

Horsepower[™]
Installation Instructions
and Parts Manual

Knoll

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Using the Horsepower™ Installation Instructions and Parts Manual

Horsepower™

An Overview

Each section of the Installation Instructions and Parts Manual contains information to guide you through Horsepower™ installations and to help you determine which parts you may need to order as replacements or to supplement reconfigurations.

Each page contains the following sections:

The **Parts List section** contains a lettered list of the essential component parts required for the application's installation. Items required that may vary in size, (i.e. worksurfaces or rails), have not been lettered, and replacements should be ordered directly from the Price List or by contacting Field Services for the correct part.

The **Tools Needed section** contains a list of the installation tools that will be required on site for the proper installation of the application or configuration.

A **Graphic Section** has been included, to the right of the Parts List, depicting images of the component parts with lettered codes that correspond to those in the Parts List. Each part is shown with its associated part number above.

NOTE: Part numbers with an asterisk, i.e. *, after the number require a paint finish code to be added to the end of the pattern number to be orderable as a replacement part. Please refer to the Finish Code listing at the end of this page for the available codes.

NOTE: Part numbers with empty brackets, i.e. (), after the pattern number indicate that a laminate or veneer finish code must be added to the end of the pattern number to be orderable as a replacement part. Please refer to the Finish Code listing in the Antenna™ Workspaces Price List for the available finish codes for those products.

Please note that not all parts are available in all finishes. Finish options available for component parts match those available when ordered with the complete items' pattern number per the Antenna™ Workspaces Price List.

The **Steps section** details step-by-step instructions for the installation of the application selected. Each step includes references to the lettered items noted in the Parts List at the top of the page and in the graphic section.

A **Drawings section** follows the steps section providing detailed assembled and exploded drawings to further assist in installation and in determining replacement parts required.

How to Order Parts

1. Look in this document's bookmarks to locate the configuration which best fits the application.
2. Go to the page where that application is described and thoroughly review all installation instructions to determine the part number(s) needed.
3. Unless otherwise noted, the standard package quantity is one (1). When ordering products where the quantity per package is listed, please indicate the number of packages required in the quantity column of your order.
4. Be sure to add "KR" to the beginning of each part number.
5. Be sure to include any finish codes required to complete the pattern number(s).
6. Complete a Knoll Service order, which can be sent to your Knoll Customer Service Representative.

If you have any questions about the contents of this manual, please call your Customer Service Representative or Field Service at 800-343-5665.

Paint Finish Codes:

111T - Jet Black
112T - Brown
113T - Dark Grey
114T - Folkstone Grey
115T - Medium Grey
116T - Sandstone
117T - Soft Grey
118T - Bright White
611T - Beige Metallic Mist
612T - Medium Metallic Grey
613T - Silver
130T - Dark Red
131T - Slate Blue
146 - Black Wrinkle

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS

When using an electrical furnishing, basic precautions should always be followed, including the following:

DANGER- To reduce the risk of electric shock:

1. Always unplug this furnishing from the electrical outlet before cleaning.
- WARNING** – To reduce the risk of burns, fire, electric shock or injury to persons:
- a) Unplug from outlet before putting on or taking off parts.
 - b) Close supervision is necessary when this furnishing is used by, or near children, invalids, or disabled persons.
 - c) Use this furnishing only for its intended use as described in these instructions. Do not use attachments not recommended by the manufacturer.

- d) Never operate this furnishing if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the furnishing to a service center for examination and repair.
- e) Keep the cord away from heated surfaces.
- f) Never drop or insert any object into any opening.
- g) Do not use outdoors.
- h) Do not operate where aerosol (spray) products are being used or where oxygen is being administered.

WARNING – Risk of Electric Shock:

Connect this furnishing to a properly grounded outlet only. See Grounding Instructions.

GROUNDING INSTRUCTIONS:

- a) For a grounded, cord-connected product rated max 15 amperes and intended for use on a nominal 120-volt supply circuit:

This product is for use on a nominal 120-volt circuit and has a grounding plug that looks like the plug illustrated above. Make sure that the product is connected to an outlet having the same configuration as the plug. No adapter should be used with this product.

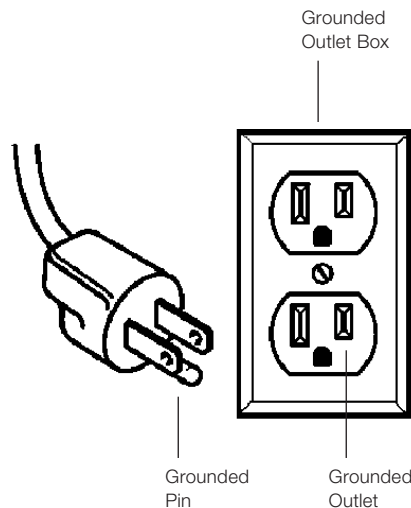
- b) For a permanently connected product:

This product must be connected and disconnected by a Licensed Electrician, approved within jurisdiction.

This product must be connected to a grounded metal, permanent wiring system, or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment-grounding terminal or lead on the product.

USER MAINTENANCE INSTRUCTIONS:

Cleaning the painted surfaces is best accomplished with a soft cloth and mild, non-abrasive household cleaner. All other servicing is to be performed by an authorized representative.



Pattern Numbers Represented:

Independent Horsepower, **YHP1K** _ _

Beam Top Cap, **YCBCC** _ _

Parts List:

M6 x 90mm Flat Head Machine Screw (A)

M6 Hex Nut (B)

M6 x 12mm Button Head Machine Screw (C)

Top Beam

Bottom Beam

End Leg Assembly

Outlet Strip Assembly

Side Cover

Beam Top Cap

Tools Needed:

4mm Allen Wrench

10mm Box Wrench

Rubber Mallet

(A) 3AB8235



(B) 3AB8299



(C) 3AB8207



STEPS

1. Orient the (2) end leg assemblies upside down, with the tabs facing each other.
2. Slide the top beam, also upside down, onto the corresponding tabs on one leg assembly.

3. Follow with the bottom beam, again upside down, onto the corresponding tabs.

Hold the beams in place and repeat steps 2 and 3 for the opposite end leg.

4. Position the M6 hex nuts (B), two at each end leg, between the beams and middle (2) tabs. Thread the M6 x 90mm flat head machine screws (A) downward into the predrilled holes in the bottom beam, through the middle tab

and hex nuts, through the second middle tab and into the top beam, connecting the end legs to the beams. Tighten the hex nuts against the end legs to strengthen the connections. See detail drawing for correct positioning of the M6 Hex Nuts (B).

5. Install the casters by pressing the caster stems into the inserts at the bottom of the leg assemblies. Use a rubber mallet, if necessary.

OUTLET STRIP INSTALLATION

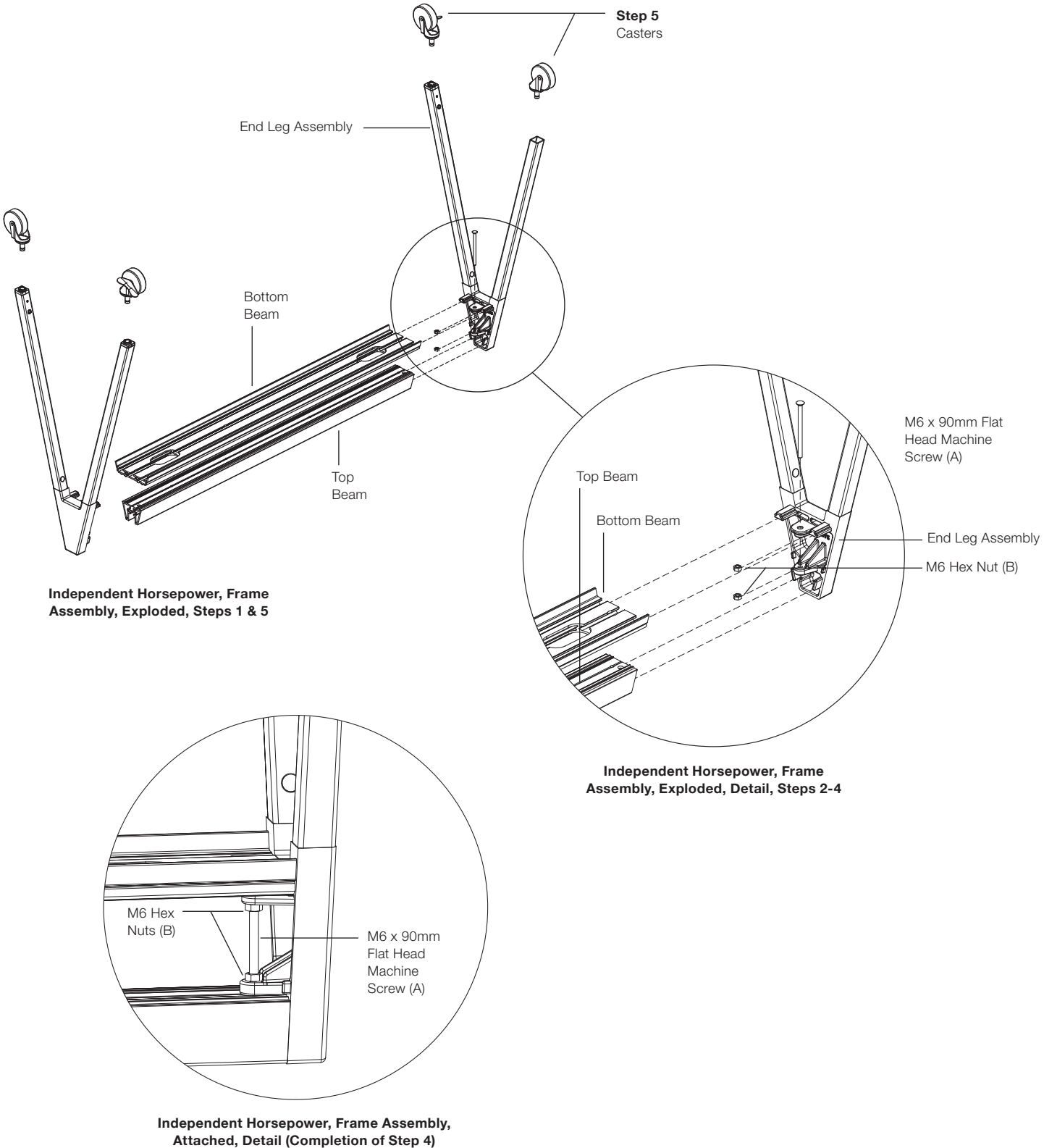
Note: Steps 6 & 7 may be skipped if power is not specified.

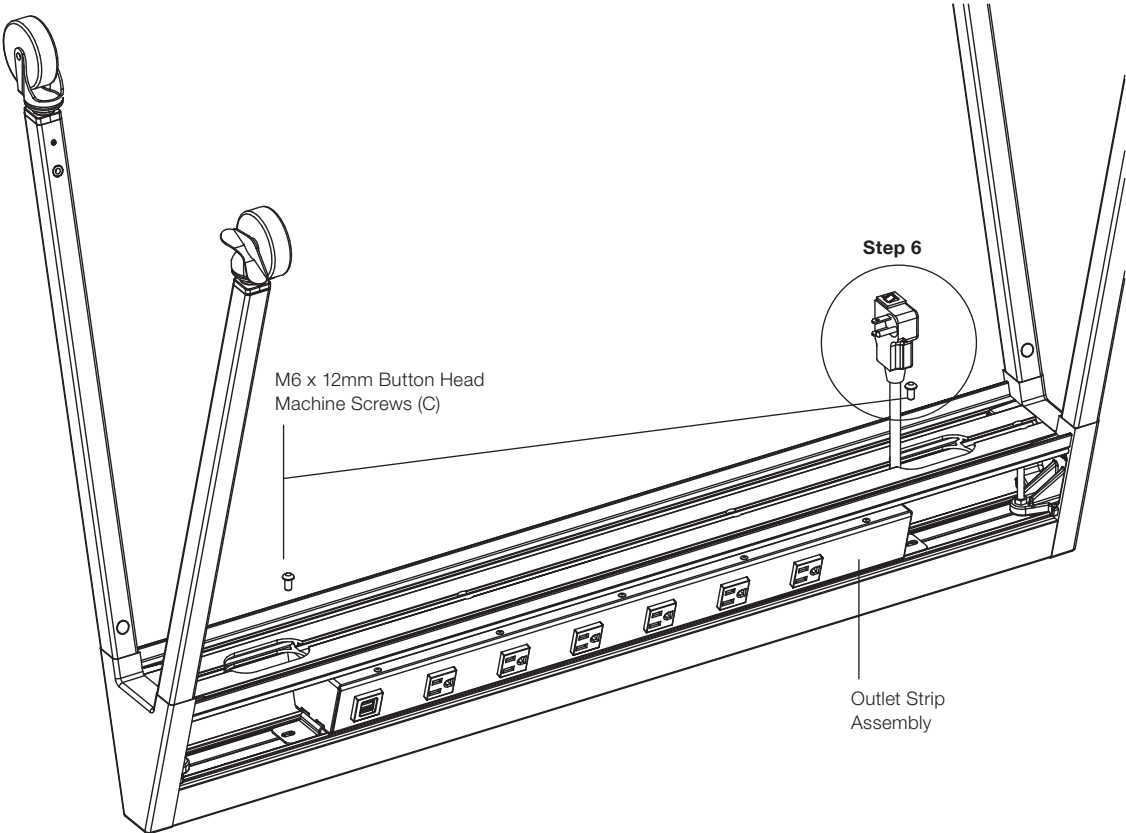
6. With the Horsepower assembly still upside down, feed the electrical plug through the bottom beam and position the outlet strip assembly between the bottom and top beams.

7. Center the outlet strip so that its tabs align with the predrilled holes in the top beam and attach using (2) M6 x 12mm button head machine screws (C).

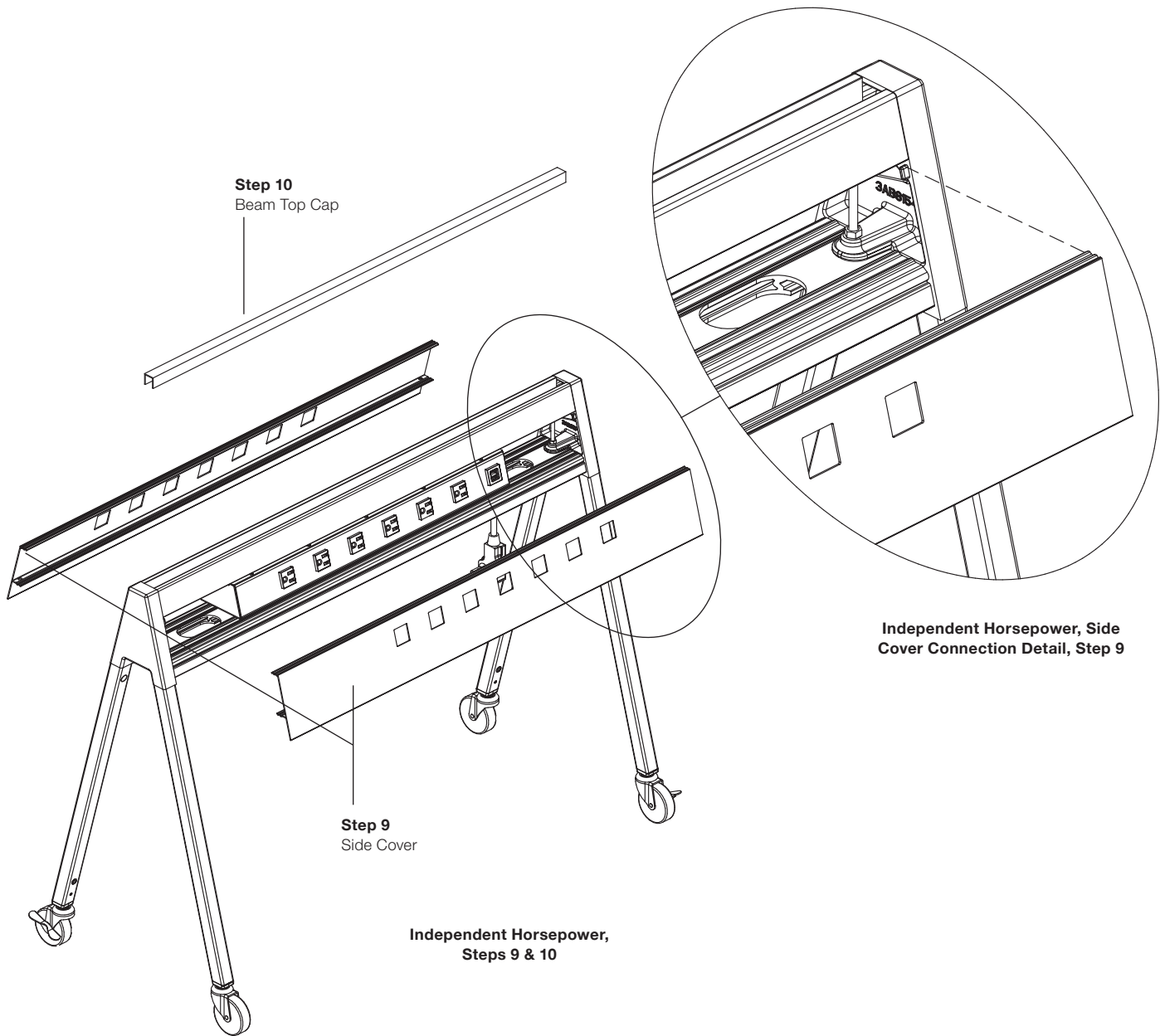
Note: It is critical to measure the outlet strip location to confirm it is centered so that the corresponding covers secure properly.

8. Turn the Horsepower assembly right side up.
9. Install side covers on each side by securing the top edge over the small tabs on each end leg assembly, then snap the bottom edge into place.
10. Position the beam top cap into the top beam.





Independent Horsepower Power Strip Installation, Steps 6 & 7



Pattern Numbers Represented:

Sapper Horsepower Mount for 20lb.
Monitor, **SAPMAHPSL124K**

Parts List:

Universal Parts:

Mast (A)
Mast Cap (B)
Height Adjustment Knob (C)
Cord Manager Clip (D)
Stop Screw (E)
½-13 x 1.5" Flat Head Socket Screw (F)
M6-1 x 14mm Flat Head Machine Screw (G)
Base Mounting Bracket (H)
M6 Spring Nut (I)
Top Mount Bracket Bushing (J)
Top Mounting Bracket (K)
M6-1 x 25mm Flat Head Machine Screw (L)
Sleeve Mount (M)
Fast Release Pin w/ Anti-theft Set Screw (N)

Single Mast Monitor Mount Parts:

Movement Joint Assembly (O)

Horsepower Assembly

Tools Needed:

5mm Allen Wrench
5/16" Allen Wrench
5/64" Allen Wrench
1/16" Allen Wrench
Power driver with a Phillips #2 bit
Screwdriver or Allen Wrench, as required,
for customer supplied screws (to
attach monitor to monitor plate)

(A) 5AD012703



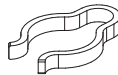
(B) 5AD0109



(C) 5AD0111*



(D) 5AD0144



(E) 5AD0221



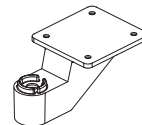
(F) 5AD0164



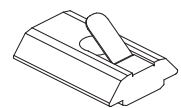
(G) 3AB4056



(H) 3AB8181



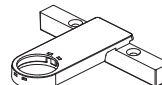
(I) 3AB4021



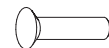
(J) 5AD0117



(K) 3AB8271



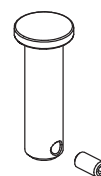
(L) 3AB4055



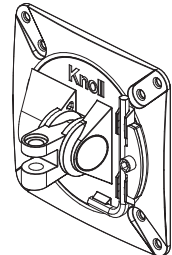
(M) 5AD0121



(N) 5AD0156



(O) 5AD0148



STEPS

CONNECT THE MAST TO THE HORSEPOWER ASSEMBLY:

1. Insert four M6 spring nuts (I) into the bottom beam of the pre-assembled Horsepower assembly with the spring tabs facing upward (two nuts per channel.)
2. Align the spring nuts (I) with the holes in the base mounting bracket (H) and attach the base mounting bracket (H) using (4) M6-1 x 14mm flat head machine screws (G).
3. Install top mounting bracket bushing (J) by aligning snap tabs and mating slots. Press and snap into place.
4. Insert two M6 spring nuts (I) into the top beam of the Horsepower assembly with the spring tabs facing downward.
5. Align the spring nuts (I) with the holes in the top mounting bracket (K) and attach the top mounting bracket (K) to the spring nuts (I) with (4) M6-1 x 25mm flat head machine screws (L).

Note: Be sure the brackets are vertically aligned before tightening the screws.

6. Insert the mast (A) through the hole in the top mounting bracket (K) and press firmly onto the curved ribs of the base mounting bracket (H).
7. Attach the mast (A) to the base mounting bracket with a ½-13 x 1.5" Flat Head Socket Screw (F).

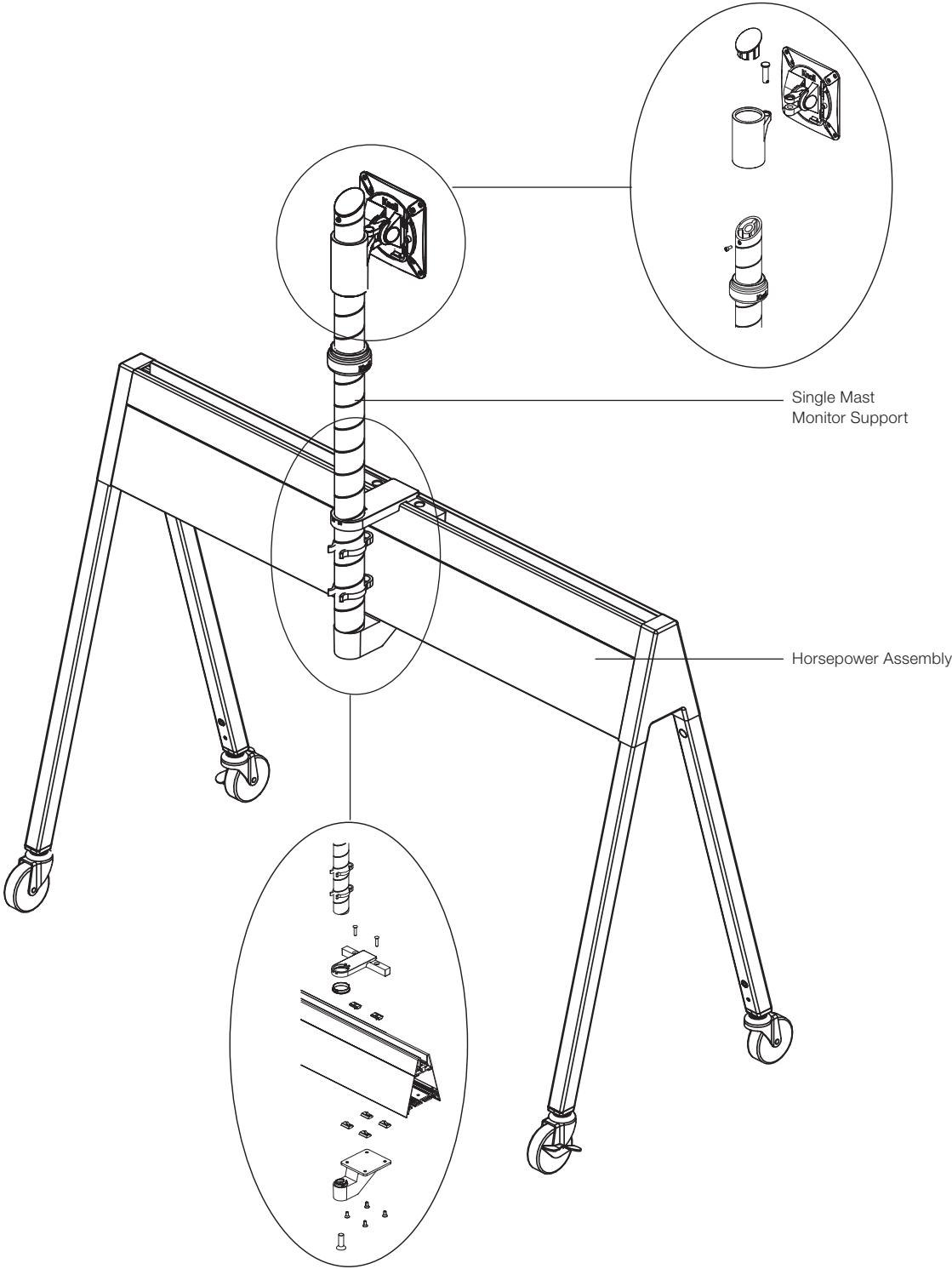
CONNECT THE MONITOR MOUNT TO THE MAST:

8. Remove monitor base and hardware, from the monitor. Retain all hardware.
9. Remove the mast cap (B) and the stop screw (E) from the top of the mast (A).
10. Rotate the height adjustment knob (C) to the desired height. (Note: The Knoll logo on the adjustment knob should be face up.)
11. Slide the sleeve mount (M) onto and down the mast (A) until it rests securely on the height adjustment knob (C).
12. Reinstall the mast cap (B) and the stop screw (E).
13. Place movement joint (O) against back of monitor or television, with Knoll logo toward top of monitor and attach the VESA plate using appropriate customer supplied hardware. VESA plate can accommodate 75 mm or 100 mm hole patterns.

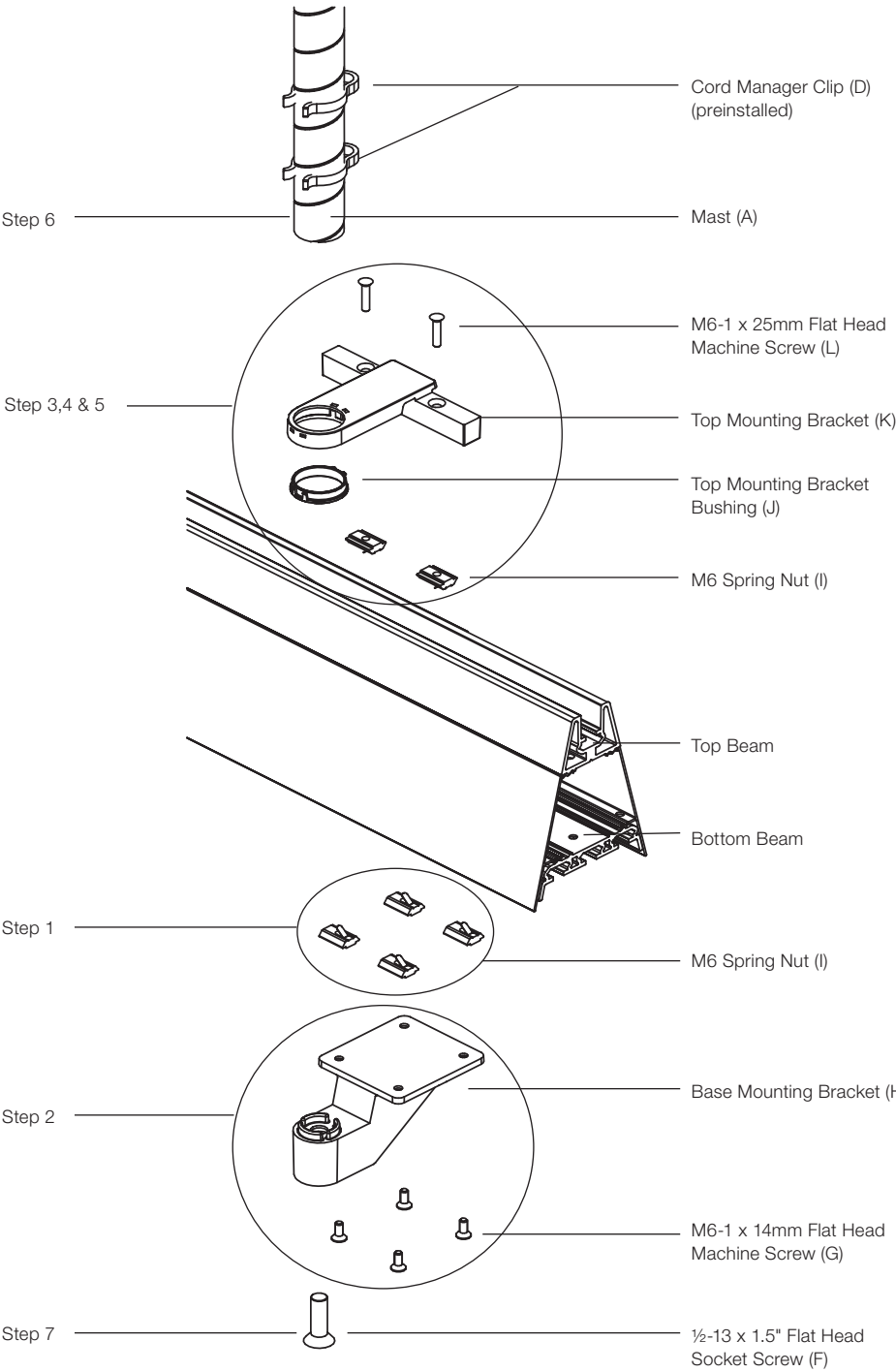
Note: Movement joint can hold up to 20lbs.

Note: Check VESA compliancy and hole pattern on monitor or television as Knoll monitor solutions are designed to work with VESA compliant monitors only. The Knoll VESA plate can accommodate 75mm or 100mm hole patterns. Knoll movement joints do not ship with screws and are designed to accept an M4 or M5 screw; length is dependent on the specific monitor or television and screw should be tested prior to installation to ensure correct length; Knoll is not responsible for use of incorrect screws.

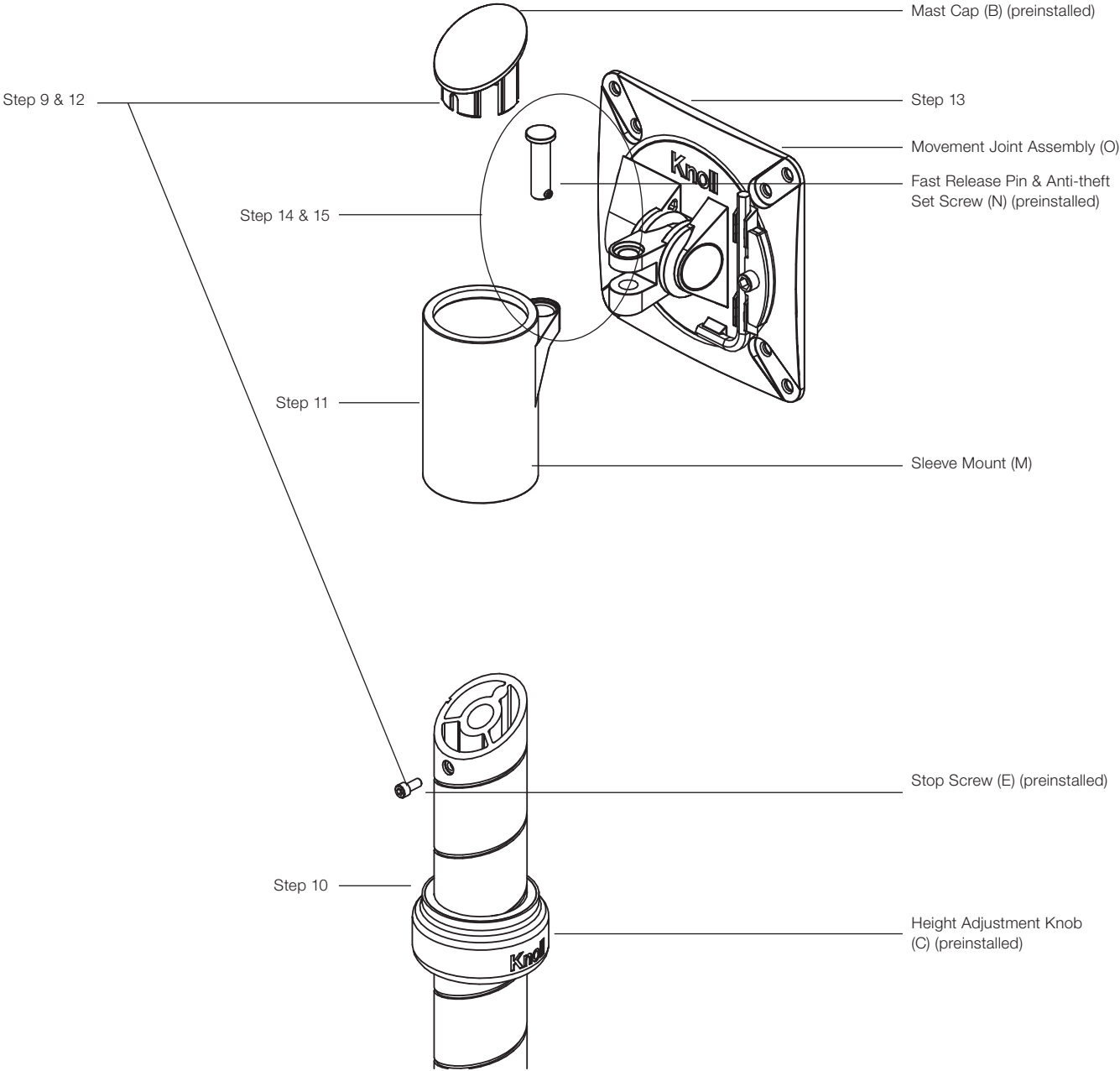
14. Attach monitor plate (with movement joint) to sleeve arm (M) by inserting fast release pin (N).
15. **Optional:** To activate the anti-theft feature, back the set screw at the bottom of the fast release pin partially out with a 1/16" Allen wrench.



Sapper Monitor Support, Single Mast (20lb), Installed



Sapper Single Mast Monitor Support,
Lower Detail, Exploded



Sapper Single Mast Monitor Support
(20lb.), Upper Detail, Exploded

Pattern Numbers Represented:

Sapper Horsepower Mount for 30lb. Monitor (100x100), **SAPMAHP224100K**

Sapper Horsepower Mount for 30lb. Monitor (200x200), **SAPMAHP224200K**

Sapper Horsepower Mount for 30lb. Monitor (400x400/600), **SAPMAHP224400K**

Parts List:

Universal Parts:

- Mast (A)
- Mast Cap (B)
- Height Adjustment Knob (C)
- Cord Manager Clip (D)
- Stop Screw (E)
- ½-13 x 1.5" Flat Head Socket Screw (F)
- M6-1 x 14mm Flat Head Machine Screw (G)
- Base Mounting Bracket (H)
- M6 Spring Nut (I)
- Top Mount Bracket Bushing (J)
- Top Mounting Bracket (K)
- M6-1 x 25mm Flat Head Machine Screw (L)
- Sleeve Mount (M)
- Fast Release Pin w/ Anti-theft Set Screw (N)

Double Mast Monitor Mount Parts:

- VESA Assembly Plate (100x100) (O)
- VESA Assembly Plate (200x200) (P)
- VESA Assembly Plate (400x400/600) (Q)

Horsepower Assembly

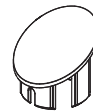
Tools Needed:

- 5mm Allen Wrench
- 5/16" Allen Wrench
- 5/64" Allen Wrench
- 1/16" Allen Wrench
- Power driver with a Phillips #2 bit
- Screwdriver or Allen Wrench, as required, for customer supplied screws (to attach monitor to monitor plate)

(A) 5AD012703



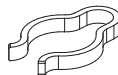
(B) 5AD0109



(C) 5AD0111*



(D) 5AD0144



(E) 5AD0221



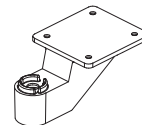
(F) 5AD0164



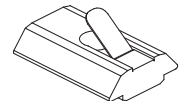
(G) 3AB4056



(H) 3AB8181



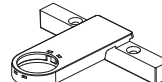
(I) 3AB4021



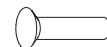
(J) 5AD0117



(K) 3AB8271



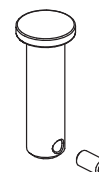
(L) 3AB4055



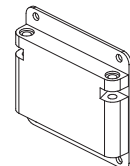
(M) 5AD0121



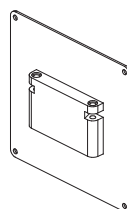
(N) 5AD0156



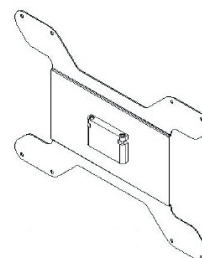
(O) SAP HP VESA 100100



(P) SAP HP VESA 200200



(Q) SAP HP VESA 400400



STEPS

CONNECT THE MAST TO THE HORSEPOWER ASSEMBLY:

1. Insert four M6 spring nuts (I) into the bottom beam of the pre-assembled Horsepower assembly with the spring tabs facing upward (two nuts per channel.)
 2. Align the spring nuts (I) with the holes in the base mounting bracket (H) and attach the base mounting bracket (H) using (4) M6-1 x 14mm flat head machine screws (G).
 3. Install top mounting bracket bushing (J) by aligning snap tabs and mating slots. Press and snap into place.
 4. Insert two M6 spring nuts (I) into the top beam of the Horsepower assembly with the spring tabs facing downward.
 5. Align the spring nuts (I) with the holes in the top mounting bracket (K) and attach the top mounting bracket (K) to the spring nuts (I) with (4) M6-1 x 25mm flat head machine screws (L).
- Note:** Be sure the brackets are vertically aligned before tightening the screws.
6. Insert the mast (A) through the hole in the top mounting bracket (K) and press firmly onto the curved ribs of the base mounting bracket (H).

7. Attach the mast (A) to the base mounting bracket with a ½-13 x 1.5" Flat Head Socket Screw (F).
8. Repeat steps 1-6 for the second mast, positioning the second top mounting bracket directly adjacent to the first.

CONNECT THE MONITOR MOUNT TO THE MAST:

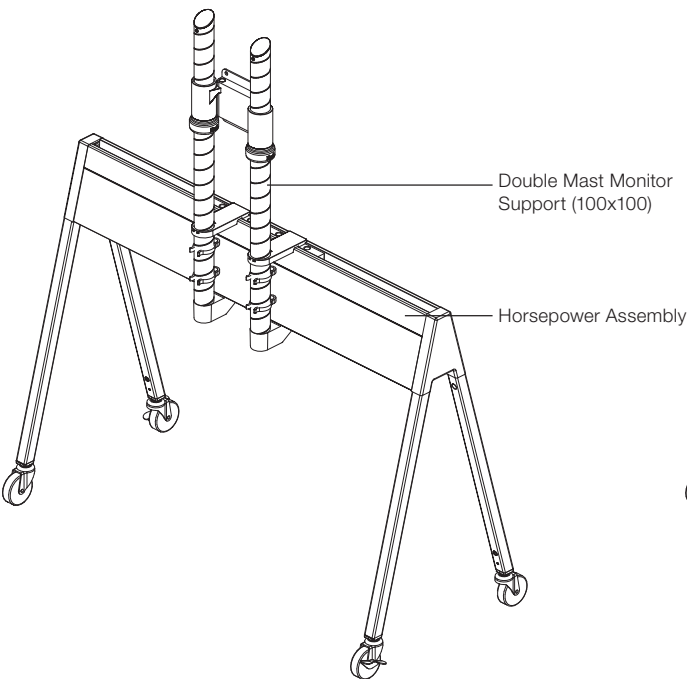
9. Remove monitor base and hardware, from the monitor. Retain all hardware.
10. Remove the mast caps (B) and the stop screws (E) from the top of the masts (A).
11. Rotate the height adjustment knobs (C) to the desired height. (Note: The Knoll logo on the adjustment knobs should be face up.)
12. Slide the sleeve mount (M) onto and down the masts (A) until they rest securely on the height adjustment knobs (C).
13. Reinstall the mast caps (B) and the stop screw (E).

14. Attach the VESA plate to the VESA bracket using (4) 20 x 5/8" machine screws. Place the VESA plate assembly (O, P, or Q) against back of monitor or television and attach using appropriate customer supplied hardware. VESA plates can accommodate 100mm, 200mm, or 400mm hole patterns.

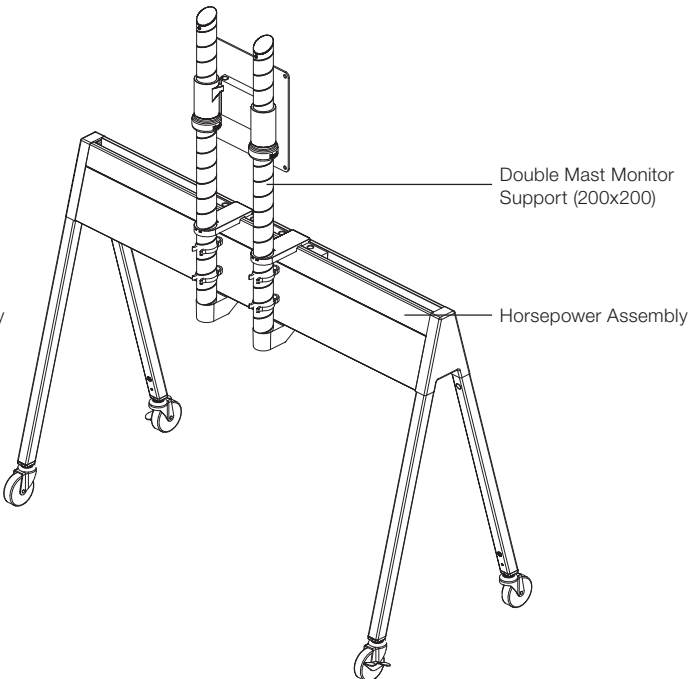
Note: VESA plates can hold up to 30lbs.

Note: Check VESA compliancy and hole pattern on monitor or television as Knoll monitor solutions are designed to work with VESA compliant monitors only. Knoll VESA plates do not ship with screws and are designed to accept an M4 or M5 screw; length is dependent on the specific monitor or television and screw should be tested prior to installation to ensure correct length; Knoll is not responsible for use of incorrect screws.

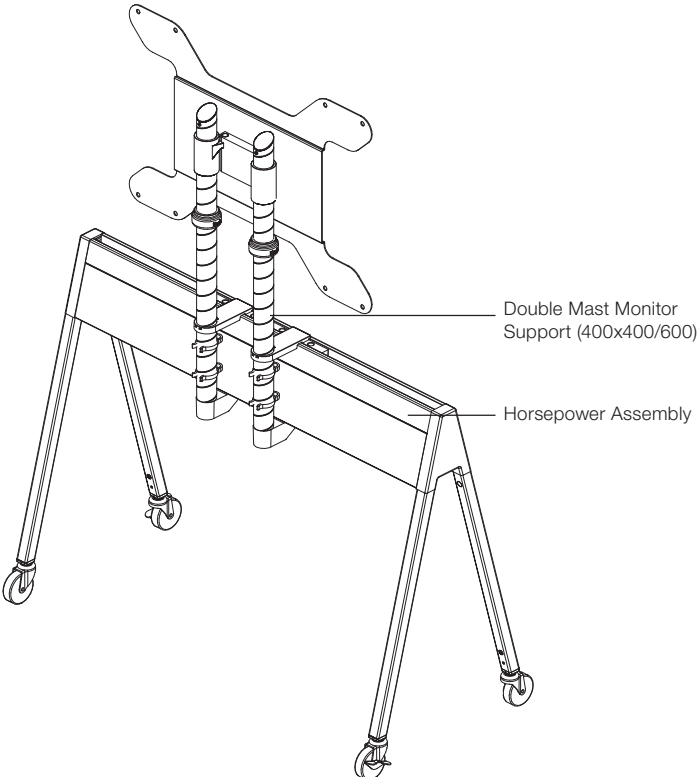
15. Attach VESA plate (O, P, Q) to sleeve arms (M) by inserting fast release pins (N).
16. **Optional:** To activate the anti-theft feature, back the set screw at the bottom of the fast release pin partially out with a 1/16" Allen wrench.



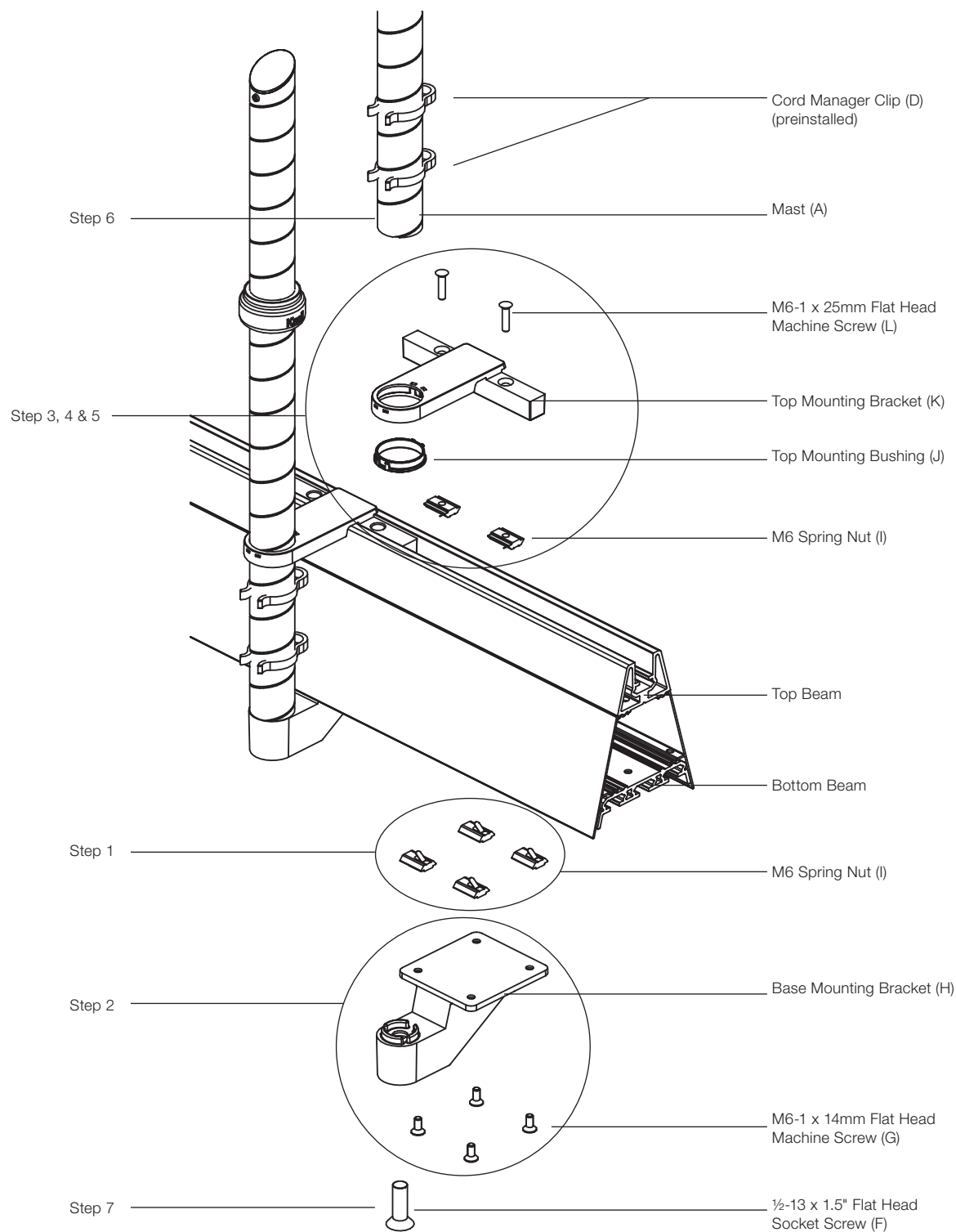
**Sapper Monitor Support,
Double Mast (100x100), Installed**



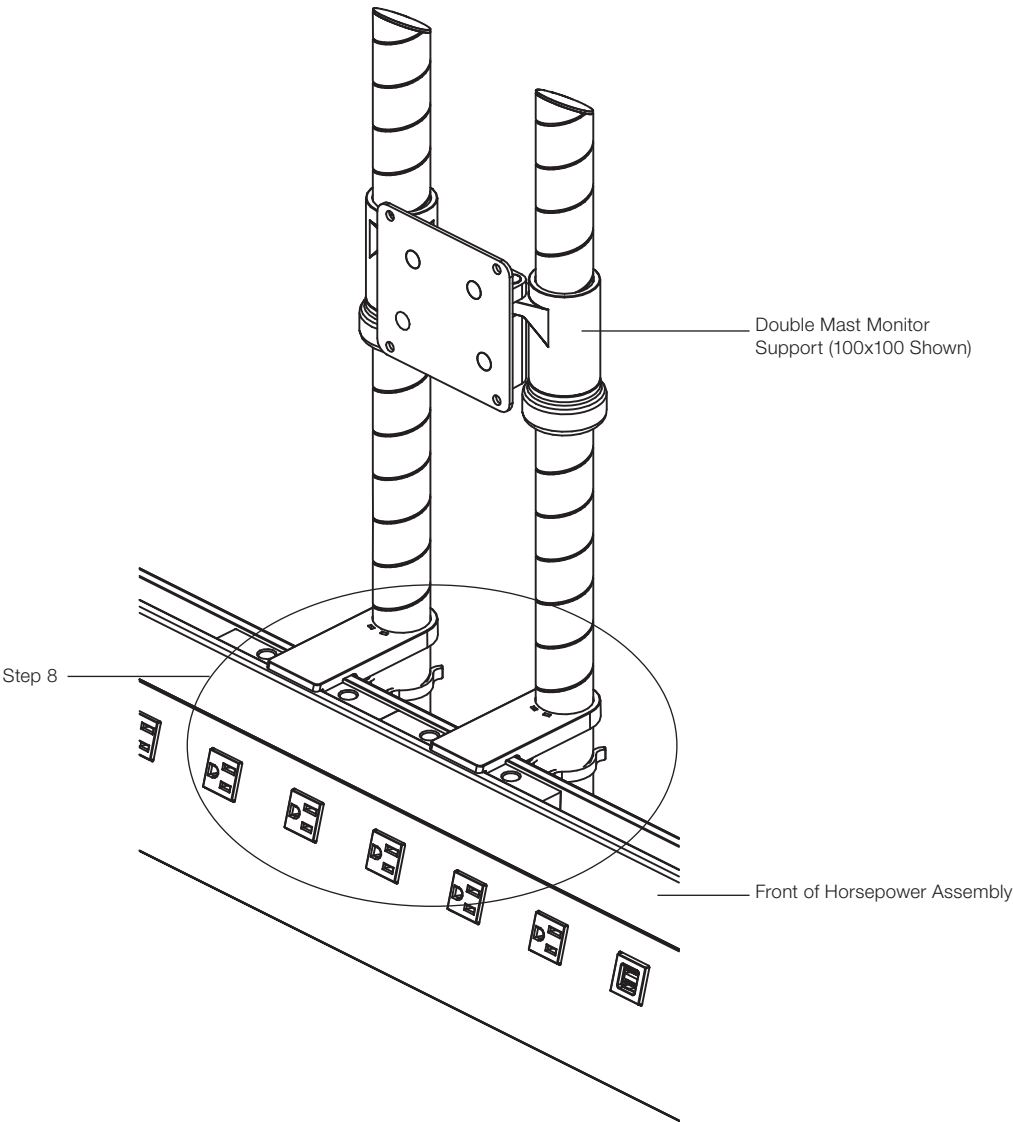
**Sapper Monitor Support,
Double Mast (200x200), Installed**



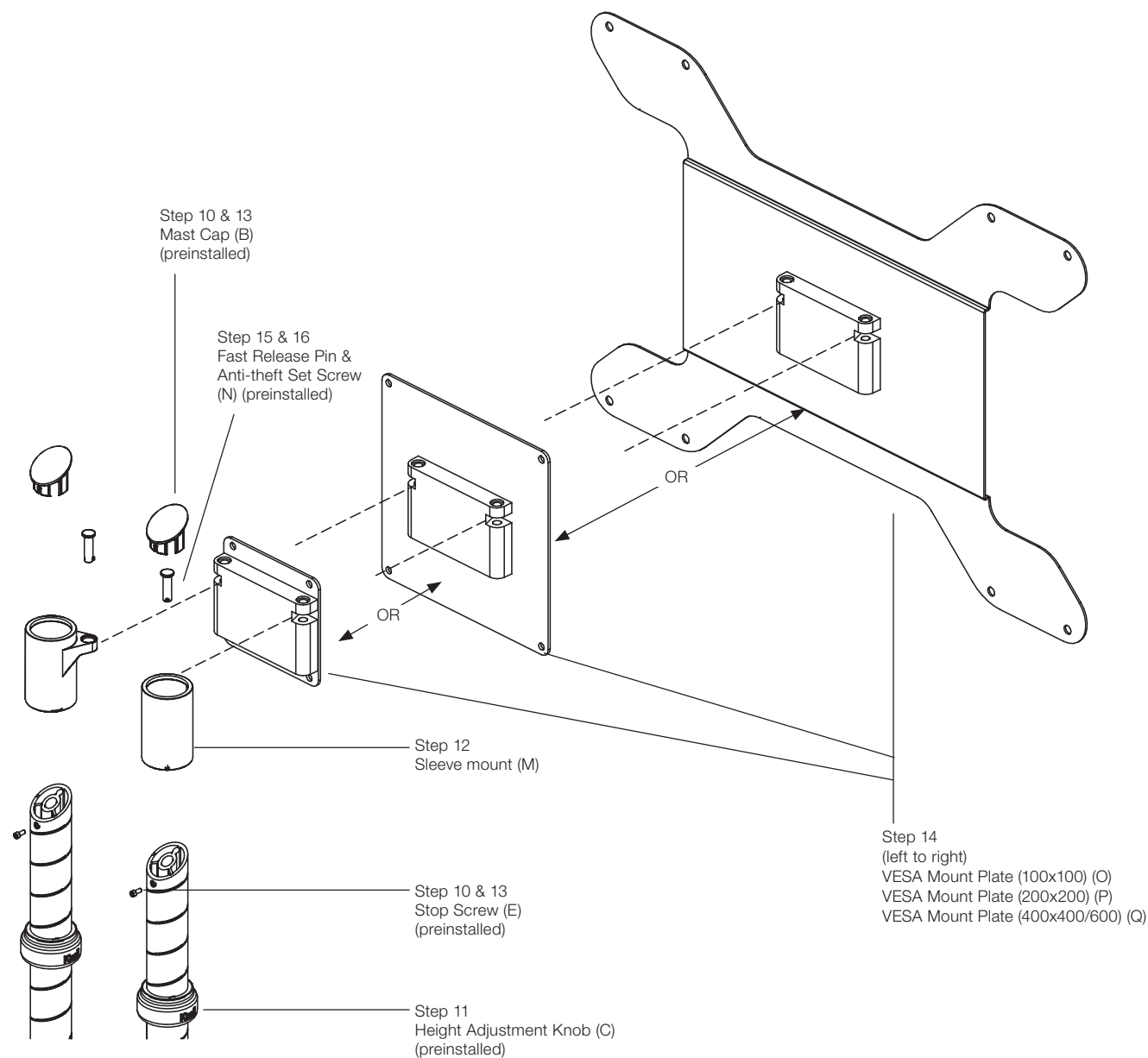
**Sapper Monitor Support,
Double Mast (400x400/600), Installed**



Sapper Double Mast Monitor Support,
Lower Detail, Exploded View



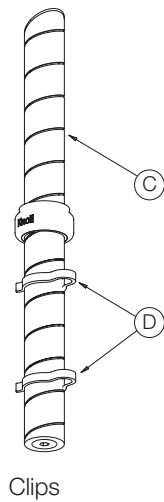
Sapper Double Mast Monitor Support,
Installed Front Axonometric View (100x100 shown)



**Sapper Double Mast Monitor Support,
Upper Detail, Exploded View**

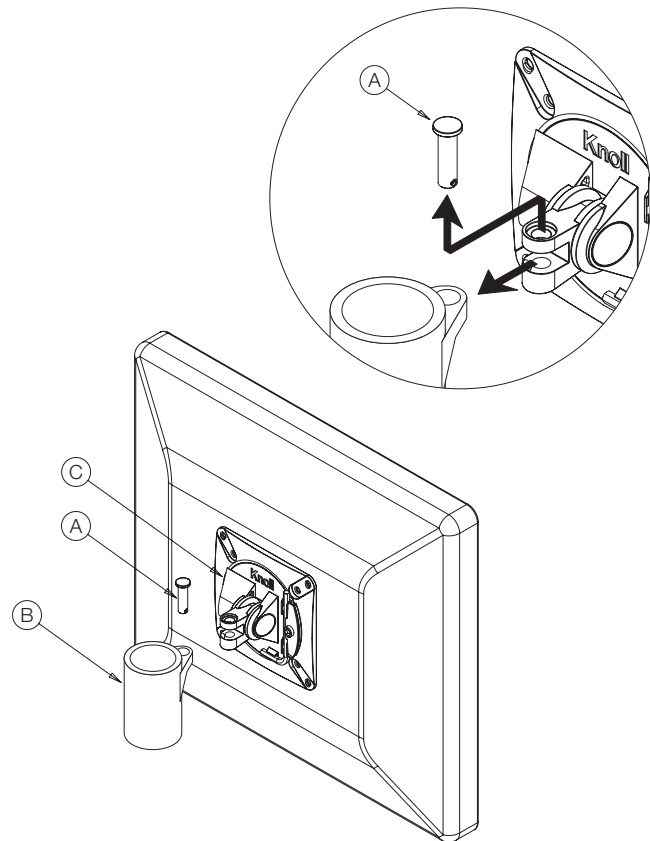
CABLE MANAGEMENT CLIP(S)

Manage cables down mast (C) and install cable management clips (D) by snapping clip (D) over cables and onto mast (C). Please note there will be one clip for 8" masts and two clips for all masts 12" and longer.



FAST RELEASE

1. Fast release functionality allows rapid removal of monitor and movement joint. Remove the fast release pin (A) from the arm assembly (B), disconnecting the movement joint (C).
2. To reinstall, position movement joint on monitor arm and insert fast release pin (A). When fully seated, pin should be flush.



TILT AND ROTATION FRICTION ADJUSTMENT

Tools Needed:

Allen Wrench (in inches)

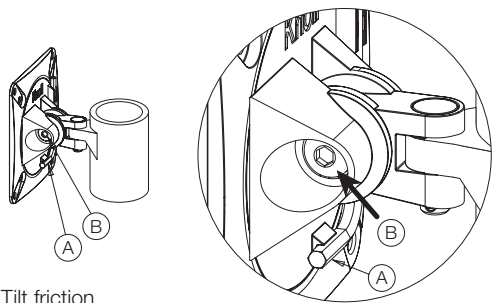
- Tilt friction - $\frac{3}{16}$ " (Included on Monitor Plate)
- Rotation friction - $\frac{3}{16}$ " (C) (Included on Monitor Plate)

Tilt friction:

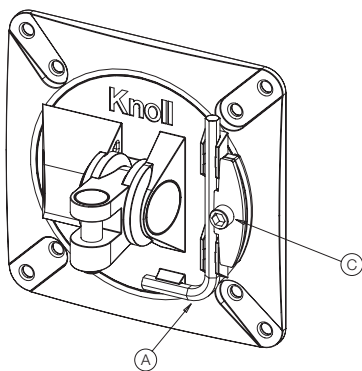
To increase friction, insert Allen wrench (included on each monitor plate) (A) into screw (B) and turn clockwise. To reduce tilt friction, turn screw (B) counterclockwise. Adjust in very small increments.

Rotation friction:

To increase friction, insert Allen wrench (A) (included on each monitor plate) into screw (C) and turn clockwise. Adjust in very small increments.



Tilt friction



Rotation friction

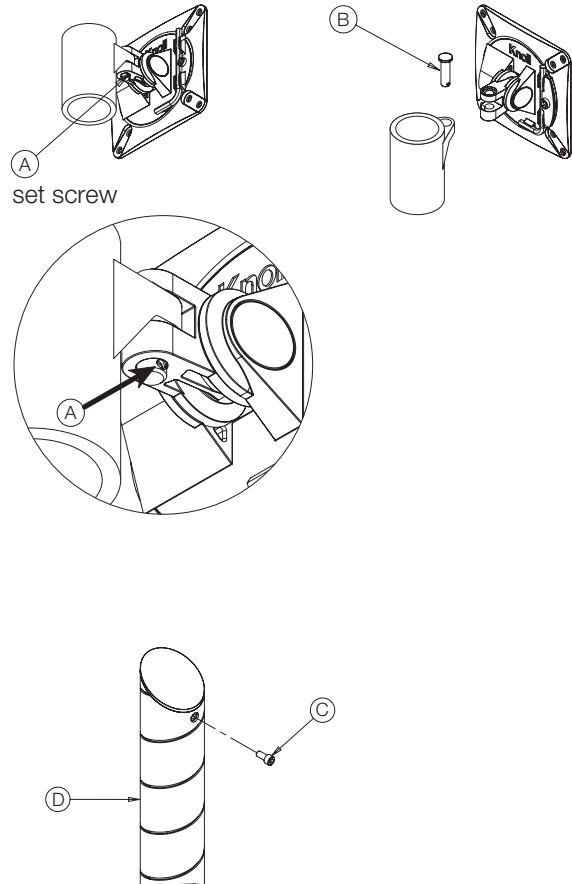
ANTI-DISLODGEEMENT AND THEFT DETERRENCE

Tools Needed:

Allen Wrench (in inches)

- Anti-theft - $\frac{1}{16}$ " (A)

1. Sapper monitor arms have anti-theft features. A small set screw (A) resides inside the lower end of the fast release pin (B). To activate anti-theft feature, use a $\frac{1}{16}$ " Allen wrench and back set screw (A) partially out of fast release pin (B). This prevents fast release function.
2. Also, the stop screw (C) at the top of the mast (D) prevents monitor from being removed.



set screw

Pattern Numbers Represented:

Beams, **YHP1B** _
 Beam Covers, **YHP1C** _ _
 End Legs, **YHP1A** _ _
 Intermediate Legs, **YHP1M** _
 Beam Top Cap, **YCBCC** _ _

Parts List:

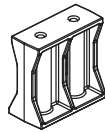
Support Pillar (A)
 M6 x 90mm Flat Head Machine Screw (B)
 M6 Spring Nut (C)
 M6 x 16mm Flat Head Machine Screw (D)
 M6 Hex Nut (E)

Top Beam
 Bottom Beam
 End Leg Assembly
 Intermediate Leg Assembly
 Side Cover
 Beam Top Cap

Tools Needed:

4mm Allen Wrench
 10mm Box Wrench
 Rubber Mallet

(A) 3AB8230



(B) 3AB8235



(C) 3AB4021



(D) 3AB8169



(E) 3AB8299



STEPS

1. With all components oriented upside down, install (1) support pillar (A) centered between each top and bottom beam pair, using (2) M6 x 90mm flat head machine screws (B) per pillar.

Note: Beams 48"W or less do not have support pillars at the center of the beam, only at beam joint of the linking sections.

2. Align linking sections, and install (1) support pillar (A) at each joint of the linking sections, using (2) M6 x 90mm flat head machine screws (B) per pillar.
3. Insert (4) M6 spring nuts (C) into the bottom beams in the outermost slots, (2) on each side of the seam between the linked segments.
4. Place the inverted intermediate leg assembly over the spring nuts, so the holes in the bridging plate align with the spring nuts (C), and the leg is centered on the seam. Attach with (4) M6 x 16mm flat head machine screws (D).
5. Slide one end leg assembly, upside down, onto the linked beam assembly, so the tabs on the leg assembly are inserted into the slots in the bottom and top beam. Repeat for the opposite end of the beam assembly.
6. Position the M6 hex nuts (E), two at each end leg, between the beams and middle (2) tabs. Thread the M6 x 90mm flat head machine screws (B) downward into the predrilled holes in the bottom beam, through the middle tab and hex nuts, through the second middle tab and into the top beam, connecting the end legs to the beams. Tighten the hex nuts against the end legs to strengthen the connections. See detail drawing for correct positioning of the M6 hex nuts (E).

7. Install the glides by threading them into the inserts at the bottom of the leg assemblies.

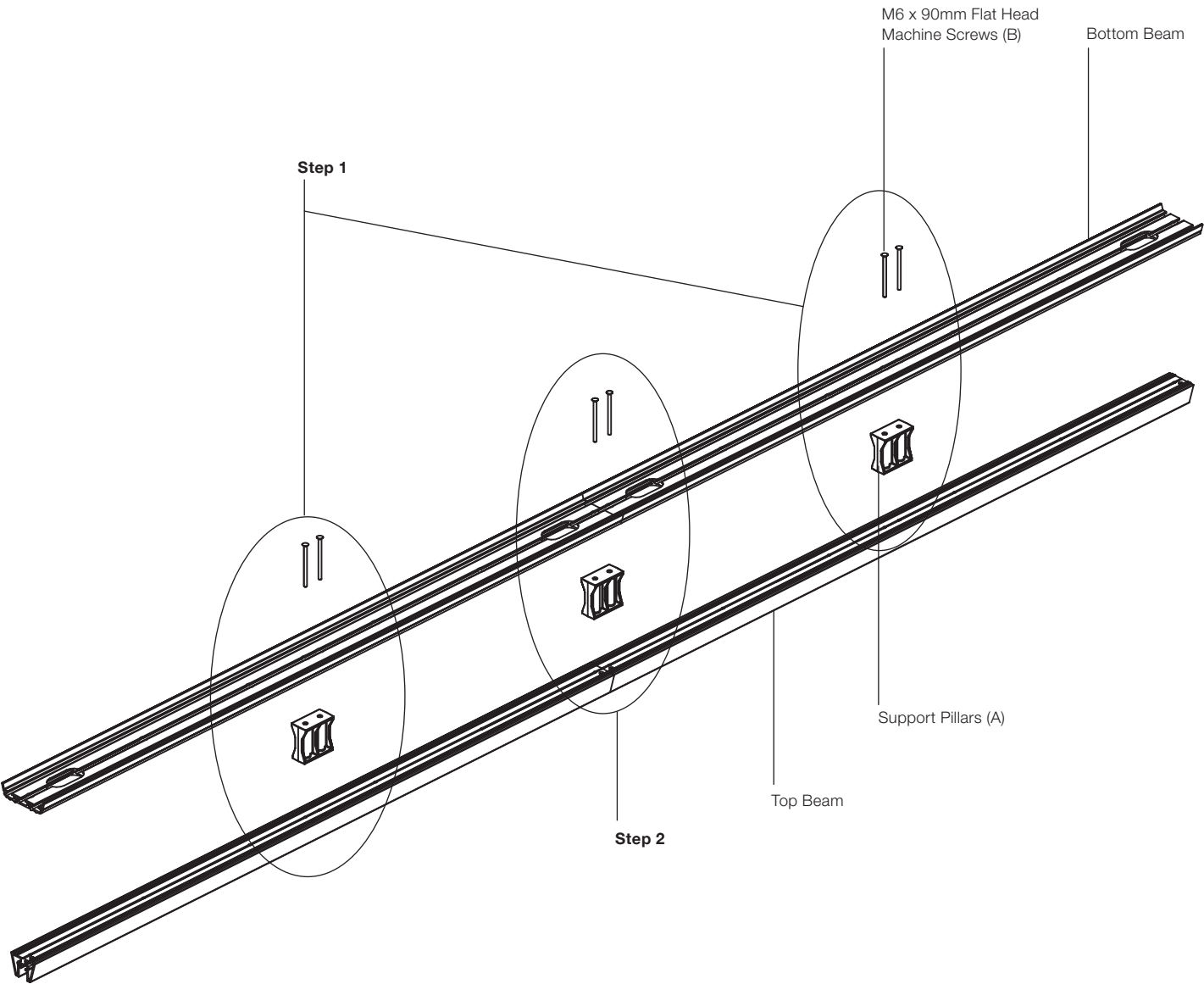
Note: If Horsepower assemblies are to be powered, please refer to electrical instruction pages as this point; if not powered please continue as follows.

8. Turn the Horsepower assembly right side up.

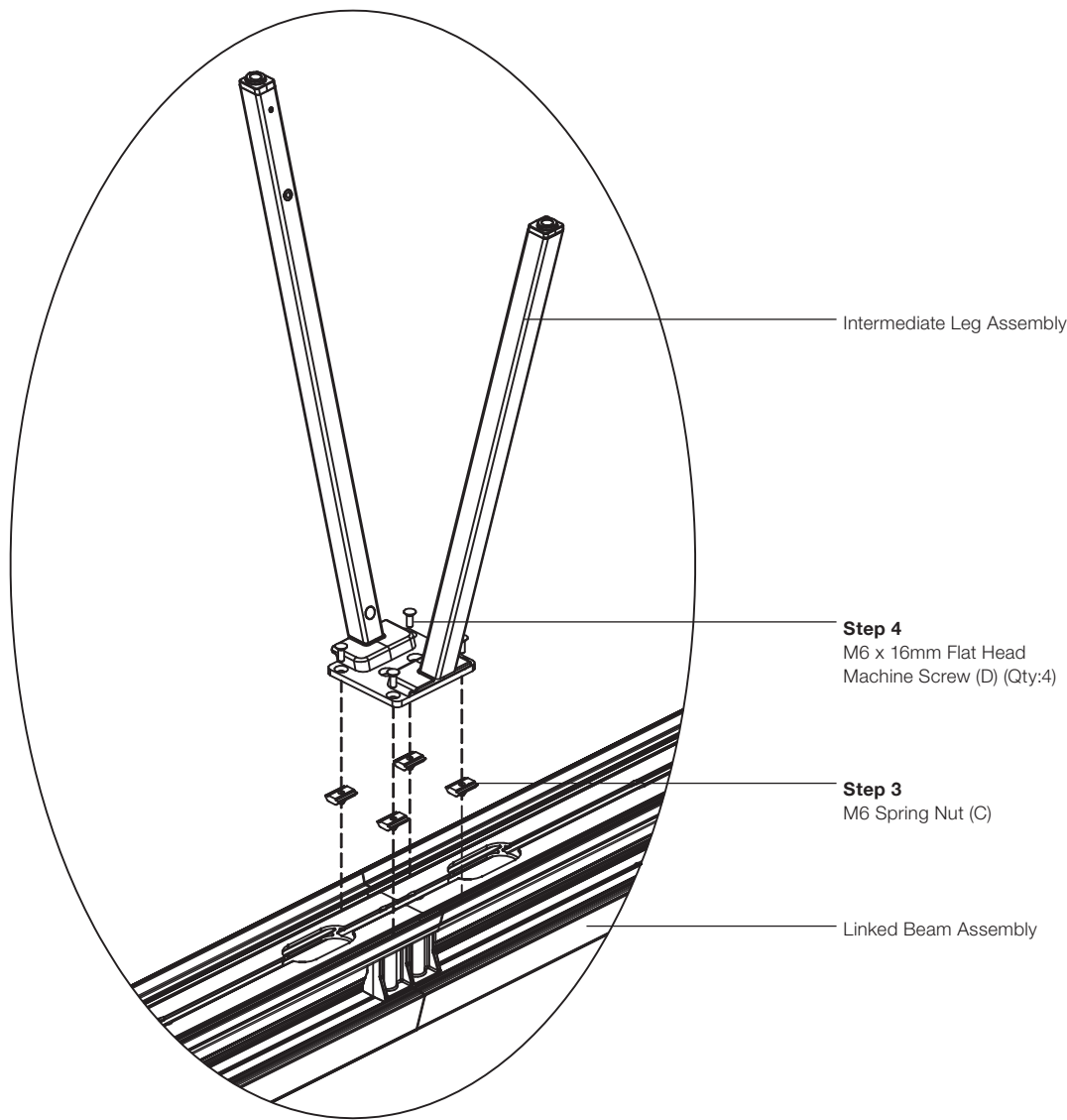
9. Install side covers on each side by securing the top edge over the small tabs on each end leg assembly, then snap the bottom edge into place.

Note: There are no placement tabs in the intermediate leg assembly. Seat the top edge of the side cover against the underside of the top beam, then snap the bottom edges into place.

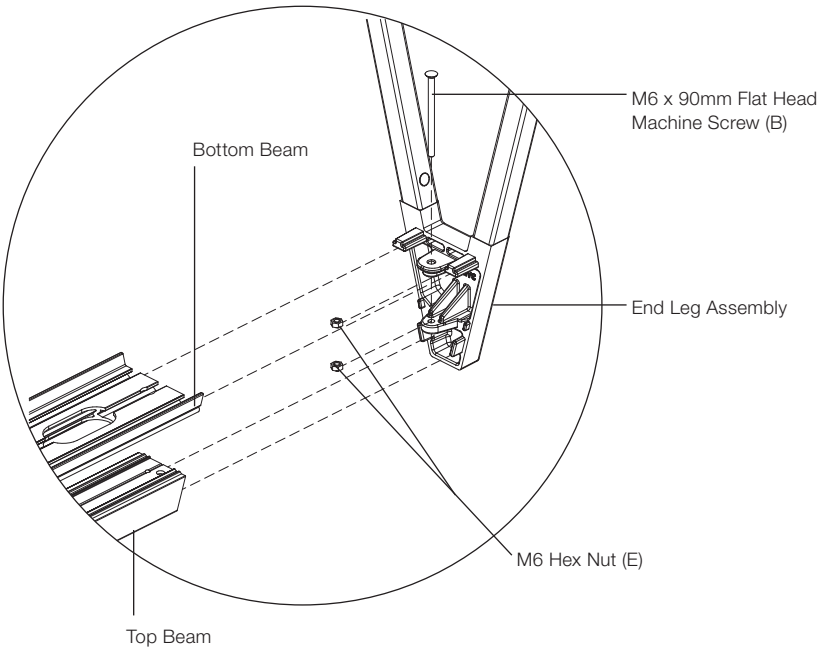
10. Position the beam top cap into the top beam.



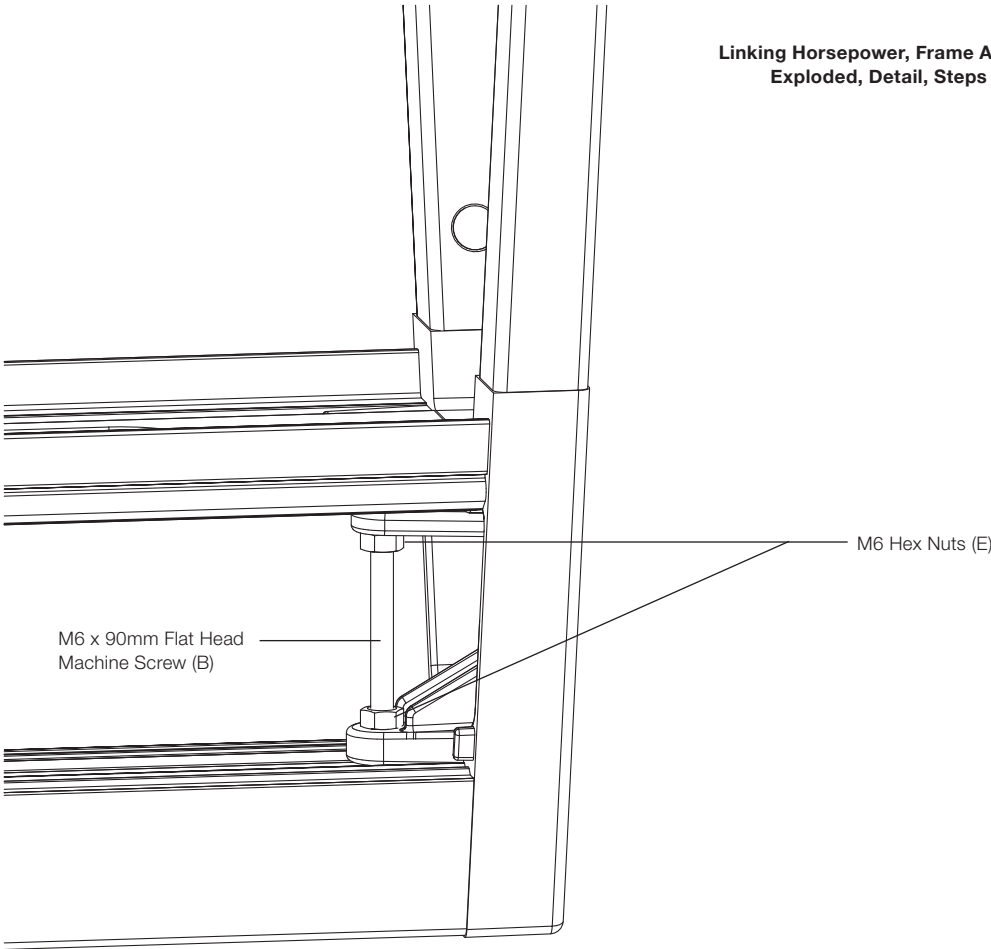
Linking Horsepower, Beam Assembly, Exploded, Steps 1 & 2



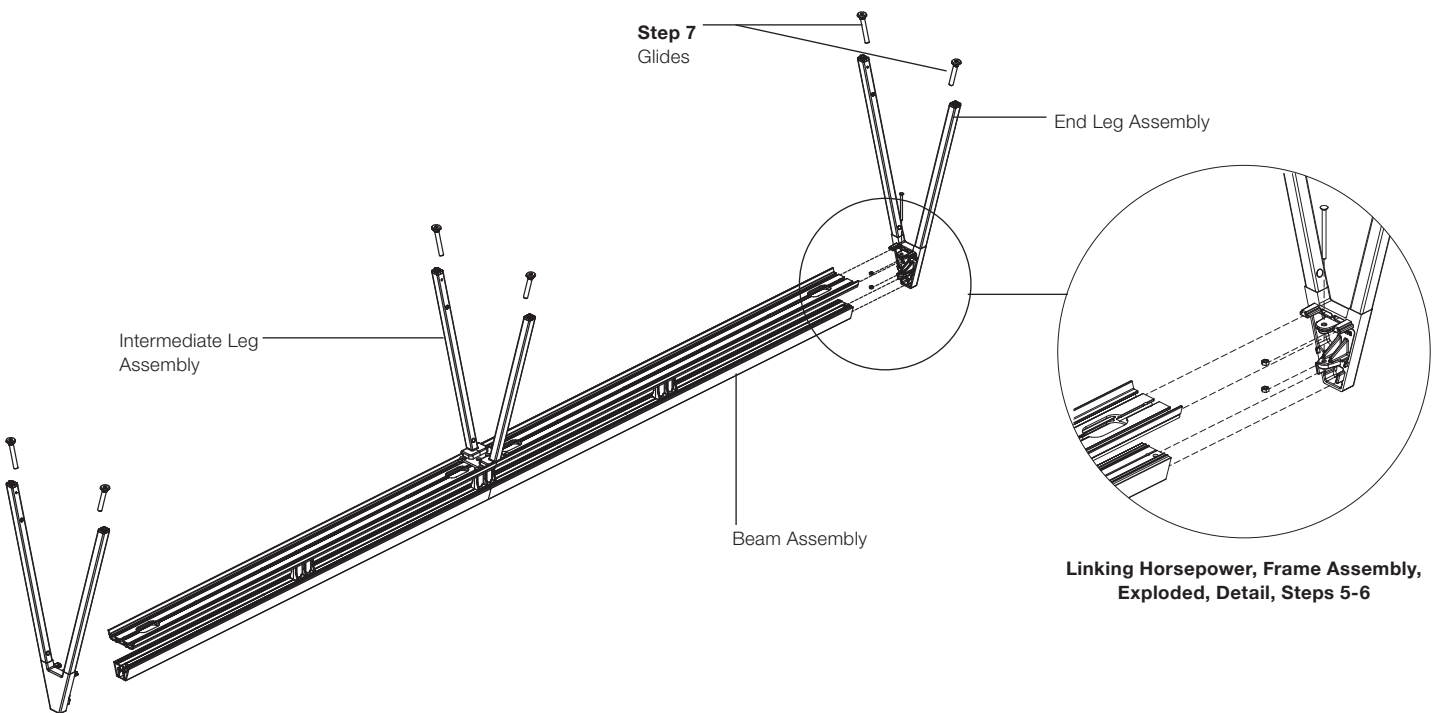
Linking Horsepower, Intermediate Leg Attachment, Exploded,
Steps 3 & 4



**Linking Horsepower, Frame Assembly,
Exploded, Detail, Steps 5-6**

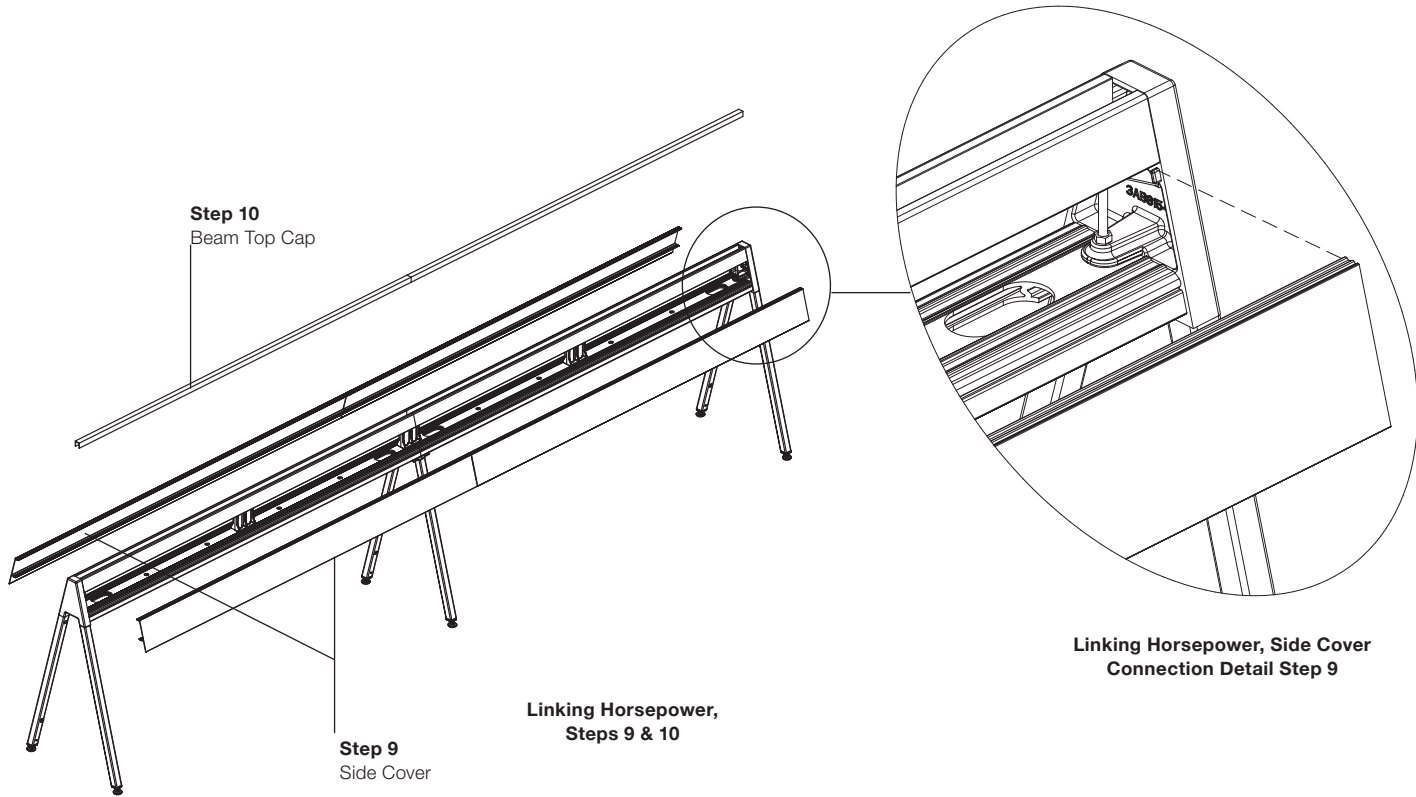


**Linking Horsepower, Frame Assembly,
Detail (Completion of step 6)**



Linking Horsepower, Frame Assembly, Exploded, Steps 5-7

Linking Horsepower, Frame Assembly, Exploded, Detail, Steps 5-6



Linking Horsepower, Steps 9 & 10

Linking Horsepower, Side Cover Connection Detail Step 9

Pattern Numbers Represented:

Antenna Desk Adapter Brackets, **YHP1DAK (28)**

Parts List:

Support Bracket (A)

Cradle (B)

Cradle Clamp Bracket (C)

M6 Spring Nut (D)

M6 x 16mm Flat Head Machine Screw (E)

¼-20 x 5/8" Flat Head Machine Screw (F)

#14 x 1" Flat Head Wood Screw (G)

Antenna Desk End Leg for Desk or Return (Desk Height)

Antenna Starter Rails with End Caps

Antenna Desk Top

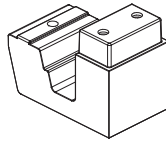
Horsepower Assembly

Tools Needed:

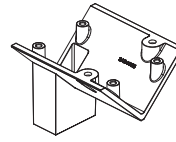
Antenna Install Gauge

Power Driver with #2 & #3 Phillips bits

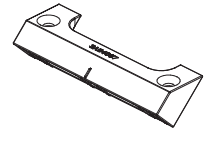
(A) 3AB8168*



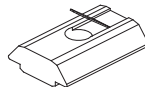
(B) 3AB4005*



(C) 3AB4007



(D) 3AB4021



(E) 3AB8169



(F) 7189140

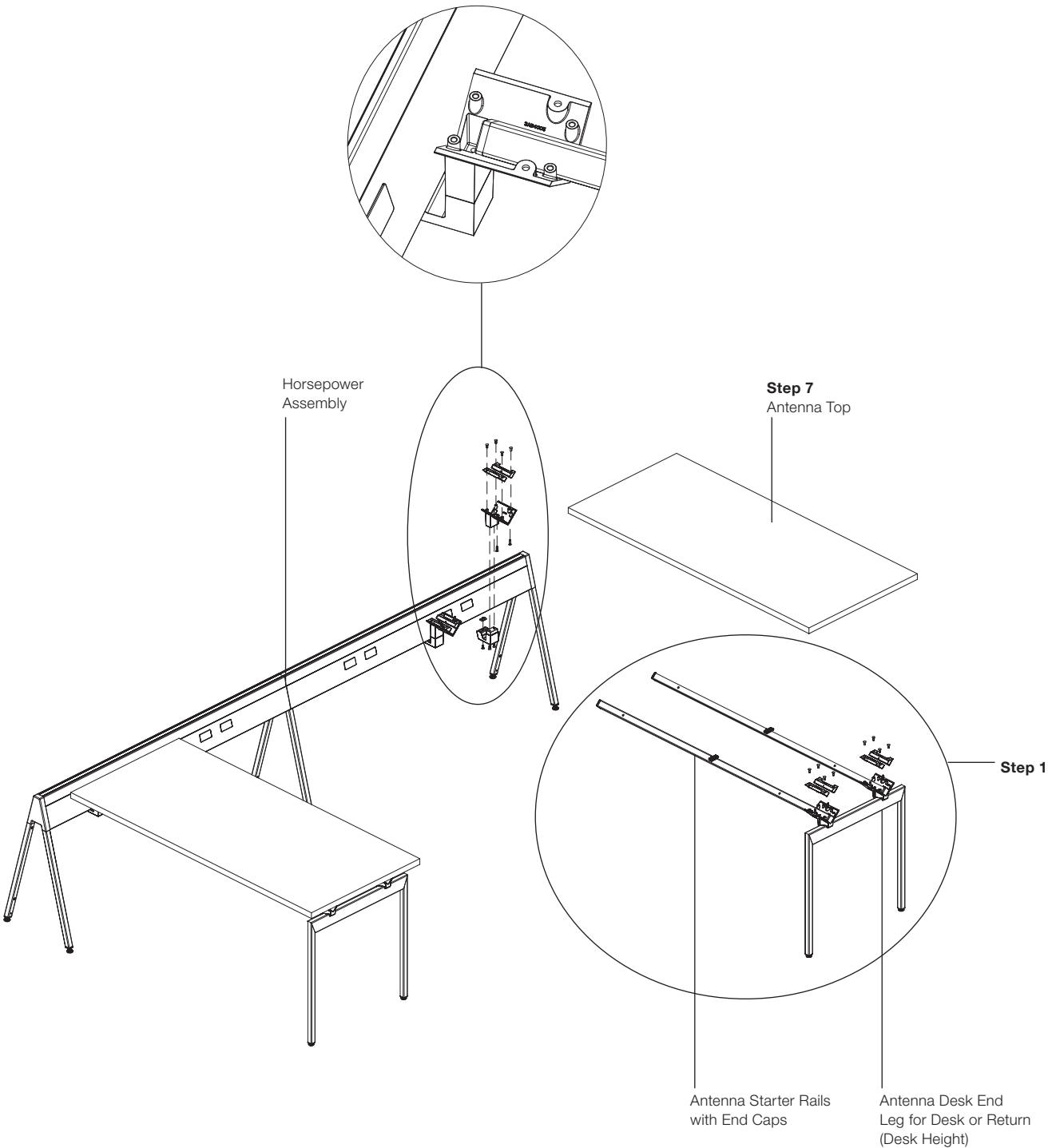


(G) 7434100

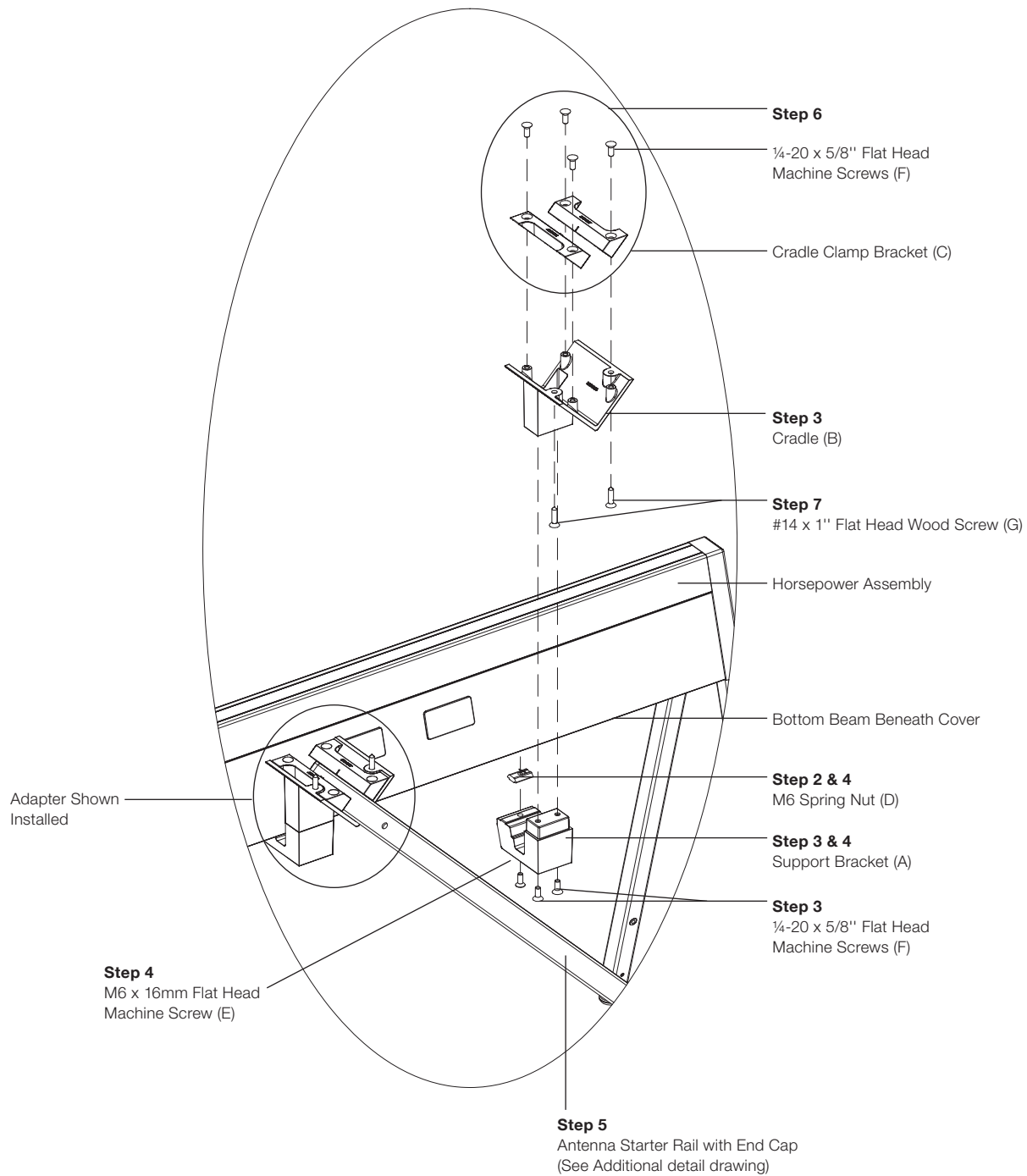


STEPS

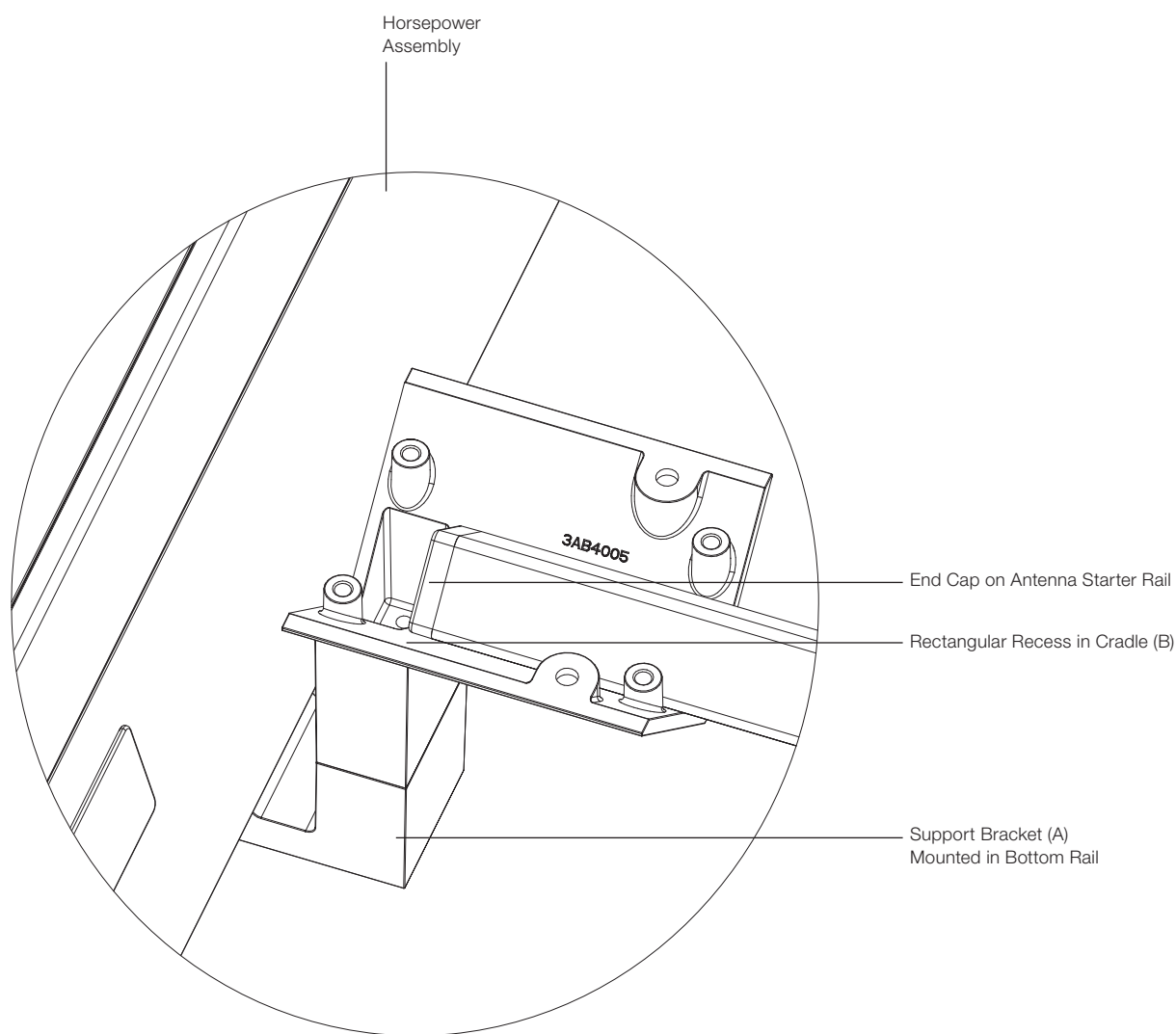
1. Assemble Antenna desk end leg and starter rails according to Antenna Workspaces Installation Instructions, and set the leg assembly aside.
2. Insert (2) M6 spring nuts (D), into the outer slot of the bottom beam of the Horsepower assembly with the spring tabs facing upward. Space the spring nuts so they are the same distance apart from one another as are the brackets on the end leg assembly (centerline dimension).
3. Place a cradle (B) on each support bracket (A) and attach each, from below, with (2) ¼-20 x 5/8" flat head machine screws (F).
4. Position the support bracket assemblies beneath the spring nuts (D), and attach each assembly with a M6 x 16mm flat head machine screw (E).
5. Position the Antenna desk end leg assembly upright and join to the Horsepower Assembly by laying the two free rail ends into the two cradles (B). The rails should be positioned so that the end caps fall adjacent to the rectangular recess in the cradle (B).
6. Attach (2) cradle clamp brackets (C) to each cradle using (4) ¼-20 x 5/8" flat head machine screws (F) per cradle (B) and tighten.
7. Place desk top on base assembly and attach using (2) #14 x 1" flat head wood screws (G) per cradle (B). Screws should line up with the appropriate pre-drilled holes in the underside of the desk top.
8. Follow Antenna Workspaces Installation Instructions' guidelines regarding required worksurface support spacers.
9. Adjust Horsepower and Antenna end leg glides as needed to level the assembly.



Horsepower to Antenna Desk Adapter Brackets:
Installed View and Partially Exploded View



**Horsepower to Antenna Desk Adapter
Brackets: Installed and Exploded Detail View**



Horsepower to Antenna Desk Adapter
Brackets,Rail Position (Step 5)

Pattern Numbers Represented:

Antenna Simple Table Adapter Brackets, **YHP1SAK (28)**

Parts List:

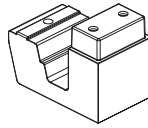
Support Bracket (A)
Desk Cradle (B)
M6 Spring Nut (C)
M6 x 16mm Flat Head Machine Screw (D)
5/16-18 x 1" Flat Head Machine Screw (E)

Antenna Simple Table
Horsepower Assembly

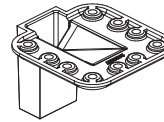
Tools Needed:

Power Driver with #2 & #3 Phillips bits
Rubber Mallet

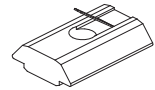
(A) 3AB8168*



(B) 3AB8167*



(C) 3AB4021



(D) 3AB8169



(E) 6AA450140



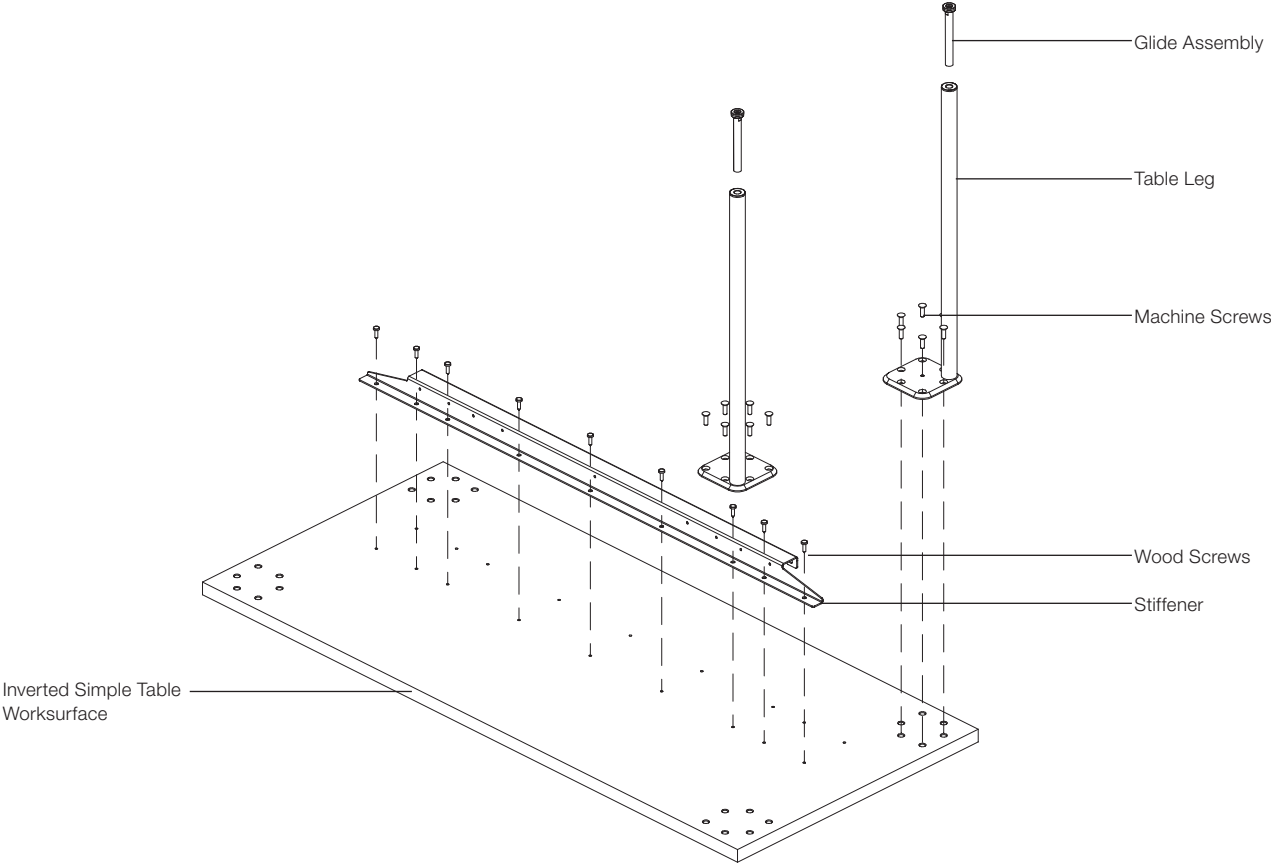
STEP

PARTIALLY ASSEMBLE ANTENNA SIMPLE TABLE

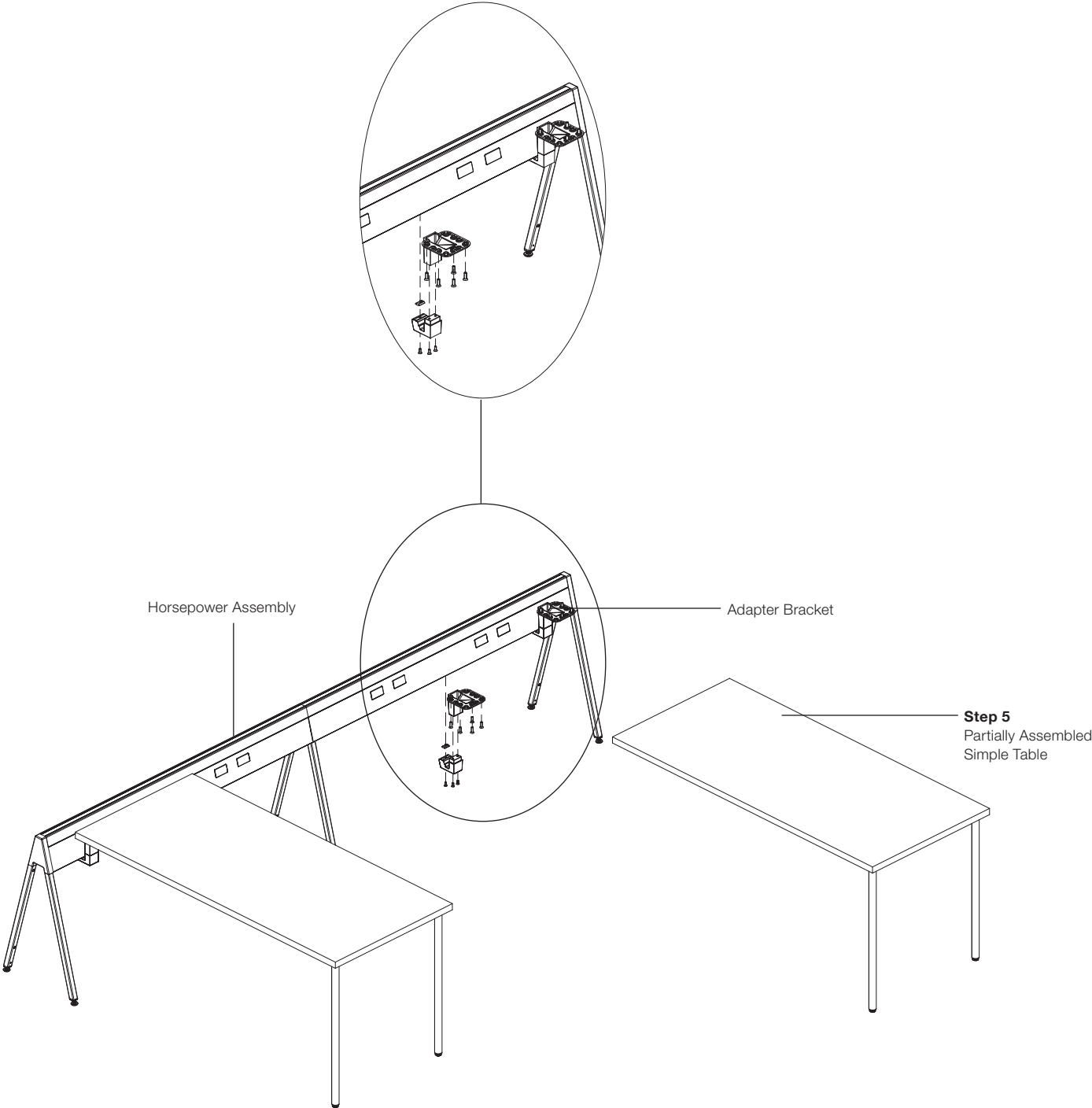
1. Attach (2) table legs to the end of the table top, with (6) provided machine screws per leg. Insert a glide assembly into the bottom of each table leg. Attach the worksurface stiffener to the underside of the worksurface with the wood screws provided. Stiffener may be mounted either centered on top depth or offset 9" from the back edge. Set the table assembly aside.

CONNECT SIMPLE TABLE ASSEMBLY TO HORSEPOWER ASSEMBLY

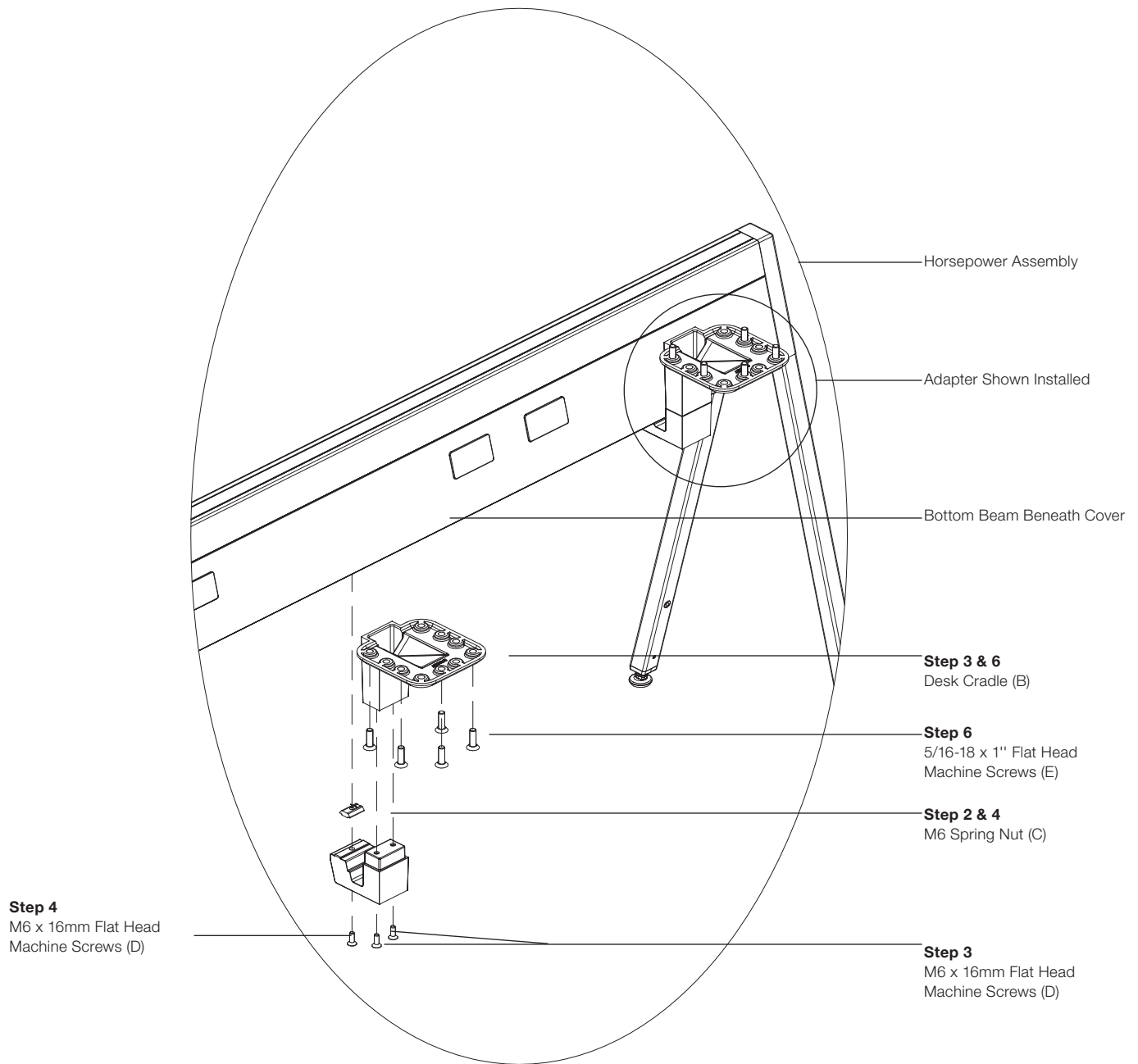
2. Insert (2) M6 spring nuts (C), into the outer slot of the bottom beam of the Horsepower assembly with the spring tabs facing upward. Space the spring nuts so they are the same distance apart from one another as the leg attachment plates under the Simple Table assembly (centerline dimension).
3. Place a desk cradle (B) on each support bracket (A) and attach each, from below, with (2) M6 x 16mm flat head machine screws (D).
4. Position the support bracket assemblies beneath the spring nuts (C), and attach each assembly with a M6 x 16mm flat head machine screw (D).
5. Position the Antenna Simple Table assembly upright and join to the Horsepower Assembly by laying the free worksurface end onto the two adapter bracket assemblies.
6. Attach the worksurface to the adapter bracket assemblies using (5) 5/16-18 x 1" flat head machine screws (E) per desk cradle (B). Screws should line up with the metal inserts at the corners on the underside of the top.
7. Adjust Horsepower and Antenna end leg glides as needed to level the assembly.



Horsepower to Antenna Simple Table Adapter Brackets,
Step 1: Partially Assemble Antenna Simple Table



Horsepower to Antenna Simple Table Adapter Brackets:
Installed View and Partially Exploded View



Horsepower to Antenna Simple Table Adapter
Brackets: Exploded and Installed Detail View

Pattern Numbers Represented:

Sawhorse to Antenna Adapter Brackets, **YHP1BAK**

Parts List:

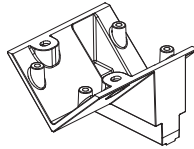
Cradle (A)
Cradle Clamp Bracket (B)
M6 Spring Nut (C)
M6 x 16mm Flat Head Machine Screw (D)
¼" Washer (E)
M6 x 40mm Pan Head Machine Screw (F)
#14 x 1" Flat Head Wood Screw (G)

Antenna Starter Rails with End Caps
Antenna Desk Top
Independent Horsepower Assemblies, 25"H (2)

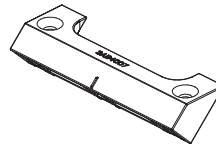
Tools Needed:

Antenna Install Gauge
Power driver with #2 & #3 Phillips bit
Rubber Mallet

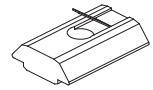
(A) 3AB8212*



(B) 3AB4007*



(C) 3AB4021



(D) 3AB8169



(E) 3AB8330



(F) 3AB8331



(G) 7434100



STEPS

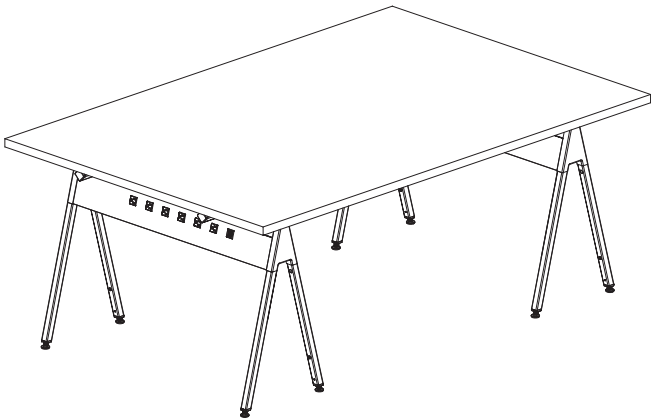
1. Assemble Independent Horsepower assemblies (see previous instruction pages) and position upright and parallel with one another, approximating the table base positions.
2. Insert end caps into Antenna Starter Rails, using a rubber mallet as required, and set the rails aside.
3. For each cradle bracket, insert (2) M6 spring nuts (C), into the top beam of a Horsepower assembly with the spring tabs facing downward.
4. Place a cradle (A) on the spring nuts (C) and attach, using (2) ¼" washers (E), and (2) M6 x 40mm pan head machine screws (F).

Repeat steps 3 & 4 for all 4 cradles. Ensure that the cradles are facing inward, toward the middle of the table.

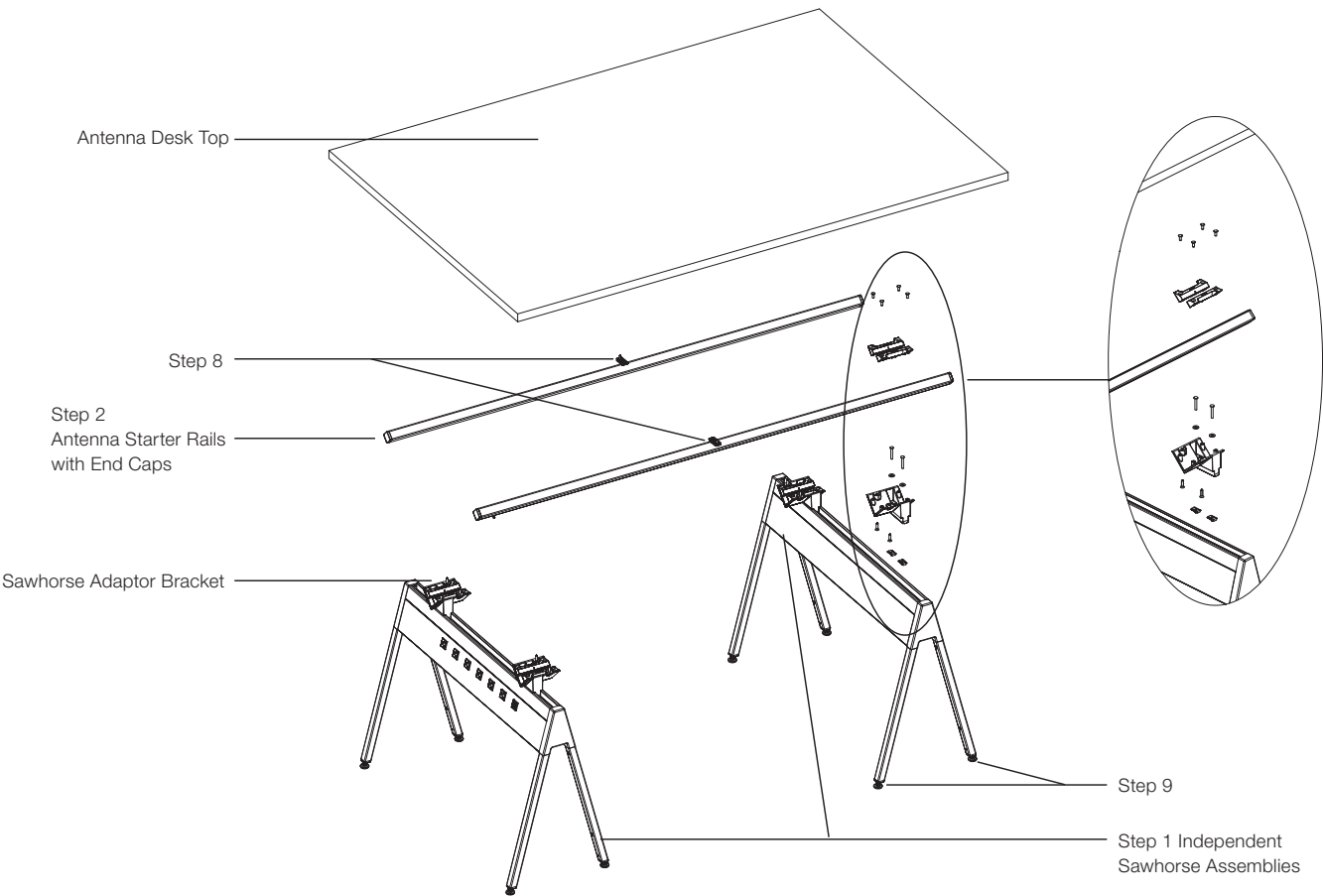
Note: Spacing between cradles is flexible, but the following centerline spacing is recommended (see included drawing):

- 24"W Horsepower with 27"D tabletop: 13.75" apart
- 24"W Horsepower with 30"D tabletop: 16.75" apart
- 30"W Horsepower with 36"D tabletop: 16.75" apart
- 36"W Horsepower with 42"D tabletop: 22.75" apart
- 36"W Horsepower with 48"D tabletop: 22.75" apart

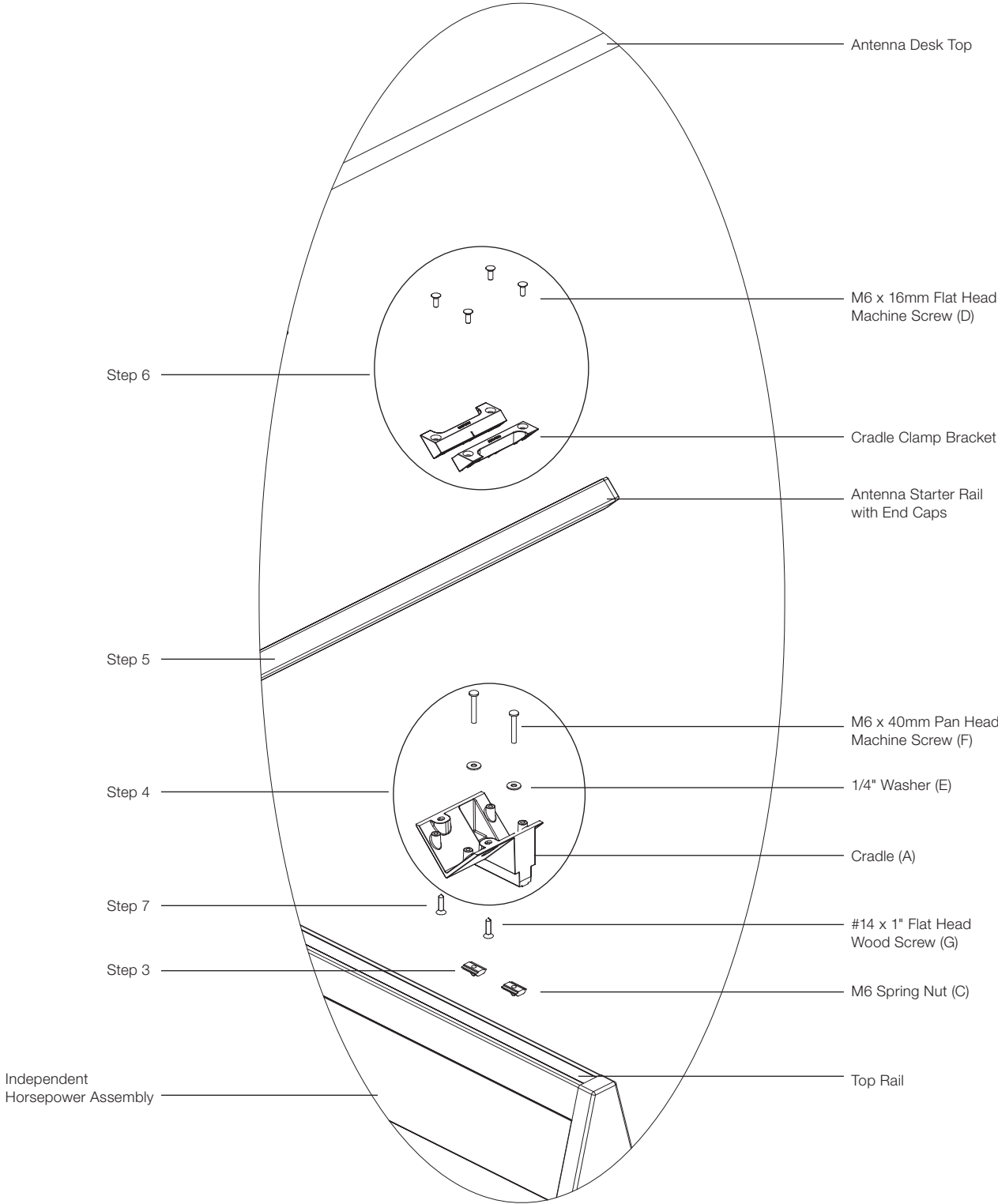
5. Lay the two starter rails into the four cradles (A), adjusting the position of the Horsepower assemblies, so that the faces of the rail end caps extend 6-1/2" from the edges of the cradles.
6. Attach (2) cradle clamp brackets (B) to each cradle using (4) M6 x 16mm flat head machine screws (D) per cradle (A) and tighten.
7. Place desk top on base assembly and attach using (2) #14 x 1" flat head wood screws (G) per cradle (A).
8. Follow Antenna Workspaces Installation Instructions' guidelines regarding required worksurface support spacers.
9. Adjust Horsepower end leg glides as needed to level the assembly.



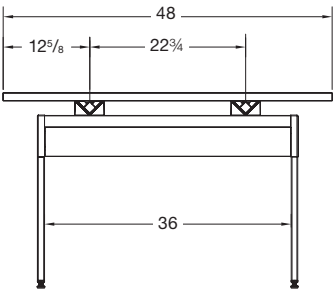
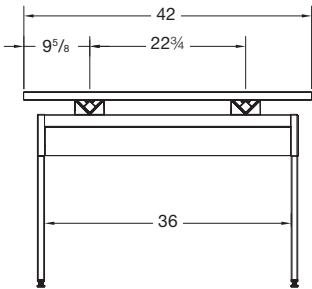
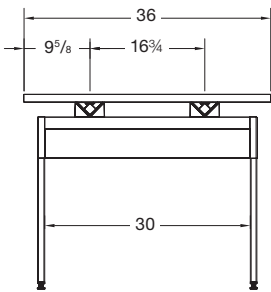
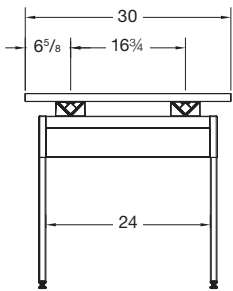
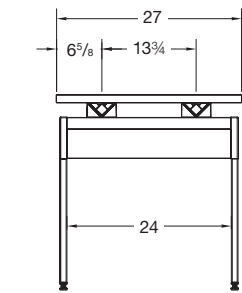
Sawhorse Tables Desk, Installed



Sawhorse Tables Desk,
Partially Exploded View Steps 1 & 2, 8 & 9



**Sawhorse Adaptor Bracket,
Exploded Detail View Steps 3-7**



Sawhorse Table Desk: Recommended Rail Spacing

Pattern Numbers Represented:

Power Harness, **YHP1HEK** _ _
 Duplex Receptacle, **YR1XD** _
 Jumper Cable, 2+2, **YR1EJ** _
 Jumper Cable, 3+3, **YR1TJ** _
 Modular Infeed, 2+2, **YR1EDPI**
 Modular Infeed, 3+3, **YR1TDPI**
 Outlet Fillers, **YHP1OF**
 Cleats, **YHP1BC**

Parts List:

Top Power Harness Mounting Bracket (A)
 Bottom Power Harness Mounting Bracket (B)
 M6 Spring Nut (C)
 M6-1 x 70mm Machine Screw (D)
 Cable Cleat (E)
 M6-1 x 18mm BTNHD Machine Screw (F)

Linked Horsepower Assembly (i.e. beams, legs, side covers, top caps)
 Power Harnesses
 Duplexes
 Jumpers
 Infeed
 Outlet Fillers
 Cleats

Tools Needed:

4mm Allen Wrench
 10mm Box Wrench
 Power Driver
 Phillips #2 & #3 bits

STEPS

BUILD HARNESS ASSEMBLIES

1. Insert top power harness mounting bracket (A) into the top of the power harness.
2. Insert the bottom power harness mounting bracket (B) into the bottom of the power harness.
Repeat steps 1 & 2 for all harnesses.
3. With the Horsepower assembly still oriented upside down, insert the power harness assembly, also UPSIDE DOWN, between the beams so the holes in the top power harness mounting bracket (A) align with the holes that are pre-tapped in the top beam.
4. Thread (2) M6-1 x 70mm machine screws (D) downward into the clearance holes in the bottom beam, through the power harness brackets, and into the pre-tapped holes in the top beam.

5. Connect harnesses with jumpers, as required, by inserting the jumper ends and engaging the clips at the harness ends.

INSTALL CLEATS

6. With the Horsepower assembly still oriented upside down, insert a spring nut (C) into the slot in the bottom beam. Place a cable cleat (E) UPSIDE DOWN on top of the spring nut, and attach the cleat with a M6-1 X 18mm BTNHD machine screw (F)
Repeat, as required, for multiple cable cleats.

INSTALL DUPLEXES

7. Turn the Horsepower assembly upright and install duplexes, as required, by inserting the duplexes between the tabs on the power harness, then sliding outward to engage the connector plugs.

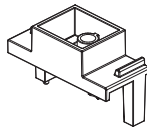
CONNECT POWER SOURCE/ INFEED

8. The modular end of the infeed should first be connected to the Horsepower assembly by inserting the plug and engaging the clip on the end of a power harness. The pigtail end of the modular power infeed should then be connected to the building power supply, as required by local and/or national codes.

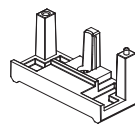
RETURN TO LINKED HORSEPOWER INSTALLATION INSTRUCTIONS, STEP 9, FOR COMPLETION OF INSTALLATION.

Note: Install outlet fillers into openings in side covers that will not be occupied by duplexes or data faceplates by snapping in the fillers from inside the covers before installing the covers on the Horsepower assembly.

(A) 3AB5001



(B) 3AB5008



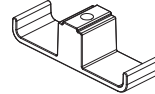
(C) 3AB4021



(D) 3AB4034



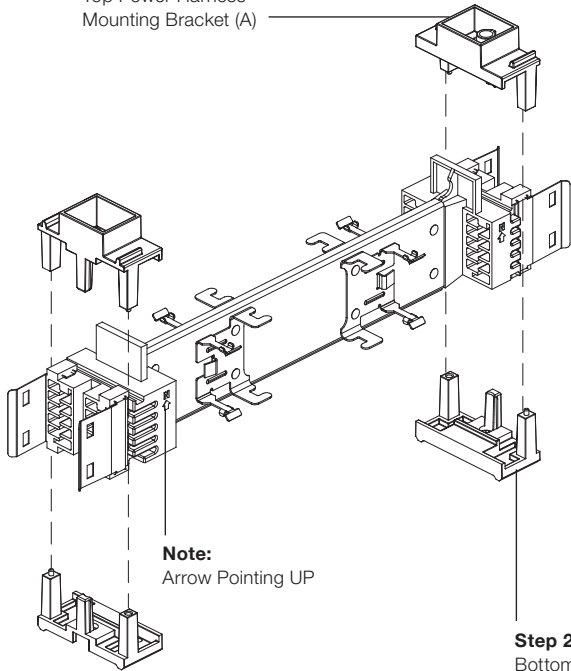
(E) 3AB8202



(F) 3AB8162



Step 1
Top Power Harness
Mounting Bracket (A)

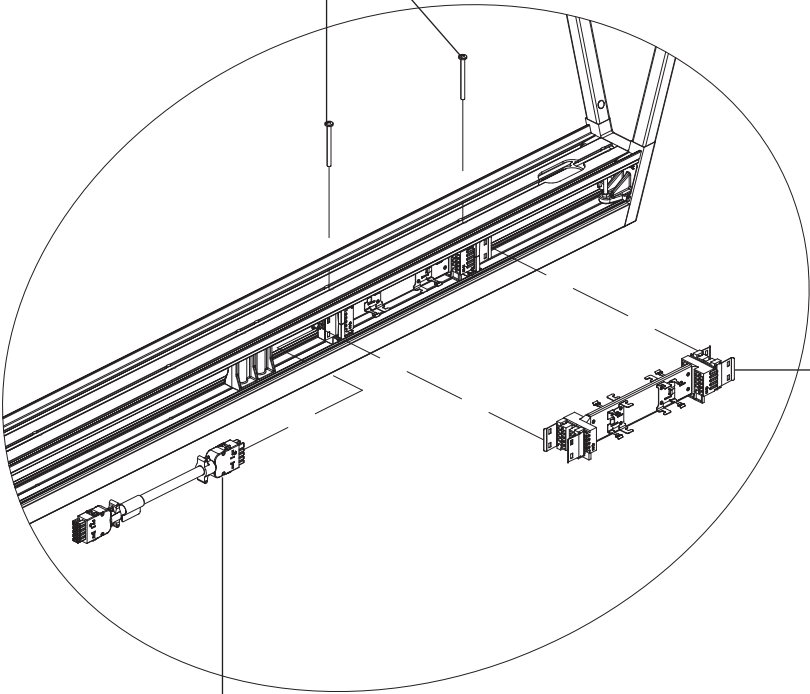


Note:
Arrow Pointing UP

Step 2
Bottom Power Harness
Mounting Bracket (B)

**Modular Electrical Harness,
Exploded, Steps 1 & 2**

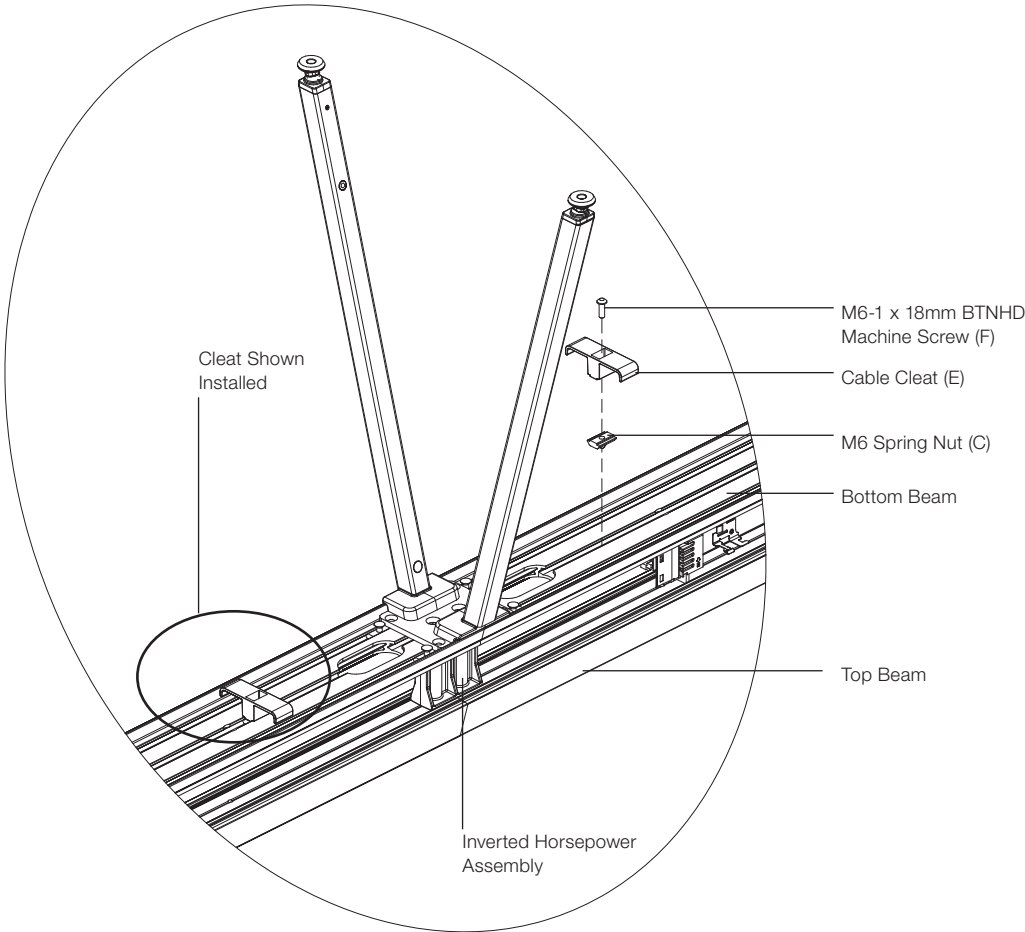
Step 4
M6-1 x 70mm
Machine Screw (D)



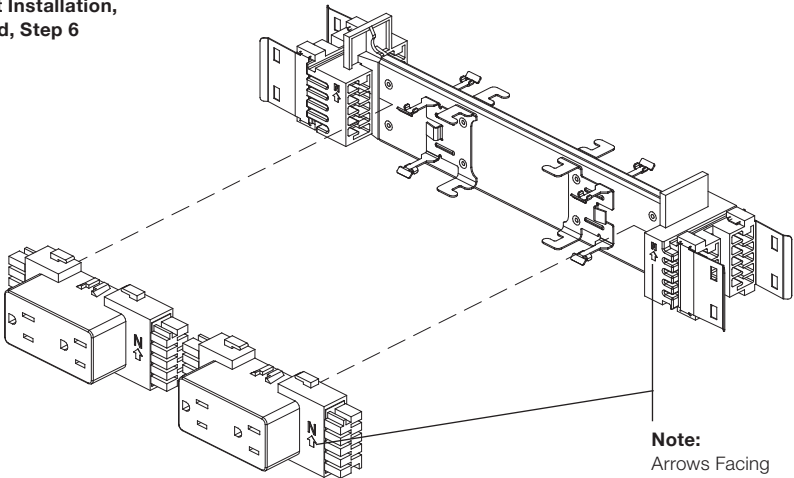
Step 3
Power Harness

Step 5
Jumper

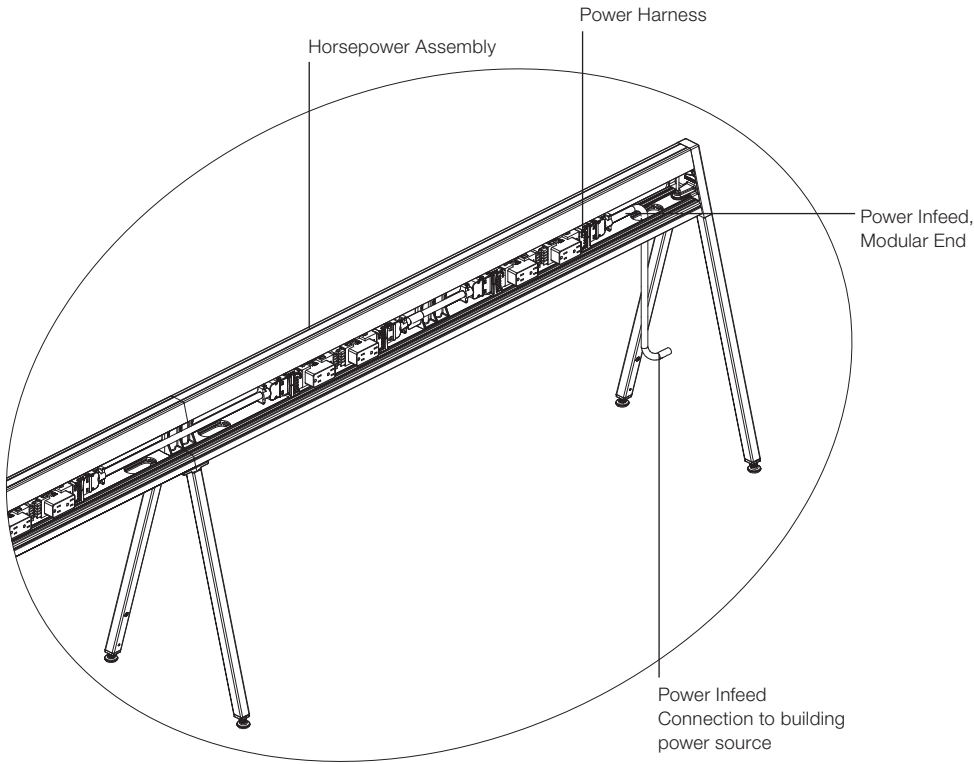
**Modular Electrical Harness
Installation, Exploded, Steps 3-5**



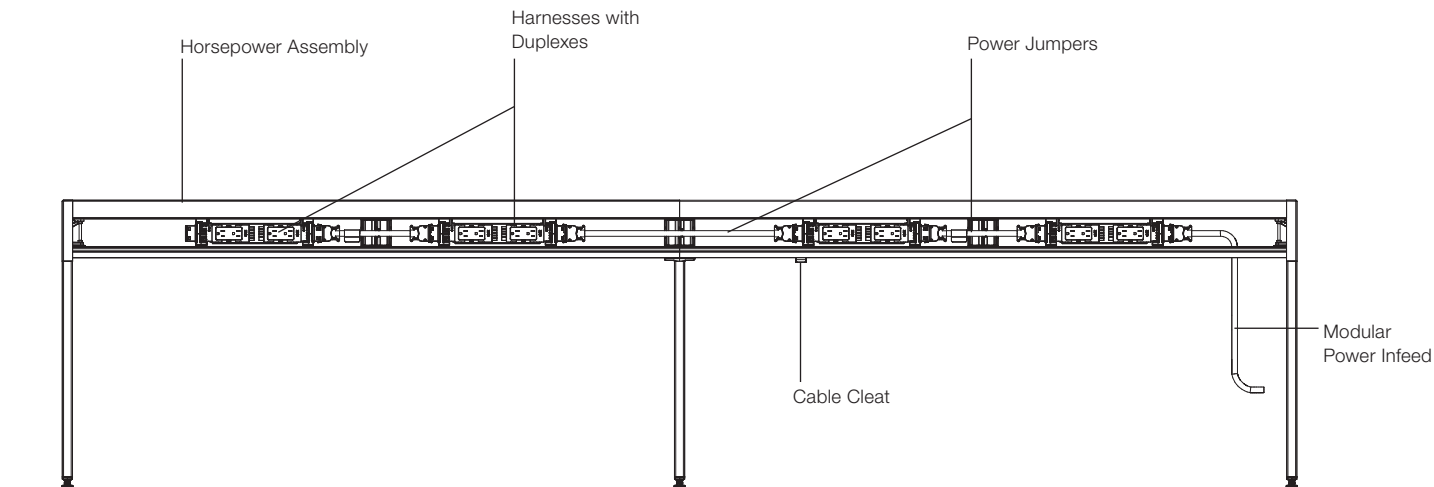
Wire Management Cleat Installation,
Exploded & Installed, Step 6



Duplex Installation
Detail, Step 7



Modular Electrical Components, Installed, Detail, Axonometric View, Step 8



Modular Electrical Components, Installed, Elevation

Pattern Numbers Represented:

NYC Infeed, 2+2, **YR1EPNY** _

NYC Infeed, 3+3, **YR1TPNY** _

Parts List:

Junction Box (A)

Junction Box Cover Plate (B)

Conduit Connector (C)

10-32 x 3/8" Grounding Screw (D)

M6 Spring Nut (E)

8-32 x 3/8" Self Tapping Screw (F)

M6 x 10mm Machine Screw

Power Infeed (2+2 or 3+3)

Powered Linking Horsepower Assembly (i.e. powered beams, legs, side covers, top caps)

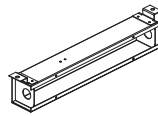
Tools Needed:

4mm Allen Wrench

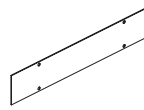
Power Driver

Phillips #2 & #3 bits

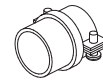
(A) 6AA5064



(B) 6AA5025



(C) 5067000



(D) 7462400



(E) 3AB4021



(F) 7232440



(G) 3AB4067

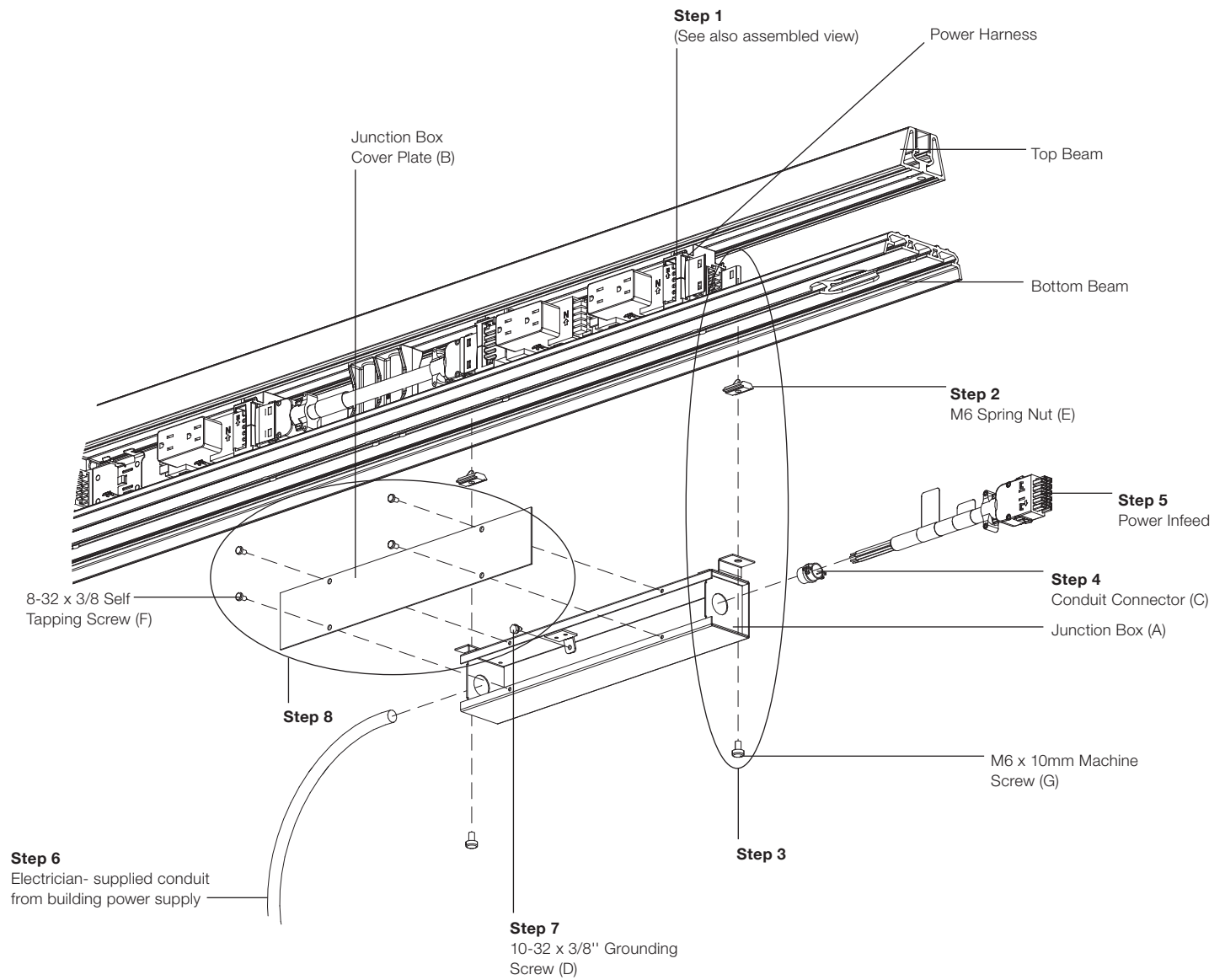


STEPS

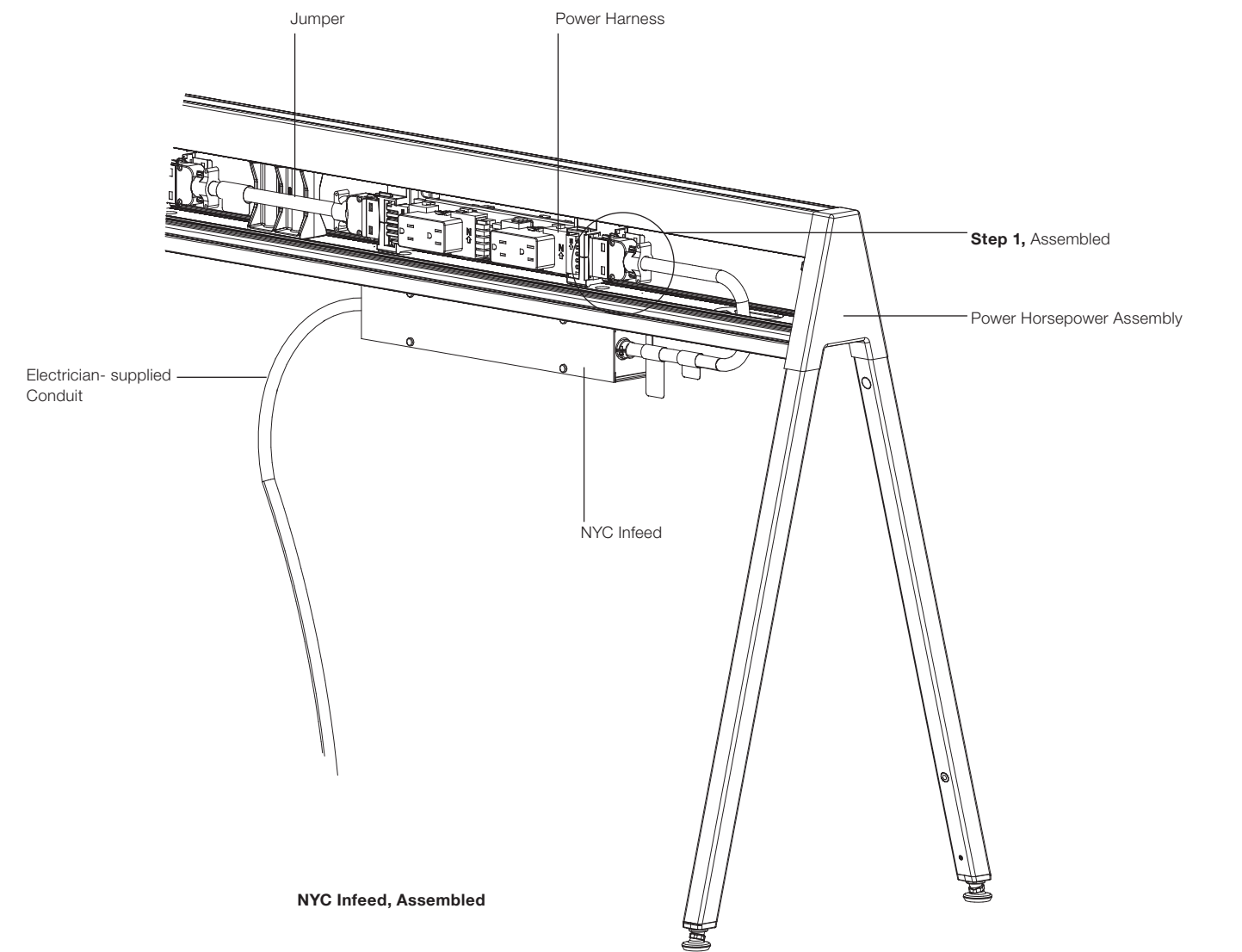
1. Thread the modular head of the power infeed through the bottom rail of the Horsepower assembly and connect to the end of the pre-installed power harness. Be sure to engage the clips at the end of the power harness.
2. Insert two M6 spring nuts (F) into the bottom beam of the Horsepower assembly.
3. Align the tabs on the top of the junction box (A) with the inserted spring nuts (E), and attach using (2) M6 x 10mm machine screws (G).

Note: The following steps must be performed by a qualified, licensed electrician, and must comply with any and all local and national code standards for the location in which the components in these instructions are installed.

4. Insert the conduit connector (C) into one side of the junction box (A), and affix accordingly, tightening the connector's washer from within the junction box.
5. Insert the pigtail end of the power infeed into the conduit connector (C), and tighten the two screws on the connector, clamping the conduit into place.
6. Insert and connect the pigtail end of the electrician-supplied power conduit into the opposite end of the junction box, as necessary (similarly to Steps 3 & 4).
7. Connect the wires within the box, utilizing the 10-32 x 3/8" grounding screw (D), as required.
8. Place the junction box cover plate (B) over the box opening, and affix with (4) 8-32 x 3/8 self tapping screws (F).



NYC Infeed, Exploded, View From Below



Pattern Numbers Represented:

Horsepower Hardwired Outlet Box, **YHP1HOK_ _**
Outlet Fillers, **YHP1OF**

Parts List:

Dual or Single Sided Outlet Box (A)

Outlet Box Side Cover (B)

M6 x 1 x 12mm Button Head Cap Screw (C)

#6-32 Phillips Flat Undercut Head Screw (D)

#10-32 Grounding Hex Nut (E)

Side Covers with Outlet Openings for Hardwired
Outlets Linking Horsepower Assembly (i.e. beams,
legs, side covers top caps)
Outlet Fillers

Tools Needed:

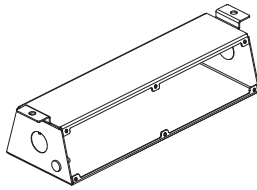
4mm Allen Wrench

3/8" Hex Wrench

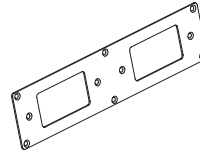
Power Driver

Phillips #2 & #3 bits

(A) 12" or 24" Dual or Single
Sided Box (varies)



(B) Outlet Box Side
Cover (varies)



(C) 3AB8207



(D) 3AB8521



(E) 3AB8522



STEPS

INSTALL POWER BOXES

1. Turn the Horsepower assembly right side up.
2. Position a dual or single sided outlet box (A), between the top and bottom beam so that the two holes in the top tabs align with the two predrilled holes in the top beam.
3. Insert (2) M6 x 1 x 12mm button head cap screws (C) from below, through the tabs in the outlet box, and into the tapped holes in the top beam, connecting the outlet box to the beam.
4. Loosely screw (1) #10-32 grounding hex nut (E), to the threaded stud that is welded in place on the inside of the outlet box. **This stud and nut are to be used for the grounding wire.**
5. Repeat Steps 1-4 for all required outlet box positions.

CONNECT POWER SOURCE, DUPLEXES, AND ELECTRICAL CONNECTIONS

Note: Connection of electrified components must be performed by a qualified, licensed electrician, and must comply with any and all local and national code standards for the location in which the components are installed.

Note: Electrical contractor to provide and install all electrical systems including, but not limited to: conduit, wire, receptacles, and all connection hardware.

INSTALL OUTLET BOX SIDE COVERS

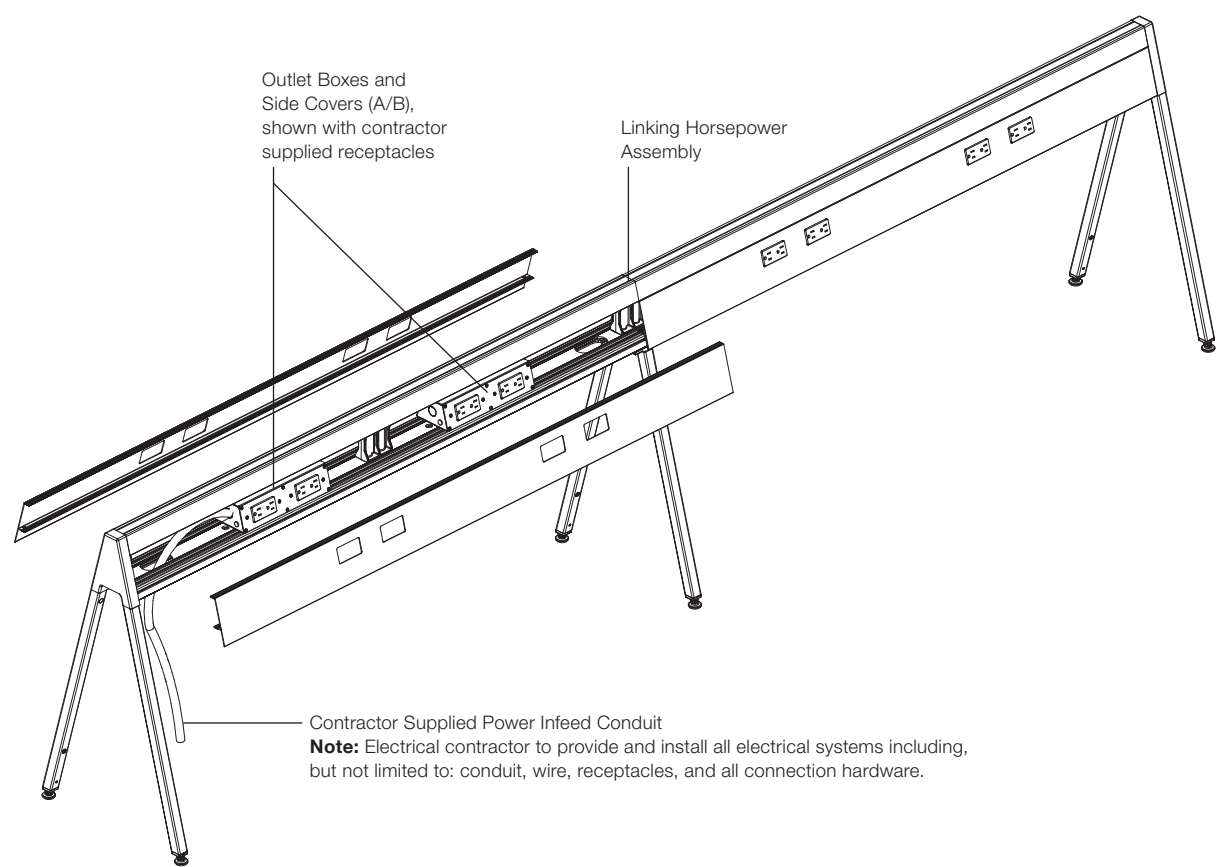
6. Install outlet box side covers (B) to the open faces of the installed outlet boxes (A), using (2) #6-32 Phillips flat undercut head screws (D) to fasten each contractor supplied receptacle to the side cover (B), and (6) #6-32 Phillips flat undercut head screws (D) to fasten the side cover (B) to the outlet box (A).

Note: Electrical contractor is responsible for sealing any unused outlet locations appropriately.

7. Install Horsepower side covers on each side of the Horsepower assembly by first securing the top edges over the small tabs on each end leg assembly, then snap the bottom edges into place.

Note: There are no placement tabs in the intermediate leg assembly. Seat the top edge of the side cover against the underside of the top beam, then snap the bottom edges into place.

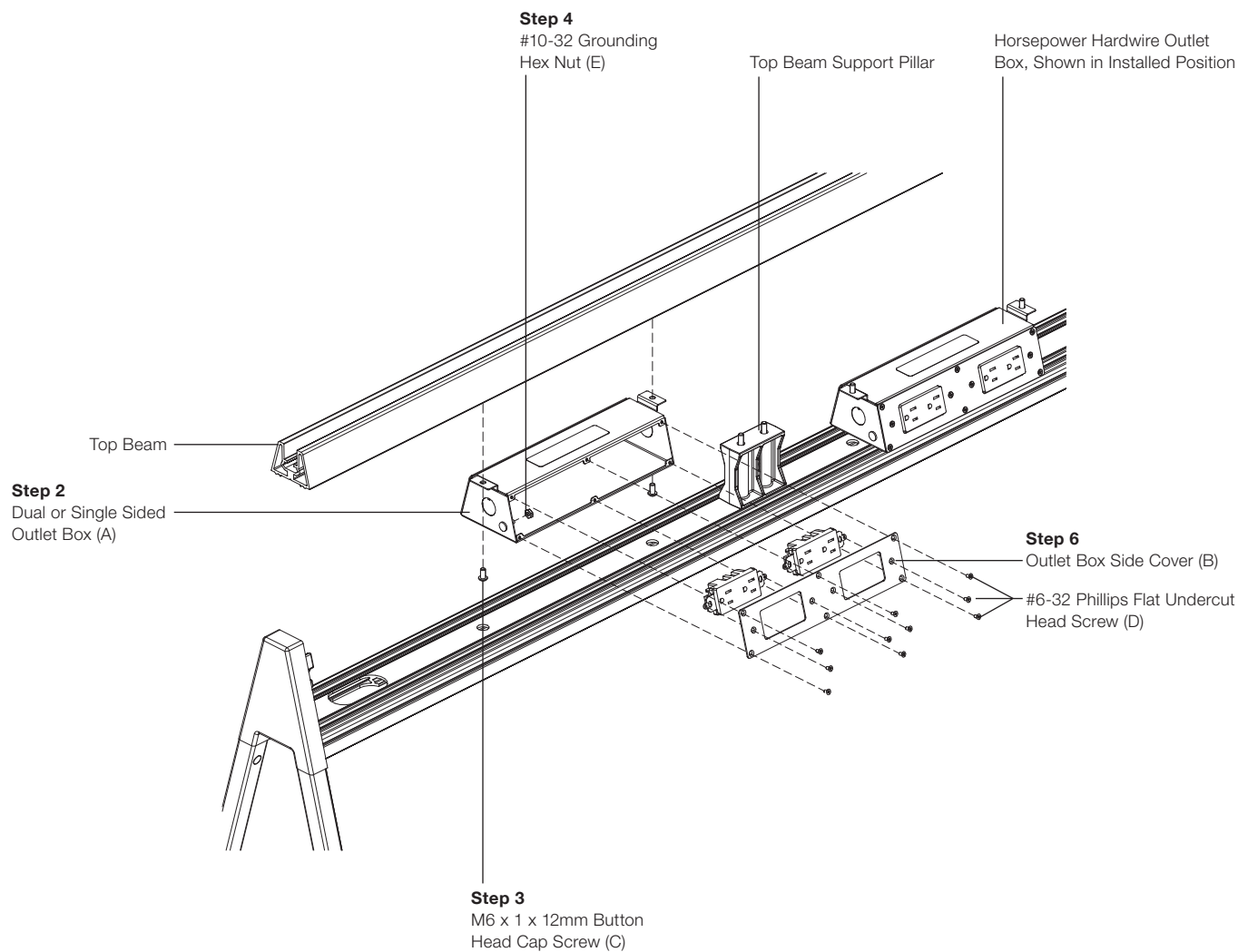
Note: Install outlet fillers into openings in side covers that are not in front of outlet boxes, and will not be occupied by duplexes or data faceplates by snapping in the fillers from inside the covers before installing the covers on the Horsepower assembly.



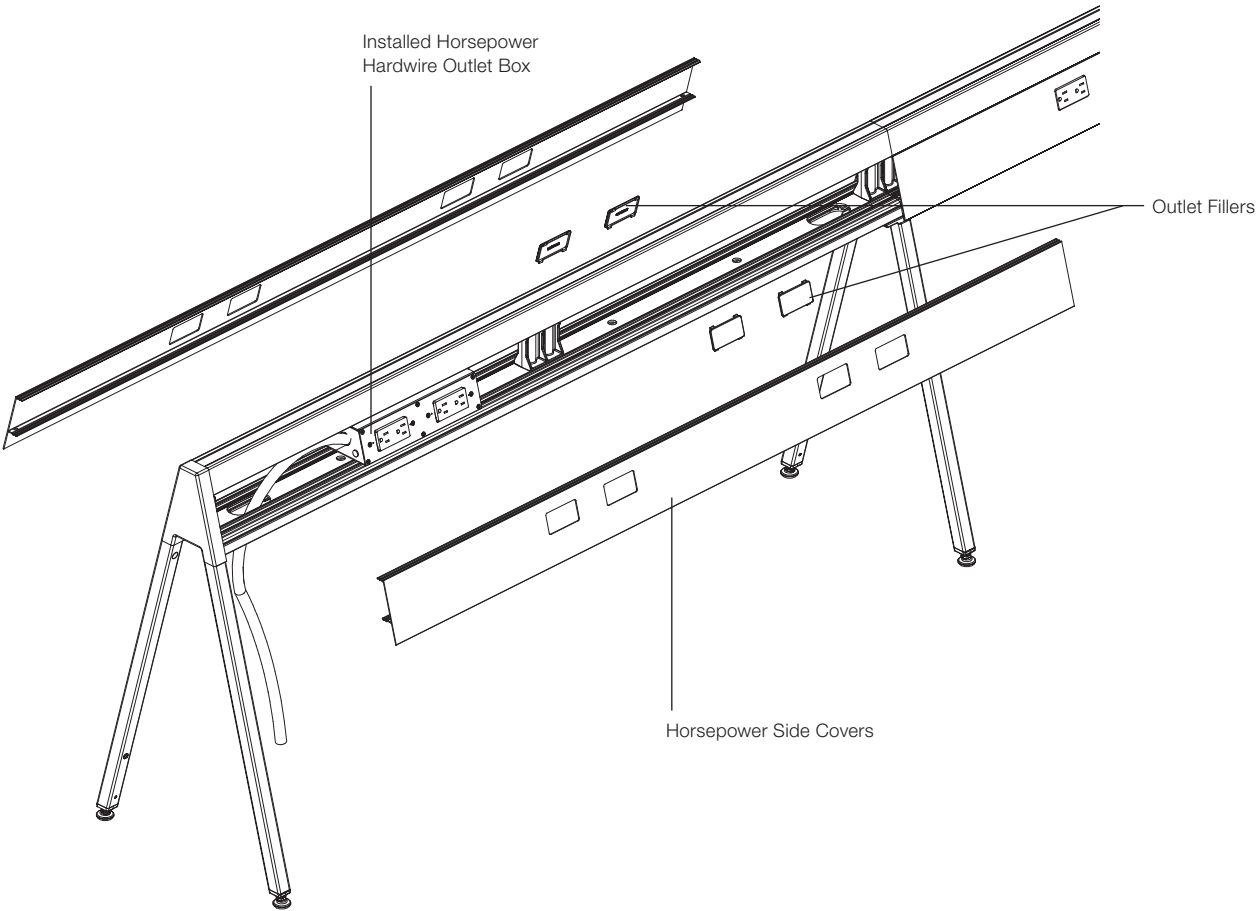
Contractor Supplied Power Infeed Conduit

Note: Electrical contractor to provide and install all electrical systems including, but not limited to: conduit, wire, receptacles, and all connection hardware.

Hardwired Outlets for City of Chicago, Installed



Hardwired Outlets for City of Chicago, Partially Exploded, Steps 2-6



Hardwired Outlets for City of Chicago, Partially Exploded, Steps 7

Pattern Numbers Represented:

Horsepower Communications
Mounting Box, **YHP1CMB**

Parts List:

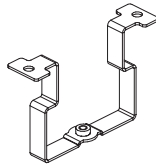
Communications Box Strap (A)
Data Box (B)
¼ - 20 x ¾" Round Head Machine Screw (C)
M6-1 x 12mm Pan Head Machine Screw (D)
Spring Nut (E)

Pre-Assembled Horsepower Unit
Outlet Fillers (if applicable)

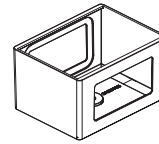
Tools Needed:

Power Drive
Phillips #2 & #3 bits

(A) 3AB8501



(B) 3AB5035



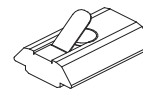
(C) 3AB8503



(D) 3AB4066

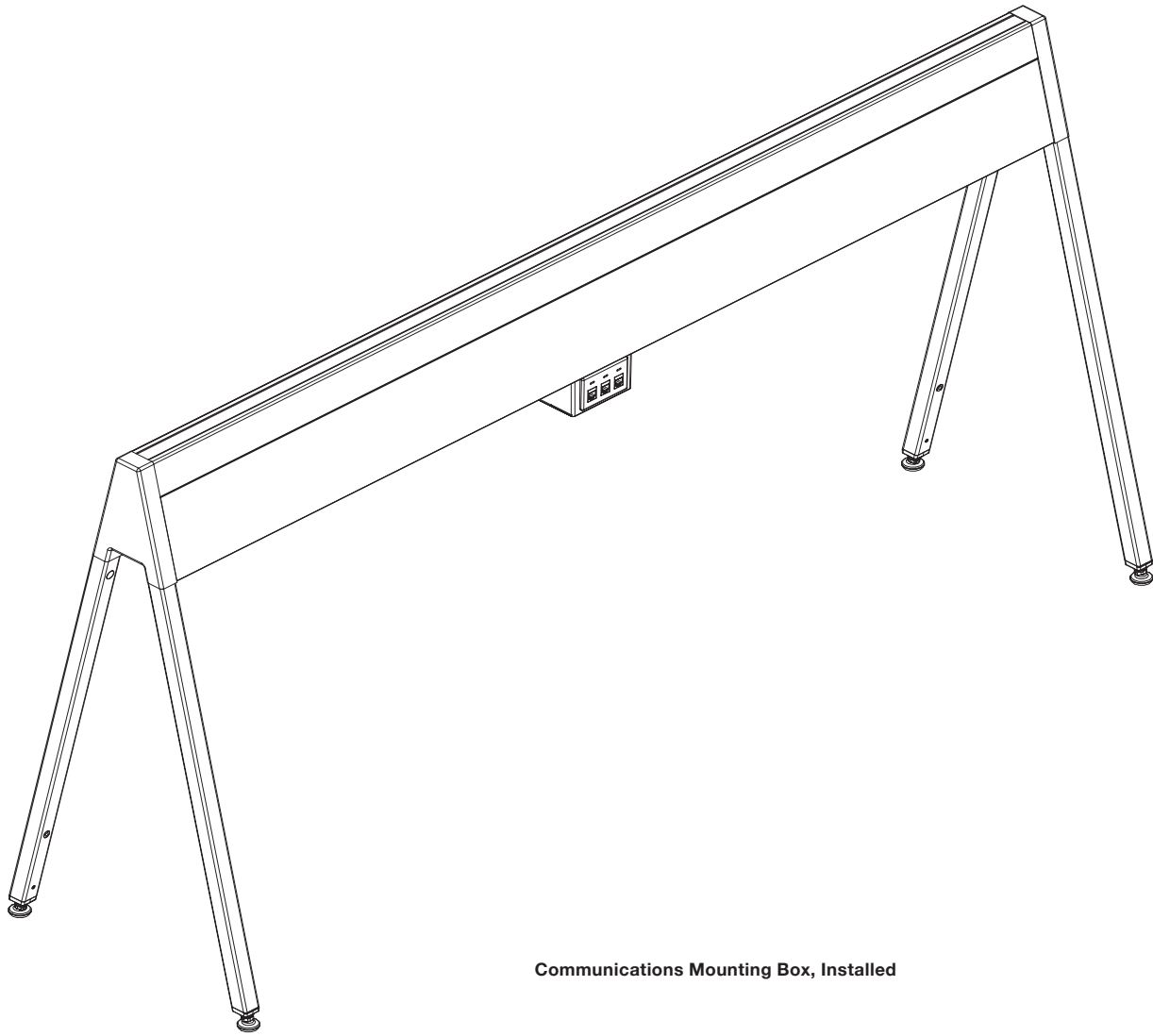


(E) 3AB4021

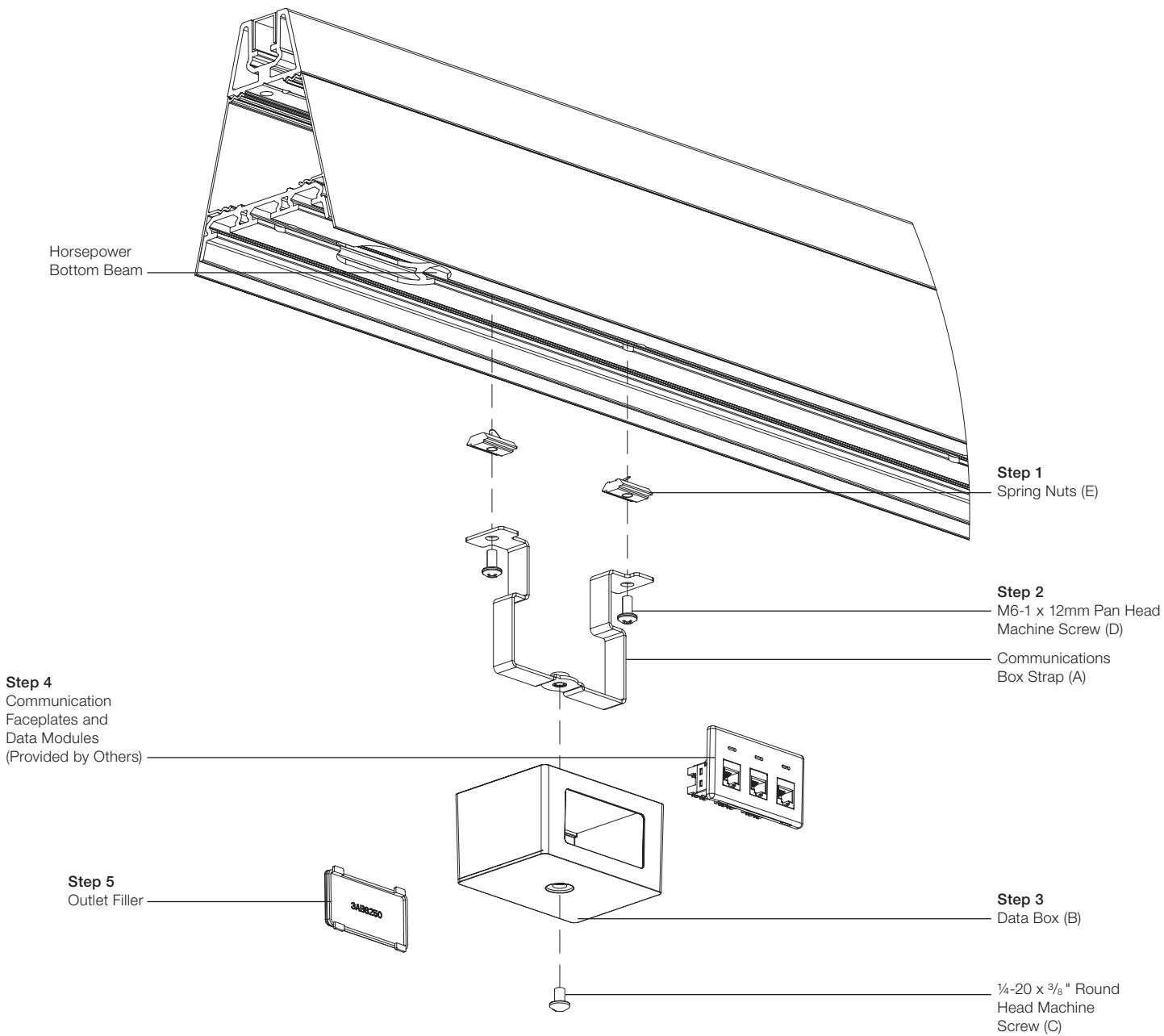


STEPS

1. Insert (2) spring nuts (E), with their tabs facing up, into the bottom slot in the bottom beam of the Horsepower unit to the desired location.
2. Fasten the Communications Box Strap (A) to the spring nuts using (2) M6 -1 x 12mm pan head machine screws (D).
3. Attach the Data Box (B) to the Communications Box Strap (A) using a ¼ - 20 x ¾" Round Head Machine Screw (C)
4. Install communications faceplates and data modules (provided by others) by snapping into the front and/or back knockout of the Data Box (B), as required.
5. Install Outlet Fillers into any unused knockouts in the Data Box (B).



Communications Mounting Box, Installed



Communications Mounting Box, Installation,
Exploded View, From Below

Pattern Numbers Represented:

Vertical Wire and Infeed Manager, **YHP1VWM** _

Parts List:

M6 Spring Nut (A)

M6 x 12mm Machine Screw (B)

Vertical Wire Manager Conduit Assembly

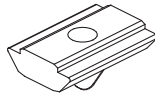
Vertical Wire Manager Assembly Covers

Tools Needed:

Power Drive

Phillips #2 & #3 bits

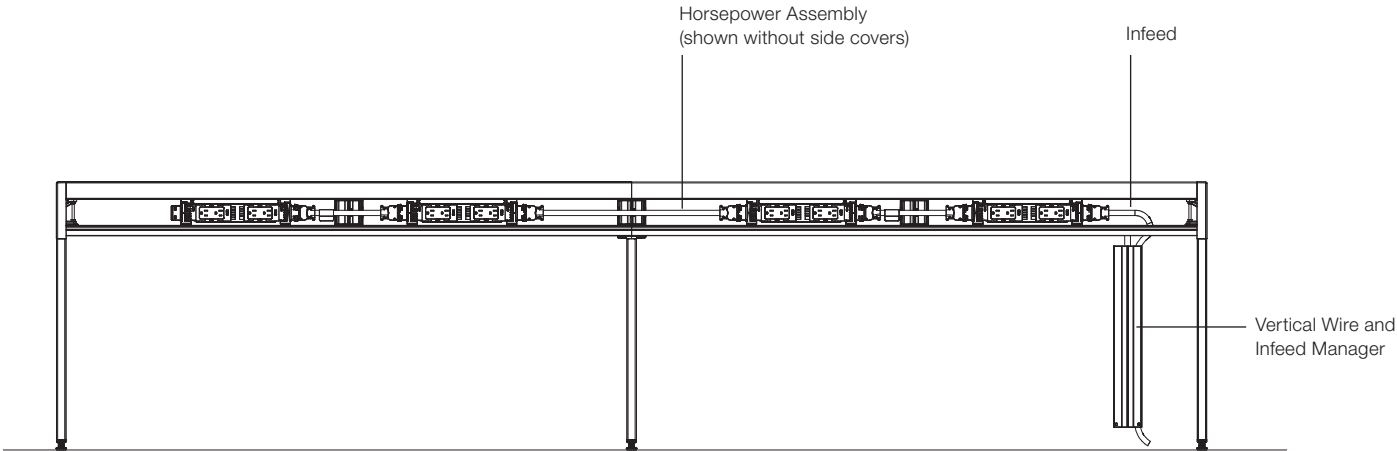
(A) 3AB4021



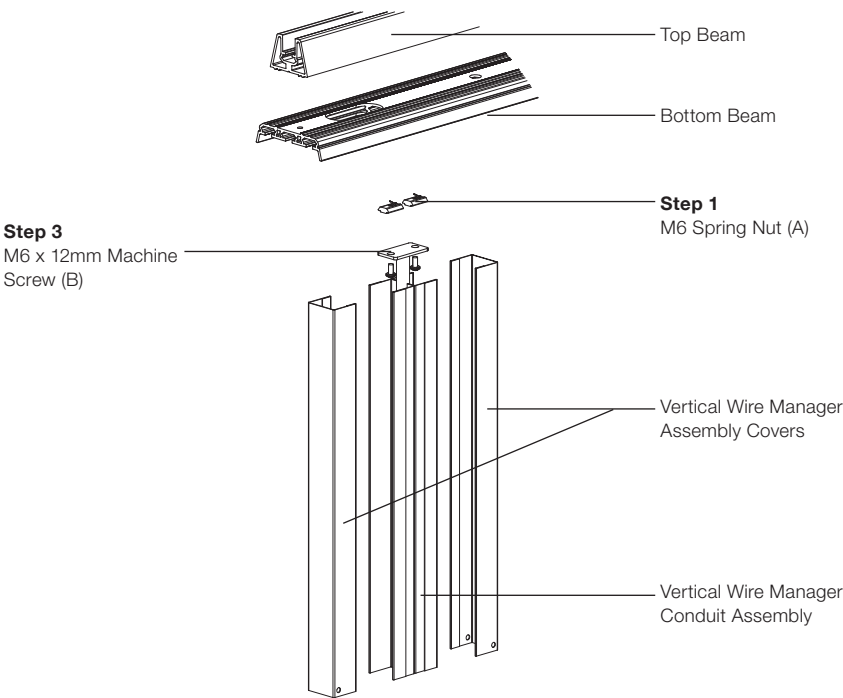
(B) 3AB4066

**STEPS**

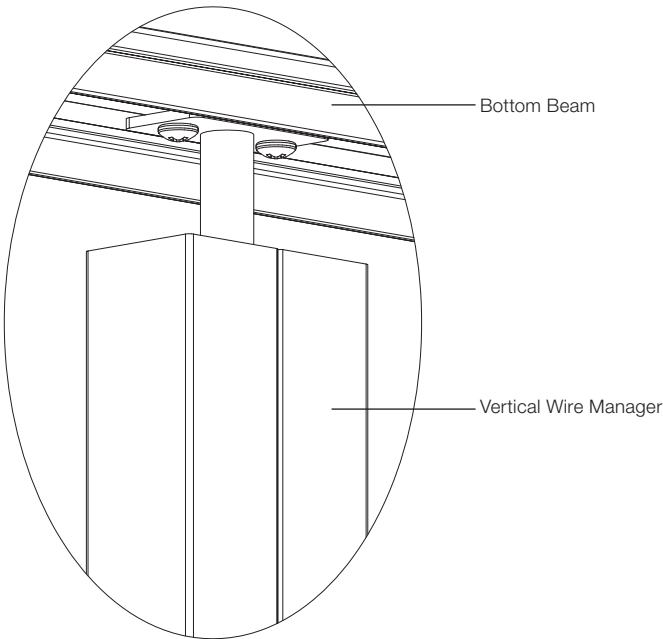
1. Insert (2) spring nuts (A) into the bottom beam of the Horsepower assembly, in desired location for wire management or infeed.
2. Position the vertical wire management conduit assembly under the bottom beam, in the center slot, aligning the holes in the assembly with the spring nuts (A).
3. Fasten the vertical wire management conduit assembly to the spring nuts using (2) M6 x 12mm machine screws (B).
4. Place cables, conduit, and wires in side cavities of conduit assembly, separating data from power, if desired.
5. With the factory holes oriented toward the floor, pressure fit a cover on each side of the assembly.



Horsepower Assembly with Vertical Wire and Infeed Manager, Elevation



Vertical Wire and Infeed Manager, Exploded



Vertical Wire Manager Connection Detail (View From Below)

Pattern Numbers Represented:

Upmounted Fabric Screens 36" - 60", **YPSC14__F**

Upmounted Fabric Screens 66" - 72", **YPSC21__FRR**

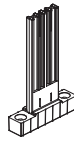
Parts List:

Bayonet Mount Bracket (A)

Spring Nut (B)

M6 x 25mm Flat Head Machine Screw (C)

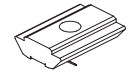
(A) 3AB408200



(B) 3AB402196



(C) 3AB405540



Screen

Horsepower Assembly

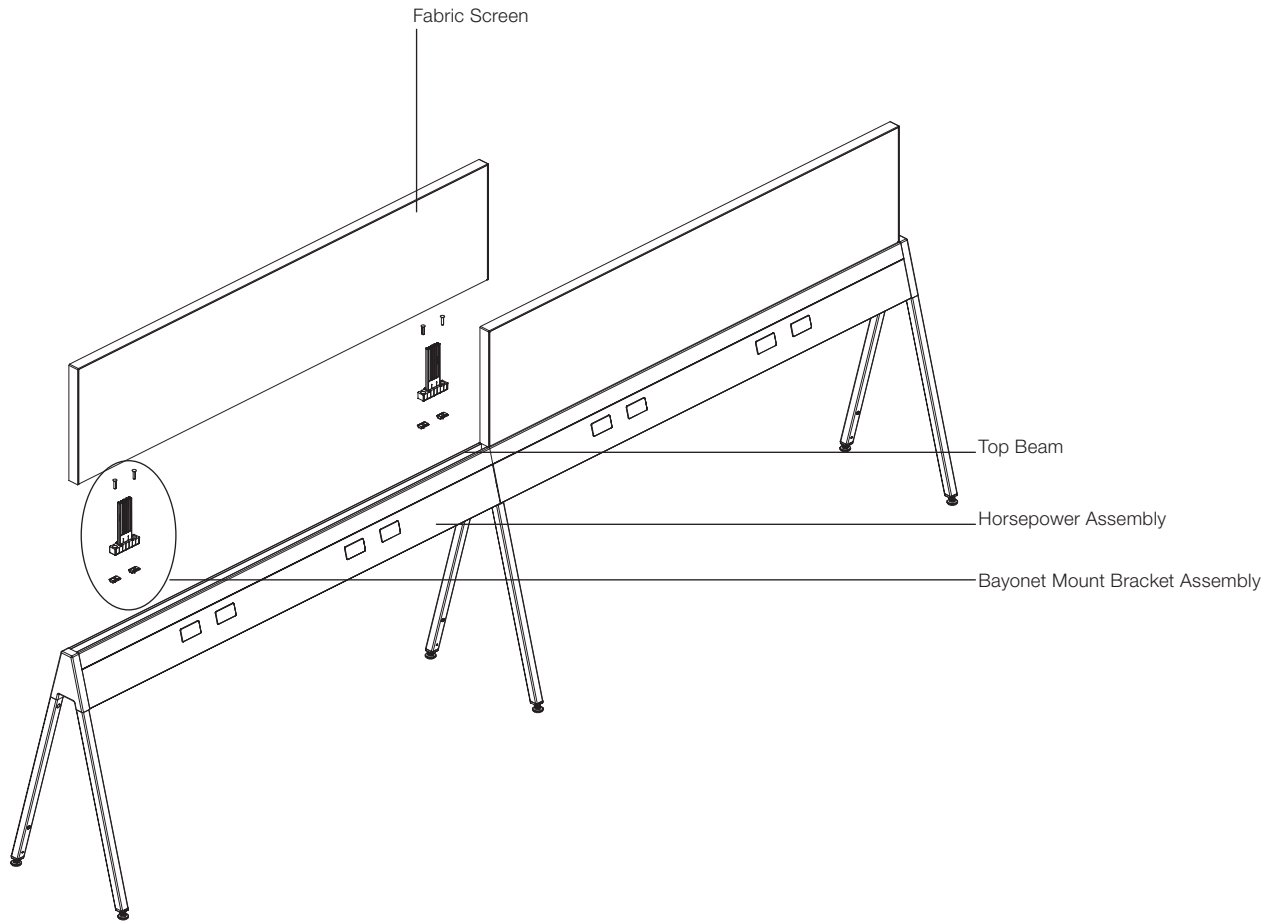
Tools Needed:

Power Driver with #2 & #3 Phillips bits

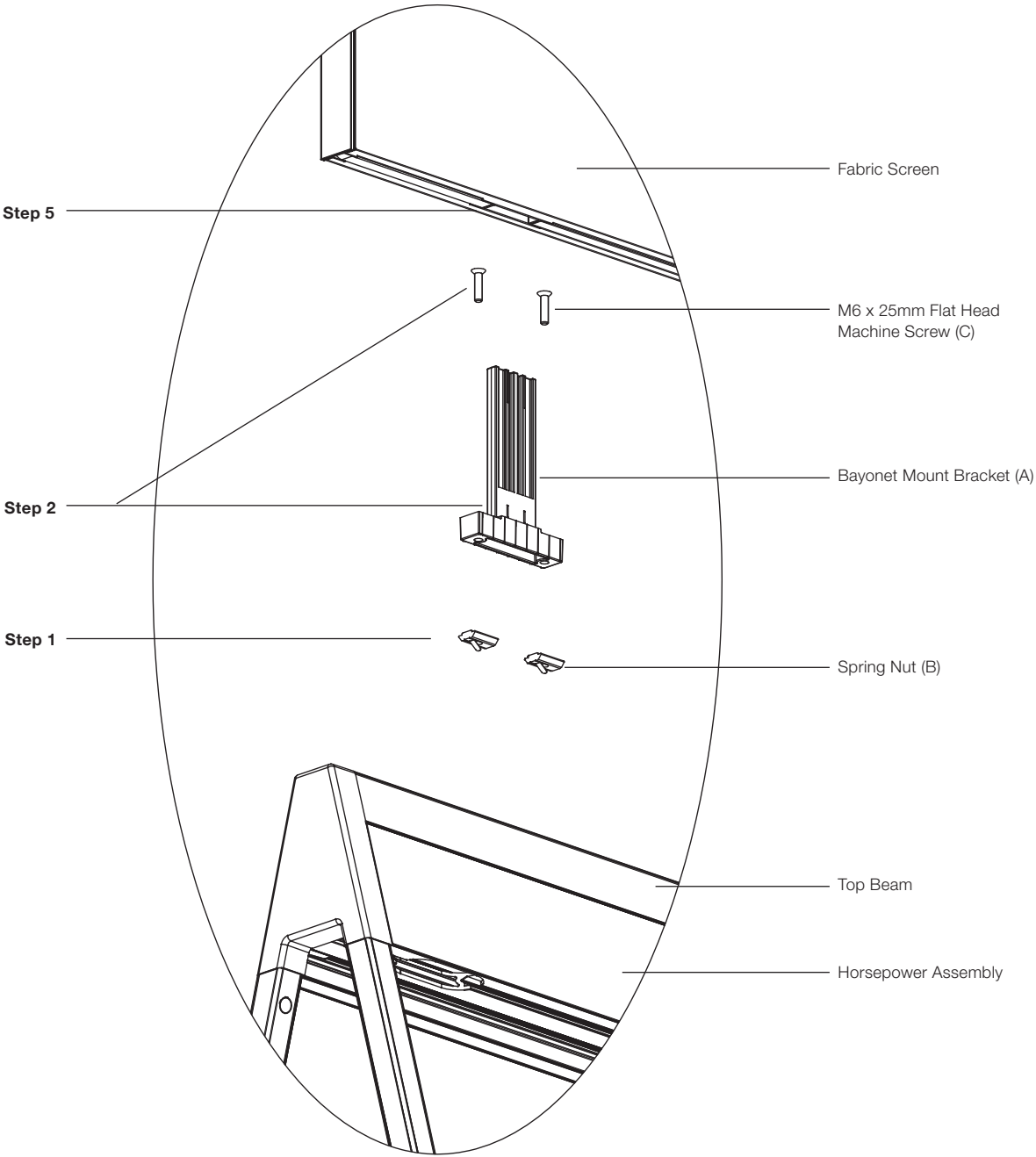
STEPS

1. Insert M6 spring nuts (B), as required, into the top beam of the Horsepower assembly with the spring tabs facing downward.

Note: Each bayonet mount bracket requires (2) M6 spring nuts (B).
2. Attach (2) bayonet mount brackets (A) loosely to the spring nuts (B), using (2) M6 x 25mm flat head machine screws (C) per bracket. Do not tighten.
3. Determine the desired screen position along the width of the horsepower assembly, and adjust/slide the location of the bayonet mount brackets (A) along the top beam so they will correspond with the openings on the underside of the screen.
4. Tighten the screws (C) in the bayonet mount brackets (A) to secure their locations.
5. Position the openings in the underside of the screen over the bayonet mount brackets (A) and push the screen down until the screen is firmly seated.



Partially Exploded Horsepower
Fabric Screen Assembly



Horsepower to Antenna Desk Adapter
Brackets: Installed and Exploded Detail View

Pattern Numbers Represented:

42" High Horizon Hard Surface Screens, **YPSC14**_ _

49" High Horizon Hard Surface Screens, **YPSC21**_ _

Parts List:

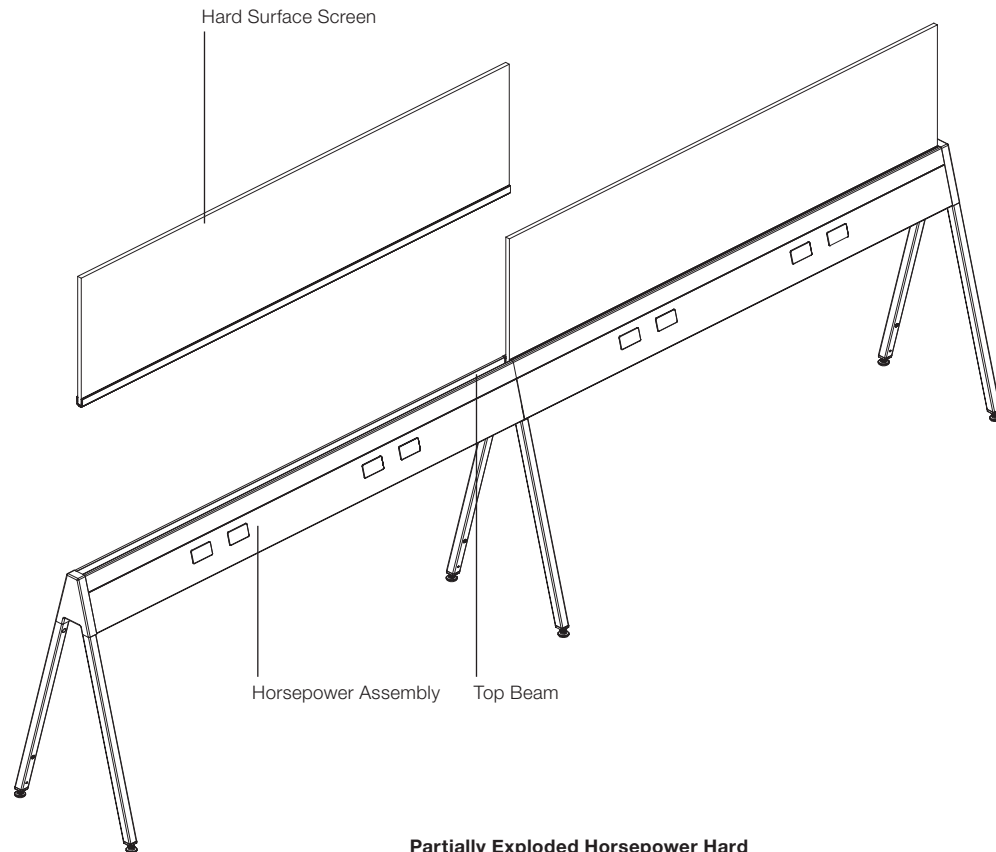
Screens

Horsepower Assembly

Tools Needed:

Rubber Mallet

Level



Partially Exploded Horsepower Hard Surface Screen Assembly

STEPS

1. Complete Horsepower assembly, as required.
(See Freestanding or Linking Horsepower installation section.)
2. Orient each screen so the aluminum extrusion bracket is at the bottom, and pressure fit into the slot in the top beam.
3. If required, use a rubber mallet to lightly tap each screen into the slot, assuring that each screen is level and firmly seated.

Pattern Numbers Represented:

Saddle, YHP1AS_

Parts List:

M6 x 12mm Button Head Machine Screw (A)

M6 Spring Nut (B)

Saddle

Attached Block Assembly

Independent or linked Horsepower Assembly

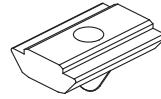
Tools Needed:

4mm Allen Wrench

(A) 3AB8207



(B) 3AB4021



STEPS

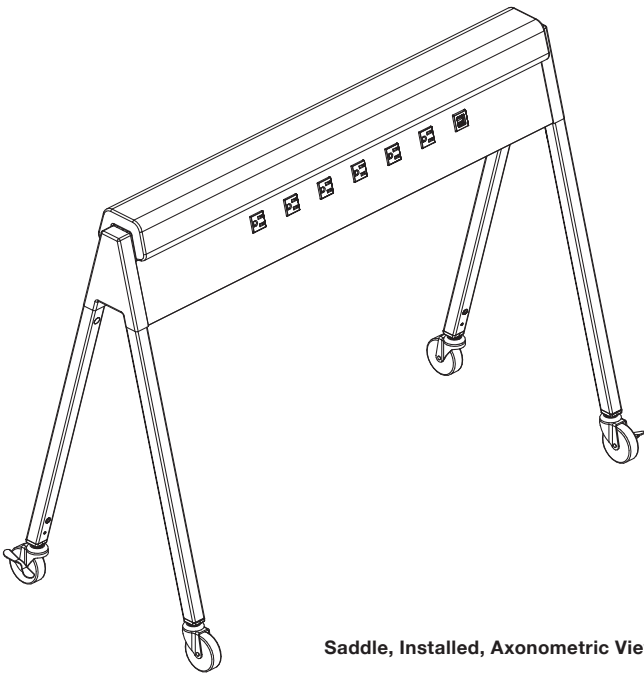
1. Insert two M6 spring nuts (B) into the top beam of the pre-assembled independent or linked Horsepower assembly with the spring tabs facing downward.

Adjust the spacing between the nuts so it corresponds with the spacing between the round holes in the attachment block assembly.

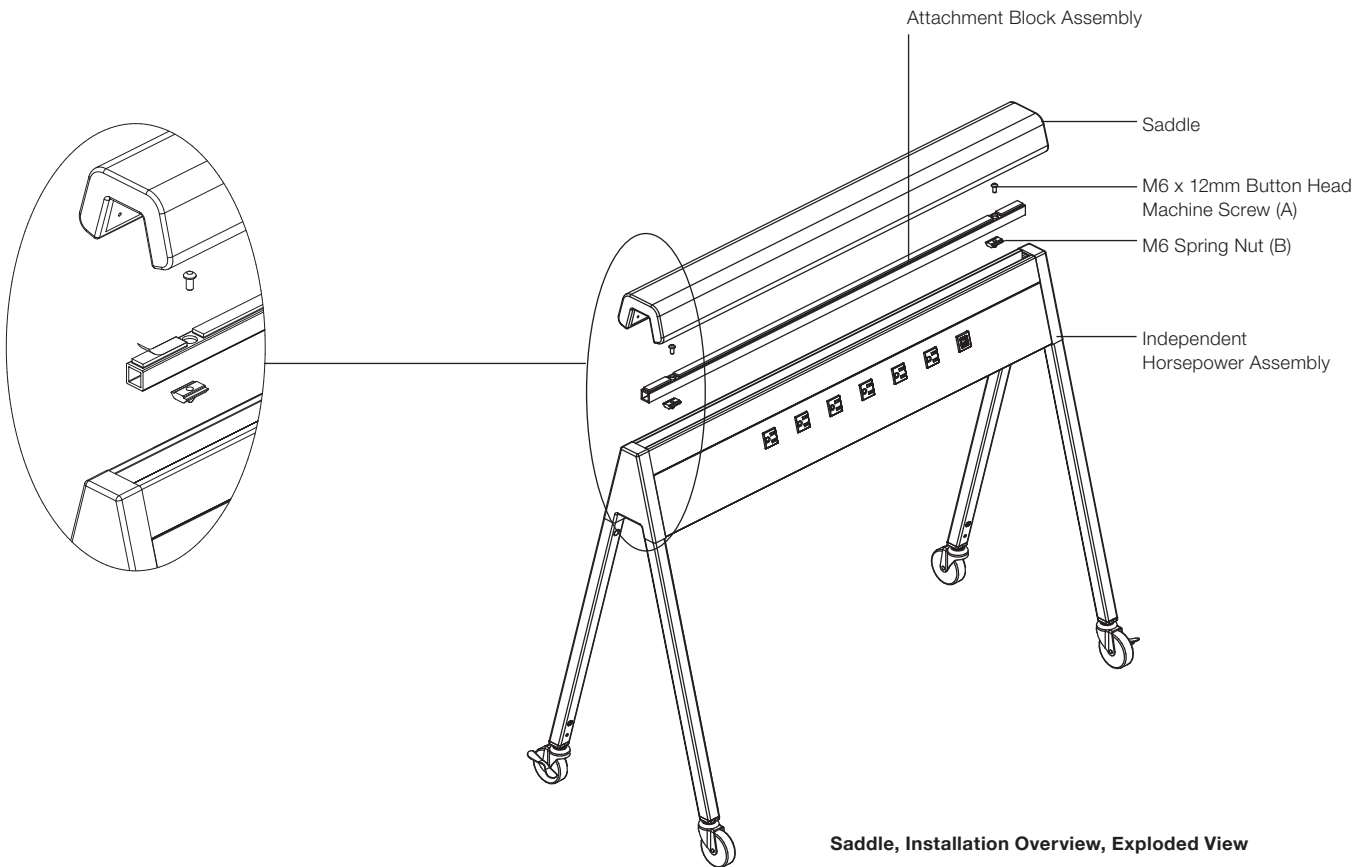
2. Insert the attachment block assembly into the top beam with the Velcro tape facing upward, and attach to the spring nuts with (2) M6 x 12mm button head machine screws (A).
3. Remove the pressure sensitive backing from the three sections of Velcro tape on the attachment block assembly to expose the adhesive.

4. Position the saddle, carefully centered, on top of the exposed adhesive and press firmly for 30 seconds to bond the saddle to the attachment block.

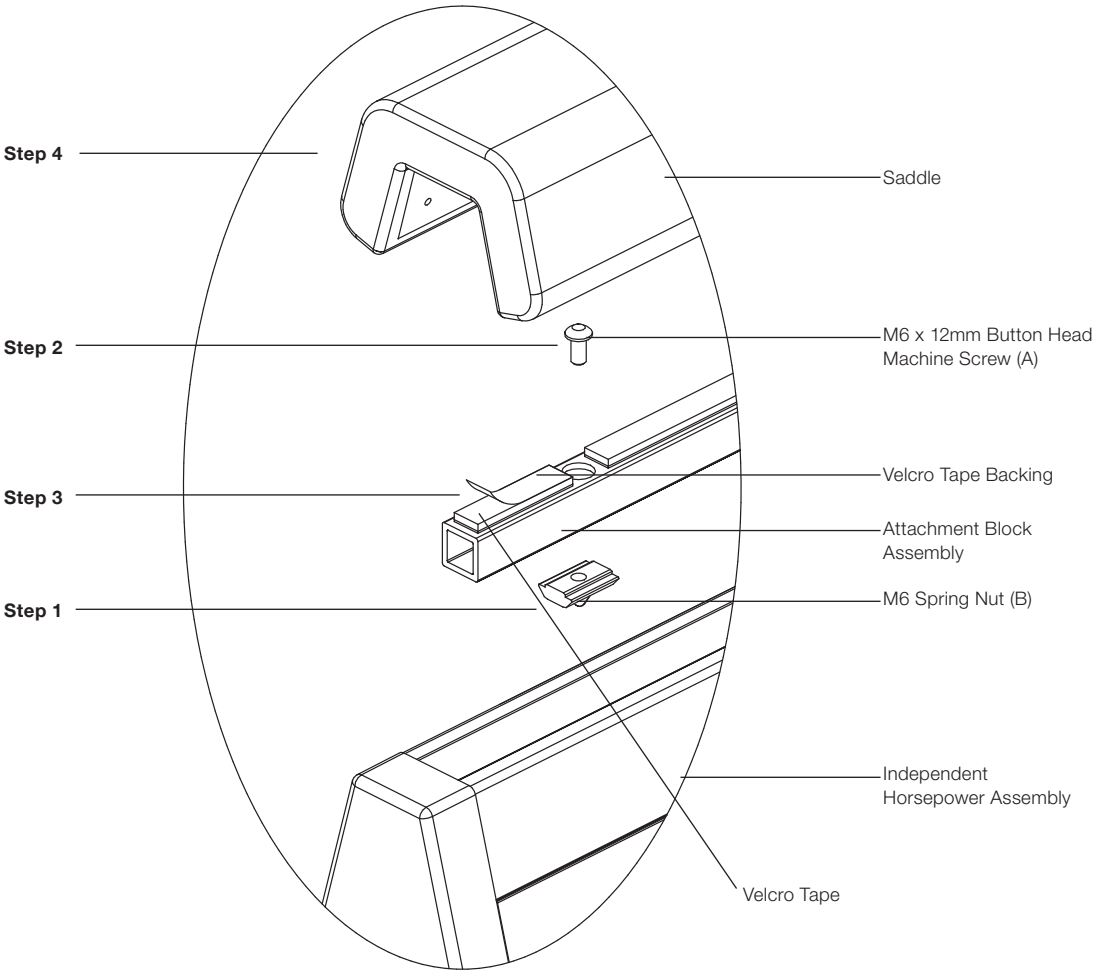
Note: The seat is removable, but should be allowed to remain attached for at least 1 hour after initial installation to allow the adhesive bond to set.



Saddle, Installed, Axonometric View



Saddle, Installation Overview, Exploded View



Saddle Installation, Detail

Pattern Numbers Represented:

Over Counter, **YHP1AP**_ _

Parts List:

Counter Plate (A)

Counter Attachment Bracket (B)

M6 x 16mm Flat Head Machine Screw (C)

#10 x 5/8" Flat Head Wood Screw (D)

M6 Spring Nut (E)

Over Counter Top

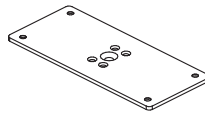
Independent Horsepower Assembly

Tools Needed:

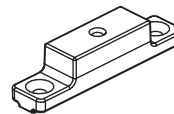
4mm Allen Wrench

Power Driver with #2 Phillips bit

(A) 3AB8269*



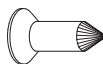
(B) 3AB8175



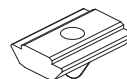
(C) 3AB8169



(D) 3AB8189



(E) 3AB4021

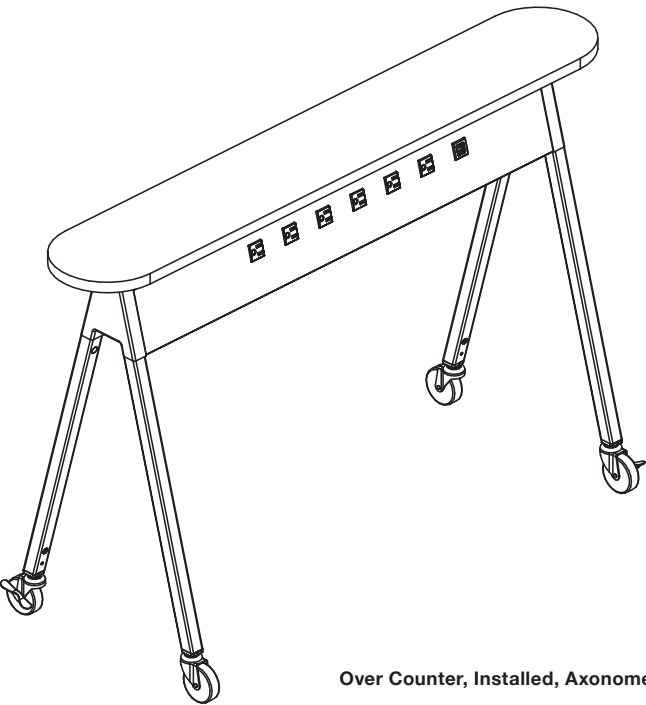


STEPS

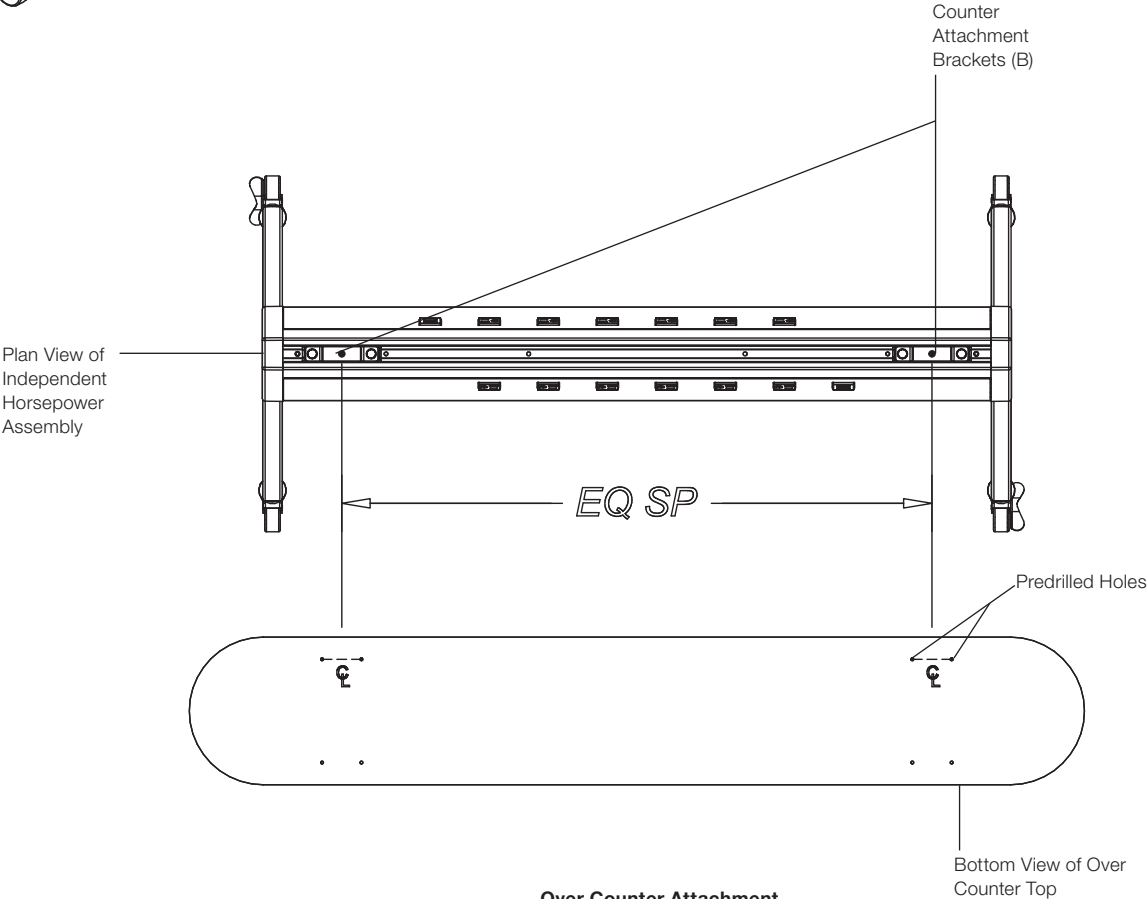
1. Insert (4) M6 spring nuts (E), (2) towards each end, into the top beam of the pre-assembled independent Horsepower assembly with the spring tabs facing downward.

Adjust the spacing between the nuts so it corresponds with the spacing between the pair of holes in the counter attachment brackets (B).
2. Insert (2) counter attachment brackets (B) into the top beam, and attach to the spring nuts, loosely, with (2) M6 x 16mm flat head machine screws (C) in each bracket.
3. Measure and note the distance (centerline) between the two sets of predrilled holes in the bottom of the over counter top.

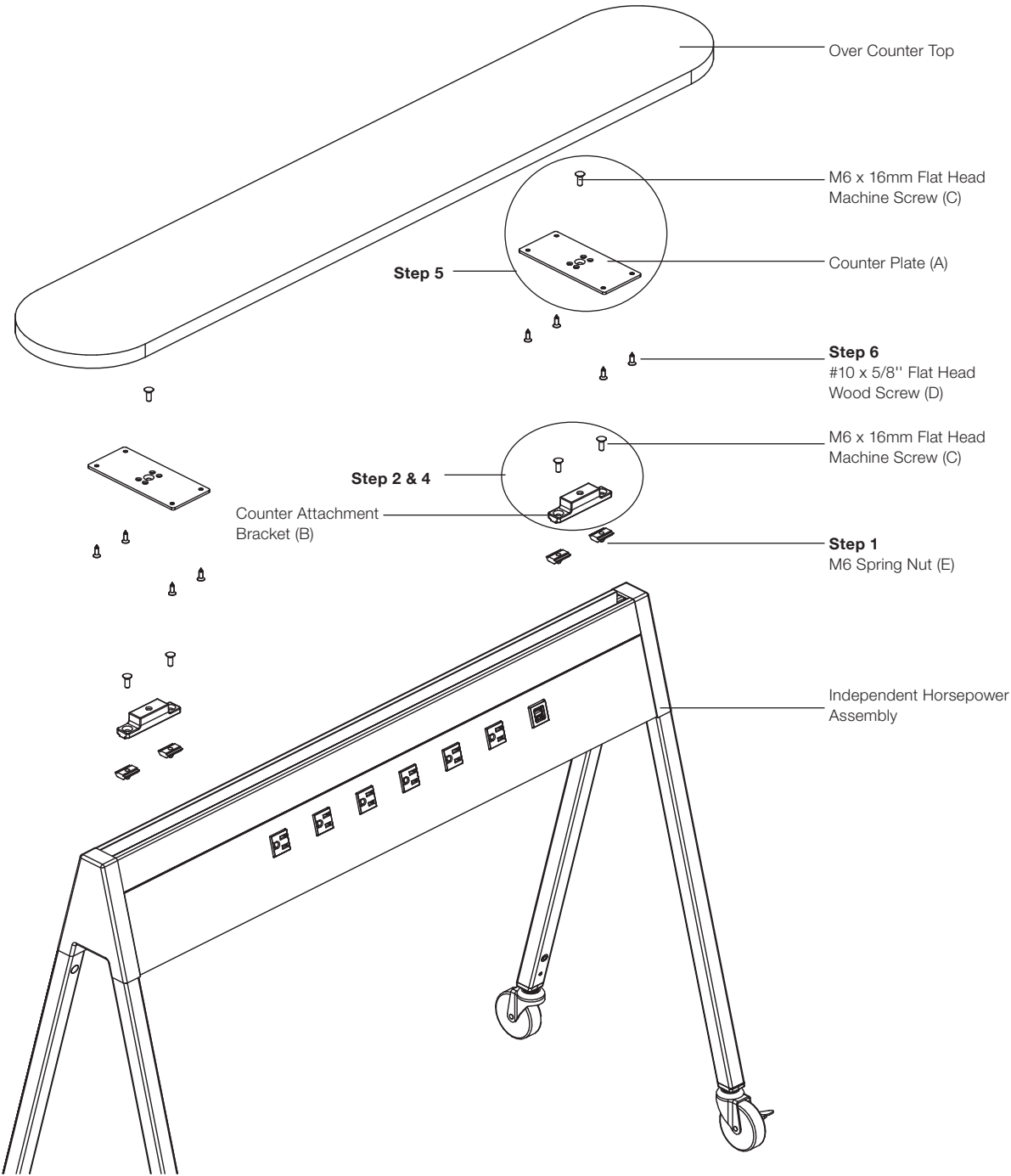
Adjust the spacing of the counter attachment brackets (also centerline) so that they are equidistant and centered on the Horsepower assembly.
4. Tighten the (4) screws (C) previously placed into the counter attachment brackets (B) to firmly set their position.
5. Place (1) counter plate (A) on each counter attachment bracket (B) and attach with (1) M6 x 16mm flat head machine screw (C) in each bracket.
6. Center the over counter top on the counter plates (A), and attach from below with (4) #10 x 5/8" flat head wood screws (D) through each plate and into the predrilled holes in the top.



Over Counter, Installed, Axonometric View



Over Counter Attachment Bracket Spacing, Step 3



Over Counter, Exploded Detail

Pattern Numbers Represented:

Top Platform, **YHP1UP**__

Parts List:

Platform Plate (A)

Stanchion (B)

Stanchion Base (C)

#8-32 x 1" Pan Head Thread Rolling Taptite Screw (D)

8-32 x 1 Flat Head Trilobe Machine Screw (E)

M6 x 25mm Flat Head Machine Screws (F)

#10 x 5/8" Flathead Wood Screw (G)

M6 Spring Nut (H)

Top Platform Worksurface

Horsepower Assembly

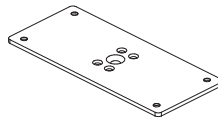
Beam Top Caps

Tools Needed:

4mm Allen Wrench

Power Driver with #2 & #3 Phillips bits

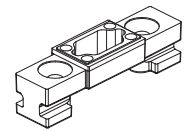
(A) 3AB8269*



(B) 3AB8268*



(C) 5AD5005*



(D) 5AD5015



(E) 5AD5009



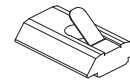
(F) 3AB4055



(G) 3AB8189



(H) 3AB4021



STEPS

ASSEMBLE STANCHIONS

1. Position a stanchion (B) on top of a stanchion base (C) and connect, from below, with (4) #8-32 x 1" pan head thread rolling Taptite screws (D).
2. Position a platform plate (A) on top of the stanchion assembly, and connect, from above, with (4) 8-32 x 1 flat head trilobe machine screws (E).

Repeat steps 1-2 for all stanchions

POSITION STANCHION ASSEMBLIES

3. Insert M6 spring nuts (H), as required, into the top beam of the Horsepower assembly with the spring tabs facing downward.

Note: Each stanchion requires (2) M6 spring nuts (H). The quantity of stanchions varies per length of top platform.

Adjust the spacing between the nuts so they correspond with the spacing between the pairs of holes in the stanchion bases (C).

4. Insert the stanchion assemblies into the top beam, and attach to the spring nuts, **loosely**, with (2) M6 x 25mm flat head machine screws (F) in each stanchion base (C).
5. Measure and note the distance (centerline) between the sets of predrilled holes in the bottom of the top platform worksurface.

Adjust the spacing of the stanchion assemblies (also centerline) so that they are equidistant and positioned per the specification on the Horsepower assembly.

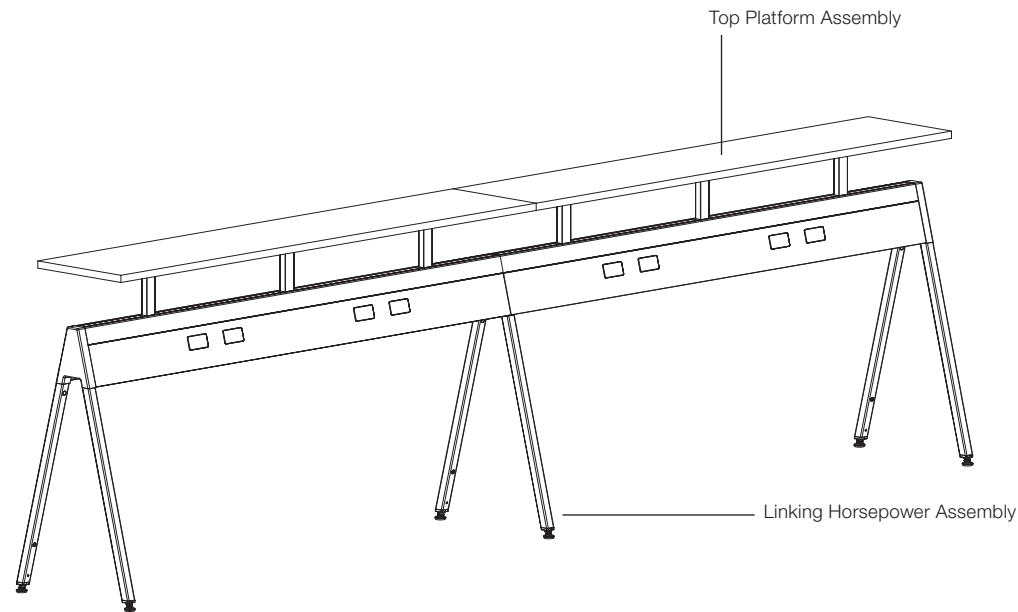
6. Tighten the (4) M6 x 25mm flat head machine screws (F) previously placed into the stanchion bases (C) to firmly set their position.

ATTACH TOP PLATFORM

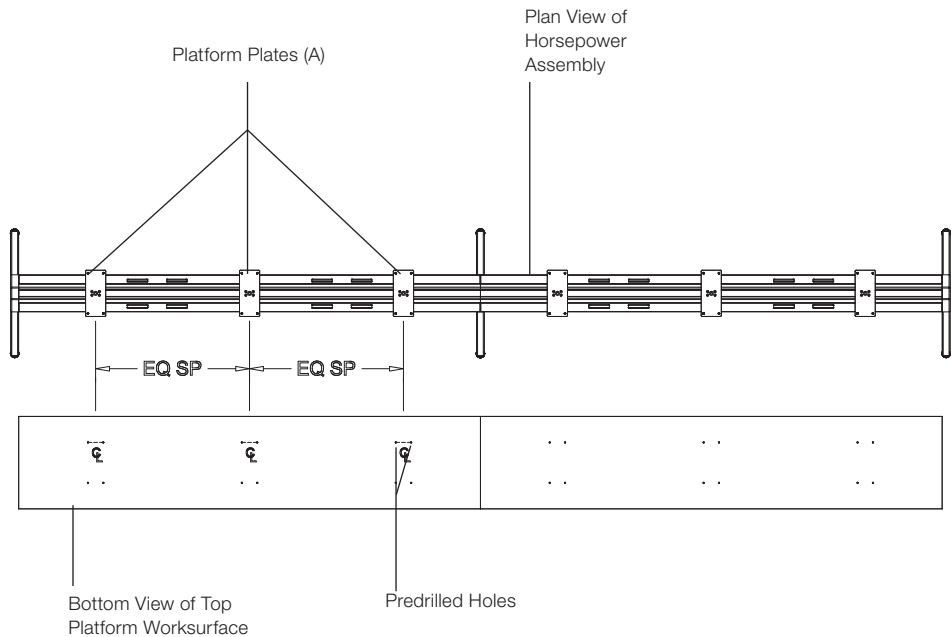
7. Center the top platform worksurface on the platform plates (A), and attach, from below, with (4) #10 x 5/8" flat head wood screws (G) through each plate and into the predrilled holes in the underside of the top platform worksurface.

INSTALL TOP CAPS

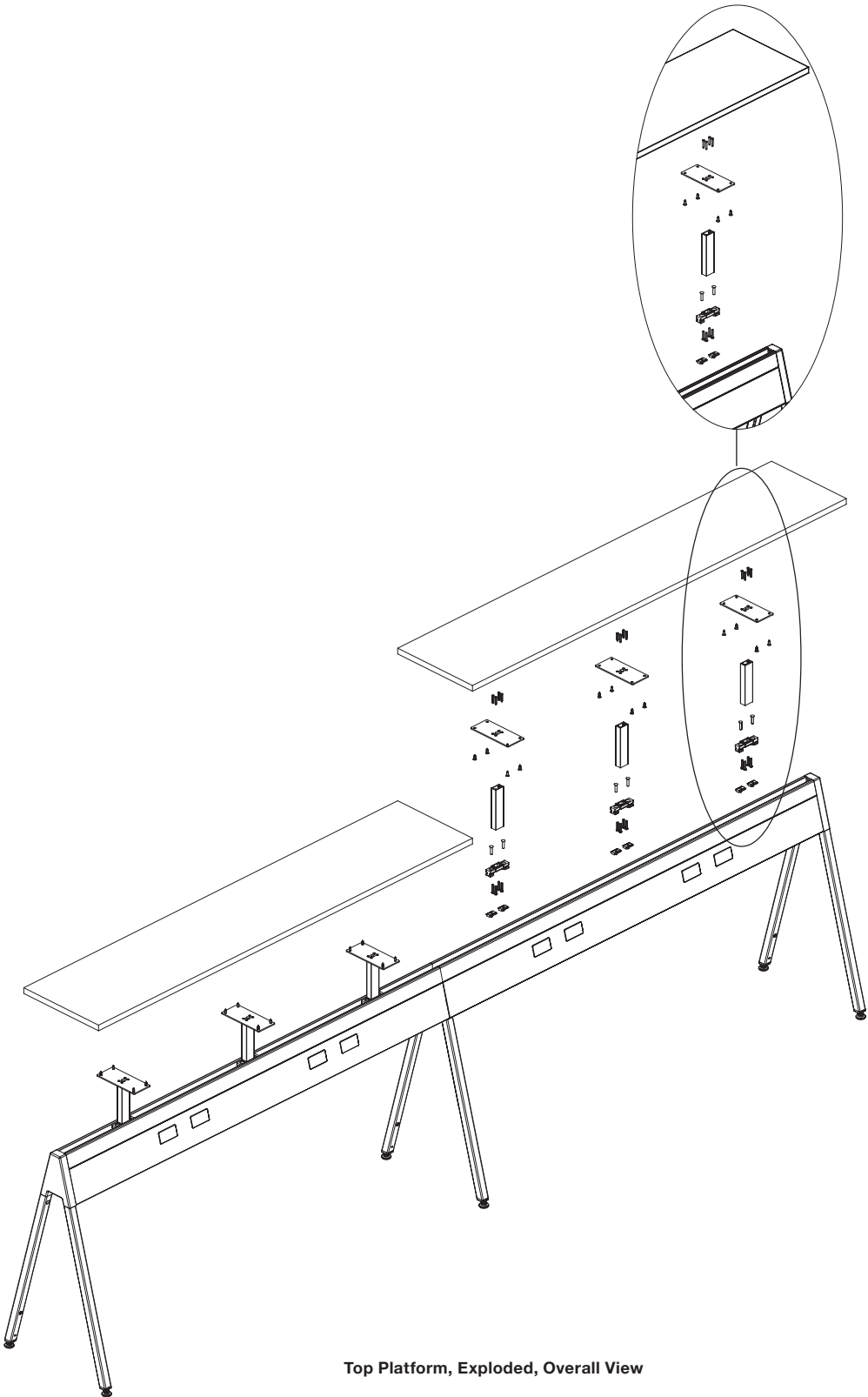
8. Cut beam top caps to fit the spaces between the vertical stanchions (B) and position into the top beams.



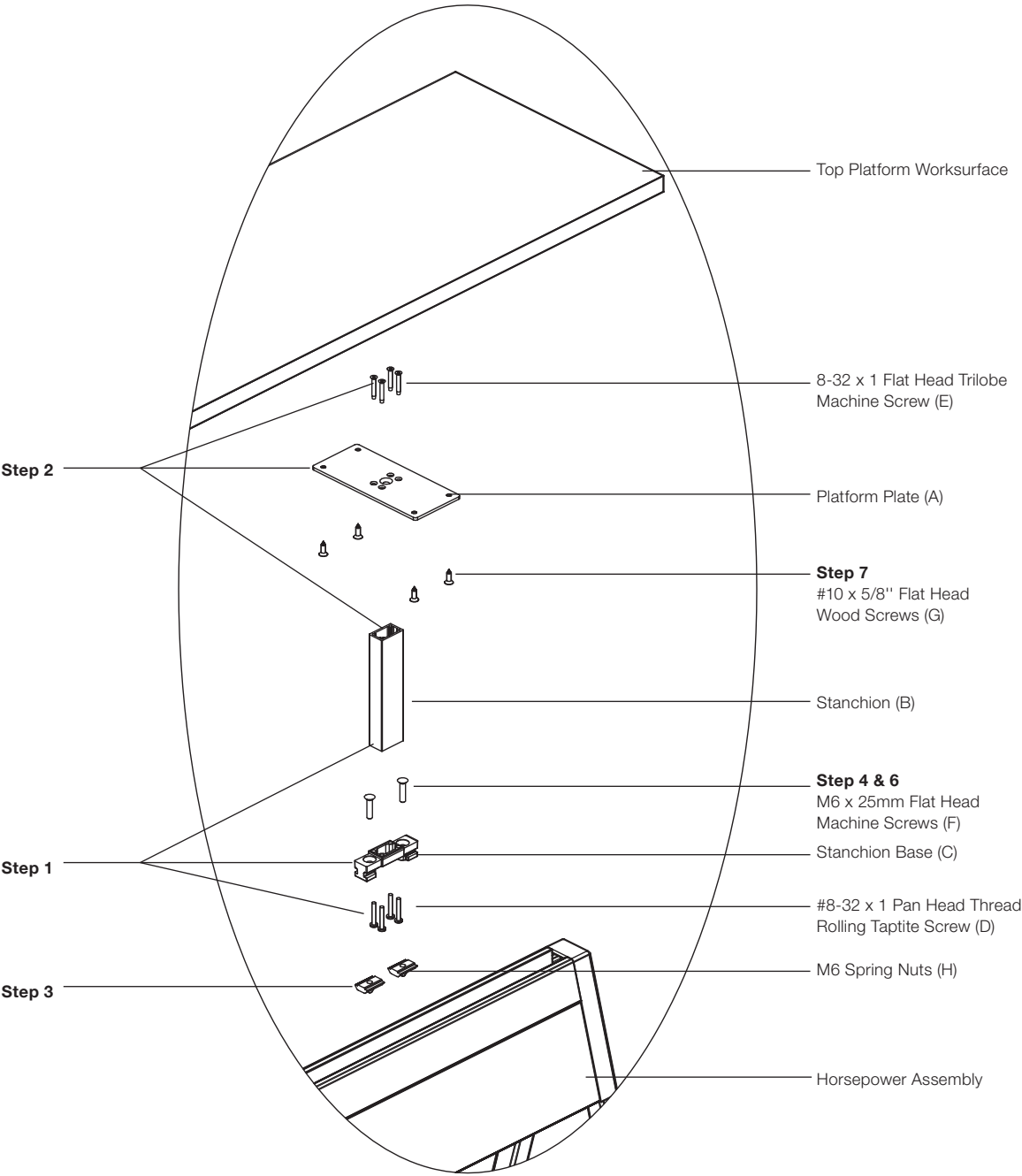
Top Platform, Installed



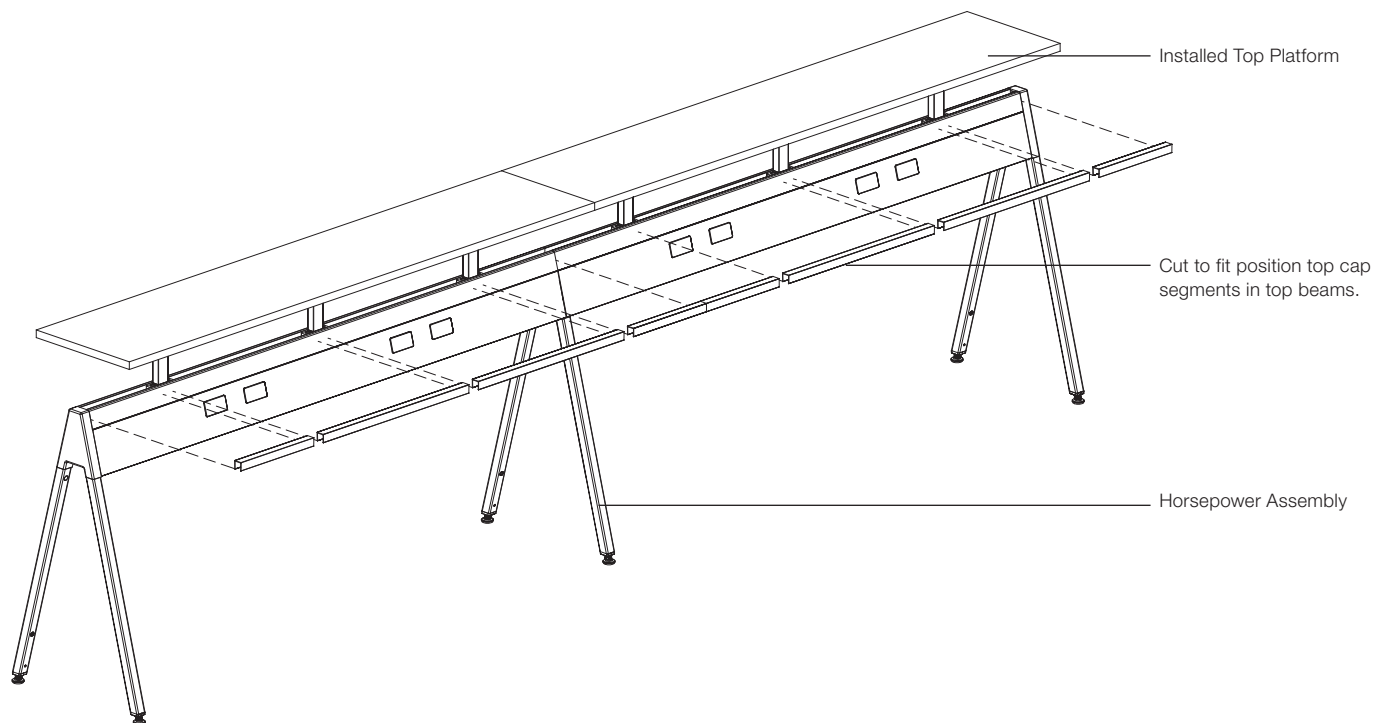
Over Counter Attachment Bracket Spacing, Step 5



Top Platform, Exploded, Overall View



Top Platform, Exploded, Detail



Top Platform, Top Cap Installation, Step *

Pattern Numbers Represented:

Horsepower Display Shelf, **YHP1DS_**

Parts List:

Support Bracket (A)

Desk Cradle (B)

M6 Spring Nut (C)

M6 x 16mm Flat Head Machine Screw (D)

5/16-18 x 1" Flat Head Machine Screw (E)

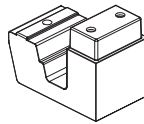
Horsepower Display Shelf

Horsepower Assembly

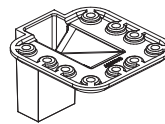
Tools Needed:

Power Driver with #2 & #3 Phillips bits

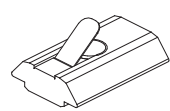
(A) 3AB8168*



(B) 3AB8167*



(C) 3AB4021



(D) 3AB8169



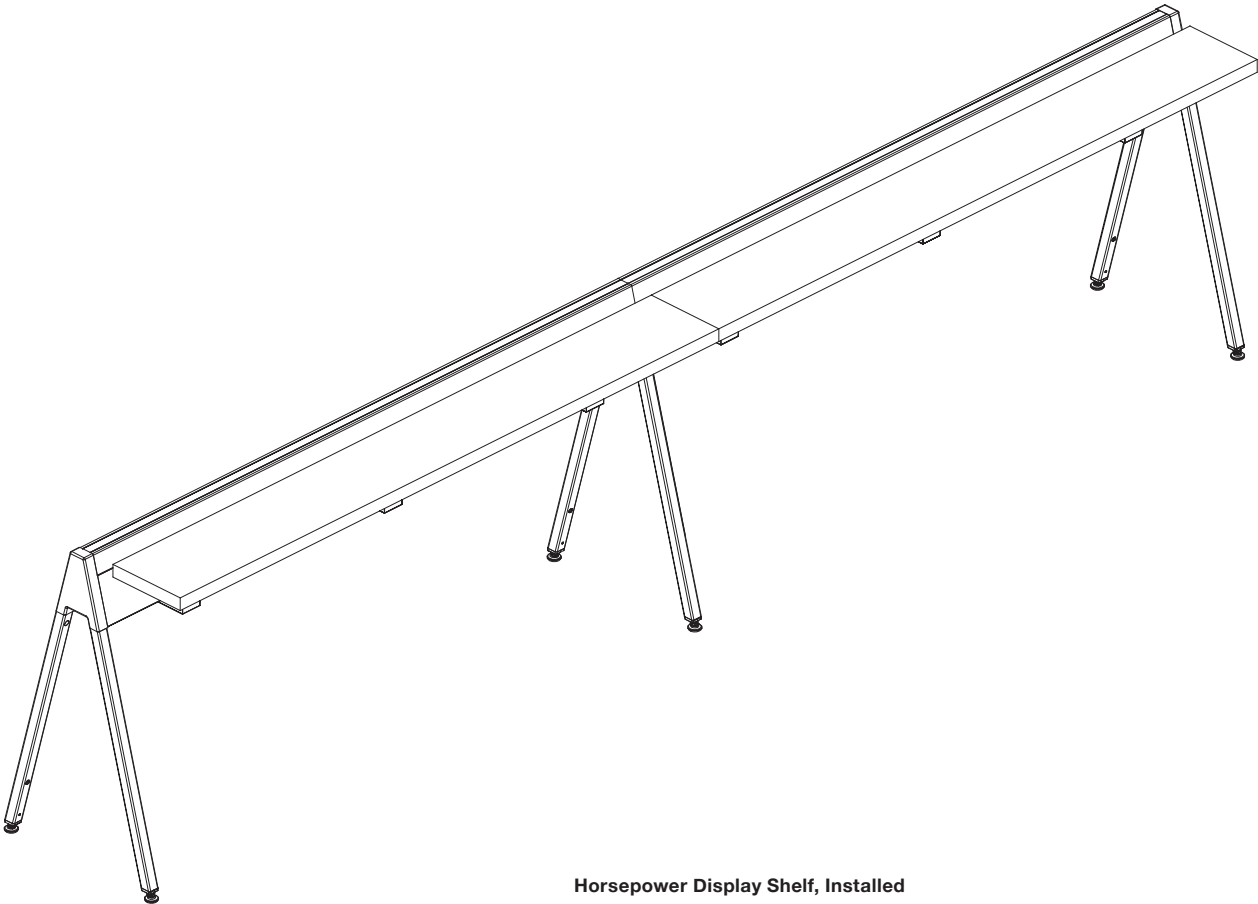
(E) 6AA450140



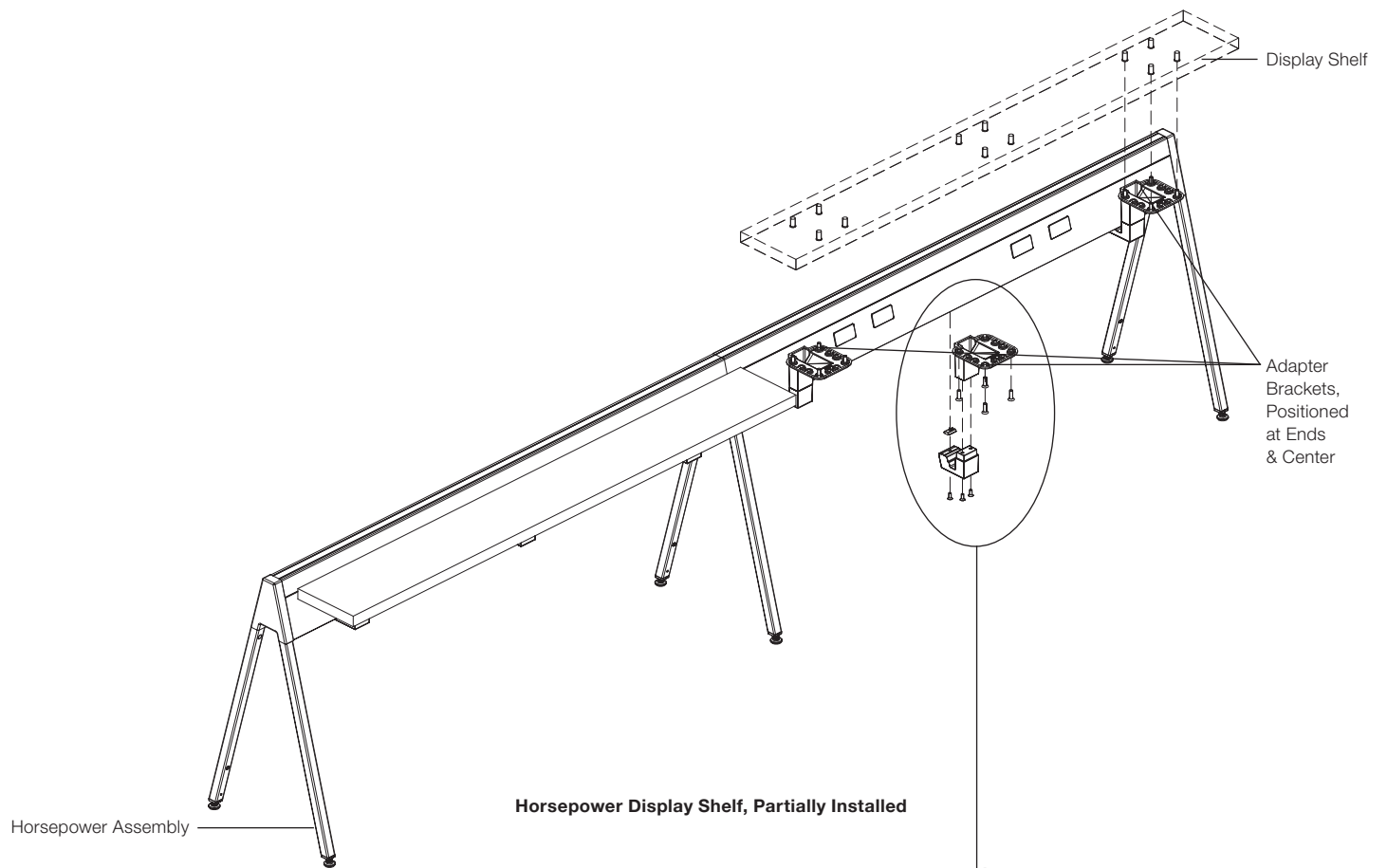
STEPS

1. Insert (3) M6 spring nuts (C), into the outer slot of the bottom beam of the Horsepower assembly with the spring tabs facing upward. Space the spring nuts so they are towards the ends and center of where the Display Shelf will be mounted.
2. Place a desk cradle (B) on each support bracket (A) and attach each, from below, with (2) M6 x 16mm flat head machine screws (D).
3. Position the support bracket assemblies beneath the spring nuts (C) and attach each assembly, loosely, with an M6 x 16mm flat head machine screw (D).
4. Position the Display Shelf onto the (3) adapter bracket assemblies. Adjust the position of the bracket assemblies so the holes in the brackets align with the threaded inserts under the shelf.
5. Adjust the shelf position, if necessary, then tighten the previously attached M6 x 16mm flat head machine screws (D) to secure the spring nuts in their final location.

Attach the shelf to the adapter bracket assemblies using (4) 5/16-18 x 1" flat head machine screws (E) per desk cradle (B).



Horsepower Display Shelf, Installed



Step 4

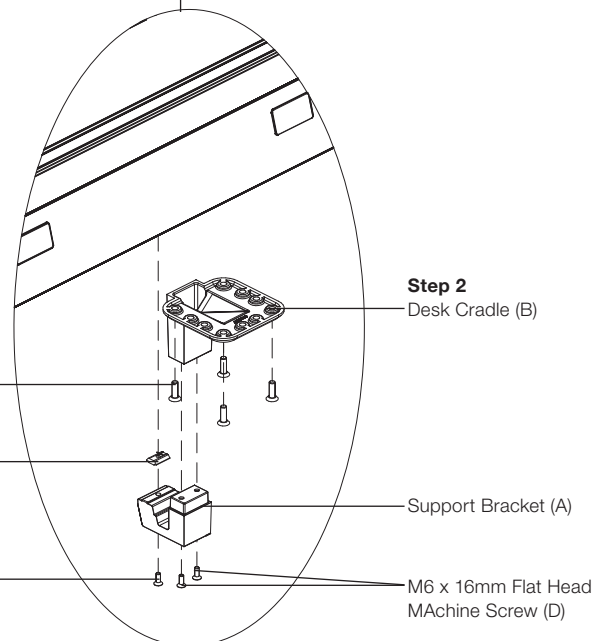
5/16-18 x 1" Flat Head Machine Screw (E)
Attach to Shelf

Step 1

M6 Spring Nut (C)

Steps 3 & 5

M6 x 16mm Flat Head Machine Screw (D)



Pattern Numbers Represented:

Suspended Cabinet Mounting Brackets, **YHP1 SK_**
 Cabinet, Open with Center Partition, **YHP1 SOS_**
 Cabinet, Enclosed Back, Open One Side, **YHP1 SOE_**
 Cabinet, Enclosed Back, Shared Two Sides, **YHP1 SOE (L/R)_**
 Cabinet, Enclosed Back, Case for Overlapping Doors One Side, **YHP1 SSD_**
 Cabinet, Enclosed Back, Shared Case for One Door on Each Side, **YHP1 SSD (L/R)_**
 Wood Undershef, **YHP1 SWS _ _**

Parts List:

Right Hand Cabinet Bracket (A)
 Left Hand Cabinet Bracket (B)
 Two Sided Cabinet Bracket (C)
 M6 x 20mm Flat Head Hex Screw (D)
 #14 x 1" Flat Head Wood Screw (E)
 End Cap (F)
 M6 x 12mm Pan Head Machine Screw (G)
 Threaded Insert (H)
 Horsepower Assembly
 Cabinet Case or Wood Shelf
 Threaded Insert

Tools Needed:

Power driver with #2 Phillips bit
 Hex Bits, size 6mm (for threaded inserts) and 4mm (for hex screws)
 Driver Extension
 Rubber Mallet

STEPS

Wood cabinets and shelves that are 48" or wider require a stiffener, mounted under the cabinet or shelf.

INSTALL STIFFENERS

1. Insert an end cap (F) into each end of the stiffener support, using a rubber mallet.
2. Turn the cabinet case or wood shelf upside down and screw the threaded inserts (H) into the underside of the case or wood shelf, as required. The number of inserts will vary per the size of the case or shelf.
3. Position a stiffener support on the underside of the case or shelf. The larger holes on the stiffener support should be facing upward. Attach the stiffener support using an M6 x 12mm pan head machine screw (G) for each threaded insert (H). Utilize a driver extension, if necessary, to reach through the stiffener support and tighten the screws.

Repeat steps 1-3 for each cabinet case or wood shelf.

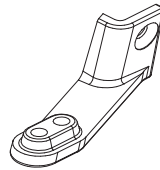
ATTACH SUPPORT BRACKETS

4. For each end leg, attach (1) right hand cabinet bracket (A), and (1) left hand cabinet bracket (B), with an M6 x 20mm flat head hex screw (D) for each.
5. For each mid leg, attach (2) two sided brackets (C) with an M6 x 20mm flat head hex screw (D) for each.

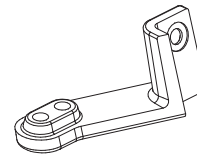
INSTALL CABINET CASES OR WOOD SHELVES

6. Orient each cabinet case or wood shelf upright, and position within the Horsepower assembly, on top of the installed cabinet brackets (A, B & C).
7. Attach each cabinet case or shelf with (4) #14 x 1" flat head wood screws (E) from below, through the cabinet brackets (A, B & C), and into the predrilled holes in the underside of the case or shelf.

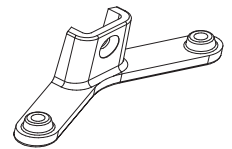
(A) 3AB8274R



(B) 3AB8274L



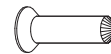
(C) 3AB8263



(D) 3AB8284



(E) 3AB8298



(F) 3AB4000

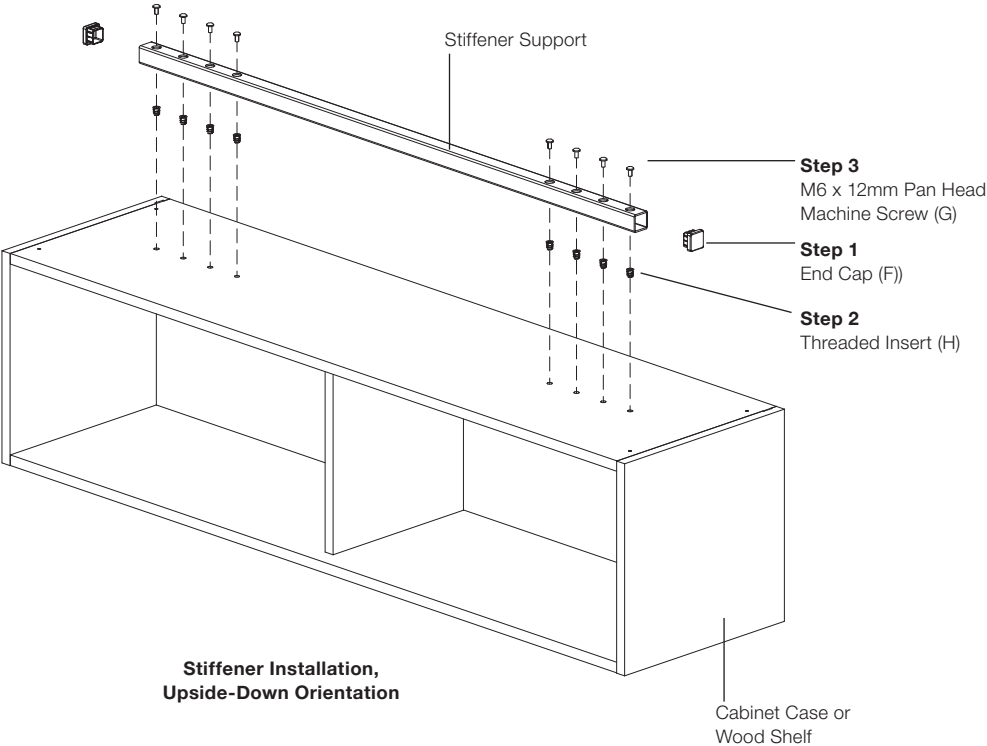
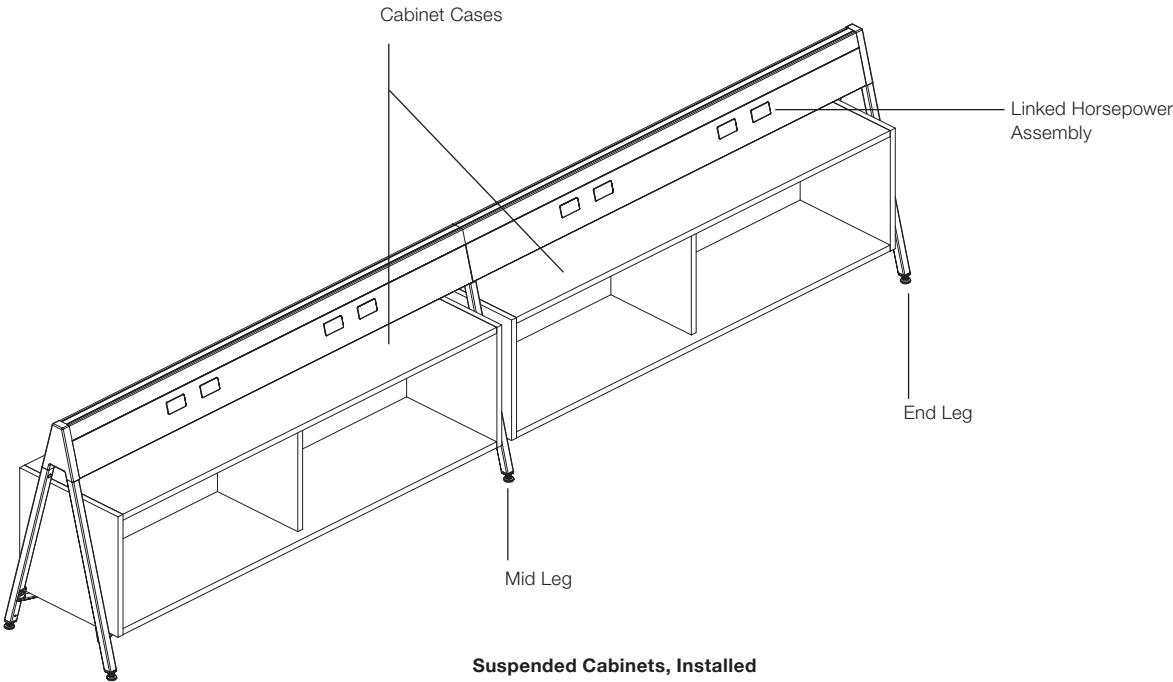


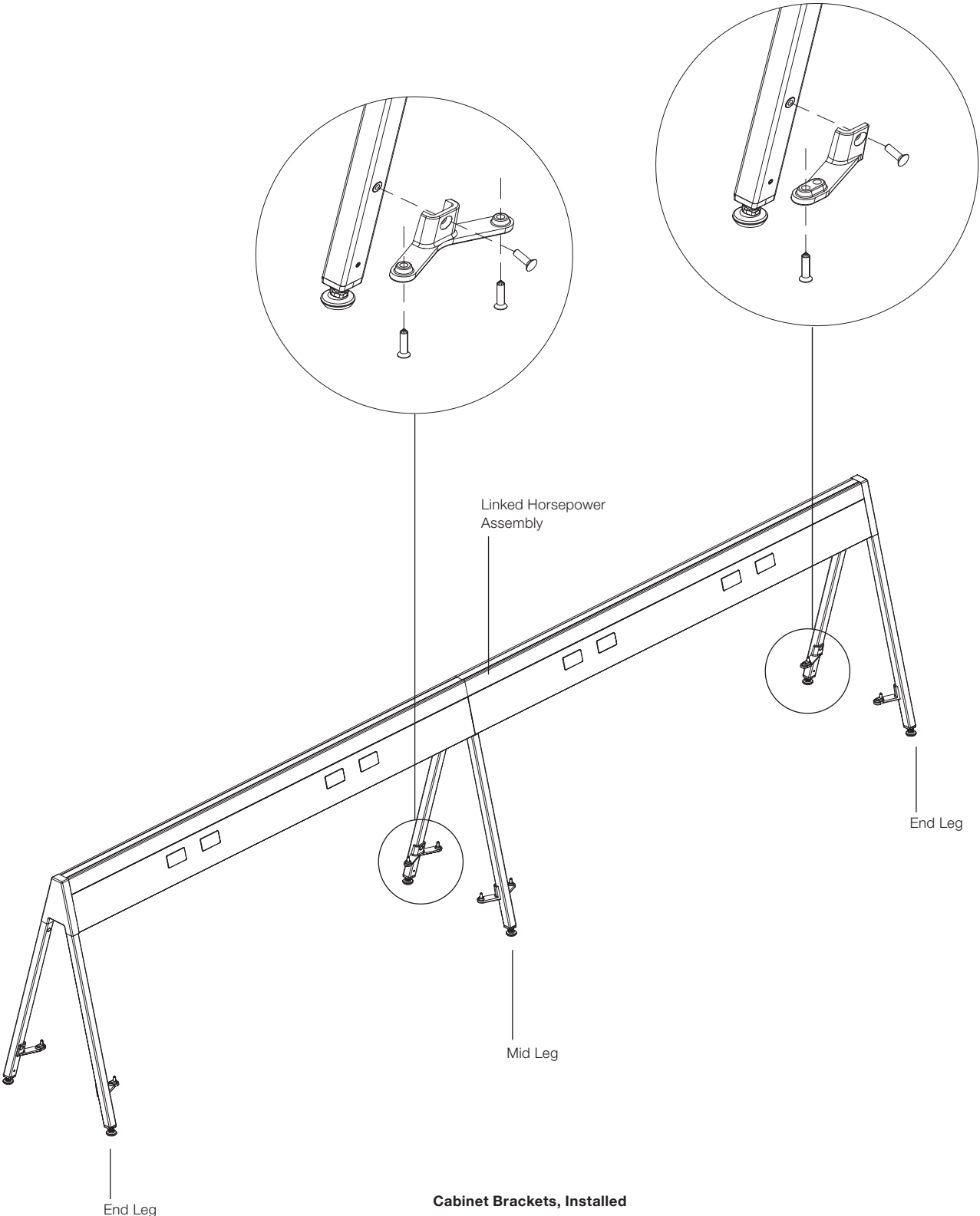
(G) 3AB8305

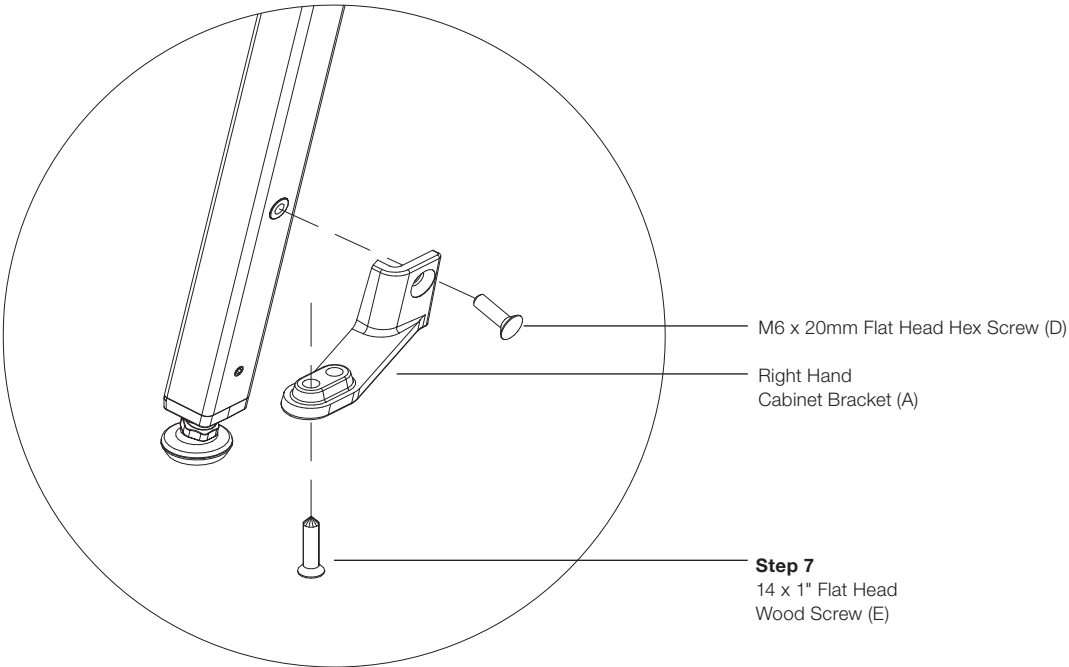


(H) 3AB8326

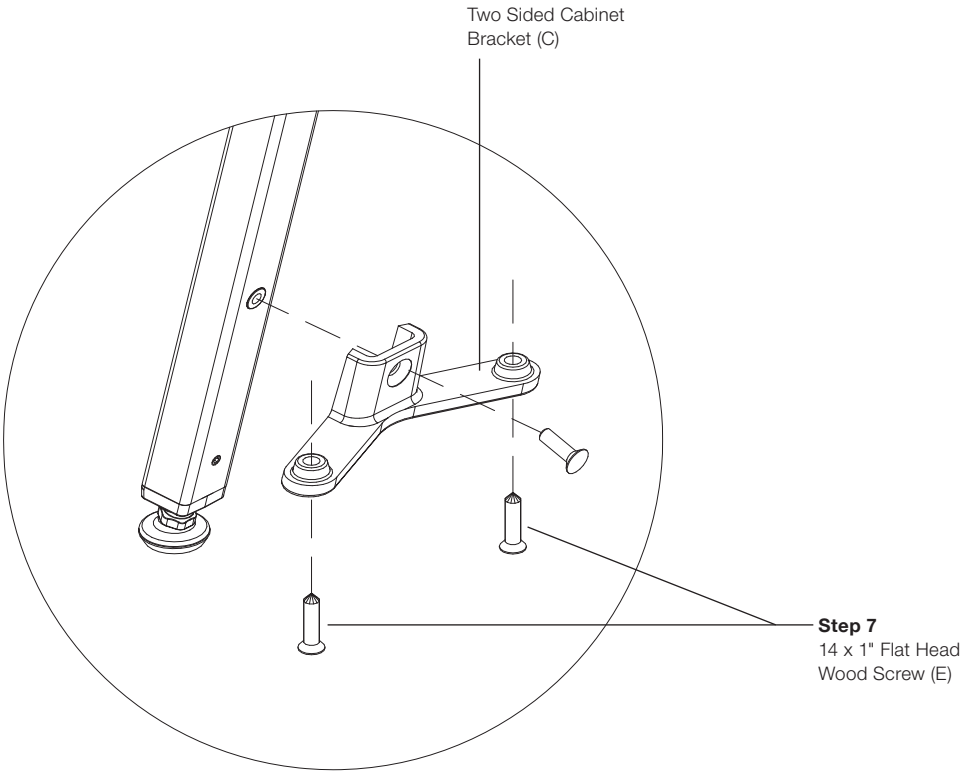








Cabinet Brackets Detail, End Leg
(right hand bracket shown)



Cabinet Brackets Detail,
Mid Leg

Pattern Numbers Represented:

Enclosed Back Doors Kit, **YHP1 SDK_**
 Enclosed Doors Kit, Left Handed, **YHP1 SDKL_**
 Enclosed Doors Kit, Right Handed, **YHP1 SDKR_**

Parts List:

Housing (A)
 Fastener (B)
 Guide (C)
 Running Gear (D)
 Stopper (E)

Horsepower Assembly
 Suspended Cabinet
 Sliding Doors

Tools Needed:

Power driver with #2 Phillips bit
 Hex Bits, size 6mm (for threaded inserts) and 4mm
 (for hex screws)
 Driver Extension
 Rubber Mallet

(A) 6TP40330



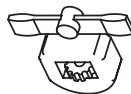
(B) 6TP40335



(C) 6TP40333



(D) 6TP40331



(E) 6TP40332



STEPS

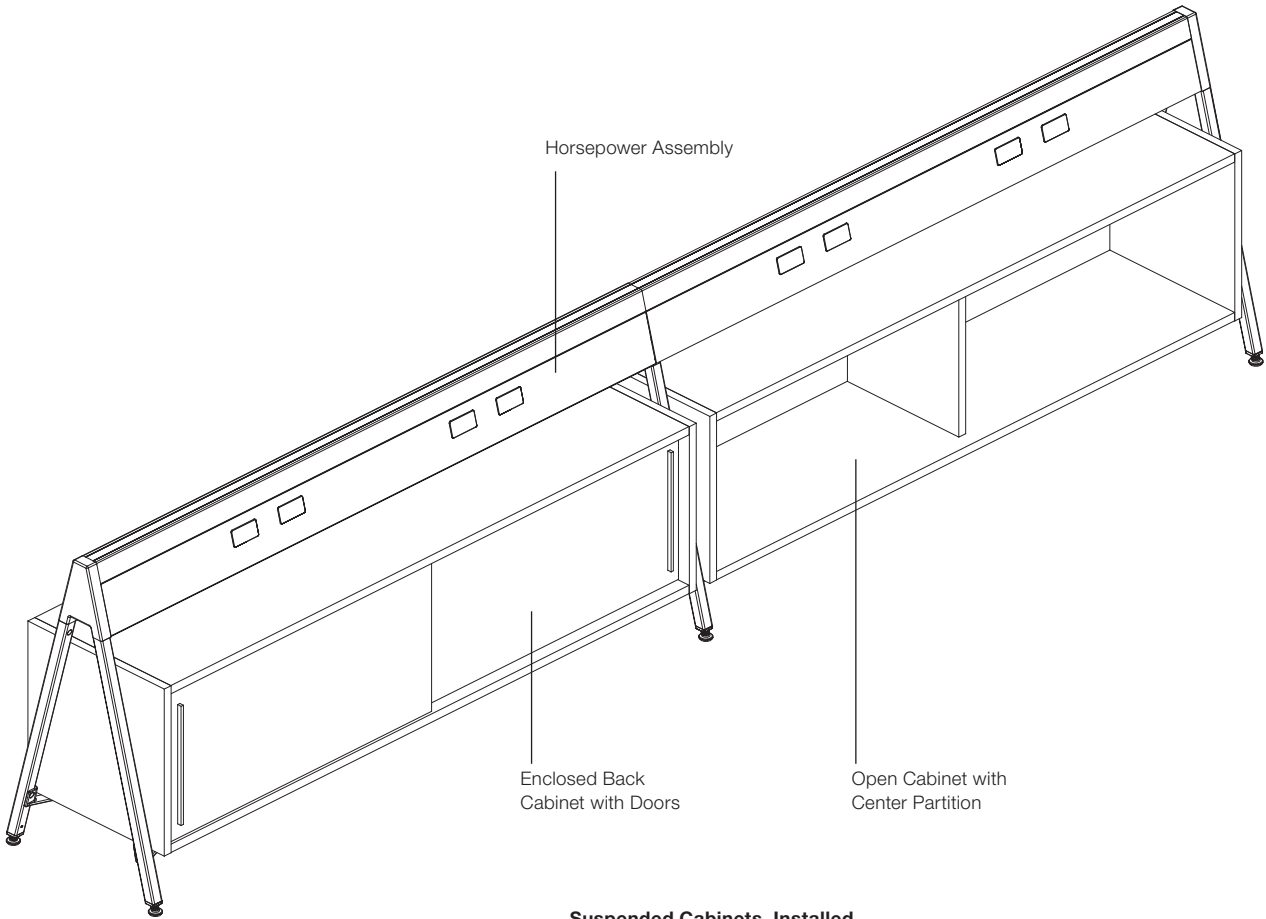
SLIDING DOOR PRE-ASSEMBLY

1. (If not factory installed) Fasten the housings (A) to the back of doors into the factory drilled pockets using fastener (B). (Fig. 2)
2. (If not factory installed) Using a hammer, insert the press-fit guide(s) (C) into the factory drilled hole(s) on the inside surface of the bottom shelf oriented with the flats of the guide parallel to the front edge of the bottom shelf. (Fig. 3)

3. At each end of the factory installed support rail you will find a rectangular cut-out, using this as an access point, install all the running gears (D). (Fig. 4)
4. Once all the running gears are installed onto the track(s), insert one stopper (E) at each end. (Fig. 5A & 5B)

SLIDING DOOR INSTALLATION

5. Line the bottom track on the back of the door with the guides on the bottom shelf, rotating the door up, align the running gears with the housings and snap into place.
6. (If required) The doors can be leveled using the gear mechanism on the running gears which provides 1/8" of adjustment up and down for a total of 1/4" adjustability. (Fig.7)



Suspended Cabinets, Installed

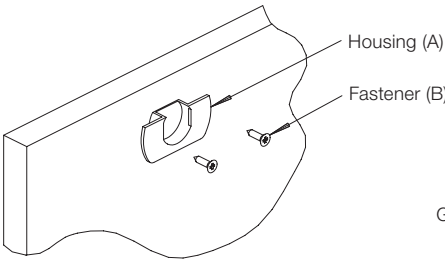


Figure 2

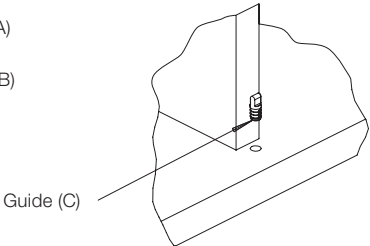


Figure 3

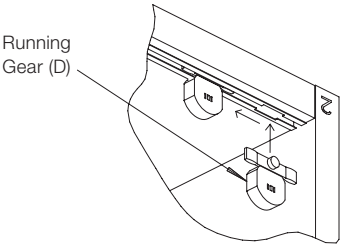


Figure 4

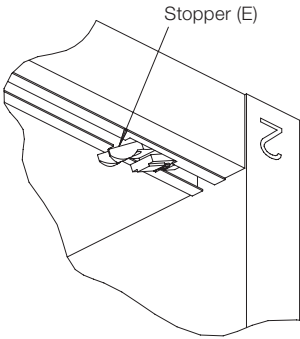


Figure 5A

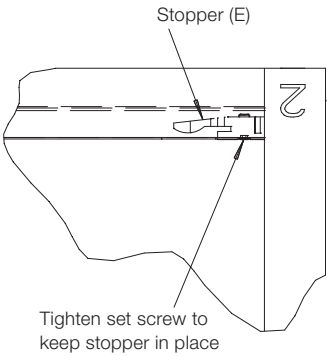


Figure 5B

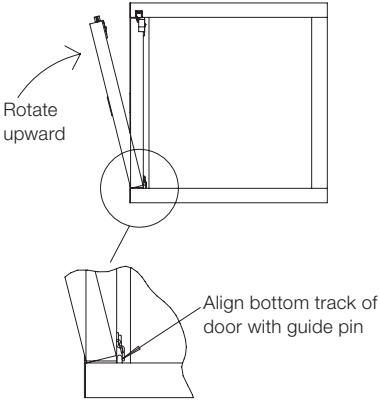


Figure 6A

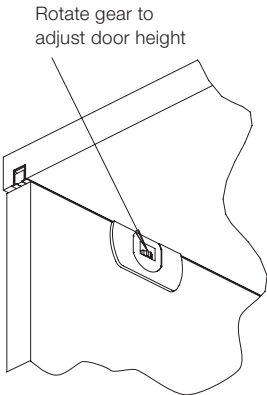


Figure 7

Pattern Numbers Represented:

Metal Undershell, **YHP1 SMS**__

(A) 3AB8207

Parts List:

M6 x 12mm Button Head Machine Screw (A)



Horsepower Assembly

Metal Shelf

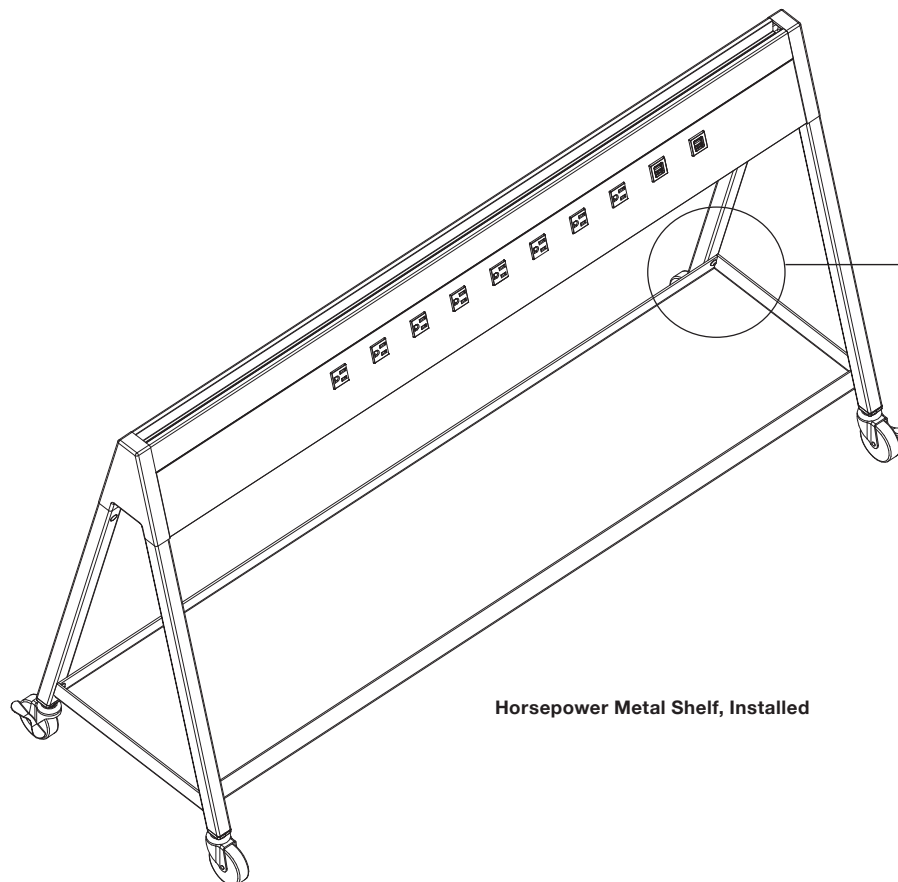
Tools Needed:

4mm Allen Wrench

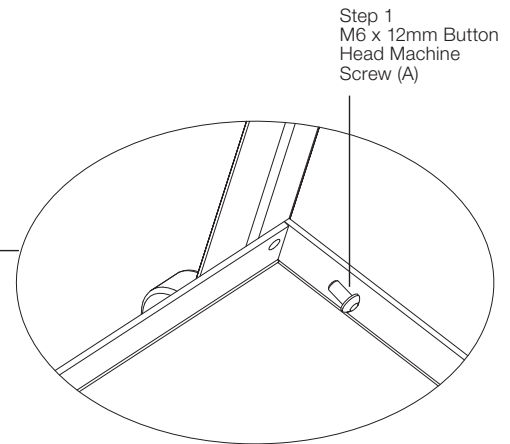
STEPS

Install Shelf

1. Position the metal shelf within the pre-assembled Horsepower assembly's legs. Align the holes in the lip of the metal shelf with the holes in the legs, and attach the shelf to the legs with (4) M6 x 12mm button head machine screws (A).



Horsepower Metal Shelf, Installed



Horsepower Metal Shelf, Exploded, Detail

Pattern Numbers Represented:

Ballast Kit, **YHP1KUB__**

Parts List:

¼" Flat Washer (A)

M6 Split Lock Washer (B)

M6 x 13mm Hex Insert (C)

M6 x 14mm Pan Head Machine Screw (D)

M6 x 25mm Pan Head Machine Screw (E)

Counterweights (two required per shelf)

Horsepower Assembly

Metal Shelf or Wood Shelf /Cabinet

Tools Needed:

6 mm Allen Wrench

Power driver with #2 Phillips bit

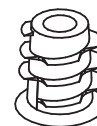
(A) 3AB8330



(B) 3AB8329



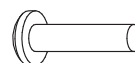
(C) 3AB8326



(D) 3AB8335



(E) 3AB8333



STEPS

Note: Counterweights may be installed on shelves *before* shelves are mounted to the Horsepower assemblies, or *after*.

Instruction for Metal Shelf

1. Position a counterweight under the shelf, and align the predrilled holes with the factory installed weldnuts in the underside of the shelf.
2. Place an M6 split lock washer (B), and a ¼" Flat Washer (A), in that order, on an M6 x 14mm pan head machine screw (D). Repeat for a second M6 x 14mm pan head machine screw (D). Use the two hardware sets to attach the counterweight to the shelf weldnuts.

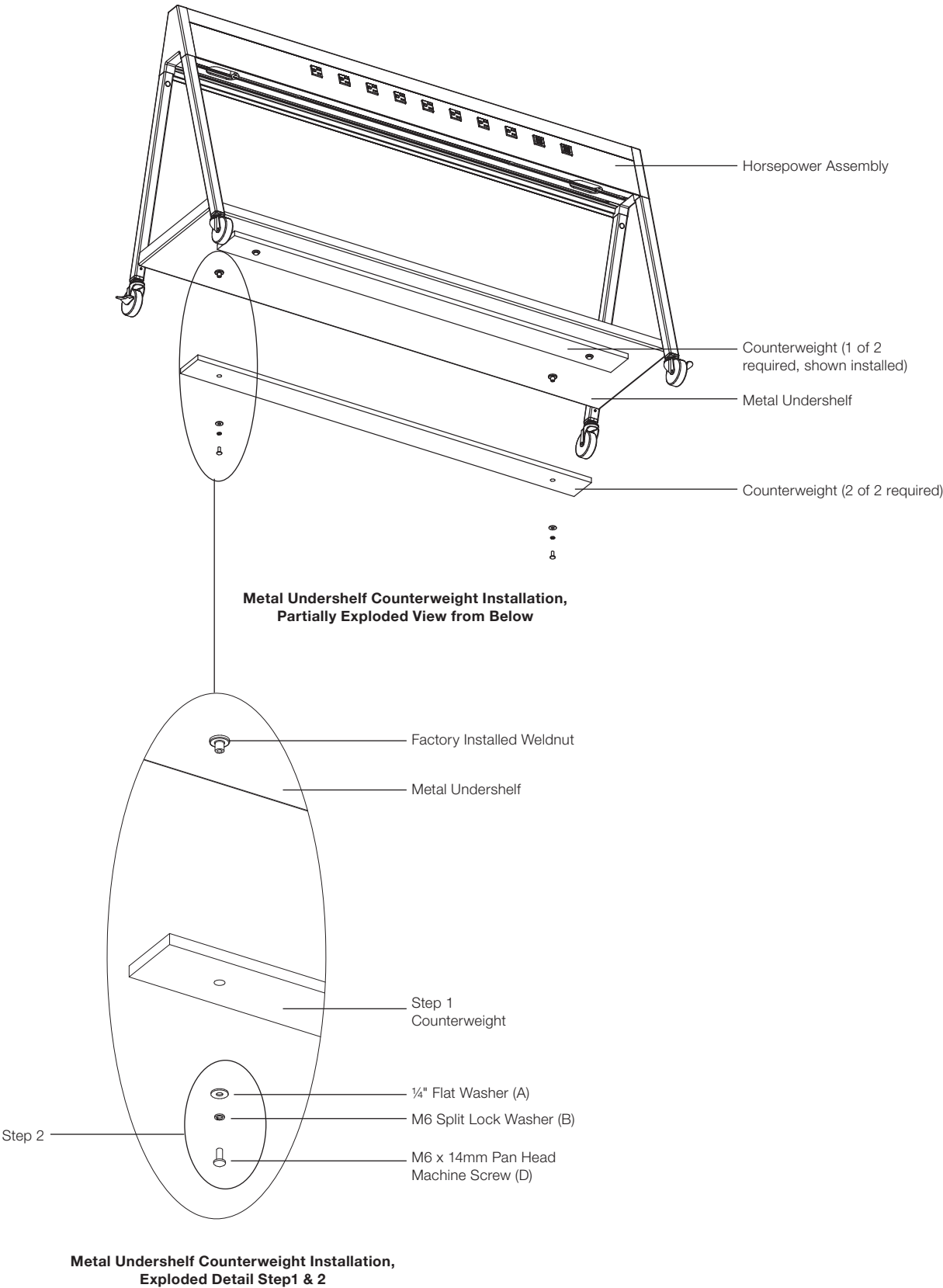
Repeat steps 1 and 2 for the second counterweight.

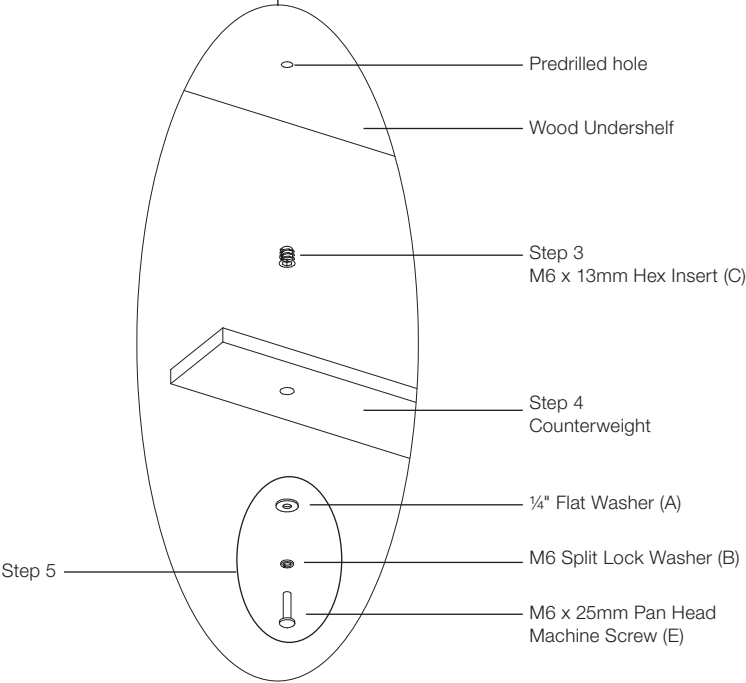
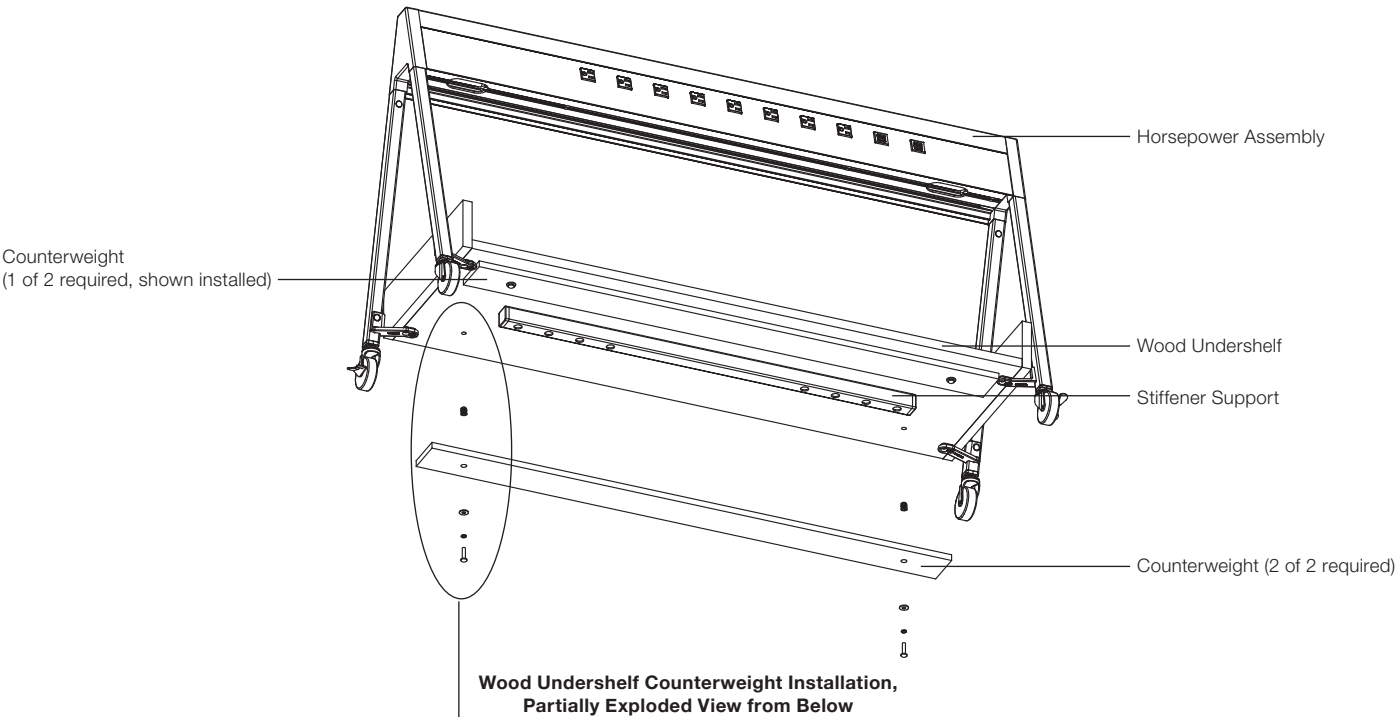
Instructions for Wood Shelf or Wood Cabinet

3. Screw (4) M6 x 13mm hex inserts (C), into the predrilled holes in the bottom of the wood shelf/cabinet. Be sure to insert from the underside of the shelf.
4. Position a counterweight under the shelf, and align the predrilled holes with the hex inserts (C) inserted in step 3.

5. Place an M6 split lock washer (B), and a ¼" Flat Washer (A), in that order, on an M6 x 25mm pan head machine screw (E). Repeat for a second M6 x 25mm pan head machine screw (E). Use the two hardware sets to attach the counterweight to the hex inserts (C).

Repeat steps 4 and 5 for the second counterweight.





Wood Undershaft Counterweight Installation, Exploded Detail Step 3 to 5