STOP

**READ ALL OF THE FOLLOWING INSTRUCTIONS BEFORE
REMOVING CABINET FROM SKID**

PANDUIT®
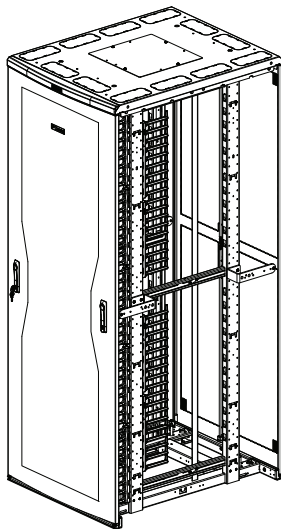
NET-ACCESS Cable Management Cabinets

INSTRUCTIONS CM317D
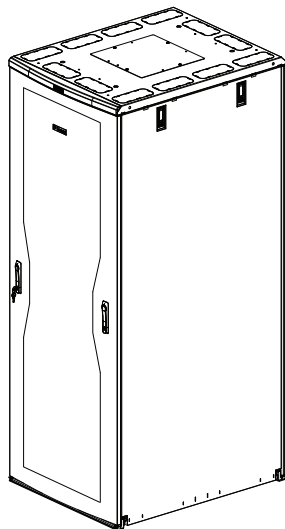
CN1/CN1CN

(1) Base Cabinet
(2) Solid Side Panels
(1) Dual Hinge Door
(1) Split Door Set
(2) Cable Management Finger Kits
(1) Bezel and Removable Cover Kit
(1) Hardware Kit
CN1:(2) #12-24 Threaded Equipment Rail Sets
CN1CN: (2) Cage Nut Equipment Rail Sets

CN2/CN2CN

(1) Base Cabinet
(1) Dual Hinge Door
(1) Split Door Set
(2) Cable Management Finger Kits
(1) Bezel and Removable Cover Kit
(1) Hardware Kit
CN2: (2) #12-24 Threaded Equipment Rail Sets
CN2CN: (2) Cage Nut Equipment Rail Sets
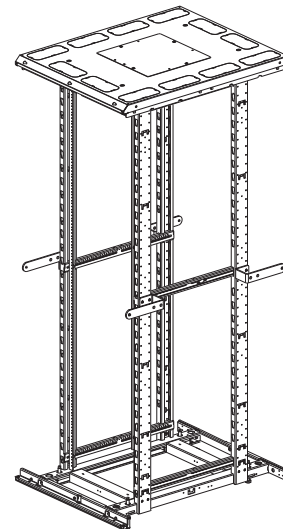
CN3/CN3CN

(1) Base Cabinet
(2) Cable Management Finger Kits
(1) Bezel and Removable Cover Kit
(1) Hardware Kit
CN3: (2) #12-24 Threaded Equipment Rail Sets
CN3CN: (2) Cage Nut Equipment Rail Sets

CN4
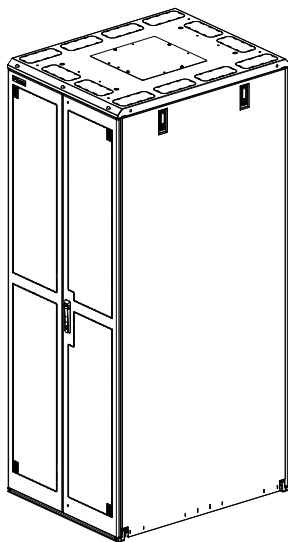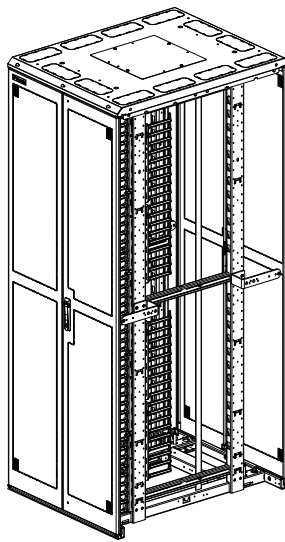
(1) Base Cabinet
(2) Solid Side Panels
(2) Split Door Sets
(2) Cable Management Finger Kits
(1) Bezel and Removable Cover Kit
(1) Hardware Kit
(2) #12-24 Threaded Equipment Rail Sets

CN5

(1) Base Cabinet
(2) Split Door Sets
(2) Cable Management Finger Kits
(1) Bezel and Removable Cover Kit
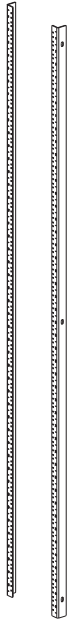(1) Hardware Kit
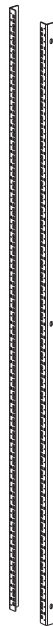(2) #12-24 Threaded Equipment Rail Sets

NOTE-Some views in this document may vary slightly from your actual cabinet configuration.

Other cabinet configurations covered by this instruction sheet: **CN1CNNU, CN1CNU, CN1NU, CN2C, CN2CNNU, CN2CNU, CN2NU, CN3C, CN3CNNU, CN3CNU, CN3CFR, CN4C, CN5C, CN5NU**

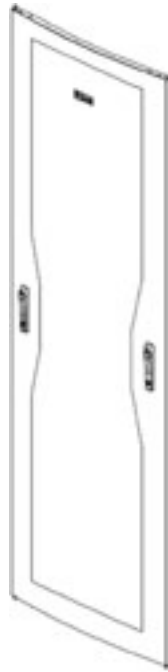*FOR TECHNICAL SUPPORT www.panduit.com/resources/install_maintain.asp*

Accessory Guide

Cabinet Rails Tapped Holes
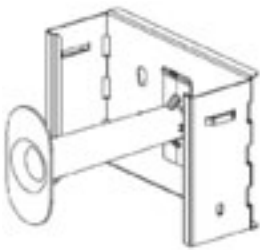(CNRT)

Cabinet Rails Cage Nuts
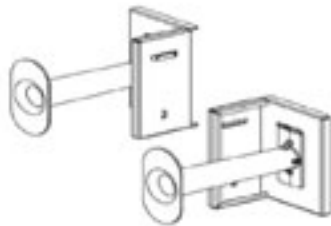(CNRC)

Dual Hinging Door
(CNDDE)

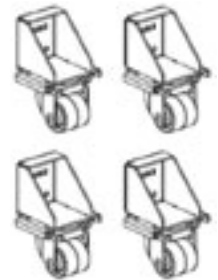**Solid Side Panel**
(CNPS)

Split Doors
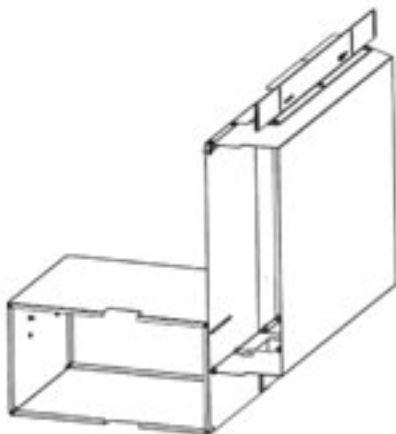(CNDS)

Center Spool Kit
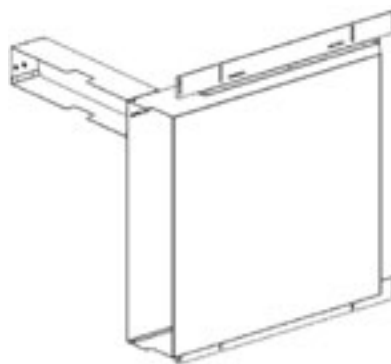(CNSPC)

End Spool Kit
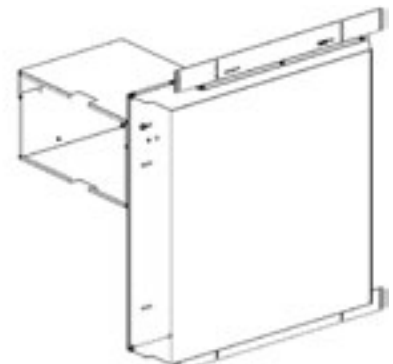(CNSPE)

Finger Kit
(CNBRFK)

Caster Kit
(CNCSTR)

Thermal Ducting for Cisco 6509/6509E Series
(CNAE1)

Thermal Ducting for Cisco 9513 Series
(CNAE2)

Thermal Ducting for Cisco 6513 Series
(CNAE3)

Before removal of packaging material:
Check tip indictor on the outside of cabinet to ensure cabinet was shipped in the upright position.

Packing Material Removal

After removing stretch wrap and outer cardboard shell, remove the four (4) lag bolts that hold the cabinet to the pallet using a 7/16"(11mm) socket. (As Shown)

Base Cabinet

Bolt Locations
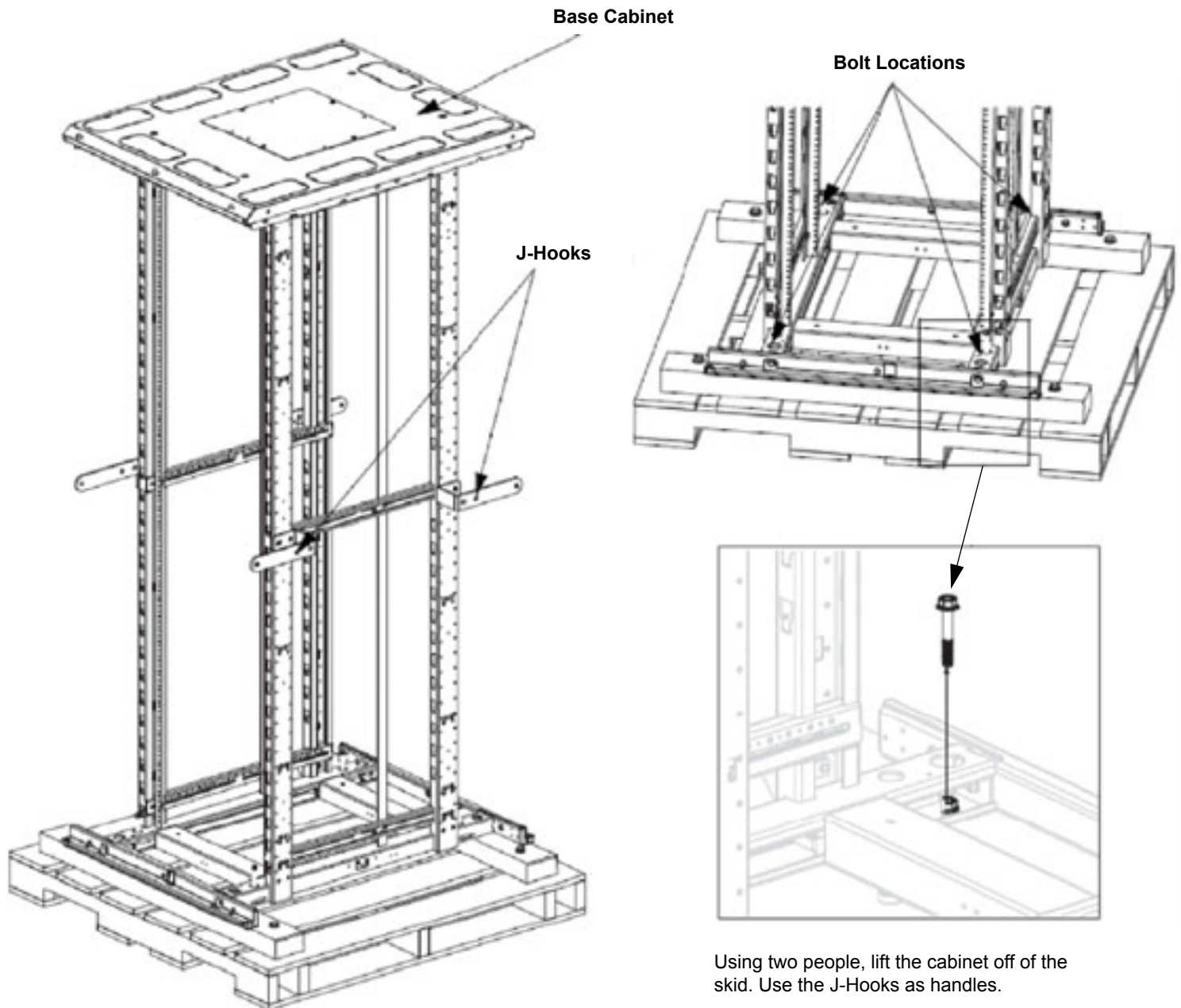
J-Hooks

Using two people, lift the cabinet off of the skid. Use the J-Hooks as handles.

If cabinet has side panels, remove side panels for easier removal of the cabinet from skid

Note: Doors and Side panels are removed for clarity.
See pages 13 thru 17 for door removal and pages 18 and 19 for side panel removal.

Shipping Bracket Removal

There are two (2) bracket used for shipment of the Front door and four(4) brackets for shipment of side panels. Remove brackets prior to use of the cabinet see below.
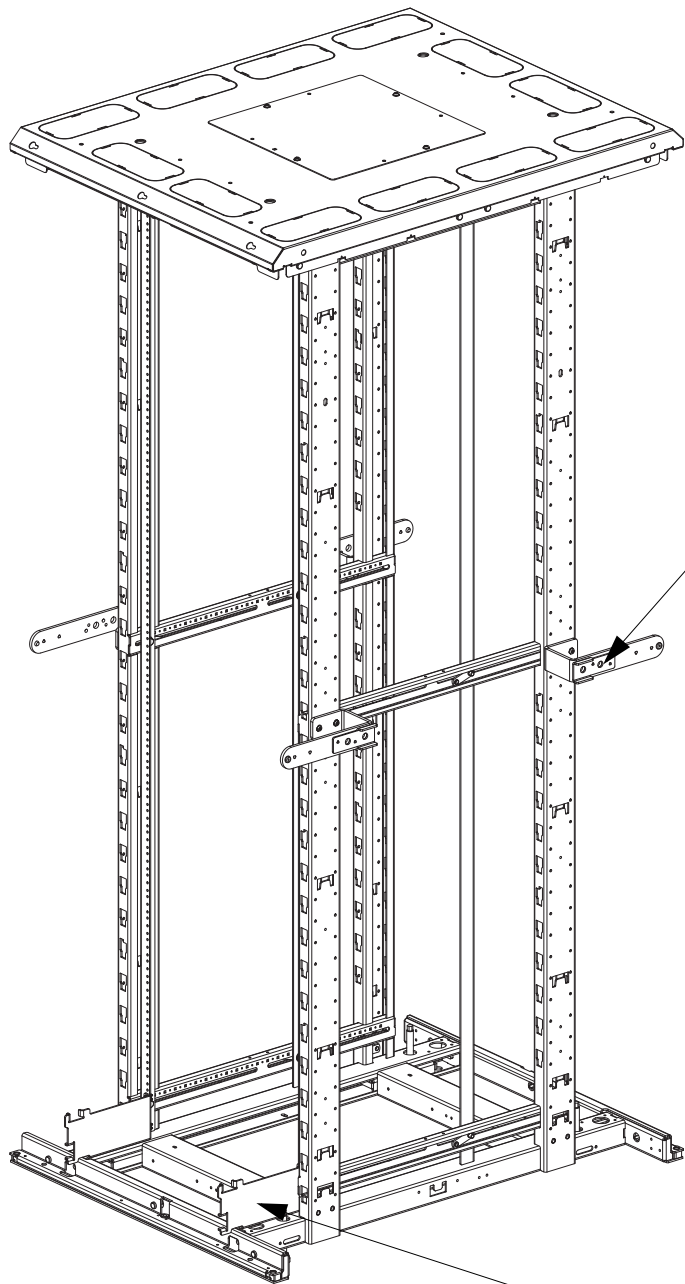
Side Panel Brackets

Door Brackets

Caster Kit (CNCSTR)

With the leveling legs in the down position hook the caster bracket to the mounting hook on the cabinet post in the locations shown. Fasten with two (2) 5/16 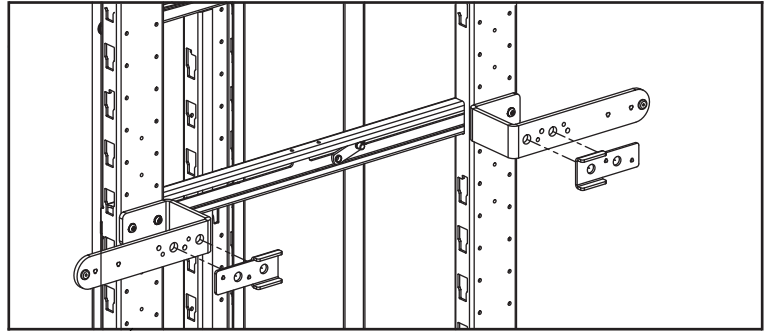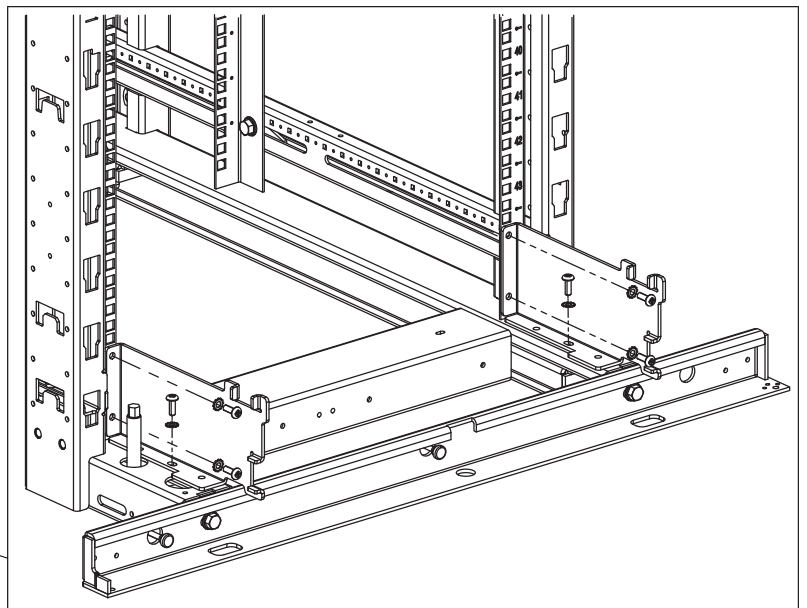X 3/4" bolts provided as shown using a 1/2"(13mm) socket. Retract the leveling legs to allow the cabinet weight to be supported by the casters.

Note: Casters can support a fully loaded cabinet. However, the casters should only be used to move the cabinet from one location to another. To ensure maximum stability, the leveling legs should be used to support the cabinet when it is in permanent location.

Mounting Hook
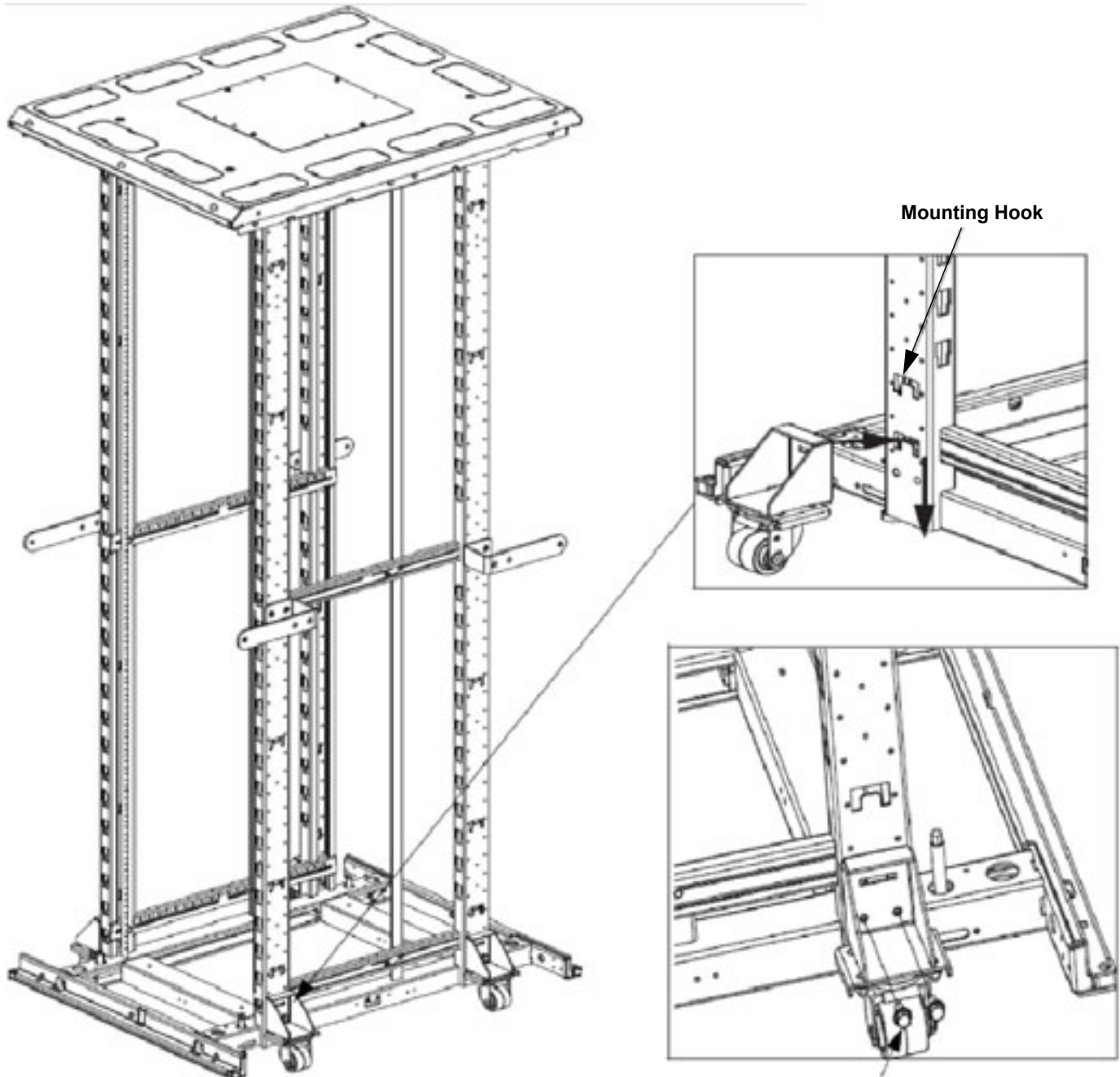
Torque bolts to 14 ft.-lbs(19.0 N-m)
Proper torque ensured casters are bonded to the cabinet frame.

Leveling

Once the leveling legs are fully retracted use two people to slide the cabinet into the desired location. Lower the leveling legs using a 3/8" (10mm) deep well socket, until the cabinet weight is fully supported. Use a bubble level placed on the base rails in the locations shown to adjust legs until the cabinet is level. For ganged cabinet applications, ensure that adjacent cabinets are adjusted to the same height, parallel with each other, and no gaps at the top or bottom between cabinets.

Front-to-Back Cabinet Leveling

3/8" socket
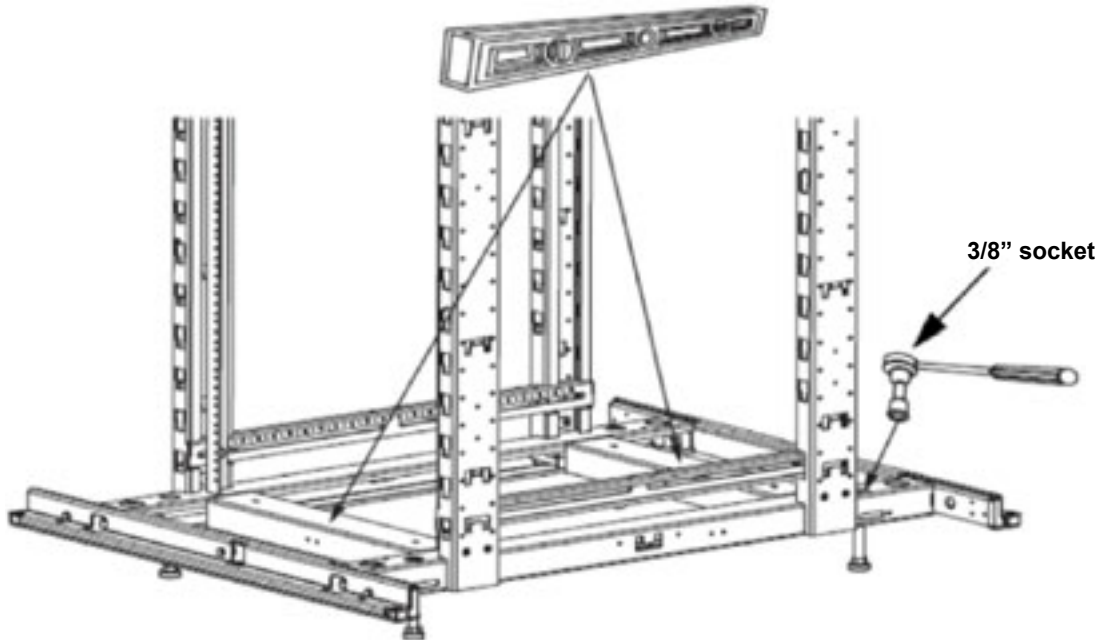
Side-to-Side Cabinet Leveling

3/8" socket
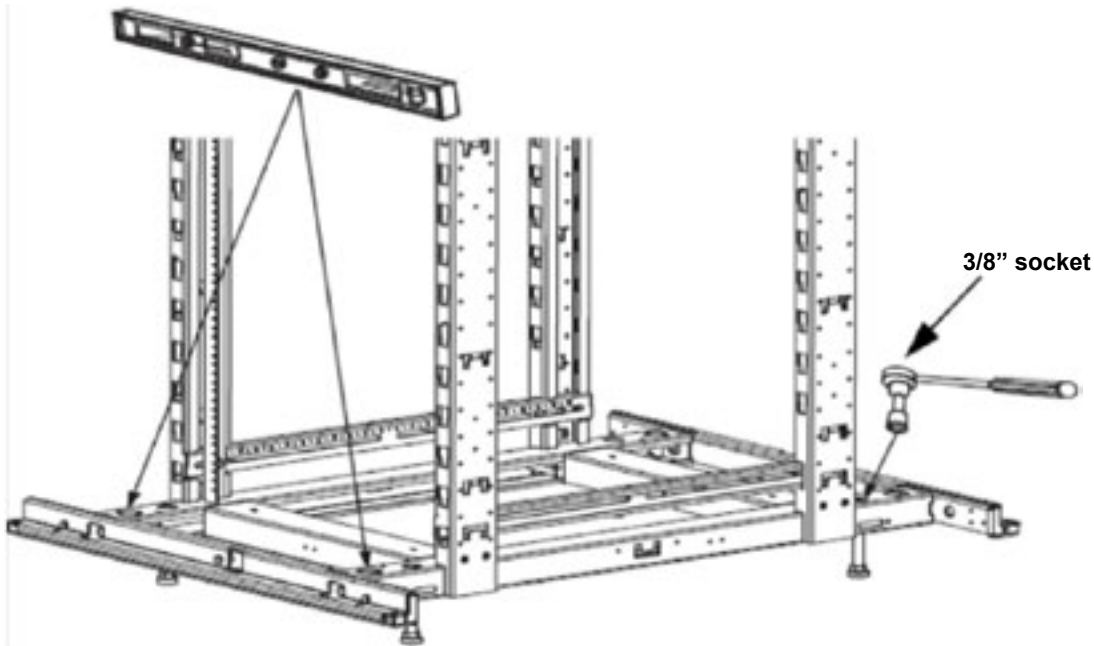
Note: The maximum weight load of the cabinet is 2500 pounds (1134 kg). The weight load should be evenly distributed across the height of the cabinet, with the heaviest components mounted at the bottom of the cabinet.

For Technical Support: www.panduit.com/resources/install_maintain.asp

J-Hook Removal (Optional)

J-hooks provide support the side panel and can be used for moving the cabinet. For ganged cabinet applications, the J-Hooks can be removed to provide greater access between cabinets. The J-Hooks can be removed by removing the two screws mounted to the cabinet rail.

Vertical Post

Screws
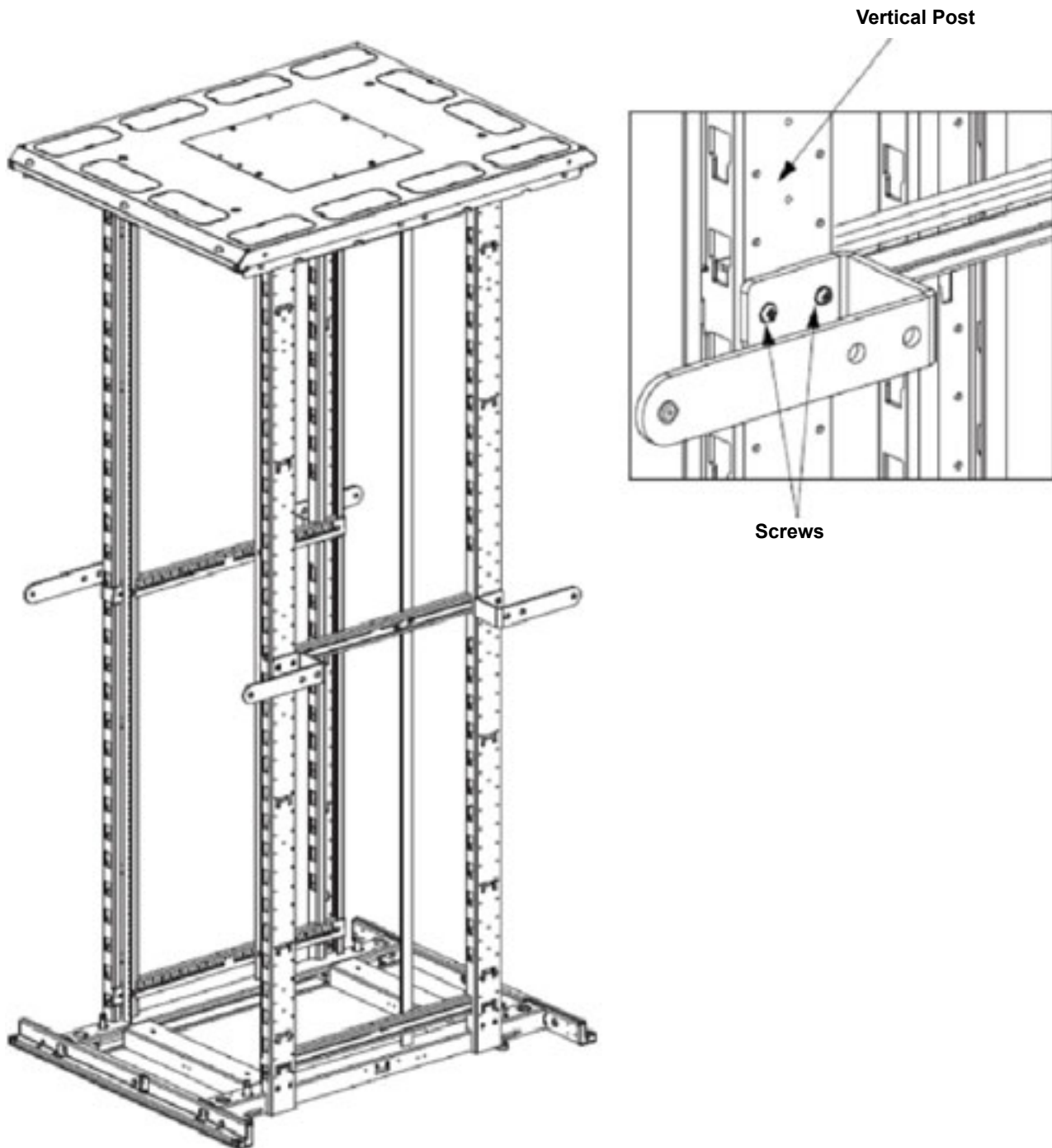
Ganging

IMPORTANT:
The first step to ensuring the proper ganging installation is to distinguish which model of cabinet is being utilized. Cabinets with ganging tabs already in place are illustrated below. For cabinets without ganging tabs please refer to Instruction Sheet **CM371** or **Click Here**.
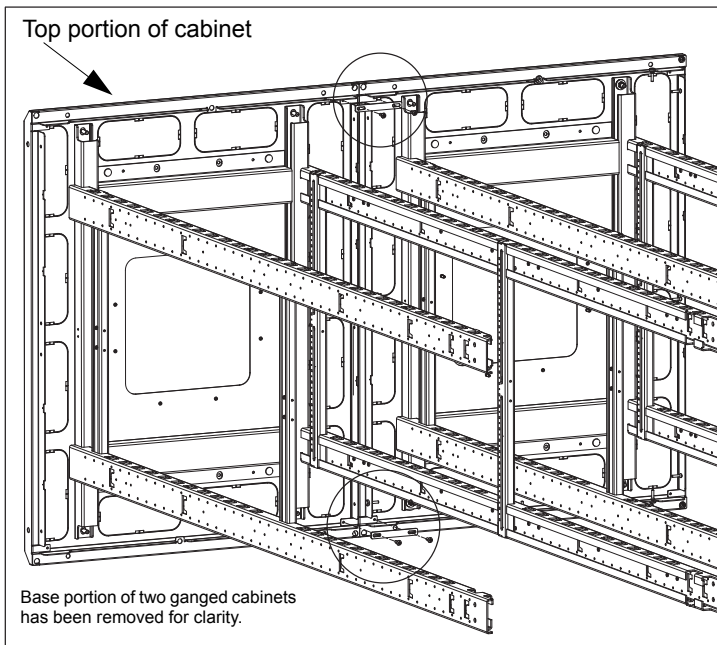
IMPORTANT:
If side panels are going to be used between cabinets, install (if needed) prior to ganging cabinets as shown on pages 18-19. If switch air ducting (CNAE series) will be used with side panel between ganged cabinets, install both ducting and side panels prior to ganging.

IMPORTANT:
Ensure cabinets are level by following the guidelines on page 7. Leveling the cabinet prior to ganging is important to ensure proper door operation.
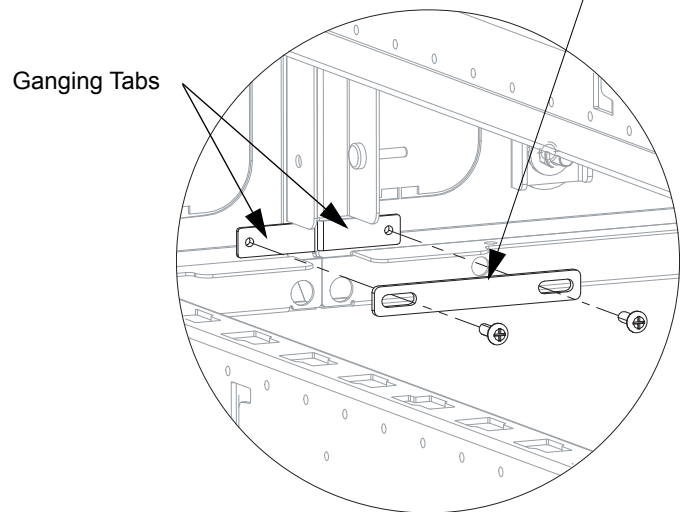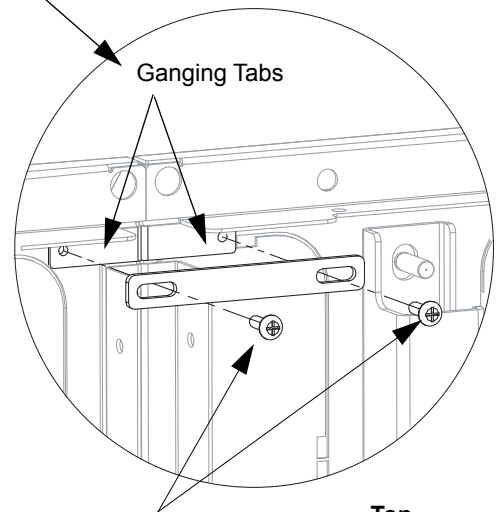
Secure the top of the cabinets with two (2) top ganging brackets and four (4) #12-24 trilobular screws in the locations shown.

Top Mounting Location

Top portion of cabinet

Base portion of two ganged cabinets has been removed for clarity.

IMPORTANT:
Ensure tops are touching prior to ganging. Do not cinch the tops together with the ganging hardware.

Ganging Tabs

**#12-24 Trilobular Screw**

Top Ganging Bracket

Ganging Tabs

Bottom Mounting Location

Ensure the door shoes of adjacent cabinet are touching. Secure the bottom of the cabinets with two (2) bottom ganging brackets and four (4) #12-24 trilobular screws in the locations shown.

Bottom Ganging Bracket

**#12-24 Trilobular Screw**   **Screw intended for second cabinet**
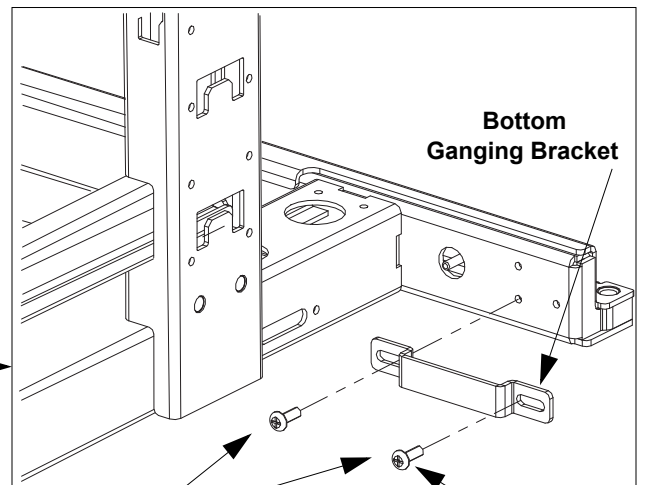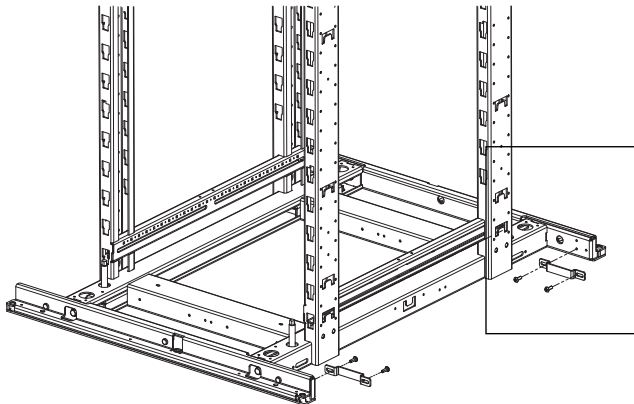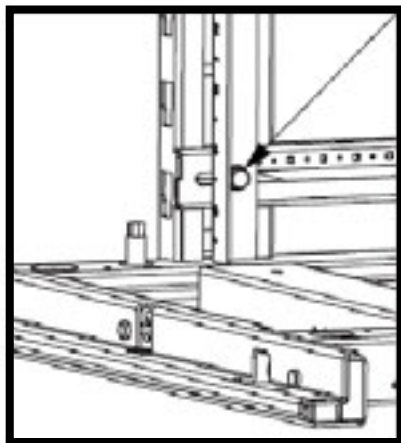
Equipment Rail adjustment and usage

All four rails are fully adjustable. To change depth, loosen three (3) 5/16 x 3/4" mounting bolts using a 1/2" (13mm) socket and slide to desired position. Retighten the mounting bolts to 14ft.-lbs (19.0 N-m). Proper torque ensures equipment rails are bonded to the cabinet frame.
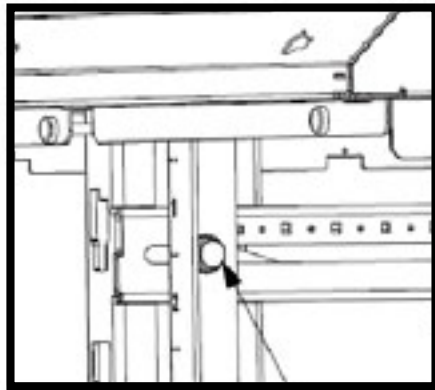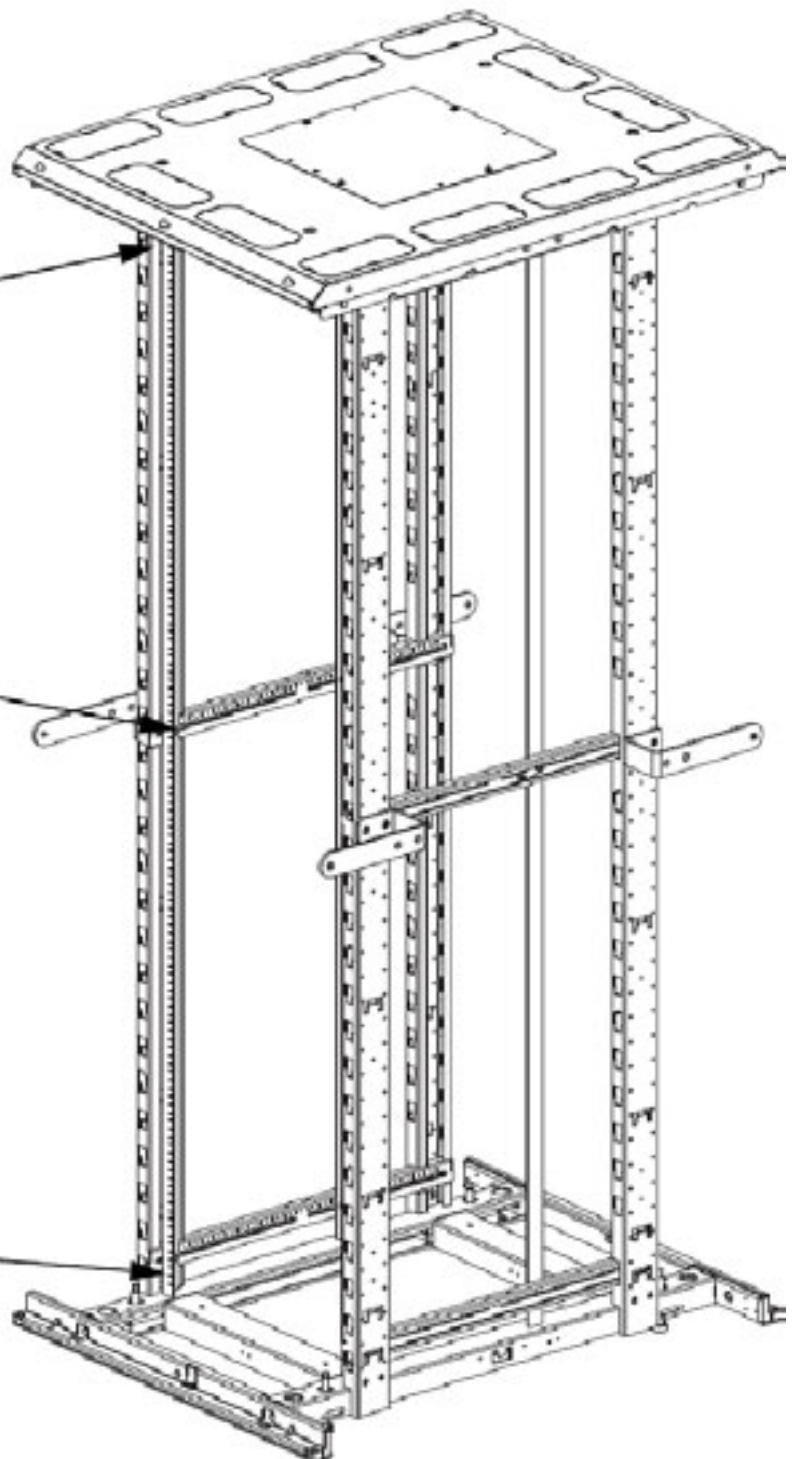
5/16" Bolt
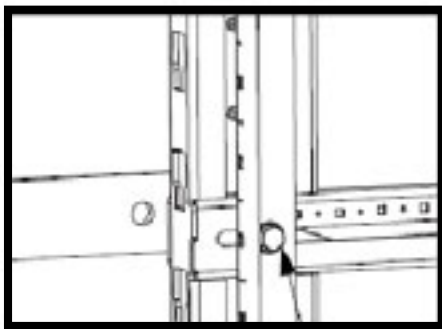
5/16" Bolt

5/16" Bolt

Rail Installation (CNRC, CNRT)

Install cabinet rails at three locations shown below with Bolt and Dual Nut provided. The Paint Piercing washers are used in the middle location to bond the equipment rails to the cabinet as shown in figure 1. Equipment rails are set 1" back on the front of the cabinet to ensure proper clearance for switch fans and door clearance for the high capacity horizontal cable managers NCMHAEF2 and NCMHAEF4.

Note: Torque bolts to 14 ft.-lbs (19.0 N-m) to ensure equipment rails are bonded to the cabinet frame

Figure 1

Thread bolt through hole toward outside of cabinet

Paint piercing washer
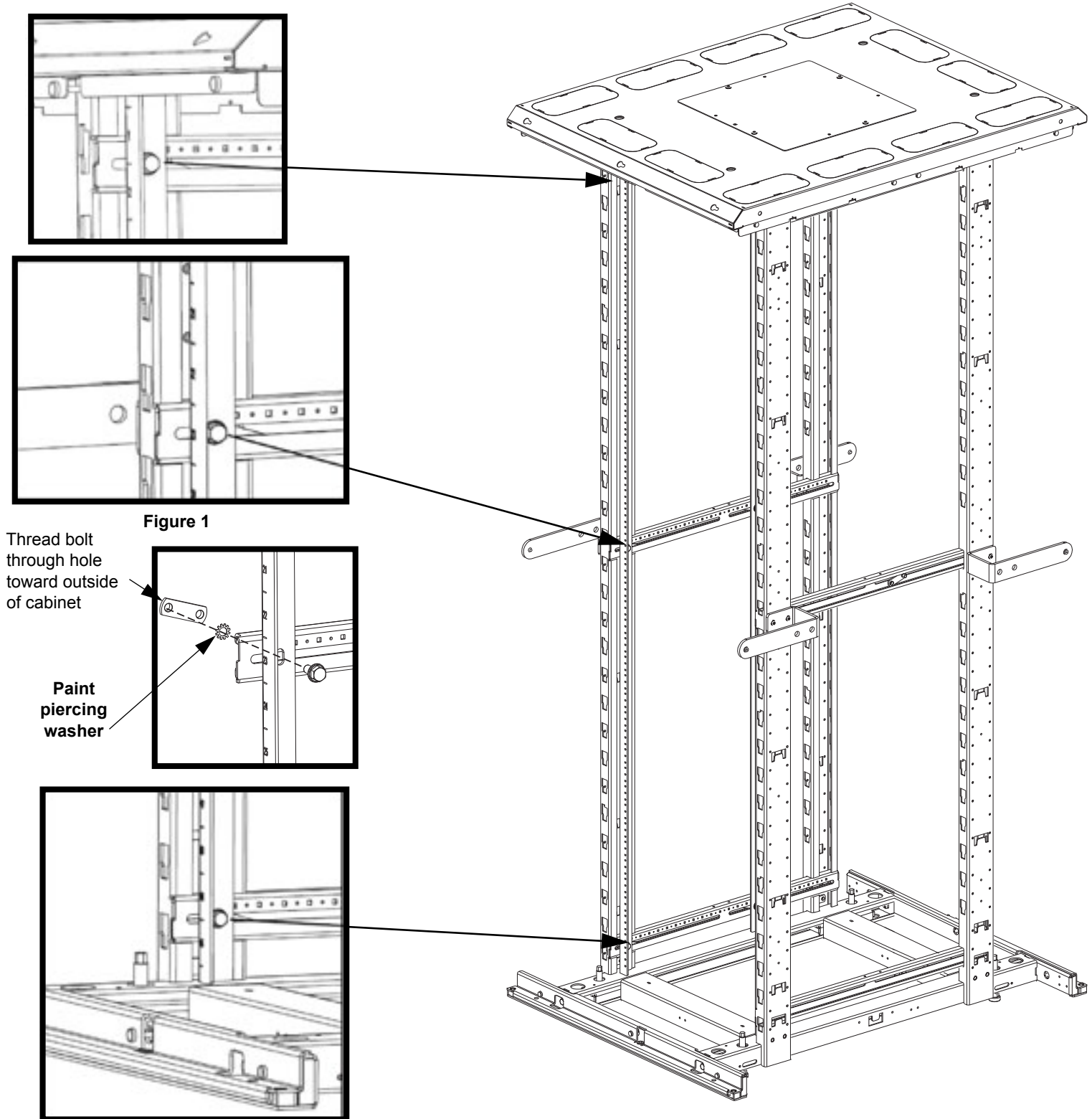
Grounding

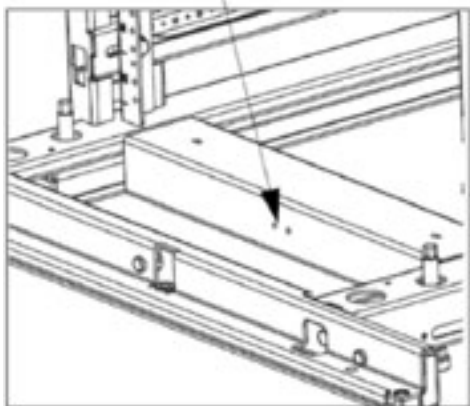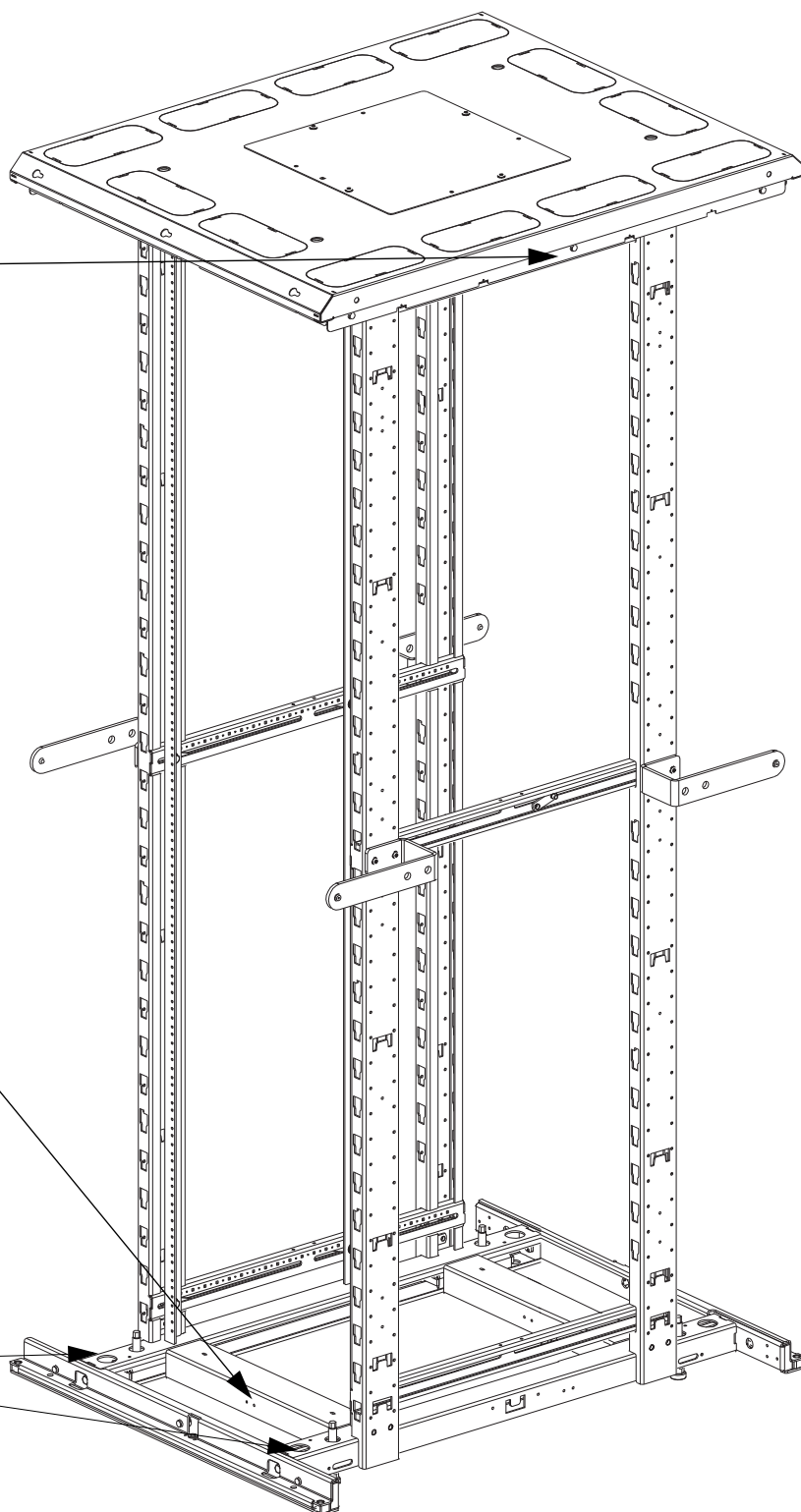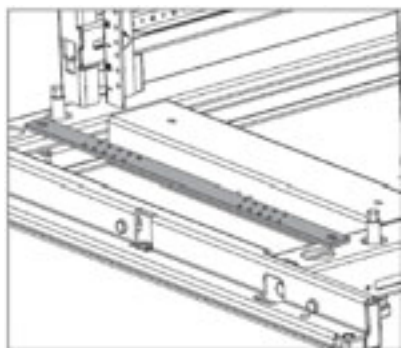The Grounding locations for connection to the CBN (Common Bonding Network) are as shown. Remove masking from desired grounding location. Use *PANDUIT* RGEJ series equipment jumper CBN connection.
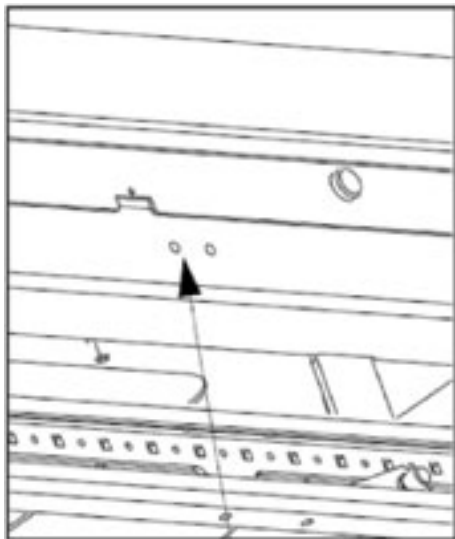
Grounding Lug Location

**Grounding Bar Location
(*PANDUIT* RGRB series)**

Cabinet Door Specifications

Before performing any procedures to the cabinet door, please take a minute and select which door application you are working with. One option for your cabinet door system is the CNDDE application, which is illustrated below. The pin assembly of this door is visibly different from the alternative. If this is the door style you are currently working with, please **continue on to page 14** of this document.

CNDDE Application
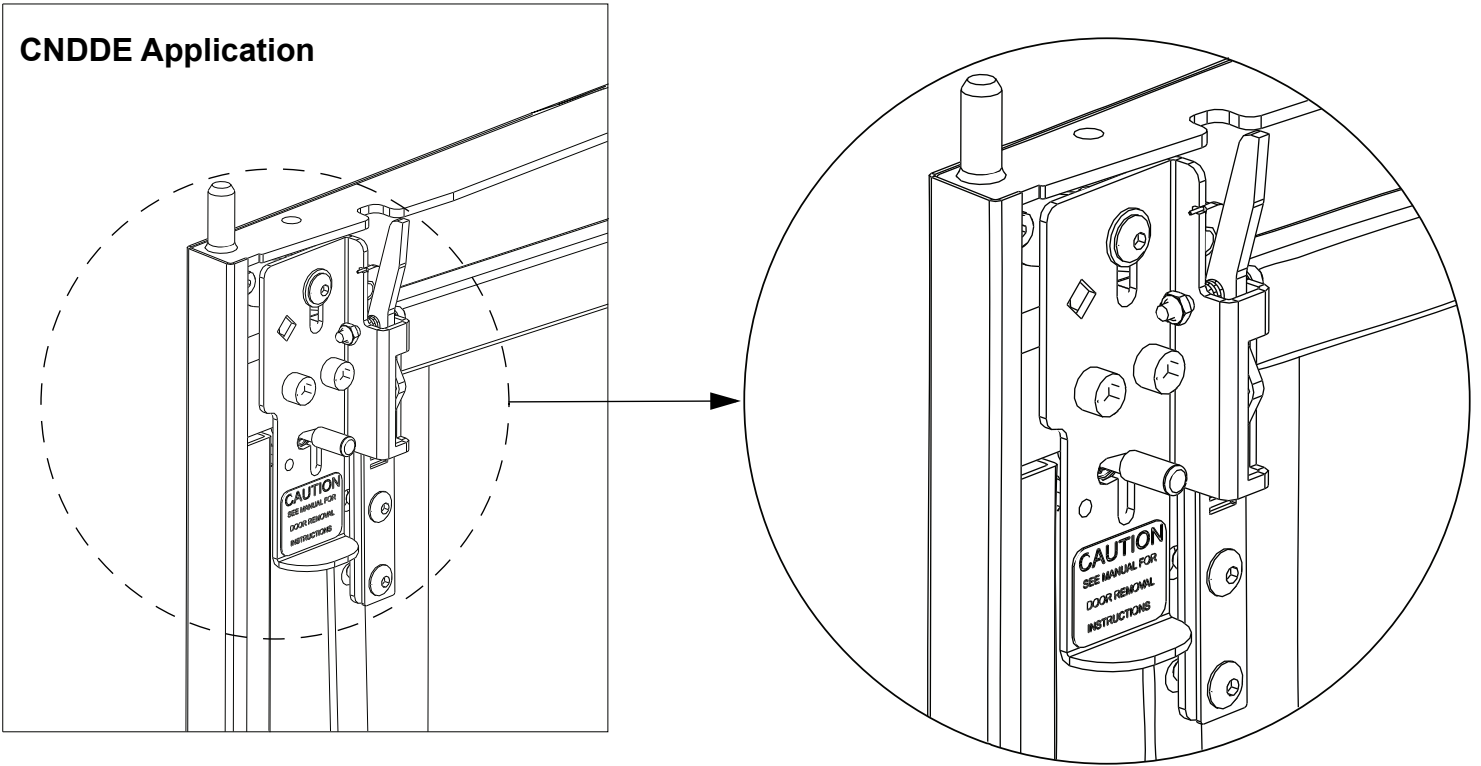
If the door option above does not match the system you are currently working with, you are working with the CNDD application. Although both doors are very similar, the easiest method of distinguishing the two of them apart is their mechanized pin assembly. The CNDD door system is illustrated below. If this is the style door you are currently working with, please **click here** for CNDD instruction document **CM322**.

CNDD Application
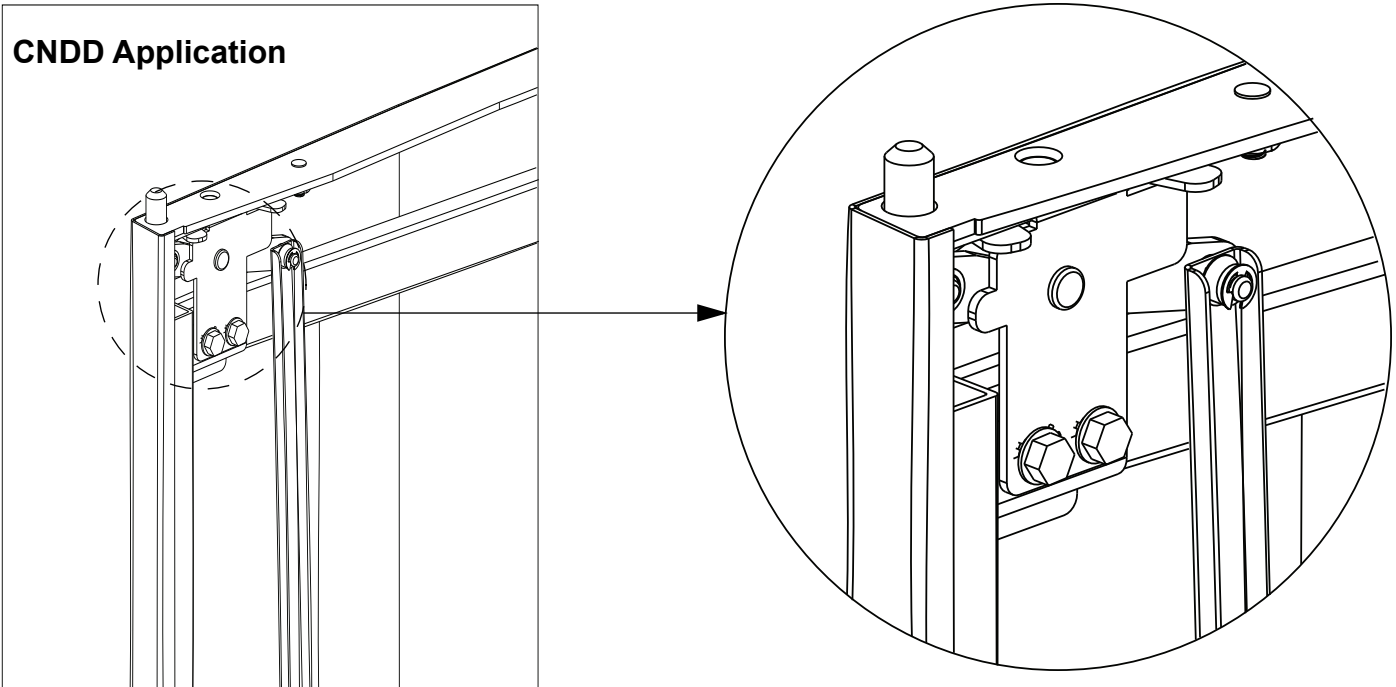
Dual Hinge Door Installation and Removal (CNDDE)

To install, lift door and insert lower hinge pin into the bushing in the bottom door support. Orient the door so the top hinge pin is near the top cabinet bushing. Using a pinching action, pull the red finger handle over and down to retract the hinge pin. Release the red finger handle when aligned with the top bushing. To remove, support the door on the open side with one hand while retracting the hinge pin with the other hand as described above.
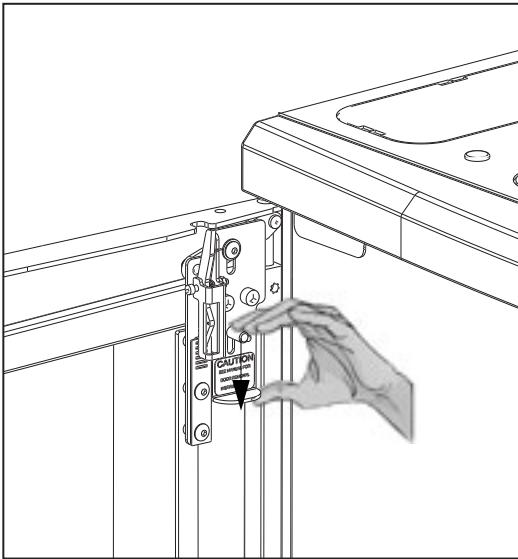
Upper Hinge Location

Caution: Support the weight of the door during removal.
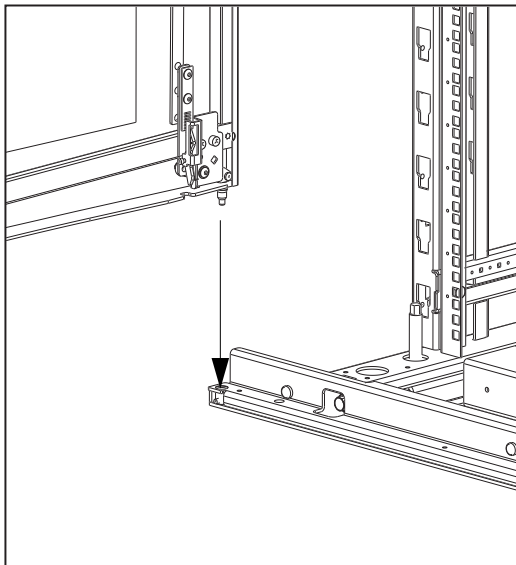
Lower Hinge Location

Note: For cleaning *PANDUIT* recommends using '*SIMPLE GREEN*' all purpose cleaner (or local equivalent) and a lint free cloth

Dual Hinge Door Usage (CNDDE)

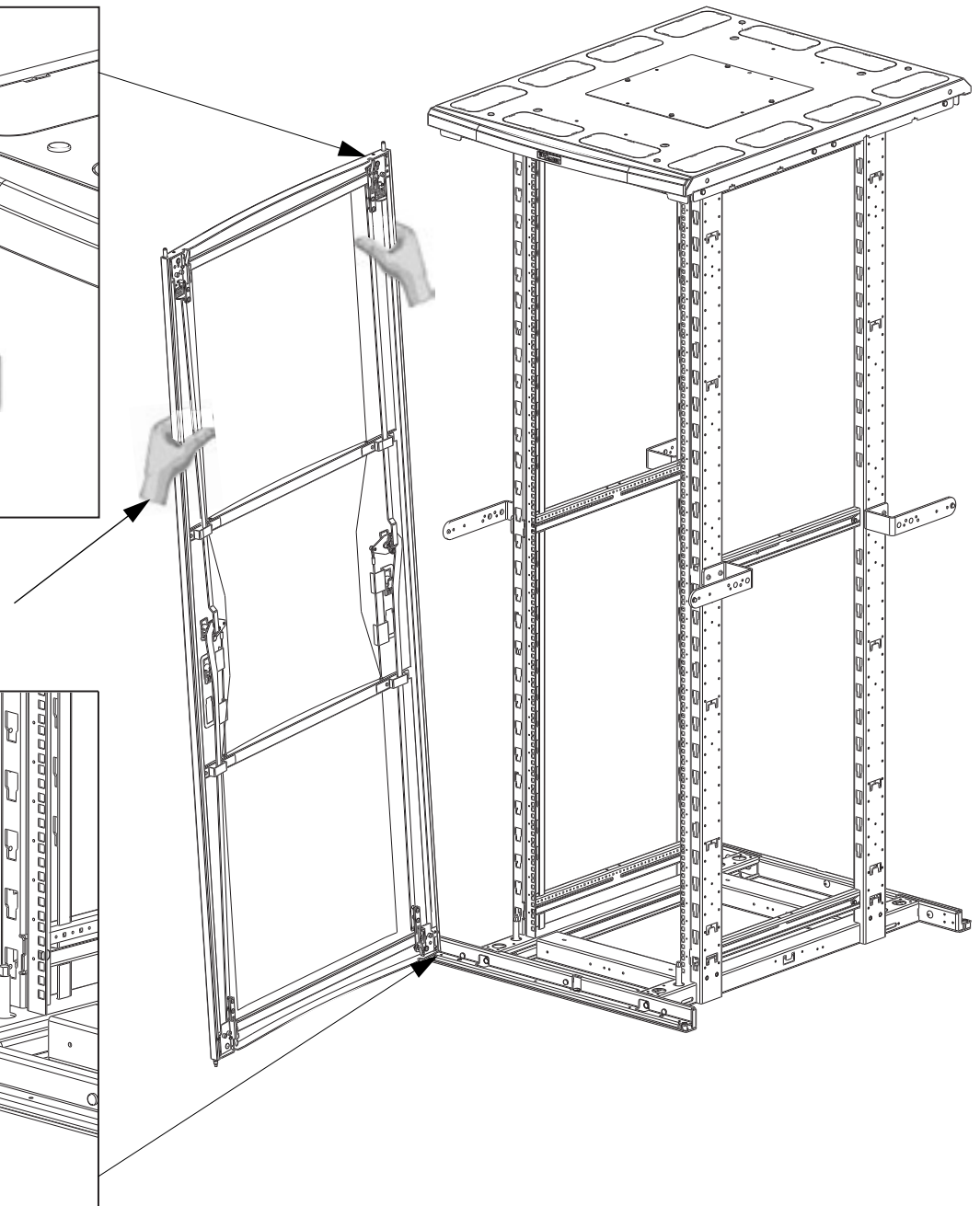The dual hinge door has the unique ability to open on either the left or the right side. This allows full access to either side of the cabinet. For safety, the dual hinge door features an interlock system that prevents handles from turning when either side is open. To close a handle that is locked open, press the spring-loaded levers in the top and the bottom corners of the door and turn the handle simultaneously.

Spring Loaded Lever
See note below

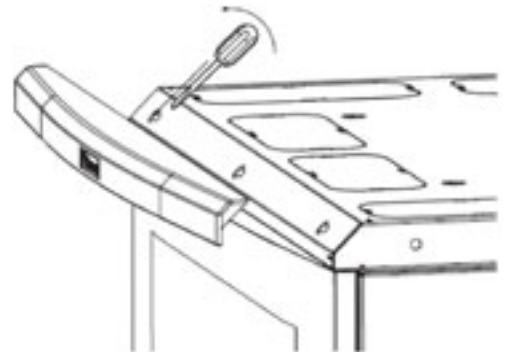**Spring Loaded Lever**
See note below
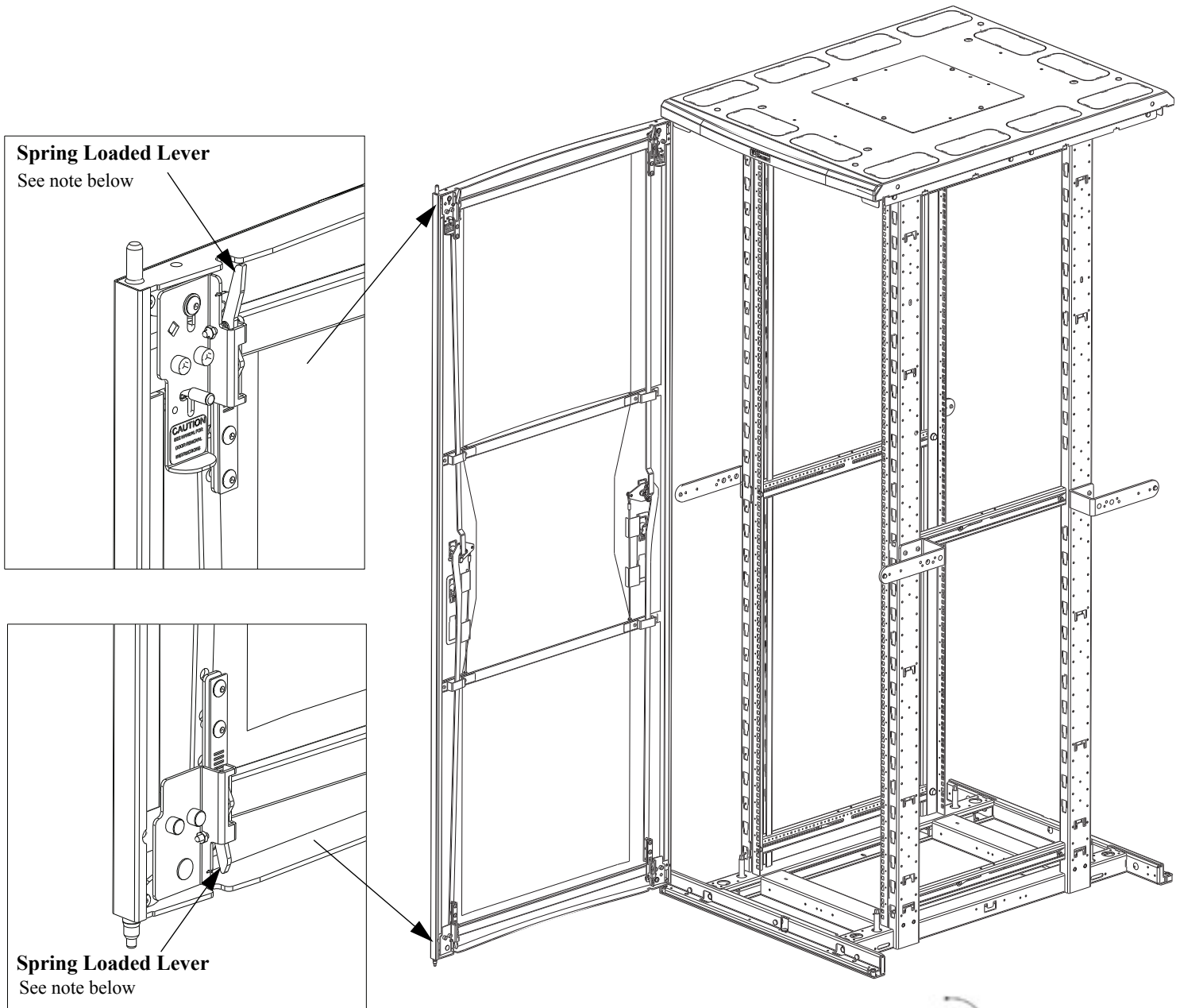
Note: Depress levers simultaneously to disengage handle interlock.

Fascia Installation
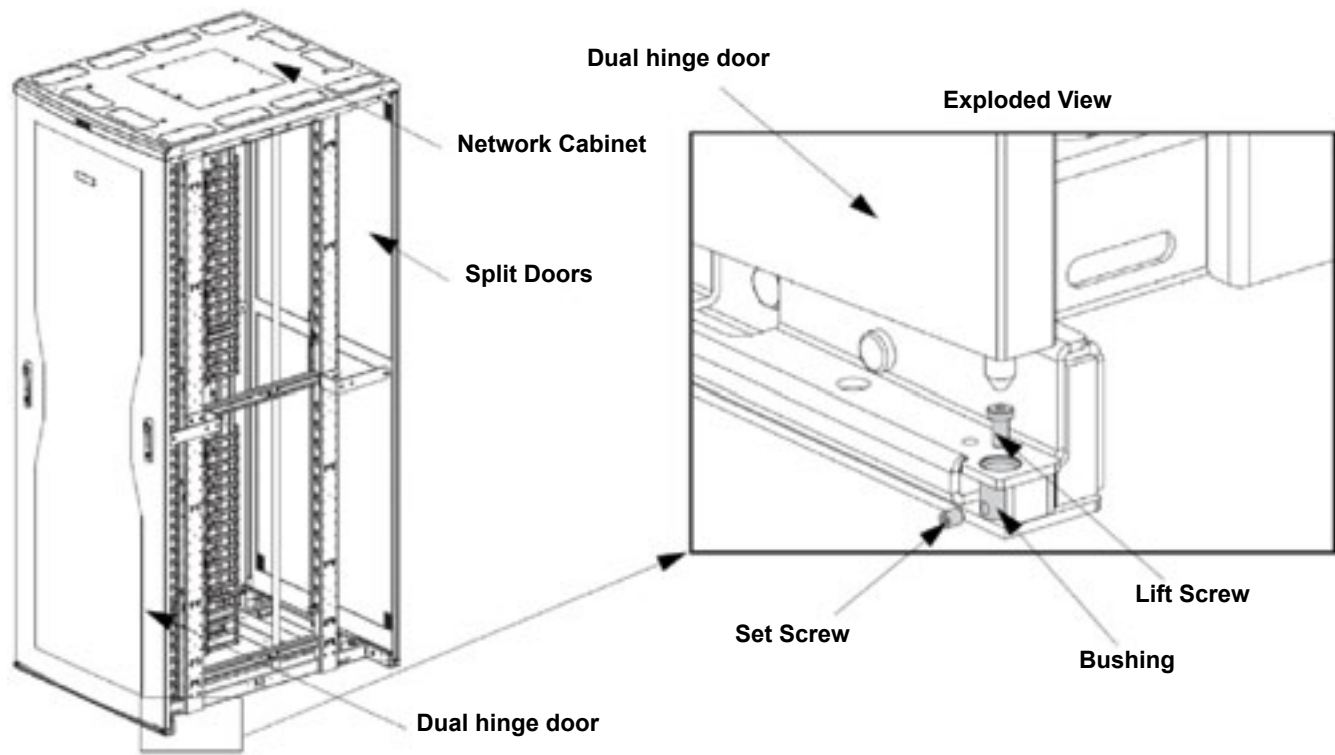Remove 3 keyed knockouts and secure the fascia with the 3 screws provided

Important:
Note: Do not over tighten. Maximum torque applied should be 20in.-lbs (2.26 N-m).

Door Adjustment

The cabinet is equipped with a bottom door shoe lift bushing. The purpose of this lift bushing is to provide vertical adjustment within a cabinet's door frame and enable cabinet doors to be adjusted for a consistent fit and function.

Dual hinge door

Exploded View

Network Cabinet

Split Doors

Lift Screw

Set Screw

Bushing

Dual hinge door

The door shoe lift bushing allows field adjustments on the cabinet doors. Loosing the set screw and raising the lift screw, which lifts the door, adjusting the door's fit within a cabinet's door frame.

Door adjusted by lift bushing
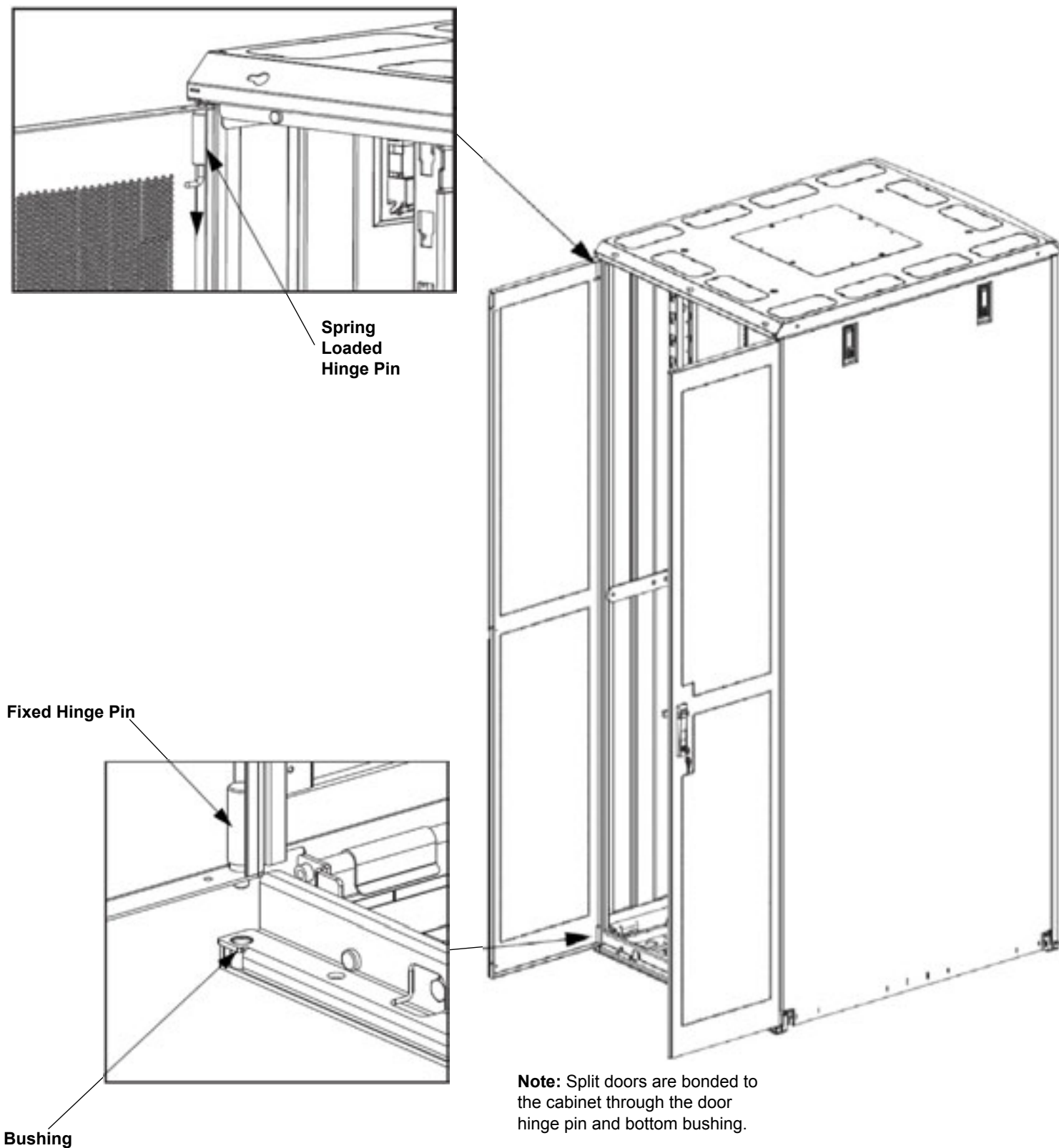maintaining consistent top gaps

Corrected door fit by adjusting
opposite side lift screw.
Re-tighten set screws when
desired fit is achieved

Unleveled cabinet causing insufficient
gap between door and door shoe,
resulting in rubbing or interference
with bottom door shoe
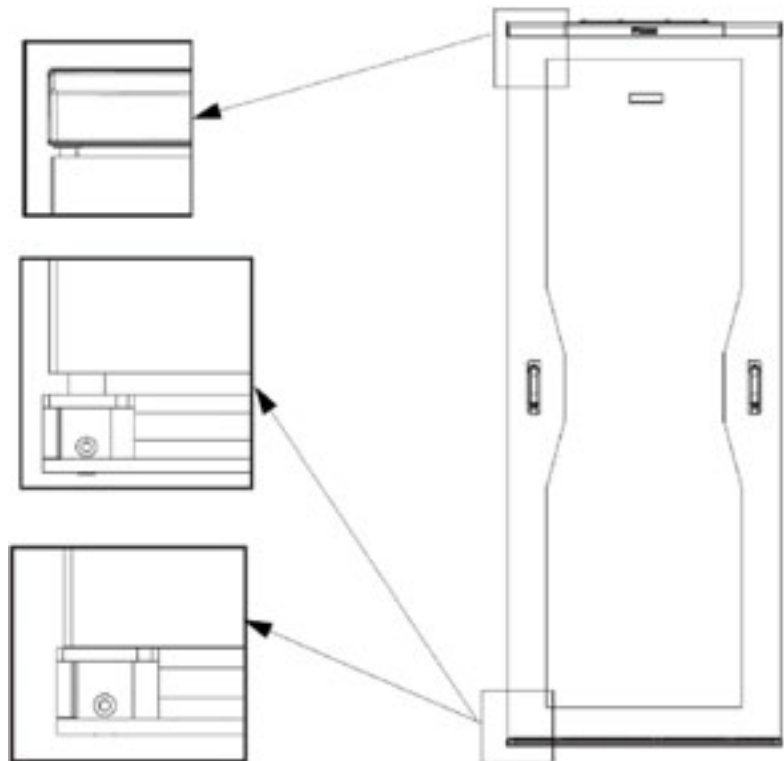
Split Door Installation (CNDS)

Lift split-door and align fixed hinge pin with the bushing in the bottom door support. Swinging door up, pull down the lever of the spring loaded hinge pin and align pin with the bushing in the top cap. Release lever when aligned. To remove the doors reverse steps

Spring Loaded Hinge Pin

Fixed Hinge Pin

Bushing

Note: Split doors are bonded to the cabinet through the door hinge pin and bottom bushing.

Side Panel Installation (CNPS)

Install the four (4) spring clips by removing masking from area as shown. Slide spring clip in place until it clips into pilot hole. The spring clips bond the side panel to the cabinet frame. Install side panel as shown on the next page

Remove Paint Masking

Spring Clip
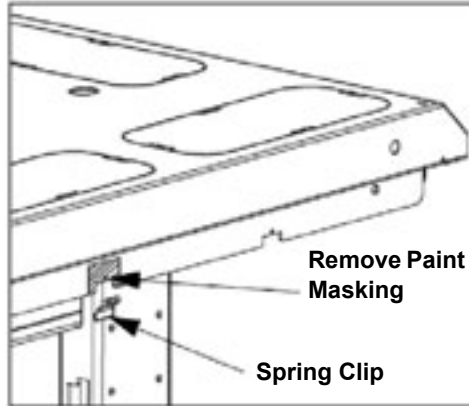
External Tooth Lock Washer

Mid-Level Center Support Bracket

Install the mid-level center support bracket using four (4) #12-24 screws and two (2) #12 external tooth lock washers as shown. The lock washers bond the bracket to the cabinet frame.
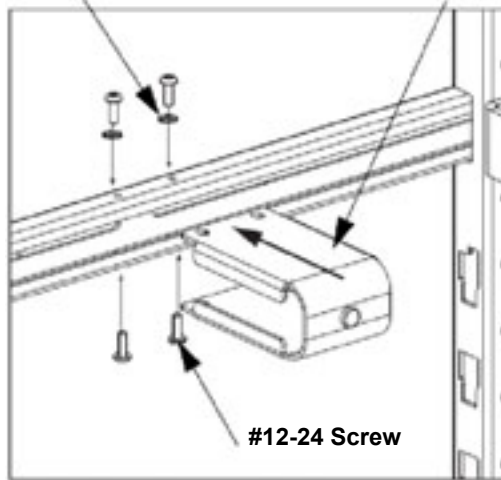
#12-24 Screw

Lower Center Support Bracket

Install the lower-level center support brace using two (2) #12-24 screws and two (2) #12 external tooth lock washers as shown. Adjust brace to support the bottom tube support bar assembly as needed.The lock washer bond the bracket to the cabinet.

External Tooth Lock Washer
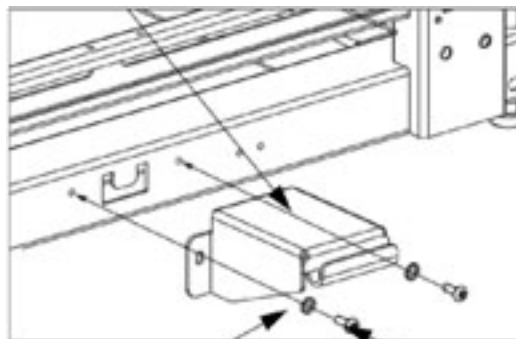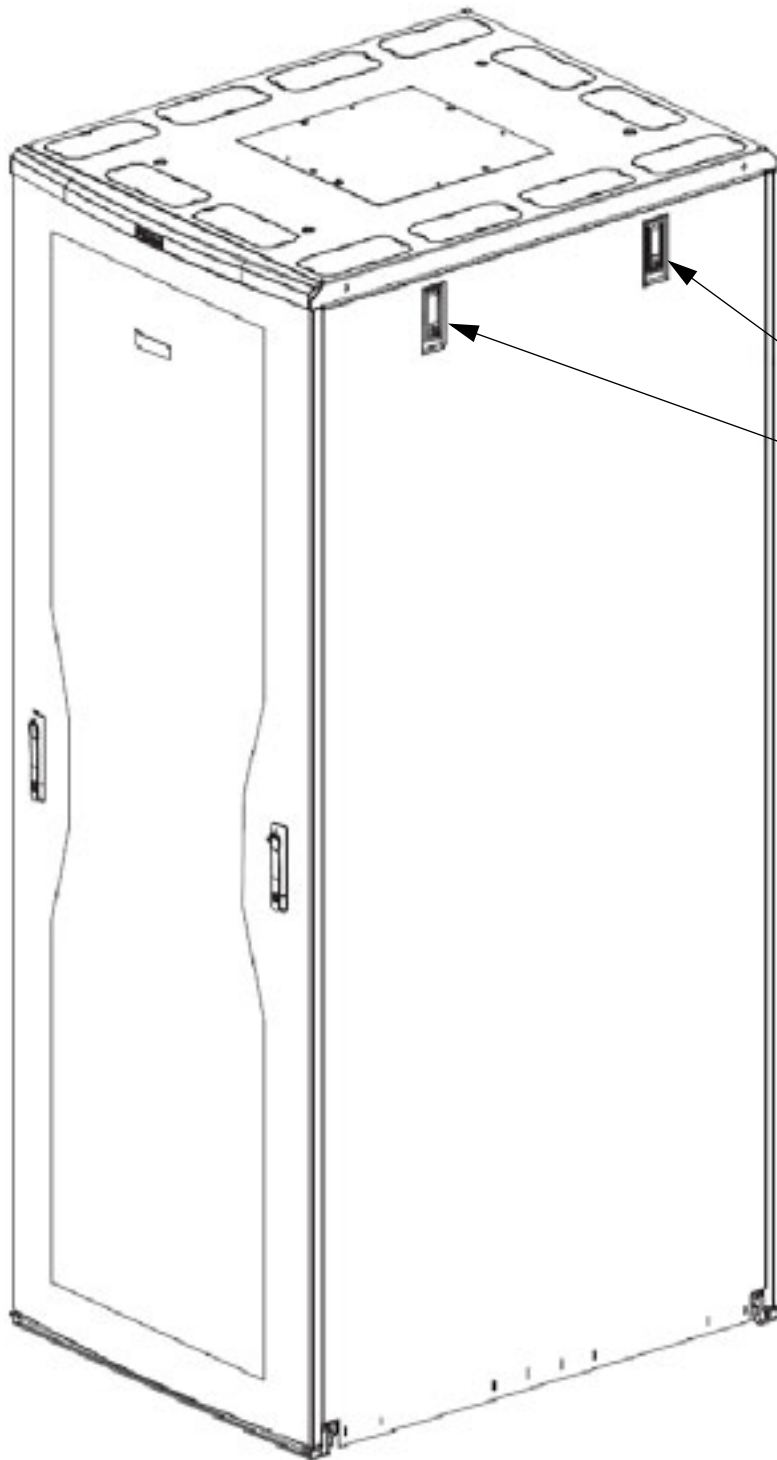
#12-24 Screw

Install the bottom tube support bar assembly using four (4) #12-24 screws and two (2) #12 external tooth lock washers as shown. Adjust assembly as needed to fit side panel squarely in place with cabinet opening. Check around side panel edge for gap consistency. The lock washer bond the bracket to the cabinet.
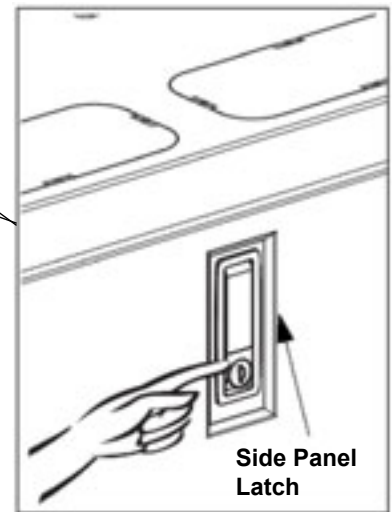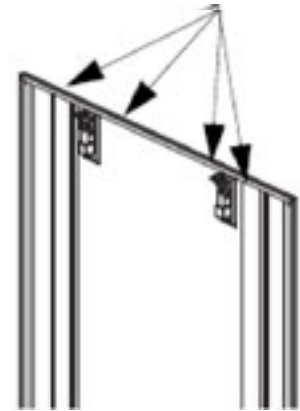
Support Tube Assembly

#12-24 Screw

External Tooth Lock Washer
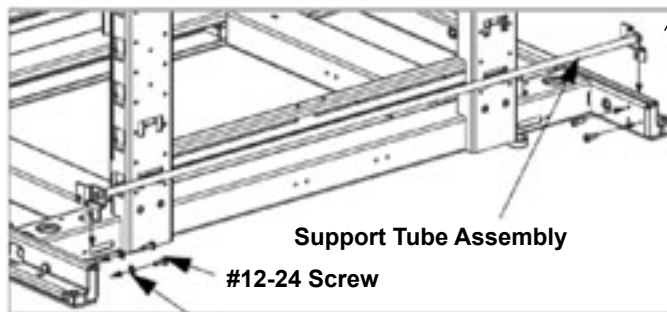
Side Panel Installation (CNPS)

Lift up side panel until mounting hooks are resting on the support tube assembly. Rotate panel into place with latches open and close latches. Adjust latch grip range if necessary. To remove reverse steps. If side panels are going to be used between cabinets, install (if needed) prior to ganging cabinets. If switch air ducting (CNAE series) will be used with side panels between ganged cabinets, install both ducting and side panels prior to ganging.
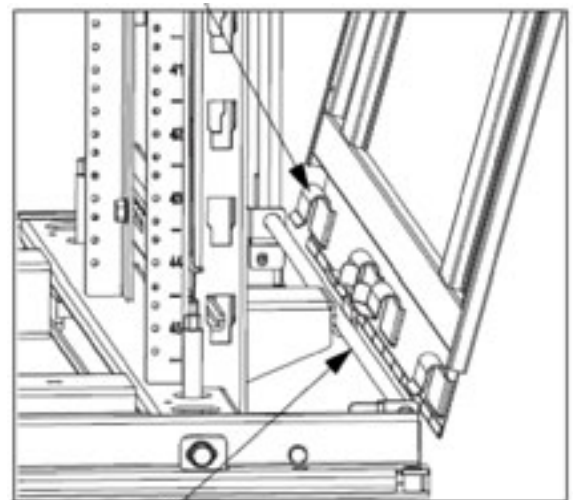
Note: The side panel is bonded the cabinet at the interface between the spring clips on the top cap and the side panel masked area. If a side panel is moved to a different cabinet, the masking should be removed from the cabinet top cap and hardware should be moved as shown on page 18.

Remove masking (if needed)

**Side Panel Latch**

Mounting Hooks

Support Tube Assembly

Overhead Cable Openings

Cabinet is equipped with multiple covers and knockouts for cable entry. The center top plate can be removed by removing the four (4) #12-24 screws that hold it in place. Knockouts can be removed by cutting the (8) tabs with a wire cutter as shown. Bezels are to be snapped into position where knockouts have been removed, as shown below. The removable covers can be snapped into overhead cable opening bezels. Grommet edging is provided and is to be used around any knockouts that are removed where bezels and removable covers are not installed. Grommet edging should be cut to 21" in length to cover the edges of each removed knockout.

Removable Cover

Overhead Cable Opening Bezel

Overhead Cable Opening Bezel (INSTALLED)

Center Top Plate
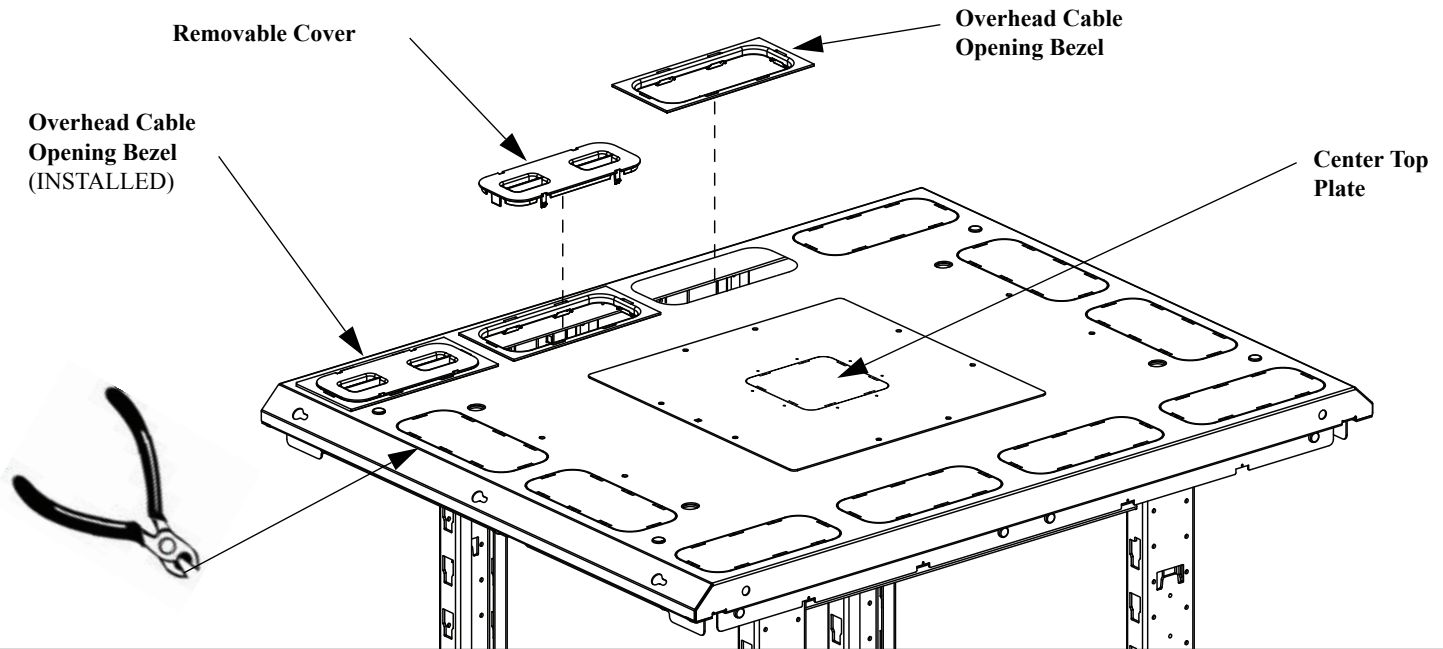
Cable Management Installation

Included in the cabinet are (2) sets of cable management fingers sections (10 Right 10 Left). Cable management can be installed where desired by inserting the tabs on the rear of the finger sections in the mounting slots slot located on the four (4) cabinet posts and sliding downward. To remove reverse the process.

Keyed Tab

Right Finger Section

Left Finger Section

Finger Tab
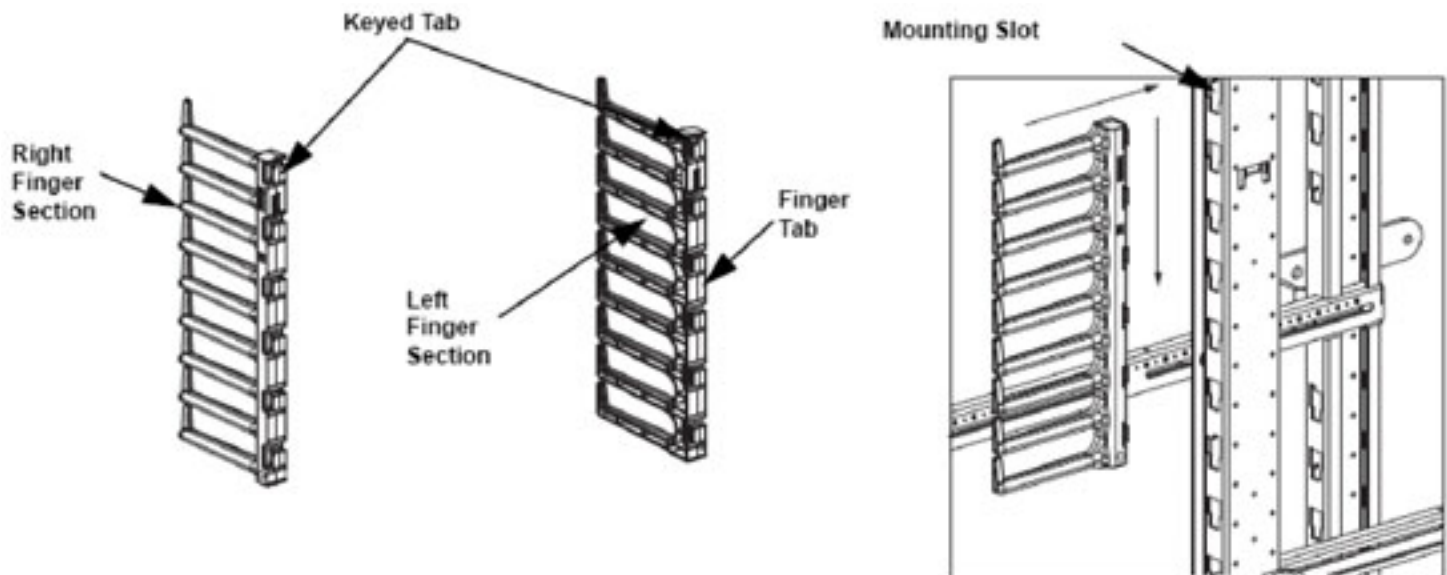
Mounting Slot

Note: The top mounting tab and mounting slot are keyed to allow proper alignment with rack units