Modular Furniture

LMS
Technical environment systems
Installation manual

Powering Business Worldwide

Technical Environment Systems

INSTALLATION MANUAL

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Product specifications are subject to change without notice

Technical Environment Systems

Introduction

Congratulations on your purchase of Wright Line's Technical Environment Systems. These systems consist of a wide selection of steel uprights, structural support frames, worksurfaces, keyboard holders, steel and laminate shelf components and accessories designed to meet specialized storage requirements in a wide variety of environments in today's workplace.

technical furniture

Full Frame and Upright Assembly

Tools Required

-Tape measure
-Phillips head screwdriver
-5/32" Allen wrench (provided)
-1/4" Allen wrench (provided)
-Plastic mallet
-1/2" Wrench
-2 ft. to 3 ft. level
- Leveling wrench (provided)

NOTE: 24", 30", 36", 42", and 48" wide **Full Frames** are one-piece units, ready for assembly to the Uprights. 60", 72", and 90" wide units are two-piece construction and 96" wide Frames ship as three pieces. All require assembly before before attachment to the Uprights. See page A-2.

1. 60", 72", and 90" Frames have a left and right half. A warning label is on the rear of the left half. See **Figure 1**. The 96" frame has a left, a right, and a "I" shaped center section. Lay the sections on the floor, butting the ends of the top and bottom channels.

Important! Compare the trapazoidal holes (holes to accept components) of the Frame sections making sure they are in the same direction.

2. Remove the 5/16"-18 x 1.00 Cap screws and washers from the top and bottom channels. The screws and washers are shipped in place to prevent damage to the threads.

3. Packaged with the Full Frame are two full length **Support Tubes** that bolt into the top and bottom channels. These tubes tie the two halves together. See **Figure 1. Note**: The bottom tube has adjustable **Levelers**. Drive a #10-24 x 3/8" screw through the channel into the pre-drilled hole in the support tube on both sides of the joint, both top and bottom. **NOTE**: The 60" Frame only has holes on one side of the joint. See **Figure 1**.

4. Bolt the tubes in place with the 5/16"-18 x 1.00 Cap screws and washers just removed. Repeat the proccess for the bottom. See **Figure 1**. Tighten all screws.

5. Place the **Cap** over the Top Support Tube to verify its fit. Next, remove the protective paper from the adhesive strip on its underside and secure it to the top of the Frame. See **Figure 1.**

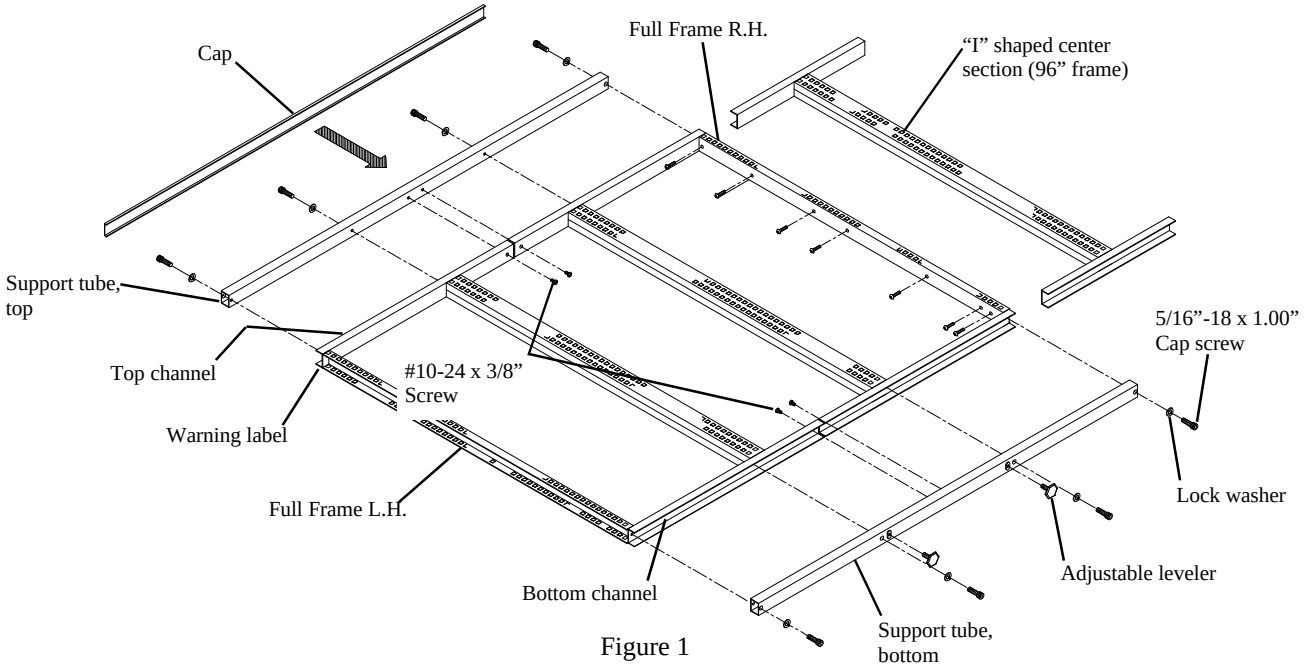
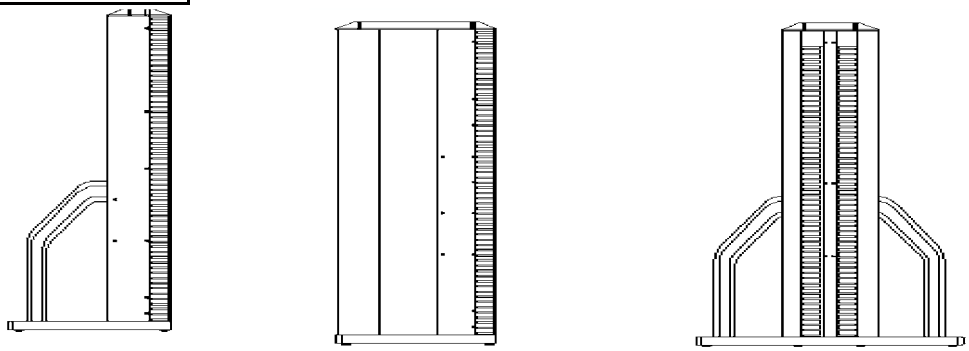


Figure 1

Full Frame and Upright Assembly (cont.)



Enhanced Upright | Full Depth Upright | Double Upright

Figure 2

UPRIGHT ASSEMBLY

NOTE: There are **three** kinds of **Uprights**. All include Vertical Cable Management. See **Figure 2**. All are shipped fully assembled. It is recommended to slide the **Cover** from the top of the Vertical Cable Management Duct prior to assembly of the Upright to its frame. Remove the protective inner packing located inside the vertical duct.

1. Assign uprights to be **left end** and **right end** relative to a frame.

NOTE: If a **Tech Corner Post** will be used, refer to page A-9 for additional assembly instructions.

2.With two people, stand the **Full Frame** up in the approximate area it will be used. Attach the appropriate Upright (left, right and intermediate) to each end with two 1/4"-20 x 5/8" screws. **Do not tighten at this time**.

Make sure the frame is attached to the upright as shown in **Figure 4.** It will now stand by its self. Install the remaining screws. Tighten each side after all the screws have been installed.

3. Adjust the Foot Levelers with the leveling wrench until the unit(s) are square and level. For 48" wide and larger frames, lower the levelers under the intermediate posts until they touch the floor.

4. Install the **Top Caps** and **Cable Management Covers**. Also install the **Hole Plugs** on the outside of each Upright.

If you are installing **Tech Wall Panels**, please refer to page 1 Section G for installation. instructions.

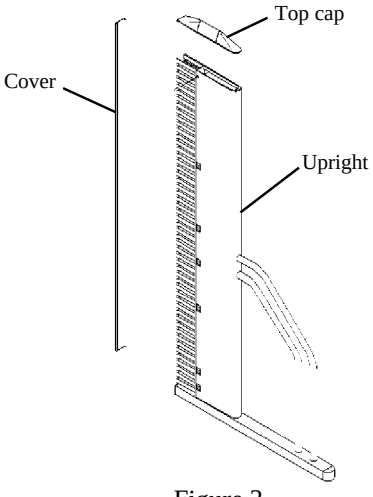


Figure 3

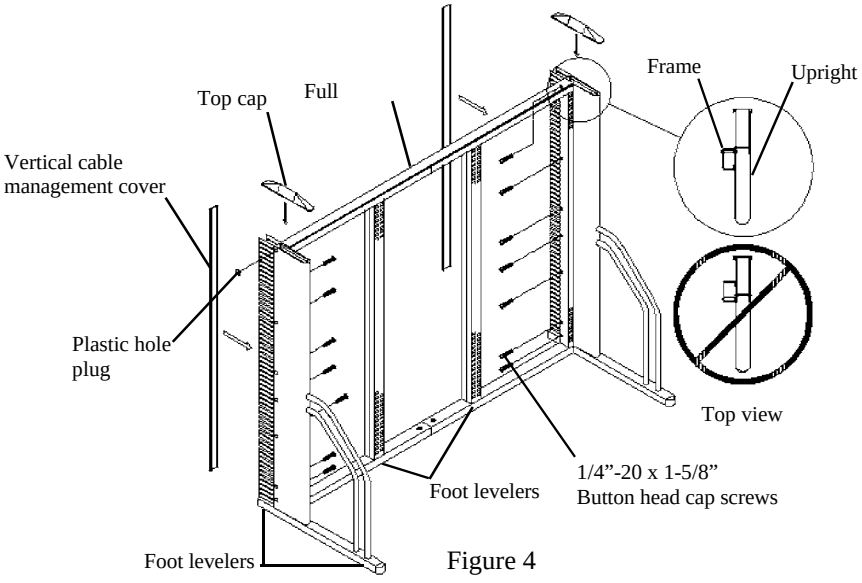
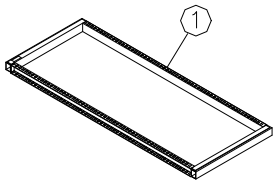


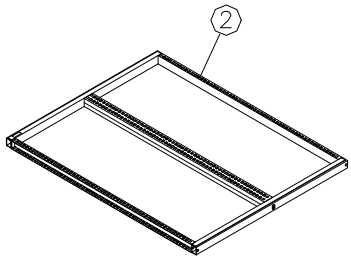
Figure 4

technical furniture

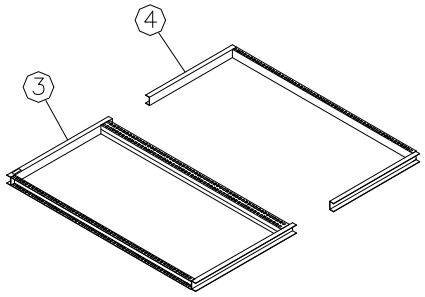
Full Frame and Upright Assembly (cont.)



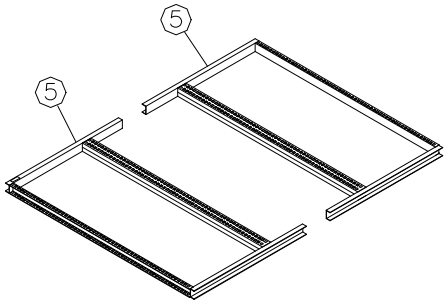
24”, 30”, 36”, 42” Full Frame



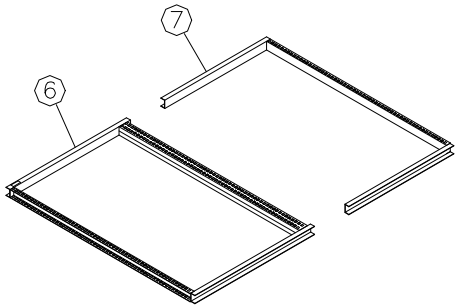
48” Full Frame



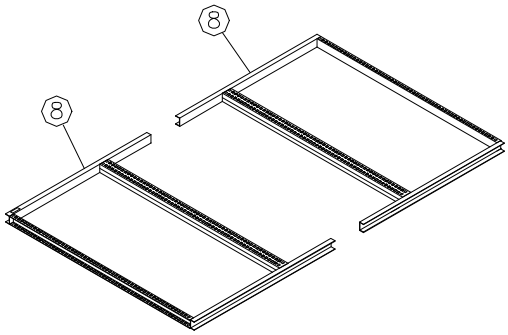
60” Full Frame



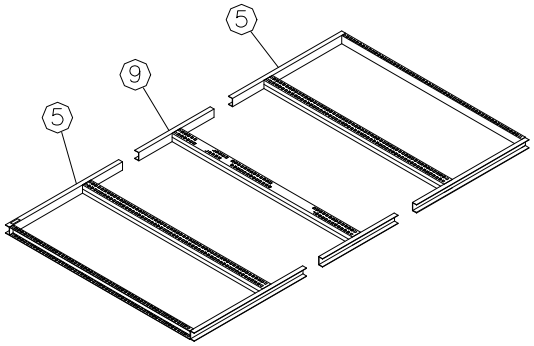
72” Full Frame



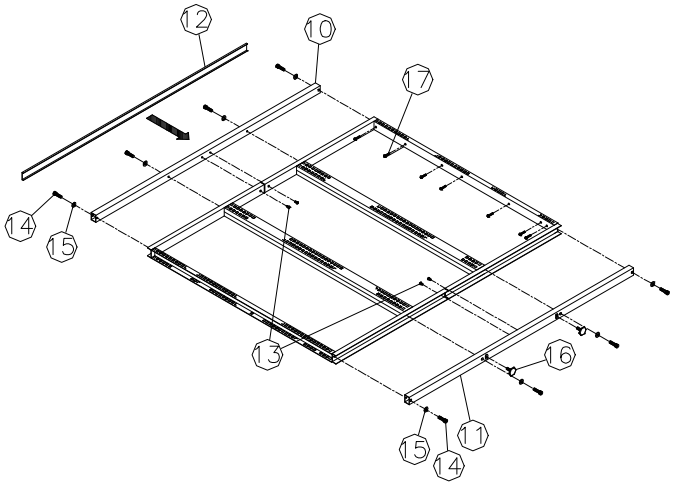
72” Full Frame (36”/36”)



90” Full Frame



96” Full Frame



Full Frame and Upright Assembly (cont.)

Parts List

Part Number		Description	Qty.
1	3485X	24”W x 45”H Full Frame	1
	3486X	30”W x 45”H Full Frame	
	3487X	36”W x 45” H Full Frame	
	3488X	42”W x 45” H Full Frame	
	2466X	24”W x 61” H Full Frame	
	2469X	30”W x 61” H Full Frame	
	2472X	36”W x 61” H Full Frame	
	2467X	24”W x 72”H Full Frame	
	2470X	30”W x 72” H Full Frame	
	2473X	36”W x 72” H Full Frame	
	2468X	24”W x 84” H Full Frame	
	2471X	30”W x 84” H Full Frame	
	2474X	36”W x 84” H Full Frame	
2	3489X	48”W x 45”H Full Frame	1
	2478X	48”W x 61”H Full Frame	
	2479X	48”W x 72”H Full Frame	
	2480X	48”W x 84”H Full Frame	
3	3491X	L.H. 60”W x 45”H Full Frame	1
	2626X	L.H. 60”W x 61”H Full Frame	
	2667X	L.H. 60”W x 72”H Full Frame	
	2669X	L.H. 60”W x 84”H Full Frame	
4	3490X	R.H. 60”W x 45”H Full Frame	1
	2627X	R.H. 60”W x 61”H Full Frame	
	2668X	R.H. 60”W x 72”H Full Frame	
	2670X	R.H. 60”W x 84”H Full Frame	

Parts List

Part Number		Description	Qty.
5	3497X	Half 72”W x 45”H Full Frame	2
	2624X	Half 72”W x 61”H Full Frame	
	2622X	Half 72”W x 72”H Full Frame	
	2620X	Half 72”W x 84”H Full Frame	
6	3493X	L.H. 45”W 36”/36” Full Frame	1
	3596X	L.H. 72”W x 61”H x 36”/36” FF	
	3315X	L.H. 72”W x 36”/36” Full Frame	
	3598X	L.H. 72”W x 84”H x 36”/36” F F	
7	3492X	R.H. 45”W 36”/36” Full Frame	1
	3597X	R.H. 72”W x 61”H x 36”/36” F F	
	3316X	R.H. 72”W 36”/36” Full Frame	
	3599X	R.H. 72”W x 84”H 36”/36” F F	
8	3495X	Half 90”W x 45”H Full Frame	2
	2949X	Half 90”W x 61”H Full Frame	
	2950X	Half 90”W x 72”H Full Frame	
	2876X	Half 90”W x 84”H Full Frame	
9	3448X	Add-on 96”W x 45”H Full Frame	1
	2787X	Add-on 96”W x 61”H Full Frame	
	2788X	Add-on 96”W x 72”H Full Frame	
	2789X	Add-on 96”W x 84”H Full Frame	
10	2664X	Support, 47.00”, Top	1
	2637X	Support, 59.46”, Top	
	2639X	Support, 71.46”, Top	
	2878X	Support, 89.46”, Top	
	2785X	Support, 95.46”, Top	

Full Frame and Upright Assembly (cont.)

Parts List

Part Number		Description	Qty.
11	2665X	Support Tube, 47.00”, Bottom	1
	2638X	Support Tube, 59.46”, Bottom	
	2640X	Support Tube, 71.46”, Bottom	
	2879X	Support Tube, 89.46”, Bottom	
	2786X	Support Tube, 95.46”, Bottom	
12	2691X	24” Cap, Full Frame	1
	2692X	30” Cap, Full Frame	
	2693X	36” Cap, Full Frame	
	2695X	48” Cap, Full Frame	
	2696X	60” Cap, Full Frame	
	2697X	72” Cap, Full Frame	
	2953X	90” Cap, Full Frame	
	2954X	96” Cap, Full Frame	
13	66714	#10-24 x 3/8” PHPAN TFM screw	6-8
14	68809	5/16”-18 x 1.00 Socket head screw	6-10
15	18950	Lock Washer	6-10
16	21333	Glide Foot	1-3
17	83508	1/4”-20 x 1-5/8” Button head cap screw	14
18	85267	Leveler Wrench	1

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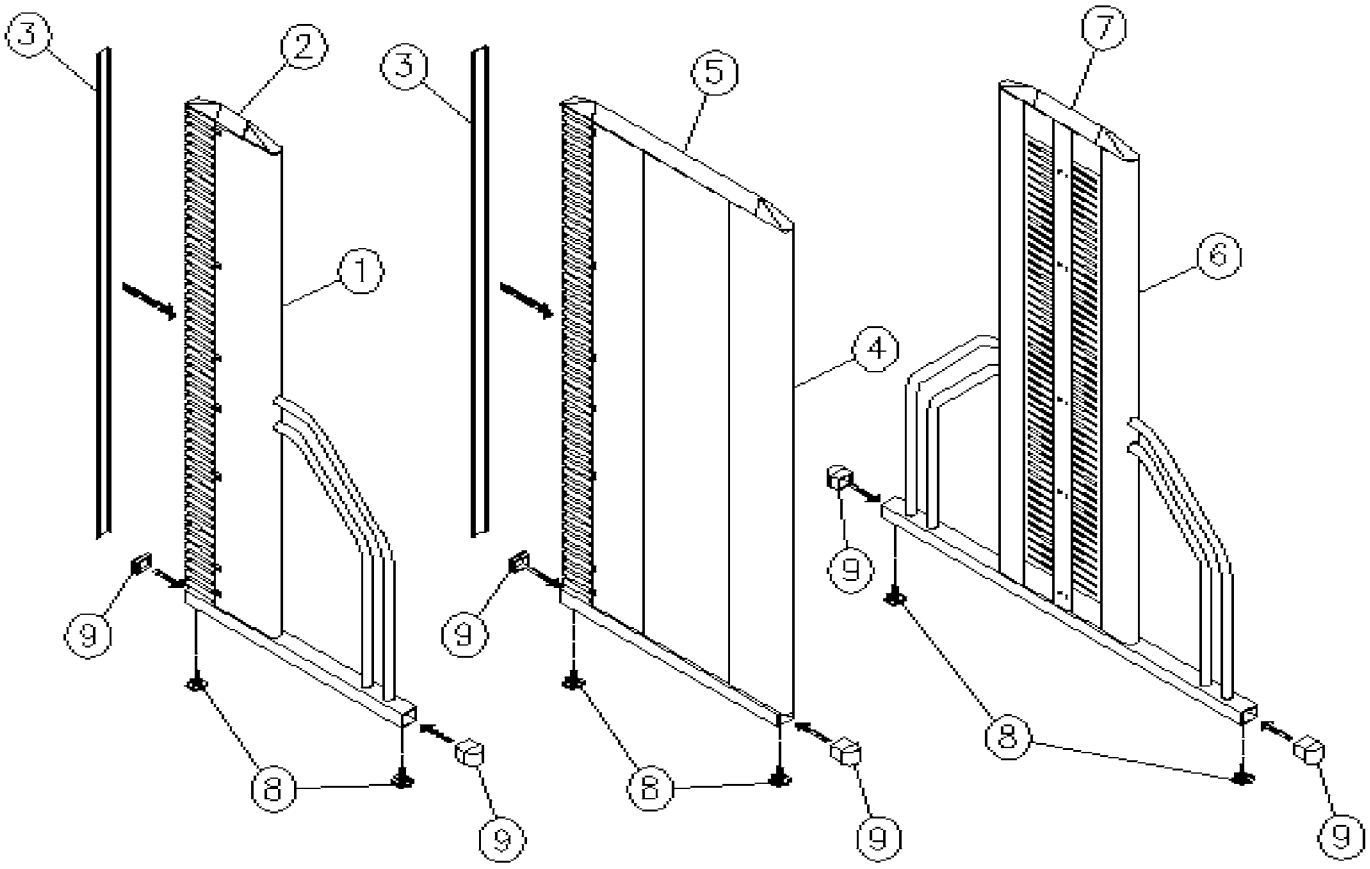
Full Frame and Upright Assembly (cont.)



Full Frame and Upright Assembly (cont.)

Parts List			
Part Number		Description	Qty.
1	3483X	45” Upright	1
	3029X	61” Upright	
	3030X	72” Upright	
	3031X	84” Upright	
2	3381X	Top Trim Assembly	1
3	4268X	58.84” Cover	1
	4269X	69.84” Cover	
	3727X	81.84” Cover	
4	6L05-XX	61” Deep Upright	1
	7L05-XX	72” Deep Upright	
	8L05-XX	84” Deep Upright	
5	4149X	Top Trim Assembly	1
6	4l14-XX	45” Double Upright 27” Deep	1
	6L14-XX	61” Double Upright 27” Deep	
	7L14-XX	72” Double Upright 27” Deep	
	8L14-XX	84” Double Upright 27” Deep	
	4L15-XX	45” Double Upright 42” Deep	
	6L15-XX	61” Double Upright 42” Deep	
	7L17-XX	72” Double Upright 42” Deep	
	8L15-XX	84” Double Upright 42” Deep	
	4L16-XX	45” Double Upright 36”/42” Deep	
	6L16-XX	61” Double Upright 36”/42” Deep	
	7L16-XX	72” Double Upright 36”/42” Deep	
	8L16-XX	84” Double Upright 36”/42” Deep	
7	3711X	Top Trim Assembly	1
8	21333	Glide Foot	2
9	1242X	End Caps (pair)	1

Tech Corner Post

The **Tech Corner Post** enables two or more Full/Open Frames to be configured perpendicular to each other. It can also create "T" or "X" shaped configurations. See **Figure 6**. Dissimilar height units may be used around the Tech Corner Post, provided it is equal to the tallest frame.

1. First, assemble an Upright to the end of the Full/Open Frame opposite from the corner post. This will provide some extra stability while attaching the frame to the Tech Post.

   The Tech Corner Post has two vertical rows of holes on all four sides allowing attachment of the Full Frame. The end of the frame should centered on the post when correctly positioned. Attach with 1/4"-20 x 1-5/8" Button Head Cap Screws. See **Figure 7**.

2. Check for vertical alignment and horizontal level of the entire assembly. Adjust the **levelers** under the post, upright feet, and beneath the interior verticle post of the 48" and larger Full Frames as needed.

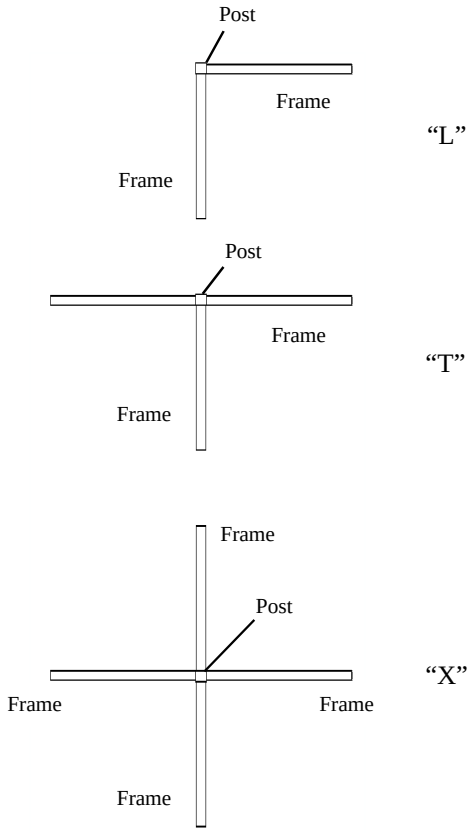


Figure 6

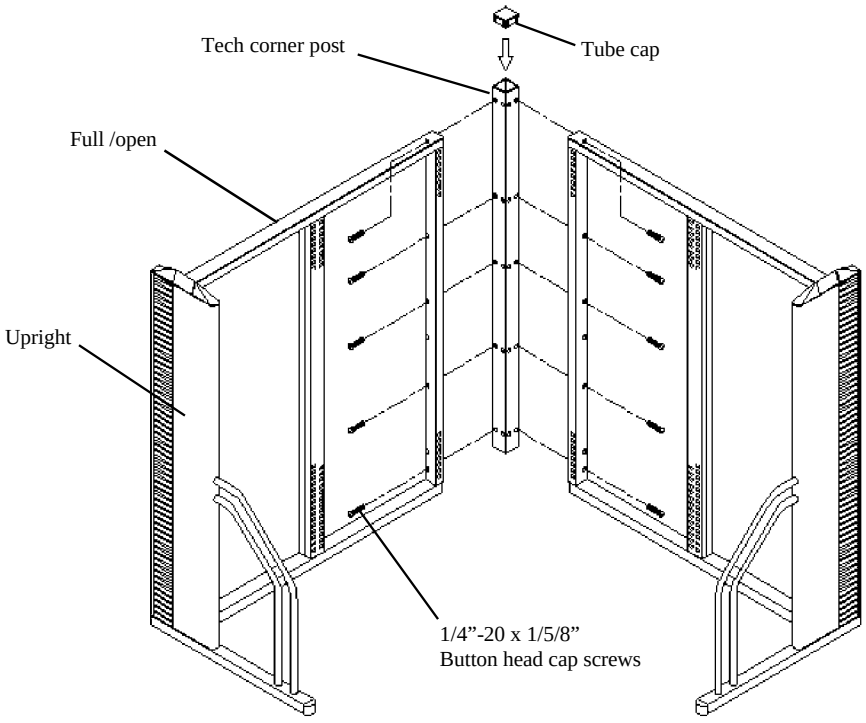
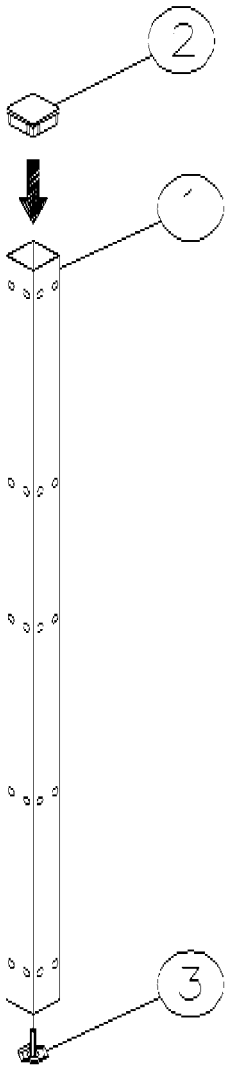


Figure 7

Tech Corner Post (cont.)

Parts List			
Part Number		Description	Qty.
1	3591X	45” Corner Post	1
	2945X	61” Corner Post	
	2944X	72” Corner Post	
	2943X	84” Corner Post	
2	2957X	Cap	1
3	21333	Glide Foot	1



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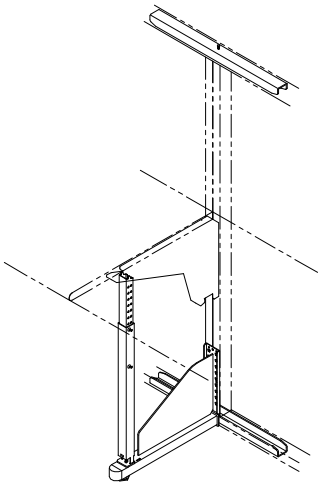
Frame Linking Kit



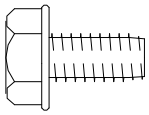
Frame Linking Kit

Please read these instructions carefully and follow the installation steps in sequence.

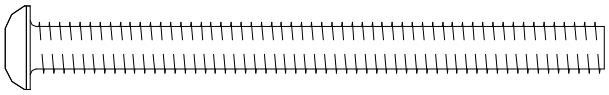
Tools Required

- 3/8" Open end wrench
- 7/16" Open end wrench
- 1/2" Open end wrench
- 5/32" Allen Wrench
- Plastic mallet
- Level

Fasteners That You Will Be Using

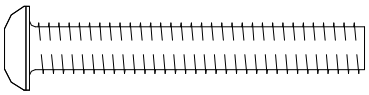


#54348
1/4"-20 x 1/2" Hex
Washer Head Screw



#87464
1/4"-20 x 3.00" Button
Head Cap Screw

#87466
1/4"-20 Hex Nut
w/Lockwasher



#84741
1/4"-20 x 1-3/4" Button
Head Cap Screw

IMPORTANT SAFETY INSTRUCTIONS

1. Maximum loading: (Evenly distributed loads on worksurfaces and shelving.)

   (2) 72" x 84" Frame sections = 2000#/section.
   (3) 72" x 84" Frame sections = 1700#/section.

   NOTE: If worksurfaces are not part of the installation, the maximum loading decreases to 1600# /section for two sections and 1200# /section for three sections. The reduction is due to the Front Support not being used.

2. Maximum number of frame sections that can be linked is three (3).

3. Each frame joint must have the following components properly installed:

   (1) Top Connector with centering screw. (Remove centering screw after installation.)

   (1) Bottom Connector with leveler.

   (1) Add-On Foot

   (1) Front Support

   Frame joint hardware (1/4"-20 x 3.00" button head cap screws and 1/4"-20 hex nuts).

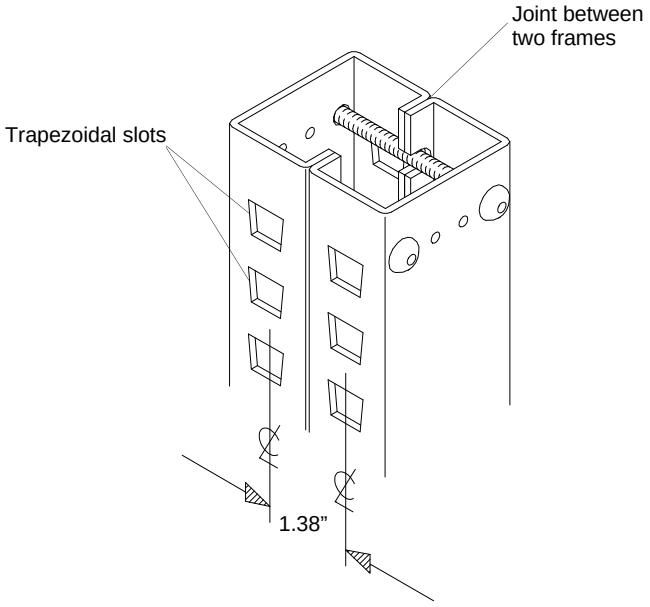
4. A minimum of two people are required for assembly.

Frame Linking Kit (cont.)

IMPORTANT
When two frames are linked, the center-to-center dimension between the trapezoidal holes at the joint is 1.38” or .08” greater than the 1.30” on intermediate standards.

Components which have a ***one piece hook-on panel*** will ***not*** be able to be installed in a configuration which spans the joint. For Example:

- Horizontal Cable Management
- Locking Compartments
- Universal Shelves
- Documate Hanger Bar
- Heavy Duty Shelf Support
- Open Printer Shelves



LINKING FRAMES

1. Pre-assemble a Full Frame section and Upright. See figure 1.
2. Insert the **Top Connector** into the 1.50” x 2.00” tube at the top of the frame oriented as shown in figure 1.

   It may be necessary to file the weld at the tube ends on 48” and narrower frames which were manufactured before 9/99.

   NOTE: The centering screw must be facing up. ***Do not remove*** the centering screw at this time.
3. Insert the **Bottom Connector** into the 1.50” x 2.00” tube at the bottom of the frame. See figure 1.

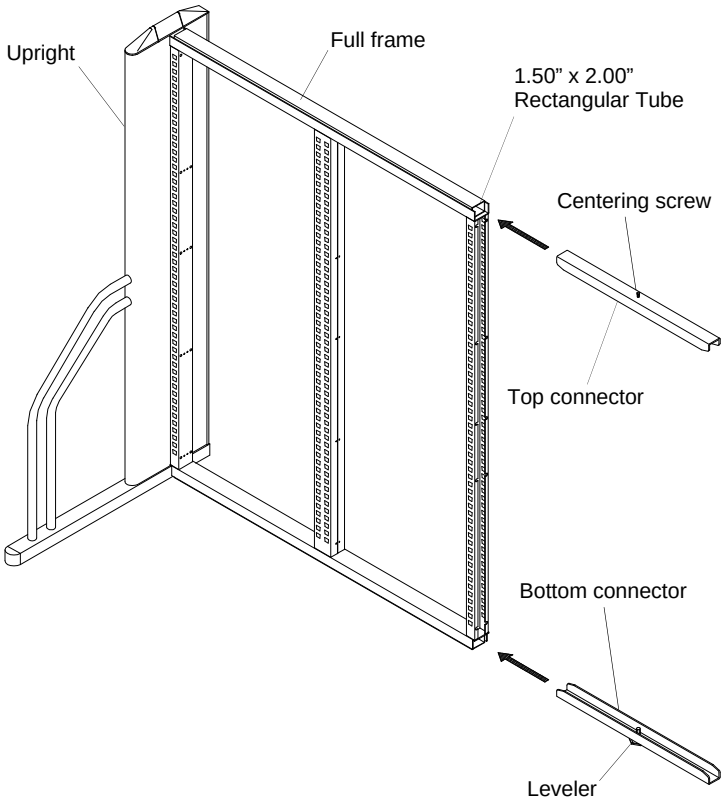


Figure 1

Frame Linking Kit (cont.)

LINKING FRAMES (continued)

4. Align the ***second pe-assembled*** frame section with the first and slide the two frame sections together. See figure 2.

   It may be necessary to alternately use a plastic mallet at the top and bottom of the frames to fully seat the connectors.

   NOTE: The leveler on the Bottom Connector must be partially extended.

   Remove the centering screw in the Top Connector at this time.

5. Fasten the two frame sections together using the 1/4”-20 x 3.00” button head cap screws and hex nuts.

   Note: Ensure that the face of each end standard are in the same plane. Use the **Add-On Foot** hook plate to adjust if necessary. (See step 6.)

   Tighten all fasteners securely using a 5/32” allen wrench and 7/16” wrench.

6. Install an Add-on Foot at the bottom at the bottom of the joint of each frame section. See figure 2.

   Insert the hooks on the back of the Add-On Foot into the slotted standards on the frames and push down. Tap the top of the Add-On Foot with a plastic mallet to ensure that the hooks are fully seated.

7. Lock the Add-On Foot in place by installing the four 1/4”-20 x 1/2” hex washer head thread forming screws using a 3/8” wrench.

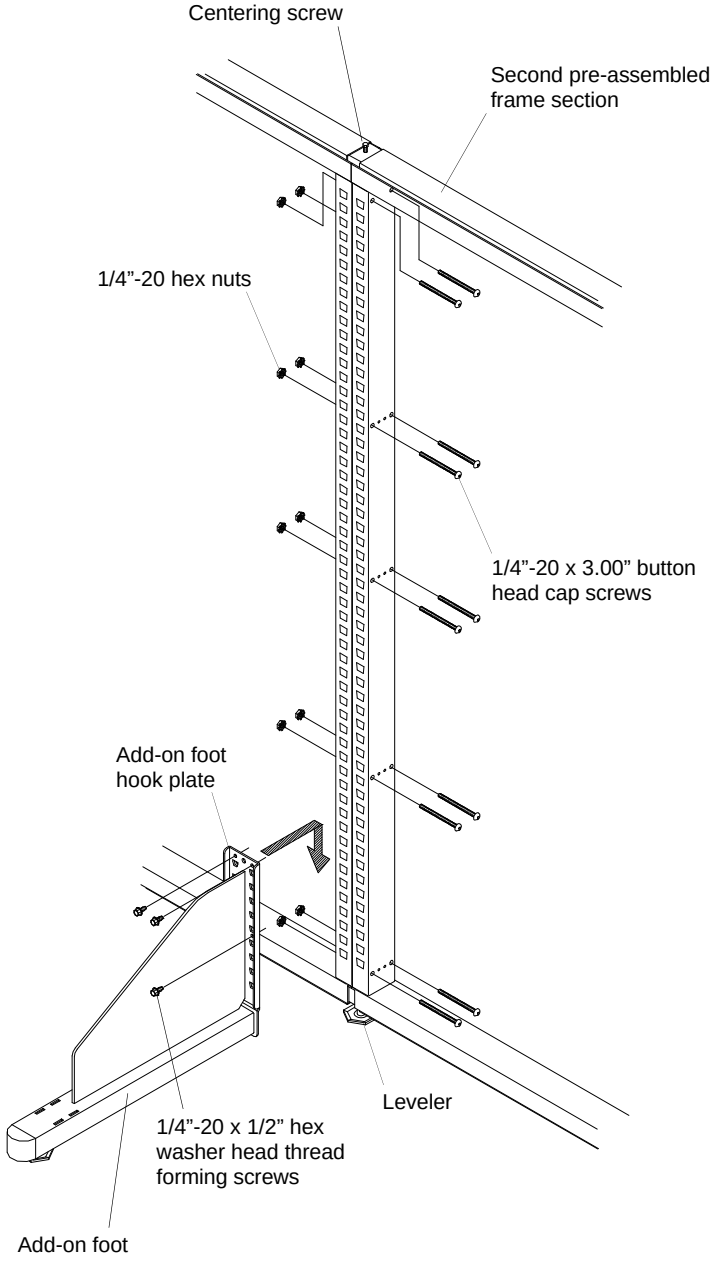


Figure 2

Frame Linking Kit (cont.)

INSTALLING THE FRONT SUPPORT

If worksurfaces are being installed in the linked frame configuration, they must be positioned at the same height and **Front Supports** must be installed with the Add-On Foot at each frame joint.

The Front Support can be installed with both 27" and 36" deep worksurfaces. See figure 1. The support can be installed at heights of 27" to 40" for 27" deep worksurfaces and 29" to 40" for 36" deep worksurfaces.

1. Remove the two 1/4"-20 x 1-3/4" button head cap screws and hex nuts from the Front Support assembly. See figure 2.

2. With the upper section loose inside the lower section,
   insert the bottom tabs on the lower section thru the slots in the **Bearing Plate** and into the appropriate slots in the top of the foot.

   • Front slots for 27" deep worksurfaces
   • Rear slots for 36" deep worksurfaces.

3. Slide the upper section up to engage the hooks with the appropriate access holes in the bottom of each top support. See figures 1 and 3.

4. Align the holes in the upper and lower support sections and re-install two 1/4"-20 x 1-3/4" button head cap screws and hex nuts into the appropriate holes.

   • Use holes toward front for 27" deep worksurfaces.

   • Use holes toward rear for 36" deep worksurfaces.

   Tighten securely using a 5/32" allen wrench and a 7/16" wrench.

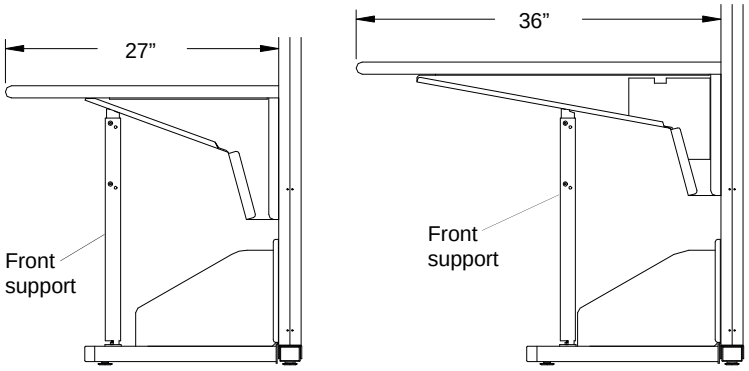


Figure 1

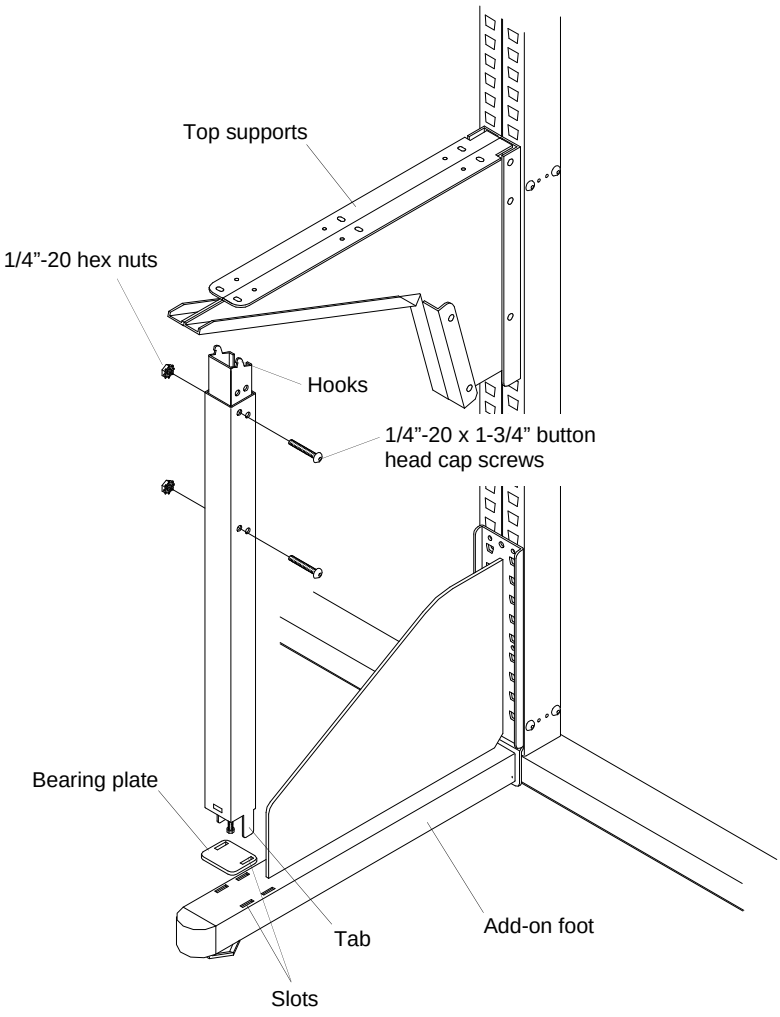


Figure 2

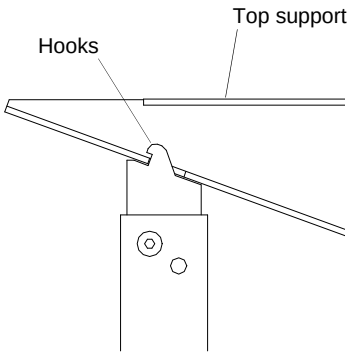


Figure 3

Frame Linking Kit (cont.)

INSTALLING THE FRONT SUPPORT (cont.)

5. Adjust the screw at the bottom of the Front Support assembly with a 1/2” wrench to snug up the fit between the Add-On Foot and the top supports. See figure 4.

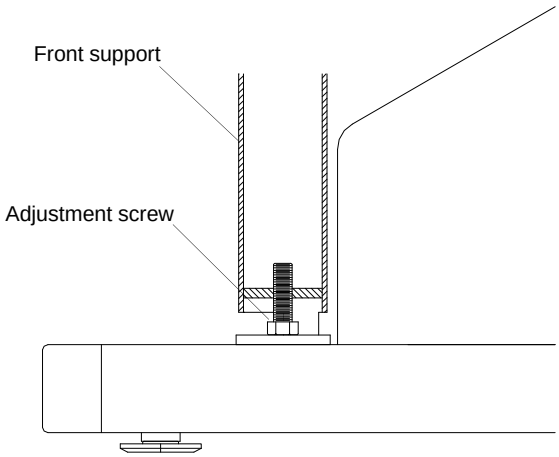


Figure 4

LEVELING THE LINKED FRAMES

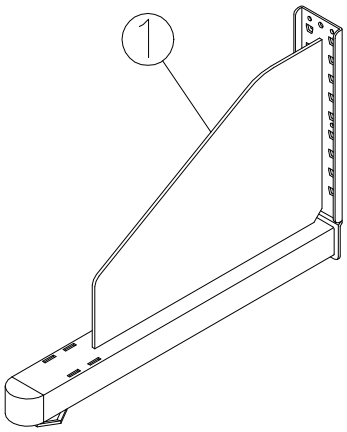
1. Prior to loading the worksurfaces and shelving, level the entire unit by adjusting the leveling glides.

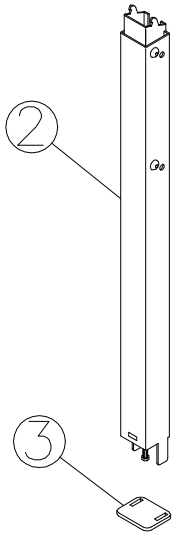
IMPORTANT
Ensure that all leveling glides are in contact with the floor.

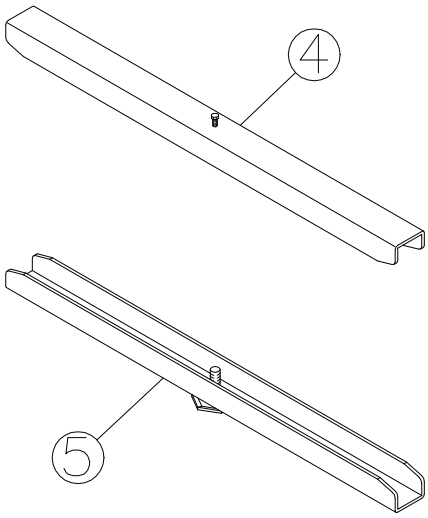
technical furniture

Frame Linking Kit (cont.)

Parts List			
Part Number		Description	Qty.
1	8837X	Add-On Foot Assembly	1
2	8839X	Front Support Assembly	1
3	8842X	Bearing Plate	1
4	8848X	24” Upper Connector Assembly	1
5	8847X	24” Lower Connector Assembly	1







technical furniture

Foot Extender Kit

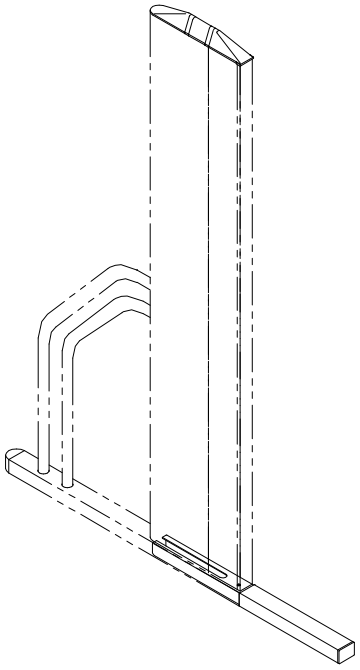
Please read these instructions carefully and follow the installation steps in sequence.

Tools Required
-5/32” Allen wrench (provided)

1. Remove the end cap from the back of the foot and install the **Foot Extender**. Fasten it in place with the 1/4”-20 x 3/8” button head cap screw. See **Figure 1**.

   Install the end cap into the end of the Foot Extender See **Figure 1**.

   Repeat the process for the opposite foot.



Foot Extender Kit

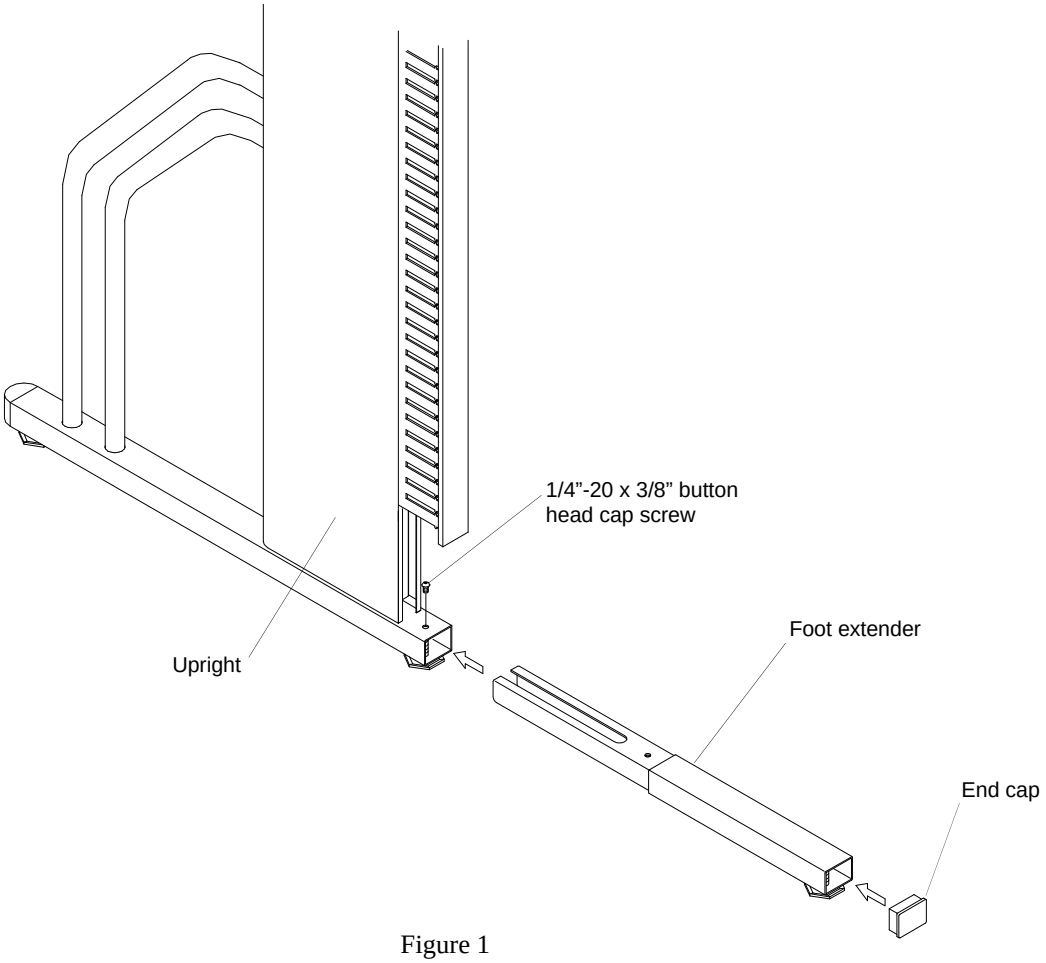


Figure 1

technical furniture

Tool Track/Tool Jib

Please read these instructions carefully and follow the installation steps in sequence.

TOOL TRACK INSTALLATION

Tool Tracks may be installed on Low Profile Overhead Brackets (MA50-MM) or on High Profile Overhead Brackets (MA51-MM) which are ordered separately.

Tool Tracks may be installed on LMS Full Frames or TechOrganizer frames.

IMPORTANT: Maximum Tool Track loading is 50 lbs.

Tools Required:
- -5/32" Allen Wrench
- -1/2" Wrench
- -Soft mallet

1. Determine the desired Tool Track location and hook on the first Overhead Bracket. Space the second Bracket based on the Tool Track size, 36", 48" etc. Tap the Brackets down to make sure that the hooks are seated. Secure the Brackets to the Frame using the #10-24 x 3/8" screws provided. See **Figure 1**.

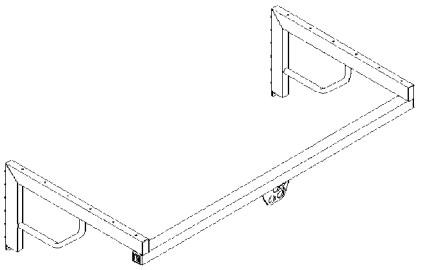
2. Position the Tool Track under the Overhead Brackets and align the holes in the Track with the holes in the Brackets. Attach the Tool Track using the 1/4"-20 x 1/2" screws and lock washers Tighten both screws securely. See **Figure 2**.

3. Insert one **End Stop** into the Tool Track (see **Figure 2** for orientation). The bottom flat plate is outside the Track to clamp the Stop in place.

   Install an **End Cap** into the Tool Track and slide the End Stop to the End Cap and lock in place by tightening the two nuts on the Stop.

4. At the opposite end, insert the **Balancer Trolley** into the Track and then install the second End Stop and End Cap following the instructions in step 3.

NOTE: If an End Cap strikes a screw head before seating fully into the Tool Track, trim the Cap with scissors.



Tool Track

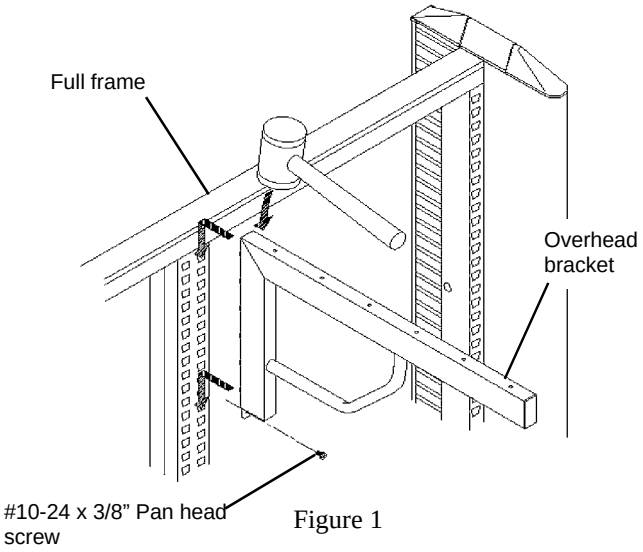


Figure 1

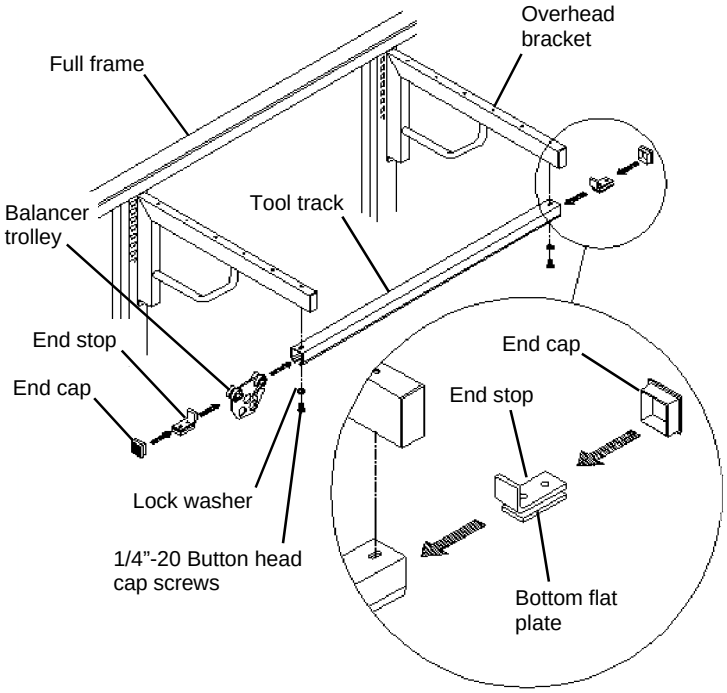
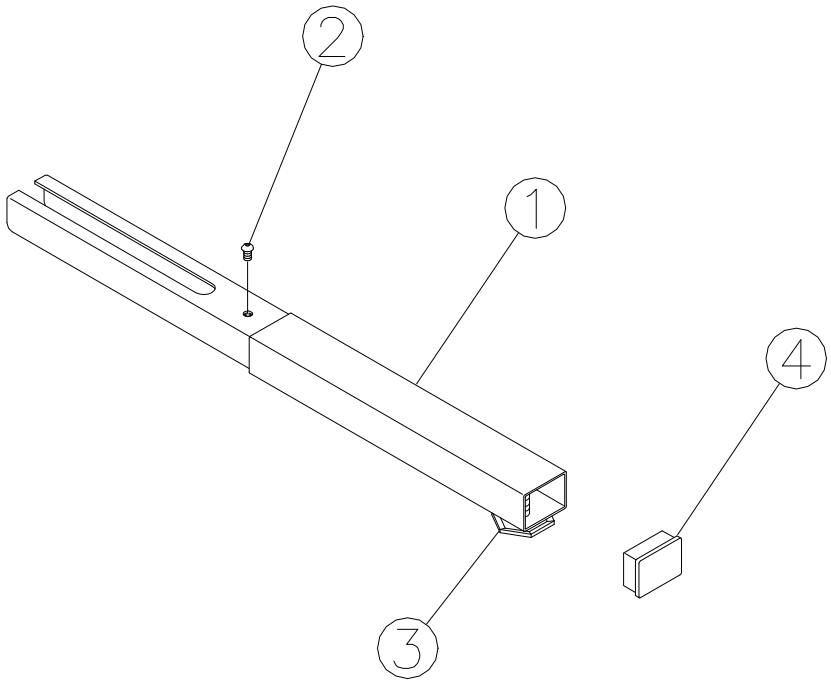


Figure 2

Foot Extender Kit (cont.)

Parts List			
Part Number		Description	Qty.
1	1979X	Foot Extender	2
2	68681	1/4”-20 x 3/8” Button Head Cap Screw	2
3	21333	Leveler	2
4	1242X	End Cap (pair)	2



Tool Track/Tool Jib (cont.)

BENCH MOUNTED JIB INSTALLATION

Bench mounted **Jibs** may be installed on maple bench tops or laminate particle board tops.

IMPORTANT:
- Maximum Jib loading is 20 lbs.
- Thru Bolts with Washers (not provided) are required to attach the **Mounting Plate** to any bench top less than 1.18" thick.

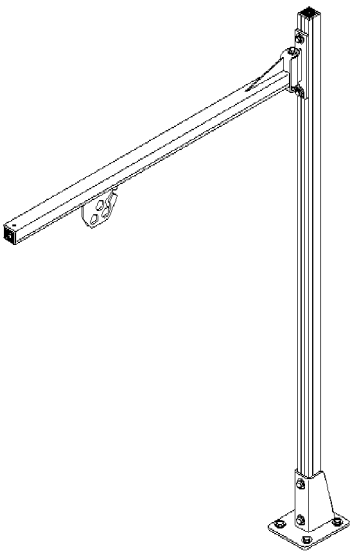
Tools Required:
-Electric drill
-.185" dia. (#13) drill bit
-7/16" wrench
-9/16" wrench

1. Position the Mounting Plate assembly in the desired location on the workbench and mark the location of the four mounting holes. See **Figure 3**.

2. Drill four .185" dia. thru holes and fasten the Mounting Plate assembly to the top using the 1/4" x 1-1/2" Lag screws and washers (provided). See **Figure 3**. If the top is less than 1.18" thick, use thru bolts, nuts and washers (not provided).

3. Loosen the clamp bar inside the Mounting Plate assembly, insert the **Vertical Column** and then tighten the clamp bar. See **Figure 4**.

4. Insert the **Jib Assembly** into the top of the Vertical Column and position it at the desired vertical height. Lock it into place by securely tightening the 3/8"-16 bolts and then install the **End Cap**. See **Figure 4**.



Bench Mounted Jib

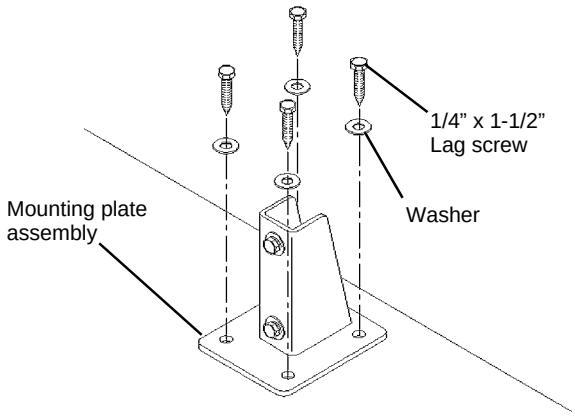


Figure 3

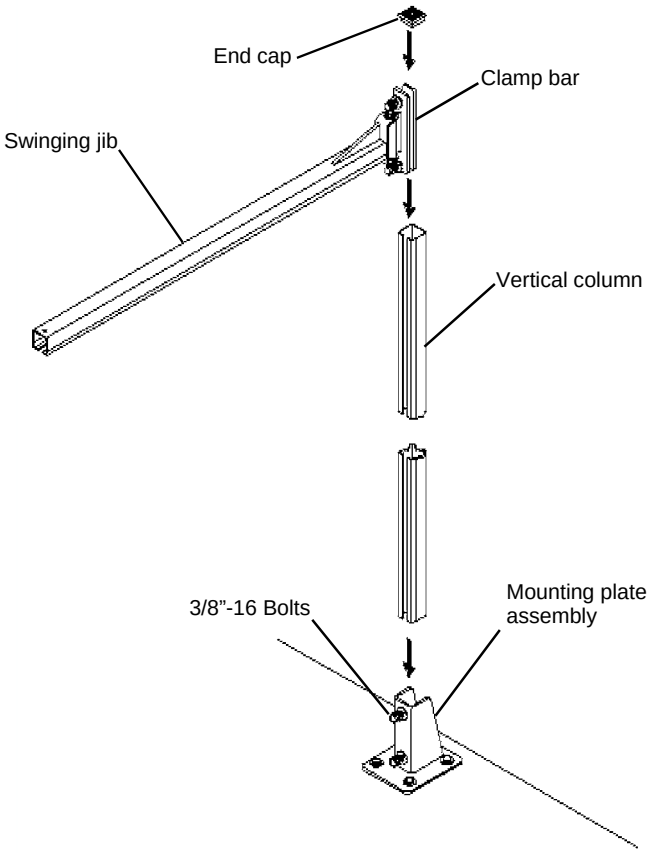


Figure 4

Tool Track/Tool Jib (cont.)

BENCH MOUNTED JIB INSTALLATION (cont.)

5. Insert the Balancer Trolley and the End Stop into the Swinging Jib Track and then install the End Cap. Lock the End Stop in place by tightening the two nuts on the Stop. See **Figure 5**.

6. Adjust the drag on the Jib by tightening or loosening the adjustment screw. See **Figure 5**.

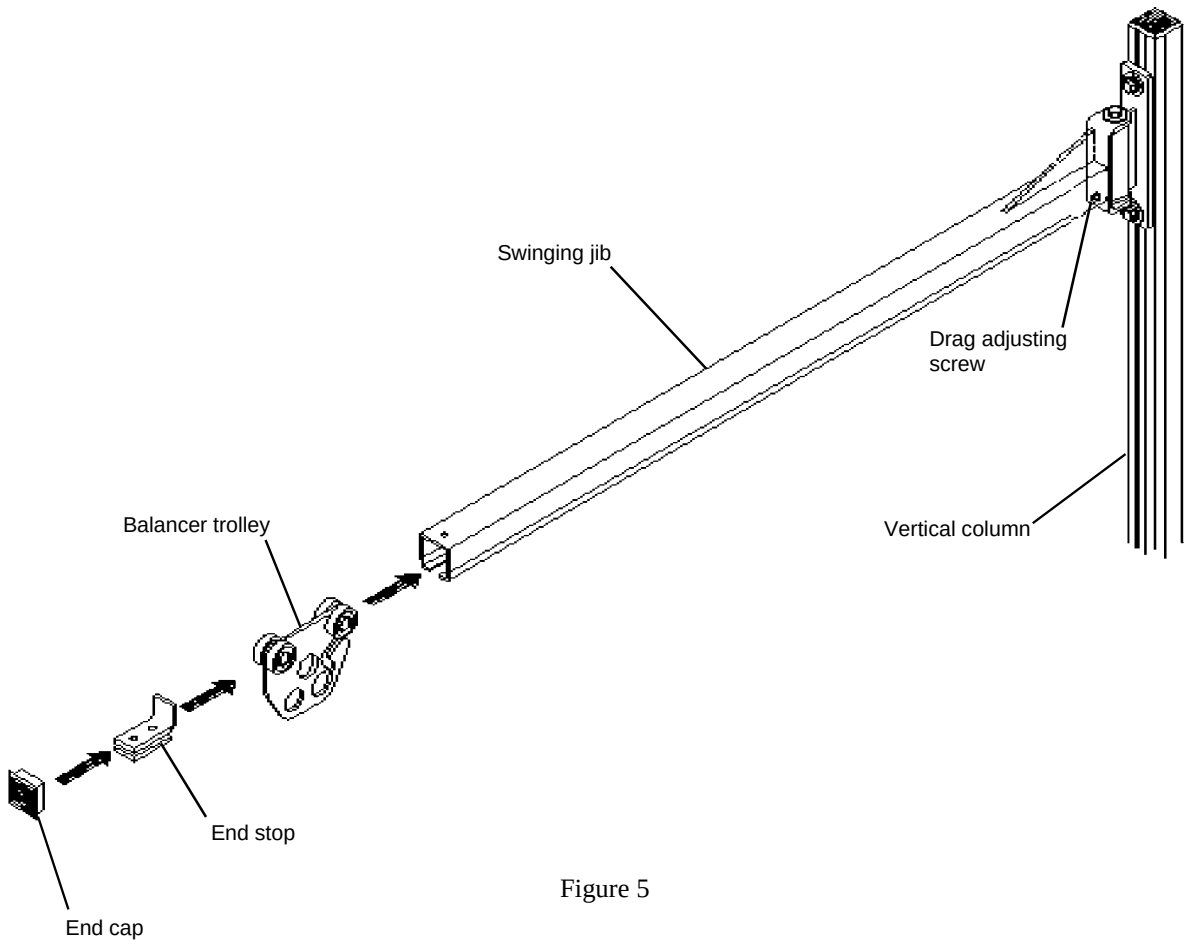


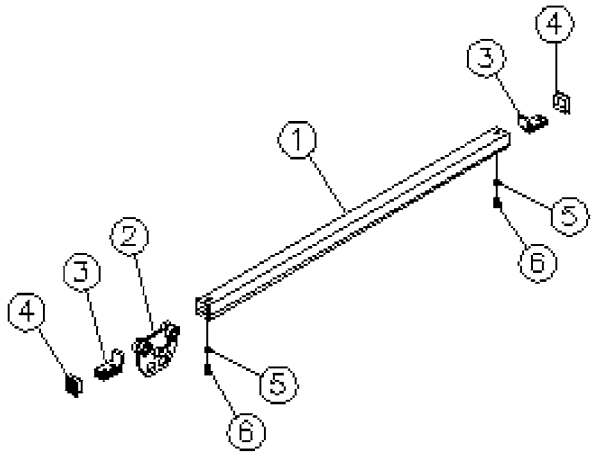
Figure 5

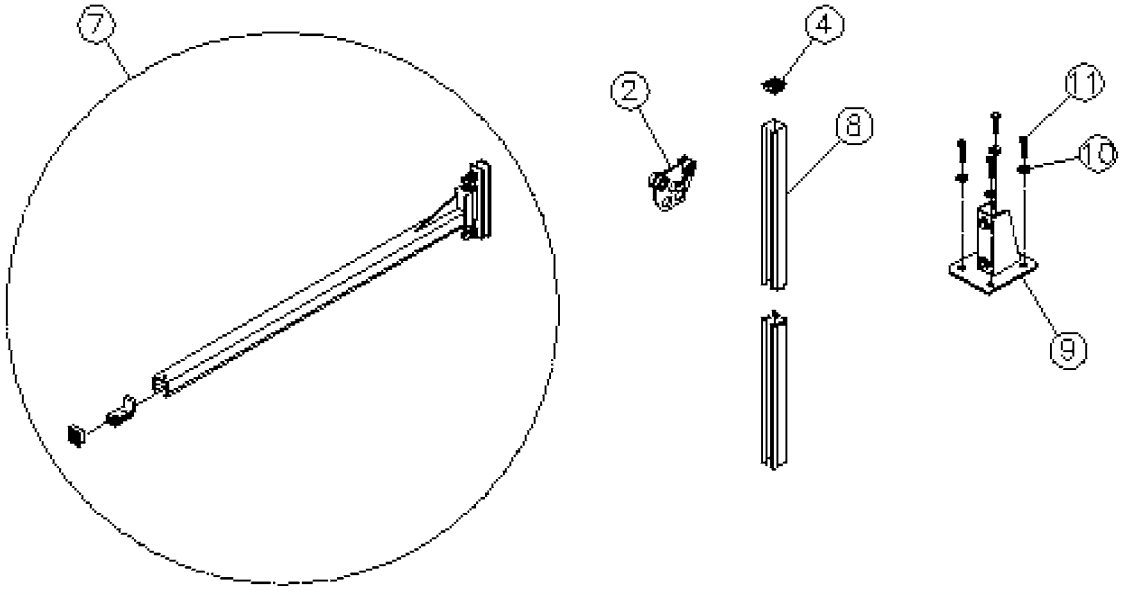
technical furniture

Tool Track/Tool Jib (cont.)

Parts List			
Part Number		Description	Qty.
1	83631	Tool Track, 48.00”	1
	85352	Tool Track, 60.00”	
	85353	Tool Track, 72.00”	
2	85368	Balancer Trolley	1
3	83632	End Stop	2
4	83633	End Cap	2

Parts List			
Part Number		Description	Qty.
5	59588	Lock Washer	2
6	82703	1/4”-20 x 1/2” Button Head Cap Screw	2
7	86250	Jib Assembly, 36” Swinging	1
8	83631	Vertical Column	1
9	85356	Mounting Plate Assembly	1
10	18959	Washer	4
11	85354	1/4” x 1.50” Lag Screw	4





technical furniture

Retrofit Kit
Nova

Please read these instructions carefully and follow the installation steps in sequence.

NOTE: The Trim Ring provided with the Nova01 and Nova06 kits can not be used with Linx Worksurfaces. Please discard Trim Ring.

Tools required

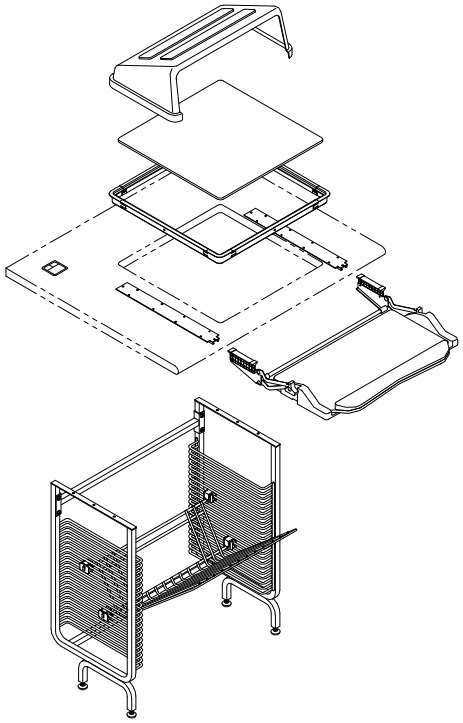
-Phillips head screwdriver

NOTE: The wire rack is to be on the inside of the Side Assemblies to create one left hand and one right hand assembly. Refer to **Figure 1** for handing).

1. Attach the **Cross Braces** to the Side Assemblies using eight #14AB x 3/4" screws. See **Figure 1**.

2. Attach the **Legs** (optional) to the Side Assemblies using four #14AB x 3/4" screws and then install the **Levelers** (optional) on each leg. See **Figure 2**.

NOTE: Legs are not provided with the Oversized Nova kits. Install the four Levelers directly into the Side Assemblies.



Nova Retrofit

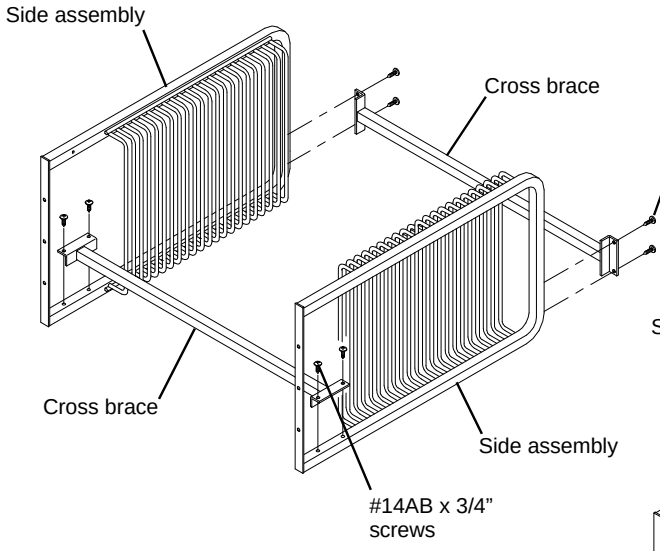


Figure 1

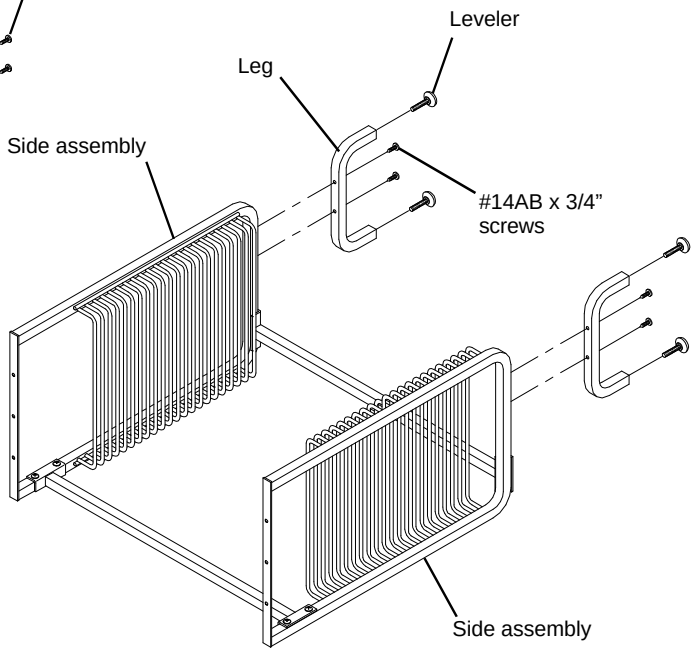


Figure 2

Retofit Kit
Nova (cont.)

3. Turn the assembly upright and position it underneath the viewport cutout in the Worksurface. Align the holes in the Top Rails with the corresponding holes in the Worksurface and attach with the #14AB x 3/4" screws provided. See **Figure 3**.

4. Attach the **Tracks** to the to the underside of the Worksurface by aligning the holes in the Tracks with the corresponding holes in the Worksurface (or stiffener on a 30" Linx Worksurface) and securing with the #6AB x 5/8" screws provided. **Note**: One end of each Track is painted black; this end must be to the front of the Worksurface. See **Figure 4**.

   Install a **Rubber Stop** in the center hole at the rear of each Track with the #6AB x 5/8" screws provided.

5. Install the **Keyboard Drawer** by sliding the two brackets into the Tracks installed in step 5. Push the Drawer all the way to the rear of the Tracks and install a Rubber Stop in the center hole at the front of each Track with the #6AB x 5/8" screws provided. See **Figure 5**.

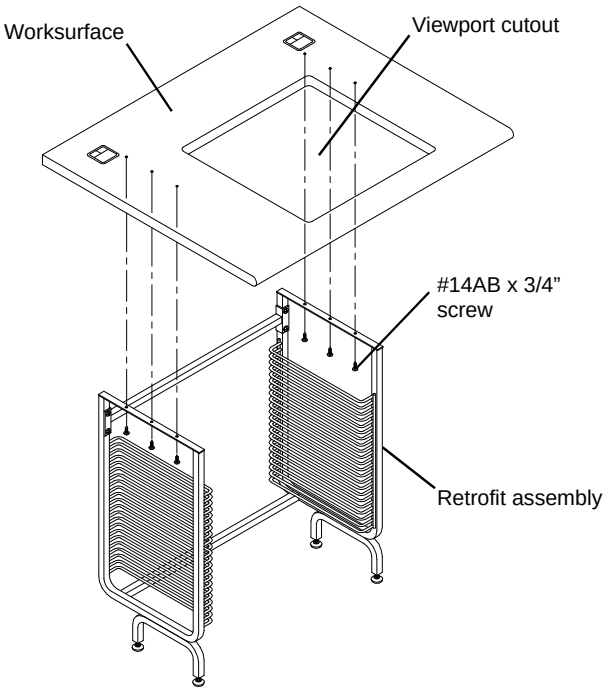


Figure 3

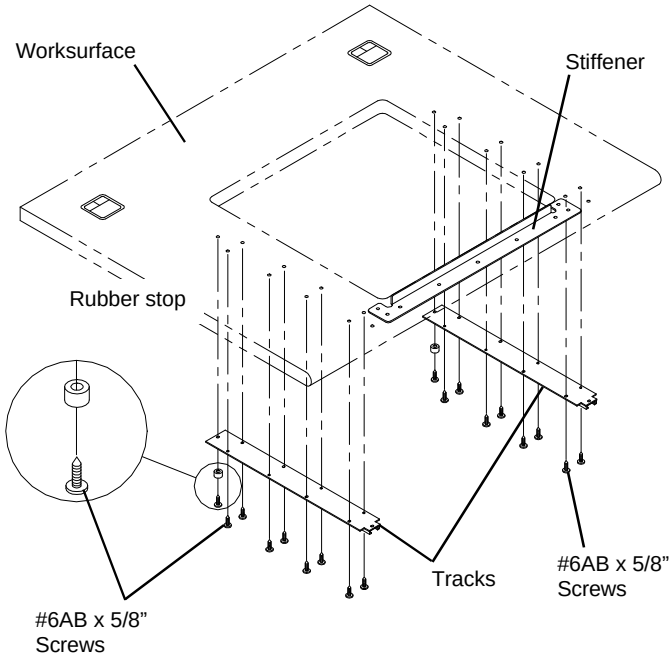


Figure 4

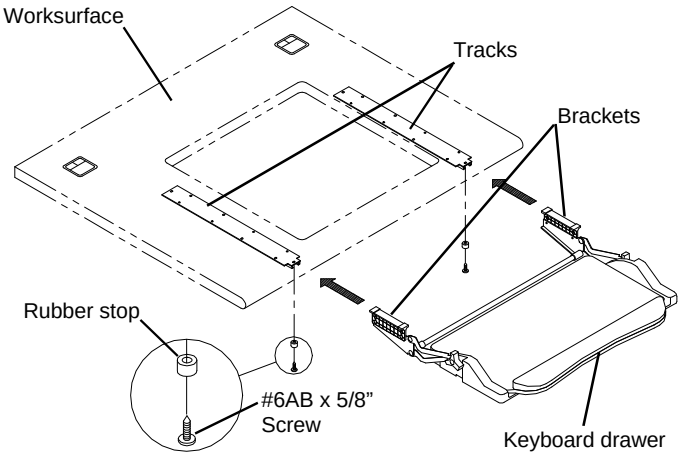


Figure 5

6. Install **Trim Ring** by snapping pieces together, lowering into cut-out and attaching with four #6AB x 5/8" screws provided. See **Figure 6**.

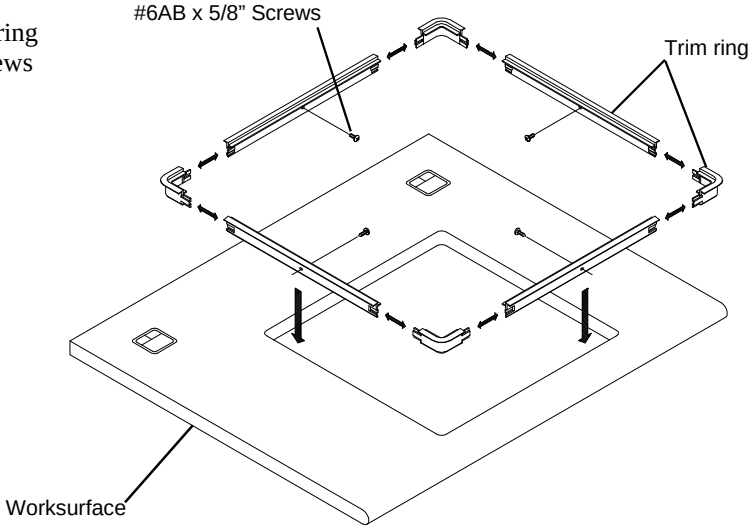


Figure 6

7. Attach the **Adjustable Mousing Surface** to the keyboard drawer using the pre-drilled holes and four #10AB x 5/8" phillips head screws provided. See **Figure 7**.

NOTE: The mousing surface can be attached to either the right hand or the left hand side of the drawer.

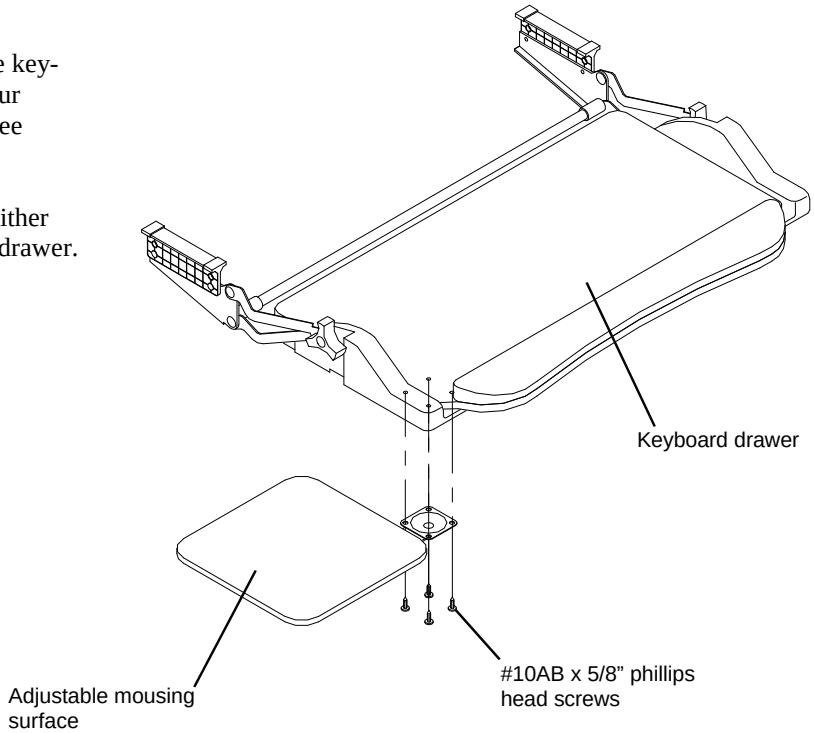


Figure 7

MONITOR SUPPORT INSTALLATION

NOTE: The **Monitor Support** adjusts three ways - for height, angle and forward/backward. Adjust it so that you have a comfortable viewing angle of the monitor when you're in a normal working position.

1. The Monitor Support is installed using the plastic **Tracking Blocks**. See **Figure 8**, detail a. For standard size monitors, a good starting point is nine bars down (rest the bottom of a Tracking Block on the ninth bar down from the top) and seven bars up (rest the bottom of a Tracking Block on the seventh bar from the bottom). **NOTE**: Do not install the security screws at this time.

2. With the assistance of another person, lower the monitor through the viewport opening while allowing wires to feed through the back of the Monitor Support.

3. To make angle adjustments, move either the top or bottom Tracking Blocks independently of each other. For height adjustments, move both bottom and top Tracking Blocks. To adjust the viewing distance, simply slide the Monitor Support forward or backward. When the adjustments are completed, install the #6AB x 5/8" Security screws. See **Figure 8**.

4. Carefully install the **Viewport Glass** into the viewport opening.

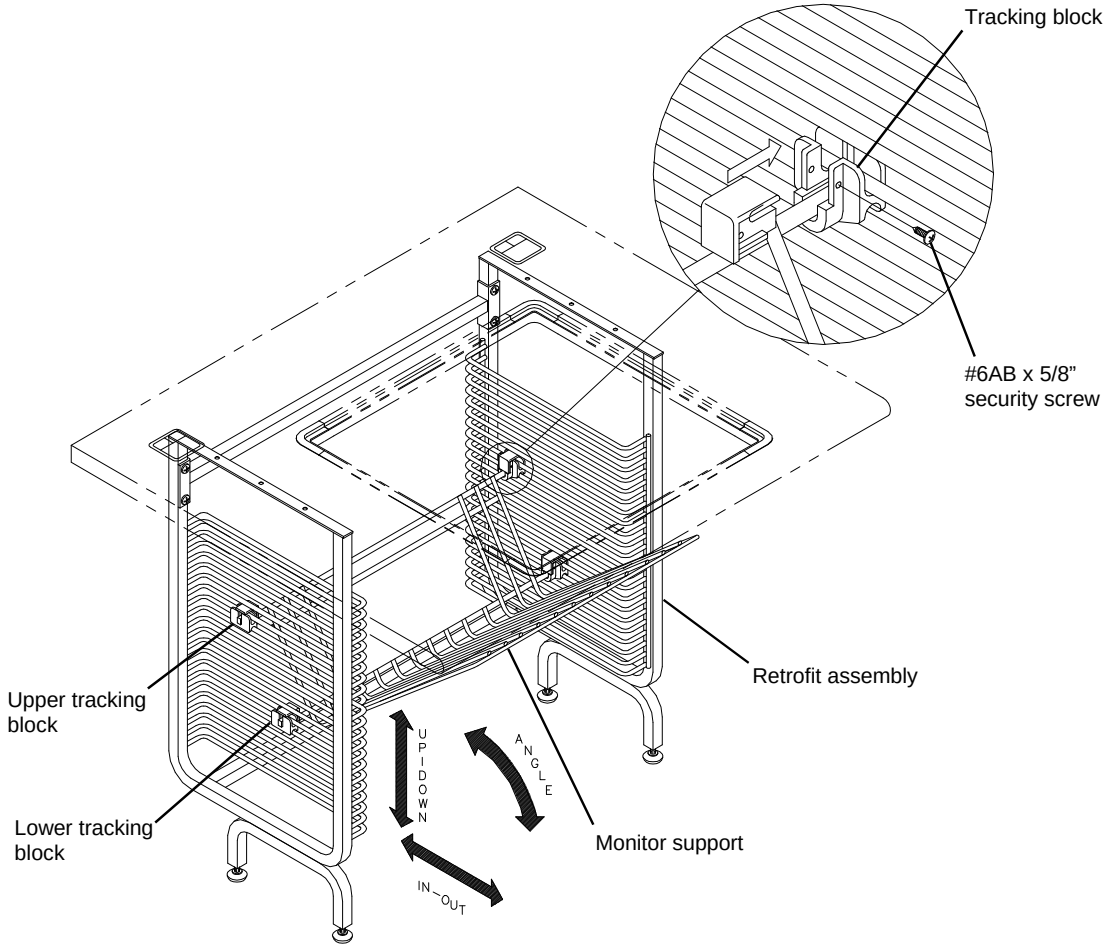


Figure 8

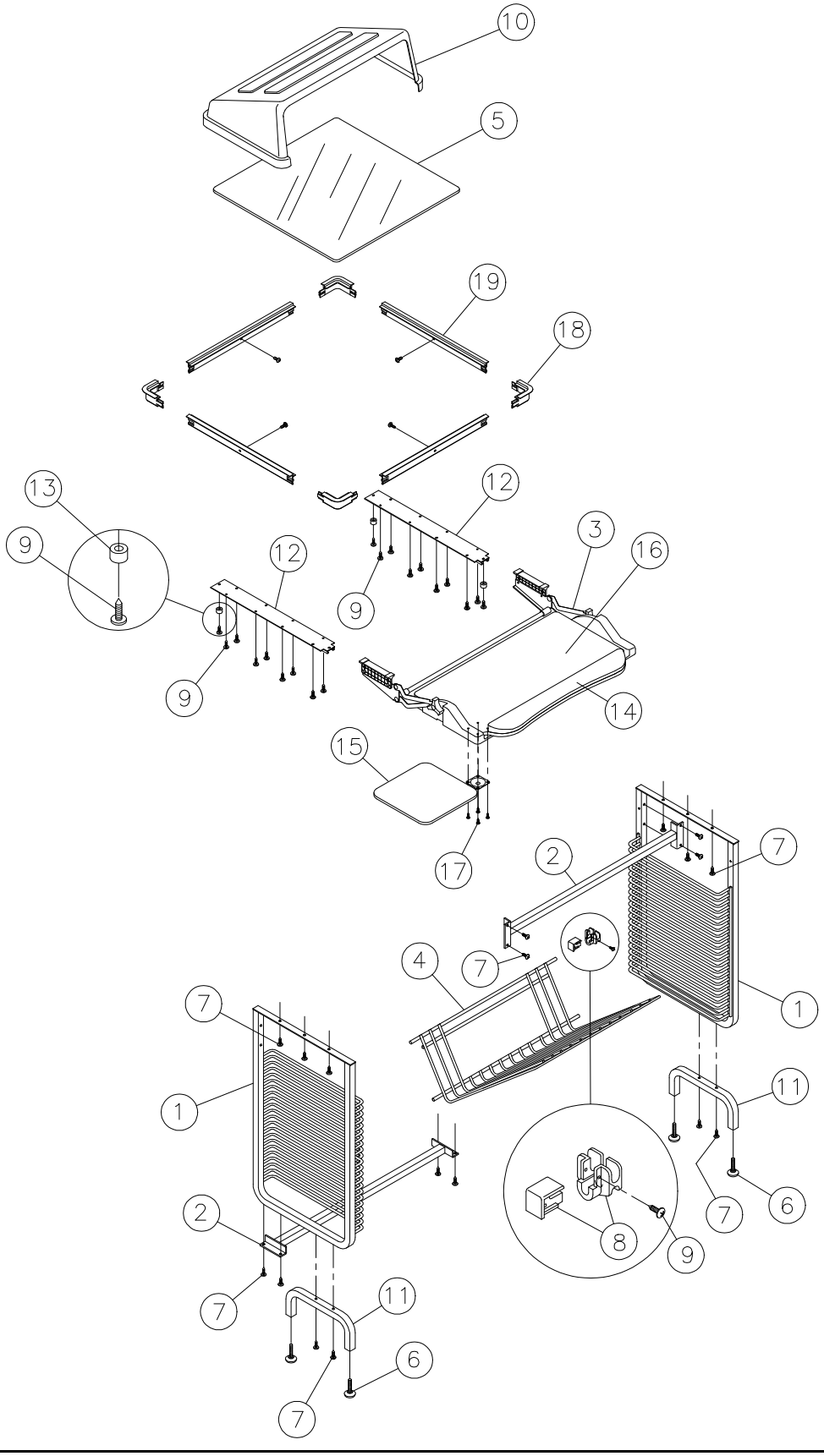
Retofit Kit
Nova (cont.)

Parts List

Part Number		Description	Qty.
1	5001818-02	Side Assembly	2
2	5001818-03	Cross Brace	2
3		Keyboard Drawer	1
4	5001818-06	Monitor Support	1
5	5001818-07	Viewport Glass	1
6	5001818-08	Leveler	4
7	5001818-11	#14AB x 3/4” Screw (Cross Braces, Legs and Worksurface)	18
8	5001818-12	Tracking Block	4
9	5001818-13	#6AB x 5/8” Screws (Tracks, security)	24
10	5001818-14	Visor	1
11	5001818-15	Leg	2
12	22784	Track	2
13	22289	Rubber Stop	4
14	24968	Palm Rest	1
15	X29408C	Adjustable Mousing Surface	1
16	X29409A	Keyboard Tray	1
17	82287	#10AB x 5/8” Phillips Pan Head Thread Forming Screws	4
18	50900034	Trim Ring Corner	4
19		Trim Ring Straight - Oversize	4
	50900037	Trim Ring Straight - Standard	

technical furniture

Retofit Kit
Nova (cont.)

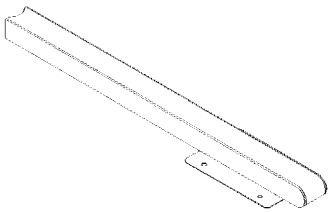


technical furniture

surface filler

Tools Required
- Phillips head screwdriver
- Electric drill
- 1/8” Drill bit

NOTE: This **Surface Filler** is designed to be compatible with Standard Uprights only. It is not compatible with Enhanced Uprights.



Surface Filler

1. Fasten the **Mounting Plate** to the Surface Filler using two of the #10 Phillips head screws provided. See **Figure 1**.

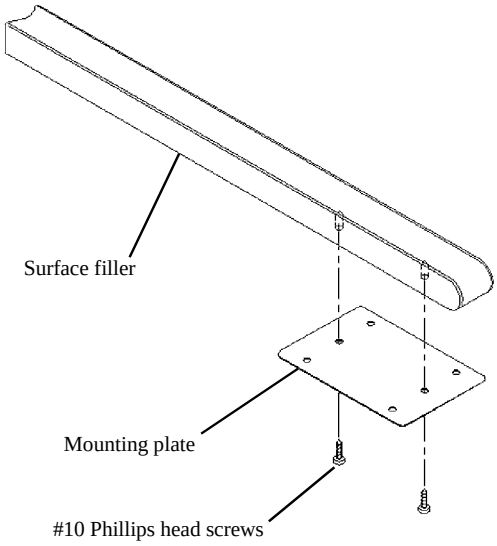


Figure 1

2. Position the Surface Filler Assembly between two surfaces and flush off the fronts.
3. Mark the four hole locations and remove the Filler Assembly.
4. Drill four 1/8” diameter holes 1/2” deep.
5. Install the Filler Assembly with the four remaining #10 phillips head screws. See **Figure 2**.

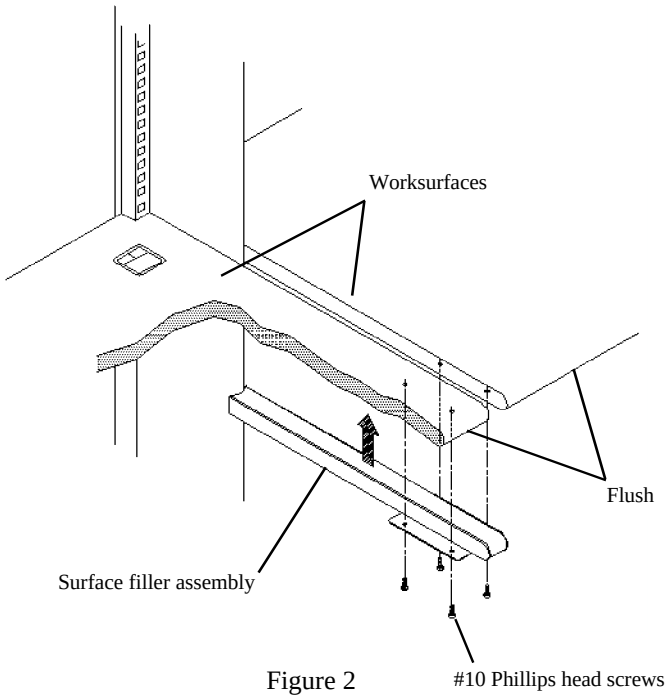


Figure 2

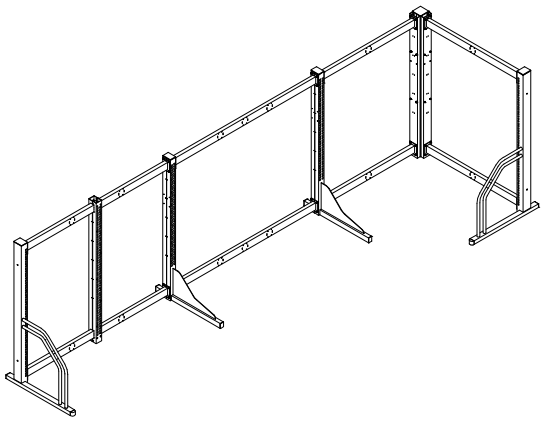
technical furniture

L M S F o u n d a t i o n s

Please read these instructions carefully and follow the installation steps in sequence.

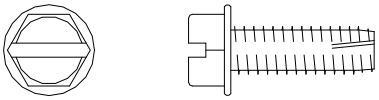
Tools Required

-3/8” Wrench
-5/32” Allen wrench
-1/8” Allen wrench
-Level
-Leveling wrench (provided)

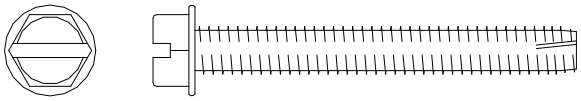


LMS Foundations

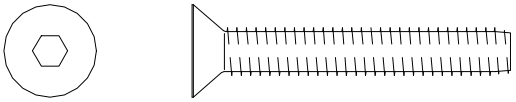
Fasteners That You Will Be Using



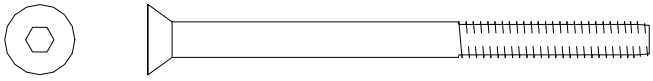
#87551
1/4”-20 x 3/4” Hex Washer Head
Thread Cutting Screw (Black)



#87554
1/4”-20 x 2.00” Hex Washer Head
Thread Cutting Screw (Black)



#87552
1/4”-20 x 1-1/2” Flat Head
Socket Cap Screw (Black)



#87553
#10-24 x 2-1/2” Flat Head
Socket Cap Screw (Black)

IMPORTANT SAFETY INSTRUCTIONS

1. Maximum loading:

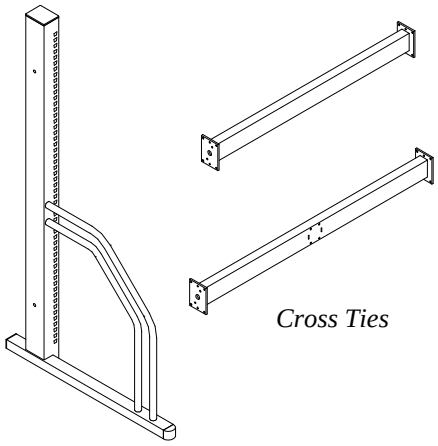
   1500 lbs. per section (Evenly distributed loads on worksurfaces and shelving.)

2. A minimum of two people are required for assembly.

3. If the wall option with reduced foot on back of upright is being installed, special care must be taken during assembly to prevent the unit from falling over backwards. To avoid this, the unit should be assembled against a wall or supported at the rear during assembly.

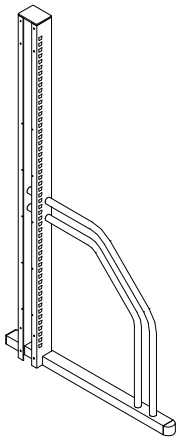
LMS Foundations (cont.)

Frame Components

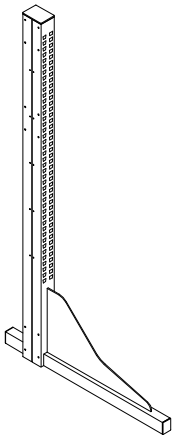


End Upright - L.H.

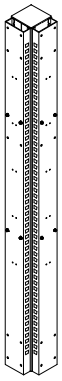
Cross Ties



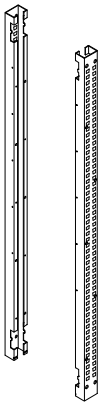
End Upright - R.H.



Intermediate Upright



Corner Post With Standards Assembled



Intermediate Standards

NOTE: If a single free standing unit is being assembled, (1) left hand and (1) right hand **End Upright** will be used.

If add-on sections are part of the installation, **Intermediate Upright(s)** will be used with the left and right hand End Uprights. The End Uprights are placed at each end of the installation.

FRAME ASSEMBLY - INITIAL SECTION

1. Lay one **End Upright** on the floor as shown in **figure 1**.

2. With two people, attach each **Cross Tie** to the End Upright with four 1/4”-20 x .75” hex washer head thread cutting screws.

   NOTE: Attach the Cross Ties with the two smaller dia. holes (.260 dia.) in the end plates toward front of the unit.

   Tighten all screws securely.

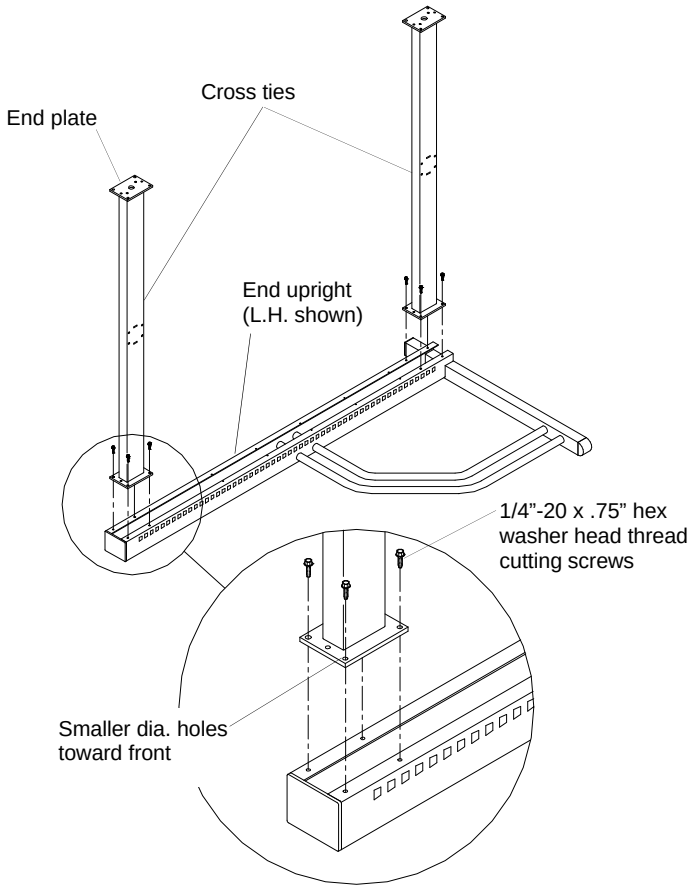


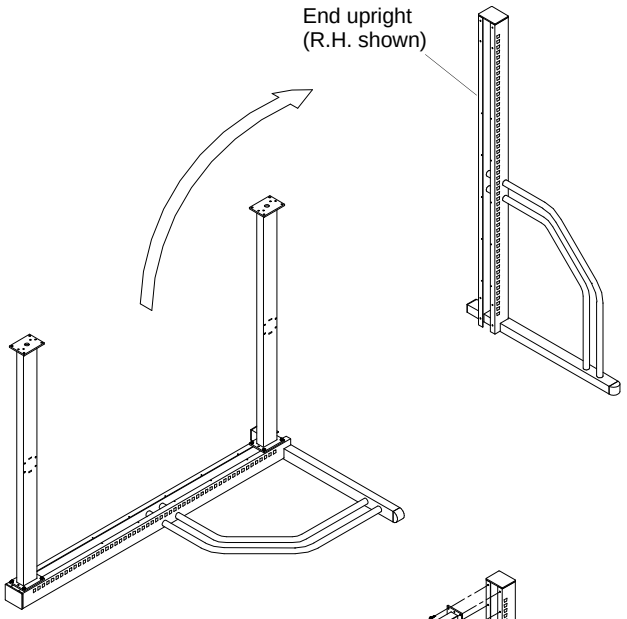
Figure 1

LMS Foundations (cont.)

FRAME ASSEMBLY - INITIAL SECTION (cont.)

3. With two people, position the second End Upright vertically and attach the previously assembled upright and Cross Ties to it with eight 1/4”-20 x .75” hex washer head thread cutting screws. See **figure 2.**

NOTE: A free standing unit is shown with L.H and R.H. End Uprights. If mutiple sections are being assembled, one of the End Uprights would be replaced with an **Intermediate Upright**.



FRAME ASSEMBLY - ADD-ON SECTIONS

1. Place the Initial Assembly in it’s final location. Additional sections can be added by repeating steps 1 thru 3. See **figure 3**.

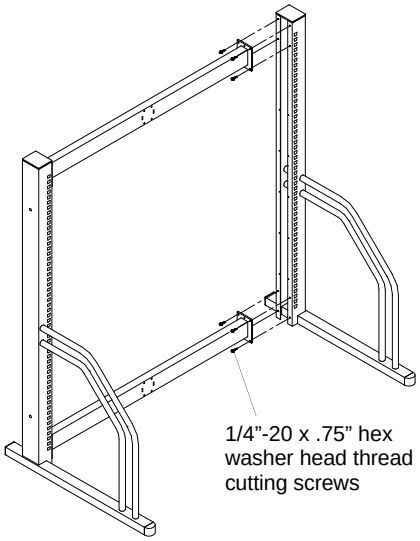


Figure 2

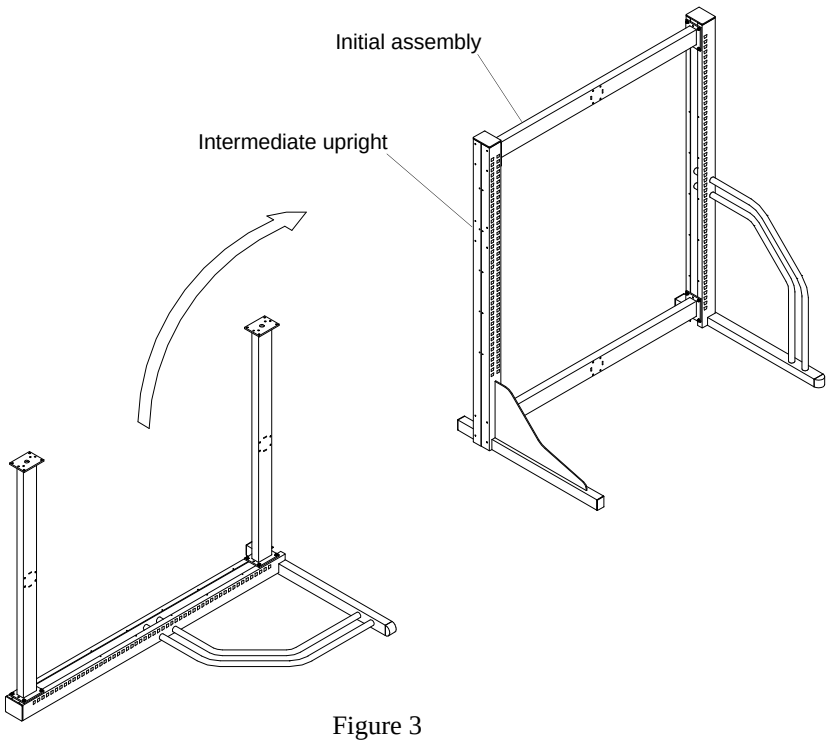


Figure 3

LMS Foundations (cont.)

FRAME ASSEMBLY - CORNER SECTIONS

The LMS Foundations System can be assembled in various corner configurations. See **figure 4**.

1. Attach the appropriate quantity of **Standards** to the **Corner Post** with the 1/4"-20 x 2.00" hex washer head thread cutting screws and tighten securely. See **figure 5**. **DO NOT** install screws in the top four holes and bottom four holes at this time.

   NOTE: Use two screws for each of the remaining four hole patterns.

   "L" Configuration = (2) Standards
   "T" Configuration = (3) Standards
   "X" Configuration = (4) Standards

2. Attach the top and bottom Cross Ties to *one* Standard in the same manner as step 1 thru 3 with eight 1/4"-20 x 2.00" hex washer head thread cutting screws. See **figure 6**. Tighten securely.

3. Unscrew the leveler until it extends .375" (3/8") past the bottom of the corner post. See **Figure 6**.

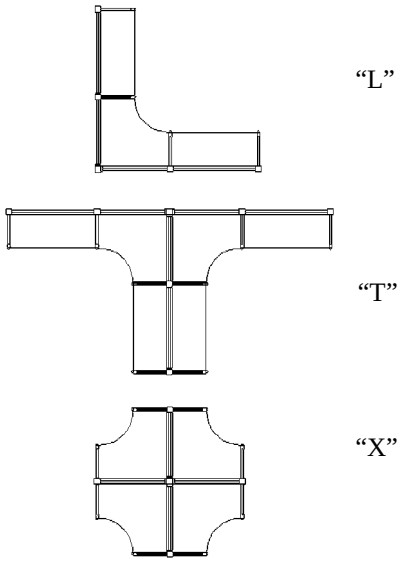


Figure 4

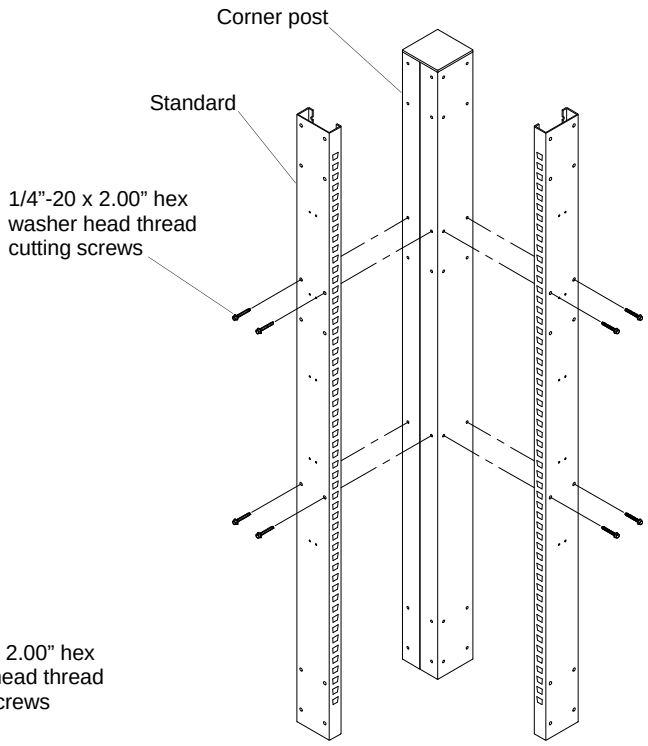


Figure 5

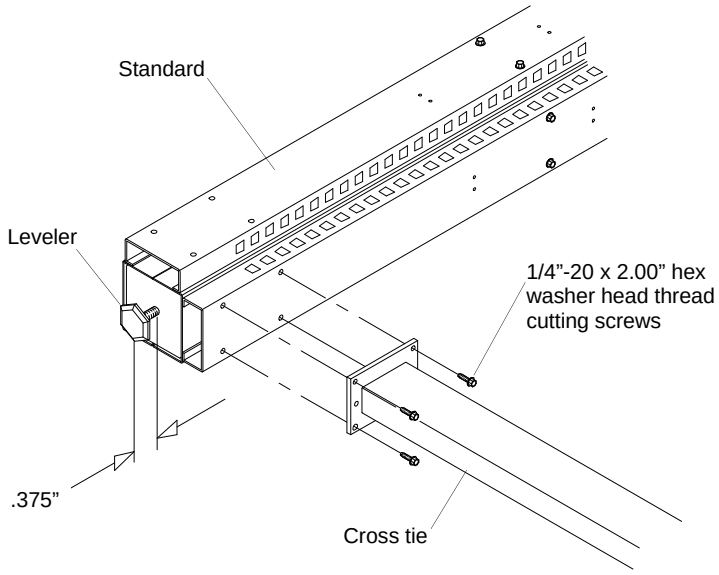


Figure 6

LMS Foundations (cont.)

4. Stand the Corner Post assembly up and and attach the Cross Ties to the linear unit with eight 1/4”-20 x 2.00” hex washer head thread cutting screws and tighten securely. See **figure 7**.

5. Continue adding sections using the methods shown in steps 1 thru 4.

6. Check all screws to ensure that they have been fully tightened.

7. Adjust the levelers as necessary to level the unit.

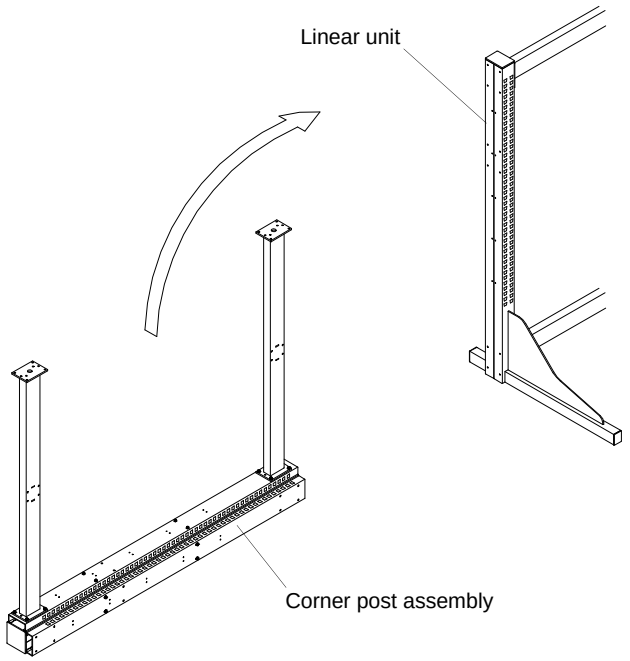


Figure 7

INTERMEDIATE STANDARDS

The 48”, 60” and 72” wide units can be segmented into the following modules.

48” Unit = (2) 24” Modules

60” Unit = (2) 30” Modules

72” Unit = (3) 24” Modules
= (2) 36” Modules
= (1) 24” Module, (1) 48” Module

1. Locate the appropriate hole patterns in the Cross Ties and attach the two **Intermediate Standard** halves to the top/bottom Cross Ties with eight 1/4”-20 x 1-1/2” flat head socket cap screws and tighten securely. See **figure 8**.

2. Complete the assembly by installing #10-24 x 1-1/2” flat head socket cap screws at the pre-punched locations on both the front and back halves of the Intermediate Standards and tighten securely. See **figure 8**.

3. Adjust the leveler(s) at the bottom of the Intermediate Standard(s).

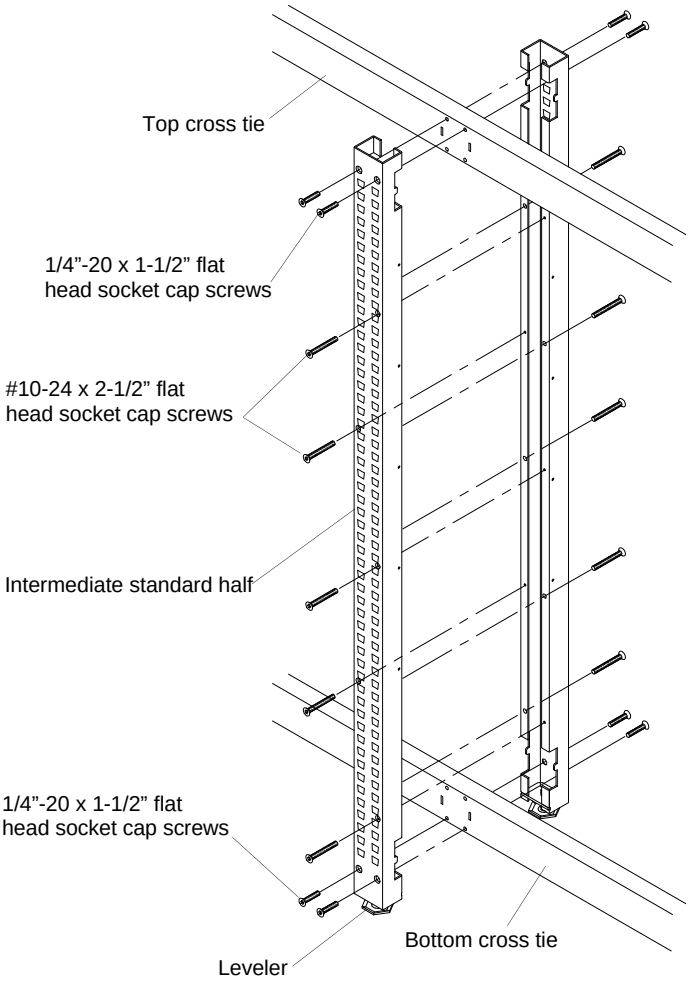


Figure 8

LMS Foundations (cont.)

Parts List

	Part Number	Description	Qty.
1	9027X	Ass'y, 61" End Upright - L.H. 31" Deep	1
	9029X	Ass'y, 72" End Upright - L.H. 31" Deep	
	9031X	Ass'y, 84" End Upright - L.H. 31" Deep	
	9033X	Ass'y, 61" End Upright - L.H. 40" Deep	
	9035X	Ass'y, 72" End Upright - L.H. 40" Deep	
	9037X	Ass'y, 84" End Upright - L.H. 40" Deep	
	9139X	Ass'y, 61" End Upright - L.H. 27" Deep	
	9141X	Ass'y, 72" End Upright - L.H. 27" Deep	
	9143X	Ass'y, 84" End Upright - L.H. 27" Deep	
	9145X	Ass'y, 61" End Upright - L.H. 36" Deep	
	9147X	Ass'y, 72" End Upright - L.H. 36" Deep	
	9149X	Ass'y, 84" End Upright - L.H. 36" Deep	
2	9028X	Ass'y, 61" End Upright - R.H. 31" Deep	1
	9030X	Ass'y, 72" End Upright - R.H. 31" Deep	
	9032X	Ass'y, 84" End Upright - R.H. 31" Deep	
	9034X	Ass'y, 61" End Upright - R.H. 40" Deep	
	9036X	Ass'y, 72" End Upright - R.H. 40" Deep	
	9038X	Ass'y, 84" End Upright - R.H. 40" Deep	
	9140X	Ass'y, 61" End Upright - R.H. 27" Deep	
	9142X	Ass'y, 72" End Upright - R.H. 27" Deep	
	9144X	Ass'y, 84" End Upright - R.H. 27" Deep	
	9146X	Ass'y, 61" End Upright - R.H. 36" Deep	
	9148X	Ass'y, 72" End Upright - R.H. 36" Deep	
	9150X	Ass'y, 84" End Upright - R.H. 36" Deep	
3	9105X	Ass'y, 61" Double End Upright	1
	9106X	Ass'y, 72" Double End Upright	
	9107X	Ass'y, 84" Double End Upright	

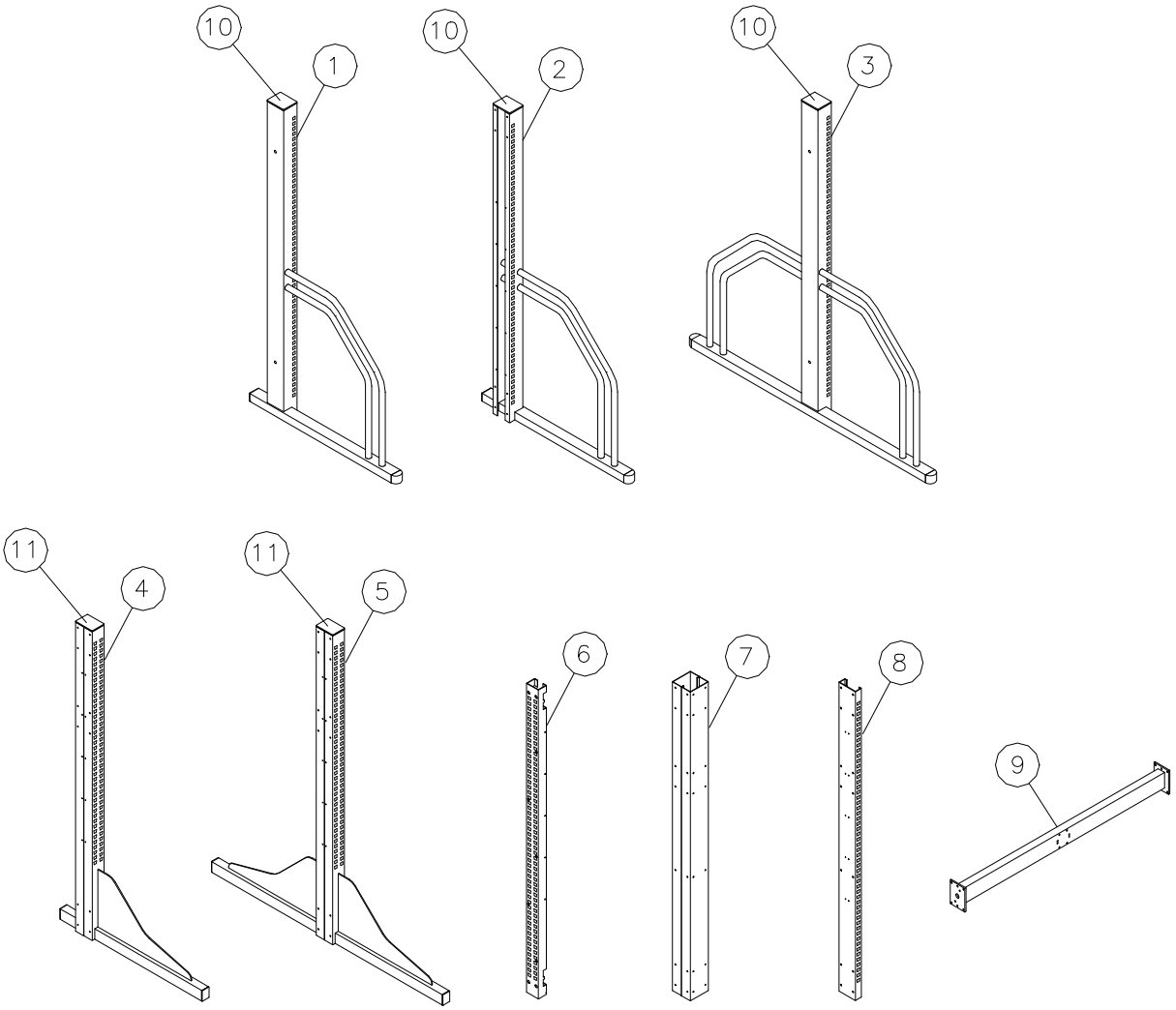
LMS Foundations (cont.)

Parts List

	Part Number	Description	Qty.
4	9039X	Ass'y, 61" Intermediate Upright, 31" Deep	1
	9040X	Ass'y, 72" Intermediate Upright, 31" Deep	
	9041X	Ass'y, 84" Intermediate Upright, 31" Deep	
	9042X	Ass'y, 61" Intermediate Upright, 40" Deep	
	9043X	Ass'y, 72" Intermediate Upright, 40" Deep	
	9044X	Ass'y, 84" Intermediate Upright, 40" Deep	
	9163X	Ass'y, 61" Intermediate Upright, 27" Deep	
	9164X	Ass'y, 72" Intermediate Upright, 27" Deep	
	9165X	Ass'y, 84" Intermediate Upright, 27" Deep	
	9166X	Ass'y, 61" Intermediate Upright, 36" Deep	
	9167X	Ass'y, 72" Intermediate Upright, 36" Deep	
	9168X	Ass'y, 84" Intermediate Upright, 36" Deep	
5	9111X	Ass'y, 61" Double Intermediate Double Upright, 31" Deep	1
	9112X	Ass'y, 72" Double Intermediate Double Upright, 31" Deep	
	9113X	Ass'y, 84" Double Intermediate Double Upright, 31" Deep	
6	9015X	61" Intermediate Standard	2
	9016X	72" Intermediate Standard	
	9017X	84" Intermediate Standard	
7	9009X	61" Corner Post	1
	9010X	72" Corner Post	
	9011X	84" Corner Post	
8	9012X	61" Corner Standard	1
	9013X	72" Corner Standard	
	9014X	84" Corner Standard	

LMS Foundations (cont.)

Parts List			
Part Number		Description	Qty.
9	9002X	24” Cross Tie	1
	9003X	30” Cross Tie	
	9004X	36” Cross Tie	
	9006X	48” Cross Tie	
	9007X	60” Cross Tie	
	9008X	72” Cross Tie	
10	9045X	Cap - End Upright	1
11	9047X	Cap - Intermediate Upright	1



BASIC PLUS PLUG CAP ACCESSORY

The **Plug Cap** is a decorative cap for the End Panels of Tower, Electronics and General Purpose Shelves. To insert the Plug, simply place it over the exposed screw on the End Panel and push it on. Plug Caps are ordered as an optional accessary. See **Figure 1**.

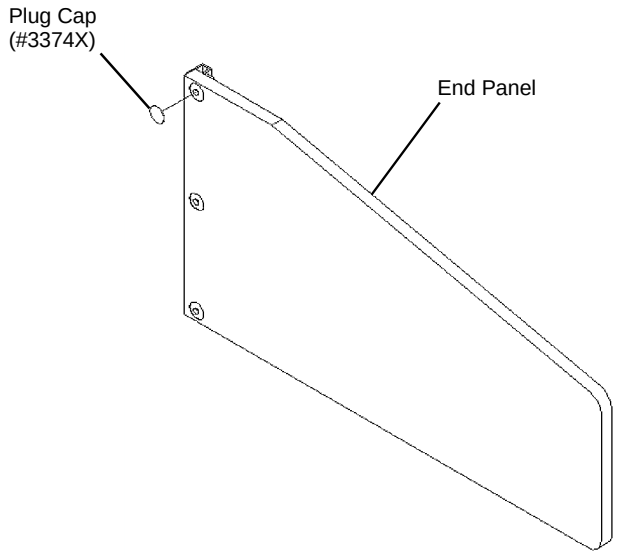


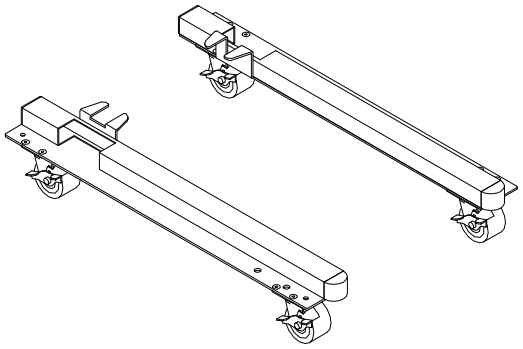
Figure 1

technical furniture

LMS Foundations Caster Kit

Please read these instructions carefully and follow the installation steps in sequence.

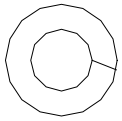
Tools Required
-1/4" Allen Wrench (provided)



Caster Kit

Fasteners That You Will Be Using

#68809
5/16"-18 x 1.00" Socket Head Cap Screw



#18950
Lockwasher

1. With a minimum of two people, carefully position the Foundations frame on it's back. See figure 1.
2. Remove the two levelers from each foot.
3. Position the Caster Brackets as shown in figure 1 and attach each bracket to the bottom of each foot using the 5/16"-18 x 1.00" socket head cap screws and lockwashers provided. **Tighten securely**.
4. Engage the caster brakes and carefully return the unit to it's upright position.

IMPORTANT

Maximum loading of unit with casters is 1000 lbs.

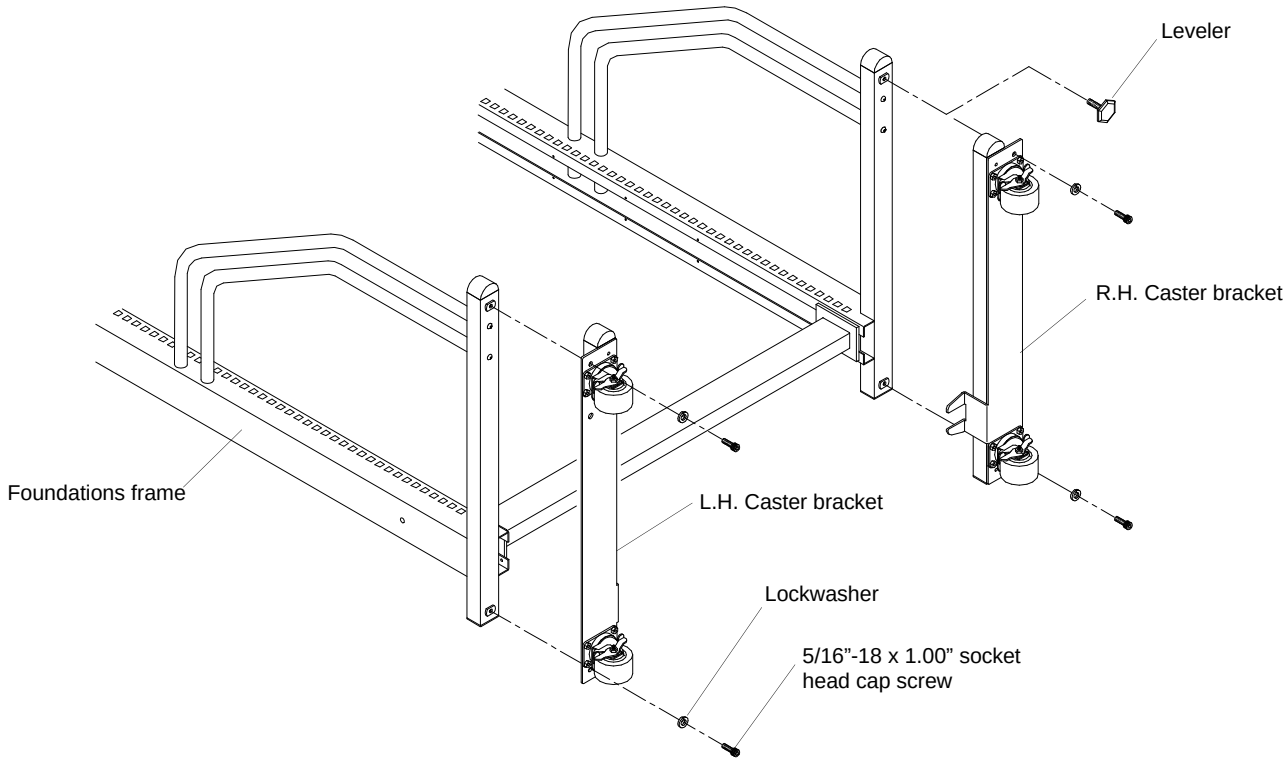
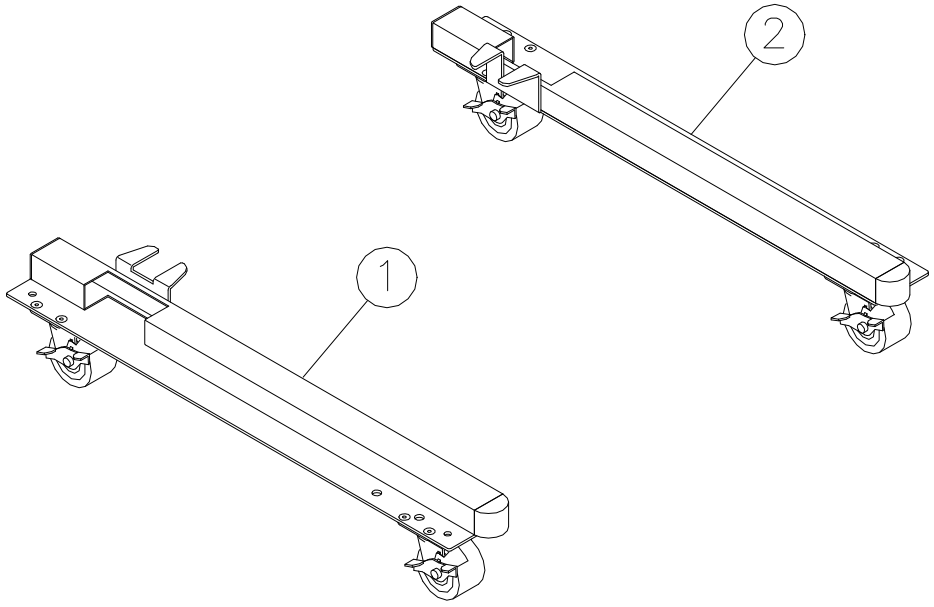


Figure 1

LMS Foundations
Caster Kit(cont.)

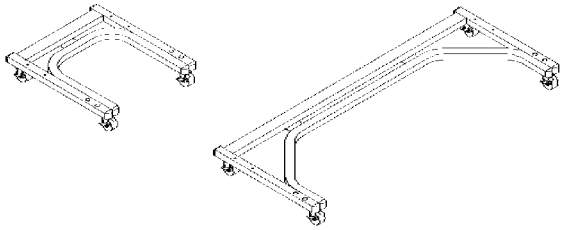
Parts List			
Part Number		Description	Qty.
1	9185X	L.H. Caster Bracket Assembly	1
2	9186X	R.H. Caster Bracket Assembly	1



technical furniture

Open Mobile Base

Tools Required
-5/32” Allen wrench (provided)
-1/4” Allen wrench (provided)



24”, 30”, 36”
Mobile Base

48” thru 72”
Mobile Base

UPRIGHT /MOBILE BASE ASSEMBLY

Note: Place the **Mobile Base** in an area with adequate floor space for the base and the Full Frame. This Base design requires two (2) Enhanced Uprights and a corresponding Frame.

Enhanced Uprights are shipped fully assembled. It is recommended to slide the Cover from the top of the Vertical Cable Management duct prior to assembly of the Upright to its frame. Remove the protective inner packing located inside the Vertical duct.

1. Remove the feet from **Enhanced Uprights**. The screws will be re-used. You may want to store the feet for future re-assembly should mobility no longer be required. See **Figure 1**.

2. Remove all of the plastic hole plugs from one side of an Upright. Remove them from the opposite side of the second Upright creating a left and right hand. See **Figure 1**. The hole plugs will not be re-used.

3. Re-assemble one Upright to the Mobile Base, keeping the side with no plugs to the inside. See **Figure 2**. **Insert the screws into the round tubes first**. Do not tighten the screws at this time. Slight movement may be needed when positioning the Full Frame.

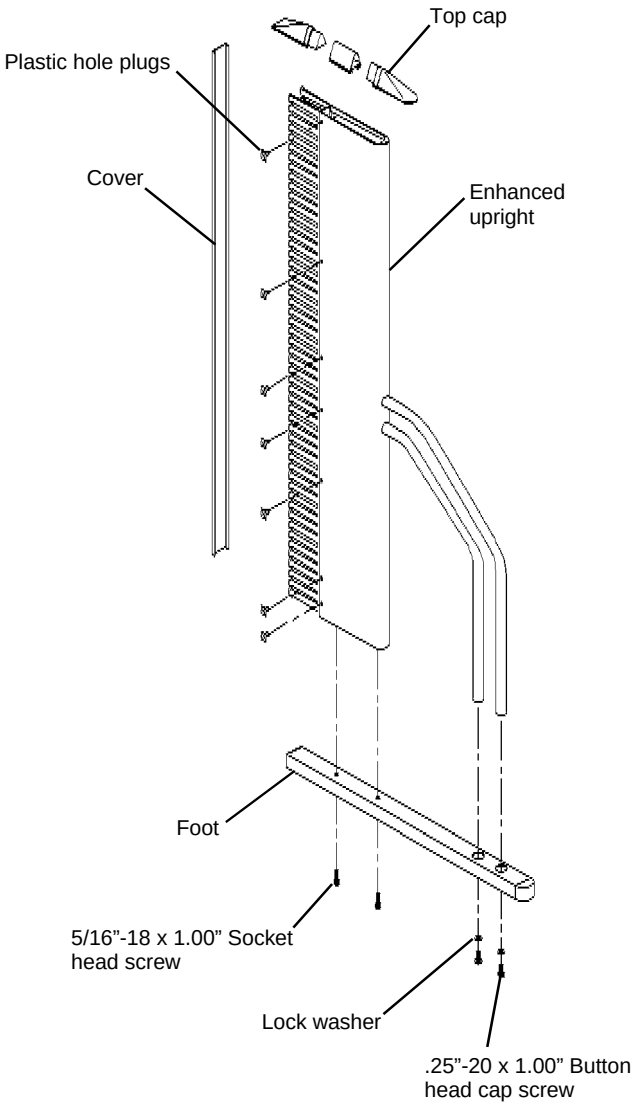


Figure 1

Open Mobile Base (cont.)

FULL FRAME ASSEMBLY

Refer to page_ for Full Frame assembly.

FRAME TO UPRIGHT ASSEMBLY

NOTE: The rear of the **Mobile Base** has a straight tube and spaced from it, a formed tube. The tubes are joined by two steel plates. The Full Frame is positioned on these plates and between the tubes. See **Figure 3a**.

1. Place the **Full Frame** onto the Mobile Base. Be sure that the Wright Line logo faces front. Align the vertical holes in the Frame end with the holes in the Upright and attach with the 1/4"-20 x 1-1/2" screws packaged with the Full Frame. See **Figure 3b**.

2. Assemble the second Upright to the Mobile Base and Frame. Install and tighten all the screws. **See Figure 3b**.

3. Re-install the **Top Caps** and **Cable Management Covers**.

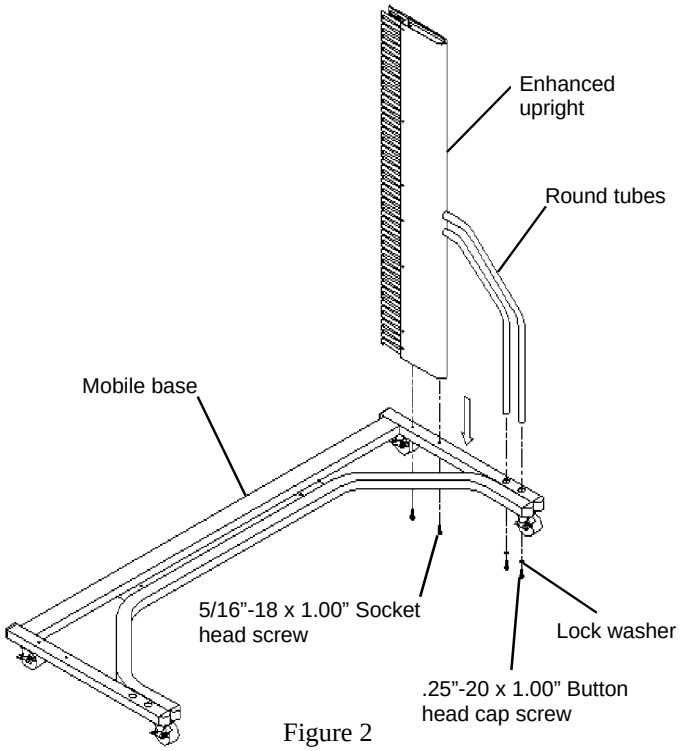


Figure 2

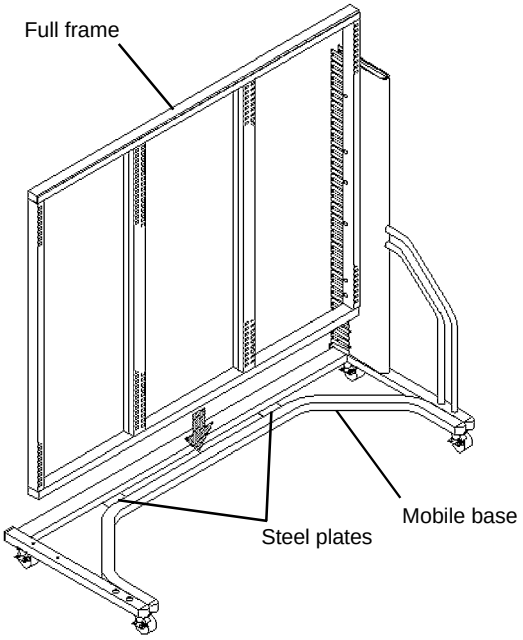


Figure 3a

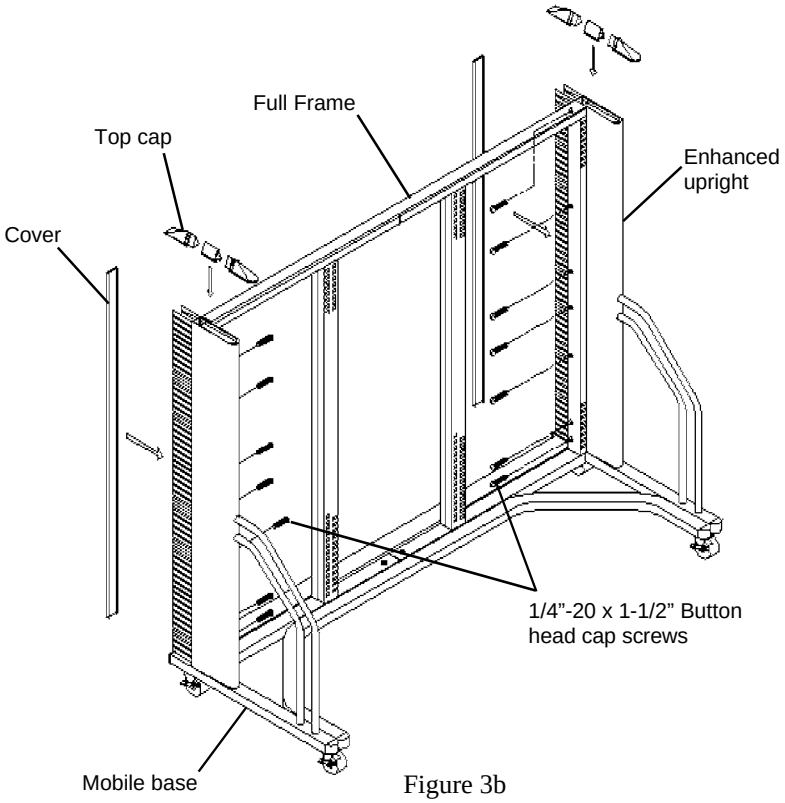
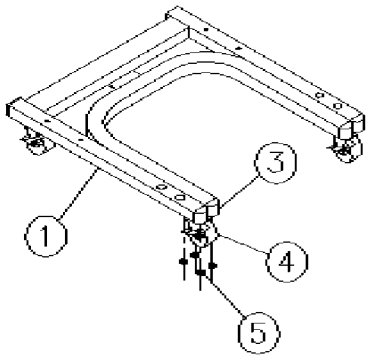


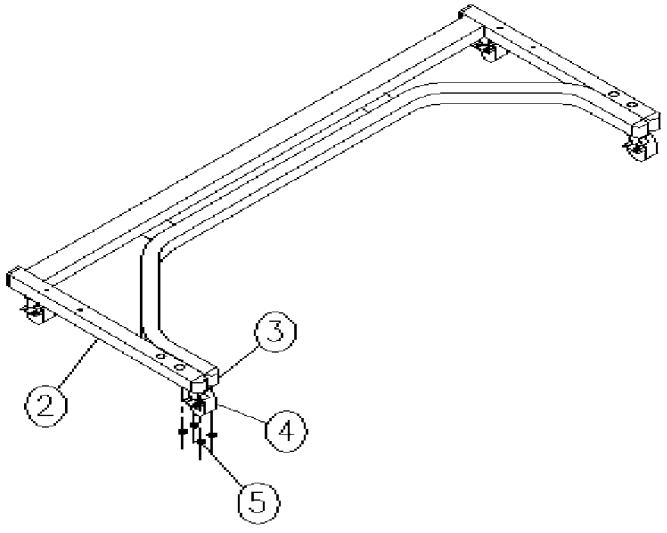
Figure 3b

Open Mobile Base (cont.)

Parts List			
Part Number		Description	Qty.
1	3511X	Mobile Base, 24” x 31” Deep	1
	3512X	Mobile Base, 30” x 31” Deep	
	3513X	Mobile Base, 36” x 31” Deep	
	3515X	Mobile Base, 48” x 31” Deep	
	3518X	Mobile Base, 24” x 40” Deep	
	3519X	Mobile Base, 30” x 40” Deep	
	3520X	Mobile Base, 36” x 40” Deep	
	3522X	Mobile Base, 48” x 40” Deep	
2	3516X	Mobile Base, 60” x 31” Deep	1
	3517X	Mobile Base, 72” x 31” Deep	
	3523X	Mobile Base, 60” x 40” Deep	
	3524X	Mobile Base, 72” x 40” Deep	
3	1242X	End Cap	2 Pairs
4	81728	3.00” Swivel Casster w/Brake	4
5	18209	1/4”-20 Keps Lock Nut	16



24”-48” Mobile Bases



60”-72” Mobile Bases

technical furniture

Caster Base

SAFETY INSTRUCTIONS

1. The Frame and Upright Assembly must be unloaded prior to installation to the **Caster Base**.

   If the Caster Base is being installed onto a Frame configuration that is in use, the unit must be unloaded and partially unassembled.

2. A minimum of two people are required for the installation.

3. The Frame and Upright Assembly must be bolted to the Caster Base prior to use.

4. Assemble components and load the Frame unit from the bottom up.

5. Do not exceed the maximum load rating for individual components.

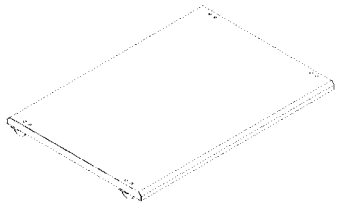
6. Do not exceed a total unit loading of 1500 lbs.(682Kg).

Tools Required
-1/2" wrench

1. Position the **Caster Base** adjacent to the empty Frame unit and lock the four casters in place by rotating their individual brakes clockwise.

2. Remove the **Levelers** and **Foot Caps** from the Vertical Upright feet. See **Figure 1**. **NOTE**: If it is a **Full Frame Basic**, remove the Levelers and Front Caps only. Replace the removed caps with the **Angled Caps** packaged with the Caster Base. See **Figure 2**.

3. With a minimum of two people, lift the assembly and position it on the Caster Base. Fasten it to the Caster Base using the four 5/16"-18 x 2" Hex head machine screws and washers provided. Tighten securely with a 1/2" wrench. See **Figure 2**.



Caster Base

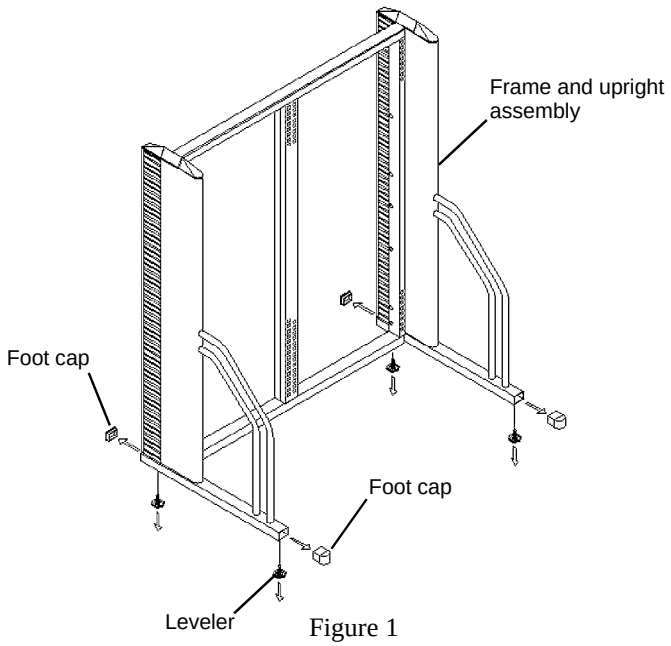


Figure 1

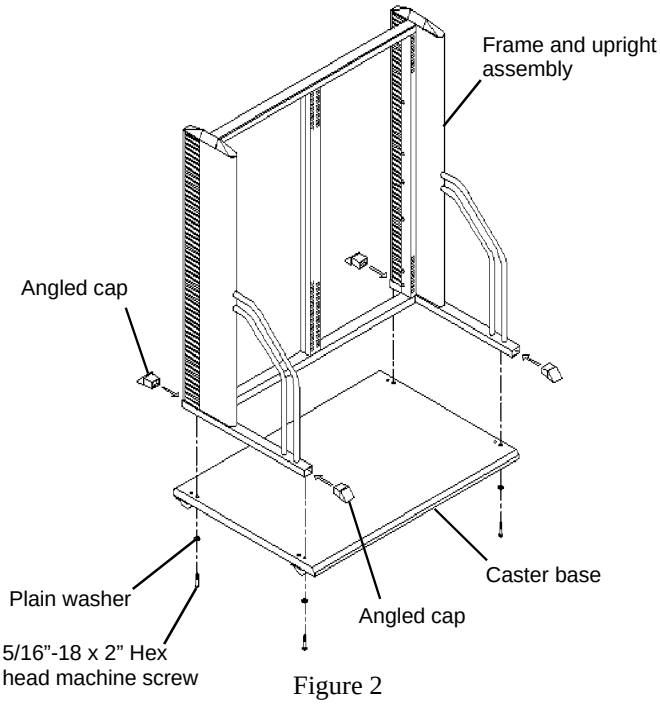


Figure 2

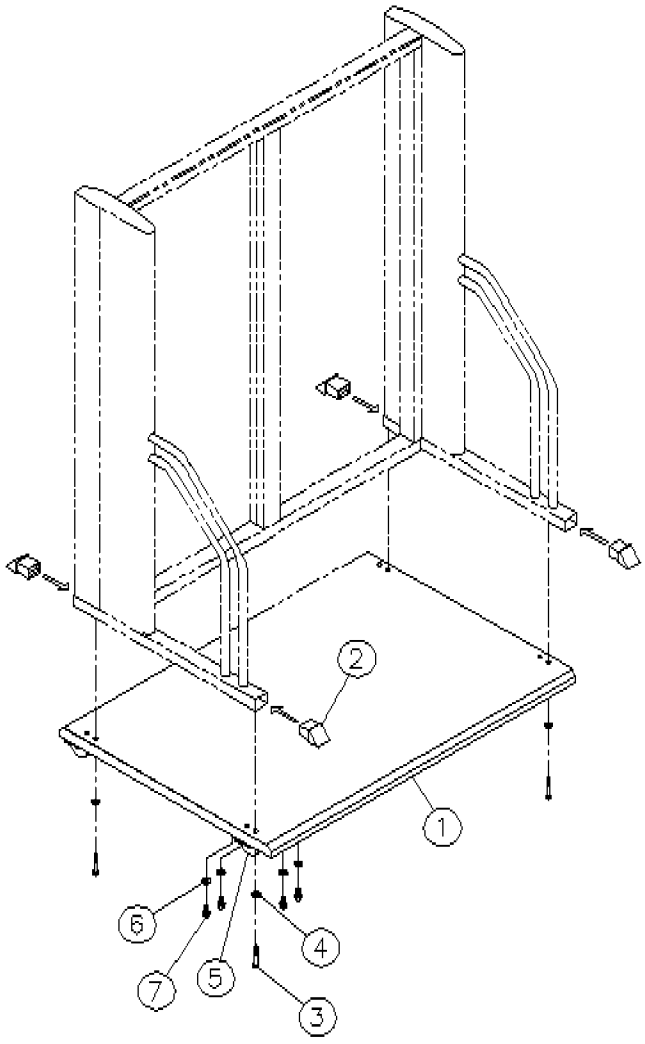
Caster Base (cont.)

Parts List

Part Number		Description	Qty.
	2457X	24” Caster Base	
	2458X	30” Caster Base	
	2459X	36” Caster Base	
	2461X	48” Caster Base	
	2462X	60” Caster Base	
	2463X	72” Caster Base	
1	2897X	24” x 40” Caster Base	1
	2898X	30” x 40” Caster Base	
	2899X	36” x 40” Caster Base	
	2900X	42” x 40” Caster Base	
	2901X	48” x 40” Caster Base	
	2902X	60” x 40” Caster Base	
	2903X	72” x 40” Caster Base	

Parts List

Part Number		Description	Qty.
2	3275X	Foot Cap	4
3	57403	5/16”-18 x 2.00” Hex Cap Screw	4
4	81710	5/16” Flat Washer	4
5	81728	3.00” Swivel Caster w/ Brake	4
6	18950	Lock Washer	16
7	54348	1/4”-20 x 1/2” Hex Washer Head Screw	16



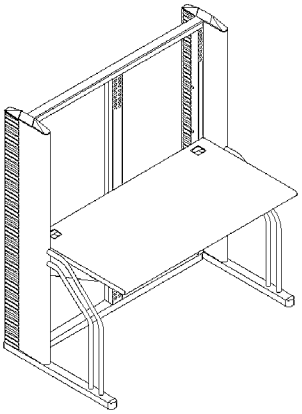
technical furniture

Linear Hook-on Worksurfaces

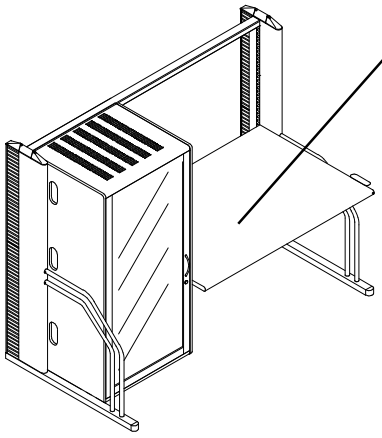
Linear Hook-On Worksurfaces come in three depths and seven lengths. Different worksurfaces have different reqirements for installation that are outlined below. 27 inch deep tops require 31" deep uprights and standard hook -on support brackets. Configuration #1 is typical of a 27 inch deep surface.

Tools Required

- -Phillips head screwdriver with extension
- -Rubber mallet
- -3/8" socket with extension
- -Measuring device



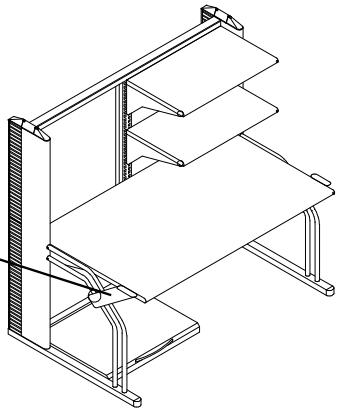
Configuration 1



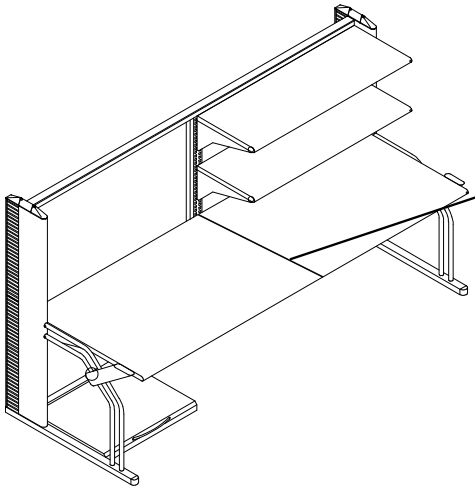
Select one Extended Top Support (MA02) for 36" deep worksurfaces not next to an upright.

Configuration 2

Use Upright Top Supports (MA01) to support 36" deep and 42" deep worksurfaces next to uprights



Configuration 3



Select one set of Extended Top Supports (MA02) to support two adjoining 36" deep worksurfaces sharing a Full Open Frame

Configuration 4

technical furniture

Linear Hook-on Worksurfaces (cont.)

Tools Required
- Phillips head screwdriver
- 3/8" Socket with extension
- Plastic mallet
- Measuring device

Linear Hook-on Worksurfaces can be installed at any height at one inch increments. The recommended Worksurface height is 29 or 30 inches off the floor.

There are three different configurations that 27 and 36 inch deep Hook-on Worksurfaces can be attached. Each configuration will vary in the installation procedure. Different depth Worksurfaces will require additional hardware when installed.

1. Determine what height the Worksurface will be by measuring from the floor to the top of the hook-on **Top Support Bracket** and adding 1.00 inch.

2. Attach the Top Support Bracket to the Full Frame and tap it into place with a plastic mallet to make sure the hooks are securely seated. See **Figure 1**.

3. Locate the small hole inside the back of the Top Support Bracket and insert the 1/4"-20 x 1/2" Hex head screw with a 3/8" socket. See **Figure 2**.

If you are installing two worksurfaces on one Full Open Frame, Extended Top Support Brackets are needed. Refer to the next page before proceeding.

If the Hook-on Modesty Panel option is used, please go to page ___for additioal instructions.

4. For Worksurfaces that are longer than 60" in length, a **Stiffener** needs to be installed. Position the Stiffener as shown in **Figure 2**. Attach the Stiffener to the Hook-on Top Support Brackets using the 1/4"-20 x 1/2" Machine screws.

   NOTE: If you are installing the Worksurface with a **Modesty Panel**, the stiffener is not needed.

5. Position the Worksurface on the Top Support Brackets so it is flush with the frame and centered between the uprights. Make sure that all of the Top Support Brackets are at the same height. The holes in the brackets will correspond to pilot holes in the top. Secure the Worksurface to the brackets using the #10 AB x .75" Phillips head screws.

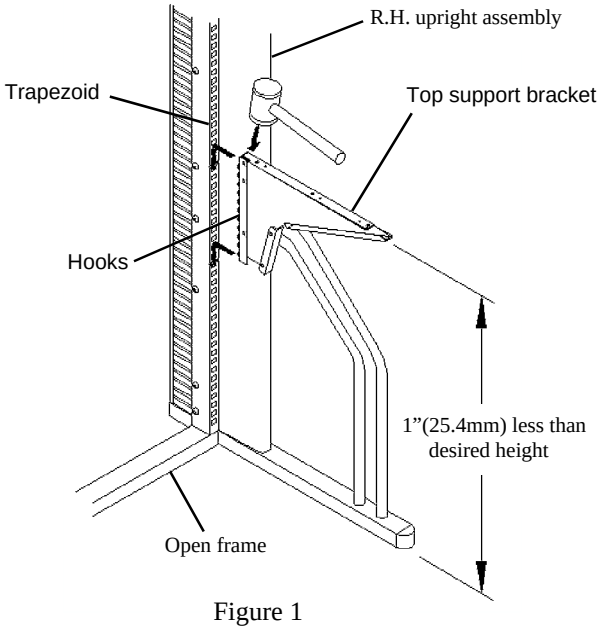


Figure 1

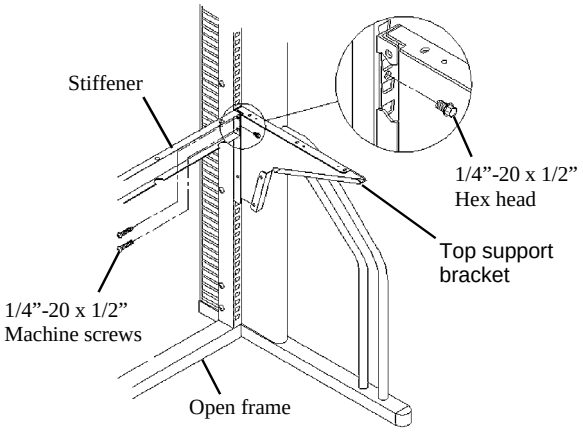


Figure 2

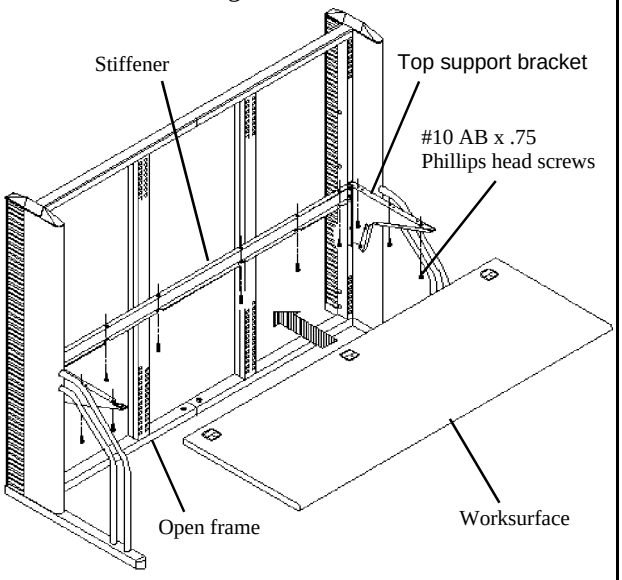


Figure 3

Linear Hook-on Worksurfaces (cont.)

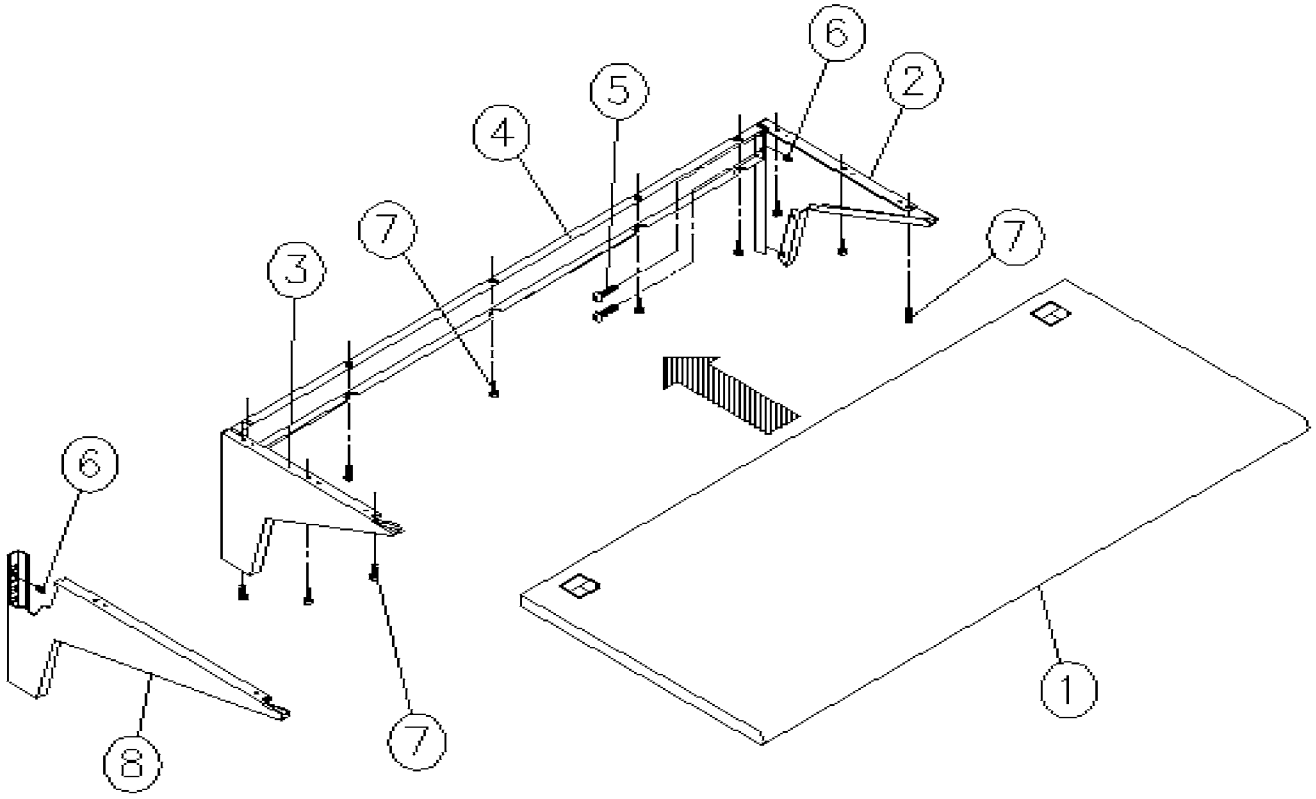
Parts List

Part Number		Description	Qty.
	5199X	Hook-on Worksurface 24” x 27”	
	5200X	Hook-on Worksurface 30” x 27”	
	5201X	Hook-on Worksurface 36” x 27”	
	5203X	Hook-on Worksurface 48” x 27”	
	5204X	Hook-on Worksurface 60” x 27”	
	5205X	Hook-on Worksurface 72” x 27”	
	5541X	Hook-on W/s 24” x 27” ESD	
	5542X	Hook-on W/s 30” x 27” ESD	
	5586X	Hook-on W/s 36” x 27” ESD	
	5544X	Hook-on W/s 48” x 27” ESD	
	5588X	Hook-on W/s 60” x 27” ESD	
1	5587X	Hook-on W/s 72” x 27” ESD	1
	5206X	Hook-On Worksurface 24” x 36”	
	5207X	Hook-On Worksurface 30” x 36”	
	5208X	Hook-On Worksurface 36” x 36”	
	5210X	Hook-On Worksurface 48” x 36”	
	5211X	Hook-On Worksurface 60” x 36”	
	5212X	Hook-On Worksurface 72” x 36”	
	5640X	Hook-On W/s 24” x 36” ESD	
	5641X	Hook-On W/s 30” x 36” ESD	
	5642X	Hook-On W/s 36” x 36” ESD	
	5644X	Hook-On W/s 48” x 36” ESD	
	5645X	Hook-On W/s 60” x 36” ESD	
	5646X	Hook-On W/s 72” x 36” ESD	

Parts List

Part Number		Description	Qty.
	5213X	Hook-on Worksurface 24” x 42”	
	5214X	Hook-on Worksurface 30” x 42”	
	5215X	Hook-on Worksurface 36” x 42”	
	5217X	Hook-on Worksurface 48” x 42”	
	5218X	Hook-on Worksurface 60” x 42”	
1	5219X	Hook-on Worksurface 72” x 42”	1
	5681X	Hook-on W/s 24” x 42” ESD	
	5682X	Hook-on W/s 30” x 42” ESD	
	5683X	Hook-on W/s 36” x 42” ESD	
	5685X	Hook-on W/s 48” x 42” ESD	
	5686X	Hook-on W/s 60” x 42” ESD	
	5687X	Hook-on W/s 72” x 42” ESD	
2	3574X	Top Support, R.H.	1
3	3573X	Top Support, L.H.	1
4	2450X	Stiffener, 60”	1
	2433X	Stiffener, 72”	
5	68681	1/4”-20 x 3/8” Button Head Cap Screw	4
6	54348	1/4”-20 x 1/2” Hex Washer Head Screw	2
7	59103	#10AB x .75” RPTF Screw	4-14
8	3810X	30” Deep Top Support. L.H. (Extended Top Support)	1
9	3809X	30” Deep Top Support, R.H. (Extended Top Support) (not shown)	1

Linear Hook-on Worksurfaces (cont.)



technical furniture

Corner Hook-On Worksurface

Tools Required
- -5/32” Allen Wrench (provided)
- -Phillips head screwdriver
- -Plastic mallet

Important
Corner Hook-on Worksurfaces with 36” deep sides require the use of:
- -40” deep **Uprights** (6L08, 7L08, 8L08)
- -**Aluminum Top Supports** (MA01-MM).

The 27” deep Worksurface sides require 31” deep Uprights (6L07, 7L07, 8L07).

Determine the desired location of the **Corner Hook-on Worksurface**. The 36” deep Worksurface can be positioned at a height from 27” to 31” in 1” increments. This limit is due to the requirement of Aluminum Top Supports with 36” deep surfaces.

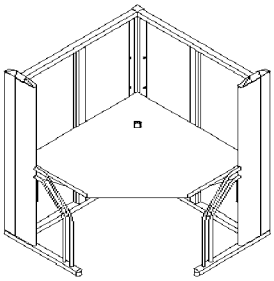
The 26.9” deep Worksurfaces can be positioned in 1” increments to suit your needs. Typical heights, floor to the top of the surface are:

Seated position .....29”
Standing range.....36” - 40”

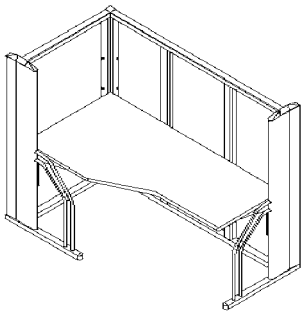
Using the 5/32” Allen wrench , remove from the Upright any 1/4”-20 x 3/8” Button head cap screws that would interfere with the placement of the Hook-on Surface.

NOTE: All Corner Hook-on Worksurfaces require three supports, one installed to each connecting side and the third in the corner (Corner post). See **Figure 2**.

Important
The depth of the Hook-On Corner Worksurfaces is .30” less than the depth of Linear Hook-On Surfaces. This is to eliminate an interference with the corner post.



Corner Worksurface



Integrated Corner Worksurface

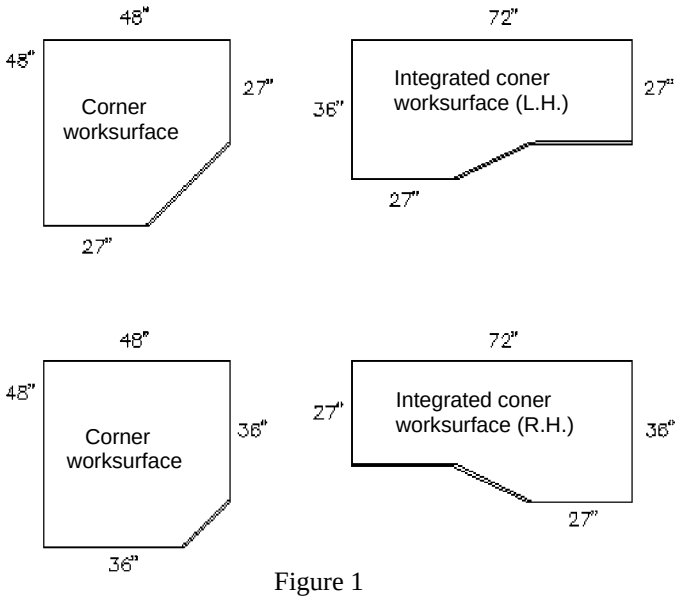


Figure 1

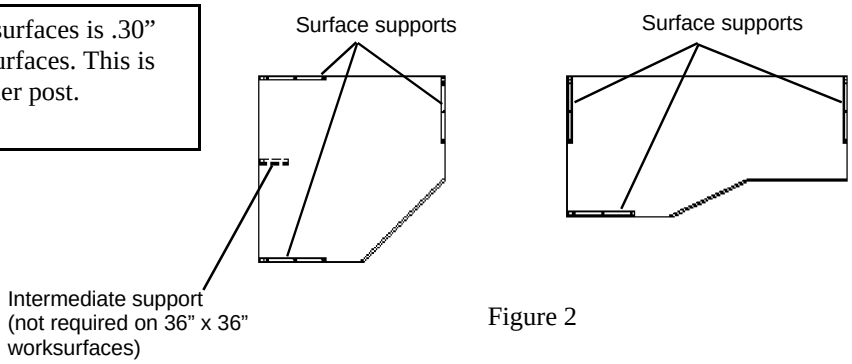


Figure 2

Corner Hook-On Worksurface

1. Determine what height the Corner Hook-on Worksurface will be by measuring from the floor to the top of the hook-on **Top Support** and adding 1".

2. Insert the hooks of the Top Support into the slotted standard of the Full Frame and push down. To assure that the hooks are seated, tap the top rear corner with a plastic mallet or equivalent. See **Figure 3**.

3. Locate the small hole inside the back of the Top Support and insert the 1/4"-20 x 1/2" Hex head screw with a 3/8" socket. See **Figure 4**.

   Install the remaining Top Supports. Make sure that all supports are at the same level and firmly seated in the slotted standards.

4. For Worksurfaces longer than 60" in length, a **Stiffener** has to be installed. Position the Stiffener as shown in **Figure 4**. Attach the Stiffener to the Hook-on Top Supports using the 1/4"-20 x 1/2" Machine screws.

   NOTE: If you are installing the Worksurface with an optional **Modesty Panel**, the Stiffener is not needed.

   NOTE: It will be necessary to lift the Worksurface at an angle to clear the uprights.

5. Position the Worksurface on the Support Brackets so that it is flush with the frame. Make sure that all of the support brackets are at the same height. The holes in the brackets will correspond to the pilot holes in the laminate top. Secure the Worksurface to the Support Brackets using the #10AB x .75" Phillips head screws. See **Figure 5**.

   If you are installing a 72" wide Worksurface, also fasten the Worksurface to the rear Top Support.

   NOTE: The maximum Worksurface loading is 300lbs. regardless of size.

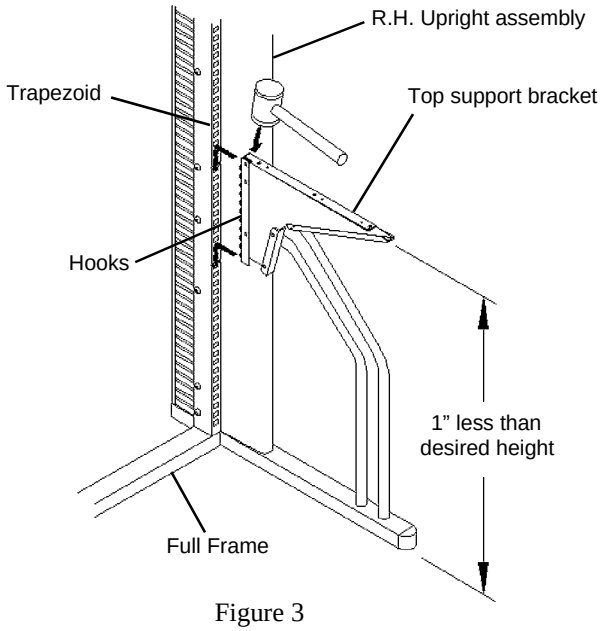


Figure 3

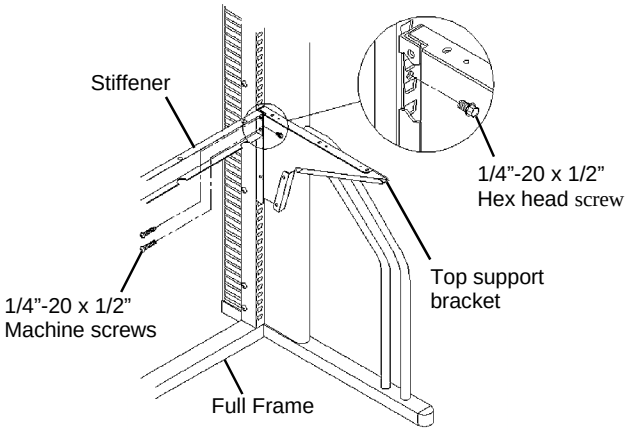


Figure 4

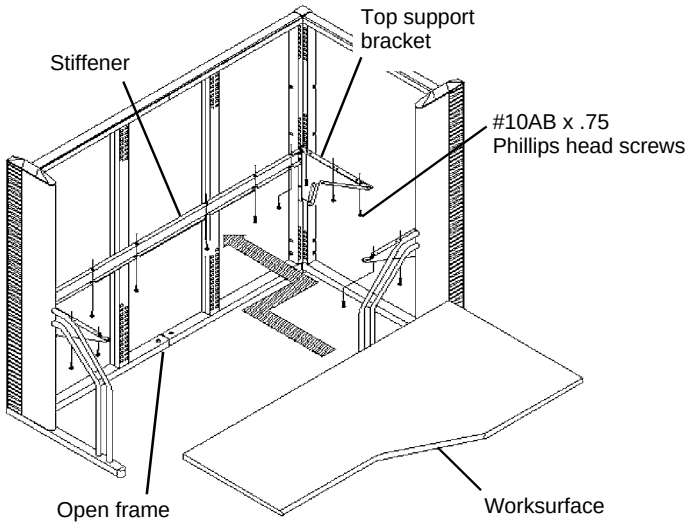
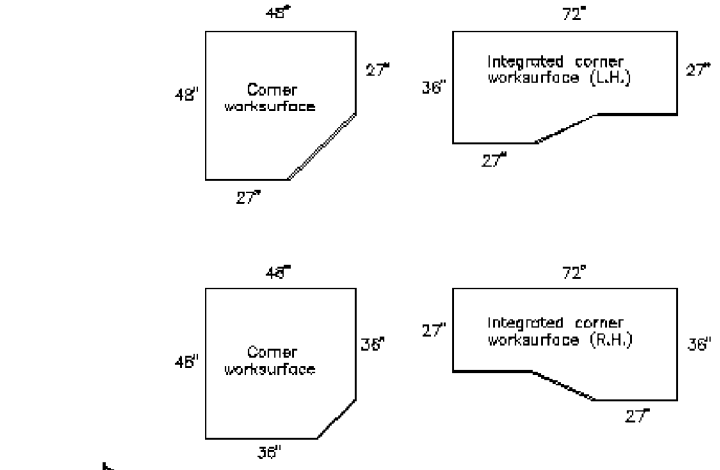


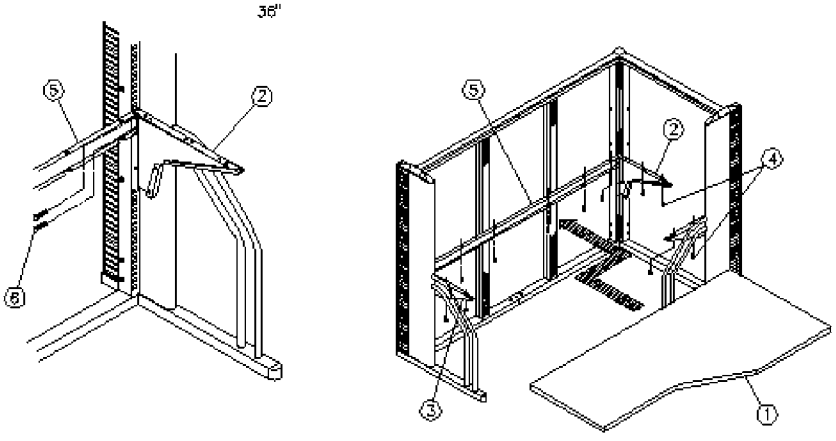
Figure 5

technical furniture

Corner Hook-On Worksurface

Parts List			
Part Number		Description	Qty.
1	3007X	48” x 48” Corner Worksurface, 27” Sides	1
	3008X	48” x 48” Corner Worksurface, 36” Sides	
	3018X	72” x 36” Integrated Corner Worksurface, L.H.	
	3019X	72” x 36” Integrated Corner Worksurface. R.H.	
2	3574X	Hook-On Surface Support, R.H.	1-2
3	3573X	Hooh-On Surface Support, L.H.	1-2
4	59103	#10AB x .75 Phillips Pan Head Thread Forming	15
5	2433X	Rear Support (72” Surface only)	1
6	68681	1/4”-20 x .38 Button Head Cap Screw	
7	3125X	Intermediate Rear Support (see Figure 2)	1





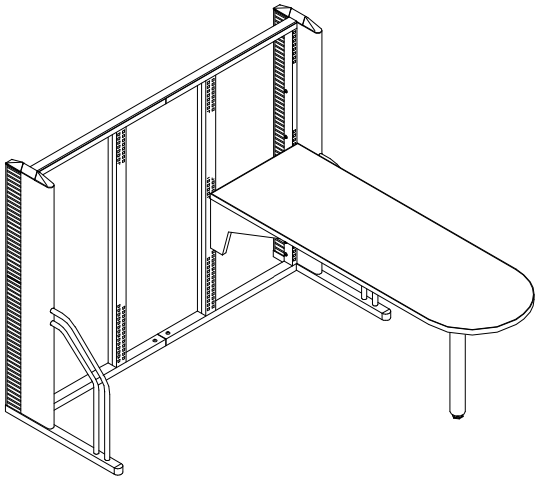
technical furniture

Hook-On Peninsula Worksurface

Please read these instructions carefully and follow the installation steps in sequence.

Tools Required

- 5/32 Hex Key
- Phillips Head Screwdriver
- 3/8" Socket with extention
- Ratchet



Hook-On Peninsula

NOTE: The height adjustable **Tubular Leg** provides approximately 1.00" height adjustability to the Worksurface.

Using the 5/32" Hex Key, remove from the Upright any 1/4-20 x 1/2" Button head cap screws that would interfere with the Support Brackets.

1. Remove the two **Hook-on Top Supports** from the carton. Hook them to the Full Frame at 28" (top of the bracket) for a 29" finished height (or 39" for stand-up height). To assure the hooks are properly seated, tap the top rear corner with a plastic or plastic mallet. See **Figure 1**.

   Locate the small hole inside the back of the Top Support and insert the 1/4"-20 x 1/2" Hex head screw with the 3/8" socket. See **Figure 1**.

   The supports are left and right hand. The smooth

2. Remove the **Peninsula Worksurface** from the carton and place it carefully , finish side down, on a smooth clean surface.

3. Attach the **Tubular Leg** to the worksurface. Align the holes in the mounting plate with the appropriate holes in the worksurface and secure using the six #10AB x 1.00" Pan head self tapping screws provided. See **Figure 2**.

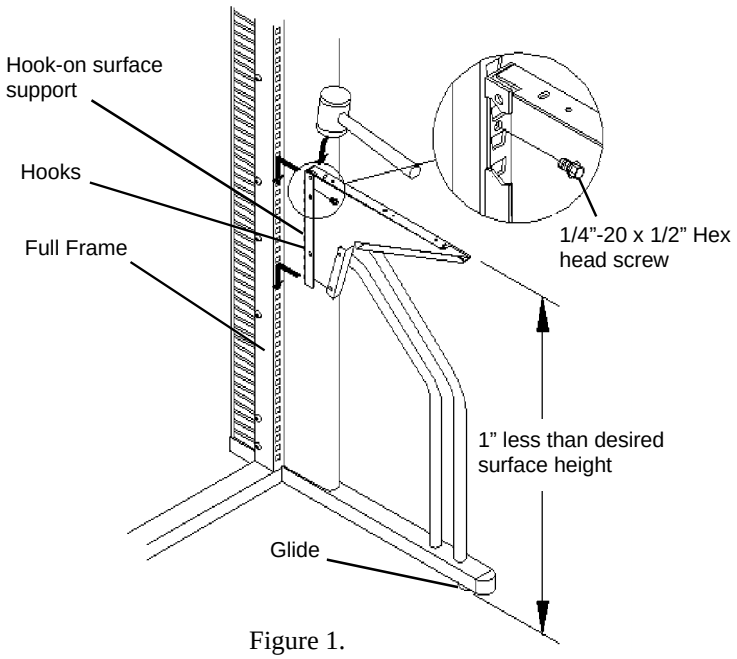


Figure 1.

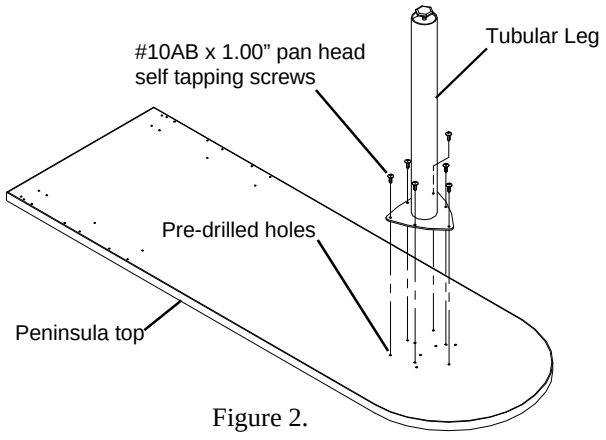


Figure 2.

Hook-On Peninsula Worksurface (cont.)

3. With two people, turn the Peninsula upright and place it onto the Hook-on Support Brackets. Slide it back until it touches the Full Frame.

   Align the oval holes in the Support Brackets with holes located approximately .50" from the Peninsula edges.

   Drive three #10 x 3/4" screws through each bracket into the Peninsula. See **Figure 3**.

   NOTE: If there is an adjacent Worksurface, install a **Tie Plate** at the front of the surfaces.

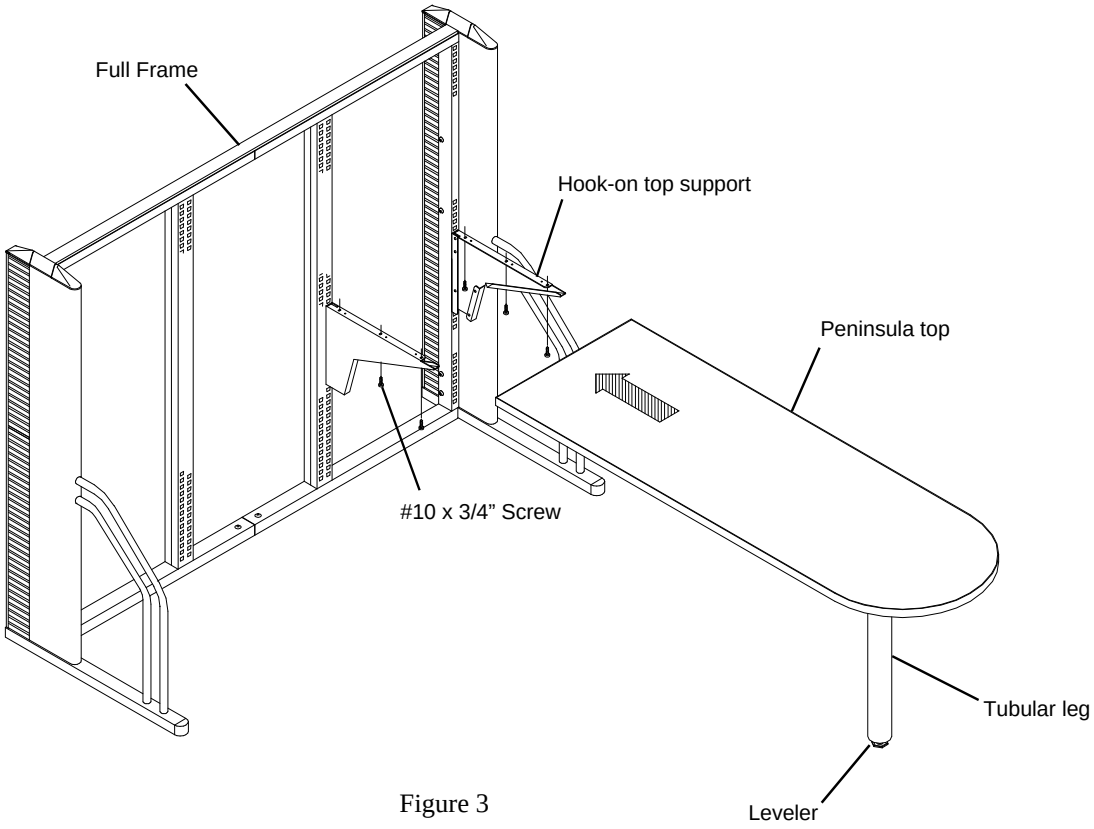


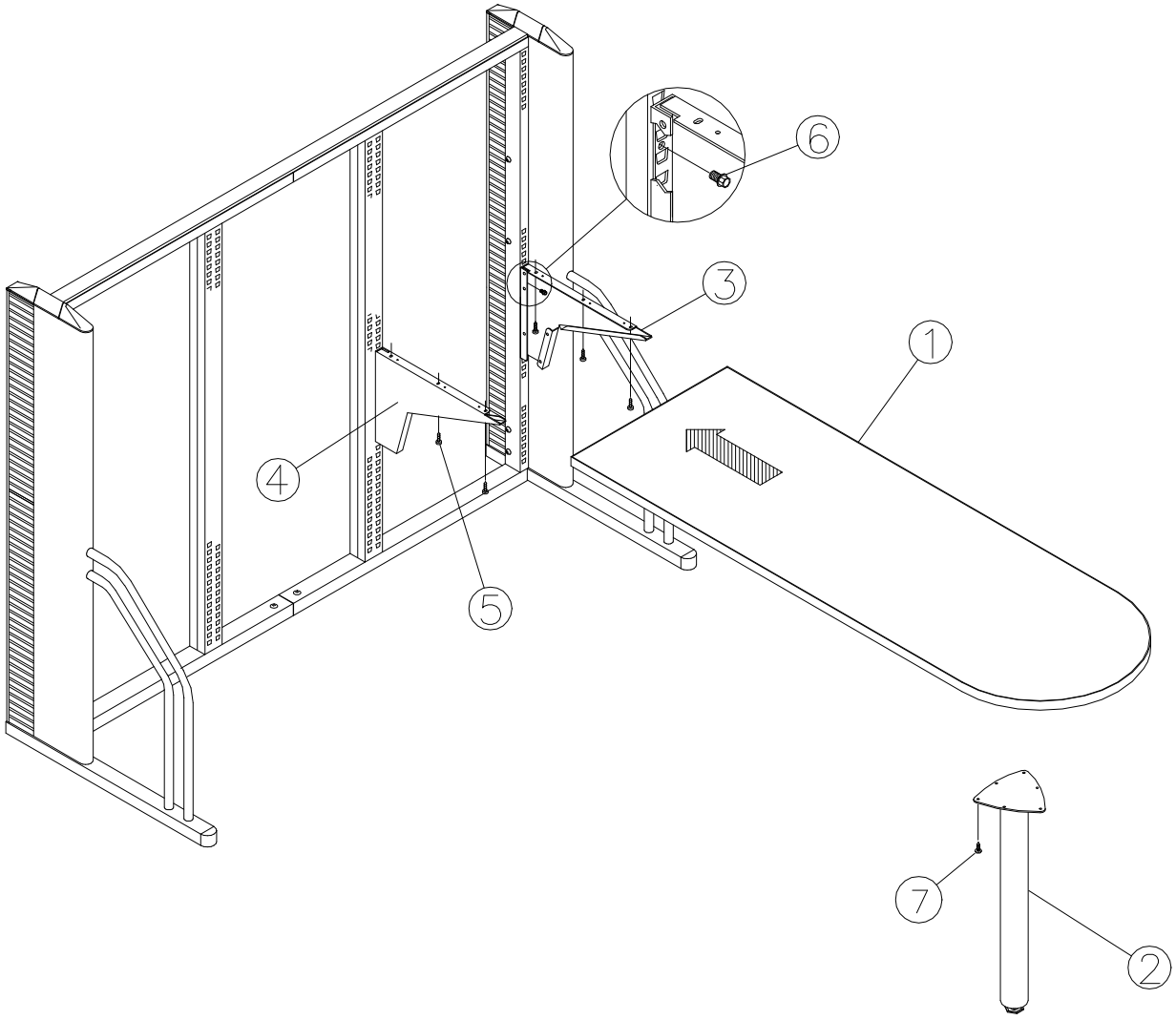
Figure 3

Hook-On Peninsula Worksurface (cont.)

Parts List

Part Number		Description	Qty.
1	4023X	Peninsula, 60” x 24”	1
	4024X	Peninsula, 60” x 30”	
	4003X	Peninsula, 60” x 36”	
	4025X	Peninsula, 72” x 24”	
	4026X	Peninsula, 72” x 30”	
	4027X	Peninsula, 72” x 36”	
	7902X	Peninsula, 60” x 24” (36” sides)	
	7903X	Peninsula, 60” x 30” (36” sides)	
	7905X	Peninsula, 72” x 24” (36” sides)	
	7906X	Peninsula, 72” x 30” (36” sides)	
	7907X	Peninsula, 72” x 36” (36” sides)	
	7908X	Peninsula, 60” x 24” (36” sides), ESD	
	7909X	Peninsula, 60” x 30” (36” sides), ESD	
	7910X	Peninsula, 60” x 36” (36” sides), ESD	
	7911X	Peninsula, 72” x 24” (36” sides), ESD	
	7912X	Peninsula, 72” x 30” (36” sides), ESD	
	7912X	Peninsula, 72” x 36” (36” sides), ESD	
2	9130X	Tubular Leg, 27.66”	1
	9175X	Tubular Leg, 34.51”	
	9176X	Tubular Leg, 39.16”	
3	3574X	Surface Support, R.H.	1
4	3573X	Surface Support. L.H.	1
5	59103	#10 x 3/4” Sheet Metal Screw	10
6	54348	1/4”-20 x 1/2” Hex Head Screw	2
7	62071	#10AB x 1.00” Pan Head Self Tapping Screw	6
8	57488	Cord Clip (not shown)	4
9	81066	Tie Plate	1

Hook-On Peninsula Worksurface (cont.)

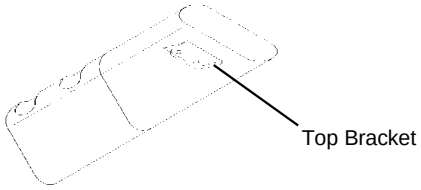


technical furniture

Aluminum Top Supports

Tools Required
-5/32" Allen wrench
-Phillips head screwdriver

NOTE: The **Aluminum Top Supports** are constructed of two die cast aluminum parts and are designed to attach to Enhanced Uprights using front to back tubular stabilizers.



Aluminum Top Support
(R.H. shown)

The Aluminum Top Supports can be configured as left hand, right hand or center. A center Top Support is required where two 36" or 42" deep worksurfaces meet. See **Figure 1**.

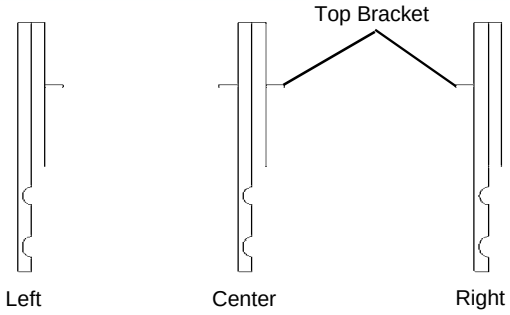


Figure 1

Based on the quantity of 36"and 42" deep worksurfaces, and the configuration being installed, assemble the required quantity of left hand, right hand and center Top Supports.

1. Fasten the appropriate **Top Bracket(s)** to the Top Support, using two #10-24 x 3/8" Socket head cap screws that are provided. See **Figure 2**.

   Please Note: *If the Aluminum Top Support is to be used in conjunction with* a *Worksurface Filler do* ***not*** *use the Top Brackets supplied with the Top Support. Use the replacement Top Brackets supplied with the Worksurface Filler.*

   On left and right hand supports, install the appropriate **Plastic Insert** into the recessed area on the side opposite the Top Bracket.

   Do not install the **Clamps** at this time.

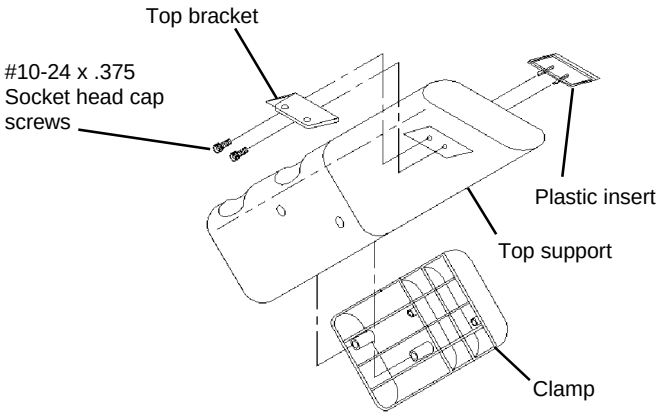


Figure 2

2. Position the Top Support onto the tubular stabilizers as shown in **Figure 3**. Slide the Top Support up the stabilizers until the Top Bracket contacts the underside of the worksurface.

   Fasten the **Clamp** to the Top Support using the four #10-24 x 1.00" Socket head cap screws provided. This will lock the Top Support in place.

3. Fasten the Top Supports to the underside of the worksurface using the #10AB x 3/4" Phillips head screws provided. Carefully drill a 1/2" deep pilot hole in the bottom of the worksurface for each screw. See **Figure 3**.

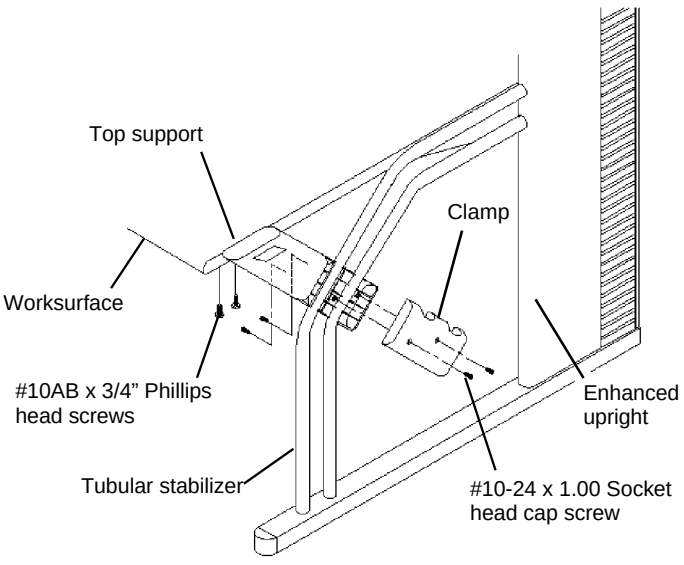
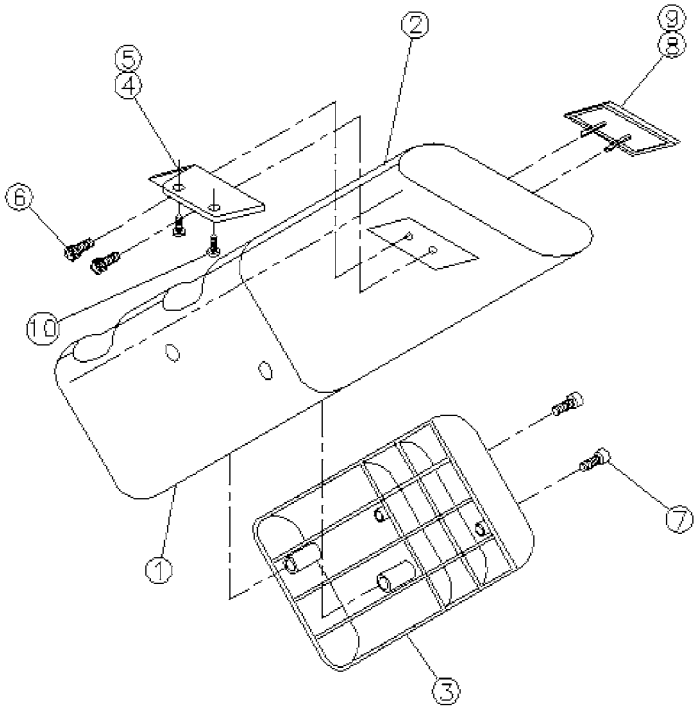


Figure 3

Aluminum Top Supports (cont.)

Parts List

Part Number		Description	Qty.
1	3098X	Support Half, L.H.	1
2	3099X	Support Half, R.H. Upper	1
3	3100X	Support Clamp	1
4	3101X	Top Bracket, L.H.	1
5	3102X	Top Bracket, R.H.	1
6	82460	#10-24 x .375" Socket Head Cap Screw	4
7	82461	#10-24 x 1.00" Socket Head Cap Screw	8
8	3120X	Insert, L.H.	1
9	3121X	Insert R.H.	1
10	59103	#10AB x >75 Phillips Pan Head Thread Forming	4



technical furniture

Worksurface Filler

Tools Required
-Phillips head screwdriver
-Electric drill
-1/8" Drill bit

PLEASE NOTE:
- **Worksurface Fillers** can only be used on Worksurfaces located 29" or more from the floor.
- Worksurface Fillers can only be used where two adjacent Worksurfaces are located on either side of an upright.
- The adjacent Worksurfaces must be located at the same height from the floor.

IMPORTANT:
36" and 42" deep Worksurfaces usually require **#MA01-MM Aluminum Top Supports**. If the Worksurface Filler is going to be installed in conjunction with a Top Support, the Top Brackets included with the Worksurface Filler must be used ***instead of*** the Top Brackets included with the Aluminum Top Support.

Before assembling the Aluminum Top Support to the tubular stabilizers, assemble the appropriate replacement Top Brackets to the support. Use two #10-24 x 1/2" Phillips head machine screws for each Bracket. See **Figure 1**.

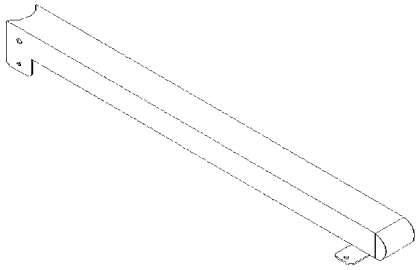
Complete the installation of the Top Support as instructed in the Top Support instruction sheet. ***The top of the support should align with the bottom of the worksurface.***

*Replacement Top Brackets are **not** supplied with 27" deep and 30" deep Worksurface Fillers.*

WORKSURFACE FILLER INSTALLATION

1. Position the Worksurface Filler between the adjacent Worksurfaces. The front bracket flanges should rest under the surfaces. Align the "bull nose" of the Filler with the "bull nose" on the surfaces. Mark the location of the bracket holes and carefully drill two 1/8" diameter by 1/2" deep pilot holes.

2. Attach the Filler using two #10 x 3/4" Phillips head wood screws at the front bracket. Use two #10 x 3/8" Phillips head thread forming screws to attach the rear of the filler to the worksurface brackets. See **Figure 2**.



Worksurface Filler

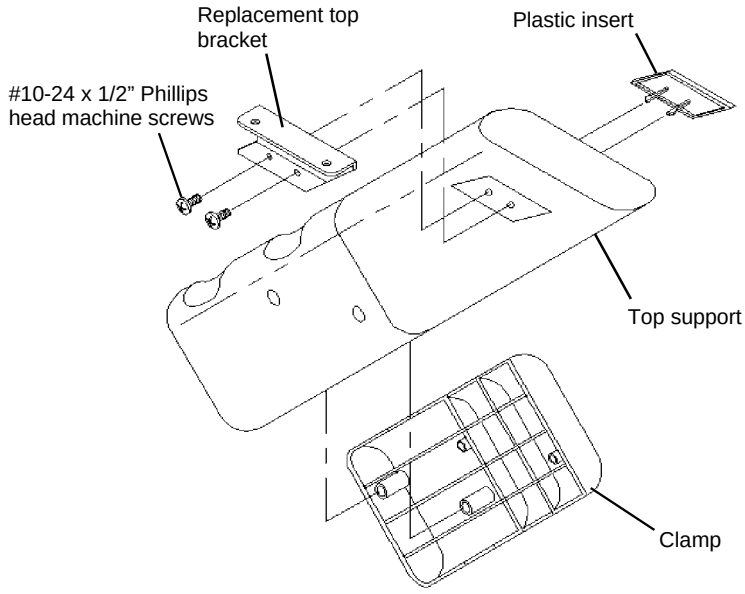


Figure 1

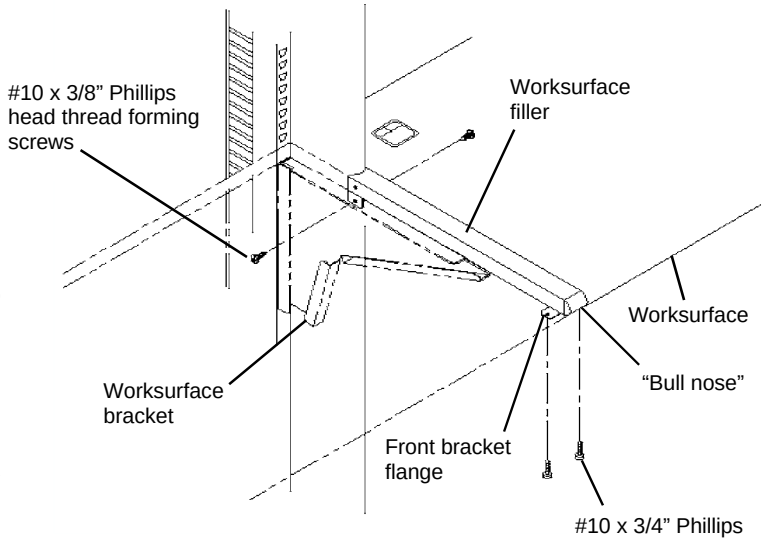


Figure 2

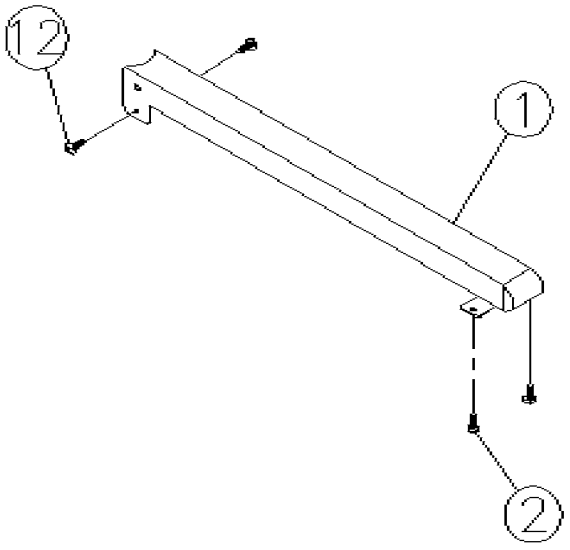
Worksurface Filler (cont.)

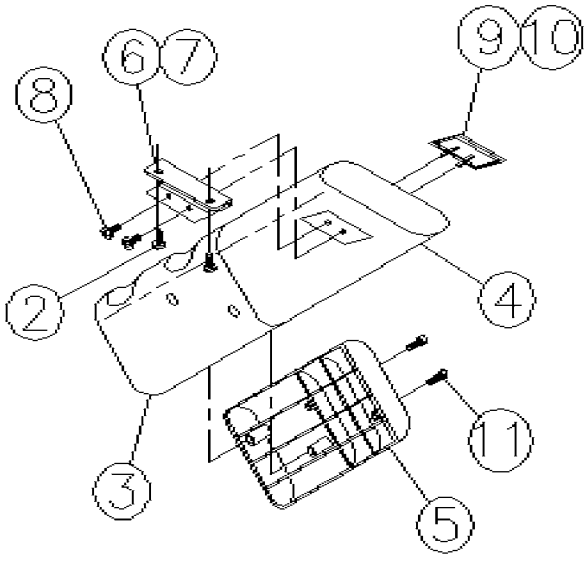
Parts List

Part Number		Description	Qty.
1	6045X	Worksurface Filler, 27” LMS	1
	6048X	Worksurface Filler, 30” LMS	
	6046X	Worksurface Filler, 36” LMS	
	6047X	Worksurface Filler, 42” LMS	
	6049X	Worksurface Filler, 27” Basic +	
	6050X	Worksurface Filler, 36” Basic +	
	6051X	Worksurface Filler, 42” Basic +	
	6106X	Worksurface Filler, 27” Double Upright	
	6107X	Worksurface Filler, 36” Double Upright	
	6108X	Worksurface Filler, 42” Double Upright	

Parts List

Part Number		Description	Qty.
2	59103	#10AB x .75 Philips Pan Head Thread Forming screw	6
3	3098X	Support Half, L.H.	1
4	3099X	Support Half, R.H. Upper	1
5	3100X	Support Clamp	1
6	6558X	Top Support Bracket. L.H.	1
7	6559X	Top Support Bracket, R.H.	1
8	55617	#10-24 x .50” Phillips Head Machine Screw	4
9	3120X	Insert, L.H.	1
10	3121X	Insert, R.H.	1
11	82461	#10-24 x 1.00” Socket Head Cap Screw	8
12	54055	#10-24 x 3/8” Pan Head Thread Forming Screw	2





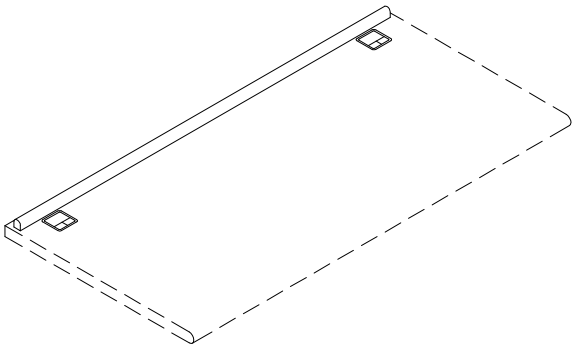
technical furniture

Worksurface Backstop

Tools Required

-Tape Measure
-Electric Drill
-9/32”(.281) Drill
-Phillips head Screwdriver

1. Accurately measure, locate and drill the correct number of .281 diameter holes in the back of the Worksurface. See **Figure 1** and the chart below for the specific hole quantities and location.



Backstop

Hole Locations

WORKSURFACE		BACKSTOP		A	B	C	D	E
SIZE	DESCRIPTION	SIZE	ITEM NO.					
24"	HOOK-ON WORKSURFACE	24"	MB26	1.20"	2.00"	2	10.00"	20.00"
30"	HOOK-ON WORKSURFACE	30"	MC26	1.20"	2.00"	2	13.00"	26.00"
36"	HOOK-ON WORKSURFACE	36"	MG26	1.20"	2.00"	2	16.00"	32.00"
42"	HOOK-ON WORKSURFACE	42"	MD26	1.20"	2.00"	4	9.50"	38.00"
48"	HOOK-ON WORKSURFACE	48"	ME26	1.20"	2.00"	4	11.00"	44.00"
60"	HOOK-ON WORKSURFACE	60"	MM26	1.20"	2.00"	4	14.00	56.00"
72"	HOOK-ON WORKSURFACE	72"	MF26	1.20"	2.00"	5	13.60"	68.00"
48" X 48"	CORNER HOOK-ON WORKSURFACE	42"	MD26	1.03"	5.00"	4	9.50"	38.00"
36" X 36"	CORNER HOOK-ON WORKSURFACE	30"	MC26	1.03"	5.00"	2	13.00"	26.00"
36" X 72"	INTEGRATED CORNER WORKSURFACE	30"	MC26	1.03"	5.00"	2	13.00"	26.00"
		60"	MM26	1.03"	5.00"	4	14.00	56.00"

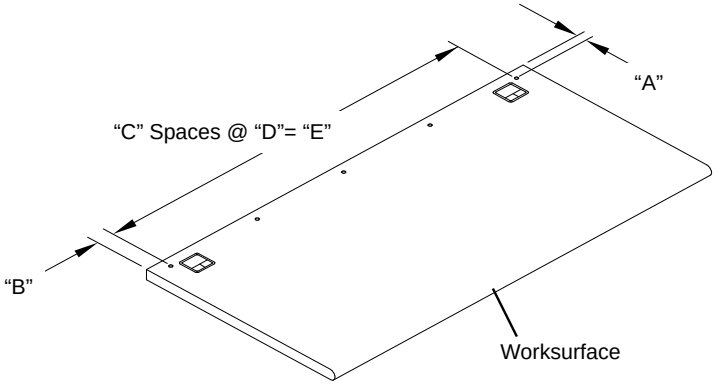


Figure 1

2. Install the **Backstop** onto the Worksurface using the #10AB x 1-3/4” phillips pan head thread forming screws provided. See **Figure 2**.

Note: If the Backstop is being installed onto a Worksurface that was produced prior to October 1995, the Backstop may extend over the back edge of the Cable Manage-
ment bushing(s).

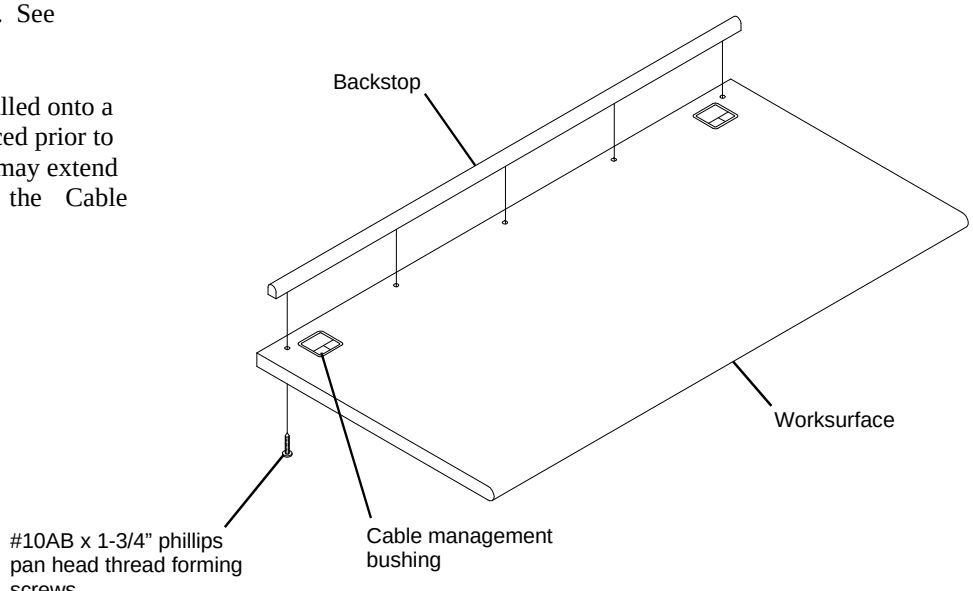
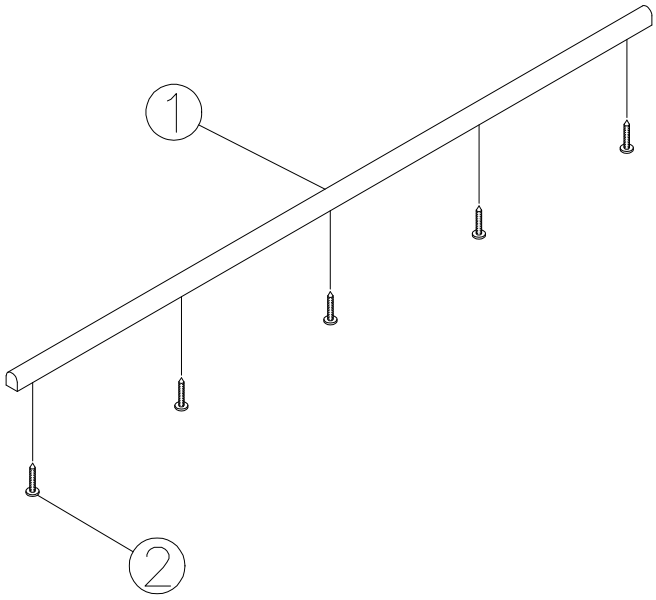


Figure 2

Worksurface Backstop (cont.)

Parts List			
Part Number		Description	Qty.
1	8969X	24” Backstop	1
	8970X	30” Backstop	
	8971X	36” Backstop	
	8973X	48” Backstop	
	8974X	60” Backstop	
	8975X	72” Backstop	
2	85320	#10-24 x 1.75” Phillips Pan Head Thread Forming Screws	3-6



technical furniture

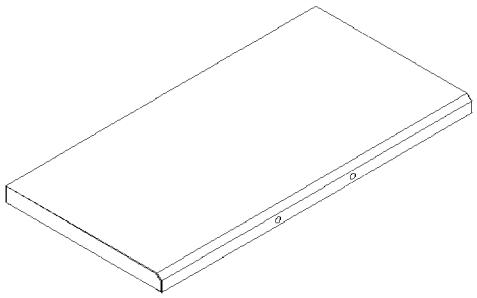
Tower Shelf

Tools Required
-None

1. Position the **Tower Floor Shelf** between the Upright Feet of the Full Frame or Slotted Posts of a **Basic** system. See **Figure 1**.

2. Adjust the leveler/glides, on the bottom of the shelf, as necessary to level the Floor Shelf prior to loading.

Note: the recommended maximum loading of the Floor Tower Shelf is 900# (409 kg.)



Tower Floor Shelf

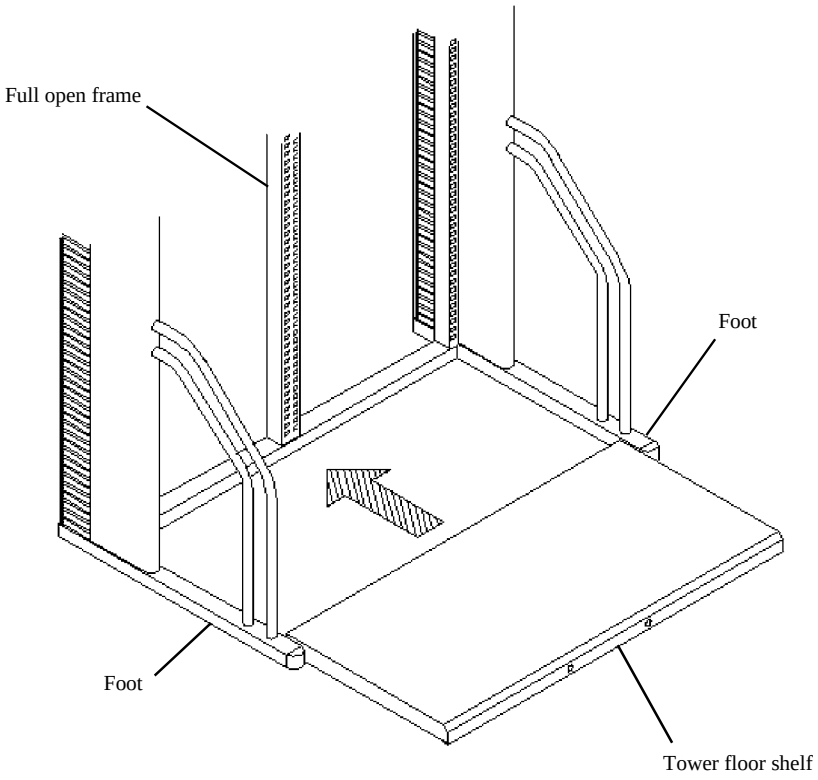
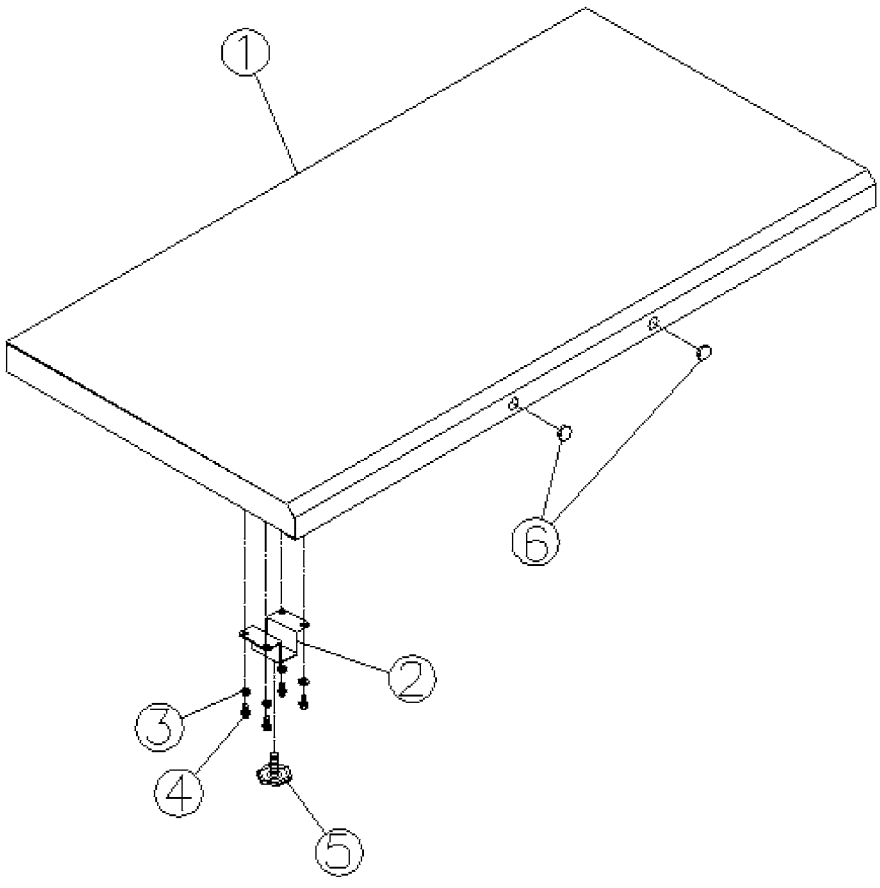


Figure 1

Tower Shelf (cont.)

Parts List			
Part Number		Description	Qty.
1	2596X	24” LMS Tower Roll-Out	1
	2597X	30” LMS Tower Roll-Out	
	2598X	36” LMS Tower Roll-Out	
	2600X	48” LMS Tower Roll-Out	
	2601X	60” LMS Tower Roll-Out	
	2602X	72” LMS Tower Roll-Out	
2	2740X	Leveler Bracket	4-6
3	59588	Lock Washer	16-24
4	54348	1/4”-20 x 1/2” Hex Washer Head Screw	16-24
5	21333	Glide Foot	4-6
6	87034	Hole Plug	2



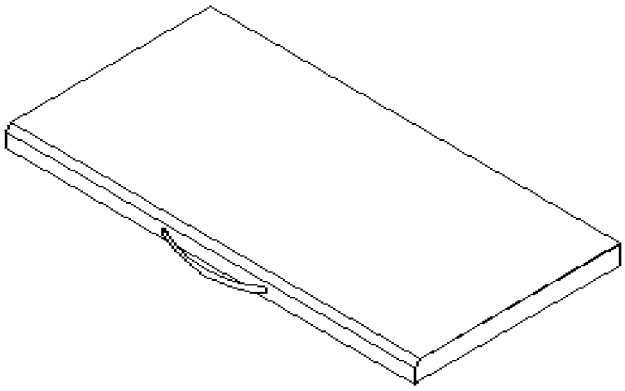
technical furniture

Tower Roll-out Shelf

Tools Required
-Phillips head screwdriver
-5/32 Allen wrench

Note: The **Tower Roll-Out** can be connected to the Full Frame, Open Frame, Basic, or Basic Plus prior to use to prevent forward creep during repeated use.

The recommended maximum load capacity of the Tower Roll-Out is 1000 lbs, 200 lbs on the 12" wide unit.



Tower Roll-Out

Assembling the handle to the Tower Roll-Out

1. Place the Roll-Out , upside down, on it's shipping carton. Extend the Roll-Out front approx. 2"-3" beyond the carton edge. See **Figure 1**. Remove the tape strips that held the **Base Pan** in position during shipping, and slide the Base Pan back.

Note: The 12" Roll-Out has a smaller handle (6.00") than the 24" through 72" (12.76").

2. Assemble a **12.76" Handle** to the Roll-Out using the two lockwashers and 4mm x 6mm phillips fillister head machine screws. Tighten securely. See **Figure 1**.

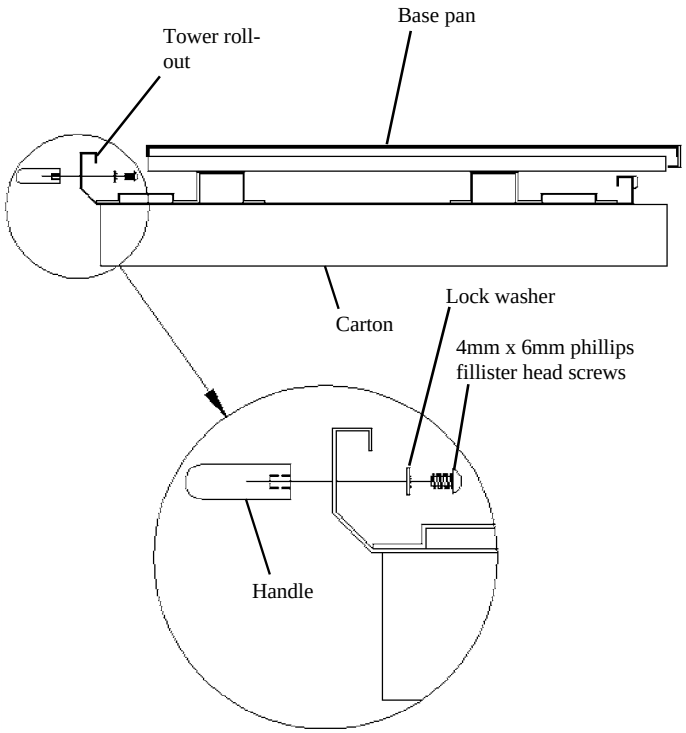


Figure 1

Tower Roll-out Shelf (cont.)

2. Position the Tower Roll-out component between the feet of the unit. Center it between the feet and extend the Roll-Out platform from the Base Pan. See **Figure 2**.

Note: If using multiple 12" Tower Roll-Outs, space them evenly between the feet. Six Roll-Outs used with a 72" wide Full frame will have approximately 5/16" between each. The spacing will vary depending on the Full Frame width.

Installing the Retention Brackets (Full Frame, Lower Frame, Open Frame)

3. Install **Bracket "A "**or **"B"** (use Bracket "A" for Full Frame or Open Frame; use Bracket "B" for Lower Frame) by inserting the side without holes under the Frame. It may be necessary to raise the frame slightly in order to slide the Bracket underneath. See **Figure 2**.

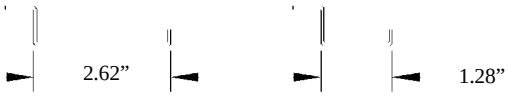
Note: The center 12" Roll-Out (using 5 Roll-Outs) on a 60" wide Full Frame cannot be attached to the Frame due to the location of the double standard and adjustable glide in the center.

4. Slide the Bracket over the back flange on the Base Pan and align the holes in each. See **Figure 2**.

   Fasten the Brackets in place using the #10-24 screws provided.

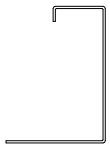
   Two Brackets are on each 24" through 72" Tower roll-out. One with each 12" Tower roll out.

Note: Additional holes are provided in the Base Pan of the 24" thru 72" wide Tower Roll-Outs to facilitate installing units in a back-to-back configuration on LMS Frames with double uprights.



Bracket "A"
Full Frame/Open Frame

Bracket "B"
Lower Frame



Bracket "C"
Foundations

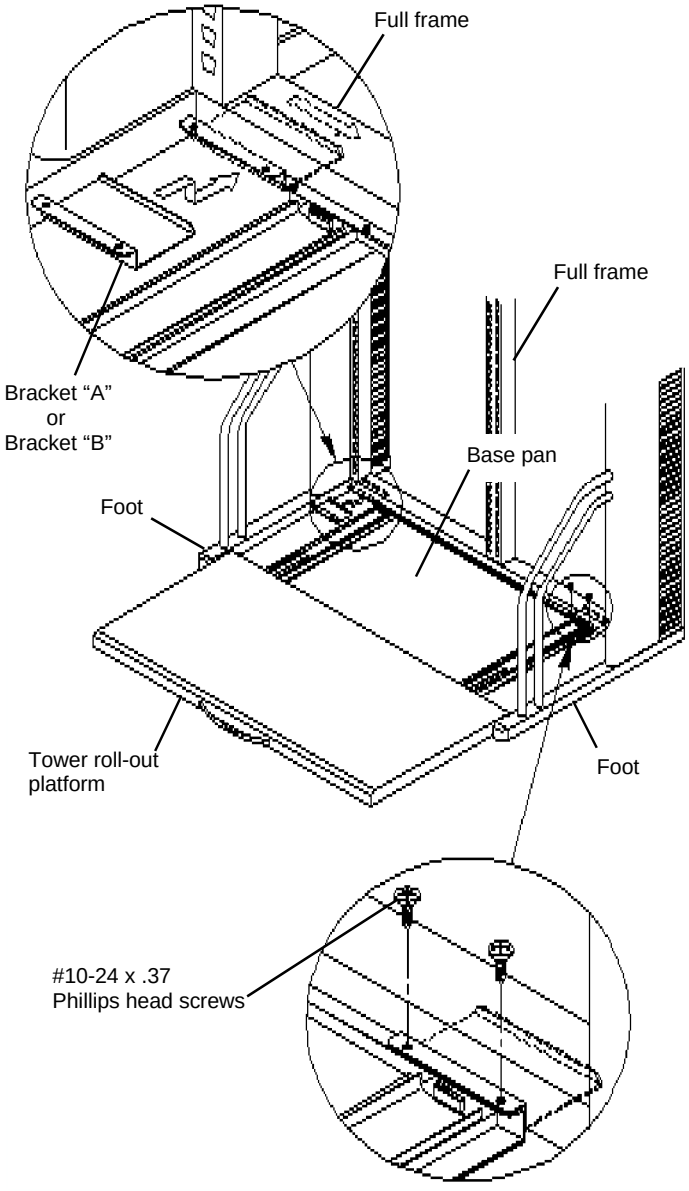


Figure 2

Tower Roll-out Shelf (cont.)

Installing the Retention Brackets (Foundations)

5. Install **Bracket "C"** by sliding the Bracket over the Cross tie as shown in **Figure 3**.

6. Position the Bracket over the back flange on the Base Pan and align the holes in each. See **Figure 4**.

7. Fasten the Brackets in place using the #10-24 screws provided. See **Figure 4**. There are two Brackets on each 24" through 72" Tower Roll-out and one with each 12" Tower Roll-out.

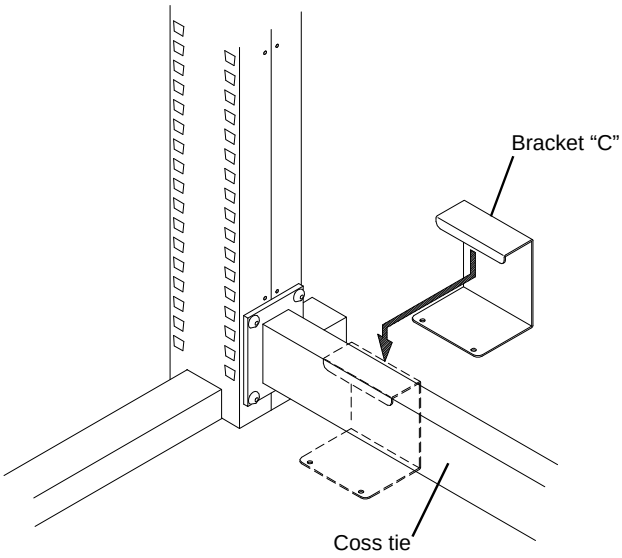


Figure 3

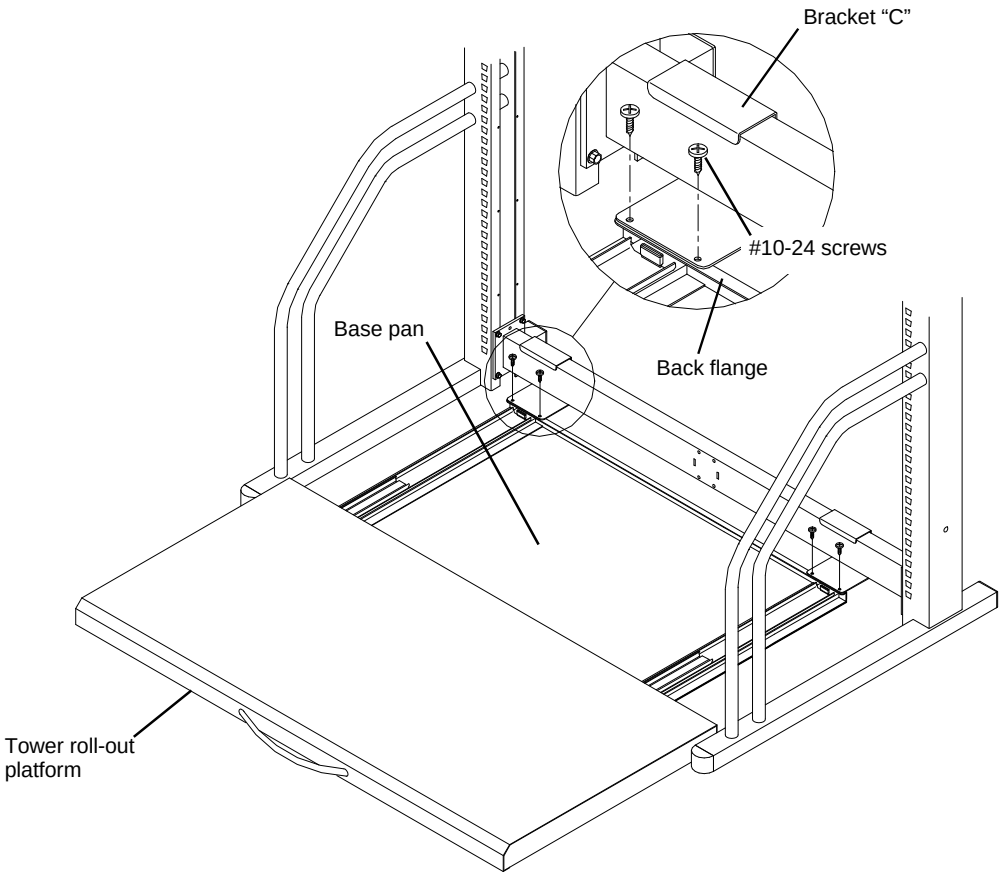


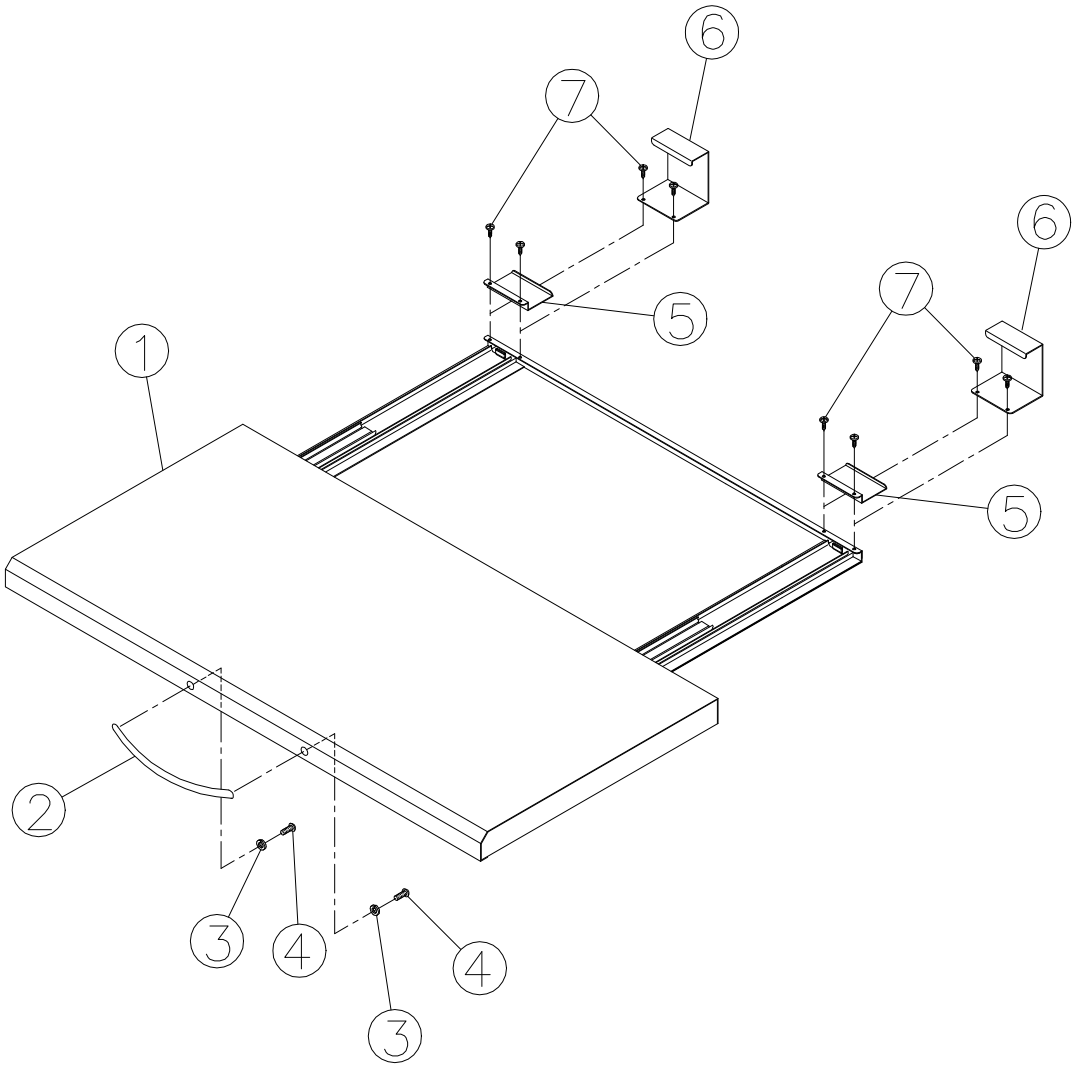
Figure 4

technical furniture

Tower Roll-out Shelf (cont.)

Parts List			
Part Number		Description	Qty.
1	LA28-XX	12” Tower Roll-out	1
	LB28-XX	24” Tower Roll-out	
	LC28-XX	30” Tower Roll-out	
	LG28-XX	36” Tower Roll-out	
	LE28-XX	48” Tower Roll-out	
	LM28-XX	60” Tower Roll-out	
	LF28-XX	72” Tower Roll-out	
2	81911	Handle (12” Tower R/O)	1
	87033	Handle	

Parts List			
Part Number		Description	Qty.
3	18977	External Lock Washer	2
4	81868	4mm x 6mm Phillips Fillister Head Screw	2
5	2605X	Bracket “A”	2
	2690X	Bracket “B”	
6	9138X	Bracket “C”	2
7	66714	#10-24 x 3/8” Phillips Pan Head Thread Forming Screw	8



technical furniture

Hook-on Shelving Components

Tools Required
-Phillips head screwdriver
-Plastic mallet
-5/33" Allen wrench

1. Determine the location of the **Shelf End Panels**. Positon the end panels as shown. (The End Panels are stamped "R.H." and "L.H.") Insert the hooks on the End Panels into the slotted standards and push down. To assure the hooks are seated, tap the top rear corner of the panels with a plastic mallet or equivalent. See **Figure 1**.

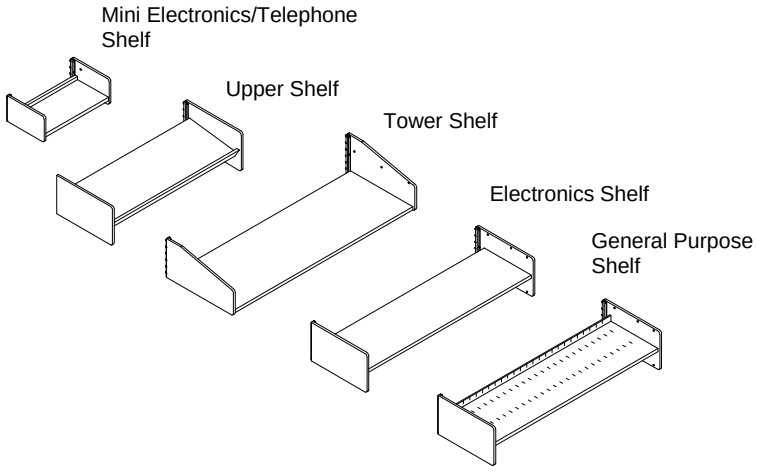
   Make sure both End Panels are in the same location.

NOTE: If the shelf is being installed in the lowest possible position, it is recommended that the shelf be pre-assembed as shown above (upper right), and then installed on the Full Frame with two people. This allows the screws to be pre-tightened.

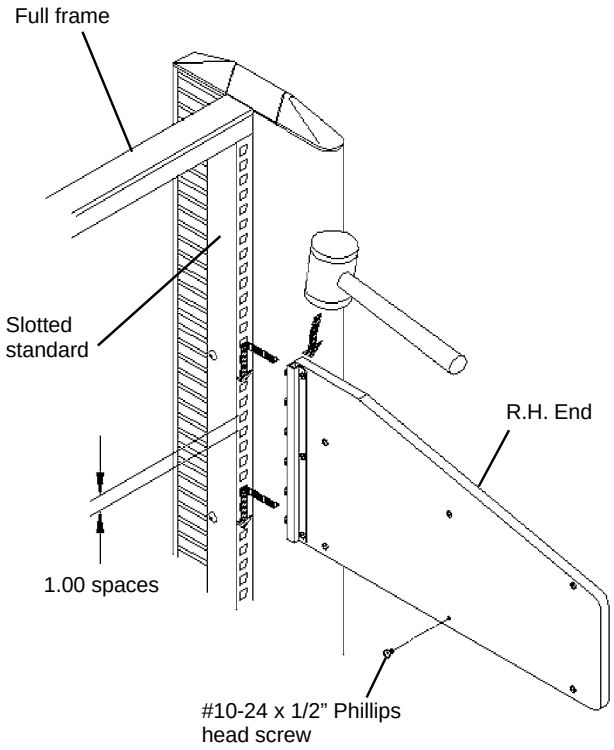
2. The End Panels accept single or multiple levels of steel shelves. Refer to shelf position diagrams on next page.

   Install the #10-24 x 1/2" Phillips head machine screws in each End Panel, leaving approximately 1/8" of thread exposed. See **Figure 1**.

3. With two people, carefully position the steel shelf over the screws. Note: install the shelf with the 1/16" corner notch toward the back. Drop the shelf in place and tighten the screws.



Steel Hook-On Shelving



Maximum Shelf Loading
The recommended maximum loading for most shelf components is 300lbs regardless of shelf width. If more than one shelf is installed on a pair of end panels, the maximum load per pair of end panels is not to exceed 300 lbs.

Heavy Duty Shelf Supports (#8161X) can be purchased separately to increase the weight capacity of the shelf. See page G-9 for details.

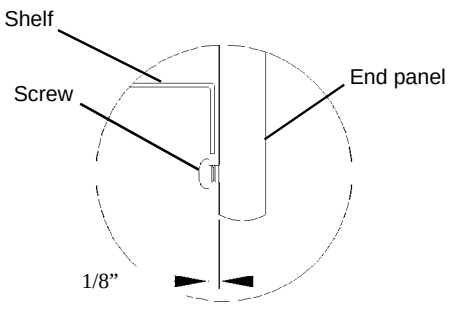
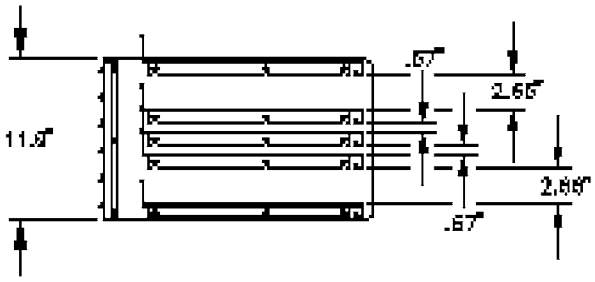
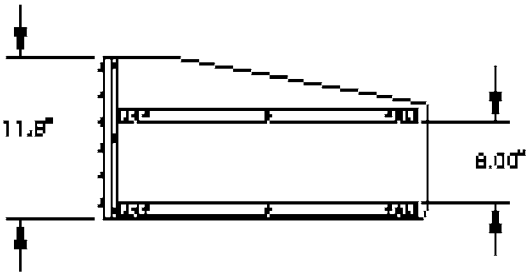


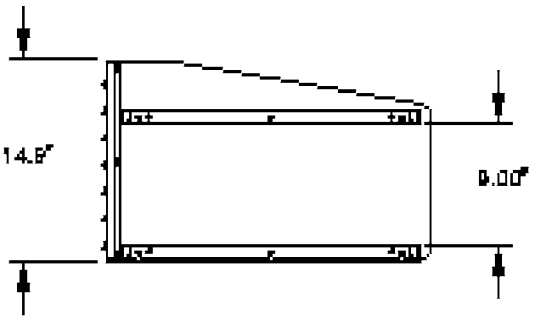
Figure 1

Hook-on Shelving Components (cont.)

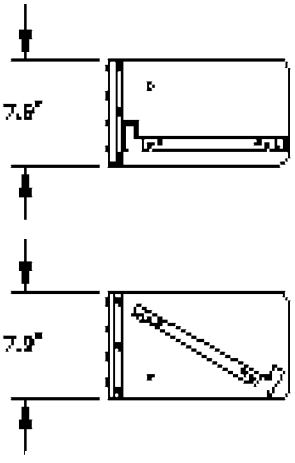


General Purpose

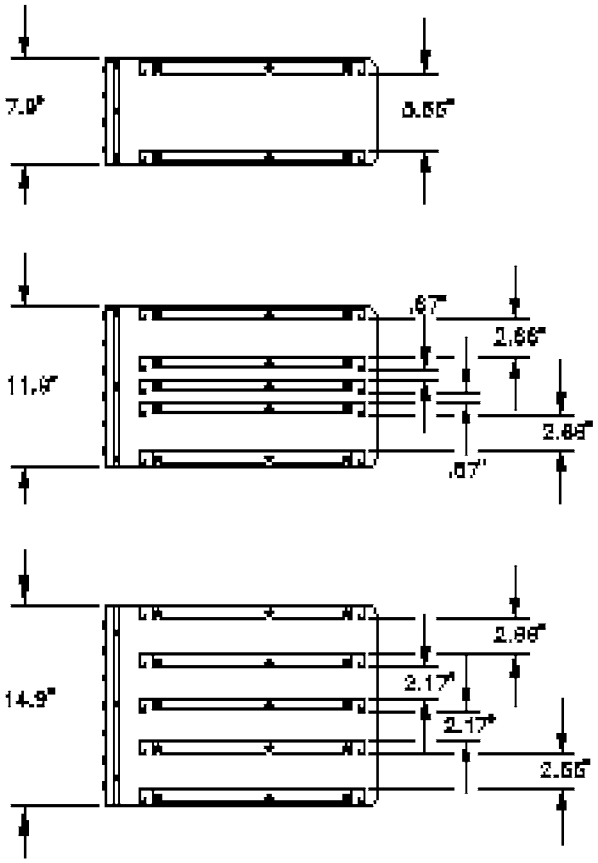




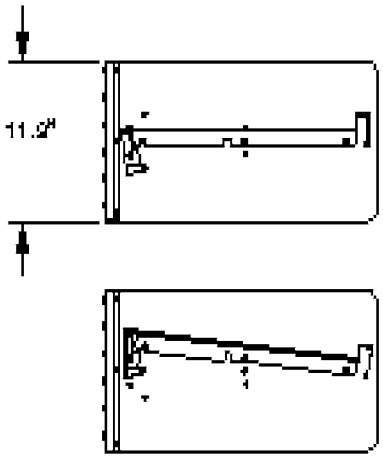
Tower Shelf - 22" Deep



Mini Electronics/Telephone Shelf - 11.0" Deep



Electronics Shelf - 16.7" Deep



Upper Shelf - 17.4" Deep

Hook-on Shelving Components (cont.)

Parts List

Part Number		Description	Qty.
1	1928X	End Panel Ass'y, L.H.	1
	1929X	End Panel Ass'y, R.H.	
2	1922X	24" General Purpose Shelf	1
	3433X	24" General Purpose Shelf W/ Hole	
	2414X	30" General Purpose Shelf	
	3434X	30" General Purpose Shelf W/ Hole	
	2415X	36" General Purpose Shelf	
	3437X	36" General Purpose Shelf W/ Hole	
	1923X	48" General Purpose Shelf	
	3443X	48" General Purpose Shelf W/ Hole	
	3444X	48" General Purpose Shelf W/ Hole	
	3445X	48" General Purpose Shelf W/ Hole	
	3448X	48" General Purpose Shelf W/3 Holes	
	2448X	60" General Purpose Shelf	
	3449X	60" General Purpose Shelf W/ Hole	
	3450X	60" General Purpose Shelf W/ Hole	
	3451X	60" General Purpose Shelf W/ Hole	
	3452X	60" General Purpose Shelf W/2 Holes	
	3453X	60" General Purpose Shelf W/2 Holes	
	3454X	60" General Purpose Shelf W/2 Holes	
	3455X	60" General Purpose Shelf W/3 Holes	
	1924X	72" General Purpose Shelf	
	3456X	72" General Purpose Shelf W/ Hole	
	3457X	72" General Purpose Shelf W/ Hole	
	3458X	72" General Purpose Shelf W/ Hole	
	3459X	72" General Purpose Shelf W/2 Holes	

Parts List

Part Number		Description	Qty.
2	3460X	72" General Purpose Shelf W/2 Holes	1
	3461X	72" General Purpose Shelf W/2 Holes	
	3462X	72" General Purpose Shelf W/3 Holes	
3	55617	10-24 x 50" Pan Head Machine Screw	6-8
4	2393X	End Panel Ass'y L.H.	1
	2394X	End Panel Ass'y R.H.	
5	2380X	24" Tower Shelf	1
	2385X	30" Tower Shelf	
	2386X	36" Tower Shelf	
	2381X	48" Tower Shelf	
	2388X	60" Tower Shelf	
	2382X	72" Tower Shelf	
6	2485X	End Panel Ass'y L.H.	1
	2486X	End Panel Ass'y R.H.	
7	2829X	End Panel Ass'y L.H.	1
	2830X	End Panel Ass'y R.H.	
8	2825X	24" Mini Elecronic Shelf	1
	2826X	30" Mini Elecronic Shelf	
	2827X	36" Mini Elecronic Shelf	
	2765X	48" Mini Elecronic Shelf	
9	2397X	End Panel Ass'y L.H.	1
	2398X	End Panel Ass'y R.H.	

Hook-on Shelving Components (cont.)

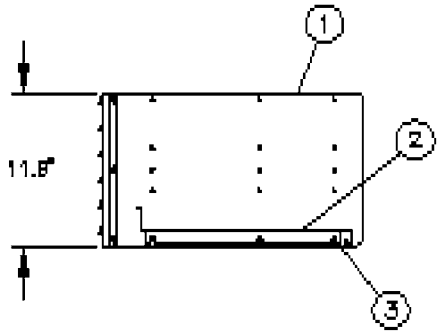
Parts List

Part Number		Description	Qty.
	1925X	24” Electronic Shelf	
	3402X	24” Electronic Shelf W/ Hole	
	2389X	30” Electronic Shelf	
	3403X	30” Electronic Shelf W/ Hole	
	2412X	36” Electronic Shelf	
	3406X	36” Electronic Shelf W/ Hole	
	1926X	48” Electronic Shelf	
	3412X	48” Electronic Shelf W/ Hole	
	3413X	48” Electronic Shelf W/ Hole	
	3414X	48” Electronic Shelf W/ Hole	
	3417X	48” Electronic Shelf W/2 Holes	
	2447X	60” Electronic Shelf	
10	3418X	60” Electronic Shelf W/ Hole	1
	3419X	60” Electronic Shelf W/ Hole	
	3420X	60” Electronic Shelf W/ Hole	
	3421X	60” Electronic Shelf W/2 Holes	
	3422X	60” Electronic Shelf W/2 Holes	
	3423X	60” Electronic Shelf W/2 Holes	
	3424X	60” Electronic Shelf W/3 Holes	
	1927X	72” Electronic Shelf	
	3425X	72” Electronic Shelf W/ Holes	
	3426X	72” Electronic Shelf W/ Hole	
	3427X	72” Electronic Shelf W/ Hole	
	3428X	72” Electronic Shelf W/2 Holes	
	3429X	72” Electronic Shelf W/2 Holes	
	3430X	72” Electronic Shelf W/2 Holes	

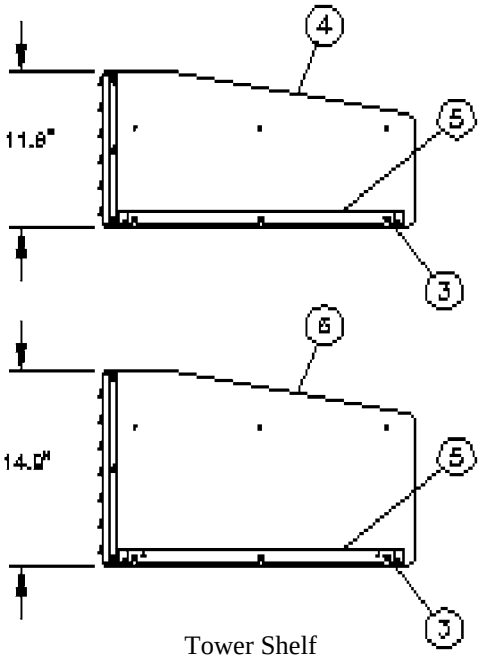
Parts List

Part Number		Description	Qty.
10	3431X	72” Electronic Shelf W/3 Holes	1
11	2395X	End Panel Ass’y L.H.	1
	2396X	End Panel Ass’y R.H.	
12	1917X	End Panel	2
	1725X	24” Upper Shelf	
	2430X	30” Upper Shelf	
13	2431X	36” Upper Shelf	1
	1726X	48” Upper Shelf	
	2449X	60” Upper Shelf	
	1727X	72” Upper Shelf	
14	1708X	Hook Plate, L.H.	1
	1709X	Hook Plate R.H.	
15	53956	1/4”-20 x 3/4” Phillips Pan Head Machine Screw	6

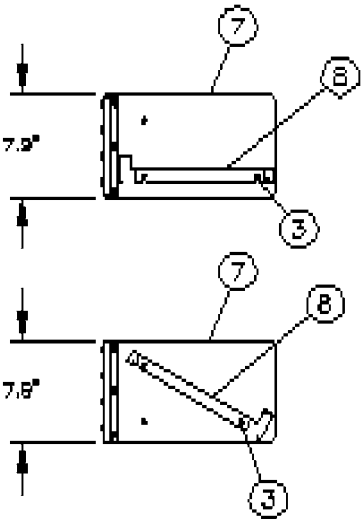
Hook-on Shelving Components (cont.)



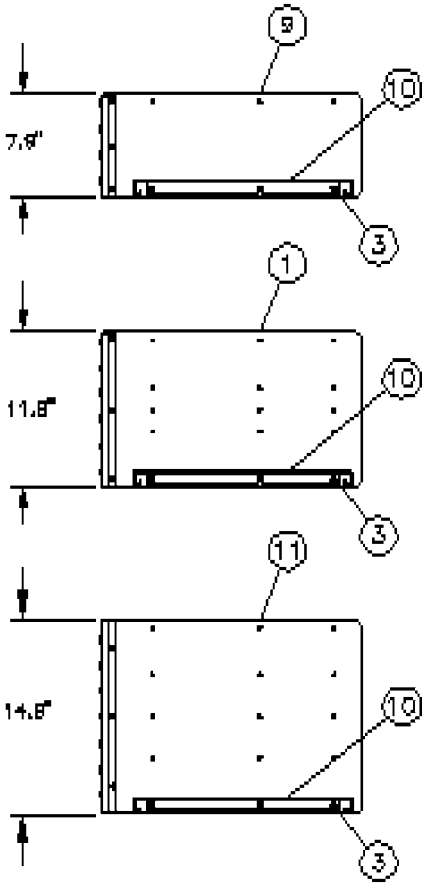
General Purpose Shelf



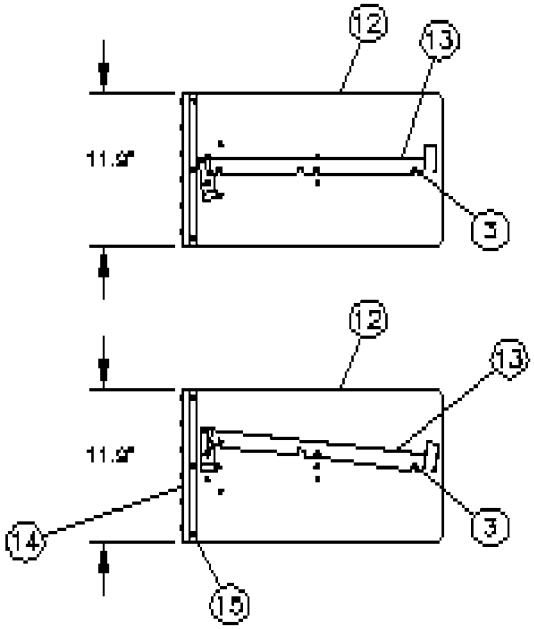
Tower Shelf



Mini Electronics/Telephone Shelf



Electronics Shelf



Upper Shelf

technical furniture

Steel Shelving

Please read these instructions carefully and follow the installation steps in sequence.

Tools Required
- -Phillips head screwdriver
- -Plastic mallet
- -3/8" Wrench

1. Determine the desired location of the **Steel Shelf** and attach the **Brackets** to the frame as shown in **figure 1**.

   NOTE: Be sure that the Brackets are at the same level.

   Tap the top of each Bracket with a plastic mallet to be that the hooks are fully seated.

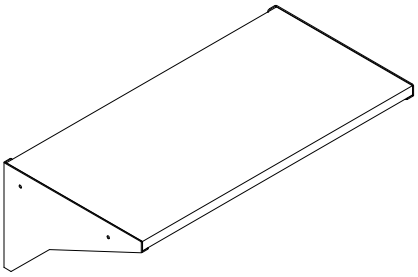
2. Lock the Brackets in place by installing a 1/4" -20 x 1/2" hex washer head thread forming screw using a 3/8" wrench. See **figure 1**.

3. With two people, carefully place the Shelf onto the Brackets and align the holes in the bottom of the Shelf with the holes in the Brackets. Fasten the shelf in place using three #10-24 x 1/2" phillips head thread forming screws on each side. See **figure 2**.

   NOTE: It may be necessary to rotate the Shelf 180° to align the attachment holes.

MAXIMUM SHELF LOADING

The recommended maximum shelf loading is 300 lbs. Heavy Duty Shelf Supports (LA12) can be purchased separately to increase the weight capacity of the shelf.



Steel Shelving

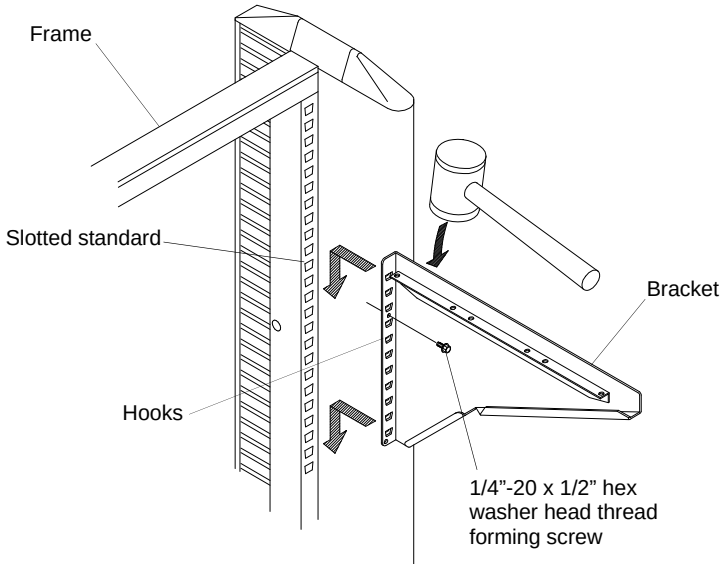


Figure 1

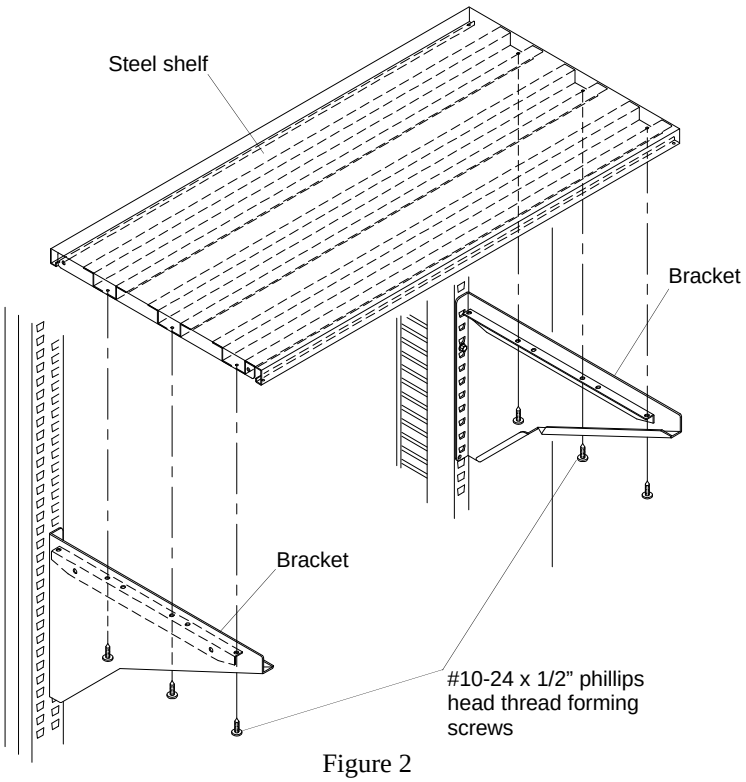
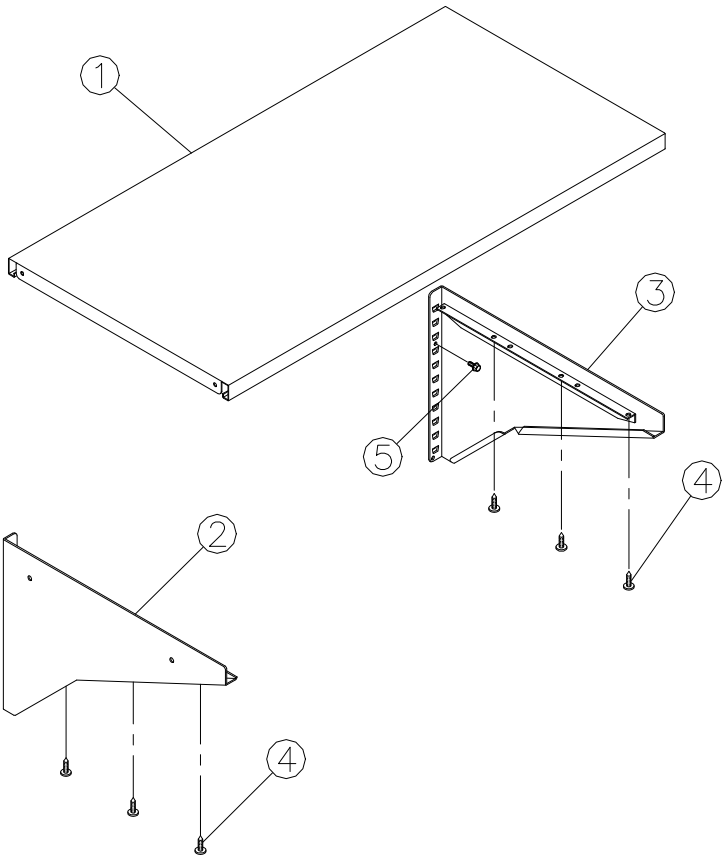


Figure 2

Steel Shelving (cont.)

Parts List

Part Number		Description	Qty.
1	8580X	24”W x 18”D Shelf	1
	8581X	30”W x 18”D Shelf	
	8582X	36”W x 18”D Shelf	
	8583X	42”W x 18”D Shelf	
	8584X	48”W x 18”D Shelf	
	8585X	60”W x 18”D Shelf	
	8586X	72”W x 18”D Shelf	
	8587X	24”W x 24”D Shelf	
	8588X	30”W x 24”D Shelf	
	8589X	36”W x 24”D Shelf	
	8590X	42”W x 24”D Shelf	
	8591X	48”W x 24”D Shelf	
	8592X	60”W x 24”D Shelf	
	8593X	72”W x 24”D Shelf	
	8594X	24”W x 27”D Shelf	
	8595X	30”W x 27”D Shelf	
	8596X	36”W x 27”D Shelf	
	8597X	42”W x 27”D Shelf	
	8598X	48”W x 27”D Shelf	
	8599X	60”W x 27”D Shelf	
	8600X	72”W x 27”D Shelf	
2	8601X	Bracket, 12” x 18.2” - L.H.	1
	8603X	Bracket, 12” x 24.2” - L.H.	
	8605X	Bracket, 12” x 27.2” - L.H.	
3	8602X	Bracket, 12” x 18.2” - R.H.	1
	8604X	Bracket, 12” x 24.2” - R.H.	
	8606X	Bracket, 12” x 27.2” - R.H.	
4	66714	#10-24 x Phillips Pan Head Thread Forming Screw	6
5	54348	1/4”-20 x 1/2” Hex Washer Head Screw	2



technical furniture

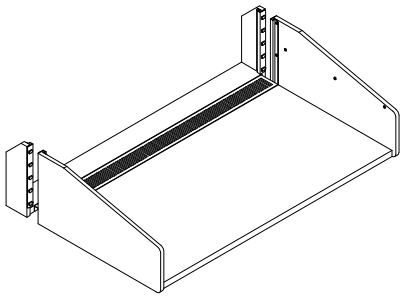
Deeper Tower Computer Shelf

NOTE: The **28" Deep Tower Shelf** consists of a rear **Shelf Extension** and **Slotted Filler** used in conjunction with a 22" Tower Shelf. When placed at the bottom of the Frame, the shelf must be pre-assembled to the **End Panels** for access to and tightening of the mounting screws.

1. Install the front Tower Shelf first, following the previous instructions. **NOTE**: the screws protruding from the long edge are on the back of the shelf.

2. Install (2) #10-24 x 1/2" (13mm) Phillips head machine screws in each End Panel. Leave approximatly 1/8" (3mm) of thread exposed. See **Figure 1**.

3. Pre-assemble the Shelf Extension to the End Panels. Engage the rear screw first then lower the front onto its screw. Tighten both screws. See **Figure 2**.



Deeper Tower Computer Shelf

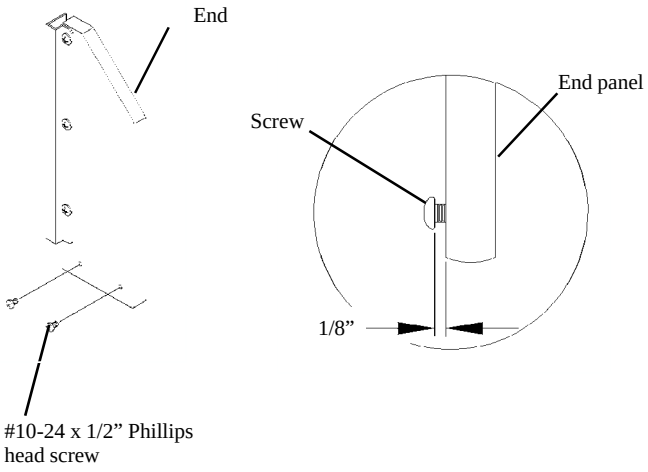


Figure 1

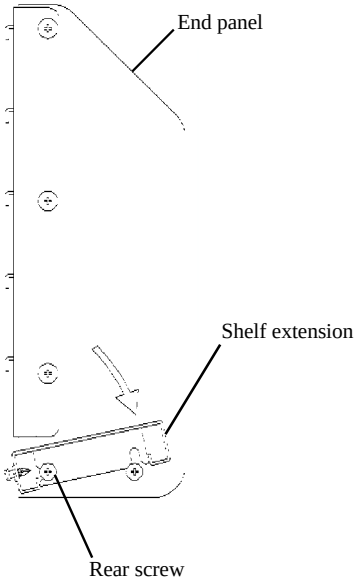


Figure 2

Deeper Tower Computer Shelf (cont.)

4. With two people, position the Shelf Extension End Panels opposite the End Panels of the already positioned Tower Shelf. To assure the hooks are seated in the slotted standard, tap the top rear corner with a plastic mallet or equivalent. See **Figure 3**.

5. The Slotted Filler(s) are placed between the two shelves. They are supported by the special screws protruding from the rear of the shelves. See **Figure 4**.

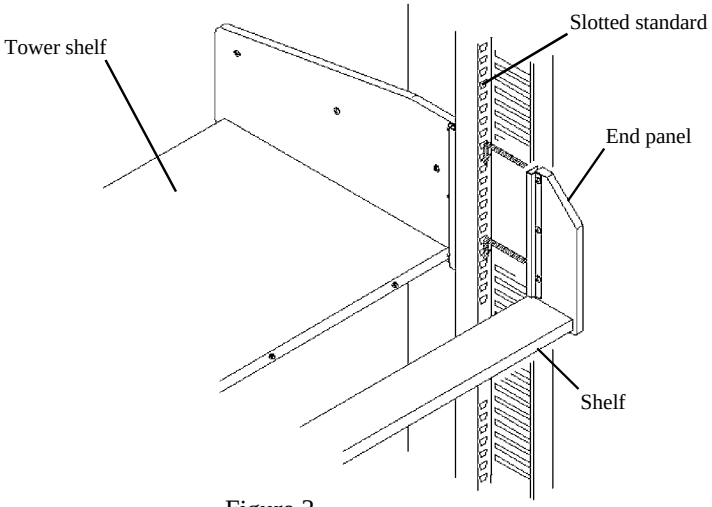


Figure 3

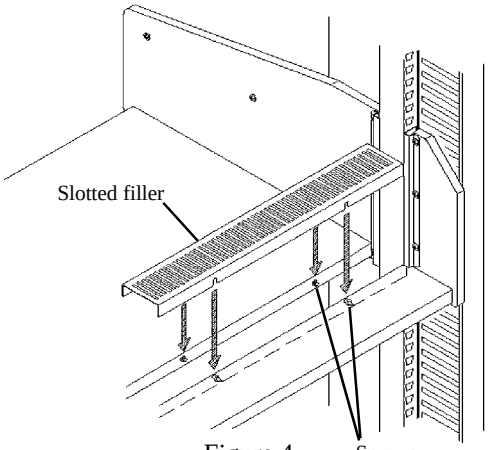


Figure 4

technical furniture

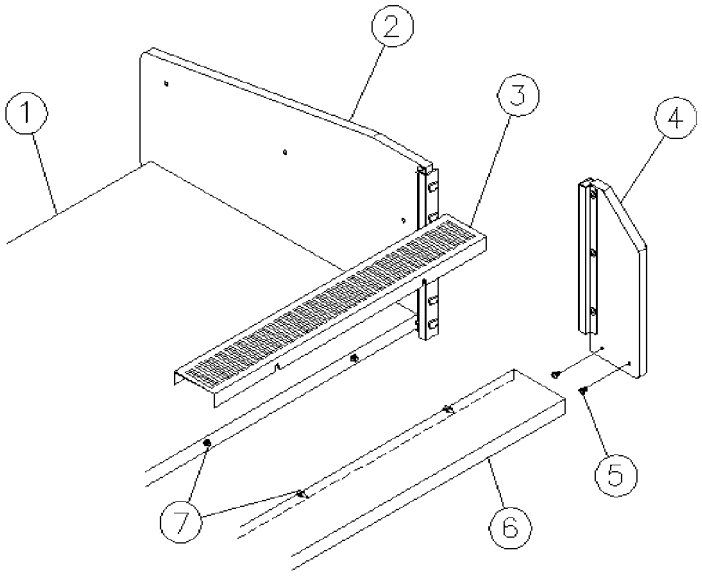
Deeper Tower Computer Shelf (cont.)

Parts List

Part Number		Description	Qty.
1	2380X	24” Tower Shelf	1
	2385X	30” Tower Shelf	
	2386X	36” Tower Shelf	
	2381X	48” Tower Shelf	
	2388X	60” Tower Shelf	
	2382X	72” Tower Shelf	
2	2393X	End Panel Ass’y L.H.	1
	2394X	End Panel Ass’y R.H.	
3	2557X	24” Filler, 1.0” Frame	1
	2558X	30” Filler, 1.0” Frame	
	2559X	36” Filler, 1.0” Frame	
	2560X	42” Filler, 1.0” Frame	
	2589X	24” Filler. 2.2” Frame	
	2590X	30” Filler. 2.2” Frame	
	2591X	36” Filler. 2.2” Frame	
	2592X	42” Filler. 2.2” Frame	
	3260X	24” Filler, LMS Basic	
	7064X	30” Filler, LMS Basic	
	7065X	36” Filler, LMS Basic	
	7066X	42” Filler, LMS Basic	
	3261X	48” Filler, LMS Basic	
	3262X	60” Filler, LMS Basic	
	3263X	72” Filler, LMS Basic	
4	2546X	End Panel Ass’y, L.H.	1
	2547X	End Panel Ass’y, R.H.	

Parts List

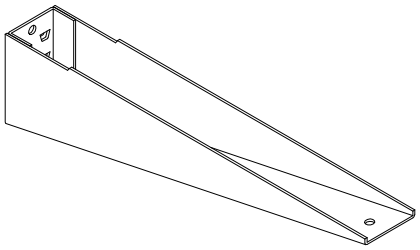
Part Number		Description	Qty.
5	55617	#10-24 x .50” Pan Head Machine Screw	4
6	2550X	24” Shelf Extension	1
	2551X	30” Shelf Extension	
	2552X	36” Shelf Extension	
	2554X	48” Shelf Extension	
	2555X	60” Shelf Extension	
	2556X	72” Shelf Extension	
7	80302	#10-32 MT x3/8” Thread Cutting Screw	4-12



technical furniture

Heavy Duty Shelf Support

Tools Required
-Phillips head screwdriver
-Plastic mallet



Heavy Duty Shelf Support
Part No. 8161X

Heavy Duty Shelf Supports may be installed with Tower, Electronics and General purpose shelves to increase their load capacity.

NOTE: Two people are required for installation of the larger shelf sizes; i.e. 48" (1219mm) and larger.

1. Install the shelf in the desired location following the instructions in the previous sections. **DO NOT** tighten the six screws which fasten the shelf to the end panels at this time. See **Figure 1**.

   NOTE: If the Shelf Supports are being installed on a pre-installed shelf, unload the shelf and loosen the six screws which fasten it to the end panels.

   When using the Heavy Duty Shelf Supports, the minimum distance that a shelf can be located to the floor is 6.65".

2. Mark the location of the two trapeziod slots in the slotted standard(s) directly below the shelf. See **Figure 2**.

3. Remove the shelf from the end panels and install the Shelf Supports by inserting the top pair of hooks into the marked slots in the slotted standard and push down. To assure the hooks are seated, tap the top rear of the Shelf Support with a plastic mallet or equivalent. See **Figure 3**.

4. With two people, re-install the shelf. Carefully position the shelf over the screws on the end panels . Drop the shelf in place and tighten the screws.

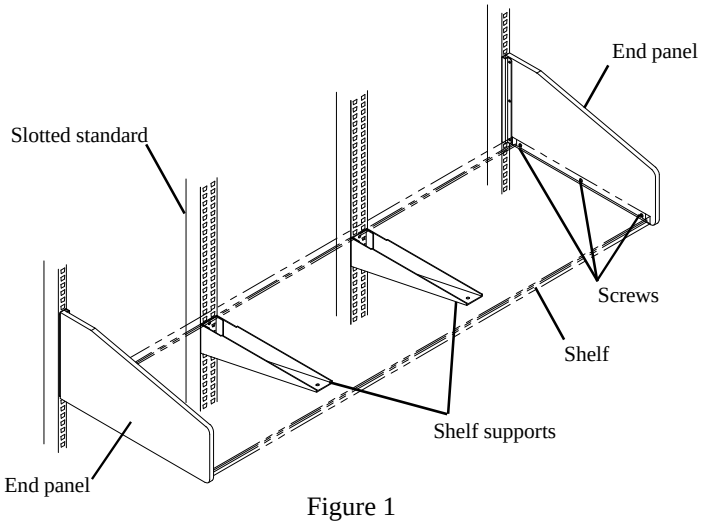


Figure 1

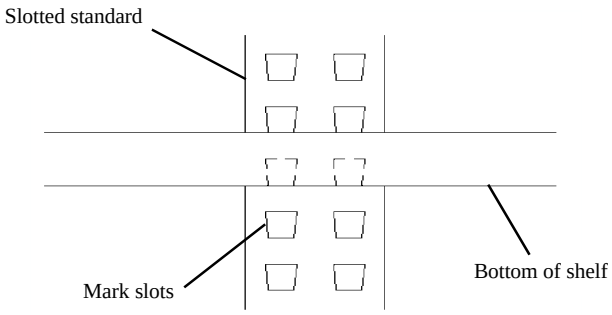


Figure 2

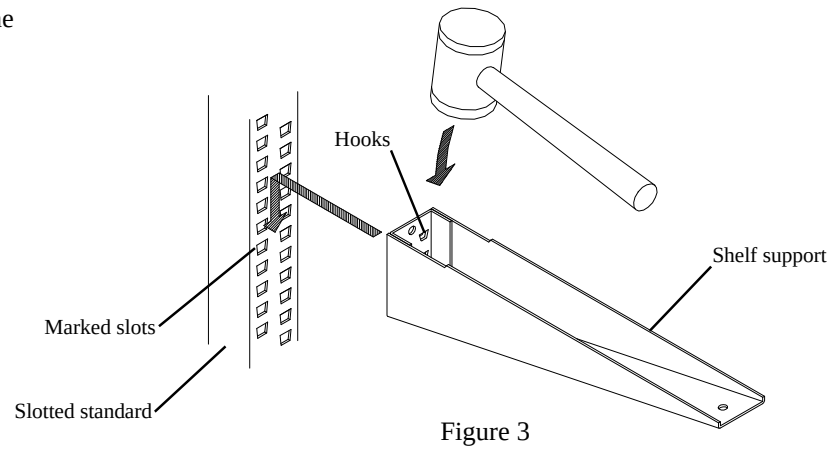
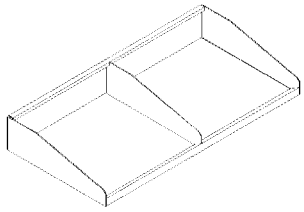


Figure 3

Forms Tray

Tools Required
- Plastic mallet

NOTE: Fully welded **Forms Tray** includes integrated hooks at the back of the shelf which attach the component to a Full Frame. A removable **Shelf Divider** is also included.



Forms Tray

1. Determine the location of the Forms Tray on the Full Frame.

2. Insert the hooks on the back of the Forms Tray into the slotted standards on the Full Frame and push down. See **Figure 1**

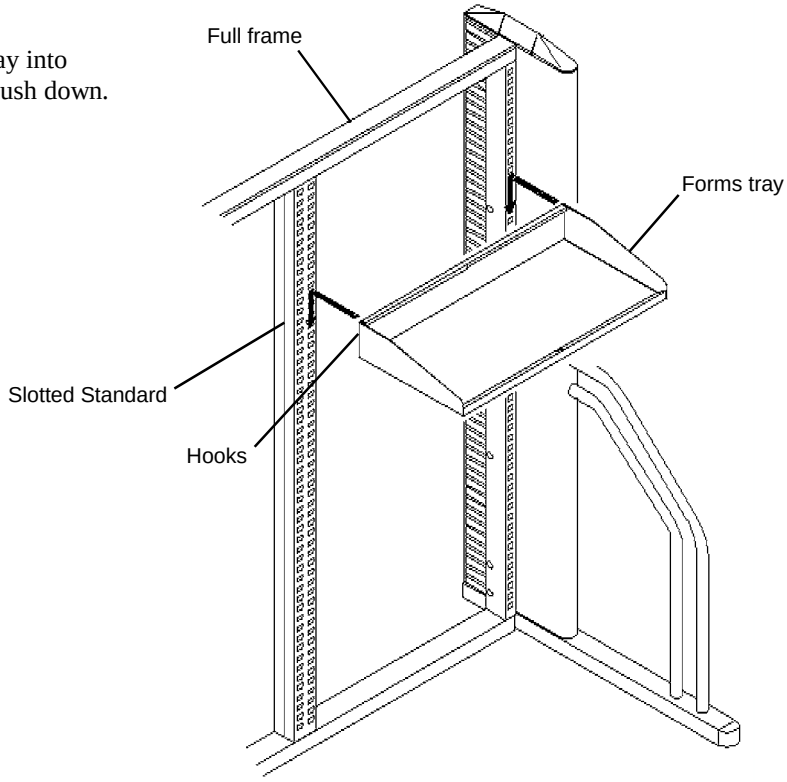


Figure 1

3. Attach the Shelf Divider if desired. See **Figure 2**.

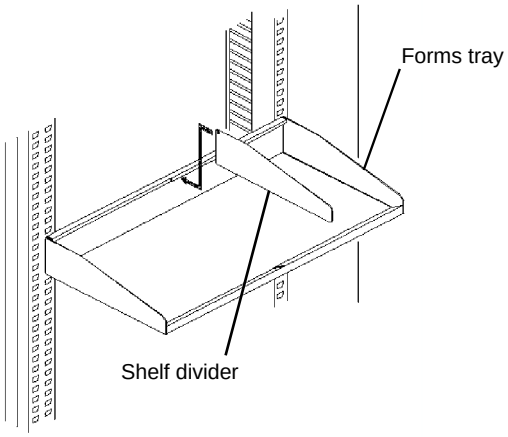
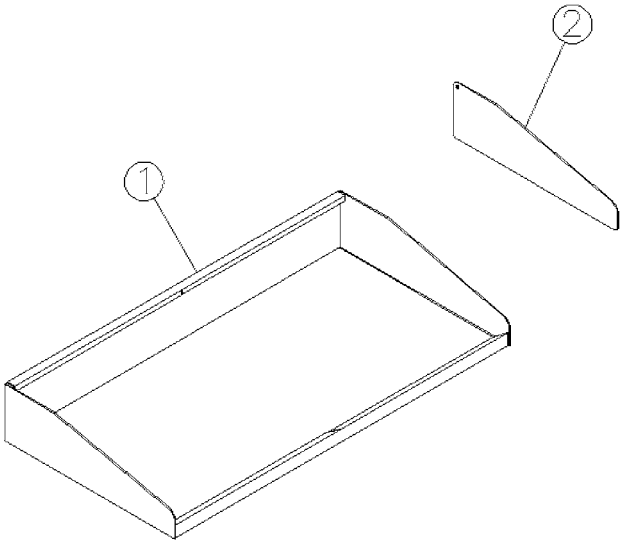


Figure 2

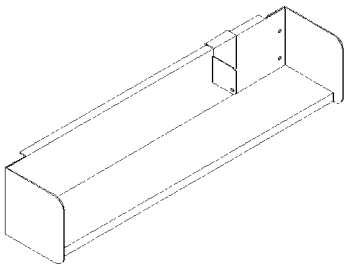
Forms Tray (cont.)

Parts List			
Part Number		Description	Qty.
1	3774X	24” Forms Tray	1
	5051X	30” Forms Tray	
	5052X	36” Forms Tray	
2	3775X	Divider	1



technical furniture

Universal Tape Shelf



Universal Tape Shelf

Tools Required
-Plastic mallet

1. Stand the Uprights apart at approximately the width of the component.

2. Place the **Tape Shelf** in position at the top of the uprights by inserting the hooks at each end of the component into the slotted standards and pushing down. To assure that the hooks are seated, tap the rear corners with a plastic mallet or equivalent. See **Figure 1.**

3. Space the Tape Shelves according to the chart below.

4. The **Index** is attached to the Tape Shelf by hooking it onto the flange at the top of the shelf. See **Figure 2**.

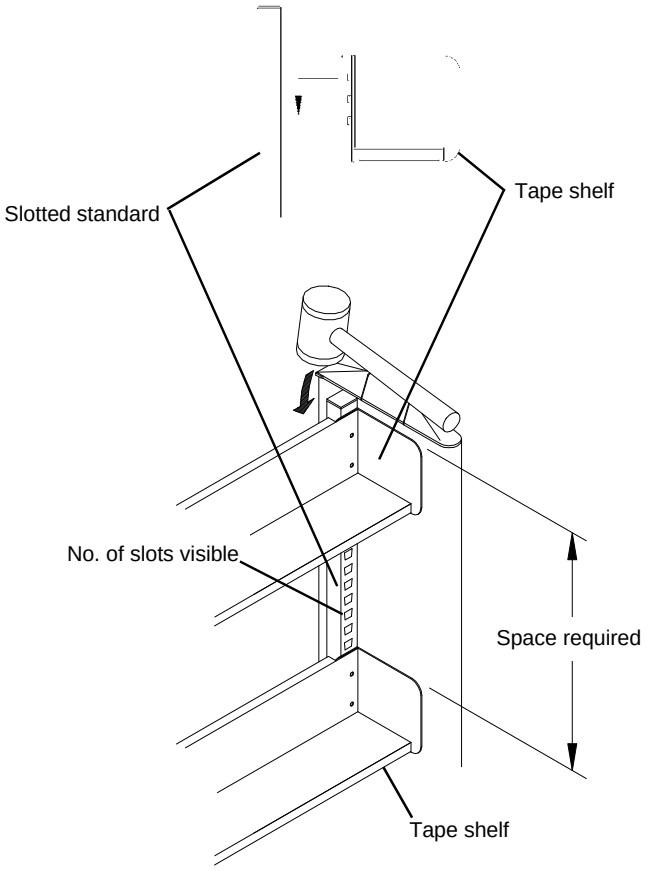


Figure 1

COMPONENT SPACING (CONFIGUATION) CHART

MEDIA	SPACE REQ'D	NO. OF SLOTS VISIBLE
8mm Video Cartridge	5.00"	~
Data Cartridge 185'		
16mm Microfilm Cartridge		
16mm in Box		
TK50 Cartridge	6.00"	1
3480 Cartridge		
Data Cartridge 600'	8.00"	3
VHS Tape	9.00"	4
VHS Tape (professional)	11.00"	6

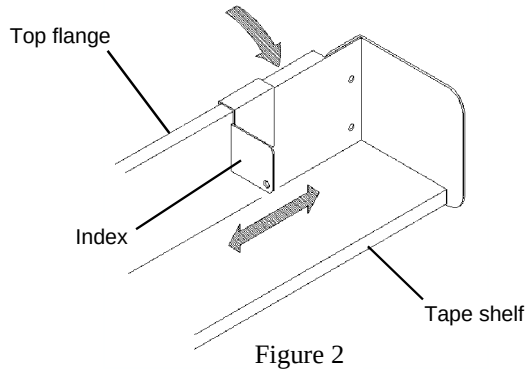
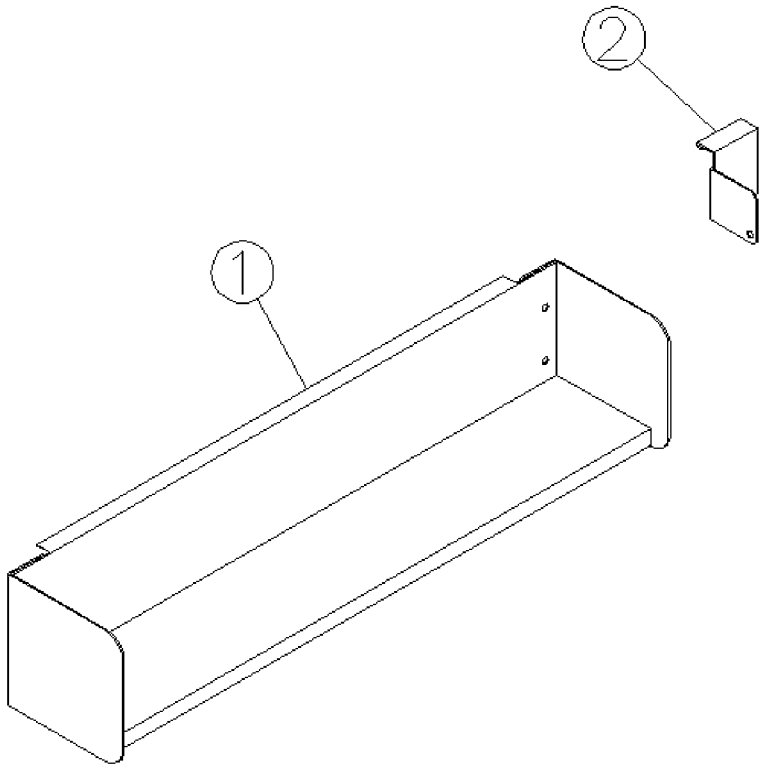


Figure 2

Universal Tape Shelf (cont.)

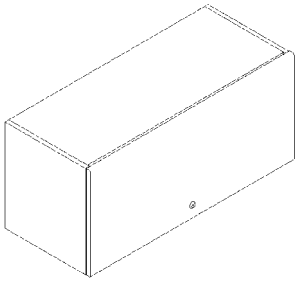
Parts List			
Part Number		Description	Qty.
1	2863X	24” Universal Tape Shelf	1
	1919X	30” Universal Tape Shelf	
	4288X	36” Universal Tape Shelf	
	1921X	48” Universal Tape Shelf	
2	1918X	Index	1



technical furniture

Locking Compartment

Tools Required
-Phillips head screwdriver
-Plastic mallet



Locking Compartment

NOTE: Some assembly may require assistance.

REAR AND END PANEL INSTALLATION

1. Install the **Rear Panel** by inserting the hooks on either side of the panel into the Slotted Standards of the Full Frame and pushing down. To assure that the hooks are seated, tap the top corners with a plastic mallet or equivalent. See **Figure 1**.

2. Position the **End Panels** as shown in **Figure 2**. Insert the hooks on the End Panels into the Slotted Standards and push down. Tap the top corners of the panels with a plastic mallet to assure that the hooks are seated.

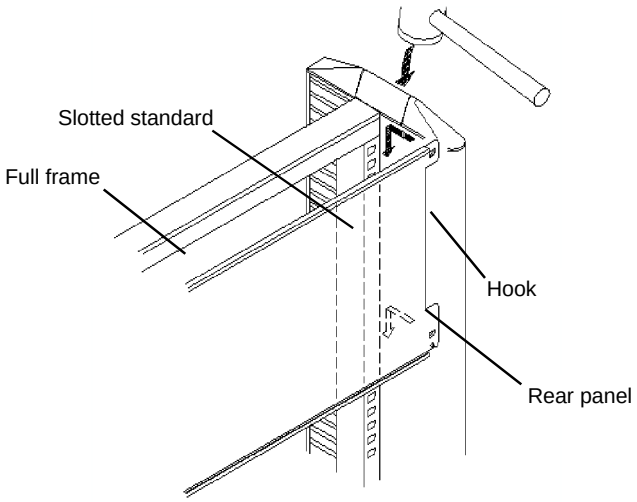


Figure 1

SHELF INSTALLATION

1. There are three factory installed screws along the top and bottom edge of each Side Panel. These screws must be backed out approximately 1/8”(3mm) as shown in **Figure 3** (inset).

2. After backing out all six lower screws, position the **Shelf** between the End Panels above the screws. Lower the Shelf so that all six screws engage their corresponding slots in the Shelf. Next, tighten the screws to secure the Shelf. See **Figure 3**.

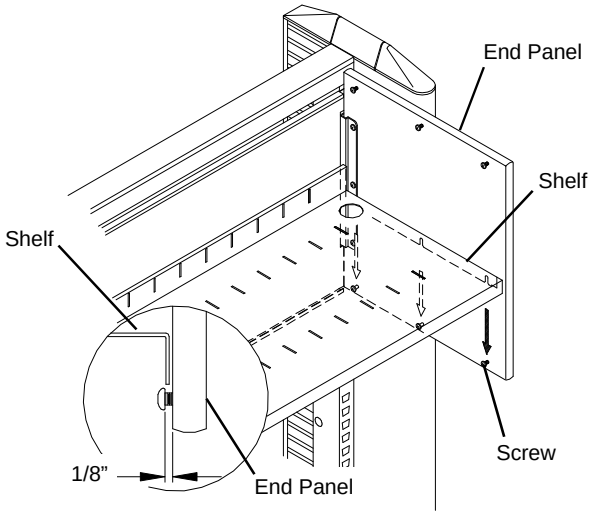


Figure 3

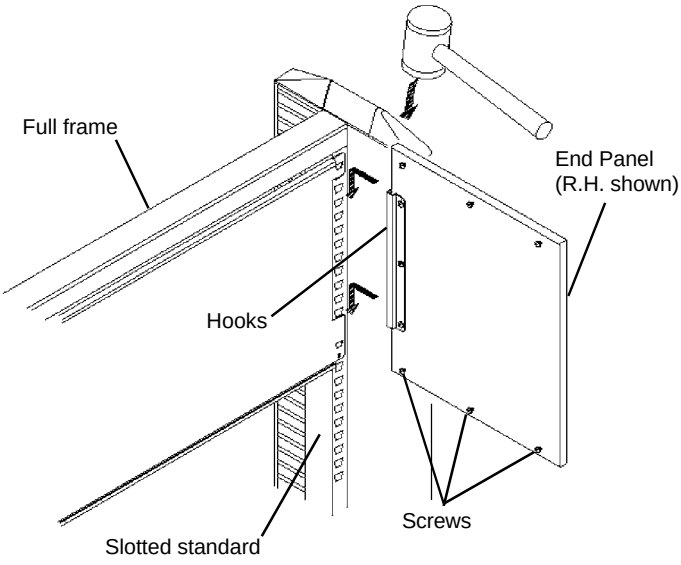


Figure 2

Locking Compartment

TOP INSTALLATION

1. Before installing the **Top**, make sure that the three screws at the top of each End Panel is backed out 1/8”(3mm) as shown in **Figure 3**.

2. Position the Top between the End Panels above the screws. **NOTE**: The Receeding Door mounting holes must face towards the front. Lower the Top so that all six screws engage their corresponding slots in the Top. Next, tighten the screws to secure the Top. See **Figure 4**.

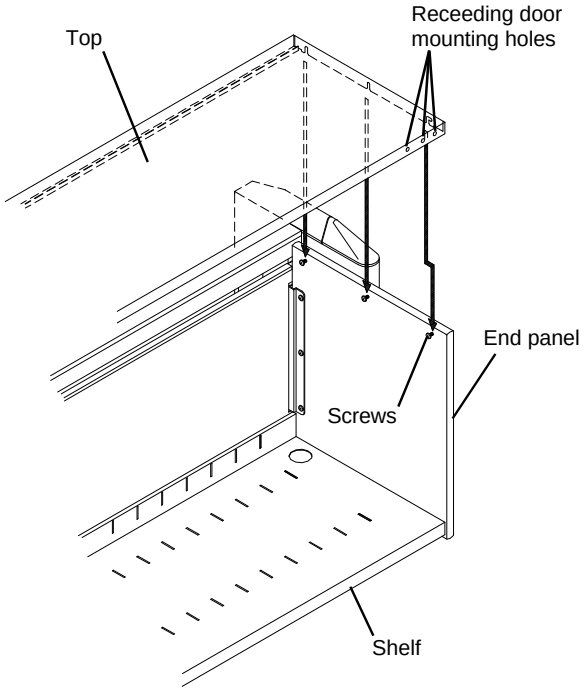


Figure 4

RECEEDING DOOR INSTALLATION

1. Place the **Receeding Door** assembly face up on top of the Locking Compartment. See **Figure 5**. Position the two **Door Track** hinges against the front flange of the Top. The Door edges must be aligned with the outer surfaces of the End Panels. Align the slots in the Door Track hinges with the six holes in the front flange of the Top. Install and tighten six #8 Phillips head sheet metal screws into the Door Track hinges to secure them. See **Figure 5**.

   To operate the Receeding Door, grasp the lower edge of the door panel near the center and pull the door all the way toward you. Carefully lower the door to the closed position. Reverse this procedure to open the door.

   NOTE: Never allow the Receeding Door to slam closed. Personal injury or damage to the unit may result.

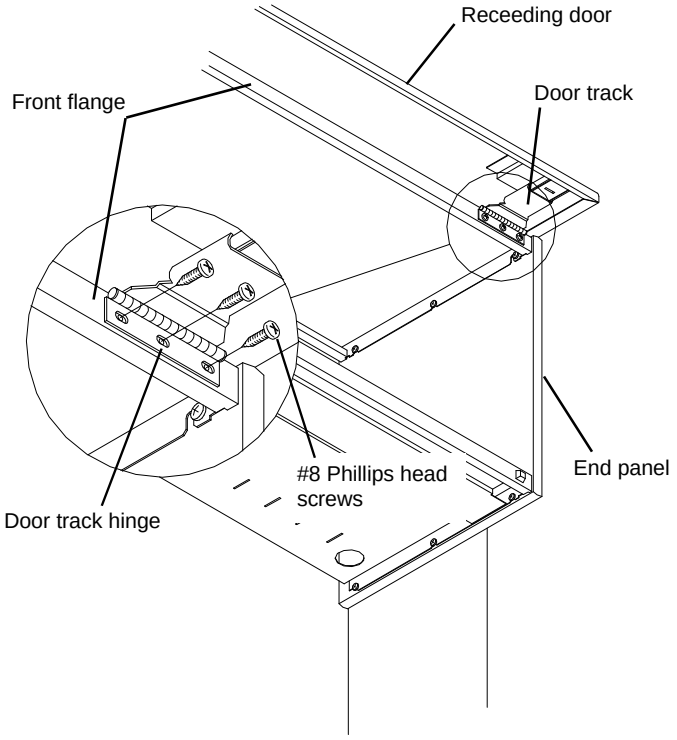


Figure 5

technical furniture

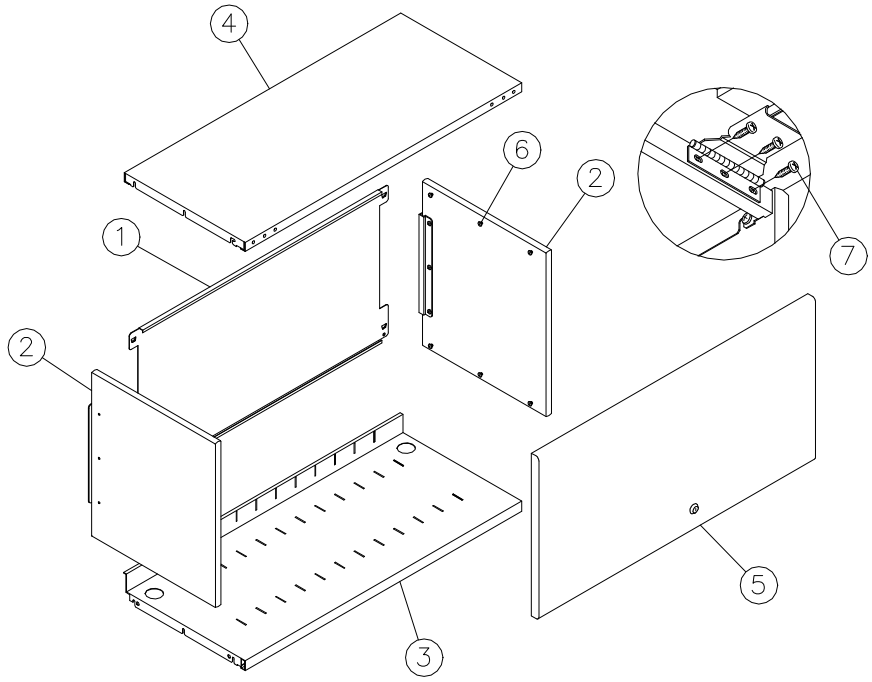
Locking Compartment

Parts List

	Part Number	Description	Qty.
1	2614X	Rear Panel, 24”	1
	1870X	Rear Panel, 30”	
	3334X	Rear Panel, 36”	
	2615X	Rear Panel, 48”	
2	1877X	End Panel Assembly, L.H.	1
	1878X	End Panel Assembly, R.H.	
3	6583X	Shelf, 24”	1
	1864X	Shelf, 30”	
	3333X	Shelf, 36”	
	2610X	Shelf, 48”	
4	8236X	Top , 24”	1
	8237X	Top , 30”	
	8238X	Top , 36”	
	8240X	Top , 48”	

Parts List

	Part Number	Description	Qty.
5	8204X	Receeding Door, 24”	1
	8205X	Receeding Door, 30”	
	8206X	Receeding Door, 36”	
	8208X	Receeding Door, 48”	
6	68374	#8AB x .50” Phillips Pan Head Screw	12
7	66249	#8 x 3/8” Phillips Pan Head Screw	6
8	1575X	Extra Dividers	5



technical furniture

High Capacity Laminate Hook-on Shelves

Tools required
-Plastic mallet

1. Determine the location of the **Shelf**. Position the Shelf Supports as shown in **Figure 1**. Insert the hooks on the back of the supports into the slotted standards and push down.

2. To assure the hooks are seated, tap the top rear corner with a plastic mallet or equivalent.

Note
Two shelf supports are required with shelves 24”(610mm) thru 42”(1067mm) wide.

Three shelf supports are required with 48”(1219mm) and 60”(1524mm) wide shelves.

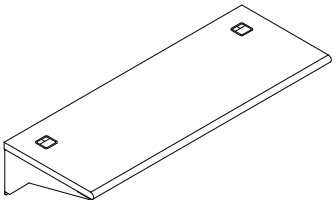
Four shelf supports are required with 72” (1829mm) wide shelves.

3. Align the pre-drilled holes in the bottom surface of the shelf with the holes in the left hand and right hand shelf supports. See **Figure 2**.

4. Fasten the shelf to the left /right hand shelf supports using the four #10AB x 5/8” long phillips head screws provided. See **Figure 2**.

   NOTE: Only the *outer* left/right hand supports are attached to the shelf.

5. Lock the shelf supports in position with the #10-24 x 3/8” long phillips head screws provided. See **Figure 3**.



High Capacity Laminate Shelf

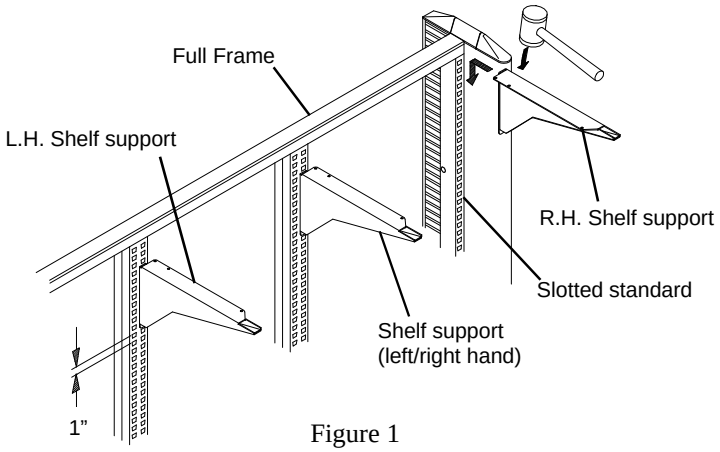


Figure 1

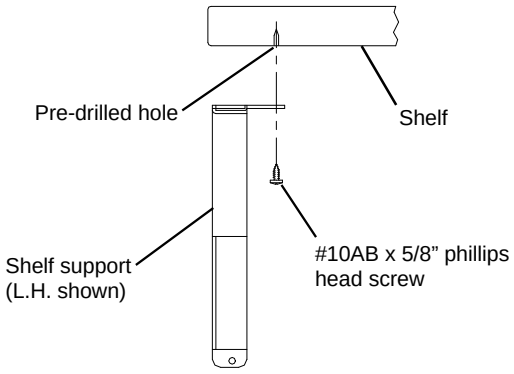


Figure 2

Maximun Shelf Loading		
Shelf Width	**Number of Brackets**	**Load Capacity**
24” -42”Shelves 610mm-1067mm	2	300 lbs 136 kg
48”-60” Shelves 1219mm-1524mm	3	500 lbs 227 kg
72” Shelves 1828mm	4	750 lbs 342 kg

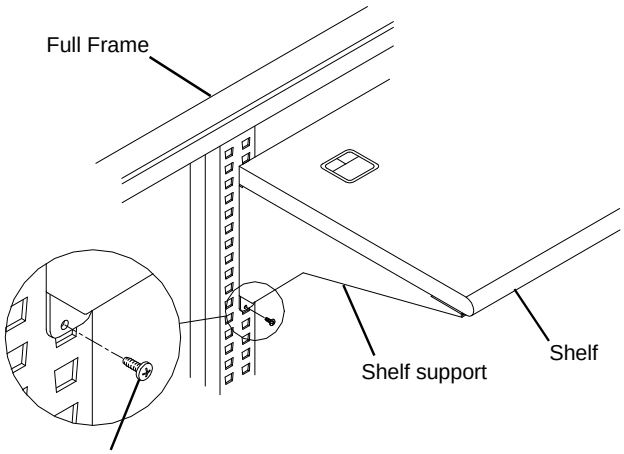


Figure 3

technical furniture

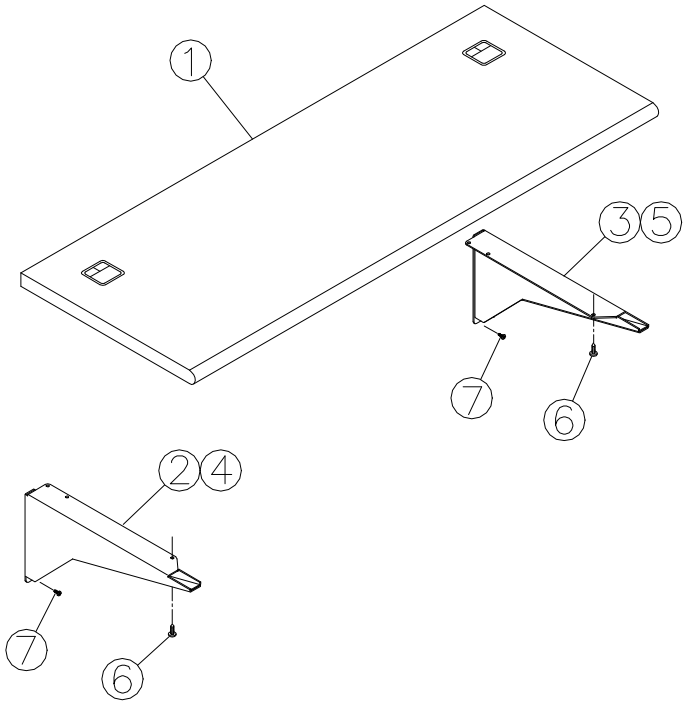
High Capacity Laminate Hook-on Shelves (cont.)

Parts List

Part Number		Description	Qty.
1	2984X	Laminate Shelf, 12” x 24”	1
	2985X	Laminate Shelf, 12” x 30”	
	2986X	Laminate Shelf, 12” x 36”	
	2987X	Laminate Shelf, 12” x 42”	
	2988X	Laminate Shelf, 12” x 48”	
	2989X	Laminate Shelf, 12” x 60”	
	2990X	Laminate Shelf, 12” x 72”	
	2991X	Laminate Shelf, 18” x 24”	
	2992X	Laminate Shelf, 18” x 30”	
	2993X	Laminate Shelf, 18” x 36”	
	2994X	Laminate Shelf, 18” x 42”	
	2995X	Laminate Shelf, 18” x 48”	
	2996X	Laminate Shelf, 18” x 60”	
	2997X	Laminate Shelf, 18” x 72”	
	2998X	Laminate Shelf, 24” x 24”	
	2999X	Laminate Shelf, 24” x 30”	
	3000X	Laminate Shelf, 24” x 36”	
	3001X	Laminate Shelf, 24” x 42”	
	3002X	Laminate Shelf, 24” x 48”	
	3003X	Laminate Shelf, 24” x 60”	
	3004X	Laminate Shelf, 24” x 72”	

Parts List

Part Number		Description	Qty.
2	8156X	8” x 11” Shelf Support - L.H., 12” Deep Shelf	1-2
3	8157X	8” x 11” Shelf Support - R.H., 12” Deep Shelf	1-2
4	8154X	8” x 17” Shelf Support - L.H., 18”/24” Deep Shelves	1-2
5	8155X	8” x 17” Shelf Support - R.H., 18”/24” Deep Shelves	0-2
6	82287	#10AB x 5/8” Phillips Pan Head Thread Forming Screw	4
7	66714	#10-24 x 3/8” Phillips Pan Head Self Tapping screw	2



technical furniture

Laminate Hook-on Shelves

Tools required
-Plastic mallet

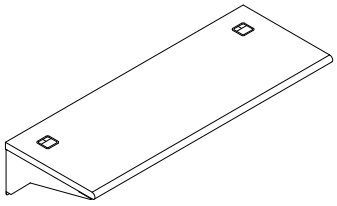
1. Determine the location of the **Shelf**. Position the Shelf Supports as shown in **Figure 1**. Insert the hooks on the back of the supports into the trapeziod shaped slots in the upright posts and push down.

2. To assure the hooks are seated, tap the top rear corner with a plastic mallet or equivalent.

3. Align the pre-drilled holes in the bottom surface of the shelf with the holes in the left hand and right hand shelf supports. See **Figure 2**.

4. Fasten the shelf to the left /right hand shelf supports using the four #10AB x 5/8" long phillips head screws provided. See **Figure 2**.

5. Lock the shelf supports in position with the #10-24 x 3/8" long phillips head screws provided. See **Figure 3**.



Laminate Shelf

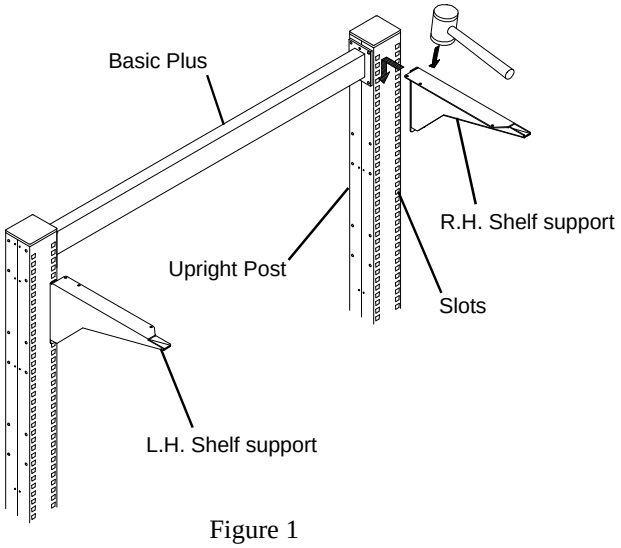


Figure 1

Maximun Shelf Loading		
Shelf Width	**Number of Brackets**	**Load Capacity**
24" -42"Shelves 610mm-1067mm	2	300 lbs 136 kg
48"-60" Shelves 1219mm-1524mm	2	300 lbs 227 kg
72" Shelves 1828mm	2	300 lbs 342 kg

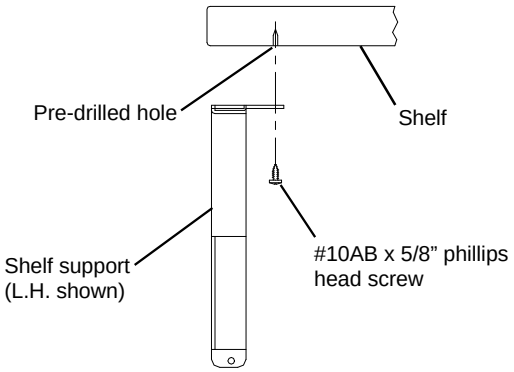
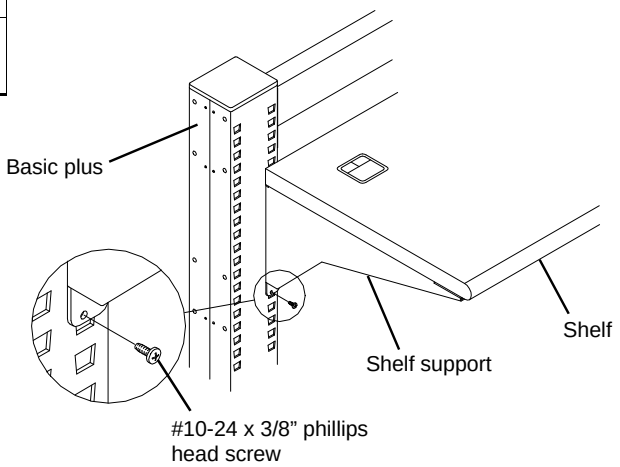


Figure 2



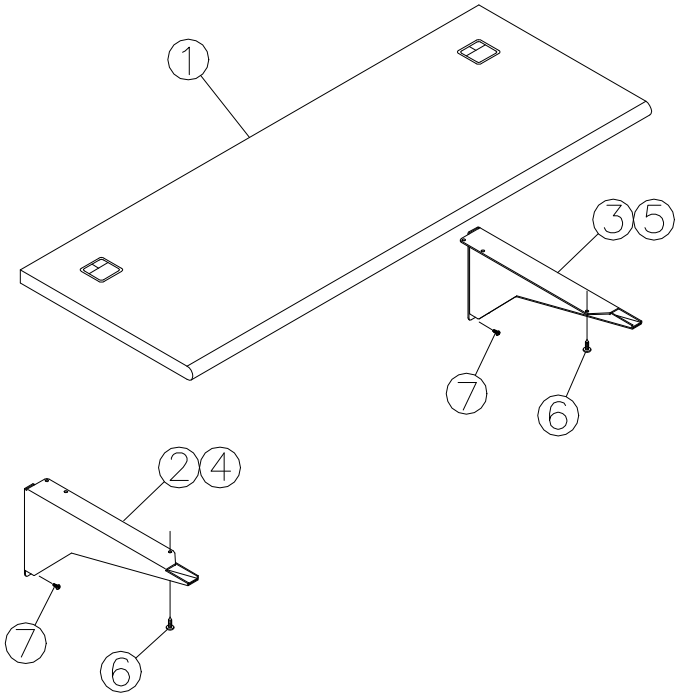
Laminate Hook-on Shelves (cont.)

Parts List

Part Number		Description	Qty.
	6136X	48” x 12” Laminate Shelf	
	6138X	60” x 12” Laminate Shelf	
	6140X	72” x 12” Laminate Shelf	
	6137X	48” x 12” Laminate Shelf, ESD	
	6139X	60” x 12” Laminate Shelf, ESD	
	6141X	72” x 12” Laminate Shelf, ESD	
	6142X	48” x 18” Laminate Shelf	
	6144X	60” x 18” Laminate Shelf	
1	6146X	72” x 18” Laminate Shelf	1
	3852X	48” x 18” Laminate Shelf, ESD	
	6145X	60” x 18” Laminate Shelf, ESD	
	6147X	72” x 18” Laminate Shelf, ESD	
	6148X	48” x 24” Laminate Shelf	
	6150X	60” x 24” Laminate Shelf	
	6152X	72” x 24” Laminate Shelf	
	6149X	48” x 24” Laminate Shelf, ESD	
	6151X	60” x 24” Laminate Shelf, ESD	
	6153X	72” x 24” Laminate Shelf, ESD	

Parts List

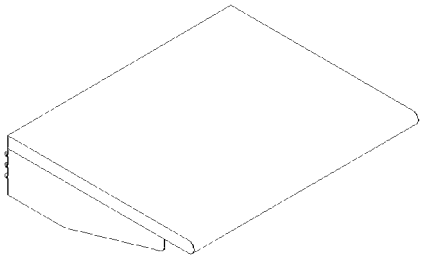
Part Number		Description	Qty.
2	8156X	8”x 11” Shelf Support - L.H., 12” Deep Shelf	1
3	8157X	8”x 11” Shelf Support - R.H., 12” Deep Shelves	1
4	8154X	8”x 17” Shelf Support - L.H., 18”/24” Deep Shelves	1
5	8155X	8”x 17” Shelf Support - R.H., 18”/24” Deep Shelves	1
6	82237	#10AB x 5/8” Phillips Pan Head Thread Forming Screw	4
7	66714	#10-24 x 3/8” Phillips Pan Head Self Tapping Screw	2



Open Printer Shelf

Tools Required

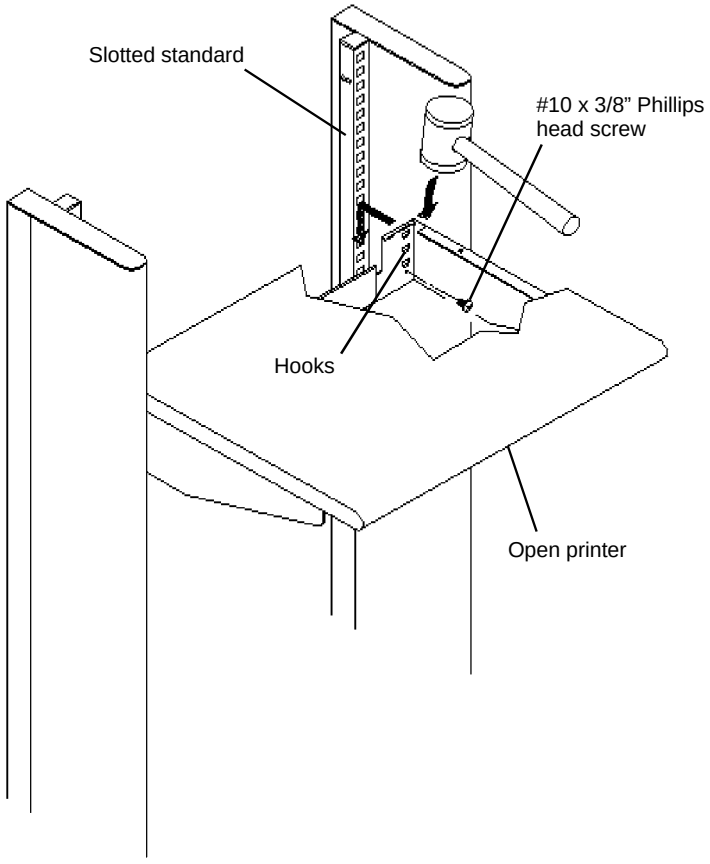
-Phillips head screwdriver
-Plastic mallet



Open Printer Shelf

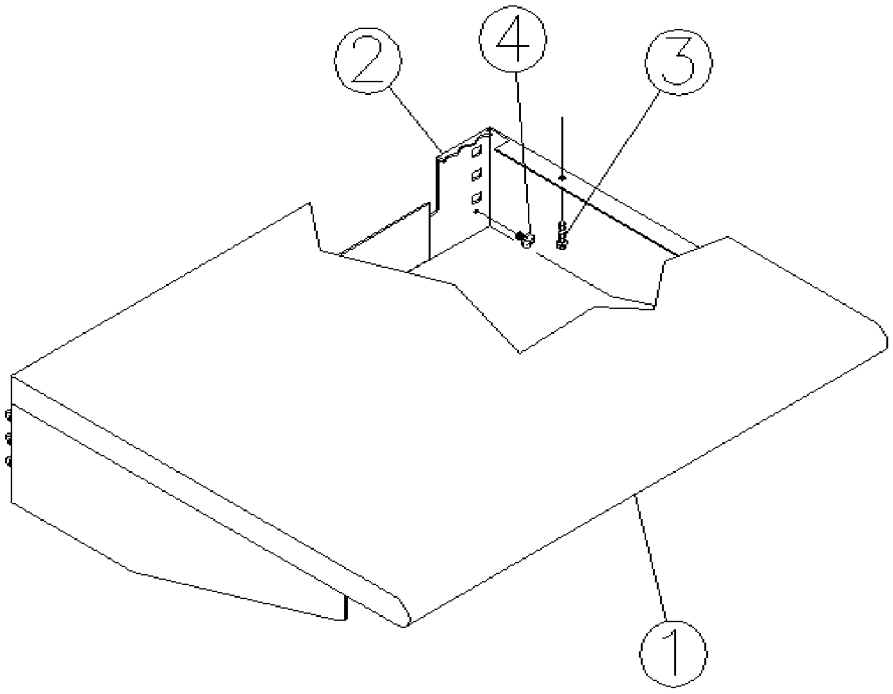
1. Determine the location of the **Open Printer Shelf**. and insert the rear hooks into the slotted standards and push down. To assure that the hooks are seated, tap the rear corners with a plastic mallet or equivalent. See **Figure 1**.

2. To prevent accidental disengagement of the shelf, install the two #10 x 3/8" Phillips head screws into the holes located below the hooks. See **Figure 1**.



Open Printer Shelf (cont.)

Parts List			
Part Number		Description	Qty.
1	5399X	24” Open Printer Shelf	1
	5400X	30” Open Printer Shelf	
	5546X	24” Open Printer Shelf, ESD	
	5547X	30” Open Printer Shelf, ESD	
2	4569X	24” Support Frame	1
	4570X	30” Support Frame	
3	64857	#10 x 3/4” Hex Washer Head Screw	6
4	66250	#10 x 3/8” Phillips Pan Head Screw	2



Forms Feed and Receiver Racks

Tools Required
-None

NOTE: The **Forms Feed** and **Receiver Rack** may be installed on the Linx Open Printer Shelves, Electronics Shelves and General Purpose Shelves.

The illustrations show installation on the Open Printer Shelf.

NOTE: The Feed Rack must be installed first to shelf.

1. Hook the lower hooks of the Forms Receiver Rack onto the back crosswire of the Forms Feed Rack. See **Figure 1**.

2. Squeeze the two upper hooks inward and pivot the Receiver Rack upward to engage the hooks onto the Feed Rack. See **Figure 2**.

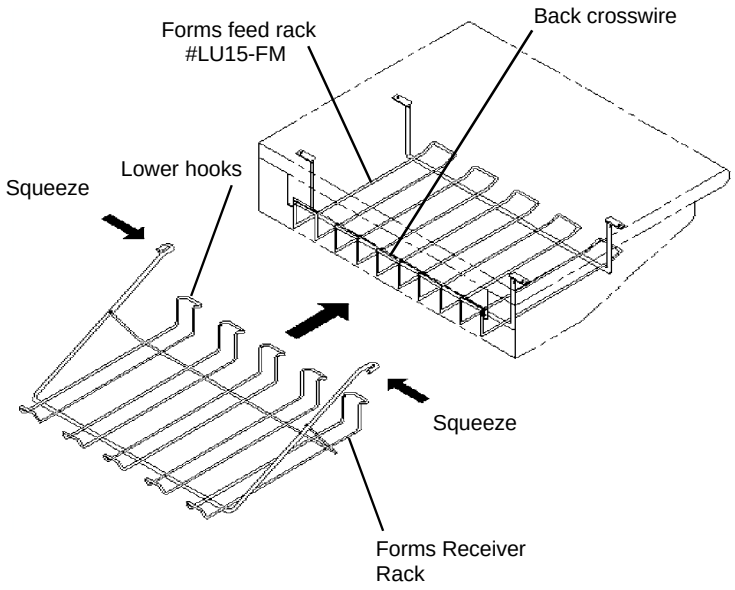


Figure 1

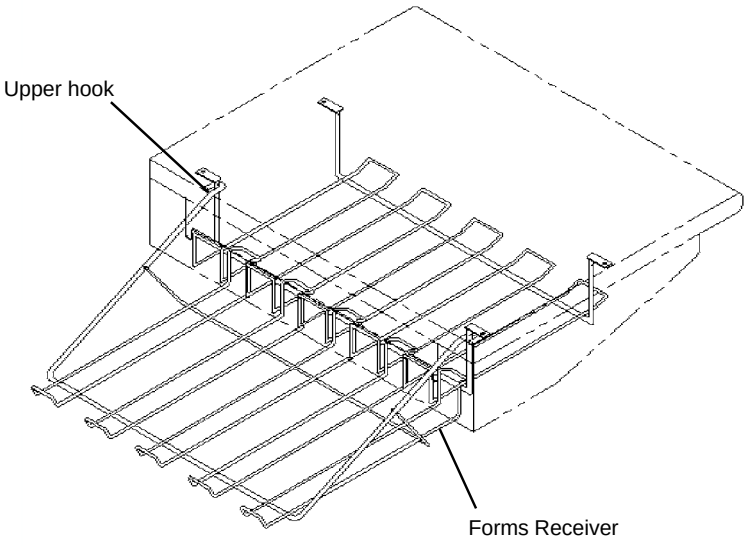


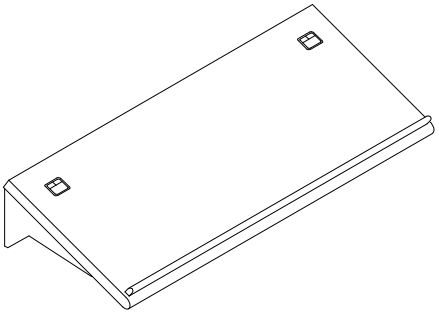
Figure 2

technical furniture

Linear Incline Hook-on Shelves

Tools Required
-Plastic Mallet
-Phillips head screwdriver
-Flat blade screwdriver

1. Assemble the **Front Stop** to the shelf, using the #10AB x
1-3/4" phillips pan head thread forming screws provided.
See **Figure 1**.



Incline Shelving

Note
The front stop must be installed on the Incline Shelving to prevent equipment from sliding forward and off the shelf. If your equipment can be safely secured to the shelf (Wright Line suggests using "Safety Fasteners"), hole plugs are provided in lieu of Front Stop assembly.

2. Determine the location of the shelf. Position the **Shelf Supports** as shown in **Figure 2**. Insert the hooks on the back of the supports into the slotted standard of the Full Frame and push down.

To assure the hooks are seated, tap the top rear corner with a plastic mallet or equivalent

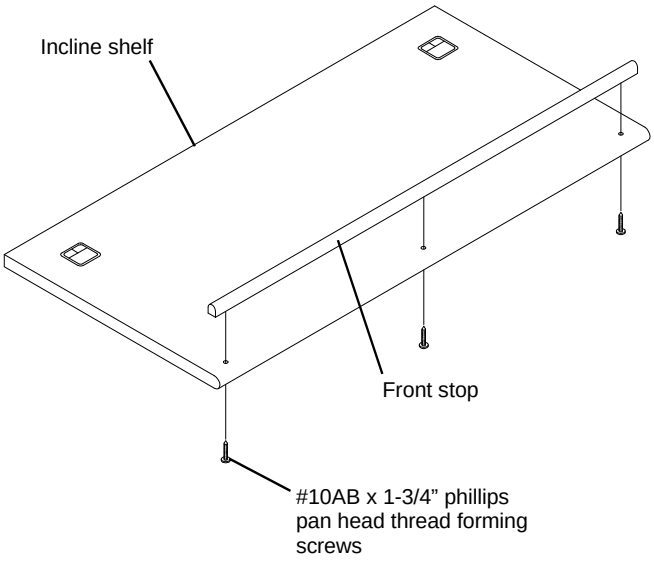


Figure 1

Note
Two shelf supports are required for 24", 30", 36" and 42" wide shelves.

Three shelf supports are required for 48" and 60" wide shelves.

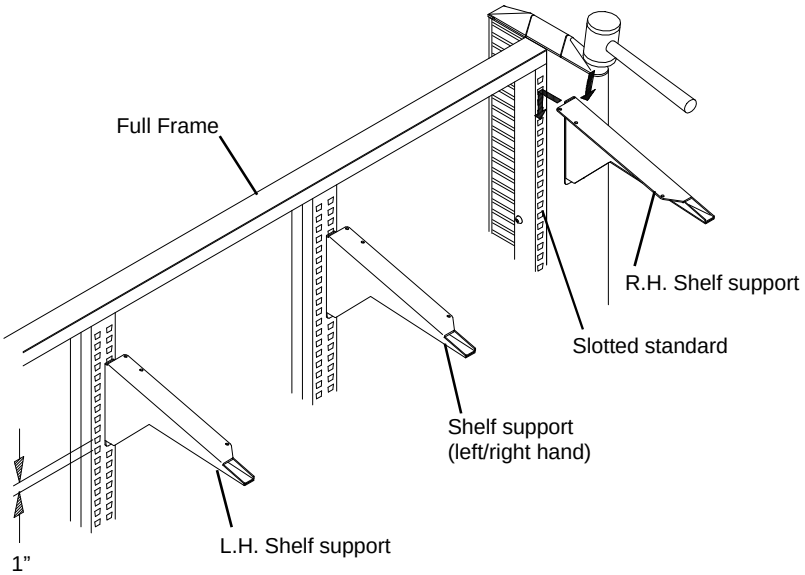


Figure 2

Linear Incline Hook-on Shelves (cont.)

3. Align the pre-drilled holes in the bottom surface of the shelf with the holes in the left hand and right hand shelf supports. See **Figure 3**.

4. Fasten the shelf to the left /right hand shelf supports using the four #10AB x 5/8" long phillips head screws provided. See **Figure 3**.

   NOTE: Only the *outer* left/right hand supports are attached to the shelf.

5. Lock the shelf supports in position with the #10-24 x 3/8" long phillips head screws provided. See **Figure 4**.

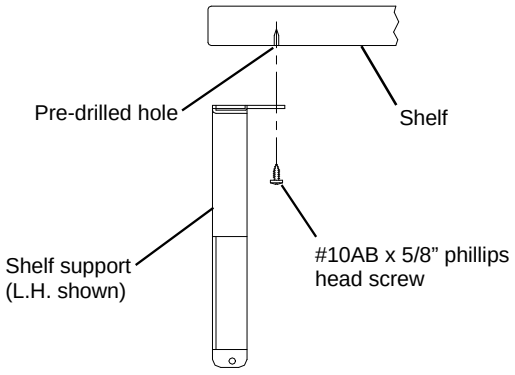


Figure 3

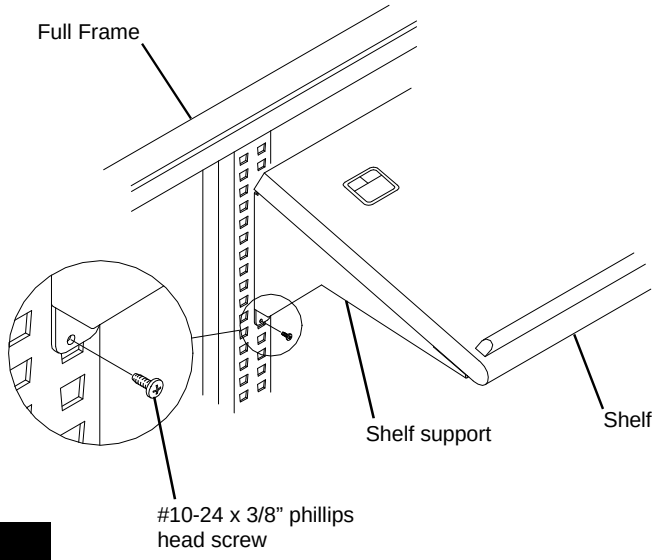


Figure 4

Maximun Shelf Loading		
Shelf Width	**Number of Brackets**	**Load Capacity**
24" -42"Shelves 610mm-1067mm	2	300 lbs 136 kg
48"-60" Shelves 1219mm-1524mm	3	500 lbs 227 kg
72" Shelves 1828mm	4	750 lbs 342 kg

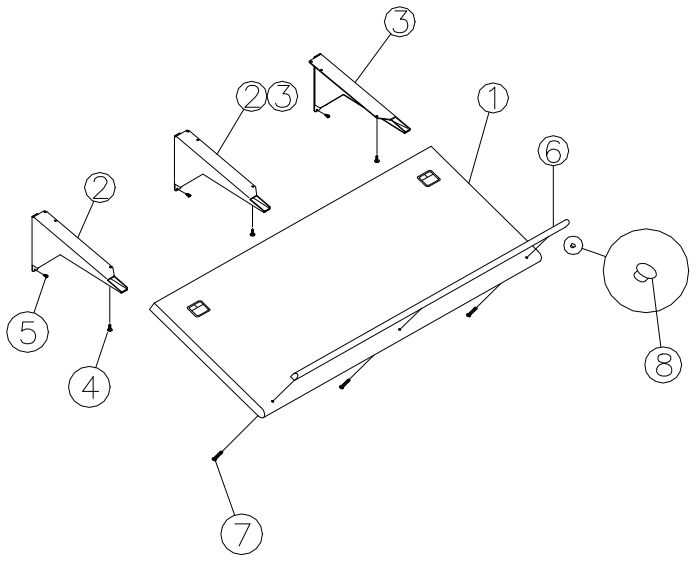
Linear Incline Hook-on Shelves (cont.)

Parts List

Part Number		Description	Qty.
	3618X	Inclined Shelf, 18”x 24”	
	3619X	Inclined Shelf, 18”x 30”	
	3620X	Inclined Shelf, 18”x 36”	
	3622X	Inclined Shelf, 18”x 48”	
	3623X	Inclined Shelf, 18”x 60”	
	3624X	Inclined Shelf, 18”x 72”	
	3625X	Inclined Shelf, 24”x 24”	
	3626X	Inclined Shelf, 24”x 30”	
	3627X	Inclined Shelf, 24”x 36”	
	3629X	Inclined Shelf, 24”x 48”	
	3630X	Inclined Shelf, 24”x 60”	
1	3631X	Inclined Shelf, 24”x 72”	1
	4157X	Inclined Shelf, 18”x 24”, ESD	
	4158X	Incline Shelf, 18”x 30”, ESD	
	4159X	Incline Shelf, 18”x 36”, ESD	
	4161X	Incline Shelf, 18”x 48”, ESD	
	4162X	Incline Shelf, 18”x 60”, ESD	
	4163X	Incline Shelf, 18”x 72”, ESD	
	4164X	Incline Shelf, 24”x 24”, ESD	
	4165X	Incline Shelf, 24”x 30”, ESD	
	4166X	Incline Shelf, 24”x 36”, ESD	
	4168X	Incline Shelf, 24”x 48”, ESD	
	4169X	Incline Shelf, 24”x 60”, ESD	
	4170X	Incline Shelf, 24”x 72”, ESD	

Parts List

Part Number		Description	Qty.
2	8158X	8”x 17” 15° Shelf Support - L.H.	1-2
3	8159X	8”x 17” 15° Shelf Support - R.H.	1-2
4	82287	#10AB x 5/8” Phillips Pan Head Thread Forming Screw	4
5	66714	#10-24 x 3/8” PhillipsPan Head Self Tapping Screw	2-4
	8970X	29” Front Stop	
	8971X	35” Front Stop	
6	8973X	47” Front Stop	1
	8974X	59” Front Stop	
	8975X	71” Front Stop	
7	85320	#10AB x 1.75” Phillips Pan Head Thread Forming Screw	3-6
8	87034	Hole Plug	3-6



technical furniture

Corner Laminate Hook-on Shelves

Tools Required
-Plastic mallet
-Phillips head screwdriver

1. Determine the location of the **Corner Laminate Hook-on Shelf**. Position the **Shelf Supports** as shown in **Figure 1**. Insert the hooks on the back of the supports into the slotted standards and push down.

Note
Ensure that the left hand and right hand supports are installed as shown.

To assure the hooks are seated, tap the top rear corner of the supports with a plastic mallet or equivalent.

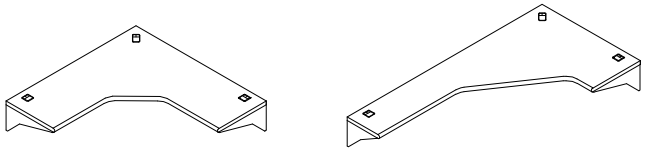
2. Install the **Rear Supports**. Ensure that they are located at the same height as the right hand and left hand supports. See **Figure 1**.

3. With two people, lift and place the shelf on the shelf supports.

Note
It will be necessary to lift the shelf at an angle to cear the uprights.

4. Fasten the shelf to the left hand and right hand supports using the four #10AB x 5/8" long screws provided. See **Figure2**.

Maximum Shelf Loading
The maximum shelf loading is 300 lbs regardless of size.



Corner Laminate Shelves

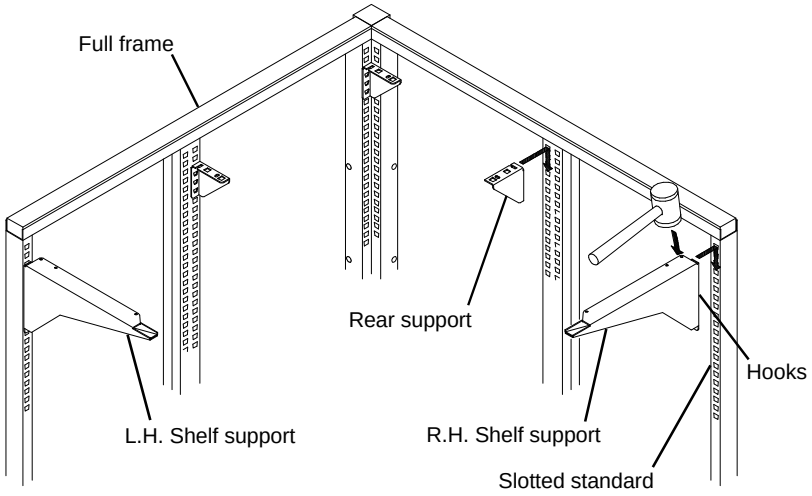


Figure 1

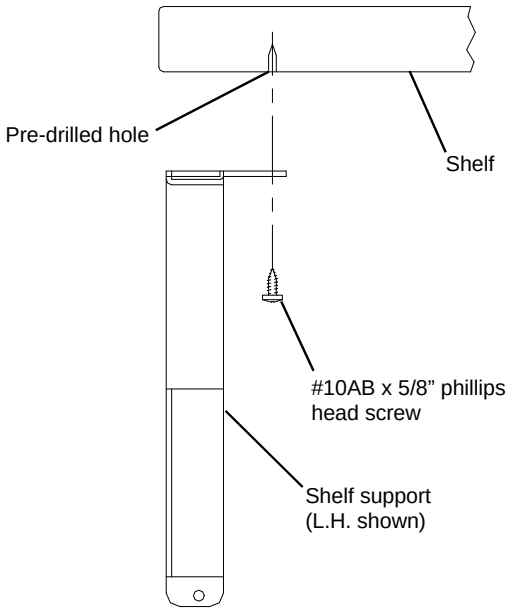


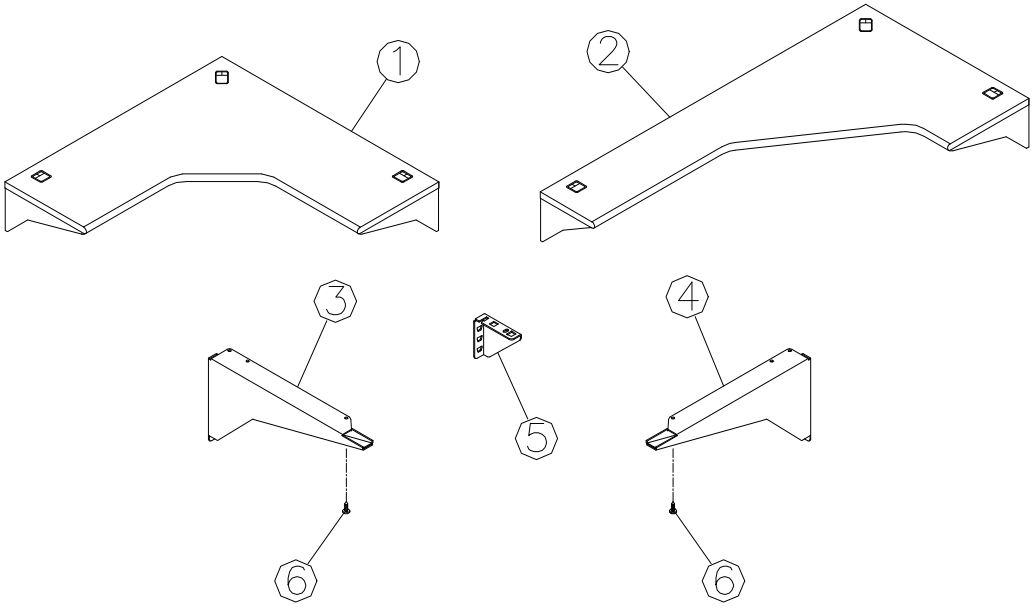
Figure 2

technical furniture

Corner Laminate Hook-on Shelves (cont.)

Parts List

Part Number		Description	Qty.
1	4028X	Corner Upper Shelf, 36”x 36” (18” Sides), “L”	1
	3015X	Corner Upper Shelf, 48”x 48” (12” Sides)	
	3014X	Corner Upper Shelf, 48”x 48” (18” Sides), “L”	
	3013X	Corner Upper Shelf, 48”x 48” (18” Sides)	
	3012X	Corner Upper Shelf, 48”x 48” (24” Sides), “L”	
	4040X	Corner Upper Shelf, 36”x 36” (18” Sides), “L”, ESD	
	3835X	Corner Upper Shelf, 48”x 48” (12” Sides), ESD	
	3836X	Corner Upper Shelf, 48”x 48” (18” Sides), “L”, ESD	
	3837X	Corner Upper Shelf, 48”x 48” (18” Sides), ESD	
	3838X	Corner Upper Shelf, 48”x 48” (24” Sides), “L”, ESD	
2	3839X	Integrated Upper Shelf, 36”x 72”, L.H. ESD	1
	3840X	Integrated Upper Shelf, 72”x 36”, R.H. ESD	
	3020X	Integrated Upper Shelf, 36”x 72”, L.H.	
	3021X	Integrated Upper Shelf, 72”x 36”, R.H.	
3	8154X	8” x 17” Shelf Support - L.H.	1
4	8155X	8” x 17” Shelf Support - R.H.	1
5	3125X	Rear Support	3
6	82287	#10AB x 5/8” Phillips Pan Head Screw	4



technical furniture

Basic Plus Corner Laminate Shelf

Tools Required
-Plastic mallet
-Phillips head screwdriver

1. Determine the location of the **Corner Laminate Hook-on Shelf**. Position the **Shelf Supports** as shown in **Figure 1**. Insert the hooks on the back of the supports into the slotted standards and push down.

Note
Ensure that the left hand and right hand supports are installed as shown.

To assure the hooks are seated, tap the top rear corner of the supports with a plastic mallet or equivalent.

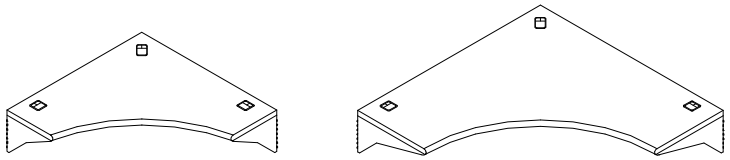
2. Install the **Rear Support**. Ensure that it is located at the same height as the right hand and left hand supports. See **Figure 1**.

3. With two people, lift and place the shelf on the shelf supports.

Note
It will be necessary to lift the shelf at an angle to clear the uprights.

4. Fasten the shelf to the left hand and right hand supports using the four #10AB x 5/8" long screws provided. See **Figure2**.

Maximum Shelf Loading
The maximum shelf loading is 300 lbs regardless of size.



Corner Laminate Shelves

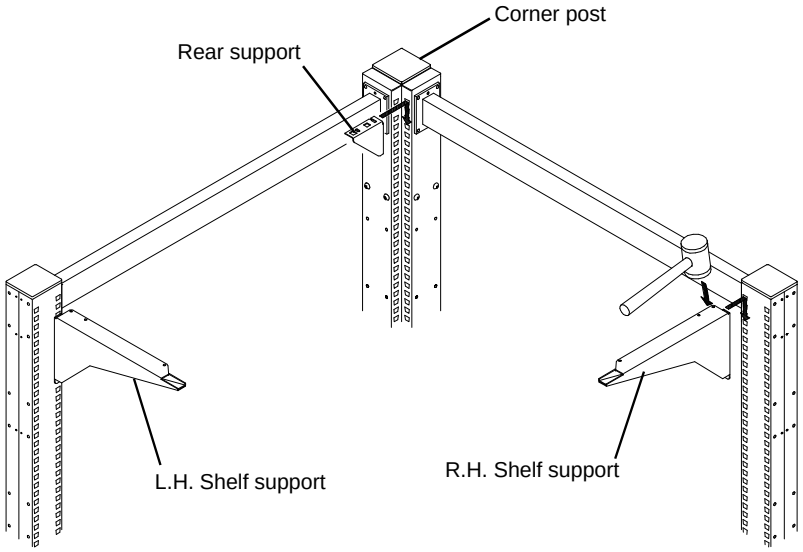


Figure 1

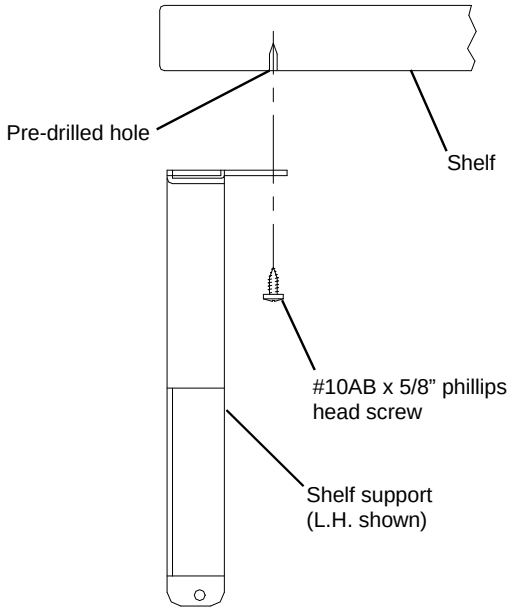


Figure 2

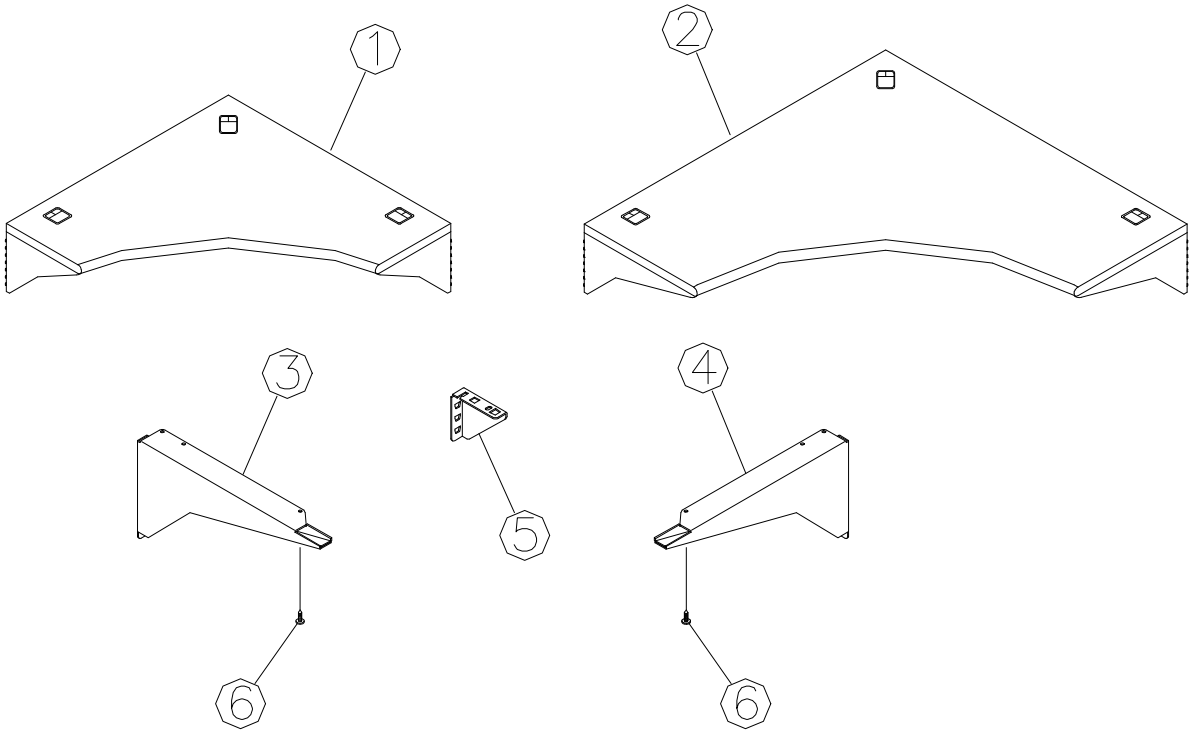
Basic Plus Corner Laminate Shelf (cont.)

Parts List

	Part Number	Description	Qty.
1	6181X	48”x 48” Corner Shelf (12” Sides)	1
	6173X	48”x 60” Corner Shelf (12” Sides), L.H.	
	6175X	48”x 60” Corner Shelf (12” Sides), R.H.	
	6165X	48”x 72” Corner Shelf (12” Sides), L.H.	
	6167X	48”x 60” Corner Shelf (12” Sides), R.H.	
	6157X	36”x 72” Corner Shelf (12” Sides), L.H.	
	6159X	36”x 72” Corner Shelf (12” Sides), R.H.	
	6182X	48”x 48” Corner Shelf (12” Sides), ESD	
	6174X	48”x 60” Corner Shelf (12” Sides), L.H., ESD	
	6176X	48”x 60” Corner Shelf (12” Sides), R.H., ESD.	
	6166X	48”x 72” Corner Shelf (12” Sides), L.H., ESD	
	6168X	48”x 72” Corner Shelf (12” Sides), R.H., ESD	
	6158X	36”x 72” Corner Shelf (12” Sides), L.H., ESD	
	6160X	36”x 72” Corner Shelf (12” Sides), R.H., ESD	
	7391X	30”x 30” Upper Shelf (12” Sides), ESD	
2	6183X	48”x 48” Corner Shelf (18” Sides)	1
	6177X	48”x 60” Corner Shelf (18” Sides), L.H.	
	6179X	48”x 60” Corner Shelf (18” Sides), R.H.	
	6169X	48”x 72” Corner Shelf (18” Sides), L.H.	
	6171X	48”x 72” Corner Shelf (18” Sides), R.H.	
	6161X	36”x 72” Corner Shelf (18” Sides), L.H.	
	6163X	36”x 72” Corner Shelf (18” Sides), R.H.	
	6184X	48”x 48” Corner Shelf (18” Sides), ESD	
	6178X	48”x 60” Corner Shelf (18” Sides), L.H., ESD	
	6180X	48”x 60” Corner Shelf (18” Sides), R.H., ESD	
	6170X	48”x 72” Corner Shelf (18” Sides), L.H., ESD	
	6172X	48”x 72” Corner Shelf (18” Sides), R.H., ESD	
	6162X	36”x 72” Corner Shelf (18” Sides), L.H., ESD	
	6164X	36”x 72” Corner Shelf (18” Sides), R.H., ESD	
	7390X	30”x 30” Upper Shelf (18” Sides), ESD	

Basic Plus Corner Laminate Shelf (cont.)

Parts List			
Part Number		Description	Qty.
3	8156X	8”x 11” Shelf Support - L.H.	1
	8154X	8”x 17” Shelf Support - L.H.	
4	8157X	8”x 11” Shelf Support - R.H.	1
	8155X	8”x 17” Shelf Support - R.H.	
5	3125X	Rear Support	3
6	82287	#10AB x 5/8” Phillips Pan Head Screw	4



technical furniture

Rack Mount Module

Tools Required
- -Phillips head screwdriver
- -5/32” Allen wrench (provided)
- -Plastic mallet

NOTE:
Two people are required for the assembly of the larger 61”(1549mm), 72”(1829mm) and 84” high (2134mm) **Rack Mount Modules**.

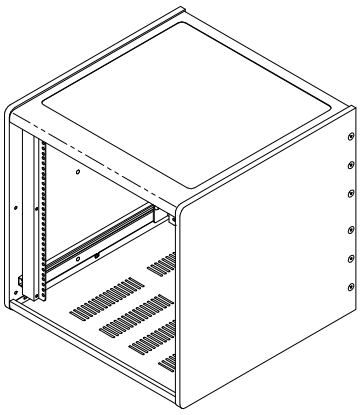
The **Side Panels** are pre-assembled at the factory with the Front Rails in the forward position. See **Figure 1**.

The **Front Rails** can be repositioned 6”(152mm) back from the front position if your hardware installation requires additional clearance behind an optional Plexiglass Door.

The position of the **Rear Rails** can be adjusted by loosening the 1/4”-20 Button head cap screws using the 5/32” Allen wrench (provided). Reposition the Rear Rails as required by sliding them along the Horizontal Rails. Re-tighten the 1/4” Button head cap screws to secure the Rear Rails in place.

The Rear Rails can be adjusted over a range of 6.76”(172mm) to 20.40”(518mm). See **Figure 2**.

After you have made any necessary rail location adjustments and determined the desired installation location of the Rack Mount Module on the Frame assembly, proceed as follows.



Rack Mount Module

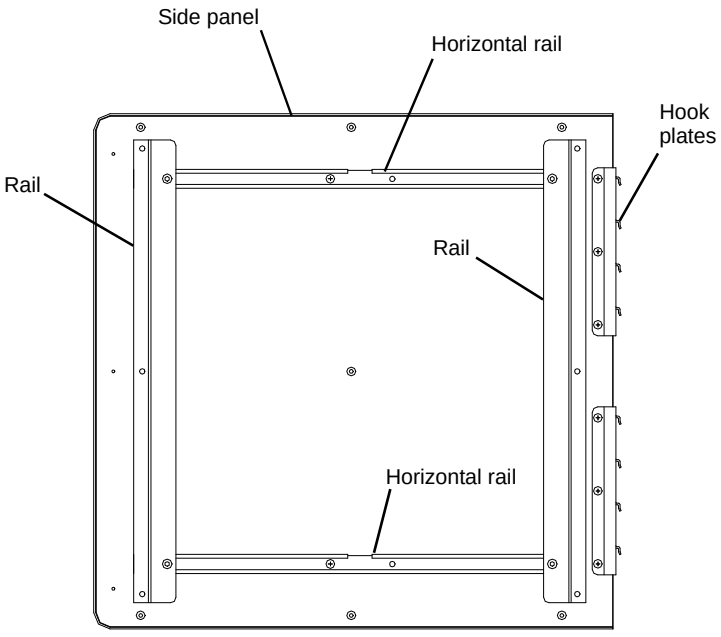


Figure 1
Side View of Side Panel

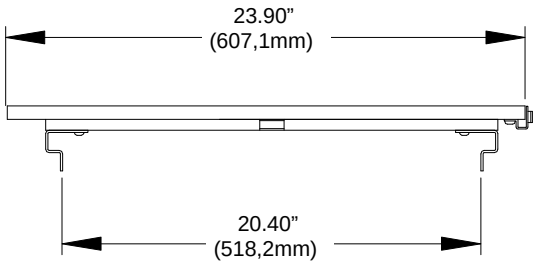


Figure 2
Top view of Side Panel

Rack Mount Module (cont.)

INSTALLING THE SIDE PANELS

1. Position the Side Panel in the desired location . Insert the hooks in the Side Panel into the Slotted Standard and push down. To assure the hooks are seated, tap the rear corner with a plastic mallet or equivalent. See **Figure 3.**

   NOTE:
   If you are installing a Side Panel with three or more Hook Plates, it may be necessary to loosen the three 1/4"-20 screws securing the Hook Plates to the Side Panel. This will allow the Hook Plates to be adjusted in or out to engage the slots. **Re-tighten the Hook Plates securely after the Side Panel is installed.**

2. Install the opposite Side Panel. Make certain that both Side Panels are at the same level and firmly seated in the Slotted Standards.

3. Install six #10-24 x 1/2" Phillips head machine screws in each Side Panel. Install 3 screws at the top and 3 screws at the bottom of each panel. Leave approximately 1/8"(3mm) of thread exposed. See **Figure 3**.

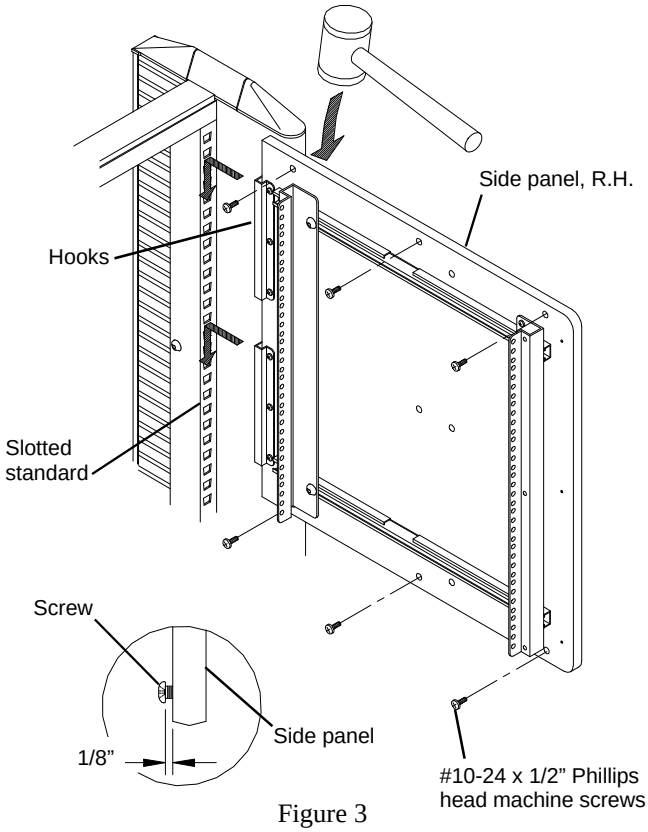


Figure 3

INSTALLING THE TOP/BOTTOM PANEL

19" Rack Mount Modules have two **Perforated Top Panels** with the 10" and 17" high units. They have one **Cable Access Bottom** and one Perforated Top Panel with heights 24" through 84". 24" Rack Mount Modules have one of each with all heights, 38" through 84".

Top/Bottom Panels are interchangeable. If the cables are to enter the Rack Modules from above or through the floor, use the Cable Access Panel accordingly. If the cables enter through the back, install the Cable Access Panel at the bottom. They can be changed at any time without dismantling the Rack Mount Module. See **Figure 4**.

NOTE: An optional **Fan Mount Top Panel** is available. See page O-5 .

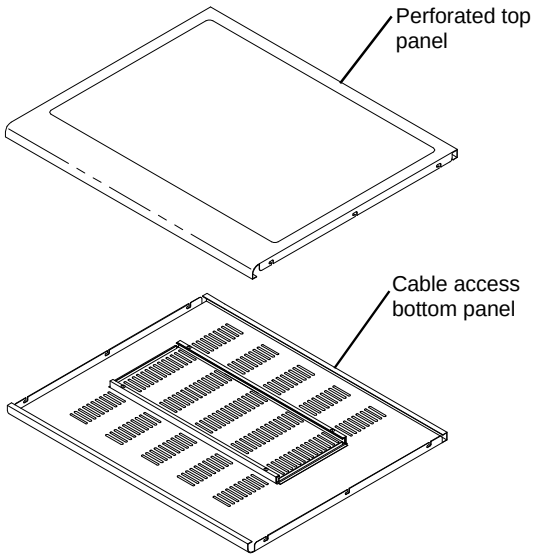


Figure 4
Top/Bottom panels

Rack Mount Module (cont.)

4. For larger amounts of cable, remove the 8" x 20" **Center** (four screws). Taped to the Top/Bottom panel are two **20" Edge Protectors**. Put them on the now exposed edges. Store the 8" x 20" Center at the bottom of the module. See **Figure 5**.

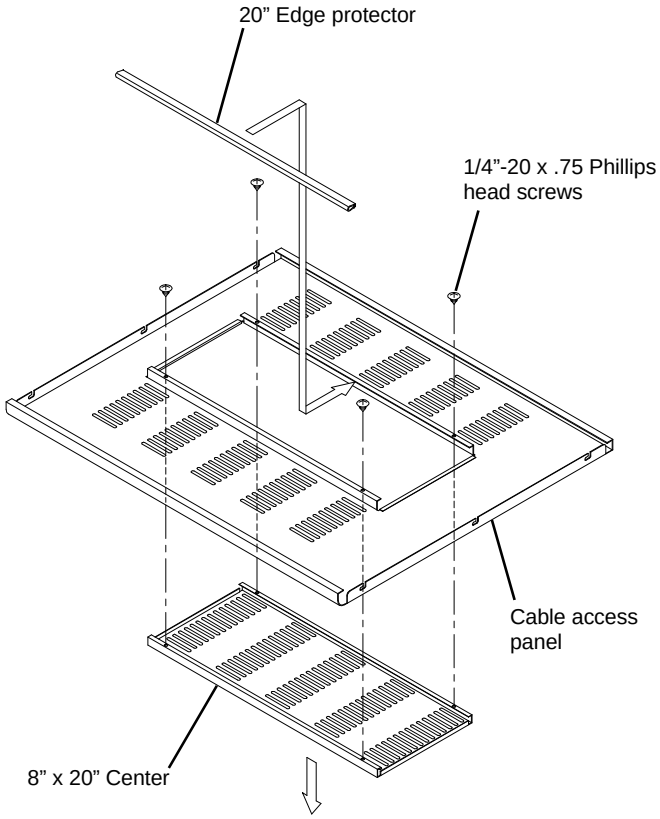


Figure 5

6. Install the Top onto the Side Panels by carefully positioning it over the three screws on each Side Panel. See **Figure 6**. Slide it back until the screws bottom out in the horizontal slots See **Figure 6**. Tighten the screws securely.

   Repeat this procedure to install the Bottom onto the Side Panels. **NOTE**: The Top/Bottom Panel reverses at the bottom position (upside down). See **Figure 5**.

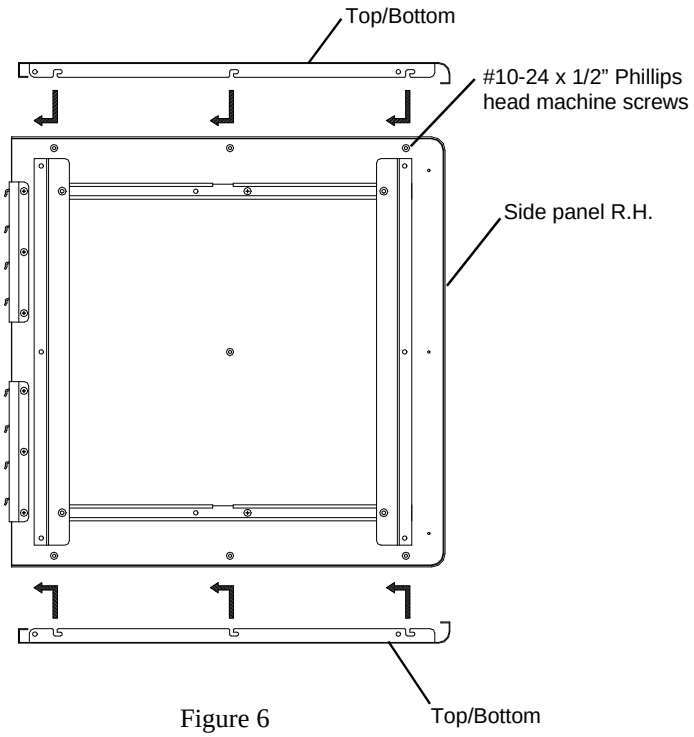


Figure 6

Rack Mount Module (cont.)

7. **#10-32 Clip Nuts** and **#10-32 x 1/2" Phillips head machine screws** are included to allow easy installation of electronic equipment.

   Install the Clip Nuts in the desired location (based on the electronic equipment being used) on the front and rear rails. See **Figure 7**.

   Follow the instructions provided with the electronic equipment for specific equipment installation instructions.

   If additional Clip Nuts are required, order the LB71-00 Clip Nut hardware kit.

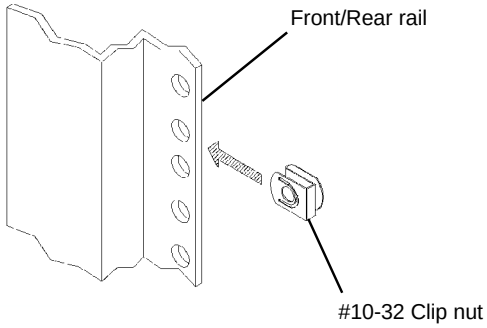


Figure 7

RACK MOUNT MODULE PANEL SPACE AND MAXIMUM LOADING			
Item No.	Description	Panel Space	Maximum Loading
LB55-XX	10" Rack Mount Module	7.14"(181mm)	150#(68kg)
LB57-XX	17" Rack Mount Module	14.14"(359mm)	300#(136kg)
LB59-XX	24" Rack Mount Module	21.14"(537mm)	300#(136kg)
LB61-XX	38" Rack Mount Module	35.14"(893mm)	400#(182kg)
LB63-XX	61" Rack Mount Module	56.14"(1426mm)	600#(273kg)
LB65-XX	72" Rack Mount Module	66.64"(1693mm)	800#(364kg)
LB67-XX	84" Rack Mount Module	78.90"(2004mm)	800#(364kg)

Rack Mount Module (cont.)

ASSEMBLING THE OPTIONAL EXHAUST FAN

Packaged with the Fan Kit is the required hardware for attachment.

NOTE: The Top Panels have two screw hole patterns. Those shipped through the first quarter of 1996 will have pattern "A". Those shipped after will have pattern "B". See **Figure 8**.

1. Place the Fan (side without guard) on the inside of the Top Panel and align it with the eight holes. Position the Fan so that the cord connection is toward the rear.

2. With the screw head on the outside, attach one screw and nut (finger tight) to opposite sides. Start the remaining six screws. Place the ground wire (green with terminal end) onto the nearest screw before the nut. Tighten all screws. See **Figure 8**.

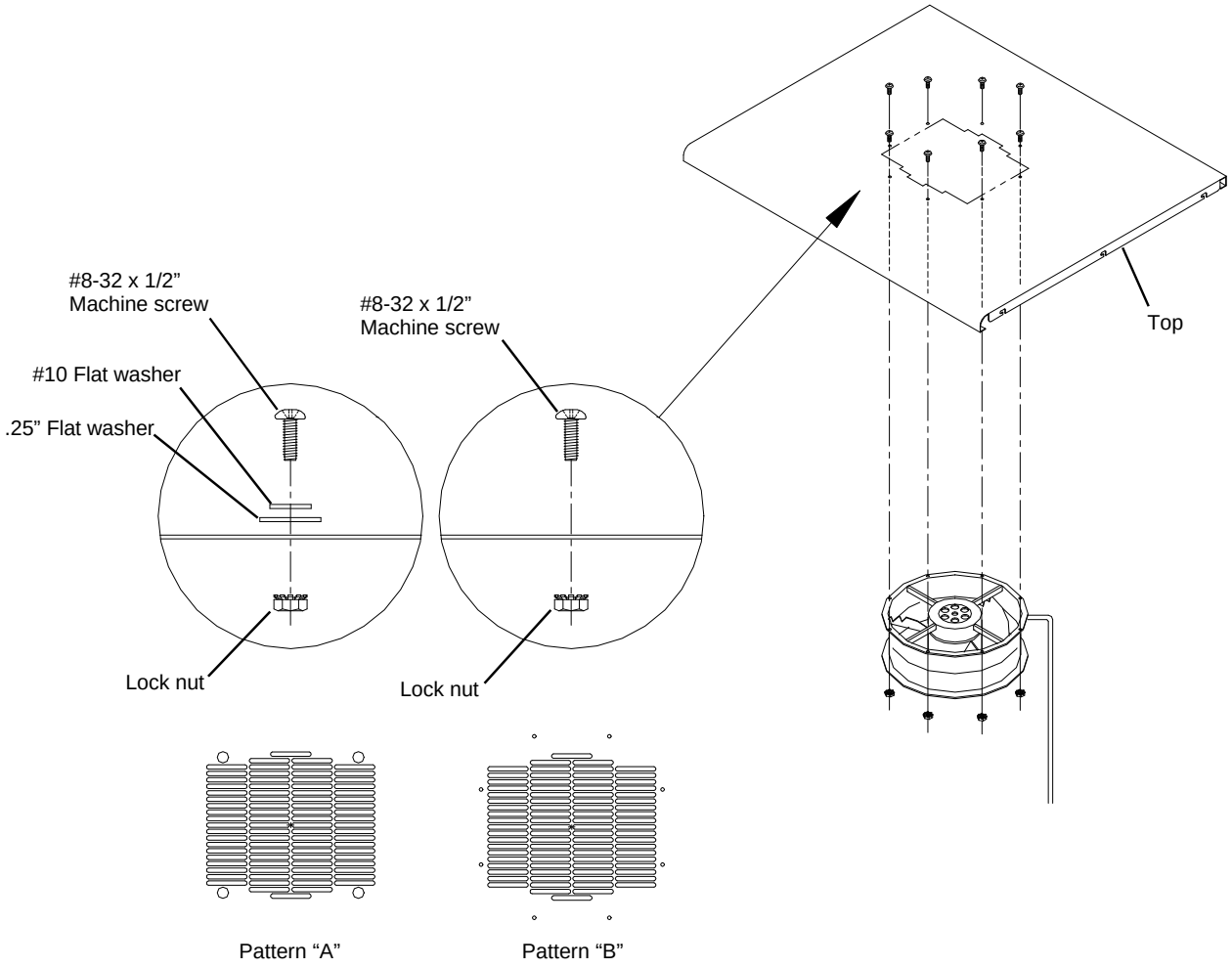


Figure 8

Rack Mount Module (cont.)

Parts List

Part Number		Description	Qty.
1	2716X	10” End Panel, 19” Rack Mount Module	2
	2717X	17” End Panel, 19” Rack Mount Module	
	2718X	24” End Panel, 19” Rack Mount Module	
	5198X	38” End Panel, 19” Rack Mount Module	
	3075X	59” End Panel, 19” Rack Mount Module	
	3077X	70” End Panel, 19” Rack Mount Module	
	3079X	82” End Panel, 19” Rack Mount Module	
2	2768X	7.3” Rail, 19” Rack Mount Module	4
	2769X	14.3” Rail, 19” Rack Mount Module	
	2770X	21.3” Rail, 19” Rack Mount Module	
	2732X	35.3” Rail, 19” Rack Mount Module	
	2733X	56.3” Rail, 19” Rack Mount Module	
	2734X	66.8” Rail, 19” Rack Mount Module	
	2735X	79.05” Rail, 19” Rack Mount Module	
3	55617	#10-24 x 1/2” Phillips Pan Head Machine Screw	24-44
4	6914X	20.8” Horizontal Rail	4-8
5	68681	1/4”-20 x 3/8” Button Head Cap Screw	4-8
6	82088	1/4” Clamp Nut	4-8
7	1708X	Hook Plate, L.H. (used on LB57, LB61, LB63, LB65, LB67)	1-4
	1709X	Hook Plate, R.H. (used on LB57, LB61, LB63, LB65, LB67)	1-4
	2408X	Hook Plate, L.H. (used on LB55, LB59)	1-2
	2409X	Hook Plate, R.H. (used on LB55, LB59)	1-2
8	53956	1/4”-20 x .75” Phillips Pan Head Machine Screw	5-24

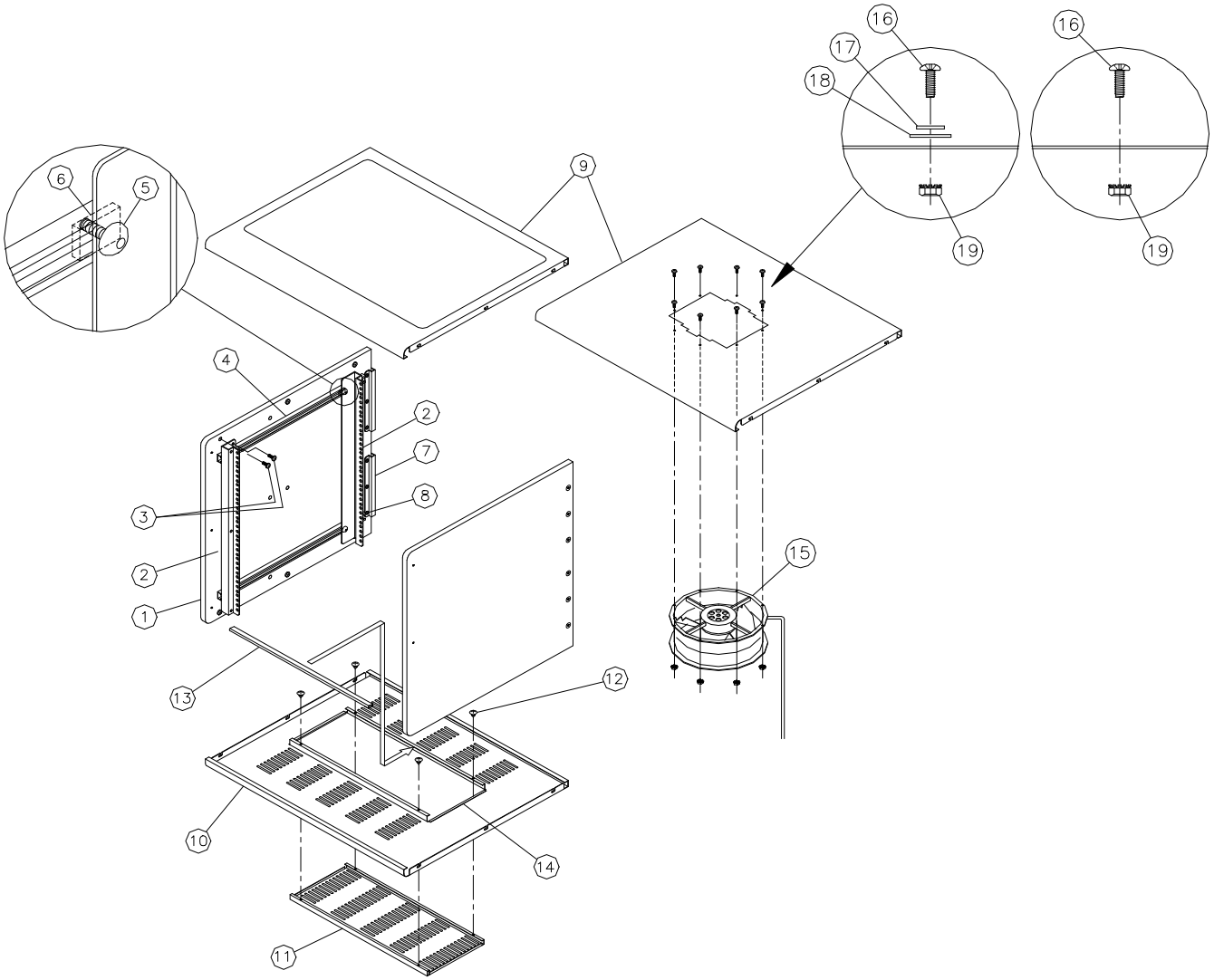
Rack Mount Module (cont.)

Parts List

Part Number		Description	Qty.
9	7846X	Perforated Top, 19” Rack Mount Module	1
	7750X	Top w/ Fan, 19” Rack Mount Module	
10	7848X	Bottom, Cable Access, 19” Rack Mount Module	1
11	7106X	8” x 20” Center	1
12	66249	#8AB x .38” Pan Head Thread Forming Screw	4
13	82241	Fabric Clip, 20” Long	2
14	83340	Fabric Clip, 8.25” Long	2
15	84010	Fan (optional)	1
16	83840	#8-32 x 1/2” Machine Screws	8
17	54225	#10 Flat Washer	4
18	18959	.25” Flat Washer	4
19	18244	#8-32 Hex Lock Nut	8

technical furniture

Rack Mount Module (cont.)



technical furniture

Rack Mount Module Front Support (cont.)

INSTALLING THE FRONT SUPPORT

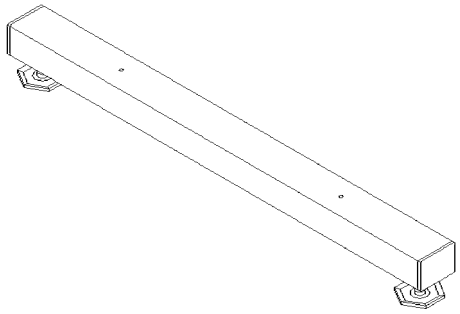
A **Front Support** is provided with all 84" Rack Mount Modules to support the front of the Side Panels when the unit is loaded with heavy components.

The Front Support should be installed after the unit has been leveled and the door has been installed.

1. Position the Front Support in front of the Rack Mount Module, centering it side to side, and slide it under the front of the Side Panels. See **Figure 1**.

2. Adjust the levelers on the Front Support as required. See **Figure 2**.

   If the unit is loaded, it may be necessary to lift up the front of the Rack Mount Module.



Front Support

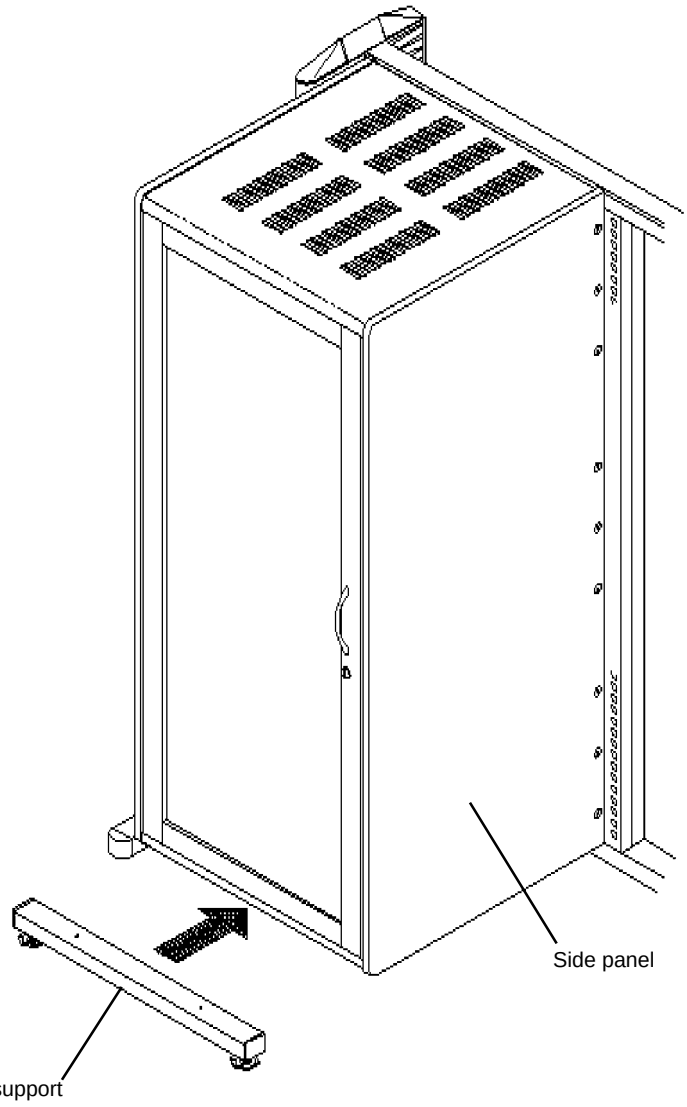


Figure 1

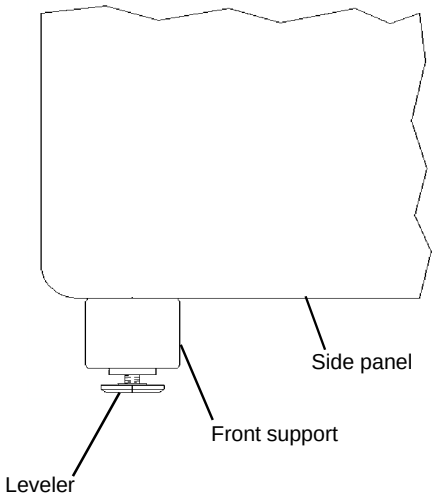
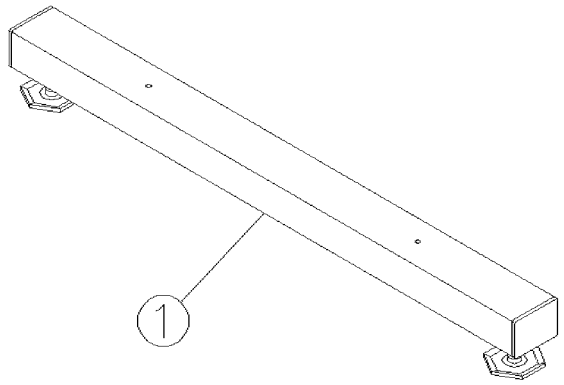


Figure 2

technical furniture

Rack Mount Module Front Support (cont.)

Parts List			
Part Number		Description	Qty.
1	7244X	Front Support, 24” Rack Module	1
	3206X	Front Support, X-Deep LAN Locker	



technical furniture

Rack Mount Module
Plexiglass Door

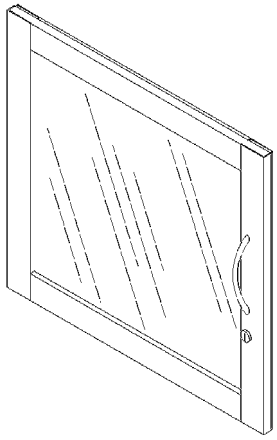
Tools Required
-Phillips head screwdriver

NOTE: Instructions show assembly of a Left Door Swing module.

The Rack Module must be installed and leveled on the Full Frame prior to installation of the **Pexiglass Door**.

Two people are required for the installation of the Door onto the Lan Locker ll enclosure.

After installation, clean the Plexiglass door panel with water and mild detergent. Use a soft cloth and avoid abrasives and cleaning solvents.



Rack Module Door

1. Install the **Door Stop** onto the Right Hand Side Panel using the #8AB x .50 Phillips head screws. The Side Panel is pre-drilled to accept the screws. See **Figure 1**.

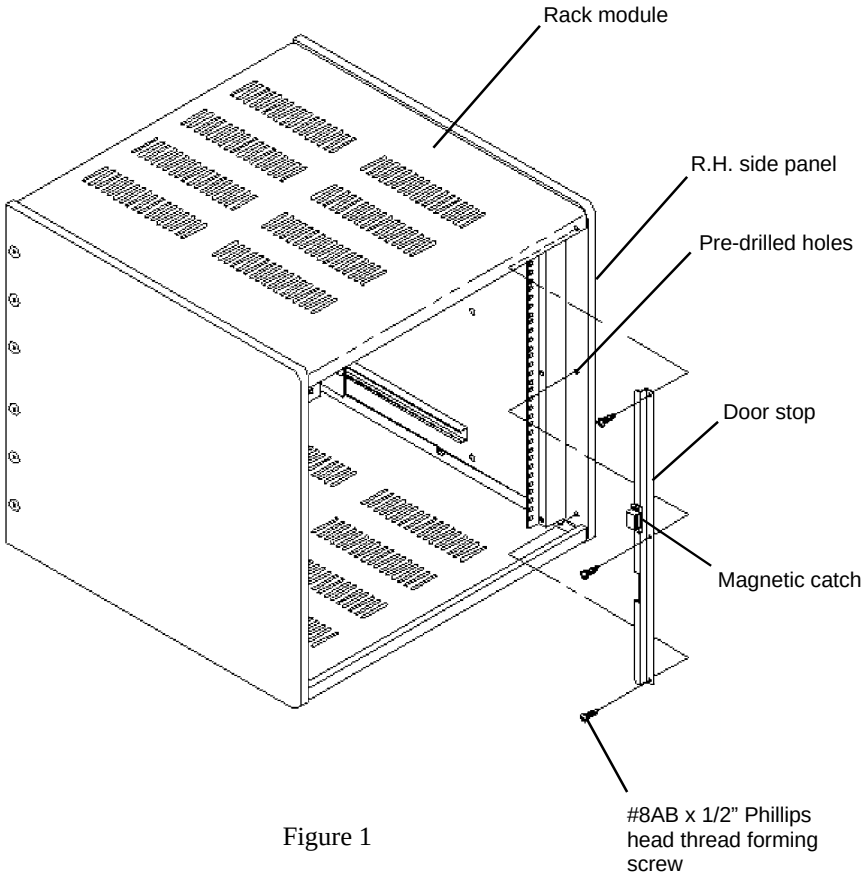


Figure 1

Rack Mount Module Plexiglass Door (cont.)

2. With one person holding the Door, align the holes in the Hinge with the pre-drilled holes in Left Hand Side Panel. Fasten the door to the Side Panel using the #8 AB x .50 Phillips head screws. See **Figure 2**.

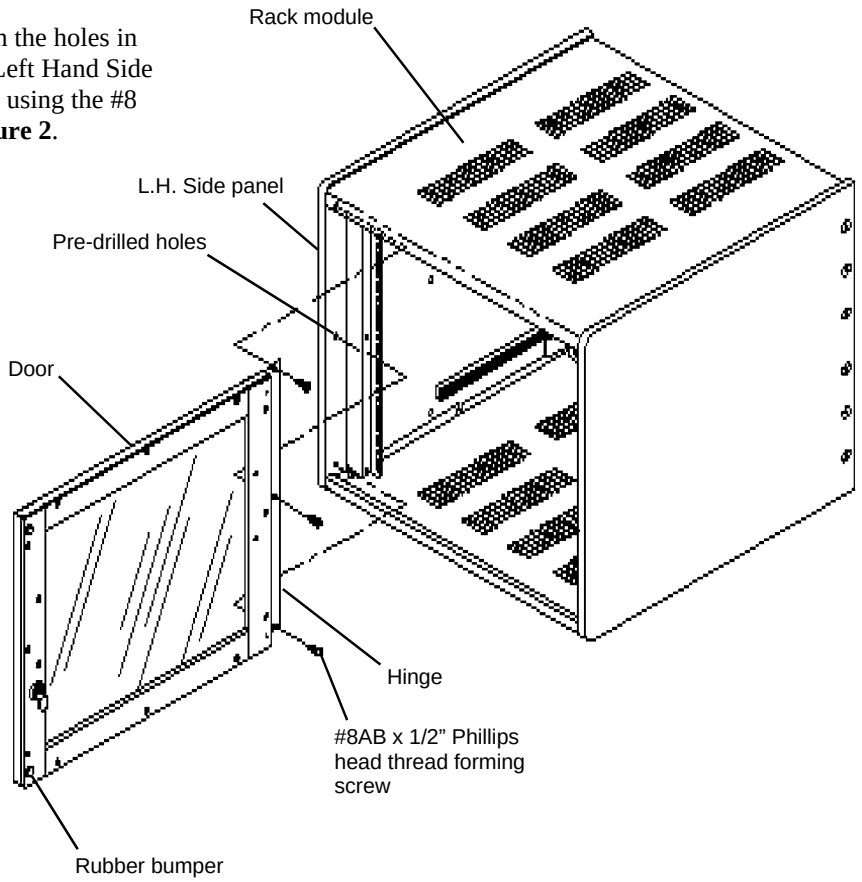


Figure 2

3. If necessary, adjust the **Magnetic Catch(s)** (which are mounted on the Door Stop) so that it contacts the Door with the Rubber bumpers on the Door.

   NOTE: The 56", 66", and 79" high doors are each provided with three catches to provide additional door retention.

   If the retention is found to be too great, one or more of the catches can be moved away from the door face or removed.

   The Magnetic Catch(s) can be moved in or out by loosening the two #4-40 Machine screws. Re-position the Catch(s) to the desired location and tighten the screws securely. See **Figure 3**.

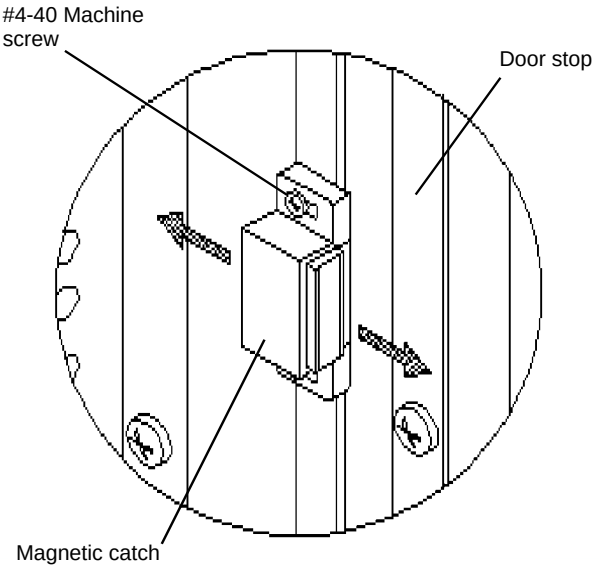


Figure 3

Rack Mount Module Plexiglass Door (cont.)

DOOR ALIGNMENT ADJUSTMENT IF NECESSARY

If the Door is mis-aligned within the Lan Locker ll enclosure with an uneven space between the Door and the Top and Bottom as shown in **Figure 4**, one or more of the following adjustments must be made.

A. Check the Full Frame and the Lan Locker ll enclosure to ensure that they are level. Adjust as required.

B. Ensure that both Side Panels are fully seated in the slotted standards. Use a plastic mallet to tap the Side Panels downward.

C. If one Side Panel remains remains higher than the other, loosen all of the 1/4"-20 x .75" Phillips head machine screws which fasten the hook plates to the Side Panels. See **Figure 5**.

Tap the top of the Side Panel with a plastic mallet to adjust it and then re-tighten the 1/4"-20 screws. Adjust the opposite Side Panel in the same manner if necessary.

D. The Door can be adjusted up or down within the Lan Locker ll enclosure by loosening the #8AB x .50" Phillips head screws. See **Figure 5**. Re-tighten the screws after adjusting the door.

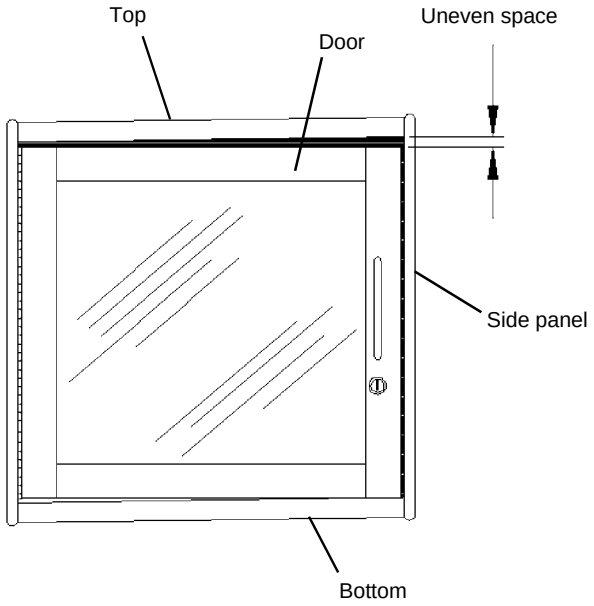


Figure 4

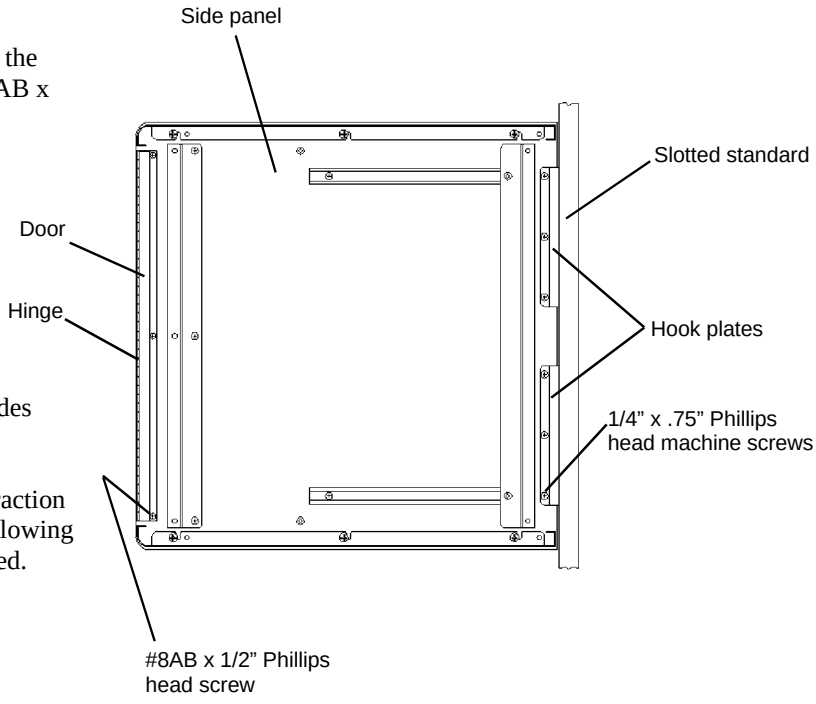


Figure 5

1. Remove the protective liner paper from both sides of the Plexiglass door panel.

If static build-up causes a problem with the attraction of dust particles, it is recommended that the following or similar anti-static cleaner and polisher be used. Wright Line recommends:

KLEENMASTER BRILLIANIZE
Chemical Products Co. Inc.
Omaha, Nebraska

Rack Mount Module Plexiglass Door (cont.)

Parts List

	Part Number (L. Hinge/R. Hinge)	Description	Qty.
1	2774X/- - - - -	7” Door Weldment, 19” Rack Mount Module	1
	2751X/- - - - -	14” Door Weldment, 19” Rack Mount Module	
	2752X/3684X	21” Door Weldment, 19” Rack Mount Module	
	2753X/3685X	35” Door Weldment, 19” Rack Mount Module	
	2754X/3686X	56” Door Weldment, 19” Rack Mount Module	
	2755X/3687X	66” Door Weldment, 19” Rack Mount Module	
	2756X/3688X	79” Door Weldment, 19” Rack Mount Module	
2	82104	5.10” x 20.50” Acrylic Panel, Dark Tint Bronze	1
	82062	12.10” x 20.50” Acrylic Panel, Dark Tint Bronze	
	82063	19.10” x 20.50” Acrylic Panel, Dark Tint Bronze	
	82064	33.10” x 20.50” Acrylic Panel, Dark Tint Bronze	
	82065	54.10” x 20.50” Acrylic Panel, Dark Tint Bronze	
	82066	64.60” x 20.50” Acrylic Panel, Dark Tint Bronze	
	82067	76.86” x 20.50” Acrylic Panel, Dark Tint Bronze	
	82257	5.10” x 20.50” Acrylic Panel, Light Tint Bronze	
	82258	12.10” x 20.50” Acrylic Panel, Light Tint Bronze	
	82259	19.10” x 20.50” Acrylic Panel, Light Tint Bronze	
	82260	33.10” x 20.50” Acrylic Panel, Light Tint Bronze	
	82261	54.10 x 20.50” Acrylic Panel, Light Tint Bronze	
	82262	64.60” x 20.50” Acrylic Panel, Light Tint Bronze	
	82263	76.86” x 20.50” Acrylic Panel, Light Tint Bronze	
	86731	5.12” x 14.32” Acrylic Panel, Dark Tint Bronze, Ventilated Door	
	86727	12.12” x 14.32” Acrylic Panel, Dark Tint Bronze, Ventilated Door	
	86723	19.12” x 14.32” Acrylic Panel, Dark Tint Bronze, Ventilated Door	
	86719	33.12” x 14.32” Acrylic Panel, Dark Tint Bronze, Ventilated Door	
	86715	54.12” x 14.32” Acrylic Panel, Dark Tint Bronze, Ventilated Door	
	86711	64.62” x 14.32” Acrylic Panel, Dark Tint Bronze, Ventilated Door	

technical furniture

Rack Mount Module Plexiglass Door (cont.)

Parts List

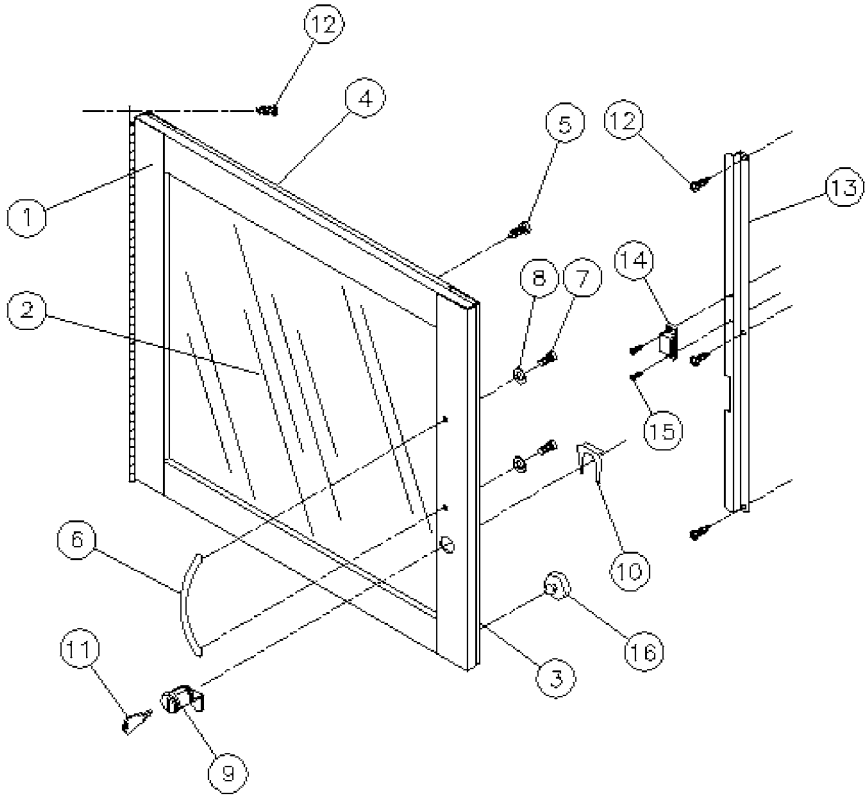
	Part Number (L. Hinge/R. Hinge)		Description	Qty.
2	86707		76.88” x 14.32” Acrylic Panel, Dark Tint Bronze, Ventilated Door	1
	86729		5.12” x 14.32” Acrylic Panel, Light Tint Bronze, Ventilated Door	
	86725		12.12” x 14.32” Acrylic Panel, Light Tint Bronze, Ventilated Door	
	86721		19.12” x 14.32” Acrylic Panel, Light Tint Bronze, Ventilated Door	
	86717		33.12” x 14.32” Acrylic Panel, Light Tint Bronze, Ventilated Door	
	86713		54.12” x 14.32” Acrylic Panel, Light Tint Bronze, Ventilated Door	
	86709		64.62” x 14.32” Acrylic Panel, Light Tint Bronze, Ventilated Door	
	86719		76.88” x 14.32” Acrylic Panel, Light Tint Bronze, Ventilated Door	
	82178 L. Hinge	~	7” Rear Vertical Trim	
	2757X L. Hinge	~	14” Rear Vertical Trim	
	2758X L. Hinge	3678X R. Hinge	21” Rear Vertical Trim	
	2759X L. Hinge	3677X R. Hinge	35” Rear Vertical Trim	
	2760X L. Hinge	3676X R. Hinge	56” Rear Vertical Trim	
	2761X L. Hinge	3675X R. Hinge	66” Rear Vertical Trim	
3	2762X L. Hinge	3674X R. Hinge	79” Rear Vertical Trim	2
	7801X L. Hinge	~	7” Rear Vertical Trim	
	7800X L. Hinge	~	14” Rear Vertical Trim	
	7799X L./R. Hinge		21” Rear Vertical Trim	
	7798X L./R. Hinge		35” Rear Vertical Trim	
	7797X L./R. Hinge		56” Rear Vertical Trim	
	7796X L/R. Hinge		66” Rear Vertical Trim	
	7795X L./R. Hinge		79” Rear Vertical Trim	
4	2763X		Rear Horizontal Trim	2
	7372X		Rear Horizontal Trim, Ventilated Door	
5	68374		#8AB x .50 Phillips Head Thread Forming Screw	10-18
6	81911		Handle (Except on 7” Door, use Handle #82177)	1
7	82061		4mm x 25mm Phillips Head Screw	2
8	18977		Lock Washer	2

technical furniture

Rack Mount Module Plexiglass Door (cont.)

Parts List

	Part Number (L. Hinge/R. Hinge)		Description	Qty.
9	82069		Lock Assembly	1
10	60297		#3 Spring Clip, Lock	1
11	80805		#150000 Keys	2
12	68374		#8AB x .50 Phillips Pan Head Screw	6-14
	2778X L. Hinge	~	7” Door Stop	
	2779X L. Hinge	~	14” Door Stop	
	2780X L. Hinge	3672X R. Hinge	21” Door Stop	
13	2781X L. Hinge	3671X R. Hinge	35” Door Stop	1
	2782X L. Hinge	3670X R. Hinge	56” Door Stop	
	2783X L. Hinge	3669X R. Hinge	66” Door Stop	
	2784X L. Hinge	3668X R. Hinge	79” Door Stop	
14	82118		Magnetic Catch	1
15	82119		#4-40 x .37 Phillips Pan Head Machine Screw	2
16	21034		Rubber Bumper	2



technical furniture

Rack Mount Rear Service Doors

NOTE: **Rear Service Doors** are available in five heights (24", 38", 61", 72", and 84") and in the two Full Frame Module widths (24" and 30"). The Doors are designed to attach to the rear of the "Full Frame". All Doors have left hand mounted "lift-off" hinges which allow the removal of the Door Panel for total service access. The Frame of the Rear Service Door has openings for the passage of cables into the Full Frame Cable Management channels or into an adjacent Rear Service Door.

Tools Required:
-Plastic mallet
-Phillips head screwdriver

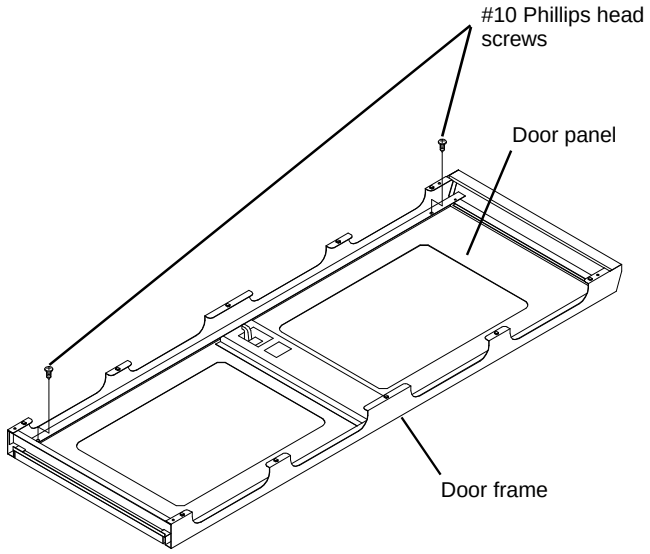


Figure 1
Rear Service Door Assembly

DOOR INSTALLATION

1. Carefully remove the LAN Locker Rear Service Door assembly from its packaging. Lay the assembly face down on a protective surface.

   For shipping purposes, the **Door Panel** is secured to the **Door Frame** with two #10 Phillips head screws. The screws are located on the Latch side of the Door, one near the top and one near the bottom. Remove and discard the two screws. See **Figure 1**.

2. *For the three tallest Rear Service Doors (84", 72", and 61" high) it is recommended that the Door Panel be removed from the Frame before further assembly. This will reduce the total weight of the unit and make it easier to assemble to the Full Frame Slotted Uprights. The Door Panel may be left attached to the smaller 34" and 24" high units.*

   To remove the Door Panel, first carefully turn the entire Door assembly over so that it lays on its back. Depress the **Latch** release button and open the Door approximately 90 degrees. To disengage the Door hinges, carefully slide the Door towards the top of the Frame. The hinges will slip apart so that the Door may be set aside. See **Figure 2**.

3. The three tallest Rear Service Doors, 84", 72", and 61" are designed to attach to corresponding Full Frame heights and will cover the entire height of the Frame when installed.

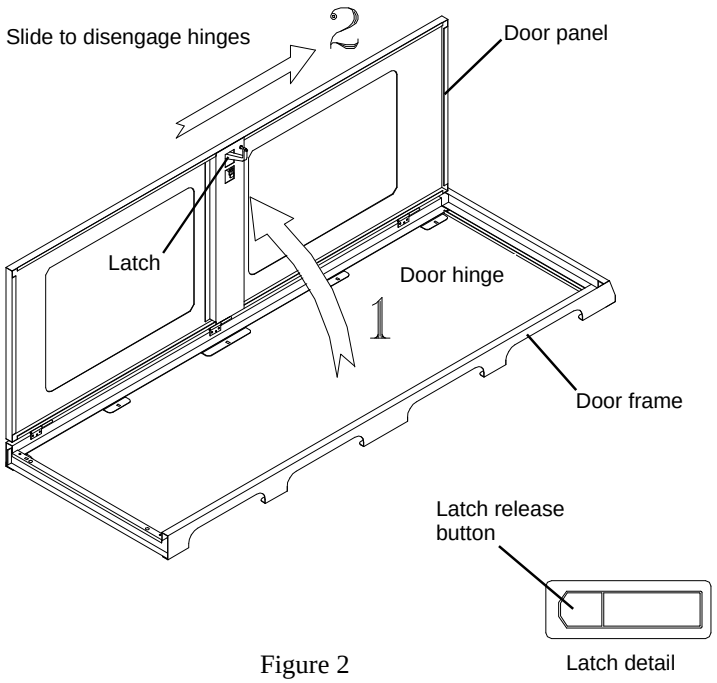


Figure 2

Rack Mount Rear Service Doors (cont.)

DOOR INSTALLATION (cont.)

However, the two shorter units, 38" and 24" high, may be assembled in any position along the height of the Full Frame. The shorter Rear Service Doors must be installed so that the top of the Door Frame is even with the top of the LAN Locker which has been previously assembled. Depending on the location, there may be an open space left at the top and/or bottom of the Full Frame between the Frame and the back of the Lan Locker. Two **Fillers** are supplied with each 38" and 24" high Rear Service Door to finish off the open space(s). Attach each Filler to the Door Frame with two #10-24 x 3/8" Phillips head thread forming screws. See **Figure 3**.

4. Lift the Door Frame up and engage the hooks on the back of the Frame into the Full Frame Slotted Uprights. For the 84", 72", and 61" high "full height" Service Doors the top hooks should engage the third slot down from the top of each Upright. This will align the top of the Door Frame with the top of the Full Frame trim. For 38" and 24" high Service Doors, position the Door Frame so that the top of the Frame is even with the top of the LAN Locker which has been previously installed. See **Figure 4**.

   Ensure that all of the Door Frame hooks are engaged into the Upright slots. If neecessary, use a plastic mallet to tap the Door Frame downward to seat the hooks into the slots. **Caution! Use of excessive force may cause damage**.

5. Insert a long screwdriver through the access holes in the Door Frame and bend the two **Retaining Tabs** (one on each Door Frame Upright) into the adjacent open slot. Push the tabs in approximately 1/16". See **Figure 5.**

6. To replace the Door Panel, position the Door with its three female hinges oriented directly over the male hinge pins on the Door Frame. Lower the Door Panel making sure that all three female Door hinges properly engage the male hinge pins. See **Fugure 6**.

Please note: The Latch on the Rear Service Doors is adjustable and pre-set at the factory for proper operation. However , if minor adjustments are required, do so by first loosening the "jam" nut on the Latch adjusting screw and then making the necessary adjustments. Remember to re-tighten the "jam" nut to maintain the setting.

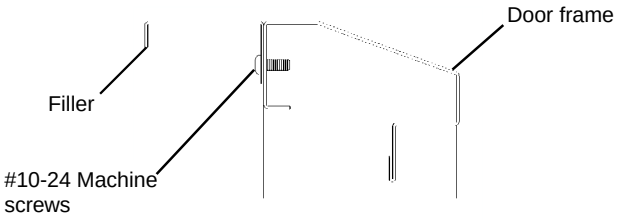


Figure 3

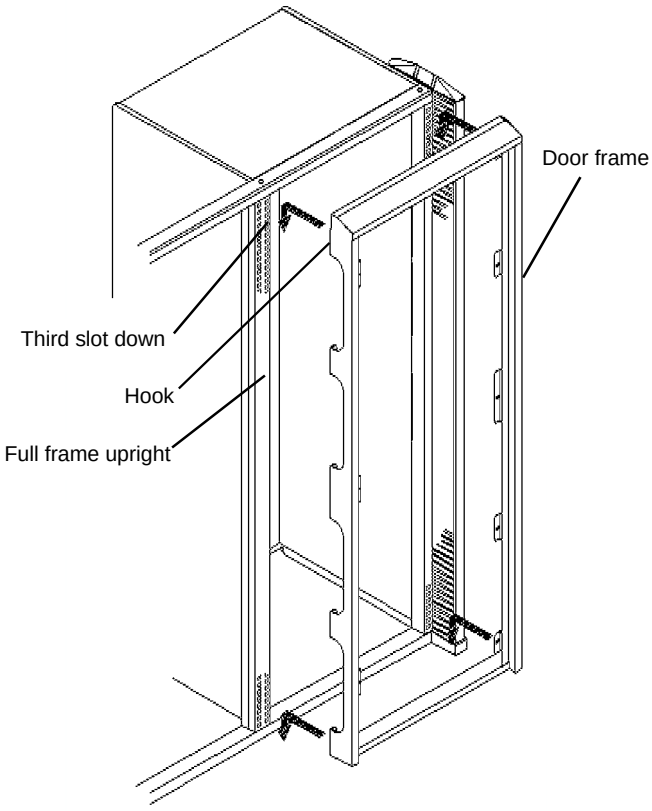


Figure 4

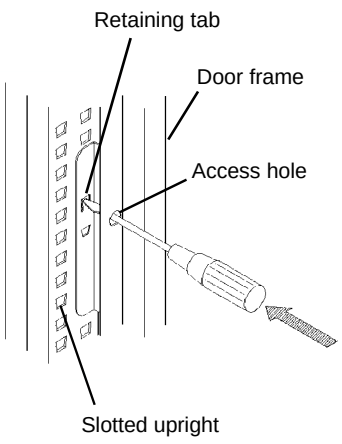


Figure 5

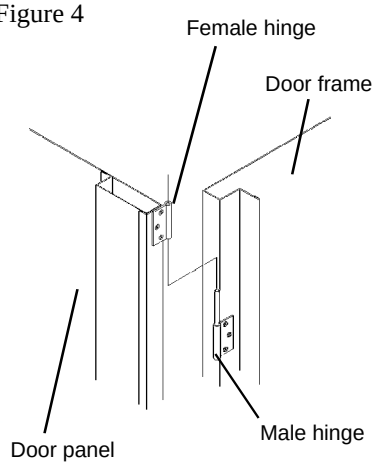


Figure 6

technical furniture

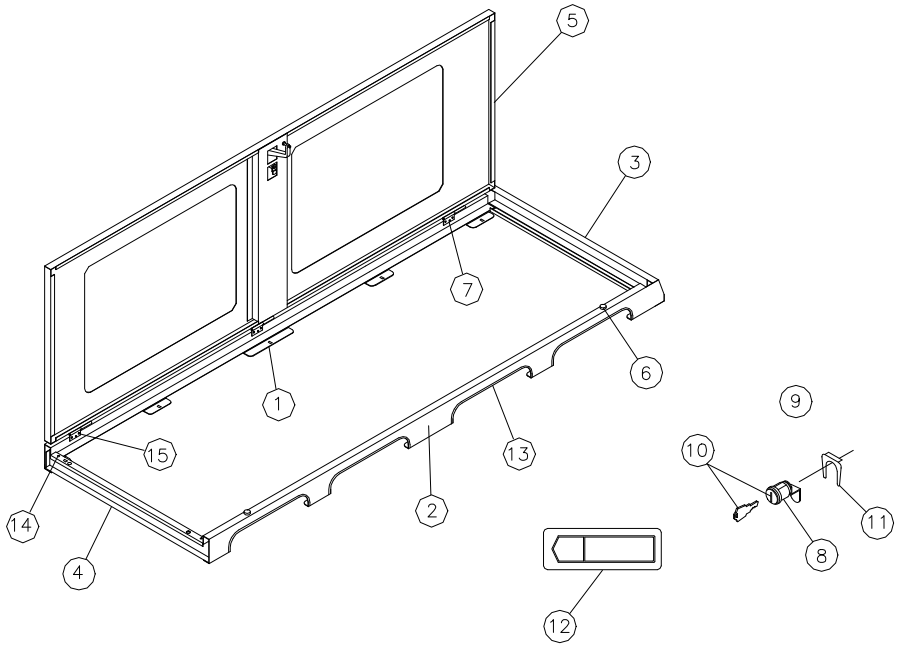
Rack Mount Rear Service Doors (cont.)

Parts List

Part Number		Description	Qty.
1	3218X	Frame Side - L.H., 24” High	1
	3216X	Frame Side - L.H., 38” High	
	3214X	Frame Side - L.H., 61” High	
	3212X	Frame Side - L.H., 72” High	
	3174X	Frame Side - L.H., 84” High	
2	3219X	Frame Side - R.H., 24” High	
	3217X	Frame Side - R.H., 38” High	
	3215X	Frame Side - R.H., 61” High	
	3213X	Frame Side - R.H., 72” High	
	3175X	Frame Side - R.H., 84” High	
3	3176X	Frame Top - 30” Wide	
4	3177X	Frame Bottom - 30” Wide	
5	3229X	Door Panel - 30” Wide x 24” High	
	3227X	Door Panel - 30” Wide x 38” High	
	3225X	Door Panel - 30” Wide x 61” High	
	3223X	Door Panel - 30” Wide x 72” High	
	3178X	Door Panel - 30” Wide x 84” High	

Parts List

Part Number		Description	Qty.
6	21034	Rubber Bumper	Varies
7	82462	Hinge	Varies
8	81910	Lock	1
9	82494	Lock Cam	
10	62046	Lock Core & Keys	
11	60297	Spring Clip	
12	82495	Door Latch	
13	82538	Edge Protector	Varies
14	54348	1/4”-20 x 1/2” Hex Washer Head Screw	4
15	82215	#8AB x 3/4” Phillips Flat Head Screw	Varies



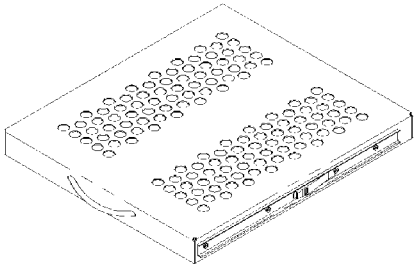
technical furniture

Rack Mount Shelf

Tools Required

-11/32” Combination wrench
-3/8” Combination wrench
-Flat blade screwdriver
-Phillips head screwdriver
-Tape measure

NOTE: These instructions cover installation of the **Stationary Shelf**, and **Roll-out Shelf**.



Rack Mount Roll-Out Shelf

CLIP NUT INSTALLATION

Clip Nuts (included with Rack Module) provide mounting points on 19” and 24” rack mount equipment rails.

Clip Nuts have a front or screw side. Consider which way it should face for ease of access to the screw head during component installation. See **Figure 1**.

To remove a Clip Nut from a rail, insert a flat blade screwdriver or knife under the tab on the front and pry up, freeing the retaining ring from the rail. See **Figure 1**.

1. Select the location at which the shelf or roll-out will be installed in the Rack Mount Module.

   NOTE: If the component is a roll-out and the weight load exceeds 75lbs. or more, use four screws in each of the brackets. See **Figure 4**. It will be necessary to select a four hole grouping that matches the bracket.The center two holes will be .50” apart. If less than 75 lbs., two screws are sufficient.

2. Snap one Clip Nut into the top hole at the selected position. For light loads, place the second Clip Nut four holes (1.75”) below. Start #10-32 x 1/2” screws.

   Use a mounting bracket as a guide to match holes and attach corresponding Clip nuts. **Do not** start the screws.

3. Measure from the bottom of the Vertical Rail to the top Clip Nut. Assemble Clip Nuts onto the three other rails at the measured height.

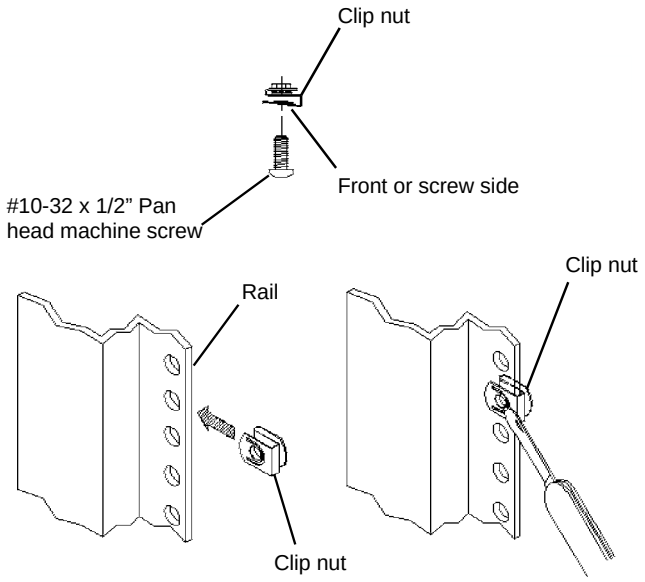


Figure 1

Rack Mount Shelf (cont.)

ROLL-OUT SHELF INSTALLATION

NOTE: The **Roll-Out** is equipped with "**Lock Out Slides**" and a "**Front Disconnect**" chassis member for your convenience during assembly to the Rack Module.

1. Assemble the Slide sections onto the Rack Module rails. Slip the **Mounting Brackets** behind the screw head of the Clip Nut. See **Figure 4**.

2. Snug the Clip Nut screws enough to retain the Slide, but still allow it to move in and out. **Do not tighten**.

3. Tighten the **Rear Mounting Bracket** to the Slide screws now (not the Clip Nut screws).

4. Close the two sections of the assembled Slide.

   Slide the shelf with the disconnect members into the mounted section. See **Figure 5**.

   Push the shelf in until there is a click

   Now extend it to its full length.

   Push it in again until it is fully closed (the ends of the three slide sections are even). The last two inches may bind; just push. It should now slide in and out freely.

5. Now tighten the Clip Nut screws or leave them snug.

6. To remove the shelf and chassis rail, refer to **Figure 6**.

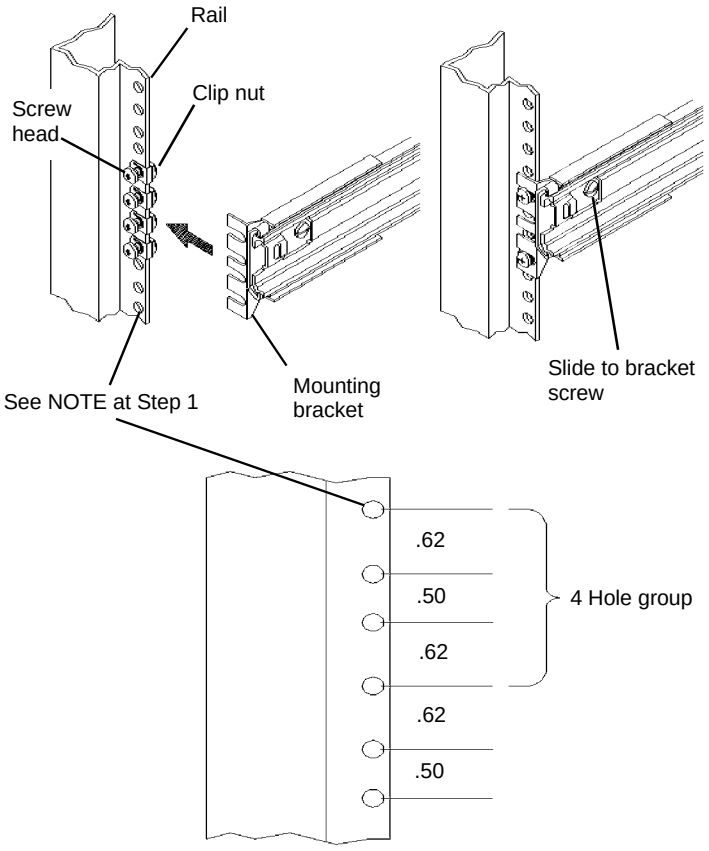


Figure 4

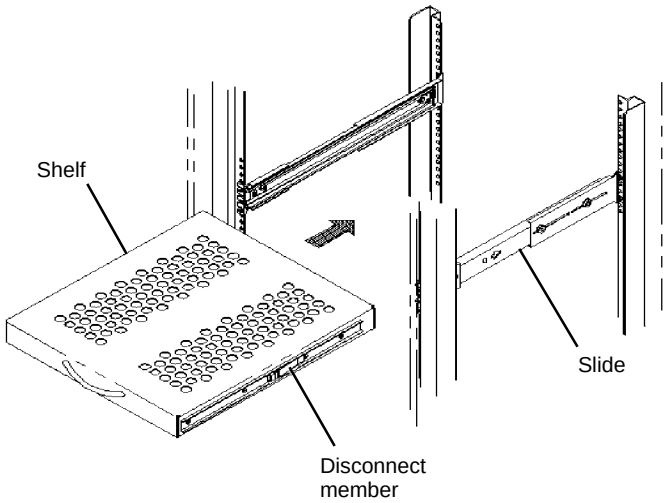


Figure 5

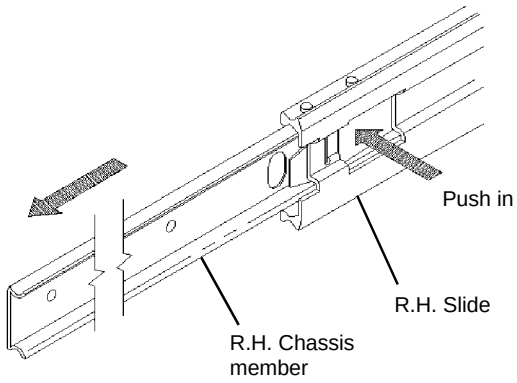


Figure 6

Rack Mount Shelf (cont.)

STATIONARY SHELF INSTALLATION

1. Position the **Stationary Shelf** with the four brackets on the correct side of the clip nuts See **Figure 2**.

2. Attach the front brackets to the rails and tighten.

3. Repeat for the rear brackets and tighten all screws.

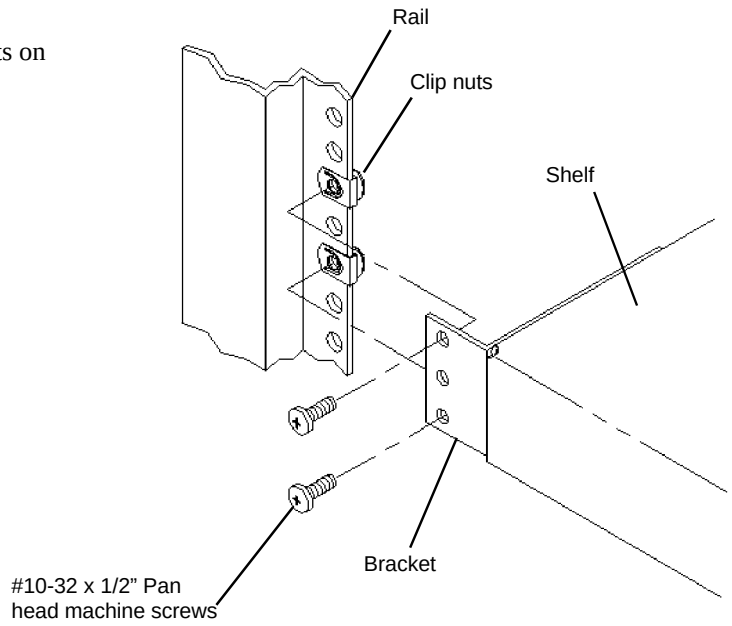


Figure 2

STATIONARY SHELF WITH KEYBOARD MOUNT (AVAILABLE ON 24" RACK MOUNT SHELF ONLY)

1. Assemble the **Keyboard Track** to the underside of the Shelf before installing the Shelf component to Rack Mount Rails. The Keyboard Track Mount is flush to the Shelf front. See **Figure 3**.

   The rear of the Shelf is indented to allow the Keyboard Platform Support mechanism to slide on the Track. It is necessary to use a bumper at that end as a stop.

   Refer to Keyboard assembly instructions to complete installation.

2. Install the shelf as described in Steps 1 through 3 above.

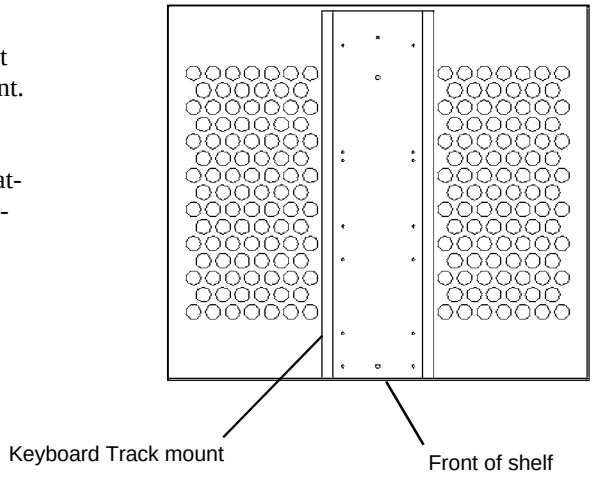


Figure 3
Underside of Shelf

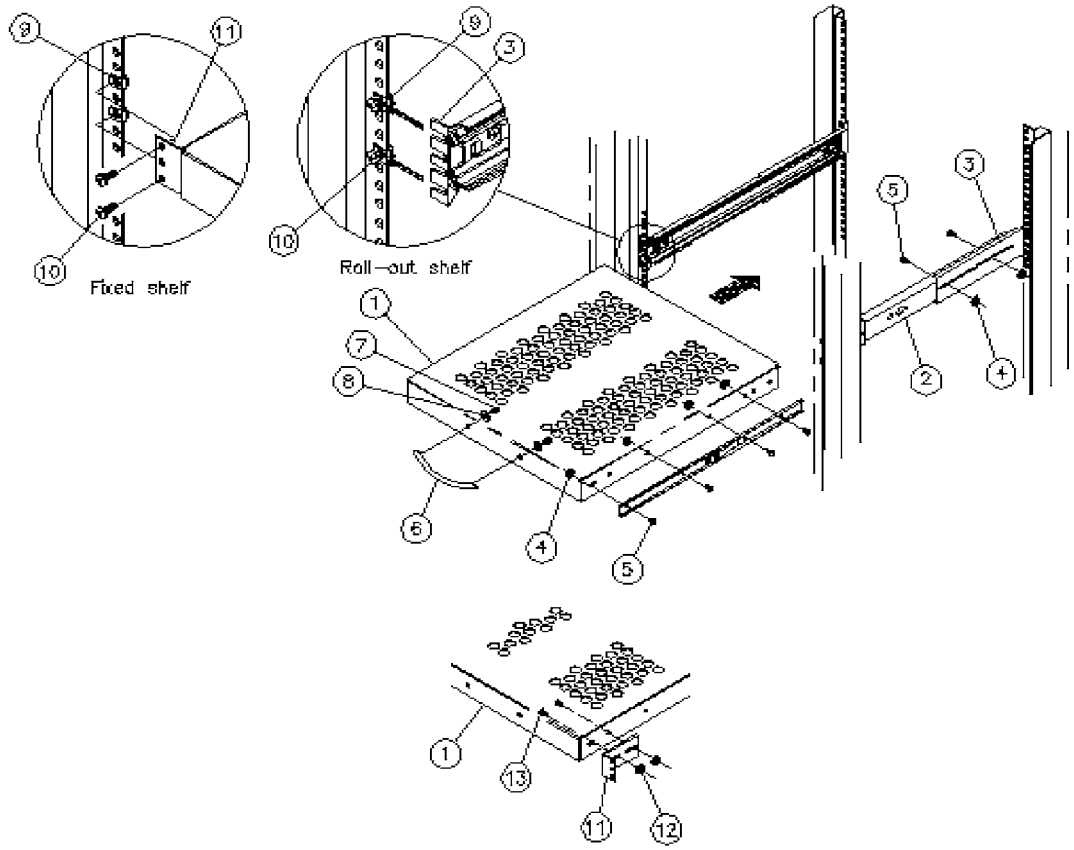
Rack Mount Shelf (cont.)

Parts List

Part Number		Description	Qty.
1	3150X	X-Deep Shelf	1
	3432X	Rack Mount Shelf, 16.6” x 28”	
2	82155	Quick Disconnect Slide, 18”	2
	82459	Quick Disconnect Slide, 28”	
3	82156	Mounting Bracket Kit	2
4	18244	#8-32 Keps Lock Nut	16
5	82157	#8-32 x 3/8” Slotted Pan Head Screw	16
6	81911	Handle	1

Parts List

Part Number		Description	Qty.
7	81868	4mm x 6mm Phillips Phillister Head Screw	2
8	18977	Lock Washer	2
9	82087	#10-32 Clip Nut	16
10	82031	#10-32 x 1/2” Pan Head Machine Screw	16
11	7061X	Rack Mount Shelf Bracket	4
12	18242	#10-24 Keps Lock Nut	8
13	66714	#10-24 x 3/8” Phillips Pan Head Thread Forming Screw	8



technical furniture

Vertical Adapter Rail/Horizontal Chassis Bracket

Tools Required
-Phillips head screwdriver

VERTICAL ADAPTER RAIL

NOTE: The Front Rail should be in the foward-most position.

1. Locate mounting holes on existing front and rear rails attached to Rack Mount Module Side Panels. See **Figure 1**.

2. Attach the **Vertical Adapter Rails** to the Front and Rear Rails on both sides of the unit at equal heights using the #10-24 x 1/2" screws and #10-24 lock nuts provided. See **Figure 2**.

NOTE: If additional clearance is required between the acrylic door panel and the Front Rail, reverse the Front Rail as shown in **Figure 3**.

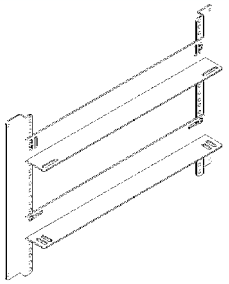
HORIZONTAL CHASSIS BRACKET

1. Four **#10-32 Clip Nuts** and four **#10-32 x 1/2" Phillips head machine screws** are included for attaching the **Horizontal Chassis Bracket** to the Vertical Adapter Rails.

2. Install the Clip Nuts in the desired location on the Vertical Adapter Rails. **Figure 4**.

3. Attach the Horizontal Chassis Bracket to the Vertical Adapter using the #10-32 screw.

NOTE: For additional horizontal adjustments, attach the Horizontal Bracket as shown in **Figure 4**. For vertical adjustments, attach the Horizontal Bracket using holes on the other face.



Vertical Adapter Rail/Horizontal Chassis Bracket

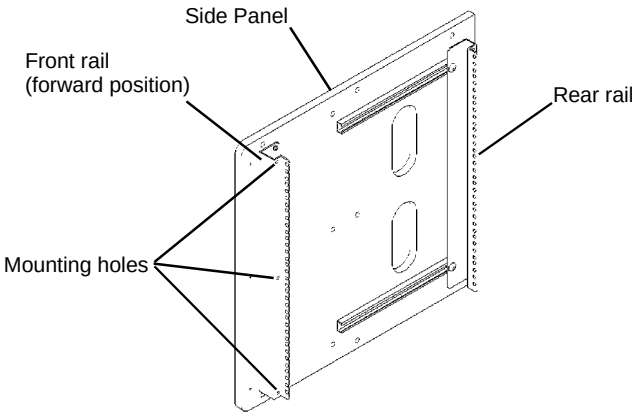


Figure 1

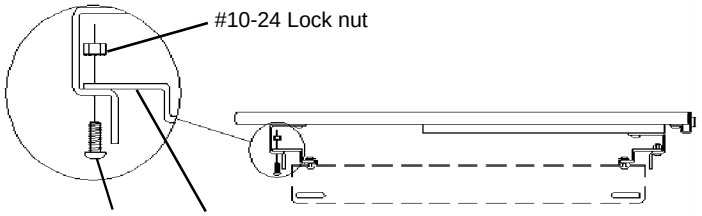


Figure 2

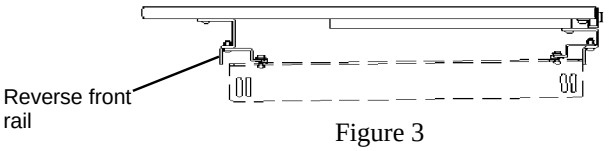


Figure 3

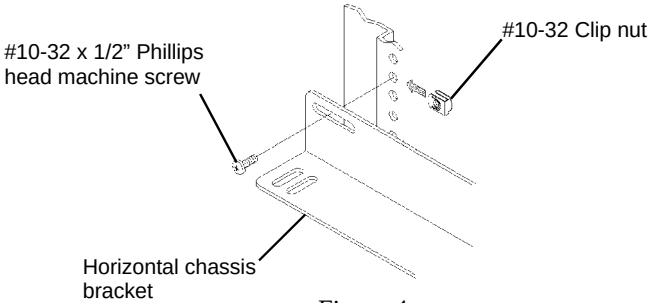
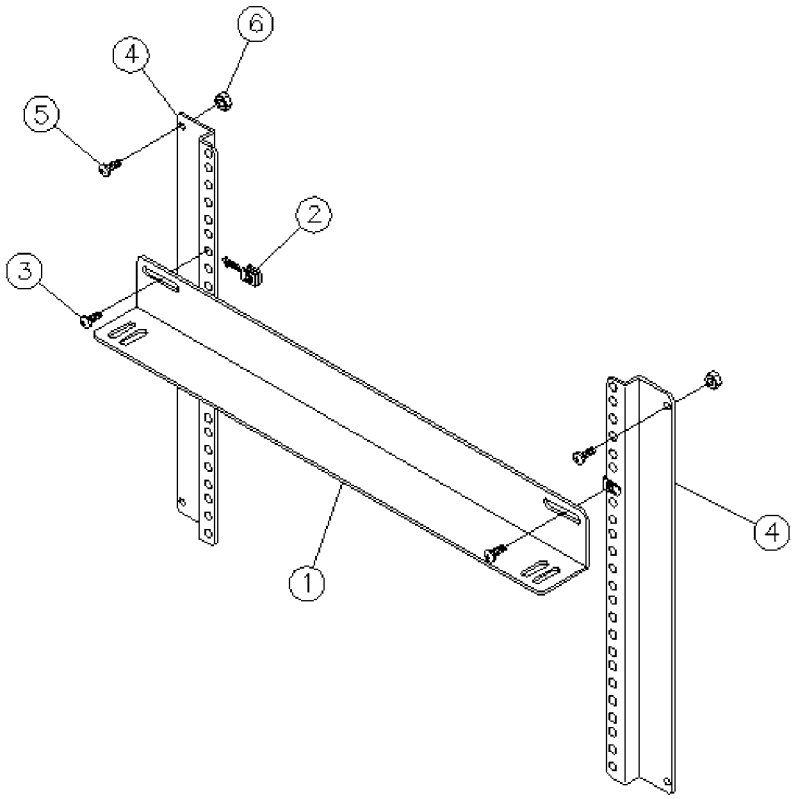


Figure 4

Vertical Adapter Rail/Horizontal Chassis Bracket (cont.)

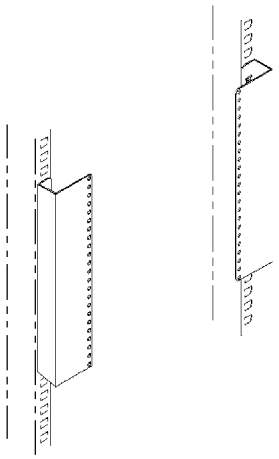
Parts List			
Part Number		Description	Qty.
1	82598	19” Horizontal Chassis Bracket	2
2	82087	#10-32 Clip Nut	4
3	82031	#10-32 x .50” Hillips Pan Head Machine Screw	4
4	3243X	7” Vertical Adapter Rail	4
	3244X	14” Vertical Adapter Rail	
	3245X	24” Vertical Adapter Rail	
	3246X	35” Vertical Adapter Rail	
	3247X	56” Vertical Adapter Rail	
	3248X	66” Vertical Adapter Rail	
	3249X	78” Vertical Adapter Rail	
5	55617	#10-24 x .50” Phillips Pan Head Machine Screw	8-32
6	18242	#10-24 Lock Nut	8-32



technical furniture

Patch Panel Brackets

Tools Required
-Plastic mallet



Patch Panel Brackets

1. Determine the desired location of the **Patch Panel Brackets** on the Full Frame. **NOTE**: If multiple levels are being used, install the lowest level first.

   Position the brackets as shown in **Figure 1**. Insert the hooks into the slotted standard and push down. To assure the hooks are seated, tap the bracket down with a plastic mallet or equivalent. See **Figure 1**.

NOTE: The 1-3/4”(44mm) hole spacing module is continuous from bracket to bracket. Brackets of various sizes may be installed together if there is adequate vertical space on the slotted standards.

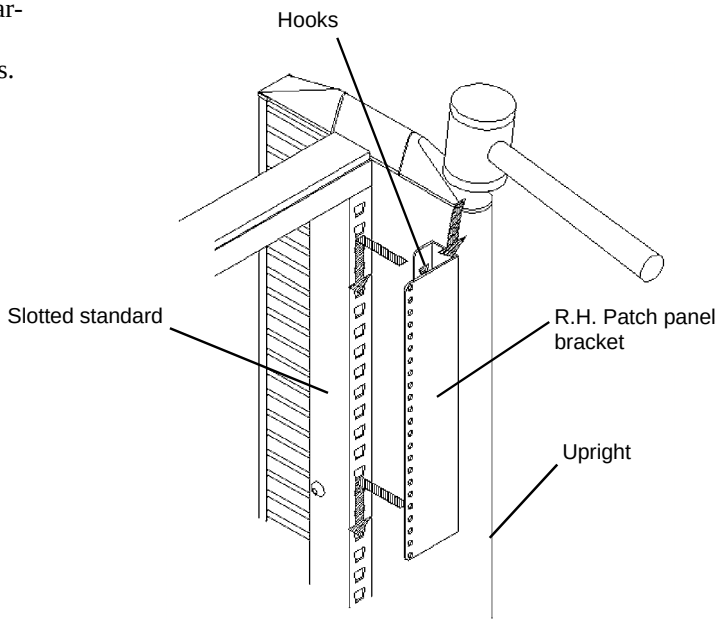


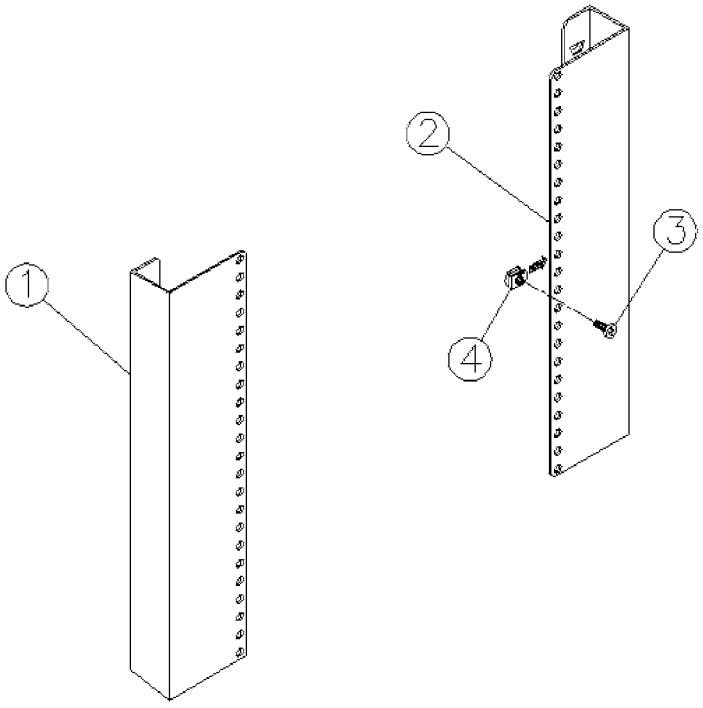
Figure 1

Maximum Quantity Of Brackets Per Full Frame Unit			
	61”(1549mm)	72”(1829mm)	84”(2134mm)
LB80, 7”(179mm) Bracket	7	9	11
LB81, 14”(356mm) Bracket	3	4	5
LB82, 21”(533mm) Bracket	2	3	3
LB83, 35”(889mm) Bracket	1	1	1
LB84, 56”(1422mm) Bracket	1	1	1

technical furniture

Patch Panel Brackets (cont.)

Parts List			
Part Number		Description	Qty.
1	2406X	7” Patch Panel Bracket, L.H.	1
	2404X	14” Patch Panel Bracket, L.H.	
	2853X	21.3” Patch Panel Bracket, L.H.	
	2855X	35.3” Patch Panel Bracket, L.H.	
	2857X	56.3” Patch Panel Bracket, L.H.	
2	2407X	7” Patch Panel Bracket, R.H.	1
	2405X	14” Patch Panel Bracket, R.H.	
	2854X	21.3” Patch Panel Bracket, R.H.	
	2856X	35.3” Patch Panel Bracket, R.H.	
	2858X	56.3” Patch Panel Bracket, R.H.	
3	80023	#10-24 x 3/4” Phillips Pan Head Thread Forming Screw	10
4	81615	#10-24 “U” Type Nut	10



technical furniture

Tech Wall

Tools Required
- -Phillips head screwdriver
- -Plastic mallet
- -Flat file

Tech Walls are available as fabric covered or perforated steel partitions. These instructions are applicable for both types of panels.

Panels are provided in various widths and heights, depending on the size of the Full Frame.

IMPORTANT!
Tech walls **cannot** be installed on Full Frames shipped prior to 12/26/95, as the space between the Slotted Standards varies.

NOTE: For ease of installation, it is recommended that the panels be installed onto the Full Frames prior to the installation of any other components. (ie.worksurfaces, shelves, ect.). If this is not possible, proceed to page _ for panel installation with components pre-installed on one side of the Full Frame.

1. Attach the steel **Mounting Channels** to the side of the Full Frame Slotted Standards, using the #8-32 x 3/8" Phillips pan head thread forming screws provided. See **Figure 1a**.

2. Install the Mounting Channels with the end having the embossed triangle at the top. Align the holes in the Mounting Channel with the pre-punched holes in the Slotted Standards Fasten the Mounting Channel in place with a screw in each hole. See **Figure 1b**.

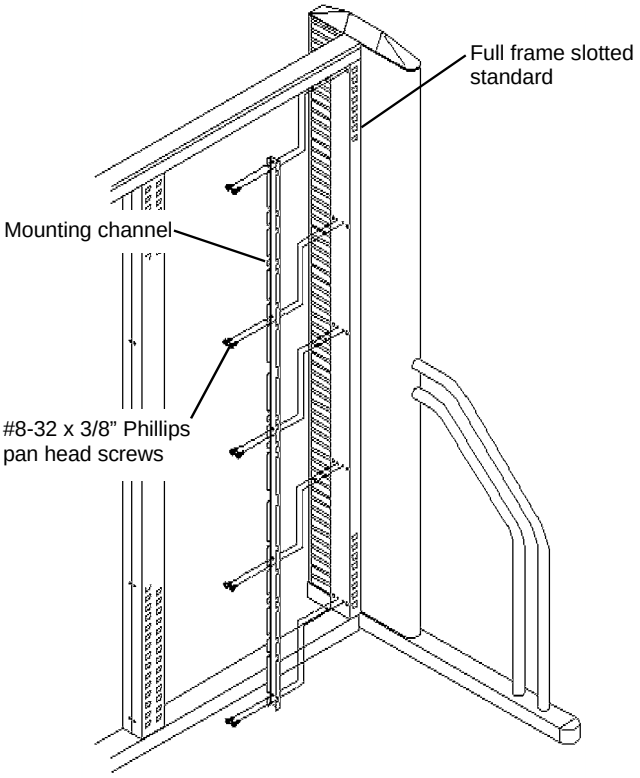


Figure 1a

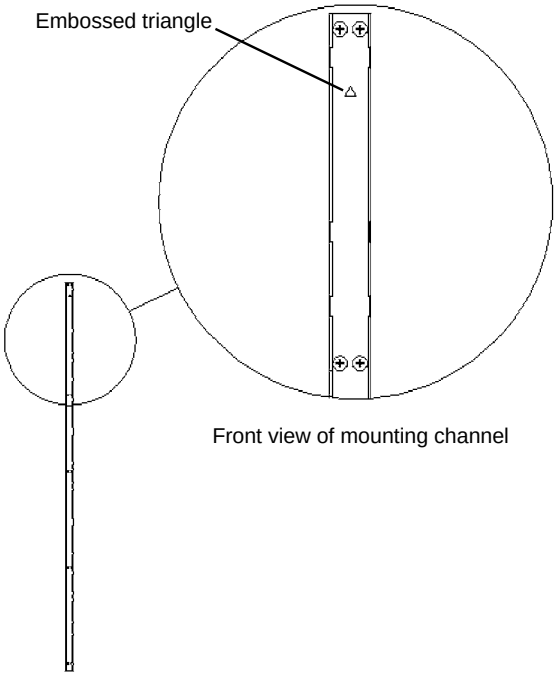


Figure 1b

Tech Wall (cont.)

Important - For proper panel installation, the Mounting Channels must attach flat against the Slotted Standards. If a weld joining the two halves of the intermediate standard exceeds a height of approximately .03”(.8mm), it may be necessary to carefully file the weld. See **Figure 2**.

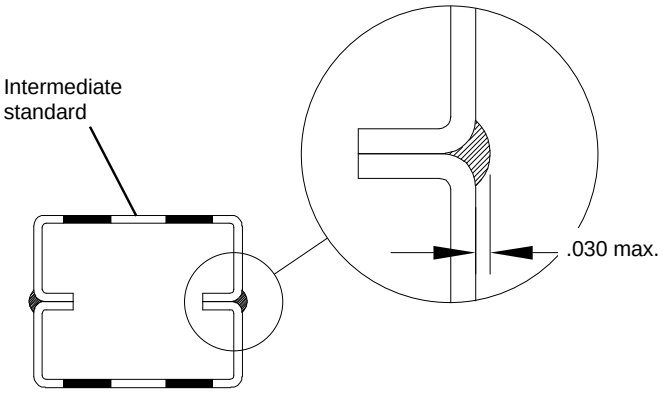


Figure 2

3. Install the panels onto the Full Frame by first inserting one side of the panel onto the Mounting Channel and then snapping the panel onto the opposite Mounting Channel. See **Figure 3**.

4. To facilitate positioning the panel within the Frame, align the locator tab on each corner of the panel with the appropriate notch in the Mounting Channel. See **Figure 4**.

NOTE: It is recommended that the panels be installed from the bottom up.

The quantity of panels will vary, depending on the size of the Full Frame. Reference page _, for panel configurations.

Install the panels onto both sides of the Full Frames. To insure that the panels are fully attached, tap the vertical sides of the frame with a Plastic mallet.

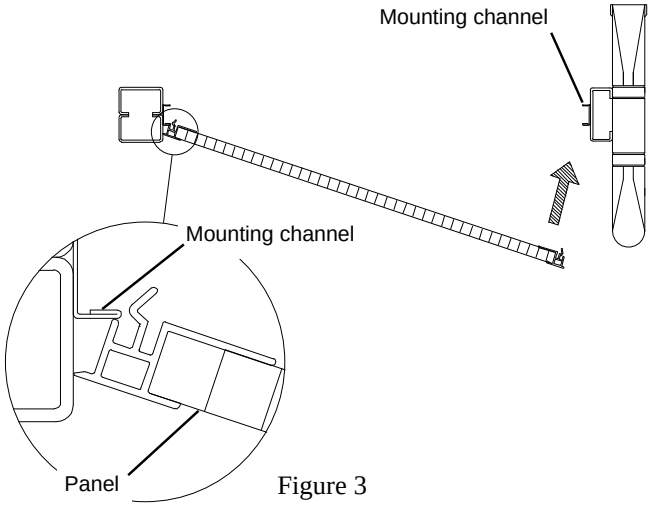


Figure 3

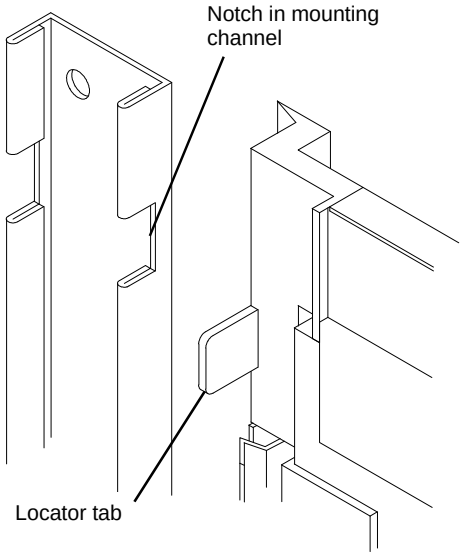


Figure 4

Tech Wall (cont.)

Panel Installation with Components Pre-installed on One Side of Frame

Tech Walls may be installed onto Full Frames that have other components on one side. If the Frames have components installed on both sides, they must be removed from one side prior to panel installation.

1. Attach a single Steel Mounting Channel to the left or right side of each Full Frame section. See **Figure 1**.

2. Install the panels, from the bottom up, onto the single Mounting Channel. See **Figure 2**.

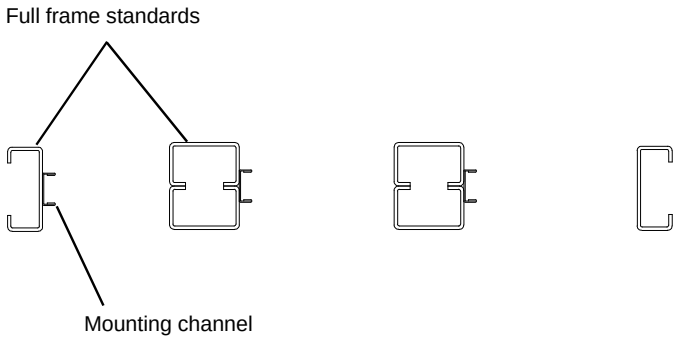


Figure 1

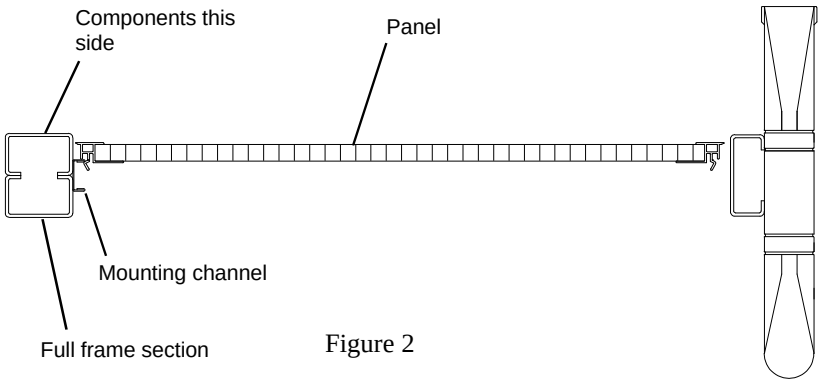


Figure 2

3. With all panels in place, insert the second Mounting Channel into the **Vertical Panel Retainer**. See **Figure 3a**. Align Frame tabs with the slots on the channel.

   Rotate the Mounting Channel, align the holes in the channel with the holes in the Frame Standard, and fasten the channel in place, using the #8-32 x 3/8" screws. See **Figure 3b**.

4. Install the second set of panels onto the side of the Frame without components following the instructions on page L1, step 2.

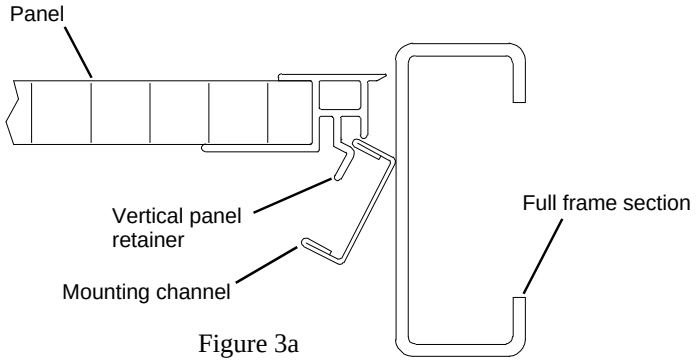


Figure 3a

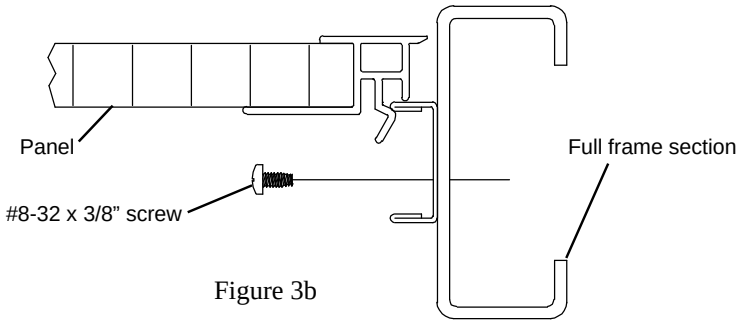


Figure 3b

Tech Wall (cont.)

Parts List

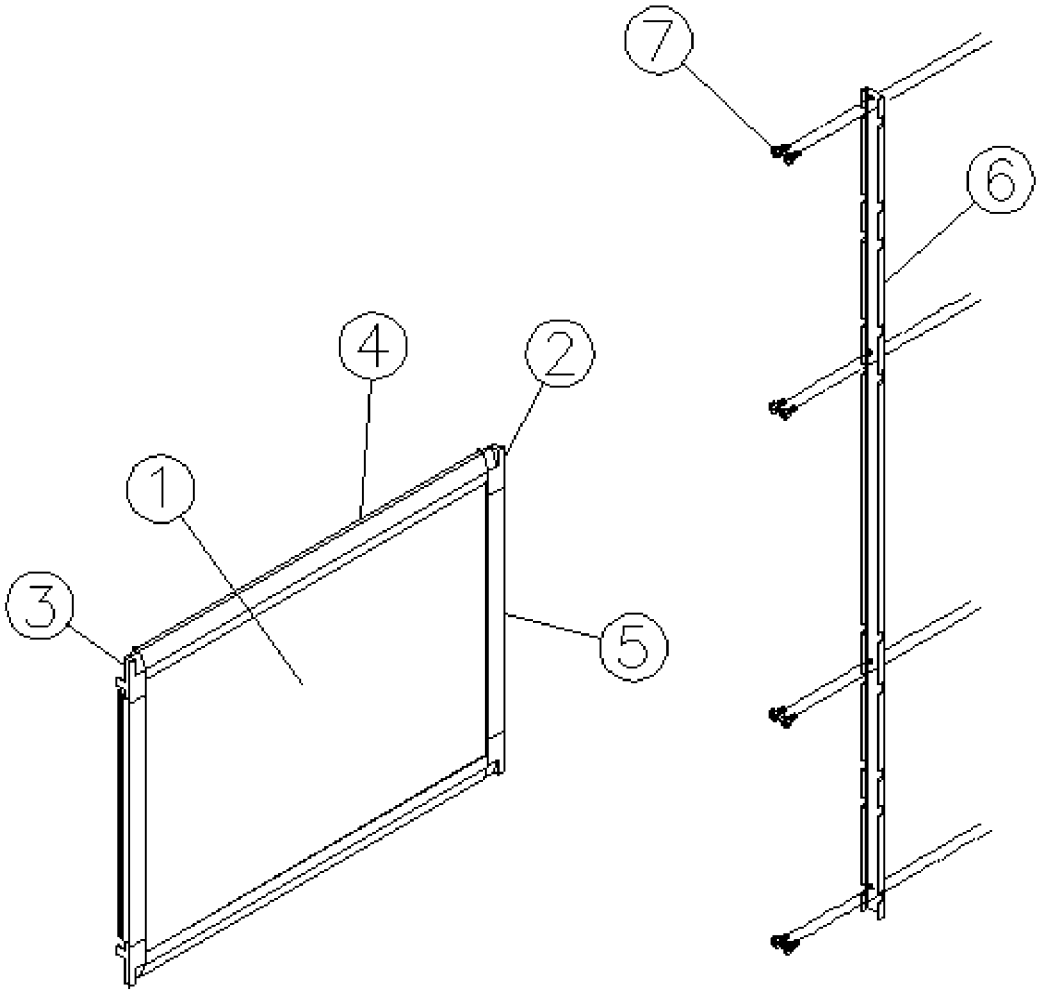
Part Number		Description	Qty.
	83563	Fabric Panel, 25.84” x 19.88”	
	83564	Fabric Panel, 25.84” x 25.88”	
	83565	Fabric Panel, 25.84” x 31.88”	
	83548	Fabric Panel, 10.86” x 19.88”	
	83549	Fabric Panel, 25.84” x 25.88”	
	83540	Fabric Panel, 4.84” x 25.88”	
	83554	Fabric Panel, 13.88” x 19.88”	
	83555	Fabric Panel, 13.80” x 25.88”	
	83556	Fabric Panel, 13.80” x 31.88	
	83560	Fabric Panel, 24.80” x 19.88”	
	83561	Fabric Panel, 24.80” x 25.88”	
	83562	Fabric Panel, 24.80” x 31.88”	
	83569	Fabric Panel, 36.80” x 19.88”	
1	83570	Fabric Panel, 36.80 “ x 25.88”	1
	83571	Fabric Panel, 36.80” x 31.88”	
	3889X	Steel Panel, 25.84” x 19.88”	
	3890X	Steel Panel, 25.84” x 25.88’	
	3891X	Steel Panel, 25.84” x 31.88”	
	3874X	Steel Panel, 10.86” x 19.88”	
	3875X	Steel Panel, 10.86” x 25.88”	
	3876X	Steel Panel, 10.86” x 31.88”	
	3880X	Steel Panel, 13.80” x 19.88”	
	3881X	Steel Panel, 13.80” x 25.88”	1
	3882X	Steel Panel, 13.80” x 31.88”	
	3886X	Steel Panel, 24.80” x 19.88’	
	3887X	Steel Panel, 24.80” x 25.88”	
	3888X	Steel Panel, 24.80’ x 31.88”	
	3895X	Steel Panel, 36.80” x 19.88”	
	3896X	Steel Panel, 36.80” x 25.88”	
	3897X	Steel Panel, 36.80” x 31.88”	

Parts List

Part Number		Description	Qty.
2	3400X	Corner Connector, L.H.	2
3	3401X	Corner Connector, R.H.	2
	3906X	19.36” Horizontal Trim	
4	3907X	25.36” Horizontal Trim	2
	3908X	31.36” Horizontal Trim	
	3917X	23.94” Vertical Trim	
	3912X	8.96” Vertical Trim	
5	3914X	11.90” Vertical Trim	2
	3916X	22.90” Vertical Trim	
	3919X	34.90” Vertical Trim	
	83300	40.40” Channel	
6	83301	56.40” Channel	2
	83302	67.40” Channel	
	83303	79.40” Channel	
7	83645	#8-32 x 3/8” Phillips Pan Head Thread Forming Screw	10-14
	3920X	Horizontal Retainer (not shown)	
8	3921X	Horizontal Retainer (not shown)	2
	3922X	Horizontal Retainer (not shown)	
	3931X	Vertical Retainer (not shown)	
	3926X	Vertical Retainer (not shown)	
9	3928X	Vertical Retainer (not shown)	2
	3930X	Vertical Retainer (not shown)	
	3933X	Vertical Retainer (not shown)	

technical furniture

Tech Wall (cont.)



technical furniture

Horizontal Cable Management

Tools Required
- Plastic Mallet

1. Install the **Horizontal Cable Management** component(s) in the desired location on the back of the frame by inserting the hooks at each end of the component into the slots in the Slotted Standards. See **Figure 1**.

   The component should fall directly into place.To assure that the hooks are properly seated, tap the top rear corners with a plastic mallet or equivalent. See **Figure 2**.

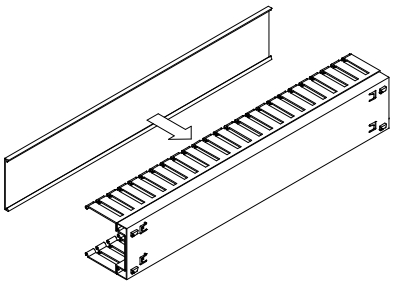
2. To remove the **Cover(s)** from the Horizontal Cable Management component(s), grasp the cover with both hands and push down and rotate the bottom of the Cover outward. **See Figure 3**.

NOTE: The 60" and 72" Horizontal Cable Management components are provided with two piece covers for ease of removal and/or installation.

3. Install the **Wire Retainers** (provided) as shown in **Figure 4**.

4. To re-install the Cover(s), hook the top edge over the top flanges of the Horizontal Cable Management. Push down with both hands and rotate the Cover inward to engage the bottom flanges of the Cable Management. See **Figure 3**.

NOTE: If the Vertical Covers have been removed, re-install them before installing the Horizontal Covers.



Horizontal Cable Management

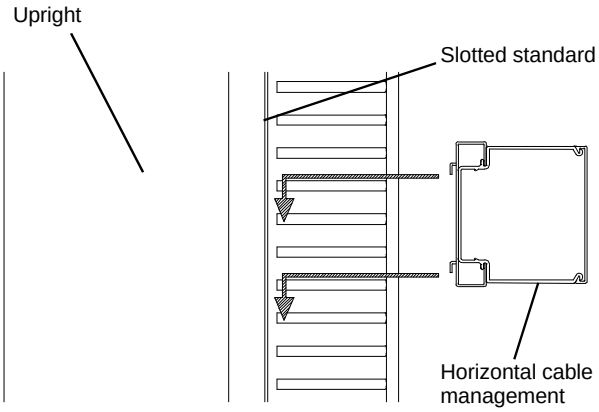


Figure 1

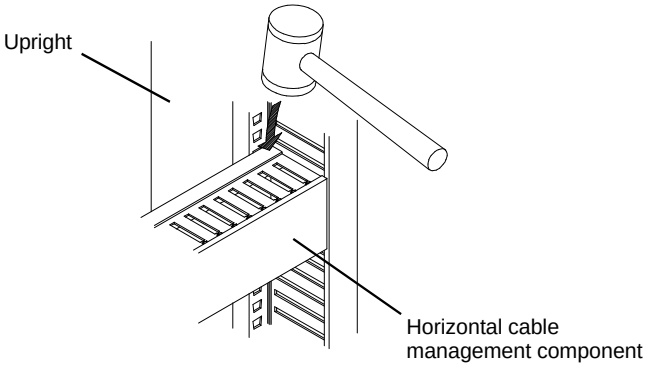


Figure 2

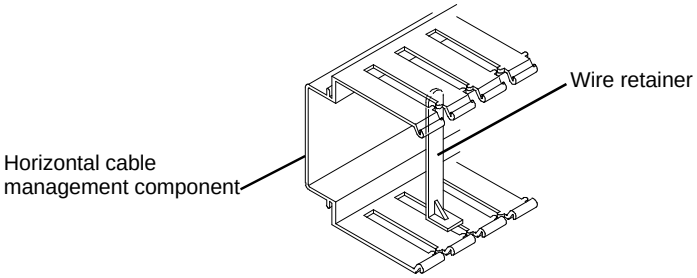


Figure 4

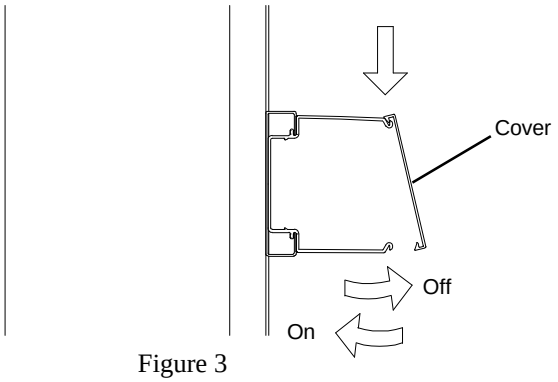


Figure 3

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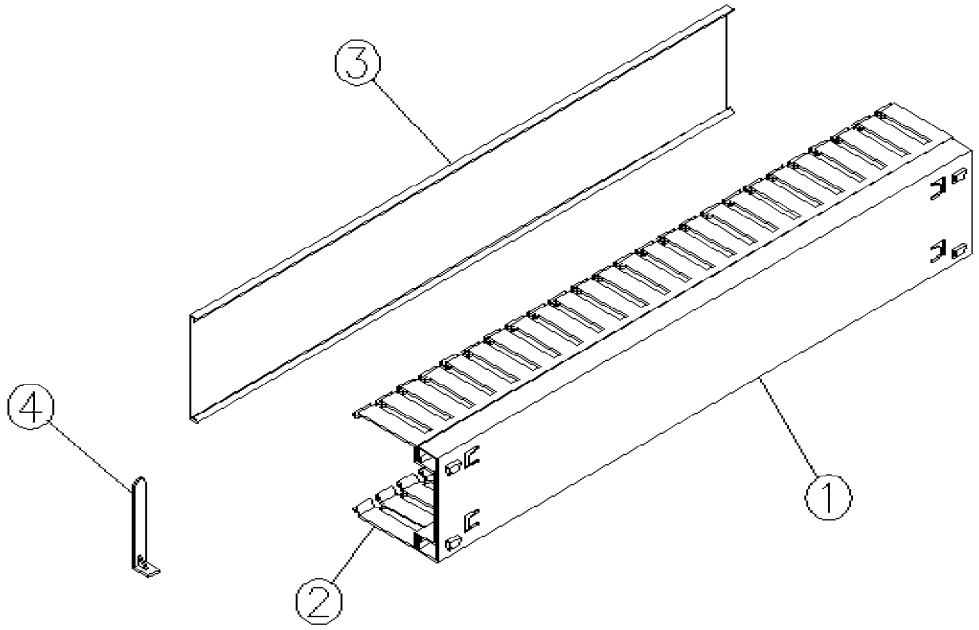
Horizontal Cable Management (cont.)

Parts List

	Part Number	Description	Qty.
1	3781X	3” x 4” HCM, 24”	1
	3780X	3” x 4” HCM, 30”	
	3779X	3” x 4” HCM, 36”	
	3778X	3” x 4” HCM, 42”	
	3777X	3” x 4” HCM, 48”	
	3776X	3” x 4” HCM, 60”	
	3734X	3” x 4” HCM, 72”	
2	4366X	24” Wire Duct Rail	1
	4367X	30” Wire Duct Rail	
	4368X	36” Wire Duct Rail	
	4369X	42” Wire Duct Rail	
	4370X	48” Wire Duct Rail	
	4371X	60” Wire Duct Rail	
	4372X	72” Wire Duct Rail	

Parts List

	Part Number	Description	Qty.
3	3787X	4”x 24” HCM Cover	1
	3786X	4”x 30” HCM Cover	
	3785X	4”x 36” HCM Cover	
	3784X	4”x 42” HCM Cover	
	3783X	4”x 48” HCM Cover	
	7668X	4”x 60” HCM Cover	2
	7667X	4”x 72” HCM Cover	
4	83824	Cable Retention Clip	2



technical furniture

Top Access Cable Management Brackets

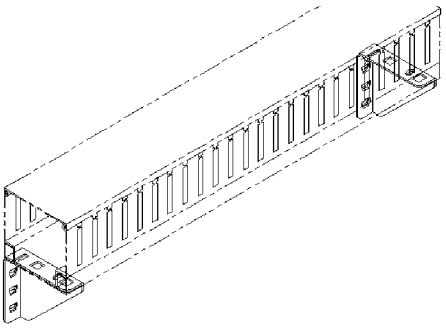
Tools Required
- None

NOTE: The **Top Access Cable Management Brackets** are used to reposition standard Horizontal Cable Management kits for top access into duct**.** The **Horizontal Cable Management Components** are ordered separately.

1. Install the **Top Access Cable Management Brackets** onto the bottom of the **Steel Duct Rail** by first inserting the bottom hook on the Duct Rail into the trapezoid shaped slot in each bracket. Next, rotate the brackets in the direction shown in **Figure 1a** to engage the other hook. Push the brackets in the direction shown to firmly seat them. See **Figure 1b**.

2. Install the **Horizontal Cable Management Component(s)** in the desired location on the back of the Frame by inserting the hooks on the brackets into the slots. See **Figure 2**.

   Push down on the component to ensure that the hooks are fully seated in the Frame slots.



Top Access Cable Management Brackets

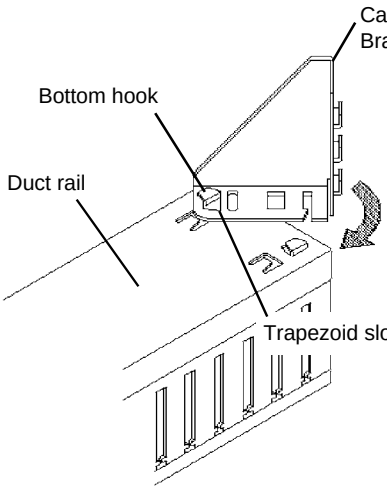


Figure 1a

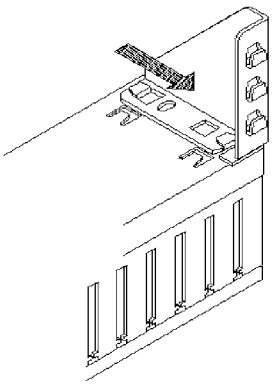


Figure 1b

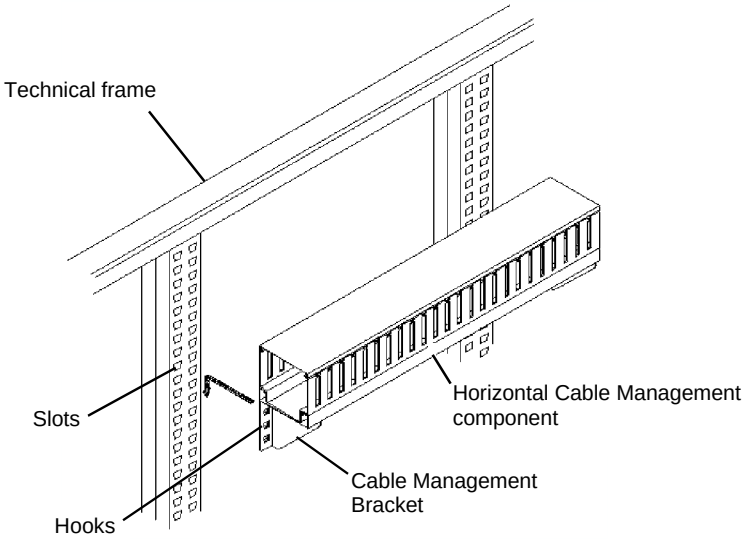


Figure 2

technical furniture

Corner Connector- Top Access Horizontal Cable Management

Please read these instructions carefully and follow the installation steps in sequence.

Tools Required
-Phillips head screwdriver

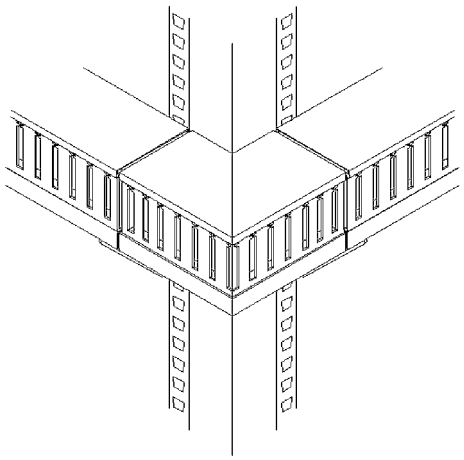
The **Corner Connector** is used with Top Access Cable Management in Tech Corner applications.

The Top Access Horizontal Cable Management sections must be installed on either side of the Tech Corner Post before installing the Corner Connector.

1. Install a **Support Bracket** into the botom of each Top Access Horizontal Cable Management section. See **Figure 1**.

2. Place the Corner Connector assembly onto the two Support Brackets and fasten it to the brackets with the four #10AB x .25" Sheet metal screws provided. See **Figure 2**.

   NOTE: To remove the Cover, move it away from the Corner Post and lift upward.



Corner Connector

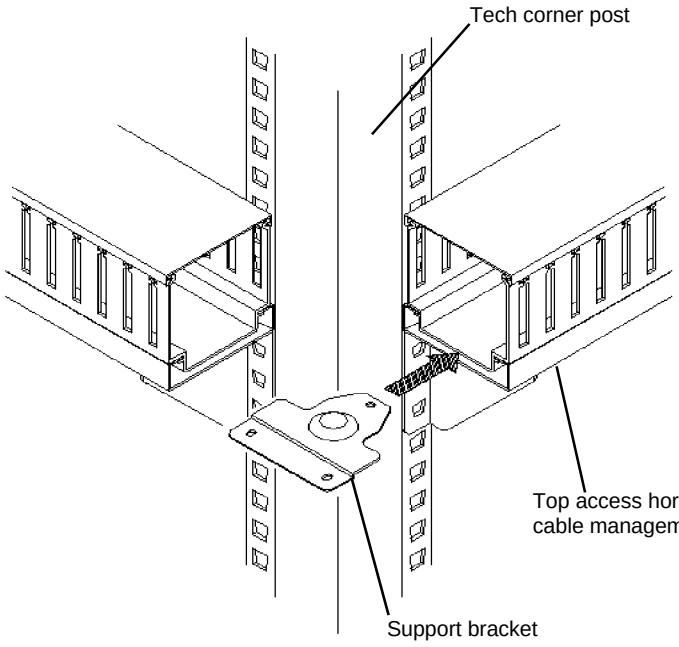


Figure 1

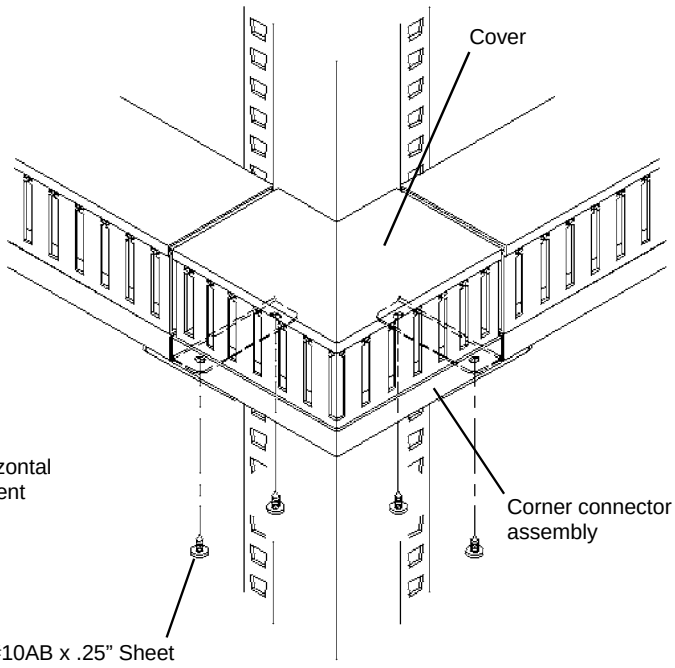
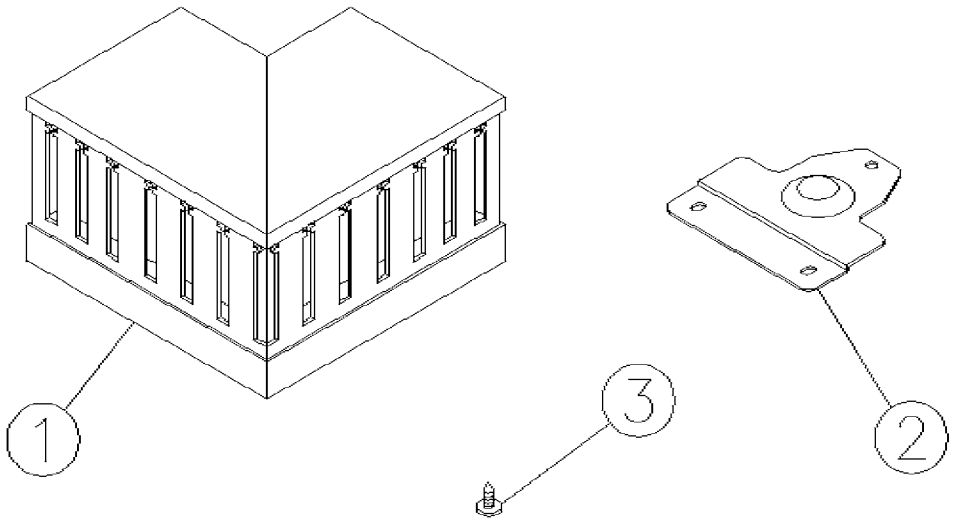


Figure 2

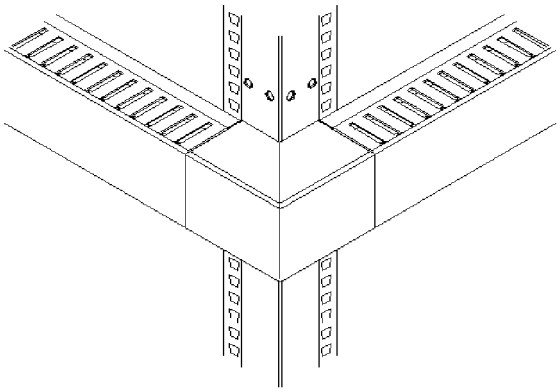
Corner Connector-Top Access Horizontal Cable Management (cont.)

Parts List			
Part Number		Description	Qty.
1	7321X	Corner Connector Assembly	1
2	86263	Support Bracket	2
3	66250	#10AB x .38” screw	4



technical furniture

Horizontal Cable Management Connector



Tech Corner Post/Corner Cable

Tools Required

-Phillips head screwdriver
-5/32" Allen wrench (provided)
-36" Carpenters level

Tech Corner Post

1. The **Tech Corner Post** enables LMS units and MediaLinx to turn 90 degrees. Dissimilar height units may be used around the Tech Corner Post, provided it is equal to the tallest frame.

   First, using instructions supplied with the Full Frame and Upright, assemble an Upright to the end of the Full Frame opposite from the Corner Post. This will provide some extra stability while attaching the frame to the Post.

   Posts have two rows of holes on each of four sides allowing right or left end attachment of the Full Frame. The end of the frame should be centered on the Post when correctly positioned. Attach with 1/4-20 x 1- 5/8" Button head cap screws. See **Figure 1**.

2. Check for vertical straightness and horizontal level of the entire assembly.Adjust, using the levelers under the Post, Upright feet, and beneath the interior vertical posts of the 48" and larger Full Frames.

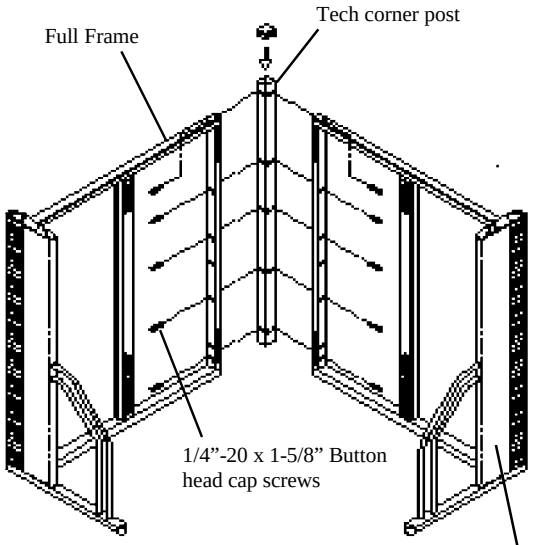


Figure 1.

Horizontal Cable Management Connector (cont.)

Corner Cable Management Connector

1. First, hook on two **Horizontal Cable Management Kits** at the same level on the back of a Tech Corner configuration. **DO NOT** put the **Covers** on.

2. With a pencil, mark where the top of the Wire Duct Rail sits on the Full Open Frame. This mark will be a reference point when attaching the **Corner Connector**.

3. Unhook one side of one of the Horizontal Cable Management (HMC). Slide the tabs on the Corner Connector into the HCM rail as shown in **Figure 2**. Part of the tab will fit between the finger on the HCM and the steel HCM rail. It may be necessary to squeeze the outside of the HCM in order to slide the tab into position.

4. Unhook the other HCM and insert the tab as shown in step 3.

5. Keeping the HCM and the HCM Corner at the same level, swing the attached pieces so that the hooks on the Wire Duct Rail can be reattached at the proper height. Use the pencil marks as a reference point.

   Note: It may be necessary to tap the Wire Duct Rails down in order to seat the hooks properly.

6. Attach all Covers

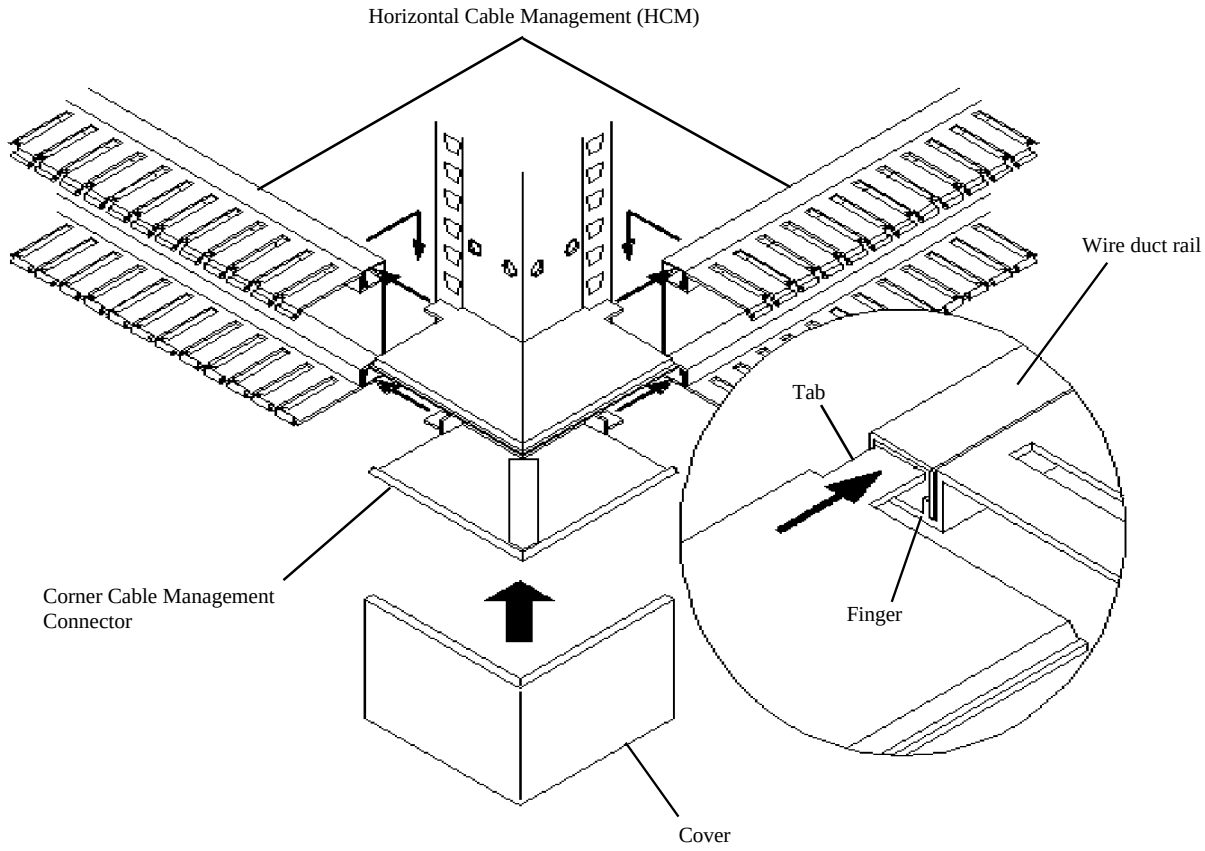
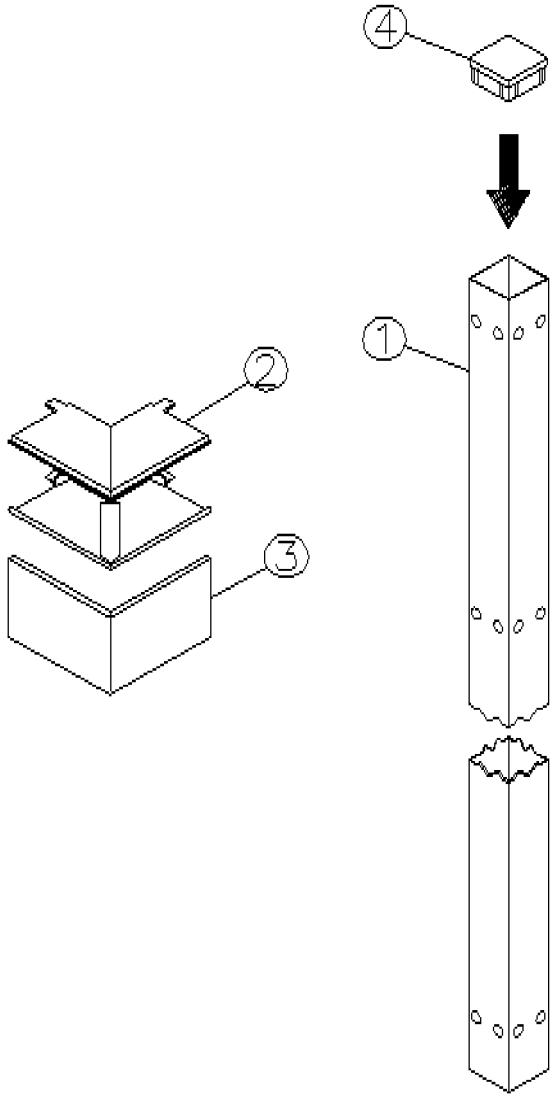


Figure 2

technical furniture

Horizontal Cable Management Connector (cont.)

Parts List			
Part Number		Description	Qty.
1	2943X	Corner Post, 83.20”	1
	2944X	Corner Post, 71.20”	
	2945X	Corner Post, 60.20”	
2	84371	HCM Corner	1
3	84372	HCM Cover	1
4	2957X	Tube Cap	1



Inner Cable Management

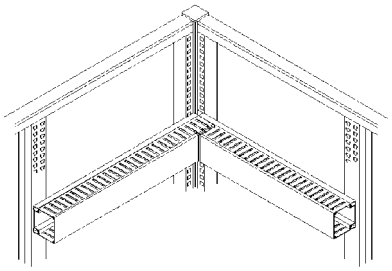
Tools Required
-Plastic mallet

1. Install the Right Hand **Inner Cable Management Assembly** in the desired location on the inside of the Tech Corner by inserting the hooks on each end of the assembly into the slotted standards. **DO NOT** put the covers on at this time. See **Figure 1**.

   The assembly should fall directly into place. To assure that the hooks are firmly seated, tap the rear corners of the assembly with plastic mallet or equivent tool.

2. Repeat this proceedure for the Left Hand **Inner Cable Management Assembly**. See **Figure 2**.

3. Install all covers. See **Figure 3**.



Inner Cable Management

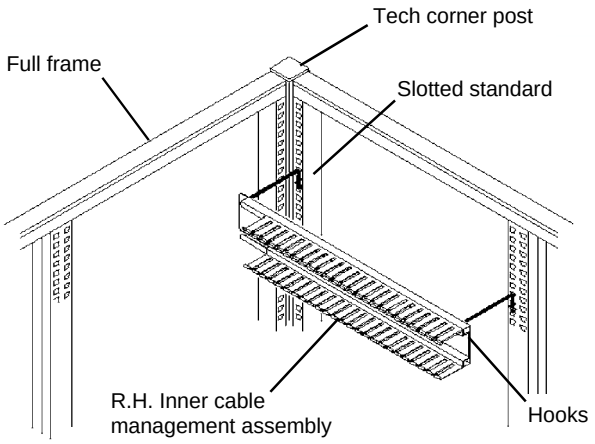


Figure 1

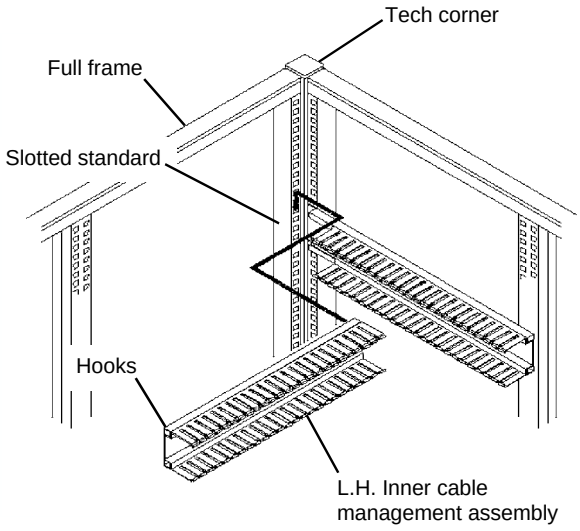


Figure 2

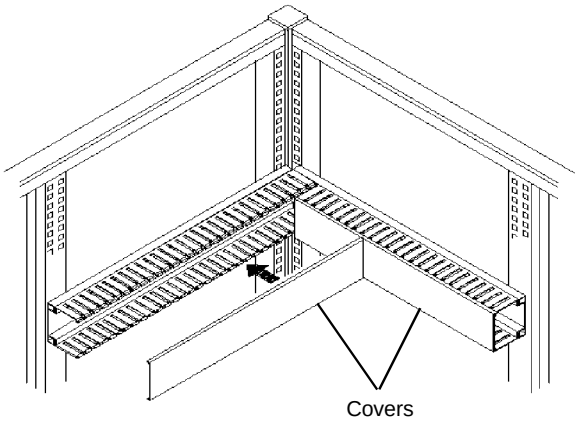
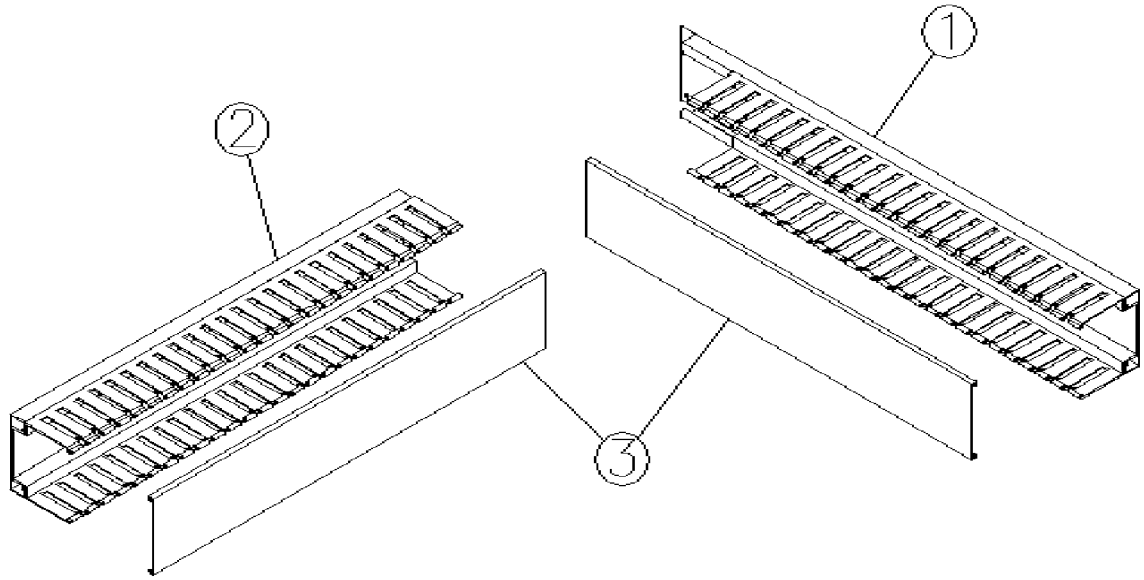


Figure 3

Inner Cable Management (cont.)

Parts List			
Part Number		Description	Qty.
1	5227X	48” Inner HCM Assembly, R.H.	1
2	5226X	48” Inner HCM Assembly, L.H.	1
	5230X	72” Inner HCM Assembly, L.H.	
3	3735X	4” x 72” HCM Cover	1



technical furniture

4” x 3” Vertical Cable Management

Please read these instructions carefully and follow the installation steps in sequence.

Tools Required
- -Plastic Mallet
- -Phillips head screwdriver

NOTE: The **4” x 3” Vertical Cable Management** is available in various lengths. (i.e. 12”, 24”, 36” ect.)

A minimum gap of .50” is required between the Vertical and Horizontal Cable Management, top and bottom, for a total of 1.00”.

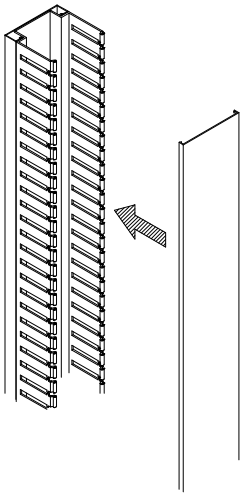
It is recommended that the Vertical and Horizontal Cable Management be installed at the same time.

If this is not possible, gaps greater than .50” (1.00” total) may be necessary. In this case, some of the Horizontal Cable Management may have to be repositioned to obtain the desired configuration.

The 4” x 3” Vertical Cable Management can only be installed on ***intermediate*** standards.

INSTALLATION BETWEEN TWO HORIZONTAL CABLE MANAGEMENT SECTIONS

1. Ensure that the total space between the two Horizontal C/M sections is a minimum of 1.00” greater than the length of the Vertical C/M section(s) being installed. Adjust as necessary. See **figure 1**.



4” x 3” Vertical Cable

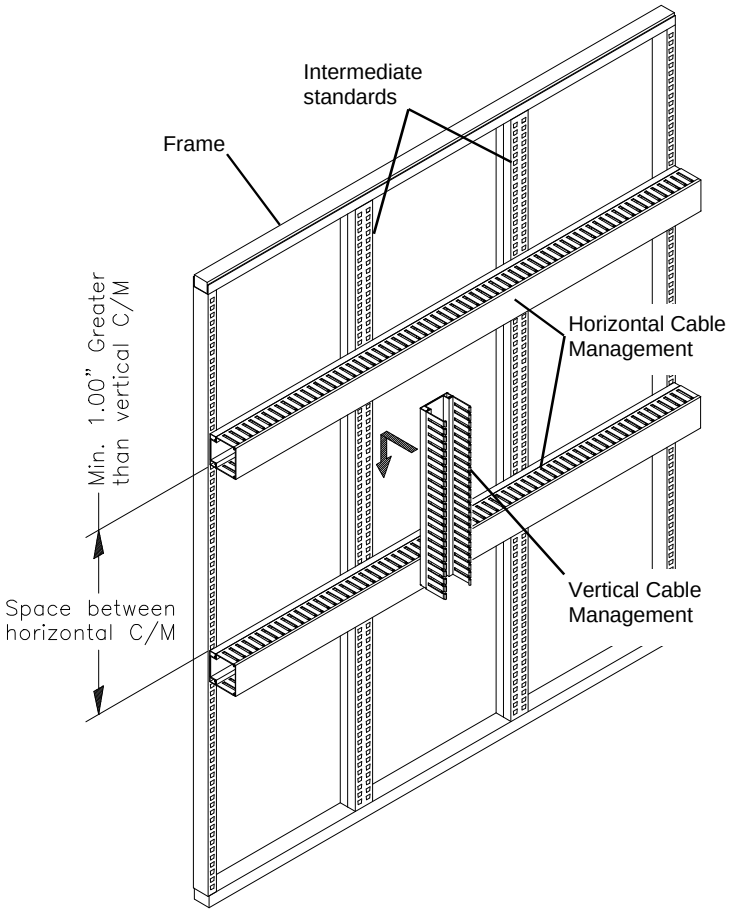


Figure 1

4" x 3" Vertical Cable Management (cont.)

INSTALLATION BETWEEN TWO HORIZONTAL

2. Insert the hooks on the back of the Cable Management into the slots in intermediate standard. Ensure that the hooks are fully seated by tapping the component downward with a plastic mallet. See **figure 2**.

3. Lock the Vertical C/M in place by installing two #10-24 x 3/8" phillips pan head thread forming screws (provided). See **figure 3**.

4. Install the **Cable Retention Clip** (provided) as shown in **figure 4**.

5. To install the **Cover**, hook one side of the cover over the flanges on one side of the Cable Management. Pull the Cover over and hook it onto the opposite flanges. See **figure 5**.

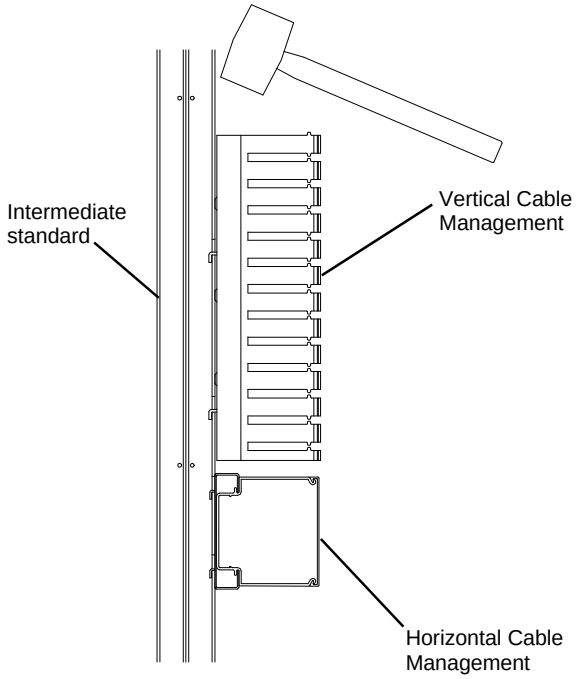


Figure 2

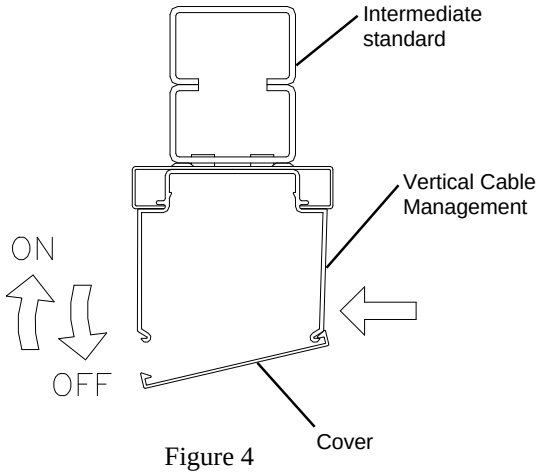


Figure 4

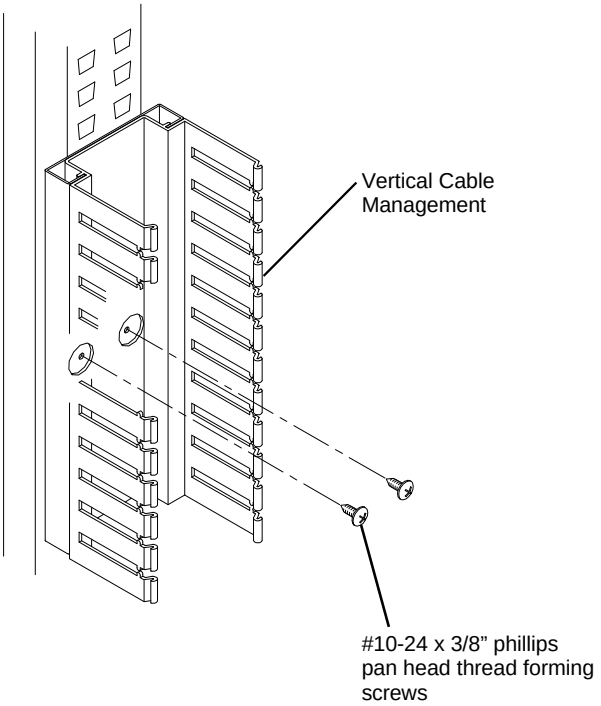


Figure 3

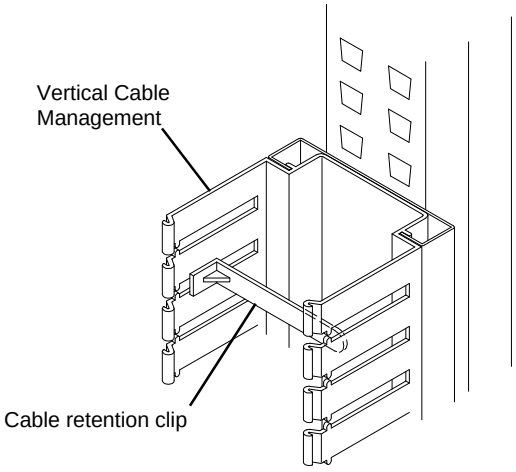


Figure 5

4” x 3” Vertical Cable Management (cont.)

INSTALLATION FOR BOTTOM CABLE FEED

1. Attach the Vertical Cable Management section to the intermediate standard. Adjust proximity to floor in 1” increments as desired. See **figure 6**.

NOTE: The Vertical C/M extends to within approximately 1” off the floor.

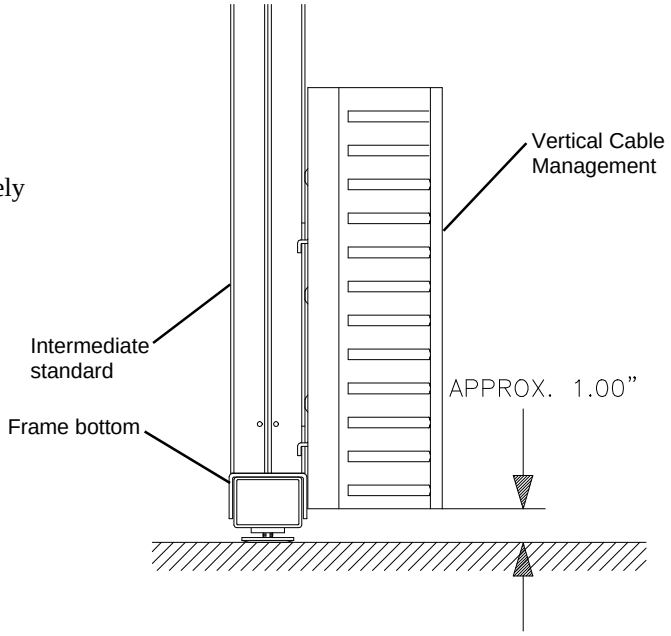


Figure 6

INSTALLATION FOR TOP CABLE FEED

1. Attach the Vertical Cable Management to the top of the frame. Adjust in 1” increments. See **figure 7**.

Vertical C/M Length	Maximum Extension Above Frame
12”	.80”
24”	12.80”
36”	24.80”
48”	36.80”

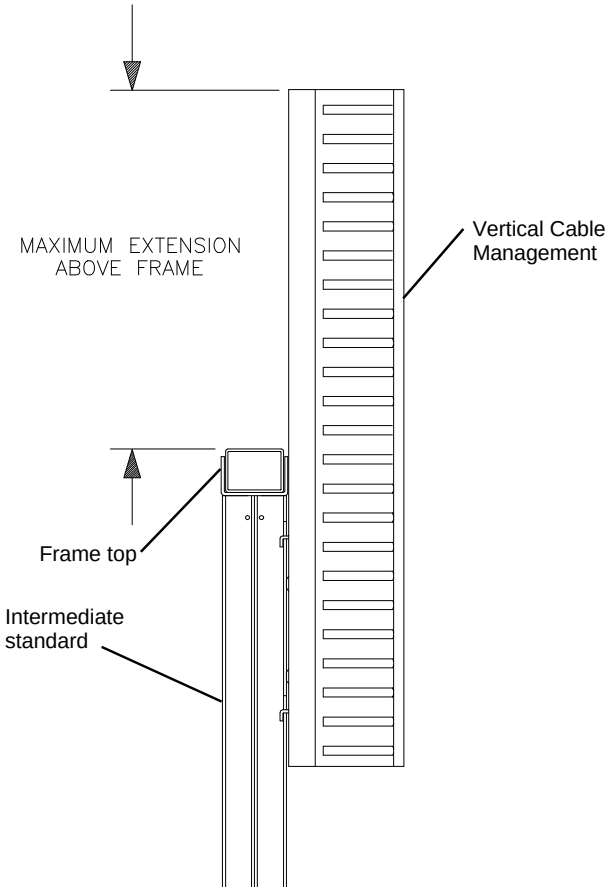
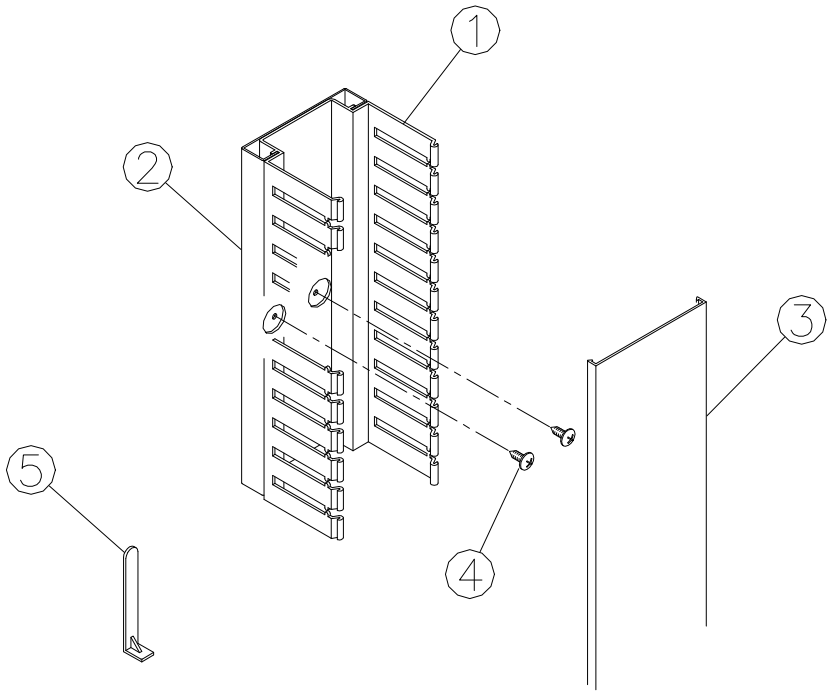


Figure 7

4” x 3” Vertical Cable Management (cont.)

Parts List			
Part Number		Description	Qty.
1	7959X	4” x 3” Vertical Cable Management (12”)	1
	7960X	4” x 3” Vertical Cable Management (24”)	
	7961X	4” x 3” Vertical Cable Management (36”)	
	7962X	4” x 3” Vertical Cable Management (48”)	
2	7955X	Rail (12”)	1
	7956X	Rail (24”)	
	7957X	Rail (36”)	
	7958X	Rail (48”)	
3	7963X	Cover (12”)	1
	7964X	Cover (24”)	
	7965X	Cover (36”)	
	7966X	Cover (48”)	
4	66714	#10-24 x 3/8” Phillips Pan Head Thread Forming Screw	2
5	83824	Cable Retention Clip	1-4



technical furniture

Basic Plus Cable Management

Tools Required

-Phillips Head Screw Driver
-Plastic mallet

ATTACHING TO LMS BASIC PLUS (BACK OF UPRIGHT)

1. The rear of the **Upright Post** has a recessed area with a row of small holes. Align the holes in the **Mounting Channel** with the Post holes and attach with the #8 screws. ***Starting at the top***, snap the **Cable Management Duct** into the channel.**NOTE**: It is meant to be a tight fit, so use of a mallet and block to tap the duct in place may be necessary. Once started, continue taping it in, moving down a few inches at a time. Next, install the **Cover(s)**. See **Figure 1**.

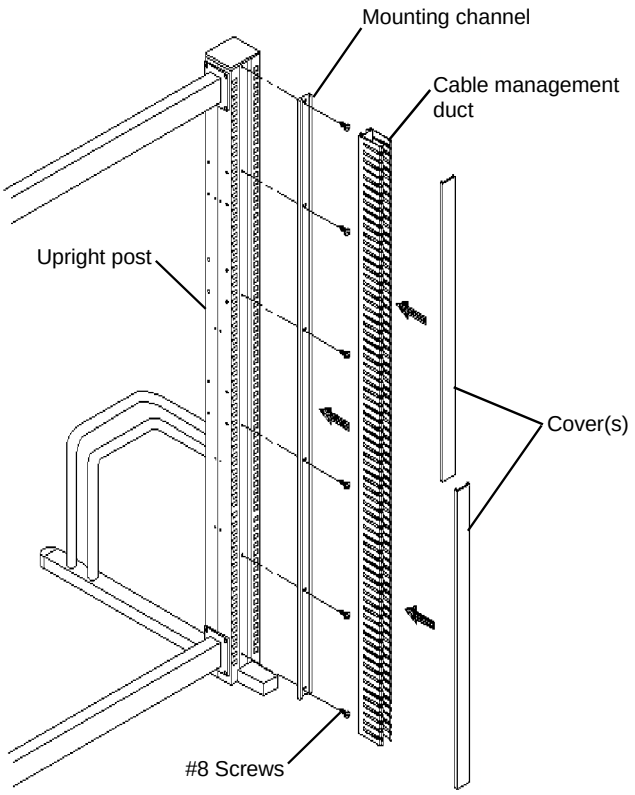


Figure 1

ATTACHING AN INNER CABLE MANAGEMENT DUCT

1. The inside of the **Upright Post** has two rows of small holes, one row on either side of the upright seam. Position the **Mounting Channel** as shown in **Figure 2**. Screw the Mounting Channel to the Upright Post using the #8 screws every other hole on each side. Follow the above instructions for inserting the Cable Management Duct into the Channel.

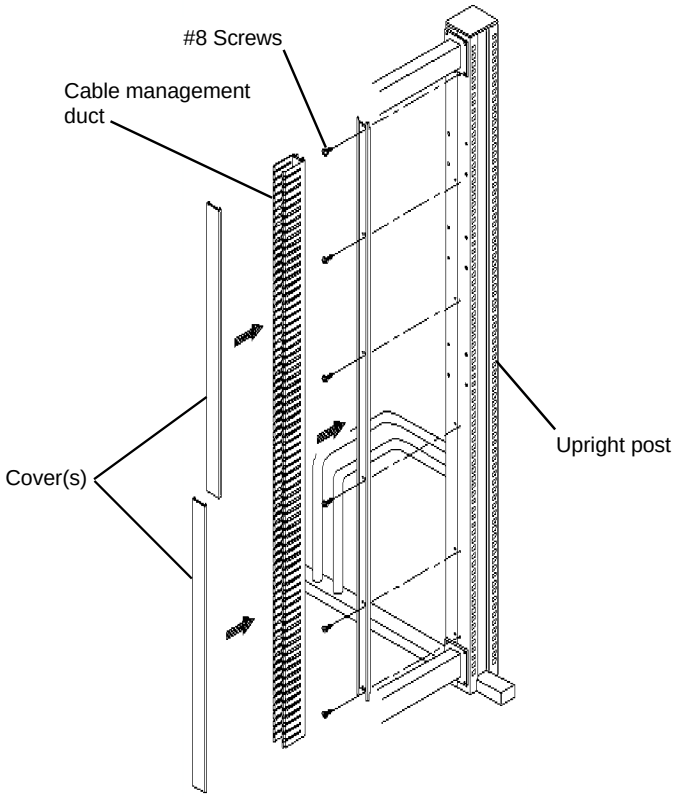


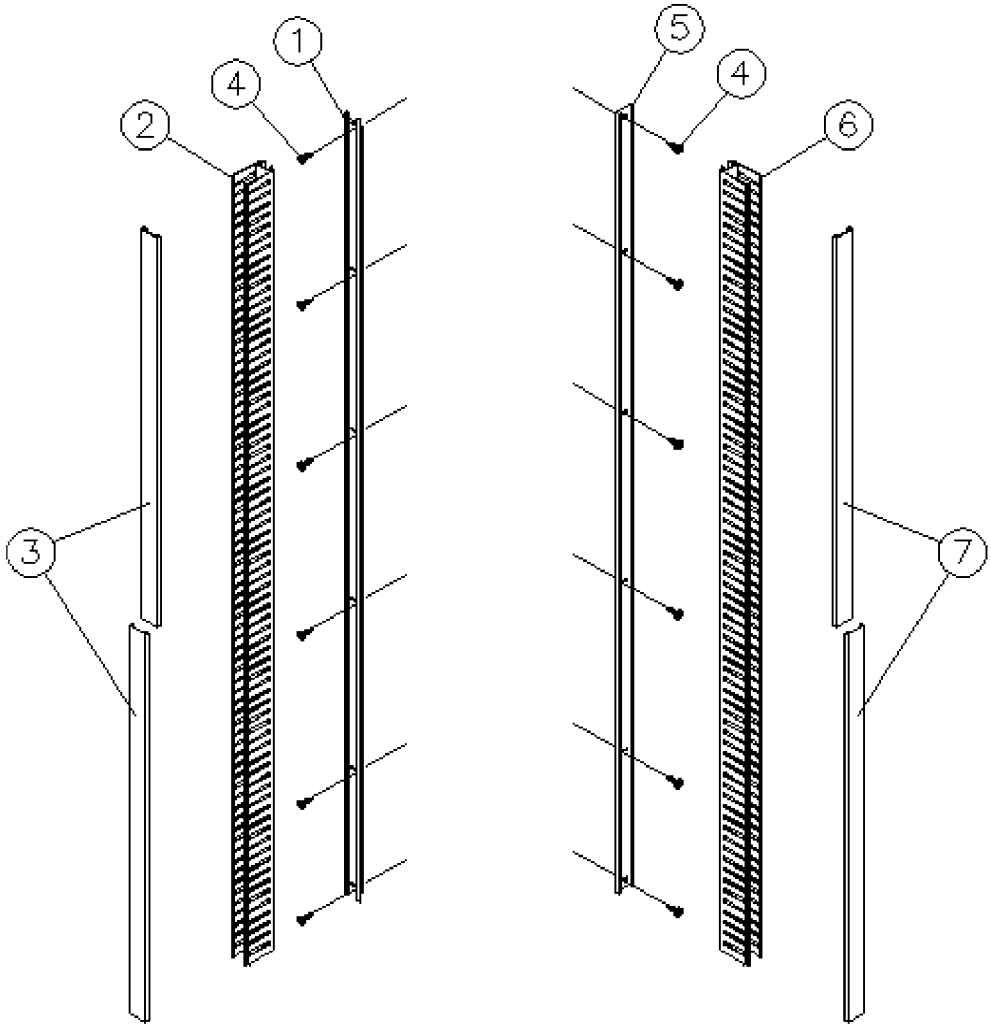
Figure 2

Basic Plus Cable Management (cont.)

Parts List			
Part Number		Description	Qty.
1	5899X	72” Inner Cable Managment Duct	1
	5898X	84” Inner Cable Managment Duct	
2	5926X	61” Inner Vertical Cable Managment	1
	5925X	72” Inner Vertical Cable Managment	
	5924X	84” Inner Vertical Cable Managment	
3	7666X	61” Inner Vertical Cable Management Cover	2
	7665X	72” Inner Vertical Cable Management Cover	
	7664X	84” Inner Vertical Cable Management Cover	
4	66249	#8 x 3/8” Phillips Pan Head Screw	12
5	5904X	61” Cable Management Duct	1
	5903X	72” Cable Management Duct	
	5902X	84” Cable Management Duct	
6	4264X	61” Vertical Cable Management	1
	4265X	72” Vertical Cable Management	
7	7575X	61” Vertical Cable Management Cover	2
	7574X	72” Vertical Cable Management Cover	
	7573X	84” Vertical Cable Management Cover	

technical furniture

Basic Plus
Cable Management (cont.)



technical furniture

LMS Basic Cable Management Kit

Tools Required
-Phillips Head Screw Driver
-Plastic mallet

APPLYING TO LMS BASIC

1. The rear of the **Post** has a row of small holes. Align the holes (every other hole) in the **Mounting Channel** with the Post holes and attach with the #8 screws. ***Starting at the top***, snap the **Cable Management Duct** into the channel. **NOTE**: It is meant to be a tight fit, so use of a mallet and block to tap the duct in place may be necessary. Once started, continue taping it in, moving down a few inches at a time. See **Figure 1**.

2. Install the **Cover(s)**.

TO FULL FRAME

1. This kit can be used to apply **Vertical Cable Management** to unused portions of the **Intermediate Standards** (double rows of slots). It can also be cut into smaller pieces and applied between components. Attach the Mounting channel with double sided tape. See **Figure 2**.

CAUTION! Once applied, do not remove and re-stick the tape. The bond strength diminishes greatly.

2. Remove the protective paper from one side and apply four (84" units) pieces of tape to the Mounting Channel first. Then, remove the remaining protective paper from the tape and starting from one end, carefully stick the channel to the standard. Snap the duct into place as described above. See **Figure 2**.

3. Install the Cover(s).

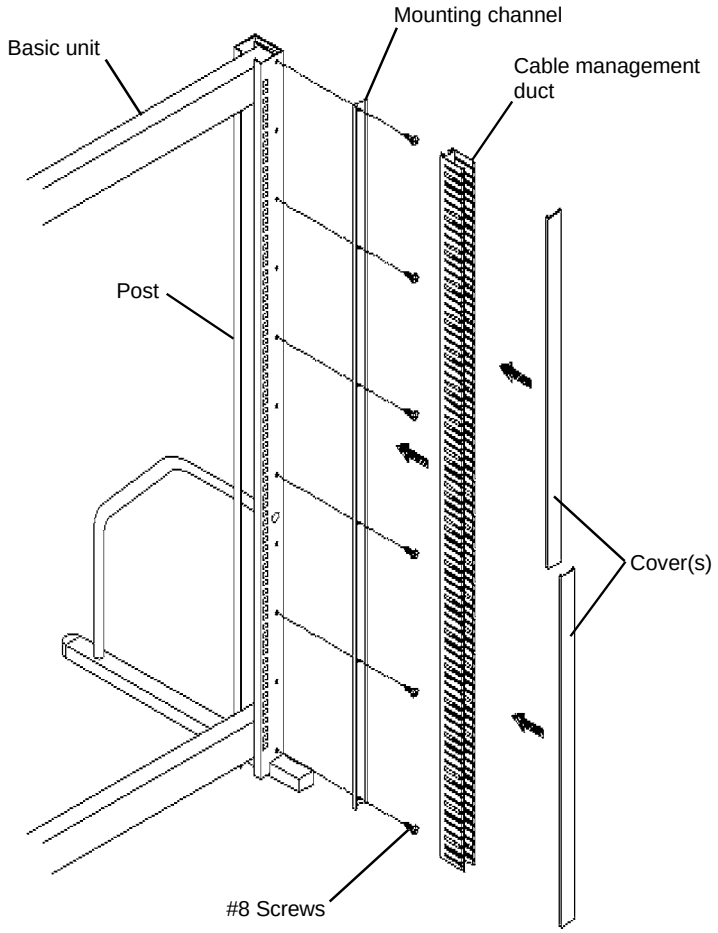


Figure 1

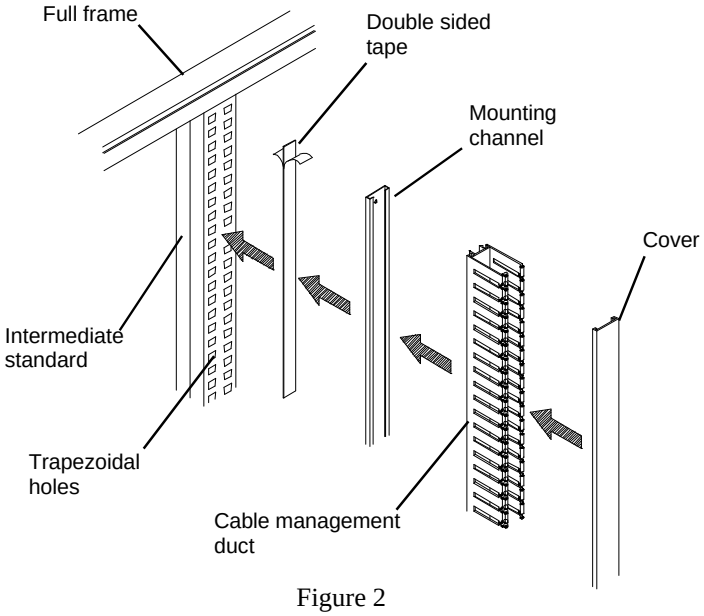


Figure 2

LMS Basic Cable Management Kit (cont.)

LA34-MM CABLE STRAP, SET OF 25

1. These **Cable Ties** can be screwed (recommended) to the rear of the LMS Basic Vertical Posts, using the small vertical holes, or Cable ties can be attached to the rear of Tower and Electronic shelves. Screwing it on provides easy removal for relocation.

2. Screw the **Wire Tie Base** to the Post, leaving the bonding tape and protective paper in place for future use. Cut the center of the tape so the screw easily passes through.

3. Slip the **Wire Tie** through the slots on the base and it's ready to use.

   If you choose to adhere the Wire Tie Base, be sure the orientation is correct for the tie, remove the protective paper, and stick it on.

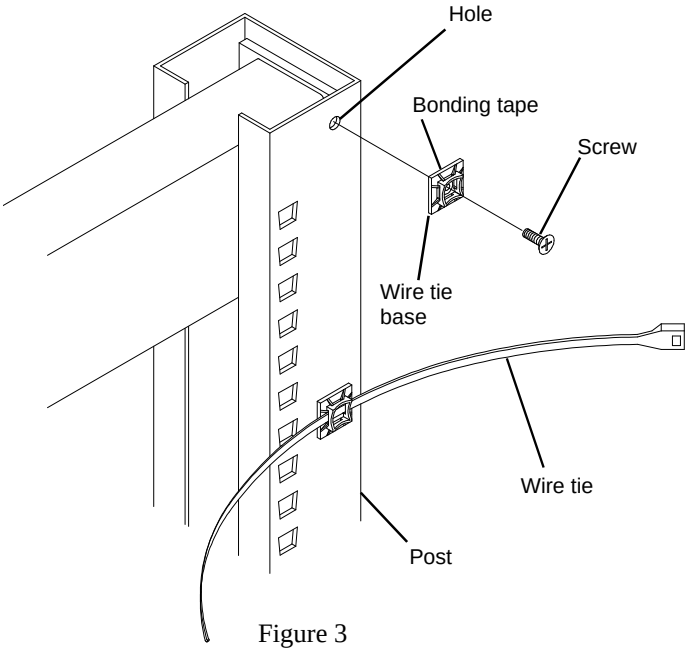


Figure 3

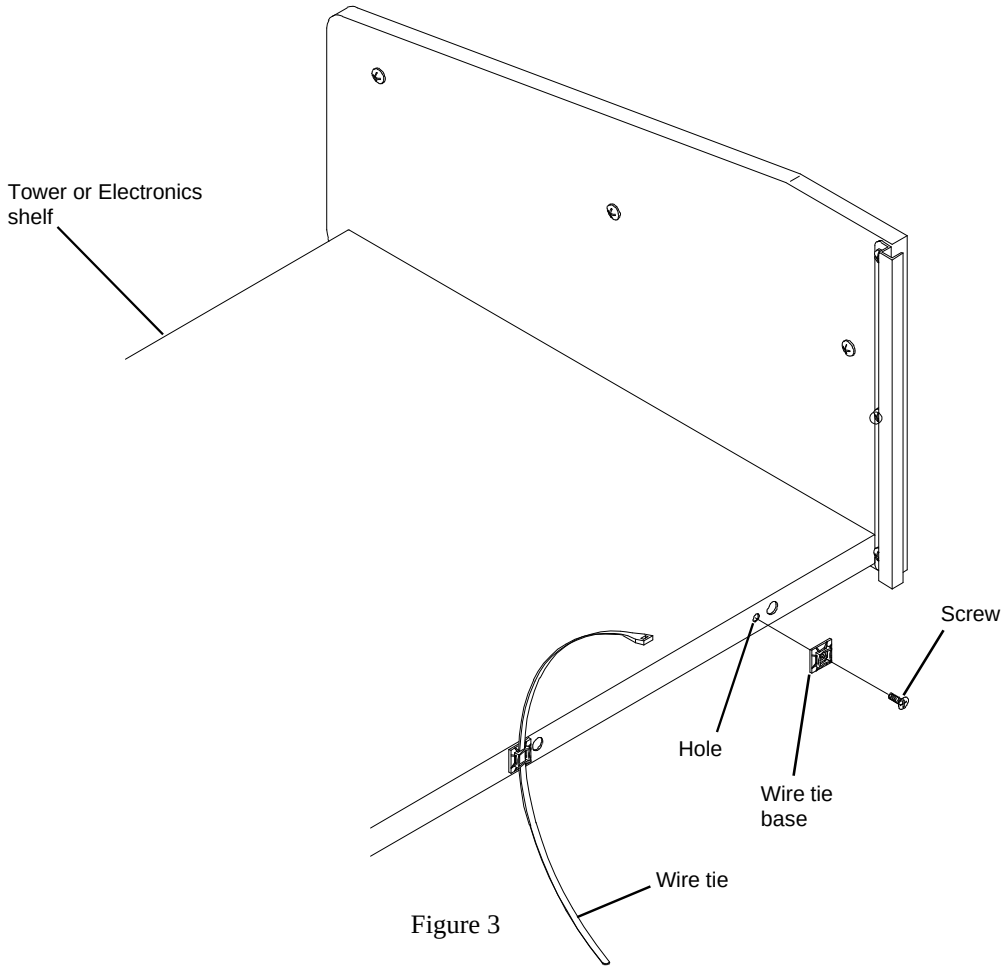
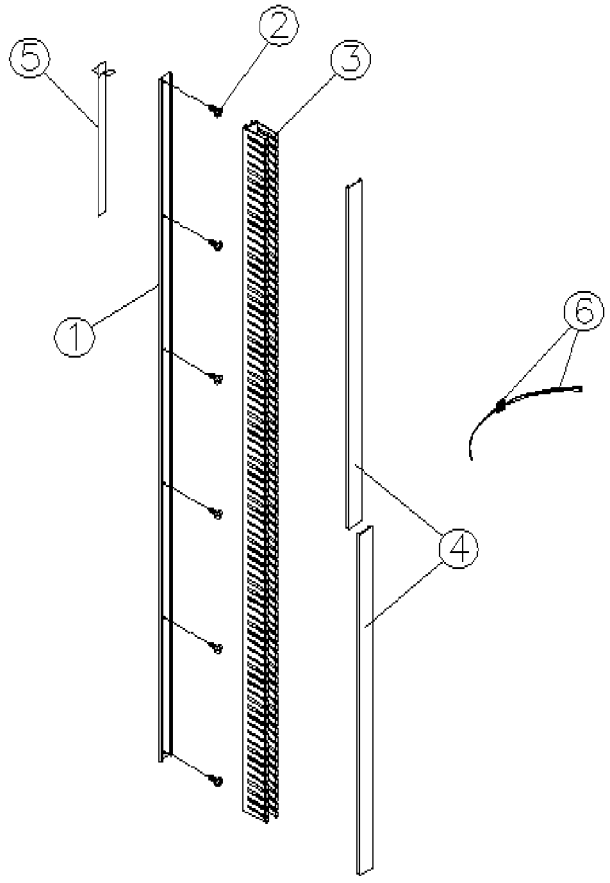


Figure 3

technical furniture

LMS Basic Cable Management Kit (cont.)

Parts List			
Part Number		Description	Qty.
1	5902X	Cable Managemnt Duct, 84”	2
	5903X	Cable Managemnt Duct, 72”	
	5904X	Cable Managemnt Duct, 61”	
2	66249	#8 x 3/8” Phillips Pan Head Screw	12
3	3726X	Vertical Cable Management, 81.84”	2
	4265X	Vertical Cable Management, 69.84”	
	4264X	Vertical Cable Management, 58.84”	
4	7573X	Cover, 40.90”	4
	7574X	Cover, 34.90”	
	7575X	Cover, 29.40”	
5	81120	Tape, VHB Strip 1” x 18” #4950	4
6	LA34-	Cable Strap	1



technical furniture

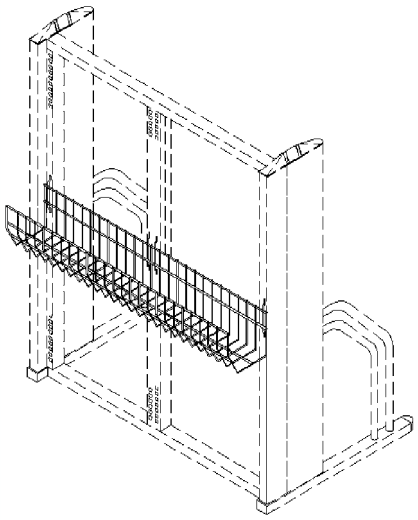
Cable Trough Cable Management

Tools Required
-Phillips head screwdriver

INSTALLATION OF THE CABLE TROUGH

1. To install the **Cable Trough,** insert the wire tabs located at the top of the Trough into the trapezoid holes in the Full Frame. With both sets of tabs in the holes, push the Trough down. Secure using the #10-24 Machine screws provided. See **Figure 1**.

2. Install one **Cross Tie** at each end of the Trough and equally spaced in the center. Longer sections may have multiple Cross Ties in the middle. See **Figure 2**.



Cable Trough

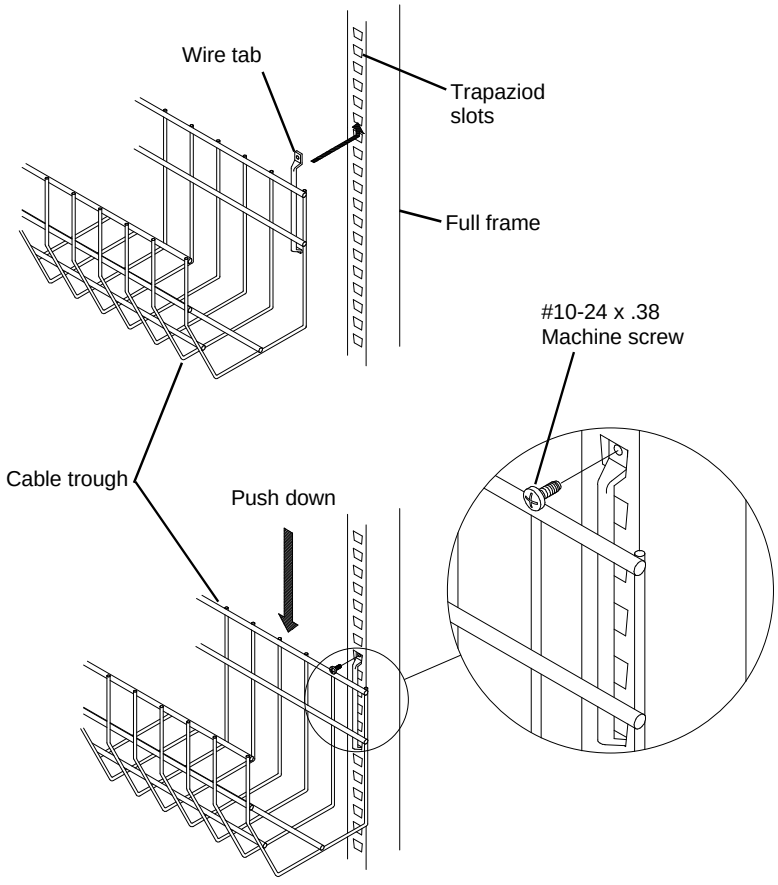


Figure 1

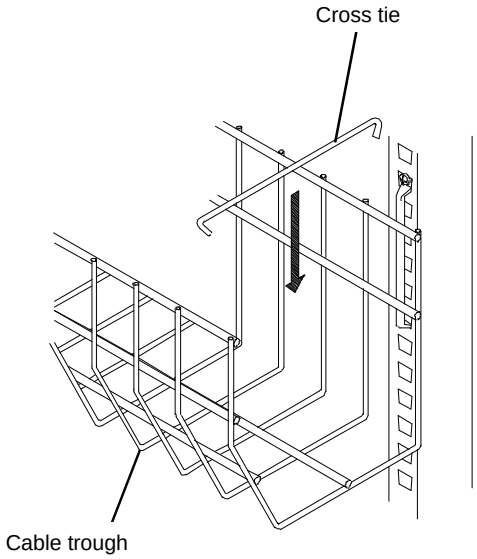


Figure 2

Cable Trough Cable Management (cont.)

INSTALLATION OF THE CABLE TROUGH CORNER

The **Cable Trough Corner** is required when using the
Cable Trough in conjunction with a Tech Corner configuration. The Cable Trough Corner is meant to go on the outside of the configuration.

1. To install the Cable Trough Corner, the Cable Trough sections must first be installed, without the Cross Ties, at the same height. From the top, place the corner section inside the straight sections. Gently pull back on the outside of the straight sections and push the Trough Corner into place. Release the straight sections. Secure using the two clamps and screws. See **Figure 3**.

2. Install the Cross Ties (refer to previous page).

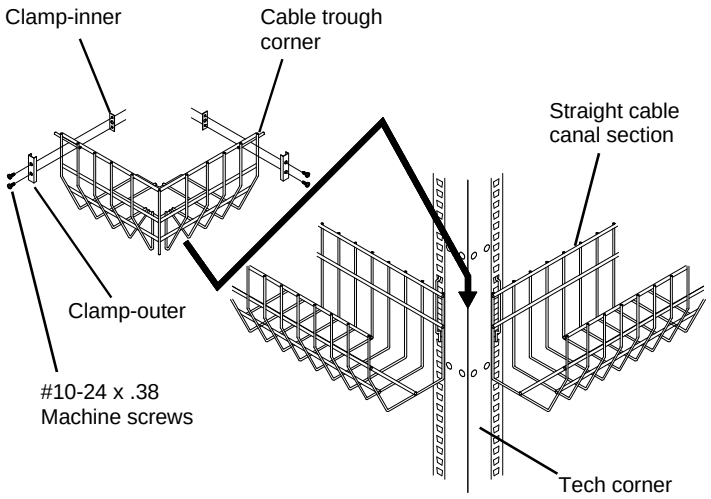


Figure 3

INSTALLATION OF THE END PANEL

1. The Cable Trough must first be installed without the Cross Ties. Identify the right **End Panel** by holding the panel in front of you so the angled side points to your left. The vertical wires should be facing you. From above, install the right End Panel by sliding it down into the Cable Trough. The top horizontal bar should be resting on top of the Cable Trough. Install the left End Panel in the same manor. See **Figure 4**.

   The End Panel will take the place of the end Cross Ties. Install the remaining Cross Ties (refer to previous page).

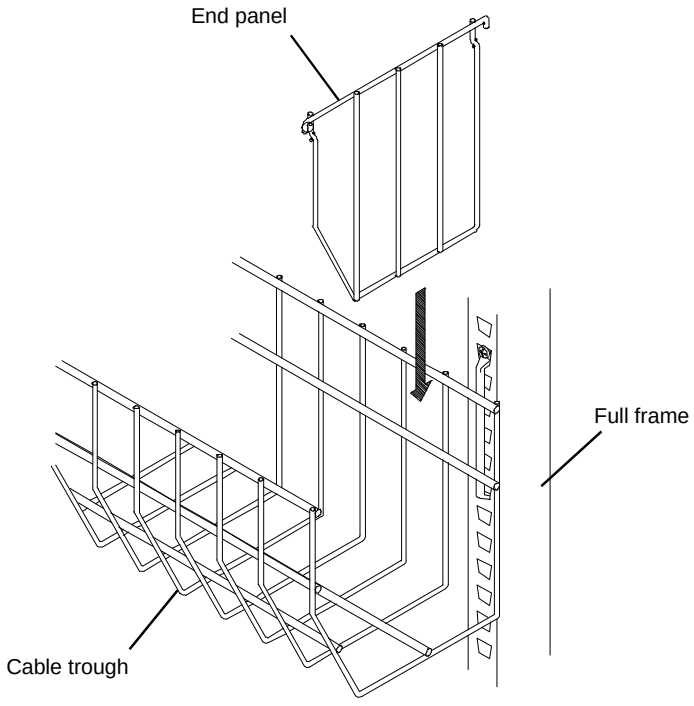
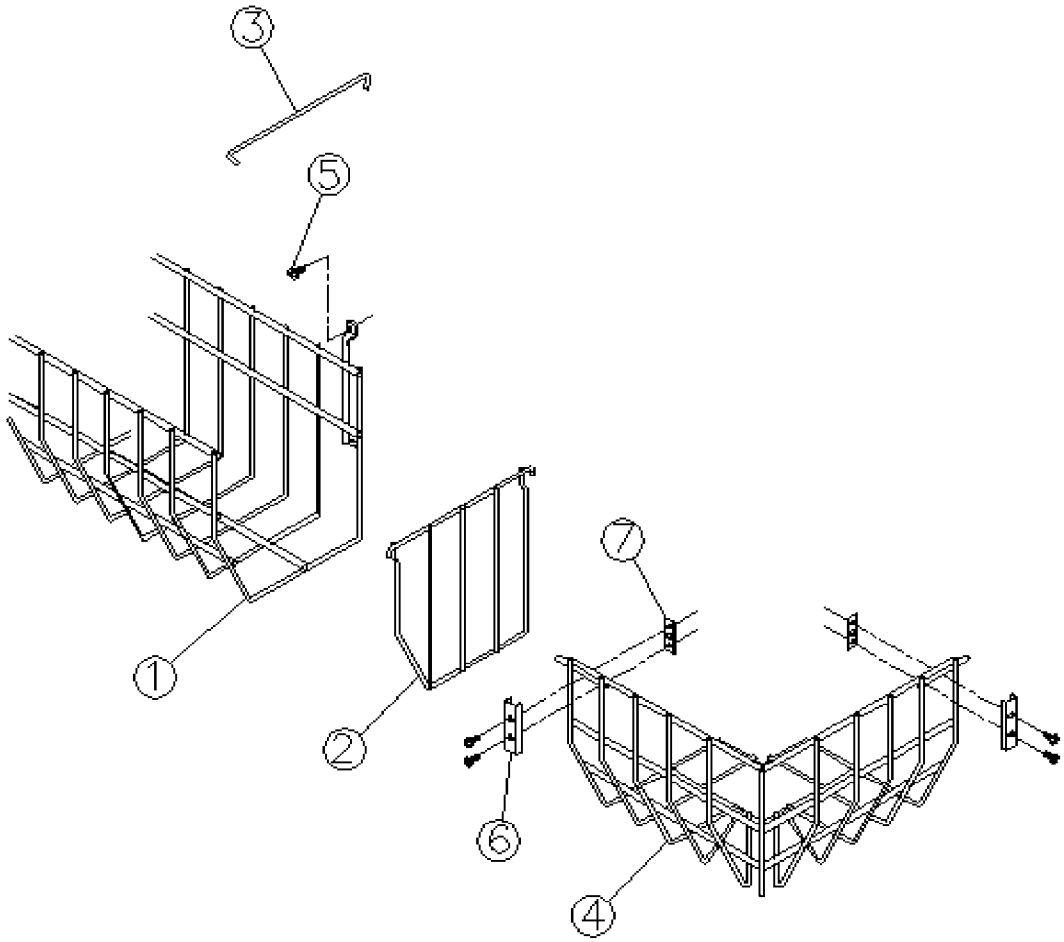


Figure 4

Cable Trough Cable Management (cont.)

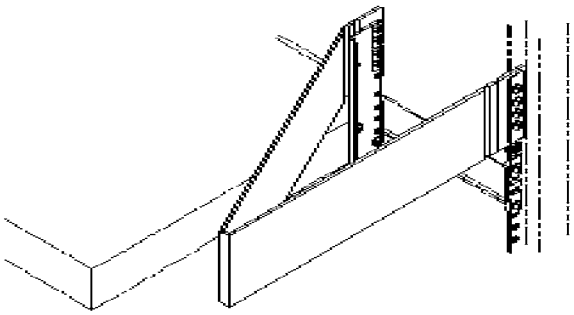
Parts List			
Part Number		Description	Qty.
1	83304	Cable Trough, 24”	1
	83305	Cable Trough, 30”	
	83306	Cable Trough, 36”	
	83308	Cable Trough, 48”	
	83309	Cable Trough, 60”	
	83310	Cable Trough, 72”	
	83311	Cable Trough, 72” 36/36	

Parts List			
Part Number		Description	Qty.
2	83313	End Panel, R.H.	1
	83314	End Panel, L.H.	
3	83315	Cross Tie	2-4
4	83312	Corner	1
5	66714	#10-24 x 3/8” Phillips Pan Head Thread Forming Screw	8
6	83849	Outer Clamp	2
7	83850	Inner Clamp	2

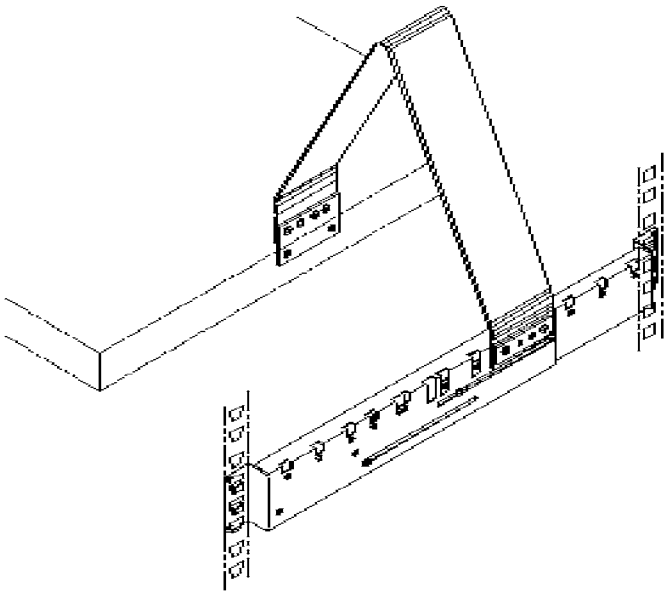


technical furniture

Cable Management Arm



Horizontally Oriented
Cable Management Arm



Vertically Oriented
Cable Management Arm

CABLE MANAGEMENT ARMS:

***** Vertically oriented **Cable Management Arms** are available in two styles:

1. LA35-MM may be attached to 12", 24", 30", 48", 60" and 72" Tower Roll-out shelves, all Rack Mount Roll-out shelves, and all LAN Locker II Bottom Roll-out shelves. This Cable Management kit includes an adjustable bracket for attachment to 24"/30" LMS Frame Modules and Rack Mount Rails.

2. LA38-MM may be attached to 36" Tower Roll-out shelves when installing on LMS Frames with 36" Modules.

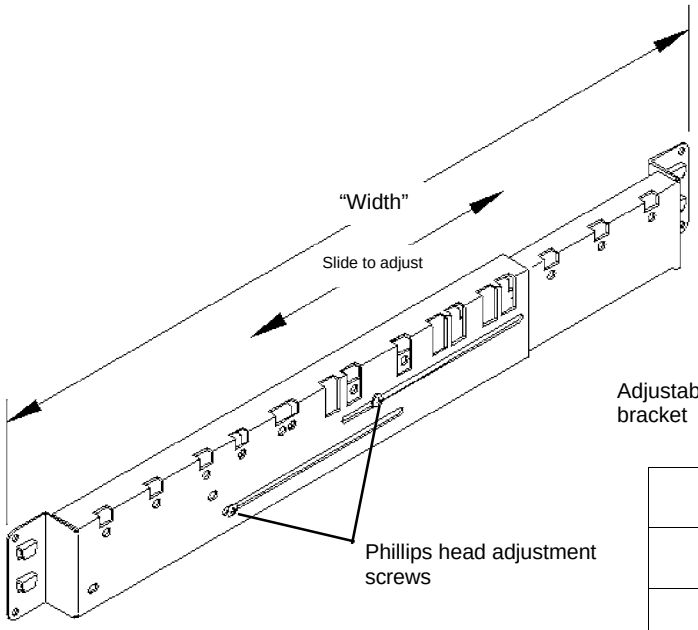
*Note: 36" Tower Roll-outs manufactured before 10/97 may not have the appropriate cable mounting holes, in which case drilling may be required.

***** Item LA36-MM may be attached to Rack Mount Roll-out shelves only in a horizontal orientation. LA36-MM Horizontal Cable management Arm kits can also be installed in a vertical orientation to existing horizontal cable arm brackets. (Extra brackets included with the kit may be discarded.)

Tools Required

-Phillips head screwdriver
-Electric drill (optional)
-#19 Drill bit (optional)

Cable Management Arm (cont.)



"Width"	Application
23.79"(23-25/32")	24" Full Frame model
29.79"(29-25/32")	30" Full Frame model
18.79"(18-25/32")	19" Rack Mount Module (Remove adjustment screws)
23.79"(23-25/32")	24" Rack Mount Module

Figure 1

VERTICAL CABLE MANAGEMENT ARM

1. Loosen the two Phillips head screws on the **Adjustable Frame Bracket.** See **Figure 1**. *(TheAdjustable Frame Bracket may be attached to 19" and 24" rack mount rails or to any 24" and 30" Full Open Frame module. If the Frame Bracket is being mounted to rack mount rails spaced at 19", the screws must be removed.)* Refering to **Figure 1**, slide the inner and outer members of the Frame Bracket to the appropriate width for your application.

2. If you are installing the Frame Bracket onto rack mount rails, four **Clip Nuts** (two per rail) must be snapped onto the rails as shown in **Figure 2**. If the Bracket is being installed onto a Full Frame, proceed to step 3.

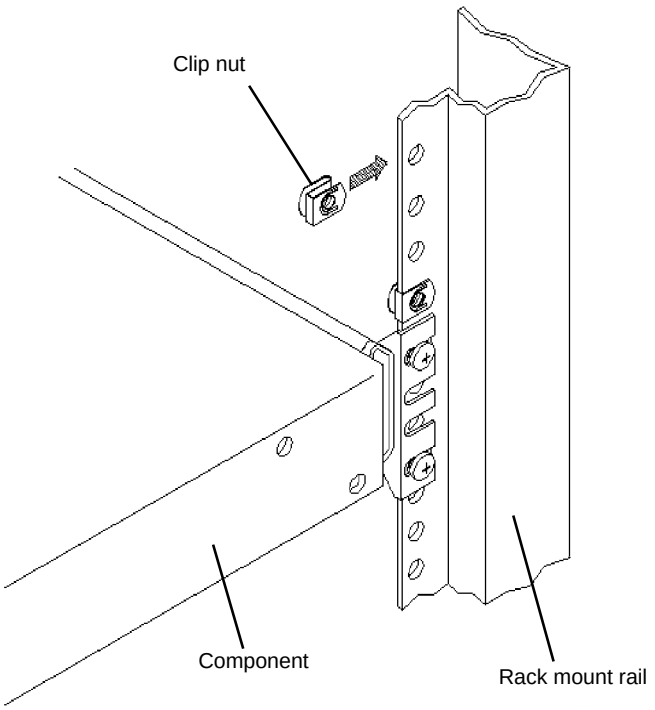


Figure 2

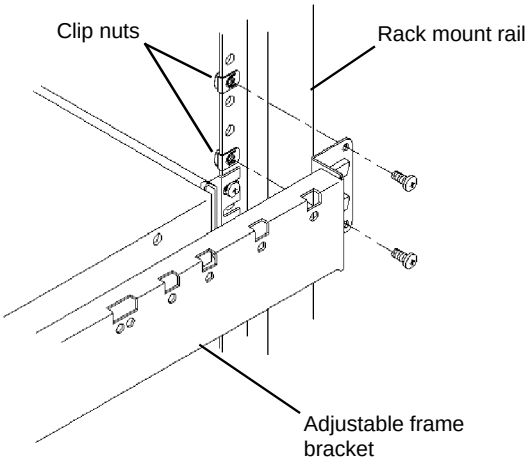
Cable Management Arm (cont.)

3. Attach the Frame Bracket by either screwing it to the Clip Nuts on the rack mount rails ***OR*** by hooking it onto the slotted Full Frame. If the Bracket is being installed onto the Full Frame, it must be positioned as close as possible to the roll-out surface. See **Figure 3**. After the Frame Bracket has been installed, re-tighten the two Phillips head adjustment screws.

4. The vertically oriented **Plasic Cable Arm** may be attached to either the center, left side, or right side of the roll-out. Roll-out shelves manufactured before June 1995 may not have the appropriate holes that are required to mount the Cable Arm Bracket and may require drilling.(Mark the appropriate hole locations for either left, center, or right mounting on the rear flange of the roll-out shelf and drill with a #9 [.166" dia.] drill bit. Refer to **Figure 4**).

5. Having determined your desired position, identify the the appropriate two mounting holes in the Frame Bracket that are in alignment with the desired mounting holes in the back of the roll-out.

   Install two Clip Nuts onto the Frame Bracket, orienting them as shown in **Figure 5**.



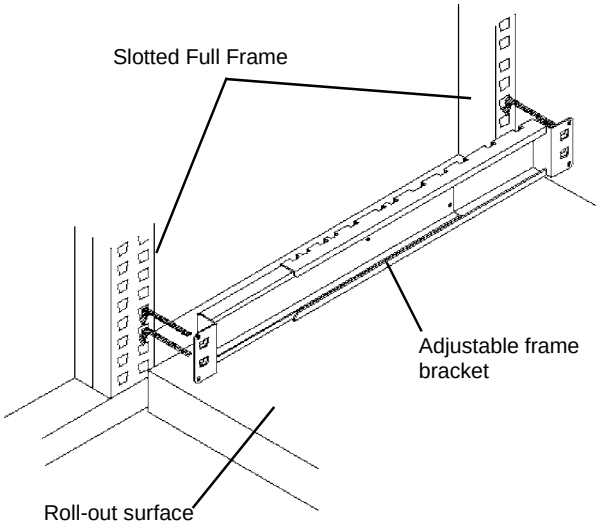


Figure 3

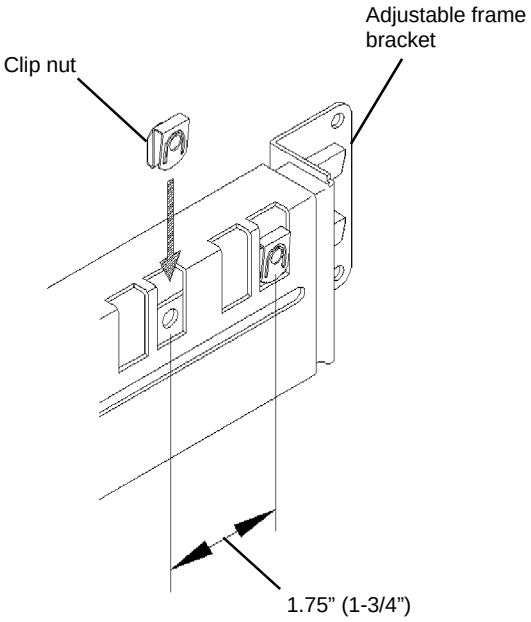


Figure 5

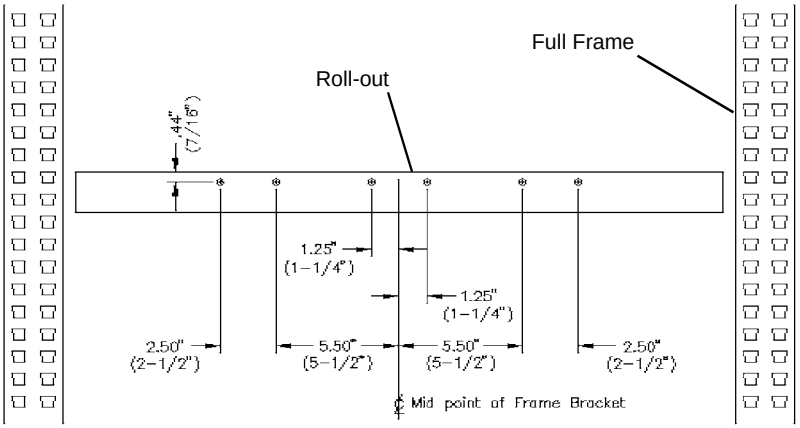


Figure 4
Rear view of roll-out

Cable Management Arm (cont.)

6. Attach the Cable Arm Bracket to the back of the roll-out using two #10 x 3/8" Phillips flat head self tapping screws. See **Figure 6**.

7. Now attach the free end of the Cable Arm to the Frame Backet as shown in **Figure 6**.

8. If the Cable Arm does not stand vertically when the roll-out is retracted, loosen the four screws that attach the arm to the Roll-Out Bracket and adjust the arm as required until you achieve the desired closed position.

9. Four **Cable Ties** are provided to secure cabling to the Cable Arm.

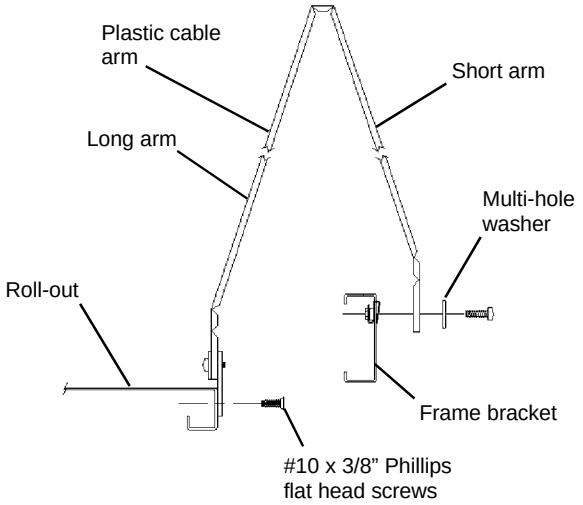


Figure 6

HORIZONTAL CABLE MANAGEMENT ARM

Horizontal Cable Arms *may be attached to either the right side or the left side of rack mounted roll-outs. The illustrations in these instructions show a right hand installation (as viewed from behind the roll-out).*

1. Roll-out shelves manufactured before June 1995 may not have the appropriate holes that are required to mount the Roll-Out Bracket and may require field drilling. (Mark the two hole locations on the rear flange of the roll-out shelf and drill with a #19 [.166" dia.] drill bit. Refer to **Figure 7**).

2. Mount the Roll-Out Bracket to the rear flange of the roll-out using two #10-24 x 3/8" Phillips pan head self tapping screws. See **Figure 8**.

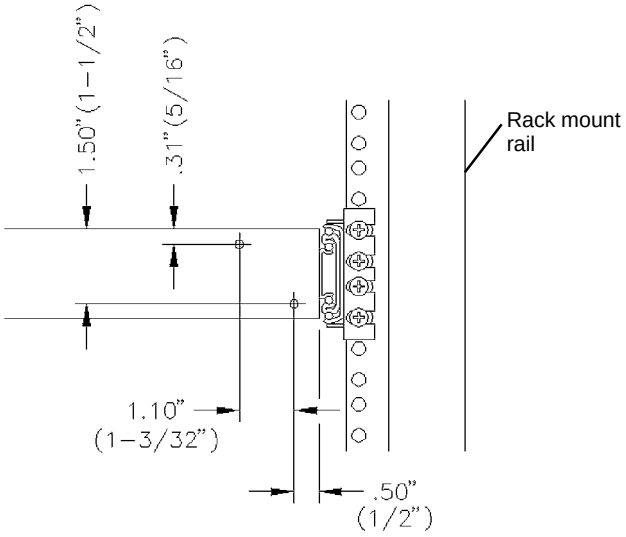


Figure 7
Rear view of roll-out

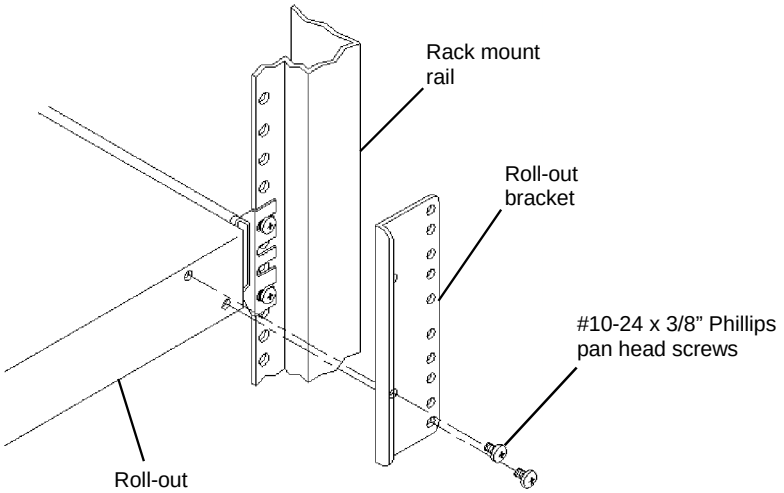


Figure 8

Cable Management Arm (cont.)

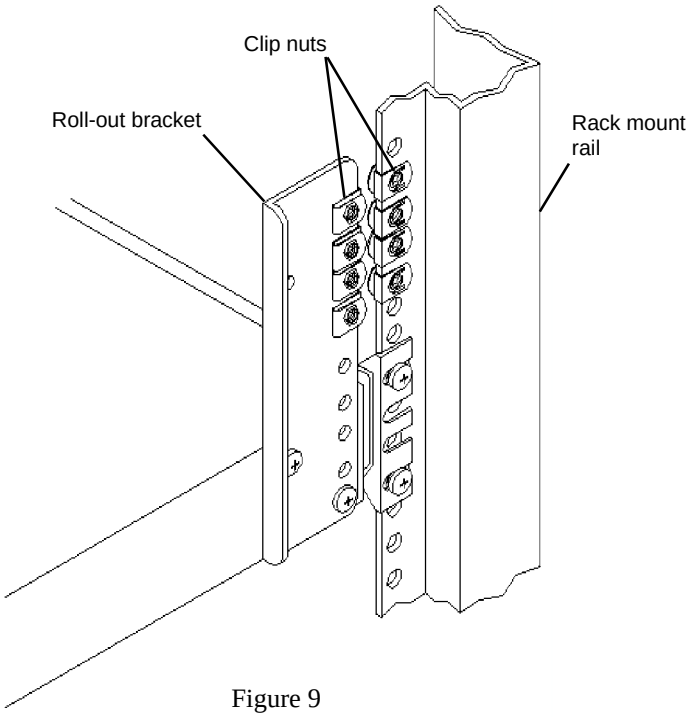


Figure 9

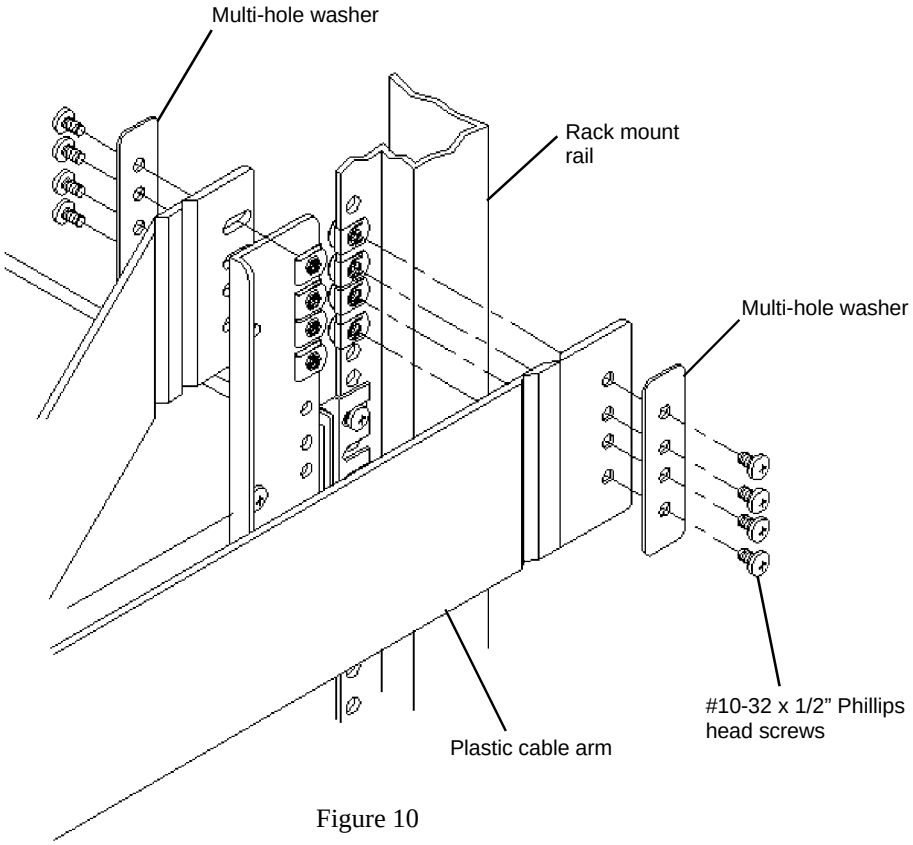
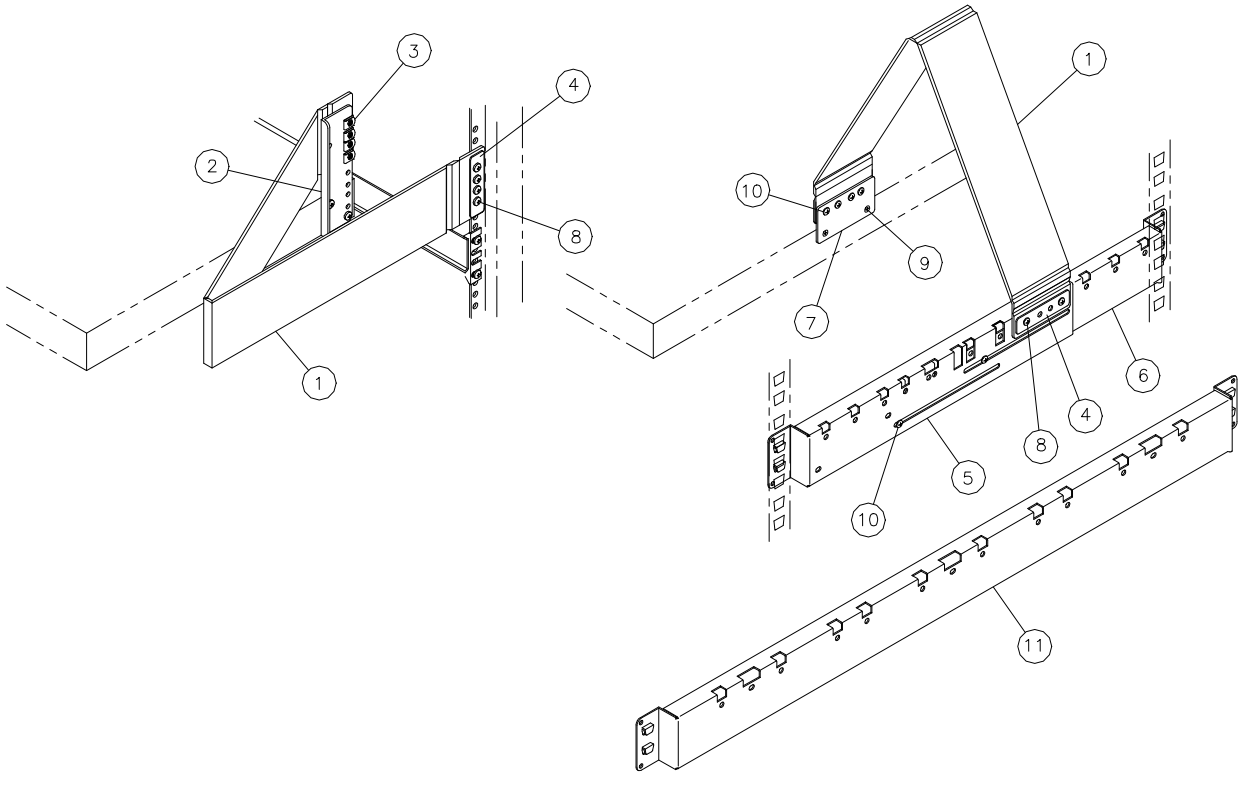


Figure 10

Cable Management Arm (cont.)

Parts List

Part Number		Description	Vertical Cable Management Arm Kit #LA35-MM	36”W Vertical Cable Management Arm Kit #LA38-MM	Extra Cable Management Arm #LA36-MM
1	83108	Cable Arm	1	1	1
2	3603X	Roll-Out Bracket	0	1	1
3	82087	#10-32 Clip Nut	0	8	8
4	3604X	Multi Hole Washer	2	2	1
5	3601X	Outer Bracket	1	0	0
6	3600X	Inner Bracket	1	0	0
7	3602X	Roll-Out Bracket	1	0	1
8	82031	#10-32 x 1/2” Phillips Pan Head Machine Screw	0	8	8
9	82555	#10-24 x 1/2” Phillips Flat Head Thread Forming Screw	0	0	2
10	66714	#10-24 x 3/8” Phillips Pan Head Thread Forming Screw	6	0	6
11	7408X	36” Vertical C/M Bracket	0	1	0
12	83110	Cable Tie (not shown)	4	4	4

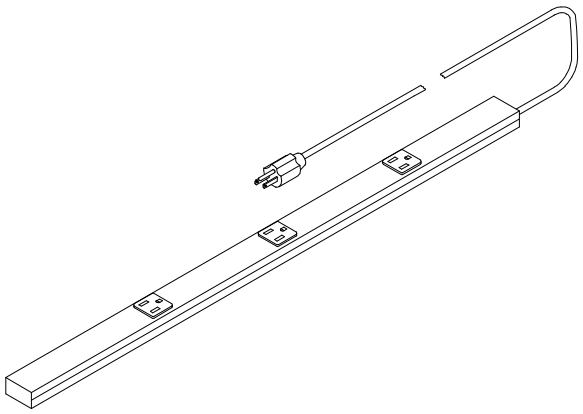


technical furniture

Low Profile (15amp)

Tools Required

-Electric drill
-.149" Drill bit
-Phillips head bit or screwdriver
-Center punch



Low Profile Power Strip

HORIZONTAL INSTALLATION

1. Install the **Mounting Clip** onto the **Base Plate** by first slipping one end of the Clip under the tab marked "X" on the Plate. Force the Clip under the tab as far as possible; the other end of the Clip will then be able to slip under the opposite tab. See **Figure 1**.

   NOTE: It may be necessary to pry the "X" tab open slightly by lifting the free end of the Clip. Do not pry the tab open more than necessary for the Clip to slip under the other tab.

2. Attach the Mounting Clip/Plate assemblies to the Power Strip by placing the two assemblies on a flat surface with the following distances between them:

24"(610mm) Power Strip	16"(406mm)
40"(1016mm) Power Strip	32"(813mm)
60"(1524mm) Power Strip	48"(1219mm)

   Next, install the Power Strip into the Clips by engaging one side of the Strip with the Clips and then pushing down to engage the other side. See **Figure 2**. Be sure that the Power Strip is firmly seated in each Clip.

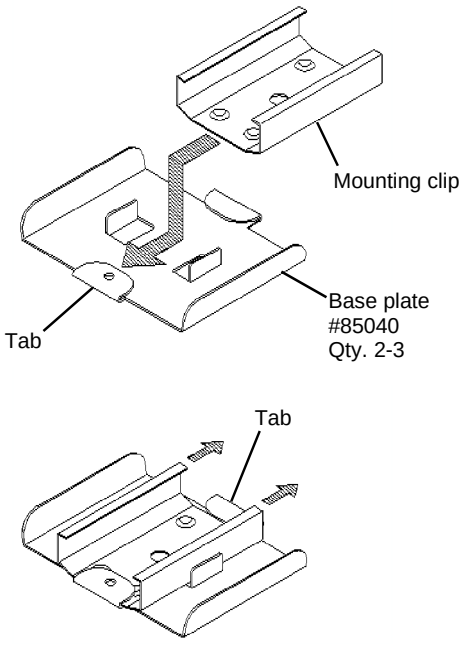


Figure 1

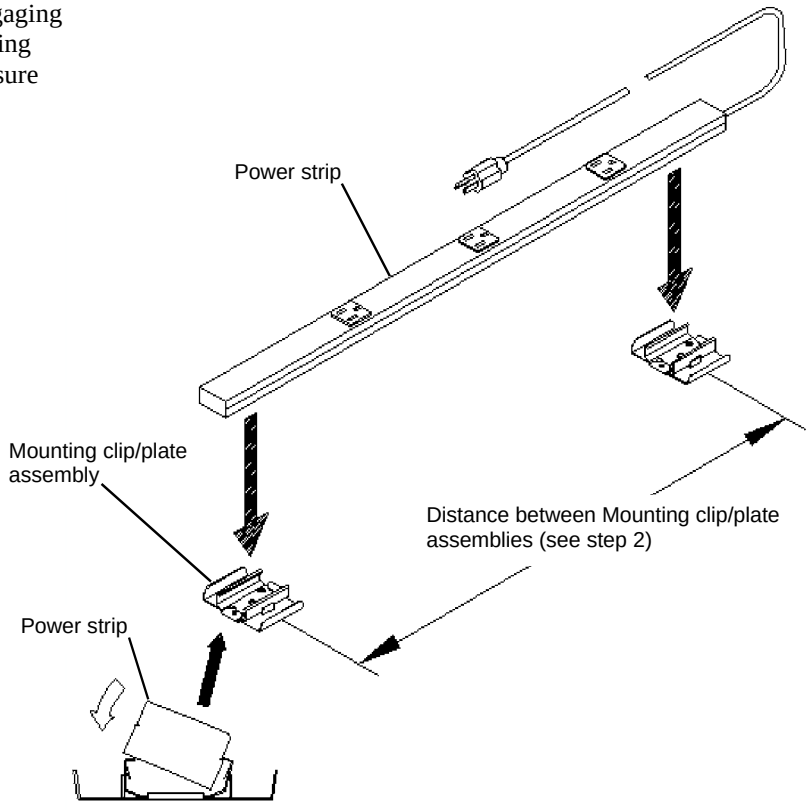


Figure 2

3. Install the Power Strip assembly into the Cable Management Component as shown in **Figure 3**. The Mounting Clip/Plate assembly will snap into place at the bottom of the Component as shown in **Figure 3** (detail).

   NOTE: If the Base Plates do not snap into place easily, simply push harder. If they are too loose and do not stay in place, it is possible to tighten the fit of the Base Plates by bending the "wings" of the Base Plates outward.

   The Power Strip can slide to any position along the length of the Cable Management Component.

4. To remove the Power Strip, slide it out of the end of the Cable Management Component.

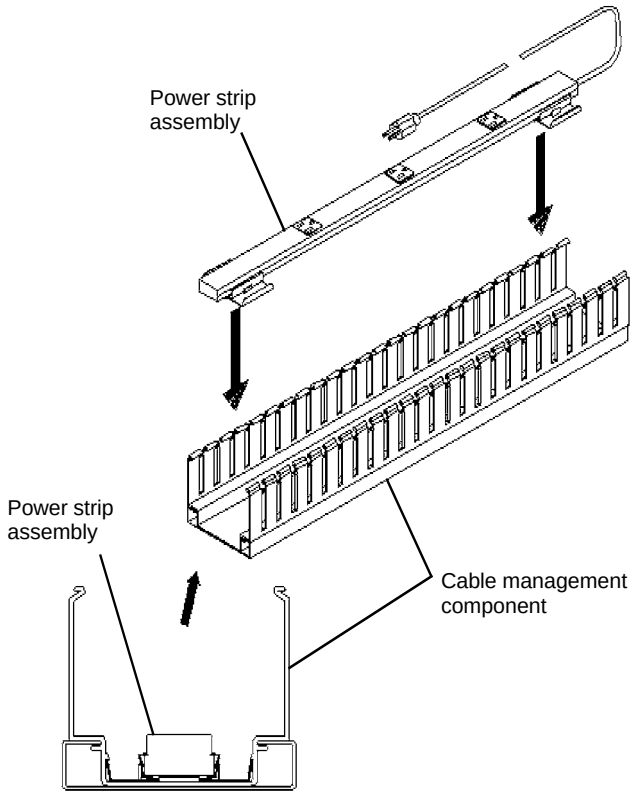


Figure 3

VERTICAL INSTALLATION

The Power Strip can be mounted on any vertical frame member of a Full/Open Frame, Rack Mount Module or LAN Locker II. Installation on all vertical frame members is the same with two possible installation scenarios outlined below.

1. Position a Mounting Clip at its highest location, centered on the **Double Standard**, and mark this point with a center punch. To position the second Clip, refer to step 2, page_ for the correct location. See **Figure 4**.

2. Drill two holes in the Double Standard and attach the Mounting Clips with the #8-32 Screws provided. See **Figure 4**.

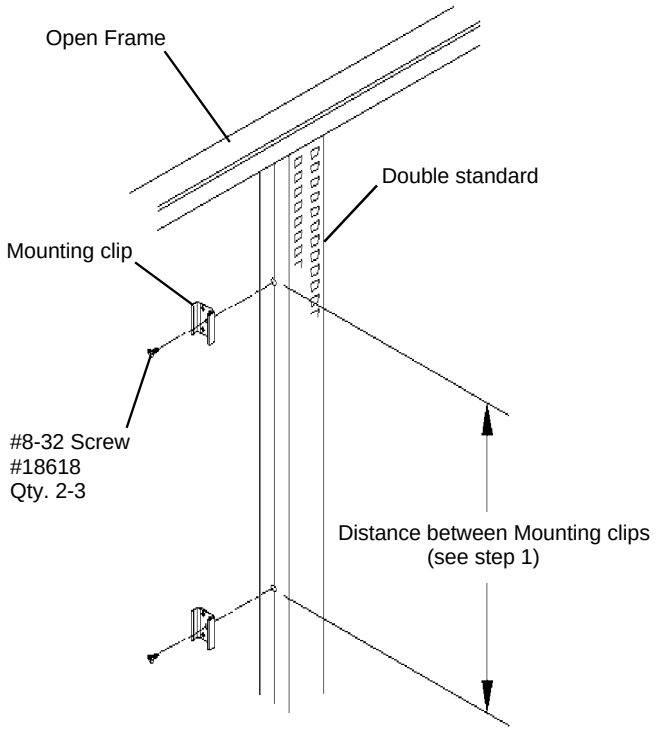


Figure 4

3. Next, install the Power Strip into the Clips by engaging one side of the Strip with the Clips and the pushing down to engage the other side. See **Figure 5**. Be sure that the Power Strip is firmly seated in each Clip.

4. The Mounting Clips attach to the **Single Standard** in same manner as as the Double Standard. But since there is no feature on the Single Standard that denotes its center, care must be taken to ensure that the Mounting Clips are centered on the Single Standard and that they do not interfere with the Upright or Side Frame screws. See **Figure 6**.

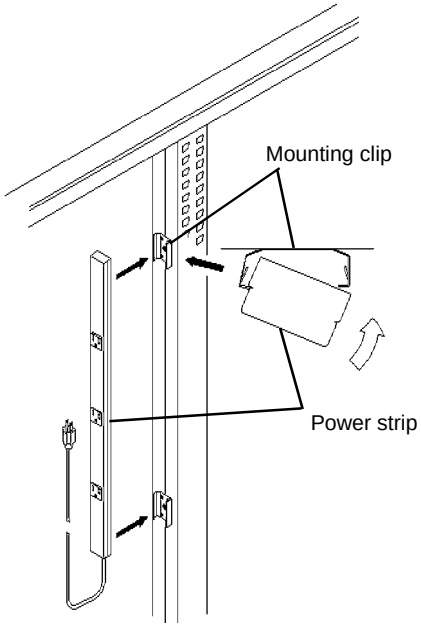


Figure 5

INSTALLATION ON OTHER SURFACES

One or more 1" x 18" strips of **3M Double Faced Adhesive Tape** has been provided for installation of the Power Strip to any flat surface.

1. Clean the back side of the **Power Strip** and the mounting surface with Isopropyl alcohol or equivalent surface cleaner.

Note: It is recommended that the position of the Power Strip be determined **before** attaching the Power Strip to a surface to avoid misaligning the strip and ruining the tape.

2. Remove the green and white backer from one side of the tape strip. Center or equally space the tape on the back of the Power Strip. Press firmly into place.See **Figure 7**.

3. Remove the remaining white backer from the tape strips.

4. Position the Power Strip on the surface.

5. The Horizontal Cable Management provides approximately three inches of space for cables or electrical plugs.

6. To ensure proper adhesion, do not apply a load to the Power Strip for 24 hours.

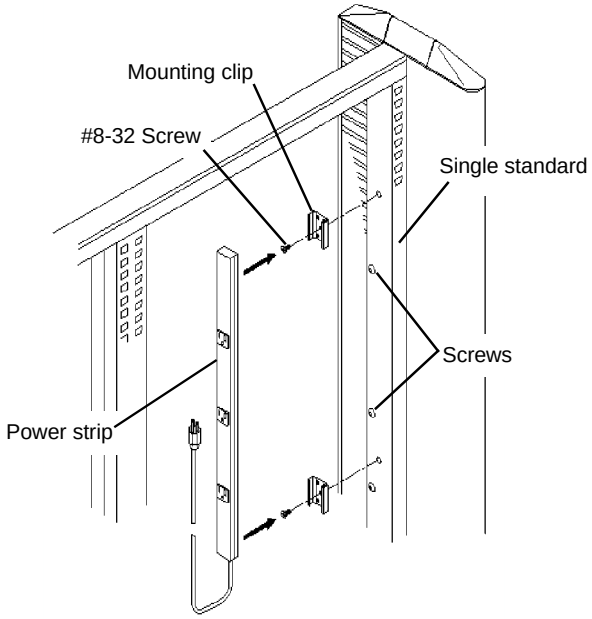


Figure 6

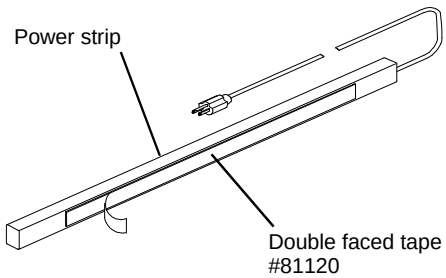


Figure 7

technical furniture

20 Amp Power Strip

Tools Required
- Power drill
- .149 inch drill bit
- Philips head bit or screwdriver
- Center punch

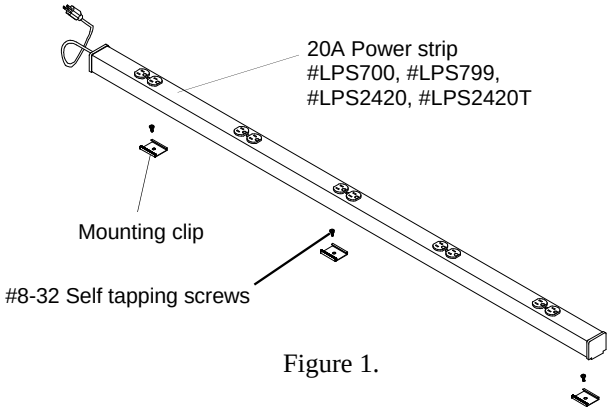


Figure 1.

INSTALLATION

The **LPS7-00** is a 5 duplex outlet (20 amp. rated) Power Strip that can be mounted vertically on any 72" and 84" high Full Frame configuration. The Power Strip can be mounted on any vertical frame member of a Tech Frame, Rack Mount Module, or LAN Locker II. Installation on all vertical frame members is the same with two possible installation scenarios outlined below:

1. The Power Strip includes two to three **Mounting Clips** and two to three **#8-32 Self tapping screws** that will attach it to the Frame. See **Figure 1**. Position a Mounting Clip in the highest position, centered on the Standard, and mark this point with a center punch. See **Figure 2**.

2. Drill three holes in the Double Standard and then attach two to three Mounting Clips with the #8-32 screws. See **Figure 3**.

3. The Power Strip snaps onto the Mounting Clips. See **Figure 4**. Once the Power Strip is attached to the Mounting Clips, a flat head screwdriver will be needed if the Power Strip is to be removed from the Mounting Clips.

NOTE: The Mounting Clips attach to the Single Standard in the same manner as the Double Standard. Since there is no feature on the Single Standard that denotes its center, care needs to be taken to ensure that the Mounting Clips are centered on the Standard and they do not interfere with the Upright or Side Frame screws. See **Figure 2**.

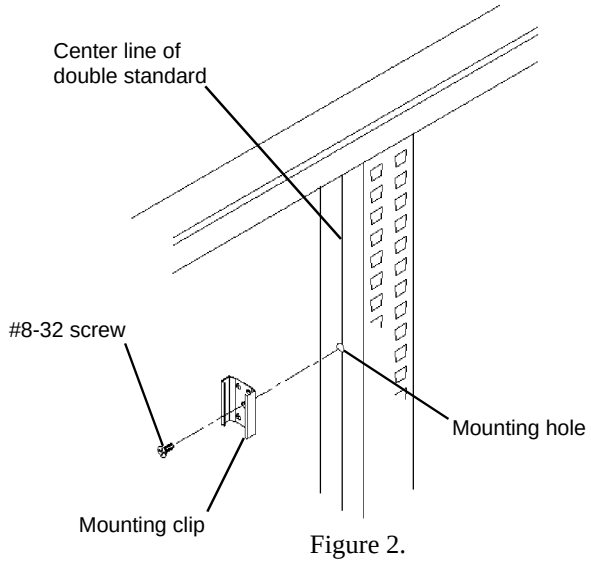


Figure 2.

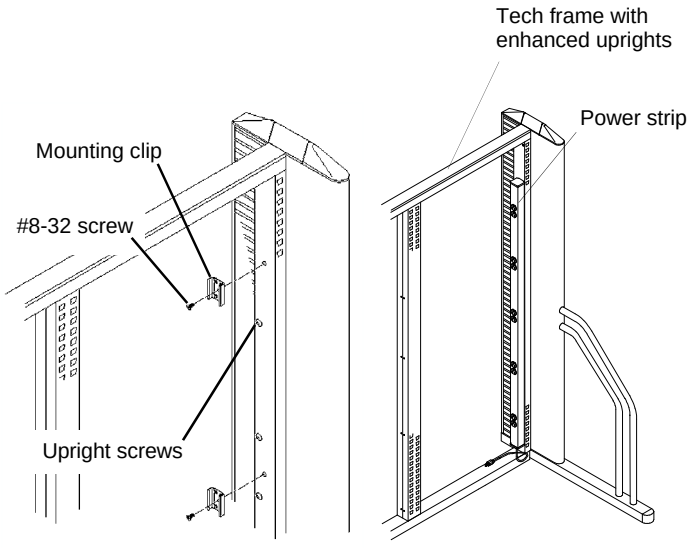


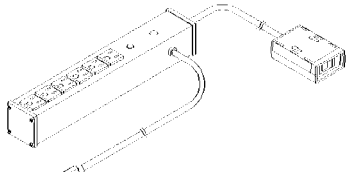
Figure 4.

Figure 3.

technical furniture

Surge Suppressor with Remote

Tools Required
- Phillips head screwdriver
- Blade screwdriver

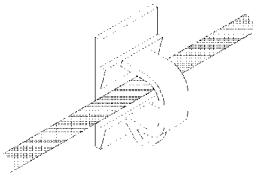


Surge Suppresser with Remote
#LPS5-MM
#GSPSO25

Packaged with your **Surge Suppresser with Remote** are the manufacturers installation and safe usage instructions. The LP55-MM has TYPE 1 mounting. The small envelope contains two **Aluminum Clips**, two **Screws** for mounting the clips.

1. Remote switch is supplied with double tape attached attached to switch housing.

2. Based on what else is attached to the underside of your Worksurface, such as Keyboards and CPU holders, the Outlet Strip may require selective placement. Extending the 44" wire of the remote its full length is also desirable. **Cord Clips**, with tape attachment, are provided with the workstation to assist in controlling your cord placement.



Cord Clip

3. Determine the location of the **Outlet Strip** and then attach the Aluminum Clips with the Flat head screws as shown in **Figure 1**. The screws will go through the holes in the Modesty Panel and into the pre-drilled holes in the Worksurface. Next, snap on the Outlet Strip.

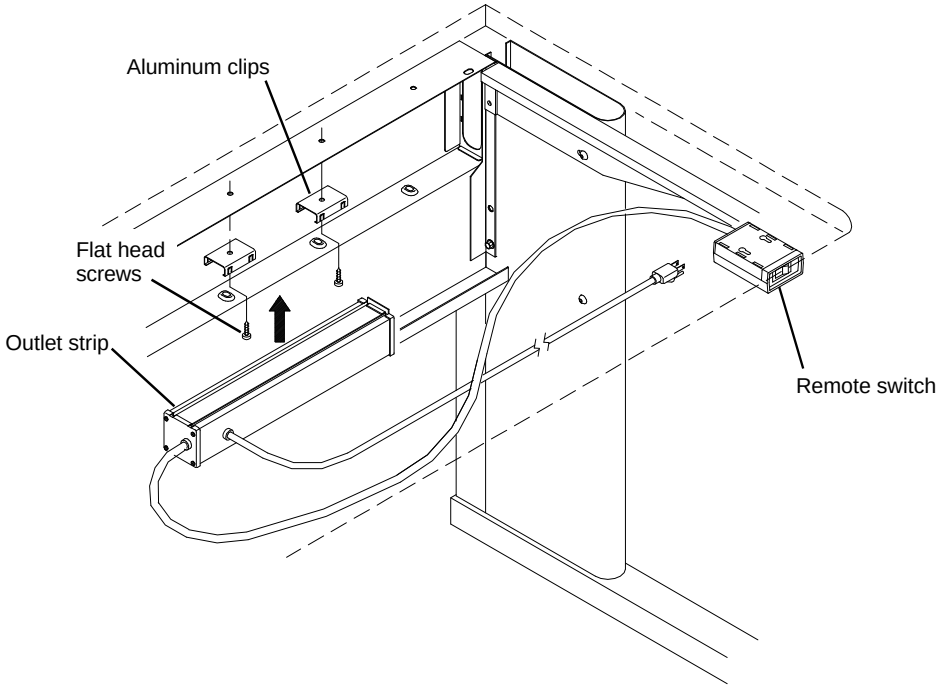


Figure 1

technical furniture

Keyboard Accessories

Tools Required
- Phillips head screw driver

NOTE: For non-standard application, use the Track as a drill template. Keeping the Track perpendicular to both edges, position it 1/2" from the front edge of the worksurface. Drill (10) .109 dia. holes.

MOUNTING TO UNDERSIDE OF WORKSURFACE

1. Align the **Track** mounting holes to pre-drilled holes on the underside of the worksurface. See **Figure 1**.

2. Install four screws along each side of the Track and a rear center screw with a **Bumper**. Make sure screws are drawn down tight enough to ensure proper clearance between the **Articulating Arm Mechanism** and the track.

3. Mount the **Keyboard Platform** to the tray brackets of the Articulating Arm Mechanism. Install six screws into the pre-drilled holes in the underside of the Platform.

4. Loosen the knob and lower the mechanism to the down position. Re-tighten the knob.

5. Slide the mechanism into the grooves on the Track until it contacts the Rear Bumper.

6. Install the **Front Bumper** and screw.

7. Apply the **Warning Label** as shown.

8. **Cord Clips** are provided for wire management.

NOTE: For smooth sliding operation, it may be necessary to apply a light layer of lubrication to both sides of the Track. Slide the mechanism back and forth to spread the lubrication.

* Keyboard mechanism intended for keyboard weights only.

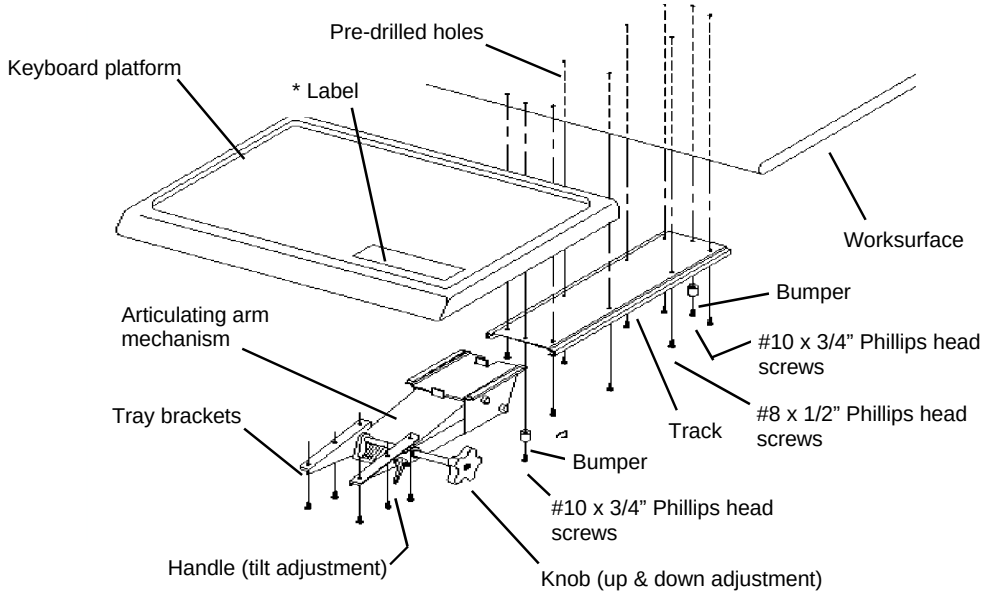


Figure 1

technical furniture

Keyboard Supplement

Tools Required
- Phillips head screw driver

NOTE: For non-standard application, use the Track as a drill template. Keeping the Track perpendicular to both edges, position it 1/2" from the front edge of the shelf. Drill (10) .109 dia. holes.

MOUNTING TO UNDERSIDE OF BASIC PLUS LAMINATE SHELVES

1. Align the **Track** mounting holes to pre-drilled holes on the underside of the Laminate Shelf Stiffener. Four of the middle holes in the track will line up with holes in the stiffener. See **Figure 1**.

2. In the remaining holes, snap spacers into the track as shown in **Figure 1.**

3. Using the #8 x 1/2" screws, attach the Track to the stiffener. Install two #8 x 1.25" screws along each side of the Track and a rear center screw with a **Bumper**. The #8 x 1.25" screws will screw through the spacer into the laminate shelf. Make sure the screws are drawn down tight enough to ensure proper clearance between the **Articulating Arm Mechanism** and the track.

4. Mount the **Keyboard Platform** to the tray brackets of the Articulating Arm Mechanism. Install six screws into the pre-drilled holes in the underside of the Platform.

5. Loosen the knob and lower the mechanism to the down position. Re-tighten the knob.

6. Slide the mechanism into the grooves on the Track until it contacts the Rear Bumper.

7. Install the **Front Bumper** with the #8 x 1.25" screw.

8. Apply the **Warning Label** as shown.

9. **Cord Clips** are provided for wire management.

NOTE: For smooth sliding operation, it may be necessary to apply a light layer of lubrication to both sides of the Track. Slide the mechanism back and forth to spread the lubrication.

* Keyboard mechanism intended for keyboard weights only.

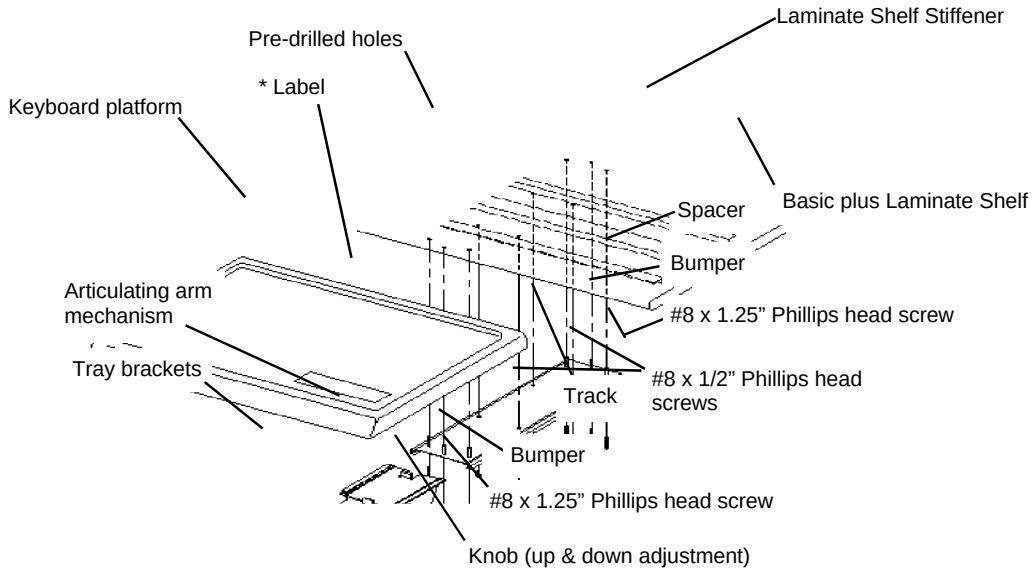


Figure 1

Keyboard Accessories (cont.)

MOUNTING TO UNDERSIDE OF UPPER SHELF

1. Slide the Articulating Arm into the Track.

2. Loosen the knob and lower the mechanism to the down position.

3. Position and align the Track Assembly with the holes in the Upper Shelf. See **Figure 2**.

4. Install two screws along each side of the Track.

   * Front and Rear Center Screws/Bumpers are not required since the Track is contained inside the bottom of the shelf.

5. Mount the Keyboard Platform to the Tray Brackets of the Articulating Arm Mechanism. Install six screws into the pre-drilled holes in the underside of the Platform.

NOTE: For smooth sliding operation, it may be necessary to apply a light layer of lubrication to both sides of the track. Slide the mechanism back and forth to spread the lubrication.

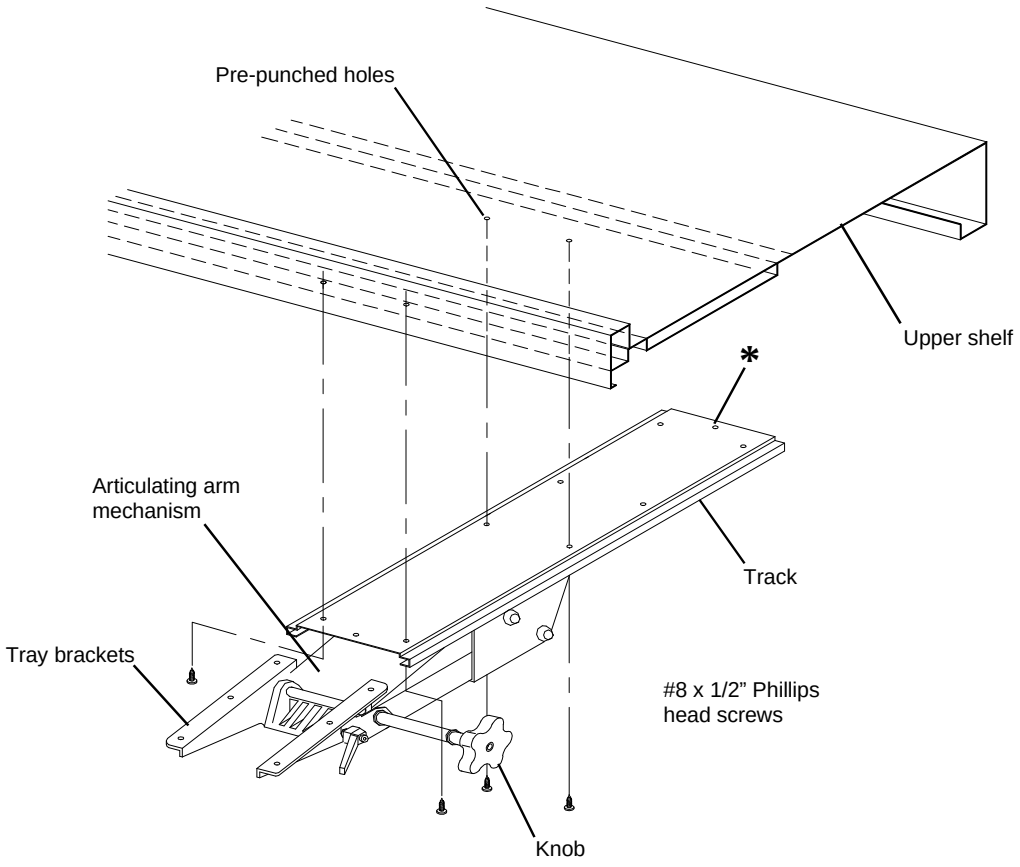
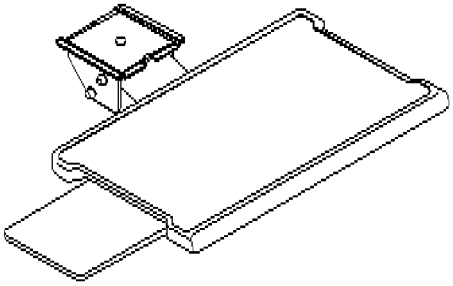


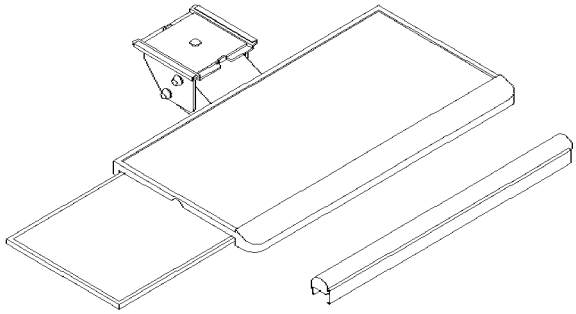
Figure 2

Keyboard Accessories (cont.)



LA09-MM Retractable Keyboard with Mouse Tray

This Keyboard Platform mounts to the Tray Brackets with four Machine screws. Insert the front two screws first (oval holes). **Do not** tighten until all four have been started.



LA14-MM Retractable Keyboard with Mouse Tray and Wrist Support

Keyboard Accessories (cont.)

Tools Required
-Phillips head screwdriver

MOUNTING TO UNDERDSIDE OF WORKSURFACE

1. Align the **Track** mounting holes marked "X" to pre-drilled holes on underside of Primary Surface. See **Figure 1**.

NOTE: The front of the **Mounting Track** has a row of three holes, the rear edge has one hole.

2. Install three screws along each side of the Track and install the rear center screw with a **Bumper**. Make sure the screws are drawn down tight enough to ensure proper clearance between the Slide and Track.

3. Position the **Slide Assembly** into the Track and push to the rear until the front center screw hole is visible.

4. Install the front center screw with a Bumper.

5. **Cord Clips** are provided for wire management.

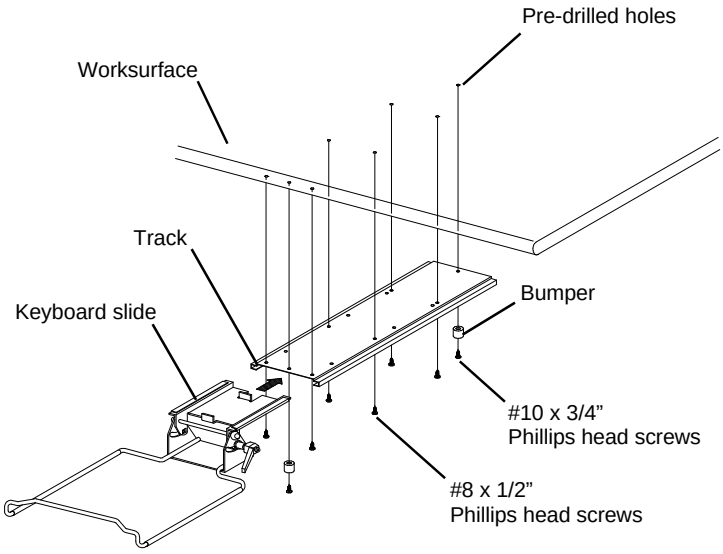


Figure 1

MOUNTING TO UNDERSIDE OF UPPER SHELF

1. Slide the **Keyboard Platform** into the Track before attaching the Track to Upper Shelf.

2. Position and align the Track assembly mounting holes marked "X" with holes in the Upper Shelf. See **Figure 2**. (To identify the front of the Track. see previous NOTE)

3. Install two screws along each side of the Track and the rear center hole with a **Bumper**. Make sure the screws are drawn down tight enough to ensure proper clearance between the Slide and Track.

4. The **Front Bumper** is not required since the Track is contained inside the bottom of the shelf.

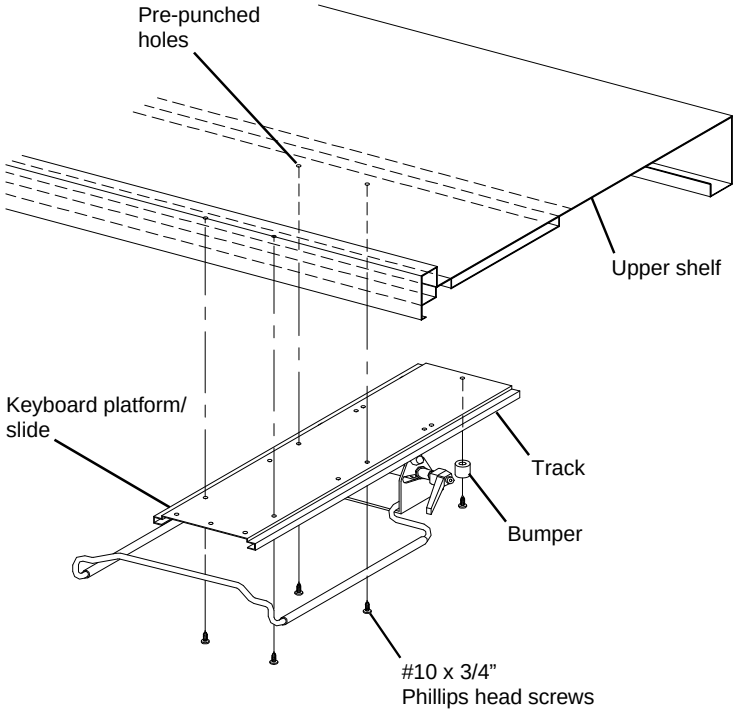


Figure 2

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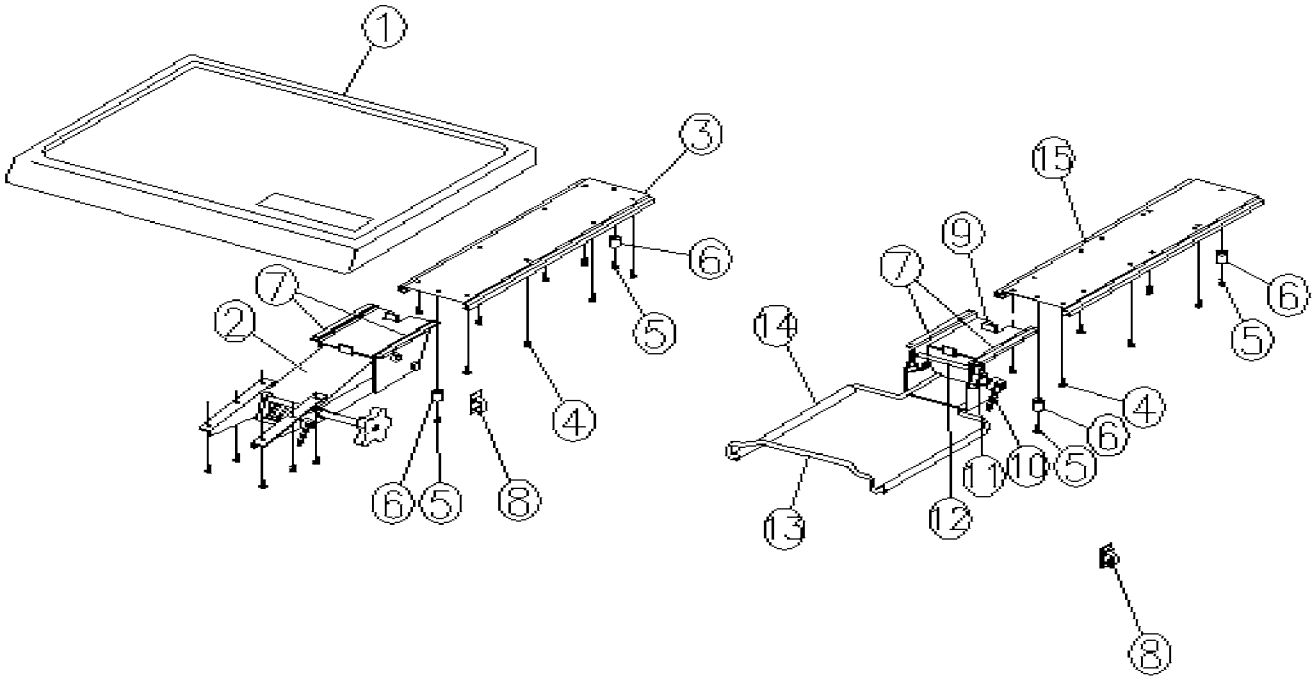
Keyboard Accessories (cont.)

Parts List

Part Number		Description	Qty.
1	2673X	Keyboard Platform w/ Mouse	1
	4069X	Keyboard Tray w/sliding Mouse Pad	
	4070X	Snap-On Wrist Rest (not shown)	
2	69799	Keyboard Arm	1
	84365	Weber Knap Spring Assist Arm	
3	80114	Keyboard Track	1
4	68374	#8AB x .50" Phillips Pan Head Screw	6
5	59103	#10AB x .75 Phillips Head Thread Forming Screw	2
6	59103	Bumper	2
7	81652	Bearing	2

Parts List

Part Number		Description	Qty.
8	57488	Cord Clip	2
9	81626	Keyboard Slide	1
10	81645	1/4"-20 x 1.00" Carriage Bolt	1
	81646	Lock Washer	
	81647	Flat Washer	
	81648	Spacer	
	81649	Adjustable Hand Lever	
11	81644	Cap Nut	2
12	81643	.244" x 4.87" Dia. Shaft	
13	81651	Key Board Platform Assembly	1
14	82242	9.00" Neoprene Tube	2
15	81627	Key Board Track	1

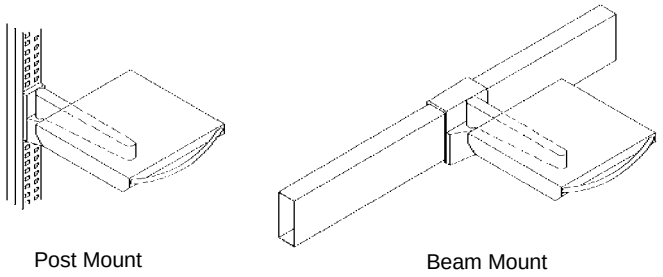


technical furniture

Interactive Monitor Arm

Tools Required
- -5mm Allen wrench
- -Phillips screwdriver
- -Plastic mallet

There are two ways to attach a **Monitor Arm** to a Full Frame; with a **Beam**, or with a **Post Mount**. Both methods are incuded in these instructions.



Monitor Arm Mount

MONITOR ARM MOUNT-POST

NOTE: The **Post Mount** can be placed on any side by side rows of trapezoidal holes. Once in place, it is ready for the monitor arm.

1. Select the desired position for the Post Mount. Next, insert the hooks located on the back of the Post Mount into the slots in the post. To assure that the hooks are firmly seated, tap the top of the Post Mount with a Plastic mallet or equivalent. See **Figure 1**.

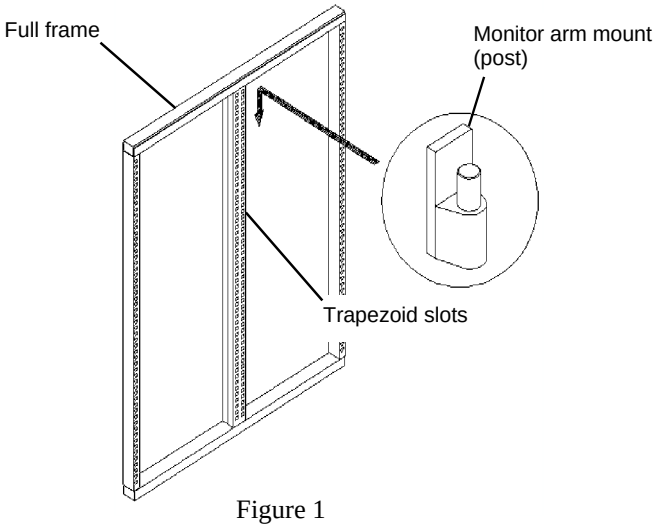


Figure 1

MONITOR ARM MOUNT-BEAM

NOTE: The Beam is attached to posts spaced to correspond with the length of the beam ordered. There are 24", 30", 36", 42", 48", 60", and 72" Beams. Beams require a separate Monitor Arm Mount.

1. Select the desired position for the Beam. Next , insert the hooks located on the back of the Beam into the slots in the posts. To assure that the hooks are firmly seated, tap the top corners of the Beam with a plastic mallet or equivelent. See **Figure 2**.

2. Hang the Monitor Arm Mount on the Beam and lock it in place by attaching the **Retainer bar** with two #10-24 x 1.00 Socket head cap screws. See **Figure 3a** and **3b**.

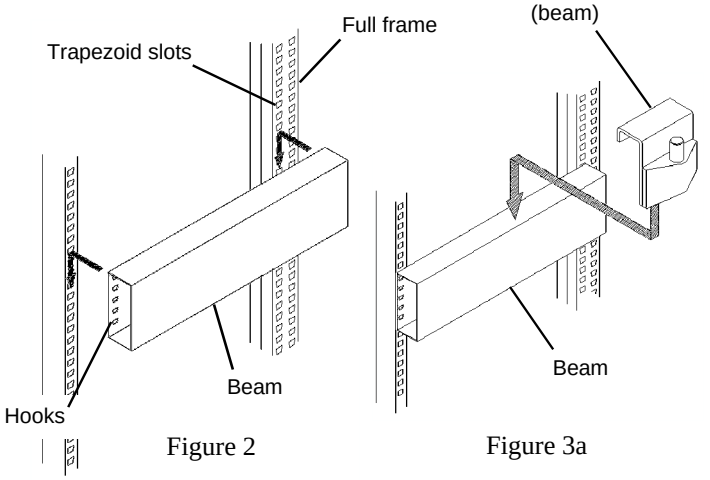


Figure 2 Figure 3a

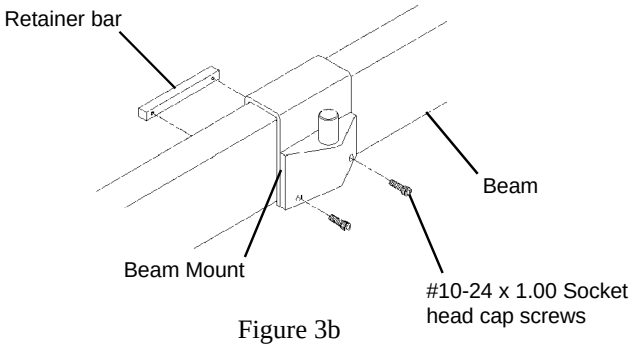


Figure 3b

Interactive Monitor Arm (cont.)

ATTACHING THE MONITOR PLATFORM

3. Place the thin plastic washer (packaged with the short arm) over the 1.18” dia. pin on the Post or Beam Mount. See **Figure 4**.

4. If you have the long arm version, assemble the arm extension to the short arm. The thin washer (packaged with the arm extension) goes over the 5/8” pin.

   Insert the pin of the extension into the end hole of the short arm. Secure that assembly by inserting the M8 screw, the lock washer, and countersunk trim washer into the end of the 5/8” pin. **Do not tighten** ; The arm must rotate.

5. The Monitor Platform drops into the end of the arm. Be sure two large black nylon spacers are on the platform pin before inserting. Secure that assembly by inserting the M8 screw with the lock washer and countersunk trim washer into the end of the 5/8” pin. **Do not over tighten**.

ADJUSTMENTS

If rotated clockwise, the **Monitor Platform** will tighten itself. If this happens, turn it counter clockwise 360 degrees or until loose. The platform should now turn freely within your operating radius.

The Monitor Platform has three adjusting knobs underneath. These are for leveling the platform if the monitor is tipped slightly in any direction. By loosening and tightening the knobs in some order, level can be attained. For example. if the monitor leans to the left (low side), loosen the low side knob(s) and tighten the high side drawing it down.

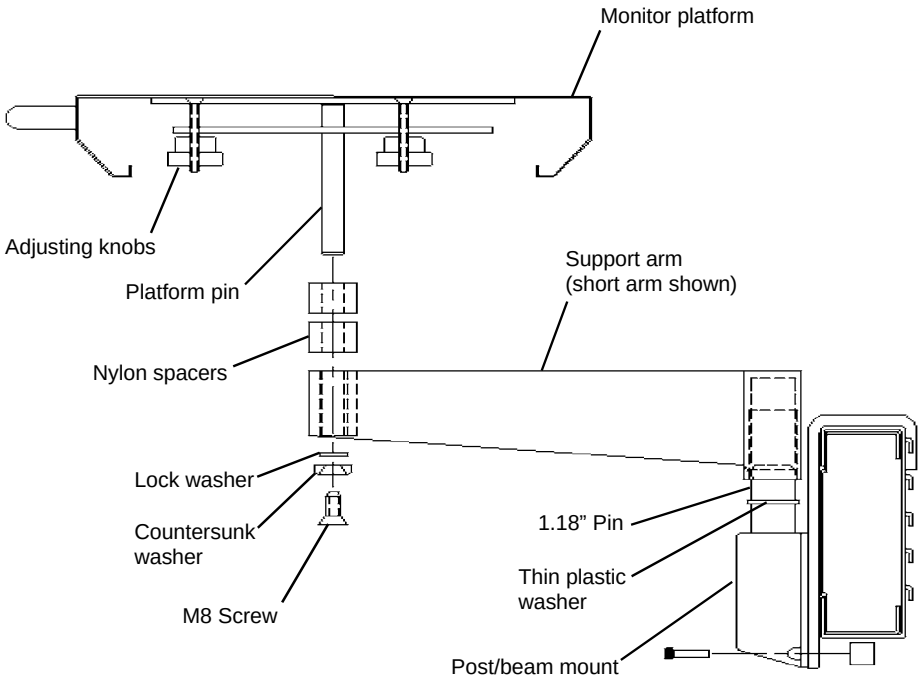


Figure 4

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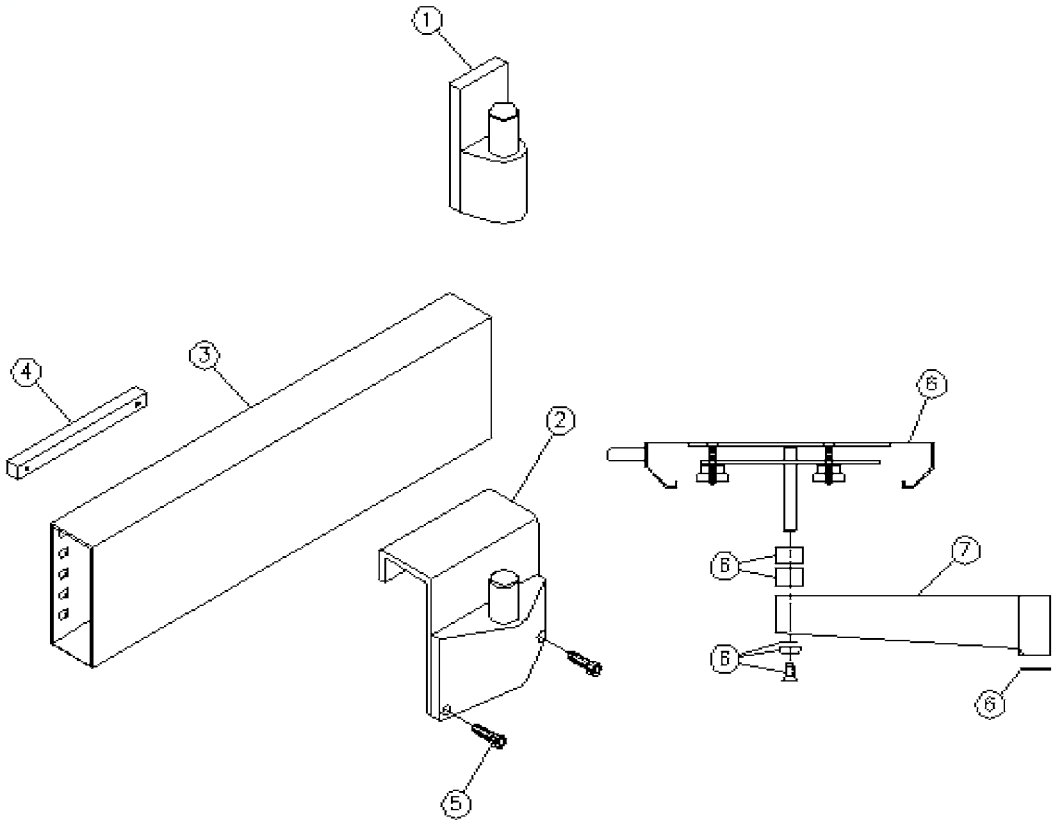
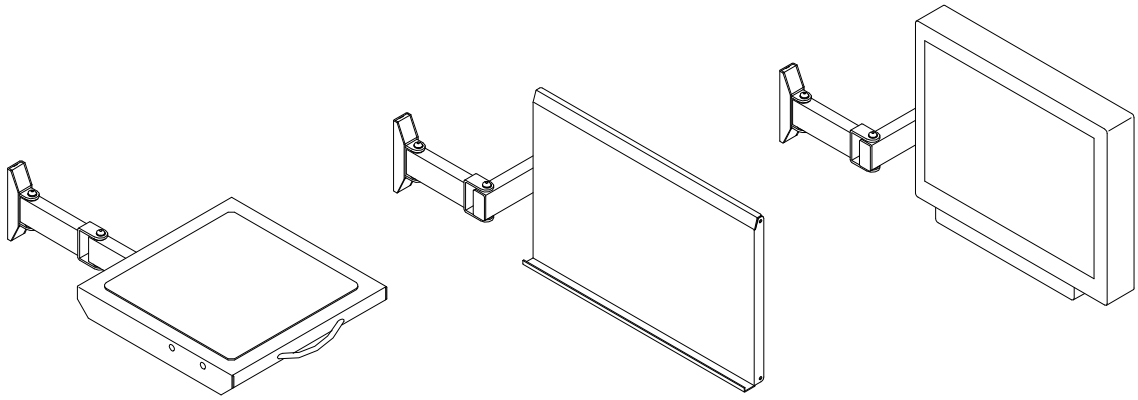
Interactive Monitor Arm (cont.)

Parts List			
Part Number		Description	Qty.
1	3153X	Post Mount Assembly	1
2	82367	Arm Mount Asembly	1
3	3161X	24” Beam	1
	3162X	30” Beam	
	3163X	36” Beam	
	3165X	48” Beam	
	3166X	60” Beam	
	3167X	72” Beam	
4	3172X	Retainer Bar	1
5	82461	#10-24 x 1.00” Socket Head Cap Screw	2
6	3154X	Monitor Arm Platform Assembly	1
7	82358	Support Arm “A”	1
	82359	Support Arm “B”	



technical furniture

Articulating Arm/ Components



Articulating Arm/Components

IMPORTANT SAFETY INSTRUCTIONS

1. **Do Not** exceed the maximum weight load capacity for any component.

Component	Maximum Capacity
Monitor Platform	60 Lbs.
Tool Tray	30 Lbs.
Bin Board	30 Lbs.
Peg Board	20 Lbs.
Document Holders	20 Lbs.

2. **Do Not** install a Monitor Platform, Tool Tray or Bin Board on the 24" or 30" wide free standing TechBench or Linx Worksurface. They may cause the unit to tip if they are fully loaded and extended to one side.

   The Bench or Worksurface must be securely attached to an adjacent unit to prevent potential tipping.

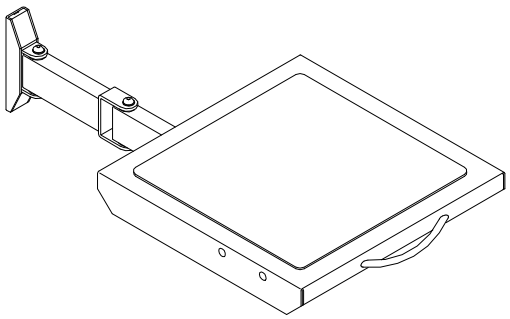
3. **Do Not** extend the components beyond the back of the 24", 30" or 36" wide TechOrganizers on Linx Worksurfaces as the unit may tip.

4. **Always** ensure that the articulating arm is secured to the TechOrganizer or Full Frame using the #10-24 x 3/8" thread forming screw provided.

Please read these instructions carefully and follow the installation steps in sequence.

Tools Required

- Phillips head screwdriver
- 3/16" Allen wrench (provided)
- 5/32" Allen wrench (provided)
- Rubber mallet



Monitor Platform

ATTACHING COMPONENTS TO ARM

Monitor Platform

1. Remove the 5/16"-18 x 1/2" Button head cap screw and washer from the shaft located on the bottom of the Monitor Platform. Use the 3/16" Allen wrench provided. See **Figure 1**.

Articulating Arm/ Components (cont.)

ATTACHING COMPONENTS TO ARM (cont.)

2. Slide the end of the Articulating Arm assembly with the thru hole onto the Platform shaft. See **Figure 1**. **Note**: Ensure that the two flange bearings on the Arm are in place.

3. Attach the Arm to the Platform shaft using the 5/16”-18 x 1/2” Button head cap screw and washer. Do not overtighten. See **Figure 1**.

Bin/Peg/White Boards, Tool Tray etc.

1. Remove the following from the factory assembled component. See Figure 2.

   (2) 5/16”-18 x 1/2” long Button head cap screws
   (2) .34” I.D. washers
   (1) .50” I.D. washer
   (1) .50” dia. x 2.42” long pin

2. Align the holes in the end of the Articulatng Arm with the holes in the pivot/swivel which is attached to the back of the component. See **Figure 2**.

   Note: Ensure that the two flange bearings are in place.

IMPORTANT: Do not push the .50” dia. pin thru the entire assembly until the .50” I.D. washer is inserted between the bottom flange bearing on the Arm and inside surface of the pivot/swivel.

3. Attach the Arm to the pivot/swivel using the 5/16”-18 x 1/2” Button head cap screws with washers. Tighten them with the 3/16” Allen wrench.

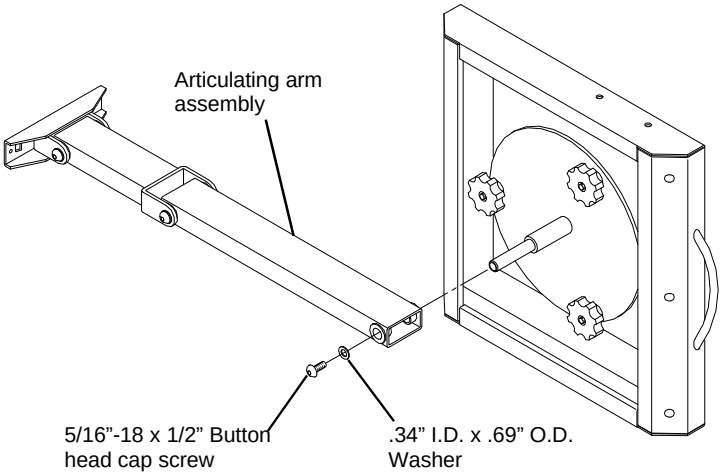
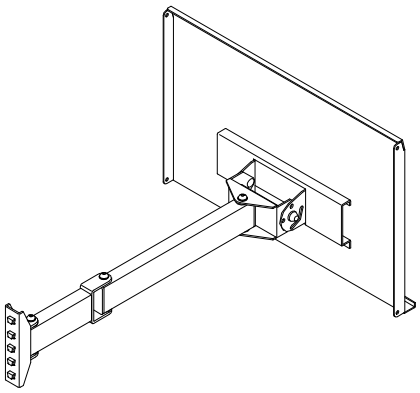


Figure 1



Articulating Arm w/ White Board

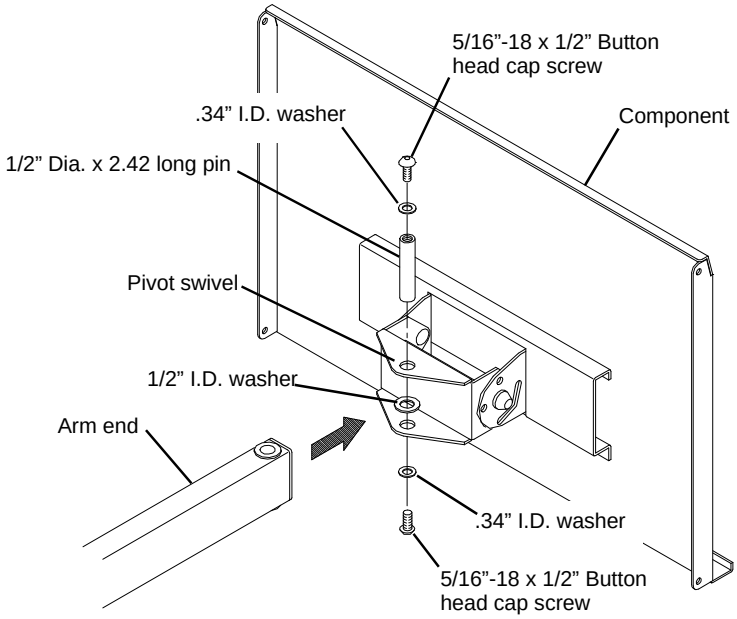


Figure 2

Articulating Arm/ Components (cont.)

INSTALLING THE COMPONENT

The Articulating Components may be installed on TechOrganizers or LMS Frames.

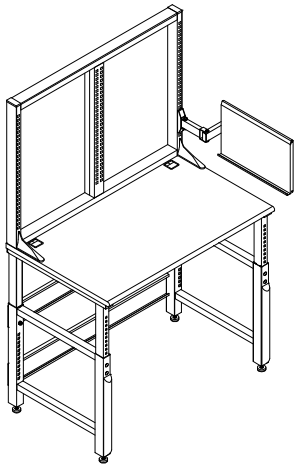
1. Determine the desired location on the Organizer/ Frame and insert the hooks on the back of the Articulating Arm mounting bracket into the slotted standard. See **Figure 3**.

2. Ensure that the mounting bracket is fully seated in the slotted standard by tapping it down with a rubber mallet.

3. Secure the mounting bracket to the standard using the #10-24 x 3/8" phillips pan head thread forming screw provided. See **Figure 3**.

4. Snap the plastic **Cover** onto the bottom of the bracket.

   Note: The top cover is factory installed. To remove the cover, use a flat blade screwdriver in the slot provided.



TechBench with White Board

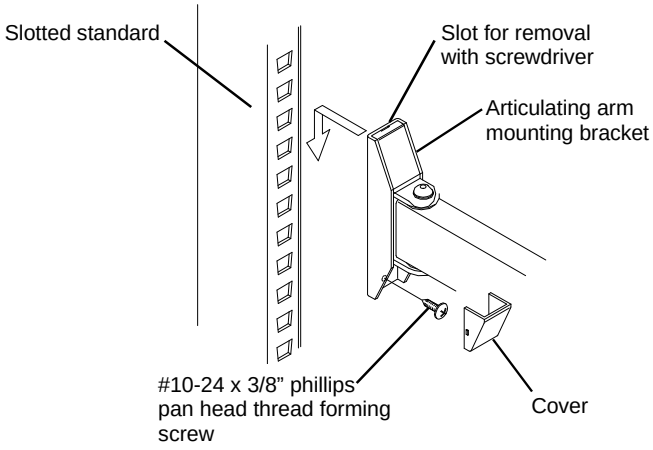


Figure 3

OPTIONAL MOUSE PLATFORM

The **Mouse Platform** can be installed on the left or right side of the Monitor Platform.

Tools Required
- 5/32" Allen wrench (provided)

1. Determine the installation side and remove the two plastic hole plugs from the Monitor Platform. See **Figure 4**.

2. Attach the Mouse Platform to the Monitor Platform using the 1/4"-20 x 3/8" Button head cap screws and 1/4-20 hex nuts. Tighten securely. See **Figure 4**.

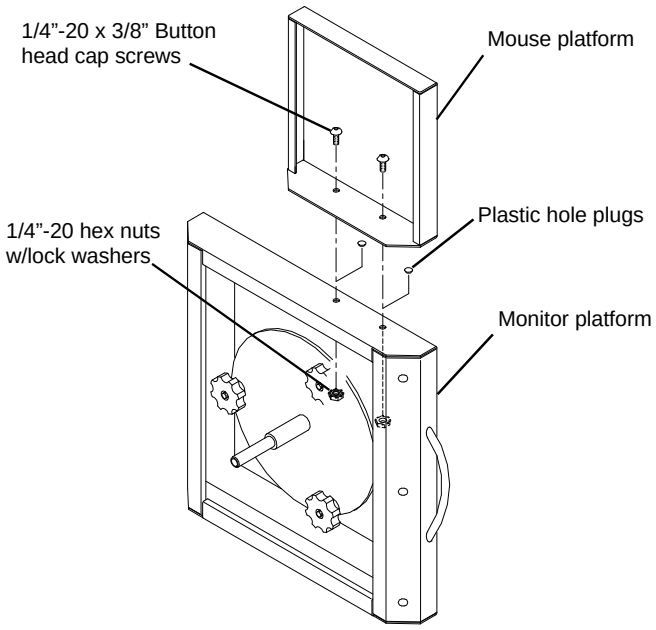
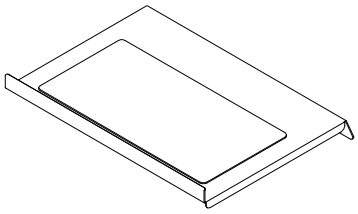


Figure 4

Articulating Arm/ Components (cont.)

OPTIONAL KEYBOARD TRAY

1. Remove the three plastic hole plugs from the front of the Monitor Platform. Align the three holes at the rear of the **Keyboard Tray** with the three holes in the Monitor Platform and insert three 1/4"-20 x 3/8" button head cap screws. Secure the screws with three 1/4"-20 hex nuts with lock washers. See **Figure 5**.



Keyboard Tray

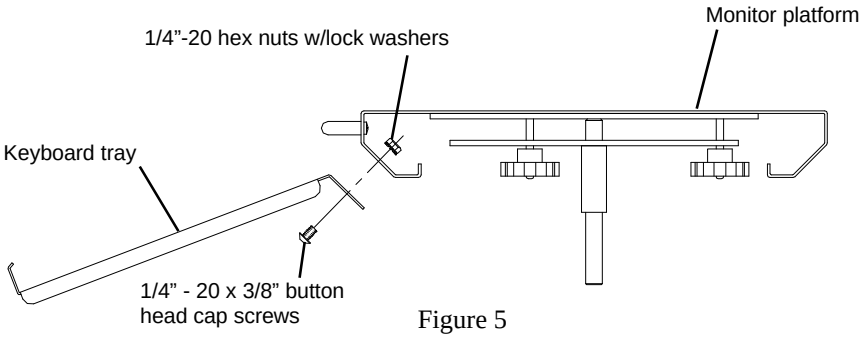


Figure 5

ADJUSTING COMPONENTS

1. The ease with which a joint pivots can be adjusted by tightening or loosening the 5/16"-18 x 1/2" Button head cap screws at each joint. See **Figure 6**.

2. The incline/tilt of a component can be adjusted using the **Hand Adjustment Lever(s)**. See **Figure 7**.

   Note: Pull the lever out to rotate it clockwise.

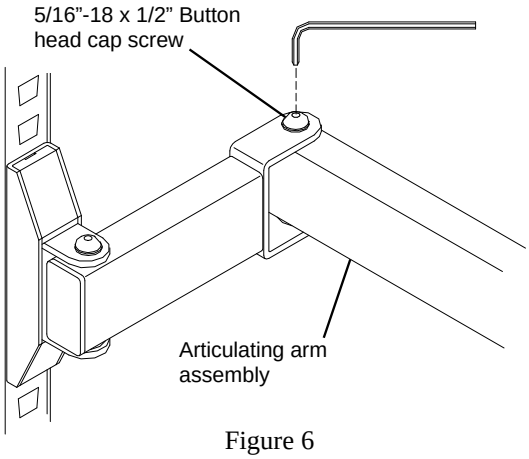


Figure 6

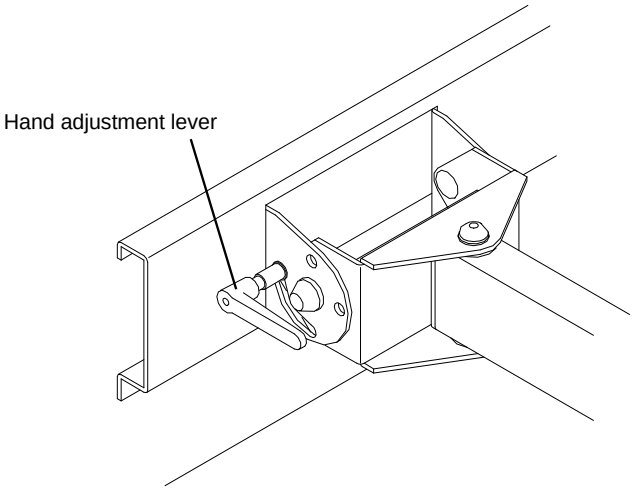


Figure 7

Articulating Arm/ Components (cont.)

OPTIONAL FLAT SCREEN MONITOR

1. Assemble the Flat Screen Monitor as shown in figure 8.

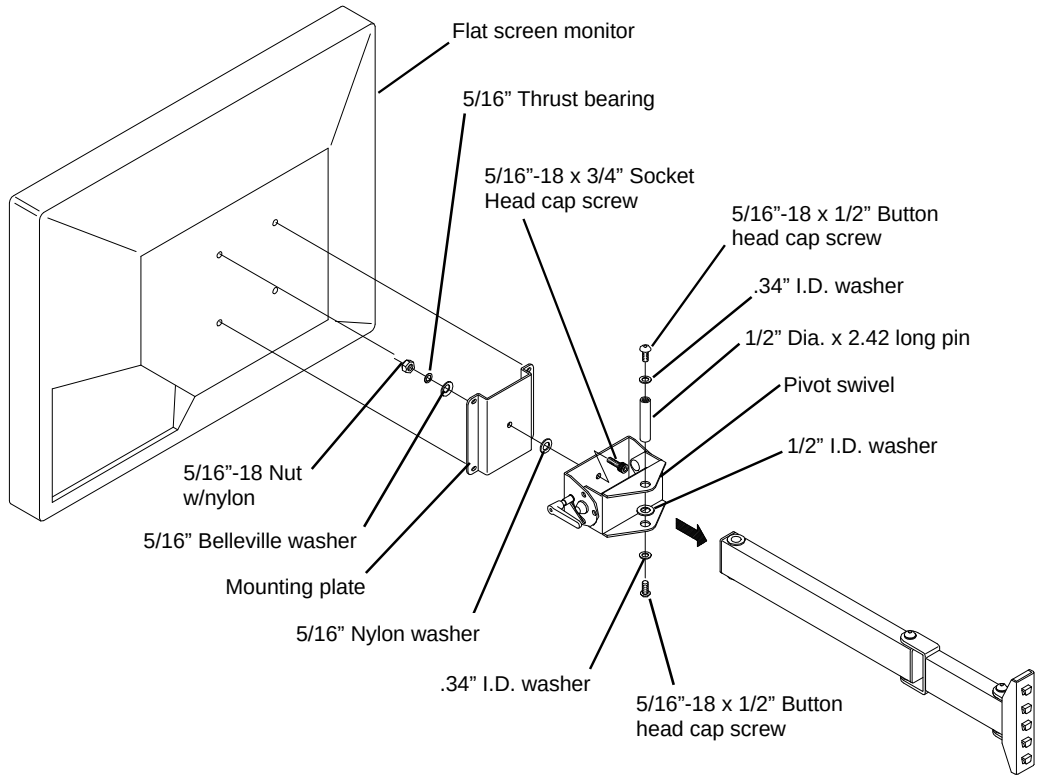
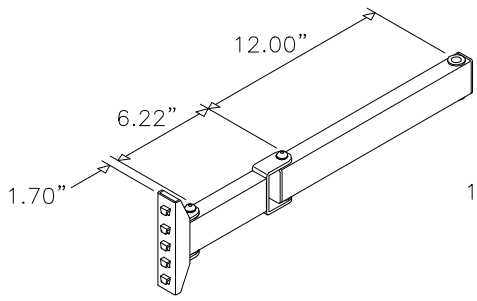


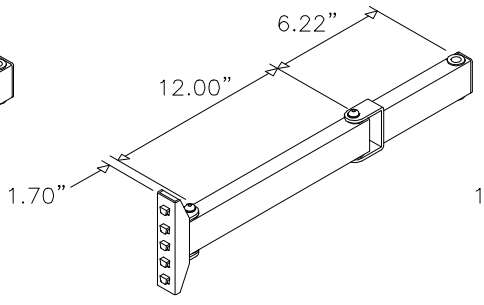
Figure 8

ARTICULATING ARM VARIATIONS

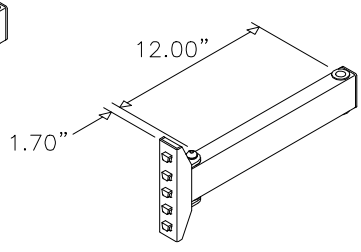
The Articulating Arm can be configured in the various ways shown at right depending on your specific requirements.



Full Arm - Factory Assembled



Reversed Arm Sections



Long Arm Only

Articulating Arm/ Components (cont.)

Parts List

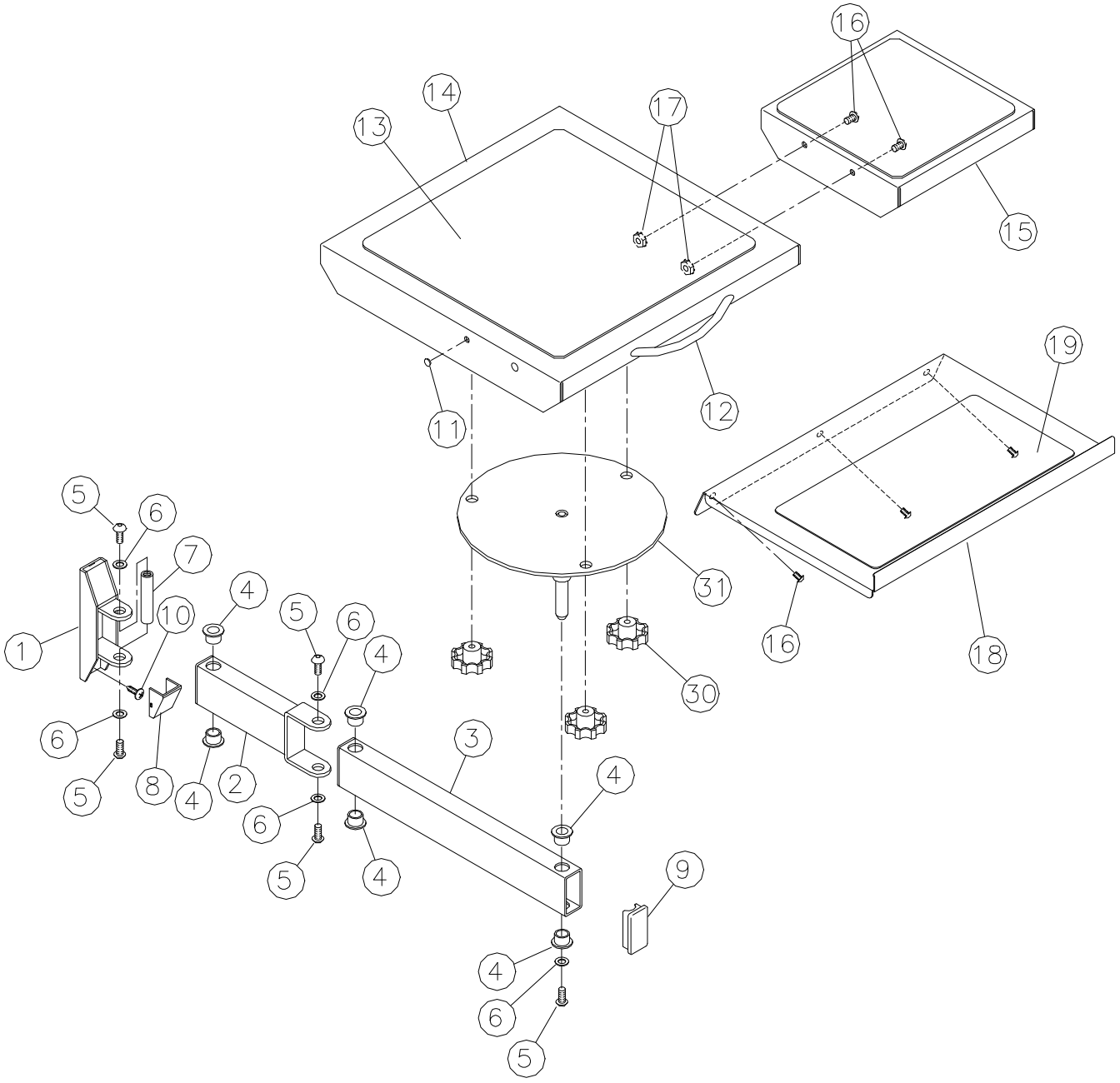
Part Number		Description	Qty.
1	7522X	Mounting Bracket	1
2	7523X	6.22” Arm	1
3	7558X	Rectangular Tube 1.00” x 2.00” x 13.22”	1
4	86471	Flange Bearing	6
5	86425	5/16”-18 x 1/2” Button Head Cap Screw	4
6	81710	Plain Washer	4
7	86426	Pin	2
8	7555X	Cover	2
9	7554X	End Cap	3
10	66714	#10-24 x 3/8” Phillips Pan Head Thread Forming Screw	1
11	82035	Hole Plug	7
12	81911	Handle w/Hardware	1
13	82366	Rubber Pad	1
14	8169X	Monitor Platform	1
15	7553X	Mouse Platform	1
16	68681	1/4”-20 x 3/8” Button Head Cap Screw	5
17	18209	1/4”-20 Hex Nut w/Lock Washer	5
18	8172X	Keyboard Tray	1
19	87023	Pad, 11.75” x 7.00”	1
20	86478	Washer - SAE 1/2”	1
21	7525X	Pivot/Swivel Bracket	1
22	81644	Cap Nut	4
23	81649	Adjustable Hand Lever	1
24	81645	1/4”-20 x 1.00” Carriage Bolt	1
25	81646	Lock Washer	1
26	81647	.28” I.D. x .62” O.D. Washer	1
27	81648	Spacer	1
28	81643	Shaft	1

Parts List

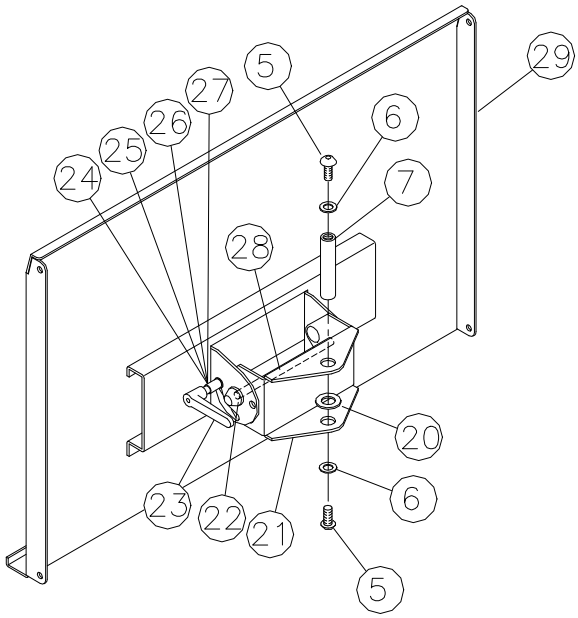
Part Number		Description	Qty.
29	86433	20” Wide White Board/Document Holder	1
	7527X	20” Wide Document Holder	
	86432	11” Wide White Board/Document Holder	
	7526X	11” Wide Document Holder	
	7529X	15” x 15.5” Peg Board	
	7528X	15” x 15.5” Bin Board	
	7530X	11” x 17.8” Tool Tray	
30	86991	Leveler Knob	3
31	8167X	Pivot Plate	1
32	9553X	75mm Mounting Plate	1
	9554X	100mm Mounting plate	
33	87989	5/16”-18 x 3/4” Socket Head Cap Screw	1
34	87991	5/16” Nylon Washer	1
35	87992	5/16” Belleville Washer	1
36	87990	5/16” Thrust Bearing	1
37	82198	5/16”-18 Nut w/Nylon	1
38	9552X	Bracket	1

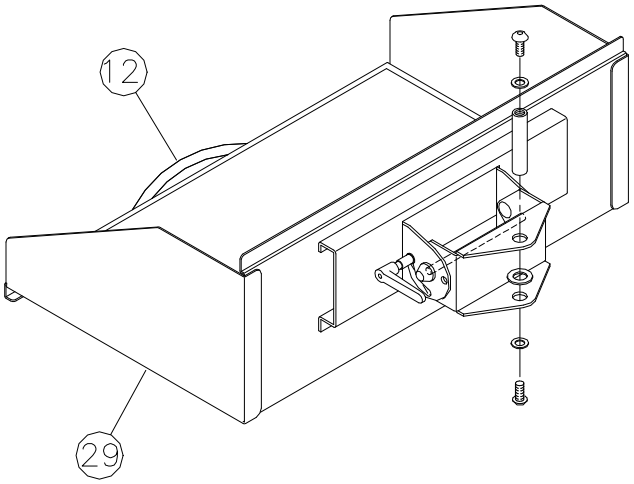
technical furniture

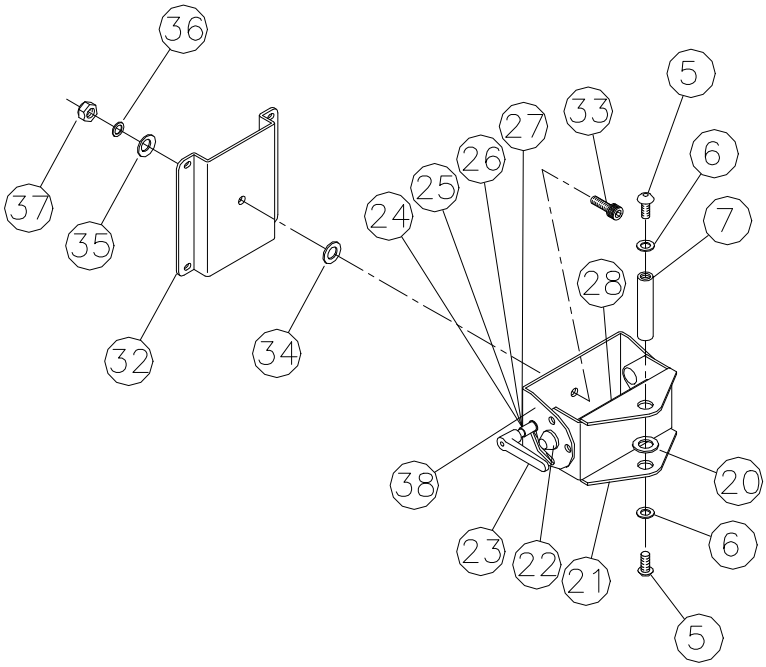
Articulating Arm/ Components (cont.)



Articulating Arm/ Components (cont.)





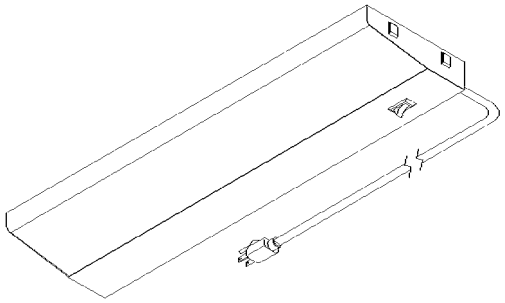


technical furniture

Task Light

Tools Required
-Phillips head screwdriver

Task Lights are available in (4) sizes and can be installed on various size shelves per the following matrix. The holes for installation are pre-punched.



Task Light

Shelf	Task Light
24” Tower/Electric/G.P Shelf -	18” centered
30” Tower/Electric/G.P Shelf -	18” centered, 24” centered
36” Tower/Electric/G.P Shelf -	18” centered, 24” centered
42” Tower/Electric/G.P Shelf -	24” centered, 36” centered
48” Tower/Electric/G.P Shelf -	24” centered, 36” centered
60” Tower/Electric/G.P Shelf -	24” L/R/C, 36” centered. 48” centered
72” Tower/Electric/G.P Shelf -	24” L/R/C, 36” centered, 48” centered
24” Locking Compartment -	18” centered
30” Locking Compartment -	18” centered, 24” centered
36” Locking Compartment -	18” centered, 24” centered
42” Locking Compartment -	18” centered, 36” centered
48” Locking Compartment -	18” centered, 36” centered

TASK LIGHT INSTALLATION

1. Locate any two screw holes in the Shelf Stiffener that are on the folowing centers.

   18” Task Light - 10” centers

   24” Task Light - 16” centers

   36” Task Light - 28” centers

   48” Task Light - 40” centers

   Install two #10 x 3/8” Phillips head sheet metal screws partially into the holes, leaving them protruding approximately 1/16”. See **Figure 1**.

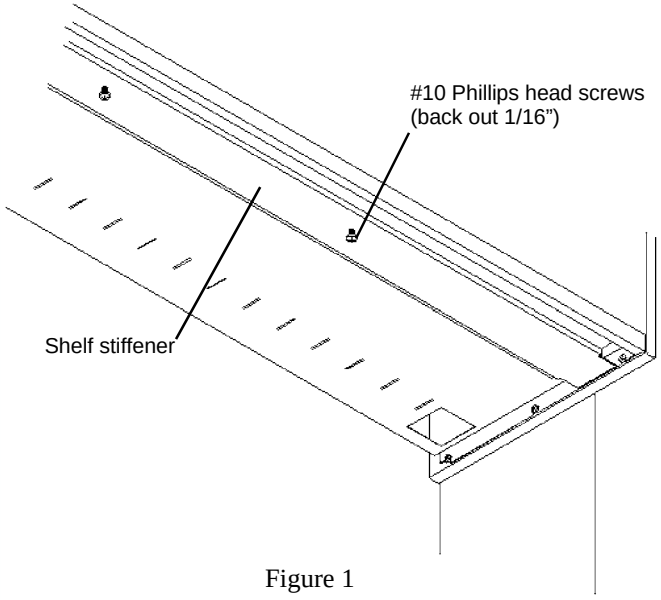


Figure 1

Task Light (cont.)

2. Remove the lens and bulb from the Task Light . To remove the lens, push it up near the front edge of the Task Light fixture. See **Figure 2**. Remove bulb by rotating it in either direction and then pulling it away from the mounting sockets.

3. Position the Task Light fixture against the Shelf stiffener with the mounting screws protruding thru the large ends of the "key hole" slots. Push the fixture toward the back of the Shelf to seat the screws into the narrow portion of the slots and then tighten the screws. See **Figure 4**.

4. Now replace the bulb and the lens. The corrugated surface of the lens is toward the bulb. See **Figure 3**.

   Cable Clips are provided to route and secure the Task Light cord.

   NOTE: Fixture must be plugged into a three pronged grounded outlet.

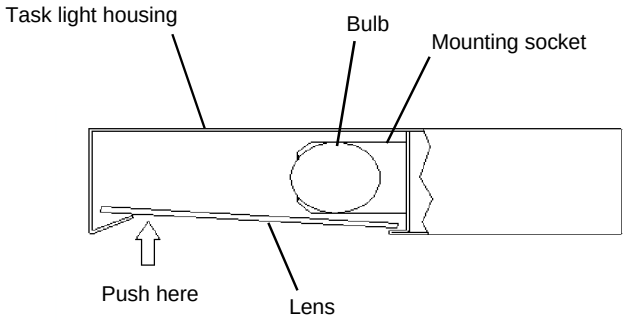


Figure 2. Removing lens and bulb

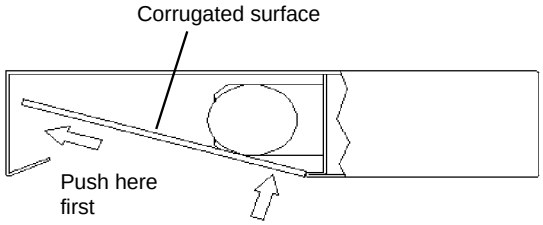


Figure 3. Replacing lens and bulb

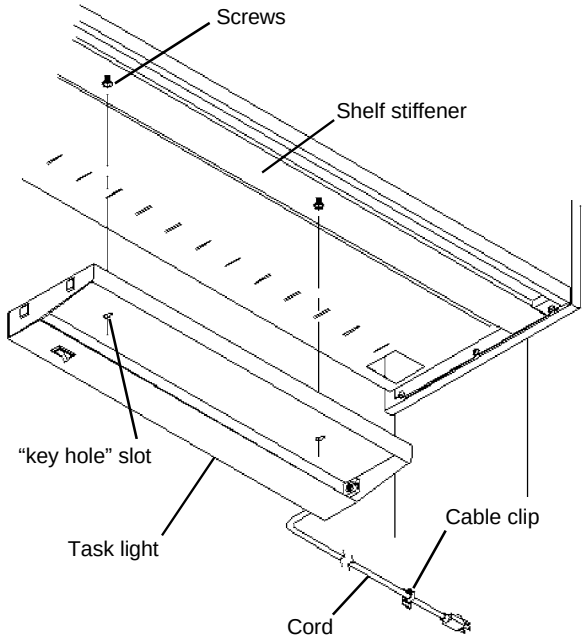


Figure 4

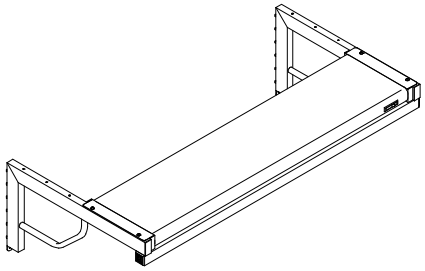
Overhead Lighting

Tools Required
- Plastic mallet
- 5/32 Hex Wrench (provided)
- 1/2” Wrench or socket
- Phillips head screwdriver

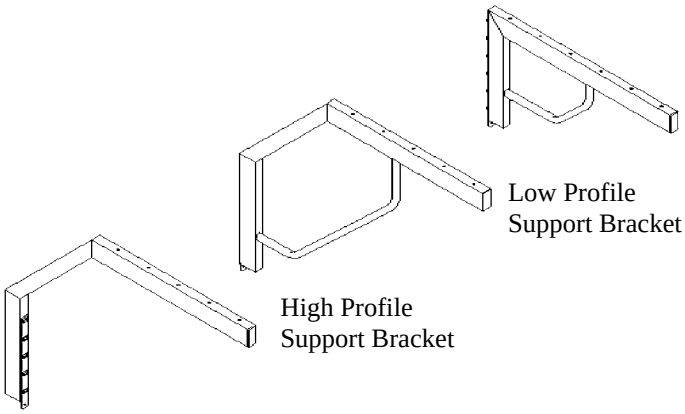
There are three types of **Overhead Lighting Support Brackets**. The **Low Profile** version (when hooked in the top trapezoids of a Standard) is below the top of the Full Frame, the **High Profile** version that is 12” above, and the **Rear Mount** version which is also 12” above the top of the Full Frame.

In addition to the light, the Overhead Brackets support an optional **Tool Track**.

The attachment options vary with Full Frame width (left side, right side), the size of the light, and your height preference.



Overhead Lighting



1. Select the position you prefer and hook on the first Support Bracket. Space the second Bracket based on the frame modules and light size (36”, 48”, etc.). Tap the Brackets down, making sure the hooks are seated into the frame. Secure the Brackets by driving the #10-24 x 3/8” screws (provided) into the hole at the bottom of each Bracket. See **Figure 1**.

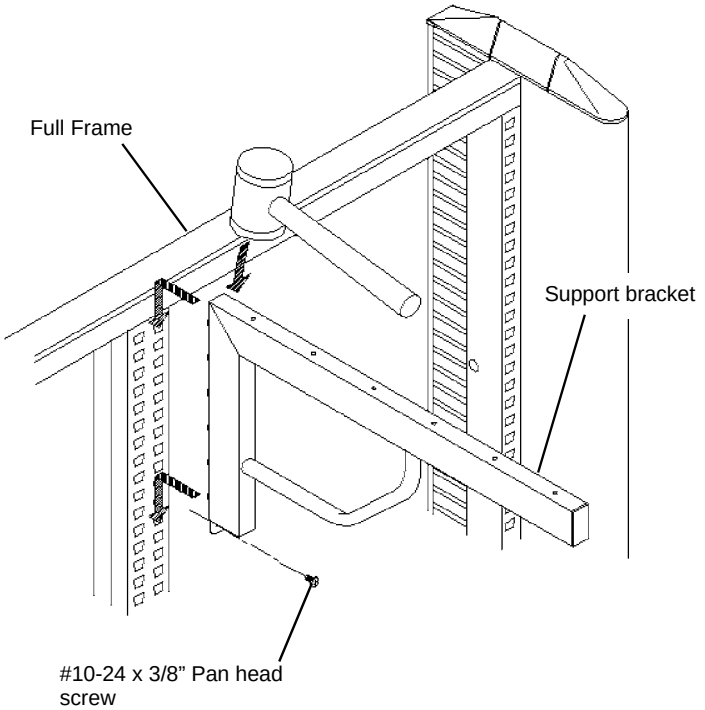


Figure 1

Overhead Lighting (cont.)

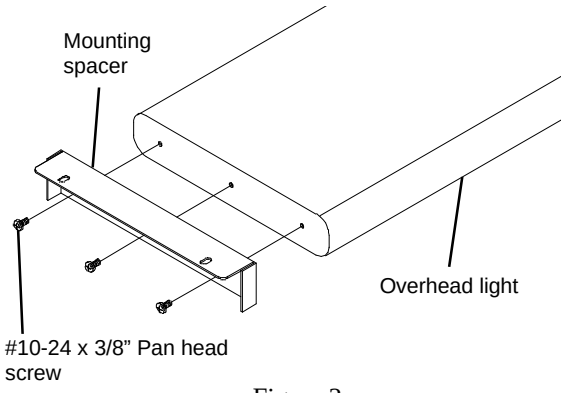


Figure 2

2. Packaged with the Light Support Brackets are two **Mounting Spacers** for the light which are in a separate carton. Attach a Spacer to each end using three 10-24 x 3/8 screws for each. See **Figure 2**.

3. Position the light between the Support Brackets with the Spacer flange above the Brackets. Rest the light on the Brackets. There are three positions, front to back, for the light. Select one by aligning the Spacer holes with Bracket holes and attach with two 1/4-20 x 1/2" Button head screws at each end. See **Figure 3**.

TOOL TRACK ATTACHMENT

1. The **Tool Track** attaches to the under side of the Light Support Brackets at the front. Align the hole in the Tool Track with the hole in the Support Bracket and drive one 1/4-20 x 1/2" screw and lock washer into the end of each Bracket. Screws at both ends should be started before tightening either one. See **Figure 4**.

2. Insert one **End Stop**, #83632, into the Tool Track (see **Figure 4** for orientation). The straight plate is on the outside creating a sandwich or clamping attachment. **Do Not** tighten yet!

3. Insert the **Tool Trolley** (not shown) next and then the second End Stop. Assemble the **End Caps** to each end. **NOTE**: If an End Cap strikes a screw head before seating fully into the tube, loosen the screw so that the End Cap slides under the head, then re-tighten. Or, trim the cap with scissors.

4. Slide the End Stops to each end to a position just short of the End Caps and tighten.

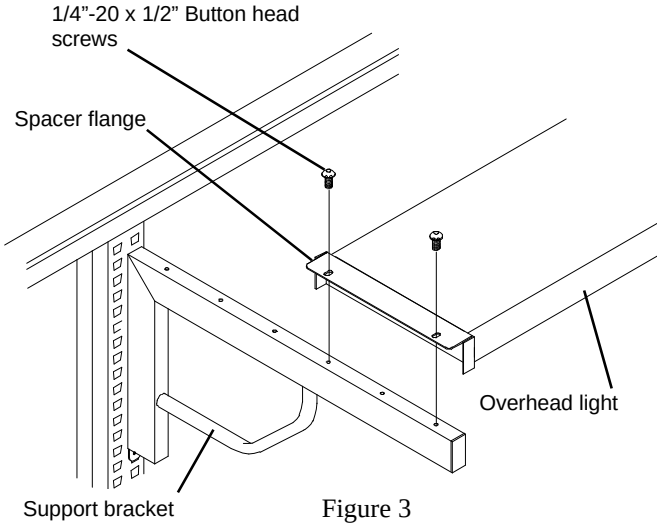
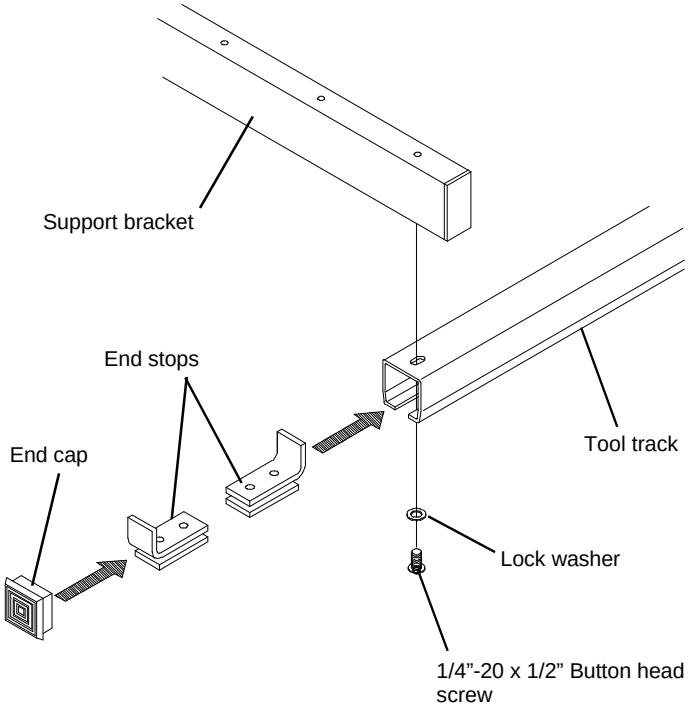


Figure 3

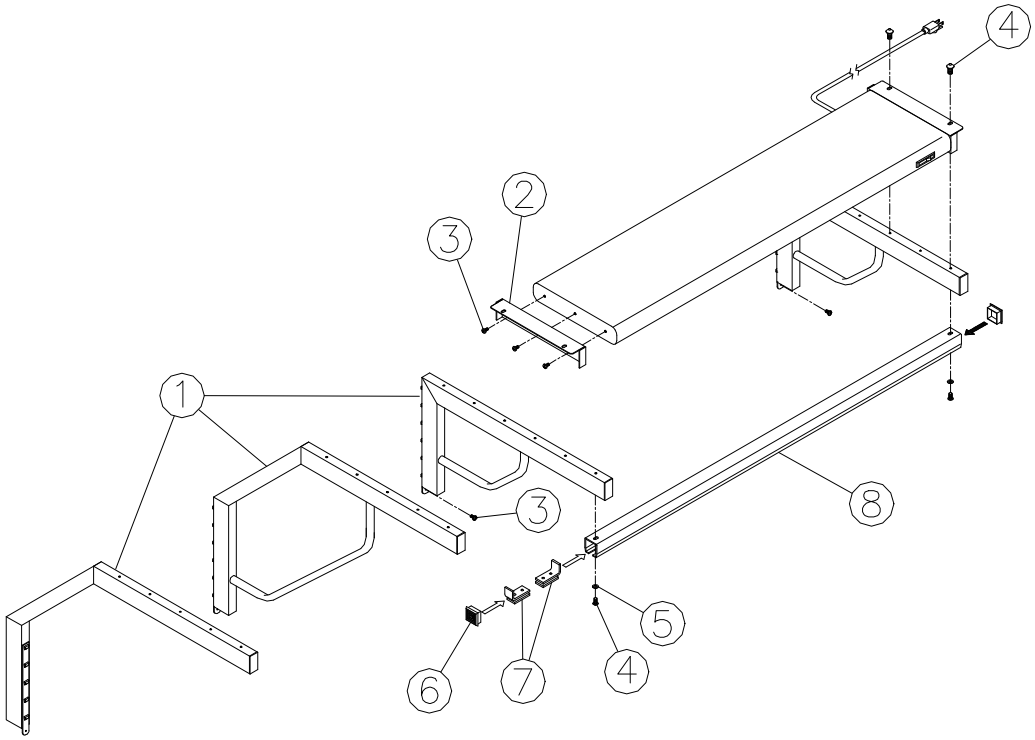


Figure

Overhead Lighting (cont.)

Parts List

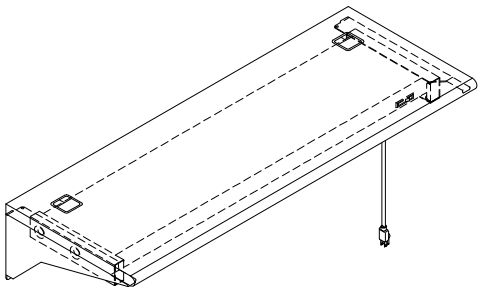
Part Number		Description	Qty.
1	3807X	Light Support, Low Profile	2
	3808X	Light Support, High Profile	
	5143X	Rear Mount Support Bracket	
2	3821X	Spacer	2
3	66714	#10-24 x 3/8” Phillips Pan Head Thread Forming Screw	6
4	82703	1/4”-20 x 1/2” Button Head Screw	6
5	59588	1/4” Lock Washer	2
6	83633	End Cap	2
7	83632	End Stop	2
8	83627	Tool Track, 24”	1
	83628	Tool Track, 30”	
	83629	Tool Track, 36”	
	83630	Tool Track, 42”	
	83631	Tool Track, 48”	



technical furniture

Laminate Hook-on Shelves with Overhead Light

Tools Required
-Plastic mallet
-Phillips head screwdriver



Laminate Hook-on Shelves
with Overhead Light

1. Determine the location of the **Shelf** and **Overhead Light** and install the shelf as outlined on page K-3.

INSTALLING LIGHT USING SHELF SUPPORT BRACKET FASTENERS

NOTE: Do not fully tighten the four screws attaching the shelf to the shelf supports; leave approximate 1/8" gap. See **Figure 1**.

2. Attach a **Light Mounting Bracket** to the underside of each shelf support. Align the keyhole slots in the brackets with the shelf attachment screws. Shift the brackets on the screws to bottom out in the keyhole slots. See **Figure 2a**.

NOTE: 12" deep shelves use the two *inner* keyhole slots on 5" centers; 18"/24" deep shelves use the two *outer* keyhole slots on 11" centers. See Figure **2b**.

3. Tighten all screws.

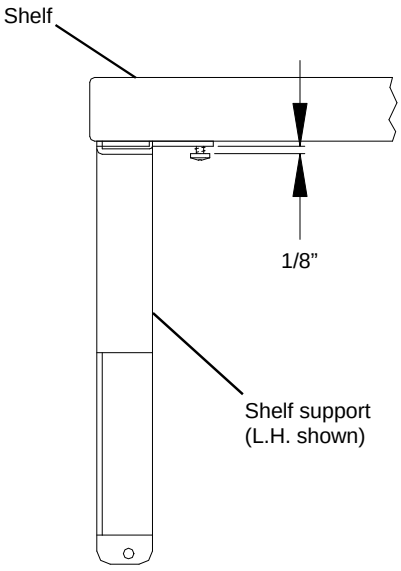


Figure 1

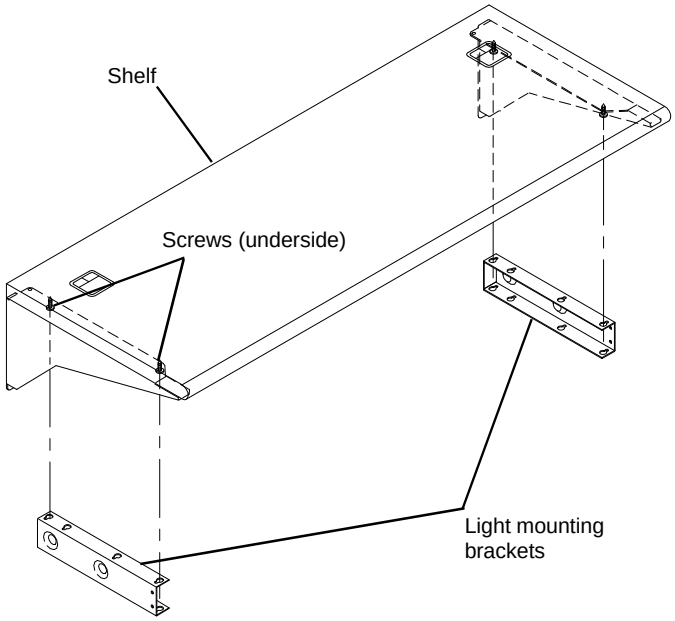


Figure 2a

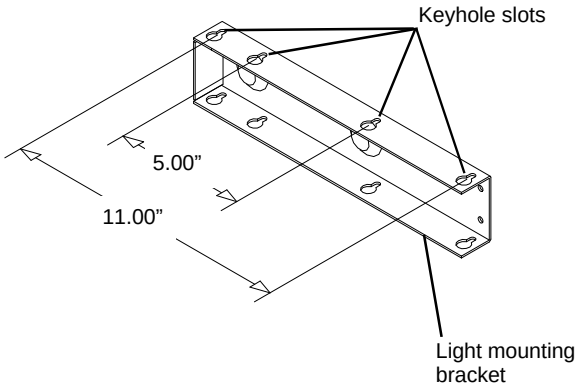


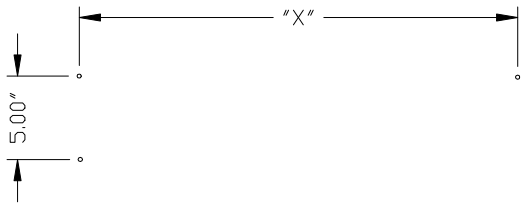
Figure 2b

Laminate Hook-on Shelves with Overhead Light (cont.)

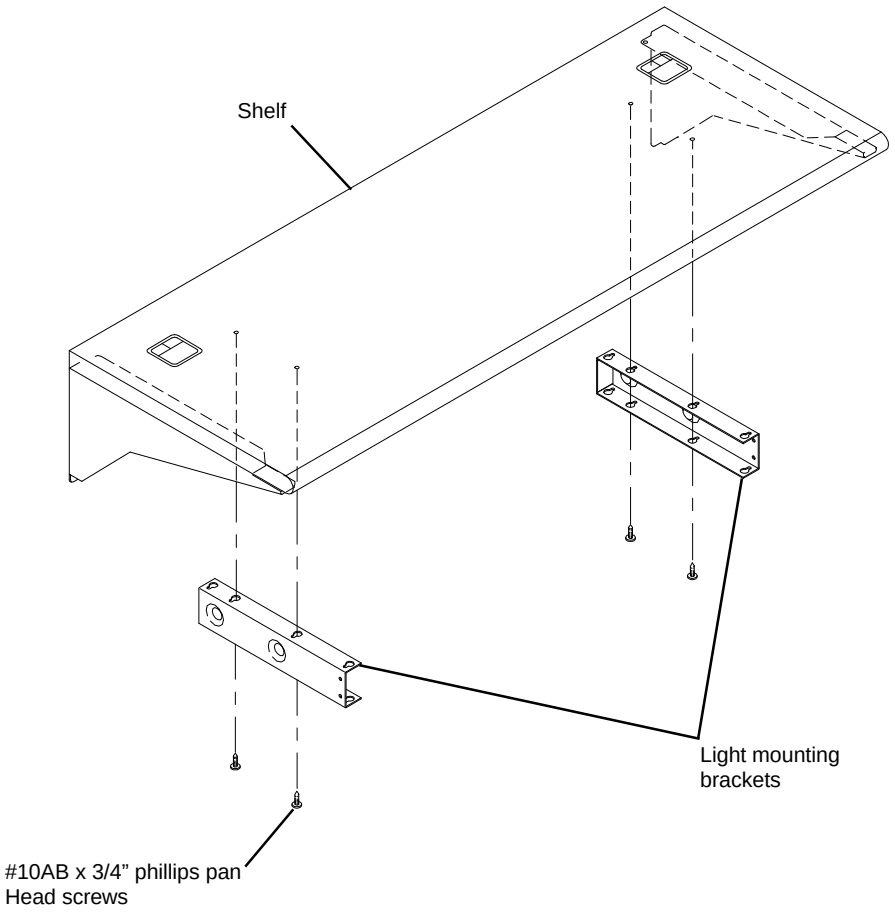
INSTALLING LIGHT BETWEEN SHELF SUPPORT BRACKETS

4. Drill four .113 diameter holes (#33 drill) .50" deep in the underside of the shelf per the hole pattern dimensions indicated, positioning the light in the desired location.

	Dim. "X"
36" Light	31.94"
48" Light	43.94"
60" Light	55.94"
72" Light	67.94"



5. Attach the Light Mounting Brackets to the underside of the shelf using four #10AB x 3/4" phillips pan head screws provided. See **Figure 3**.



Laminate Hook-on Shelves with Overhead Light (cont.)

6. Install the light into the brackets with the on/off switch toward the front. See **Figure 3**.

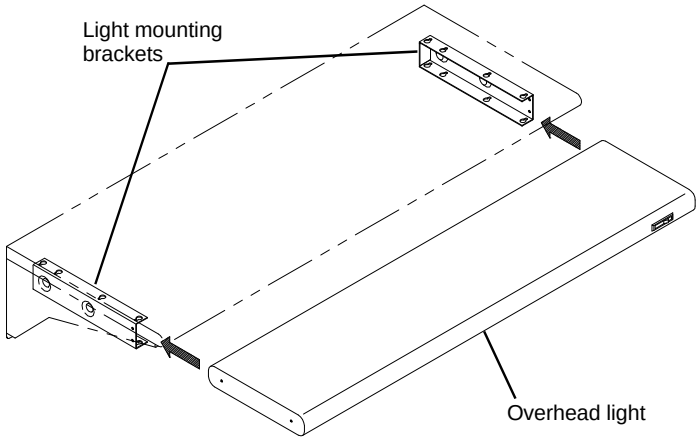


Figure 3

7. Attach an **End Stop** to the front of each light mounting bracket using the #10-24 x 3/8" thread forming screws provided. See **Figure 4**.

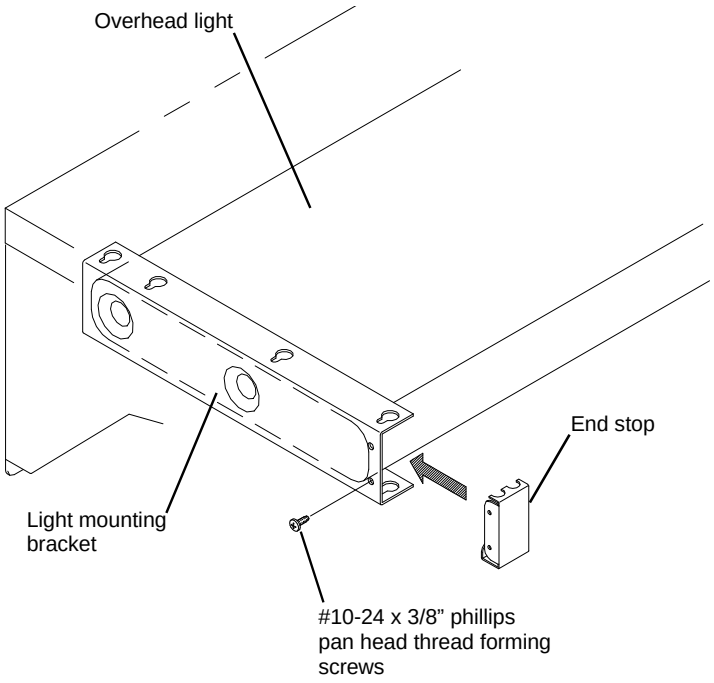


Figure 4

Laminate Hook-on Shelves with Overhead Light (cont.)

Parts List

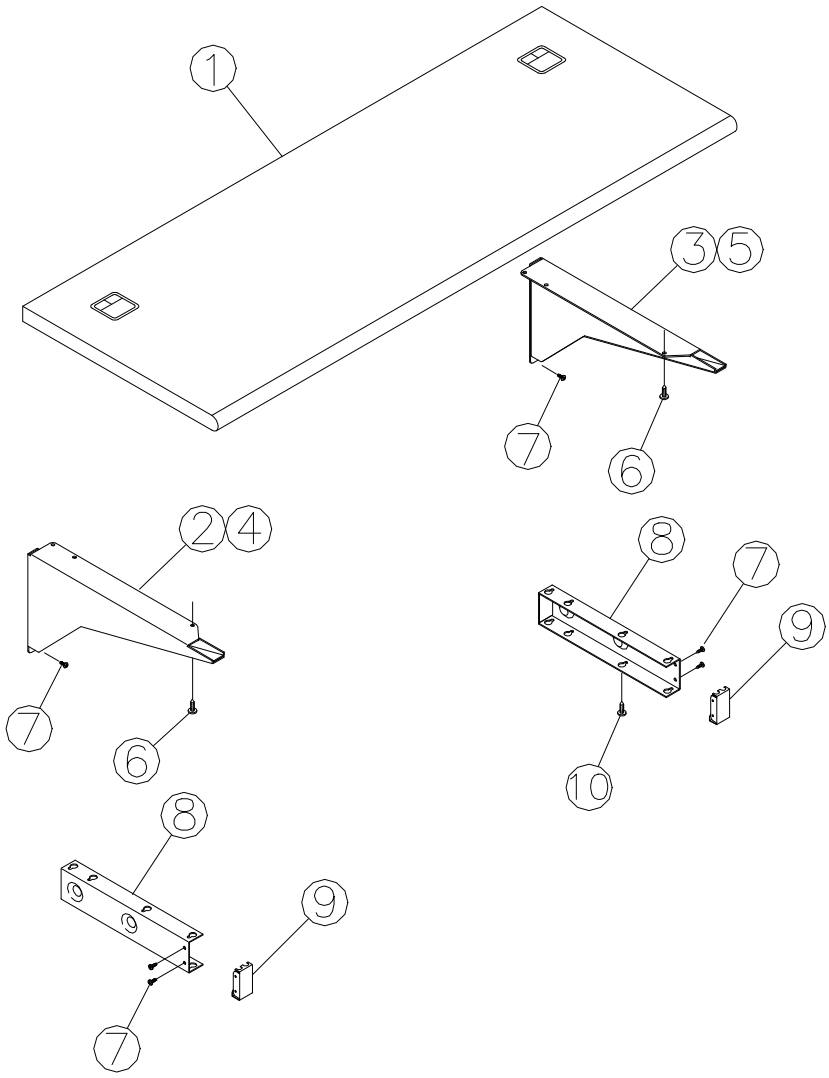
Part Number		Description	Qty.
1	2993X	Laminate Shelf, 36”x 18”	1
	2995X	Laminate Shelf, 48”x 18”	
	2996X	Laminate Shelf, 60”x 18”	
	2997X	Laminate Shelf, 72”x 18”	
	3000X	Laminate Shelf, 36”x 24”	
	3002X	Laminate Shelf, 48”x 24”	
	3003X	Laminate Shelf, 60”x 24”	
	3004X	Laminate Shelf, 72”x 24”	
	3850X	Laminate Shelf, 36”x 18” ESD	
	3852X	Laminate Shelf, 48”x 18” ESD	
	3853X	Laminate Shelf, 60”x 18” ESD	
	3854X	Laminate Shelf, 72”x 18” ESD	
	3857X	Laminate Shelf, 36”x 24” ESD	
	3859X	Laminate Shelf, 48”x 24” ESD	
	3860X	Laminate Shelf, 60”x 24” ESD	
	3861X	Laminate Shelf, 72”x 24” ESD	
	2986X	Laminate Shelf, 36”x 12”	
	2988X	Laminate Shelf, 48”x 12”	
	2989X	Laminate Shelf, 60”x 12”	
	2990X	Laminate Shelf, 72”x 12”	
	3843X	Laminate Shelf, 36”x 12” ESD	
	3845X	Laminate Shelf, 48”x 12” ESD	
	3846X	Laminate Shelf, 60”x 12” ESD	
	3847X	Laminate Shelf, 72”x 12” ESD	

Parts List

Part Number		Description	Qty.
2	8156X	8”x 11” Shelf Support - L.H., 12” Deep Shelf	1
3	8157X	8”x 11” Shelf Support - R.H., 12” Deep Shelves	1
4	8154X	8”x 17” Shelf Support - L.H., 18”/24” Deep Shelves	1
5	8155X	8”x 17” Shelf Support - R.H., 18”/24” Deep Shelves	1
6	82287	#10AB x 5/8” Phillips Pan Head Thread Forming Screw	4
7	66714	#10-24 x 3/8” Phillips Pan Head Self Tapping Screw	6
8	8170X	Light Mounting Bracket	2
9	8171X	End Stop	2
10	59103	#10AB x 3/4” Phillips Pan Head Screws	4

technical furniture

Laminate Hook-on Shelves with Overhead Light (cont.)



technical furniture

E S D L a m i n a t e

WARNING: Electro static discharge can be dangerous to equipment and to persons if not properly dissipated. Read this supplement thoroughly for information on grounding precautions as well as general care and maintenance.

It is recommended that the **ESD Top** be grounded by a certified electrician and tested before it is used. It is important to insure a proper ground to minimize the possibility of damage to equipment and person.

ESD GROUNDING

1. The point of ground for the ESD Top is installed at the factory. A **Ground Wire** should be attached to the **Grounding Bolt** with the other end attached to to the facility electrical ground. See **Figure 1**.

2. Each ESD Worksurface and Shelf comes with only one grounding point. Surfaces should be connected to ground in parallel and should not be connected to each other in series.

   When tightening the nut onto the Grounding Bolt, **DO NOT OVER TIGHTEN**. Hand tighten + 1/4 turn.

3. Once the ESD ground is established, it is important to test the system. Periodic checks of the system are recommened to ensure the integrity of the system. Monitoring devices may be used to alert persons when the integrity of the system has been compromised.

4. Enviromental factors, especially temperature and humidity, have a drastic effect on the resistive properties of the ESD Worksurfaces.

CARE AND MAINTENANCE

1. When cleaning the surface becomes necessary, it is important to use non-abrasive cleaners only. If the surface is stained, baking soda and water may be used to remove the stain but excessive scrubbing may damage the surface.

2. It is important that no film or residue be left on the surface of the ESD Top. Failure to thoroughly clean the surface will reduce the dissapative properties of the laminate.

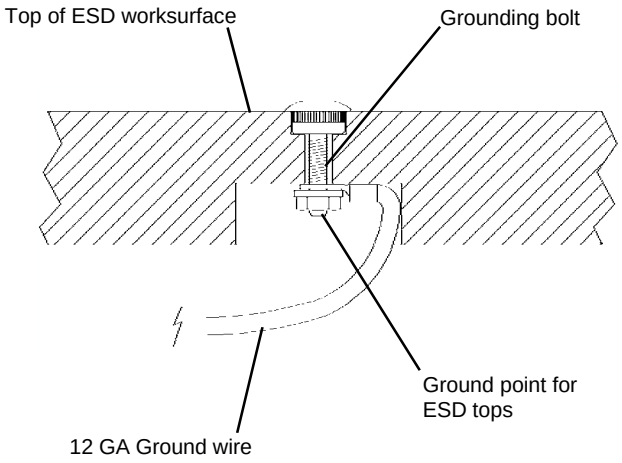
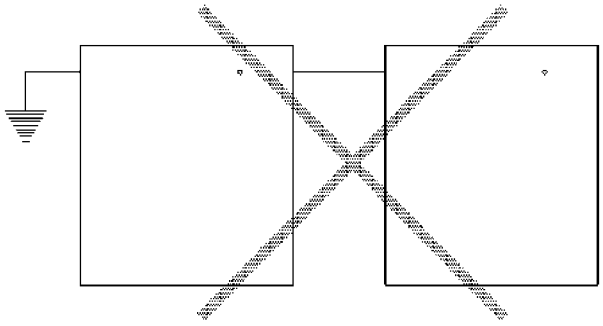
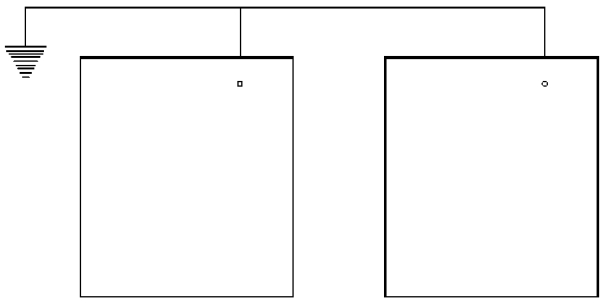


Figure 1



Improper grounding arrangement

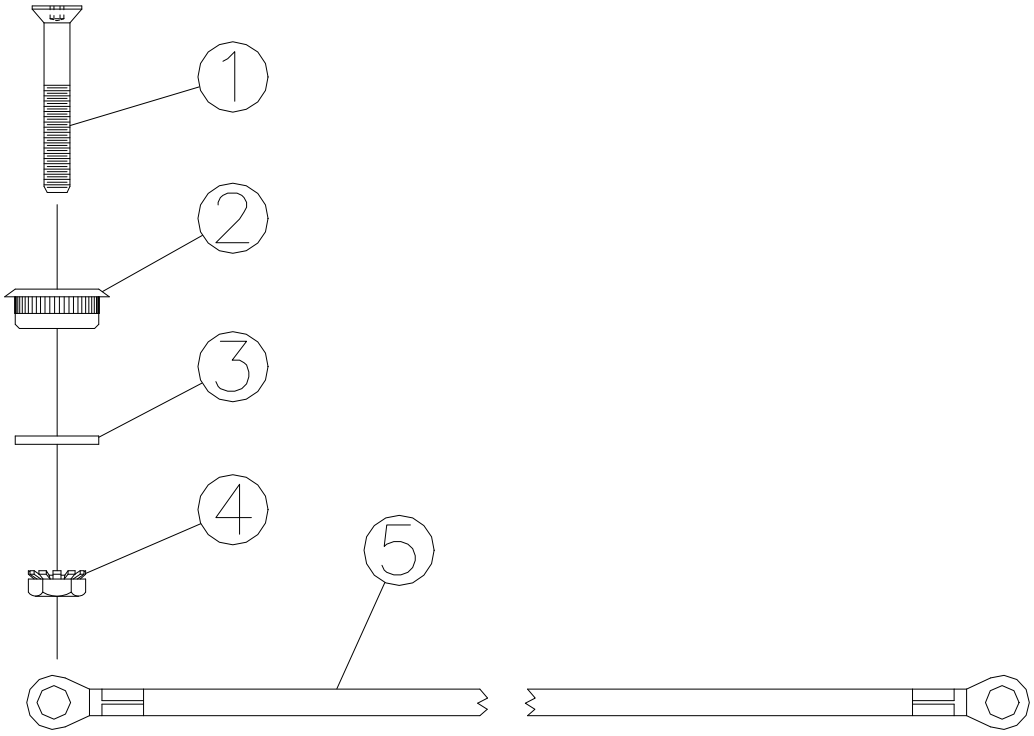


Proper grounding arrangement

Figure 2

ESD Laminate (cont.)

Parts List			
Part Number		Description	Qty.
1	84008	#8-32 x 1.00” Socket Flat Head Cap Screw	1
2	86274	Brass Insert	1
3	54225	Plain Type A Washer	1
4	18244	Keps Lock Nut	1
5	84007	12 GA Grounding Wire	1



technical furniture

Grounding Bus Bar

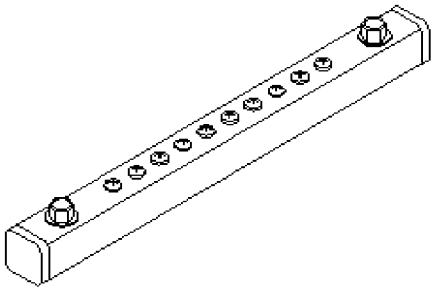
Tools Required

-Electric drill with 7/32” drill bit
-3/8” Wrench

NOTE: The **Grounding Bus Bar** can be located anywhere on a Full Frame, but the recommended location is on top of the Frame bottom rail. It is also recommended that the Bus Bar be placed in the center of a Frame member. If Tech Walls are used, the Bus Bar will fit in between the panels.

1. Using the Bus Bar as a template, drill two .221 diameter holes into the Frame bottom rail.

2. Install the Bus Bar using the two 1/4”-20 Self tapping hex washer head screws. See **Figure 1**.



Grounding Bus Bar
#LA6500

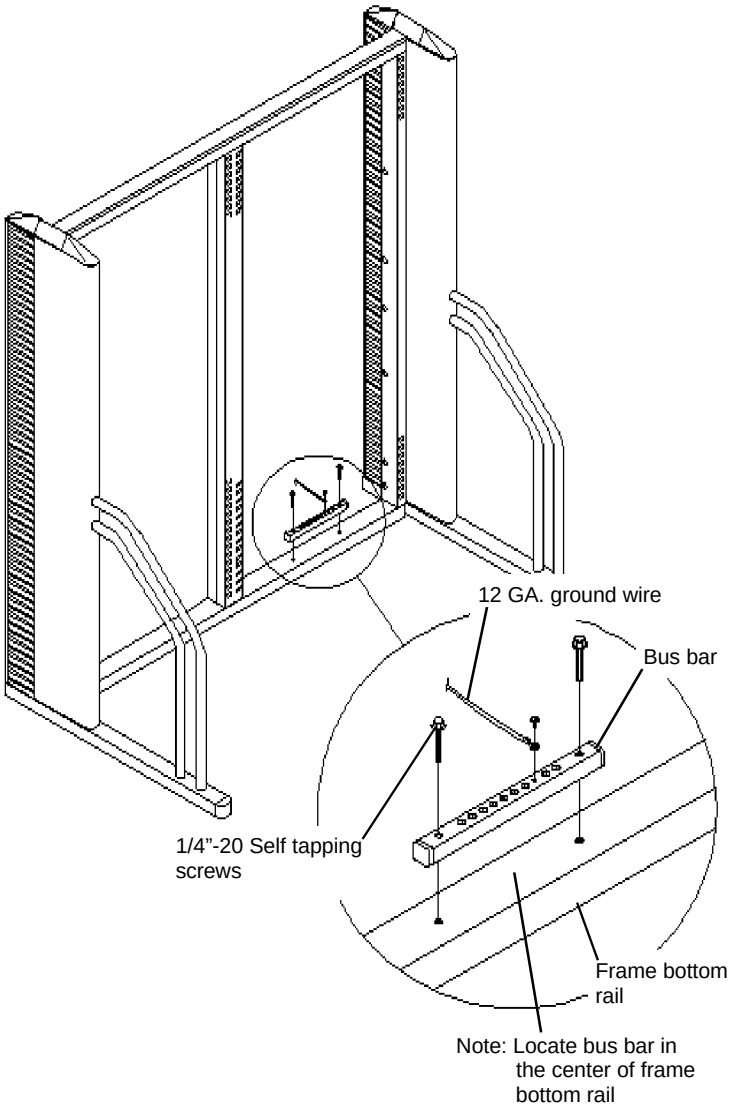


Figure 1

technical furniture

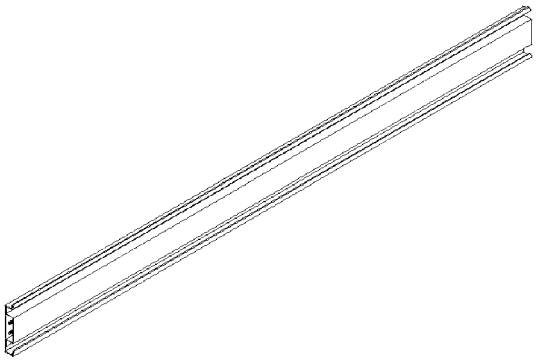
72” Bin Rail

Tools Required
-Phillips head screwdriver
-Plastic mallet

1. Select the desired height for the **Bin Rail**. Attach the Bin Rail to the frame by inserting the hooks on the back of the Bin Rail into the trapeziodal slots in the Full Frame. See **Figure 1**. To assure that the hooks are fully seated, tap the top rear corners with a plastic mallet. See **Figure 2.**

2. Drive one #10 Phillips head screw (provided) into each end of the Bin Rail to lock it in place. See **Figure 2**.

NOTE: The maximum weight capacity of the Bin Rail is 200 lbs.



60” and 72” Bin Rail

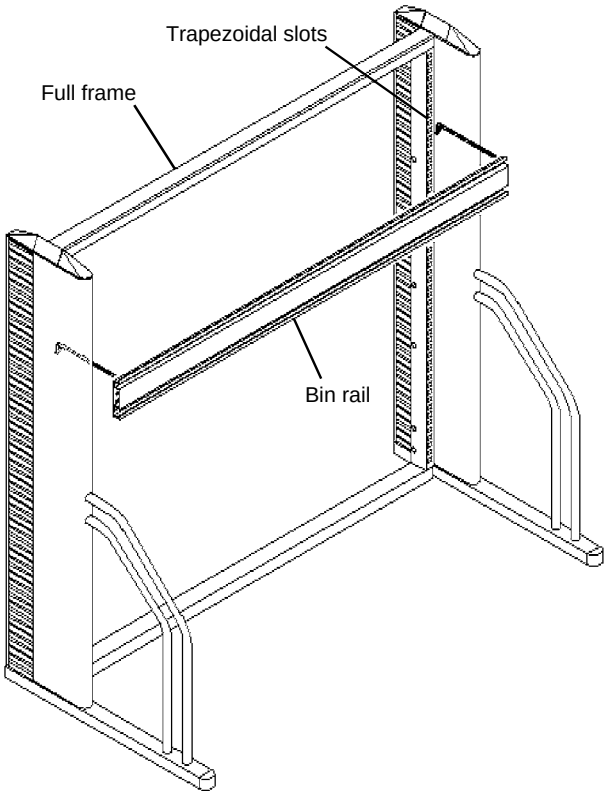


Figure 1

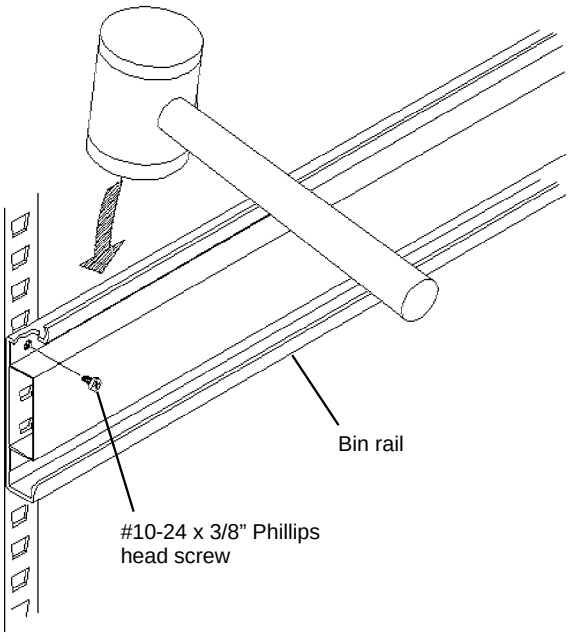
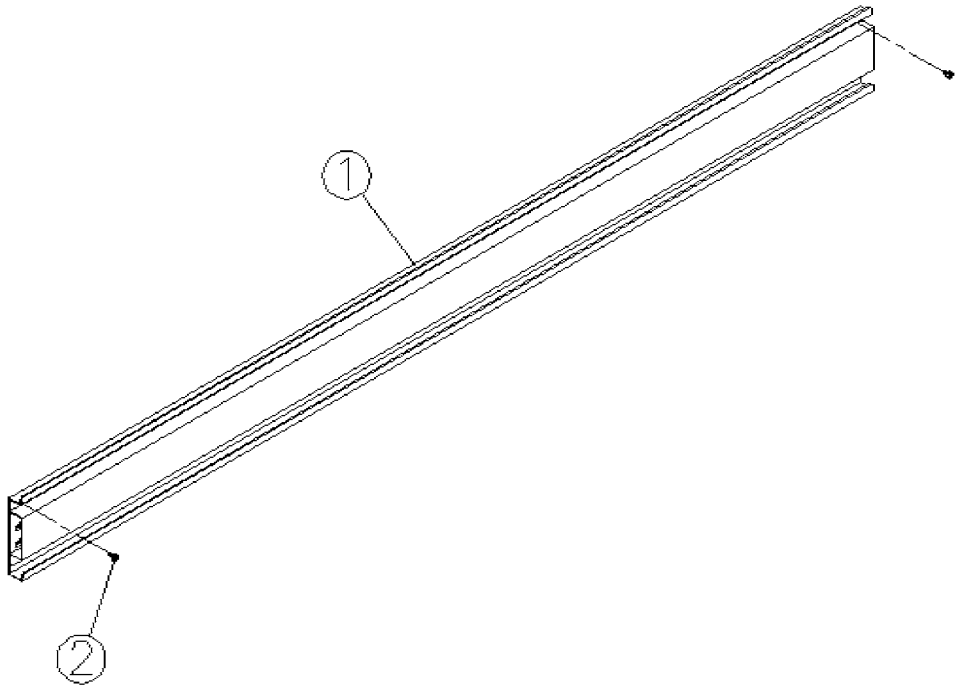


Figure 2

72” Bin Rail (cont.)

Parts List			
Part Number		Description	Qty.
1	5952X	72” Bin Rail	1
2	66714	#10-24 x 3/8” Phillips Pan Head Screw	2



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