

Bravo Assembly Instructions

Rectangular Desk - Assembly Instructions

March, 2004

Tools Required:

Screw Gun and Batteries
Phillips #2 Driver - 6" Length
Phillips #3 Driver
5mm Socket Head Ball Driver -
3" Length
3/8" Combination Wrench or Socket
1/2" Combination Wrench or Socket
Ratchet Wrench
1/2" Diameter Drill

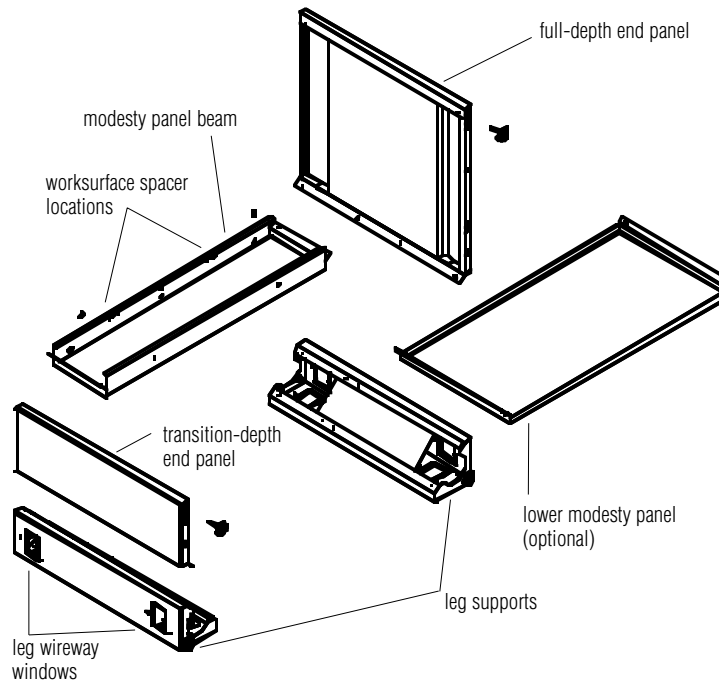


Figure 1

1. Remove all components from carton and locate hardware pack. Assemble one glide to each leg support on end with single-threaded inset. Attach leg wireway windows from inside of leg by hooking the long lip onto the rectangular cutout in leg support, flex the short lip slightly to clear cutout and push into place (Figure 1).
2. Place two leg supports on a soft surface approximately the same width as the desk. The open face of the triangular support should face up and toward the center of the workstation. Place a modesty panel beam between the leg supports, aligning holes in each flange with those of the leg supports. Secure with four 1/4-20 x 1/2 screws (Figure 1).

Note: Modesty panel beam is assembled properly when the surface containing the worksurface spacer locations is offset approximately 1/4" from the top of the leg supports.

3. Refer to space plan to determine whether the unit is to have full- or transition-depth end panels and their location. Align holes in end panel flange with those of the leg support. Secure with three 1/4-20 x 1/2 screws. Assemble glide to the threaded insert facing the same direction as the leg support glides and adjust to approximately the same height (Figure 1).

Note: To determine whether unit has full or partial modesty, refer to space plan.

4. If required, install lower modesty panel below modesty panel beam by aligning holes in each flange with those of the leg supports. Secure with four 1/4-20 x 1/2 screws (Figure 1).

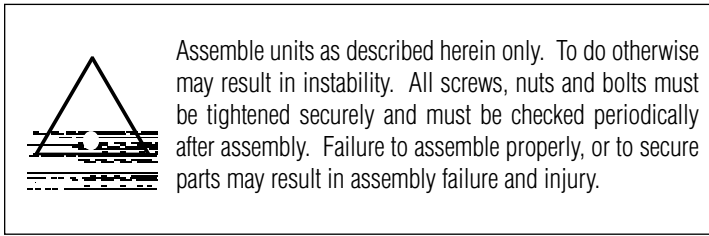


1/4-20 x 1/2
SCREW



U.S. Department of Justice
UNICOR
Federal Prison Industries, Inc.

Rectangular Desk - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

- Carefully set assembly onto glides. Attach inside leg covers by aligning keyholes in leg cover with screw heads and firmly pressing down to secure (Figure 2).

Note: If desk does not have a lower modesty panel, screws may need to be installed in the leg support.

- Locate worksurface spacer locations on end panels and modesty panel beam and snap worksurface spacers into place from topside. There are two worksurface spacer locations on each full-depth end panel, one on transition-depth end panels and two on each modesty panel beam. A worksurface spacer must be used in all available locations (Figure 2).

Note: If installing power and data, it is easier to do it before completing step 7. Refer to page 22 for instructions.

Note: If installing overstorage, overstorage supports, or screen sail brackets, it is recommended to attach them now before completing step 7. Refer to page 8.

- Place worksurface laminate side up on leg support assembly, aligning the $\frac{3}{8}$ " diameter holes near the grommet cutout locations with the threaded inserts in the leg supports. Insert six $\frac{5}{16}$ -18 x 2 short-head bolts into the threaded inserts finger tight, but do not tighten until all the bolts are in place. Once all six bolts are in place, tighten until worksurface laminate begins to deform slightly from bolt head (Figure 2).

Caution: Do not overtighten bolts.

Note: Start $\frac{5}{16}$ -18 x 2 short-head bolts by hand to prevent cross threading.

- Align worksurface spacer holes with pre-drilled holes on underside of worksurface. Secure with #14 x $\frac{3}{8}$ screws at each location (Figure 2).

Note: Worksurfaces with transition-depth end panels must be attached to adjoining desk with two ganging plates and #14 x $\frac{3}{8}$ screws. Holes for ganging plates are located on each end of worksurface, approximately 9" from front and back.

Note: 4-holed ganging plates are mounted in the front. Use only 2 holes of the 4-holed ganging plate when mounting to the back of the desk.

- Place grommets in worksurface cutouts and install grommet covers. Snap leg grommet covers into leg wireways (Figure 2).

Note: Leg grommet covers should not be used on leg support sides if desk is to gang with another desk. Refer to space plan for guidelines.

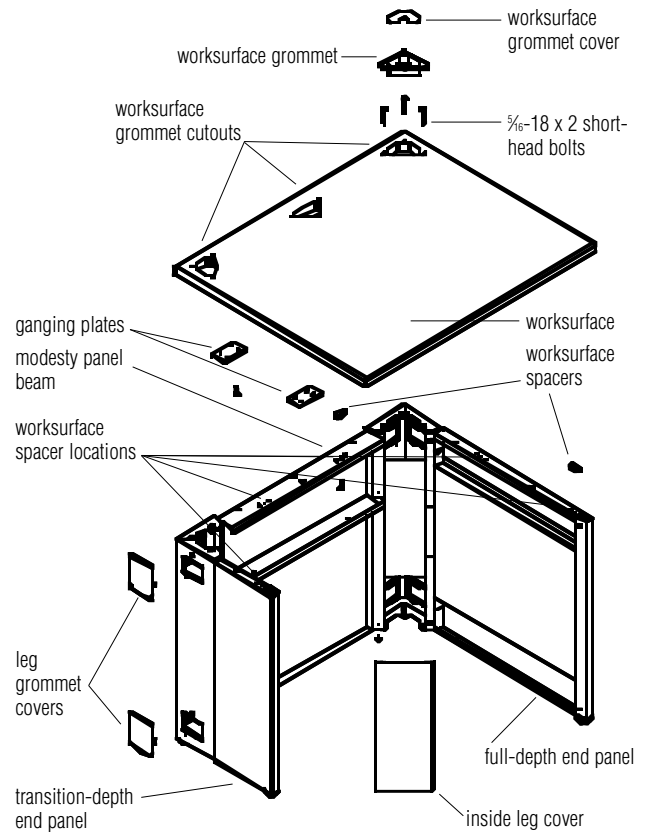
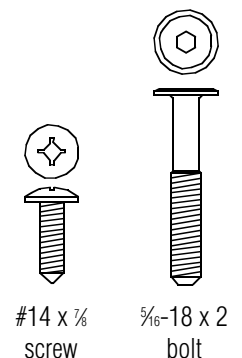


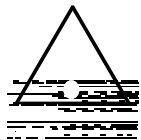
Figure 2



#14 x $\frac{3}{8}$
screw

$\frac{5}{16}$ -18 x 2
bolt

Corner Desk - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

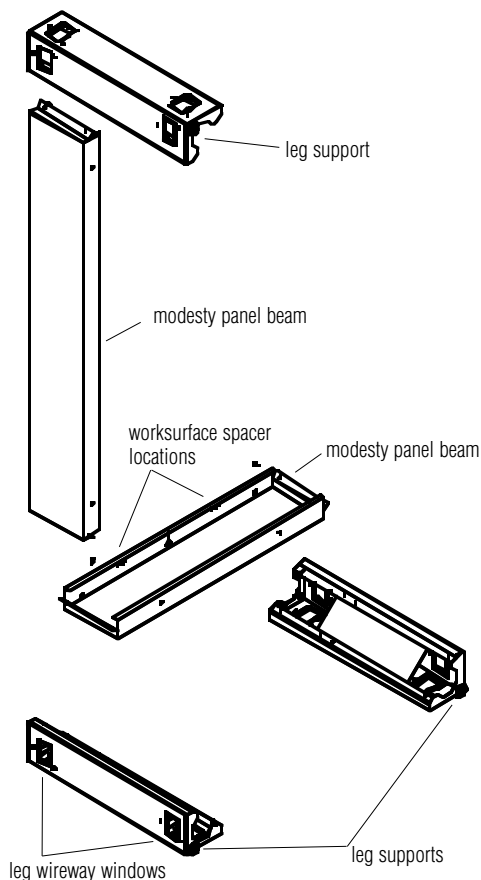


Figure 1

1. Remove all components from carton and locate hardware pack. Assemble one glide to each leg support on end with single-threaded inset. Attach leg wireway windows from inside of leg by hooking the long lip onto the rectangular cutout in leg support, flex the short lip slightly to clear cutout and push into place (Figure 1).
2. Place two leg supports on a soft surface approximately the same width as the desk. The open face of the triangular support should face up and toward the center of the workstation. Place a modesty panel beam between the leg supports, aligning holes in each flange with those of the leg supports. Secure with four $\frac{1}{4}$ -20 x $\frac{1}{2}$ screws (Figure 1).

Note: Modesty panel beam is assembled properly when the surface containing the worksurface spacer locations is offset approximately $\frac{1}{4}$ " from the top of the leg supports.

3. Assemble return components by aligning flange holes in additional modesty panel beam with those of additional leg support. Secure with two $\frac{1}{4}$ -20 x $\frac{1}{2}$ screws (Figure 1).

Note: Modesty panel beams and leg supports are non-handed and can be assembled in right- or left-hand configurations.

4. Hold the return assembly perpendicular to the floor, aligning holes in modesty panel beam flange with those of the leg support. Secure with two $\frac{1}{4}$ -20 x $\frac{1}{2}$ screws (Figure 1).

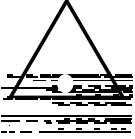
5. Refer to space plan to determine whether unit is to have full- or transition-depth end panels and their location. Assemble glides to the threaded inserts facing the same direction as the leg support glides and adjust to approximately the same height. Align holes in end panel flange with those of the leg support. Secure with three $\frac{1}{4}$ -20 x $\frac{1}{2}$ screws. Carefully set assembly onto glides (Figure 1).

Note: End panels and leg supports are non-handed and can be assembled in right- or left-hand configurations.



$\frac{1}{4}$ -20 x $\frac{1}{2}$
screw

Corner Desk - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

6. **Note:** Refer to space plan to determine whether unit is to have full or partial modesty.

If required, install lower modesty panel below modesty panel beam, aligning holes in each flange with those of the leg supports. Secure with four 1/4-20 x 1/2 screws (Figure 1).

7. Attach inside leg covers by aligning keyholes in leg cover with screw heads and firmly pressing down to secure (Figure 2).

Note: If desk does not have a lower modesty panel, screws may need to be installed in leg support.

8. Locate worksurface spacer locations on end panels and modesty panel beams and snap worksurface spacers into place from topside. There are two worksurface spacer locations on each full-depth end panel, one on transition-depth end panels, and two on each modesty panel beam. A worksurface spacer must be used in all available locations (Figure 2).

Note: If installing power and data, it is easier to do it before completing step 9. Refer to page 22 for instructions.

Note: If installing overstorage, overstorage supports, or screen sail brackets, it is recommended to attach them now before completing step 9. Refer to page 8.

9. Place worksurface laminate side up on leg support assembly, aligning the 3/8" diameter holes near the grommet cutout locations with the threaded inserts in the leg supports. Insert nine 5/16-18 x 2 short-head bolts into the threaded inserts finger tight, but do not tighten until all the bolts are in place. Once all nine bolts are in place, tighten until worksurface laminate begins to deform slightly from bolt head (Figure 2).

Caution: Do not overtighten bolts.

Note: Start 5/16-18 x 2 short-head bolts by hand to prevent cross threading.

10. Align worksurface spacer holes with pre-drilled holes on underside of worksurface. Secure with #14 x 3/4 screws at each location (Figure 2).

Note: Worksurfaces with transition-depth end panels must be attached to adjoining desk with two ganging plates and #14 x 3/4 screws. Holes for ganging plates are located on each end of worksurface, approximately 9" from front and back.

Note: 4-holed ganging plates are mounted in the front. Use only 2 holes of the 4-holed ganging plate when mounting to the back of the desk.

11. Place grommets in worksurface cutouts and install grommet covers. Snap leg grommet covers into leg wireways (Figure 2).

Note: Leg grommet covers should not be used on leg support sides if desk is to gang with another desk. Refer to space plan for guidelines.

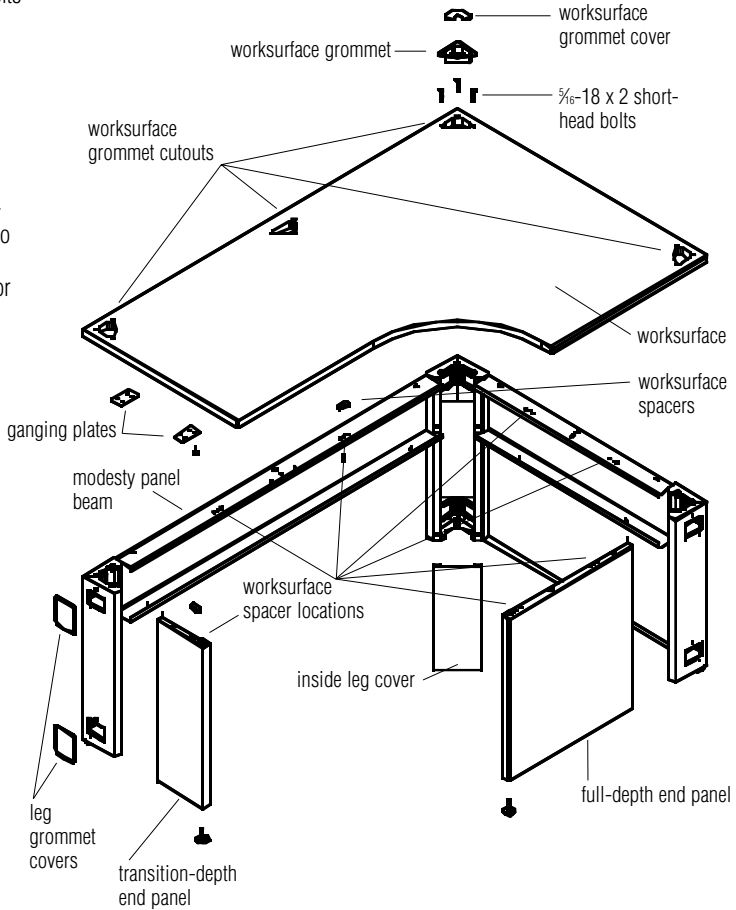
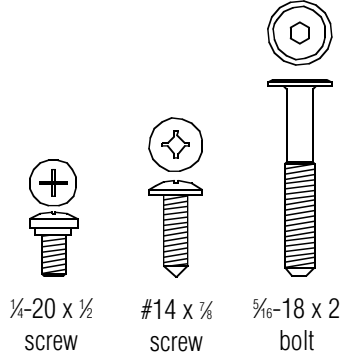
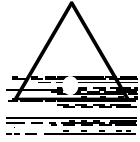


Figure 2



Peninsula Desk - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

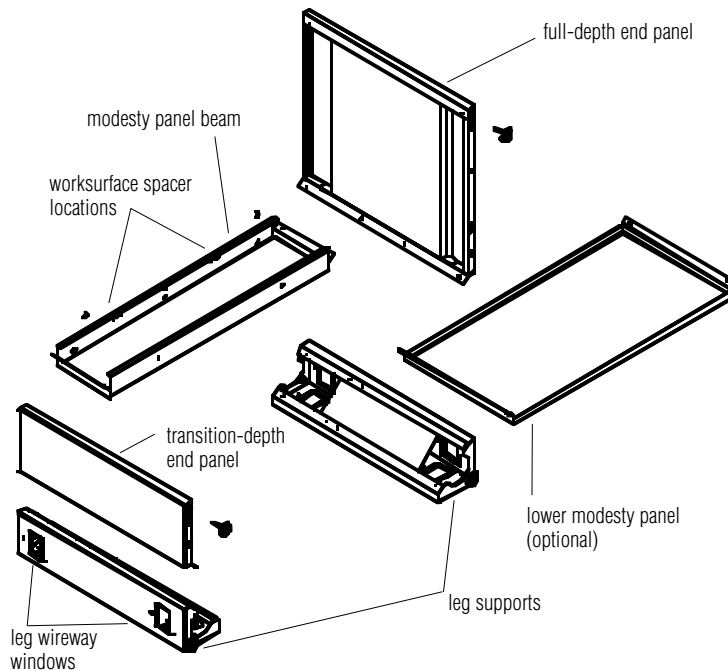


Figure 1

1. Remove all components from carton and locate hardware pack. Assemble one glide to each leg support on end with single-threaded inset. Attach leg wireway windows from inside of leg by hooking the long lip onto the rectangular cutout in leg support, flex the short lip slightly to clear cutout and push into place (Figure 1).
2. Place two leg supports on a soft surface approximately the same width as the desk. The open face of the triangular support should face up and toward the center of the workstation. Place a modesty panel beam between the leg supports, aligning holes in each flange with those of the leg supports. Secure with four ¼-20 x ½ screws (Figure 1).

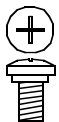
Note: Modesty panel beam is assembled properly when the surface containing the worksurface spacer locations is offset approximately ¼" from the top of the leg supports.

3. Refer to space plan to determine whether the unit is to have full- or transition-depth end panels and their location. Align holes in end panel flange with those of the leg support. Secure with three ¼-20 x ½ screws. Assemble glide to the threaded insert facing the same direction as the leg support glides and adjust to approximately the same height (Figure 1).

Note: End panels and leg supports are non-handed and can be assembled in right- or left-hand configurations.

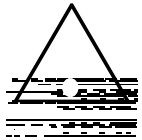
4. **Note:** Refer to space plan to determine whether unit is to have full or partial modesty.

If required, install lower modesty panel below modesty panel beam, aligning holes in each flange with those of the leg supports. Secure with four ¼-20 x ½ screws (Figure 1).



¼-20 x ½
screw

Peninsula Desk - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

- Carefully set assembly onto glides. Attach inside leg covers by aligning keyholes in leg cover with screw heads and firmly pressing down to secure (Figure 2).

Note: If desk does not have a lower modesty panel, screws may need to be installed in leg support.

- Locate worksurface spacer locations on end panels and modesty panel beam and snap worksurface spacers into place from topside. There is one worksurface spacer location on each transition-depth end panel and two on each modesty panel beam and full end panel. A worksurface spacer must be used in all available locations (Figure 2).

Note: If installing power and data, it is easier to do it before completing step 7. Refer to page 22 for instructions.

Note: If installing overstorage, overstorage supports, or screen sail brackets, it is recommended to attach them now before completing step 7. Refer to page 8.

- Place worksurface laminate side down on a soft surface to avoid scratching. Attach mounting plate to either end of the tubular leg with $\frac{5}{16}$ -18 x $\frac{1}{2}$ bolt and assemble glide to opposite end. Attach tubular leg support with four #14 x $\frac{3}{8}$ screws. Snap four worksurface spacers onto the peninsula modesty panel. Align peninsula modesty panel holes with pre-drilled holes on underside of worksurface and secure with four #14 x $\frac{3}{8}$ screws (Figure 2).

- Place worksurface laminate side up on leg support assembly, aligning the $\frac{3}{8}$ " diameter holes near the grommet cutout locations with the threaded inserts in the leg supports. Insert six $\frac{5}{16}$ -18 x 2 short-head bolts into the threaded inserts finger tight, but do not tighten until all the bolts are in

place. Once all six bolts are in place, tighten until worksurface laminate begins to deform slightly from bolt head (Figure 2).

Caution: Do not overtighten bolts.

Note: Start $\frac{5}{16}$ -18 x 2 short-head bolts by hand to prevent cross threading.

- Align worksurface spacer holes with pre-drilled holes on underside of worksurface. Secure with #14 x $\frac{3}{8}$ screws at each location (Figure 2).

Note: Worksurfaces with transition-depth end panels must be attached to adjoining desk with two ganging plates and #14 x $\frac{3}{8}$ screws. Holes for ganging plates are located on each end of worksurface approximately 9" from front and back.

Note: 4-holed ganging plates are mounted in the front. Use only 2 holes of the 4-holed ganging plate when mounting to the back of the desk.

- Place grommets in worksurface cutouts and install grommet covers. Snap leg grommet covers into leg wireways (Figure 2).

Note: Leg grommet covers should not be used on leg support sides if desk is to be ganged with another desk. Refer to space plan for guidelines.

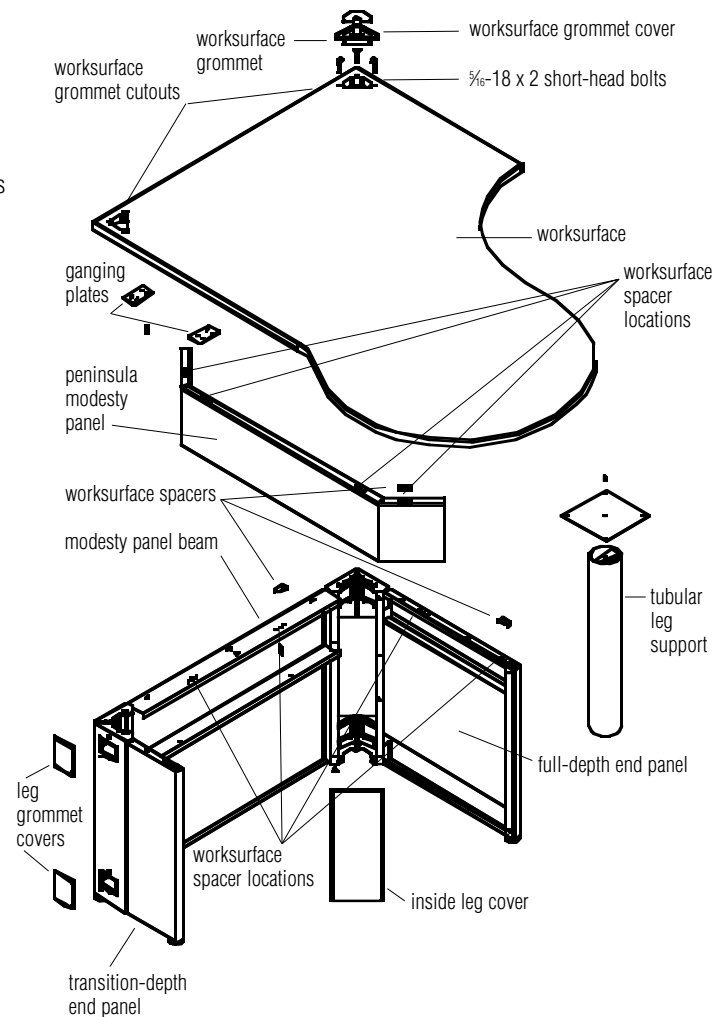
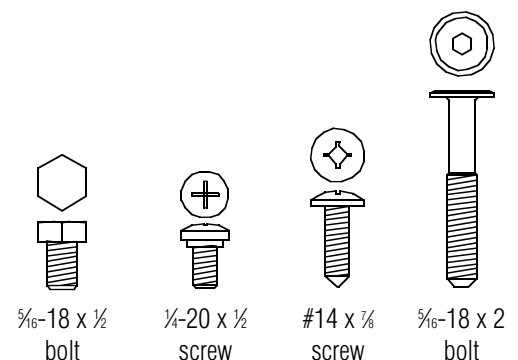
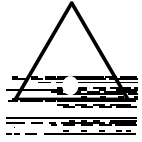


Figure 2



Add-On Worksurface Attachment - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

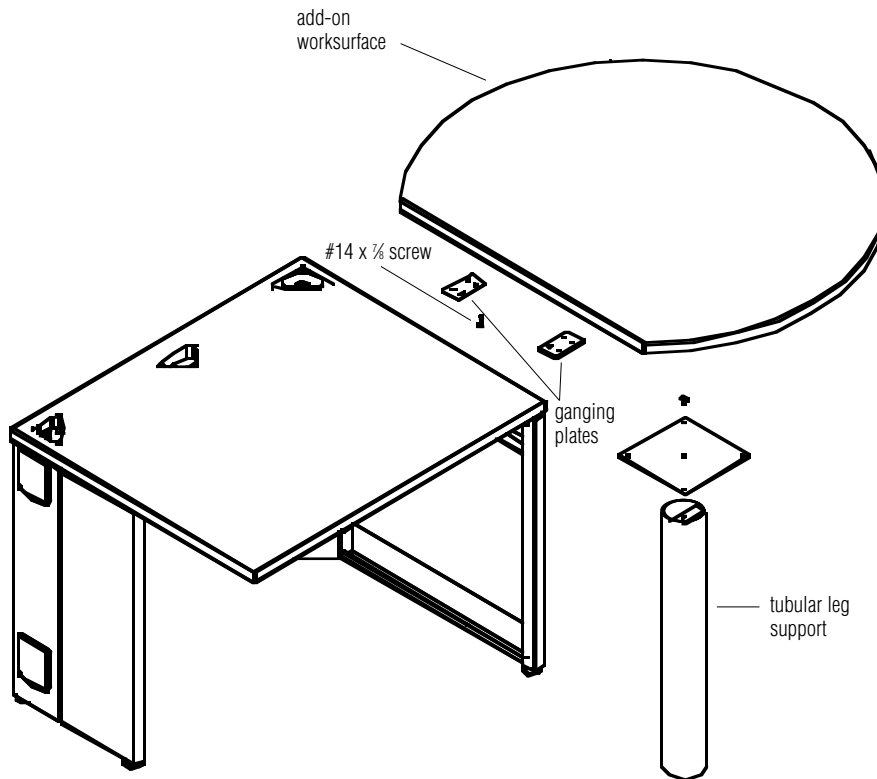


Figure 1

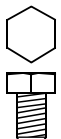
1. Place auxiliary worksurface laminate side down on a soft surface to avoid scratching. Attach mounting plate to either end of the tubular leg with $\frac{5}{16}$ -18 x $\frac{1}{2}$ bolt and assemble glide to opposite end. Attach tubular leg support to worksurface drilled holes with four #14 x $\frac{3}{8}$ screws. Align ganging plate holes with pre-drilled holes near edge and attach loosely with #14 x $\frac{3}{8}$ screws. Carefully turn auxiliary worksurface over and place next to desk assembly, allowing ganging plates to fit between worksurface and end panel. Align holes in ganging plate with clearance holes in end panel and pre-drilled holes in underside of worksurface.

Note: 4-holed ganging plates are mounted in the front. Use only 2 holes of the 4-holed ganging plate when mounting to the back of the desk.

Secure with two #14 x $\frac{3}{8}$ screws in desk worksurface and tighten auxiliary worksurface screws (Figure 1).

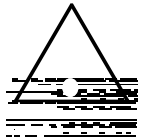


#14 x $\frac{3}{8}$
screw



$\frac{5}{16}$ -18 x $\frac{1}{2}$
bolt

Overstorage Attachment - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

1. **Note:** To determine location of overstorage, refer to space plan.

Remove appropriate worksurface grommets and covers. Remove the two outside $\frac{5}{16}$ -18 x 2 short-head bolts from the bolt cluster that secures the worksurface to the leg supports. The center bolt does not require removal and can be loosened approximately $\frac{1}{8}$ " and left in place. Repeat on other end of worksurface (Figure 1).

2. Hook slot in corner of overstorage support onto the $\frac{5}{16}$ -18 x 2 short-head bolt in corner of the worksurface. Replace remaining $\frac{5}{16}$ -18 x 2 short-head bolts and leave loose until overstorage components are attached. Repeat for other overstorage support (Figure 1).

Note: 66" and 72" overstorage units are comprised of two units and require an additional grommet cutout and holes for center overstorage support. The center support is secured with a threaded plate below the worksurface inserted between the worksurface and modesty panel beam.

3. Place center overstorage support onto worksurface, aligning holes and slot with holes in worksurface and threaded plate. Insert three $\frac{5}{16}$ -18 x 2 short-head bolts and leave loose until overstorage components are attached (Figure 1).

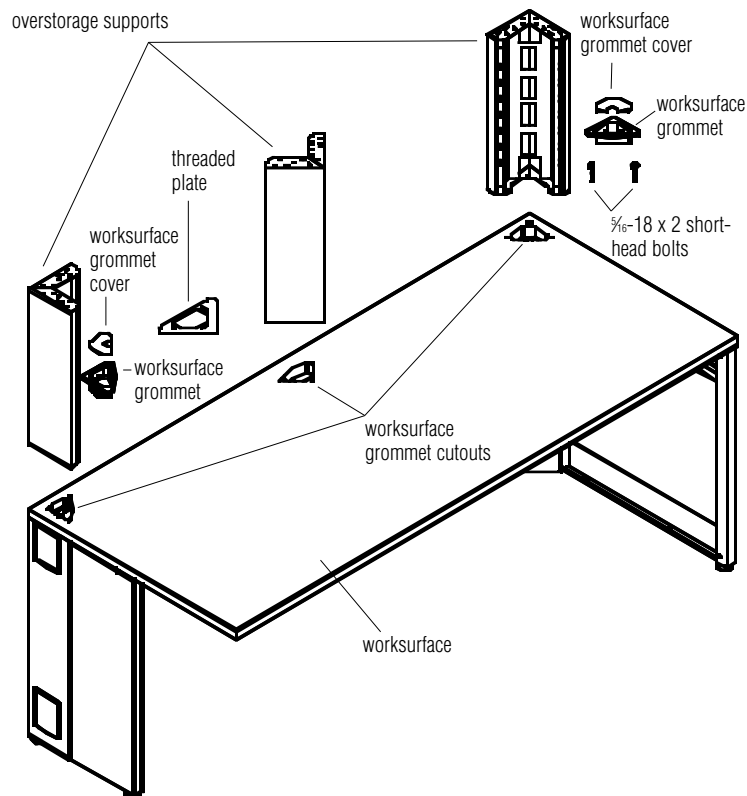
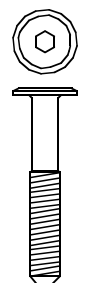
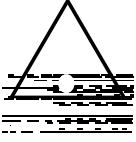


Figure 1

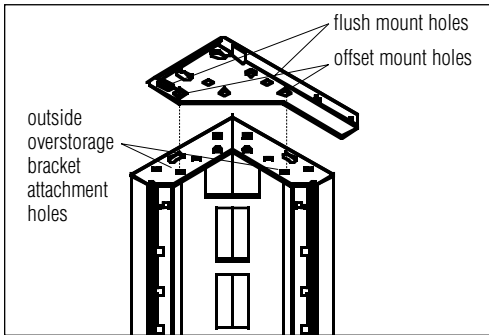


$\frac{5}{16}$ -18 x 2
bolt

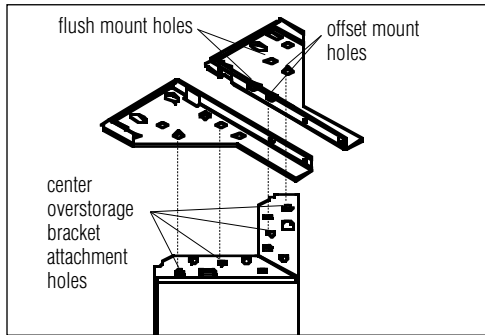
Overstorage Attachment - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.



Detail A



Detail B

Universal Overstorage - Flush or Offset Mount for All Sizes

- Note:** Overstorage unit(s) must be assembled completely before attachment to desk overstorage supports. Refer to appropriate assembly instructions.

Note: The sides of the overhead or shelf should be flush to the sides of the overstorage supports; however, the back surface of the overstorage may be assembled flush with the overstorage support or offset back 1" from user. This offset allows the overstorage back to be flush with a behind the worksurface mounted privacy screen. Assembly for both is similar; however, different mounting holes will be used.

Attach back cover by hooking top lip of back cover into space between overhead top and overhead back. Push down firmly to seat and attach bottom of back cover to bottom of overhead back with a spring clip on each end. Set assembled overstorage unit, back down, on a soft surface to avoid scratching. Attach left- and right-hand overhead brackets to underside of overhead or shelf by holding bracket tight against side-set flange and angled-back flange. Align the two holes in angled flanges with the two holes in side-set flanges and secure with four #8-32 x 3/8 screws per bracket (Figure 1).

- Carefully set overstorage assembly onto overstorage supports, aligning appropriate square holes in overhead bracket with holes in overstorage support (Figure 1). **Detail A and B**

Insert two 5/16-18 square shank bolts per bracket from overhead side and secure with 5/16-18 nuts on inside of overstorage support.

- Tighten all hardware and replace worksurface grommets and covers (Figure 1).

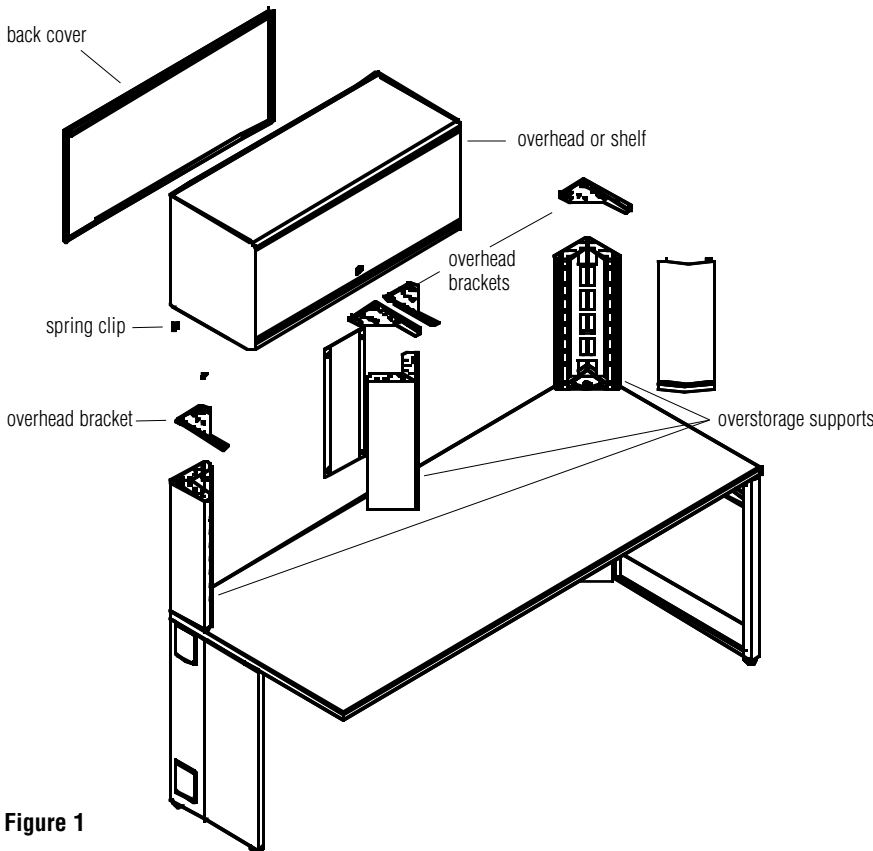
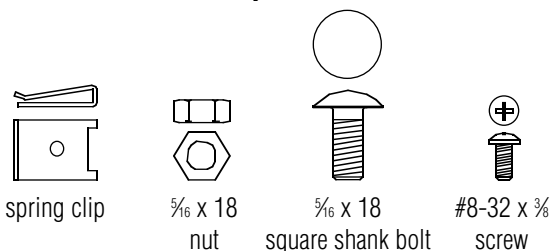
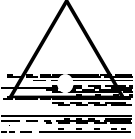


Figure 1



Overstorage Attachment - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

Venus® Overstorage - Flush Mount for All Sizes Excluding 66" and 72"

1. Align threaded inserts in underside of overhead and side-set flange with appropriate holes in overstorage support. Secure with two 5/16-18 x 1/2 screws each end (Figure 1).

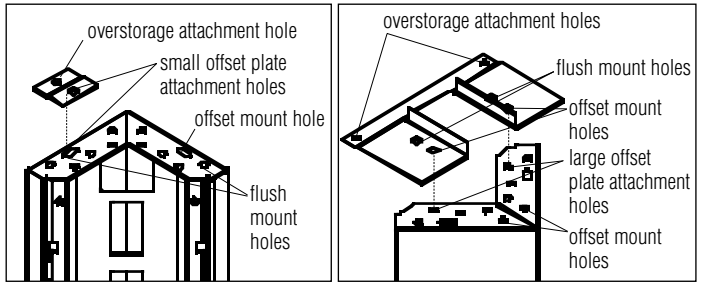
Detail A

Note: The sides and back of the overhead should be flush to the sides and back of the overstorage supports.

2. Tighten all hardware and replace worksurface grommets and covers (Figure 1).

2. Carefully set overhead onto overstorage supports, aligning square holes in small offset plates with appropriate holes in overstorage support. Insert two 5/16 x 18 square shank bolts and secure with 5/16 x 18 nuts. Align threaded inserts in left and right overhead flanges with appropriate holes in overstorage supports and secure with two 5/16-18 x 1/2 screws (Figure 1). **Detail A**

Note: The sides of the overhead should be flush to the sides of the overstorage supports.



Detail A

Detail B

Venus Overstorage - Flush Mount for 66" and 72" Sizes

1. Attach large offset plate to top of center overstorage support, aligning appropriate holes. Install two 5/16 x 18 square shank bolts and secure with 5/16 x 18 nuts. Carefully set overhead onto overstorage supports, aligning threaded inserts in underside of overhead back and side-set flange with appropriate holes in overstorage supports and large offset plate. Secure with two 5/16-18 x 1/2 screws each end, per overhead (Figure 1).

Detail A and B

Note: The sides and back of the overhead should be flush to the sides and back of the outside overstorage supports.

2. Tighten all hardware and replace worksurface grommets and covers (Figure 1).

Venus Overstorage - 1" Offset Mount for 66" and 72" Sizes

1. Attach large offset plate to top of center overstorage support, aligning appropriate holes. Install two 5/16 x 18 square shank bolts and secure with 5/16 x 18 nuts. Set overstorage unit back down on a soft surface to avoid scratching (Figure 1).
2. Align round hole in small offset plate with threaded insert in underside of overhead back and secure with 5/16-18 x 1/2 screw. Repeat on opposite end of second overhead (Figure 1).
3. Carefully set overhead onto overstorage supports, aligning square hole in small offset plate with appropriate hole in overstorage support. Insert one 5/16 x 18 square shank bolt from topside and secure with a 5/16 x 18 nut. Align threaded insert in side-set flange with appropriate hole in overstorage support and secure with 5/16-18 x 1/2 screw at each end. Align threaded insert in overhead back with hole in large offset plate and secure with 5/16-18 x 1/2 screw. Repeat for other overhead (Figure 1). **Detail A and B**

2. Align round hole in small offset plate with threaded insert in underside of overhead back and secure with 5/16-18 x 1/2 screw. Repeat on opposite end of second overhead (Figure 1).
3. Carefully set overhead onto overstorage supports, aligning square hole in small offset plate with appropriate hole in overstorage support. Insert one 5/16 x 18 square shank bolt from topside and secure with a 5/16 x 18 nut. Align threaded insert in side-set flange with appropriate hole in overstorage support and secure with 5/16-18 x 1/2 screw at each end. Align threaded insert in overhead back with hole in large offset plate and secure with 5/16-18 x 1/2 screw. Repeat for other overhead (Figure 1). **Detail A and B**

Note: The sides of the overhead should be flush to the sides of the overstorage supports.

Venus Overstorage - 1" Offset Mount for All Sizes Excluding 66" and 72"

1. Align round hole in small offset plate with threaded insert in underside of overhead back and secure with 5/16-18 x 1/2 screw. Repeat on other end (Figure 1).

Note: Offset plate should face inside of overhead.

4. Tighten all hardware and replace worksurface grommets and covers (Figure 1).

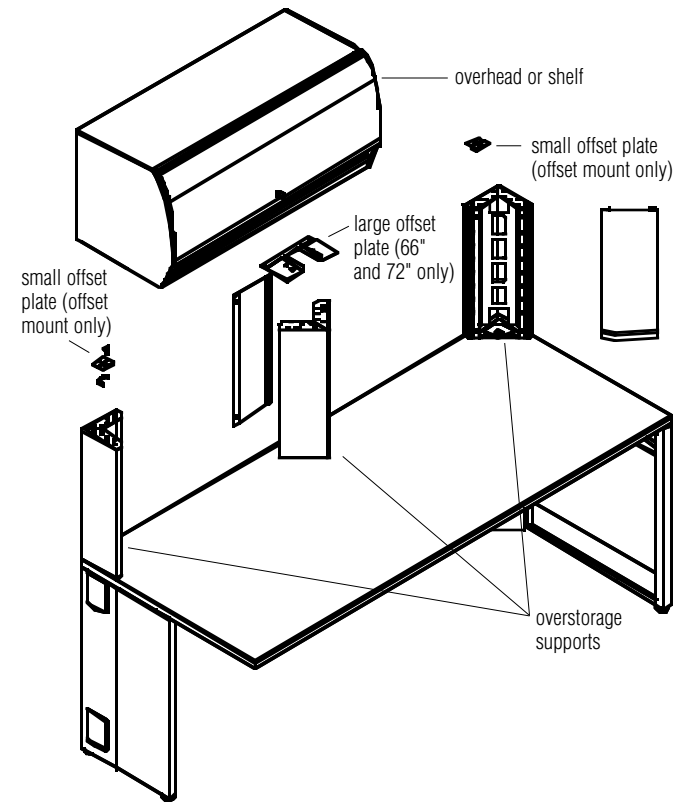
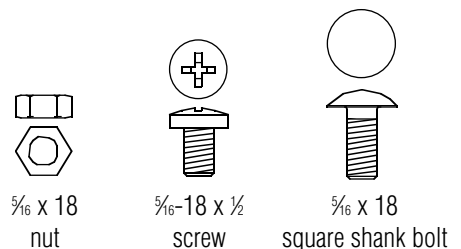
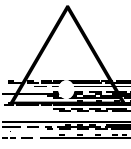


Figure 1



Overstorage Attachment - Assembly Instructions

 Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

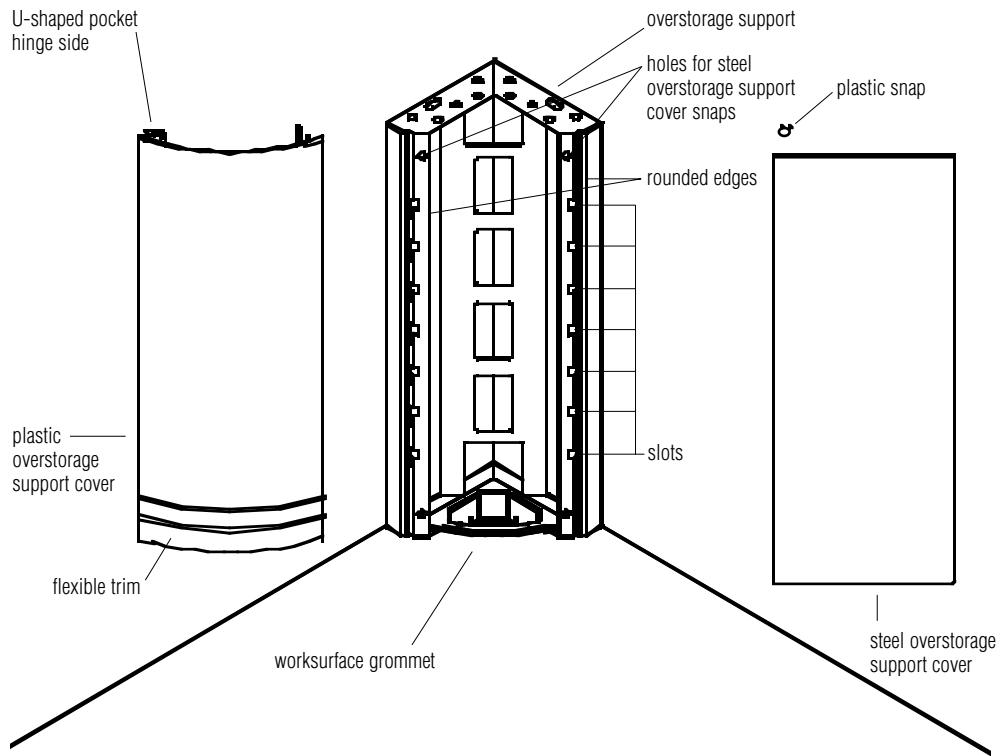


Figure 1

Overstorage Support Cover Attachment - Curved Plastic with Cord Manager

1. Align the U-shaped pocket on the inside of the cover with the rounded edge on the open face of the overstorage support. Push firmly into place along full length until cover snaps into position. Door will now snap closed against opposite rounded edge. Adjust as necessary (Figure 1).

Note: Plastic overstorage support covers should be attached so the hinge is always on the left side of the overstorage support.

To remove cover: Open slightly to determine hinge side and locate the series of slots on overstorage support. From the outside of overstorage support, insert a flat head screwdriver into top slot and push firmly on edge of cover until it starts to dislodge. Slowly pull cover away from overstorage support.

Steel

1. Slide a plastic snap into each of the four slots located on the overstorage support cover. Align snaps with holes in overstorage support and push straight on until fully engaged (Figure 1).

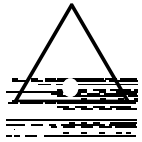
Note: Steel overstorage support covers are used on center overstorage support for 66" and 72" only.

Note: Overstorage support cover attachments must be made after all TWM Tool Rails, SBS and SSO Privacy Screens have been mounted.



plastic snap

Transaction Worksurface Attachment - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

1. Remove appropriate worksurface grommets and covers. Remove the two outside $\frac{5}{16}$ -18 x 2 short-head bolts from the bolt cluster that secures the worksurface to the leg supports. The center bolt does not require removal and can be loosened approximately $\frac{1}{8}$ " and left in place. Repeat on other end of worksurface (Figure 1).

2. Place transaction worksurface laminate side down on a soft surface to avoid scratching. Align small holes in transaction worksurface supports with drilled holes near outside of worksurface and secure with two #14 x $\frac{7}{8}$ screws per support. Align holes in transaction panel (flanges facing toward inside of desk) with drilled holes in underside of worksurface and secure with three #14 x $\frac{7}{8}$ screws per panel (Figure 2).

3. Set transaction worksurface assembly onto desk assembly and hook transaction worksurface support slots onto heads of the $\frac{5}{16}$ -18 x 2 short-head bolts. Secure with remaining $\frac{5}{16}$ -18 x 2 short-head bolts and tighten (Figure 2).

4. Assemble short overstorage covers similar to directions found in **Overstorage Support Cover Attachment** section (Figure 2).

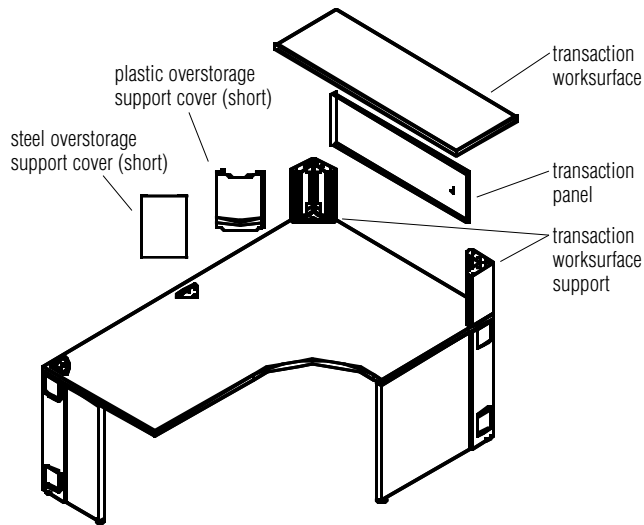


Figure 1

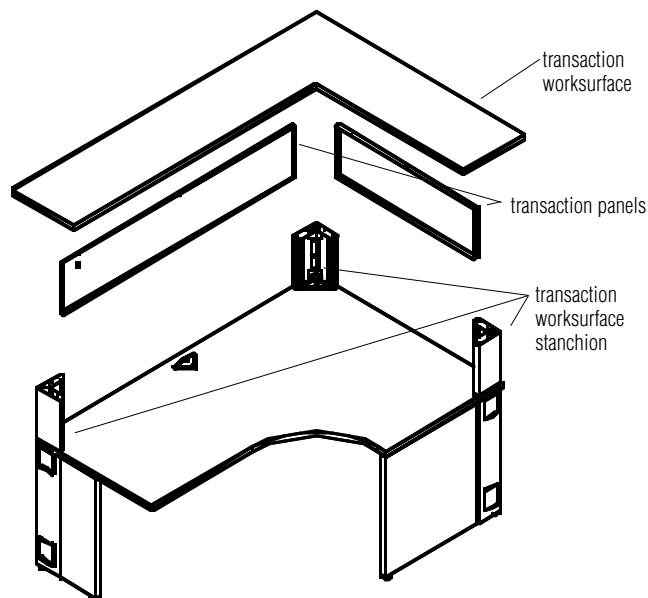
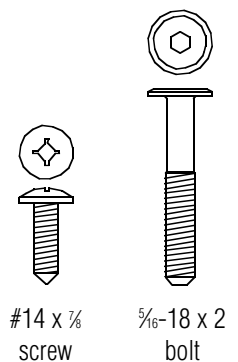
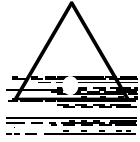


Figure 2 Note: Transaction worksurfaces must not exceed 42" in height.



SBS Privacy Screen and TWM Tool Rail Attachment - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

Overstorage support-mounted tool rail cannot be used with this SBS privacy screen option.

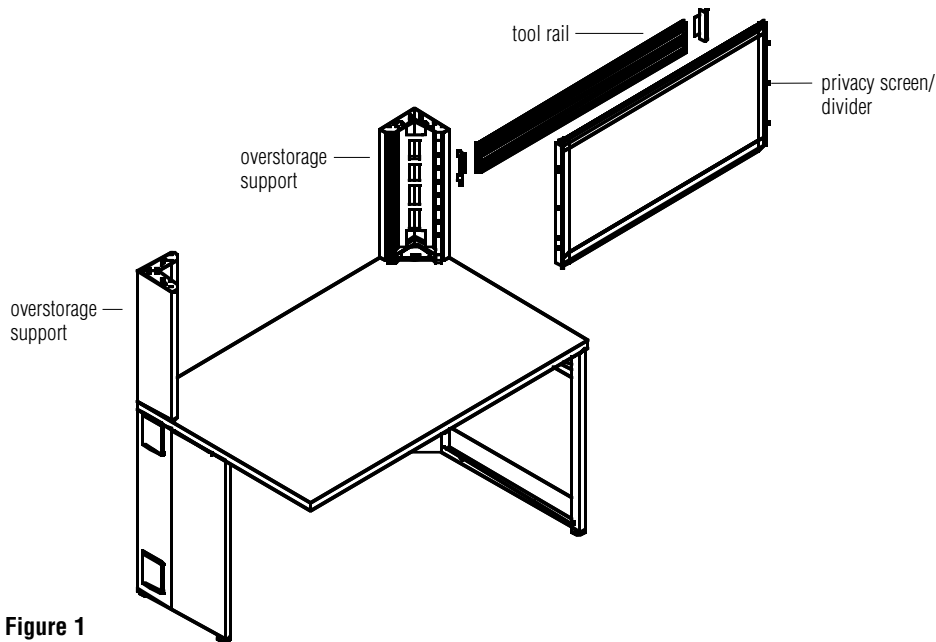


Figure 1

1. **SBS Models (Mounted between two overstorage supports)**

Assemble overstorage supports according to directions found in **Overstorage Attachment** section (Figure 1).

Note: Outside plastic overstorage support covers will need to be opened and may need to be removed from overstorage support before attachment of tool rail or privacy screen. Refer to directions found in **Overstorage Support Cover Attachment** section.

2. Align tabs on privacy screen brackets with flag-shaped cuts in each overstorage support and push into place. Allow brackets to drop into the slots of the flag-shaped cuts.

Note: It may be necessary to loosen screws attaching overstorage supports.

3. Replace and close plastic overstorage support covers.

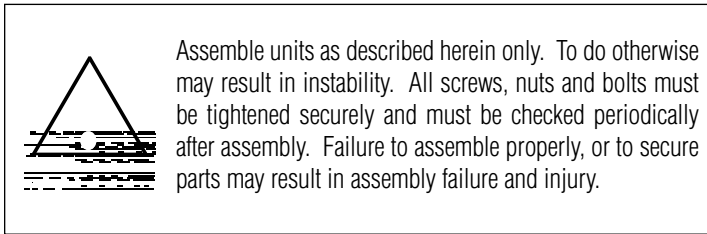
1. **TWM Tool Rail Attachment (Overstorage Support Mounted)**

Slide the single tab of the tool rail bracket into C-shaped groove on back of tool rail. Repeat on other end (Figure 1).

2. Align tabs on tool rail bracket with flag-shaped cuts in each overstorage support and push into place. Allow brackets to drop into the slots of the flag-shaped cuts.

3. Replace and close plastic overstorage support covers.

Privacy Screen Attachment - SBW (Screen Behind Worksurface) - Assembly Instructions



Note: 66" and 72" worksurfaces have two screens.

Note: If overstorage uprights are required, sail brackets must be mounted under the overstorage uprights at the same time.

1. Remove appropriate worksurface grommets and covers. Remove the two outside $\frac{5}{16}$ -18 x 2 short-head bolts from the bolt cluster that secure the worksurface to the leg supports. The center bolt does not require removal and can be loosened approximately $\frac{1}{8}$ " and left in place. Repeat on other end of worksurface.
2. Hook slot in corner of Behind Worksurface Sail Bracket onto the $\frac{5}{16}$ -18 x 2 short-head bolt and leave loose until sail bracket and screen are attached. Repeat for other side.
3. Press screen onto tooth on backside of sail bracket. Top of screen should sit flush with top of sail bracket. Attach with #8-32 x $\frac{5}{8}$ screw through sail bracket into pre-drilled hole in screen. Retighten all $\frac{5}{16}$ -18 x 2 short-head bolts.

66" and 72" Screens:

1. Attach left and right sail brackets as listed above. Attach center bracket over center grommet with #10-16 x $\frac{1}{2}$ screws. Drive screws through bracket directly into worksurface. Pilot holes are not necessary.
2. Fit screen into center sail bracket first, then to end sail bracket. Attach with #8-32 x $\frac{5}{8}$ screw through sail bracket into pre-drilled hole in screen.
3. Remove corner trim and trim top cap filler to correct length. Insert screen splice.

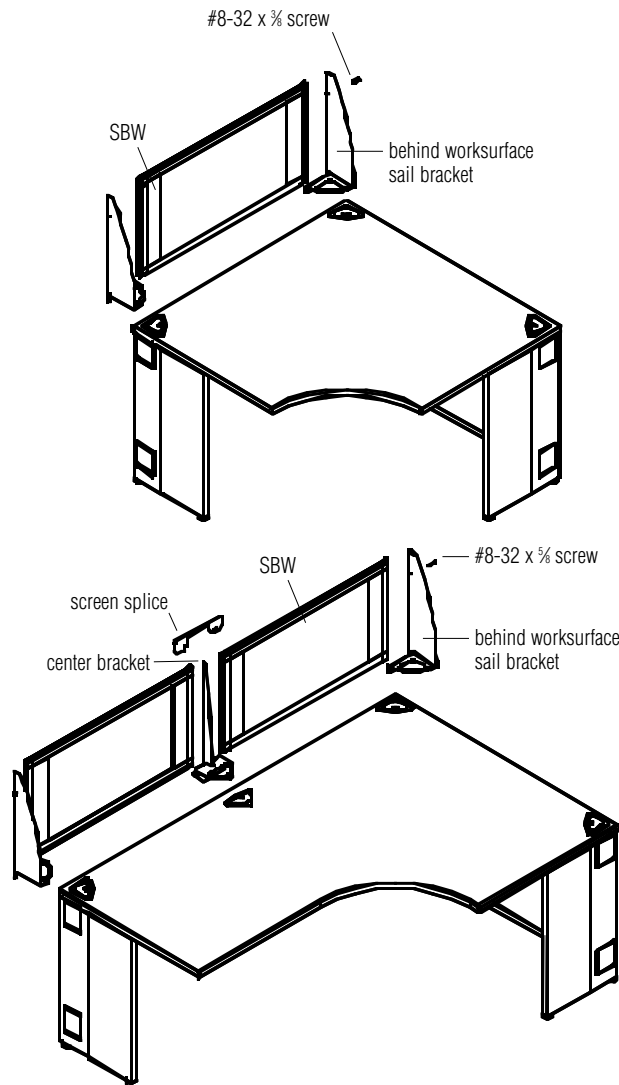
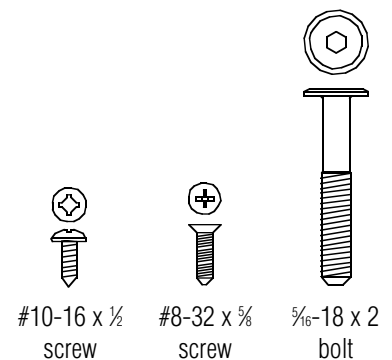
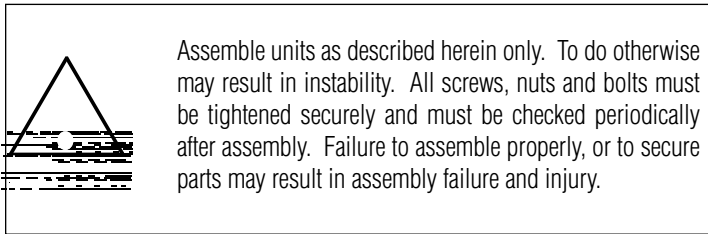


Figure 1



Privacy Screen Attachment - SBWC (Screen Behind Worksurface, Corner) - Assembly Instructions



Note: 66" and 72" worksurfaces have two screens.

Note: If overstorage uprights are required, sail brackets must be mounted under the overstorage uprights at the same time.

1. Remove appropriate worksurface grommets and covers. Remove the two outside $\frac{5}{16}$ -18 x 2 short-head bolts from the bolt cluster that secure the worksurface to the leg supports. The center bolt does not require removal and can be loosened approximately $\frac{1}{8}$ " and left in place. Repeat on other ends of worksurface.
2. Hook slot of Corner Sail Bracket onto the $\frac{5}{16}$ -18 x 2 short-head bolt in the corner of the worksurface that will make the joint of the screen intersection.
3. Hook slot in corner of Behind Worksurface Sail Bracket onto the $\frac{5}{16}$ -18 x 2 short-head bolt and leave loose until sail bracket and screen are attached. Repeat for other side.
4. Press screen onto tooth on backside of sail bracket. Top of screen should sit flush with top of sail bracket. Attach both screen ends with #8-32 x $\frac{5}{16}$ screw through sail bracket into pre-drilled hole in screen. Retighten all $\frac{5}{16}$ -18 x 2 short-head bolts.
5. Attach SBWC splice to screen joint where screens intersect. Attach with four #8-32 x $\frac{5}{16}$ screws.

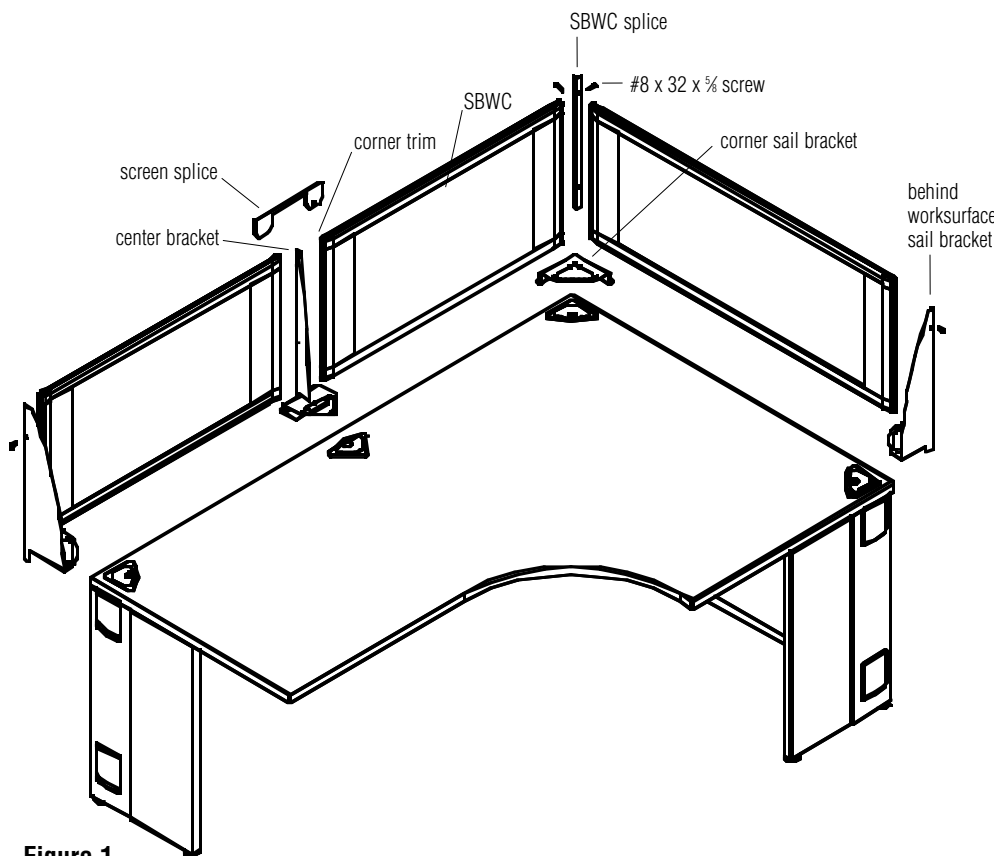
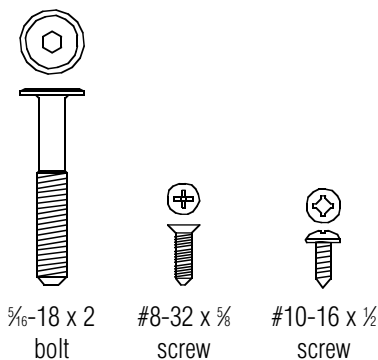


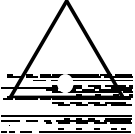
Figure 1

66" and 72" Screens:

1. Attach left, right, and center sail brackets as listed above. Attach center bracket over center grommet with two #10-16 x $\frac{1}{2}$ screws. Drive screws through bracket directly into worksurface. Pilot holes are not necessary.
2. Fit screen into center sail bracket first, then to end sail bracket. Attach with #8-32 x $\frac{5}{16}$ screw through sail bracket into pre-drilled hole in screen.
3. Remove corner trim and trim top cap filler to correct length. Insert screen splice.



Privacy Screen Attachment - SOW (Screen On Worksurface) - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

Note: 66" and 72" worksurfaces have two screens.

1. Remove appropriate worksurface grommets and covers. Remove the two outside $\frac{5}{16}$ -18 x 2 short-head bolts from the bolt cluster that secure the worksurface to the leg supports. The center bolt does not require removal and can be loosened approximately $\frac{1}{8}$ " and left in place. Repeat on other ends of worksurface.
2. Hook slot in corner of On Worksurface Sail Bracket onto the $\frac{5}{16}$ -18 x 2 short-head bolt and leave loose until sail bracket and screen are attached. Repeat for other side.
3. Press screen onto tooth on side of sail bracket. Top of screen should sit flush with top of sail bracket. Attach both screen ends with #8-32 x $\frac{5}{8}$ screw through sail bracket into pre-drilled hole in screen. Retighten all $\frac{5}{16}$ -18 x 2 short-head bolts.

66" and 72" Screens:

1. Attach left and right sail brackets as listed above. Attach center bracket over center grommet with two #10-16 x $\frac{1}{2}$ screws. Drive screws through bracket directly into worksurface. Pilot holes are not necessary.
2. Fit screen into center sail bracket first, then to end sail bracket. Attach with #8-32 x $\frac{5}{8}$ screw through sail bracket into pre-drilled hole in screen.
3. Remove corner trim and trim top cap filler to correct length. Insert screen splice.

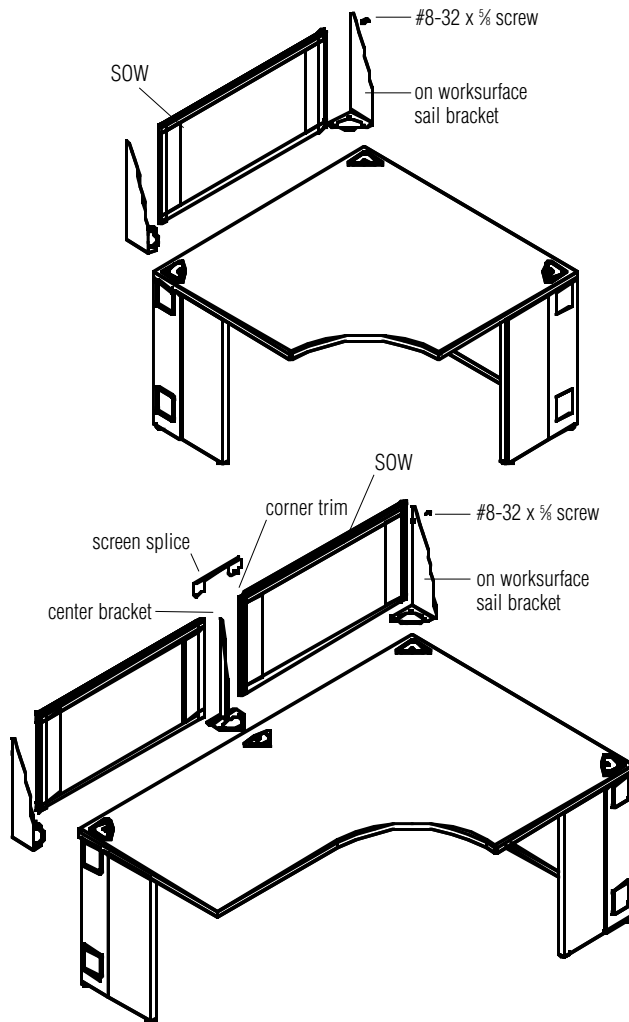
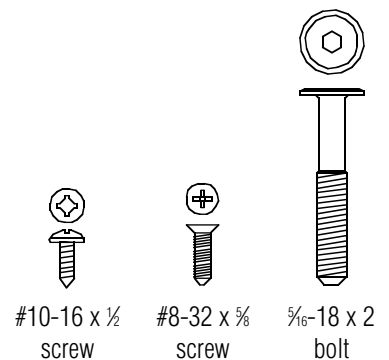
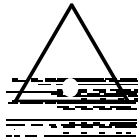


Figure 1



Privacy Screen Attachment - SOWC (Screen On Worksurface, Corner) - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

Note: 66" and 72" worksurfaces have two screens.

Note: SOWC screen attaches to an SBW screen. See page 14 for assembly instructions.

1. Remove appropriate worksurface grommets and covers. Remove the two outside $\frac{5}{16}$ -18 x 2 short-head bolts from the bolt cluster that secure the worksurface to the leg supports. The center bolt does not require removal and can be loosened approximately $\frac{1}{8}$ " and left in place. Repeat on other ends of worksurface.
2. Hook slot in corner of On Worksurface Sail Bracket onto the $\frac{5}{16}$ -18 x 2 short-head bolt and leave loose until sail bracket and screen are attached.
3. Loosen the screw attaching the SBW screen and the Behind Worksurface Sail Bracket.
4. Slide end of screen with bracket attached between SBW screen and Behind Worksurface Sail Bracket. Slot in bracket will fit around #8-32 x $\frac{5}{16}$ screw in sail bracket.
5. Press screen onto tooth on side of sail bracket. Top of screen should sit flush with top of sail bracket. Attach both screen ends with #8-32 x $\frac{5}{16}$ screw through sail bracket into pre-drilled hole in screen. Retighten all $\frac{5}{16}$ -18 x 2 short-head bolts.

66" and 72" Screens:

1. Attach left and right sail brackets as listed above. Attach center bracket over center grommet with #10-16 x $\frac{1}{2}$ screws. Drive screws through bracket directly into worksurface. Pilot holes are not necessary.
2. Fit screen into center sail bracket first, then to end sail bracket. Attach with #8-32 x $\frac{5}{16}$ screw by attaching through sail bracket into pre-drilled hole in screen.
3. Remove corner trim and trim top cap filler to correct length. Insert screen splice.

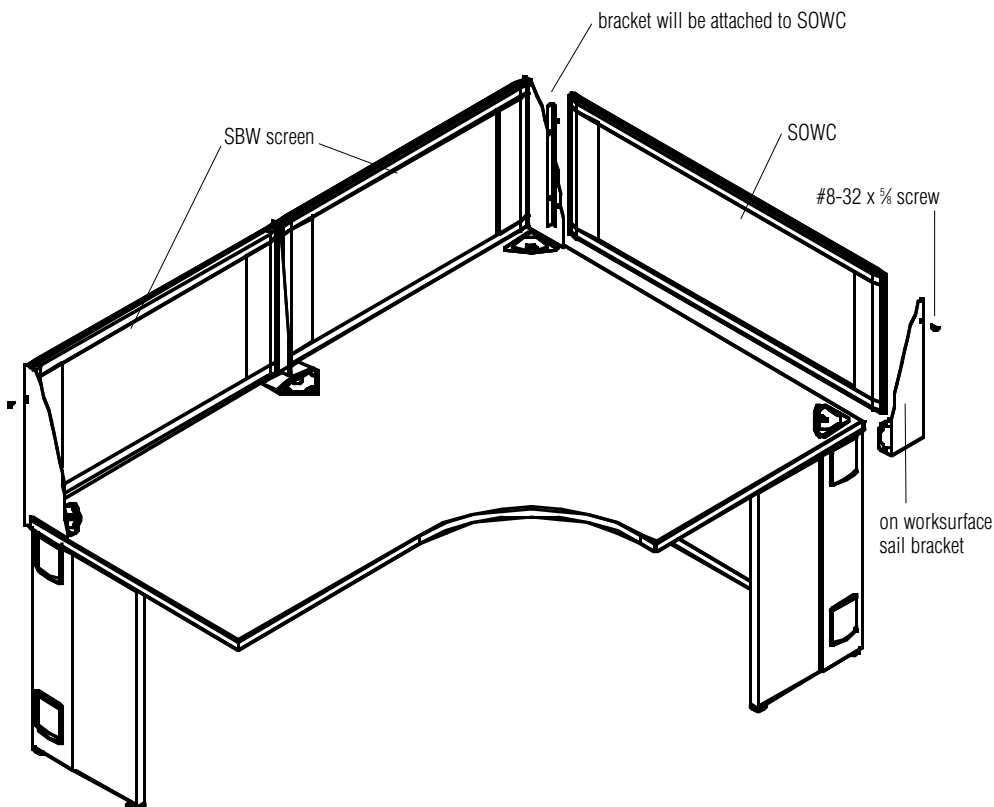
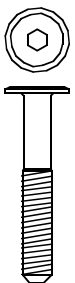


Figure 1



$\frac{5}{16}$ -18 x 2
bolt

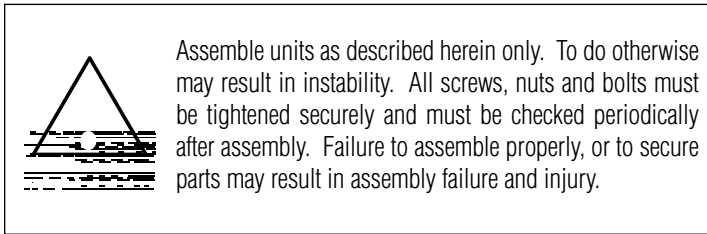


#8-32 x $\frac{5}{16}$
screw



#10-16 x $\frac{1}{2}$
screw

Privacy Screen Attachment - SSO (Screen Stanchion, On Worksurface) - Assembly Instructions



Note: 72" worksurfaces have two screens.

Note: SSO screen attaches to an Overstorage Support. See page 8 for assembly instructions.

1. Remove appropriate worksurface grommets and covers. Remove the two outside $\frac{5}{16}$ -18 x 2 short-head bolts from the bolt cluster that secure the worksurface to the leg supports. The center bolt does not require removal and can be loosened approximately $\frac{1}{8}$ " and left in place. Repeat on other ends of worksurface.
2. Hook slot in corner of On Worksurface Sail Bracket onto the $\frac{5}{16}$ -18 x 2 short-head bolt and leave loose until sail bracket and screen are attached.
3. Remove Overstorage door. Align tabs on privacy screen bracket with flag-shaped cuts in the Overstorage support and push into place. Allow bracket to drop into the slots of the flag-shaped cuts.
4. Press screen onto tooth on side of sail bracket. Top of screen should sit flush with top of sail bracket. Attach both screen ends with #8-32 x $\frac{5}{16}$ screw through sail bracket into pre-drilled hole in screen. Retighten all $\frac{5}{16}$ -18 x 2 short-head bolts and reattach Overstorage door.

66" and 72" Screens:

1. Attach left or right sail bracket as listed above. Attach center bracket over center grommet with two #10-16 x $\frac{1}{2}$ screws. Drive screws through bracket directly into worksurface. Pilot holes are not necessary.
2. Fit screen into center sail bracket first, then to end sail bracket. Attach with #8-32 x $\frac{5}{16}$ screw by attaching through sail bracket into pre-drilled hole in screen.
3. Remove corner trim and trim top cap filler to correct length. Insert screen splice.

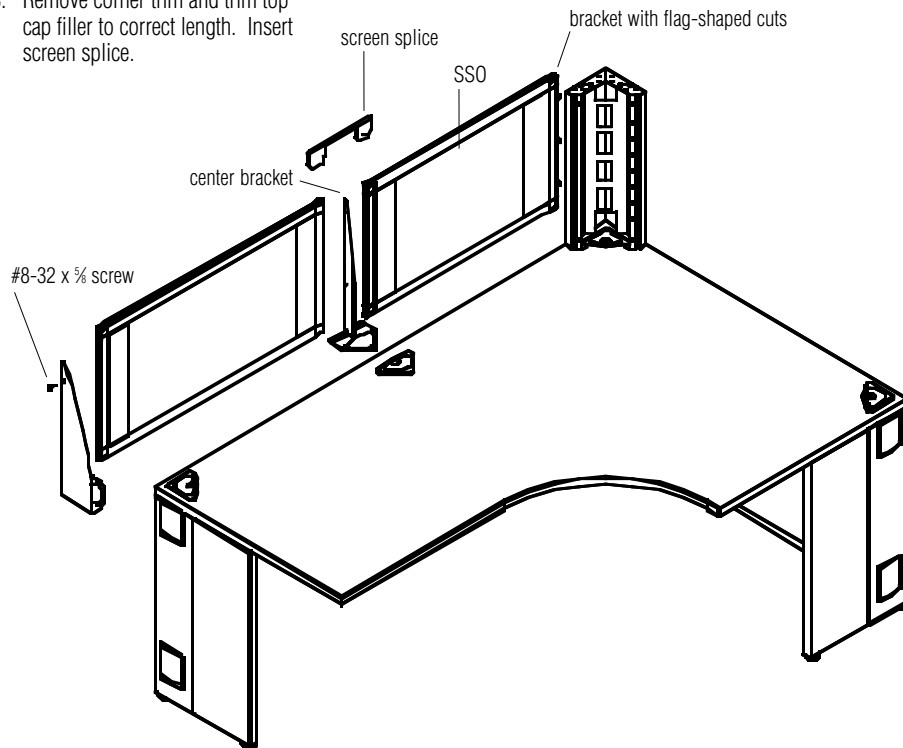
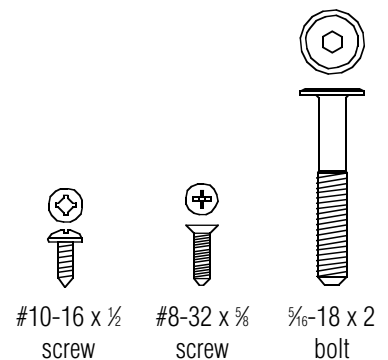
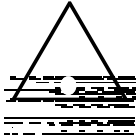


Figure 1



Privacy Screen Attachment - STK (Screen Stackable) - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

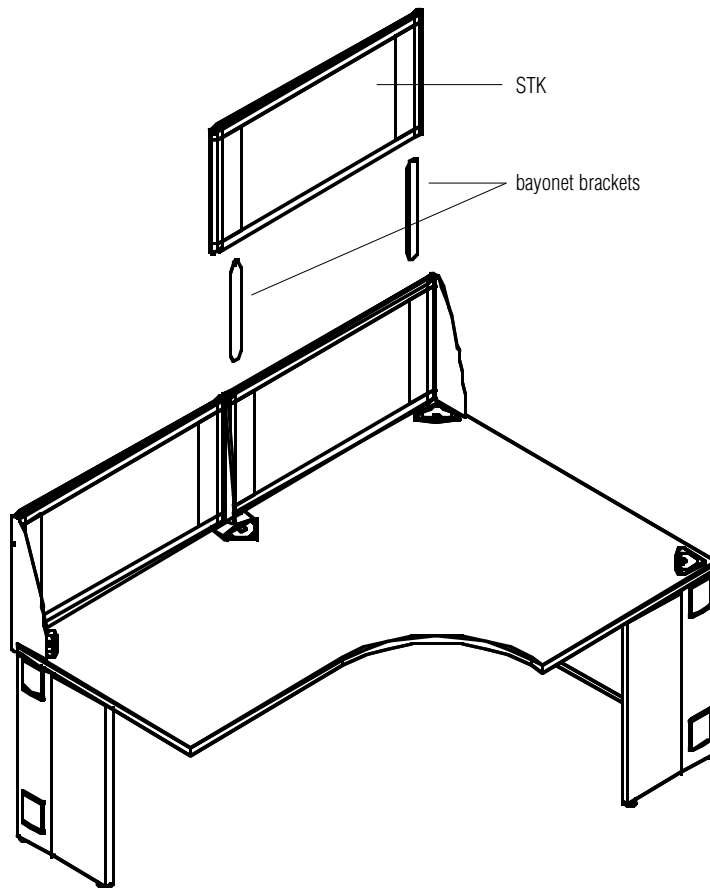
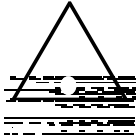


Figure 1

Note: 66" and 72" worksurfaces have two screens.

1. Trim top cap filler to proper length on desk mounted screen to expose slots for bayonet brackets.
2. Insert bayonet brackets into opening on bottom side of stackable screen.
3. Slide stackable screen assembly into top of desk-mounted screen. Make sure stackable screen is positioned flush with desk mounted screen.

Worksurface Divider Attachment - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

Note: Worksurface dividers are used in place of ganging plates on desks.

1. Open Plan Installations

Assemble desks according to instructions. Separate desk worksurfaces approximately 3" and slide one attachment flange of divider bracket into space between worksurface and end panel.

Note: Divider back and worksurface back should align. Cutouts in divider brackets allow for clearance with leg and worksurface spacers.

Align holes in divider bracket with holes on underside of worksurface and secure with two #14 x 7/8 screws. Carefully slide second desk into place, align holes in divider bracket with holes in underside of worksurface and secure with two #14 x 7/8 screws (Figure 1).

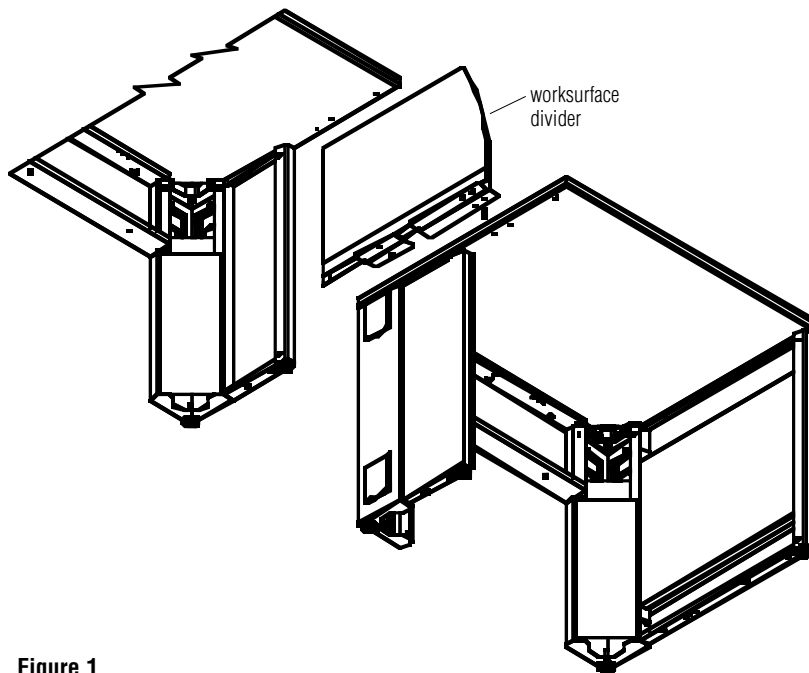
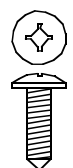


Figure 1

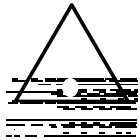
2. Panel Wrapped Installations

Remove leg covers and transition end panels on desk ends that will employ a worksurface divider. Separate desk worksurfaces approximately 1/8" and slide worksurface divider (with flanges on underside of worksurface) into place until back of divider is aligned with back of worksurface. Align holes in worksurface divider with holes in underside of worksurface and secure with four #14 x 7/8 screws. Replace transition end panels and leg covers (Figure 1).



#14 x 7/8
screw

Crescendo® Panel Supporting Bracket Attachment - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

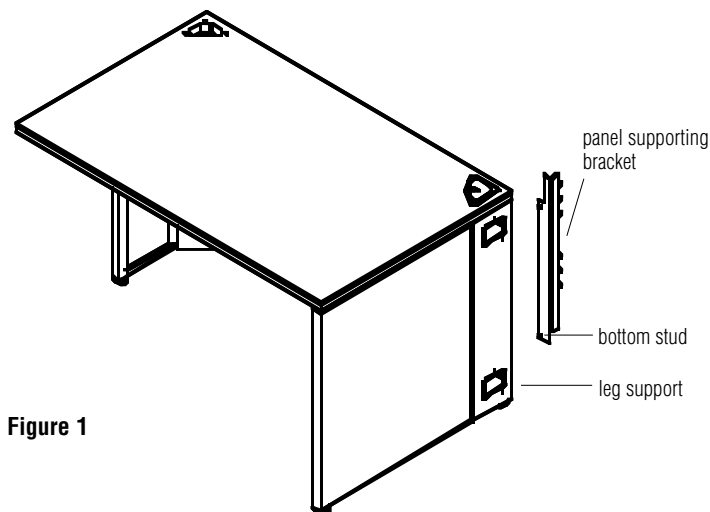


Figure 1

1. Remove inside leg cover and leg grommet cover from attachment leg. Orient panel supporting bracket such that attachment teeth openings face up. Insert top threaded stud of panel supporting bracket into small hole located near leg wireway opening. Make sure panel supporting bracket is parallel with leg and lightly tap area near bottom stud with hammer to locate drill location. Remove panel supporting bracket and drill $\frac{1}{8}$ " diameter hole at marked location.

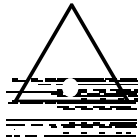
Orient panel supporting bracket such that attachment teeth openings face up and insert teeth into slots in the WireWorks panel vertical. Bottom tooth of panel supporting bracket should engage the sixth slot in panel up from floor. Firmly push up on panel supporting bracket to seat in vertical. Adjust glides of desk and panel so threaded studs in panel supporting bracket align with holes in leg support. Push desk assembly onto threaded studs and secure from inside of leg with two #10-24 nuts.

Replace inside leg cover (Figure 1).



#10-24
nut

810 Electrical Rigid Wireway - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

WARNING: Be sure all power is turned off!

Note: All desks that are electrically connected together with a 10-wire system must also be mechanically connected with a ganger plate(s).



WARNING: RISK OF FIRE OR ELECTRICAL SHOCK

Do not electrically connect a desk to more than one supply source. Always determine that the desk is electrically connected to one and only one source of supply.

Electrical Installation

1. Locate the letter "N" and arrow on rigid wireway and hold with arrow pointing up. Assemble rigid wireway bracket onto bottom injection molded snaps, one bracket per end. Place rigid wireway assembly on inside of modesty panel beam, aligning holes in rigid wireway brackets with those in the modesty panel beam. Secure with two $\frac{1}{4}$ -20 x $\frac{1}{2}$ screws (Figure 1).
2. Snap the appropriate receptacle into the rigid wireway with firm pressure from center of desk (Figure 1).

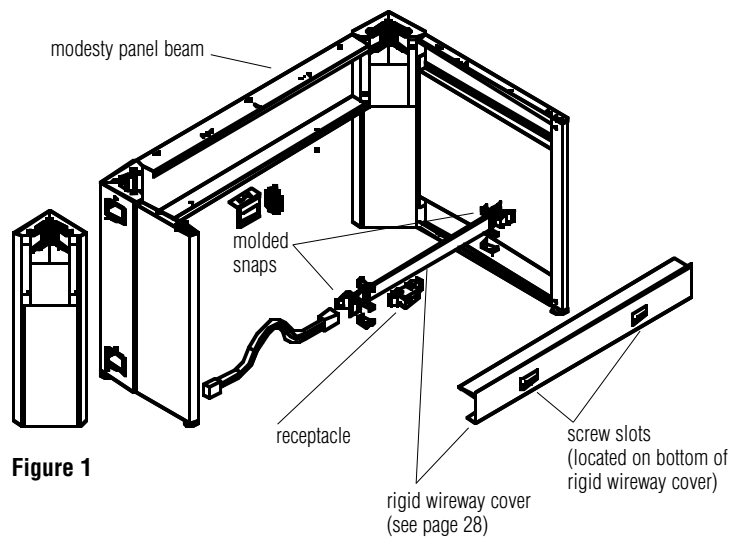
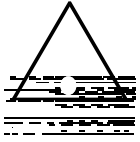


Figure 1



$\frac{1}{4}$ -20 x $\frac{1}{2}$
screw

End Panel Trough - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

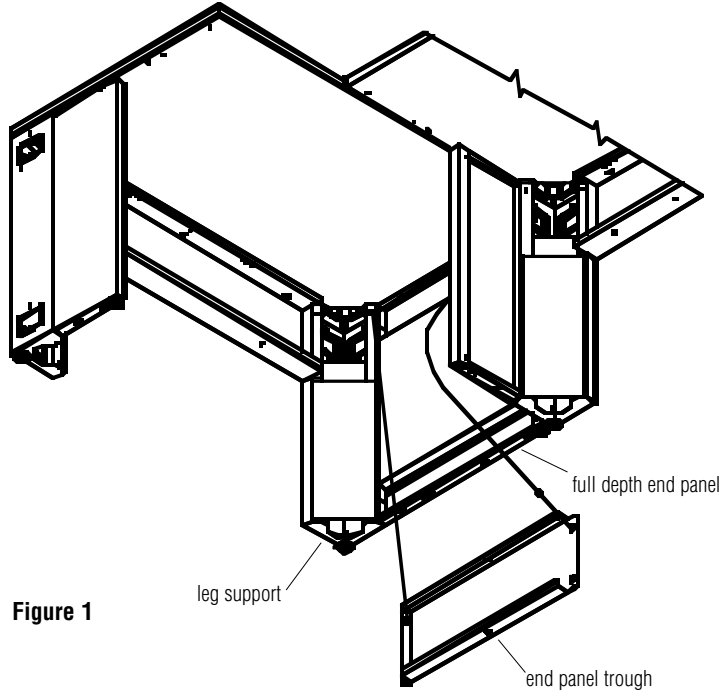


Figure 1

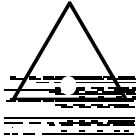
1. **Note:** End panel troughs are non-handed and can be used in left- or right-hand configurations. They are used in areas where a continuous trough is desired for routing power and data.

Align top keyhole in end panel trough with screw head and firmly press down to secure. Retighten screw. Align front, top keyhole in end panel trough with hole in end panel and secure with $\frac{1}{4}$ -20 x $\frac{1}{2}$ screw (Figure 1).



$\frac{1}{4}$ -20 x $\frac{1}{2}$
screw

Desk Jumpers/Power Pass-Thru - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

1. Orient the "N" and arrow on jumper to face up. Snap one end of jumper/power pass-thru into end of rigid wireway and route through leg support wireway openings in both desks. Snap other end of jumper/power pass-thru into end of rigid wireway in second desk.

Note: Two ganging plates attached with #14 x 7/8 screws must be used in conjunction with the jumper between adjoining desks. Holes for ganging plates are located on each end of worksurface, approximately 9" from front and back (Figure 1).

Note: DJST jumpers are used for all standard desk to desk connections. DJ24 and DJ30 sizes are used when 2 rectangular desks are used to make a corner condition.

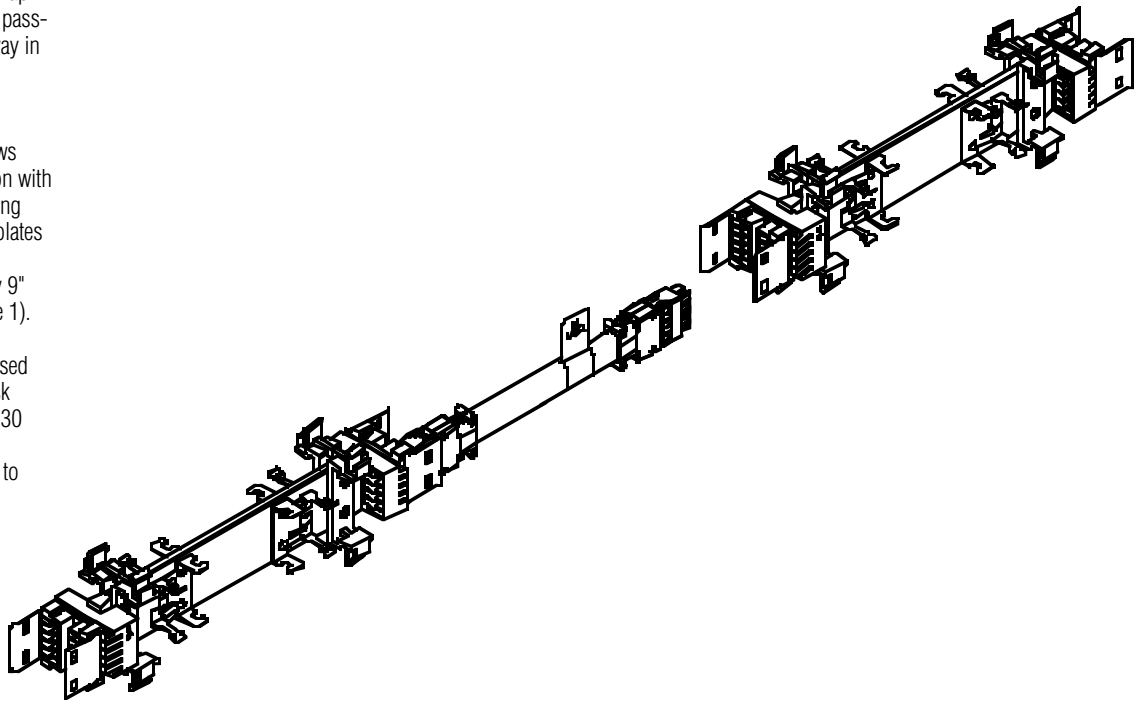
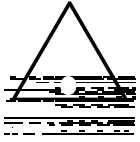


Figure 1

Basefeed - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

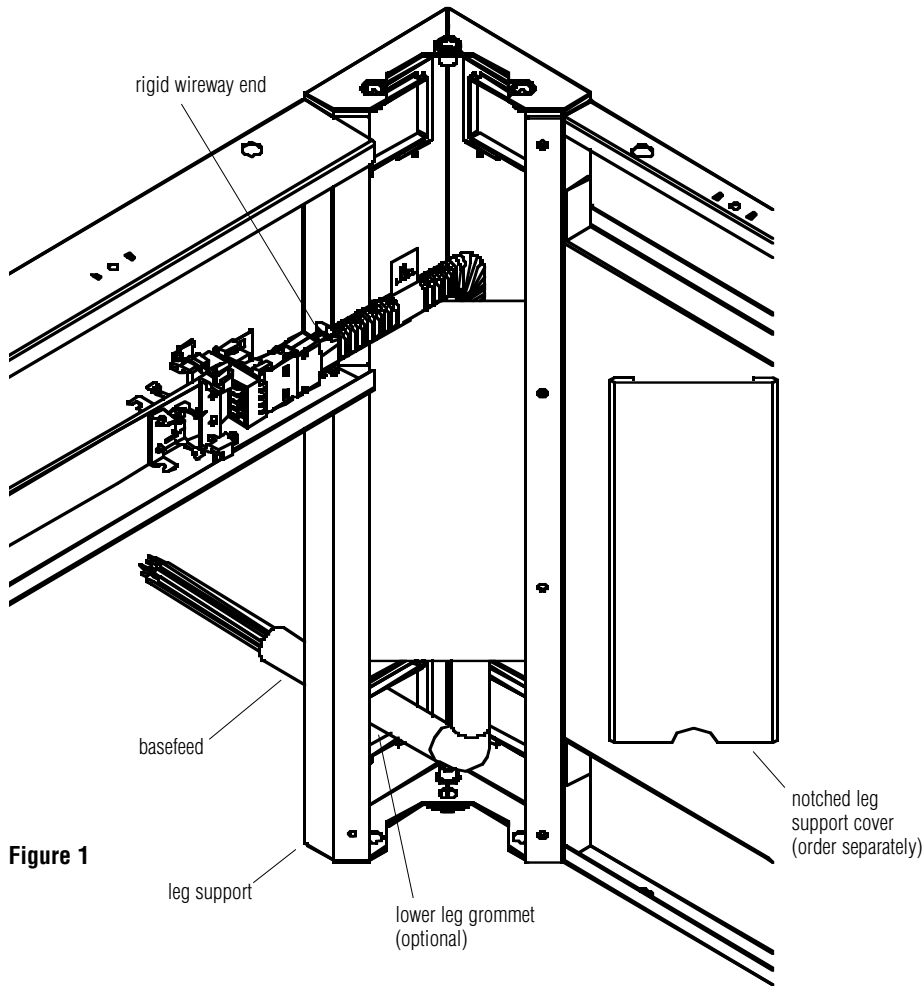


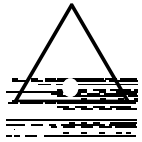
Figure 1

1. Run basefeed through lower grommet, if applicable, or through opening at bottom of leg cover, up to modesty panel beam. It may be necessary to remove leg covers to properly route the conduit (Figure 1).

Note: A leg support with a base infeed will require a notched leg support cover or a leg support with lower-leg grommets.

2. Orient the "N" on the infeed to face up. Snap end of infeed into end of rigid wireway (Figure 1).

Top Infeed - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

1. **Note:** The top infeed consists of four components: ceiling trim, infeed harness, power pole body and cover. The power pole and cover are designed to easily install after power and data is run into the desk system. Do not use base infeed when powering from the ceiling.

Using the ceiling trim as a template, mark and cut a hole in the ceiling tile slightly larger than the power pole. Insert ceiling trim tab side up into ceiling tile. Ceiling trim should fit slightly snug (Figure 1).

2. Remove grommet cover from worksurface grommet. Measure the distance from the underside of worksurface to top of ceiling tile, add 1" and cut power pole body to this length. Remove any rough edges after cutting. Align power pole body with ceiling trim hole and push into ceiling until bottom clears top of worksurface. Align power pole body with worksurface grommet hole and lower into grommet. It may be necessary to push the ceiling trim up into the ceiling tile cutout after power pole installation (Figure 1).

3. Run top infeed harness and/or data cabling through ceiling trim and cutout down through worksurface grommet to the rigid wireway. Orient the "N" on the infeed to face up. Snap end of infeed into end of rigid wireway. Measure distance between worksurface grommet and ceiling trim and cut power pole cover to this length. Place wire and snap power pole cover into power pole body (Figure 1).

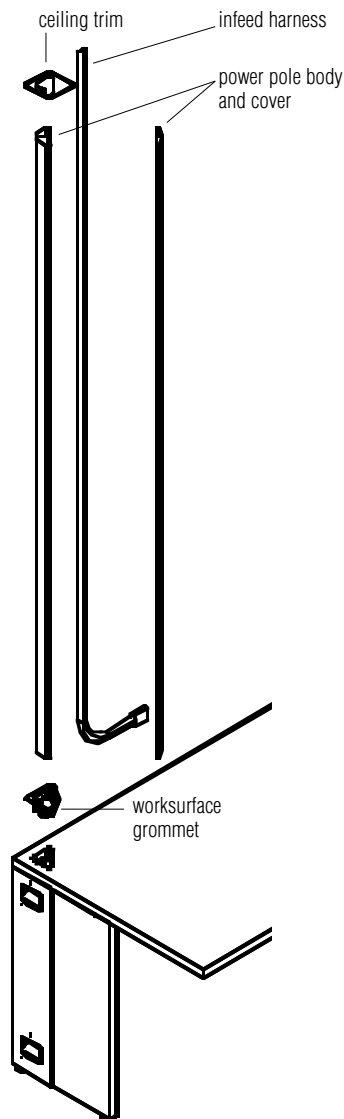


Figure 1



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

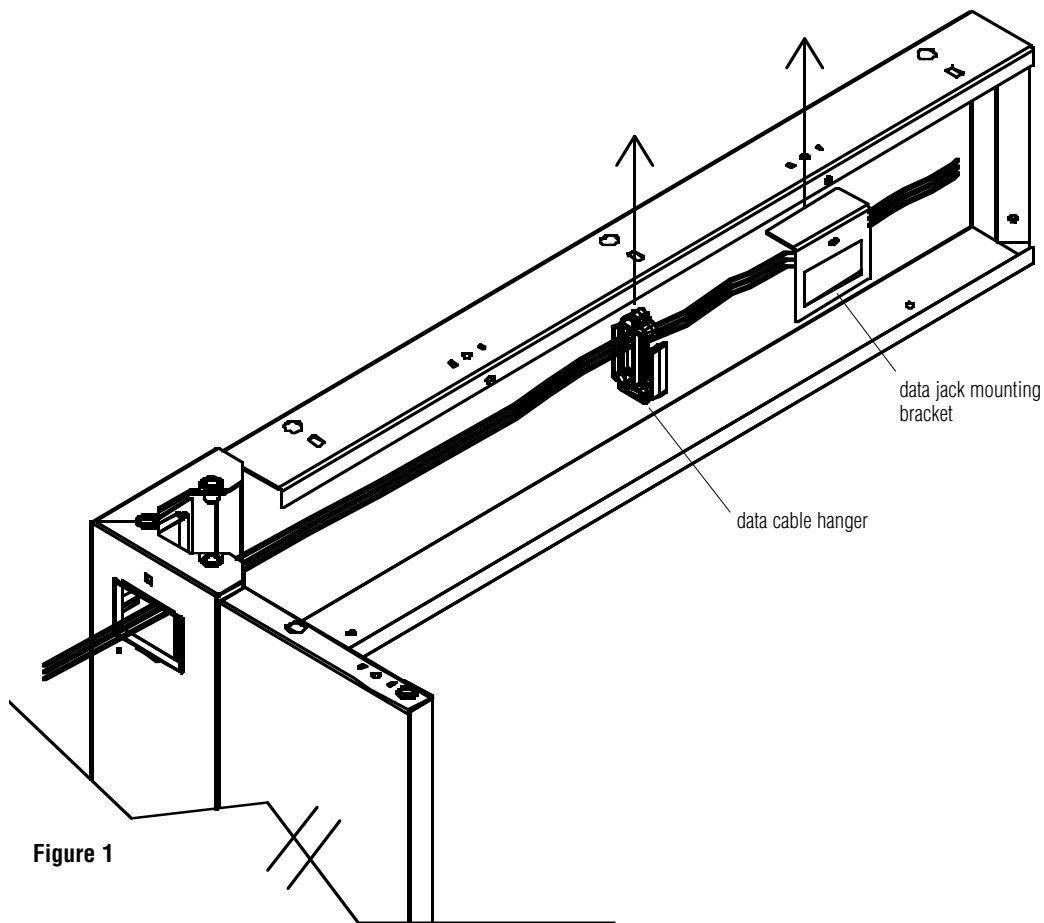


Figure 1

Cable Hanger

1. Locate rectangular hole in top surface of modesty panel beam. Align rectangular geometry on data cable hanger with hole and push up into position. Rotate 90 degrees clockwise to lock into position. Route excess cable through cable hanger (Figure 1).

Data Jack Mounting Bracket

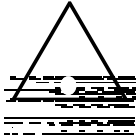
1. Locate hole on short flange of modesty panel beam and secure data jack mounting bracket to inside of modesty panel beam with a #10-24 x 1/4 screw. Run wire from behind data jack bracket through rectangular cutout and wire data jack. Snap data jack into place (Figure 1).

Note: The data jack mounting bracket accommodates modular furniture data plates. These plates are supplied by most major data connector manufacturers and are designed to snap into the opening in the data bracket. UNICOR does not provide the modular face plates or data jacks. Typical manufacturer modular face plates that are compatible with Bravo are:

- ArayaM-Series
- AMPMode Interconnect Modules
- PanduitMini-Com Face Plate
- OrtronicsSeries II IMO's Modular Furniture Bezel
- LevitonQuickport Modular Furniture Face Plates
- SiemonCT-MFP-(color)

Note: Any data face plate that fits in a 1.38 X 2.70 rectangular opening will be compatible with Bravo.

Rigid Wireway Cover - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

1. Complete all electrical connections on rigid wireway. Locate screws attaching the rigid wireway to the modesty panel beam and loosen approximately $\frac{1}{8}$ ". Align slots on rigid wireway cover flange with screws and slide into place between screw head and modesty panel beam. Retighten screws (Figure 1).

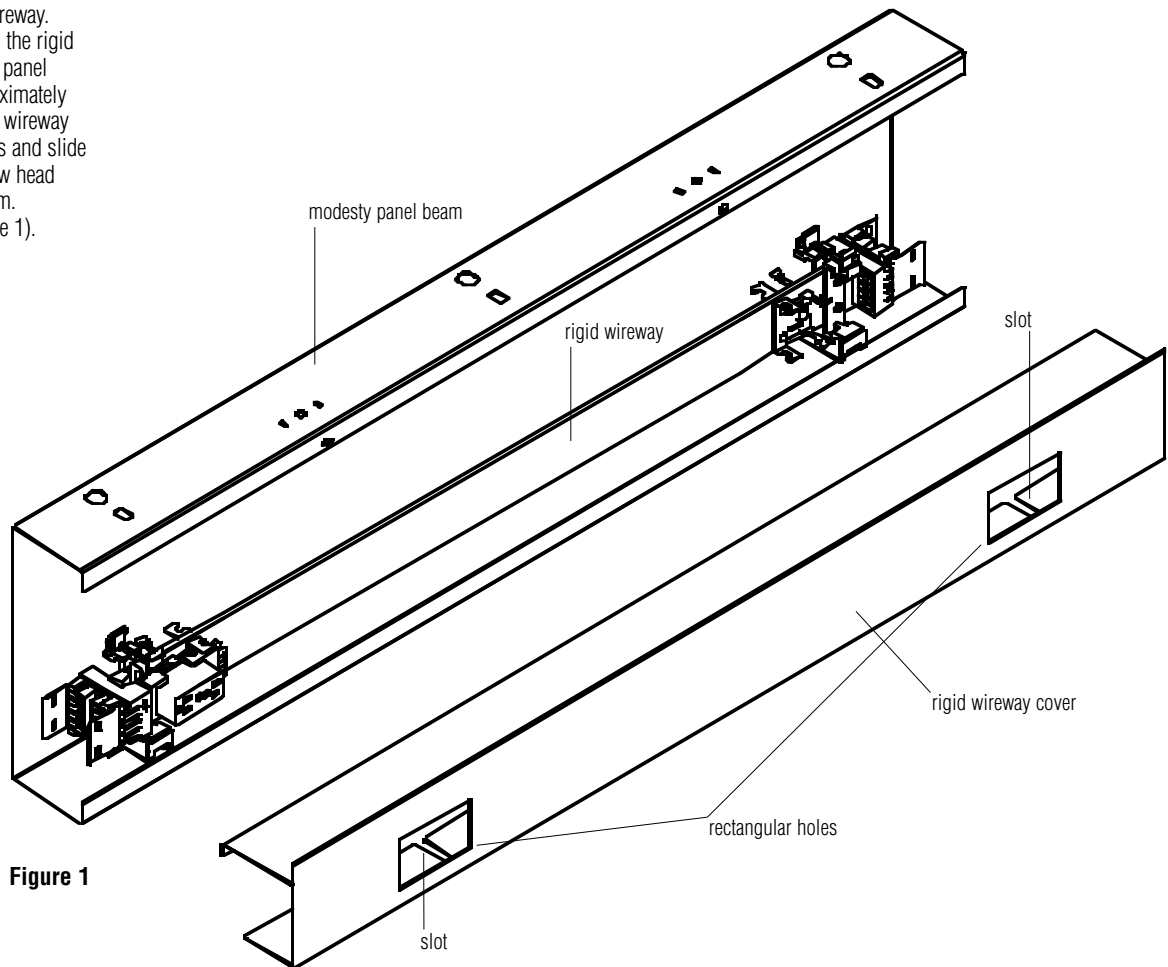
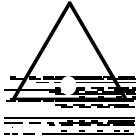
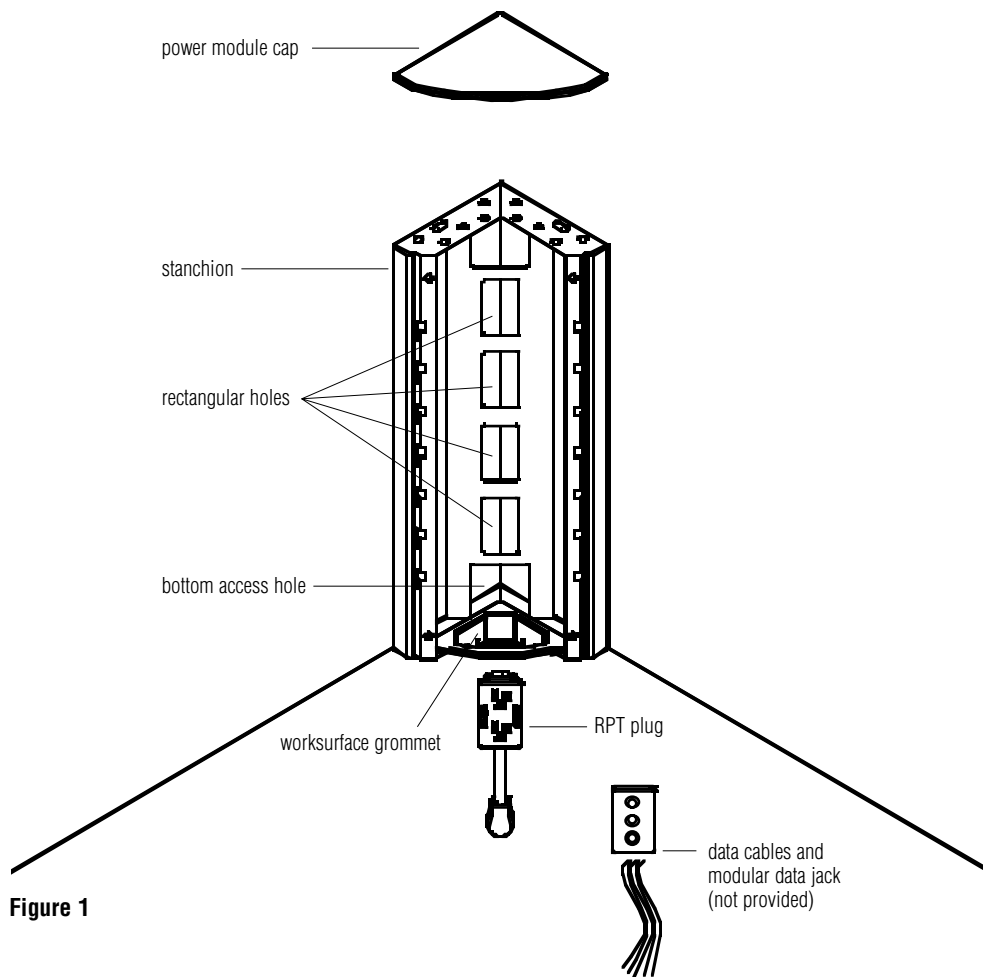


Figure 1

Relocatable Power and Data Tap - Overstorage Support - Assembly Instructions



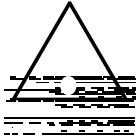
Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.



1. Open plastic overstorage support cover and remove grommet cover from worksurface grommet. Feed RPT plug through one of the rectangular holes in overstorage support, out through bottom access hole and through worksurface grommet. Plug RPT into receptacle below desk. Snap the RPT into the rectangular opening. Replace worksurface grommet cover and close overstorage support cover.

On freestanding stanchions, assemble power module cap, if applicable, to overstorage support by aligning snaps with appropriate holes and firmly pushing into place (Figure 1).

Backpack Wire Trough Kit Installation - Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.

- Note:** Leg support covers and lower modesty panel must be removed before assembly of the backpack wire trough kit to back of desk.

Assemble trough brackets to leg supports below modesty panel beam by aligning two holes in flange with those of the leg supports. Secure with two $\frac{1}{4}$ -20 x $\frac{1}{2}$ screws per bracket.

Align holes in end of troughs to holes in trough brackets and secure with two $\frac{1}{4}$ -20 x $\frac{1}{2}$ screws per trough. Repeat for two more troughs.

Insert stud of male snap into small square hole near wireway in leg support and secure with #10-24 nut. Repeat for other leg support. Route data cable and wire desks appropriately.

Hold backpack cover at approximately 15-degree angle from desk back and hook triangular-shaped holes at the bottom of the backpack cover onto tabs on trough brackets. Rotate to vertical, allowing male snaps in leg supports to engage female snap in backpack cover.

Note: Backpack covers may be assembled with beveled or flat surface up, depending on customer preference.

End run, splice, and corner trim components are available for backpack configurations. The end-run trim component is non-handed and attaches to the inside of either end of the backpack cover with double-sided tape. Splice and corner trim components are attached to the outside of a backpack cover with double-sided tape. Remove backer from appropriate tape strip and firmly press into place on the backpack cover. Trim components should be attached to only one backpack cover to allow for easier removal and access of data cables (Figure 1).

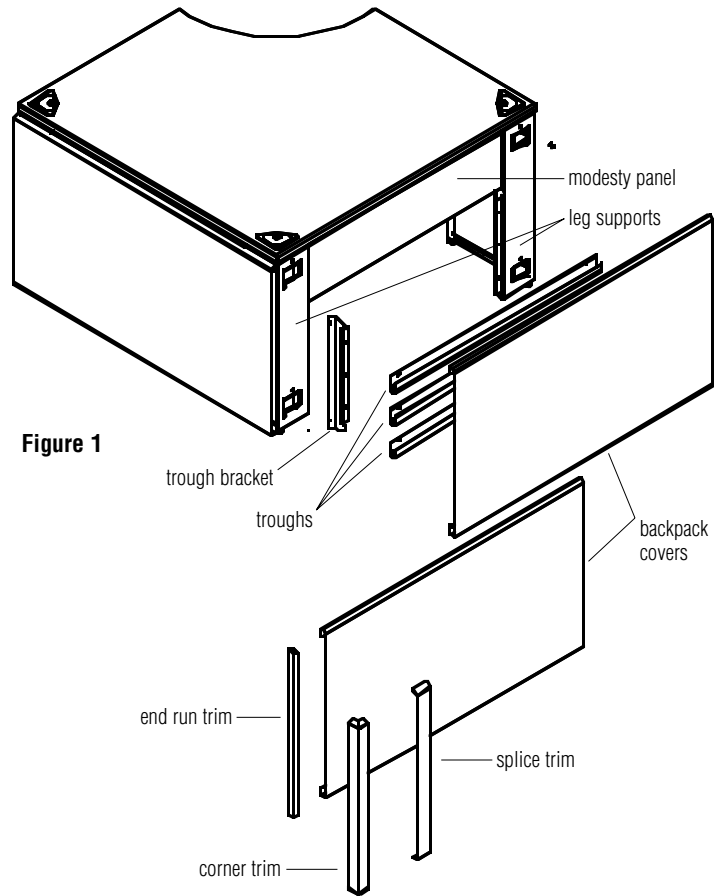
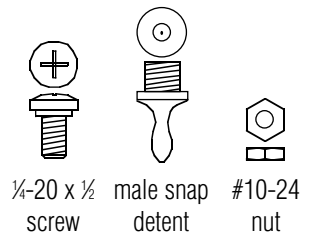
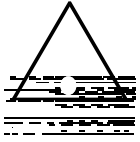


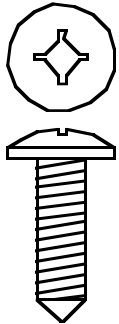
Figure 1



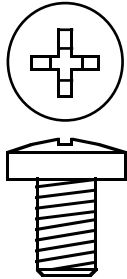
Hardware Overview



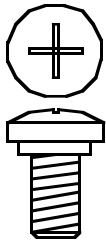
Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and injury.



#14 x 3/8
screw



5/16-18 x 1/2
screw



1/4-20 x 1/2
screw



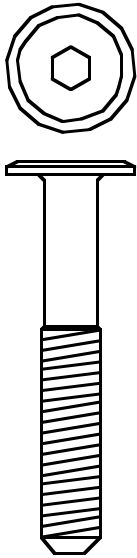
#8-32 x 5/8
screw



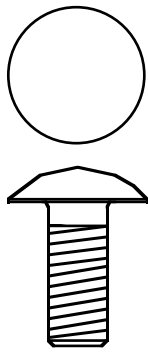
#10-16 x 1/2
screw



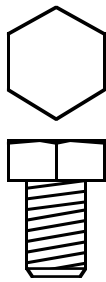
#10-24 x 1/4
screw



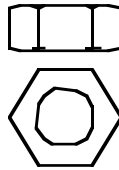
5/16-18 x 2
bolt



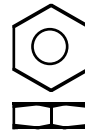
5/16 x 18
square shank bolt



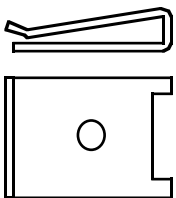
5/16-18 x 1/2
bolt



5/16 x 18
nut



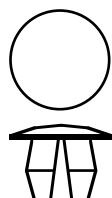
#10-24
nut



spring clip



male snap
detent



plastic snap

All hardware pictured on this page shown actual size.

Tools Required:

- Screw Gun and Batteries
- Phillips #2 Driver - 6" Length
- Phillips #3 Driver
- 5mm Socket Head Ball Driver - 3" Length
- 3/8" Combination Wrench or Socket
- 1/2" Combination Wrench or Socket
- Ratchet Wrench
- 7/32" Diameter Drill

