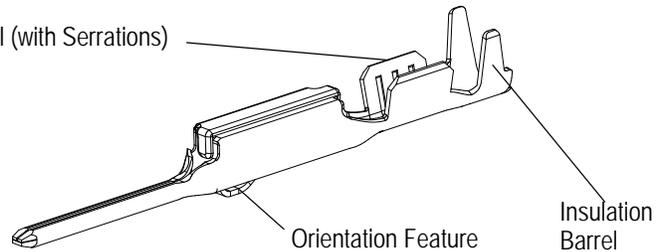
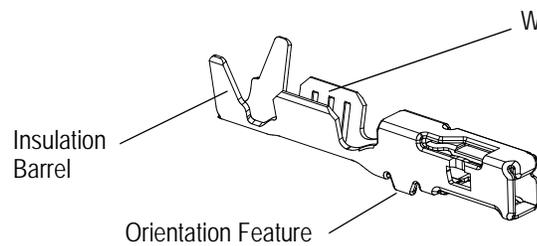
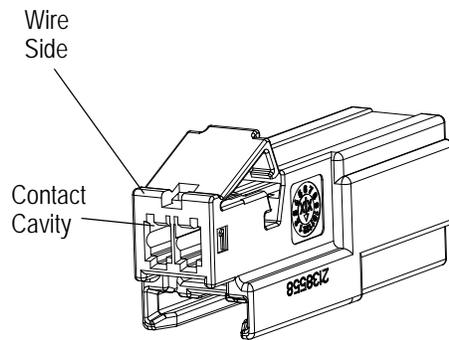
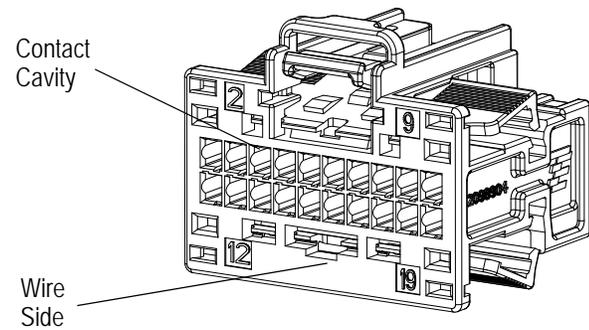
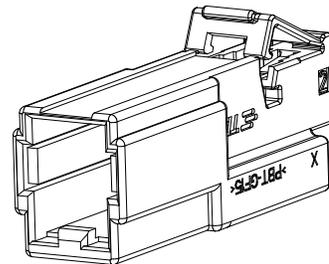
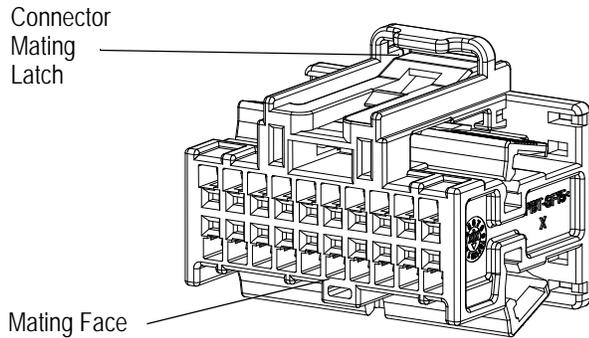


Representative Plug 2098904-[]

Representative Cap 2138558-[]



0.64mm Receptacle Contact

0.64mm Blade Contact

Figure 1

1. INTRODUCTION

This instruction sheet provides information on the assembly procedures for the Generation Y Unsealed 0.64mm Single-Piece Connectors. Representative cap and plug housings are shown in Figure 1. Representative part numbers for this family of connectors are: 2098904-[], 2138504-[], and 2138557-[] (plugs); 2138558-[] (caps).

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 Specification 114-13183 for termination requirements.

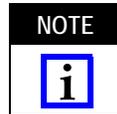
2. DESCRIPTION

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 low-glass content plastic materials.

3. ASSEMBLY PROCEDURES



The 20-position connector is shown throughout this document, however, any connector requires the same information procedures for assembly and disassembly.



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.

3.1. Tooling

Refer to Application Specification 114-13183 for specific manual and semi-automatic termination tooling for the 0.64mm receptacle and blade contacts.

3.2. Contact Assembly

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

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

2. The terminated contact must be aligned with the contact cavity at the wire end of the connector and oriented as shown. The contact orientation feature faces away from the secondary locks. 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.

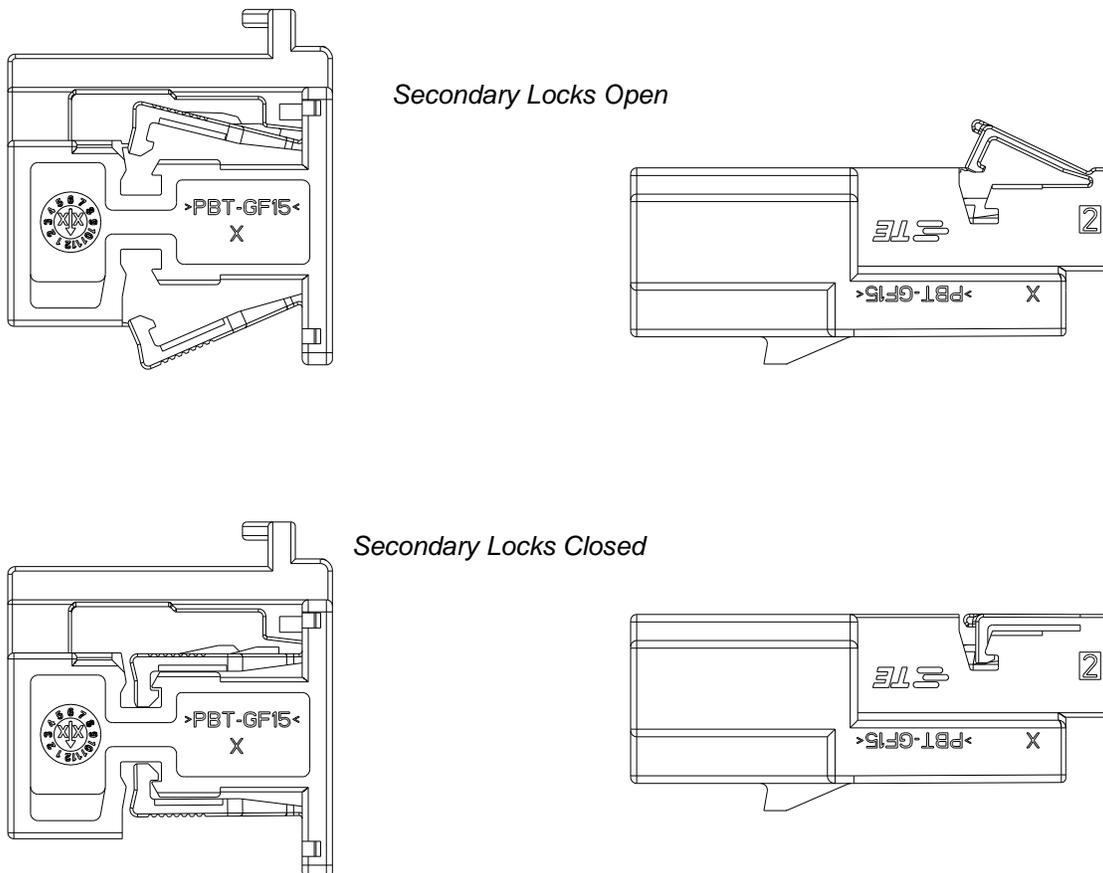


Figure 2

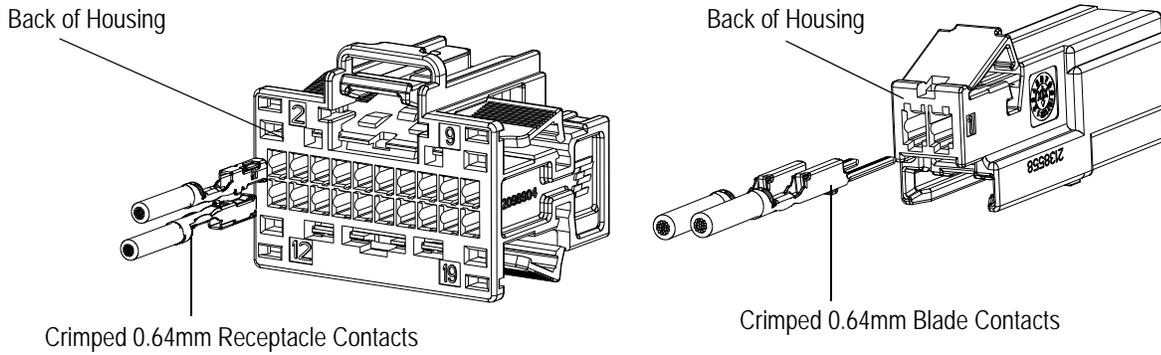


Figure 3

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.

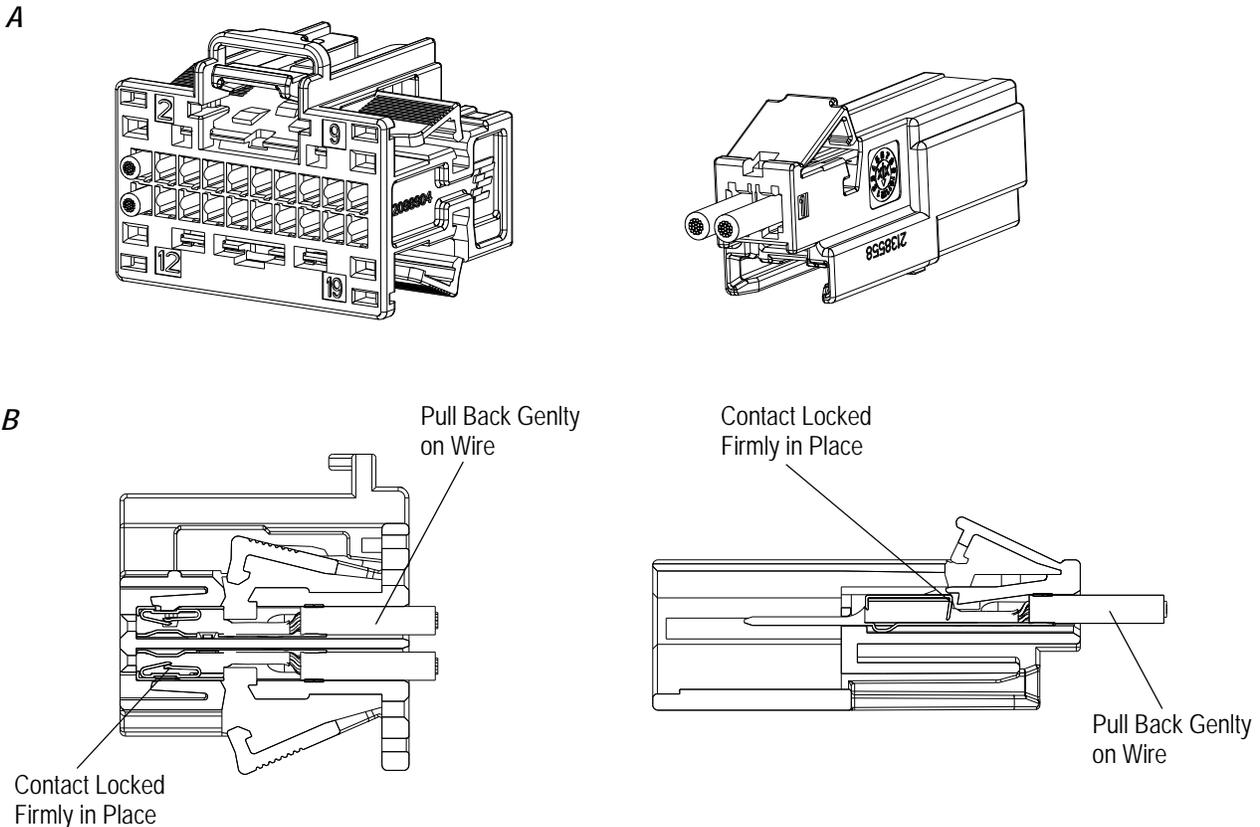


Figure 4

3.3. Circuit Testing

On the plug housing, test probe windows are located at each contact cavity on the mating face, to 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 5

On the cap housing, circuit testing is typically done by probing the tip of the inserted blade contact.

NOTE *The test probe should not enter into the terminal mating area.*

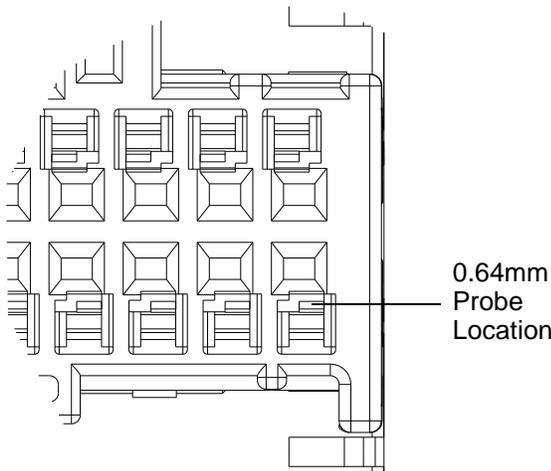


Figure 5

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.*

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 connector housing, and the connector housing must not be used.*

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

The primary contact locking latch of the connector must be deflected before the contact can be removed from the connector. A suitable tool, (see Figure 6), must be inserted into the corresponding contact removal window to release the primary contact latch, and the wire must be pulled gently to remove the contact from the connector.

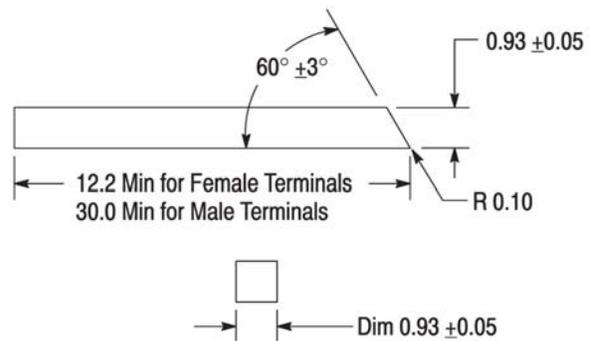


Figure 6

1. Insert a suitable tool (as described in Section 3.4) into the tapered slot on either end of the secondary lock. See Figure 7.

NOTE *Only the plug housing is shown in Figure 7. The cap housing operates in a like manner.*

2. Gently rotate and lift the secondary lock until it snaps open.
3. Insert contact removal tool (as shown in Figure 6) or a jewelers/flat-bladed screwdriver (1.0 mm width) into the selected exposed contact cavity, as shown in Figure 8.
4. Grasp the wire of the contact to be removed and push the contact forward until it stops.
5. Simultaneously pull the wire and contact from the plug housing.
6. Follow Steps 1 through 4 for remaining contacts.

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 408-32069

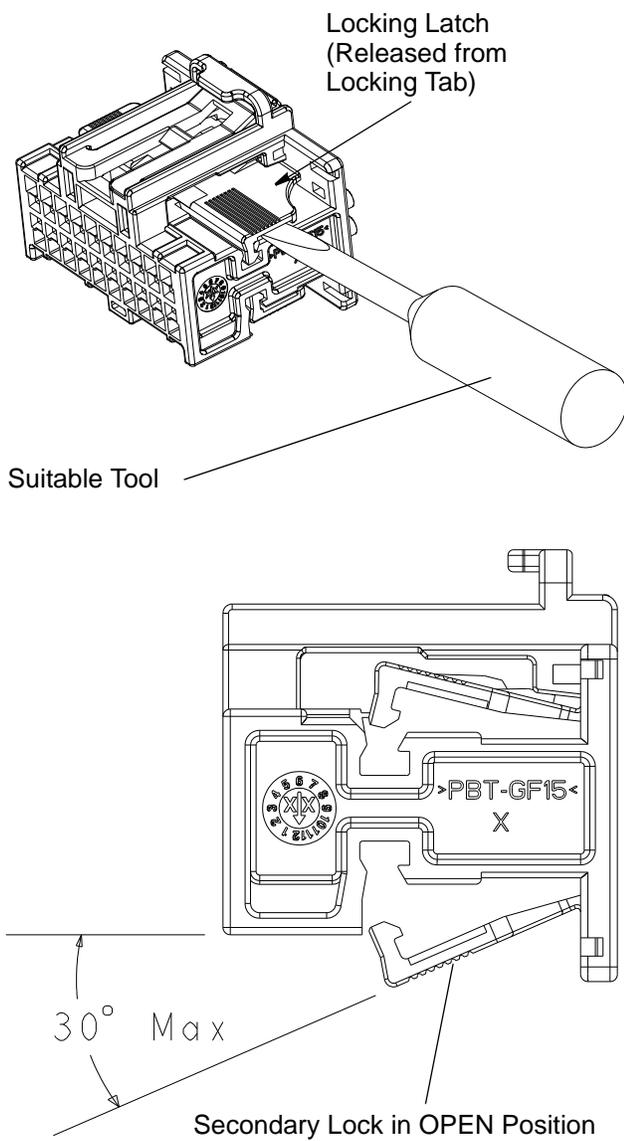
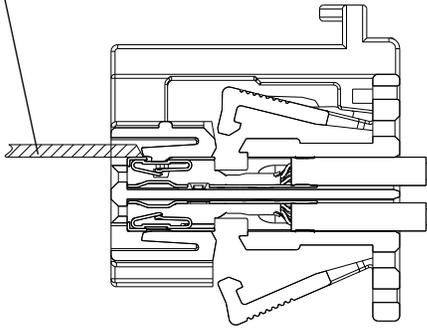


Figure 7

Extraction Tool



Extraction Tool

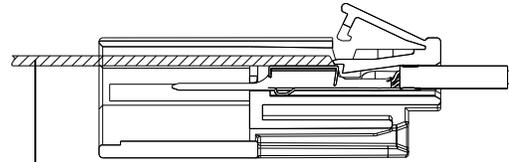


Figure 8