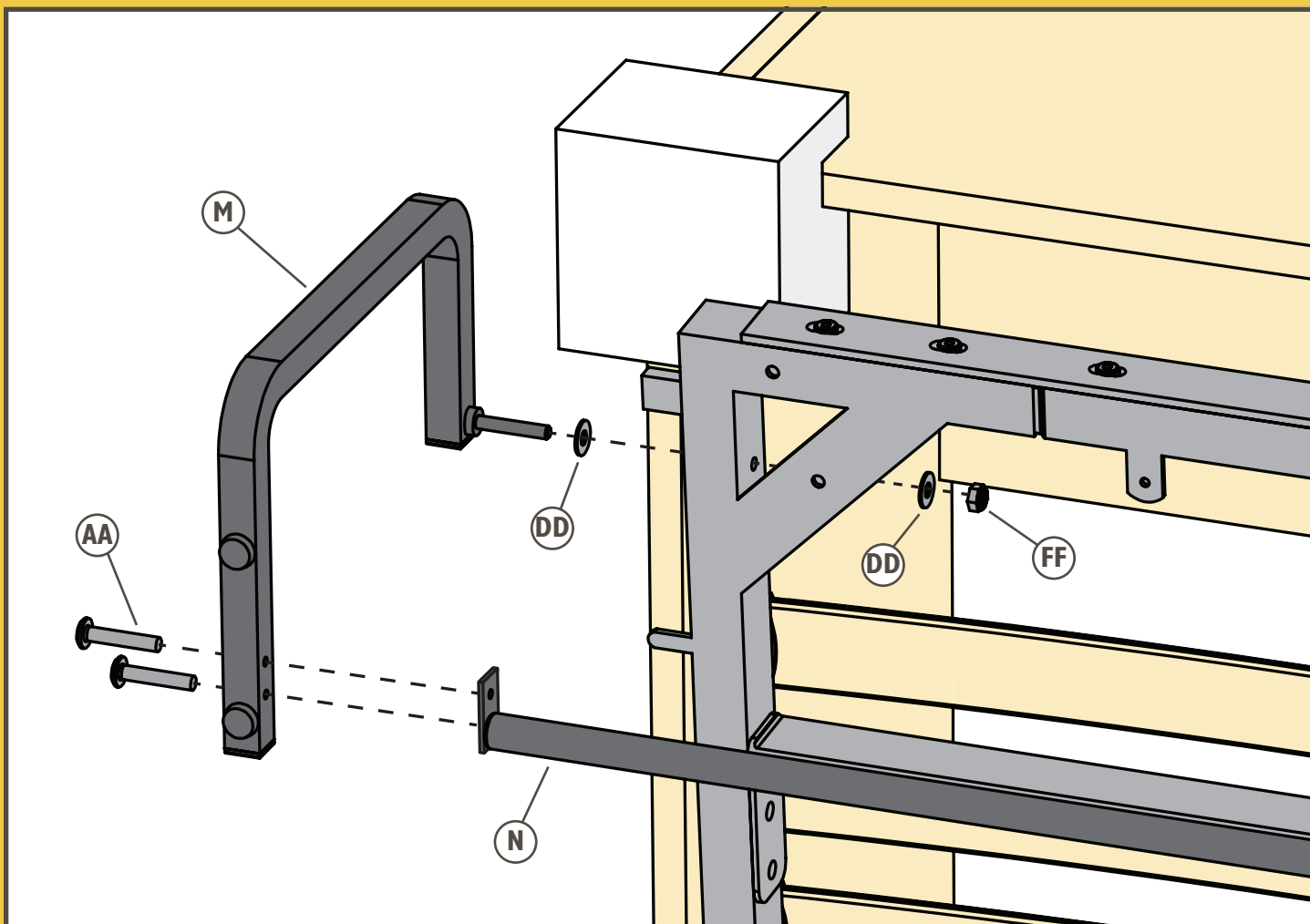


Fig. 15



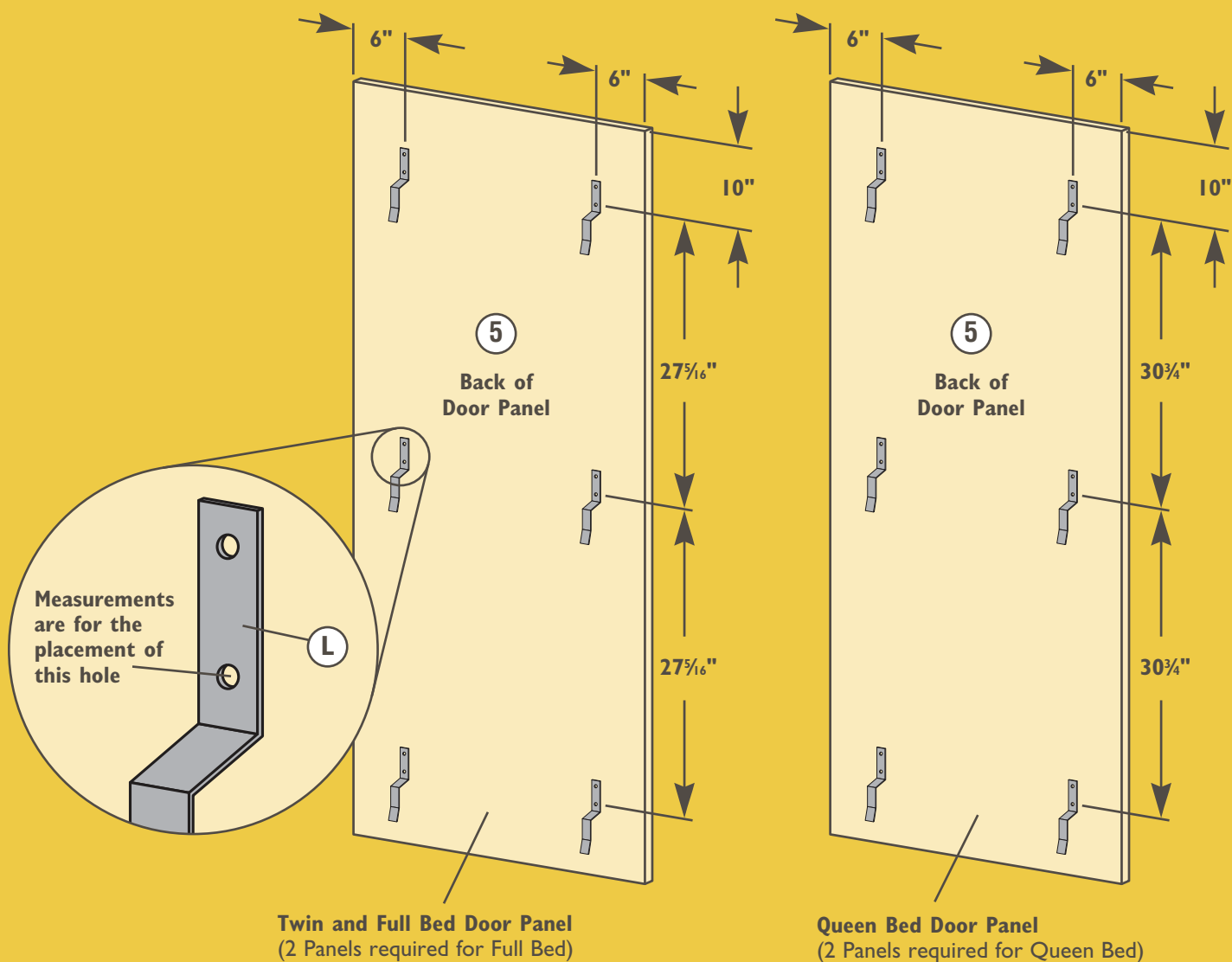


Fig. 16

## Attach the Door Panels

### ⚠ WARNING

> Do **NOT** use an impact driver to drive fasteners; the added torque of an impact driver increases the risk of stripping the pilot holes and weakening connections. Do **NOT** overtighten screws.

1. Refer to **Fig. 16** to determine Door Bracket (L) mounting number and locations for your bed size. Note that the brackets need to point downward when

installed and that the locations shown are for the bottom mounting hole on the Door Brackets.

2. Drill 5/64" diameter x 5/8" deep pilot holes at those locations on your Door Panel(s) (5) and attach each Door Bracket (L) with two #8 x 15mm Screws (W).
3. Mount your door handle(s) (not included) to the front face of your Door Panel(s) (5) at a height that will allow you to comfortably pull down the bed. About one-third of the way down from the top of the door is a good rule of thumb.

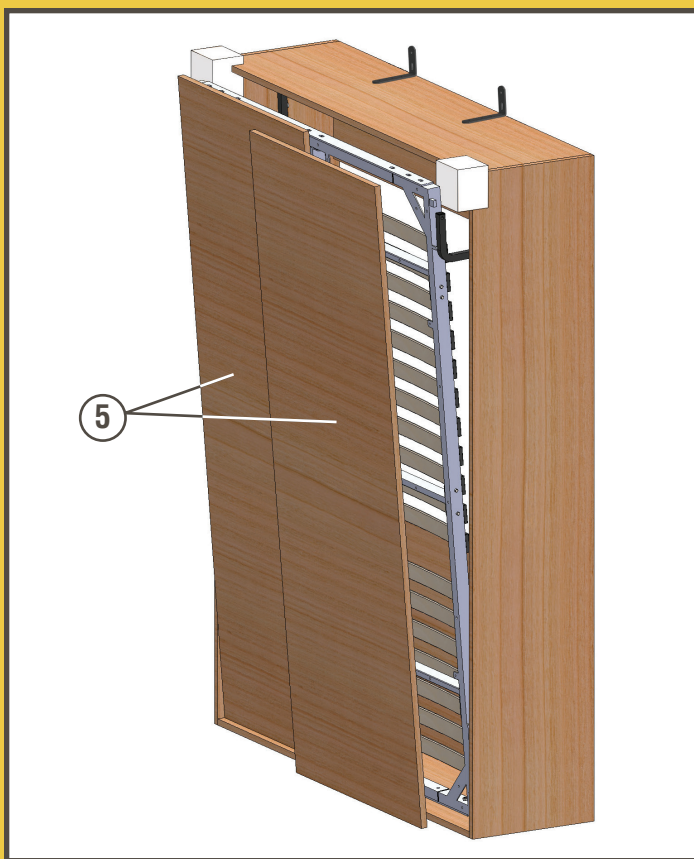


Fig. 17

4. Hook the Door Panel(s) (5) onto the frame and push down until they are firmly in place. Center and fine-tune the position of the Door Panel(s). **Fig. 17.**

**⚠WARNING** The bed will not stay down without the weight of a mattress. You **MUST** have an adult helper hold down the bed to avoid the risk of serious injury from the bed suddenly slamming shut.

5. Pull the bed frame down and have an adult helper hold it down.

**⚠WARNING** Before permanently attaching the Door Panels to the frame, make sure their outside edges won't contact the Mounting Plates or any of their hardware. Door Panels **MUST NOT** hit the hardware when the bed legs are retracted and the bed is lowered beyond the normal horizontal position. If they do, then you **MUST** either fine-tune the position of the Door Panels on the frame, or the Door Panels' width **MUST** be reduced.

6. Permanently attach the frame to the Door Panel(s) (5) by driving #8 x 15mm Screws (W) through the mounting tabs on the frame into the Door Panel(s). You will drive 20 screws for a Twin bed and 28 screws for a Full or Queen bed. **Fig. 18.**

7. Reinforce the connection by driving #10 x 55mm Screws (V) through mounting holes in the full frame at 26 locations around the frame. **Fig. 18.** Do NOT drive screws through the Long Center Frame Support (D).

## Final Touches

### ⚠WARNING

> The bed will not stay down without the weight of a mattress. You **MUST** have an adult helper hold down the bed to avoid the risk of serious injury from the bed suddenly slamming shut.

1. Install the remaining Slats (O), Slat Caps (P) and Double Slat Caps (Q). These will go in Rows 8 and 20 in Twin and Full beds and Rows 8, 11 and 20 in Queen beds. Use a rubber mallet to tap the Slat Caps and Double Slat Cap into place, if necessary. **Fig. 19.**
2. Install the Mattress Support(s) (H) at the head of the frame by inserting the ends into the appropriate holes in the frame. Twin beds will have one Mattress Support; Full and Queen beds will have two. **Fig. 20.**

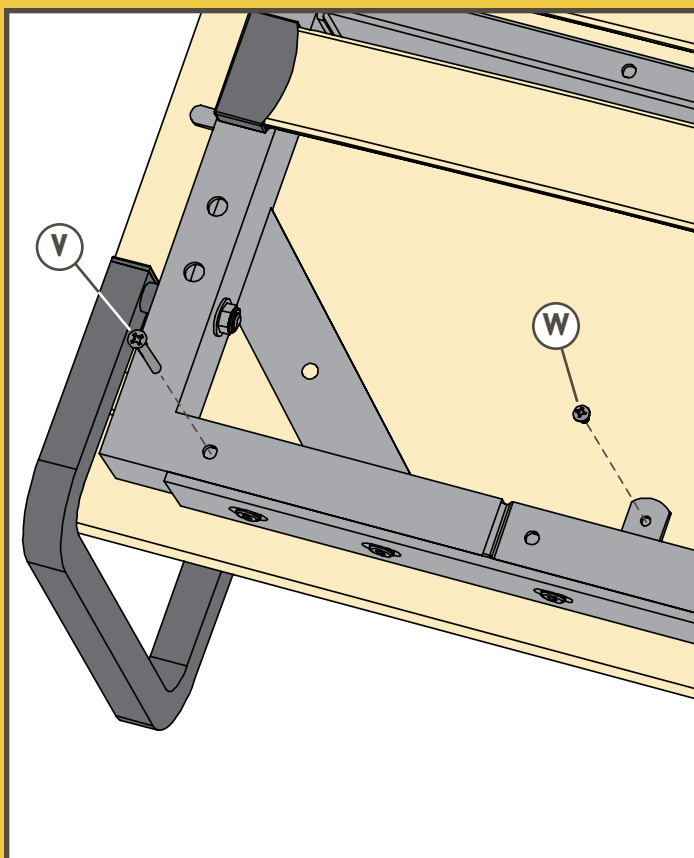


Fig. 18

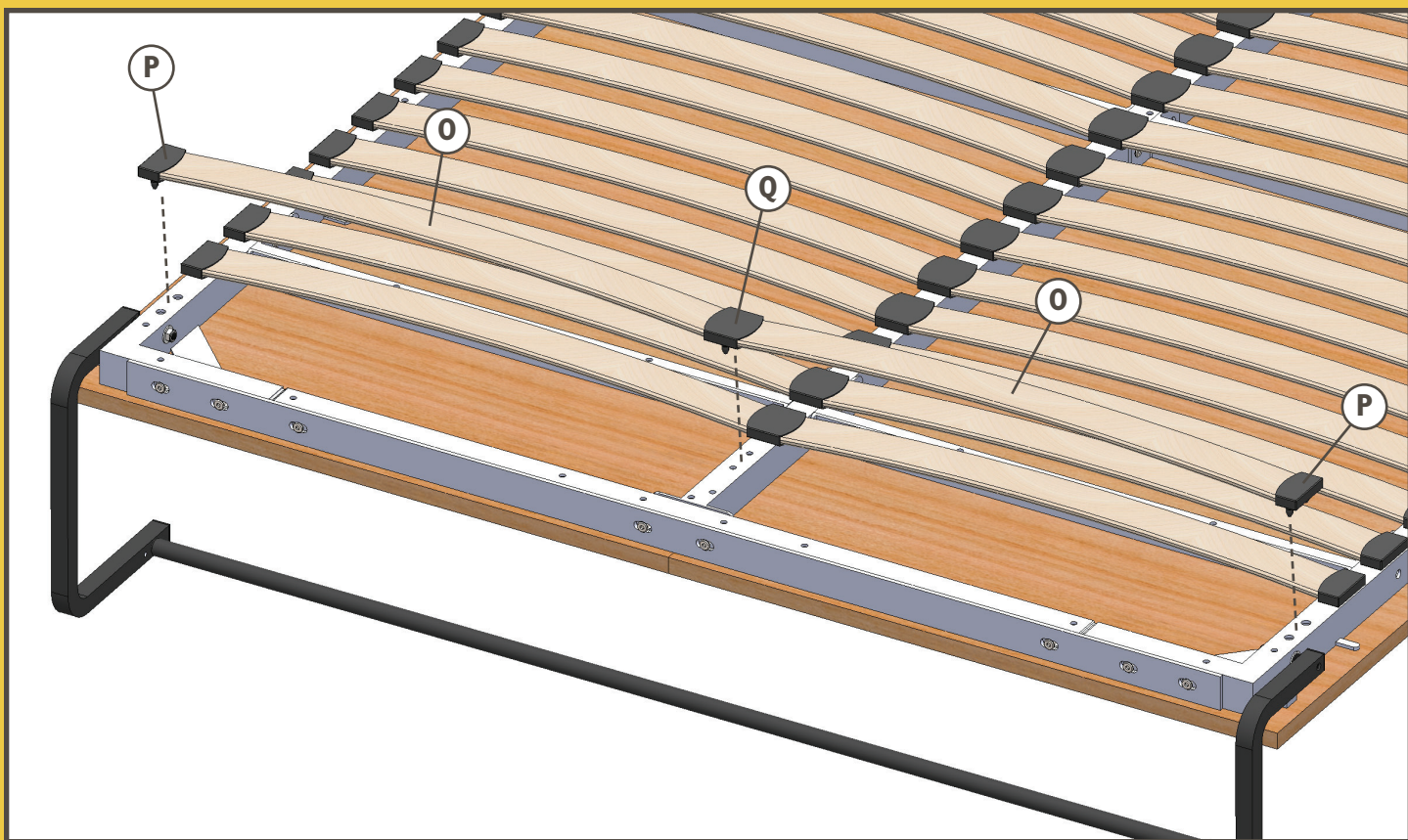


Fig. 19

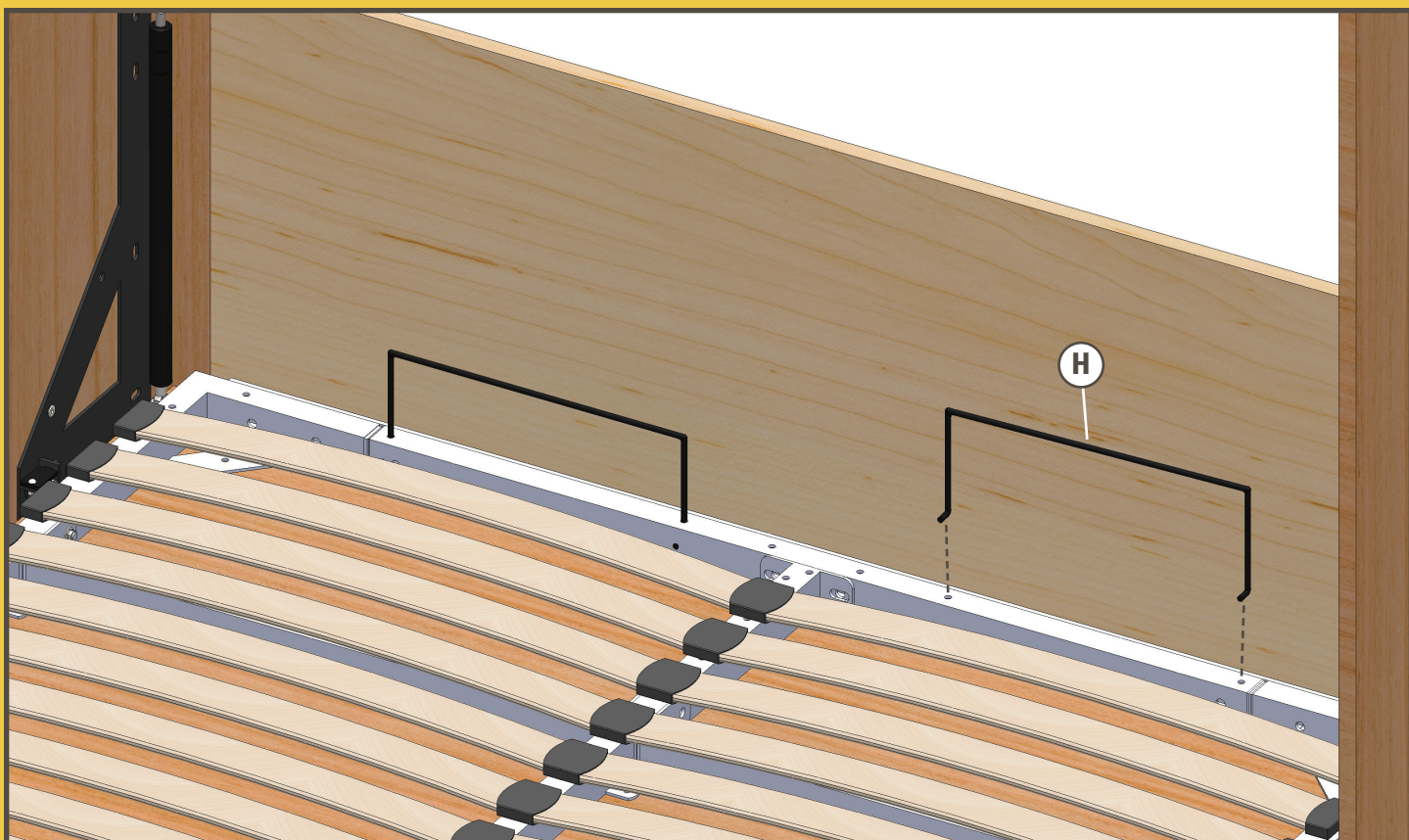
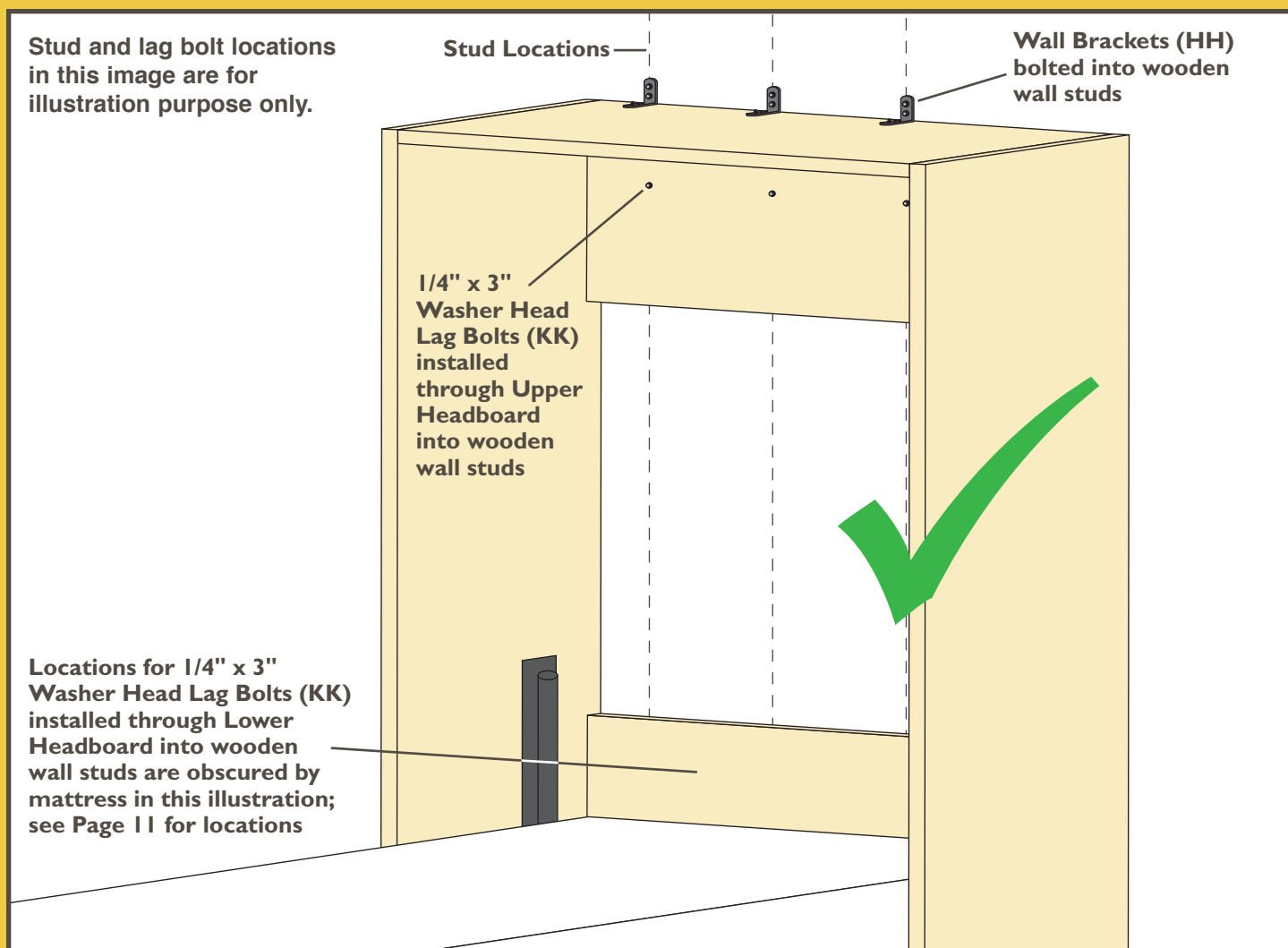


Fig. 20





### Final Check of Bed Cabinet Installation

### Using your Murphy Bed

#### **⚠ WARNING**

- > The bed will not stay down without the weight of a mattress. You **MUST** have an adult helper hold down the bed to avoid the risk of serious injury from the bed suddenly slamming shut.
- > Do **NOT** use a foam or very light mattress with this product. See required weight specifications on p. 3.
- > **TO AVOID THE RISK OF SERIOUS INJURY, DO NOT ALLOW CHILDREN TO PLAY ON THE BED UNIT OR OPERATE IT WITHOUT ADULT SUPERVISION.**

1. Once the bed unit has been assembled correctly and secured to the wall, pull the bed down and, while holding the frame securely, pivot the Leg assembly so that it will support the frame when it is fully lowered.

2. Have an adult helper hold the bed frame down while you slide the mattress onto the frame.
3. To return the bed to the cabinet, hold the frame and pivot the Leg assembly up and over the end of the mattress. The Leg assembly serves as a mattress retaining system.
4. Using the handles on the Door Panels, slowly and carefully allow the bed to tilt up into the cabinet.

Check Rockler.com for updates. If you have further questions, please contact our Technical Support Department at 1-800-260-9663 or support@rockler.com