

Charles Bus Bar Kit

97-BBTOBBBUSKIT

General Description and Installation

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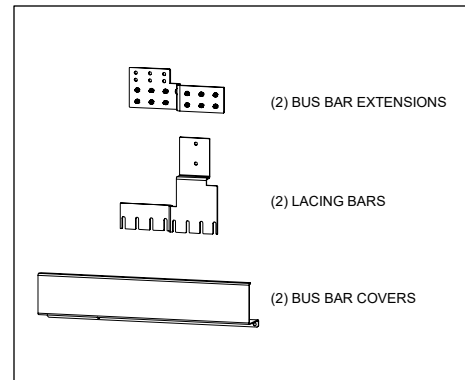


Figure 1 Kit Components

1. GENERAL INTRODUCTION

1.1. Document Purpose

This document provides general information for the 97-BBTOBBBUSKIT bus bar extension kit. Kit components are shown in Figure 1. Hardware is not shown.

-NOTE-

Hereafter, the 97-BBTOBBBUSKIT bus bar extension kit will be referred to as the "kit." The CUBE-BB series cabinet will be referred to as the "CUBE."

1.2. Product Purpose

The kit consists of a pair of bus bar extension panels that add three extra connection points to the power and return bus bars on the CUBE. The kit also includes lacing bars to support the cables connected to the bus bar panels, as well as replacement bus bar covers that are long enough to protect the original bus bar as well as the extension.

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. 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
- Any exterior cable strain relief, per company practice
- Slotted, hex, and Phillips screwdrivers
- Torque wrench
- Can wrench (216 type tool)


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. Installing the Kit

	DANGER	Ensure that the -48V power source coming into the cabinet has been shut off at the source prior to installing the kit.
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1. Use a can wrench to remove the rear cover panel from the CUBE. Set the panel aside.
2. Remove the existing cover from one bus bar on the back of the CUBE battery tray. Keep the cover hardware. Store or discard the cover per company practice.
3. Mount one kit lacing bar to the rear battery retaining bracket, to the right of the bus bar (Figure 2). Use the 1/4-20 hardware that ships with the kit.
4. Mount the bus bar extension panel on the three pairs of studs at the right side of the bus bar (Figure 3). Use the nuts included on the original bus bar.
5. Attach the new bus bar cover using the hardware from the original cover (Figure 4).
6. Repeat steps 2 through 5 for the second bus bar.
7. Re-install the CUBE rear cover panel.

All figures show installation of the 48V Return bus bar extension. Follow the same steps to install the -48V Power bus bar extension.

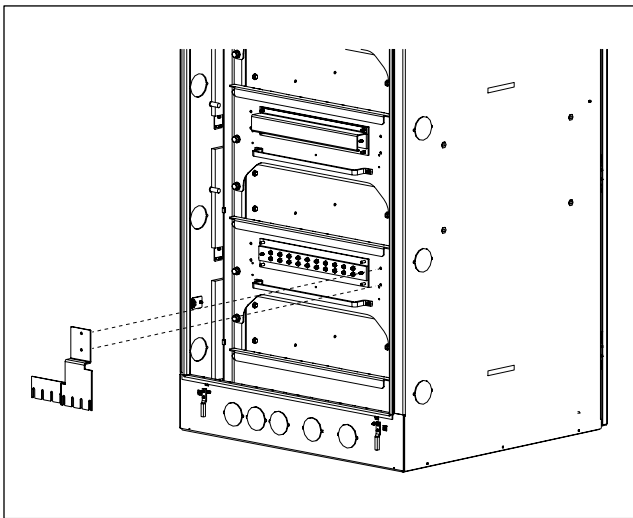


Figure 2 Lacing Bar

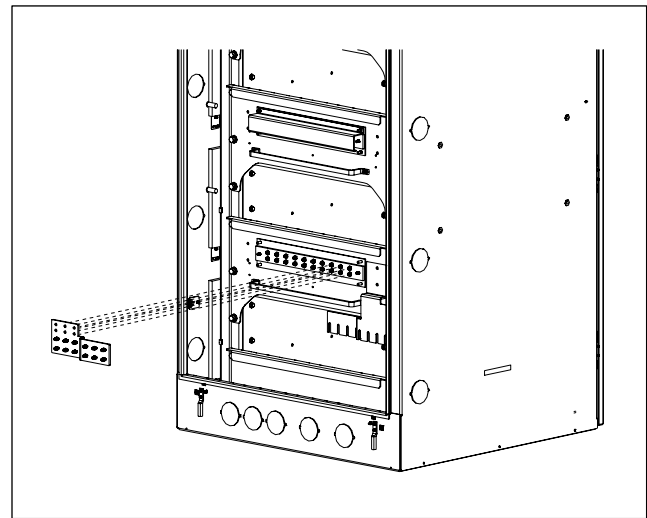


Figure 3 Bus Bar Extension

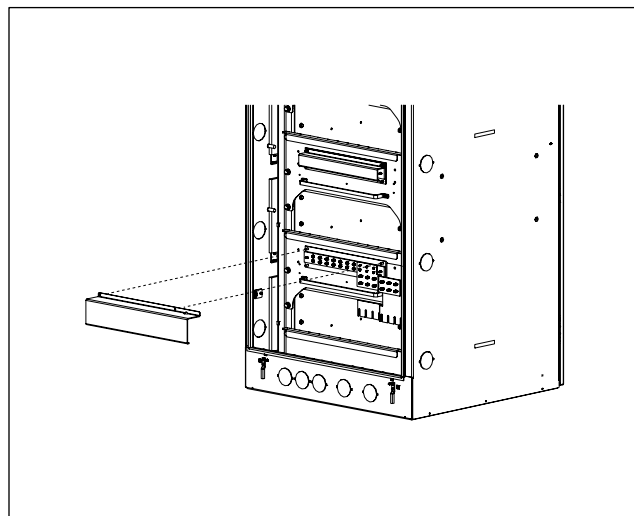


Figure 4 Bus Bar Cover

2.4.3. Application Example

Figure 5 shows an application for installing this kit between a Charles Site Support cabinet and another Battery Backup cabinet.

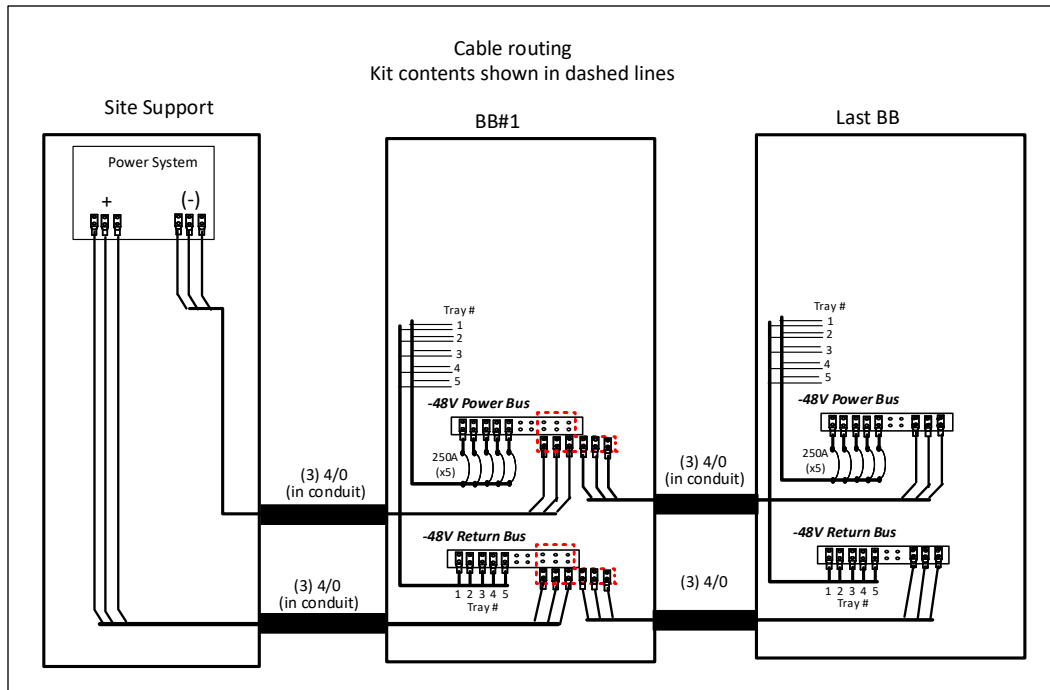


Figure 4 Bus Bar Cover

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 CUBE product. The Charles warranty is limited to the operation of the CUBE 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
mktsev@charlesindustries.com (email)
http://www.charlesindustries.com/main/telecom_sales_support.htm

5. SPECIFICATIONS

Physical	
Weight	Approx. 9 lbs. as shipped
Materials	Lacing bar: 0.125" aluminum Cover: polycarbonate Extension panel: copper and stainless steel
Color	Boss Gray
Touch-up Paint	02-000632-0
216 Type Security Tool	07-002070-0

Table 1 Kit Specifications