

# Series 5 AdjusTable Height Tables

Installation Instructions 004231D Rev H

## Tools required:



Bit Holder



#2 Square Drive Bit



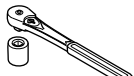
Power Drill



Allen Wrench-M3



10mm & 14mm Wrench



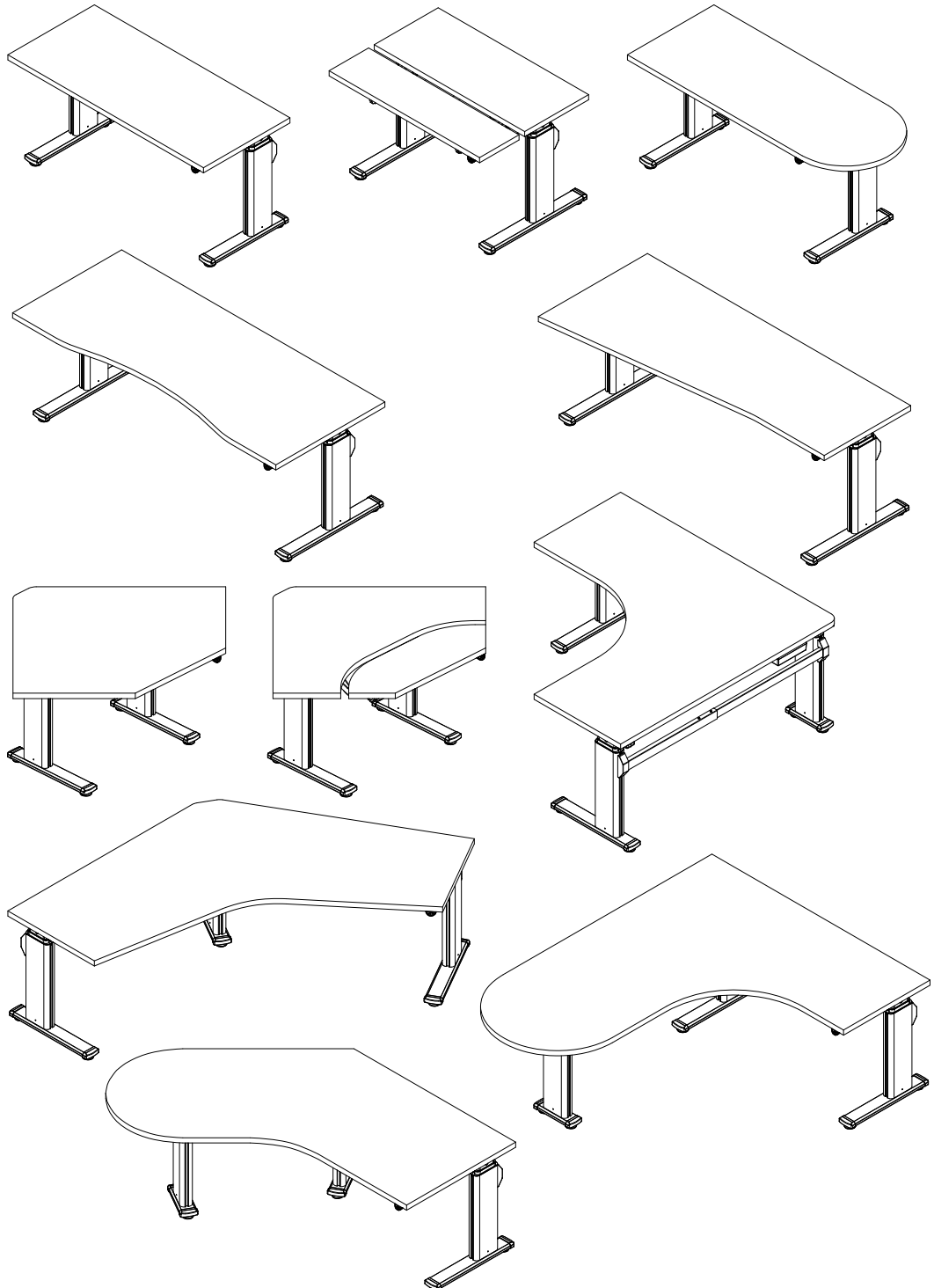
Ratchet with 10mm Socket



Adjustable Wrench



Allen Wrench-2.5mm (Provided)



A Steelcase Company

details

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### Overview of Assembly Process

- 1) Decide on the table configuration.
- 2) Assemble 2-piece worksurface or bi-level mechanism (if applicable).
- 3) Attach legs to worksurface (with worksurface upside-down).
- 4) Assemble motors, power supply, and gearbox (if applicable).
- 5) Synchronize legs and add driveshaft(s).
- 6) Add stretcher(s) and decorative parts.
- 7) Add driveshaft cover(s) and wire manager(s).
- 8) Connect and route all cables, mount switch.
- 9) Flip table upright and test function.
- 10) Level and clean it up.
- 11)

**PLEASE LEAVE THESE INSTRUCTIONS, AND  
THE USER GUIDE, IN AN OBVIOUS PLACE  
FOR THE END USER AFTER ASSEMBLY.**

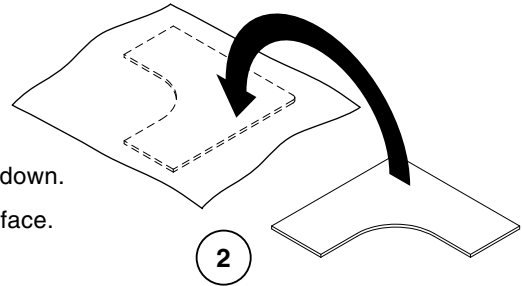
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## Let's Get Started!

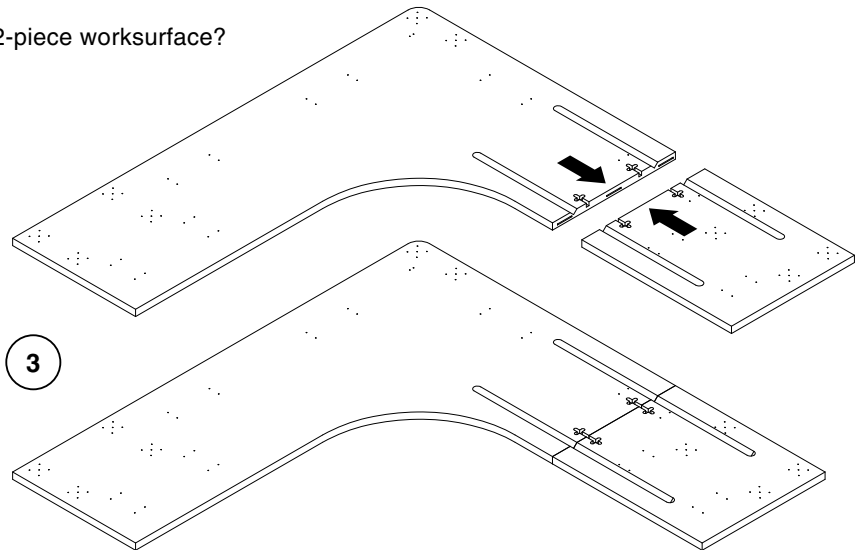
- 1 Prepare a large open space to assemble the table.
  - Sweep the floor! Screws and small parts can damage the worksurface.
  - Put down a CLEAN shipping blanket to protect the worksurface.



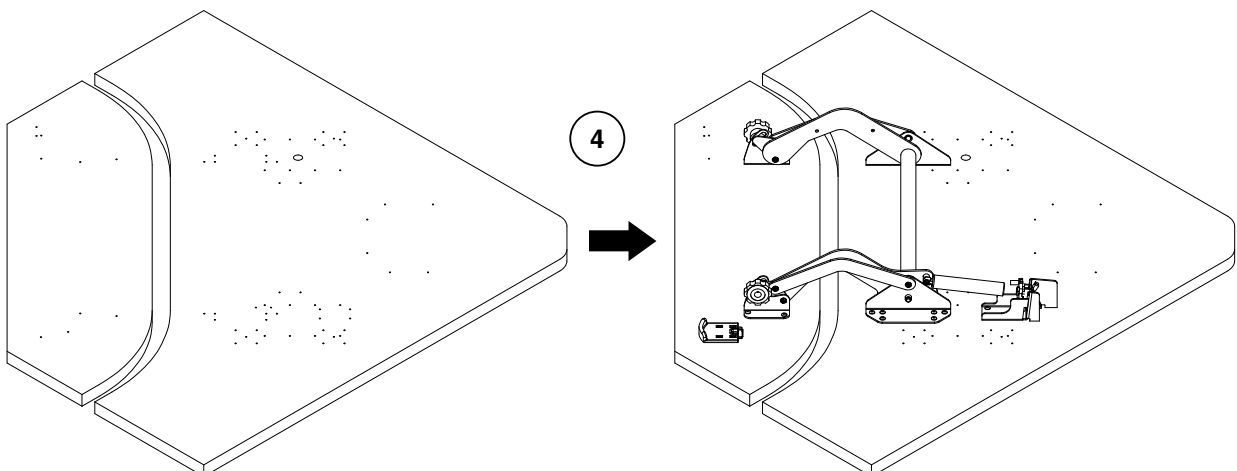
- 2 Unpack the worksurface and place on the shipping blanket upside-down.
  - REMEMBER - You're looking at the UNDERSIDE of the worksurface. Are you sure which side is left or right?



- 3 Assembling a 90° corner table with a 2-piece worksurface? Jump to Appendix 'A' now.



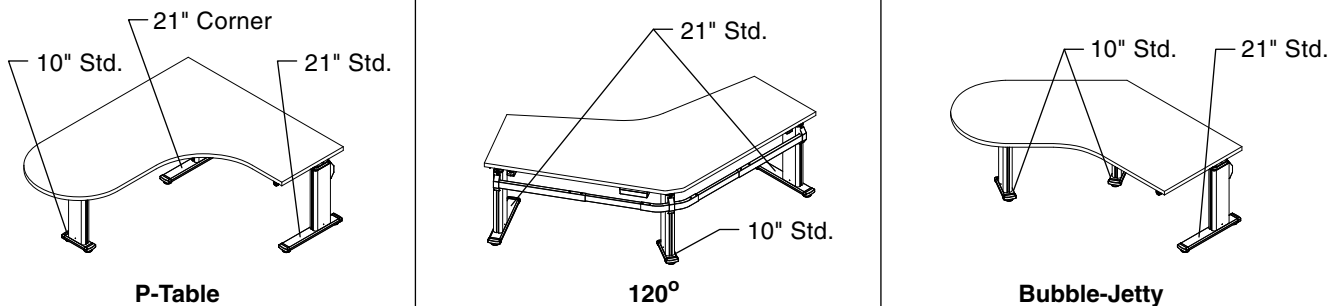
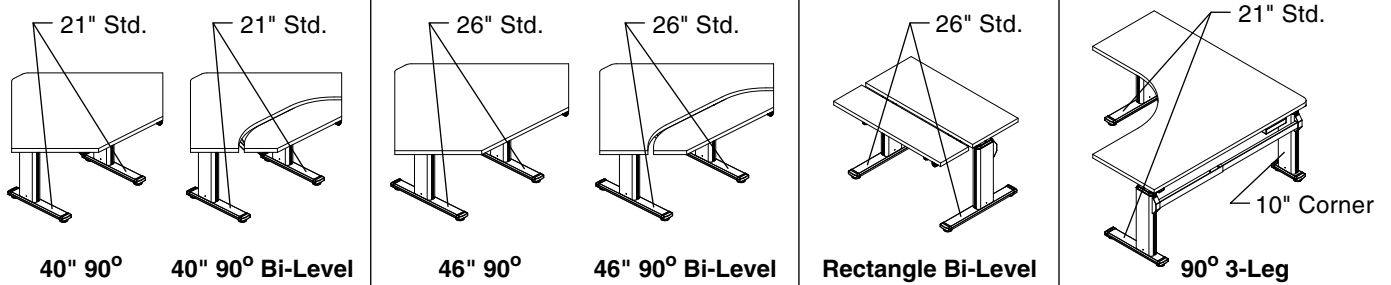
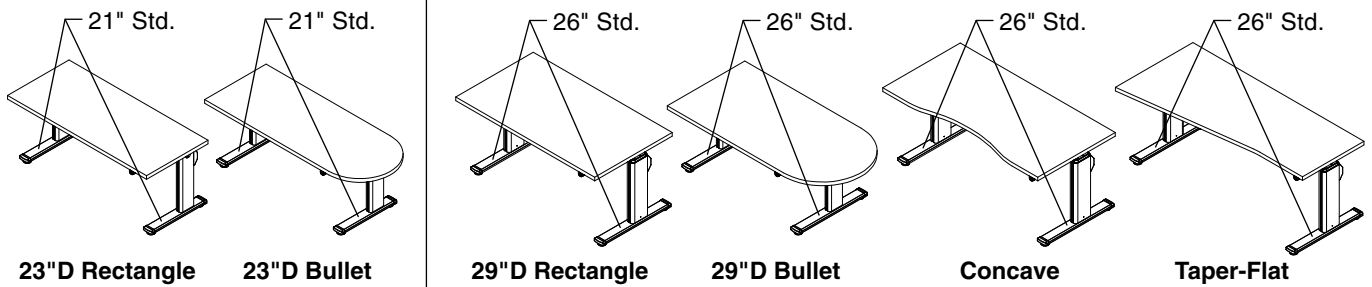
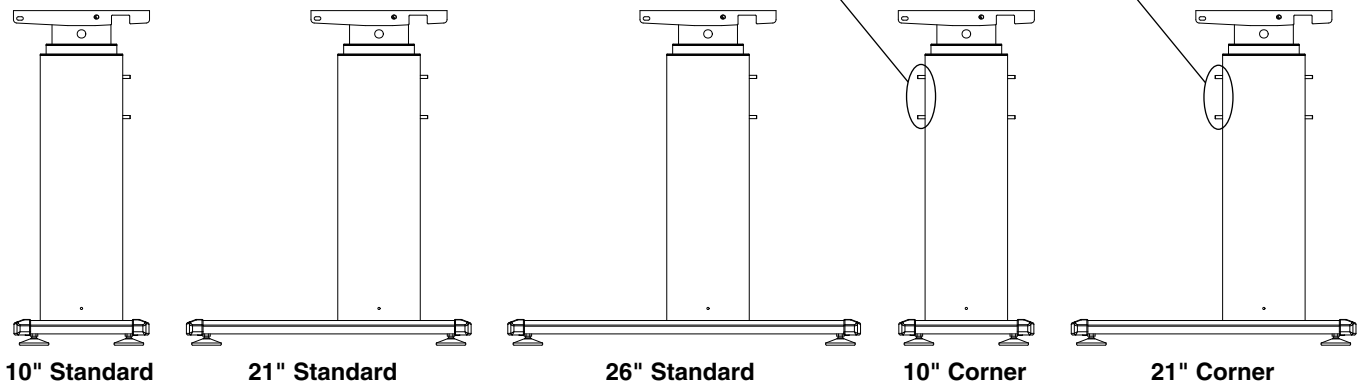
- 4 Assembling a monitor-keyboard worksurface with a bi-level mechanism? Jump to Appendix 'B' now.



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## Which Legs Go Where?

### Leg Types:

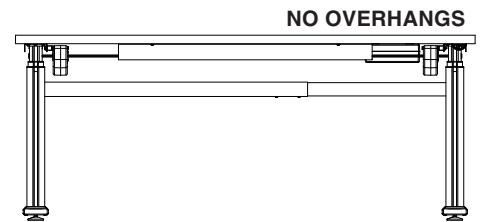
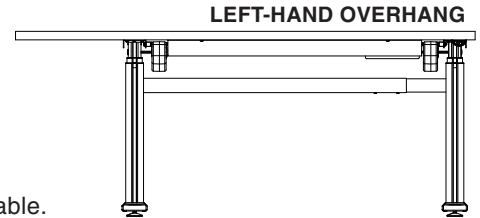
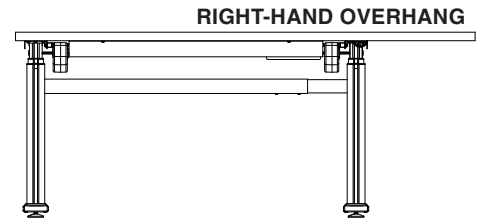




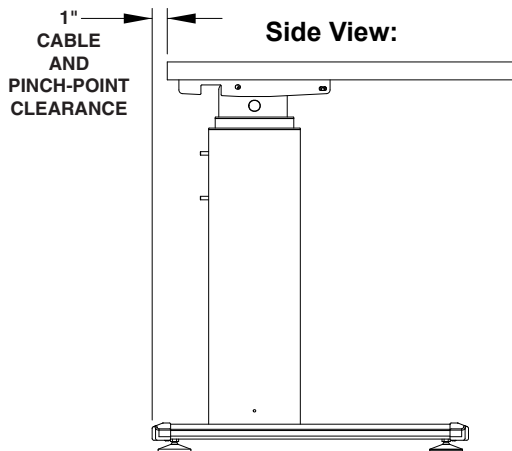
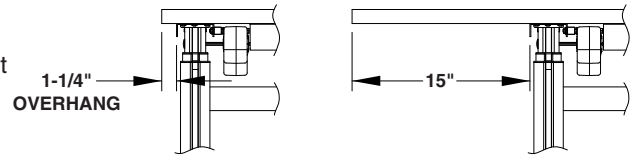
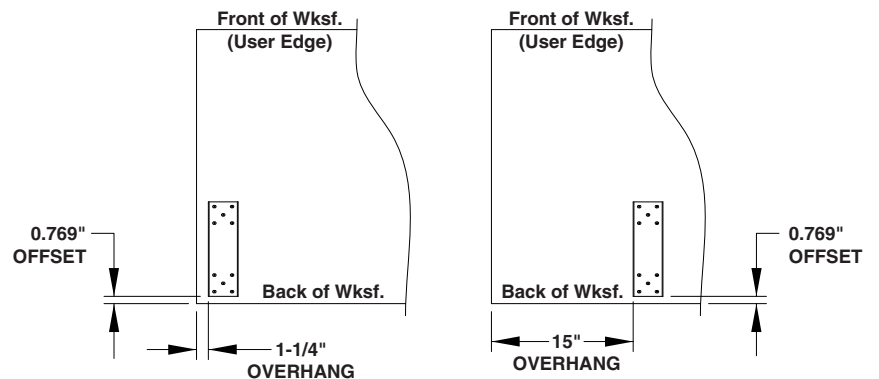
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**Determine Leg Positions on your Table:**

- Many Series 5 tables allow multiple leg positions, providing flexibility to maximize leg space, and allow overhangs for CPU slings and mobile pedestal placement.
- The smallest tables may not allow for larger worksurface overhangs. (The standard overhang is 1-1/4".)
- The mid-size tables may allow for a single 15" overhang.
- The largest tables may be capable of allowing dual 15" overhangs. (One on each side.)
- Refer to the Details specification guide for the capabilities of your specific table.

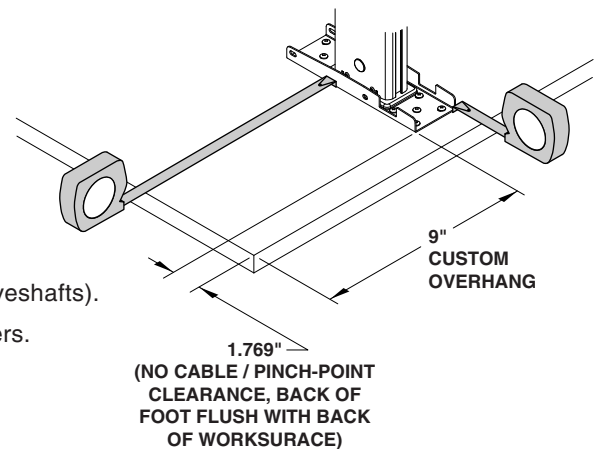
**Overhangs and Custom Leg Positions:**

- Details provides pilot holes in worksurfaces that result in the standard overhangs (1-1/4" and 15"), as well as a clearance at the back to avoid pinch-points and provide for cable drop.

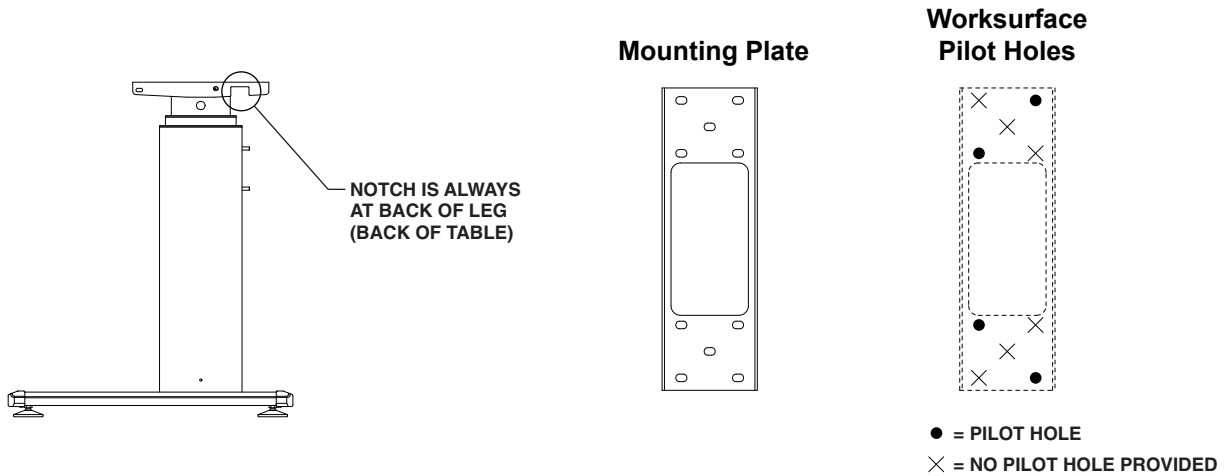
**Front View:****Standard Mounting Plate Positions: (Bottom View)**

Legs may be mounted on the worksurface in locations other than the factory default, provided that:

- The overhangs DO NOT exceed 15".
- All screws are at least 1" from outside edges.
- All provided components still fit together (stretchers, driveshafts).
- No safety hazards are posed to the end users or installers.

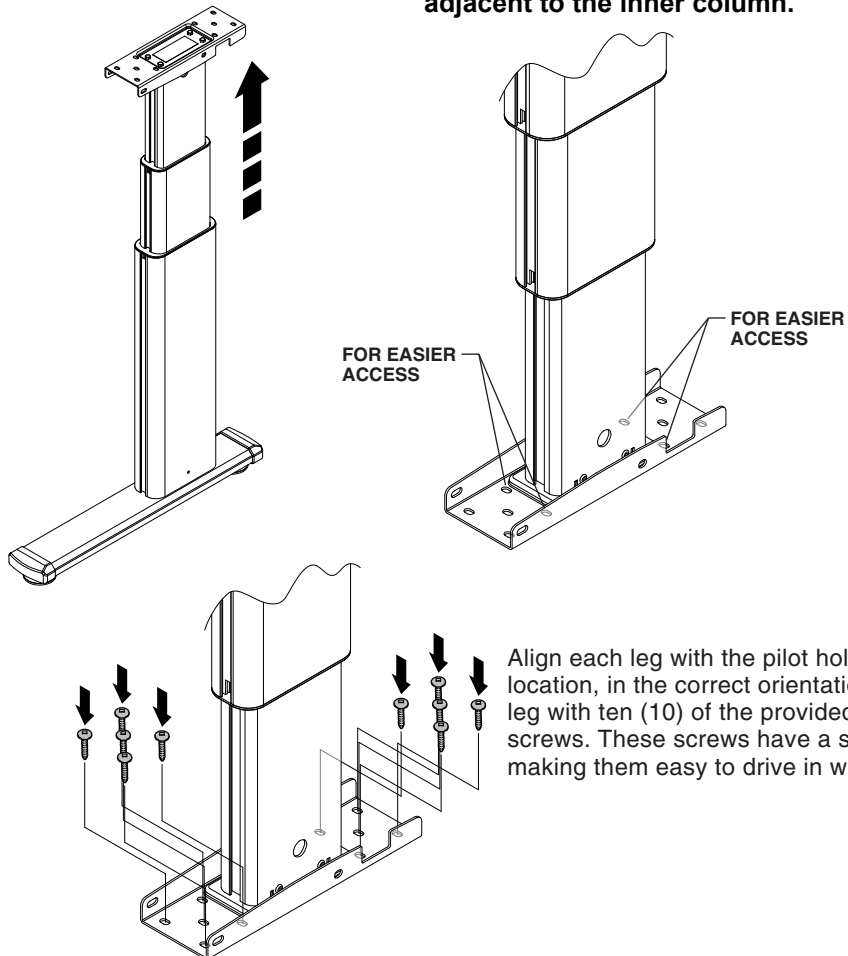


## Mounting Legs to Worksurfaces



Raise leg all the way up.

This will allow access to the screws adjacent to the inner column.



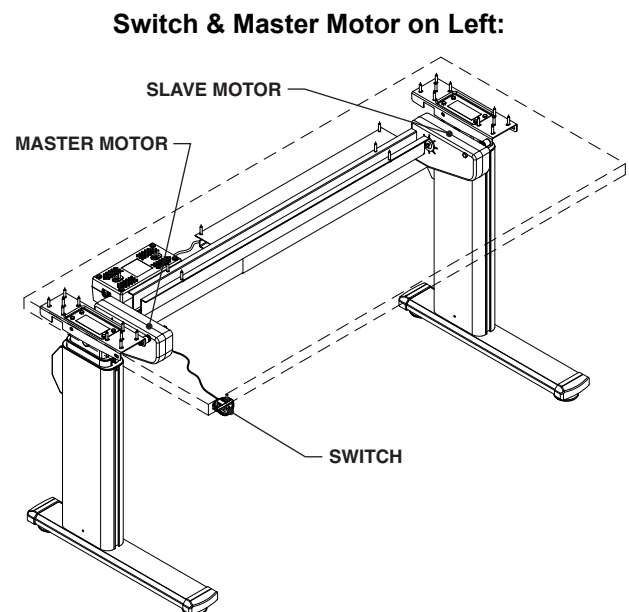
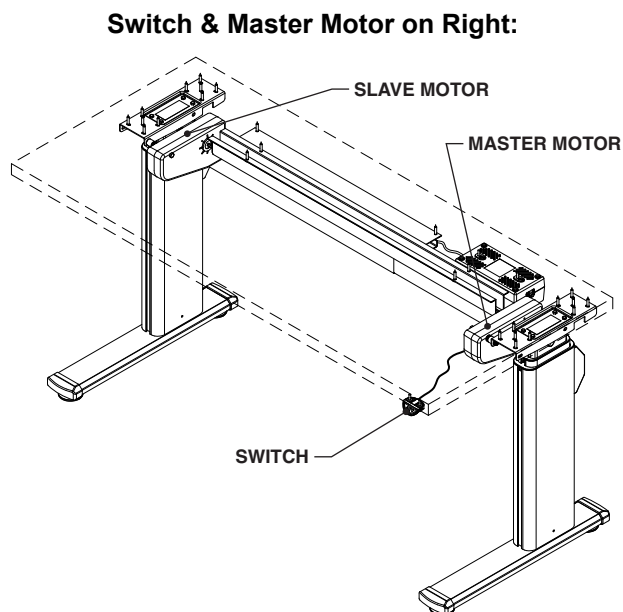
**CAUTION:** All holes in the leg mounting plates **MUST** be filled with screws. Failure to install all screws may result in structural instability.

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## Determine Switch Position on your Table:

- The switch can be located on either side of your table, but the switch comes with a short cable to minimize clutter. So, be sure to always locate the master motor near the switch location.

**NOTE:** It does not matter which side of the table the master or slave motor goes on. This applies to all tables.



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### 90° Corner Tables

90° corner tables are available either as right-hand or left-hand tables. In order to go from right-hand to left-hand configurations, three (3) items must be changed:

- 1) Orientation of center leg
- 2) Placement of stretchers
- 3) Configuration of intermediate gearbox (See page 9)

The gearboxes ship from the factory set up for right-hand tables. Orientation of the center leg and placement of stretchers are controlled by the installer.

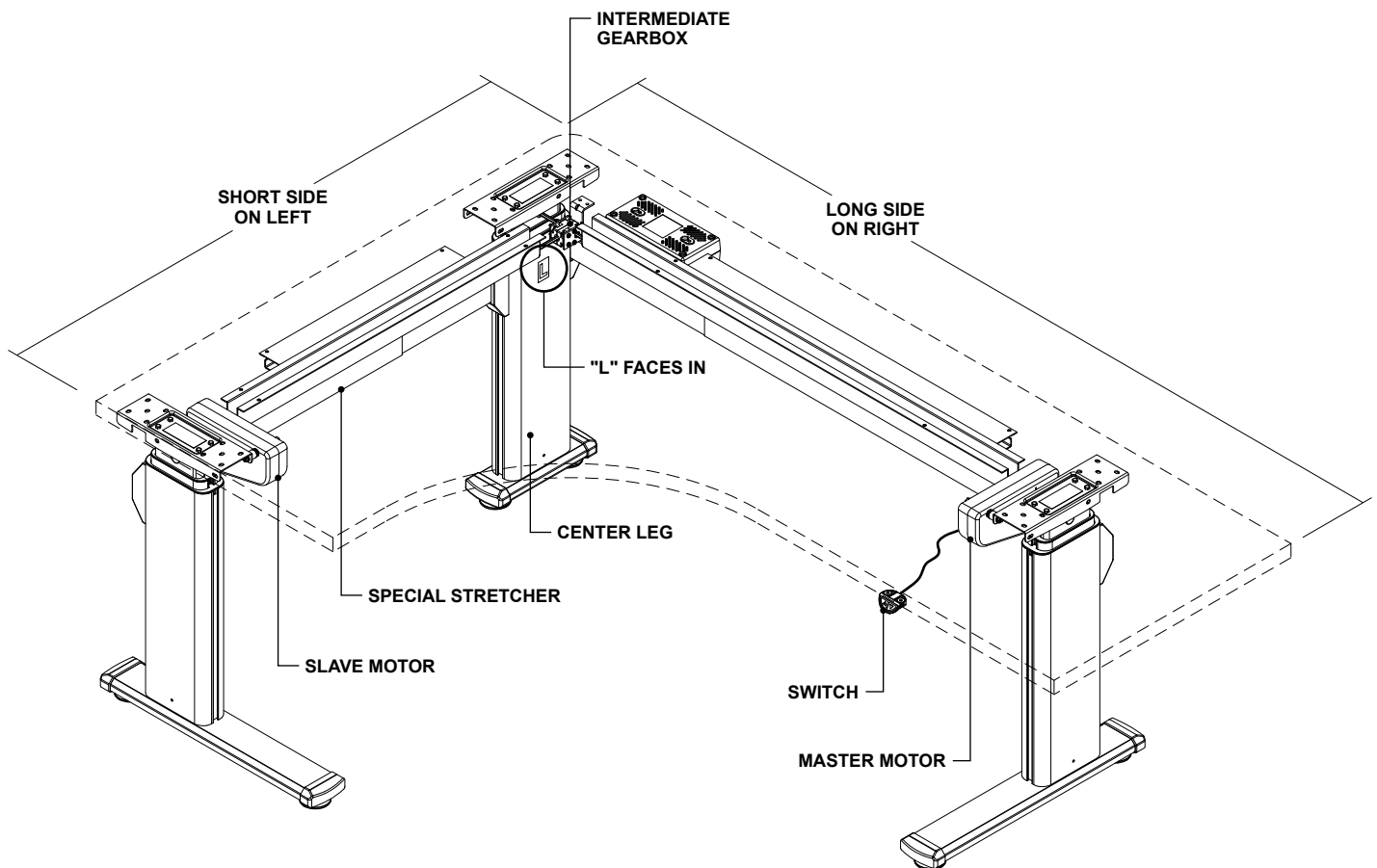
10" and 21" corner legs are marked with "L" and "R" labels.

The correct letter must be visible per the diagram.

Otherwise, the center leg would go UP when the other legs would go DOWN, and vice-versa.

### Equal-Sized and Right-Hand Tables (Factory Default)

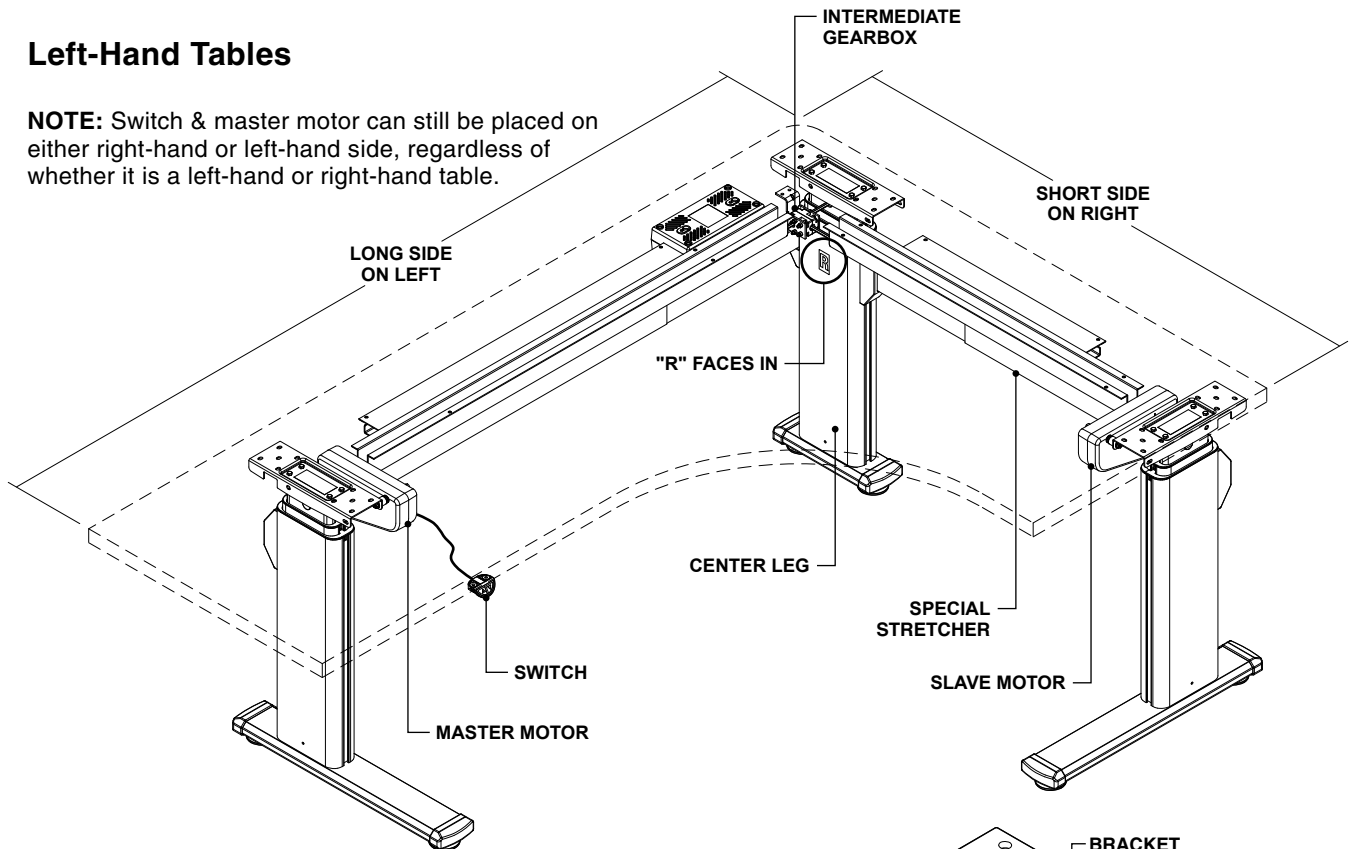
**NOTE:** Equal-Sized 90° and Equal-Sized 120° Corner Tables are designed as right-hand tables by default.



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## Left-Hand Tables

**NOTE:** Switch & master motor can still be placed on either right-hand or left-hand side, regardless of whether it is a left-hand or right-hand table.

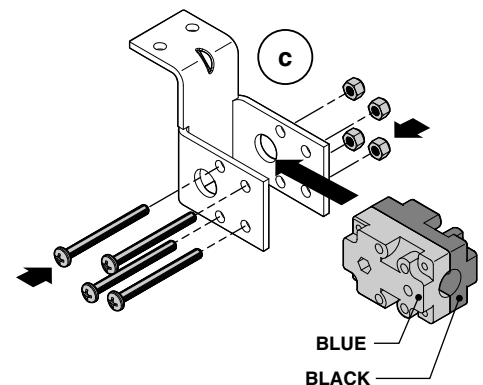
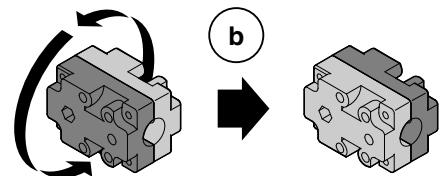
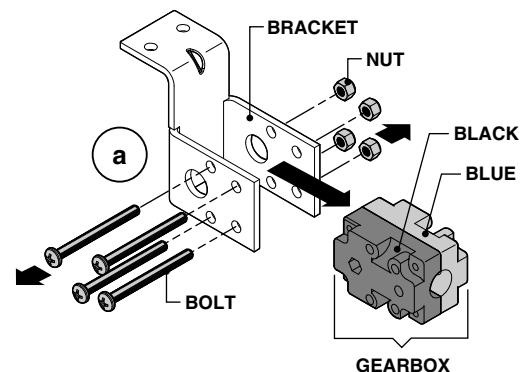


### 1 2 Changing Orientation of Center Leg and Placement of Stretchers: See Diagram Above.

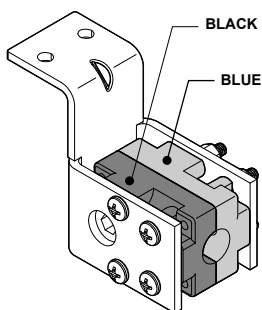
**NOTE:** Subsequent pages of this document show assembly of the right-hand table configuration.

### 3 Changing Orientation of Intermediate Gearbox:

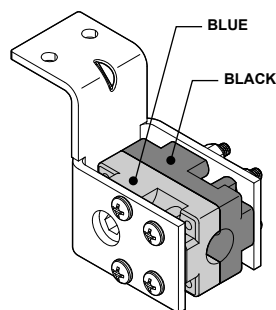
Gearbox is supplied from the factory for right-handed applications. If installing the gearbox on a left-handed application, remove nuts and bolts and gearbox from the bracket (a). Turn gearbox 180° so the blue portion of the gearbox is on the left (b). Re-install gearbox into bracket and attach the nuts and bolts (c).



**Equal-Sized and Right-Hand Tables Application (factory default)**



**Left-Hand Table Application**

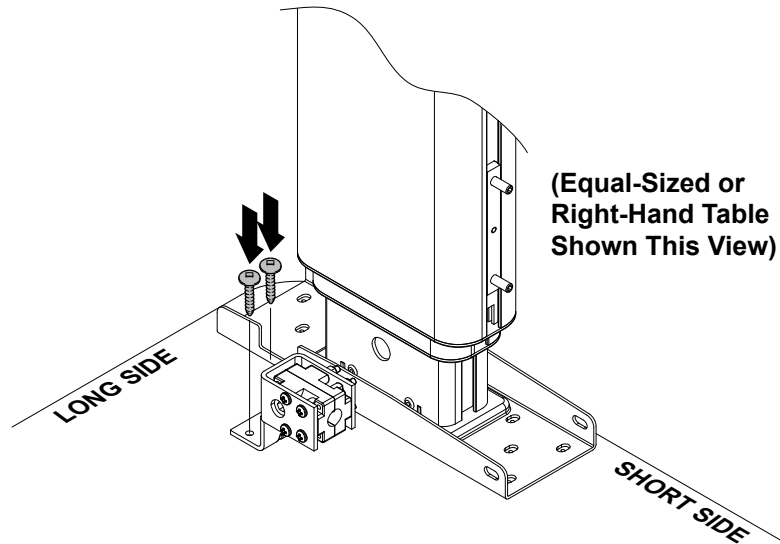


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## For 90° Tables and P-Tables

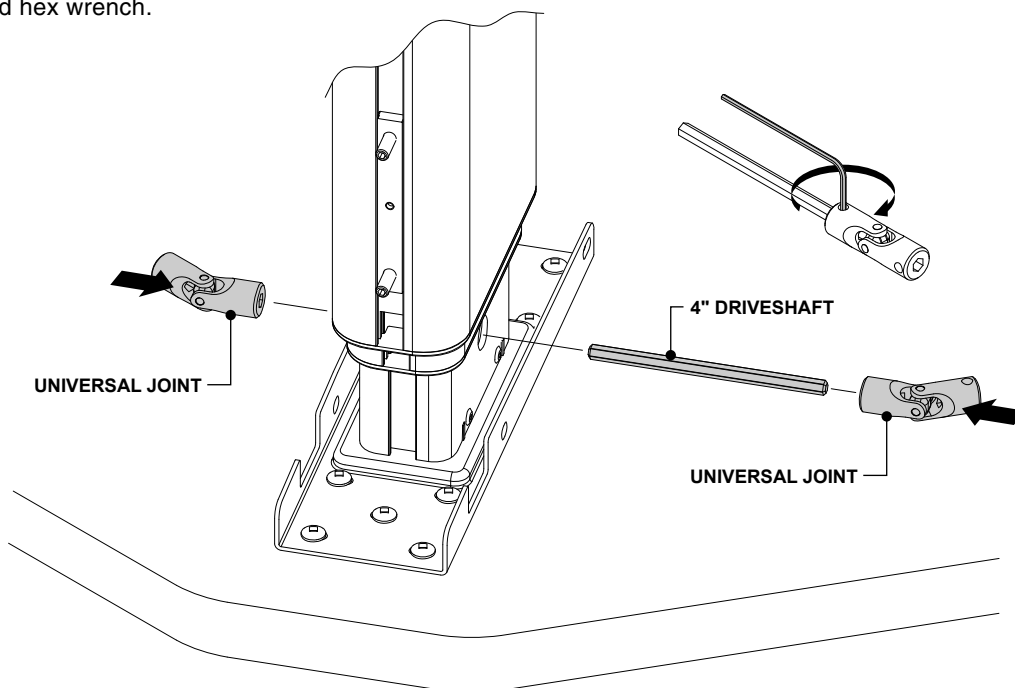
Attach the intermediate gearbox near the center leg using the provided pilot holes.

**NOTE:** The gearbox must be inverted for left-hand tables. See page 9.



## For 120° Tables and Bubble-Jetty Tables

In the center leg, insert the short (4") driveshaft, and attach a universal joint to each end. Tighten set screws on the universal joints with the provided hex wrench.

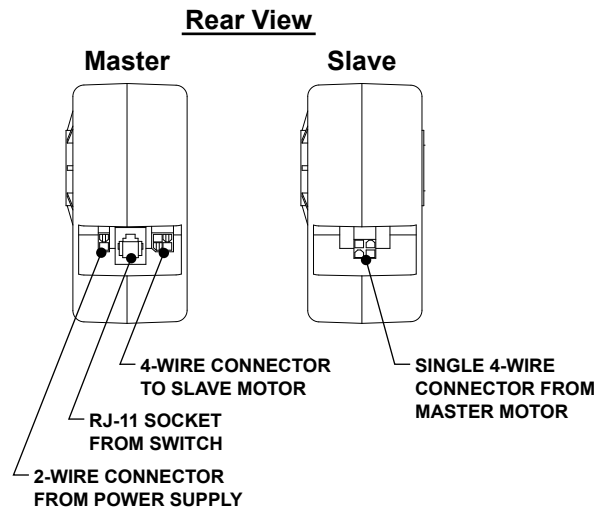
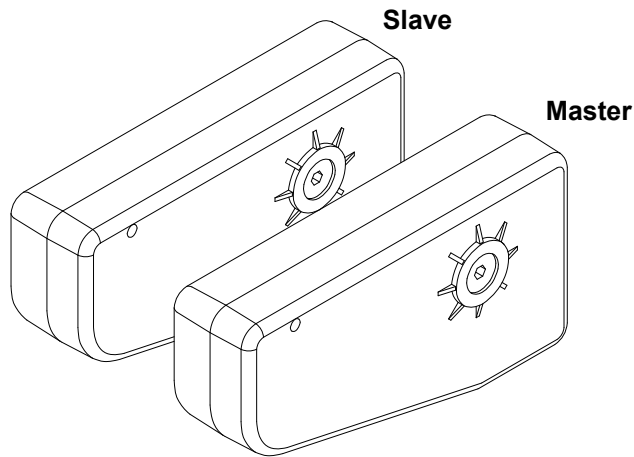


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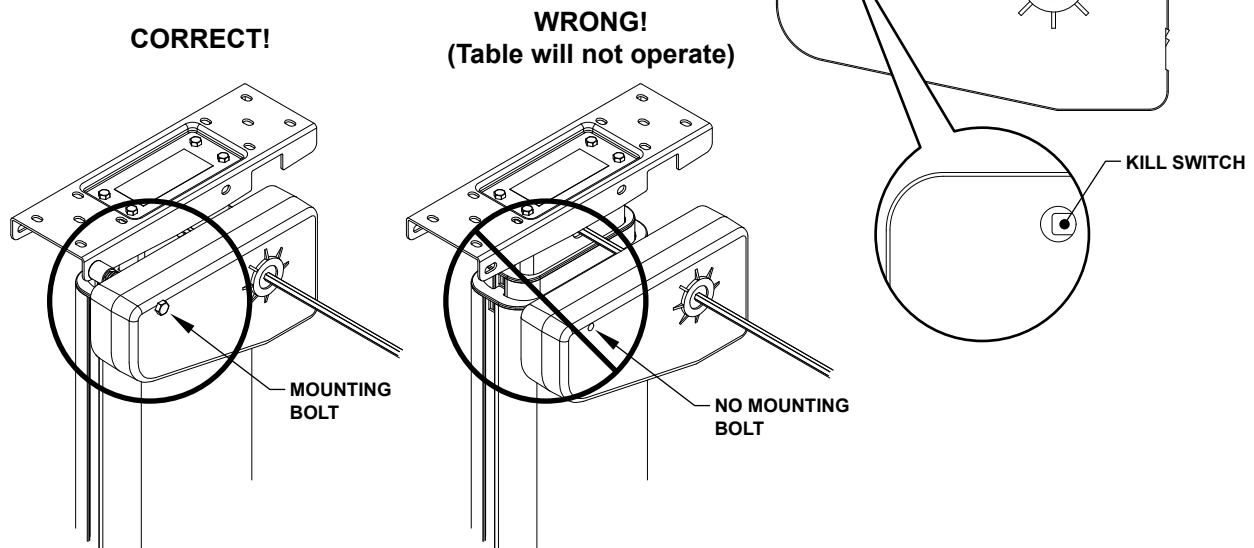
## Identify the Master and Slave Motors

The master motor and slave motor look the same, except for the connection panel at the back.

**NOTE:** The power supply converts 120V AC from the wall outlet to 24V DC. The series 5 motors operate on 24V DC.



**IMPORTANT!** The master motor has one other key difference. It also has a hidden kill switch. This kill switch is inside the front mounting hole. If the front mounting bolt is not properly installed, the table **will not operate!**



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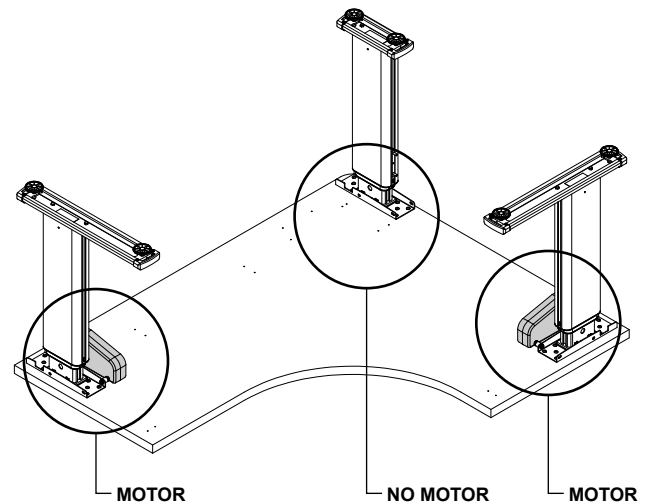
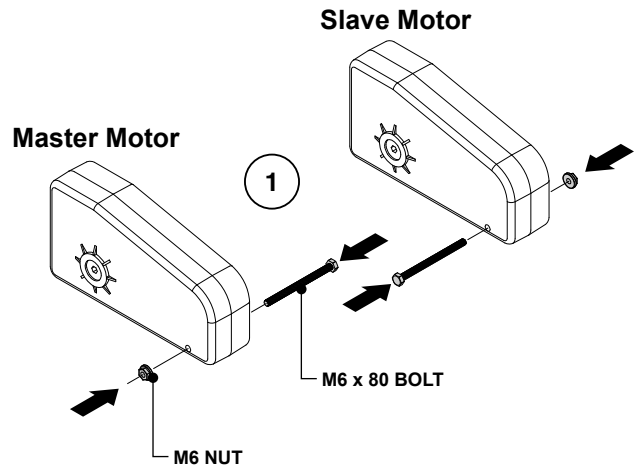
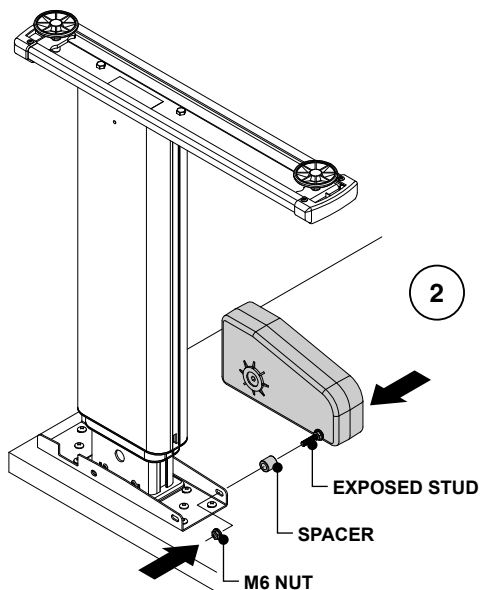
## Installing Motors and Synchronizing Legs

**Example:** Master motor and switch on user's right-hand side.

- 1 Determine on which side of the table each motor will go. (see page 5)  
Install M6 x 80 bolts & M6 nuts to each motor as shown.

- 2 Insert the exposed stud from each motor through the spacer, and then into the side mounting slot of the outboard leg mounting plates. Install M6 nut, but **DO NOT TIGHTEN** (leave motor loose).

**NOTE:** Install motors to outboard legs on 3-leg tables. Do not install a motor to the center leg.

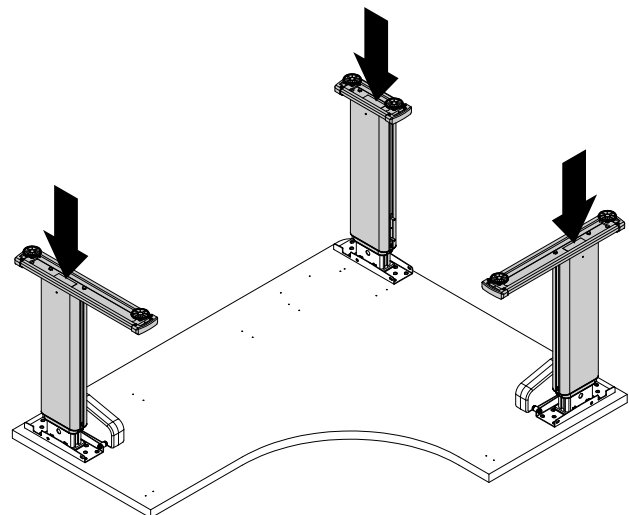


## Driveshafts and Leg Synchronization

Series 5 legs and motors must be synchronized before installing the driveshafts.

Series 5 motors are shipped from the factory in the "all the way down" position.

Before inserting the driveshafts, ensure ALL LEGS are pushed all the way down (fully compressed).

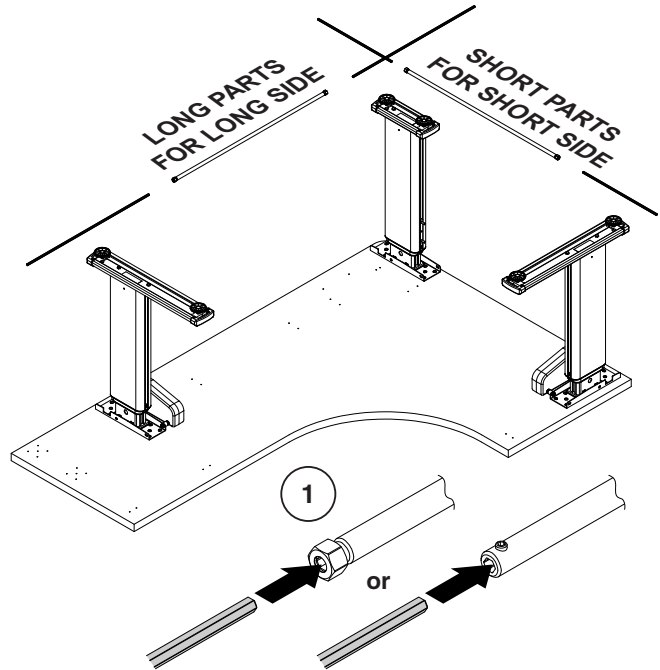




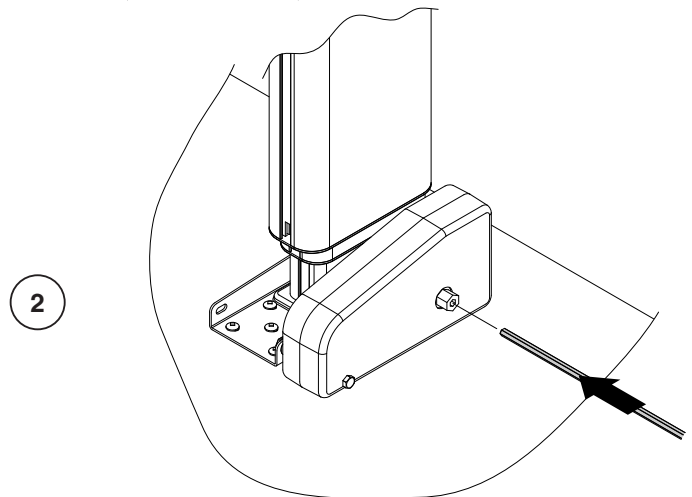
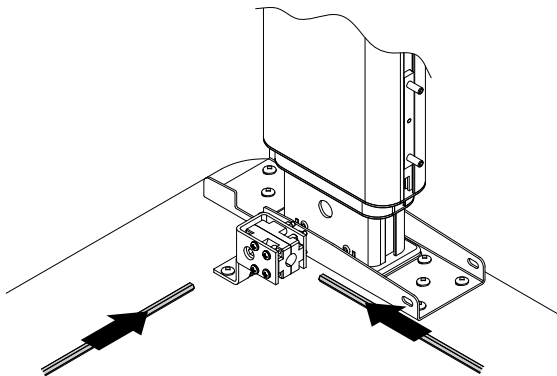
## Installing Driveshafts - All Versions

- 1 Insert hex shafts into driveshaft tube. Leave compression nuts loose.

**NOTE:** On 3-leg tables, be sure to use the correct length of driveshaft for the particular side of the worksurface. Use longer components on the long side, and shorter components on the short side, where applicable.

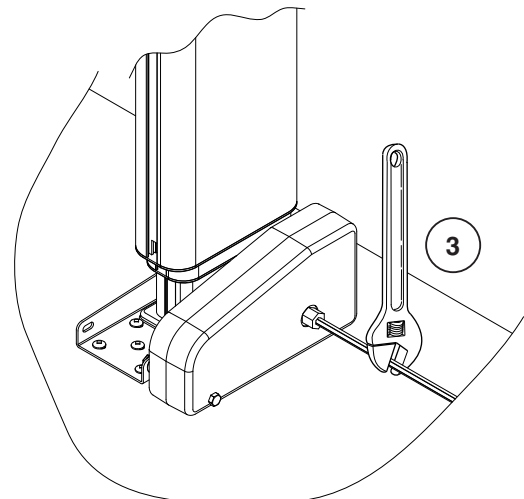
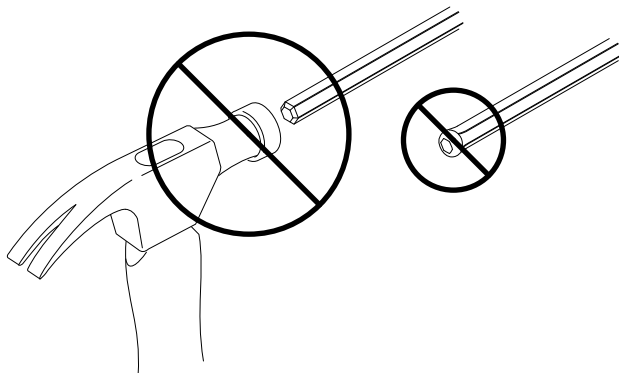


- 2 With all table legs pushed all the way down, insert driveshafts through gearboxes and legs.



- 3 If the hexagon openings are not perfectly aligned, grip the driveshaft with an adjustable wrench and rotate slightly, until the driveshaft slides through with ease.

**NOTE: DO NOT** pound the driveshafts through with a hammer. This will mushroom the end of the driveshaft.

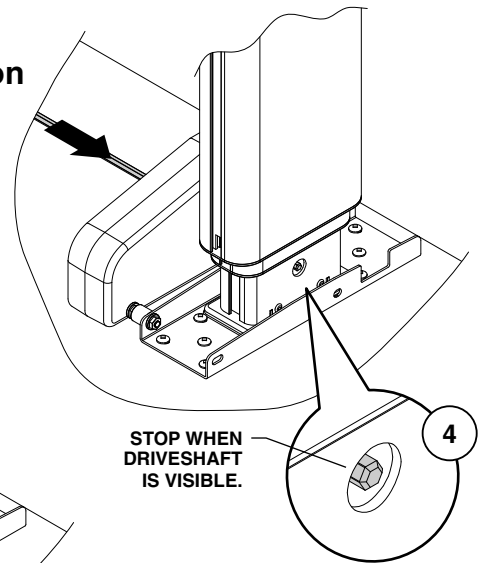
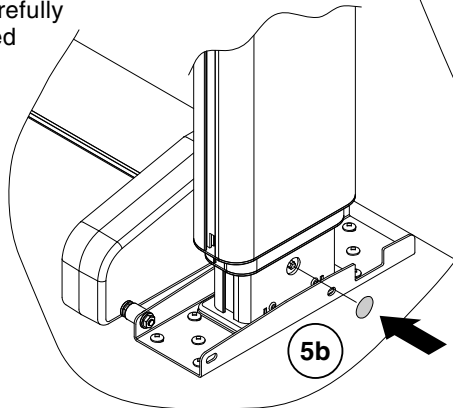
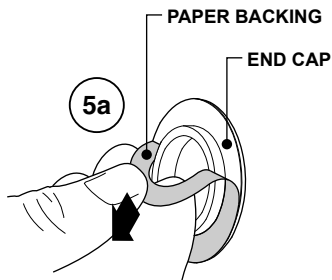


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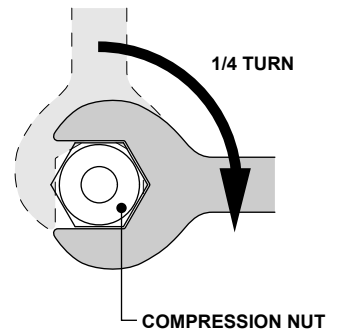
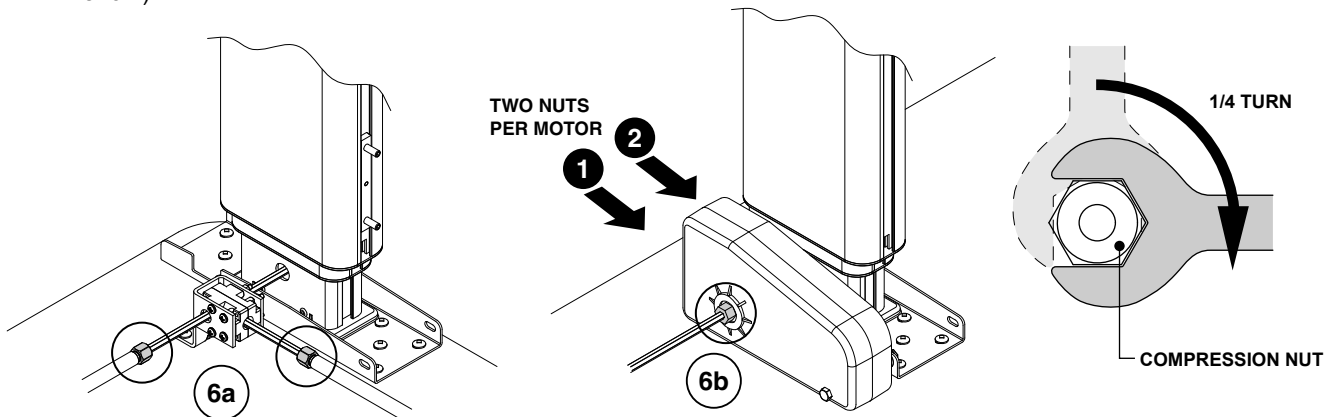
## Installing Driveshafts (cont.) - Compression Nut Version

- 4** At each outboard leg, slide the driveshaft through until it is fully-engaged with leg, but not protruding out.

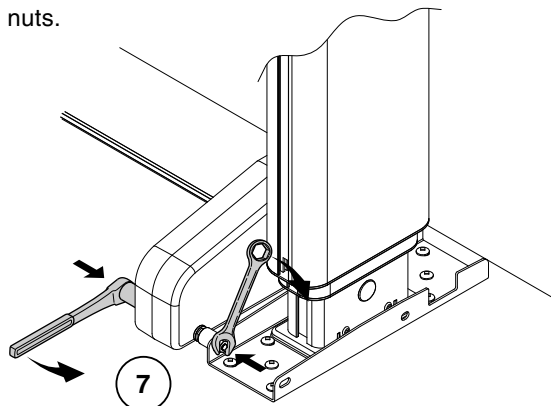
- 5** Peel away paper backing (5a) and carefully apply decorative caps at each exposed opening with firm pressure (5b).



- 6** Once all driveshafts are installed, tighten all remaining compression nuts with 40 to 50 in-lbs of torque to avoid stripping the threads. (Tighten compression nut as much as possible with fingers, then tighten about 1/4 turn with wrench.)



- 7** Tighten the motor mounting nuts.



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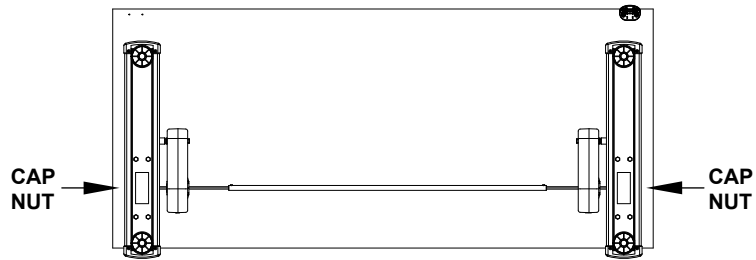
## Installing Driveshafts (cont.) - Cap Nut & Push Nut Version 2-Leg Tables & 120° Tables

Driveshafts are retained using cap nuts, which grip the driveshaft ends and prevent them from backing out of the legs.

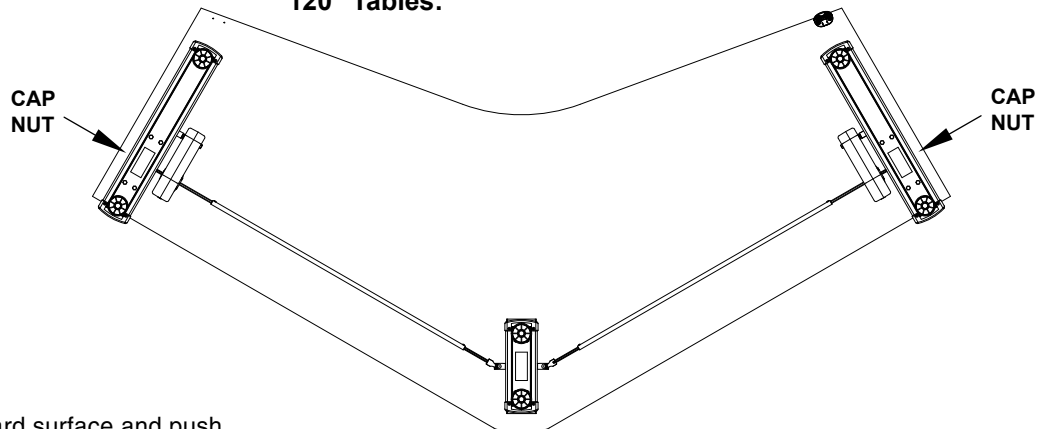
2-leg tables, 120° tables & bubble-jetty tables require one cap nut mounted outside of each leg. The driveshaft assembly is thus retained in both directions.



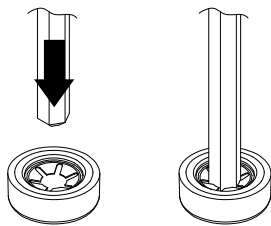
2-Leg Tables:



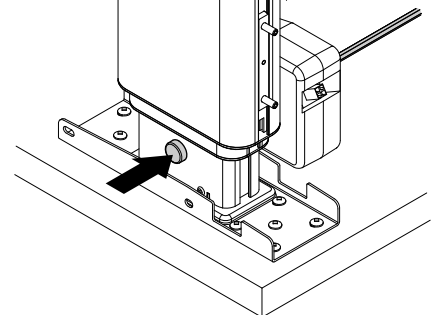
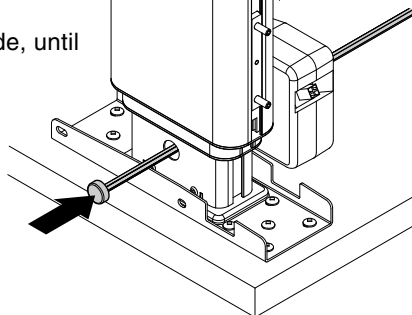
120° Tables:



- 4** Place cap nut on a flat, hard surface and push driveshaft into it.



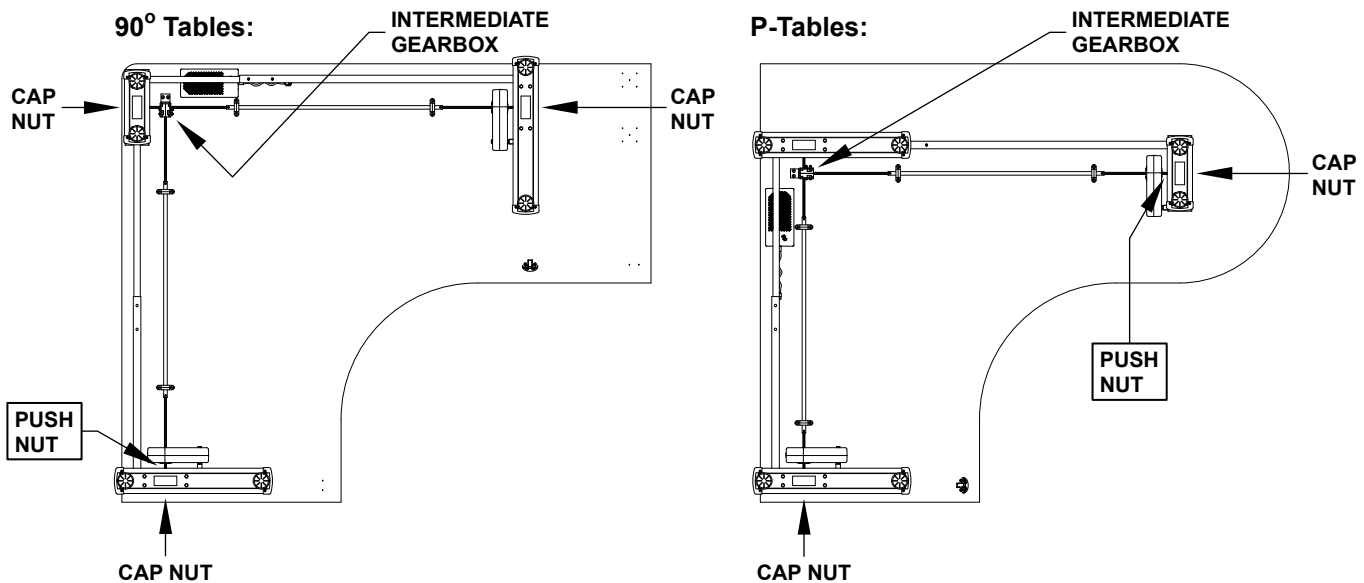
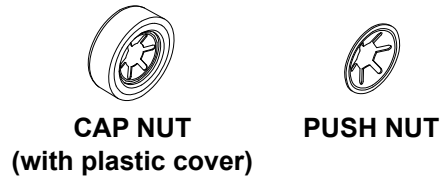
Feed driveshaft through leg, from outside, until cap nut bottoms out on leg.



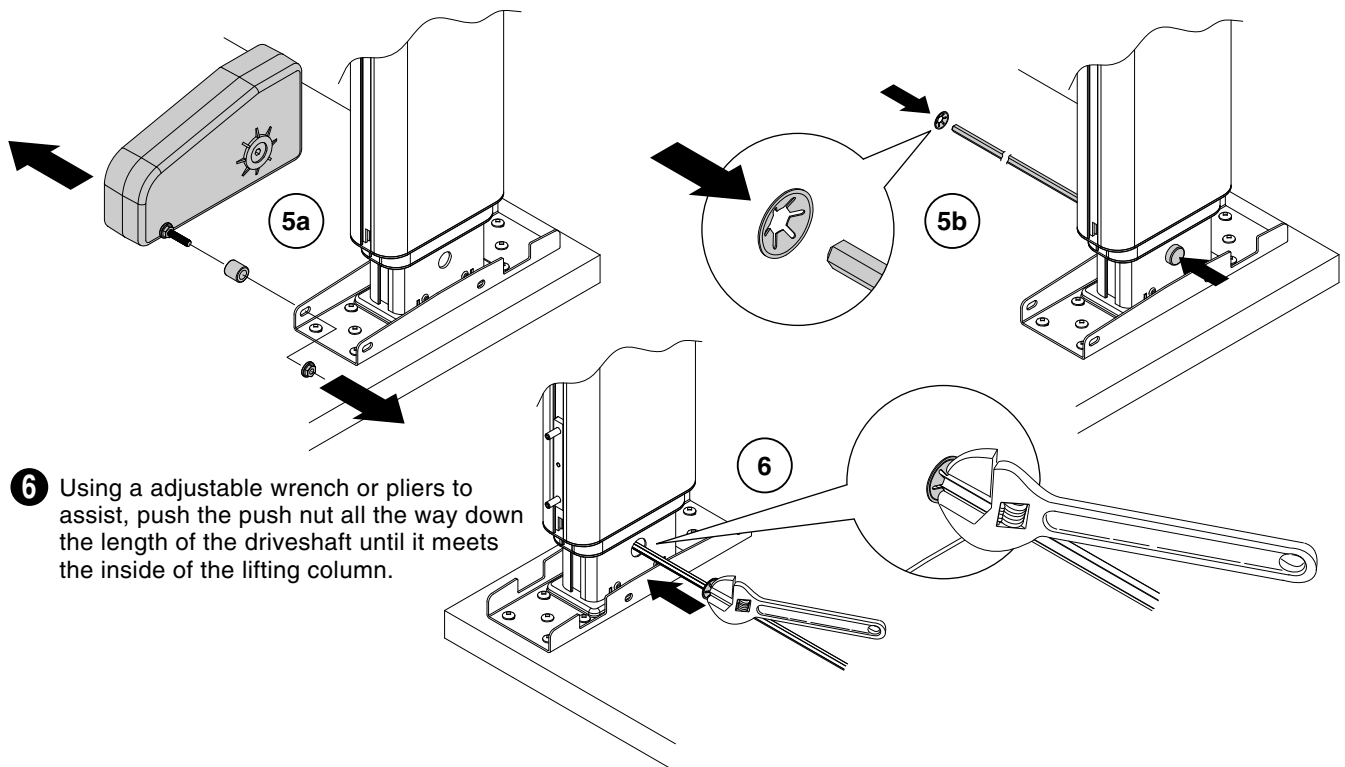
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## Installing Driveshafts (cont.) - Cap Nut & Push Nut Version 90° Tables & P-Tables

3-leg tables & P-Tables require one cap nut mounted outside of each leg, plus a push nut mounted on the inside of the leg that is perpendicular to the other 2 legs, i.e. across from the intermediate gearbox.



- 5** To install the push nut, follow steps on previous page. Locate correct location per above diagrams. Temporarily remove the motor (5a). Install push nut on free end of driveshaft (5b).

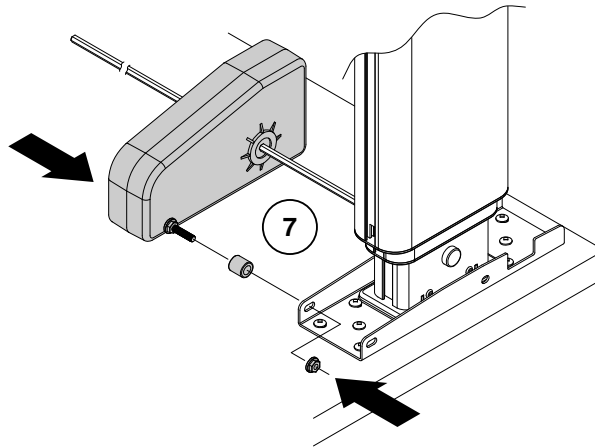


- 6** Using a adjustable wrench or pliers to assist, push the push nut all the way down the length of the driveshaft until it meets the inside of the lifting column.

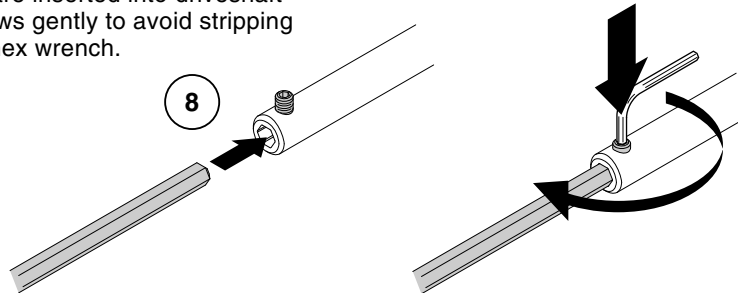
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## Installing Driveshafts (cont.) - Cap Nut & Push Nut Version

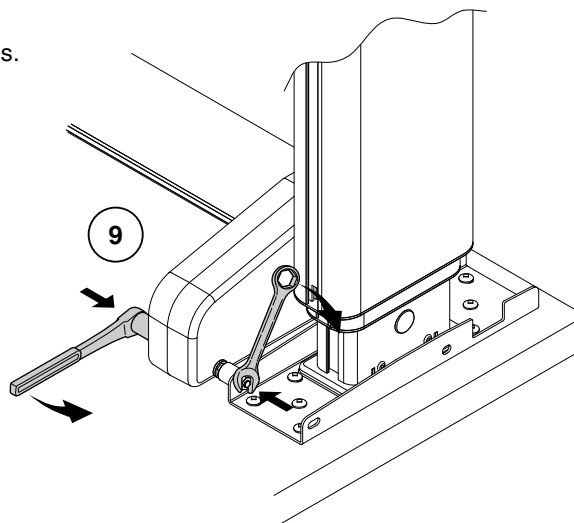
- 7** Reinstall motor.



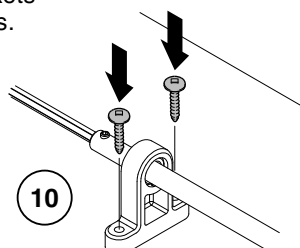
- 8** Ensure all driveshafts are inserted into driveshaft tubes. Tighten set screws gently to avoid stripping threads with provided hex wrench.



- 9** Tighten the motor mounting nuts.



- 10** Where applicable, attach driveshaft stabilizer brackets with two (2) screws each, using provided pilot holes.



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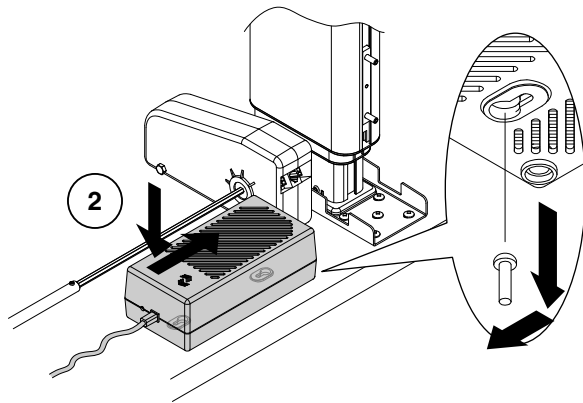
## Installing Switch & Power Supply

- 1 Locate the two (2) pilot holes for mounting the power supply. Partially install two (2) #8-15 x 5/8" screws per the diagram shown below.

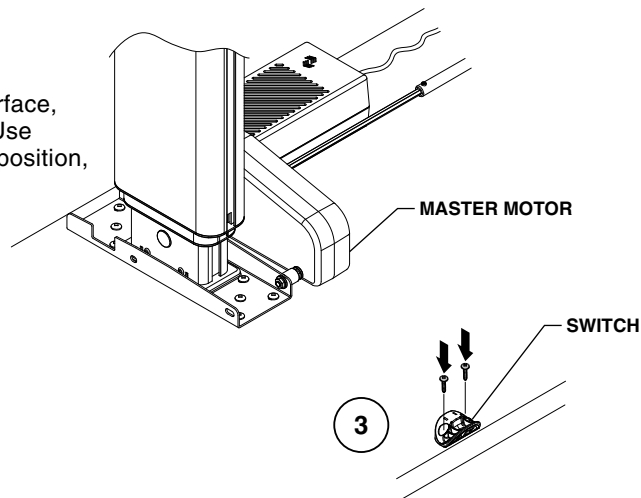
**NOTE:** Use the pre-drilled pilot holes to mount the power supply in a way that assures accessories can be clamped to the worksurface, and allow all cables to reach.

If a different power supply location is desired, use the template below, which matches the the power supply's keyhole slots and 122mm hole spacing.

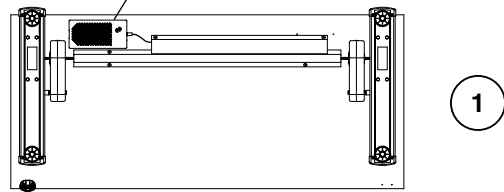
- 2 Fit the keyhole slots of the power supply over the screws, and slide over into place.



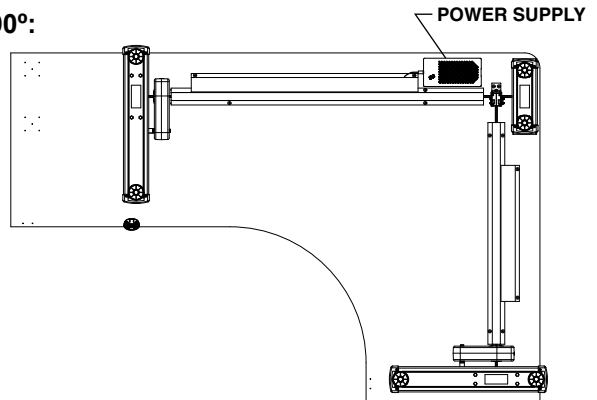
- 3 Attach the switch at the front of the worksurface, adjacent to the leg with the master motor. Use the pre-drilled pilot holes for proper switch position, and affix with two (2) #8-15 x 5/8" screws.



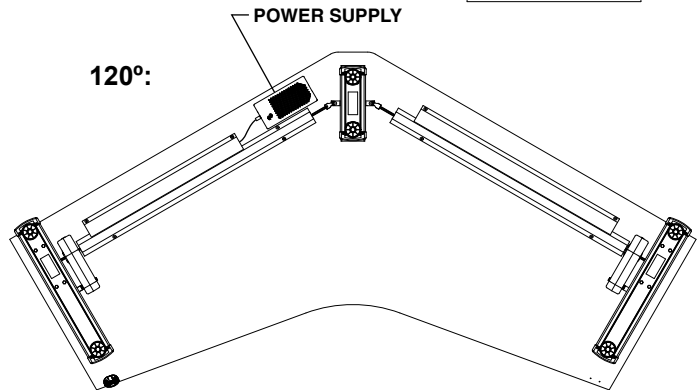
**Straight:** POWER SUPPLY



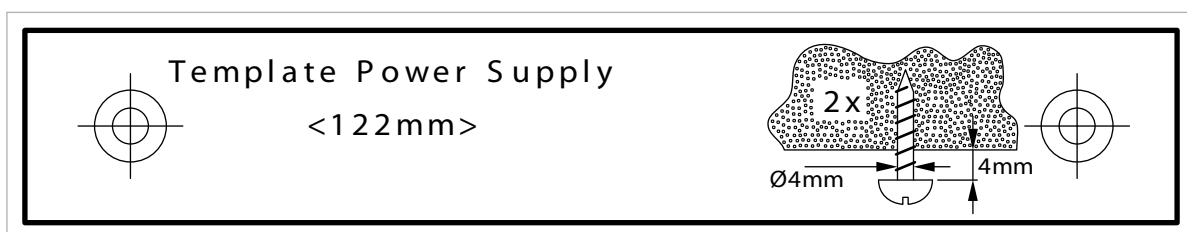
**90°:**



**120°:**



### Template for Power Supply:

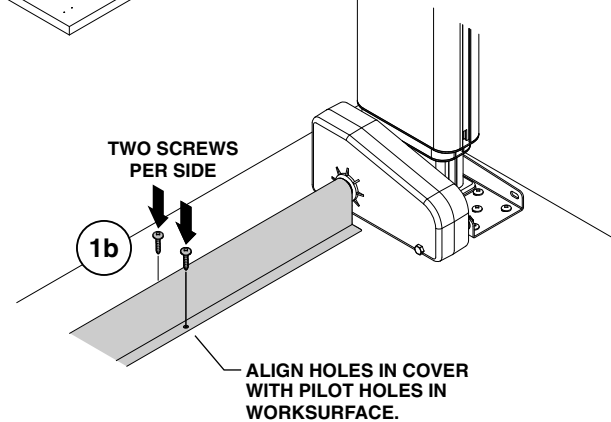
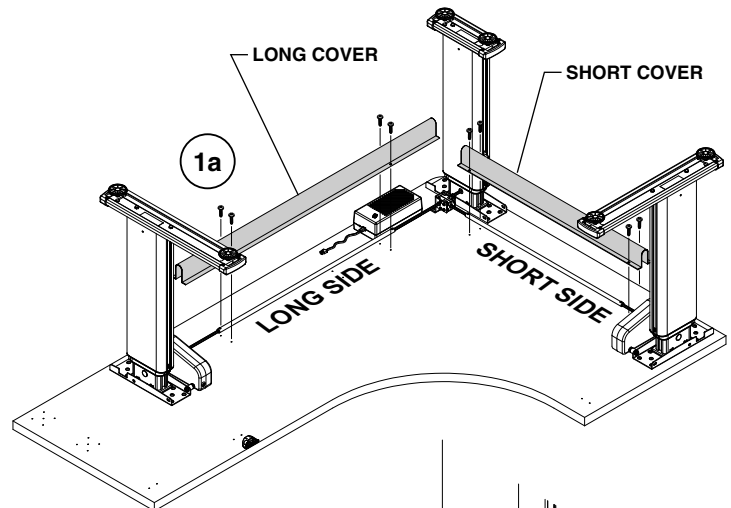
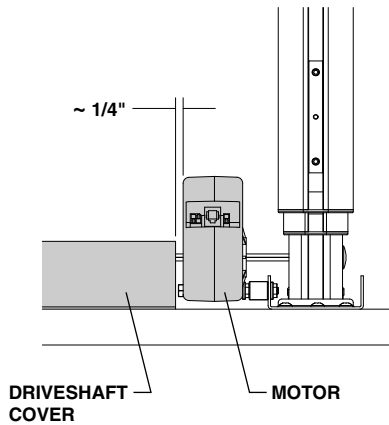


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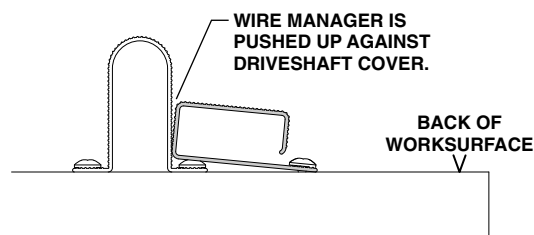
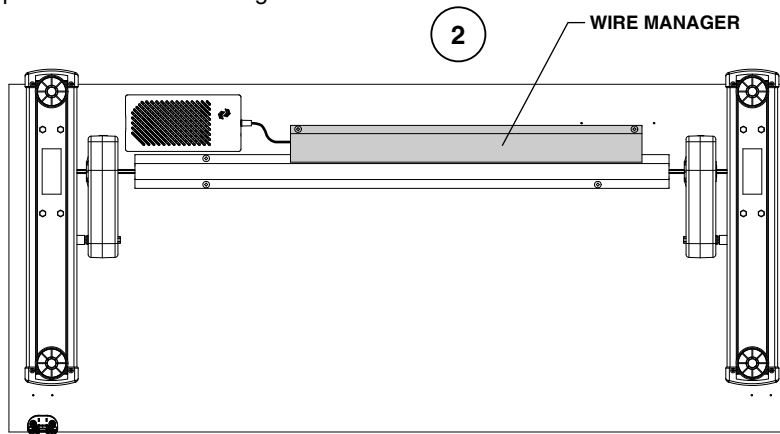
## Attach Driveshaft Covers and Wire Managers

- 1 Determine which driveshaft cover goes where, if applicable. Attach driveshaft covers using four (4) screws each, into the pre-drilled pilot holes.

**NOTE:** There should be about 1/4" between the motors and the driveshaft covers.



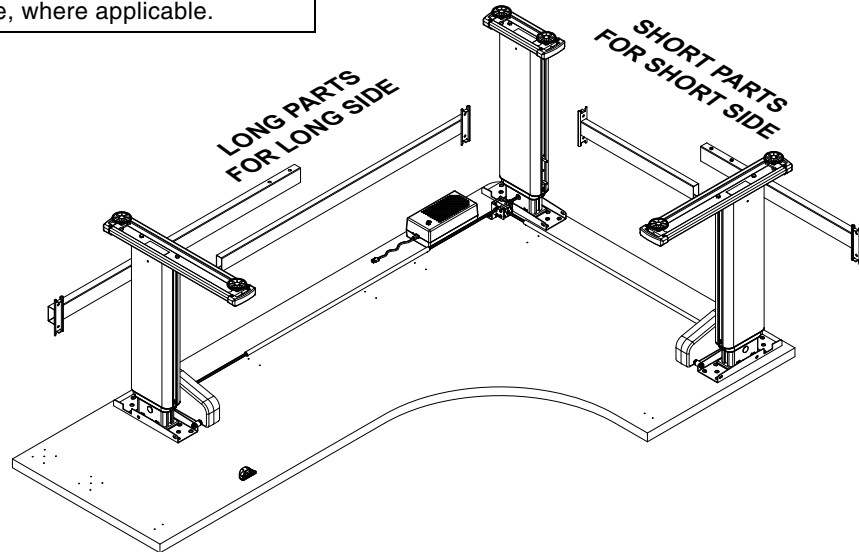
- 2 To maximize available space on the back of the worksurface for clamping accessories, place the wire manager over the driveshaft cover as shown. Attach with either two (2) or three (3) screws. No pilot holes are provided for wire managers.



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## Installing Stretchers

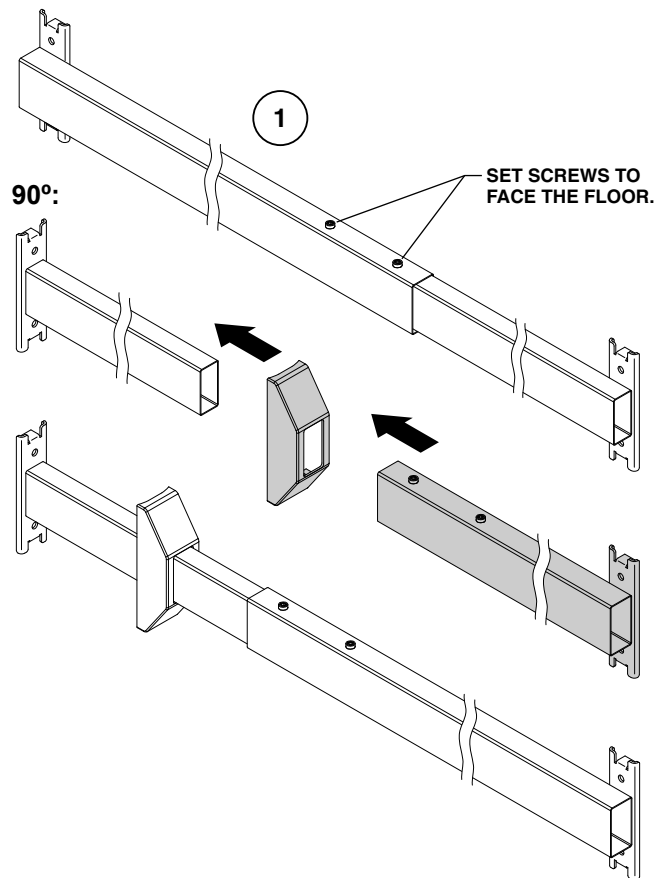
**NOTE:** On 3-leg tables, be sure to use the correct length of stretcher for the particular side of the worksurface. Use longer components on the long side and shorter components on the short side, where applicable.



- 1 Sub-assemble stretchers as shown. For 90° stretcher, place the decorative cover over the small tube first, then insert into large tube.

**NOTE:** Wherever possible, ensure that the set screws face the floor after table is assembled and flipped upright.

### Straight:

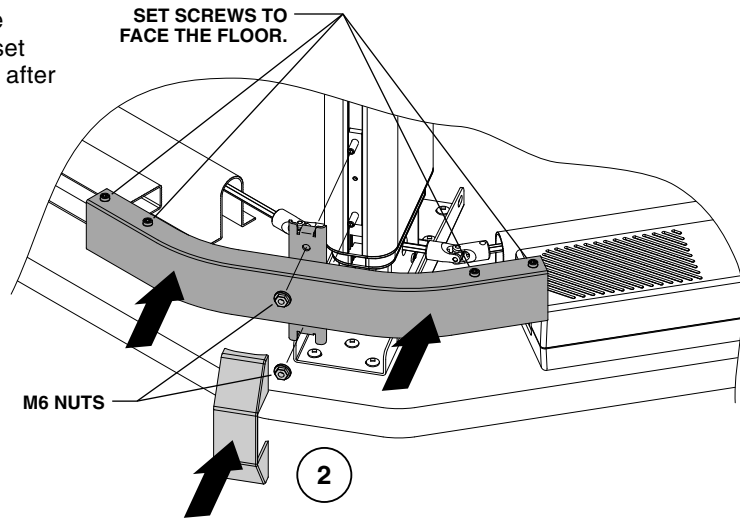




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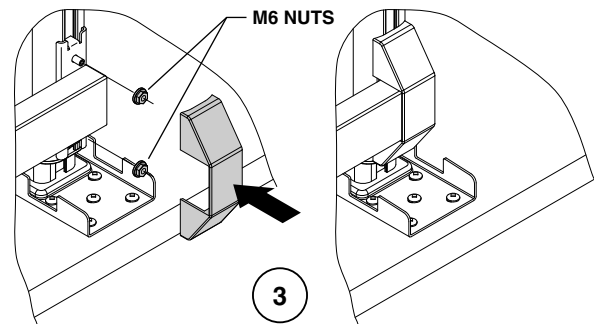
## Installing Stretchers (cont.)

- 2** For 120° and bubble-jetty tables, mount the center leg bracket as shown such that the set screws face the floor. Add decorative cover after tightening the two (2) M6 nuts.

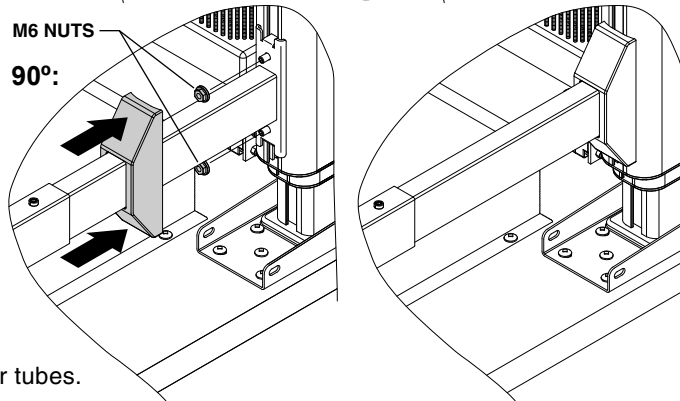


- 3** For all other stretchers, mount the ends to the legs using two (2) nuts per connection. Place decorative covers over each end after assembly.

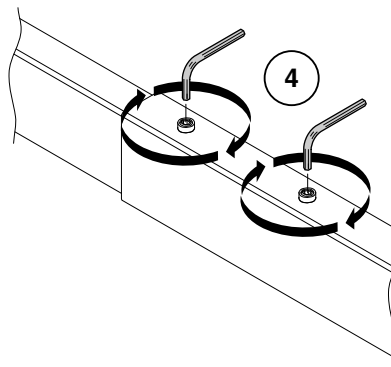
**Straight:**



**90°:**



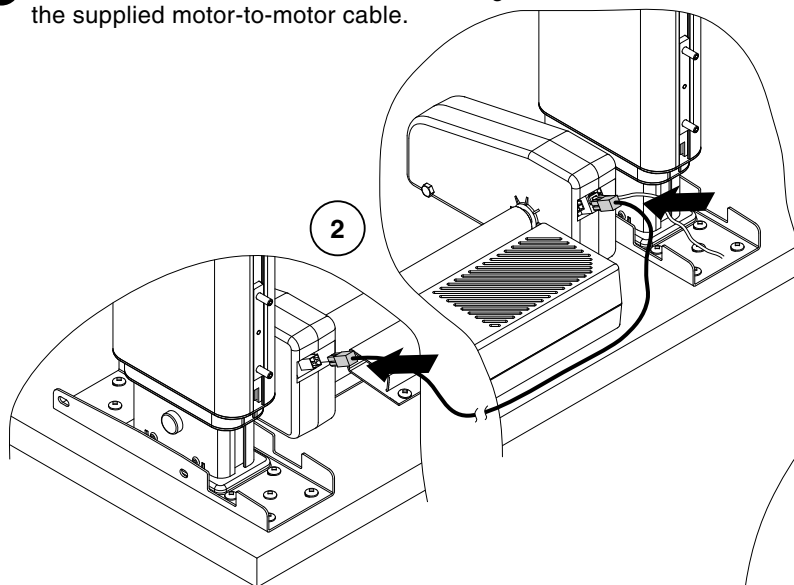
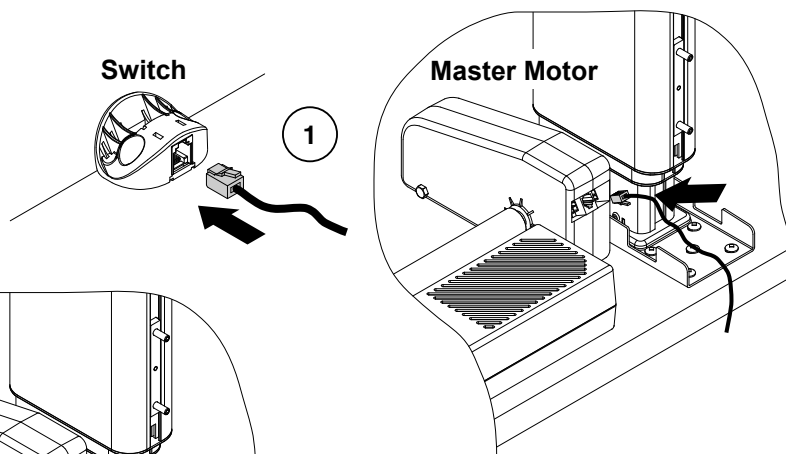
- 4** Gently tighten all set screws between stretcher tubes.



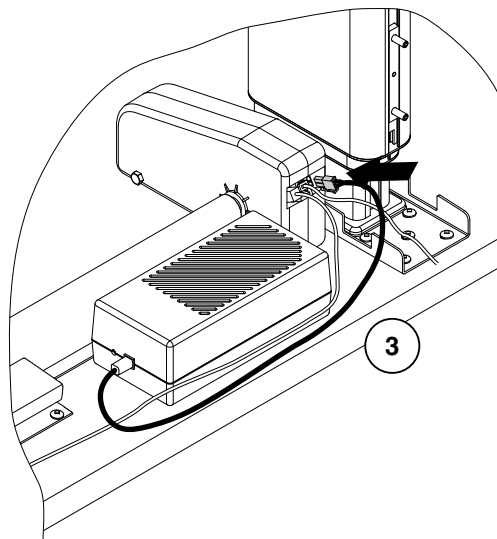
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## Connect and Route All Cables

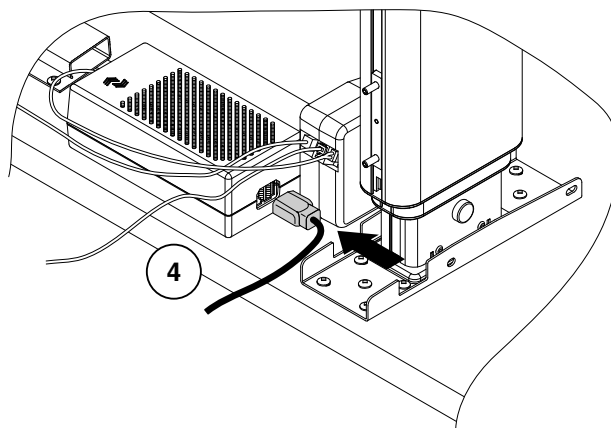
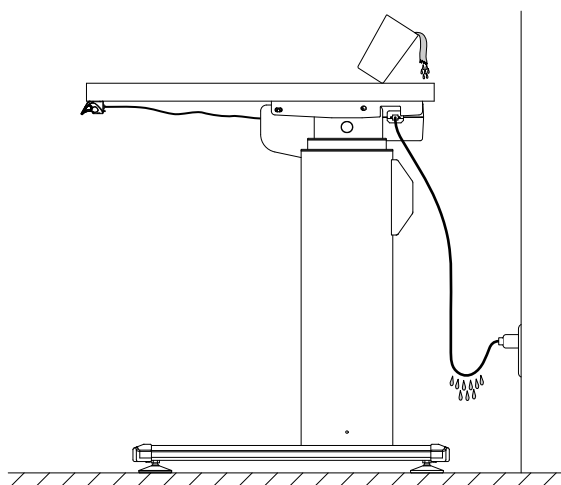
- 1 Connect switch to master motor using the supplied RJ-11 cable.
- 2 Connect master motor to slave motor using the supplied motor-to-motor cable.



- 3 Connect power supply to master motor with the cable already attached to the power supply.
- 4 Connect power cord to power supply.



**CAUTION:** Be sure to create a 'drip loop' in the power cord before making the connection to a live wall socket, to prevent electric shock if liquids spill on power cord.

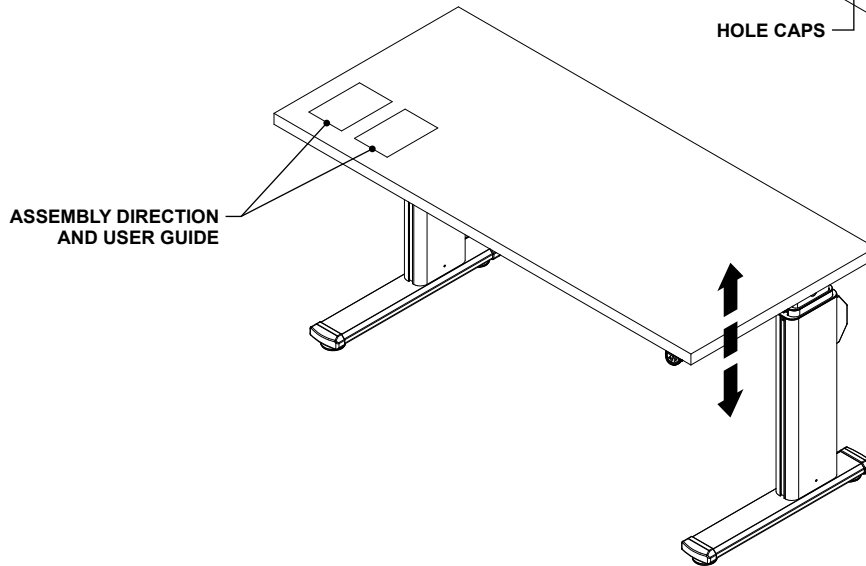
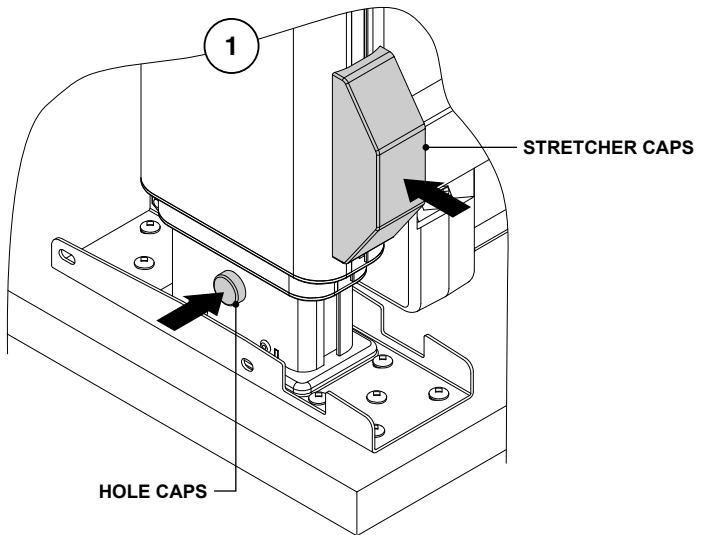


- 5 Route all cables through wire managers. Keep all cables clear of moving parts!

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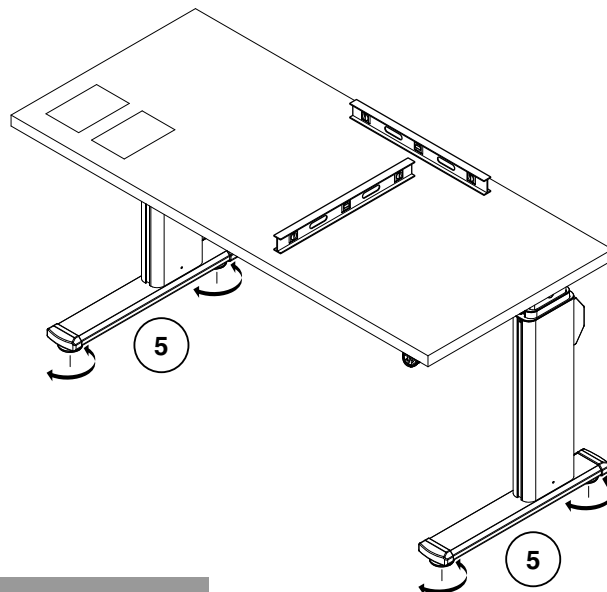
## Finishing the Table Assembly

- 1 Ensure all decorative trim caps are securely attached.
- 2 Double-check that all nuts, bolts, screws and compression nuts are securely attached.
- 3 Flip each completed table right-side up and test the function of each completed table. Cycle the table all the way up and down to test for correct function.



- 4 **PLEASE LEAVE THESE INSTRUCTIONS, AND THE USER GUIDE, IN AN OBVIOUS PLACE FOR THE END USER AFTER ASSEMBLY.**

- 5 Finally, adjust glides to level the table, both left to right and front to back.

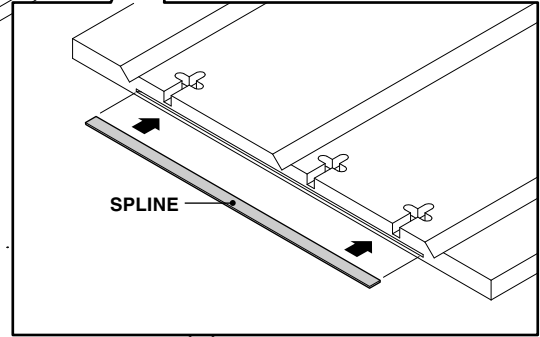
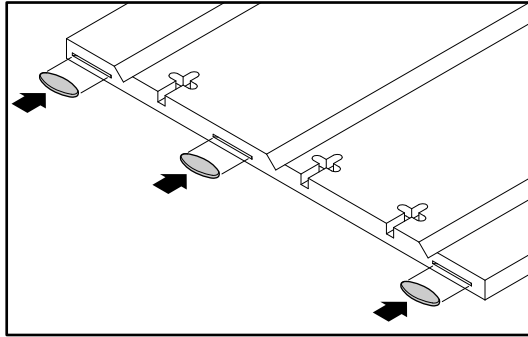


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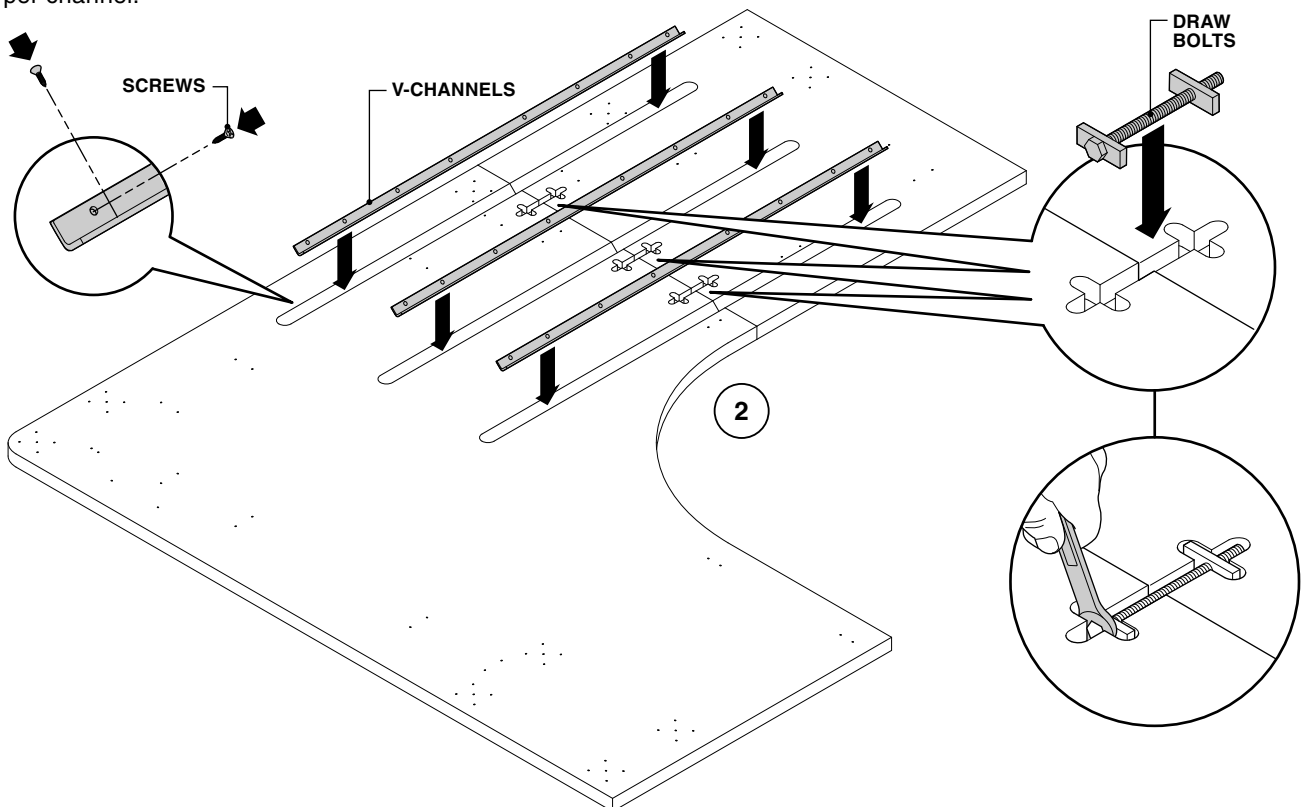
## Appendix A: 2-Piece Worksurface Assembly

- 1 Position top pieces upside down on the assembly surface and align with wood spline (or biscuits) provided.

### Optional Biscuits



- 2 Install draw bolts and tighten with 5/16" or 7/16" open end wrench. Attach two (2) v-channels using sixteen (16) screws per channel.

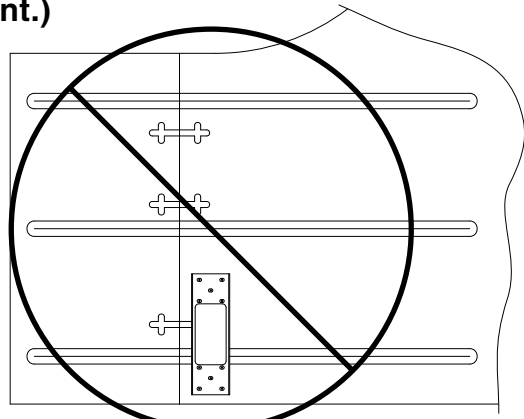


## Appendix A: 2-Piece Worksurface Assembly (cont.)

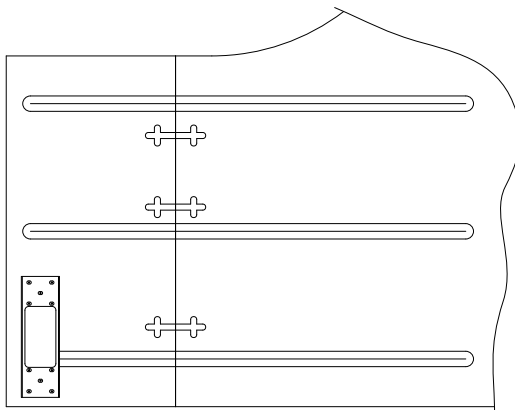
### Special Notes on 2-Piece Worksurfaces

#### Overhangs:

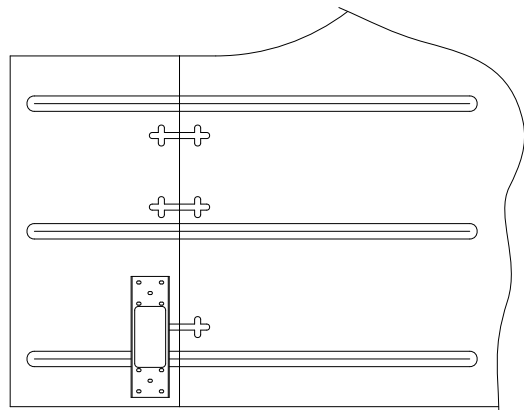
- The extension portion of 2-piece worksurfaces may not completely overhang the supporting leg!
- One leg must always be fully mounted to the extension portion.



**WRONG!**  
**THIS CONDITION**  
**IS NOT ALLOWED!**



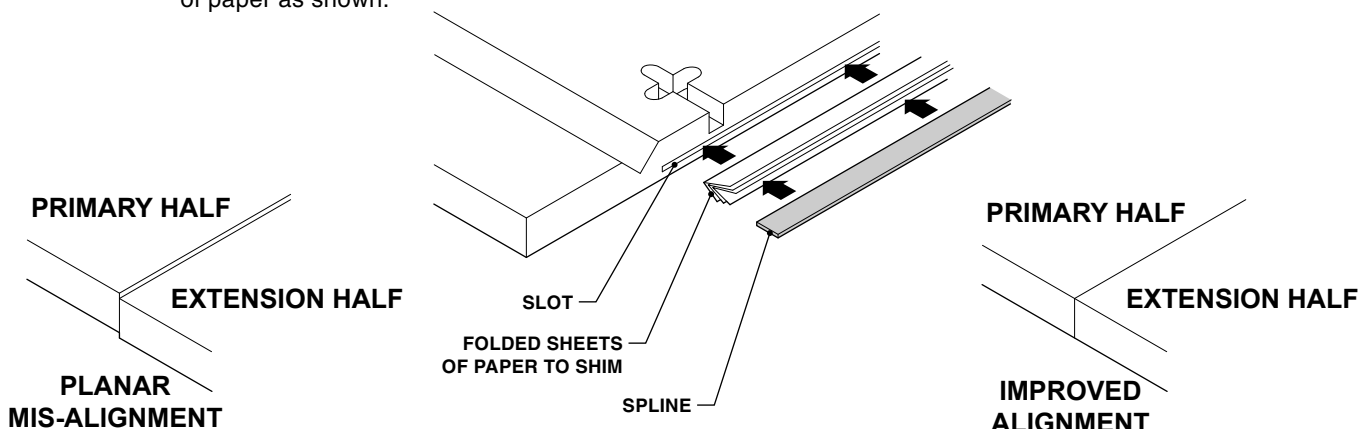
**CORRECT!**



**CORRECT!**

#### Planar Alignment:

- The spline or biscuits between the primary and extension portions act to keep the worksurface halves aligned on the top surface.
- If these parts fit loosely, shim them using pieces of paper as shown.



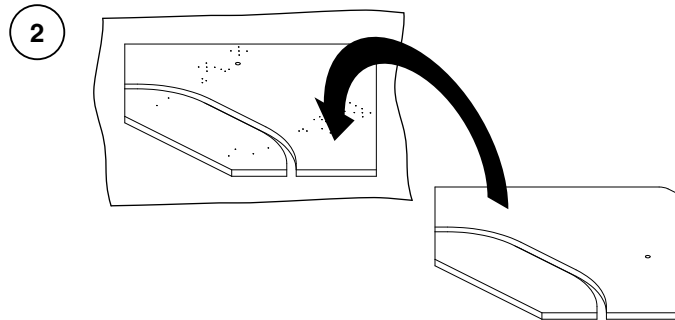
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## Appendix B: Installing a Keyboard Mechanism for Bi-Level Worksurfaces

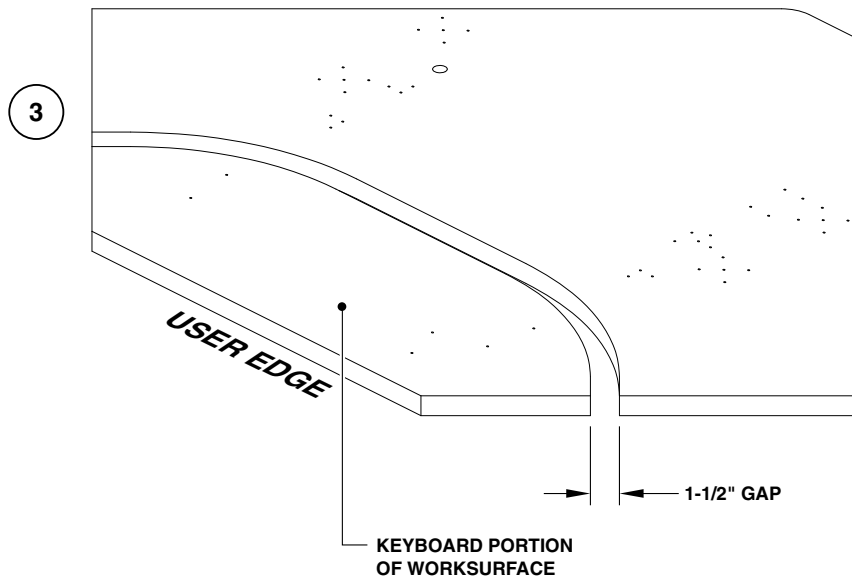
- 1 Prepare a large open space to assemble the table.
  - Sweep the floor! Screws and small parts can damage the worksurface.
  - Put down a CLEAN shipping blanket to protect the worksurface.



- 2 Unpack the worksurface and place on the shipping blanket upside-down.
  - REMEMBER - You're looking at the UNDERSIDE of the worksurface. Are you sure which side is left or right?



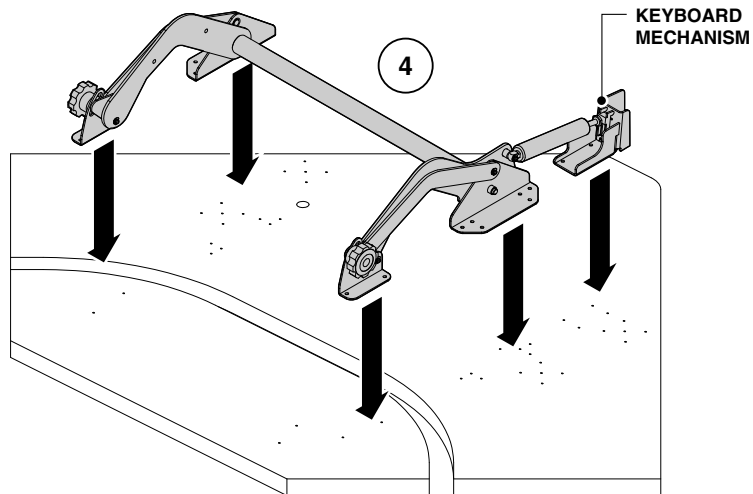
- 3 With the assembly inverted, arrange the "keyboard" portion of the worksurface face-down as shown. Be sure to place the user-edge toward the end user's position as shown.



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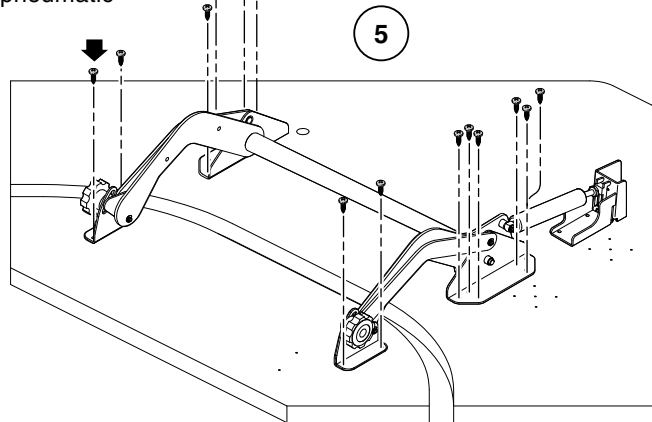
## Appendix B: Installing a Keyboard Mechanism for Bi-Level Worksurfaces (cont.)

- 4** Lower keyboard mechanism onto underside of worksurface as shown. Align with pilot holes on both portions of worksurface.

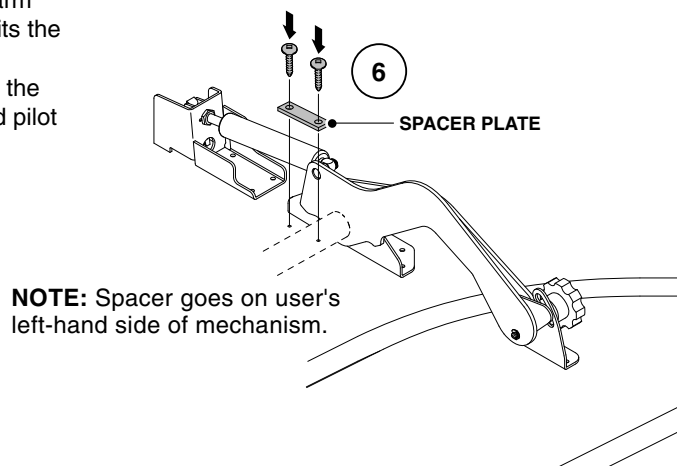


- 5** Insert screws into all available holes of mechanism (16 screws total).

**NOTE:** Do not assemble brackets for pneumatic piston yet.



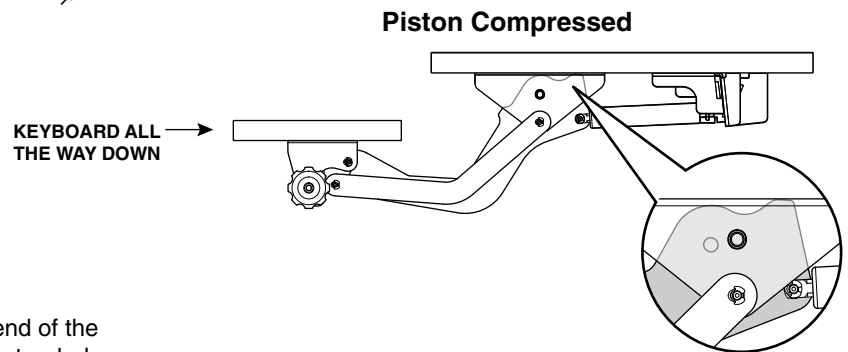
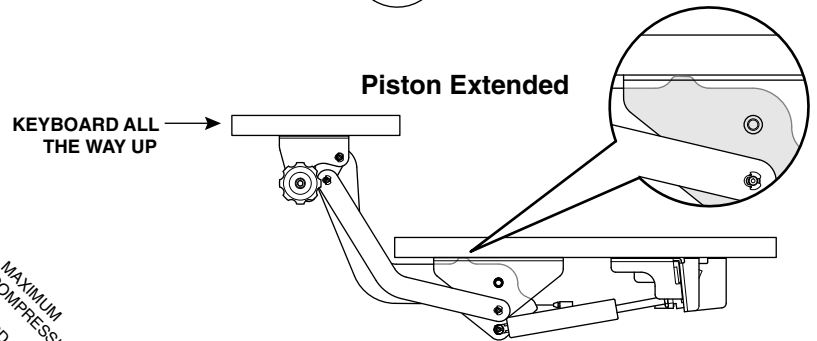
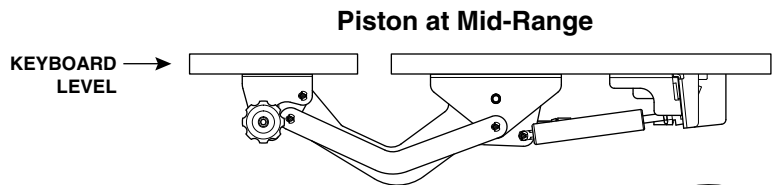
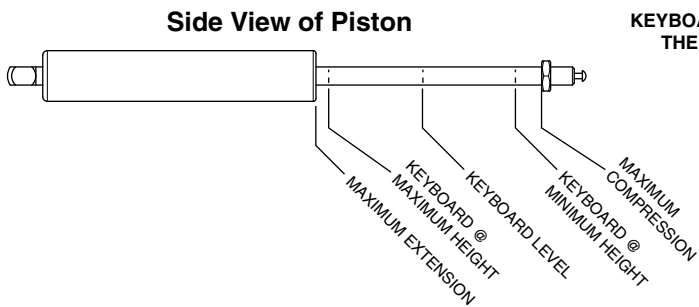
- 6** Attach small spacer plate next to the arm attached to the piston. The spacer limits the travel of the mechanism to prevent interference with the driveshaft. Install the spacer, as shown, using the pre-drilled pilot holes.



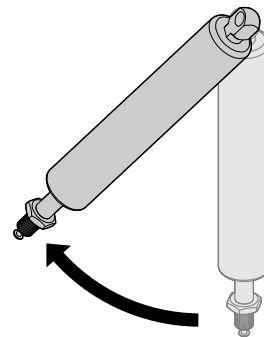
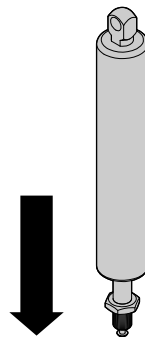
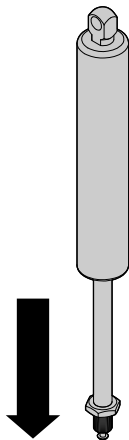
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## Appendix B: Installing a Keyboard Mechanism for Bi-Level Worksurfaces (cont.)

**NOTE:** The pneumatic piston is pre-set at the factory for level installation (monitor and keyboard portion of worksurface in same horizontal plane). From this position, the piston must extend and compress, to allow the full range of motion of the mechanism.



**CAUTION:** Do not depress button on the end of the pneumatic piston. If piston becomes fully extended, compress it prior to assembly by pushing down against hard floor, and very quickly rotating up, so that button pops back out before the piston has a chance to extend.

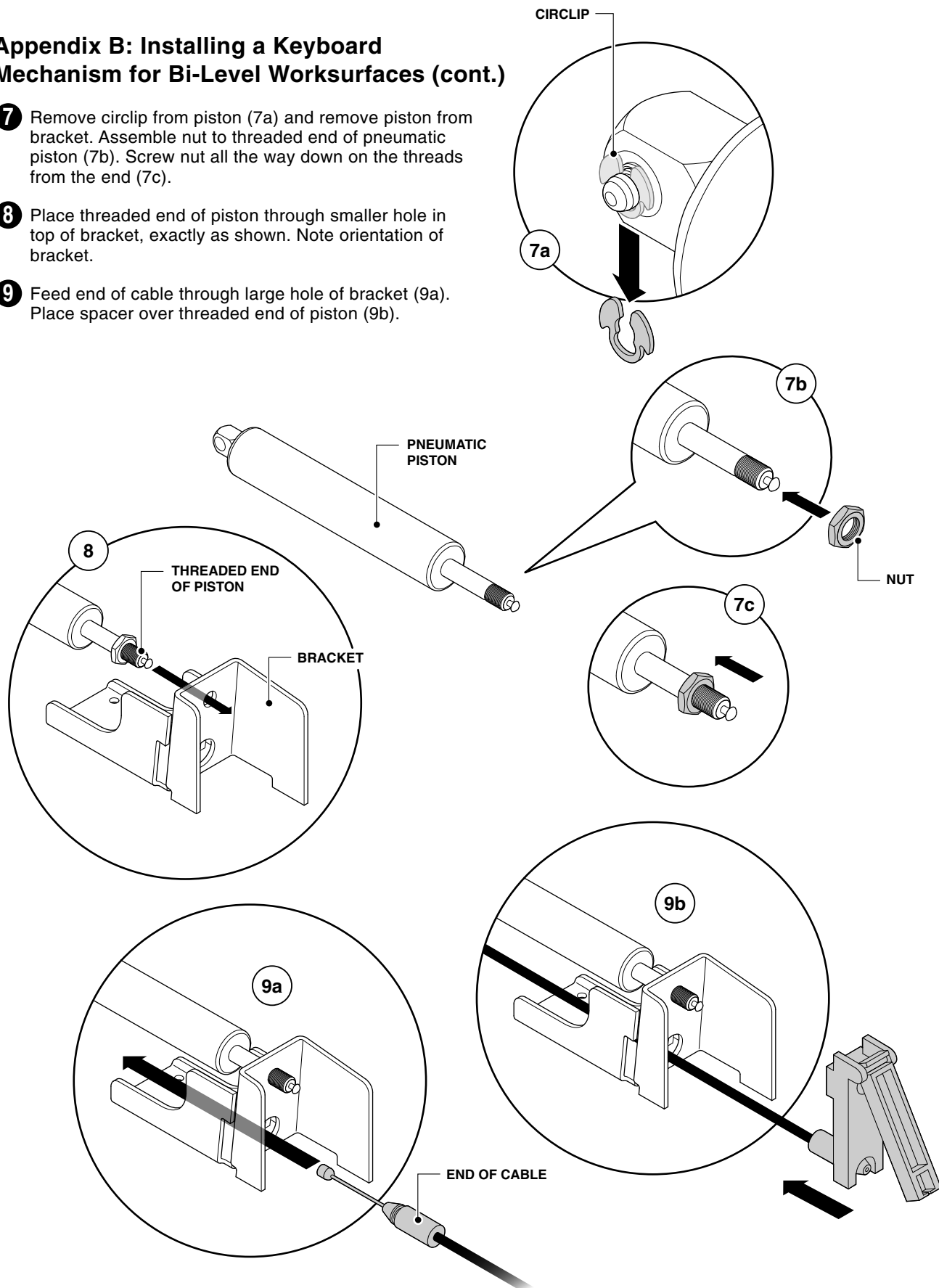




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## Appendix B: Installing a Keyboard Mechanism for Bi-Level Worksurfaces (cont.)

- 7 Remove circlip from piston (7a) and remove piston from bracket. Assemble nut to threaded end of pneumatic piston (7b). Screw nut all the way down on the threads from the end (7c).
- 8 Place threaded end of piston through smaller hole in top of bracket, exactly as shown. Note orientation of bracket.
- 9 Feed end of cable through large hole of bracket (9a). Place spacer over threaded end of piston (9b).



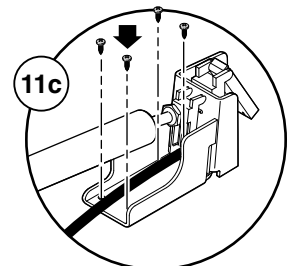
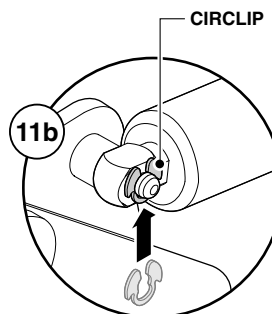
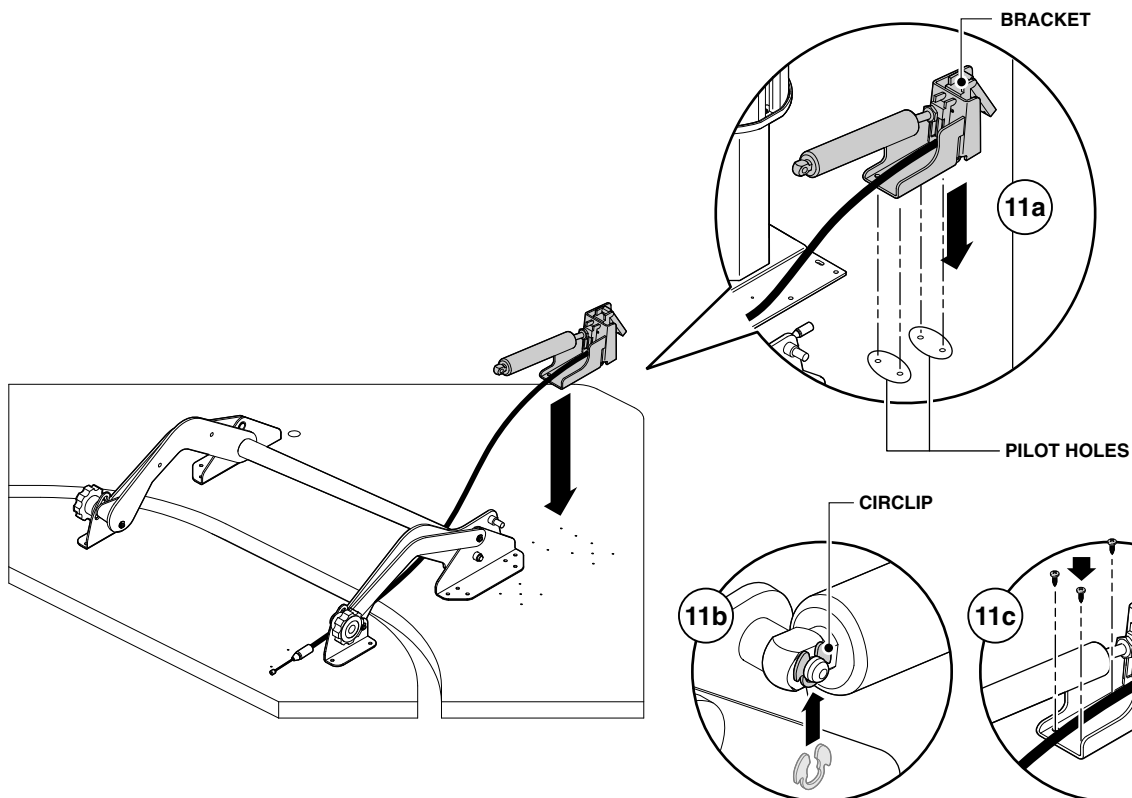
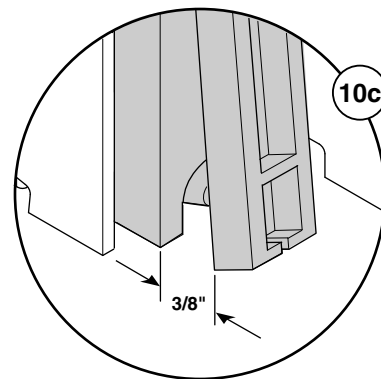
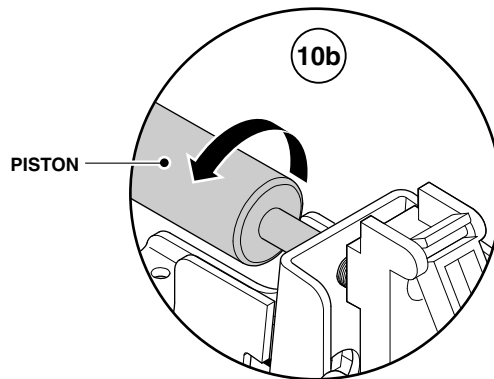
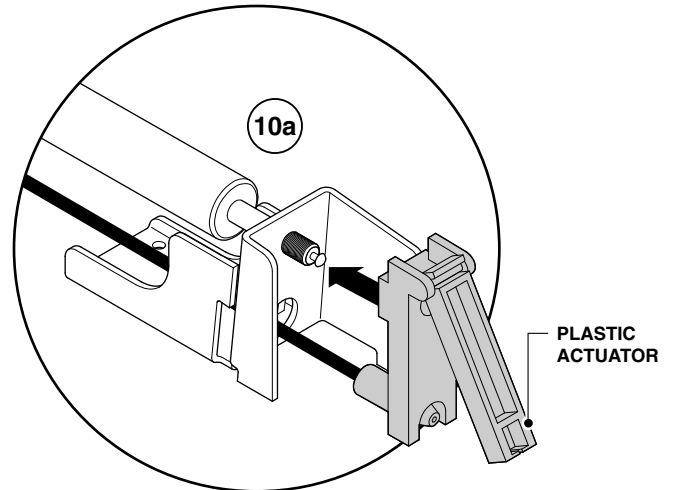
## Appendix B: Installing a Keyboard Mechanism for Bi-Level Worksurfaces (cont.)

- 10** Align threaded hole in plastic actuator with threads on piston (10a), and screw piston into place (10b).

**NOTE:** There should be about 3/8" of throw in the lever when assembled correctly (10c).

**CAUTION:** Be careful not to actuate the button on the end of the piston until assembly is complete. Refer to page 28.

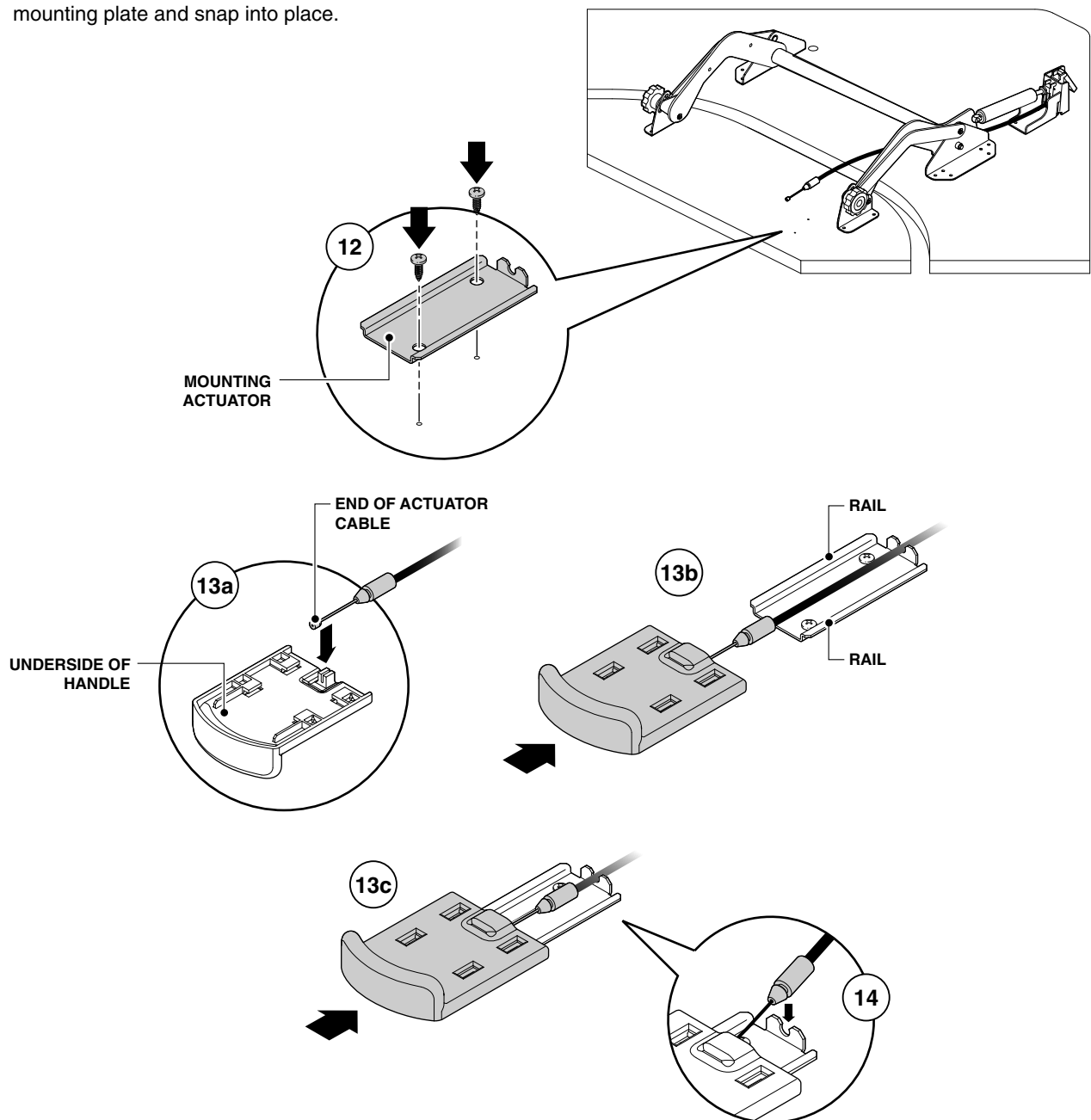
- 11** Place bracket on worksurface, and align with pilot holes (11a). The pilot holes place the bracket in the optimum location for correct mechanism function. Re-attach piston to linkage arm with circlip (11b). Secure using four (4) screws (11c).



## Appendix B: Installing a Keyboard Mechanism for Bi-Level Worksurfaces (cont.)

### Assembling Mechanism Actuator

- 12 Align mounting plate for actuator with pilot holes in keyboard portion of worksurface and install with two (2) screws.
- 13 Place end of actuator cable in slot on underside of handle (13a). Turn handle over, align guide hooks with rails on mounting plate and slide handle over mounting plate (13b). Be sure the cable remains in the slot at the back of handle (13c).
- 14 Place notched area of rubber cable overmold into notch of mounting plate and snap into place.



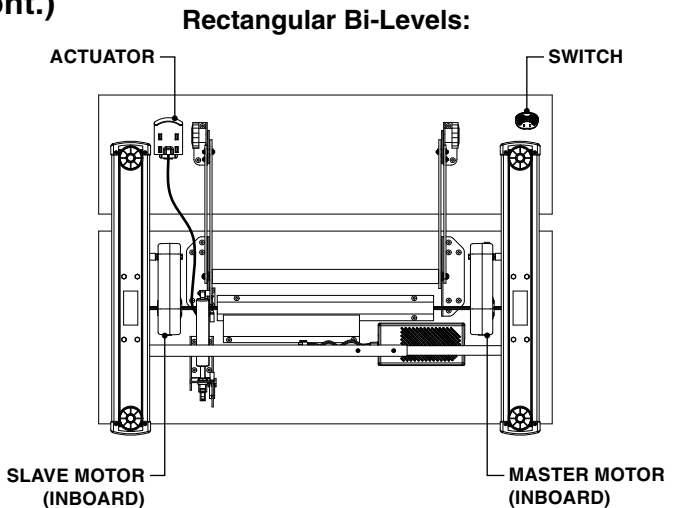
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## Appendix B: Installing a Keyboard Mechanism for Bi-Level Worksurfaces (cont.)

### Motor Placement on Rectangular Bi-Level Tables with 2-Leg Base:

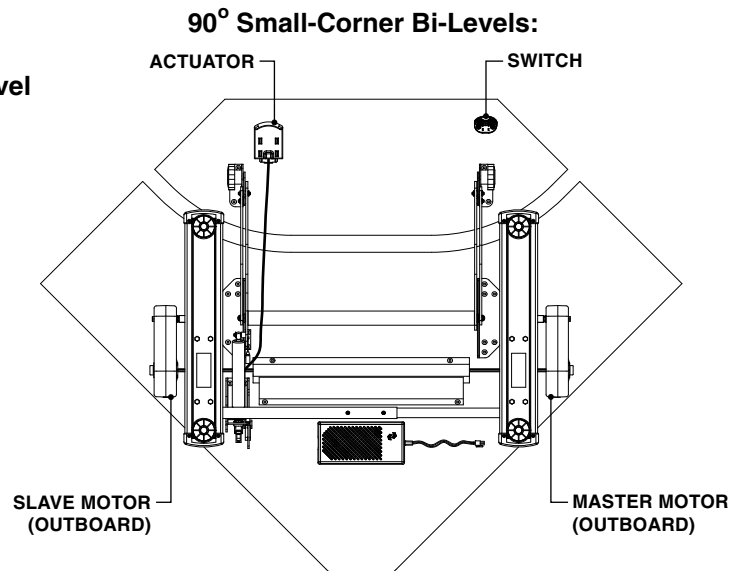
Rectangular bi-level table must still have the motors mounted in between the legs.

For all bi-level tables, the switch and master motor must be mounted on the user's right-hand side. This is because the mechanism actuator must be mounted on the left-hand side and can't be moved.



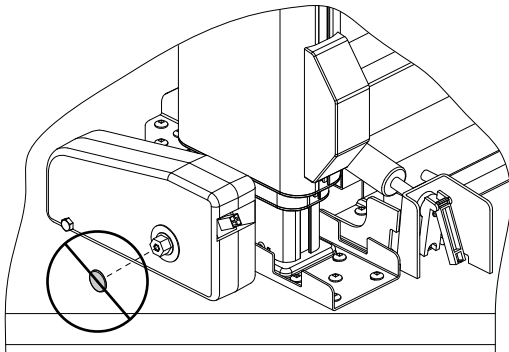
### Motor Placement on 90° Small-Corner Bi-Level Tables with 2-Leg Base:

To allow space for the bi-level mechanism, the motors on all 90° small-corner bi-level with a 2-leg base must be mounted outboard of the legs as shown.



### For Compression Nut Version:

**NOTE:** For 90° small-corner bi-level tables with 2-leg base only. The cosmetic caps that cover the ends of the driveshafts are not used and may be discarded.



### For Cap Nut / Push Nut Version:

**NOTE:** For 90° small-corner bi-level tables with 2-leg base only. Apply cap nut to the end of the driveshaft as it protrudes from the motor.

