

PART NUMBER	DESCRIPTION
2102114-[ ]	2-Pair Module Assembly Kit
2102077-[ ]	3-Pair Module Assembly Kit

Figure 1

## 1. INTRODUCTION

This instruction sheet covers the assembly and disassembly procedures for FORTIS Zd Metal Shell Module Assembly Kits 2102114-[ ] and 2102077-[ ].

Each kit is designed to be assembled onto FORTIS Zd 2- or 3-pair center header modules arranged from 10 to 60 columns installed onto a printed circuit (pc) board. Guide modules can also be used with the assembly.

The header modules and guide modules are not included with the kit; however, they are available separately.

**NOTE** *All numerical values in this instruction sheet are in metric units [with U.S. customary units in brackets]. Dimensions are in millimeters. Figures are not drawn to scale.*

Reasons for reissue of this instruction sheet are provided in Section 6, REVISION SUMMARY.

## 2. DESCRIPTION

Each module assembly kit consists of a metal shell and backplate with self-locking attachment screws. Four M2x0.4 screws, not included with the kit, are required to attach the metal shell to the printed circuit (pc) board. The length of the screws depends on pc board thickness.

## 3. ASSEMBLY

1. Prepare the pc board using the recommended pc board layout shown on the applicable customer drawing for the module assembly kit or header modules.
2. Install the header modules and guide modules onto the pc board according to Application Specification 114-13267.

3. Place the pc board with the installed modules, compliant pin contact tails facing up, and the metal shell, bottom (side with mounting holes) facing up, on a flat surface.



*To avoid damage to the modules or pc board, it is recommended to place the pc board (with the modules) and the metal shell on a flat surface.*

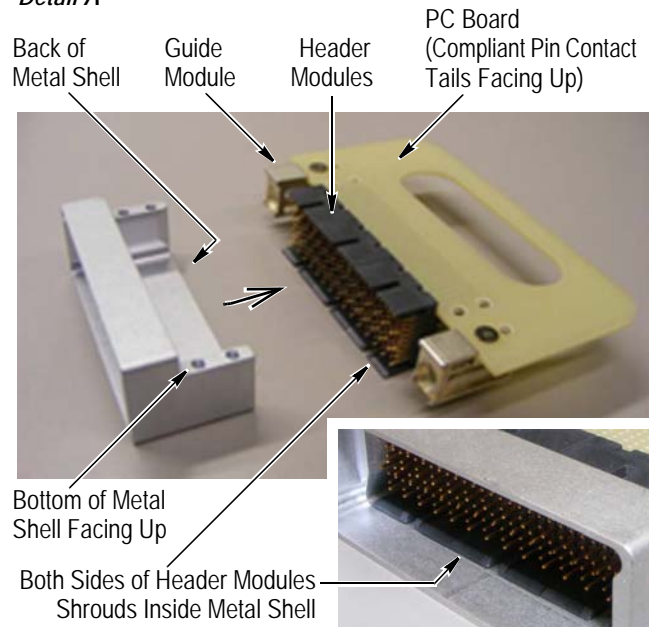
4. Ensure that the pc board is de-energized.



*To avoid personal injury, the pc board must be de-energized before installing the metal shell onto the modules.*

5. Align the back of the metal shell with the header modules. See Figure 2, Detail A. Gently slide the metal shell over the header modules, making sure that both sides of the header modules shrouds are inside the metal shell and that no part of the metal shell intrudes with the pin field. Continue sliding the

### Detail A



### Detail B

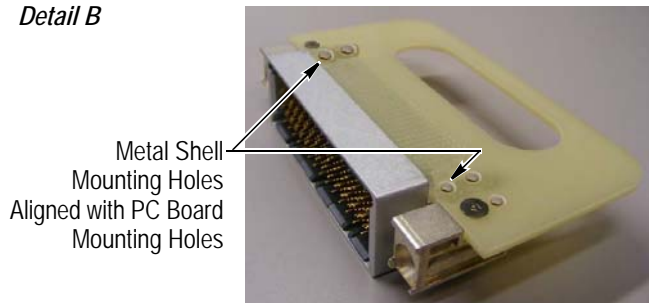


Figure 2

metal shell until the mounting holes of metal shell align with the mounting holes of the pc board. See Figure 2, Detail B.

6. Apply a low-strength threadlocker to each of the customer-supplied screws. Then, thread the screws through the mounting holes in the pc board and into the mounting holes of the metal shell. Using a screwdriver, tighten each screw to a torque of .226 Nm [2 lb-in.]. See Figure 3.

7. Turn the assembly over so that the pc board is sitting on the flat surface. See Figure 4. Fit the backplate (with the countersinks facing outward) over the back of the header module, and thread the attachment screws into the screw holes of the backplate. Tighten each screw to a torque of .226 Nm [2 lb-in.].

#### 4. DISASSEMBLY

The backplate and metal shell can be removed from the header modules and pc board by removing the attachment screws, then the customer-supplied screws.

#### 5. REPLACEMENT AND REPAIR

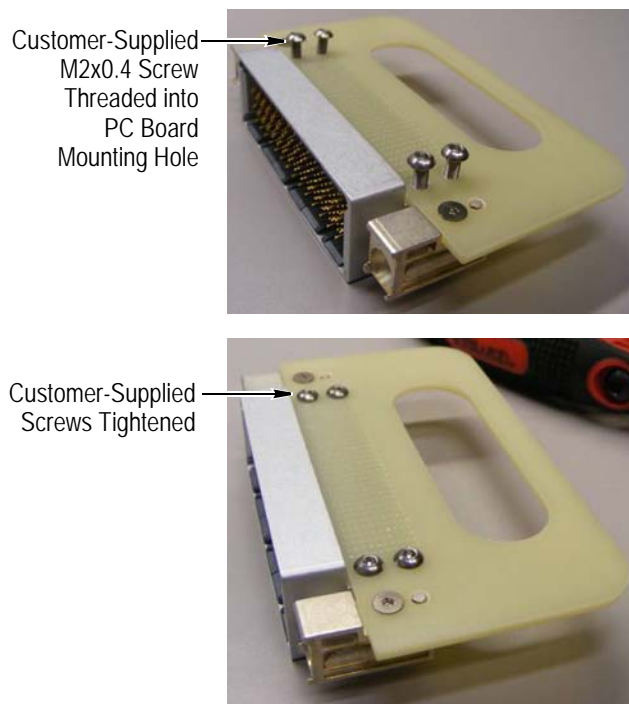
Do not use defective or damaged components. All components of the module assembly kit can be re-used after disassembly.

#### 6. REVISION SUMMARY

Revisions to this instruction sheet include:

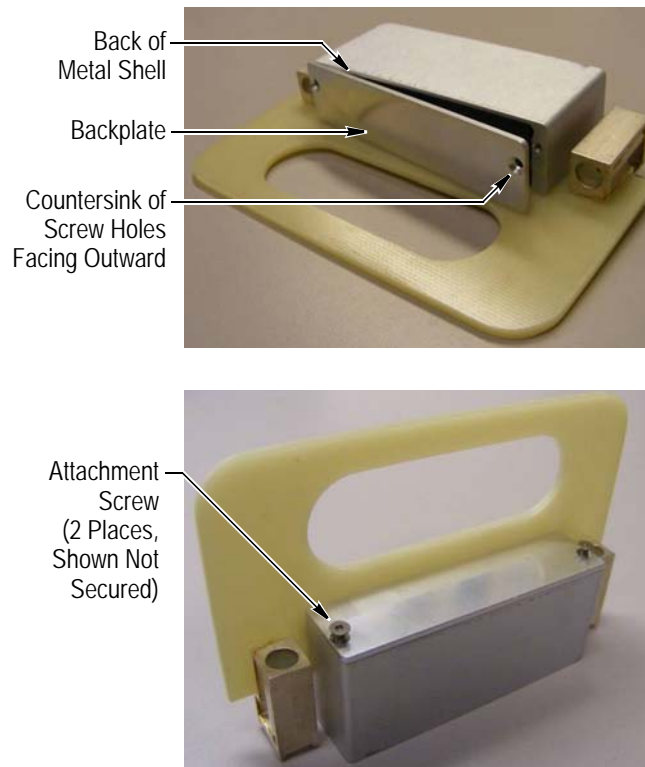
- Corrected torque value in Steps 6 and 7

*Securing Metal Shell to PC Board*



*Figure 3*

*Installing Backplate onto Metal Shell*



*Figure 4*