



ARION 600W Series Assembly Guide Innovative 19" Enclosure System

Product Compliant: UL2416/UL60950 File # E472259



This assembly guide applies to the following ARION Enclosure: 600 Series

PREFACE:

This assembly guide is provided to prevent service personnel from committing an act that results in the risk of fire, electric shock, or injury to persons. The equipment shall be installed or serviced by trained service personnel in accordance with the applicable requirements of the National Electrical Code, NFPA 70-1999 or Canadian Electrical Code and the applicable sections of ANSI C2, the National Electrical Safety Code. Not following these instructions could result in the risk of fire, electric shock, or injury to persons.

SAFETY SYMBOLS USED IN THIS MANUAL

This assembly guide provides general safety guidelines to be observed during installation, operation, and maintenance of the ARION Enclosure.



WARNING : Failure to follow directions in the warning could result in injury to persons or loss of life.



TIP : Indicates a recommended way of working.

SAFETY CONSIDERATIONS



WARNING: Improper handling and use of the ARION Enclosure could result in equipment damage, serious injury, or possible death.

- When applicable, rack systems are not intended as enclosures and do not provide any degree or protection as that of an enclosure.
- Only UL[®] Listed ITE (Information Technology Equipment) units should be installed inside the ARION Enclosure.
- Be sure to read and follow all individual manufacturer equipment manuals for safety and installation instructions.
- Proper spacing is required when installing electrical equipment to avoid electrical shock. Maintain minimum spacing between the accessories and components and the computer enclosure assembly for safe operation of the equipment when installed in accordance with the specification.



WARNING:

- Only identical ARION enclosures should be installed together when ganging.
- The ambient temperature operating range for the ARION Enclosure and accessories is +50 to +95 °F (+10 to +35 °C).
- The non-operating temperature is -4 to +140 °F (-20 to +60 °C).



WARNING: Be careful when moving enclosures before installation. Sudden stops and starts, excessive force, obstructed routes, and uneven floor surfaces may cause the enclosure to topple over.

LOADING EQUIPMENT:



WARNING: Only install equipment after the ARION Enclosure has been properly secured. If you need to move the enclosure after equipment installation, exercise extreme caution to avoid the enclosure tipping over. The casters are rated to about 650 lbs each dynamic load. Moving a fully loaded cabinet will generate heat which can damage the casters. To avoid overheating, move the enclosure a maximum of 100 yards, then stop for 2 minutes and allow the casters to cool down. Repeat until final location is reached.

- Once in place at the desired/intended location, deploy the leveling feet for maximum stability.
- If stabilizing brackets are used, they must be tightened until they are flush to the frame.
- Rated or maximum load capacity for the ARION Enclosure is 1,400 kilograms on the floor or on leveling glides.
- No EIA slide rail location instructions are provided here, location is determined by end user.
- To maintain a uniform distribution of the mechanical load in the ARION Enclosure, load the heaviest equipment first, at the bottom of the ARION Enclosure and load the lighter unit at the top.

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Thank you for purchasing our Arion 19" enclosure. We hope you find the product experience completely to your satisfaction and appreciate any feedback you may have.

WARNING

Receiving and Initial Inspection: Although we have taken our best precautions to pack your Arion rack, damage may occur from external forces during shipment of your Arion rack, please follow these steps.

1. Inspect the package for any indentations, holes or other damage and note these issues on the shipping documents. If possible, photograph the damaged area as well.
2. After opening the crate, check the components for any signs of damage. Record any damage and report to our customer service at: commce@chevalgrp.com. Keep the original packing materials in case the shipping company needs to see.
3. All damages must be reported to Cheval within three (3) days after delivery. Claims made after 3 days will not be under Cheval's responsibility.

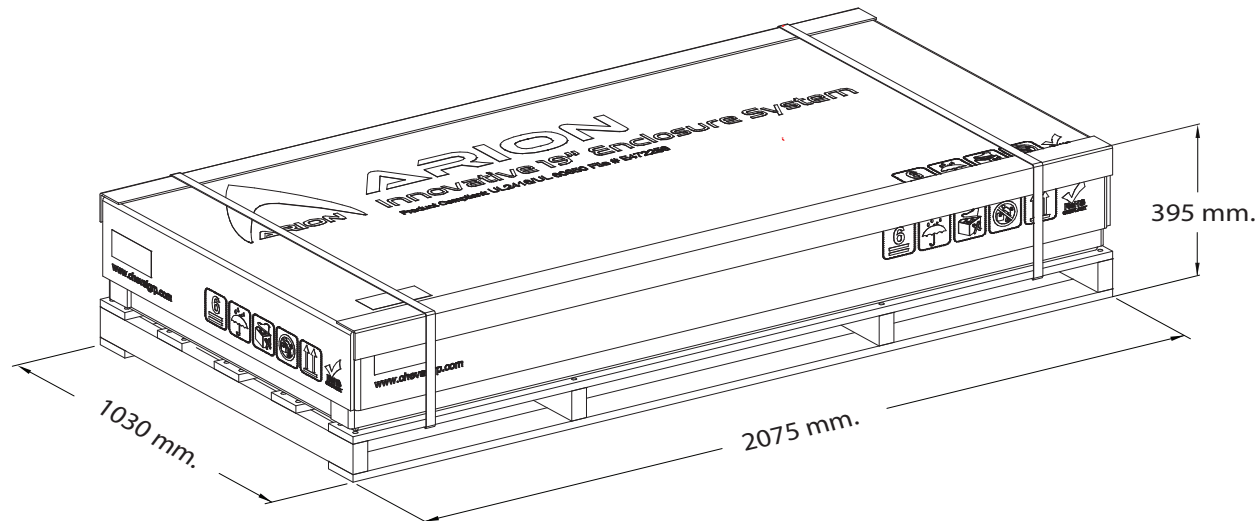
MOVING THE CARTON

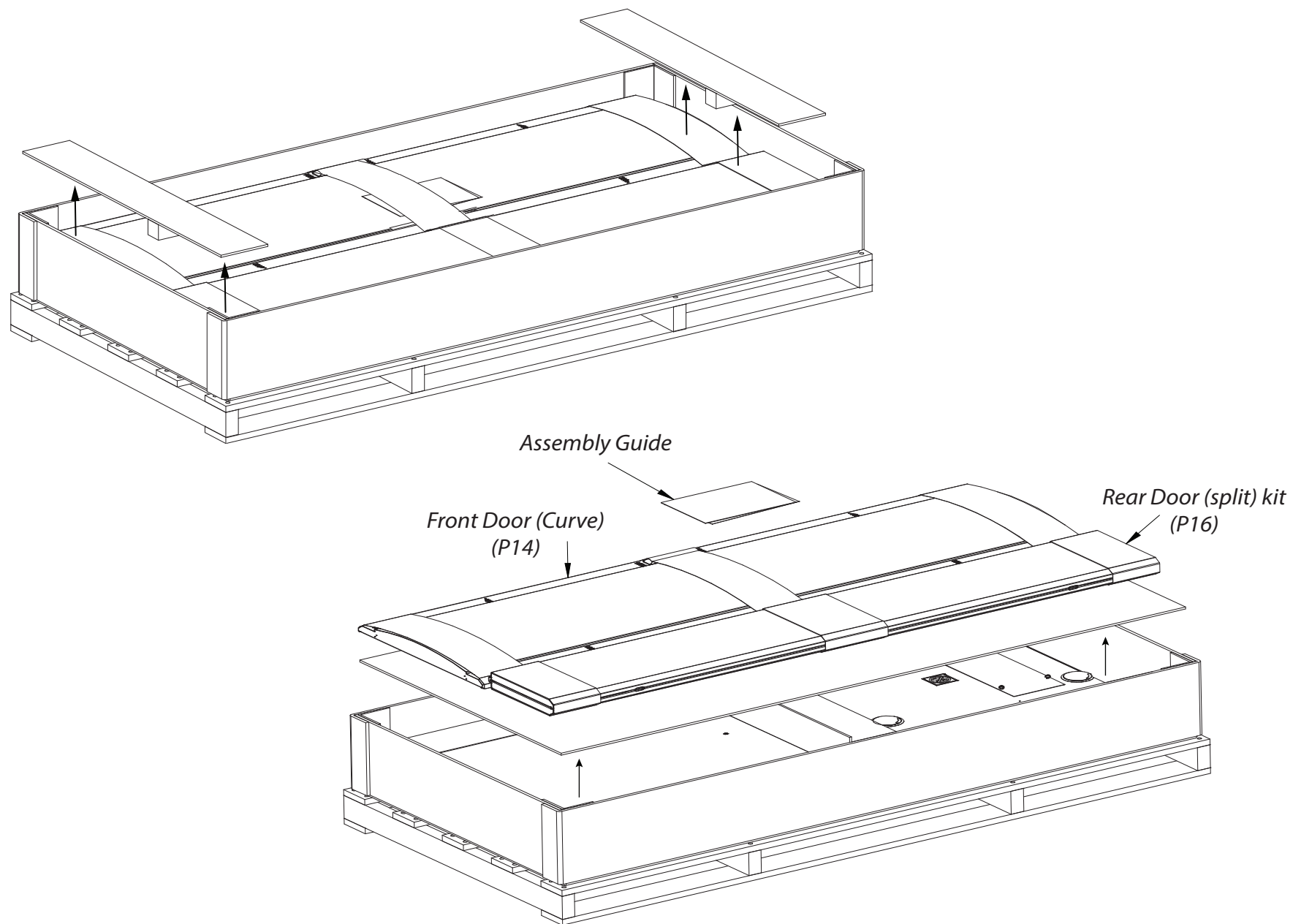
HEAVY LOAD HAZARD: This carton is not intended to be lifted or moved by hand. Failure to follow these instructions can result in injury. The recommended equipment for moving the carton are pallet jack or forklift.

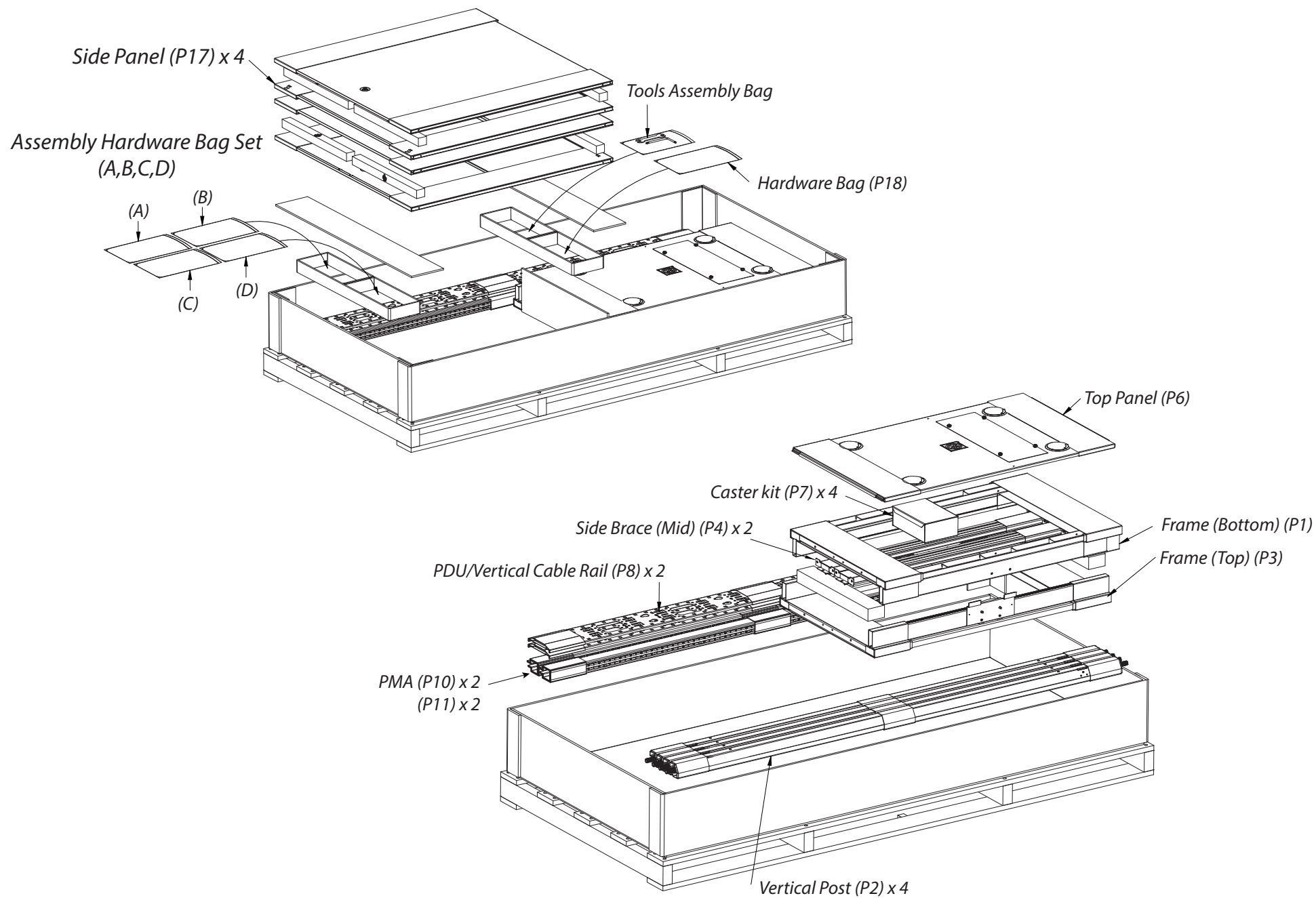
1. Move the carton to a solid, level area clear of obstructions.
2. Carefully cut the wrapping straps securing the carton.
3. Remove the top cover and take out the assembly guide for further instructions.

UNPACKING AND STAGING THE COMPONENTS FOR ASSEMBLY: The Arion Enclosure has been packed to protect the components from damage during shipping. For the best assembly experience, please follow these steps.

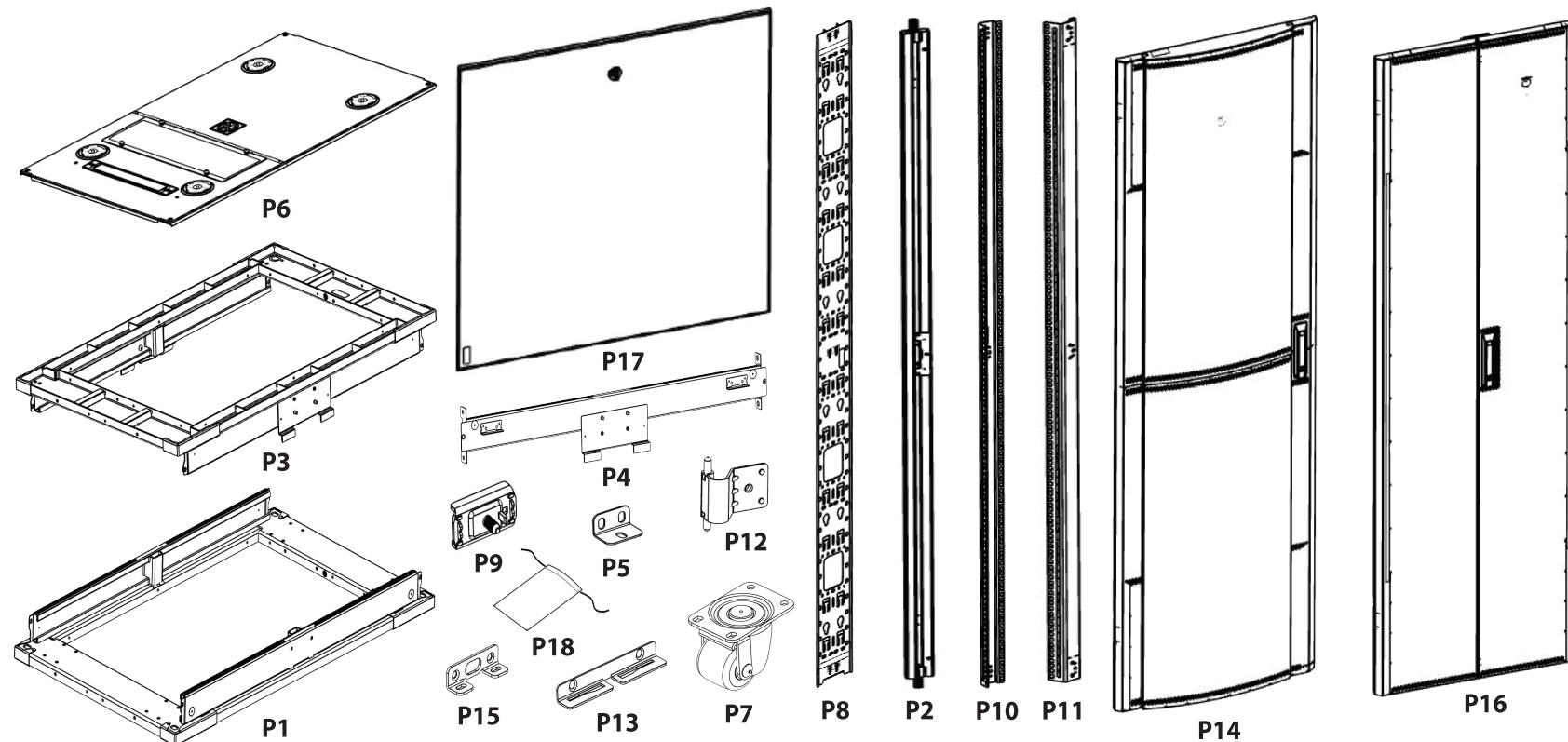
1. Prepare your work area. The area needed is approximately 8' x 8'. The surface must be clean, flat and either carpeted or use a drop cloth to prevent scratching the components. You may find it easier to assemble steps 1-4 on a table or raised surface.
2. Remove the components and check all are complete by referring to the "parts check list". Arrange the components according the assembly sequence, Step1, Step2 and etc.
3. After step 4, stand the rack up on the floor and continue the assembly.







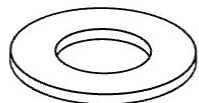
Arion 19" Standard Cabinet: Parts List



Check	Item	Part Name	QTY
	P1	Frame (Bottom)	1
	P2	Vertical Post	4
	P3	Frame (Top)	1
	P4	Side Brace (Mid)	2
	P5	Top Panel Bracket	2
	P6	Top Panel Assy.	1
	P7	Caster kit	4
	P8	PDU / Vertical Cable Rail Assy.	2
	P9	PMA Mounting Bracket	12

Check	Item	Part Name	QTY
	P10	PMA Assy (LH)	2
	P11	PMA Assy (RH)	2
	P12	Door Hinges	6
	P13	Door Latch Bracket	1
	P14	Front Door (Curve) Assy.	1
	P15	Split Door Latch Bracket	2
	P16	Rear Door (Split) Kit Assy.	2
	P17	Side Panel Assy.	4
	P18	Hardware Bag.	1

Arion 19" Standard Cabinet: Assembly Hardware Supplied



H1 (8 pcs.)
Washer Flat M16



H2 (8 pcs.)
Washer Spring M16



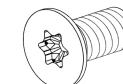
H3 (3 pcs.)
Washer Tooth lock M6



H4 (12 pcs.)
Washer Tooth lock M8



H5 (19 pcs.)
Screw Torx T30 M6x12



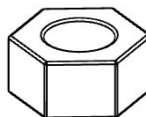
H6 (18 pcs.)
Screw Torx T30 Taper M6



H7 (18 pcs.)
Nut Flange M6



H8 (12 pcs.)
Nut Hex M8



H9 (8 pcs.)
Nut Hex M16



H10 (6 pcs.)
Hinge Bushing



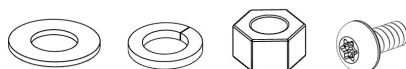
H11 (4 pcs.)
Key



H12 (4 pcs.)
Levelling Feet M10

Assembly Hardware Set List

Set A



(H1 x 8, H2 x 8, H9 x 8, H5 x 8)

Set B



(H6 x 12, H7 x 16, H12 x 4)

Set C



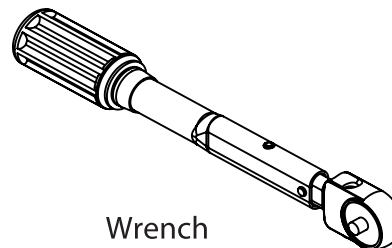
(H7 x 2, H5 x 2, H8 x 12, H4 x 12)

Set D

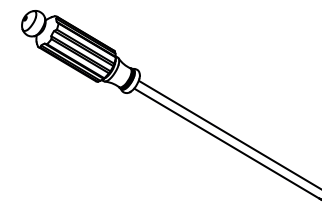


(H5 x 9, H6 x 6, H10 x 6, H3 x 3, H11 x 4)

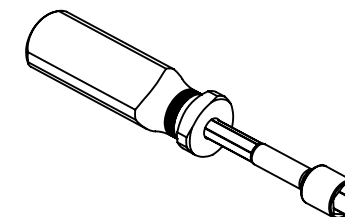
Tools Recommended for Assembly



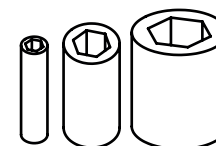
Wrench



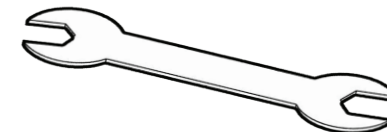
Screwdriver Torx T30



Nut & Screw Driver



Hexagon Socket
No.10, 13, 24

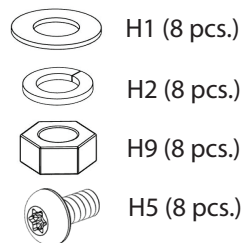


Open End Wrench NO.10,14

STEP 1

Parts: P1 x 1, P2 x 4, P3 x 1

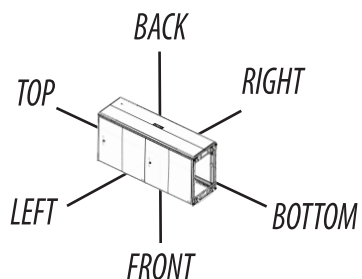
Hardware Set: "A"



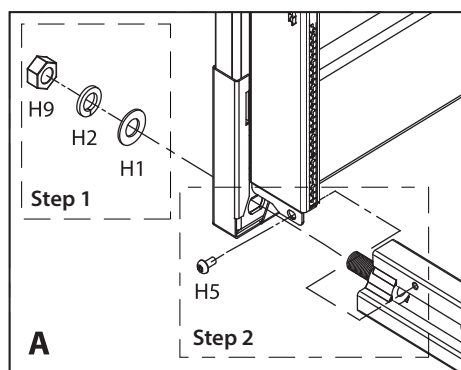
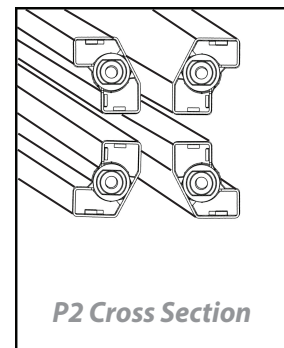
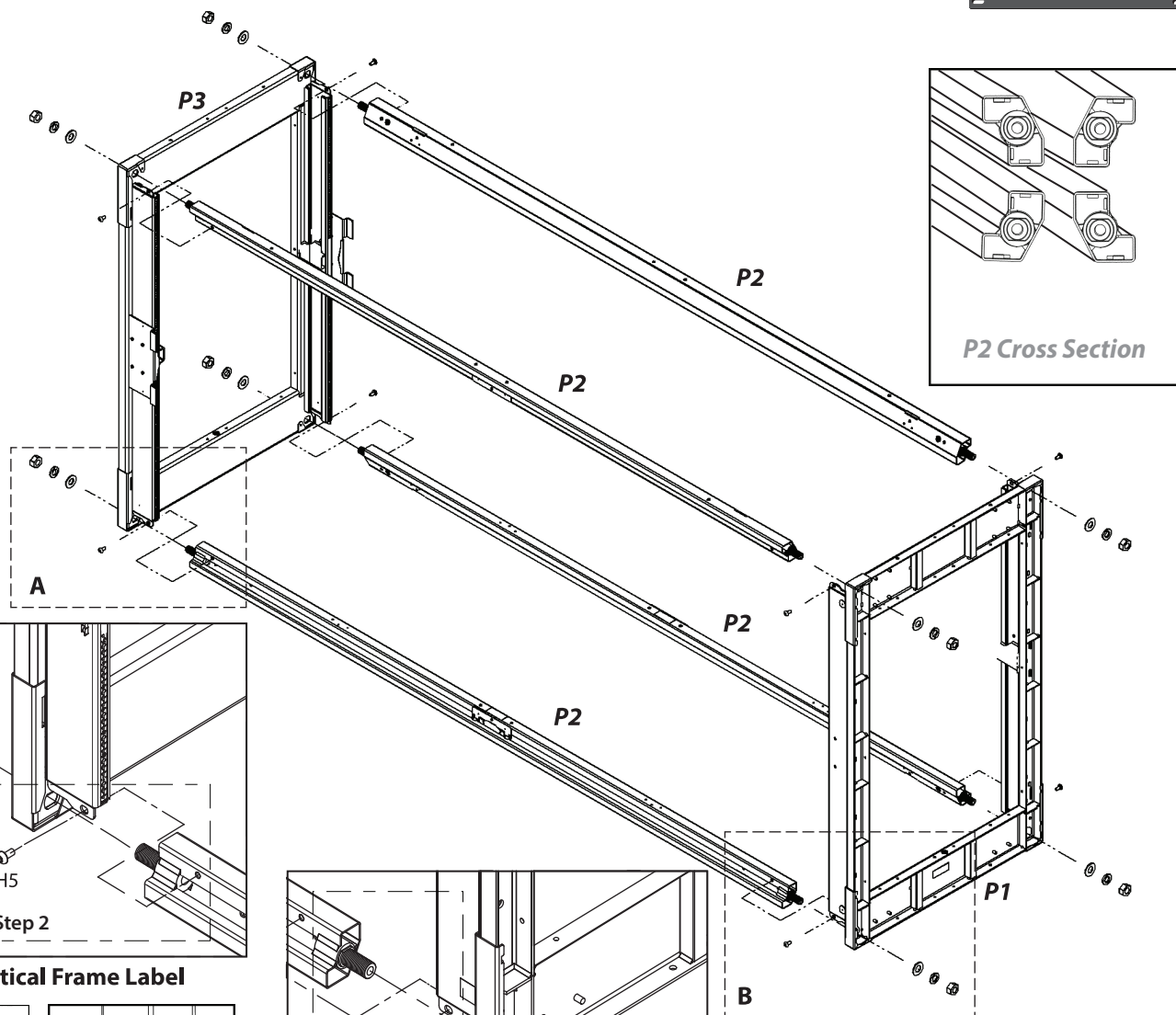
Tools:

- Hexagon Socket No.24 (16mm.)
- Screwdriver Torx T30

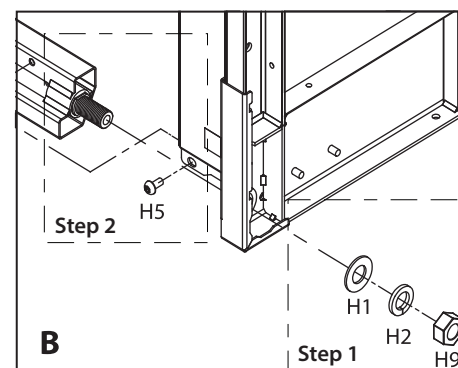
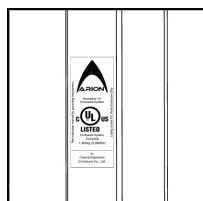
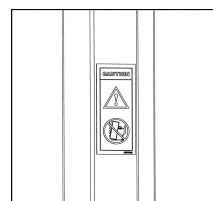
Installing Direction Locate



! Hand tight only



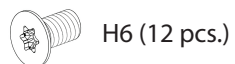
Front Vertical Frame Label



STEP 2

Parts: P4 x 2

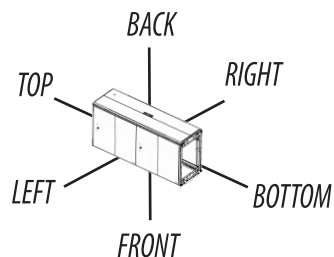
Hardware Set: "B"



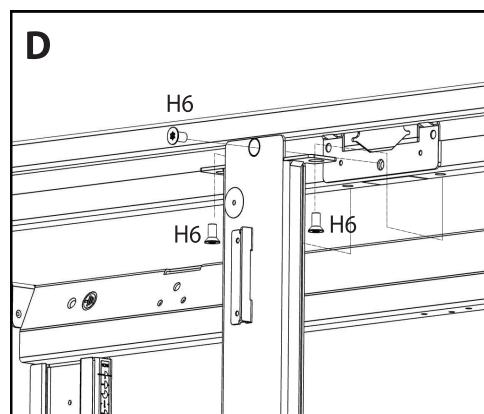
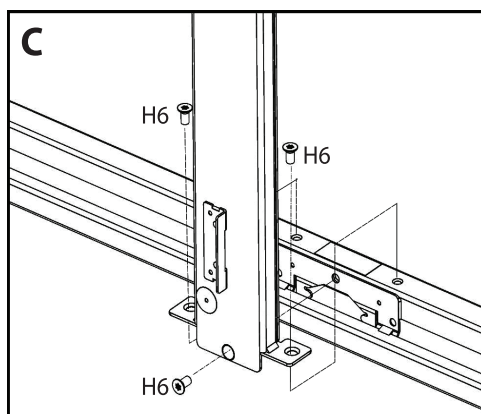
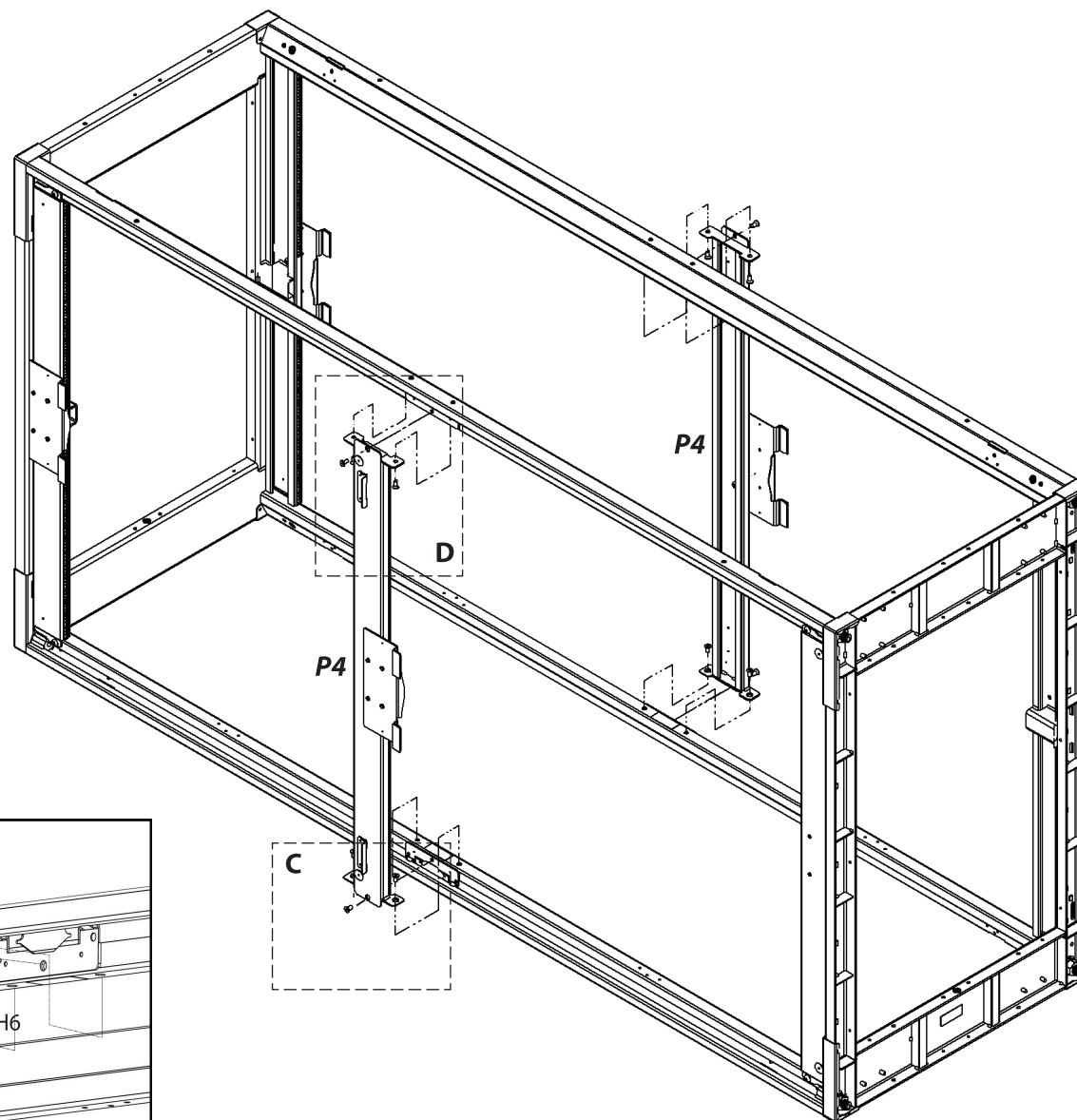
Tools:

- Screwdriver Torx T30

Installing Direction Locate



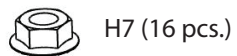
Tighten all location securely



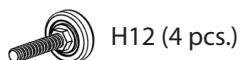
STEP 3

Parts: P7 x 4

Hardware Set: "B"



H7 (16 pcs.)

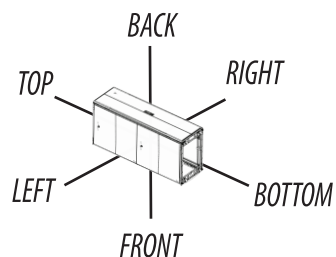


H12 (4 pcs.)

Tools:

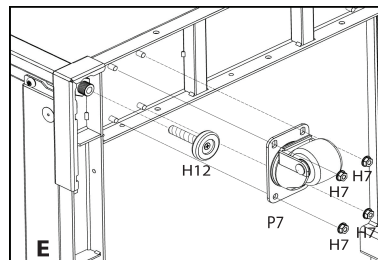
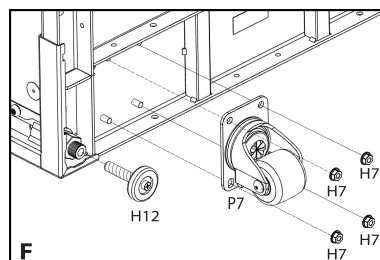
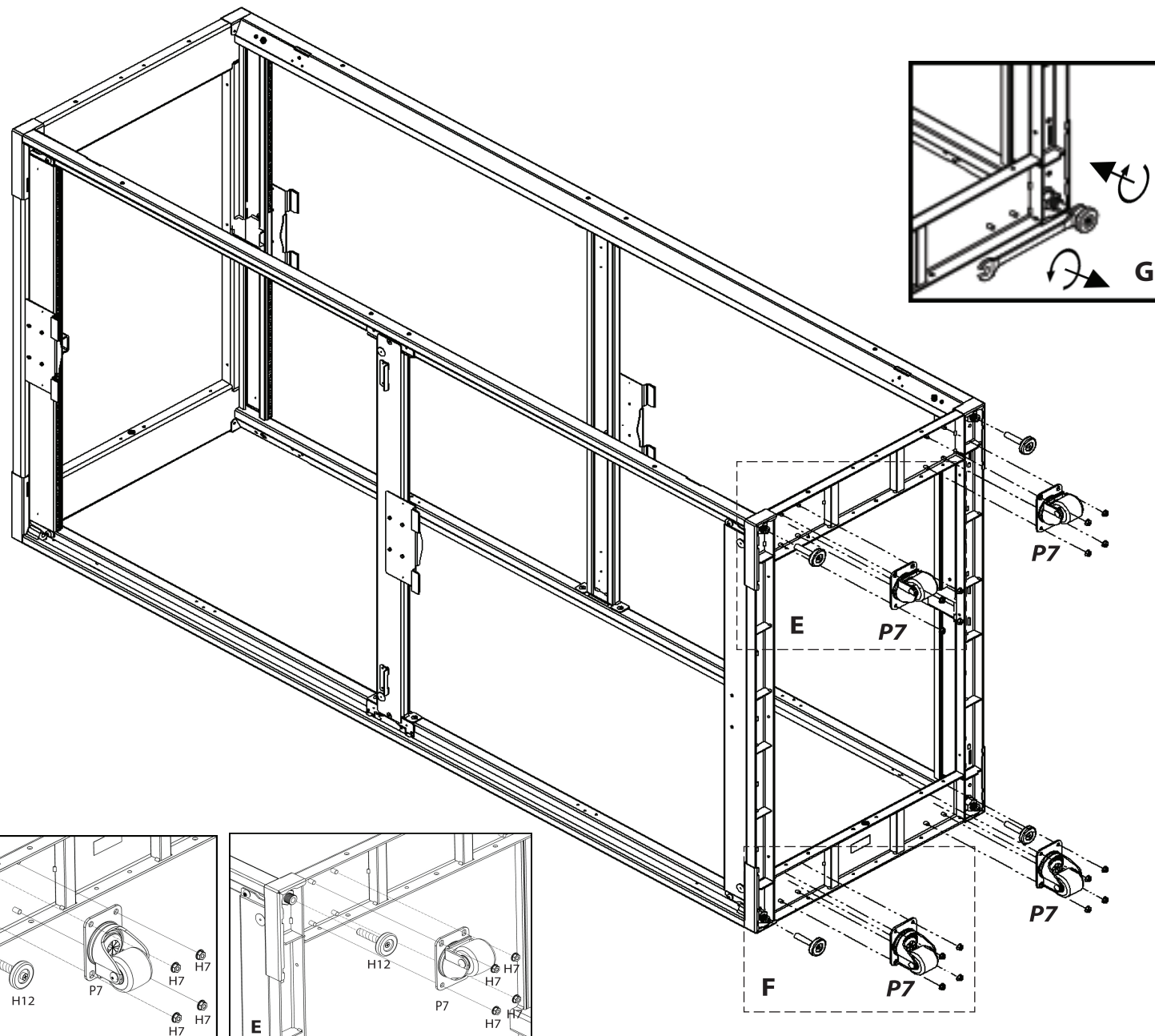
- Hexgon Socket No. 10
- Open End Wrench No. 14

Installing Direction Locate



! Once in place at the desired location, deploy the leveling feet for maximum stability. The rack should not be left standing on the casters.

Leveling feet adjust follow "G" picture



STEP 4

Parts: P5 x 2, P6 x 1

Hardware Set: "C"



H5 (2 pcs.)

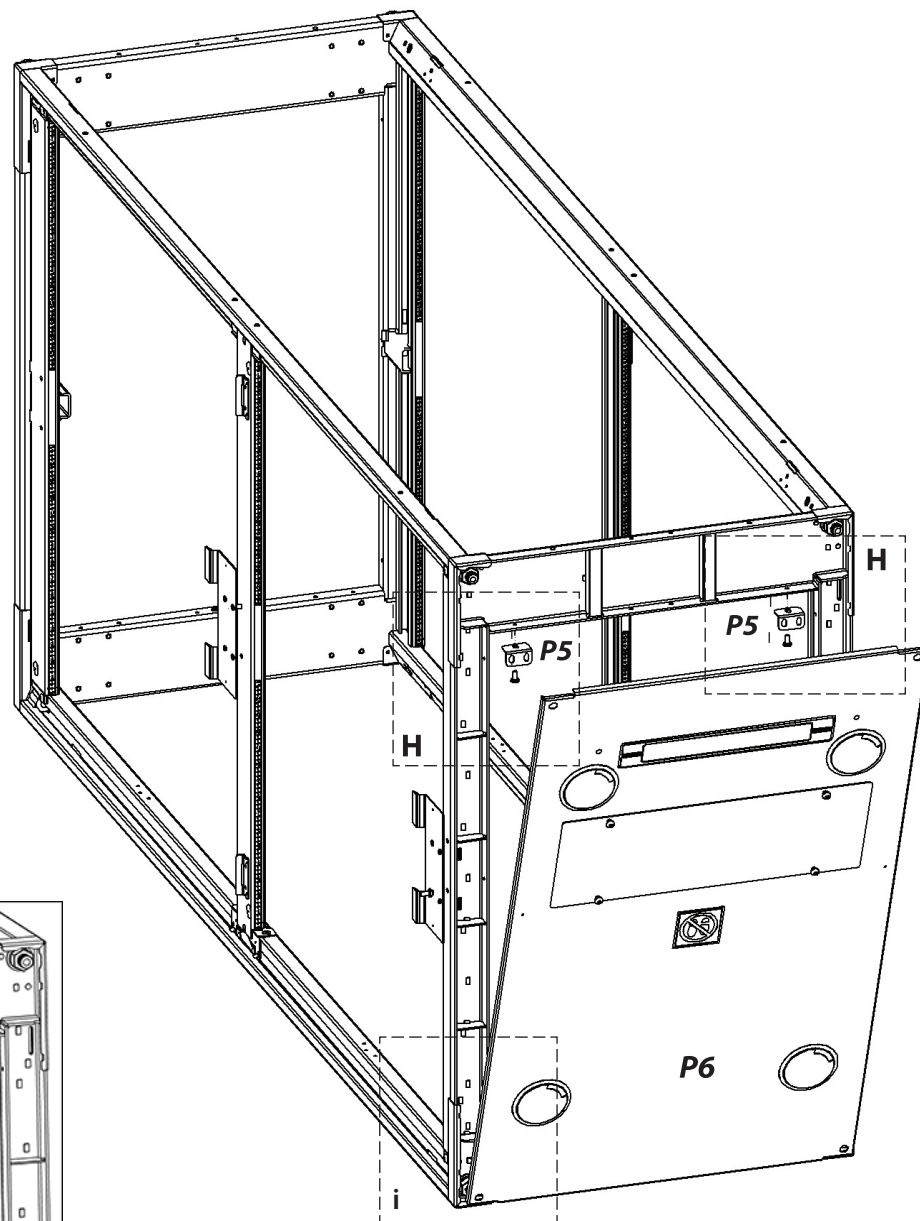
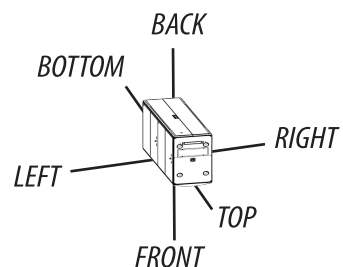


H7 (2 pcs.)

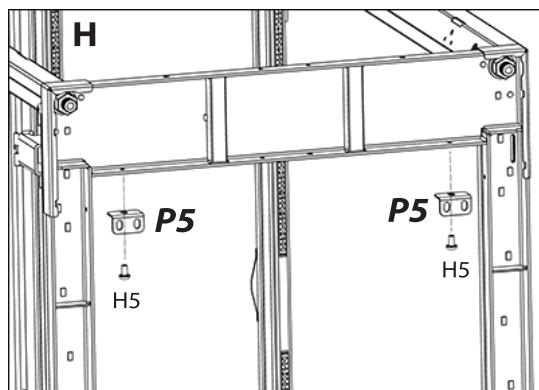
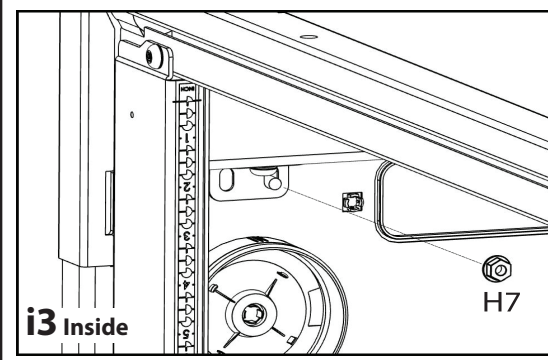
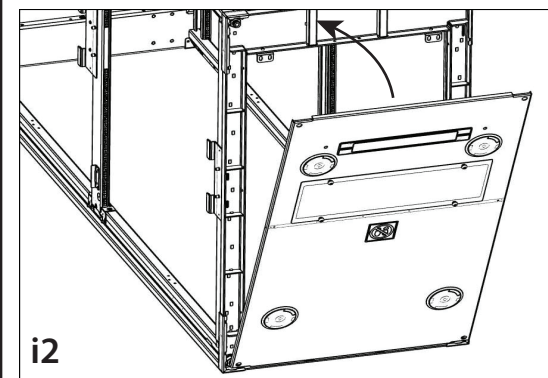
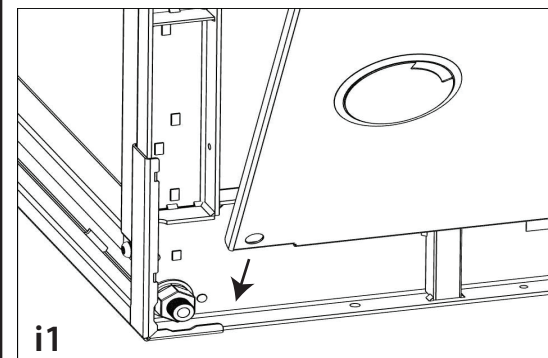
Tools:

- Screwdriver Torx T30

Installing Direction Locate



i (Insert Top panel tabs into frame slots.)



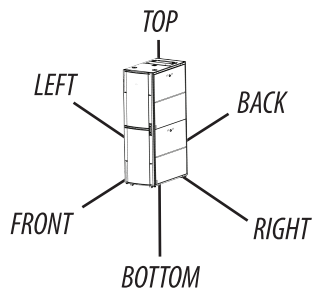
STEP 5

Parts: P8 x 2

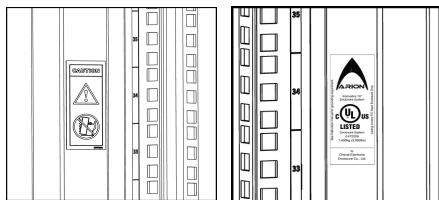
Tools:

- Screwdriver Torx T30

Installing Direction Locate

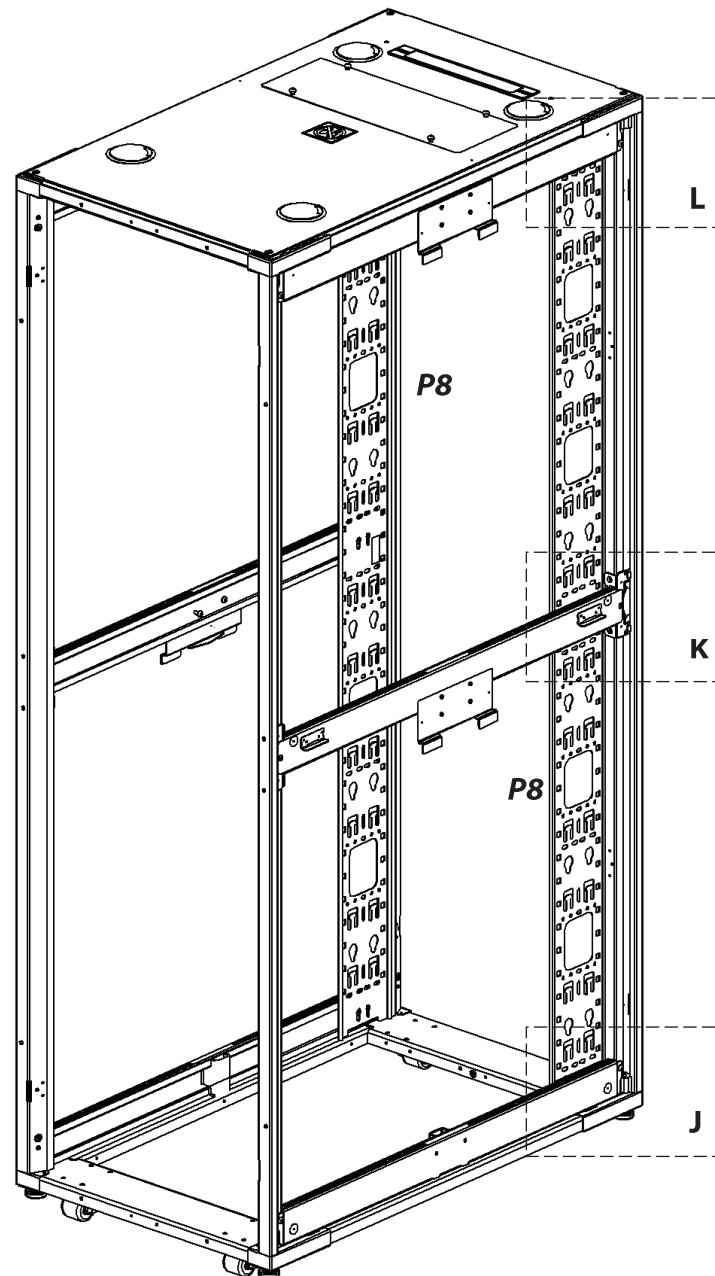


Front Vertical Frame Label

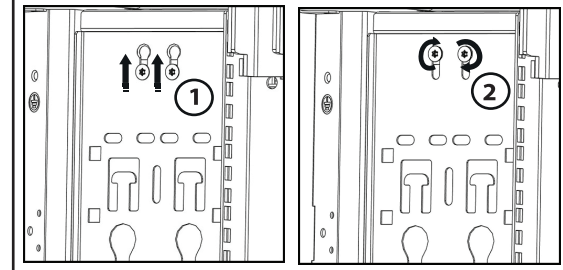


Left Front:
Caution Label

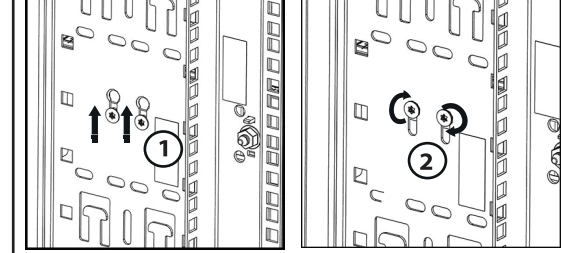
Right Front:
Load Cap (UL) Label



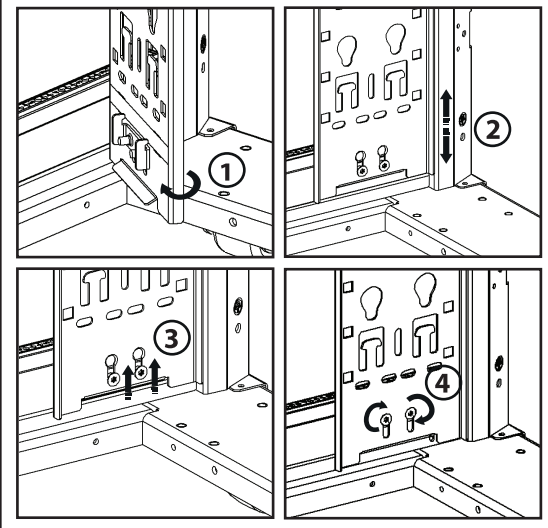
L (Inside)



K (Inside)



J (Inside)



STEP 6

Parts: P9 x12, P10 x 2, P11 x 2

Hardware Set: "C"



H8 (12 pcs.)



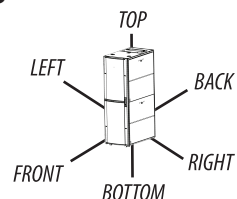
H4 (12 pcs.)

Tools:

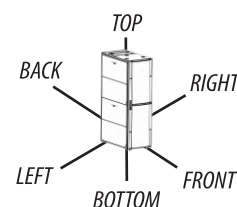
- Hexagon Socket No. 13

Installing Direction Locate

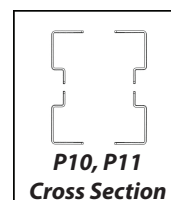
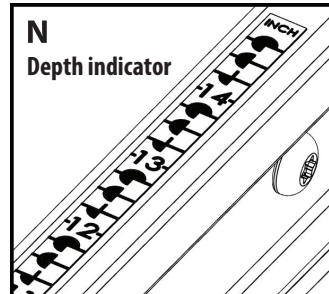
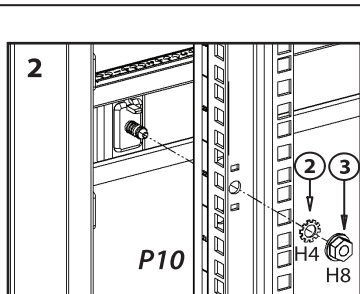
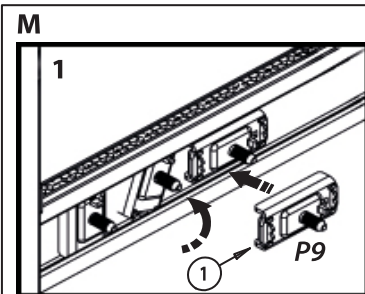
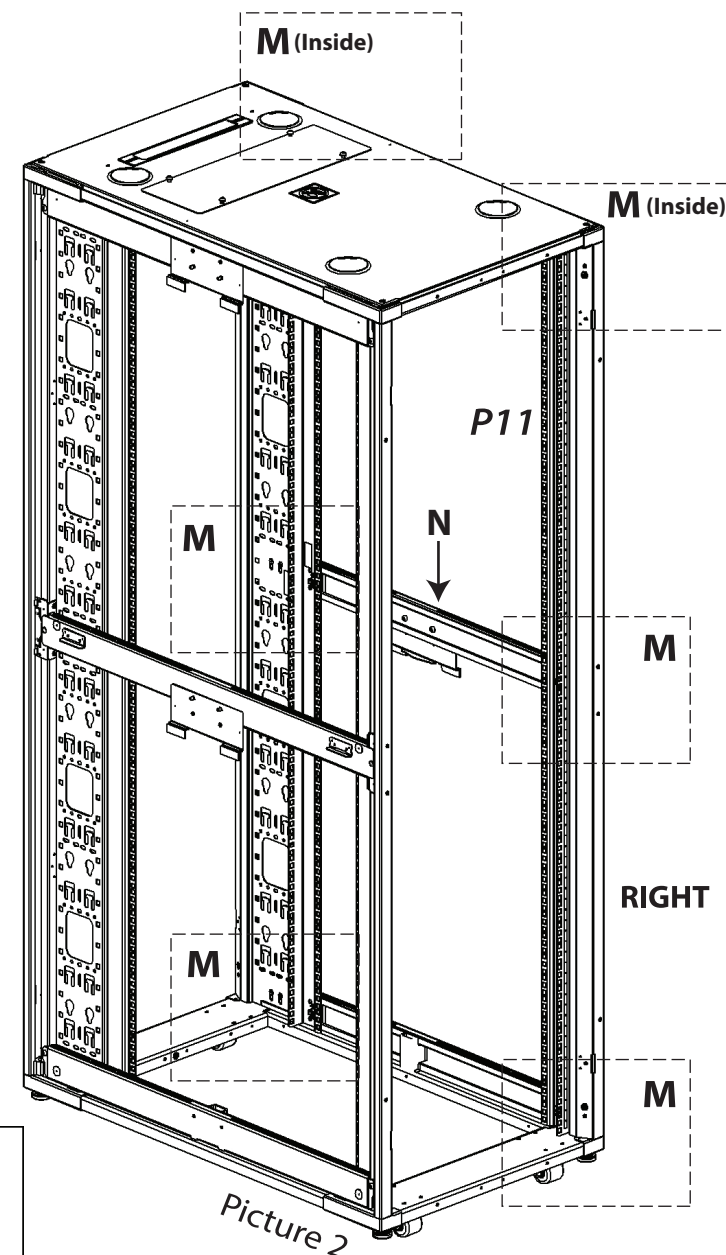
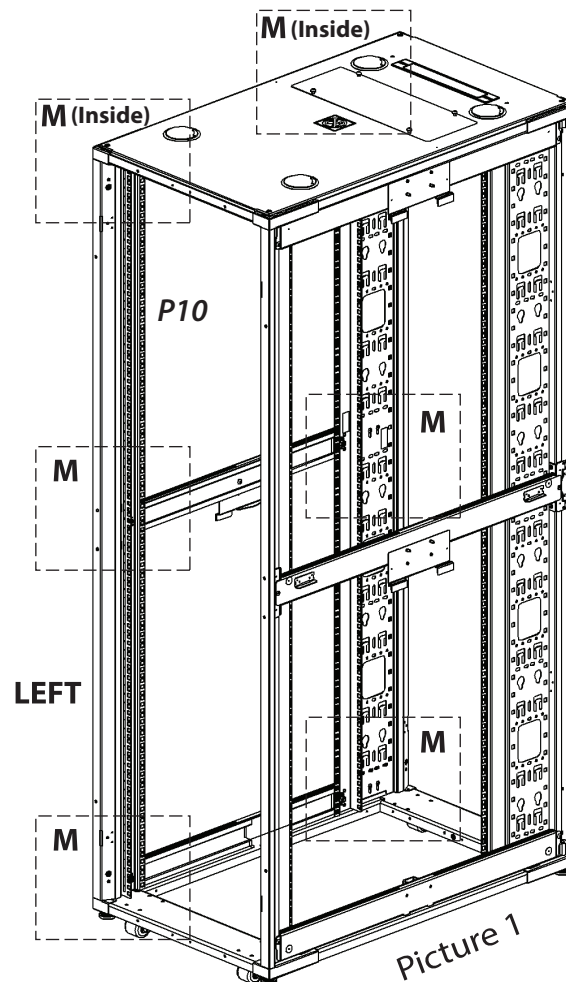
Picture 1:



Picture 2:



Use depth indicator label ("N") to select location and align L/R rails.



STEP 7

Parts: P12 x 6, P13 x 1, P15 x 2

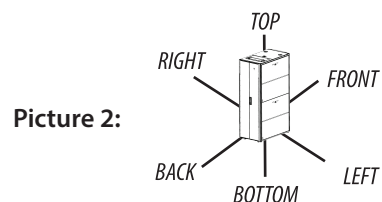
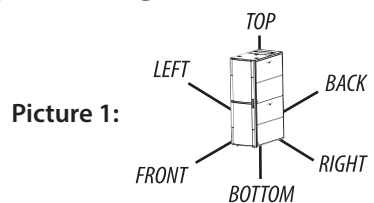
Hardware Set: "D"



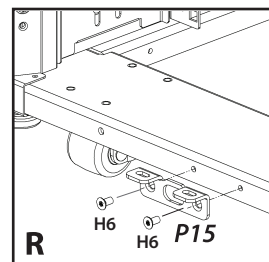
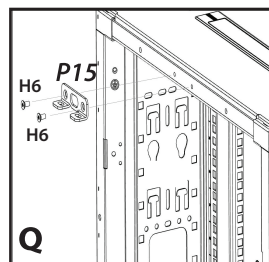
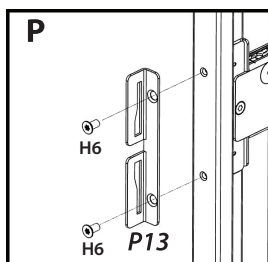
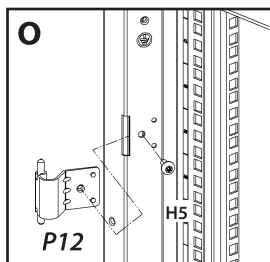
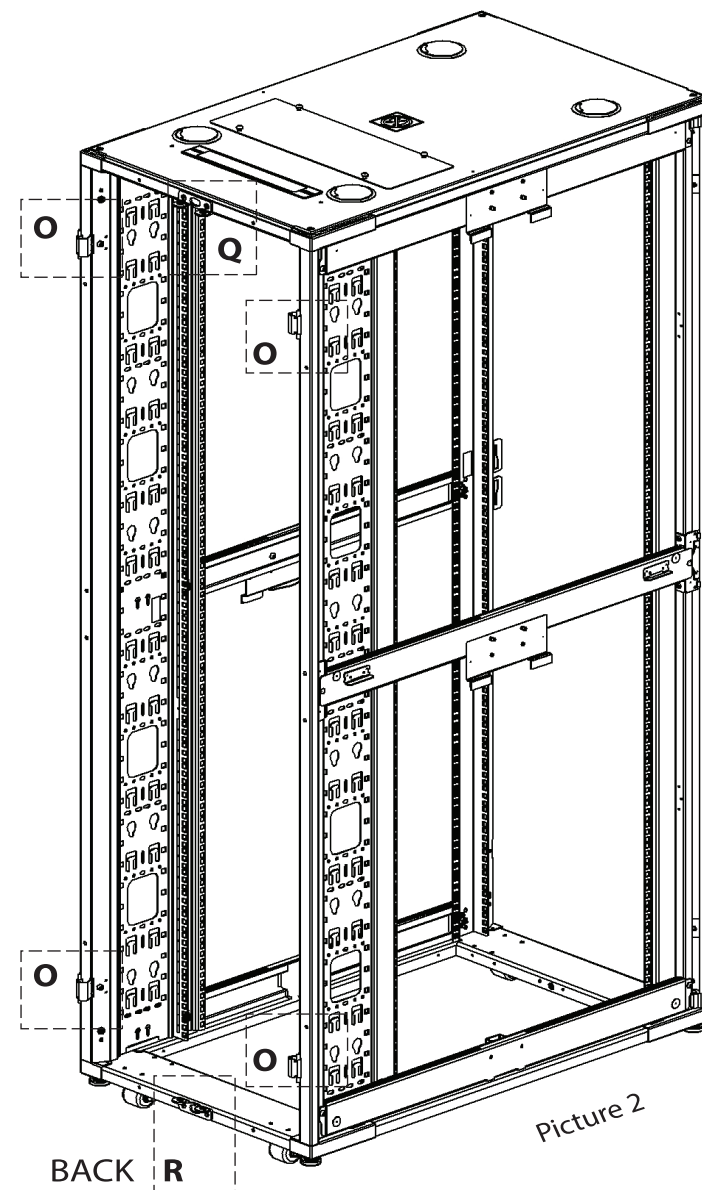
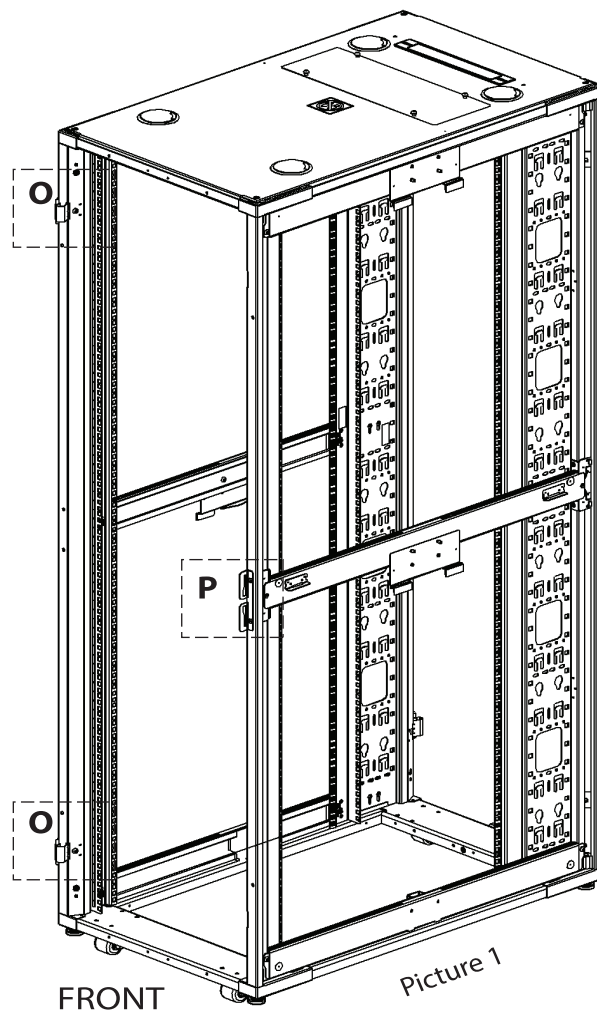
Tools:

- Screwdriver Torx T30

Installing Direction Locate



Check Installing Direction carefully for clarify



STEP 8

Parts: P14 x 1

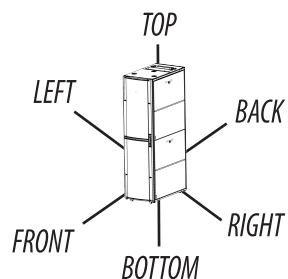
Hardware Set: "D"



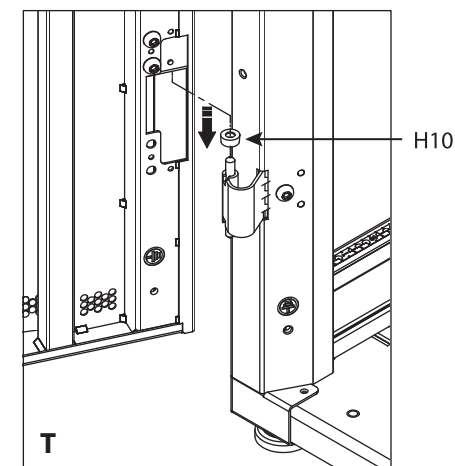
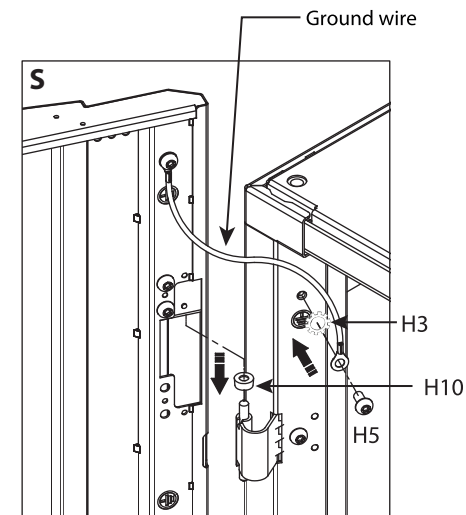
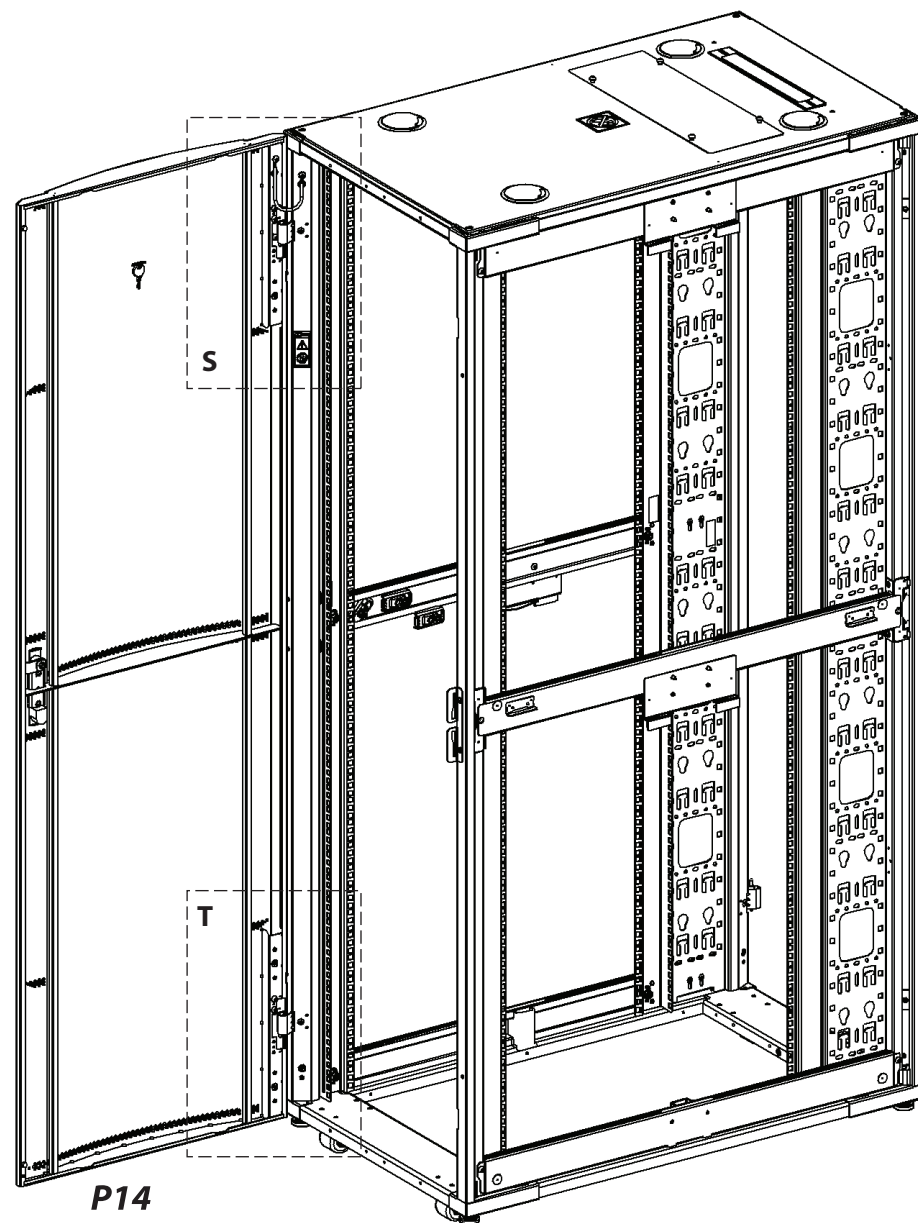
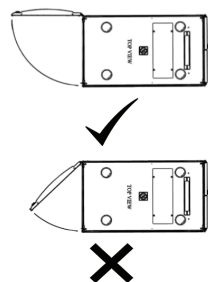
Tools:

- Screwdriver Torx T30

Installing Direction Locate



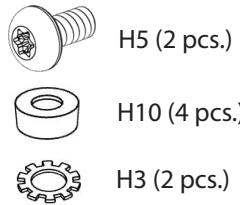
Install from 90 degree angle



STEP 9

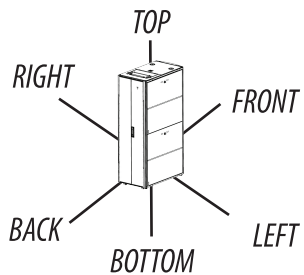
Parts: P16 x 2

Hardware Set: "D"

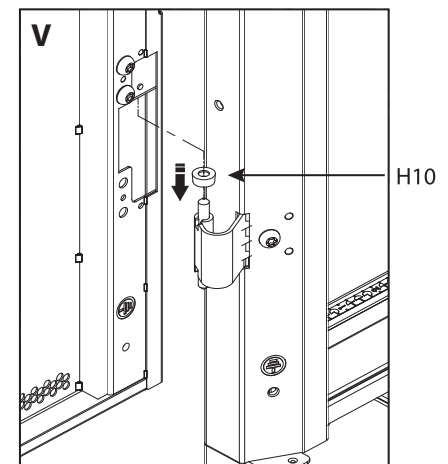
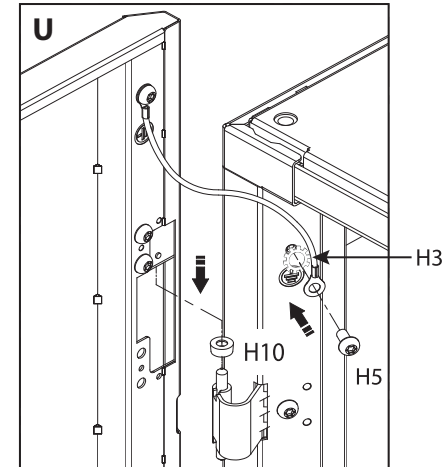
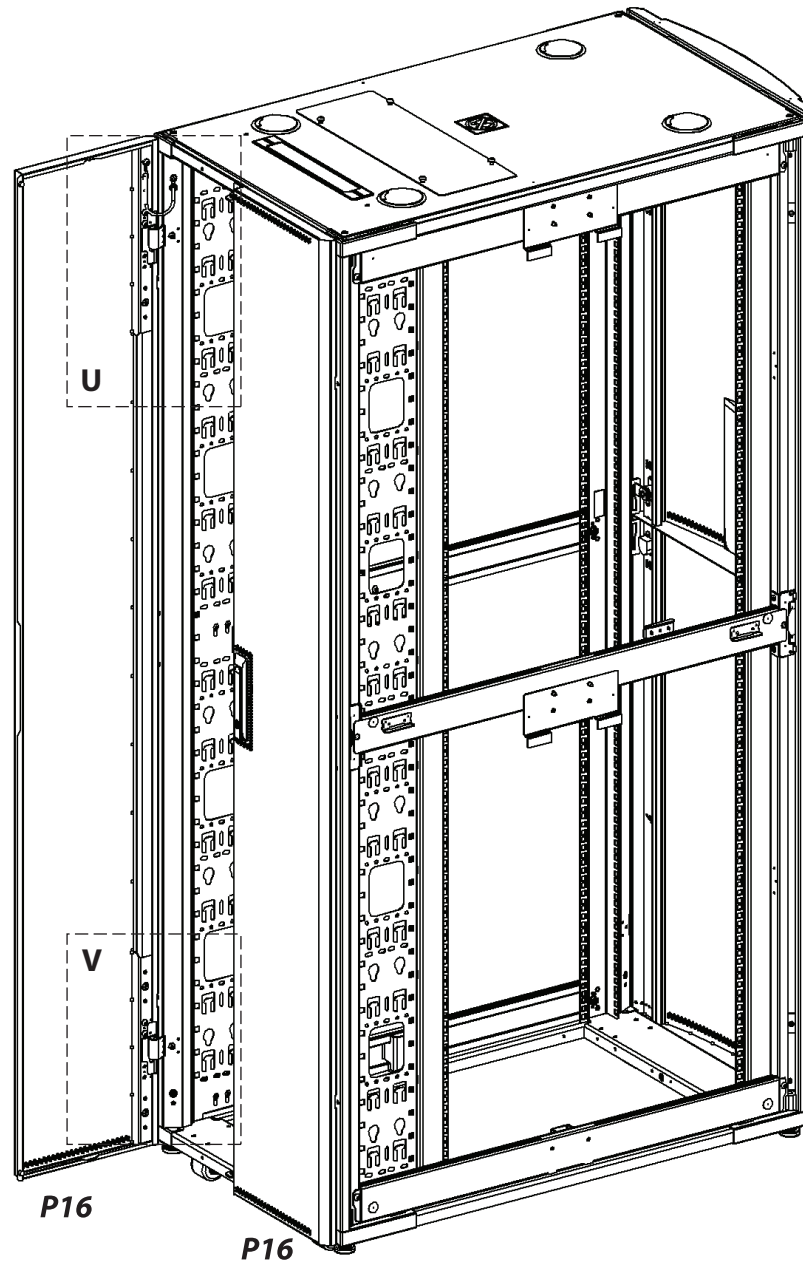
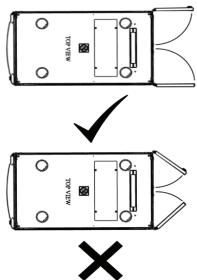


Tools:
- Screwdriver Torx T30

Installing Direction Locate



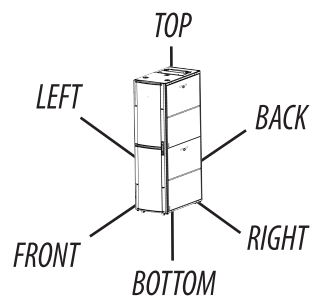
Install from 90 degree angle



STEP 10 - 1

Parts: P17 x 2

 Installing Direction Locate

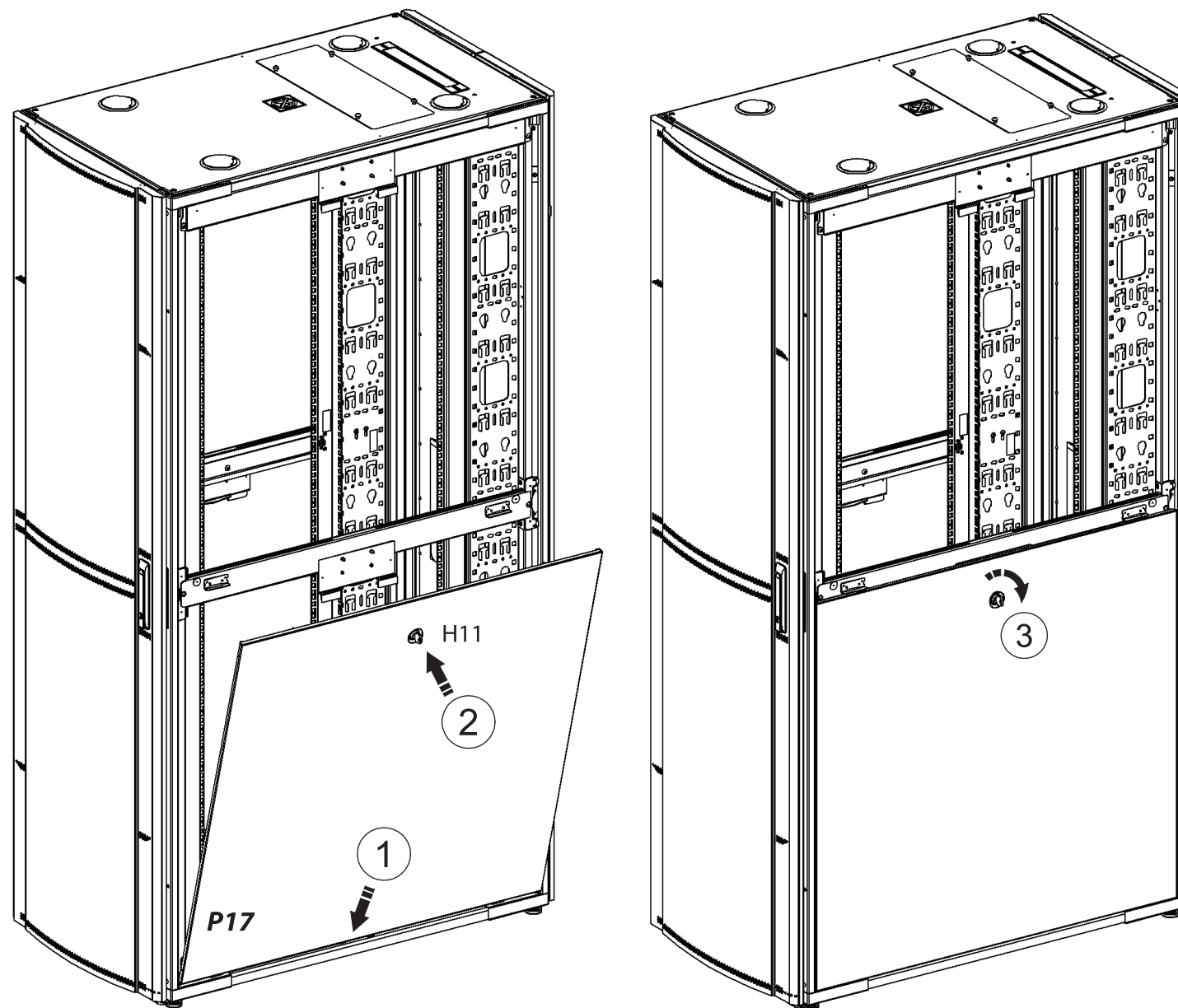


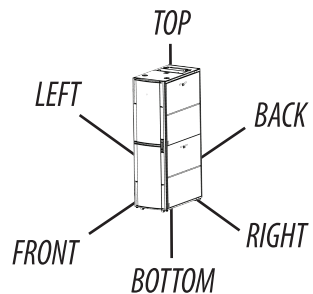
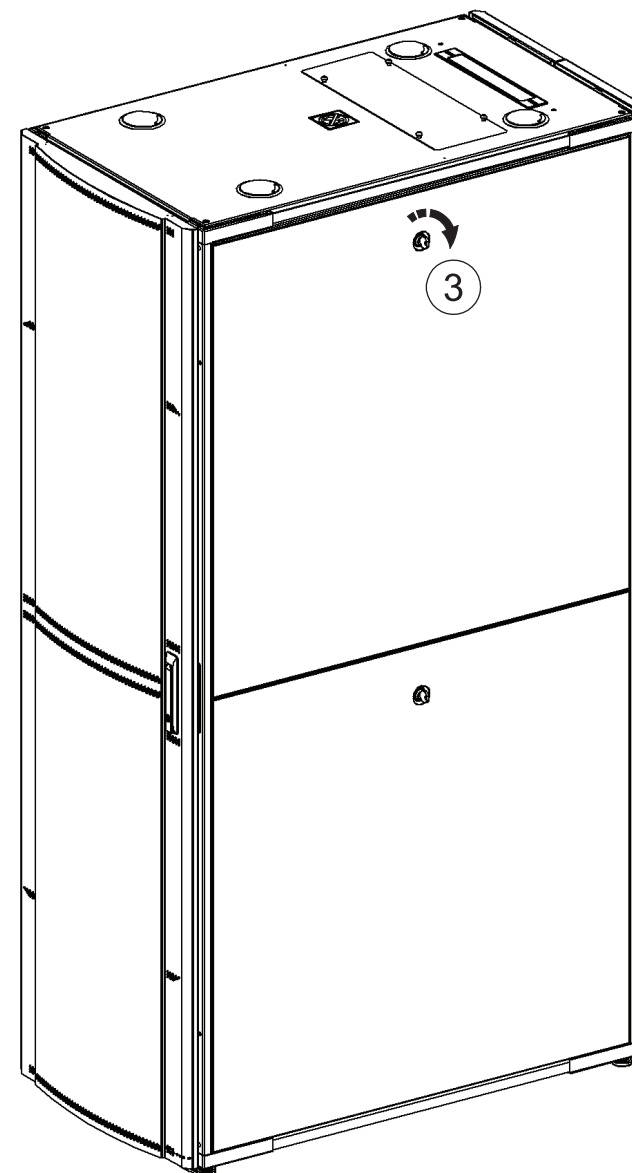
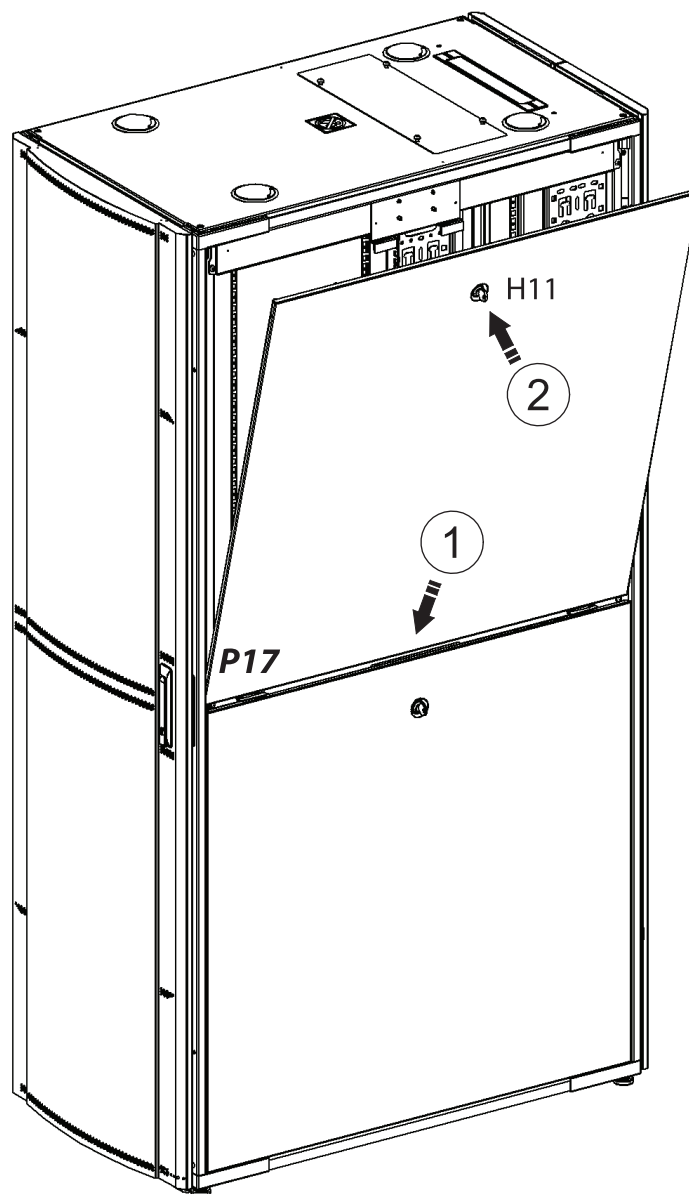
Installation Step

1 > 2 > 3



Ensure lock is engaged to prevent side panel falling off.



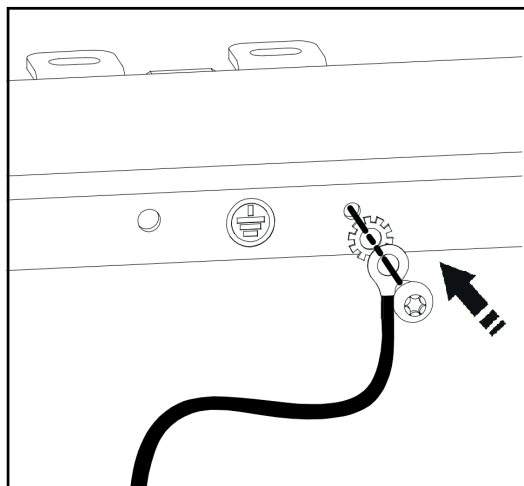
STEP 10 - 2**Parts:** P17 x 2 **Installing Direction Locate****Installation Step****1 > 2 > 3** **Ensure lock is engaged to prevent side panel falling off.**

Grounding the 19" Enclosure

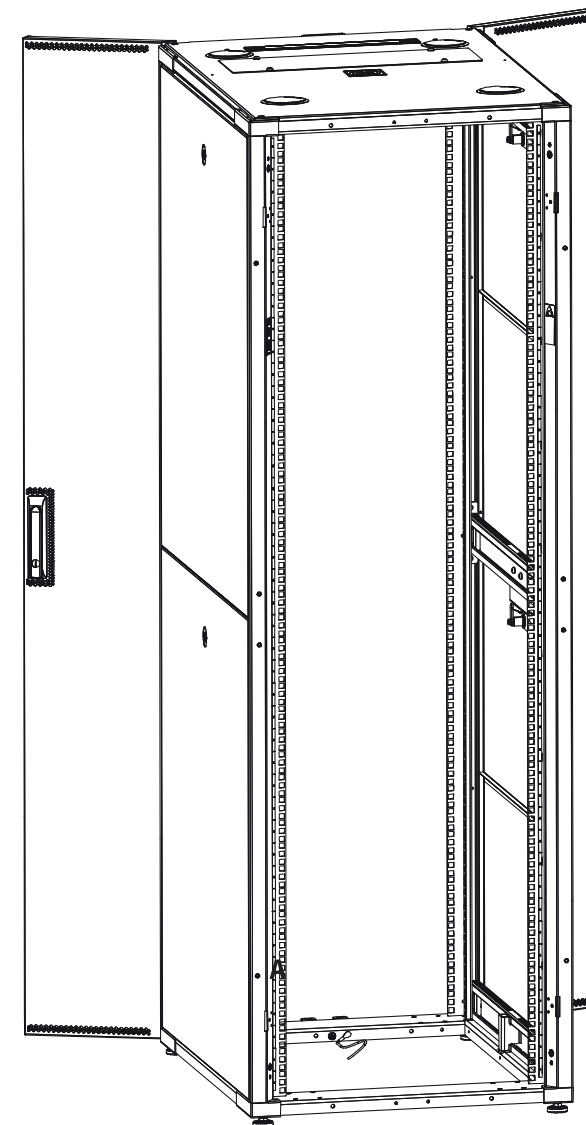
Your Arion enclosure and any installed equipment must be properly grounded to ensure safe operation. Please have a properly qualified technician take care of the grounding set up.

**Caution:**

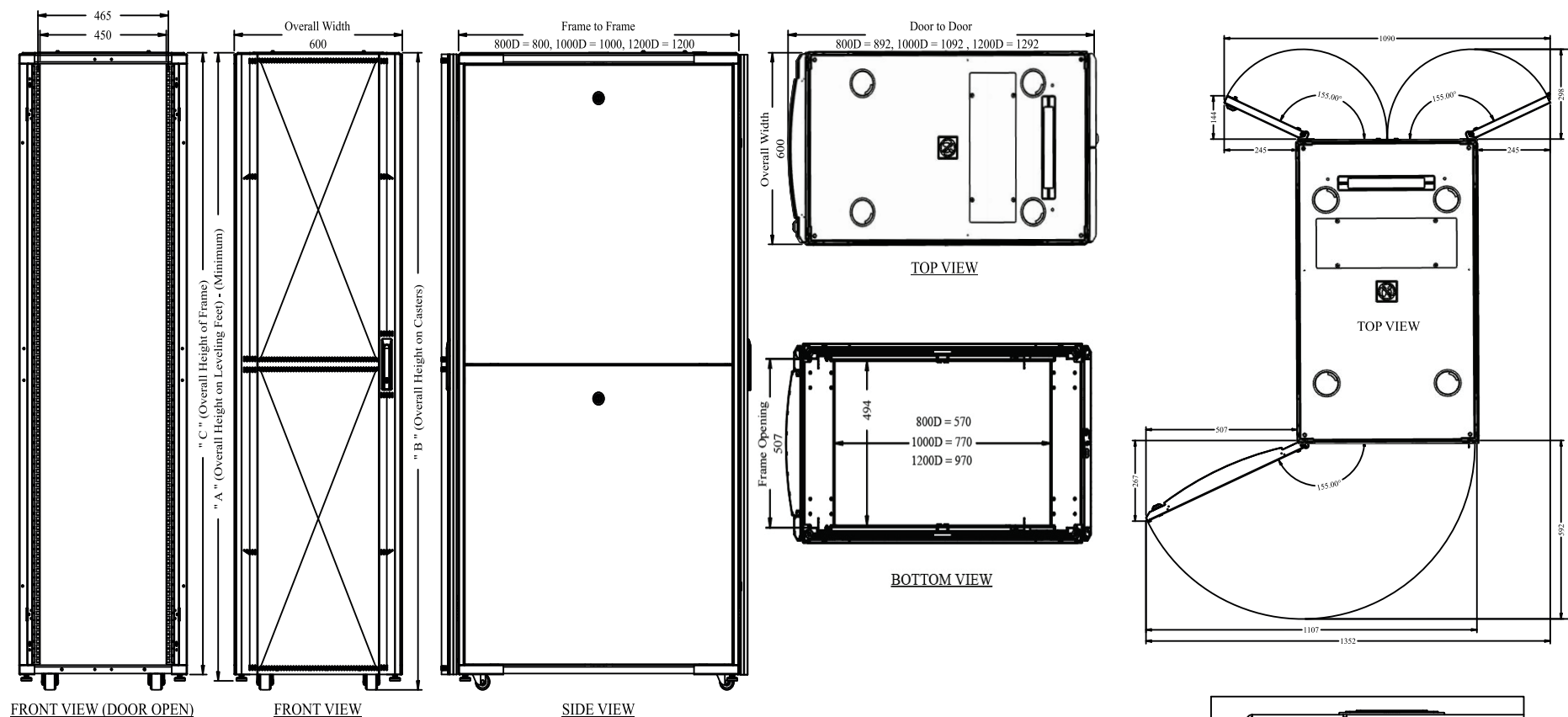
- Bond the 19" enclosure using the grounding cable ring to the bottom frame at the grounding point indicated with the ⚡ symbol.
- Use paint piercing washers between the ground terminal and enclosure frame.
- Tighten with provided screw.
- Connection of the 19" enclosure to your building's Common Bonding Network (CBN) is recommended. Consult a qualified technician to ensure compliance.



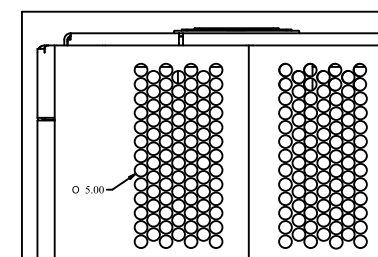
DETAIL A



Overall Dimensions of Assembled Arion Enclosure



DIMENSIONS (UNIT : MM)			
UNIT HEIGHT	DIM. "A"	DIM. "B"	DIM. "C"
42U	1966	1994	1946
45U	2099	2127	2079
47U	2188	2216	2168



Our perforate door provide over 80% open area, more than enough for most equipment requirements.

ABOUT THE ARION CABINET:

Arion is a premium 19" standard cabinet, comparable to leading brands in the market today. Arion is UL listed with a static load rate of 3,080 lbs (1,400 kg) and is strong enough for your heaviest equipment. The perforated doors provide over 80% total open area and can be switched from left hand to right hand opening at time of initial assembly or later after deployment. Arion is a knock down design and is easy to put together; does not require any special assembly jigs. With its adjustable PMA's (19" mounting rails), multipurpose PDU/Vertical rails, ample cable access and half height side panels, Arion is a versatile platform for most of your IT needs.

ABOUT CHEVAL:

Cheval Electronic Enclosure Co., Ltd is a Thailand based multinational company with over 30 years experience in 19" cabinets and data center infrastructure solutions. We provide design and manufacturing support (OEM) to some of the worlds largest and best known IT firms. All our products are designed and manufactured in house to the highest international standards. We have a full line of 19" cabinets, including network racks, colo racks, seismic racks, OCP racks and wide range of accessories.

LIMITED WARRANTY TERMS AND CONDITIONS:

Limited Warranty: Cheval warrants the Arion series 19" enclosures to be free from defects in materials and workmanship for a period of twelve (12) months from date of receipt. This warranty applies to the original purchaser only. Cheval's obligation is limited to repairing, replacing or issuing a credit for the original purchase price, at our sole discretion. This warranty does not apply to goods which have been damaged by incorrect assembly, use, modified or altered from their original form, improper storage or handling, incorrect installation, repair or service by non-authorized personnel or improper installation of third-party equipment. The Arion 19" enclosure is designed for indoor use only and should be stored and installed in an indoor environment only. This warranty is not transferable.

Limitation of Liability: Except as provided herein, Cheval makes no warranties, express or implied, including warranties of merchantability, fitness for a specific purpose and non infringement of third party rights are expressly excluded. Except as listed here, in no event shall Cheval be liable for direct, indirect, special, incidental, or consequential damages arising from the use of this product. Cheval is not liable for loss of profits, loss of revenue, loss of software or data, loss of equipment or use of equipment, cost of replacement goods or claims by third parties.



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