

# Single Sided Bench (2 or 3 Segment)

## Pattern Numbers Represented:

k. bench, Single Sided, KHABE\_SS\_ \_ \_  
 Linking Bridge, Single Sided, KHABLBSS\_  
 Single Sided Crossbar Shroud, KHABCS\_SS\_

## Parts List:

Trough (A)  
 Crossbar, 24" or 30"D (B)  
 Column, Left Hand, 2 or 3 Segment (C)  
 Column, Right Hand, 2 or 3 Segment (D)  
 Rail Set (E)  
 Rail Set for Motor Controller (F)  
 Inner Tube (G)  
 Cantilever (H)  
 Motor Control Box, 2 or 3 Segment (I)  
 P-Clamp, 5/16" (J)  
 P-Clamp, 1/4" (K)  
 Power Cord (L)  
 Column Extension Cord (M)  
 Zip Tie (N)  
 Rubber Bumper (O)  
 Isolation Bushing (P)

M6-1 x 10mm Set Screw (Q)  
 M6-1 x 10mm Flat Head Socket Screw (R)  
 M10-1.5 x 25mm Socket Cap Screw (S)  
 10.5/20mm x 2mm Washer (T)  
 M6-1 x 14mm Button Head Socket Screw (U)  
 #10 x 1" Pan Head Wood Screw (V)  
 #6 x 5/8" Pan Head Wood Screw (W)  
 5/16-18 x .75" Button Head Hex Machine Screw (X)  
 Crossbar to Back Panel Bracket (Y)

### Handset Kit, Toggle, consisting of:

Toggle Handset (Z)  
 #6 x 5/8" Pan Head Zinc Wood Screw (AA)  
 Or

### Handset Kit, Digital, consisting of:

Digital Handset (BB)  
 #8 x 3/4" Pan Head Zinc Wood Screw (CC)

Top  
 Back Panel  
 Linking Bridges (if applicable)  
 Crossbar Shrouds (LH/RH) (if applicable)

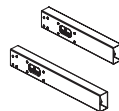
## Tools Needed:

Hex bits: 3mm, 4mm, 5mm  
 Torque Wrench with 8mm Hex Bit Socket  
 (for 33ft-lbs)  
 Power Driver with #2 Phillips Bit

(A) 47" – 71" wide, varies

(B) 3AH108101 (24"D)/  
 3AH108102 (30"D)

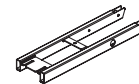
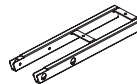
(C) 3AH0030 (2 segment, LH)  
 or 3AH0028 (3 segment, LH)



(D) 3AH0029 (2 segment, RH)  
 or 3AH0027 (3 segment, RH)

(E) 3AH1009

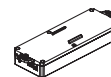
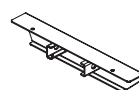
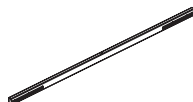
(F) 3AH1010



(G) 3AH101101

(H) 3AH1004

(I) 3AH5004\_2SEG or  
 3AH5004\_3SEG



(J) 3AH5006

(K) 3AH5007

(L) 3AH5008



(M) 3AH5009

(N) 3AH4041

(O) 3AH4042

(P) 4A22297

(Q) 4A22296

(R) 4A22293



(S) 4A22294

(T) 4A22259

(U) 4A22295



(V) 4A22284

(W) 4A22272

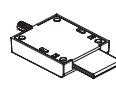
(X) 4A22268



(Y) 3AH1082

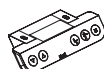
(Z) 3AH4030

(AA) 4A22272



(BB) 3AH4031

(CC) 3AE4153



## Steps:

### Construct and Position the Rail Assembly

1. Insert the ends of (2) Inner Tubes (G) into a Rail Set (E). Position a Rail Set for Motor Controller (F) onto the (2) opposite ends of the Inner Tubes (G).

Position this rail assembly on the floor, in the general location for the 1st station, so that the cross braces on the rail sets are facing downward. Ensure that the motor control box mounting plate is located right or left of center, as intended. Note: The handset (Z/BB) will be mounted on the same side as the Motor Control Box (I).

Space the two Rail Sets (E & F) far enough apart that the ends of the Inner Tubes (G) will sit further into the Rail Sets (E & F). For a 48" or 54" w application, center the Inner Tubes (G), and space the Rail Sets (E & F), so that the corresponding access holes in the Inner Tubes align with the innermost holes on the sides of the Rail Sets (see Step 1 drawing).

*Note Exceptions:* For 48"w & 54"w benches, the ends of the Inner Tubes (G) will sit further into the Rail Sets (E & F). For a 48" or 54" w application, center the Inner Tubes (G), and space the Rail Sets (E & F), so that the corresponding access holes in the Inner Tubes align with the innermost holes on the sides of the Rail Sets (see Step 1 drawing).

2. Loosely install (8) M6-1 x 10mm set screws (Q) into the upward facing threaded holes in the rails. Take care not to gouge the inner rail tubes.

### Attach the Column Legs and Crossbars

3. Place one Left Hand Column (C) within the rails at the left end of a rail assembly with the cord facing inward, and the column/crossbar mounting brackets facing forward. (Note: the crossbar brackets will face rearward when the structure is flipped upright.) Secure the column with (4) M6-1 x 10mm flat head socket screws (R).

Repeat for the Right Hand Column (D) at the other end, ensuring that the column/crossbar mounting bracket faces the same direction (forward).

4. Lay the Single Sided Trough (A) topside down on a clean padded surface. Assemble Crossbars (B) to each end of the Single Sided Trough with (4) M6-1 x 14mm button head socket screws (U) each.

5. Prop up the trough/crossbars subassembly so that the column crossbar brackets can insert into the ends of the crossbars, adjusting the width of the rails as necessary. Install the Crossbars (B) onto the Columns (C/D) and fasten using (1) 10.5/20mm x 2mm washer (T) and (1) M10-1.5 x 25mm socket cap screw (S) at each crossbar end. Torque to 33 ft-lb (45 N-m).

6. Ensure the (2) Rubber Bumpers (O) on the top side of the Inner Tubes (G) are positioned and centered in place, then secure the rails by tightening the (8) previously installed set screws (Q).

7. Prepare the Back Panel for installation by attaching (2) Crossbar to Back Panel Brackets (Y) into the outermost predrilled hole sets on the Back Panel using (2)  $\frac{5}{16}$ -18 x .75" button head hex machine screws (X) per bracket.

### Complete Support Assembly

8. With assistance, turn the entire assembly over so that the leveling glides rest directly on the floor. Insert the Crossbar to Back Panel Brackets (Y) into the ends of the crossbars and fasten using (1)  $\frac{5}{16}$ -18 x .75" button head hex machine screw (X) for each bracket

9. Further secure the Trough (A) to the Back Panel at the pre-drilled hole locations using (6)  $\frac{5}{16}$ -18 x .75" button head hex machine screws (X)

10. Slide (2) Cantilevers (H) into the outside ends of the rail assemblies, with the two holes facing upward on each cantilever. Secure each cantilever from below with (2) M6-1 x 14mm button head socket screws (U).

11. Position the assembly in its intended location, and level the crossbars and trough by adjusting the glides on the Back Panel and the Column Legs.

### Install Electrical Components

*Note:* 2-segment motor control boxes are identified with a BLUE dot, matching the dot on top of 2-segment columns. 3-segment motor control boxes are identified with a GREEN dot, matching the dot on top of 3-segment columns.

12. Position the Motor Control Box (I) by sliding it onto its mounting plate under the rail assembly.
13. Plug both columns' cords into the Motor Control Box (I) where "M1" & "M2" are indicated, using a Column Extension Cord (M) to reach the further column.
14. Plug the Handset (Z/BB) into the Motor Control Box (I) where "HS" is indicated.
15. Plug one end of a Power Cord (L) into the Motor Control Box (I), where "AC" is indicated, and the other end into the building power supply.

### Reset the Station

16. To reset, press and hold the DOWN button until the station reaches its lowest height. Release the DOWN button. Press and hold the DOWN button again for 5 seconds or until the LED display reads "RST". Release the DOWN button.

Once more, press and hold the DOWN button until the desk lowers a little bit more, slightly rises and stops. Release the DOWN button one final time. The station has been properly reset.

17. Cycle the station to its maximum height, then back to its minimum height, ensuring acceptable function.

### Connect Adjacent Stations (if applicable)

18. Position adjacent single sided bench units end to end, spaced so that the crossbars are approximately 7" apart.

*Note:* Temporarily space Back Panels approximately 1" apart.

Loosely install (4) M6-1 x 14mm button head socket screws (U) into the threaded holes (widest 4-hole pattern) in the outer side of each facing Crossbar (B). Leave a gap of approximately  $\frac{3}{16}$ " under the screw heads.

19. Place the Linking Bridge against one Crossbar (B) so that the protruding screws insert into the keyholes. Before lowering the linking bridge, slide the other station to engage the protruding screws into the other end of the linking bridge. Lower the Linking Bridge into its fully seated position, then tighten all (8) screws.

## Steps, continued:

### Install Tops

20. Determine the back edge of the tops by looking for the line of (7) pilot holes for the Power Strip and Hinged Cover near the rear of the top.

*Note:* Take care to ensure that the factory installed rubber bumpers and the isolation bushings remain in place (in the inner tubes, rail sets, and cantilevers) while adjusting the top position. It is best to lift the top slightly while repositioning.

Position the top on the base so that the pilot holes align with the grommeted base structure holes.

21. Attach the top using (2) #10 x 1" pan head wood screws (V) per cantilever, and (3) #10 x 1" pan head wood screws (V) through the cross braces of the rail assembly, maintaining the position of the isolation bushing for each screw.

Repeat steps 20-21 for each top to be installed.

### Affix Handsets

22. Affix the handset, toggle or digital (Z/BB), to the underside of the worksurface, at the front edge, using (2) #6 x 5/8" pan head zinc wood screws (AA) per toggle handset, or (2) #8 x 3/4" pan head zinc wood screws (CC) per digital handset.

*Note:* For the toggle handset, align the front tip of the toggle with the front edge of the worksurface.

### Cable Manage Base Cords

23. Utilize the zip ties (N) and P-Clamps (J/K) provided to route and manage the power cords. Affix the P-Clamps to the underside of the worksurface with (1) #6 x 5/8" pan head wood screw (W) per P-Clamp.

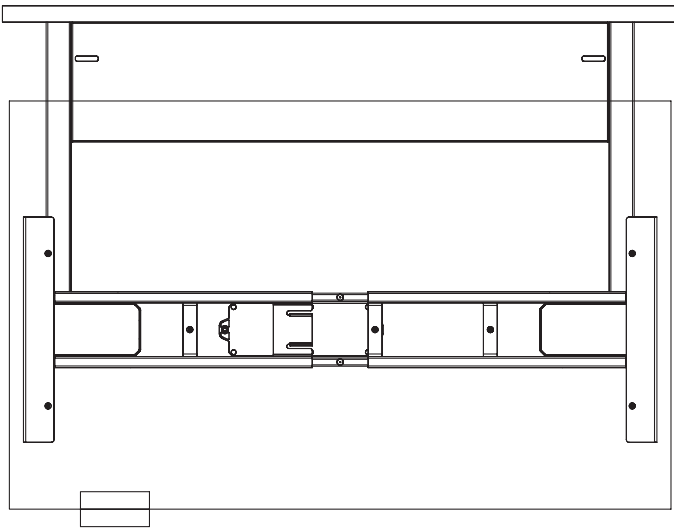
### Install Crossbar Shrouds

24. Tear off Paint-hanger tabs by flexing back and forth repeatedly. Position Crossbar Shrouds (LH or RH) above the Crossbars (B), then slide down into place.

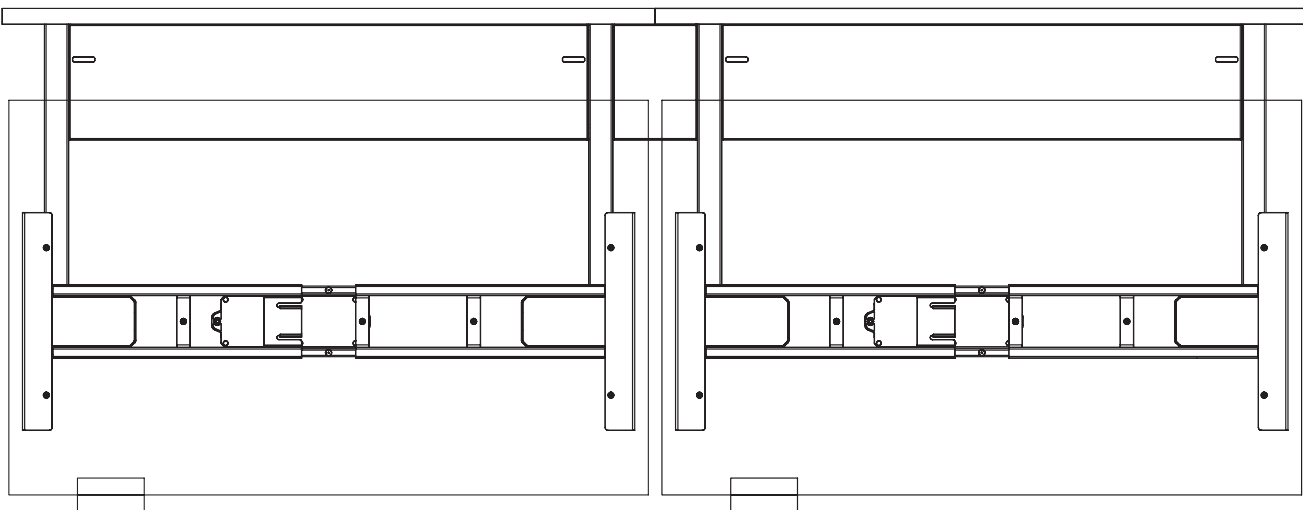
### Level Completed Installation

25. Adjust the leveling glides as necessary to level the complete installation.

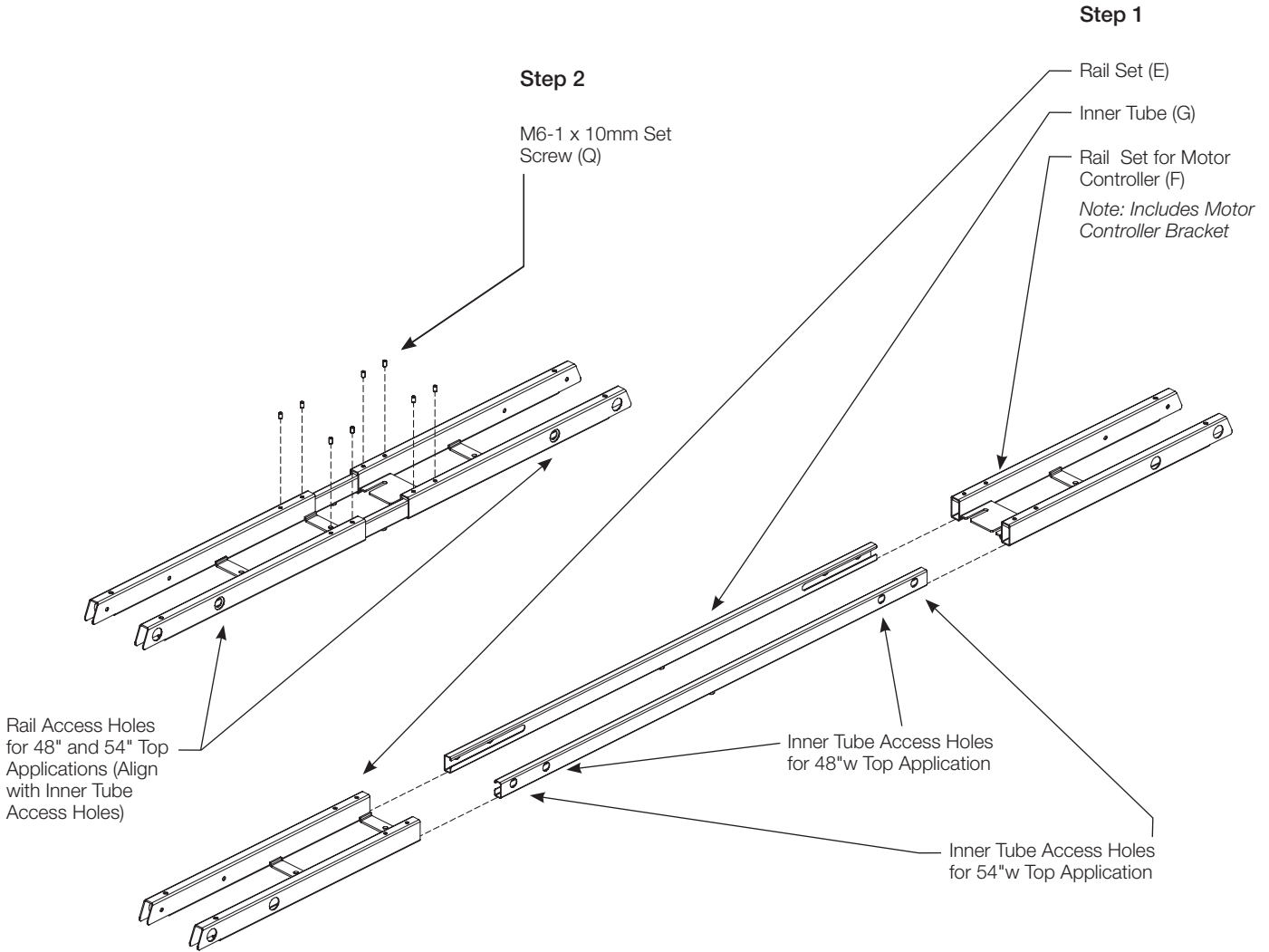
### Single Sided Bench, Single, Plan View



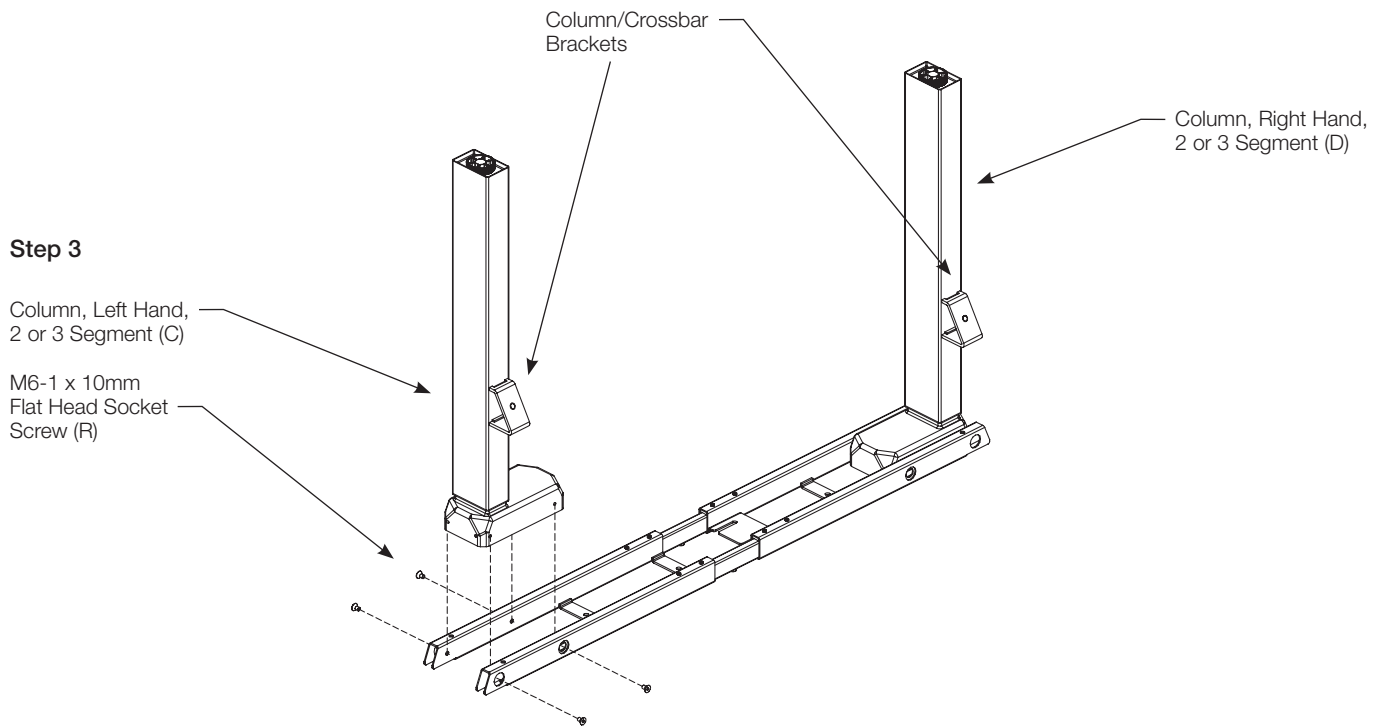
### Single Sided Bench, (2) Single Sided Benches, Connected, Plan View



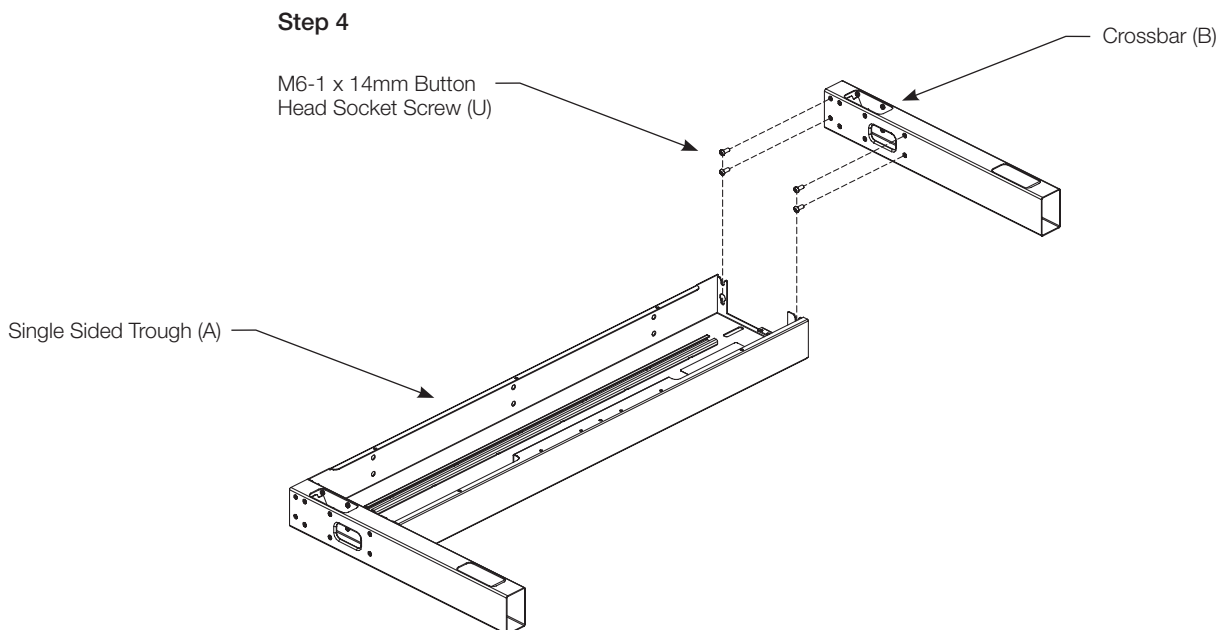
# Single Sided Bench, Rail Assembly, Steps 1&2 Shown Partially Completed, and Exploded



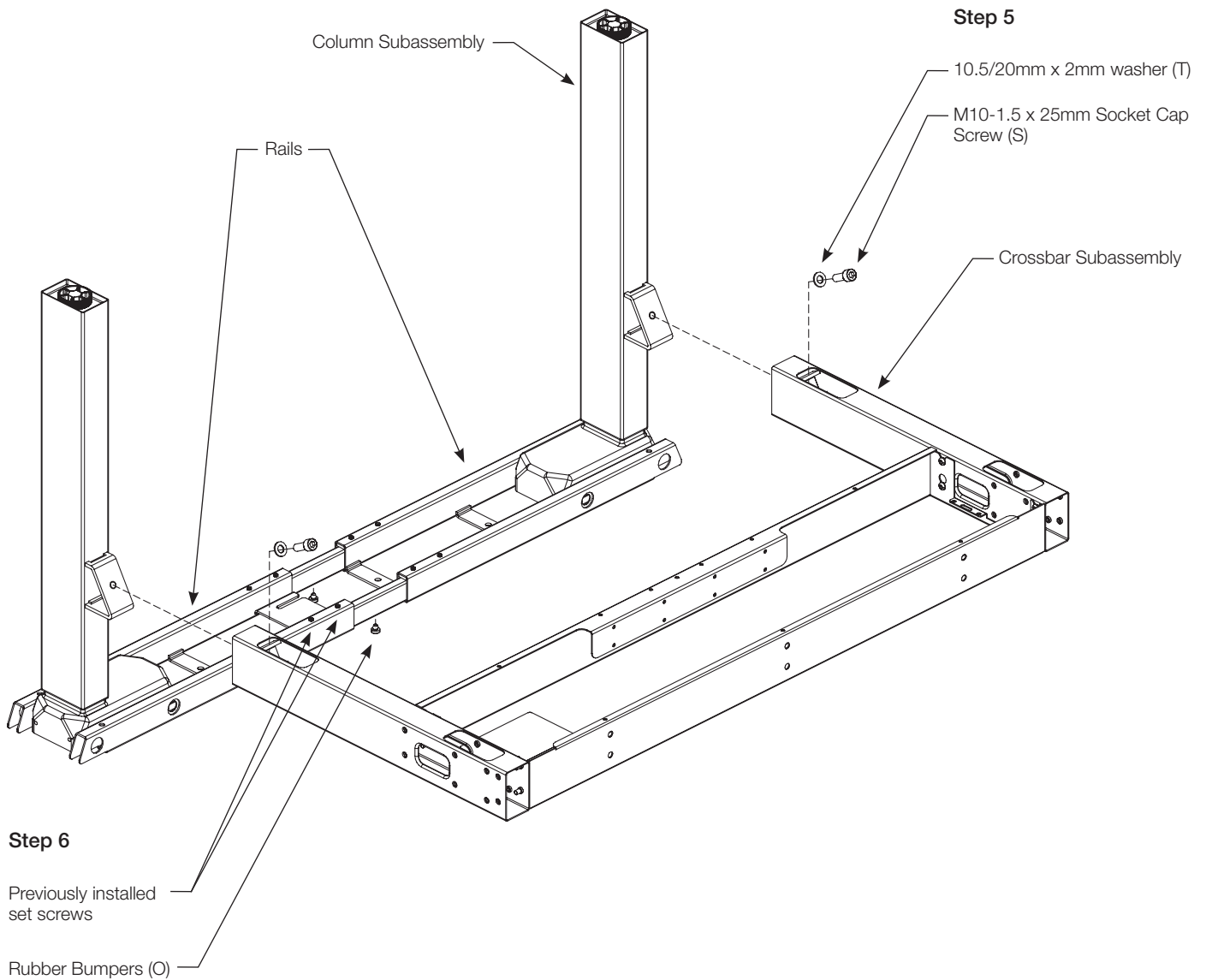
### Single Sided Bench, Leg Assembly, Step 3 Shown Partially Exploded



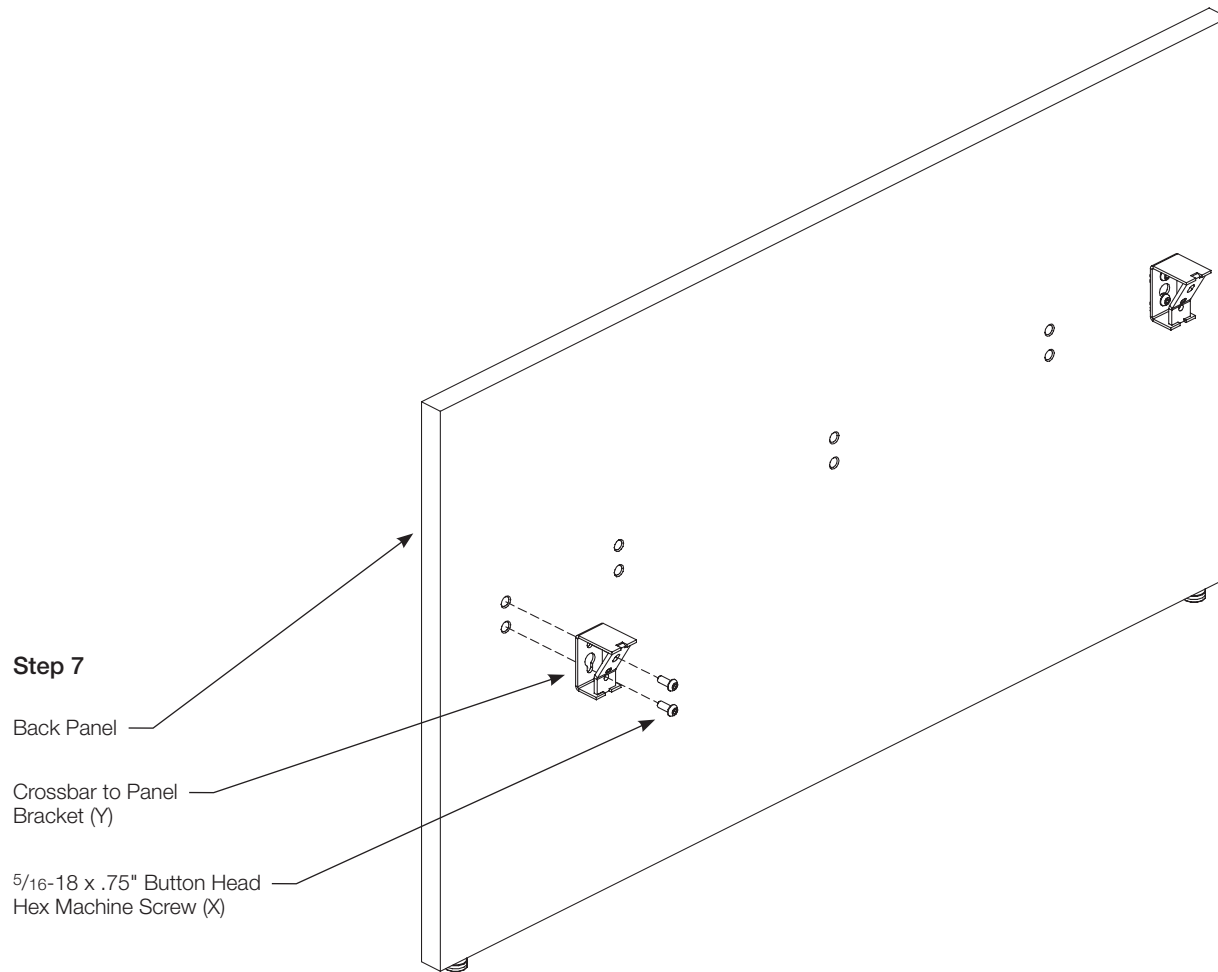
### Single Sided Bench, Trough/Crossbar Assembly, Step 4 Shown Partially Exploded



# Single Sided Bench, Column Subassembly Connection to Crossbar Subassembly, Step 5 & 6, Exploded

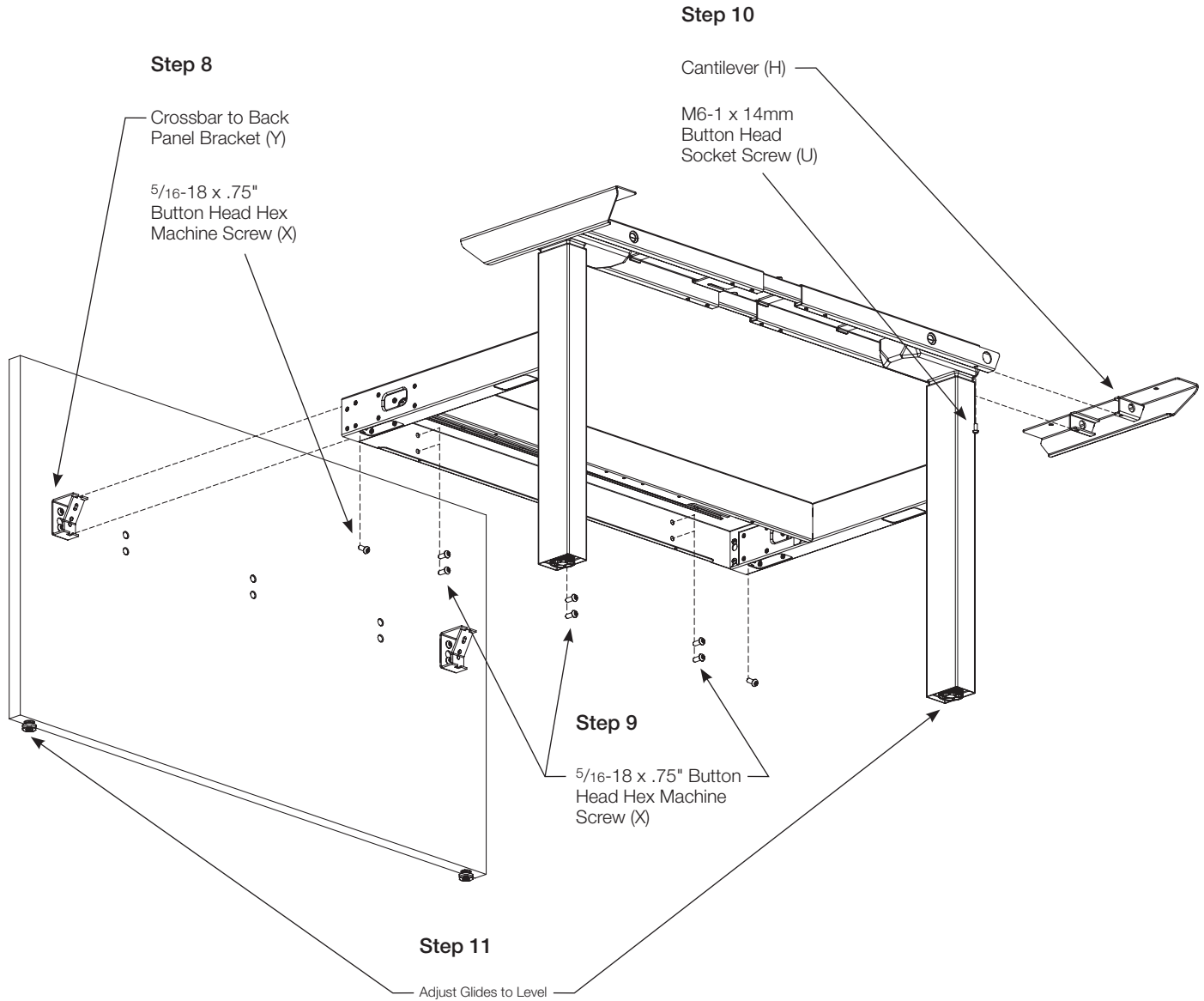


# Single Sided Bench, Back Panel Preparation, Step 7, Shown Partially Exploded





# Single Sided Bench, Back Panel and Cantilever Attachment, Steps 8-11, Partially Exploded



# Single Sided Bench, Electrical Component & Top Installation, Steps 12-14, 21-22, Partially Exploded, View From Below

## Step 20 & 21

Worksurface top (power strip and hinged cover pilot holes at back)

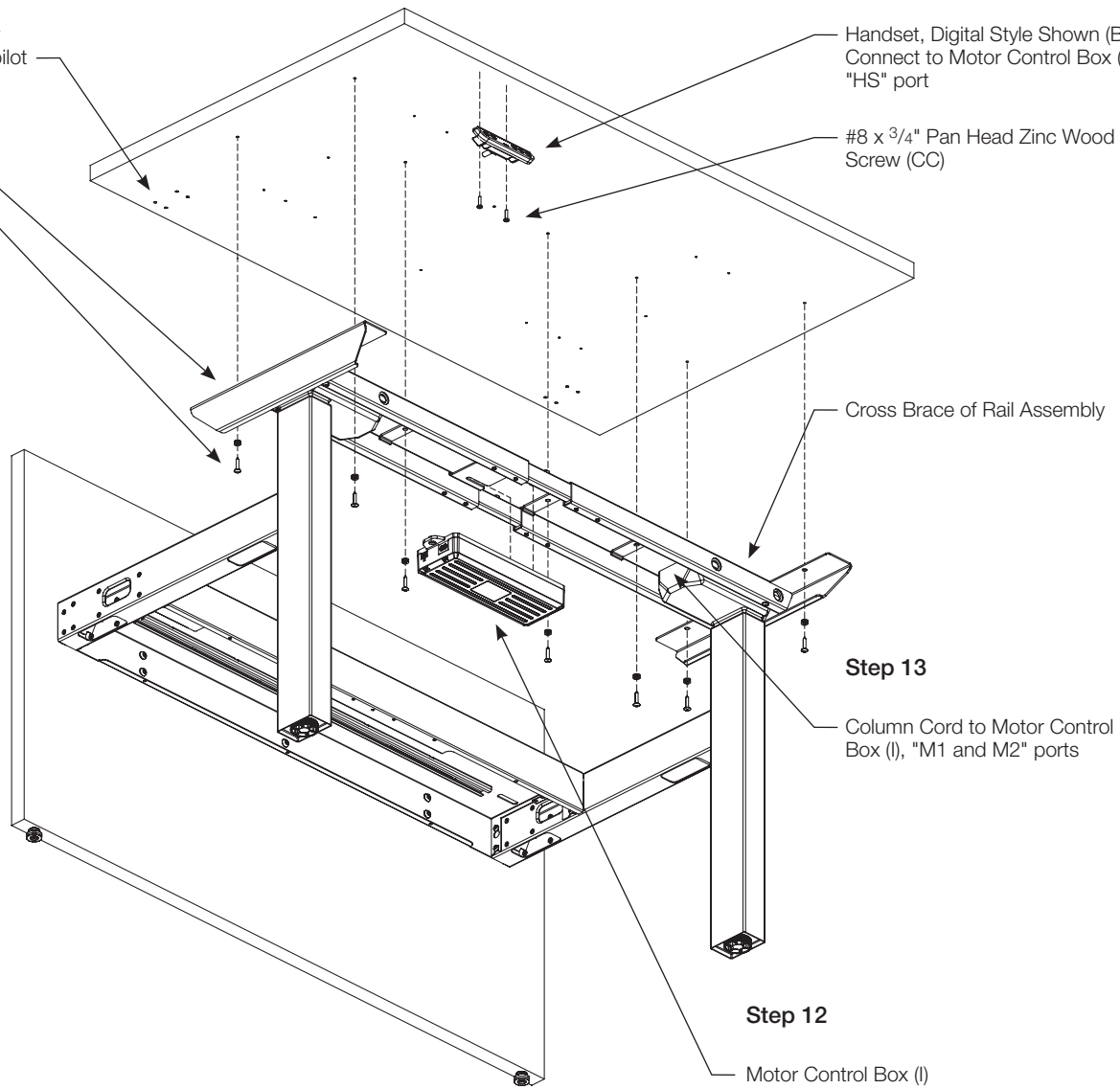
Cantilever (H)

#10 x 1" Pan Head Wood Screw (V)

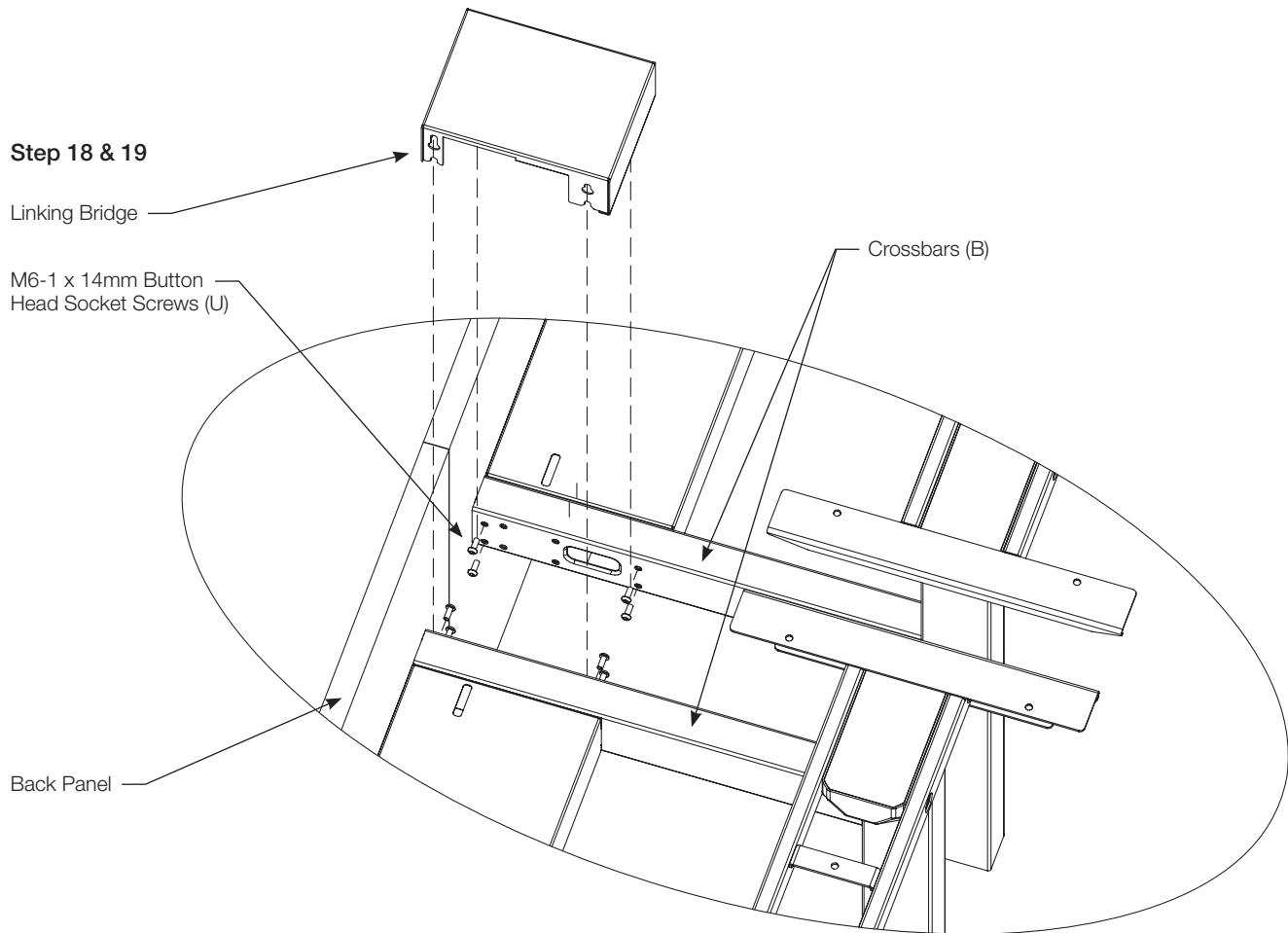
## Step 14 & 22

Handset, Digital Style Shown (BB), Connect to Motor Control Box (I), "HS" port

#8 x 3/4" Pan Head Zinc Wood Screw (CC)



# Single Sided Bench, Linking Bridge Installation, Steps 18-19, Shown Partially Exploded



## Single Sided Bench, Crossbar Shroud Installation, Step 24

