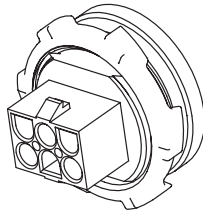
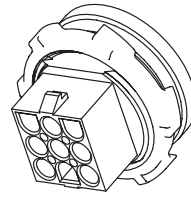


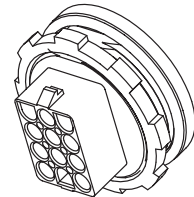
Four Position Connector



Six Position Connector



Nine Position Connector



Twelve Position Connector

UNIVERSAL MATE-N-LOK BULKHEAD CONNECTORS

TYCO ELECTRONICS BULKHEAD CAP HOUSING PART NUMBER	CONNECTOR DESCRIPTION
1604941-1	Universal MATE-N-LOK Bulkhead Connector, 12 Position
1604254-1	Universal MATE-N-LOK Bulkhead Connector, 9 Position
1604210-1	Universal MATE-N-LOK Bulkhead Connector, 6 Position
1604256-1	Universal MATE-N-LOK Bulkhead Connector, 4 Position

Figure 1

1. INTRODUCTION

This instruction sheet provides assembly procedures for the Universal MATE-N-LOK connector housings listed and shown in Figure 1.

NOTE *Dimensions on this sheet are in metric units [with U.S. customary units in brackets].*

2. DESCRIPTION

A complete connector assembly can be assembled by using the bulkhead cap housing (see Figure 1) in conjunction with the appropriate plug housing and the specified number of crimp type pin or socket contacts.

NOTE *The typical part number for the plug housing is 350779-1. Refer to Catalog 82181 for additional information.*

Mating connectors are fully polarized for proper engagement and employ a positive locking feature to prevent accidental disengagement.

Both plug and cap housings have individually numbered cavity identification on the back (wire end) plus an identification rib on the side of the plug housing, indicating the number one (1) cavity.

3. PANEL CUTOUT

The bulkhead cap housings are designed to fit into specific panel cutouts. Refer to the customer drawings of the part numbers listed in Figure 1 for dimensional requirements of the panel cutout.

4. CONNECTOR ASSEMBLY (Figure 2)

1. Remove the lock-nut from the connector assembly.
2. Prepare the panel cut-out according to the appropriate customer drawing.
3. Place the connector into the panel cut-out.
4. Orient the connector so that the mating face is protruding thru the correct side of the panel. Also make sure that cavity number "1" is properly oriented (typically on the left when viewing the connector from the flanged side).
5. Thread the lock-nut onto the threaded portion of the connector.
6. Tighten the lock-nut finger tight. Then turn the lock-nut 1/4 more turn.
7. Finish the installation by inserting the appropriate terminated contacts into connector housing.

NOTE *Refer to Section 5, CONTACTS for contact information.*

NOTE *For a completely sealed interface, the mating connector must be provided with an interfacial seal, and a wire seal. For example, 12 position interfacial seal part number 794279-1 and wire seal part number 794280-1 (as well as other sizes) are available in Catalog 82181.*

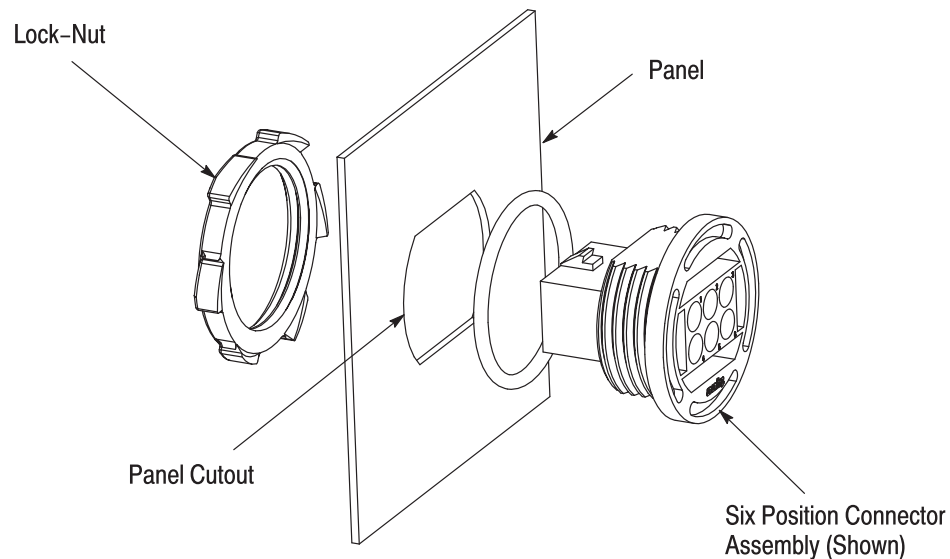


Figure 2

5. CONTACTS

5.1. Selection

NOTE Refer to pages 21 and 22 of Catalog 82181 for pin and socket compatibility.

Pin and socket crimp contacts are available in strip form for machine crimping, and in loose piece form for hand tool crimping. Split pin contacts are recommended for use in housings to reduce mating force. Grounding pin contacts (2.54 mm [.100 in.] longer than standard pin contacts) are designed for a mate first, break last grounding application. Programmable socket contacts are designed to accept 110 Series FASTON receptacle terminals.

5.2. Crimping

Follow termination procedures shown in Application Specification 114-1010.

Strip form contacts are designed to be crimped with a heavy duty miniature applicator in an semi-automatic or automatic machine. Consult your local representative for assistance in selecting the machine that will best suit your needs.

Loose piece contacts are designed to be crimped with a Tyco Electronics hand crimping tool. Read the instruction sheet packaged with the tool for the proper crimping procedure.

5.3. Insertion

An insertion tool is generally NOT required for inserting contacts into the housings. Pin and socket

contacts may be inserted in either the plug or the cap housing, or they may be intermixed in each housing to provide additional keying combinations.

Tyco Electronics Insertion Tool 455830-1 is available for inserting contacts crimped to small wire sizes. Refer to Instruction Sheet 408-7984 for insertion procedures.

5.4. Extraction

Extraction Tool 318851-1 is designed for removing pin and socket contacts from plug and cap housings. Refer to Instruction Sheet 408-4371 for extraction procedures.

6. HARDWARE REPLACEMENT

“O” rings and lock-nuts should be kept on hand for immediate replacement. See Figure 3.

DESCRIPTION	12 POSITION CONNECTOR	4, 6, AND 9 POSITION CONNECTORS
“O” Ring	1604260-1	1604260-2
Lock-nut	1604261-1	1604261-2

Figure 3

7. REVISION SUMMARY

New release