

Charles Retrofit Kit

97-002489-A

General Description and Installation

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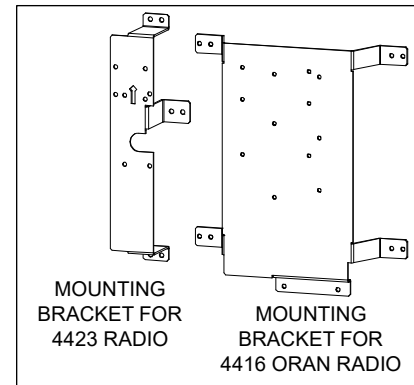


Figure 1 Kit Components

1. GENERAL INTRODUCTION

1.1. Document Purpose

This document provides general information for the 97-002489-A retrofit kit for the Charles Industries’ SH60-362322xNS1. Figure 1 shows the kit components. Hardware is not pictured.

-NOTE-

Hereafter, the Charles 97-002489-A retrofit kit will be referred to as the kit. The SH60-362322xNS1 will be referred to as the “SHRD60.”

1.2. Product Purpose

The kit includes two mounting brackets that support customer supplied Samsung RF4461D and CBRS RT4423 radios.

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.

- 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
- Slotted, hex, and Phillips screwdrivers
- Torque wrench
- Can wrench (216 tool)

2.4. Installing 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. Preparing the SHRD60

The SHRD60 configuration includes an Ericsson 320W dual band radio. Prior to installing the kit, remove the 320W radio and the bracket holding it (Figure 2, bracket held with eight Keps nuts). Store or discard the radio and bracket per company practice.

When installing the kit components, note that the hardware for mounting the brackets into the SHRD60 (Keps nuts) is included with the kit. Hardware for attaching radios to these brackets is customer supplied.

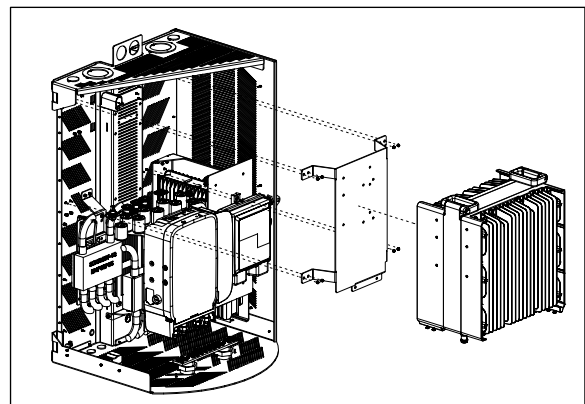


Figure 2 Remove 320W Radio and Bracket

2.4.3. Installing the Kit

The kit offers two different configurations, depending on what radios are needed. In the images in this section, all other radios and equipment are hidden for clarity.

Configuration 1: (1) Samsung RF4461D radio and (1) Samsung CBRS RT4423 radio

1. Secure the RF4461 radio to the large kit bracket.
2. Mount the radio/bracket assembly to the SHRD60 rear panel using eight Keps nuts (Figure 3).
3. Attach the CBRS radio to the smaller of the front-facing panels (Figure 4). If the SHRD60 has a radio in that position, remove the radio and store or discard per company practice.

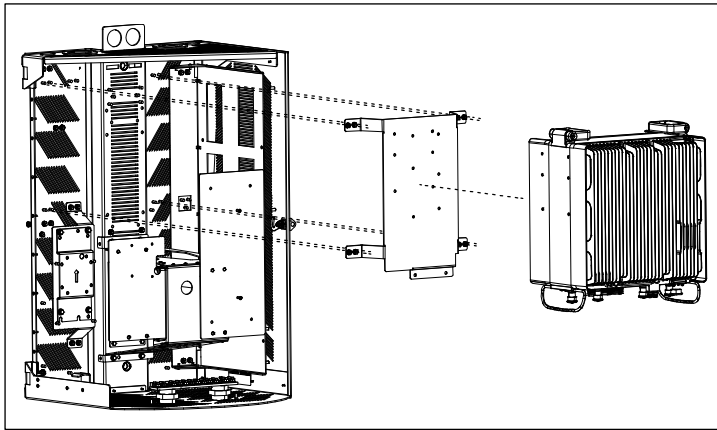


Figure 3 Install RF4461 Radio

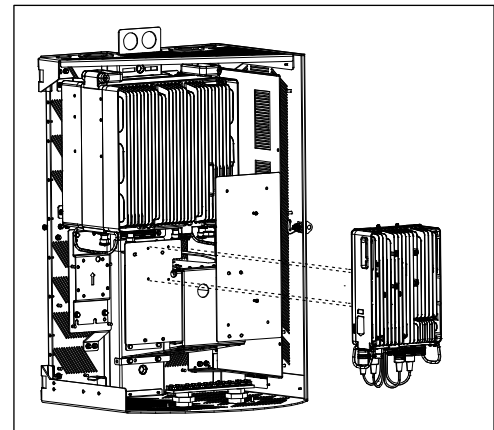


Figure 4 Install CBRS Radio

Configuration 2: (1) Samsung 160W radio and (1) Samsung CBRS RT4423 radio

1. Secure the 160W radio to the large kit bracket.
2. Mount the radio/bracket assembly to the SHRD60 rear panel using eight Keps nuts (Figure 5).
3. Secure the CBRS RT4423 radio to the smaller kit bracket.
4. Mount the radio/bracket assembly to the SHRD60 rear panel using four Keps nuts (Figure 6).

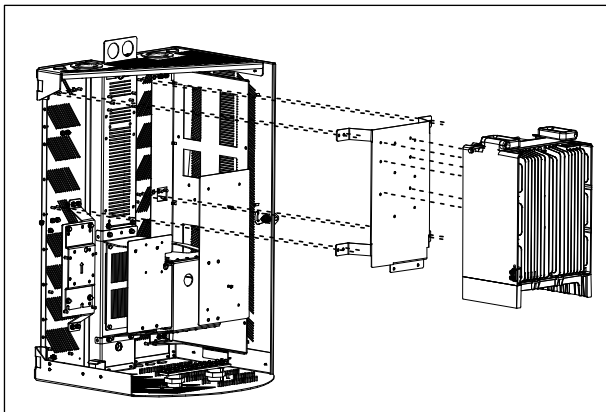


Figure 5 Install 160W Radio

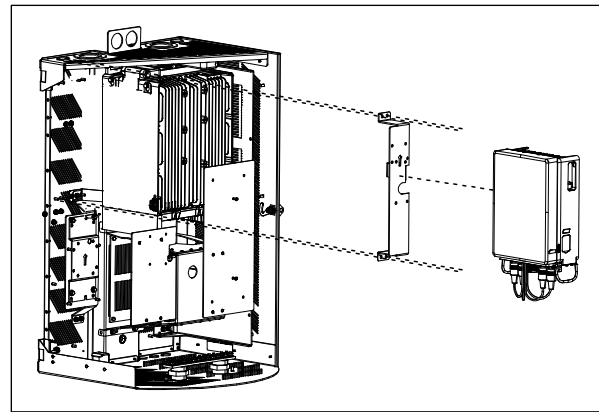


Figure 6 Install CBRS Radio

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. 25 lbs. as shipped
Materials	Steel

Table 1 Kit Specifications