



eSure™ Power Extend Converter & +27 VDC Vertiv™ eSure™ Bullet Converter Mounting Bracket, Door, and Top Cover Kits Installation Manual

Kit Specification Number: 565649, 565926, 10010670, 60018725

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Technical Support Site

If you encounter any installation or operational issues with your product, check the pertinent section of this manual to see if the issue can be resolved by following outlined procedures.

Visit <https://www.vertiv.com/en-us/support/> for additional assistance.

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Admonishments Used in this Document



DANGER! Warns of a hazard the reader **will** be exposed to that will **likely** result in death or serious injury if not avoided. (ANSI, OSHA)



WARNING! Warns of a potential hazard the reader **may** be exposed to that **could** result in death or serious injury if not avoided. This admonition is not used for situations that pose a risk only to equipment, software, data, or service. (ANSI)



CAUTION! Warns of a potential hazard the reader **may** be exposed to that **could** result in minor or moderate injury if not avoided. (ANSI, OSHA) This admonition is not used for situations that pose a risk only to equipment, data, or service, even if such use appears to be permitted in some of the applicable standards. (OSHA)



ALERT! Alerts the reader to an action that **must be avoided** in order to protect equipment, software, data, or service. (ISO)



ALERT! Alerts the reader to an action that **must be performed** in order to prevent equipment damage, software corruption, data loss, or service interruption. (ISO)



FIRE SAFETY! Informs the reader of fire safety information, reminders, precautions, or policies, or of the locations of fire-fighting and fire-safety equipment. (ISO)



SAFETY! Informs the reader of general safety information, reminders, precautions, or policies not related to a particular source of hazard or to fire safety. (ISO, ANSI, OSHA)

Important Safety Instructions

Safety Admonishments Definitions

Definitions of the safety admonishments used in this document are listed under “Admonishments Used in this Document” on page iv.

Safety and Regulatory Statements

Refer to Section 4154 (provided with your customer documentation) for Safety and Regulatory Statements.

Déclarations de Sécurité et de Réglementation

Reportez-vous à la Section 4154 (fourni avec les documents de votre client) pour les déclarations de sécurité et de réglementation.

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1 Vertiv™ eSure™ Power Extend Converter & +27 VDC Vertiv™ eSure™ Bullet Converter Mounting Bracket, Door, and Top Cover Kits Installation Instructions

1.1 Kit Description

Mounting bracket kits have been designed to easily install a Vertiv™ eSure™ Power Extend Converter (Model C48/58-1000B, Spec. No. 1C48581000B) or a +27 VDC Vertiv™ eSure™ Bullet Converter (Model C48/27-375B, Spec. No. 1C4827375B) into a distribution position of a Vertiv™ NetSure™ Power System (see UM565050 or UM60147273 for kit part numbers and descriptions). A mounting bracket kit must be used for grounding and mechanical support. See Table 1.1 for the kits covered by these instructions.

These instructions provide a step-by-step procedure to field install a Vertiv™ eSure™ Power Extend Converter or a +27 VDC Vertiv™ eSure™ Bullet Converter using one of the kits listed in Table 1.1. Installation of this kit in other systems not listed in Table 1.1 should not be attempted.

Table 1.1 Power System Mounting Bracket, Door, and Top Cover Kits Covered by these Instructions

Mounting Bracket Kit P/N	Description
565649	Mounting bracket kit for use with a 23" distribution cabinet in a Spec. No. 582136800 power system.
565926	Mounting bracket kit for use with a 19" distribution cabinet in a Spec. No. 582136800 power system.
10010670	Includes mounting bracket kit P/N 565649, door kit P/N 566095, and top cover kit P/N 10026154. For use with 23" 1-row distribution cabinet in a Spec. No. 582136800 power system and a P/N 548067 and P/N 10009822 stand-alone distribution cabinet.
60018725	Includes mounting bracket kit P/N 565926, door kit P/N 566092, and top cover kit P/N 10026155. For use with 19" 1-row distribution cabinet in a Spec. No. 582136800 power system and a P/N 548066 stand-alone distribution cabinet.

1.2 Tools and Material Required

Table 1.2 lists the items required to install this kit.

Table 1.2 Tools and Material Required

Description
#1 Flat Blade Screw Driver, insulated
#2 Phillips Blade Screw Driver, insulated
Torque Wrench, insulated (capable of being set from 9.6 in-lbs to 75 in-lbs)
3/8" Drive Ratchet and Socket Set, insulated
Power Extend Converter Kit (P/N 565050) (Model C48/58-1000B, Spec. No. 1C48581000B) or +27 VDC Vertiv™ eSure™ Bullet Converter Kit (P/N 60147273) (Model C48/27-375B, Spec. No. 1C4827375B), quantity as needed

1.3 Mounting Bracket, Door, and Top Cover Kit Contents

Table 1.3, Table 1.4, Table 1.5, and Table 1.6 list the items furnished as a part of the mounting bracket, door, and top cover kits covered by these instructions. Before installing a mounting bracket, door, and top cover kit, check the items furnished against those listed to ensure that there are no shortages.

Table 1.3 Mounting Bracket Kit P/N 565649 Contents

P/N	Description	Qty.
565657	Left Side Mounting Bracket	1
565658	Right Side Mounting Bracket	1
60018013	Front Mounting Bracket	1
132101	#10 Captive Nut (factory attached to left/right brackets)	4
218706400	#10-32 x 5/8" Screw (factory attached to left/right brackets)	4
214108100	#10 Flat Washer (factory attached to left/right brackets)	4
152175	Hot Surfaces Caution Label (factory attached to left/right brackets)	2
60010906	Panel Position Label, 30-Positions	1
151950	Storage Pouch	1
552423	Hook-and-Loop Fastener (factory attached to storage pouch)	1
566026	Toggle Breaker Guard Kit, includes... (Qty. 27) L-Shaped Guard Brackets (Qty. 27) #6-32 x 3/16" Screws (Qty. 27) M3-0.5 x 5 mm Screws	1

Table 1.4 Mounting Bracket Kit P/N 565926 Contents

P/N	Description	Qty.
565895	Left Side Mounting Bracket	1
565658	Right Side Mounting Bracket	1
565897	Front Side Mounting Bracket	1
132101	#10 Captive Nut (factory attached to left/right brackets)	3
218706400	#10-32 x 5/8" Screw (factory attached to left/right brackets)	3
214108100	#10 Flat Washer (factory attached to left/right brackets)	3
152175	Hot Surfaces Caution Label (factory attached to left/right brackets)	2
60010906	Panel Position Label, 30-Positions	1
151950	Storage Pouch	1
552423	Hook-and-Loop Fastener (factory attached to storage pouch)	1
566026	Toggle Breaker Guard Kit, includes... (Qty. 27) L-Shaped Guard Brackets (Qty. 27) #6-32 x 3/16" Screws (Qty. 27) M3-0.5 x 5 mm Screws	1

Table 1.5 Mounting Bracket, Door, and Top Cover Kit P/N 10010670 Contents

P/N	Description	Qty.
565649 Mounting Bracket Kit		
See Table 1.3 for contents.		
566095 Door Kit		
566045	Front Door	1
566042	Front Door Bracket	1
S-0650	Nut (factory assembled to door)	4
564200P1	Product Label (factory assembled to door)	1
560958P2	Brand Label (factory assembled to door)	1
514097	Caution Label (factory assembled to door)	1
545391	Panel Position Label, 24-Positions (factory assembled to door)	1
233394000	6-32 x 1/4" Screw	1
233362700	6-32 x 3/8" Screw, Pan Head, SEMS Lock Washer	1
224415500	6-32 x 3/8" Screw, Flat Head	1
223772500	6-32 Nut with Washer	1
214109200	#12 Flat Washer	1
10026154 Top Cover Kit		
10025375	Top Cover Bracket	1
10025376	Top Rear Cover	1
541711	Top Front Cover	1
218703200	6-32 x 3/8" Screw	6
218710500	12-24 x 1/2" Screw	2

Table 1.6 Mounting Bracket, Door, and Top Cover Kit P/N 60018725 Contents

P/N	Description	Qty.
565926 Mounting Bracket Kit		
See Table 1.4 for contents.		
566092 Door Kit		
566043	Front Door	1
566042	Front Door Bracket	1
S-0650	Nut (factory assembled to door)	4
564200P1	Product Label (factory assembled to door)	1
560958P2	Brand Label (factory assembled to door)	1
514097	Caution Label (factory assembled to door)	1
545391	Panel Position Label, 19-Positions (factory assembled to door)	1
233394000	6-32 x 1/4" Screw	1
233362700	6-32 x 3/8" Screw, Pan Head, SEMS Lock Washer	1
224415500	6-32 x 3/8" Screw, Flat Head	1
223772500	6-32 Nut with Washer	1
214109200	#12 Flat Washer	1
10026155 Top Cover Kit		
10025296	Top Cover Bracket	1
10025332	Top Rear Cover	1
545357	Top Front Cover	1
218703200	6-32 x 3/8" Screw	6
218710500	12-24 x 1/2" Screw	2

1.4 Mounting Bracket, Door, and Top Cover Kits Installation Procedure

THESE INSTRUCTIONS SHOULD BE READ THROUGH COMPLETELY BEFORE INSTALLING THE KIT.

The following is a step-by-step procedure to install the kit. The procedure has been written for ease of use and to minimize the possibility of contact with potentially hazardous energy. This procedure should be performed in the sequence given, and each step should be completely read and fully understood before performing that step. Observe all "Important Safety Instructions" starting on page v and also those presented in the following procedure. As each step of the procedure is completed, the box adjacent to the respective step should be checked. This will minimize the possibility of inadvertently skipping any steps. If the step is not required to be performed for your site, also check the box to indicate that it was read.

1.4.1 Important Safety Instructions



DANGER! Adhere to the "Important Safety Instructions" starting on page v and those listed in the power system manual.



CAUTION! When performing any step in these procedures that requires removal or installation of hardware, use caution to ensure no hardware is dropped and left inside the unit; otherwise service interruption or equipment damage may occur.



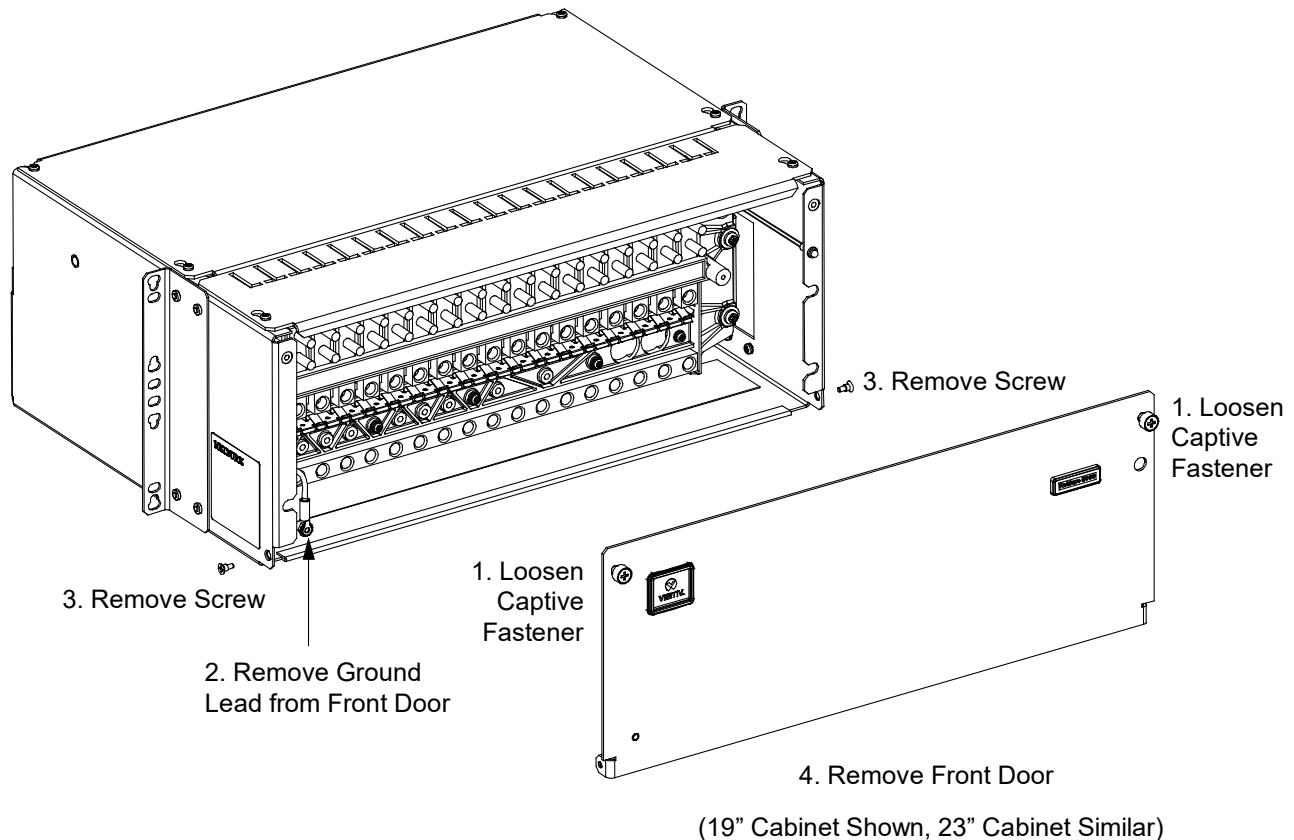
NOTE! When performing any step in this procedure which requires removal of existing hardware, retain all hardware for use in subsequent steps, unless otherwise stated.

1.4.2 Installing Mounting Bracket Kit P/N 565649, 565926

Procedure

- [] 1. Performing this procedure may activate external alarms. Do one of the following. If possible, disable these alarms. If these alarms cannot be easily disabled, notify the appropriate personnel to disregard any future alarms associated with this system while the procedure is being performed.
- [] 2. Gain access to the distribution panel into which the converter is to be installed.
- [] 3. **For 1-Row Distribution Cabinets Only:** Remove the front door from the distribution cabinet. See Figure 1.1. The front door and mounting hardware will not be re-used.
- [] 4. **For 2-Row Distribution Cabinets Only:** Open the front door.

Figure 1.1 Removing 1-Row Distribution Cabinet Front Door (19" Cabinet Shown, 23" Cabinet Similar)

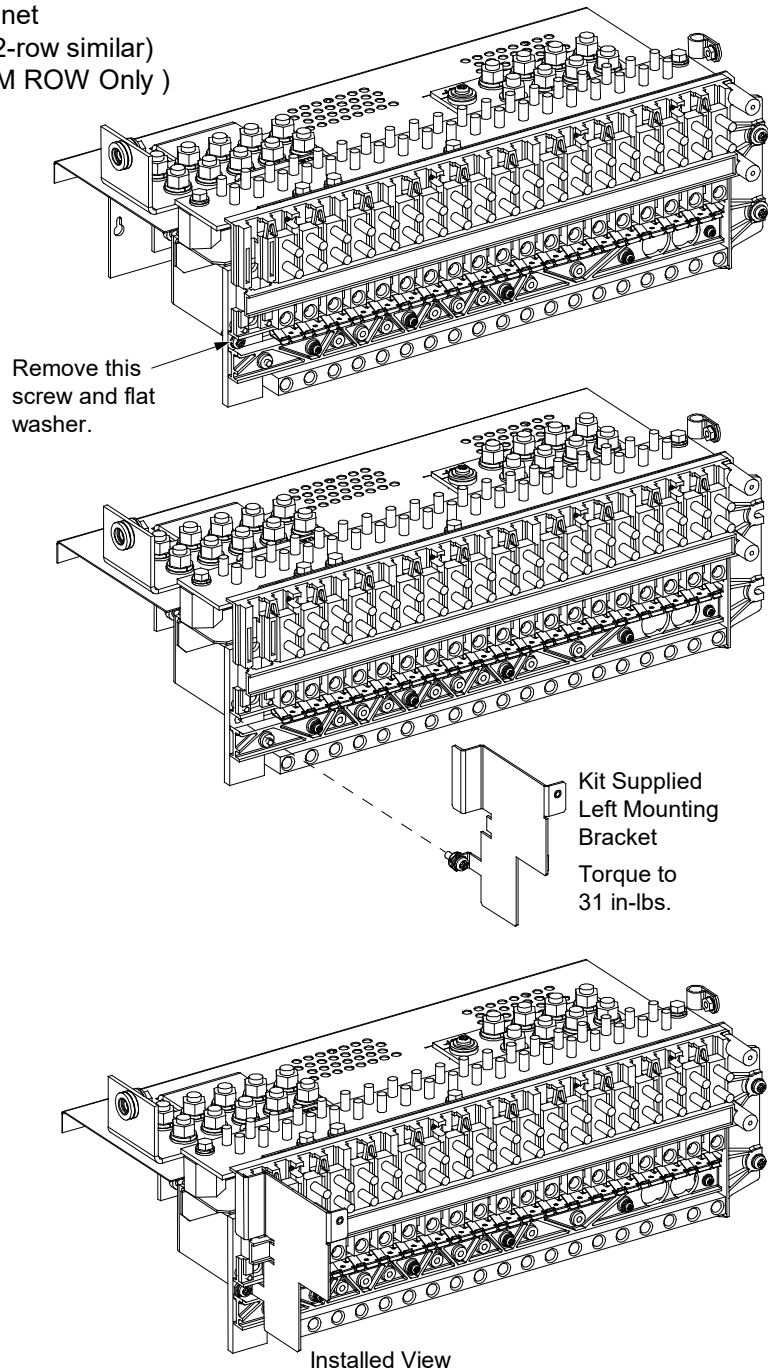


- [] 5. **For 19-Inch Distribution Cabinets Only:** Remove the screw and flat washer that secures the left side of the distribution panel to the cabinet. These will not be reused. See Figure 1.2.
- [] 6. **For 19-Inch Distribution Cabinets Only:** Orient the kit supplied left side mounting bracket as shown in Figure 1.2. Note that the bracket comes preassembled with mounting hardware. Secure the bracket to the distribution panel (and cabinet) with the preassembled mounting hardware. Torque hardware as indicated in Figure 1.2.

Figure 1.2 Installing Left Side Bracket – 19” Distribution Cabinet

19-Inch Distribution Cabinet
1-Row Cabinet (shown, 2-row similar)
2-Row Cabinet (BOTTOM ROW Only)

Components removed in illustration for clarity only.

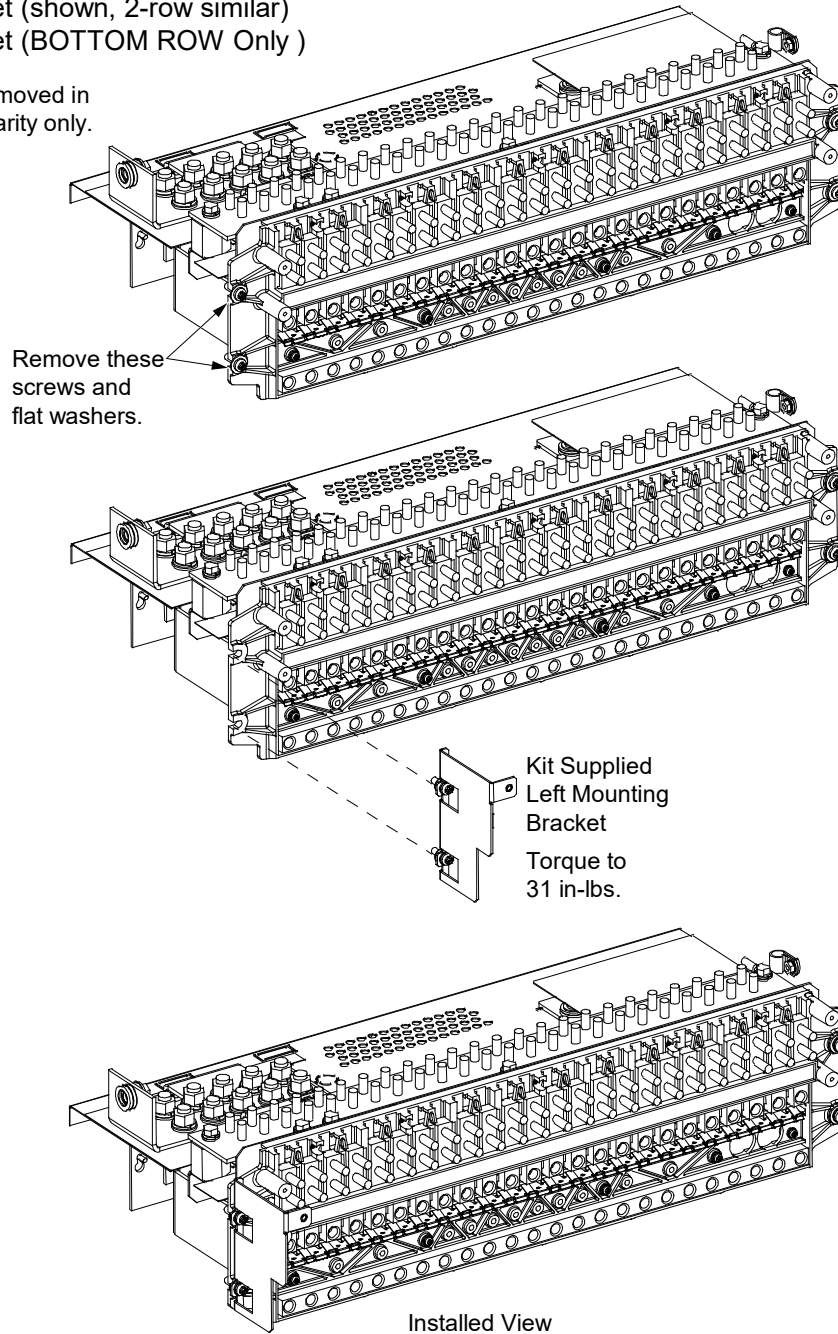


- [] 7. **For 23-Inch Distribution Cabinets Only:** Remove the two (2) screws and flat washers that secure the left side of the distribution panel to the cabinet. These will not be reused. See Figure 1.3.
- [] 8. **For 23-Inch Distribution Cabinets Only:** Orient the kit supplied left side mounting bracket as shown in Figure 1.3. Note that the bracket comes preassembled with mounting hardware. Secure the bracket to the distribution panel (and cabinet) with the preassembled mounting hardware. Torque hardware as indicated in Figure 1.3.

Figure 1.3 Installing Left Side Bracket – 23” Distribution Cabinet

23-Inch Distribution Cabinet
 1-Row Cabinet (shown, 2-row similar)
 2-Row Cabinet (BOTTOM ROW Only)

Components removed in
 illustration for clarity only.

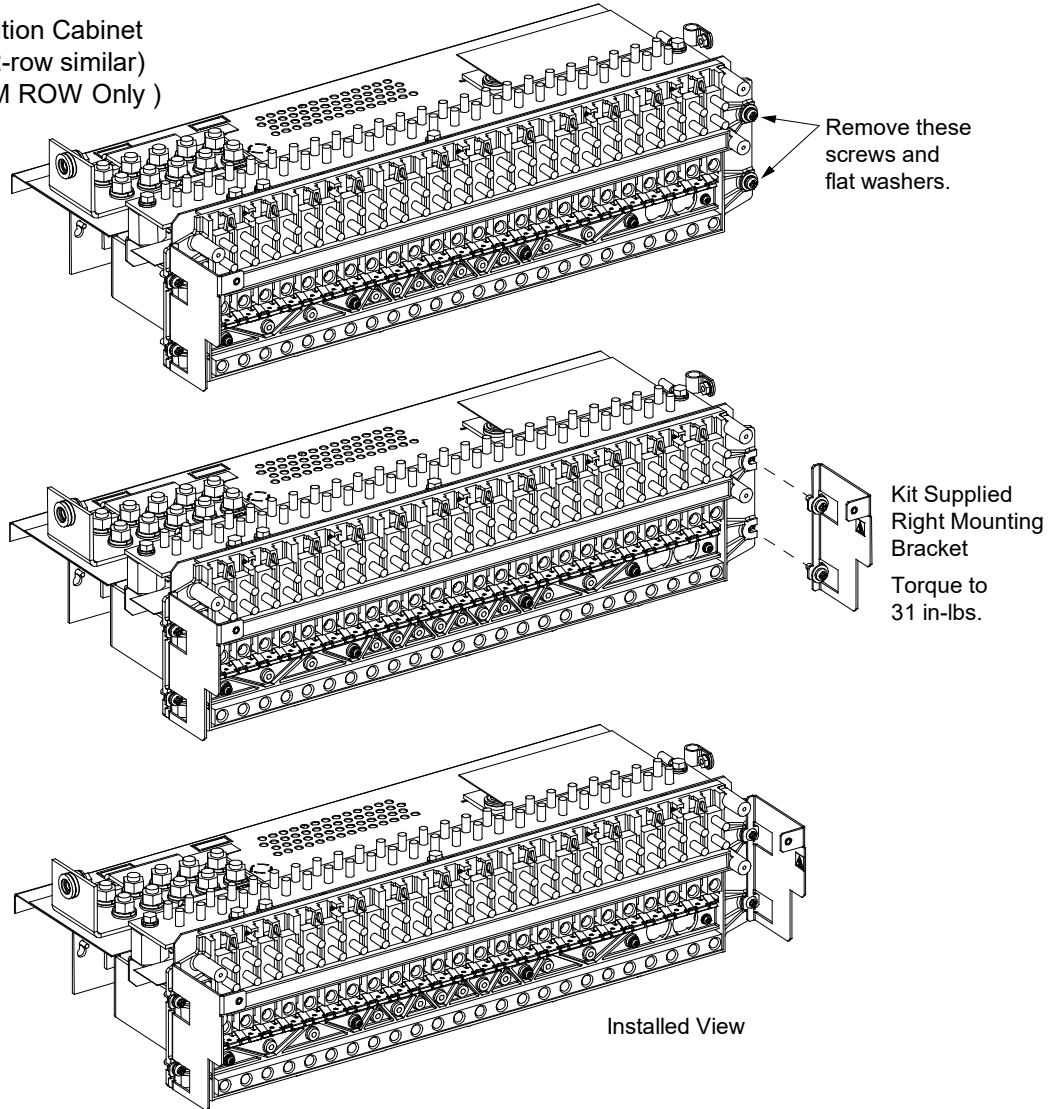


- [] 9. Remove the two (2) screws and flat washers that secure the right side of the distribution panel to the cabinet. These will not be reused. See Figure 1.4.
- [] 10. Orient the kit supplied right side mounting bracket as shown in Figure 1.4. Note that the bracket comes preassembled with mounting hardware. Secure the bracket to the distribution panel (and cabinet) with the preassembled mounting hardware. Torque hardware as indicated in Figure 1.4.

Figure 1.4 Installing Right Side Bracket (23-inch distribution cabinet shown, 19-inch distribution cabinet similar)

19-Inch / 23-Inch Distribution Cabinet
1-Row Cabinet (shown, 2-row similar)
2-Row Cabinet (BOTTOM ROW Only)

Components removed in illustration for clarity only.

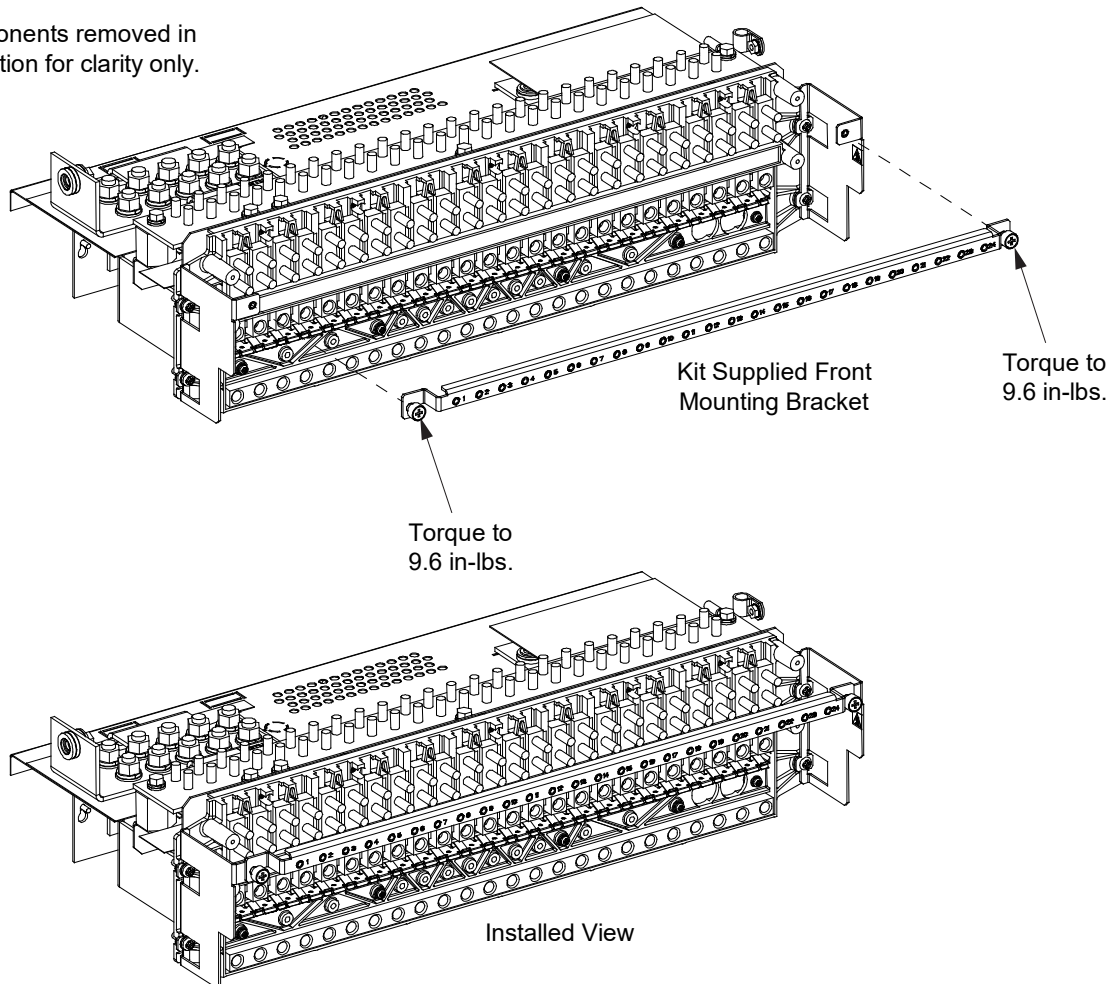


- [] 11. Orient the kit supplied front mounting bracket as shown in Figure 1.5. Note that the bracket comes preassembled with mounting hardware. Secure the front bracket to the left and right brackets by tightening the captive fasteners. Torque hardware as shown in Figure 1.5.

Figure 1.5 Installing Front Mounting Bracket (23-inch distribution cabinet shown, 19-inch distribution cabinet similar)

19-Inch / 23-Inch Distribution Cabinet
 1-Row Cabinet (shown, 2-row similar)
 2-Row Cabinet (BOTTOM ROW Only)

Components removed in illustration for clarity only.



- [] 12. Remove the kit supplied distribution position label (see Figure 1.6) from the kit supplied storage pouch and (using the label on the front door as a guide) record the distribution positions onto the kit supplied label.
- [] 13. Place the kit supplied distribution position label (see Figure 1.6) back into the kit supplied storage pouch or remove the backing from the label and adhere it to a suitable surface near the power system. If the kit supplied distribution position label is placed back into the storage pouch, remove the backing from the hook-and-loop fastener factory attached to the storage pouch and adhere the storage pouch to a suitable surface near the power system.

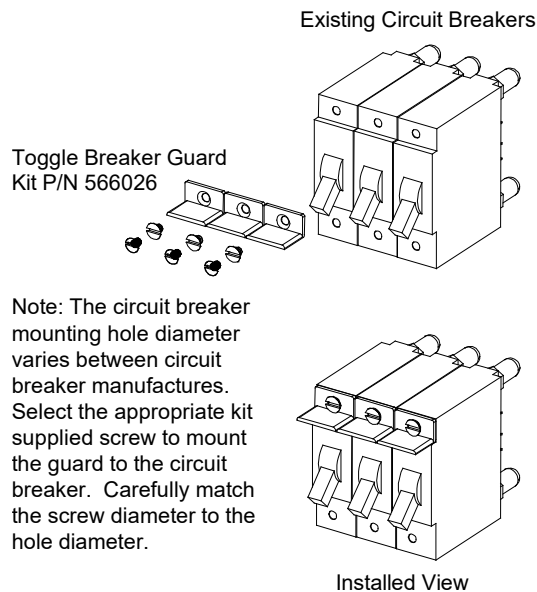
Figure 1.6 Distribution Position Label

Distribution Position Label

		ROW 2 <input type="checkbox"/>	ROW 4 <input type="checkbox"/>
VERTIV™		ROW 1 <input type="checkbox"/>	ROW 3 <input type="checkbox"/>
POS.	DETAIL	POS.	DETAIL
1		16	
2		17	
3		18	
4		19	
5		20	
6		21	
7		22	
8		23	
9		24	
10		25	
11		26	
12		27	
13		28	
14		29	
15		30	

- [] 14. Install the toggle breaker guard kit (P/N 566026) as required per site requirements. See Figure 1.7.

Figure 1.7 Toggle Breaker Guard Kit (P/N 566026)



- [] 15. If mounting bracket and door kit P/N 10010670 or 60018725 is being installed, continue with the “Installing Mounting Bracket, Door, and Top Cover Kit P/N 10010670 and 60018725” procedure starting on page 11.
- [] 16. If only mounting bracket kit P/N 565649 or 565926 is to be installed, continue with the “Installing the Converter into a Distribution Position” procedure starting on page 15.

1.4.3 Installing Mounting Bracket, Door, and Top Cover Kit P/N 10010670 and 60018725

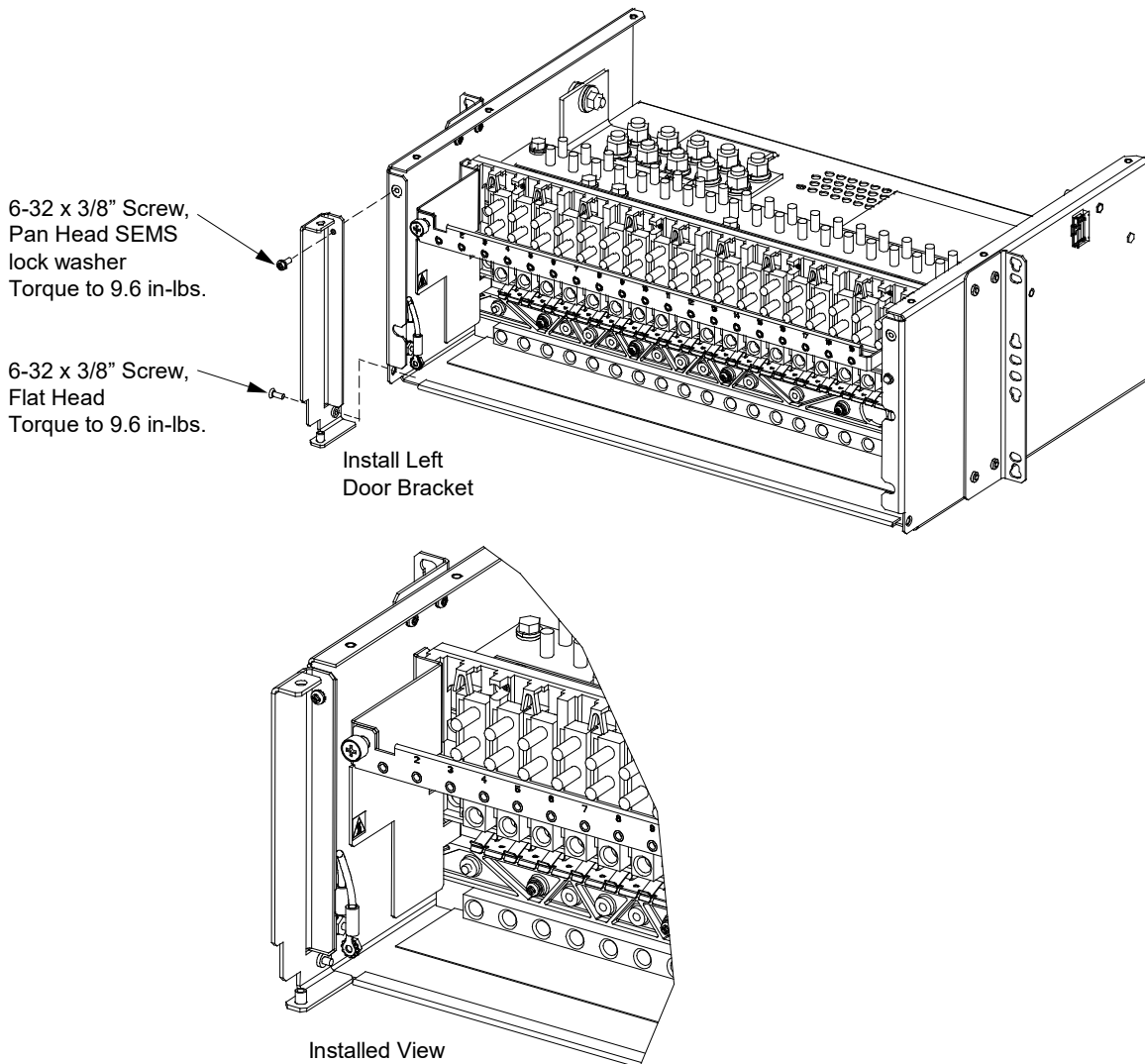


NOTE! When installing a converter mounting bracket kit covered by these instructions onto a power system or stand-alone distribution cabinet installed in an outside plant enclosure, leave the front door off the power system or stand-alone distribution cabinet when complete with the installation.

Procedure

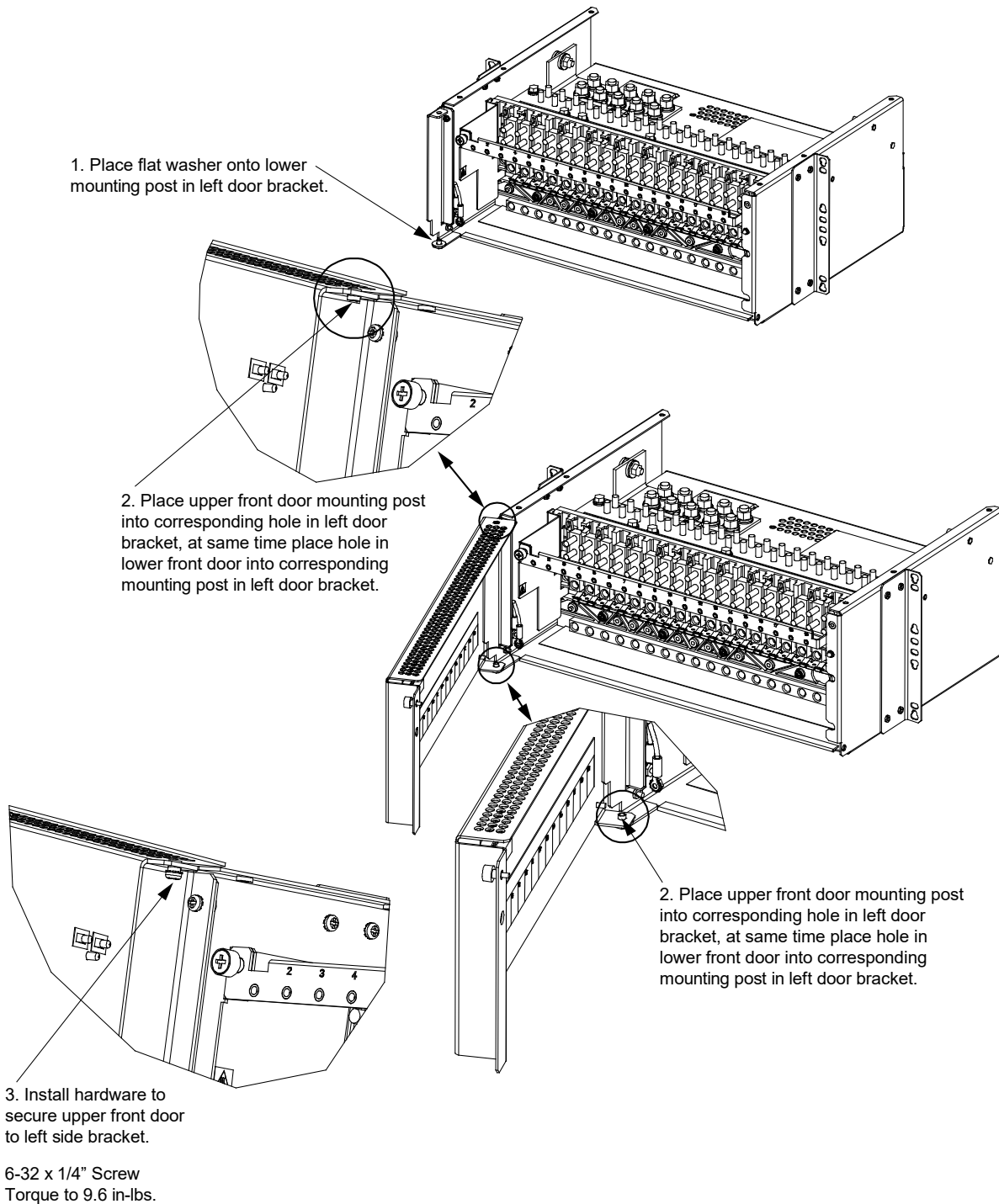
- [] 1. Refer to the “Installing Mounting Bracket Kit P/N 565649, 565926” procedure starting on page 5 to install the mounting bracket kit portion of the “Mounting Bracket, Door, and Top Cover Kit” P/N 10010670 or 60018725.
- [] 2. Continue with this procedure to install the door kit and top cover kit portion of the “Mounting Bracket, Door, and Top Cover Kit” P/N 10010670 or 60018725.
- [] 3. Orient the kit supplied left door bracket as shown in Figure 1.8. Secure the left door bracket to the distribution cabinet using the kit supplied hardware (see Figure 1.8). Torque hardware as indicated in Figure 1.8.

Figure 1.8 Installing Door Left Bracket (19-inch cabinet shown, 23-inch cabinet similar)



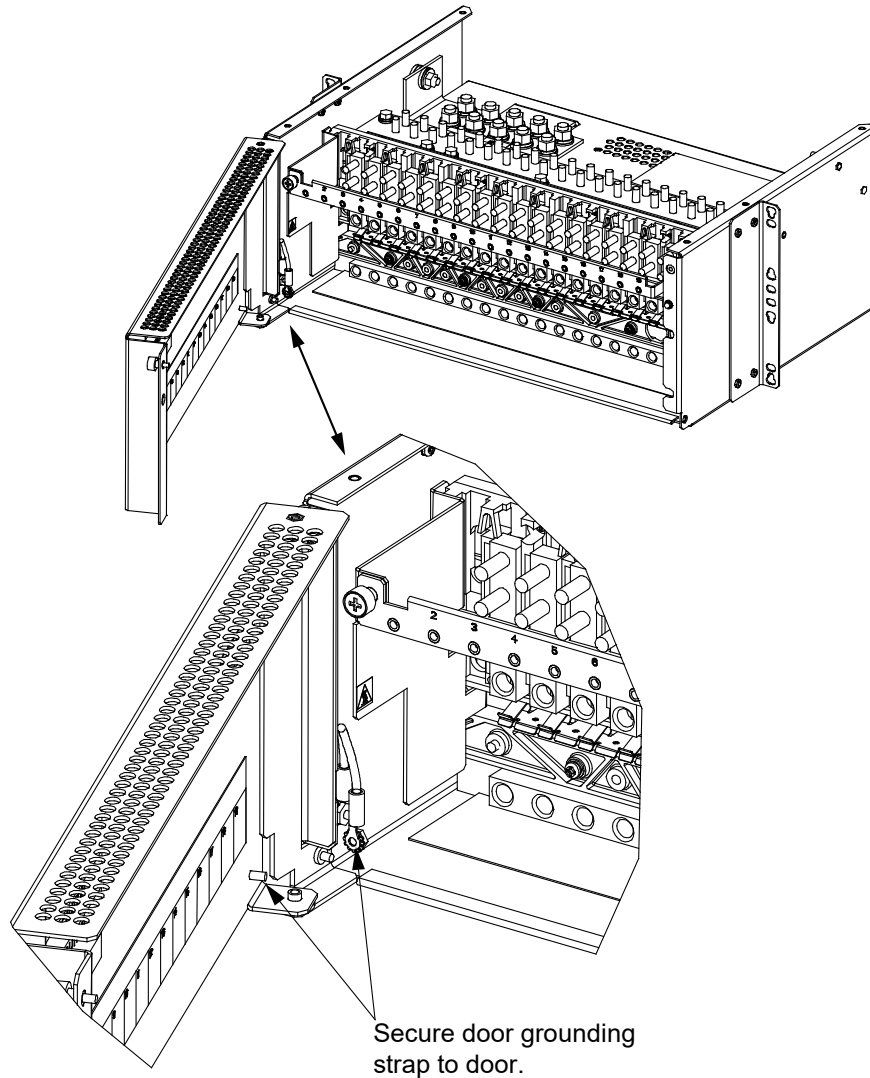
- [] 4. Place flat washer on lower post of left door bracket. Orient the kit supplied front door as shown in Figure 1.9. Place upper front door mounting post into corresponding hole in left door bracket, at the same time place hole in lower front door into corresponding mounting post in left door bracket (over washer just installed). Install hardware to secure upper front door to left door bracket as shown in Figure 1.9. Torque hardware as indicated in Figure 1.9.

Figure 1.9 Install Kit Front Door



- [] 5. Secure door grounding strap to ground stud on front door as shown in Figure 1.10. Torque hardware as indicated in Figure 1.10.

Figure 1.10 Install Door Grounding Strap

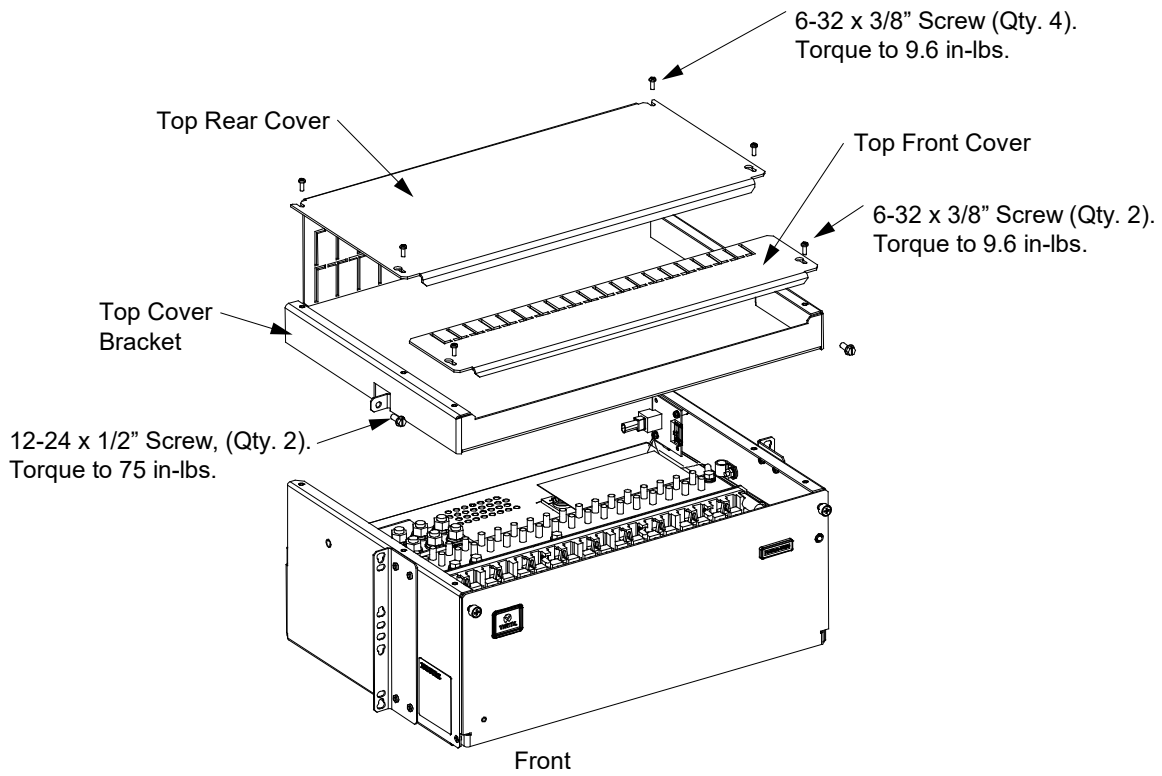


Secure door grounding strap to door.

6-32 Nut with Washer
Torque to 9.6 in-lbs.

- [] 6. Orient the kit supplied top cover bracket as shown in Figure 1.11 and place it on top of the distribution cabinet. Secure the top cover bracket to the distribution cabinet mounting rails using the kit supplied hardware (see Figure 1.11). Torque hardware as indicated in Figure 1.11.
- [] 7. Place the kit supplied top rear cover as shown in Figure 1.11. Secure the top rear cover to the top cover bracket using the kit supplied hardware (see Figure 1.11). Torque hardware as indicated in Figure 1.11.
- [] 8. Place the kit supplied top front cover as shown in Figure 1.11. Secure the top front cover to the top cover bracket using the kit supplied hardware (see Figure 1.11). Torque hardware as indicated in Figure 1.11.

Figure 1.11 Installing Top Cover Kit (19-inch cabinet shown, 23-inch cabinet similar)



- [] 9. Continue with the "Installing the Converter into a Distribution Position" procedure starting on page 15.

2 Installing the Converter into a Distribution Position

2.1 Important Safety Instructions



DANGER! Adhere to the “Important Safety Instructions” starting on page v and those listed in the power system manual.



ALERT! Only install the converter into a -48 VDC or -58 VDC distribution position. Non-repairable damage will occur if the converter is plugged into a +24 VDC distribution position.



NOTE! The converter can be inserted or removed with power applied (hot swappable) as long as the converter is inserted/removed with the enable/disable switch in the disabled position (see Figure 2.5 on page 24).



WARNING! The converter and front mounting bracket becomes very hot during converter operation at heavy load. Wear heat resistant gloves or allow the converter to cool down before removing.



NOTE! It is recommended that the +27 VDC Vertiv™ eSure™ Bullet Converters be installed in the side of the panel opposite from where the larger breakers are recommended to be installed to minimize heat concentration.

2.2 Restrictions

Refer to the converter instruction manual (UM565050 or UM60147273) for wire sizing restrictions.

For the Power Extend Converter, refer to Table 2.1 and Table 2.2 for spacing and power restrictions. This table shows how many converters can be placed side by side before skipping a single space at certain average power levels and in specific distribution row positions. These power levels pertain to the average output power (busy hour average power) drawn by the load including any power loss in the cable. The peak power available from each unit remains at 1000 watts regardless of spacing or location. Use the calculator tool that can be obtained at <https://www.vertiv.com/en-us/products-catalog/critical-power/dc-power-systems/esure-power-extend-converter-c4858-1000/#/downloads> to determine the necessity, quantity and spacing requirement of the Power Extend Converter based on the RRU type (or peak load), use application (host power system), trunk and jumper cable size and length, minimum source voltage and minimum RRU operating voltage.



NOTE! When installing a 565050 power extend converter covered by these instructions onto a power system or stand-alone distribution cabinet installed in an outside plant enclosure, leave the front door off the power system or stand-alone distribution cabinet when complete with the installation. You do not need to remove the front door if you are only installing a +27 VDC Vertiv™ eSure™ Bullet Converter.

Table 2.1 eSure™ Power Extend Converter Spacing and Power Restrictions: Spec. No. 582136800, 548066, 548067, 10009822 Operating in a 40°C Ambient

Distribution Row	Watts Per Power Extend Converter				
	No Spaces	1 Pole / Space	2 Pole / Space	3 Pole / Space	4 Pole / Space
Row 1 Only	250 W	750 W	575 W	450 W	425 W

Note: Row 1 is the Bottom Row

Table 2.2 eSure™ Power Extend Converter Spacing and Power Restrictions: Spec. No. 582136800 List 12 Operating in a Vertiv™ OSP Cabinet Spec. No. F2010398

Distribution Row	Watts Per Power Extend Converter				
	No Spaces	1 Pole / Space	2 Pole / Space	3 Pole / Space	4 Pole / Space
Row 1 Only	300 W	800 W	600 W	475 W	400 W

Note: Row 1 is the Bottom Row

For the +27 VDC Vertiv™ eSure™ Bullet Converter, no spacing is required between units. A total of three (3) units can be paralleled together for a total output power of 750 W at 40 °C and 600 W at 65°C. It is recommended that the +27 VDC Vertiv™ eSure™ Bullet Converters be installed in the side of the panel opposite from where the larger breakers are recommended to be installed to minimize heat concentration. As an example, for a single-row panel the larger breakers are recommended to be installed on the right-hand side of the panel. Therefore, the +27 VDC Vertiv™ eSure™ Bullet Converter is recommended to be installed on the left-hand side of the panel.

2.3 Preparing the Distribution Cabinet

Procedure

- [] 1. If the converter is to be installed for a newly connected load, connect the load and load return cables to the distribution position to be occupied by the converter. The connection for the load cable can be one of the busbar lug landing points directly behind the converter or to the positive side of the terminal block on the +27 VDC Bullet Nose 6-Position GMT Fuse Board (only used with the +27 VDC Vertiv™ eSure™ Bullet Converter). The connection for the return lead can be on the Return bar of the plant or the negative side of the terminal block on the +27 VDC Bullet Nose 6-Position GMT Fuse board. At the same time, connect the converter return wire faston tab provided with the converter to the cabinet's return busbar (if present, use the same location as the return lead to the load). At the same time (if required), connect the separately ordered converter paralleling busbar to the distribution panel load busbars using the same location as the load lead to the load. If two or three converters are to be connected in parallel or if a +27 VDC Bullet Nose 6-Position GMT Fuse Board Kit (10062803) is used along with the converters, a two-position (60016097), three-position (545346), four-position (10078650), or five-position (10078651) lug adapter busbar plate should be installed first, as shown in the installation instructions in UM10062803. See Figure 2.1 (1-row cabinets) or Figure 2.2 (2-row cabinets), as well as Figure 2.7. Torque as shown Figure 2.1 or Figure 2.2.
- [] 2. If the converter is to replace an existing circuit breaker, remove the circuit breaker and verify the load and return cables for the position are wired and labeled correctly. At the same time, connect the converter return wire faston tab provided with the converter to the cabinet's return busbar (use the same location as the return lead to the load). At the same time (if required), connect the separately ordered converter paralleling busbar to the distribution panel load busbars (using the same location as the load lead to the load). If two or three converters are to be connected in parallel, a two-position (60016097), or three-position (545346), or four-position (10078650), or five-position (10078651) lug adapter busbar plate should be installed first. See Figure 2.1 (1-row cabinets) or Figure 2.2 (2-row cabinets), as well as Figure 2.7. Torque as shown Figure 2.1 or Figure 2.2.



NOTE! The return wire faston tab may be connected to either the top or bottom return bar in a 2- row cabinet.

Figure 2.1 Connecting Converter Load Return Cables to the Return Bar with the Converter Return Wire Faston Tab and Connecting Converter Load Cables to the Distribution Panel with Converter Paralleling Busbar (P/N 60016097 or 545346) (if required) (1-Row Cabinet) (cont'd on next page)



NOTE! A single-row 19"W distribution panel is used in the following illustration. The 23"W single-row distribution panels are similar. Converter Return Wire faston Tab P/N 565990 is shown in the figure. P/N 10086492 is also available.

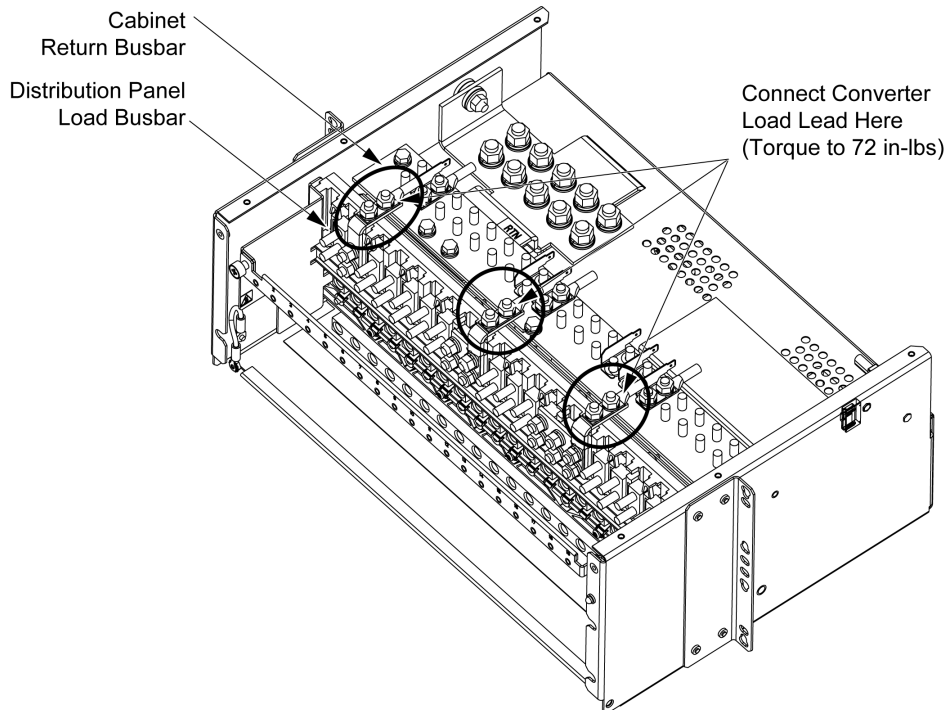
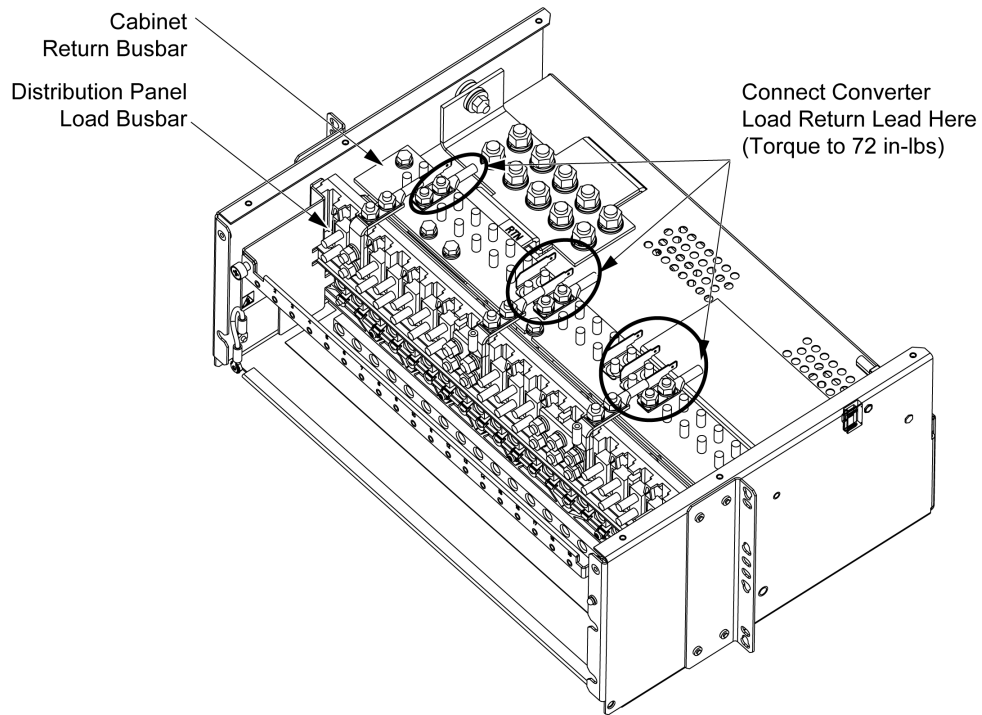
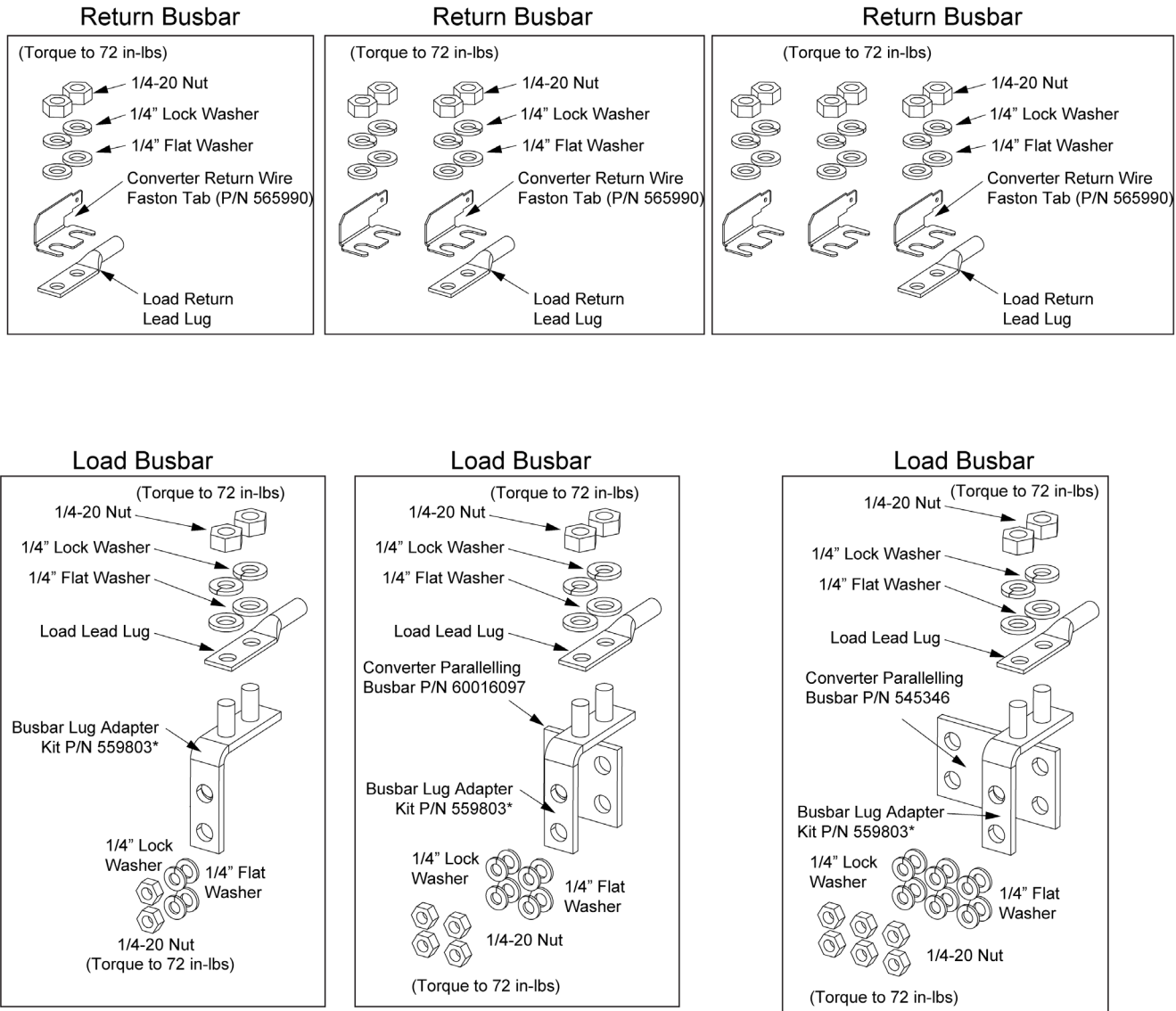


Figure 2.1 Connecting Converter Load Return Cables to the Return Bar with the Converter Return Wire Faston Tab and Connecting Converter Load Cables to the Distribution Panel with Converter Paralleling Busbar (P/N 60016097 or 545346) (if required) (1-Row Cabinet) (cont'd from previous page)

NOTE! In the images below, the Power Extend Converter Return Wire Faston Tab (P/N/ 565990) is shown. A different faston tab allows for front connection (P/N 10086492) is also available.



* Optional - lugs may be oriented straight or at 90-degrees.

NOTE! In the following figures, the Power Extend Converter is described. The installation procedure for the +27 VDC Vertiv™ eSure™ Bullet Converter is the same.

Figure 2.2 Connecting Converter Load Return Cables to the Return Bar with the Converter Return Wire Faston Tab and Connecting Converter Load Cables to the Distribution Panel with Converter Paralleling Busbar (P/N 60016097 or 545346) (if required) (2-Row Cabinet, BOTTOM ROW ONLY) (cont'd on next page)

NOTE! A 23"W two-row distribution cabinet is used in the following illustration. A 19"W two-row distribution cabinet is similar.

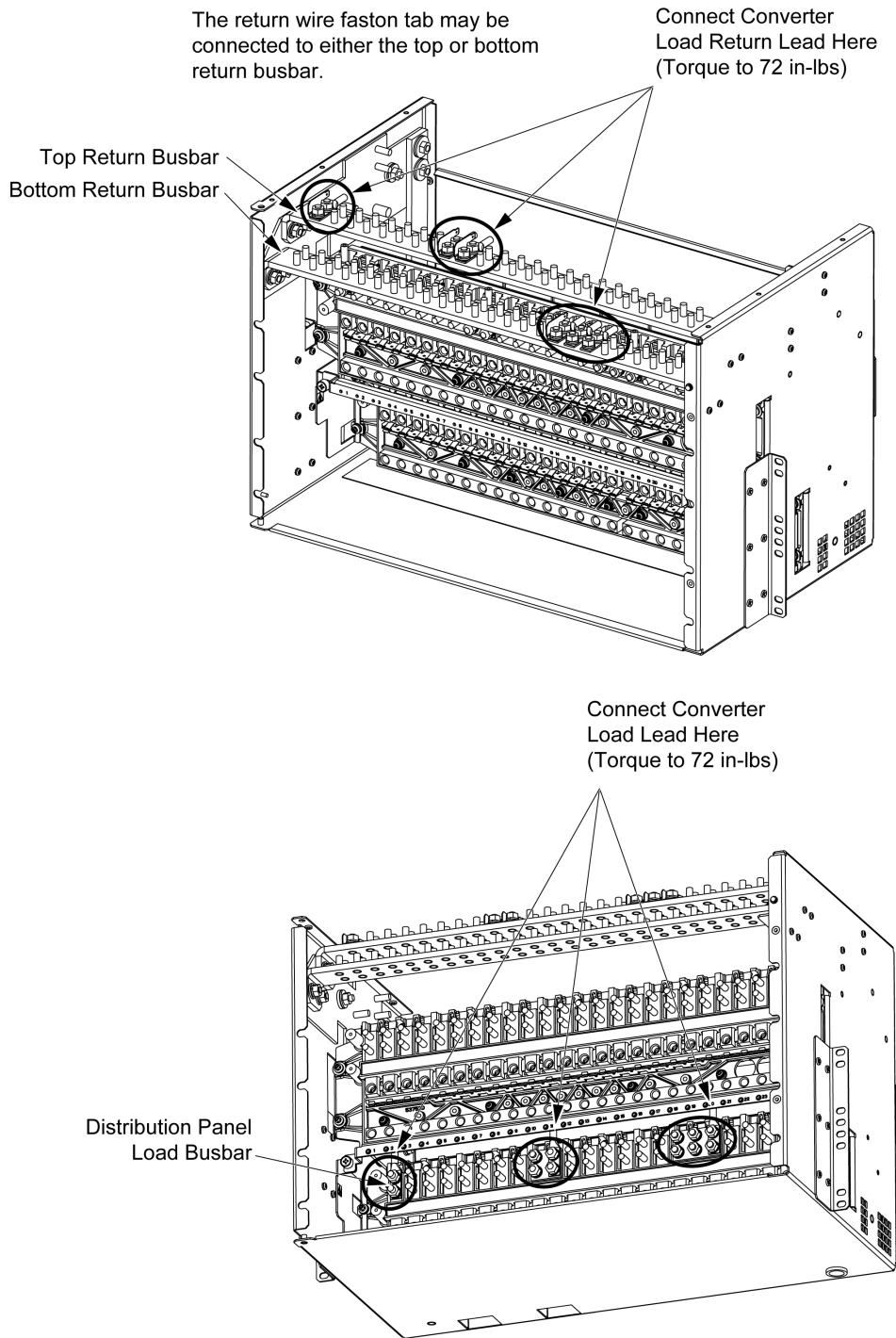
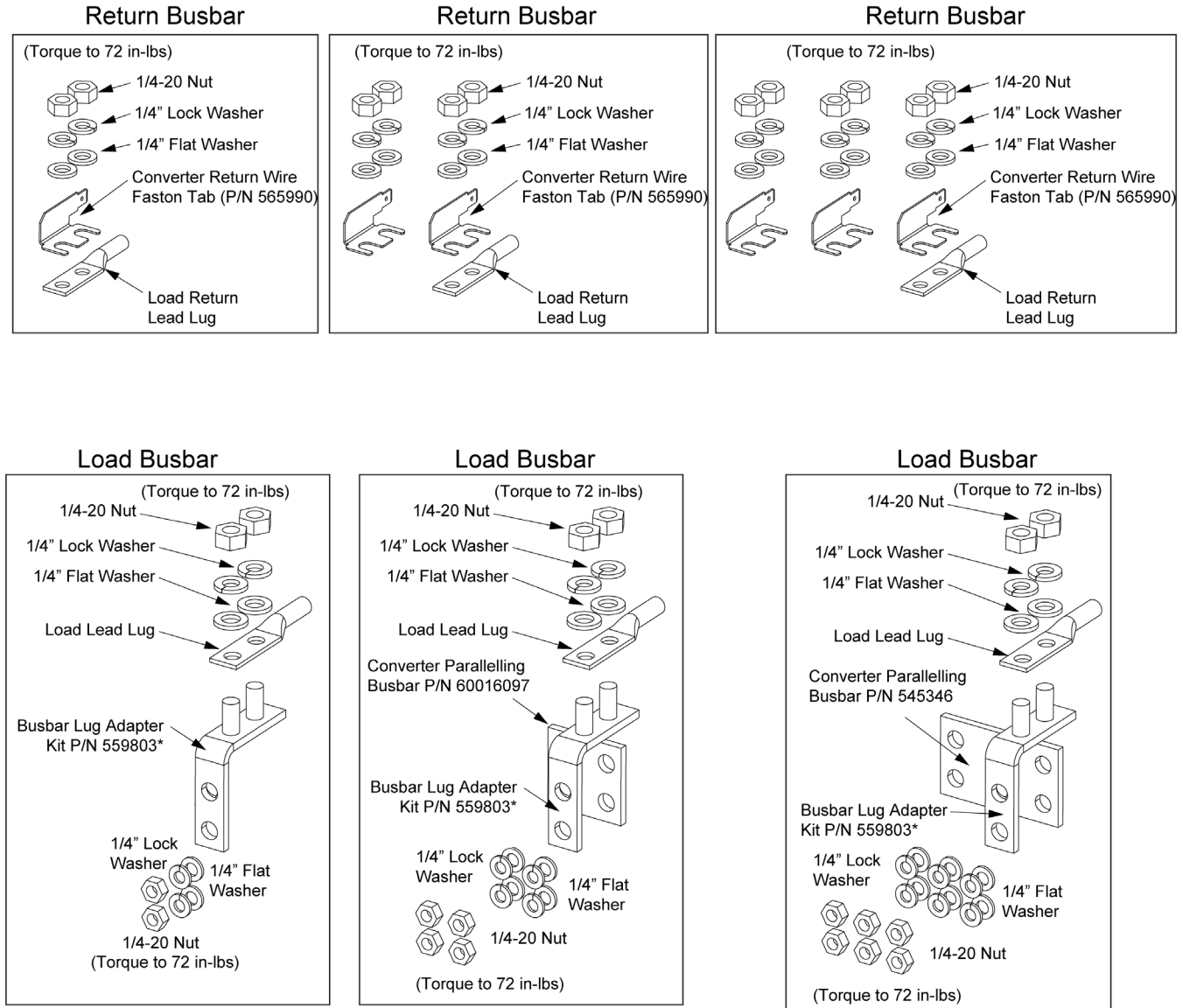


Figure 2.2 Connecting Converter Load Return Cables to the Return Bar with the Converter Return Wire Faston Tab and Connecting Converter Load Cables to the Distribution Panel with Converter Paralleling Busbar (P/N 60016097 or 545346) (if required) (2-Row Cabinet, BOTTOM ROW ONLY) (cont'd from previous page)

NOTE! In the images below, the Power Extend Converter Return Wire Faston Tab (P/N/ 565990) is shown. A different faston tab allows for front connection (P/N 10086492) is also available.



* Optional - lugs may be oriented straight or at 90-degrees.

2.4 Installing the Converter(s)



NOTE! See also “Restrictions” on page 15.



NOTE! Power Extend Converter 1C48581000B is represented in these figures. 1C4827375B is similar.

Procedure

- [] 1. **1-Row Cabinet Only:** Connect the return wire (P/N 564330) provided with the converter to a converter return wire faston tab installed on the cabinet’s return bar in a previous step. See Figure 2.3. Repeat for each converter to be installed.

Route the return wire (P/N 564330) connected above under the kit installed front mounting bracket. See Figure 2.3. Repeat for each converter to be installed.

- [] 2. **2-Row Cabinet Only:** Connect the return wire (P/N 564330) and 4-inch long return wire jumper (P/N 565752) provided with the converter to a converter return wire faston tab installed on the cabinet’s return bar in a previous step. See Figure 2.4. Repeat for each converter to be installed.

Route the return wire (P/N 564330) connected above behind the top-row distribution panel and under the kit installed front mounting bracket (bottom-row). See Figure 2.4. Repeat for each converter to be installed.



NOTE! The return wire (P/N 564330) and 4-inch long return wire jumper (P/N 565752) may be connected to either the top or bottom return bar.



NOTE! The converter is also furnished with an 8-inch long return wire jumper P/N 566207. The 8-inch long return wire jumper is not used with this mounting bracket kit. It is used in other kits.

Figure 2.3 Connecting Converter Return Wire(s) (P/N 564330) to a Converter Return Wire Faston Tab and to a Converter (1-Row Cabinet)

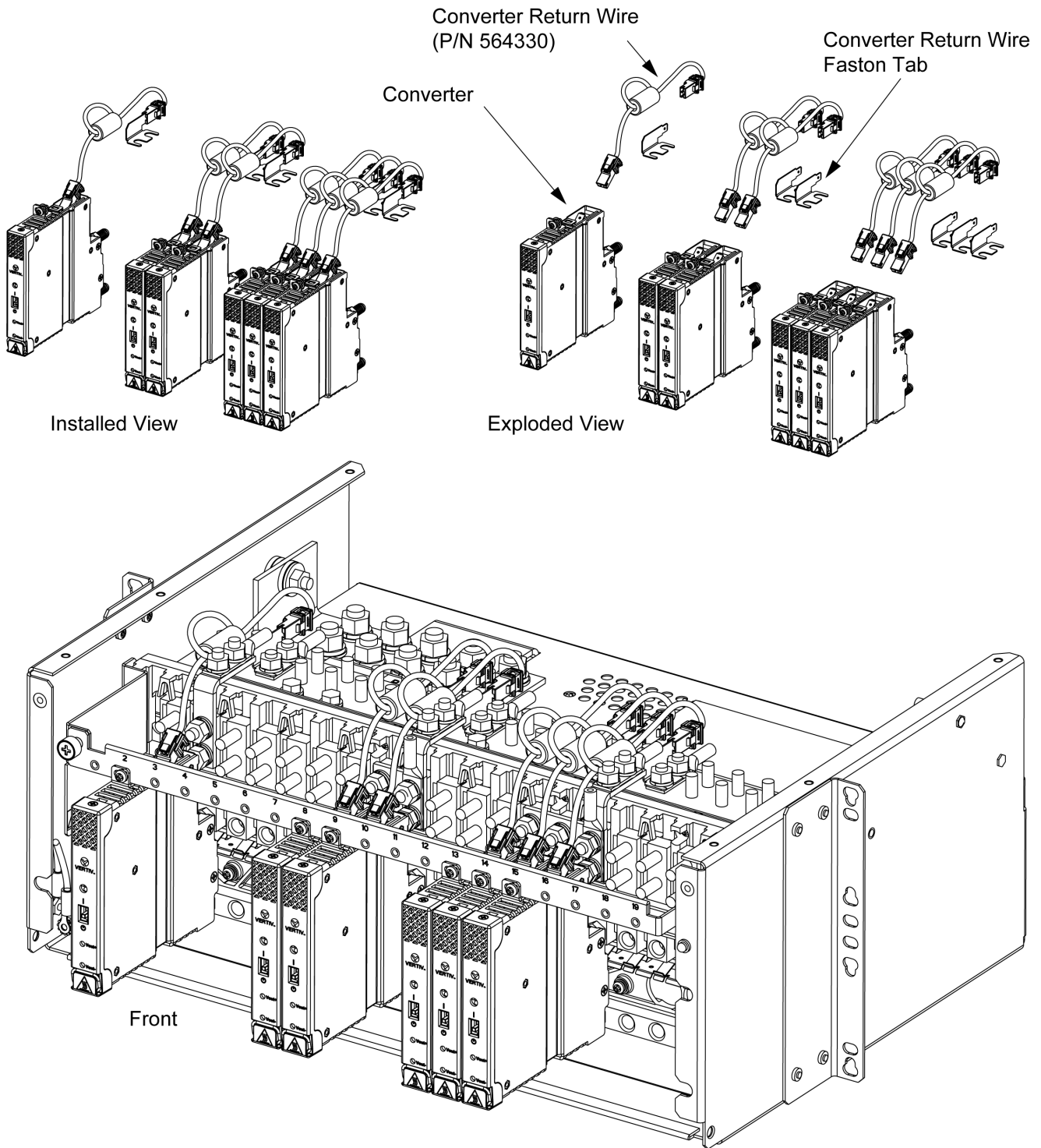
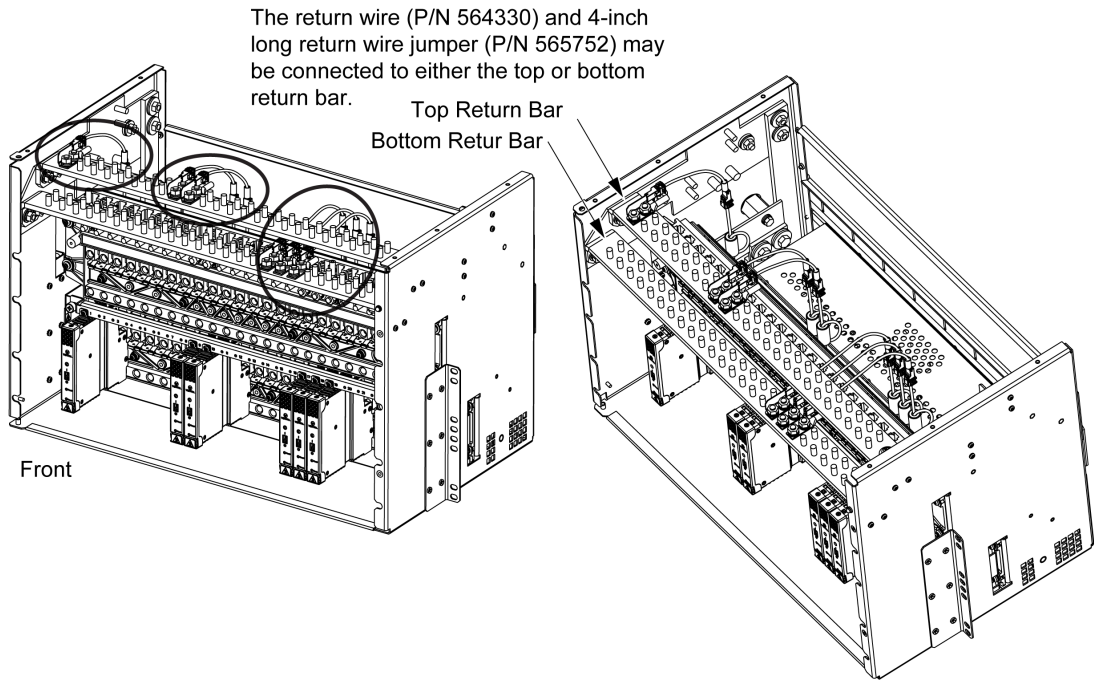
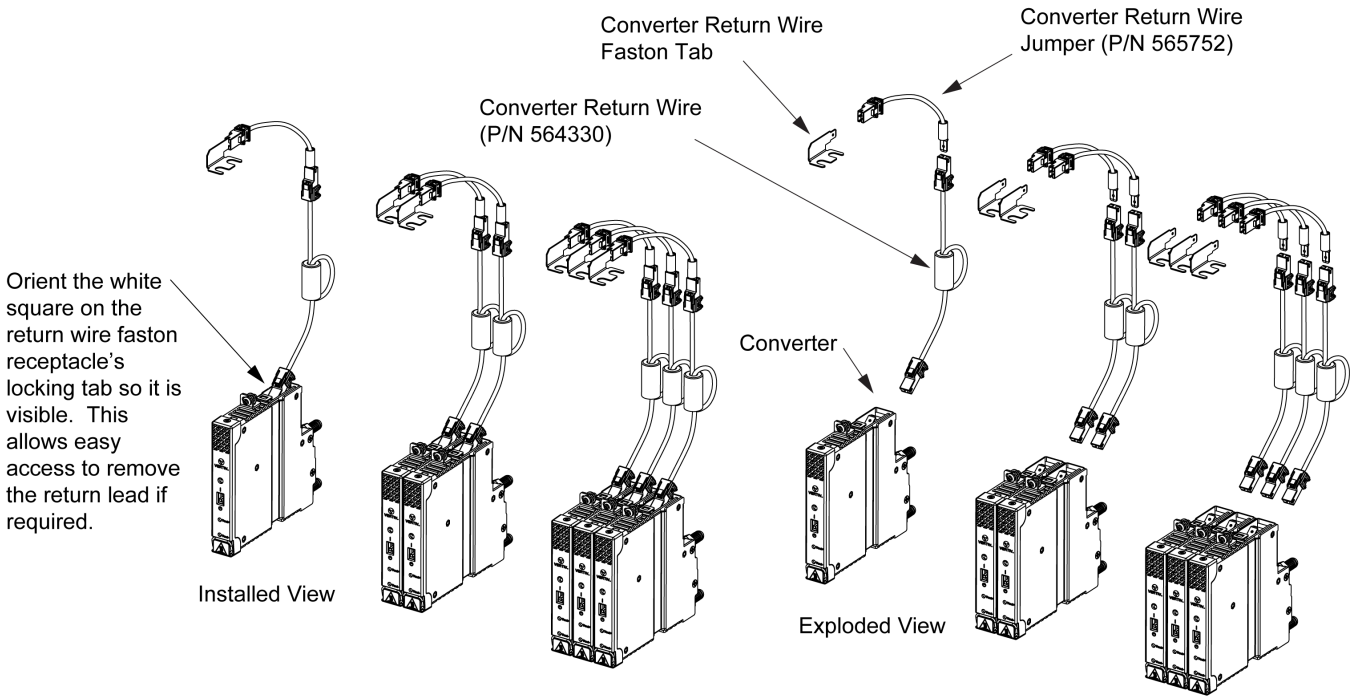
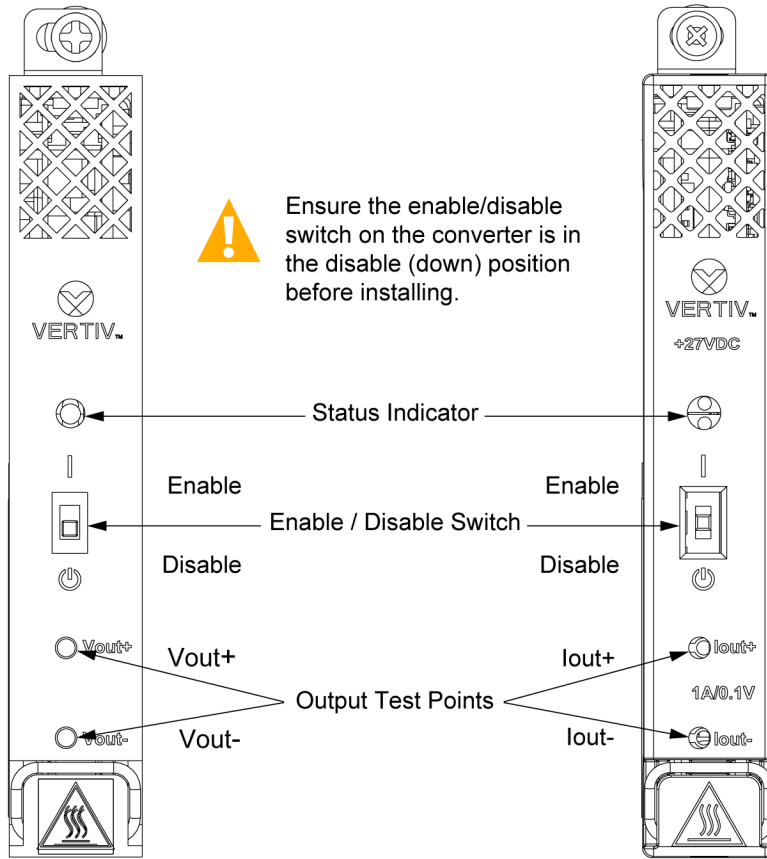


Figure 2.4 Connecting Converter Return Wire(s) (P/N 564330) and Return Wire Jumper(s) (P/N 565752) to a Converter Return Wire Faston Tab and to a Converter (2-Row Cabinet)



- [] 3. Ensure the enable/disable switch on the converter is in the disable (down) position. See **Figure 2.5**. Repeat for each converter to be installed.

Figure 2.5 Enable/Disable Switch



Note: Output Voltage measurement on the +27 VDC Vertiv™ eSure™ Bullet Converter represents output current. 1A/0.1V

- [] 4. Connect the return wire (P/N 564330) to a converter. Plug the converter into the distribution panel. Note: Orient the white square on the return wire faston receptacle's locking tab as shown in Figure 2.6. Secure the converter to the mounting bracket with the screw provided with the converter. See Figure 2.6. Torque as shown in Figure 2.6. Repeat for each converter to be installed.
- [] 5. Place the enable/disable switch on the converter to the enable position. See Figure 2.5. If two or three converters are connected in parallel to a load that exceeds the peak load rating for a single converter, they should be switched on simultaneously.
- [] 6. Observe the status of the converter front panel local indicator. If operating normally, this indicator should be illuminated green. See Figure 2.5 on page 24.
- [] 7. Ensure that there are no local or remote alarms active on the power system.
- [] 8. Enable the external alarms or notify appropriate personnel that this procedure is finished.

Figure 2.6 Installing Converter(s)

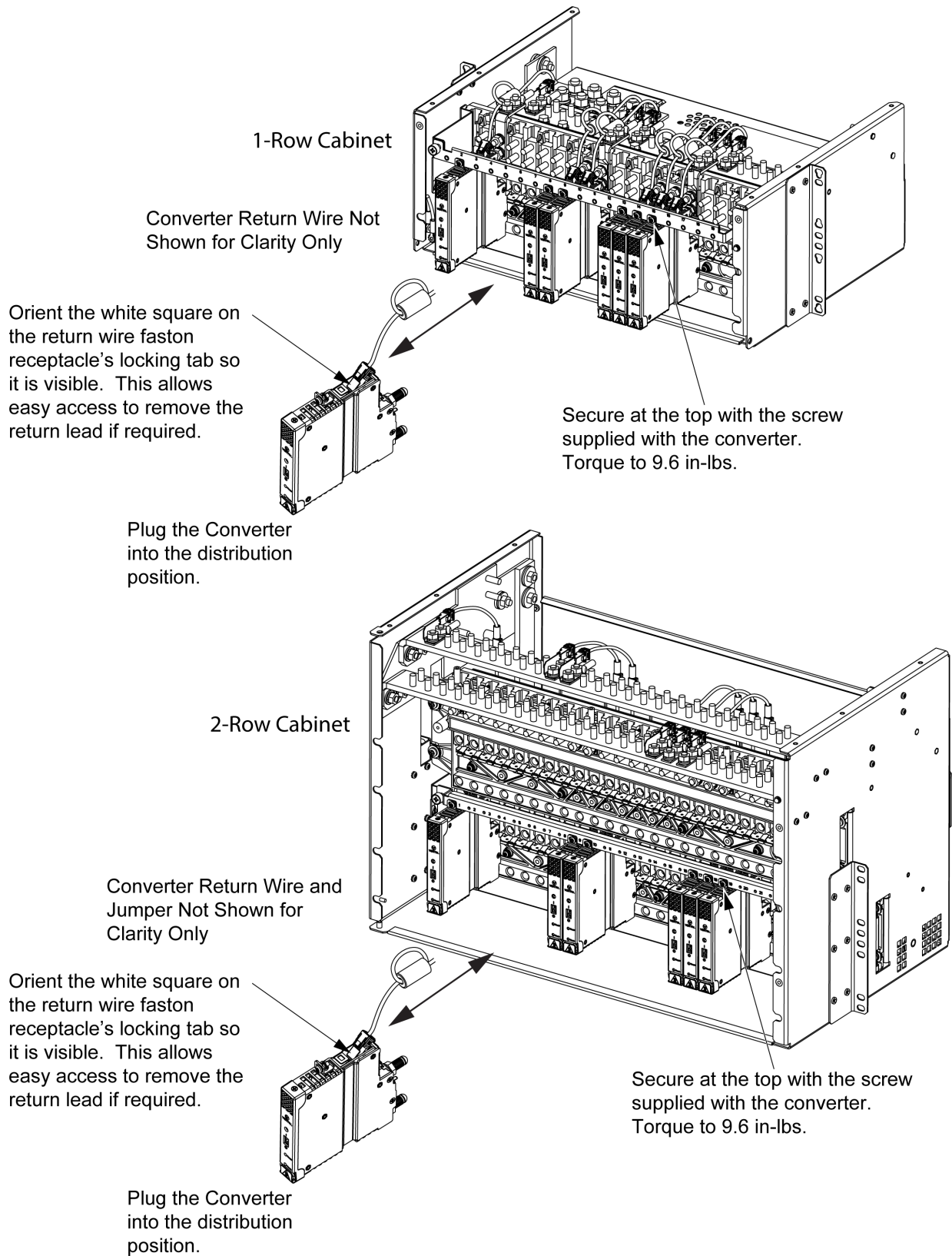
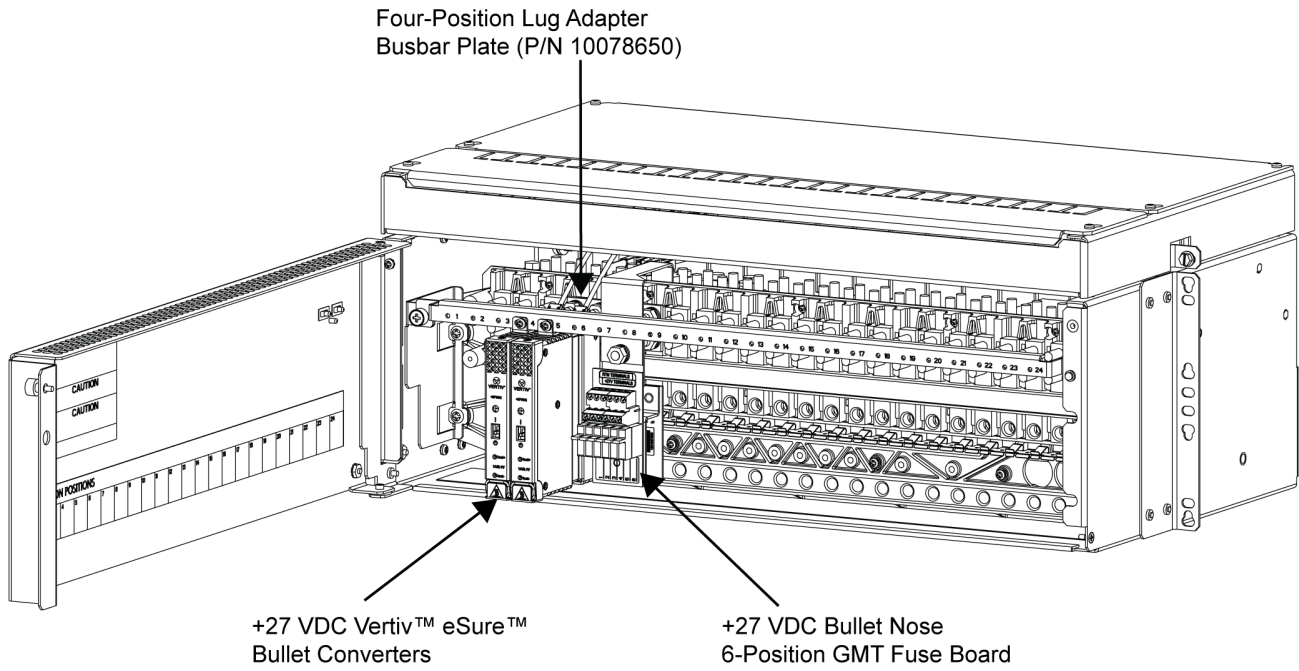


Figure 2.7 Installing +27 VDC Vertiv™ eSure™ Bullet Converters and +27 VDC Bullet Nose 6-Position GMT Fuse Board



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