

Charles Top Hat Kits

97-PMBBTOPHATCM, 97-SS8V1TOPHTCM, 97-SS8V2TOPHTCM, and 97-SS8N2TOPHTCM

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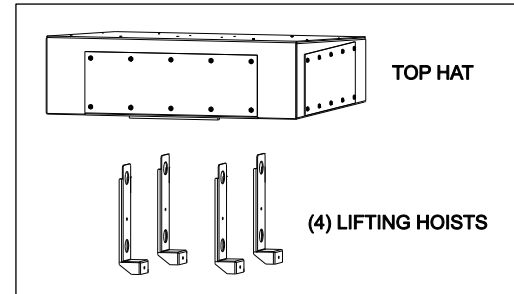


Figure 1 Kit Components

1. GENERAL INTRODUCTION

1.1. Document Purpose

This document provides general information for the 97-PMBBTOPHATCM, 97-SS8V1TOPHTCM, 97-SS8V2TOPHTCM, and 97-SS8N2TOPHTCM top hat kits for Charles Industries' CUBE-PM, CUBE-BB, and CUBE-SS series cabinets. Figure 1 shows the kit components. Hardware is not shown.

-NOTE-

Hereafter, the Charles Universal Broadband Enclosure CUBE-PM, CUBE-BB, and CUBE-SS cabinets will be referred to as the "CUBE." The 97-PMBBTOPHATCM, 97-SS8V1TOPHTCM, 97-SS8V2TOPHTCM, and 97-SS8N2TOPHTCM top hat kits will be referred to as the "kit."

1.2. Product Purpose

The kit consists of top hat that replaces the solar shield on the CUBE. The kit also includes four replacement lifting hoists.

2. INSTALLATION

2.1. Inspecting the Product

The kit is shipped in a carton. 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. Obtaining Tools and Equipment

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

- Protective and/or insulated work gloves
- Safety glasses
- Slotted, hex, and Phillips screwdrivers
- Torque wrench

2.3. Mounting the Kit

2.3.1. 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%

2.3.2. Remove the Solar Shield

1. Remove the four lifting hoists. Save the mounting hardware for later use. Store or discard the lifting hoists per company practice.
2. Remove the solar shield by removing the hardware from the inside of the CUBE-s top panel. Save the mounting hardware for later use. Store or discard the solar shield per company practice.

See Figure 2.

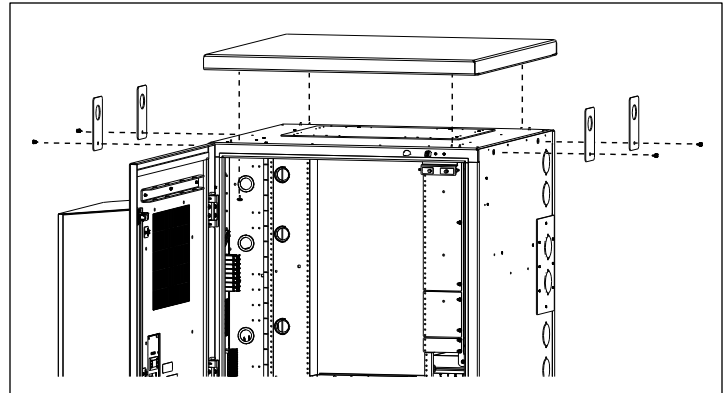


Figure 2 Remove Solar Shield

2.3.3. Mount Top Hat

1. Attach the top hat to the top of the CUBE, securing from underneath the CUBE top panel using the hardware removed previously.
2. Attach the lifting hoists to the sides of the CUBE using the hardware removed previously.

See Figure 3.

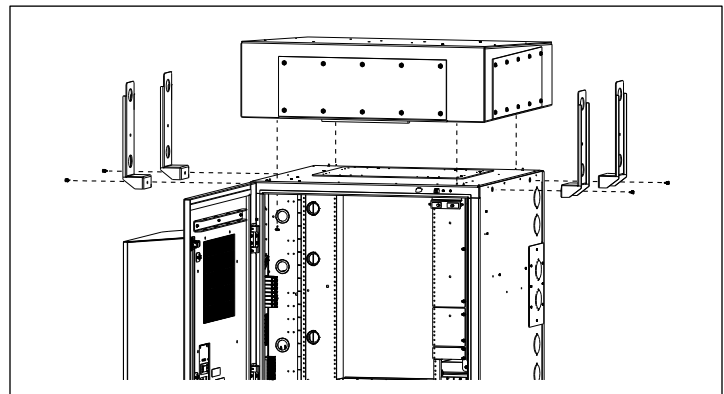


Figure 3 Mount Top Hat

2.4. Cable Entry

The top hat has four Roxtec cable entry ports on the rear panel (Figure 4). Use these ports to route cable into the top hat.

To access the interior of the top hat, remove the panel on the front or either side by removing the 10 screws that hold the panel in place (Figure 5). Replace the panel when finished.

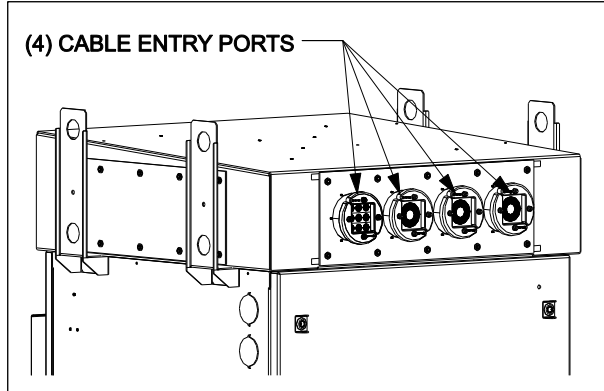


Figure 4 Port Location

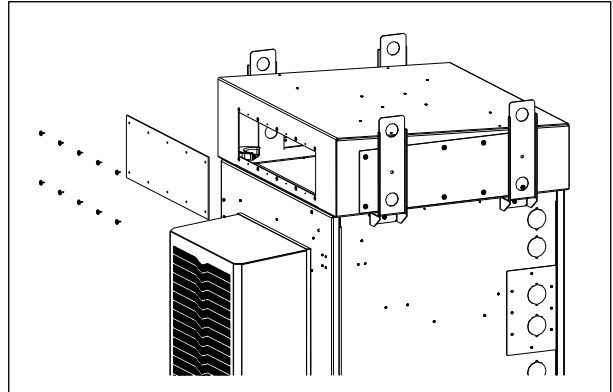


Figure 5 Open the Top Hat

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 which 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

mktsev@charlesindustries.com (email)

http://www.charlesindustries.com/main/telecom_sales_support.htm

5. SPECIFICATIONS

Kit Part Number	Weight (lbs.)	Compatible Cabinet(s)
97-PMBBTOPHATCM		CUBE-PM639158N2 CUBE-PM63915BN1 CUBE-BB48E2QVA CUBE-BB48E2HNA
97-SS8V1TOPHTCM		CUBE-SS4C2288V1
97-SS8V2TOPHTCM		CUBE-SS4C2288V2
97-SS8N2TOPHTCM		CUBE-SS4C2288N2 CUBE-SS4C2288N3

Table 1 Kit Specifications