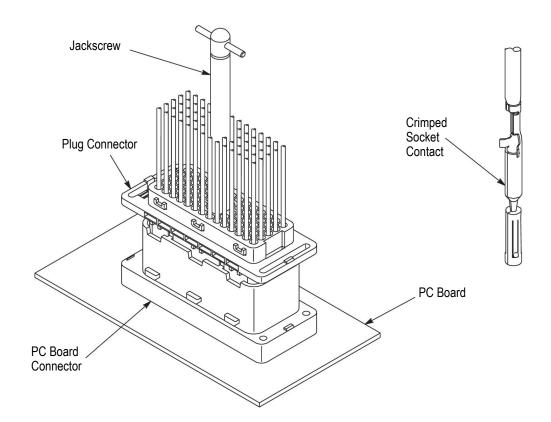
05 JAN 11 Rev A



SOCKET CONTACT PART NUMBER	WIRE SIZE RANGE (AWG)	INSULATION DIA. RANGE	PLUG ASSEMBLY PART NUMBER	PC BOARD ASSEMBLY PART NUMBER
1604634-2	24 - 20	1.02 - 2.03 [.040080]	1604520-1	211580-[ ]
1738390-2	24 - 20	1.52 - 3.43 [.060135]		
1738389-2	18 - 16	2.03 - 2.54 [.080100]		
1738388-2	18 - 14	2.79 - 3.81 [.110150]		

Figure 1

### 1. INTRODUCTION

This instruction sheet provides assembly and disassembly procedures for the 62-Position Metrimate Connector Assembly with Secondary Locking Feature. Connector components are listed in Figure 1.



All dimensions are in metric units [with U.S. customary units in brackets]. Figures and illustrations are for reference only and are not drawn to scale.

## 2. DESCRIPTION

The 62-Position Metrimate Connector Assembly is a wire-to-board connector system. The plug and pc board receptacle connector assemblies are fully polarized for proper alignment. The plug assembly has

a jackscrew designed to help provide proper mating and bottoming to the pc board receptacle connector.

Application Specification 114-13131 provides proper procedures and requirements for the crimping of the socket contacts and insertion of those contacts into the plug connector.

#### 3. ASSEMBLY PROCEDURES

- 1. Select the appropriate socket contact, wire size, and wire insulation diameter from the table in Figure 1. Follow the termination and assembly of those contacts in the procedures provided in Application Specification 114-13131.
- 2. After all required contacts have been inserted, the front housing must be closed. To close the front housing, push the housing into the rear housing



until the final latch engages on both ends of the connector. See Figure 2.



If the front housing does not close freely, check to ensure that all the contacts are properly seated in the connector.



Do NOT force the housings together as it may damage the connector.

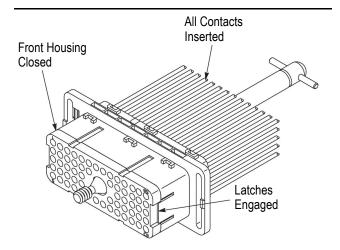


Figure 2

3. To disassemble the plug connector, use a small screwdriver to deflect the housing latches on one end to disengage the latch and move the front housing slightly forward. Repeat on the other end of the connector. Slide the front housing forward until the secondary latches engage. With the housings in this position, the contacts can be removed. See Figure 3.

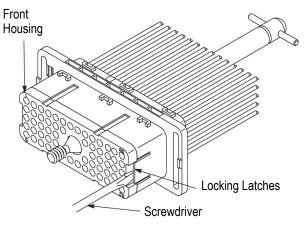


Figure 3



For small wires, the contact may not rotate when the wire is twisted and the contact may not release. In this case, to remove the contacts, the front housing must be removed completely. Using a small screwdriver, deflect the latches a second time to release the secondary latches and pull the housing straight out of the rear housing. Then, using a finger or a pencil with an eraser, press on the mating end of the contact with a rotating motion until the contact releases. Pull the contact out of the housing with the wire.

4. Refer to Application Specification 114-13131 for proper procedures and information in soldering the pc board receptacle connector.

# 4. MATING CONNECTORS

The polarizing features on the plug connector and pc board receptacle connector must be properly oriented. Insert the plug connector into the pc board receptacle connector evenly until all sockets and pins are aligned. Turn the locking jackscrew clockwise until the connectors have bottomed on each other. See Figure 4.

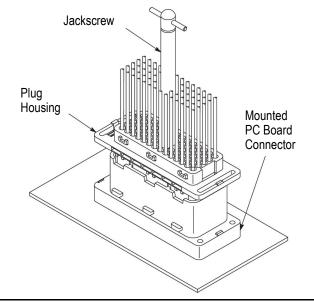


Figure 4

# 5. UNMATING CONNECTORS

To unmate the connectors, turn the jackscrew counterclockwise until it has fully opened, then gently pull the plug connector with a slight rocking motion from sideto-side until the plug connector separates from the pc board receptacle connector.

#### 6. REVISION SUMMARY

Since the previous release of this document, the TE logo was applied.

Rev A 2 of 2