

Figure 1

1. INTRODUCTION

This instruction sheet provides information on the assembly procedures for the Generation Y Unsealed Hybrid 0.64 mm/2.8 mm Contacts and Connectors. See Figure 1.

NOTE



All dimensions on this document are in metric units. Figures and illustrations are for reference only and are not drawn to scale.

Read these instructions carefully before attempting any assembly procedures. Also refer to Application Specifications 114-13013 (2.8 mm Contacts) and

114-13183 (0.64 mm Contacts) for termination requirements.

2. DESCRIPTION

Figure 1 provides the components required to make the assembly in this instruction sheet. Contact material is made from a copper alloy, pre-plated with tin or bright tin. The connector housings are made from PBT, 15% glass filled.

3. ASSEMBLY PROCEDURES

NOTE



The 13-position connector is shown throughout this document, however, the 21-position requires the same information procedures for assembly and disassembly.

3.1. Tooling

Refer to Application Specifications 114-13013 and 114-13183 for specific manual and semi-automatic termination tooling for the 0.64 mm and 2.8 mm socket contacts.

3.2. Contact Assembly

The following procedures provides the details of the contact installation into the connector housing.

1. Terminate the contacts to the correct wire size according to the information provided in the specific application specifications.

NOTE *The connector housings are shipped with the secondary locks in an open position, however, during shipping, the secondary locks may become closed. Make sure the locks are in the OPEN position before any contacts can be inserted into those contact cavities. See Figure 2.*

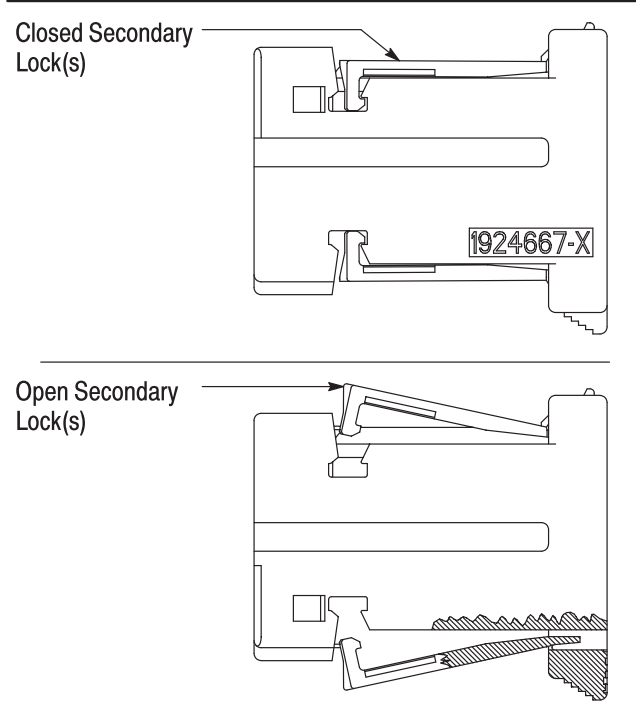


Figure 2

2. The terminated contact must be aligned with the contact cavity at the wire end of the connector and oriented as shown. The 2.8 mm contacts orientation lances face the secondary lock and the 0.64 mm contacts orientation lance face away from the secondary lock. See Figure 3. Terminals will only easily go into cavity in one orientation.

3. Each contact must be inserted into a contact cavity until the connector primary latch engages the contact. See Figure 4A. (There should be an audible and tactile click which indicates that the

contact has been fully inserted.) Pull back gently to ensure the contact has been locked in place. See Figure 4B.

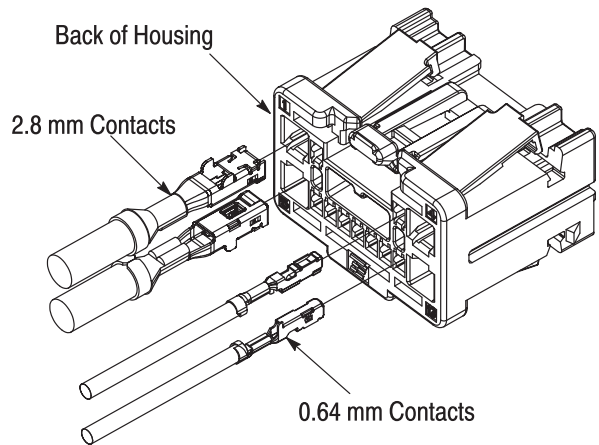


Figure 3

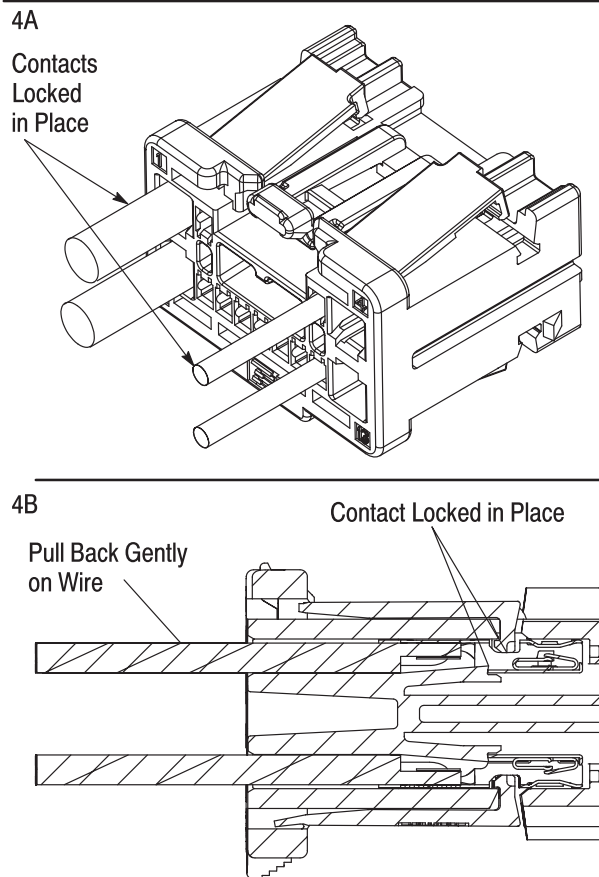


Figure 4

4. The secondary lock (for the corresponding contact cavities) must be rotated to the CLOSED position. The secondary lock is in the CLOSED position when the locking latches are fully secure to the locking tabs. After all desired contact positions are loaded, if the secondary locks do not

snap to the closed position with an audible and tactile feedback, and sit flush with the adjacent surfaces of the connector body, it is likely that one or more contacts are not fully installed. The secondary lock is the detection for partially installed terminals. Re-open the secondary lock and push/pull on the wire of each contact to ensure they are fully inserted and engaged with the primary contact latch in each cavity. See Figure 5.

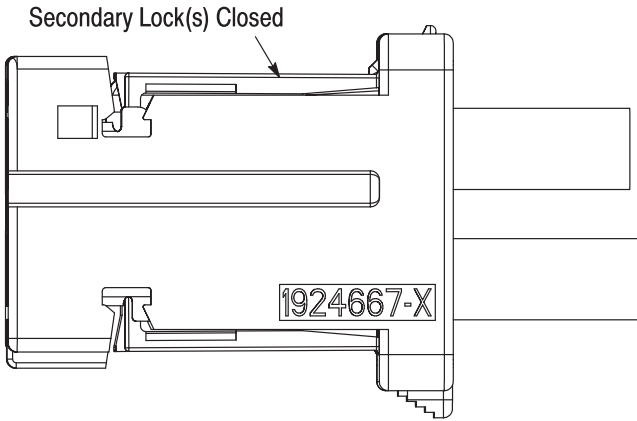


Figure 5

3.3. Circuit Testing

Test probe windows located at each contact cavity at the mating face of the connector accommodate test probes for circuit testing. Individual test probes, or equivalent, must have a diameter of 0.64 ± 0.05 mm with a minimum pin length of 1.5 mm. The force exerted by the probe should be no more than 10 N [2.25 lb] per contact cavity. Test probe location layout is shown in Figure 6.



CAUTION Pointed or sharp instruments **MUST NOT** be used for probing; otherwise, damage to the socket connector could result. To avoid system failure, the wire insulation **MUST NOT** be pierced.

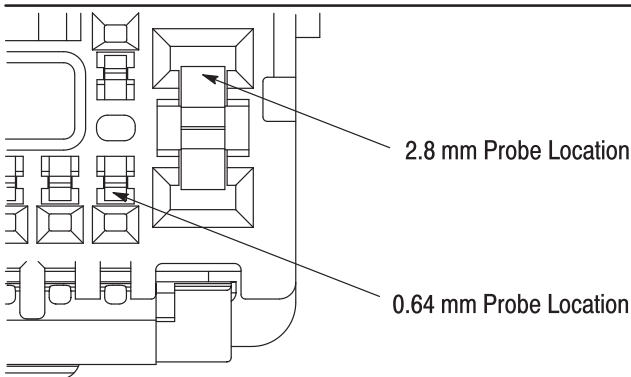


Figure 6

3.4. Contact Removal

The secondary lock (for the corresponding contact cavities) must be in the OPEN position before any contacts can be removed from those contact cavities. The locking latches must be released from the locking tabs to open the secondary lock (a small jewelers screwdriver with a maximum width of 4.0 mm must be used). The secondary lock must not be rotated beyond the limit.



CAUTION If the secondary lock is rotated past the limit given, the secondary lock will break from the socket connector, and the socket connector must not be used.



CAUTION Care must be taken not to damage the locking features with the tool.

The locking lance of the contact must be released from the contact cavity before the contact can be removed from the socket connector. A suitable tool, (see Figure 7), must be inserted into the corresponding contact removal window to release the contact locking lance, and the wire must be pulled *gently* to remove the contact from the socket connector.

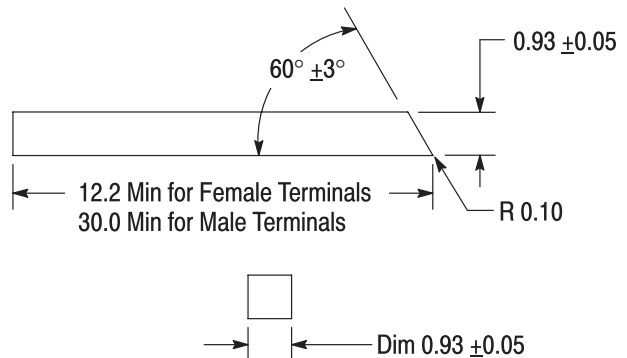


Figure 7

1. Insert contact removal tool (as detailed in Figure 7) or a jewelers/flat-bladed screwdriver (1.0 mm width) into the selected exposed contact cavity, as shown in Figure 8A.
2. Grasp the wire of the contact to be removed and push the contact forward until it stops.
3. Using the contact removal tool or jewelers/flat-bladed screwdriver, gently deflect the retention finger. See Figure 8B.
4. Simultaneously pull the wire and contact from the plug housing.
5. Follow Steps 1 through 4 for remaining contacts.

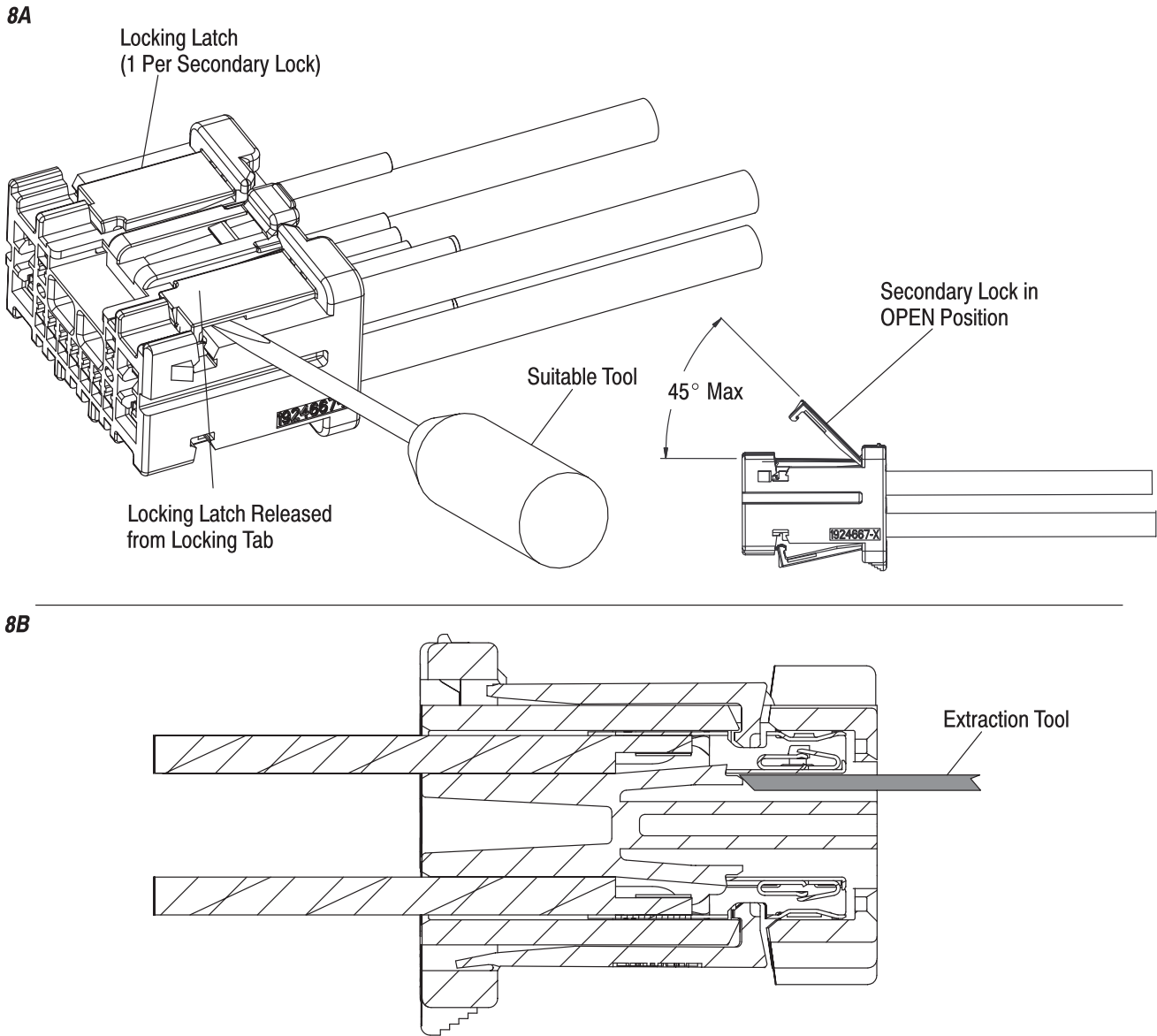


Figure 8

4. REPAIR/REPLACEMENT



These contacts and connectors are non-repairable. Damaged or defective contacts or connectors MUST NOT be used. A contact MUST NOT be re-terminated.

5. REVISION SUMMARY

- Initial release of document