



ARION 600W Series Assembly Guide **Innovative 19" Enclosure System**

Product Compliant: UL2416/UL60950 File # E472259



PREFACE:

This assembly guide is provided to prevent to 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, ANSI/NFPA 70 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.

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

SAFETY SYMBOLS USED IN THIS MANUAL

This assembly guide provides general safety guidelines to be observed during installation, operation, and maintenance of the ARION V2 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 V2 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: National Electric Code ANSI/NFPA 70-1999.

- Only identical ARION V2 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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⚠ WARNING

Receiving and Initial Inspection: Cheval is not responsible for damage sustained during shipment of the product.

Receiving Inspection: Upon receipt, inspect the carton for damage. If damage is found please note the shipping bill of lading or other details and a claim should be filed with the shipping company. Keep all packaging for inspection by the shipping company.

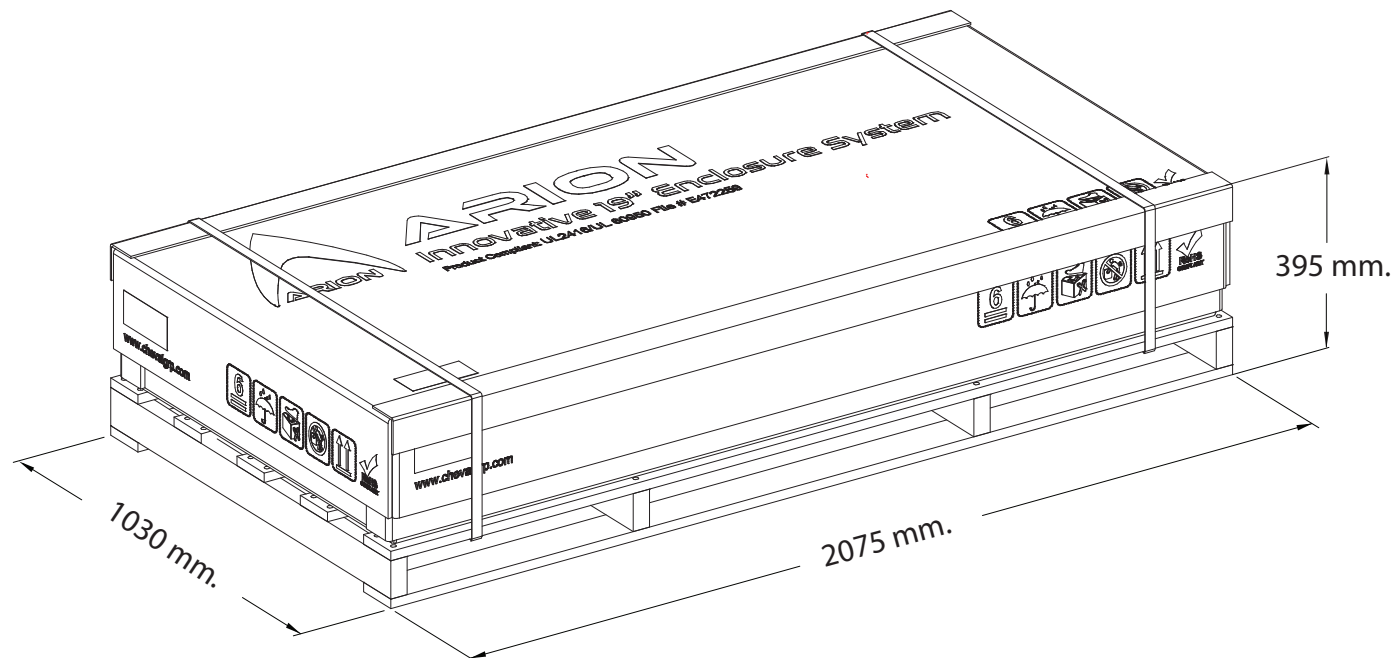
MOVING THE CARTON

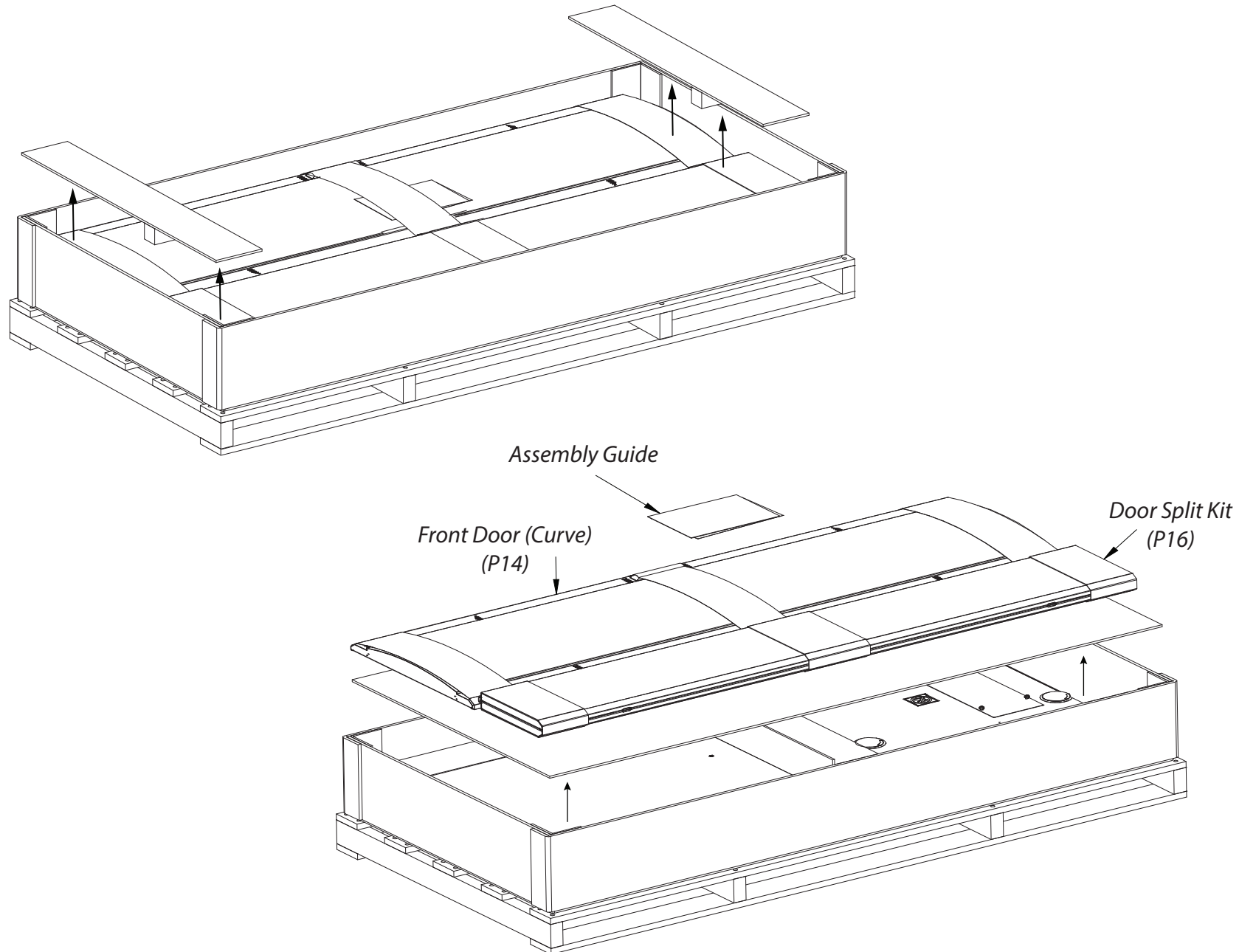
HEAVY LOAD HAZARD: This carton is not intended to be lifted or moved by hand. Failure to follow these instructions can result in injury. The recommended equipment for moving the carton are pallet jack or forklift.

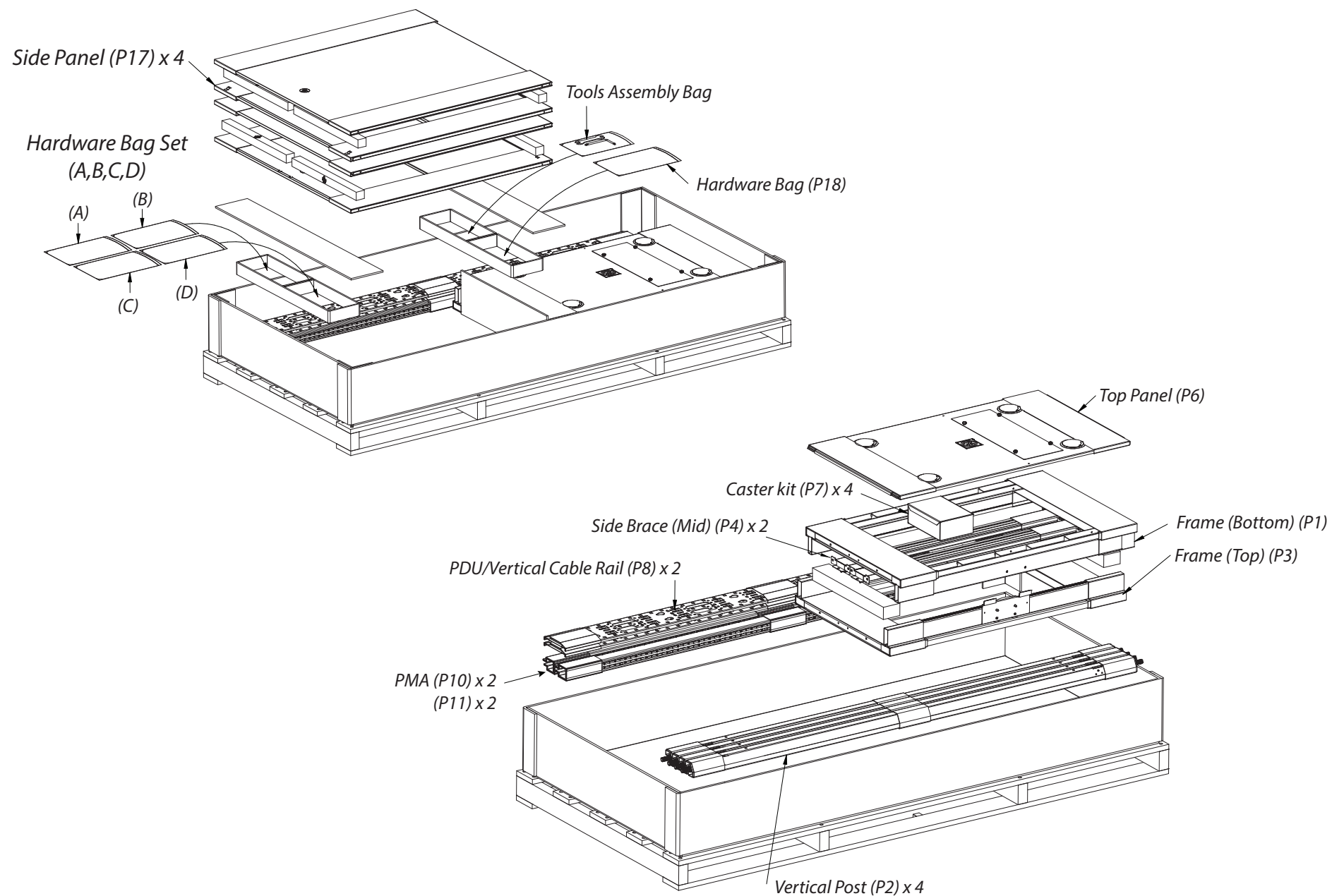
1. Move the carton to a solid, level area clear of obstructions.
2. Inspect the carton for any signs of visible damage. If found immediately notify the shipper.
3. Carefully cut the wrapping straps securing the carton.
4. Remove the top cover and take out the assembly guide for further instructions.

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

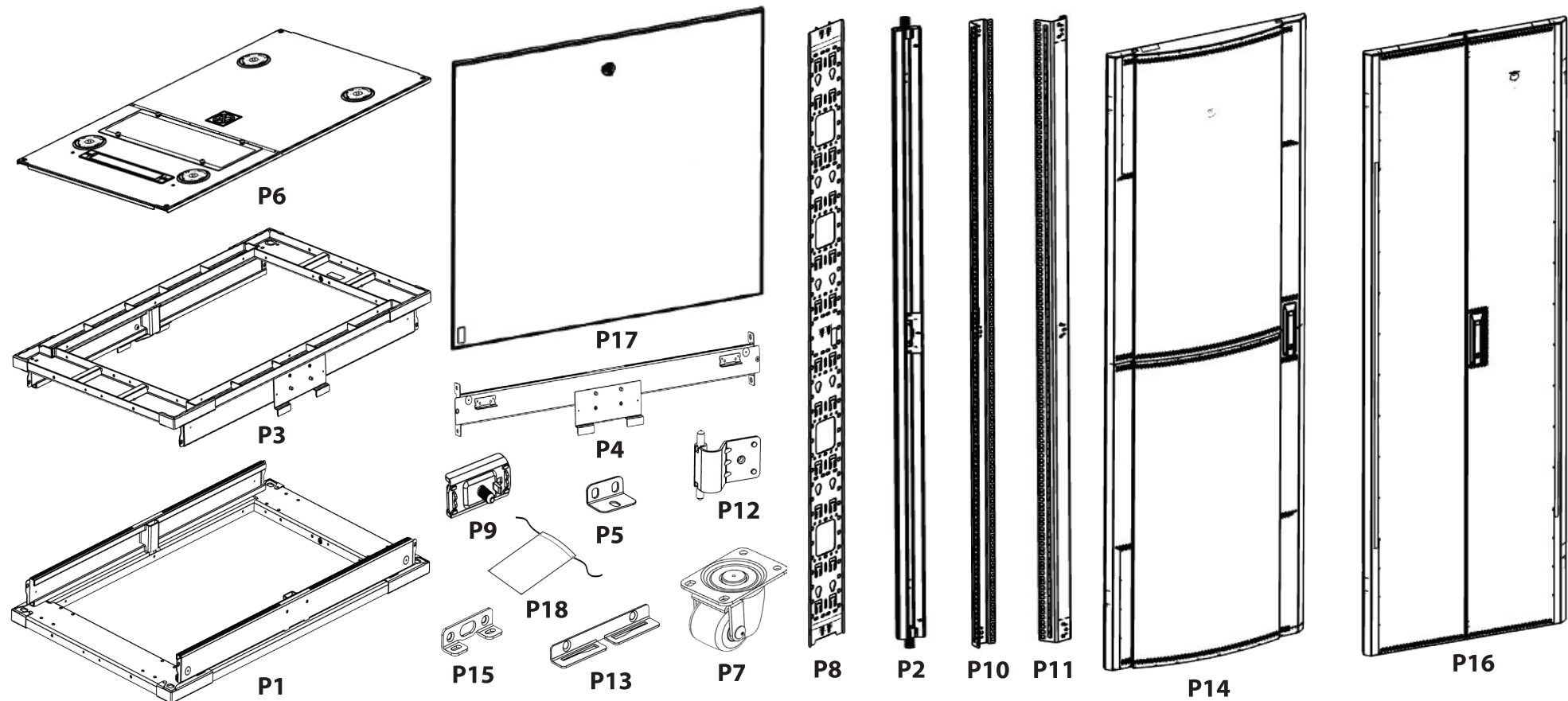
1. Prepare your work area. The area needed is approximately 3½ x 7 foot. The surface must be clean, flat and either carpeted or use a drop cloth to prevent scratching the components.
2. Remove the components and check all are complete by referring to the "parts check list". Arrange the components according to the assembly sequence, Step 1, Step 2 and etc.
You may find it easier to assemble steps 1-4 on a table or raised surface.
3. After step 4, stand the rack up on the floor and continue the assembly.







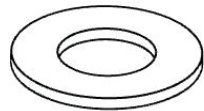
Arion 19" Standard Cabinet: Parts List



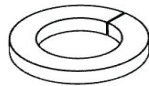
| Check | Item | Part Name | QTY |
|-------|------|---------------------------------|-----|
| | P1 | Frame (Bottom) | 1 |
| | P2 | Vertical Post | 4 |
| | P3 | Frame (Top) | 1 |
| | P4 | Side Brace (Mid) | 2 |
| | P5 | Top Panel Bracket | 2 |
| | P6 | Top Panel Assy. | 1 |
| | P7 | Caster kit | 4 |
| | 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 Assy. | 2 |
| | P17 | Side Panel Assy. | 4 |
| | P18 | Hardware Bag. | 1 |

Arion 19" Standard Cabinet: Assembly Hardware Supplied



H1 (8 pcs.)
Washer Flat M16



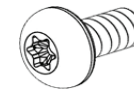
H2 (8 pcs.)
Washer Spring M16



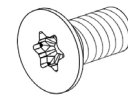
H3 (3 pcs.)
Washer Tooth lock M6



H4 (12 pcs.)
Washer Tooth lock M8



H5 (19 pcs.)
Screw Torx T30 M6x12



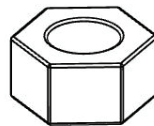
H6 (18 pcs.)
Screw Torx T30 Taper M6



H7 (18 pcs.)
Nut Flange M6



H8 (12 pcs.)
Nut Hex M8



H9 (8 pcs.)
Nut Hex M16



H10 (6 pcs.)
Hinge Bushing

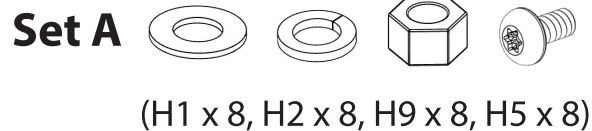


H11 (4 pcs.)
Key

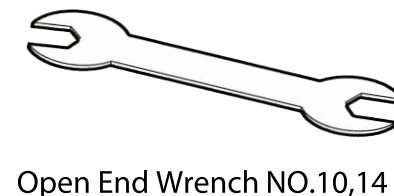
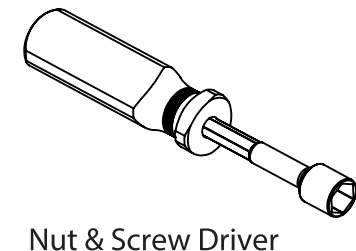
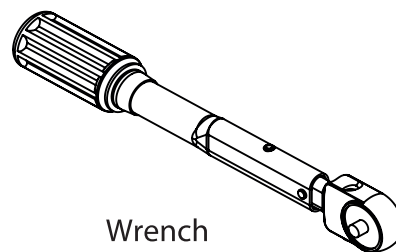


H12 (4 pcs.)
Levelling Feet M10

Hardware Set List



Tools Recommended for Assembly



STEP 1

Parts

P1 x 1, P2 x 4, P3 x 1

Hardware Set: "A"



H1 (8 pcs.)



H2 (8 pcs.)



H9 (8 pcs.)



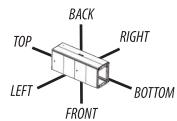
H5 (8 pcs.)

Tools:

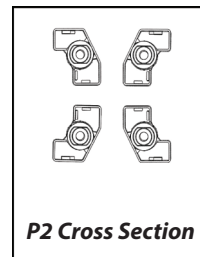
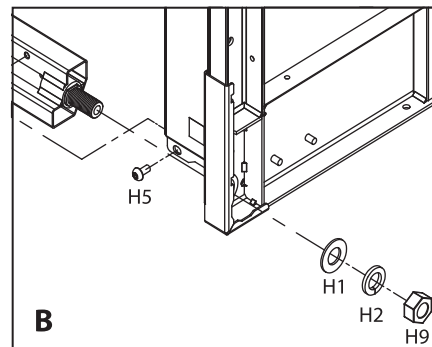
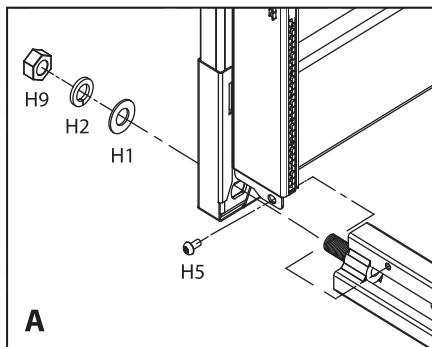
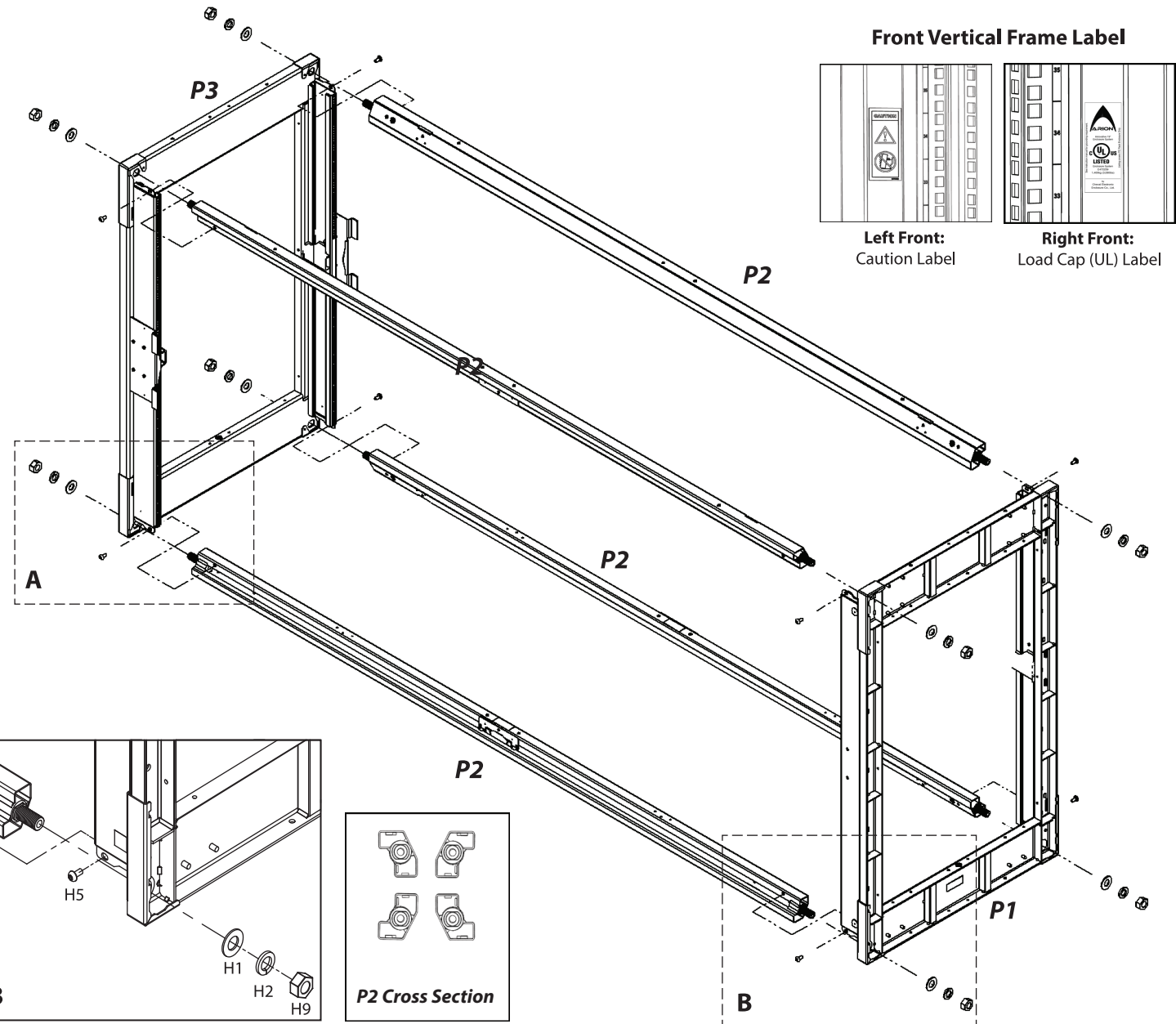
Hexagon Socket No.24 (16mm.)
Screwdriver Torx T30



Check axis for display
direction



Hand tight Only.



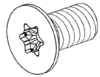
STEP 2

Parts

P4 x 2

Hardware Set:

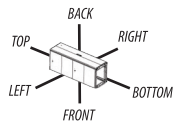
"B"



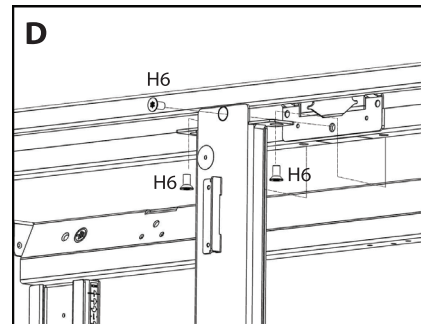
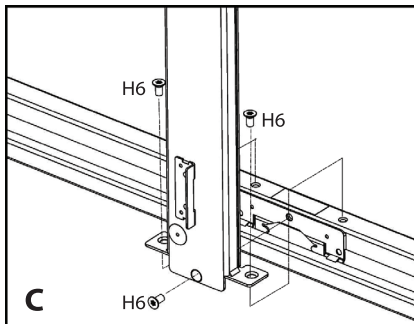
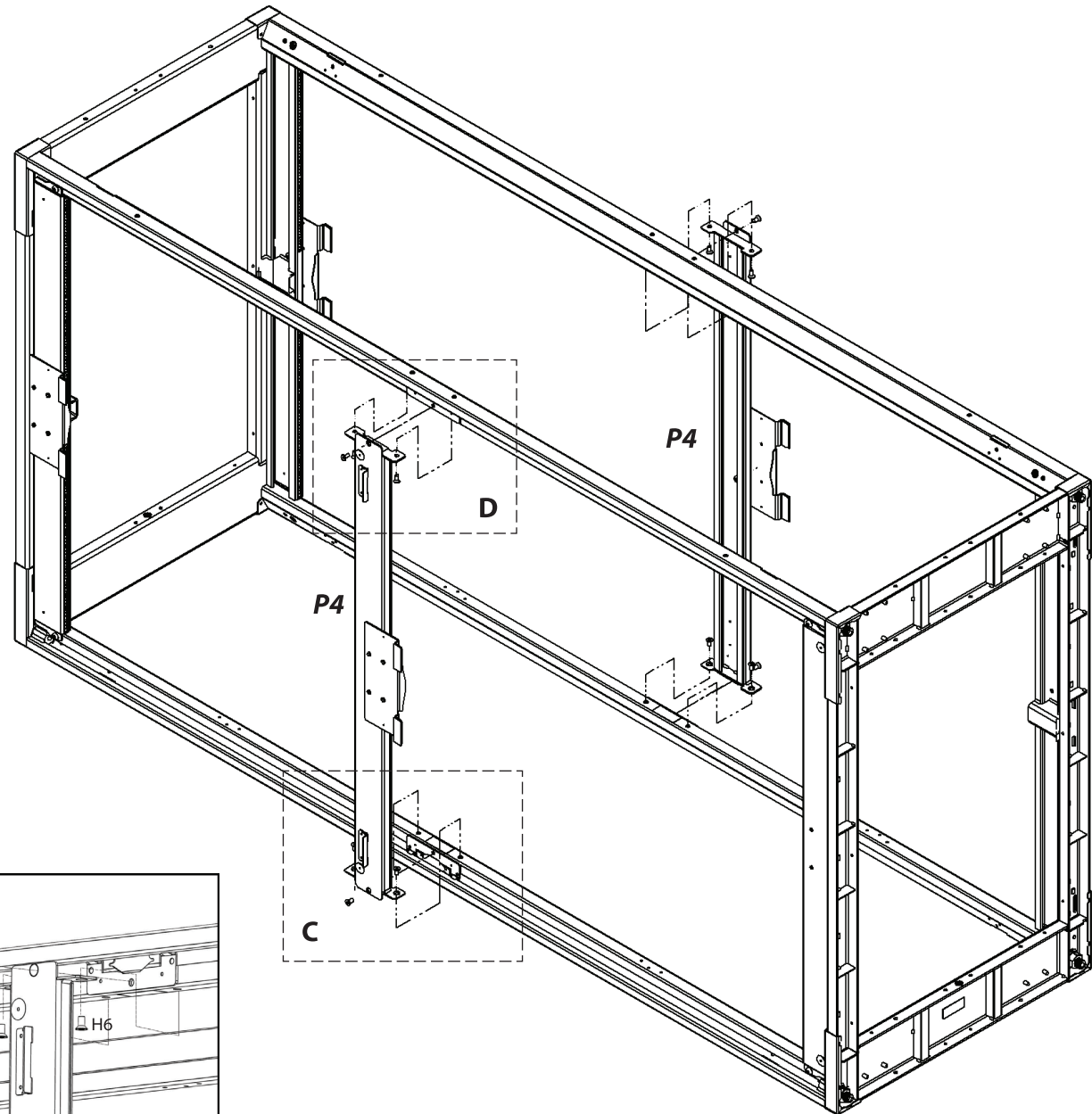
H6 (12 pcs.)

Tools:

Screwdriver Torx T30



**Tighten all
locations securely**



STEP 3

Parts

P7 x 4

Hardware Set: "B"



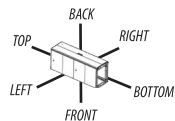
H7 (16 pcs.)



H12 (4 pcs.)

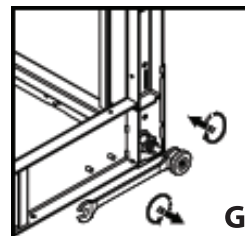
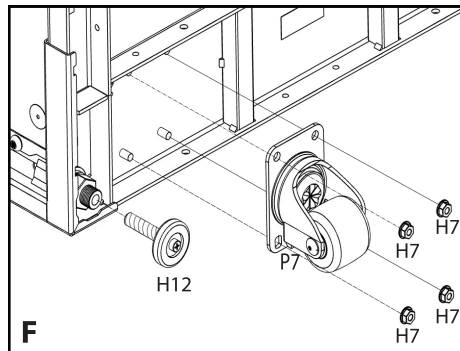
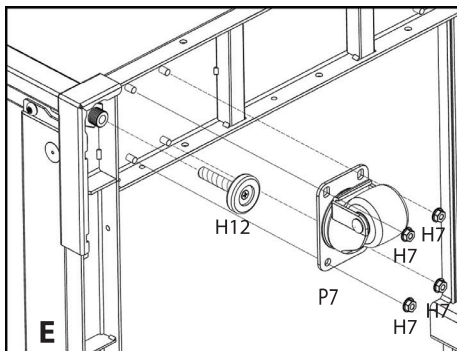
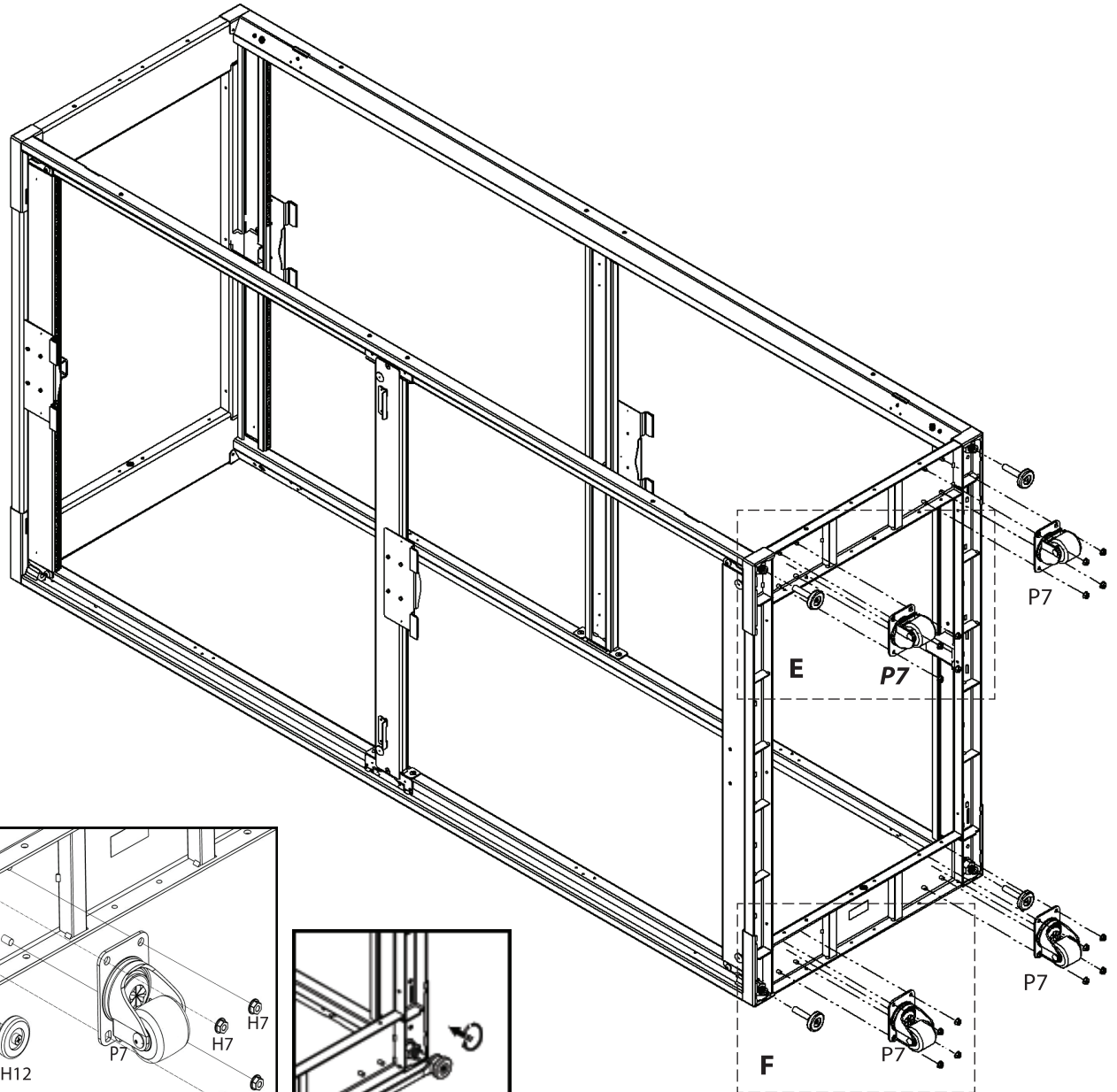
Tools:

Screwdriver Torx T30
Open End Wrench No.14



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"



STEP 4

Parts

P5 x 2, P6 x 1

Hardware Set:

"C"



H5 (2 pcs.)

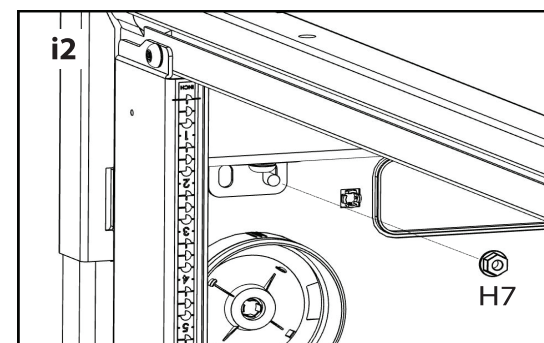
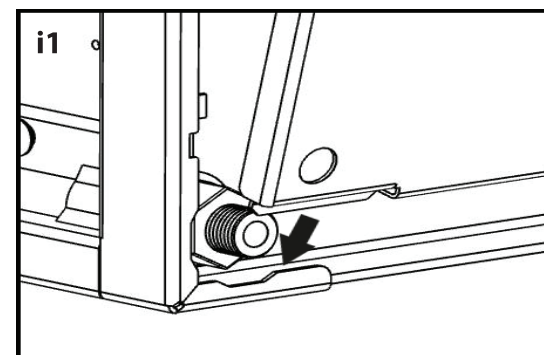
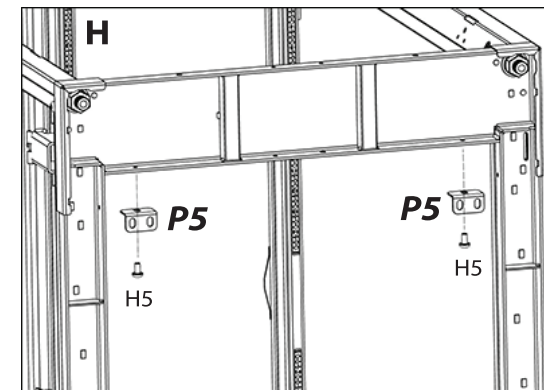
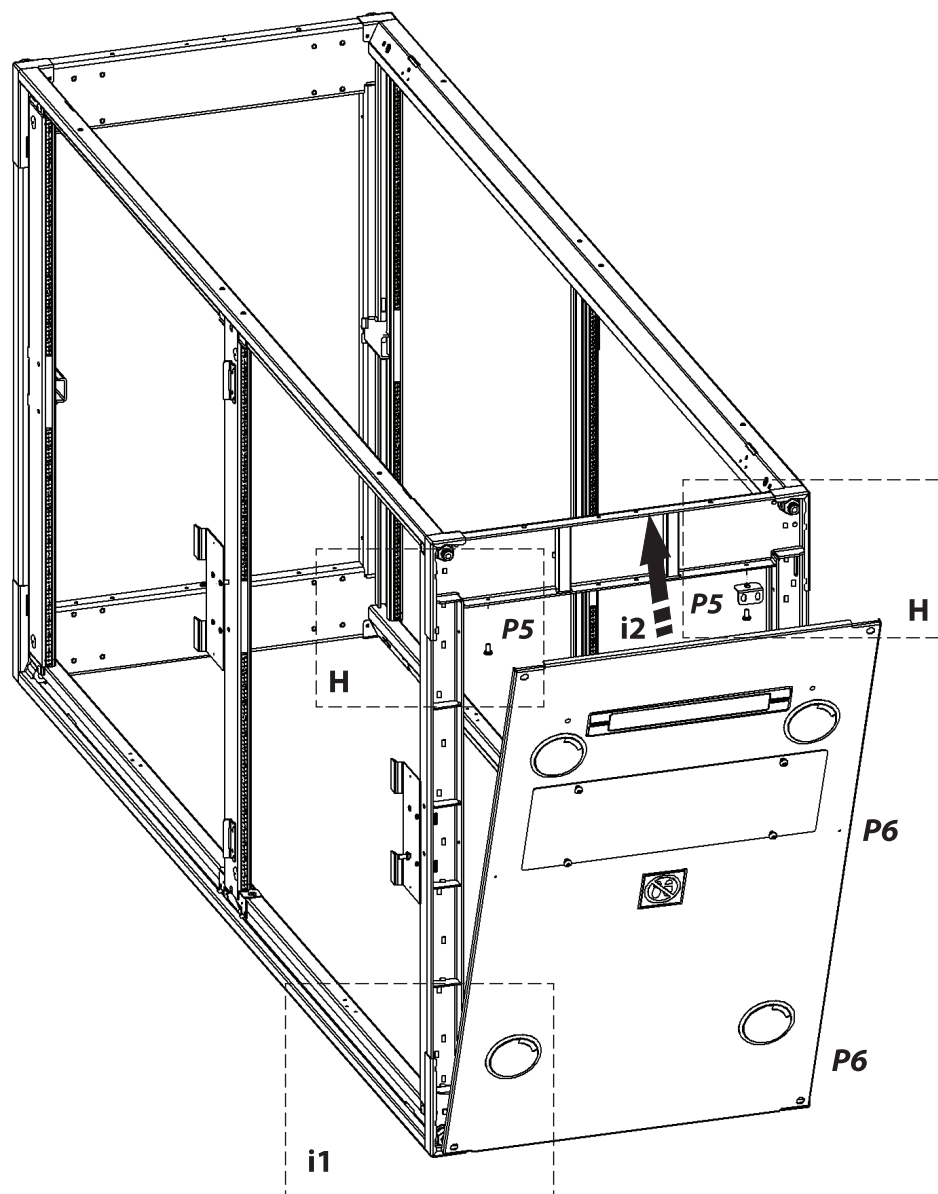
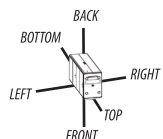


H7 (2 pcs.)

Tools:

Screwdriver Torx T30

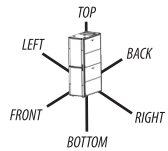
Open End Wrench No.14



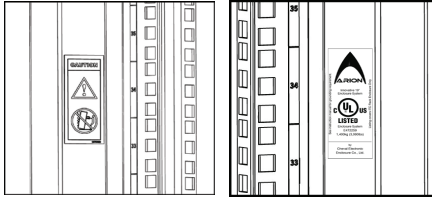
STEP 5

Parts
P8 x 2

Tools:
Screwdriver Torx T30

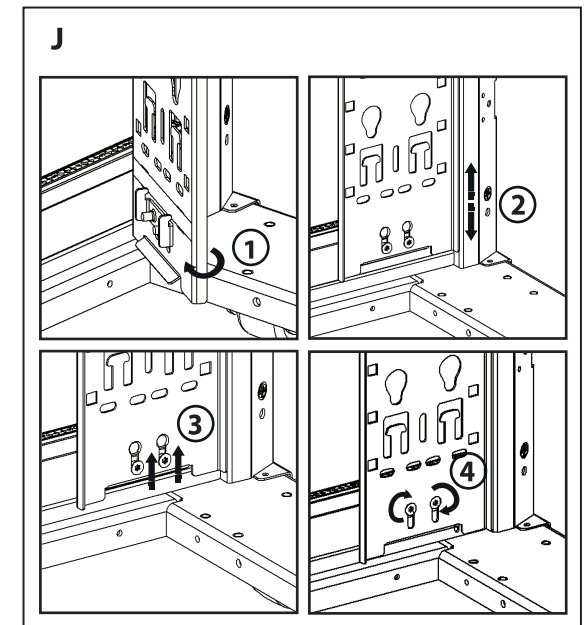
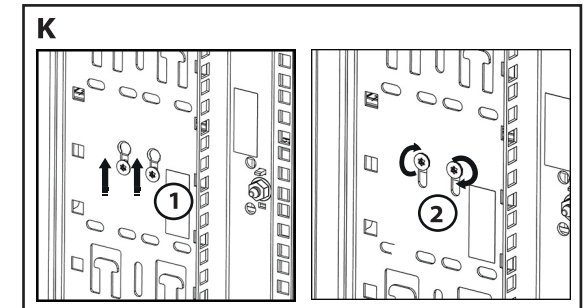
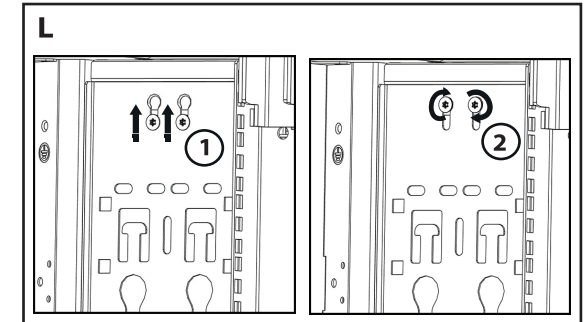
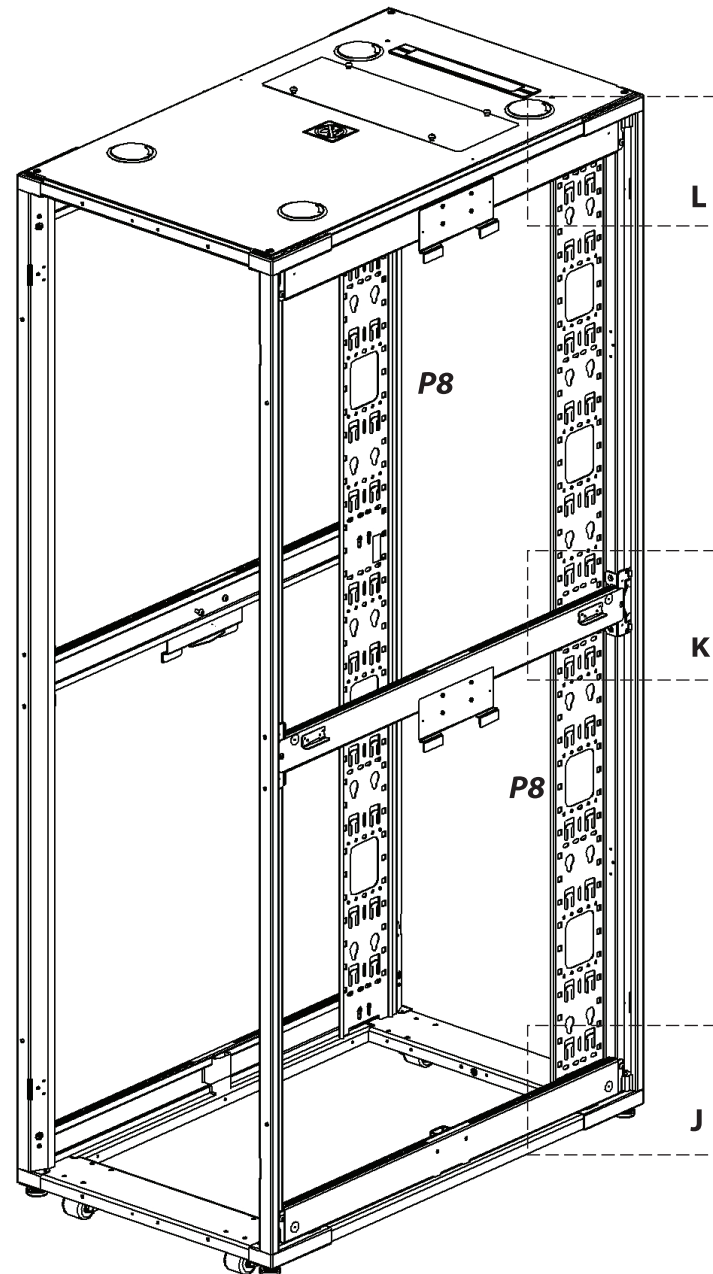


Front Vertical Frame Label



Left Front:
Caution Label

Right Front:
Load Cap (UL) Label



STEP 6

Parts

P9 x 12, P10 x 2, P11 x 2

Hardware Set: "C"



H8 (12 pcs.)

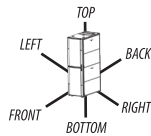


H4 (12 pcs.)

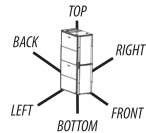
Tools:

Hexagon Socket
No.10

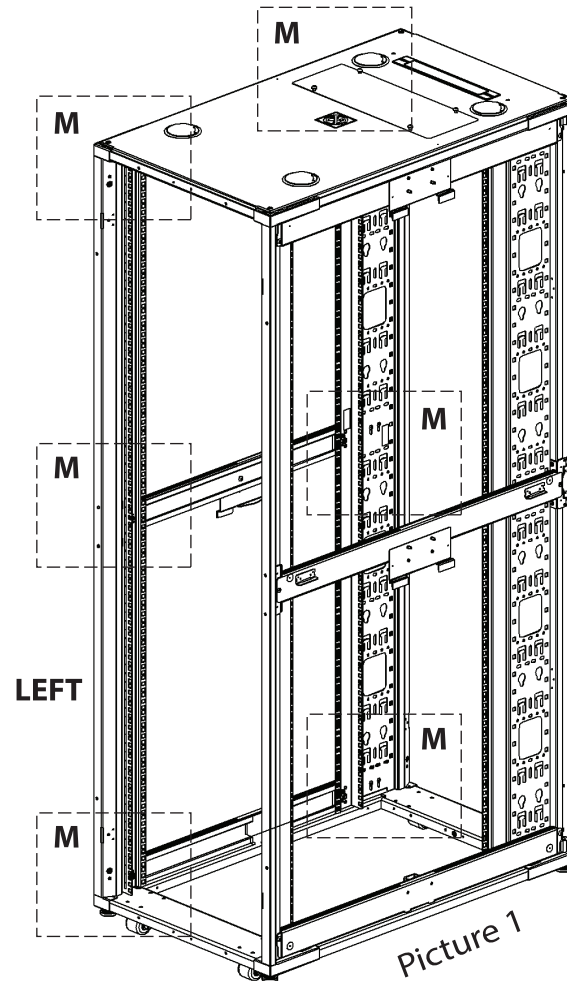
Picture 1



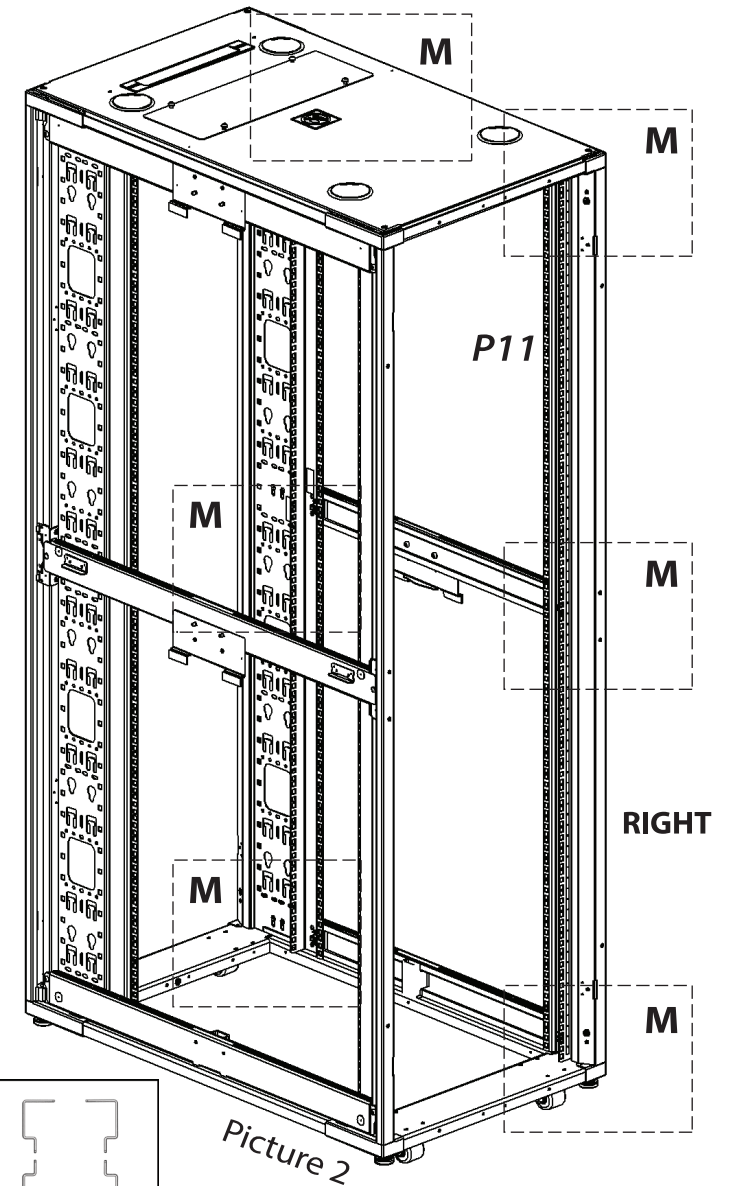
Picture 2



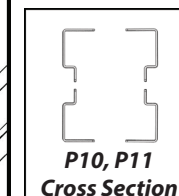
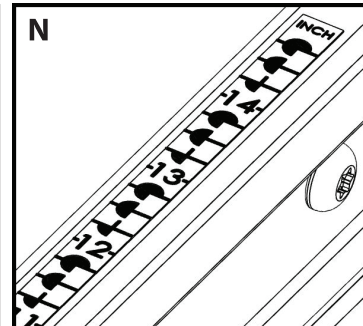
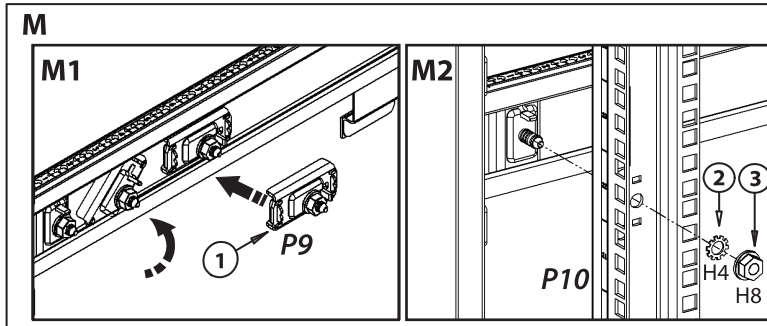
Use depth indicator
label (N) to select
location and align
L / R rails.



Picture 1



Picture 2



P10, P11
Cross Section

STEP 7

Parts

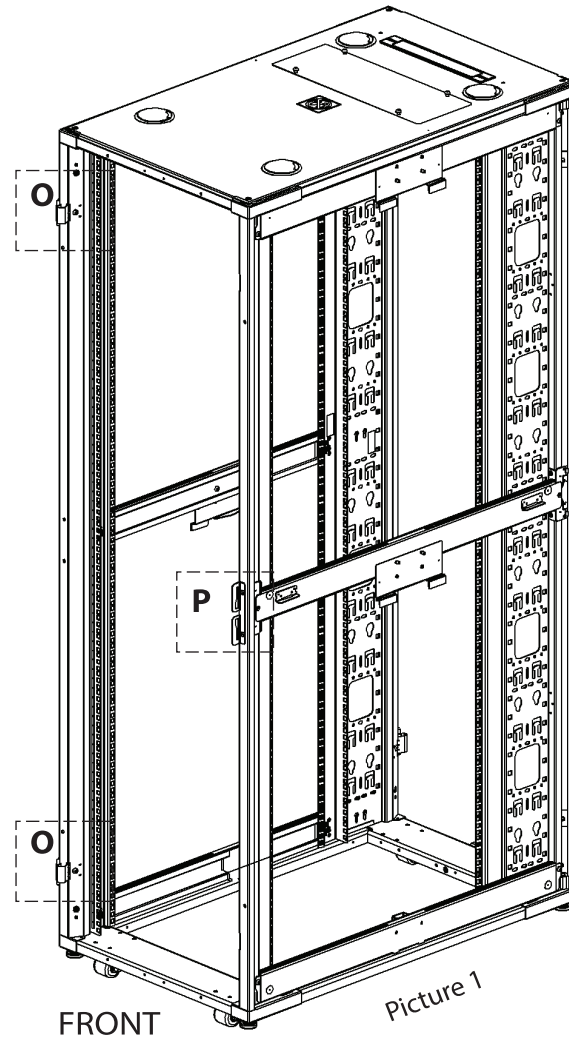
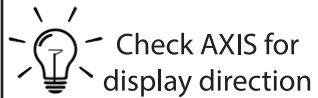
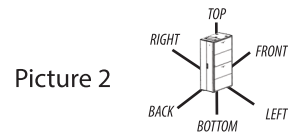
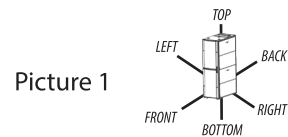
P12 x 6, P13 x 1, P15 x 2

Hardware Set: "D"

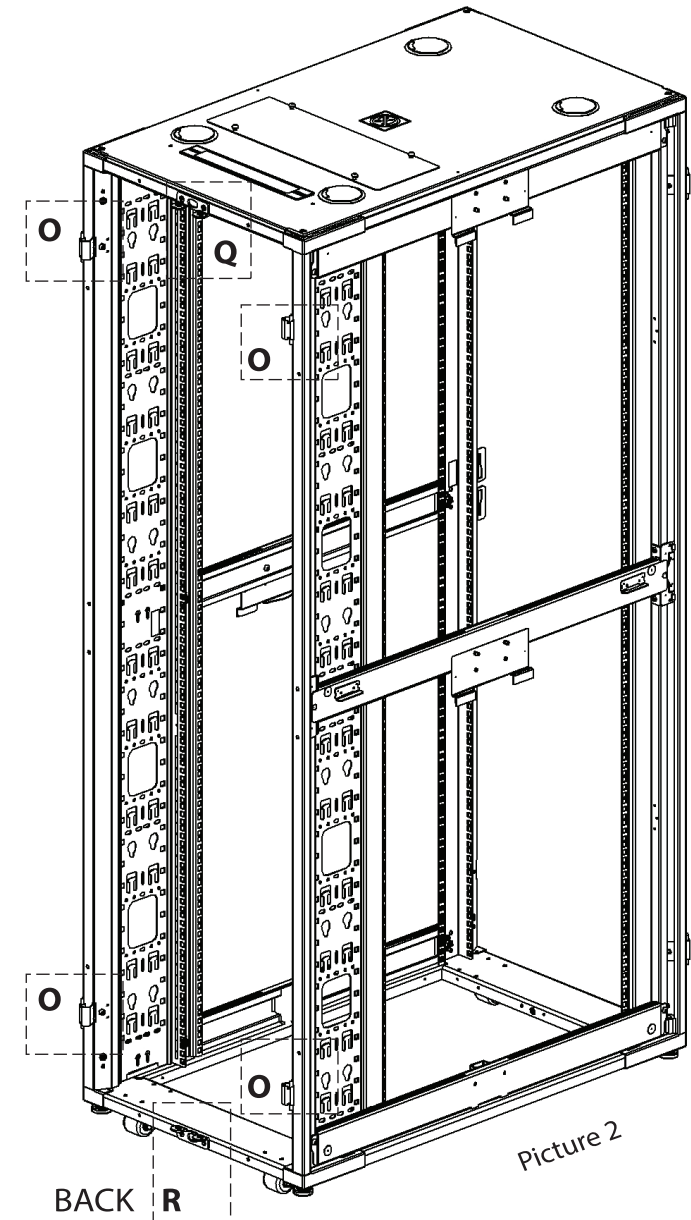


Tools:

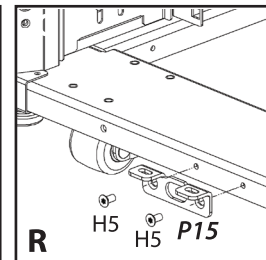
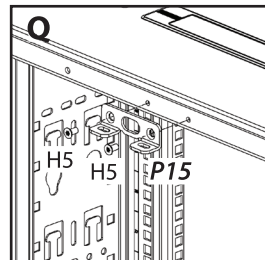
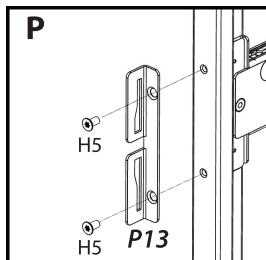
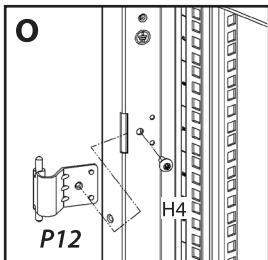
Screwdriver Torx T30



Picture 1



Picture 2



STEP 8

Parts

P14 x 1

Hardware Set:
"D"



H5 (1 pcs.)



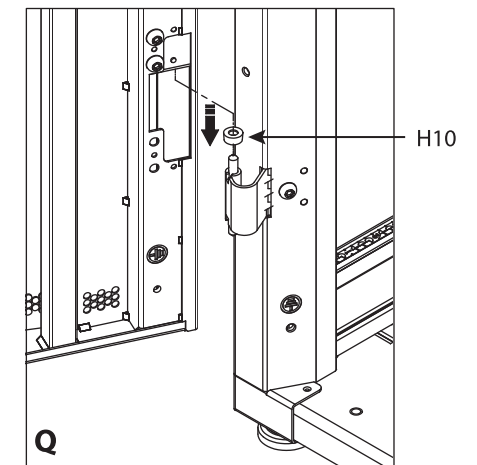
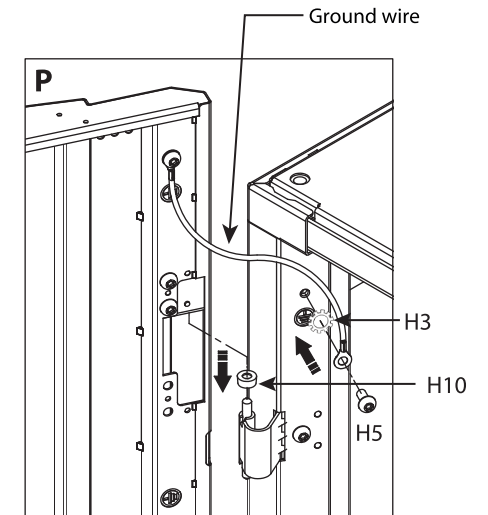
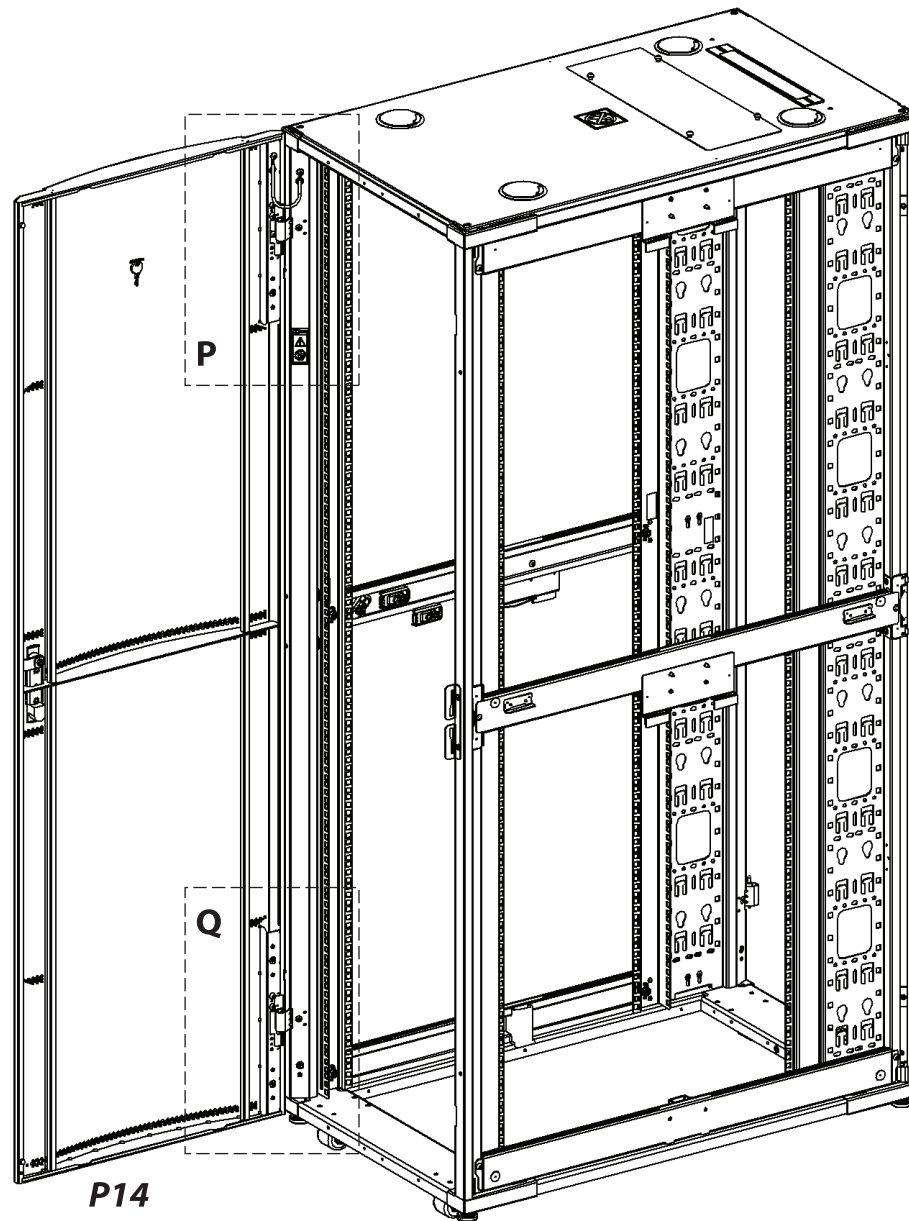
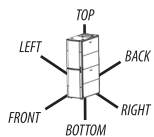
H10 (2 pcs.)



H3 (1 pcs.)

Tools:

Screwdriver Torx T30



STEP 9

Parts

P16 x 2

Hardware Set:

"D"



H5 (2 pcs.)



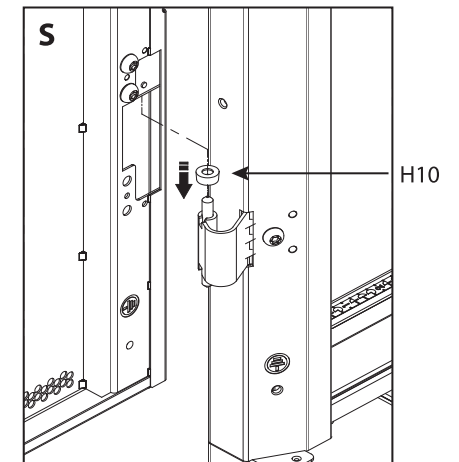
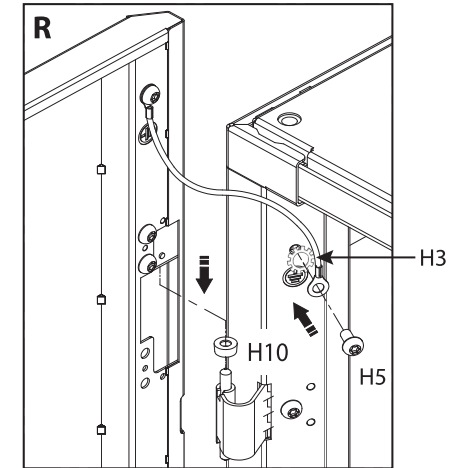
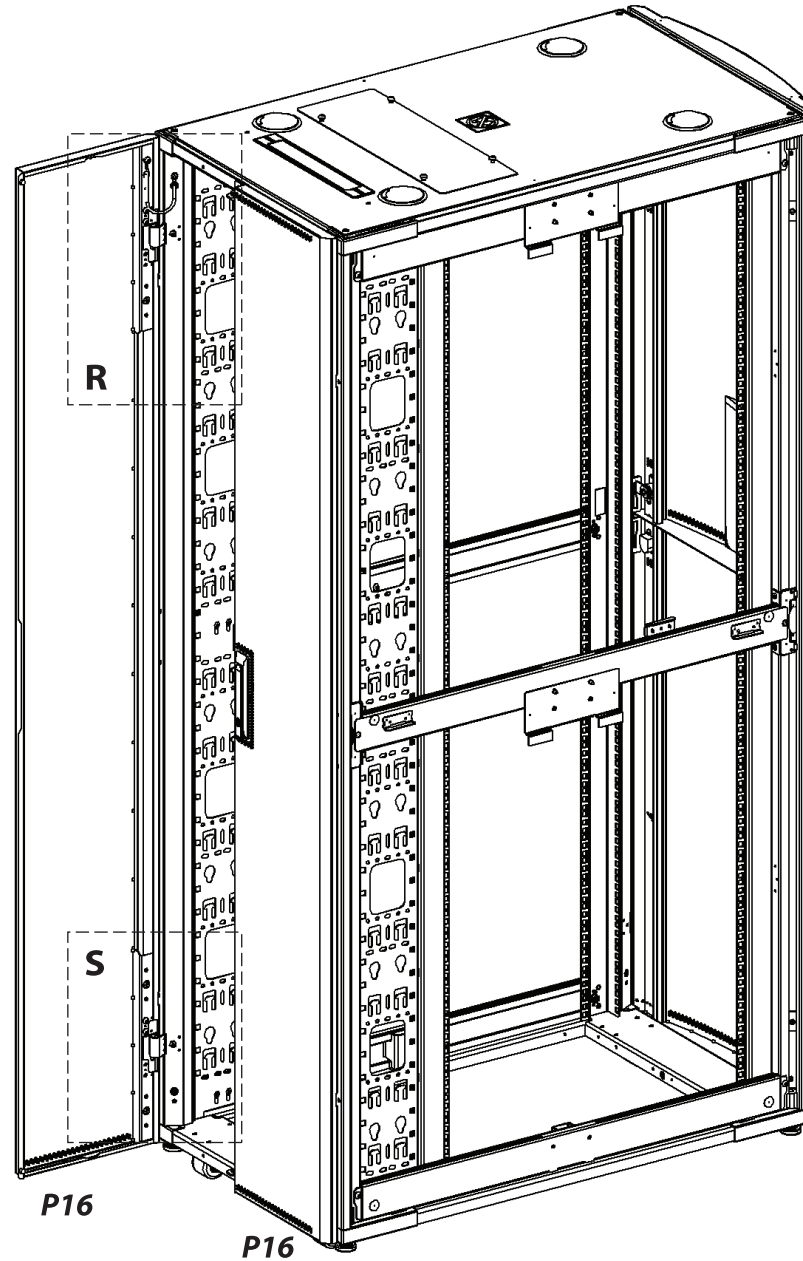
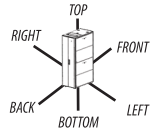
H10 (4 pcs.)



H3 (1 pcs.)

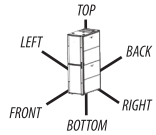
Tools:


Screwdriver Torx T30

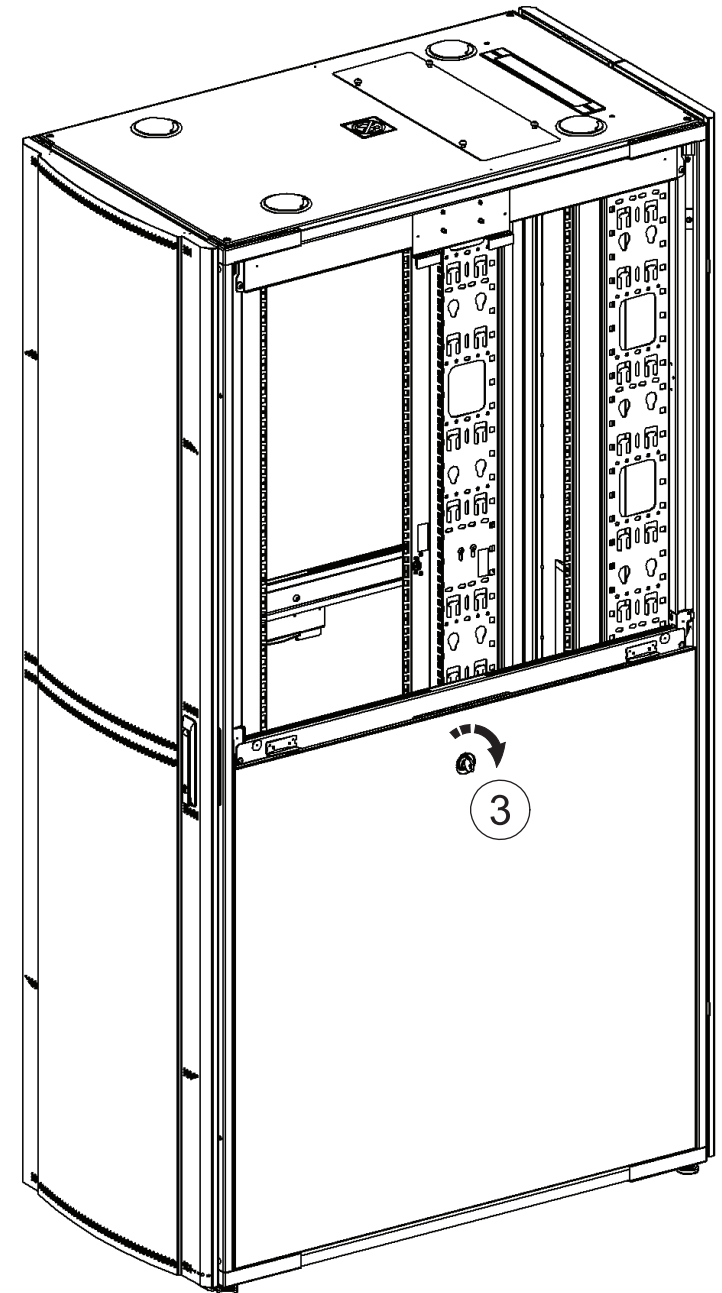
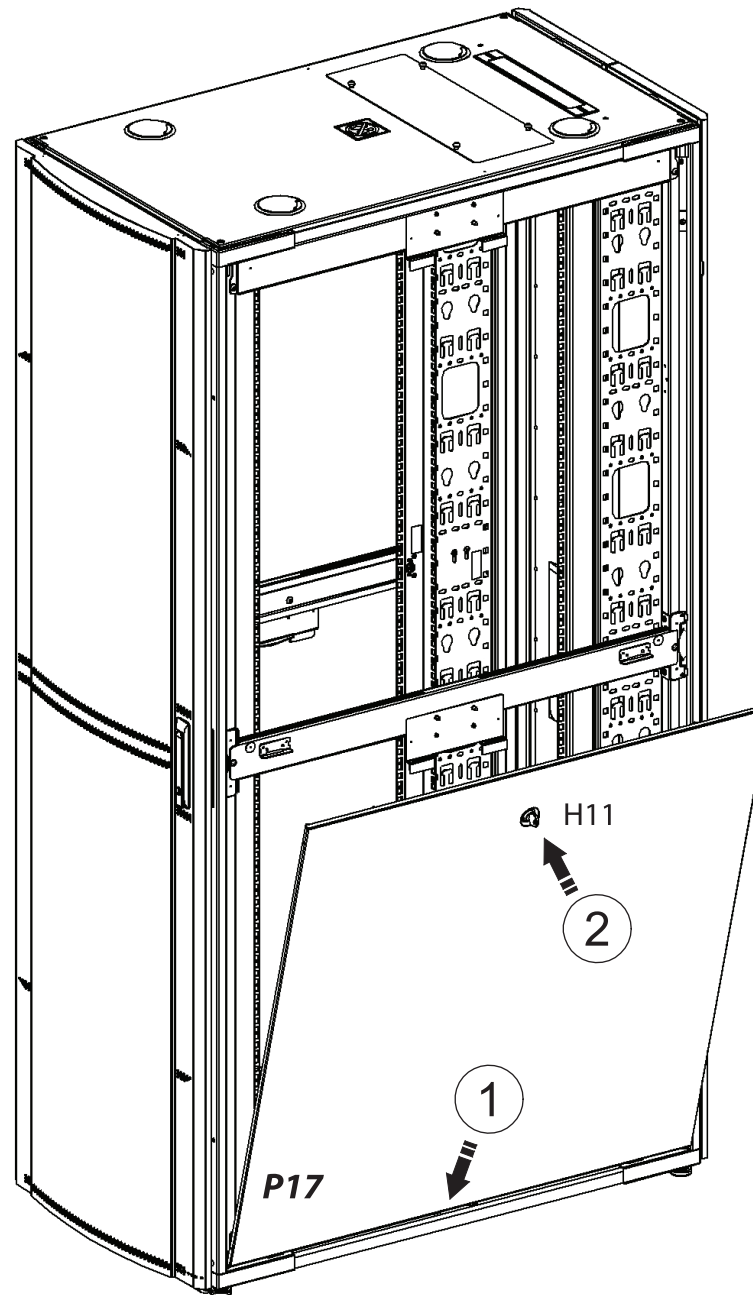


STEP 10 -1

Parts
P17 x 2



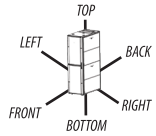
 Ensure lock is engaged to prevent side panel failing off



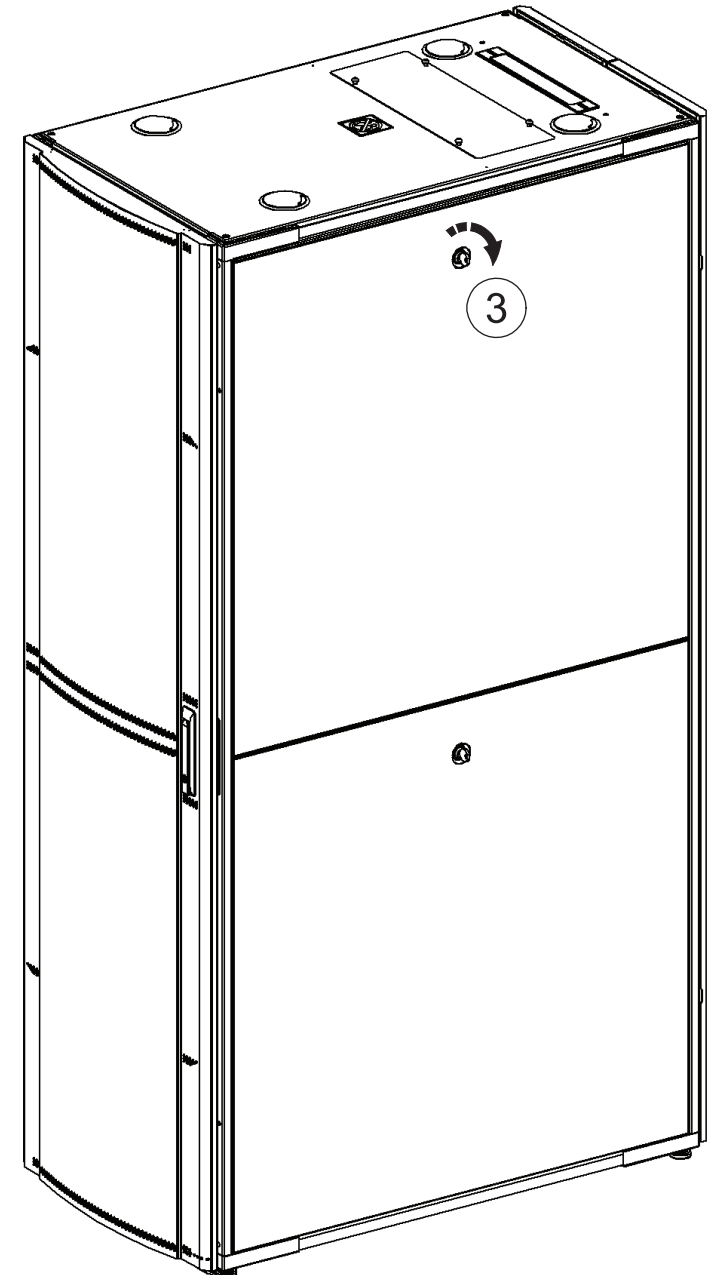
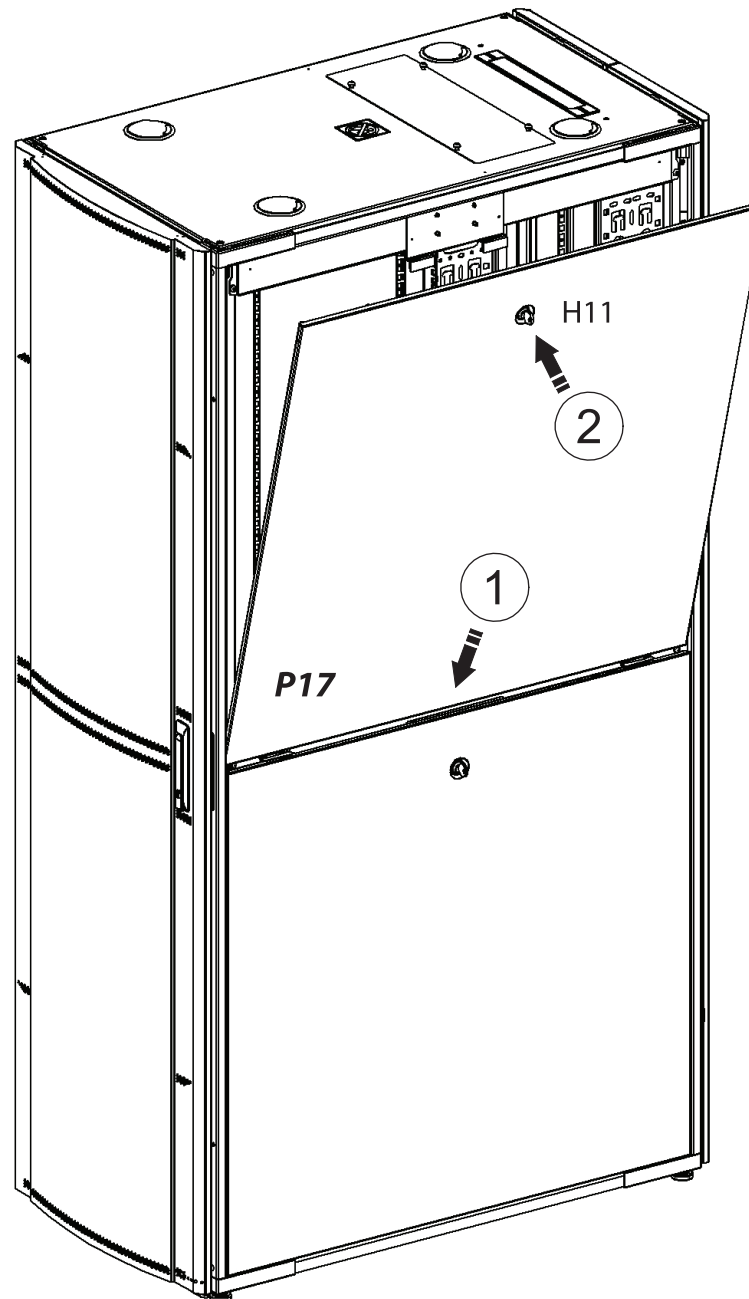
STEP 10 - 2

Parts

P17 x 2



Ensure lock is engaged
to prevent side panel
failing off

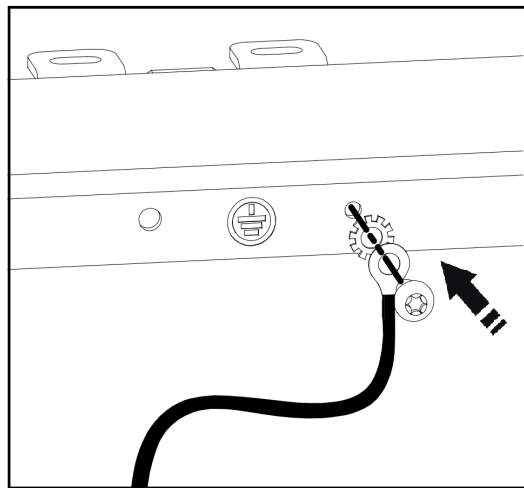


Grounding the 19" Enclosure

A grounding system that complies with TIA-942 requires each 19" enclosure to bond directly to the Common Bonding Network (CBN). The grounding system should direct damaging currents away from the enclosure equipment.

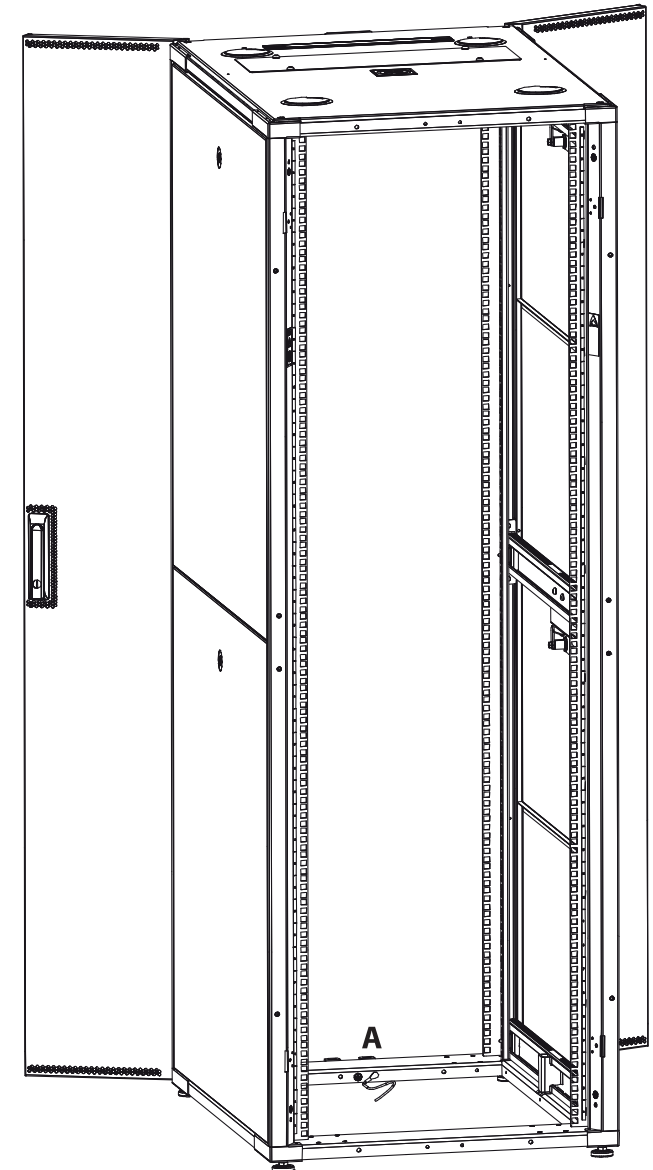


Caution: Connection of the 19" enclosure to building Common Bonding Network is required. Failure to follow these instructions could result in serious injury. Use only an approved Common Bonding Network Jumper Kit.

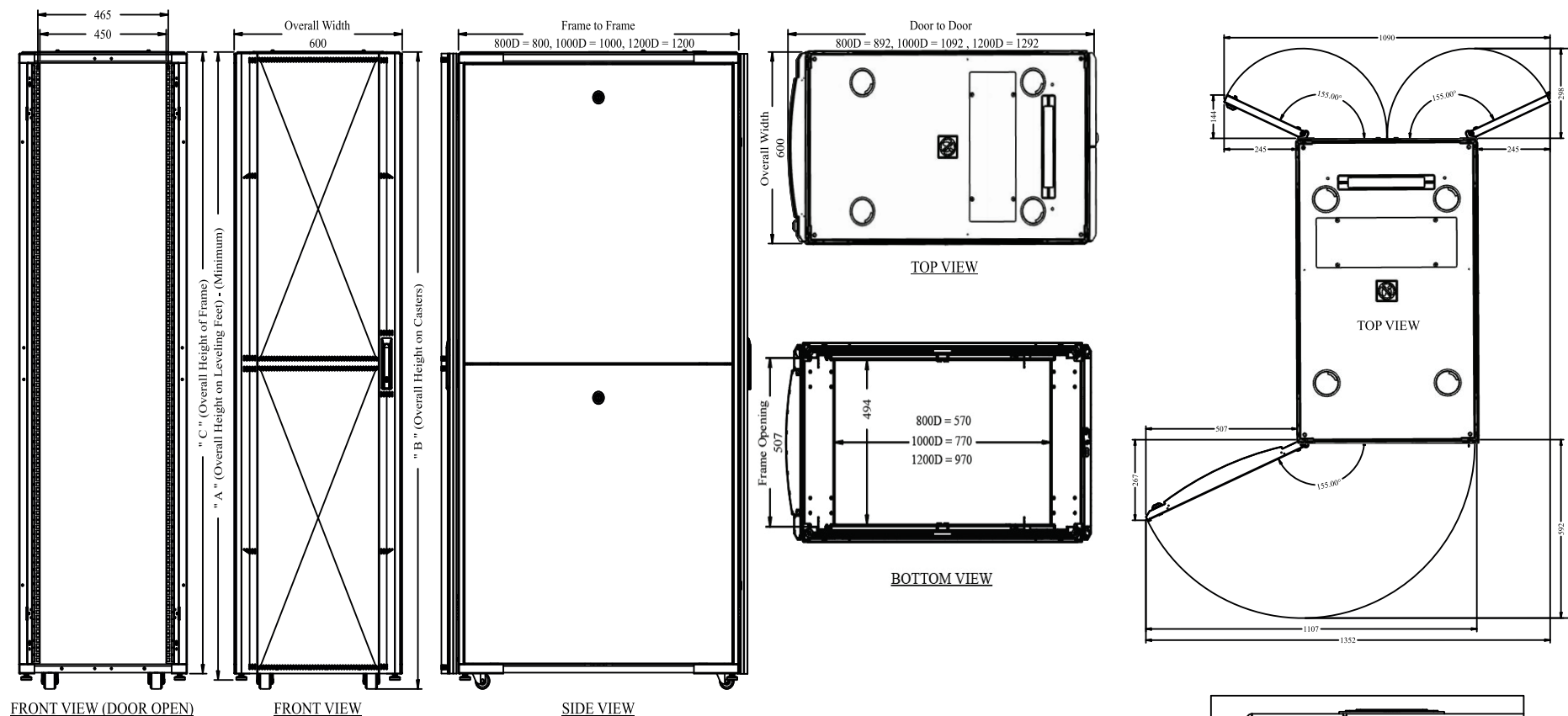


DETAIL A

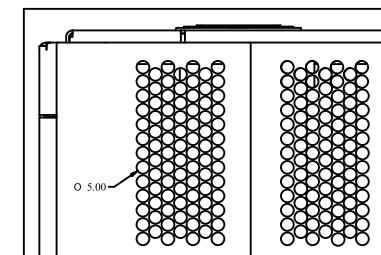
- Bond the 19" enclosure using the grounding cable ring connectoe onto the bottom frame.
- Use paint piercing washers between the ground terminal and enclosure frame.
- Tighten with provided screw.



Overall Dimensions of Assembled Arion



| 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.

Thank you very much for selecting our Arion rack.



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