

Charles Replacement Door Kit

97-SS4C22FR4KDT

General Description and Installation

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1. GENERAL INTRODUCTION

1.1. Document Purpose

This document provides general information for the 97-SS4C22FR4KDT replacement door kit for the CUBE-SS4C2220V1 cabinet. Figure 1 shows the kit components. Hardware is not shown.

-NOTE-

Hereafter, the Charles 97-SS4C22FR4KDT replacement door kit will be referred to as the "kit." The CUBE-SS4C2220V1 cabinet will be referred to as the "CUBE."

1.2. Product Purpose

The kit includes two replacement doors. One door replaces the CUBE's existing front door. The other door replaces the CUBE's rear panel. Drilling templates are included to properly drill mounting holes on the rear of the CUBE for the hinge rivets and for the door ramp.

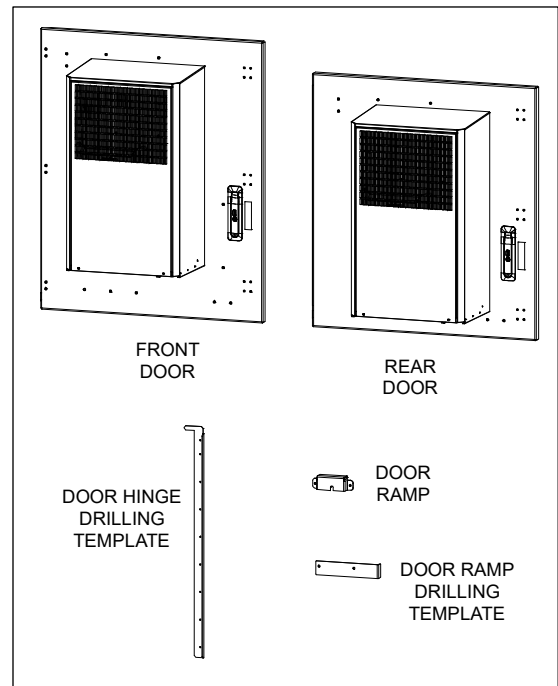


Figure 1 Kit Components

2. INSTALLATION

2.1. Inspecting the Product

The kit is shipped mounted upright on a skid. Unpack the unit and dispose of the packaging material.

-INSPECTION NOTE-

Visually inspect the unit for damages prior to installation. If the equipment was damaged in transit, immediately report the extent of the damage to the transportation company.

2.2. Following and Using Safety Precautions

Read the following site and safety tips, cautions, and warnings, then proceed with the paragraphs that follow.

- For installation, follow all National Electrical Codes (NEC) ANSI/NFPA 70, local, environmental, workplace, and company codes, safety procedures, and practices.
- Minimum spacing between the accessories and components and the housing for ITE equipment shall be maintained for safe operation of the equipment when installed in accordance with NEC ANSI/NFPA 70.
- Read all instructions, warnings and cautions on the equipment and in the documentation shipped with the product.
- Do not place this product on weak or unstable surfaces which may allow the product to fall, resulting in potentially serious damage(s) to persons or product.
- Only authorized trained personnel shall install the kit.

2.3. Obtaining Tools and Equipment

Obtain the following recommended or needed items for installing the kit.

- Protective and/or insulated work gloves
- Safety glasses
- Marking utensil
- Slotted, hex, and Phillips screwdrivers
- Torque wrench
- Can wrench (216 type tool)
- Hammer or mallet
- Drill

2.4. Mounting the Kit

2.4.1. Torque Requirements

Torque all hardware as shown below (unless otherwise noted). These values apply to SAE Grade 1 & 2 Low Carbon Steel, ASTM A307 Low Carbon Steel, and Stainless Steel Grade 18-8.

Thread Size	In-lbs	Ft-lbs
4-40	4±10%	
6-32	8±10%	
8-32	16±10%	
10-32	26±10%	
12-24	50±10%	
1/4-20/M6	60±5%	5±5%
5/16-18	125±5%	10.4±5%
3/8-16	180±5%	15.0±5%
1/2-13	500±2%	41.7±2%
5/8-11	1000±1%	83.3±1%

2.4.2. Replace Front Door

1. Remove the Keps nut that holds the ground strap to the door. Save the nut.
2. Remove the two Keps nuts that hold the wind latch fastened to the CUBE front door frame. Save these nuts.
3. Figure 2 shows the components of the hinge. The hinge plate is on the door, while the hinge base is on the CUBE.
4. Move the hinge pins upward (a hammer or mallet might be needed to move the pins). The hinge retainer clip will dislodge from the hinge when the pin is lifted (Figure 3). Save the hinge pins and retainer clips for later re-installation.
5. Remove the front door from the CUBE (Figure 3).
6. Remove the three hinge plates from the CUBE door (Figure 4). Add these hinge plates to the studs on the back of the new front door included with the kit.
7. Lift the kit door and hold in position on the CUBE, ensuring that the hinge plates on the kit door align with the hinge bases on the CUBE. Insert the hinge pins through the top of the hinge and secure the pins using the retainer clips (Figure 5).
8. Secure the wind latch and the ground strap using the Keps nuts removed previously.

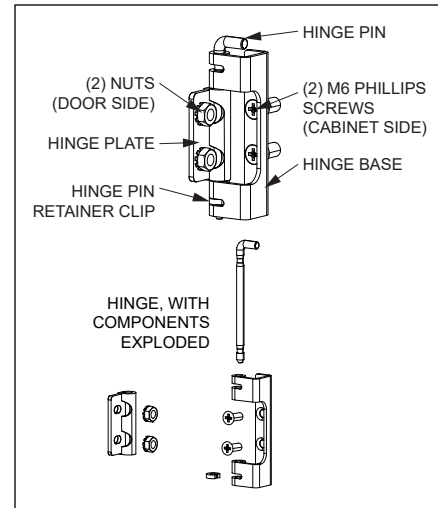


Figure 2 Hinge Construction

Store or discard the old door per company practice.

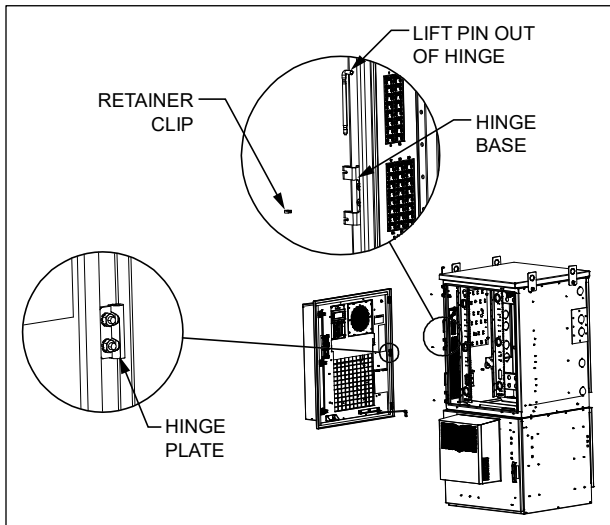


Figure 3 Remove Hinge Pins

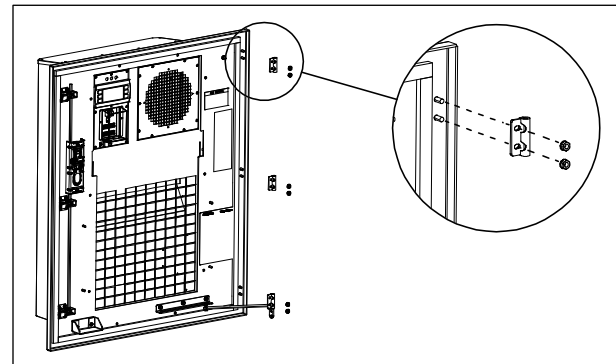


Figure 4 Remove Hinge Plates

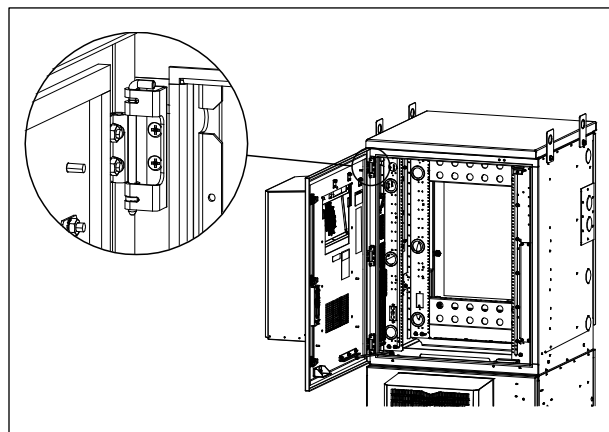


Figure 5 Mount New Front Door

2.4.3. Install Rear Door Ramp

The kit includes a door ramp for the new rear door. Install the door ramp on the CUBE door frame to help the new door close properly on the CUBE. A drilling template is included with the kit.

1. Remove the CUBE's rear panel. Store or discard the panel per company practice.
2. Place the door ramp drilling template against the CUBE, underneath the lower right corner of the door frame so that the template flange fits snugly around the corner of the CUBE (Figure 6, drilling template is shaded in gray).
3. Mark the hole locations in the template. Remove the template and set aside.
4. Drill Ø0.25" holes at the marked locations. Apply touch-up paint inside the holes to prevent corrosion.
5. Install the door ramp on the inside of the CUBE door frame using 1/4-20 hardware included with the kit (Figure 7).
6. The kit includes a ground strap. Attach this strap to the inside of the CUBE and to the stud on the new door, similar to the strap on the front door.

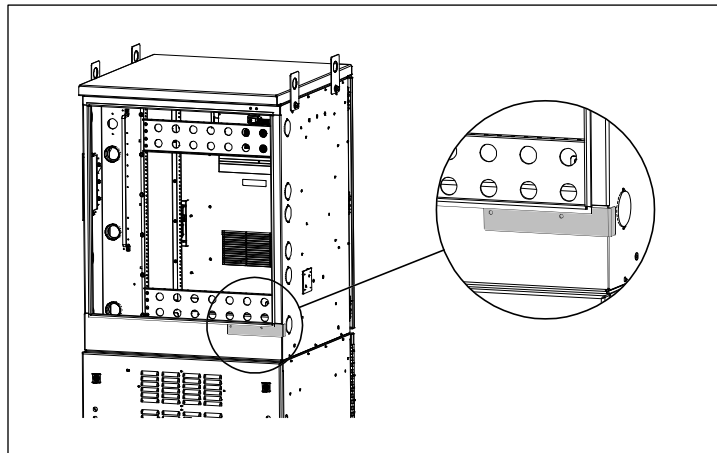


Figure 6 Place Drilling Template

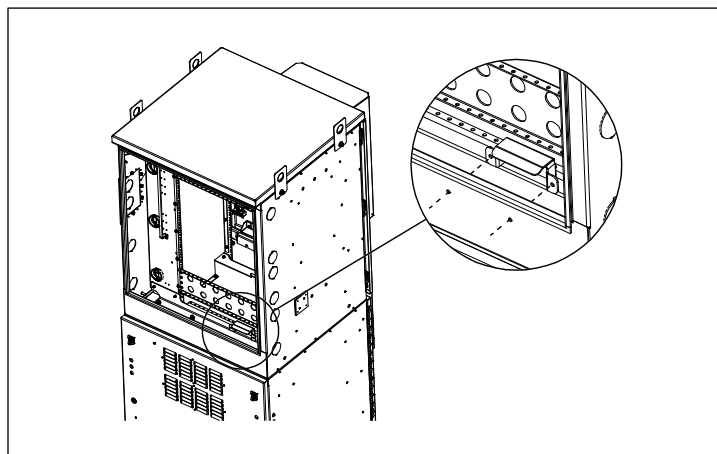


Figure 7 Mount Door Ramp

2.4.4. Install Rear Door

1. Place the drilling template so that the template flange fits snugly around the corner of the CUBE. Place the short arm around the door frame, flat against the CUBE (Figure 8, template is shaded in gray).
2. Mark the hole locations in the template. Remove the template and set aside.
3. Drill $\text{\O}0.172''$ holes at the marked locations. Apply touch-up paint inside the holes to prevent corrosion.
4. Install the kit door using the 5-32 rivets included with the kit. Use two 1/4-20 Keps nuts (included with kit) to secure the wind latch to the studs inside the bottom of the door frame (Figure 9).

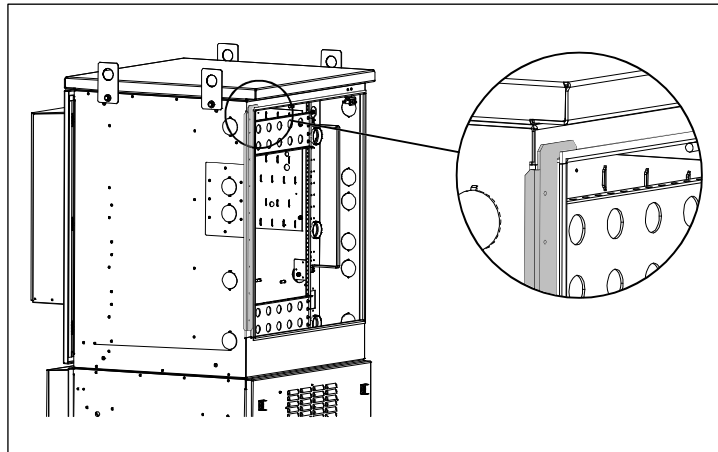


Figure 8 Place Drilling Template

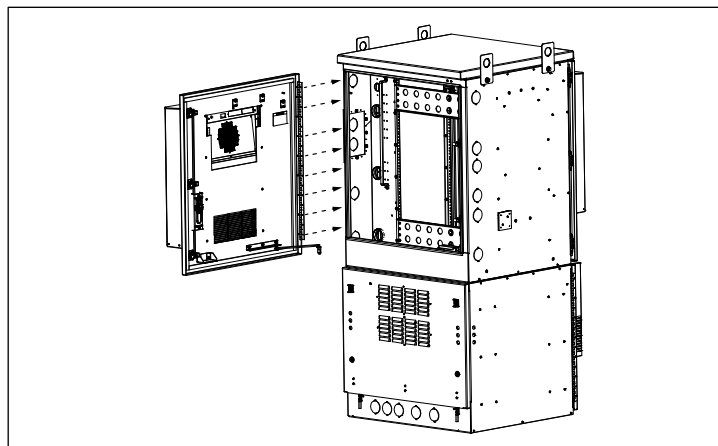


Figure 9 New Rear Door

3. TECHNICAL ASSISTANCE AND REPAIR SERVICE

For questions on product repair or if technical assistance is required, contact Charles Technical Support.

847-806-8500
techserv@charlesindustries.com (email)
<http://www.charlesindustries.com/techserv.htm>

4. WARRANTY & CUSTOMER SERVICE

Charles Industries LLC offers a one-year warranty on the kit product. The Charles warranty is limited to the operation of the kit hardware as described in this documentation and does not cover equipment that may be integrated by a third party. The terms and conditions applicable to any specific sale of product shall be defined in the resulting sales contract. For questions on warranty or other customer service assistance, contact your Charles Customer Service Representative.

847-806-6300
mktserv@charlesindustries.com (email)
http://www.charlesindustries.com/main/telecom_sales_support.htm

5. SPECIFICATIONS

Physical	
Weight	Approx. 110 lbs. as shipped (per door, total 220 lbs.)
Materials	0.125" aluminum
Color	Off-white
Thermal	
HVAC System	48VDC, Dantherm 708345
Cooling Capacity	4000BTU (per HVAC)
Environmental	
Operating Temp. Range, Outside Enclosure	-40° to +115°F, -40° to 46°C
Operating Temp Range, Inside Enclosure	-40° to +149°F, -40° to 65°C
Humidity	0 to 95% (non-condensing)
Altitude	Up to 2,000 meters (6560 feet)
Kits and Replacement Parts	
Touch-up Paint	02-000290-0
216 Type Security Tool	07-002070-0

Table 1 CUBE Specifications