Manual Service Disconnect (MSD) Receptacle Assemblies 1587987-[ ]

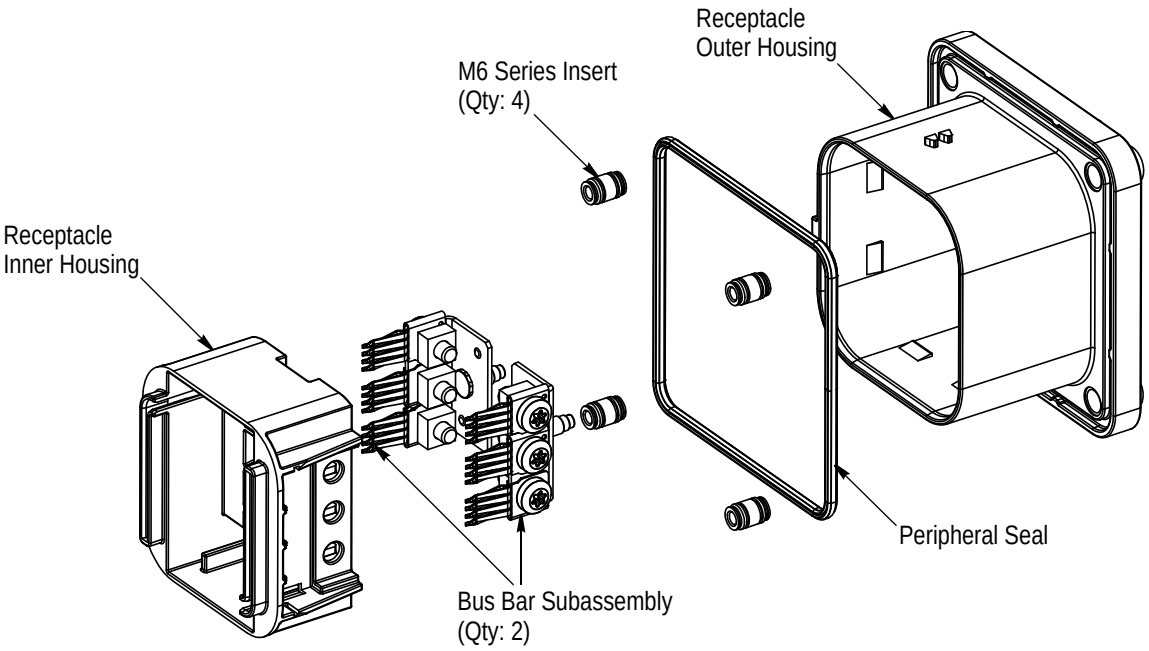

Figure 1

1. INTRODUCTION

This instruction sheet provides assembly and installation procedures for the MSD receptacle assembly (components shown in Figure 1) to a battery pack. The receptacle assembly is shipped as one piece.

Reasons for reissue of this instruction sheet are provided in Section 4, REVISION SUMMARY.

NOTE

Dimensions in this instruction sheet are in metric units [with U.S. customary units in brackets]. Figures are not drawn to scale.

Read these instructions carefully before attempting any procedure. Refer to Instruction Sheet 408-10432 for the MSD plug assembly.

2. DESCRIPTION

Each receptacle assembly consists of a receptacle outer housing, receptacle inner housing, peripheral seal, two bus bar subassemblies, and four M6 series inserts. Refer to Figure 1.

NOTE

Cable lengths shown in this instruction sheet are not to scale and are representative only. Actual lengths are customer application dependent and will be manufactured per the information provided by the customer.

The ring tongue terminals shown are for illustration purposes only. The specific type and size of the ring tongue terminal is dependent on the wire size specified for the application and the termination and mounting requirements within the device.

The receptacle assembly must be mounted to the device housing to complete the installation.

3. ASSEMBLY AND INSTALLATION PROCEDURES

Install the receptacle assembly onto the device housing as follows:

1. Identify the polarization features located on the walls of the receptacle assembly outer housing as shown in Figure 2, Detail A.

NOTE

Make sure that the peripheral seal is present and fully seated in the seal track of the receptacle assembly outer housing as shown in Figure 2.

2. Line up the polarization features of the receptacle assembly outer housing with the mating polarization slots of the device housing mounting interface as shown in Figure 2, Detail A. Refer to Customer Drawing 1587987 for the mounting interface definition and requirements.

3. Ensure that the device mounting interface is clean and that there are no surface contaminants within the footprint.

4. Manually install the receptacle assembly into the mounting interface, making sure that the polarization features and mounting holes are aligned.

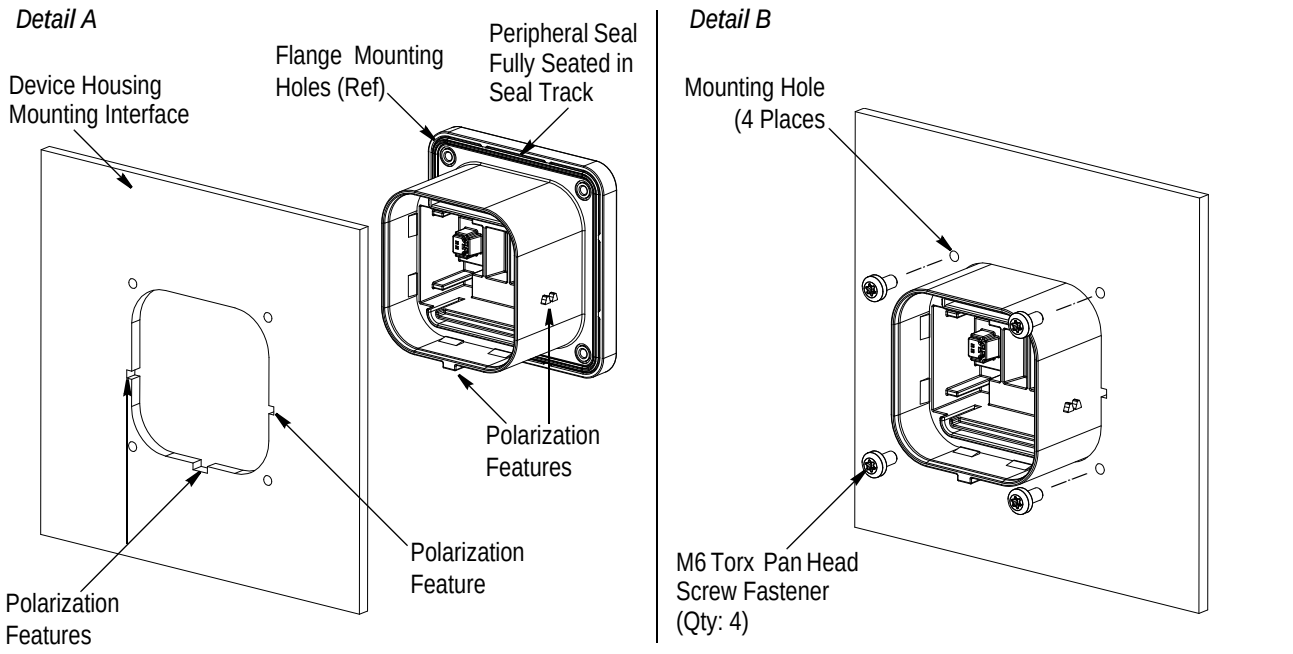

Figure 2

5. Mate the receptacle assembly outer housing to the device housing mounting interface so that the receptacle assembly is bottomed and seated firmly against the mounting interface as shown in Figure 2, Detail B. If the receptacle assembly and mounting interface do not fit together easily, check the following:

— that the keying options of the receptacle assembly match those of the device housing mounting interface

— that the receptacle assembly and device housing mounting interface are correctly oriented (180°)

6. Secure the receptacle assembly using with four standard M6 Torx pan head screw fasteners and applied threadlocker and/or lock washers through the flange mounting holes as shown in Figure 2, Detail D. Stainless steel fasteners are recommended for this application. Tighten the fasteners to a torque of 10±1 Nm. Ensure that the device side mounting provisions and fasteners are compatible and capable of meeting the required torque value.

7. Locate and position Low Voltage HVIL Connector(s) 1534111-1 and the receptacle assembly for mating as shown in Figure 3, Detail A.

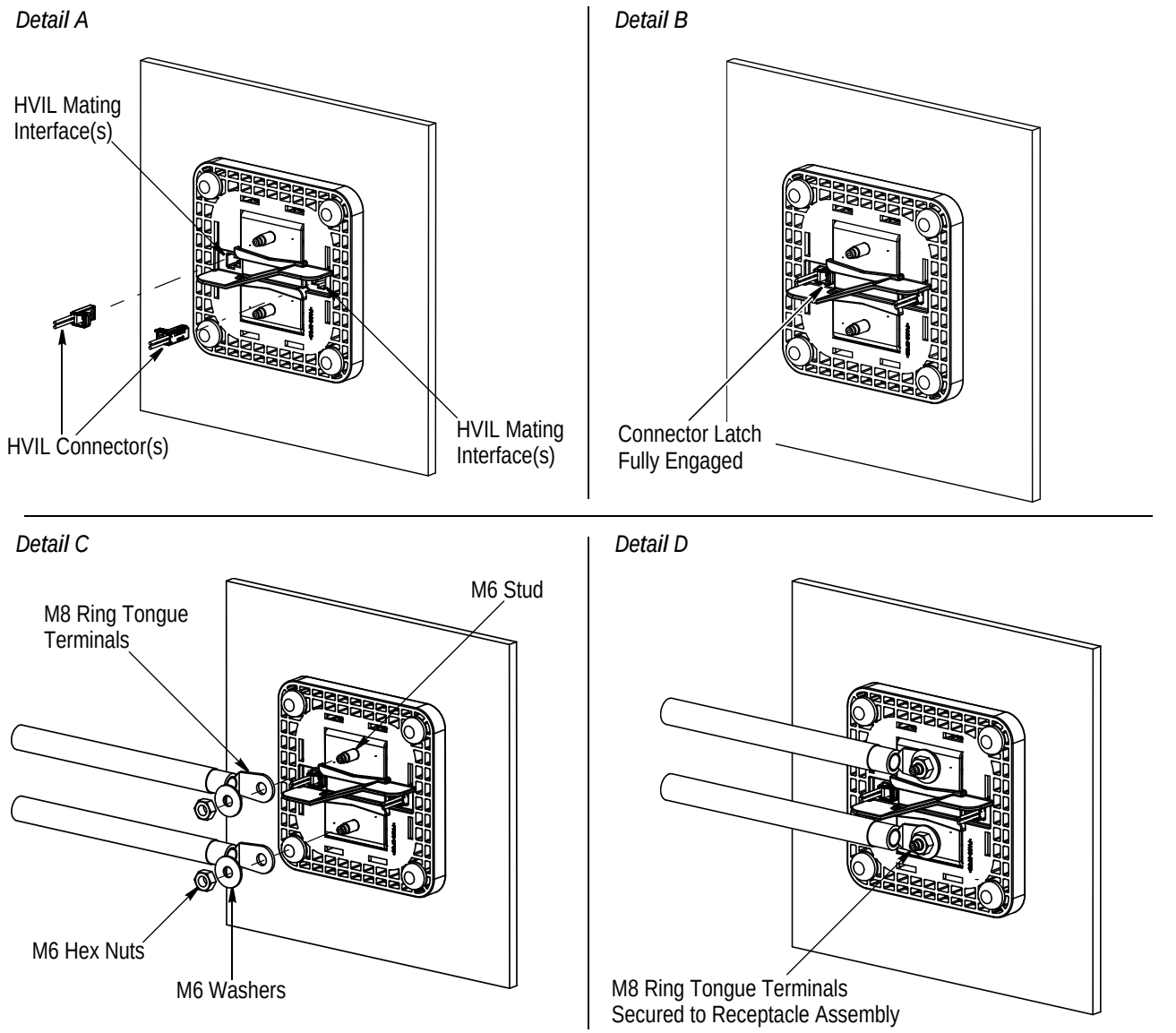

Figure 3

8. Manually install the HVIL connector(s) into the HVIL interface of the receptacle assembly, making sure that the connector latch is fully engaged using the “push, click, and pull” method as shown in Figure 3, Detail B.

9. Secure the ring tongue terminals of the wire connections with two standard M6 hex nuts and flat washers to the M6 studs as shown in Figure 3, Details C and D. Tighten the fasteners to a torque of 10 ±0.5 Nm. Ensure that the device side mounting provisions and fasteners are compatible and capable of meeting the required torque value.

Refer to Figure 4 for other dress options. Wire harness orientation is performed at customer discretion.

Refer to Figure 5 for completed assembly.

To avoid damage to product, it is important that the installer be aware of the following CAUTIONS.

CAUTION

Ensure that the high-power circuit wires within the device are routed and secured in a way so as to avoid the possibility of abrasion or chafing of the wire insulation jackets against adjacent componentry.

CAUTION

The ring tongue terminals must be bolted down securely to the device housing mounting interface. The fasteners must ensure reliable electrical contact between the contact interfaces under all application conditions. It is recommended that a torque study be performed with the customer-specific fasteners to determine acceptable torque specifications.

Other Wire Dress Options

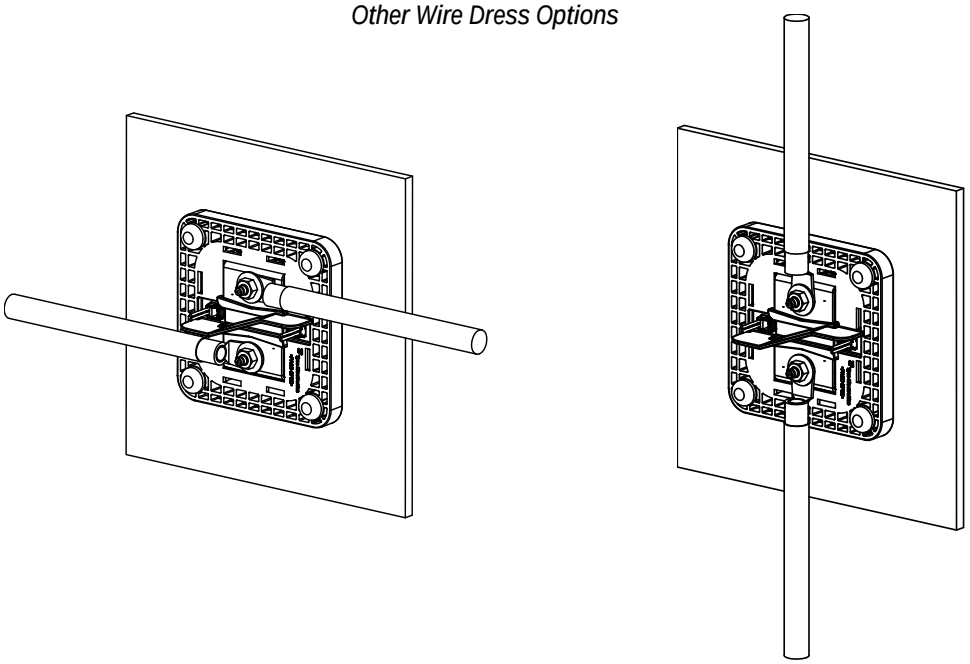

Figure 4

Complete Assembly

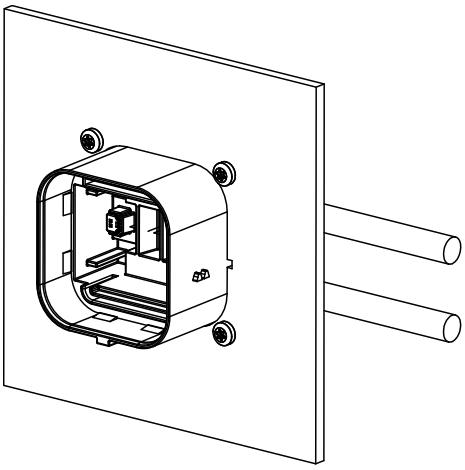

Figure 5

4. REPLACEMENT AND REPAIR

Internal components of the MSD are not serviceable. In the event of part damage or failure, remove and replace the entire assembly as indicated in this instruction sheet. DO NOT attempt to separately replace single MSD components.

DO NOT use damaged product. Damaged components must be replaced with a new ones.

5. REVISION SUMMARY

Revisions to this instruction sheet include:

- Changed company name and logo
- Changed referenced plug assembly instruction sheet
- Changed torque in Steps 6 and 9 of Section 3
- Removed component part numbers from Figure 1 and Step 2 of Section 3