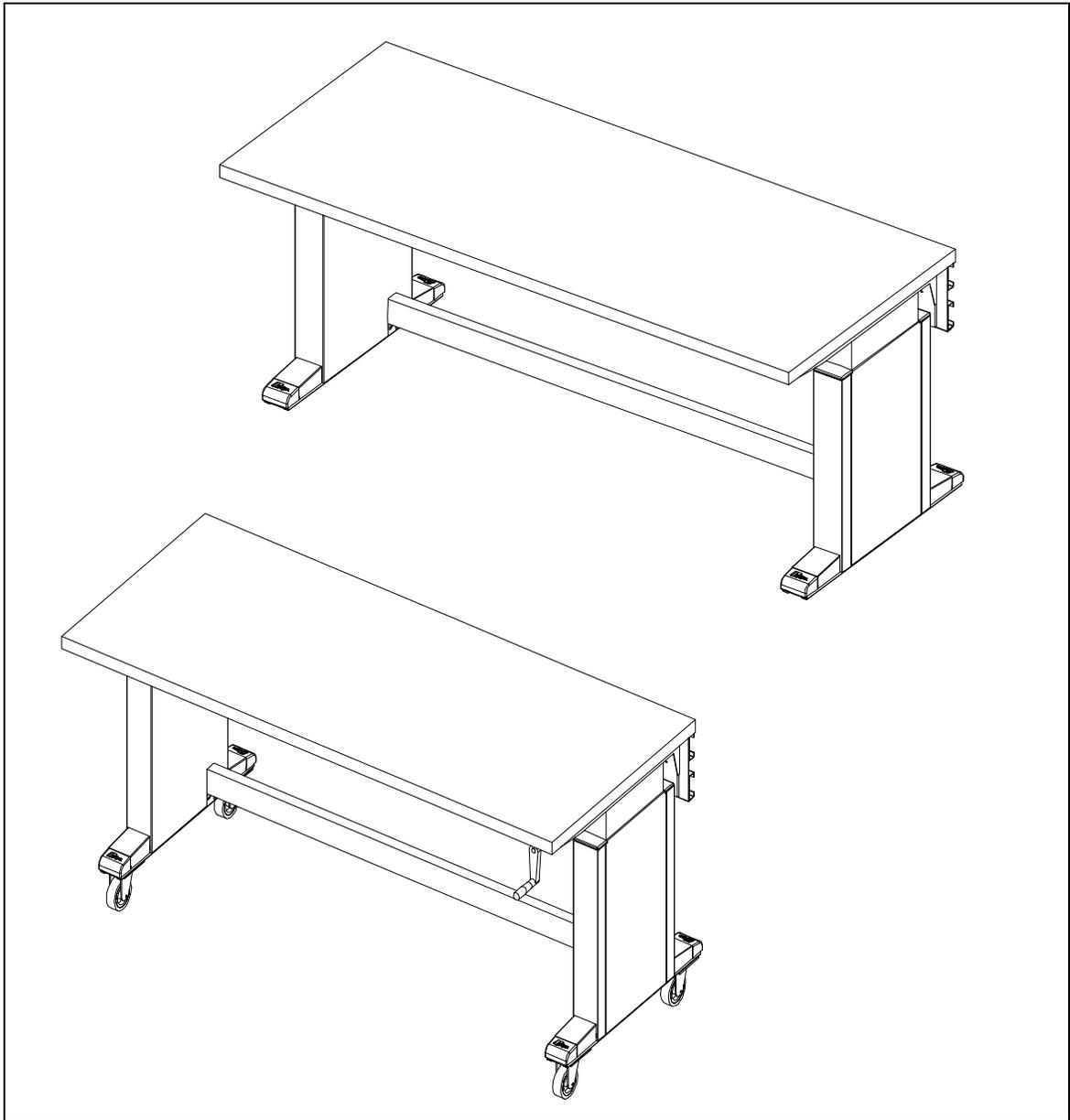


Height-Right™ Field Service Guide



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Tools Required for Assembly and Service

Assembling and servicing the Height-Right Workbench requires the following tools:

Sockets or Open End Wrenches

- 3/8" drive with 3" to 6" extension
- 1/2"
- 7/16"
- 9/16"

Allen Wrenches

- 5/32"
- 3/16"
- 5/16"

Screwdrivers

- #2 Phillips Head
- #0 Phillips Head
- Flat Head

General Tools

- Rubber Mallet
- Measuring Tape
- Loctite Blue

Before Assembling or Disassembling the Height-Right Workbench

Before you begin assembling or disassembling the Height-Right Workbench, read through the assembly instructions to familiarize yourself with order in which the parts are assembled.

It is important to assemble and disassemble the components in the same sequence as described in this manual.

Important:

Before servicing or disassembling the Height-Right workbench, make sure you unplug the power cord. For mobile workbenches, be sure to set the brakes on the casters.

For instructions on installing FlexWorks accessories and surface-mount uprights, refer to *FlexWorks Accessory System: Instructions for Assembly*, Document Number: MD001A3.

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Assembling the Height-Right Workbench

This section provides step-by-step instructions for assembling the Height-Right workbench. If your workbench includes FlexWorks accessories, refer to *FlexWorks Accessory System: Instructions for Assembly* (Document Number: MD001A3).

❶ Attaching Stringer to Legs

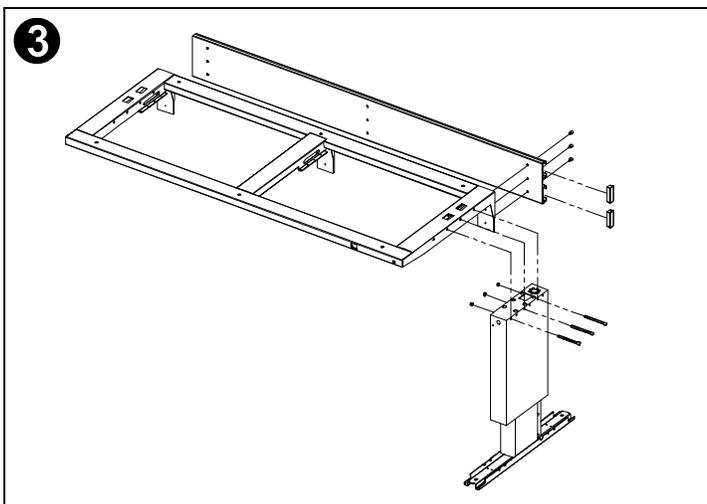
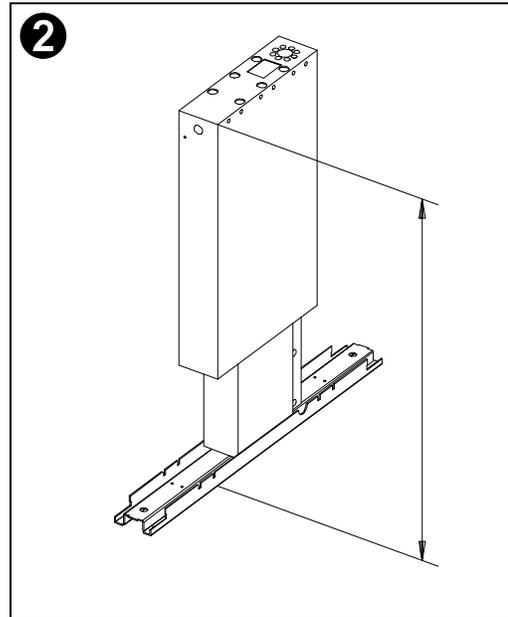
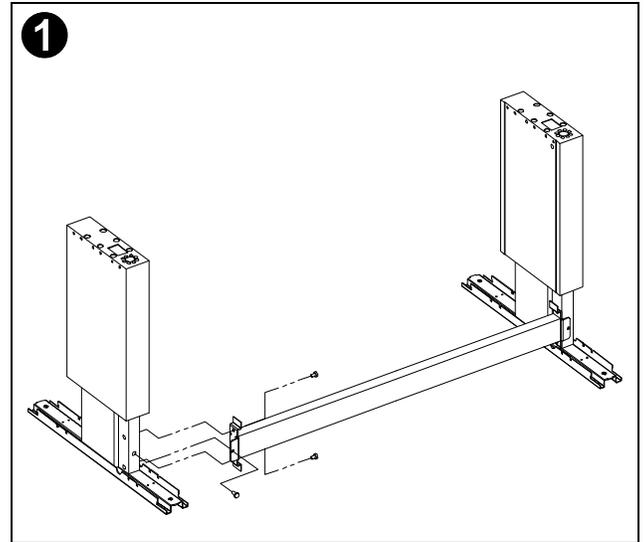
- 1 Position the legs on the floor with the rectangular cutout at the top of the legs facing the rear.
- 2 Secure the Stringer to each leg using 5/16-18x 5/8" Hex Head Whiz Bolts and nuts (3 per Leg).

❷ Making Sure Legs are Same Height

Before proceeding, make sure that the legs are the same height by measuring the distance from the foot to the top of each leg. There should be no more than 1/32" difference between the height of the two legs. To adjust the height, insert the 7mm Hex Rod into the leg's gearbox and slightly turn the rod until the height is equal to the other leg.

❸ Attaching Legs and FlexWorks Support Rail to Sub-Frame

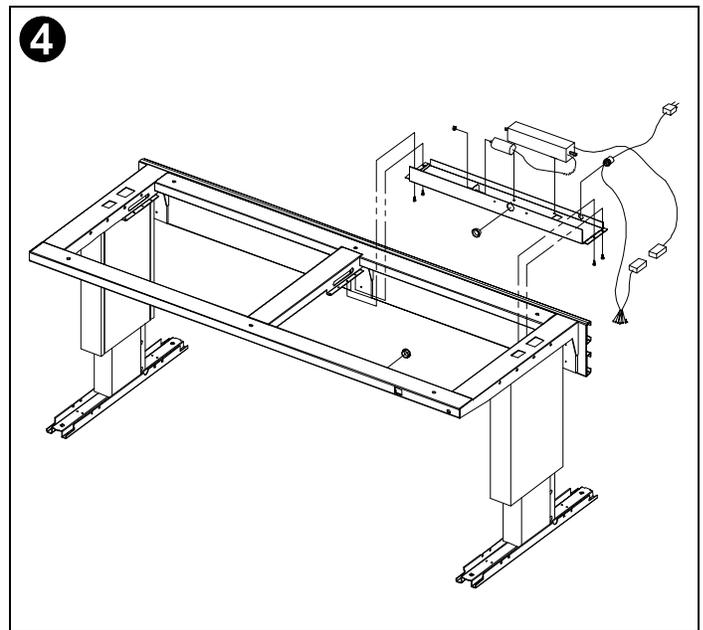
- 1 Align the hole pattern in the sub-frame with the hole pattern of the Legs in the proper mounting position:
 - If attaching Rear-Mount FlexWorks, use the three rear holes of the sub-frame.
 - If attaching Surface-Mount FlexWorks, or no FlexWorks, use the front three holes of the sub-frame.
- 2 Insert 5/16-18x4" Socket Button Cap screws through outside edge of sub-frame and through the leg. Secure with 5/16-18 Whiz nuts (3 per Leg).
- 3 Secure the FlexWorks Support Rail to the sub-frame using nine 5/16-18x 3/4" Hex Head Whiz Lock bolts and nuts.
- 4 If you are not attaching Rear-Mount FlexWorks, attach the cover (optional) to the FlexWorks Support Rail by dropping the lances of the Cover onto the lower lip of each rail.
- 5 Snap the End Caps (4) onto the FlexWorks Support Rail.



④ Installing the Electric Motor

Important: Before installing the motor, you must make sure that both Setting Bolts on the motor are pressed *in*. If they are *not* pressed in, use a #0 Phillips Head screwdriver and engage each bolt by pressing in and turning approximately 45° to the right. (¼ turn)

- 1 Attach the Motor to the Motor Bracket so that the Setting Bolts fit into the cutout in the Motor Bracket. Secure with four M5x12 Socket Cap Screws and security washers.
- 2 Secure the Capacitor to the Support Bracket using the M8 Hex nut (supplied).
- 3 The position of the Strain Relief Connector (SRC) is dependent upon the depth of the Height-Right sub-frame and the use of FlexWorks, as follows:
 - With FlexWorks, position the SRC 38" down from the end of the insulated cable for a 30" deep frame (44" down for a
 - Without FlexWorks, position the SRC 32" down from the end of the insulated cable for a 30" deep frame (38" down for a 36" frame).
- 5 Insert the SRC into the hole of the lower lip of the Motor Bracket and secure with attached nut.
- 6 From underneath the sub-frame, attach the Motor Bracket to the sub-frame. The position of the Motor Bracket is dependent upon the use of FlexWorks:
 - With FlexWorks, align two rear hole patterns of sub-frame with Motor Bracket.
 - Without FlexWorks, align two front hole patterns of sub-frame with Motor Bracket.
- 7 Secure with four (2/side) #10 Phillips Pan Head screws.

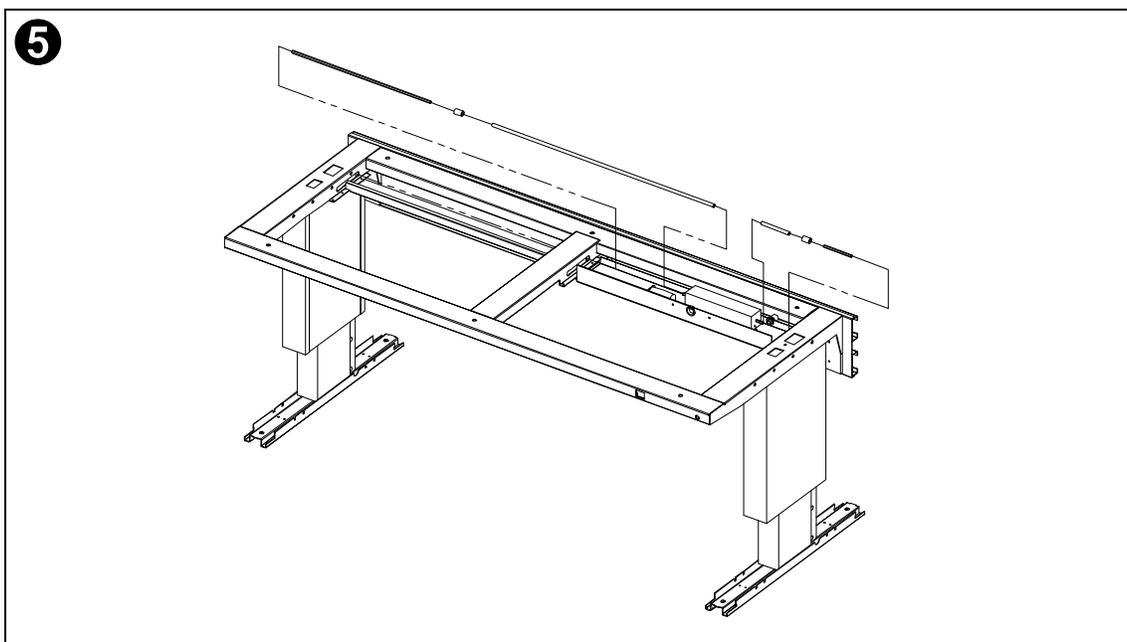


⑤ Attaching the Drive Shaft (Electric Models)

- 1 Insert the shorter Hex Rod into the short Sleeve and slide the Coupling over the assembly.
- 2 Carefully, insert the Hex Rod into the right leg's gearbox, making sure not to turn the rod.
- 3 Insert the Sleeve into the right side of the Motor and slide the Coupling over the Rod/Sleeve joint.

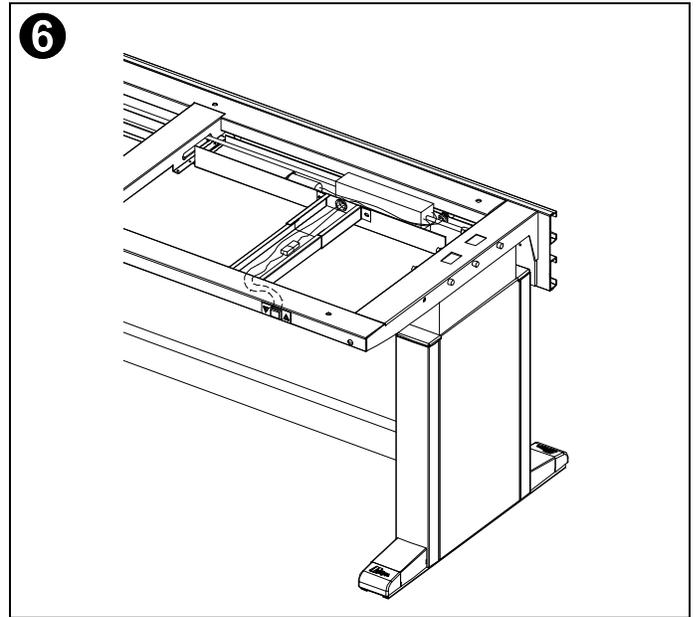
Note: You may need to slightly turn the Hex Sleeve (which is engaged into the gear box), to align it with the Motor's Hex Rod.

- 4 Use Locktite Blue and tighten the set-screws on the Coupling.
 - 5 Repeat Steps 1-4 to attach the Drive Shaft to the left Leg.
- Note:** If you inadvertently move the height of either leg while installing the Drive Shaft, refer to Step ② on page 5.



6 Managing the Wires

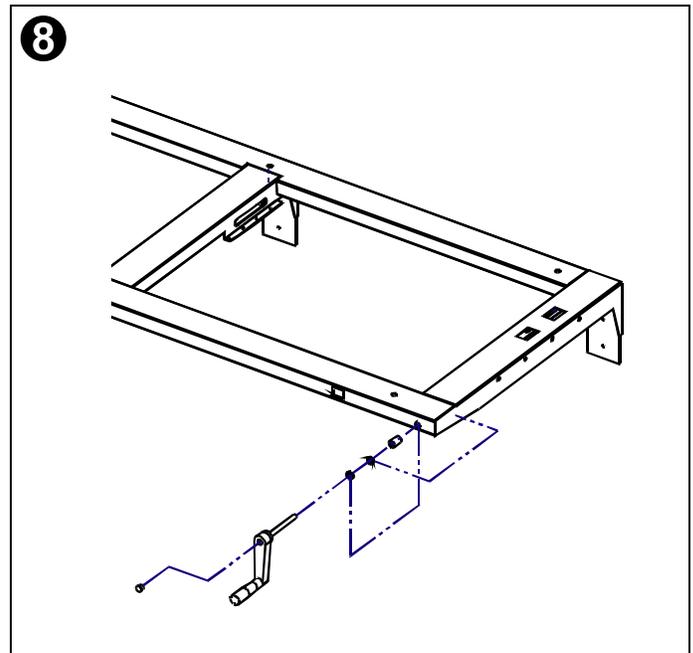
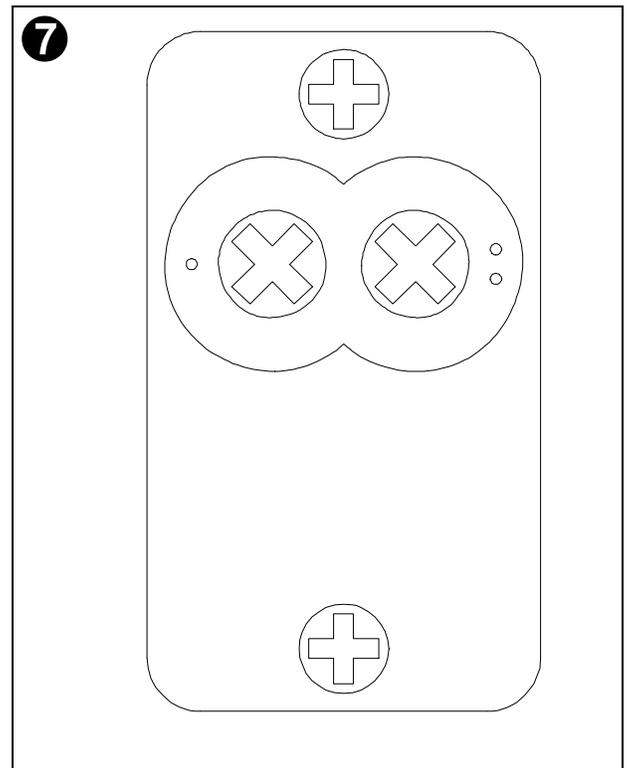
- 1 Assemble the telescoping sections of the Wire Management Channel and adjust to the depth of your workbench. Secure the Channel to the front inside of the sub-frame and front face of the Motor Bracket with four #10 Phillips Pan Head screws.
- 2 Place the Toggle Switch label on the front of the sub-frame, around the rectangular cutout.
- 3 Feed the Lead wires through the large round hole in the Motor Bracket, through the hole in the front rail of the sub-frame, and out the front of the Toggle Switch location.
- 4 Connect the Toggle Switch to the individual leads by matching the numbers on the leads to the numbers on the Toggle Switch.
- 5 Connect the Wiring Harness coupling to the Motor Coupling.
- 6 Plug the power cord into an electrical outlet and press the Toggle Switch to determine the direction of travel. Position the Toggle Switch to correspond with the arrows on the label and press it firmly into position.
- 7 Insert Wire Grommets into the front inside rail of the sub-frame and into the hole of the Motor Bracket.
- 8 Make sure all cables are neatly organized. **Important:** **The cables inside the Motor Bracket must be under and clear of the Drive Shaft and must not touch the motor.**
- 9 Insert the Shaft Cover under the left Drive Shaft and secure with #10 Phillips Pan Head screws.
- 10 Insert two Self-Adhesive Plastic Mounting Clips into the bottom of the Motor Bracket. Use Cable Ties to secure the wires in place as needed.
- 11 Center the Switch Cover under the Toggle Switch and into the channel of the front of the sub-frame, making sure that all lead wires are stored neatly before snapping into place.



⑦ Setting the Height Limits

- 1 Access the Setting Bolts from underneath the sub-frame, in the Motor Bracket.
- 2 **Setting the Upper Height Limit:** Press the Toggle switch to raise the workbench to its highest position (43" from the top of the sub-frame to the floor). Release the Toggle Switch to stop the motor. Turn the Upwards Setting bolt (marked with one dot) to the left until it reaches the limit stop, then release the Setting Bolt.
- 3 Verify the procedure in Step 2 by lowering the sub-frame 1 to 2;" stopping the motor, and raising it again. If the sub-frame stops at 43;" proceed to Step 5. **If the sub-frame exceeds 43;" it indicates that the bolts are mislabeled. Proceed to Step 4.**
- 4 **Important:** In some cases, the Upwards and Downwards Setting Bolts may be mislabeled and the sub-frame may exceed 43" when raised. This indicates that the Setting Bolt used to set the upper height limit is actually the downwards setting bolt and the motor does not recognize 43" as the upper height limit. Perform Steps 4a through 4c to correct the upper height limit.
 - 4a Press the Toggle Switch to lower the sub-frame back down to 43" (It should stop automatically at 43" because the motor now recognizes this as the lower height limit.)
 - 4b Release the Setting Bolt that was set in Step 2. Press the other Setting Bolt in and turn 45° (¼ turn) to the left.
 - 4c Press the Toggle Switch and lower the sub-frame approximately 1 to 2;" Stop the motor and release the Setting Bolt. Perform Step 3 again to verify the procedure. Proceed to Step 5 using the Setting Bolt marked with one dot to set the Lower Height Limit.
- 5 **Setting the Lower Height Limit:** Press the Toggle switch to lower the workbench to its lowest position (28" from the top of the sub-frame to the floor). Release the Toggle switch to stop the motor. Turn the Downwards setting bolt (marked with two dots) to the left until it reaches the limit stop, then release the Setting Bolt.

Locktite Blue to secure the set-screws.



⑧ Installing Drive Shaft and Handle (Manual Models)

- 1 Install both of the Hex Rods into the Hex Sleeve.
 - 2 Slide the Hex Rods/Sleeve through the slot in the mid-section of the sub-frame.
 - 3 Slide one coupling into the left side of the Hex Sleeve.
 - 4 Carefully insert the Hex Rod into the gearbox of the left leg, making sure not to turn the Hex Rod.
- Note:** If you inadvertently move the height of either leg while installing the Hex Rod, refer to Step ② on page 5.
- 4 With the Hex Rod firmly engaged into the left leg's gearbox, use Locktite Blue and tighten the set-screws on the coupling.
 - 5 Slide the coupling over the right Hex Rod/Sleeve.
 - 6 Insert the right Hex Rod into the gearbox of the right leg. Make sure that the Hex Rod is secure in each gearbox (left and right leg) before you secure the remaining coupling. There should be no play, or slack. The right coupling should firmly secure the Hex Rods and Sleeve in place when you tighten the set screws on the right coupling. Use

9 Attaching the Handle

- 1 Insert the two Glide Bushings into the pre-punched holes of the sub-frame's front rail. Push the first Glide Bushing into the outside of the front rail. Push the second into the inside rail.
- 2 Slide the Handle assembly through the Glide Bushings in the sub-frame, making sure the Glide Bushings remain secured.
- 3 Slide the Coupling over the Hex Rod of the Handle as it exits the second (inner) Glide Bushing.
- 4 Push the Handle so that the center of the Hex Rod fits securely into the Sleeve inside the sub-frame. *Note: To verify the fit, turn the handle to ensure that it is properly engaged.*
- 5 Pull the Handle assembly out so that it is approximately 1 3/4" from the sub-frame. This ensures that the worksurface (when attached) will not interfere with the operation of the handle.
- 6 Position the Coupling firmly against the inner Glide Bushing. Use LockTite blue and tighten the set-screws.

10 Attaching Lower Panels and Foot Covers

- 1 Attach the Inner Panel to each leg using 10-24 Phillips Head Pan screws (4/leg; 2 in front, 2 in back).
- 2 Attach the Accent Panel to each leg. If necessary, use a rubber mallet and gently tap the Accent Panel from the top to position the Accent Panel.
- 4 Attach the Foot Covers (2/Leg) to each foot by engaging the small end of the cover into the notches of foot and snapping it back into place. *Note: The shorter, tapered end, faces away from the leg.*
- 5 Insert the Top Caps into the Inner Panel of each leg (2/Panel).

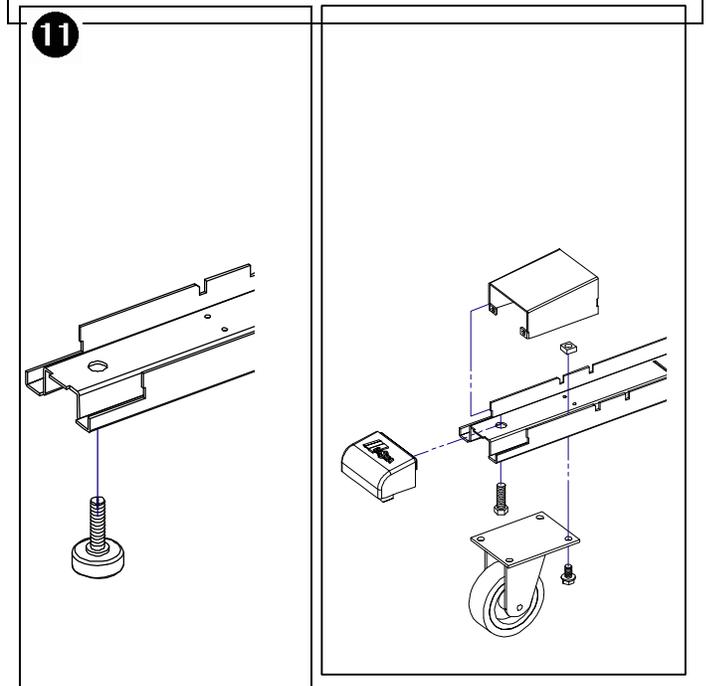
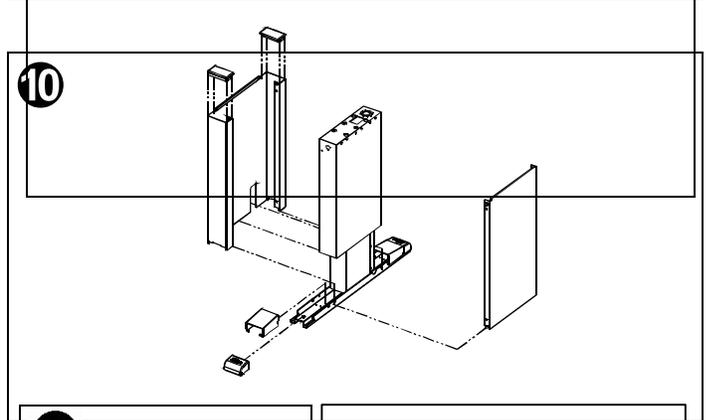
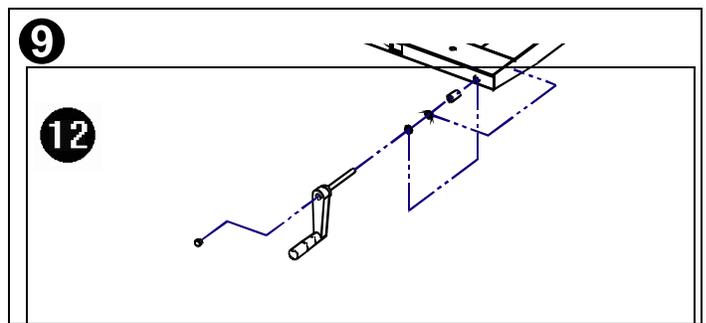
11 Attaching Leveling Glides or Casters

Leveling Glides: Tip the Height-Right workbench to insert the Leveling Glides into the bottom of each foot. Position the workbench and adjust the Leveling Glides as necessary. Attach the Toe Caps to each foot.

Castors: Tip the Height-Right workbench to insert a 1/4" bolt up from the bottom of each foot. Secure Castors with four Whiz Lock bolts, making sure that the castors with brakes are installed on the front foot of each leg. Attach the Toe Caps to each foot.

12 Installing Companion Cabinet

- 1 Raise the Height-Right workbench to its highest position.
- 2 Lift the cabinet and carefully place it over the Stringer as follows, depending on the use and type of FlexWorks:
 - Use front slot for Surface-Mount FlexWorks or no FlexWorks
 - Use rear slot for Rear-Mount FlexWorks
- 3 Secure the Cover to open slot using #10 Phillips Self-

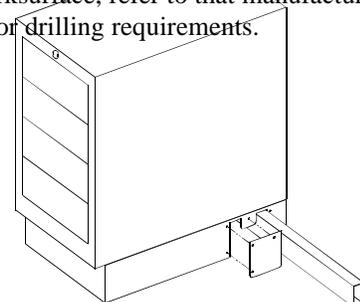


Tapping screws.

Do not store items on top of the Companion Cabinet.

13 Attaching the Top

Place the worksurface on top of the sub-frame and secure with 5/16" Hex Head Lag bolts and washers. Lista worksurfaces are pre-drilled. If you are using a non-Lista worksurface, refer to that manufacturer's instructions for drilling requirements.



Attaching Rear-Mount FlexWorks

This section provides step-by-step instructions for attaching rear-mount FlexWorks to your Height-Right workbench. For instructions on attaching FlexWorks accessories and surface-mount Uprights, refer to the *FlexWorks Accessory System: Instructions for Assembly* (Document Number: MD001A3)

① Assembling the Uprights

Attach the Inner and Outer covers to each Upright and secure with at least two Phillips Head screws/cover.

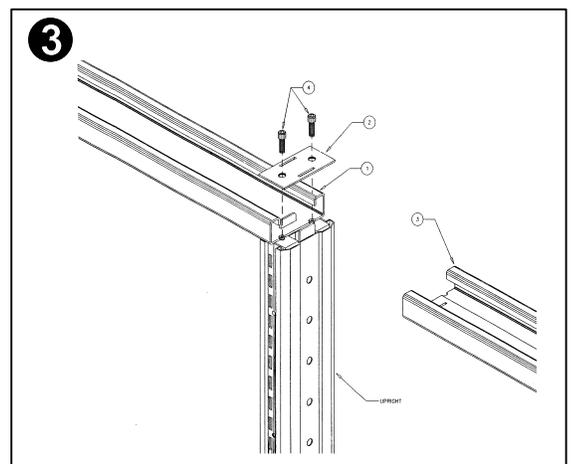
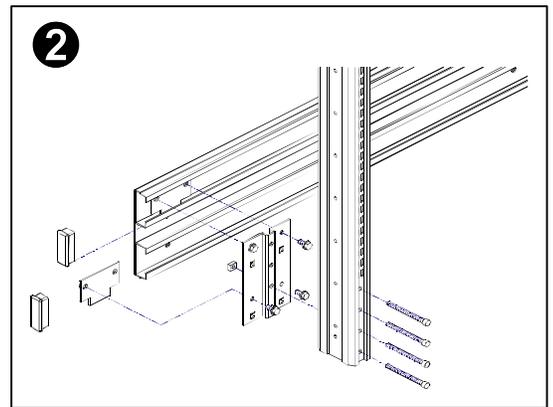
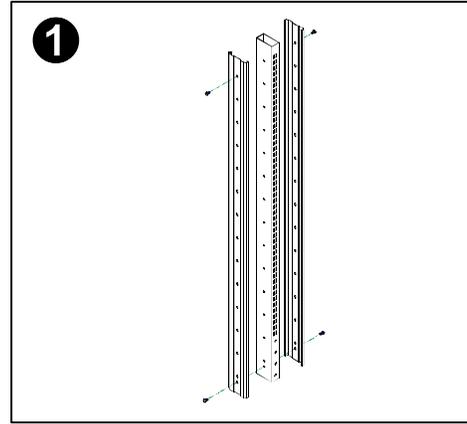
② Attaching the Uprights

- 1 Align the Mounting Bracket with the four holes at the bottom of the Upright. **Note:** *Mounting Bracket lances should face down, toward the bottom of the Upright.* Repeat for each Upright and Mounting Bracket.
- 2 Insert four 5/16 x 3/2" Socket Cap screws through the back of the Upright and into the Mounting Bracket. Tightly secure with four Square nuts. Repeat for each Upright.
- 3 Loosely secure the Anchor Plate to the Mounting Bracket with four 5/16-18 x 3/4" Hex Head bolts and Kep nuts. Repeat for each Mounting Bracket and Upright assembly.

③ Attaching the Cross-Member(s) to the Uprights

- 1 Align the hole pattern of the Cross-Member with the hole pattern at the top of each Upright.
- 2 Insert and loosely secure two 1/4 - 20 x 3/4" Socket Head screws down through the Splicer Bracket and into the hole pattern of the Cross-Member and Uprights. Insert the End Cap onto the end of the Cross-Member. Repeat this step to attach the other end of the Cross-Member to the next Upright.
- 3 Make sure the Uprights are parallel by measuring the distance between the two Uprights (from the inside of each). The difference should be no greater than 1/32" of an inch to ensure that FlexWorks accessories fit properly. If necessary, gently tap the Uprights to align the measurement.
- 4 Tightly secure the 1/4 - 20 x 3/4" Socket Head screws.
- 5 Once the Uprights are in position, tightly secure the four Kep nuts on each Anchor Plate.
- 6 Insert the End Caps into the FlexWorks Support Rail.

Note: *If the Uprights are not parallel, the FlexWorks accessories will not fit properly. Loosen the Anchor Plates and adjust the position of the Uprights by repeating Step 3 above. Once positioned, repeat Step 5 above.*



Disassembling the Height-Right Workbench

Most assembly procedures can be reversed to disassemble each component. The following table provides references for locating assembly procedures. Disassembly procedures that require specific instructions are noted.

To:	Refer to Procedure(s):	On Page(s):	Special Instructions
Remove the Workbench Top	⑬ Attaching the Top	10	Reverse the steps to remove the top. It is not necessary to remove rear-mount FlexWorks. However, surface-mount Flexworks must be removed prior to removing the top. Refer to <i>FlexWorks Accessory System: Instructions for Assembly</i> for more information.
Remove and replace Leg(s)	① Attaching Stringer to Legs ③ Attaching Legs and FlexWorks Support Rail to Sub-Frame	5	Remove the Stringer from the Legs by reversing the order. When ordering replacement legs, indicate the height and depth dimensions, as well as the color.
Remove or Replace the Electric Motor, Drive Shaft and Wiring Harness	④ Installing the Electric Motor ⑤ Attaching the Drive Shaft (Electric Models) ⑥ Managing the Wires ⑦ Setting the Height Limits	7-9	If the Height-Right workbench includes FlexWorks, or if you need to replace the Wiring Harness, you may need to loosen or disconnect the Motor Bracket from the sub-frame to access the Strain Relief Connector.
Remove or replace the Manual Drive Shaft and Handle	⑧ Installing Drive Shaft and Handle (Manual Models)	9	Reverse the order.
Remove or replace Leveling Glides or Casters	⑩ Attaching Leveling Glides or Casters	10	Reverse the order.
Adjust the Height of the Leg(s)	② Making Sure Legs are Same Height	5	
Adjust the Height Switch Limits	⑦ Setting the Height Limits	9	
Removing Rear-Mount FlexWorks	Attaching Rear-Mount FlexWorks	11	Reverse the order.

