

Figure 1

1. INTRODUCTION

This instruction sheet provides assembly (mounting header, inserting contacts, and mating header with plug) and disassembly (unmating) procedures for 2-position sealed AMP+ header HVA 280 2phx. Components (available separately) are shown in Figure 1.



NOTE

The optional shipping cap is available for the header to protect the contacts from damage or contaminates during shipping. This cap is not intended to provide protection from liquid of any type.

Reasons for re-issue of this instruction sheet are provided in Section 4, Revision Summary.

2. ASSEMBLY

2.1. Mount Header

1. Prepare the mounting interface (device) according to customer drawing [2103124](#) or [2103396](#).
2. Check that the seal is present on the header. Align the polarization feature of the header with the polarization hole in the device, then push the header onto the device until it is seated against the face of the device. Refer to Figure 2.
3. Obtain four M4 mounting fasteners that are compatible and capable of meeting the required torque of 2.5 ± 1 Nm [16.32 ± 7.4 lb-ft]. Insert each fastener through a mounting hole in the header and into the hole in the device. Tighten each fastener to the required torque. See Figure 2.



NOTE

MCP blade contact cavities do not apply to 2103396-[].

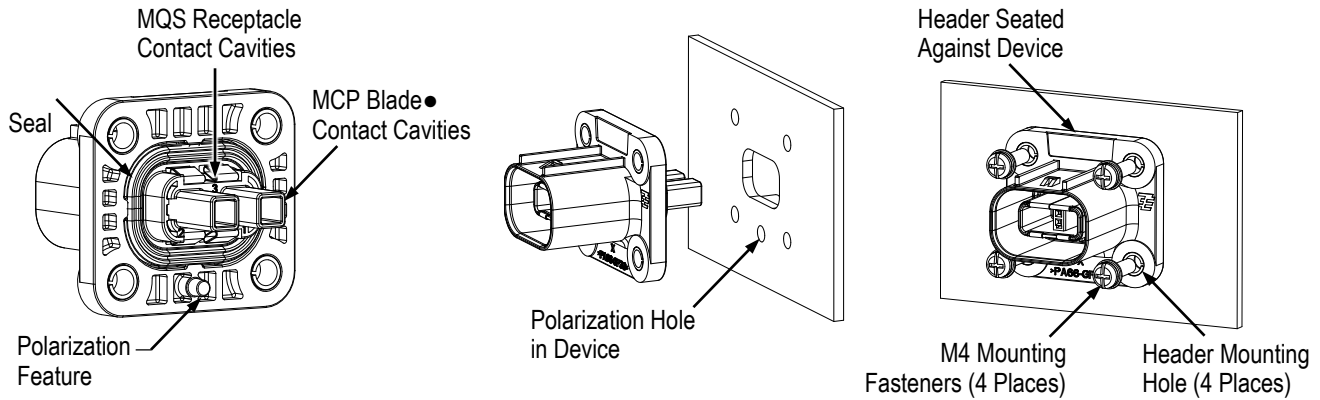


Figure 2

2.2. Install Contacts

1. Prepare the wires, then crimp the contacts according to German application specification [114-18051](#) (for MCP blade contacts) and German/English application specification [114-18021](#) (for MQS receptacle contacts). Only wire and contacts that meet the requirements of the application specification can be used. Silver-plated contacts must be used in this high-voltage application.



DANGER

Using contacts having part numbers other than the part numbers listed in Figure 1 could result in hazardous conditions.

2. Note the contact cavity identification (ID) numbers on the wire end of the header. Insert each contact into the appropriate contact cavity until there is an audible click. Refer to Figure 3. Gently pull back on the wire of each contact to verify that the contact is fully locked.

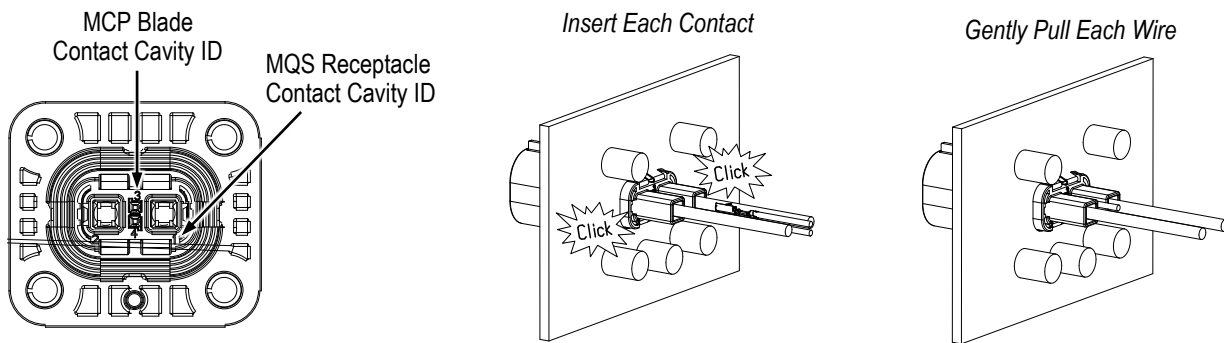


Figure 3

3. If applicable, install the optional shipping cap onto the header as shown in Figure 1.
4. Contact probing is **not recommended** due to the possible presence of high-voltage. If continuity checks need to be performed, ensure that the high-voltage power is disabled.



CAUTION

Avoid probing that could damage the contacts or plating.

2.3. Mate Connectors

1. If installed, pull the shipping cap straight off of the header.
2. Align the mating faces of the plug and header, then push the connectors together until the latches engage. Note that there are two latches (primary and secondary); therefore, there will be two audible clicks when the connectors are fully mated. See Figure 4.



DANGER

If the connectors are not fully mated, the HVIL circuit could open and shut down the electrical system.

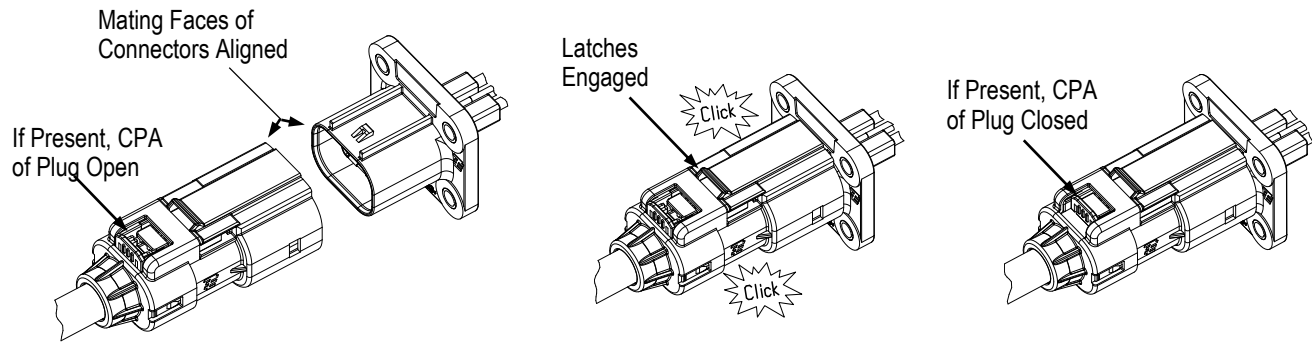


Figure 4

If the connectors do not fit together easily, check the following:

- the keying options of the plug and header match
 - the plug and header are correctly oriented at 180 degrees
3. Pull lightly on the plug to verify that the connectors are fully latched. Then, if present, seat the CPA of the plug by pushing it toward the header. See Figure 4.

3. DISASSEMBLY

1. Disable the high-voltage power.



DANGER

Exercise extreme diligence to verify that the high-voltage power is disabled before unmating the connectors.

2. If present, open the CPA of the plug by sliding it away from the header. Refer to Figure 5.
3. Depress the primary latch of the plug, and simultaneously pull the plug until it stops. At this point, the connectors are not fully unmated; therefore, do not force the connectors apart. See Figure 5.
4. Using a small screwdriver or fingertip (depending on style of header), depress the secondary latch located in the window just in front of the primary latch, and simultaneously pull the plug and header apart. Do not pull on the cable or cable seal retainer. Refer to Figure 5.

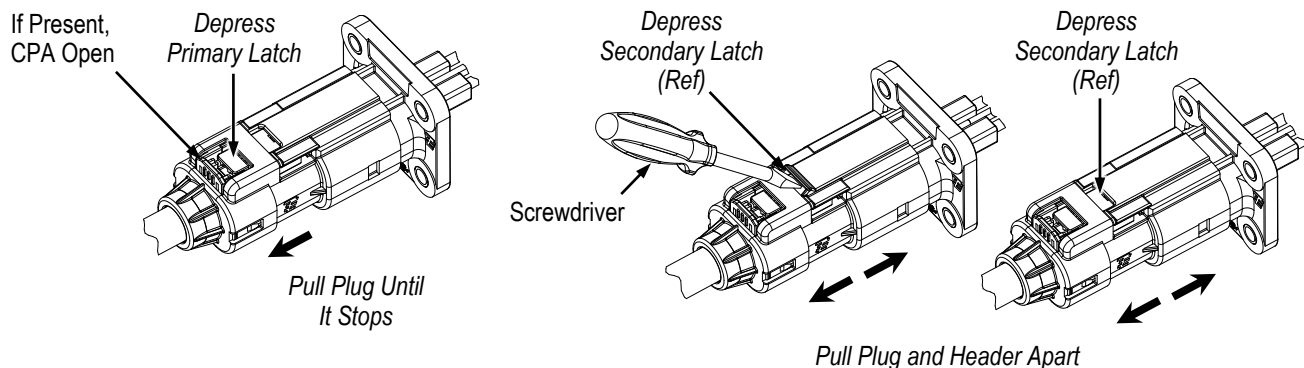


Figure 5

4. REVISION SUMMARY

- Updated document to corporate requirements, deleted part number from title, changed and added new art to Figure 1, added new information to Paragraph 2.1.1, and added new NOTE to Paragraph 2.1.3.