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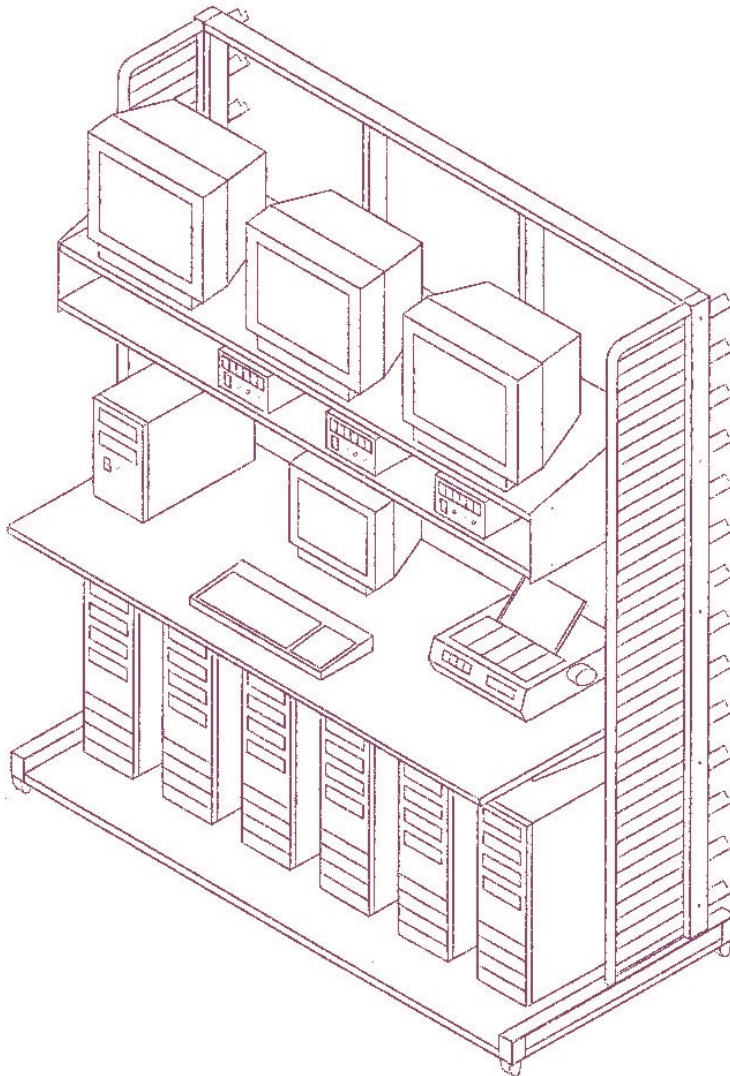
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JANUARY 2004

RF500A	RF507A	RF514A	RF521A
RF501A	RF508A	RF515A	RF522A
RF502A	RF509A	RF516A	RF523A
RF503A	RF510A	RF517A	RF524A
RF504A	RF511A	RF518A	RF525A
RF505A	RF512A	RF519A	RF526
RF506A	RF513A	RF520A	

ServCenter ServCenter II



**CUSTOMER
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INFORMATION**

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1. Specifications

Weight Capacity: RF500A–RF504A, RF513A–RF515A: 2000 lb. (907.2 kg);
RF507A, RF509A–RF510A, RF518A–RF522A: 300 lb. (136.1 kg)

CD Capacity: RF526: Up to 48 CDs

Size: RF500A, RF504A: 90"H x 76.4"W x 34.25"D (228.6 x 194.1 x 87 cm);
RF501A, RF515A: 90"H x 52.4"W x 34.25"D (228.6 x 133.1 x 87 cm);
RF502A–RF503A: 85.5"H x 76.4"W x 34.25"D (217.2 x 194.1 x 87 cm);
RF505A–RF506A: 24"W (61 cm);
RF507A: 24"W x 18"D (61 x 45.7 cm);
RF508A: 24"W x 12"D (61 x 30.5 cm);
RF509A–RF510A: 24"W x 22"D (61 x 55.9 cm);
RF511A: 16.9"W (42.9 cm), mouse pad is 8.8"W x 8"D (22.4 x 20.3 cm);
RF512A: 7.5"H x 3.1"D (19.1 x 7.9 cm);
RF513A–RF514A: 85.5"H x 52.4"W x 34.25"D (217.2 x 133.1 x 87 cm);
RF516A: 72"W (182.9 cm);
RF517A: 48"W (121.9 cm);
RF518A, RF520A: 48"W x 22"D (121.9 x 55.9 cm);
RF519A, RF521A: 72"W x 22"D (182.9 x 55.9 cm);
RF522A: 48"W x 18"D (121.9 x 45.7 cm);
RF523A: 1.4"H x 3.9"W x 41.4"D (3.6 x 9.9 cm x 105.2 cm);
RF524A: 85.5"H x 28"W x 34"D (217.2 x 71.1 x 86.4 cm);
RF525A: 90"H x 28.4"W x 34.25"D (228.6 x 72.1 x 87 cm);
RF526: 4.6"H x 23.6"W x 5.6"D (11.7 x 59.9 x 14.2 cm)

Weight: RF500A, RF502A–RF504A: 341 lb. (154.7 kg);
RF501A, RF513A–RF514A: 200 lb. (90.7 kg);
RF505A: 4 lb. (1.8 kg);
RF506A–RF507A, RF511A–RF512A, RF516A–RF517A: 3 lb. (1.4 kg);
RF508A: 16 lb. (7.3 kg);
RF509A, RF522A: 20 lb. (9.1 kg);
RF510A: 24 lb. (10.9 kg);
RF515A: 384 lb. (174.2 kg);
RF518A: 40 lb. (18.1 kg);
RF519A: 57 lb. (25.9 kg);
RF520A: 26 lb. (11.8 kg);
RF521A: 39 lb. (17.7 kg);
RF523A: 5 lb. (2.3 kg);
RF524A–RF525A: 276 lb. (125.2 kg)

2. Introduction

The ServCenter is a 48" or 72"W modular shelving unit that holds up to 2000 lb. (907.2 kg) of computer networking equipment. For smaller installations, choose the ServCenter II. It's 90"H x 28.4"W x 34.25"D (228.6 x 72.1 x 87 cm) and holds up to 1500 lb. (680.4 kg) of equipment. A variety of accessories are available, including a retractable keyboard holder, horizontal cable managers, shelves (grid, electronic, or add-on), and a rackmount panel assembly.

2.1 What's Included with the ServCenter or ServCenter II

Eight ServCenter models are available. All include (1) frame, (2) uprights with vertical cable management, and (1) work surface.

- RF501A (inside width 48") measures 90"H x 52.4"W x 34.25"D (228.6 x 133.1 x 87 cm) and has (1) add-on shelf, (1) electronic/tower shelf, and (1) caster base shelf.
- RF515A (inside width 48") is 90"H x 52.4"W x 34.25"D (228.6 x 133.1 x 87 cm) and features (2) electronic/tower shelves and (1) caster base shelf.
- RF513A (inside width 48") measures 85.5"H x 52.4"W x 34.25"D (217.2 x 133.1 x 87 cm) and has (1) add-on shelf, (1) electronic/tower shelf, and (1) tower floor shelf with roll-out kit.
- RF514A (inside width 48") is 85.5"H x 52.4"W x 34.25"D (217.2 x 133.1 x 87 cm) and has (2) electronic/tower shelves and (1) tower floor shelf with roll-out kit.
- RF500A (inside width 72") measures 90"H x 76"W x 34.25"D (228.6 x 193 x 87 cm) and has (1) add-on shelf, (1) electronic/tower shelf, and (1) caster base shelf.
- RF504A (inside width 72") is 90"H x 76.4"W x 34.25"D (228.6 x 193 x 87 cm) and has (2) electronic/tower shelves and (1) caster base shelf.
- RF502A (inside width 72") measures 85.5"H x 76.4"W x 34.25"D (217.2 x 194.1 x 87 cm) and has (1) add-on shelf, (1) electronic/tower shelf, and (1) tower floor shelf with roll-out kit.
- RF503A (inside width 72") is 85.5"H x 76.4"W x 34.25"D (217.2 x 194.1 x 87 cm) and has (2) electronic/tower shelves and (1) tower floor shelf with roll-out kit.

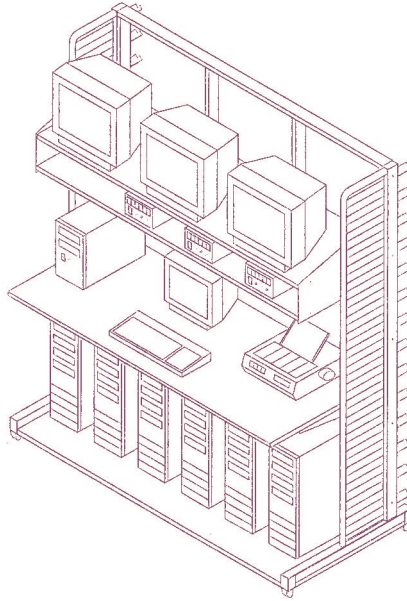


Figure 2-1. ServCenter.

Two ServCenter II models are available.

- RF524A (inside width 24") measures 90"H x 28.4"W x 34.25"D (228.6 x 72.1 x 87 cm) and has (2) electronic/tower shelves and (1) tower floor shelf with roll-out kit.
- RF525A (inside width 24") measures 90"H x 28.4"W x 34.25"D (228.6 x 72.1 x 87 cm) and has (2) electronic/tower shelves and (1) caster base shelf.

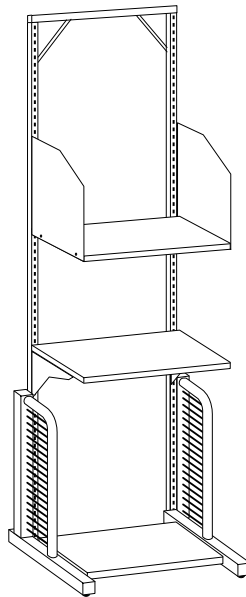


Figure 2-2. ServCenter II.

2.2 Retractable Keyboard Holder

The Retractable Keyboard Holder (RF505A) is 24"W and slides out for convenient keyboard access.

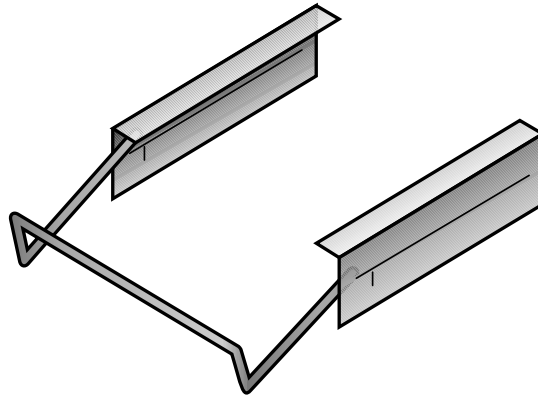


Figure 2-3. Retractable keyboard holder (RF505A).

2.3 Horizontal Cable Managers

Need to neatly organize cables? Use the Horizontal Cable Managers. They're available in 24-, 48-, and 72-inch widths (RF506A, RF517A, and RF516A) and feature an open design for easy access. They also have built-in brackets for power strips.

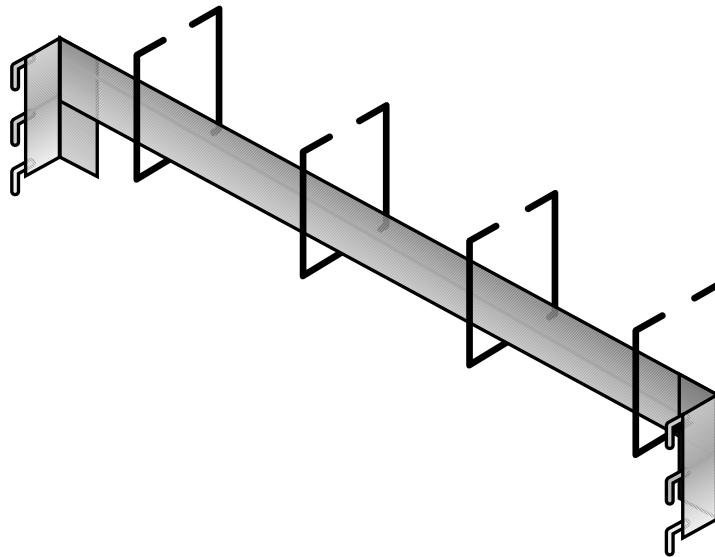


Figure 2-4. Horizontal Cable Manager (RF506A).

2.4 Grid Shelves

Grid shelves hold up to 200 lb. (90.7 kg). 24"W x 18"D (RF507A) and 48"W x 18"D (RF522A) sizes are available. Use the shelves with all ServCenters to store extra items.

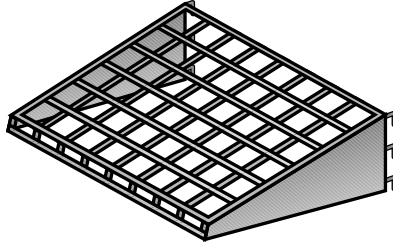


Figure 2-5. Grid Shelf (RF507A).

2.5 Mini Electronic/Tower Shelves

Mini Electronic/Tower Shelves measure 24"W x 22"D (RF509A) and hold servers and other equipment in all ServCenters.

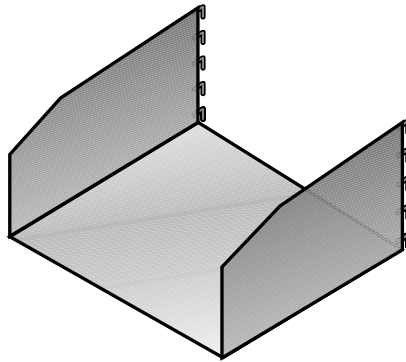


Figure 2-6. Mini Electronic/Tower Shelf (RF509A).

2.6 Mini Add-On Shelves

The Mini Add-On Shelf (RF510A) provides a second shelf 6.5" (16.5 cm) above the Mini Electronic/Tower Shelf. This shelf measures 24" wide and installs in any ServCenter model (24", 48", or 70").

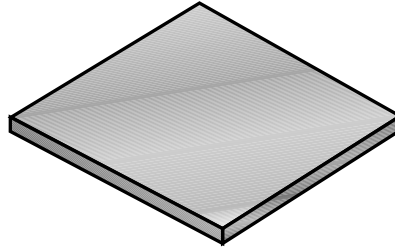


Figure 2-7. Mini Add-On Shelf (RF510A).

2.7 Adjustable Mouse Tray

The Adjustable Mouse Tray (RF511A) holds the mouse. To tighten the tray so that it doesn't inadvertently move, turn the knob that attaches to the tray.

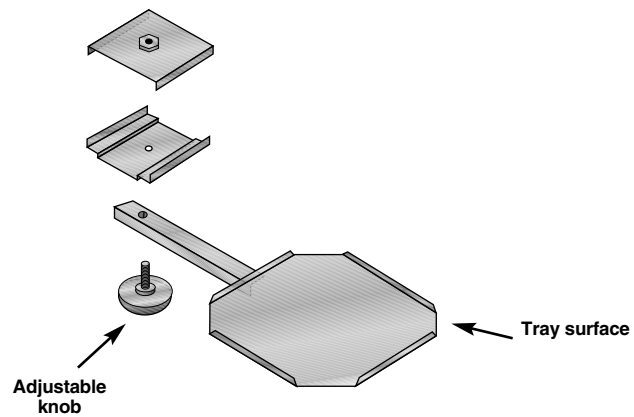


Figure 2-8. Adjustable Mouse Tray (RF511A).

2.8 Rackmount Panel Assembly

The Rackmount Panel Assembly (RF508A) holds rackmount equipment in all ServCenters.

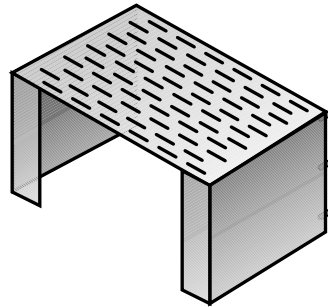


Figure 2-9. Rackmount Panel Assembly (RF508A).

2.9 Electronic/Tower Shelves

The Electronic/Tower Shelf measures 48"W x 22"D (RF518A) or 72"W x 22"D (RF519A). Use it to hold servers and other equipment.

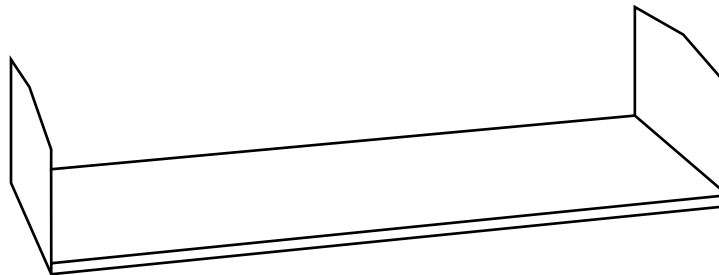


Figure 2-10. Electronic/Tower Shelf (RF518A).

2.10 Add-On Shelves

Two sizes of Add-On Shelves are available. Choose the 48"W x 22"D shelf (RF520A) or the 72"W x 22"D shelf (RF521A). It allows you to add a second shelf that's 6.5" (16.5 cm) above an Electronic/Tower Shelf.

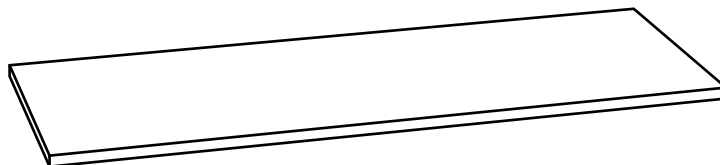


Figure 2-11. Add-On Shelf (RF521A).

2.11 Patch Panel Bracket

The Patch Panel Bracket (RF512A) can be used in all ServCenters. It holds the patch panel in place on the rack.

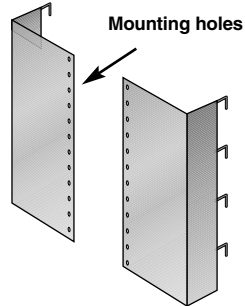


Figure 2-12. Patch Panel Bracket (RF512A).

2.12 Vertical Cable Management Cover

Use the RF523A with all ServCenters to protect your cables from dust and damage. It also holds the cables in place on the rack.

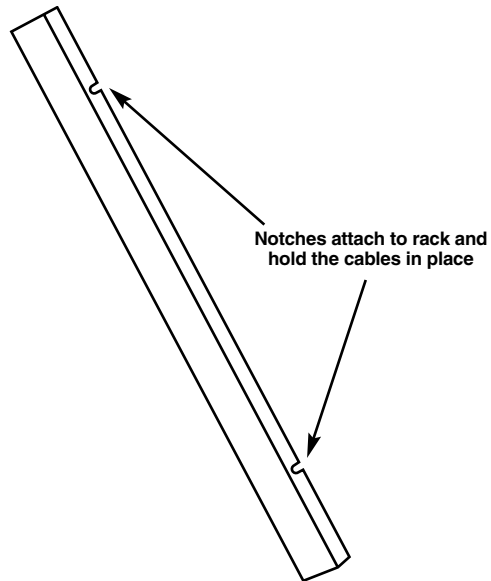


Figure 2-13. Vertical Cable Management Cover (RF523A).

2.13 CD Holder

The CD Holder (RF526) attaches to the upright framework and holds up to 48 CDs.

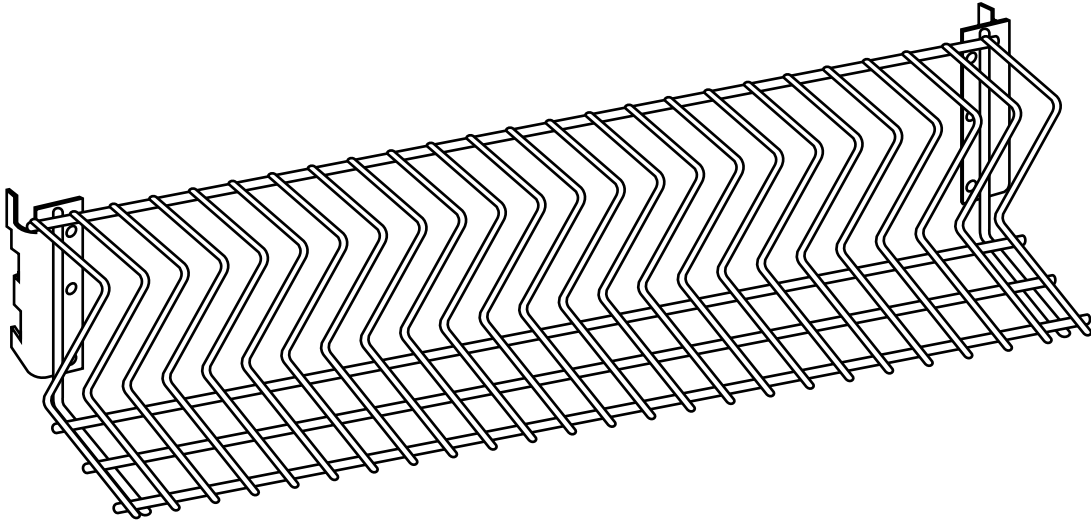


Figure 2-14. CD Holder (RF526).

3. Assembly

3.1 ServCenter

1. Lay the frame on the floor.
2. Place the uprights next to the sides of the frame.
3. Assemble the cable management and cable management cover to the uprights and frame as shown in Figures 3-1 and 3-2. Use the included hardware: ten $\frac{5}{16}$ -18 x 3" long-button socket-head cap screws, ten washers, and ten $\frac{5}{16}$ -18 hex nuts. Use five of each on each side of the frame.

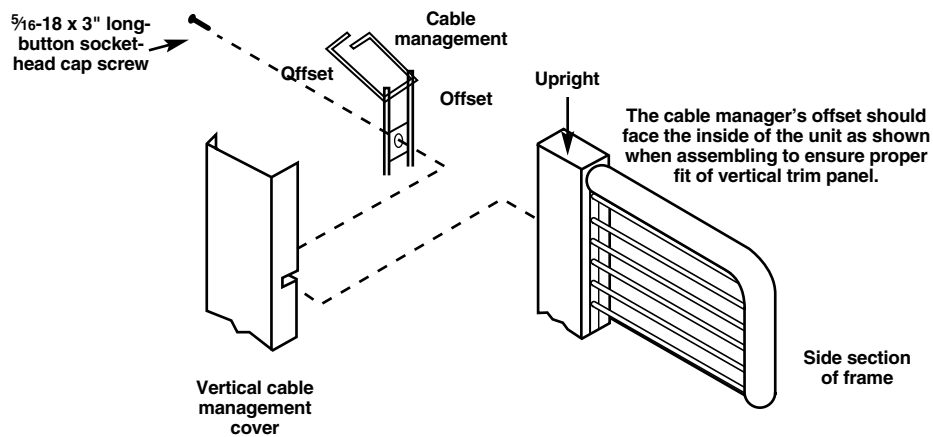


Figure 3-1. Attaching the cable management and cable management cover to the upright and frame.

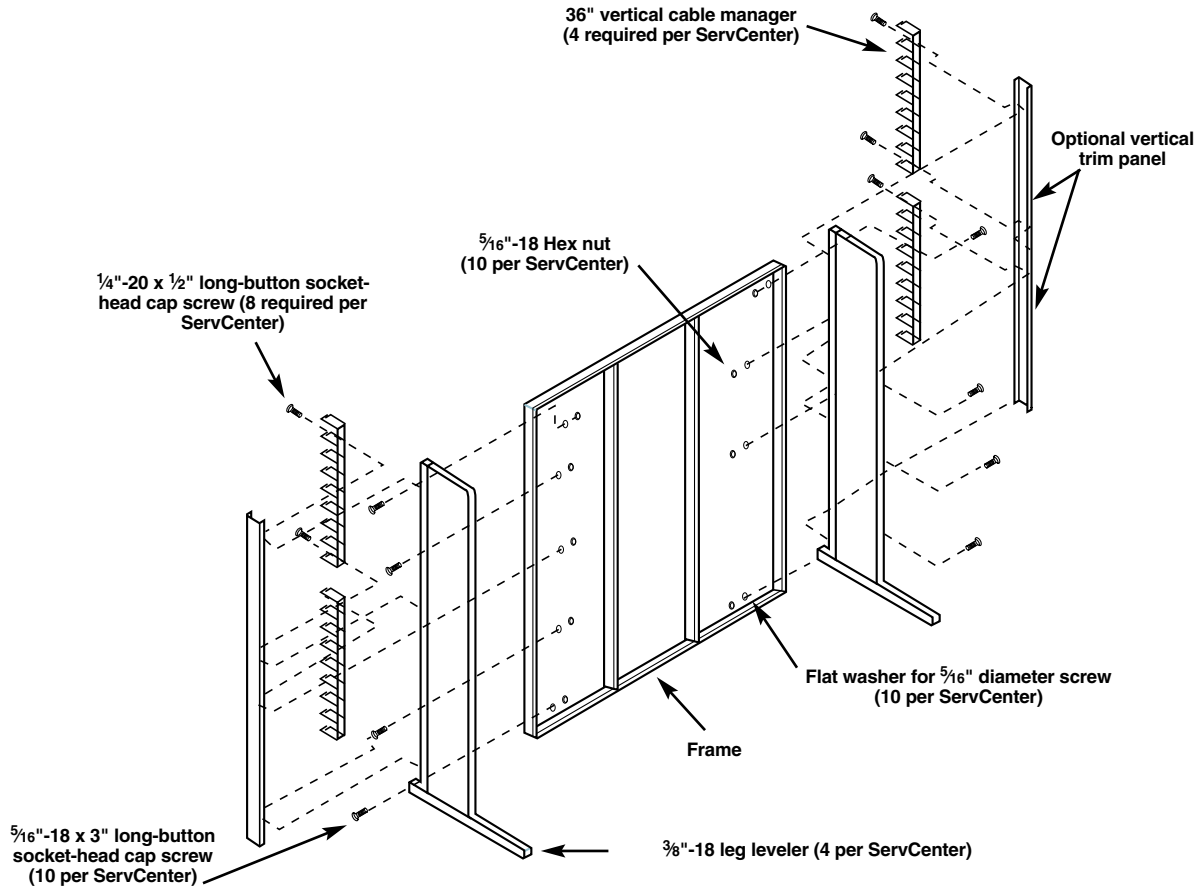


Figure 3-2. ServCenter assembly.

4. Raise the frame and uprights to a standing position.
5. Attach the vertical cable manager and optional vertical trim panel with a 1/4"-20 x 1/2" long-button socket-head cap screw.

3.2 Caster Bases

With the included screws and hex nuts, the casters attach to the three ServCenter sizes (28.4"W, 52.4"W, 76.4"W). See Figures 3-3 through 3-5.

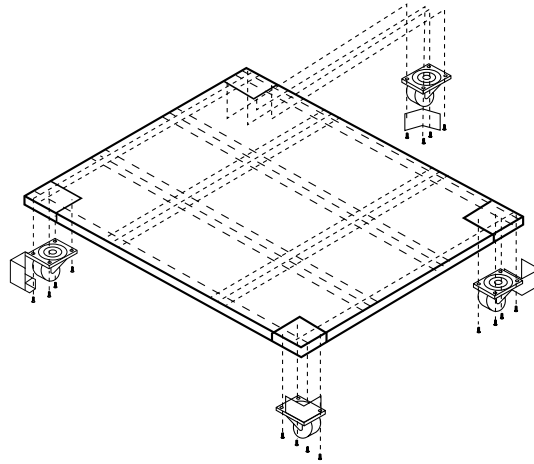


Figure 3-3. Installing casters on a 28.4"W ServCenter II.

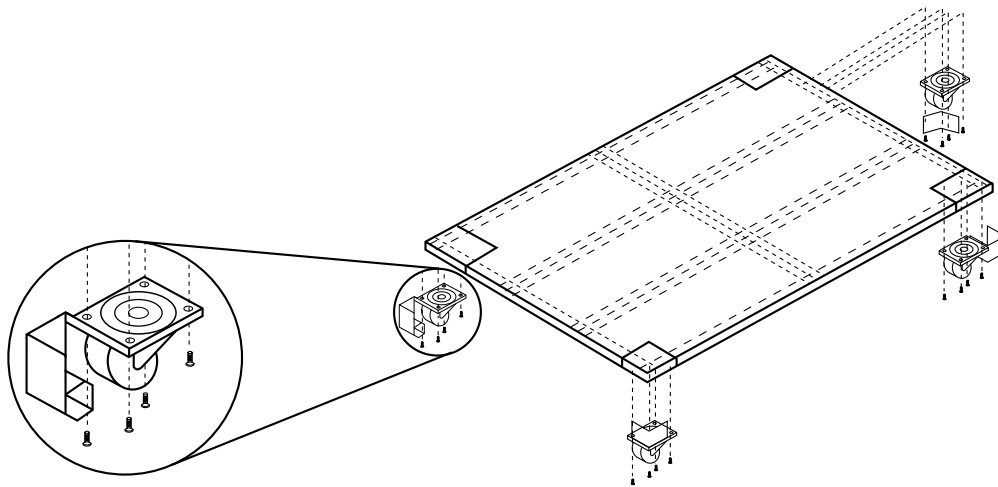


Figure 3-4. Installing casters on a 52.4"W ServCenter.

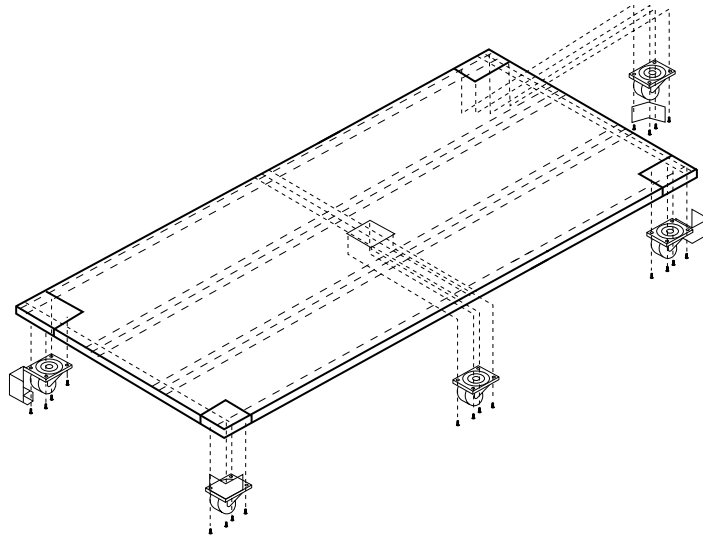


Figure 3-5. Installing casters on a 76.4"W ServCenter.

3.3 Roll-Out Tower Floor Shelves with Pull Straps

Some ServCenter models (RF502A, RF503A, RF513A, RF514A, and RF524A) include a roll-out tower floor shelf with pull straps. Figures 3-6 through 3-9 show you how to assemble these shelves.

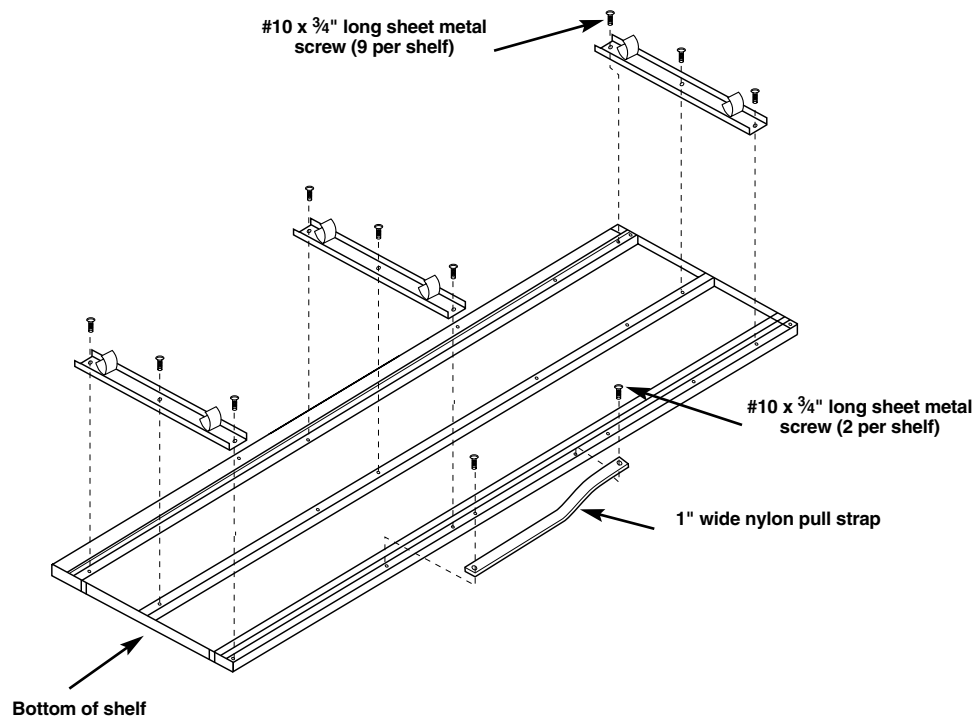


Figure 3-6. Roll-out tower shelf with pull strap for RF502A or RF503A.

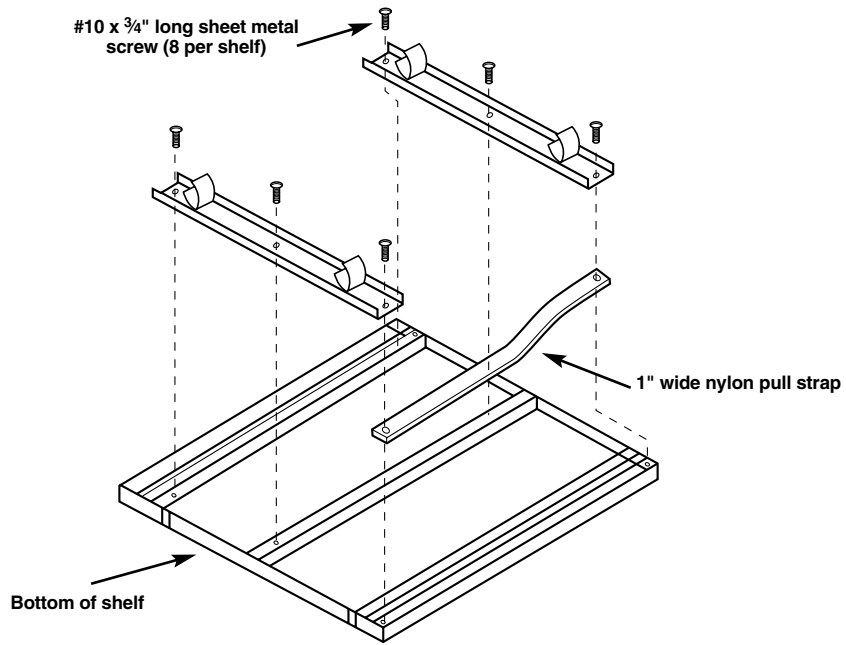


Figure 3-7. Roll-out shelf for RF513A or RF514A.

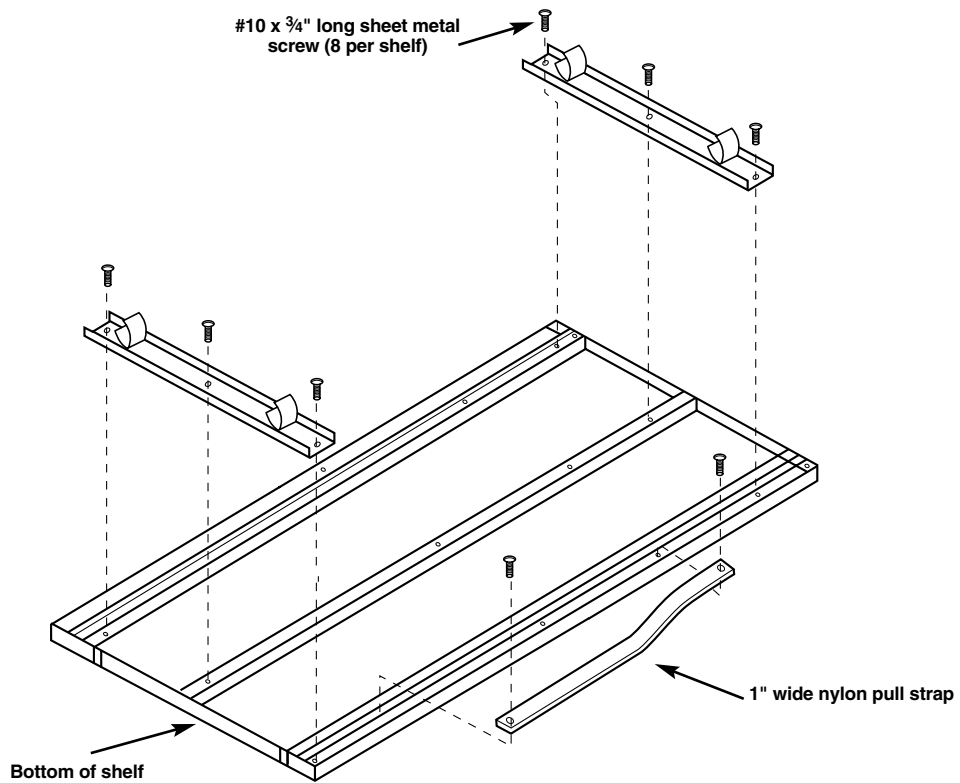


Figure 3-8. Roll-out shelf for RF524A.

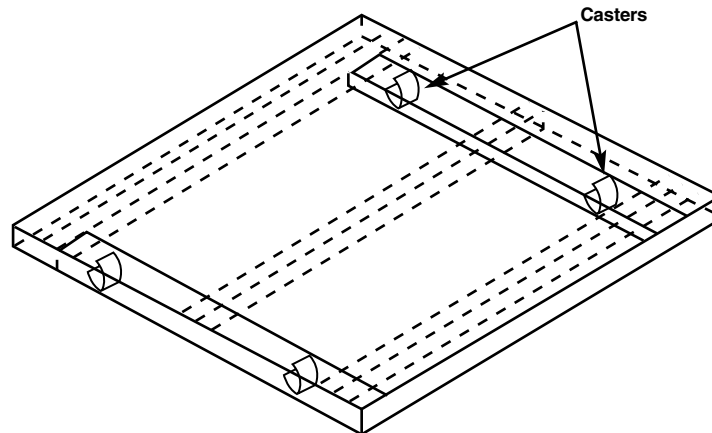


Figure 3-9. 24" shelf assembled with casters.

3.4 Work Surfaces

1. Install the work surface mounting bracket to the slotted frame at the desired height.
2. Place the shelf so that the holes in the shelf and bracket line up with one another.

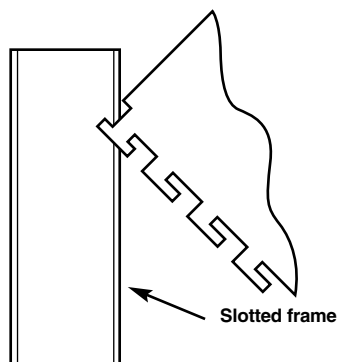


Figure 3-10. Installing the bracket.

3. Use #10 x $\frac{3}{4}$ " long sheet metal screws to attach the shelf to the brackets.

NOTE

When installing brackets to the slotted frame, place them in the correct position so that all holes line up properly for assembling the shelf to the brackets.

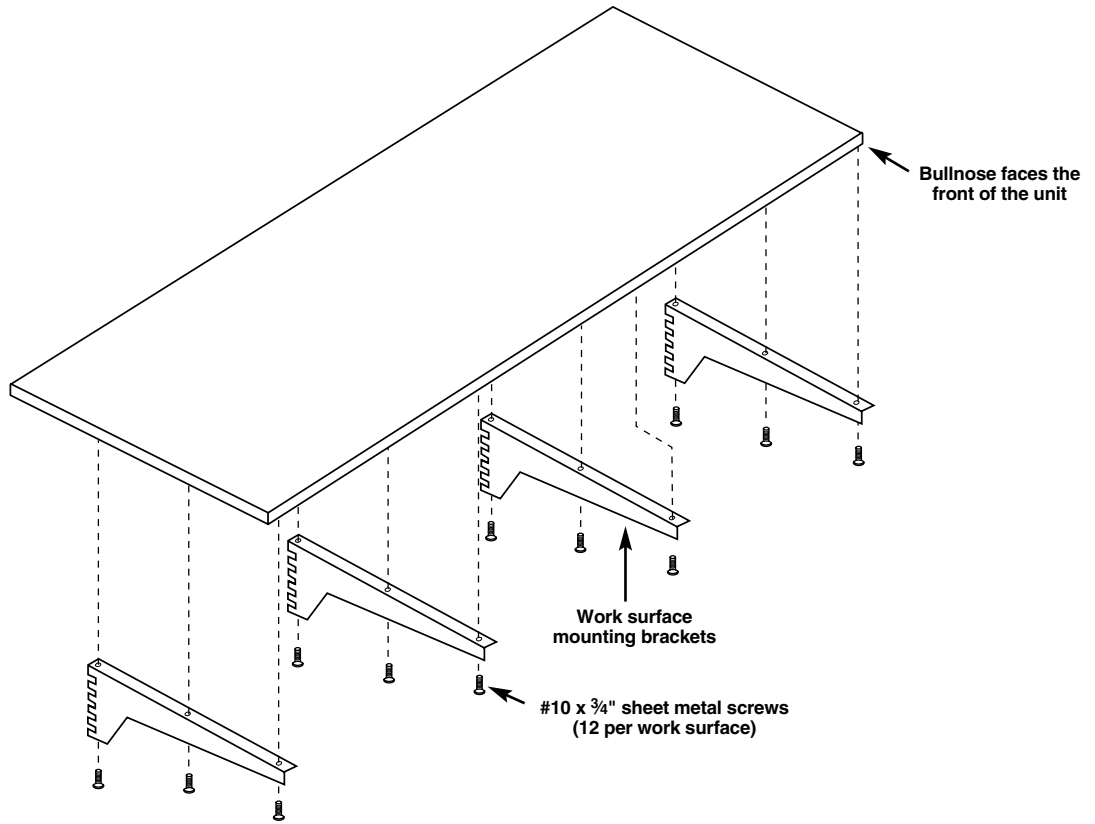


Figure 3-11. Assembling the work surface.

3.5 Retractable Keyboard Holder

1. When attaching the keyboard holder to the sheet metal bracket, insert the first tiny wheel through the large hole at the back of the bracket. See Figure 3-12.
2. Lift up the wire keyboard holder and, holding it at an angle, slide it along the slot.

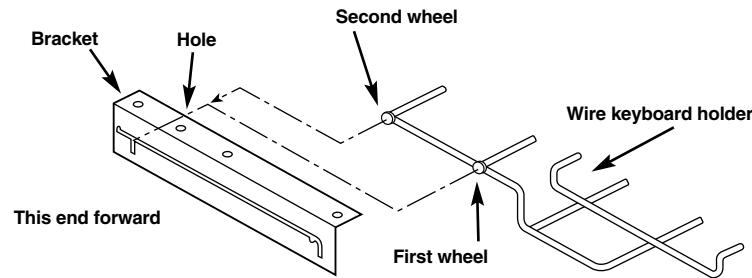


Figure 3-12. Attaching the keyboard holder to the metal bracket.

3. Insert the second small wheel through the same hole into which you inserted the first wheel. Be careful not to deform the bracket.
4. Repeat steps 2 and 3 for the other side of the keyboard holder. When both brackets are in place, connect the wire keyboard holder to a sheet metal shelf or a wood work surface.
5. Attach the assembled keyboard holder to the tower/add-on shelf or wood work surface before installing the shelf to the end brackets and frame.
6. Before tightening the keyboard holder screws into the bottom of the shelf or work surface, make certain that the holder moves smoothly in its track. You might need to adjust this so that it operates smoothly.

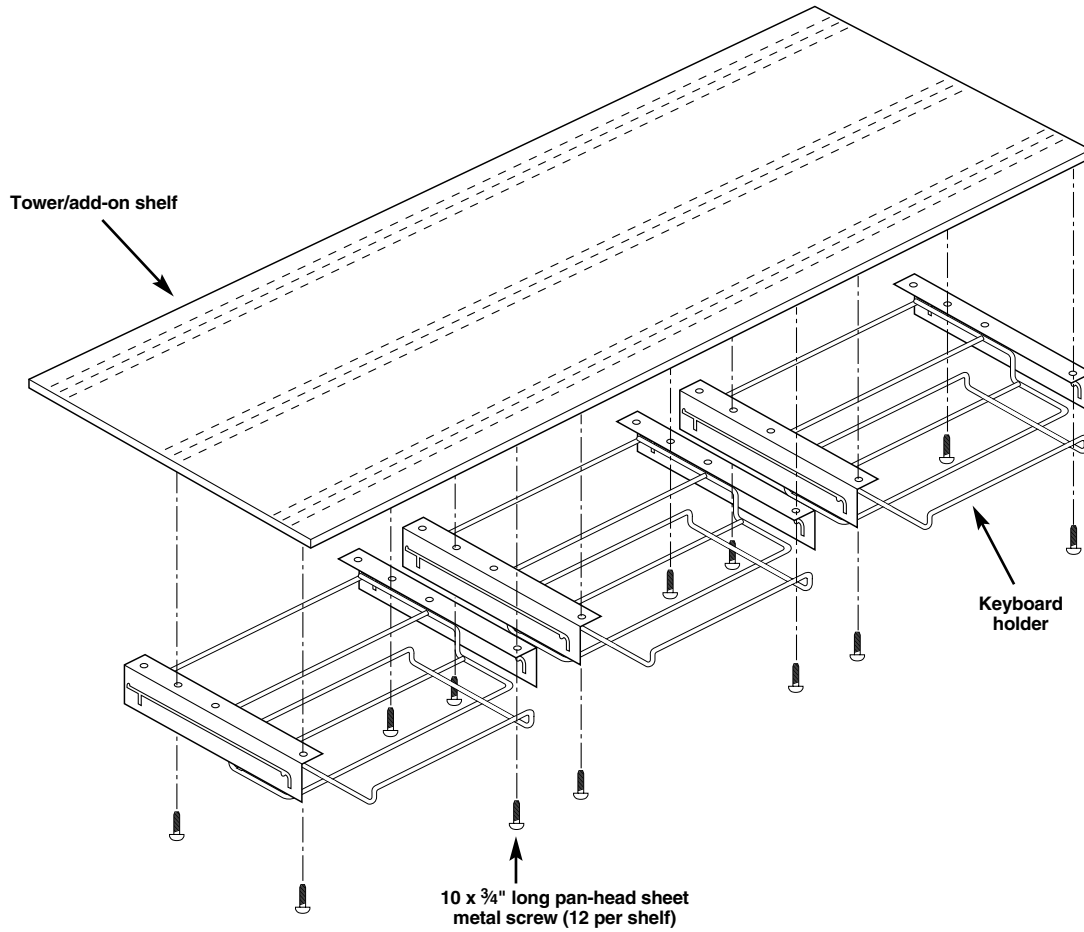


Figure 3-13. Installing the keyboard holder.

NOTE

The same instructions apply to install the keyboard holder on a wood work surface.

3.6 Add-On Shelf Tower

1. Pass the cap screws through the end bracket. Loosely connect the cap nut to the screw.
2. Install the end brackets to the slotted frame (Figure 3-14) before attaching the shelves to the brackets as shown in Figure 3-15.

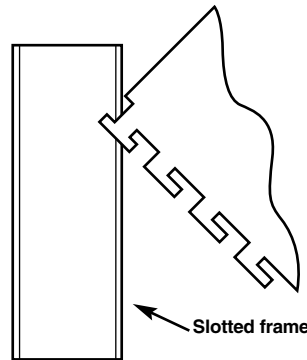


Figure 3-14. Installing the end brackets.

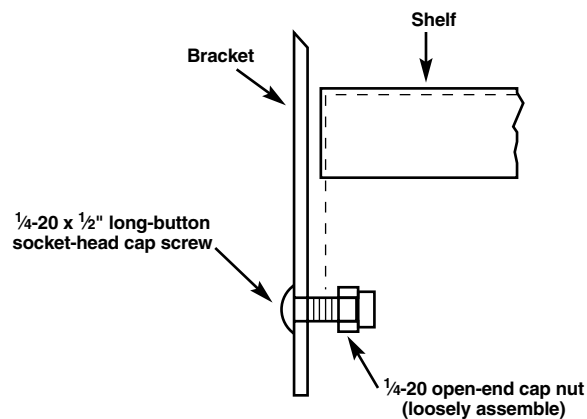


Figure 3-15. Attaching the hardware.

3. Attach intermediate support brackets (if applicable) to slotted uprights. Keep the brackets properly aligned so that when an add-on shelf and an electronic shelf are placed on them, the shelves rest on the brackets and the holes in the brackets line up with the holes in the shelf.
4. If applicable, before attaching the shelf to the end brackets, make sure that the optional keyboard holder has been installed.
5. To attach the shelves to the end brackets, line up the slots at the end of the shelf with screws and slide the shelf over the screws. (See Figure 3-16.) Once the shelf is in place, tighten the cap nuts.

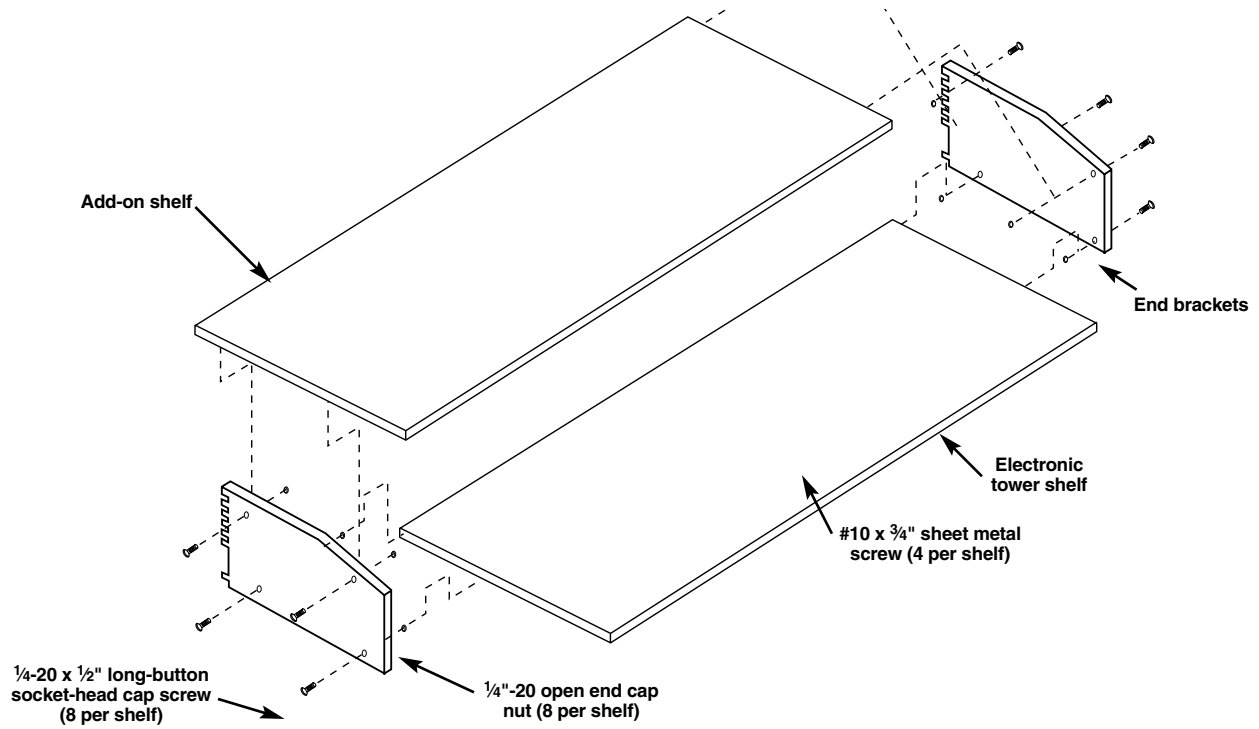


Figure 3-16. Assembling the Add-On Shelf Tower.

3.7 Grid Shelves

These shelves provide a grid and store your equipment.

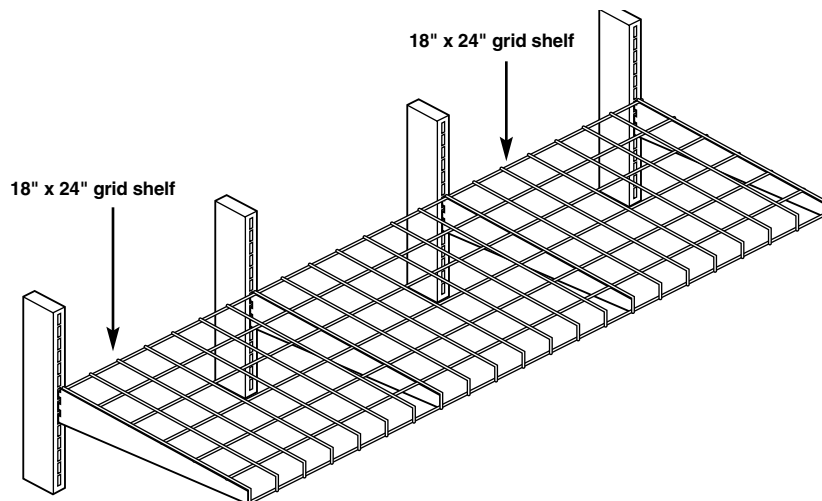


Figure 3-17. Grid shelf assembly.

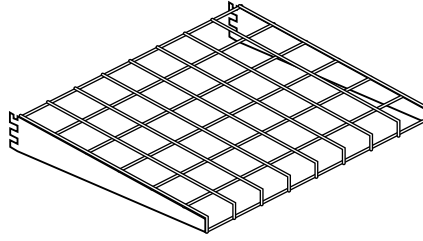


Figure 3-18. 18" x 24" grid shelf.

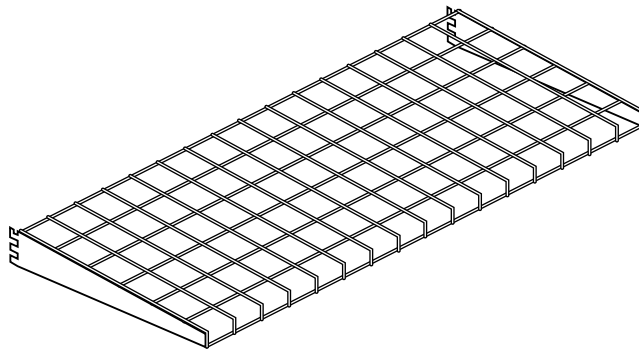


Figure 3-19. 18" x 48" grid shelf.

3.8 Rackmount Panel Assembly

NOTE

Assemble the unit on the floor or bench before installing toothed brackets into the upright.

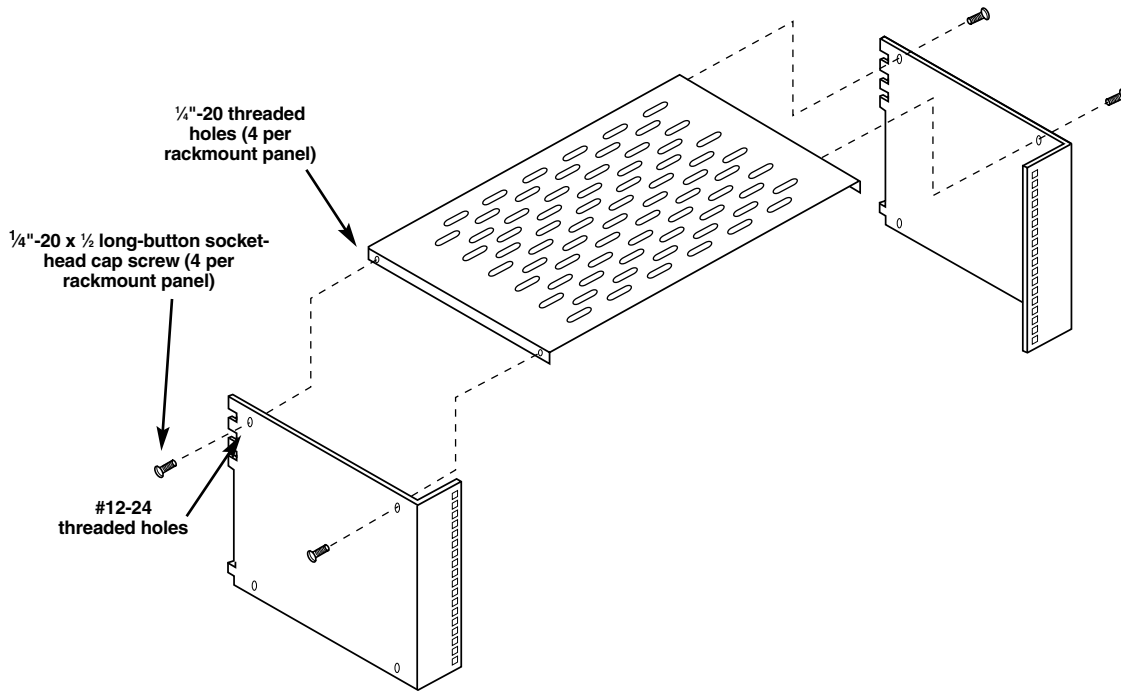


Figure 3-20. Assembling the Rackmount Panel (required hardware is included).

3.9 Adjustable Mouse Tray

Install the tray as shown below. All the components shown in the diagrams are included.

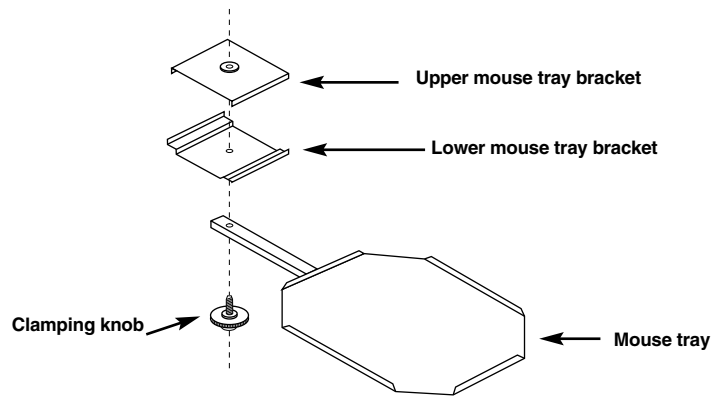


Figure 3-21. Assembling the Mouse Tray.

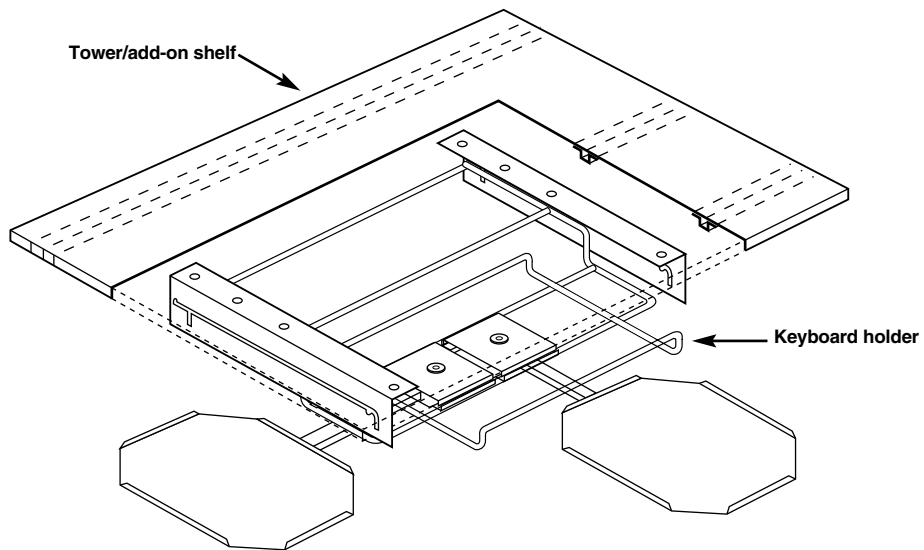


Figure 3-22. Attaching the Mouse Tray to the tower/add-on shelf.

3.10 Horizontal Cable Managers

Attach the Horizontal Cable Manager to the back of the ServCenter as shown below.

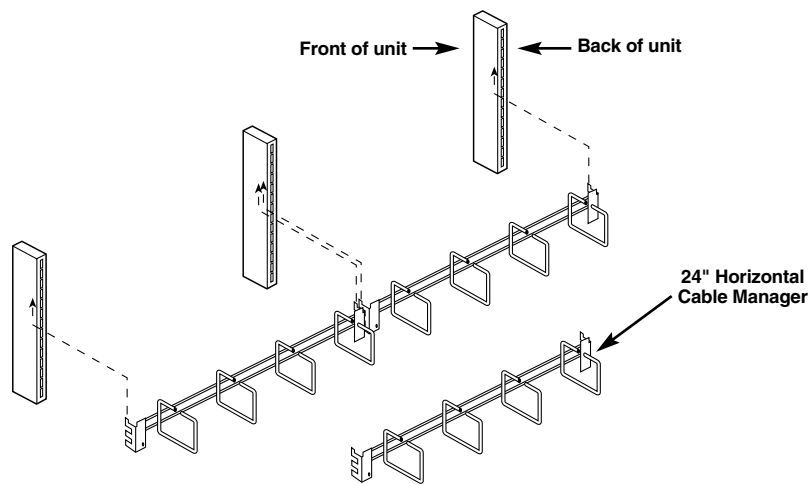


Figure 3-23. Installing the Horizontal Cable Manager.

3.11 Patch Panel Bracket

The Patch Panel Bracket consists of two sections. To install it, place the four hooks on the left section of the bracket onto the holes on left side of the ServCenter. Then attach the four hooks on the right side of the bracket onto the holes on the right side of the ServCenter. Using hardware (not included), attach your equipment to the mounting holes.

3.12 Vertical Cable Management Cover

Once your cable is installed in the ServCenter, the Vertical Cable Management Cover snaps into place over the cables on the ServCenter via two notches on the side of the cover.

3.13 CD Holder

The CD Holder attaches to the ServCenter via hooks on its side. Simply connect the hooks on the CD Holder to the holes on the ServCenter. Once it's installed in the ServCenter, place up to 48 CDs in the CD Holder.

4. Troubleshooting

4.1 Calling Black Box

If you determine that your ServCenter is malfunctioning, do not attempt to alter or repair the unit. It contains no user-serviceable parts. Contact Black Box at 724-746-5500.

Before you do, make a record of the history of the problem. We will be able to provide more efficient and accurate assistance if you have a complete description, including:

- the nature and duration of the problem.
- when the problem occurs.
- the components involved in the problem.
- any particular application that, when used, appears to create the problem or make it worse.

4.2 Shipping and Packaging

If you need to transport or ship your ServCenter:

- Package it carefully. We recommend that you use the original container.
- If you are shipping the ServCenter for repair, make sure you include everything that came in the original package. Before you ship, contact Black Box to get a Return Authorization (RA) number.