

**FIGURE 1**

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**1. INTRODUCTION**

These instructions cover the A-MP 50 Position Automatic Wiring Connector and its accessories. Read these instructions and those packaged with the accessories before assembling the connector.

**2. CONNECTOR BLOCK SELECTION**

Sockets are used in Female Block No. 203622. You must select the type of Socket and load the Sockets in the Female Blocks.

Pins are used in Male Blocks. These Blocks are available with

Pins already loaded (No. 203623) or without Pins (No. 203621-2). A variation of this Block has a flange and tooling hole on each end. It is available loaded (No. 203624) and unloaded (No. 203621-4).

**3. CONTACT SELECTION**

Size 16 Type III and Type III Plus Sockets may be used in Female Block No. 203622. Select and crimp these Sockets according to Figure 2 of AMP Instruction Sheet No. 1379.

Use Size 16 Automatic Wiring Pin No. 203620 in Male Block No. 203621.

GUIDE SOCKET		GUIDE PIN	
CENTER GUIDE ASSEMBLIES		CORNER GUIDE ASSEMBLIES	
GUIDE PINS	GUIDE SOCKETS	GUIDE PINS	GUIDE SOCKETS
200389-□	200390-□	201046-□	201047-□
201402-□	201399-□	201397-□	201401-□

FIGURE 2

**4. CONNECTOR BLOCK ENGAGEMENT ACCESSORIES**

4.1. GUIDE PINS AND SOCKETS are used to align Connector Blocks during engagement, to polarize Connector Blocks, and to attach other accessories to Connectors. See Figure 2. Center Guide Assemblies are used in the center holes of the Connector Blocks. Corner Guide Assemblies are used in the corner holes. Guide Pins and Sockets may be used in all the Blocks, however, they cannot be used in the tooling holes in Blocks No. 203624 and 203621-4.

4.2. JACKSCREWS are used to align Connector Blocks prior to engagement, to decrease the effort needed to engage the Blocks, and to lock the mated Blocks together. Two types are available - Fixed and Turnable. One of each type is usually used in a mated pair. Fixed Jackscrews may be used to mount a Connector Block to a panel. Use Jackscrews in the center holes of any of the Connector Blocks. Figure 3 lists the Jackscrews and shows the uses for each type.

TURNABLE JACK SCREWS			
FIXED JACK SCREWS			
JACKSCREW			
TYPE	NUMBER		USED WITH
	MALE	FEMALE	
FIXED	200874-□	200875-□	TURNABLE JACKSCREWS
LONG TURNABLE	200871-□	200867-□	TWO-PIECE SHIELDS
SHORT TURNABLE	200868-□	200870-□	STRAIN RELIEF CLAMPS AND NO HARDWARE
SHORT SHORT TURNABLE	201388-□	201389-□	PIN HOODS AND/OR STRAIN RELIEF CLAMPS

FIGURE 3

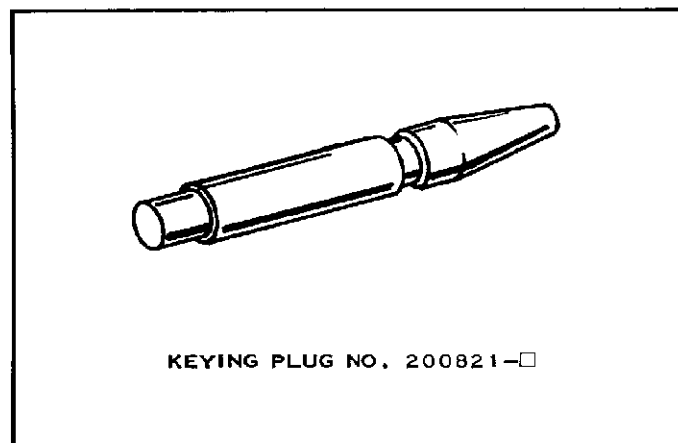


FIGURE 4

4.3. KEYING PLUGS, when inserted into contact cavities in a Connector Block, key this Block to mate only with another Block which has vacant, matching cavities. See Figure 4. Keying Plugs are used in Female Blocks only.

**5. PROTECTIVE ACCESSORIES**

5.1. STRAIN RELIEF CLAMPS relieve the strain on Contacts caused by free-hanging wires. These clamps may be used for both straight and right angle wire routing. The Flat Clamp Plate should be used with a wire bunch and the Fitted Clamp Plate with a cable. See Figure 5. The Clamps may be used only on Female Blocks. They should be attached to the Blocks, using either guide pins and sockets or two 6-32 x 3/8" machine screws with nuts and lockwashers.

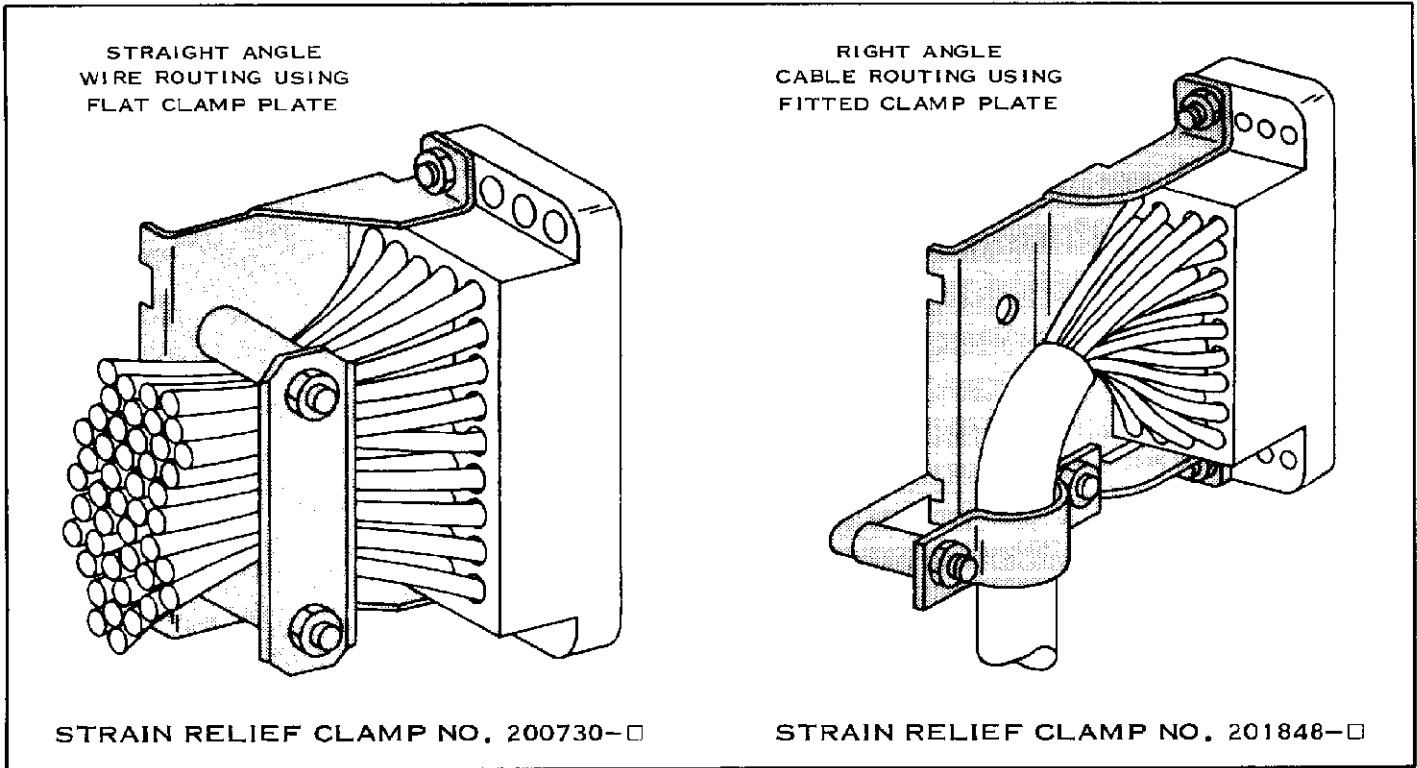


FIGURE 5

5.2. SHIELD AND CABLE CLAMPS (SHIELDS) protect the wires where they protrude from the rear of the Connector Block, and they relieve the strain on Contacts caused by free-hanging wires. Four two-piece Shields for use with Female Blocks are available. See Figure 6. These Shields should be attached to Blocks, using either guide pins and sockets or machine screws.

5.3. PIN HOODS protect Pin Contacts where they protrude from the Connector Block. (Pin Hoods cannot be used on

Blocks No. 203621-4 and 203624.) There are two styles:

- A. Closed End Pin Hoods. See Figure 7. For added protection use an External Pin Hood on one Block and an Internal Pin Hood on the mating Block.
- B. Open End Pin Hoods. These parts contain an Integral Mounting Bracket, which allows attachment of accessories to the Block before panel mounting. See Figure 7. Make the panel cut-out for this Pin Hood according to the instructions packaged with the Pin Hood.

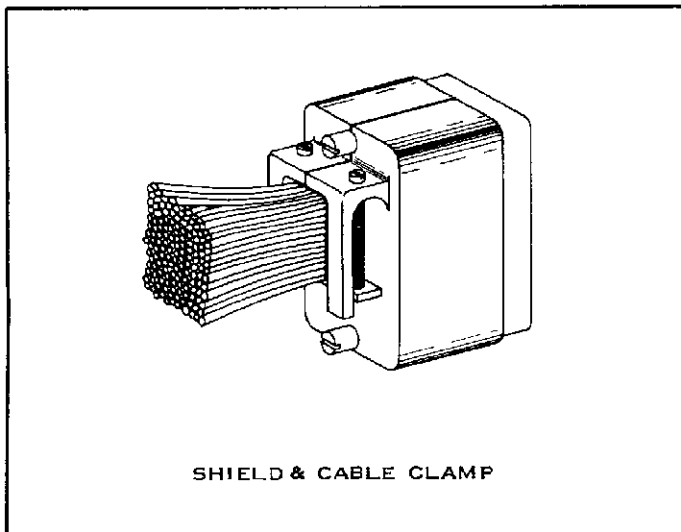


FIGURE 6

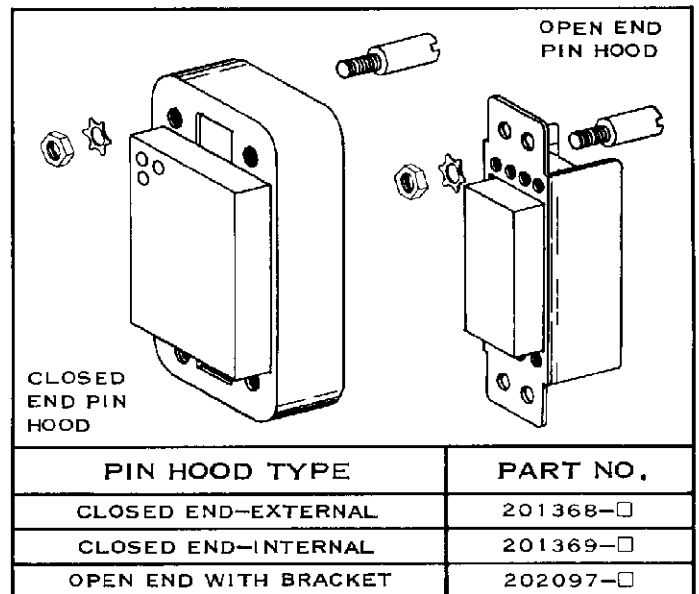


FIGURE 7

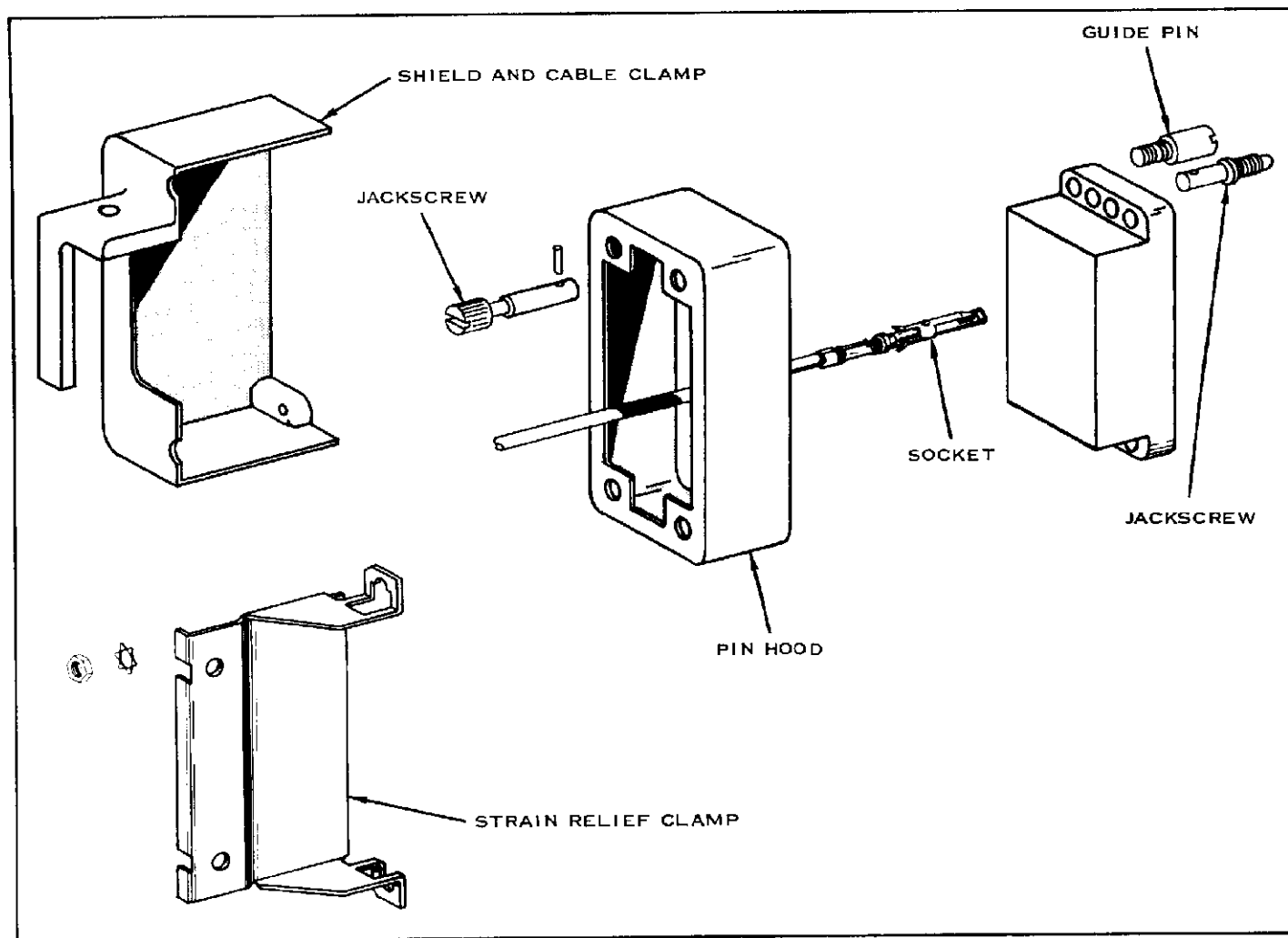


FIGURE 8

## 6. CONNECTOR ASSEMBLY

The following steps show the proper sequence for attaching the Accessories to a Connector Block. See Figure 8.

1. If a Pin Hood is used, attach it to the Block before inserting the contacts.
2. Insert crimped Sockets into the Female Block by pushing the Sockets all the way into the cavities. Pull back lightly on the wires to make sure the Sockets are locked in place. Use A-MP Insertion Tool No. 91002 when inserting Sockets crimped to small, flexible wire.
3. Insert Pins into the Male Block using A-MP Insertion Tool No. AA611080. The Pins enter the Block with the open end of the U facing the right side of the Block. See Figure 9.
4. Attach Jackscrews to the center mounting holes of each Connector Block.

**NOTE**

If Jackscrews are used with a Shield, mount the Jackscrews as shown on the instructions packaged with the Shield.

5. Place the Shield or Strain Relief Clamp against the Block. Attach the Shield or Strain Relief Clamp, using guide pins and sockets or #6-32 machine screws.
6. Assemble the Shield or Strain Relief Clamp according to the instructions packaged with the part.

## 7. PANEL MOUNTING

Make a cut-out in the panel using the dimensions shown in Figure 10. Mount either Connector Block to the panel, using #6-32 machine screws or guide pins and sockets.

## 8. CONTACT EXTRACTION

Use A-MP Extraction Tool No. 305183 to remove Contacts from the Connector Block.

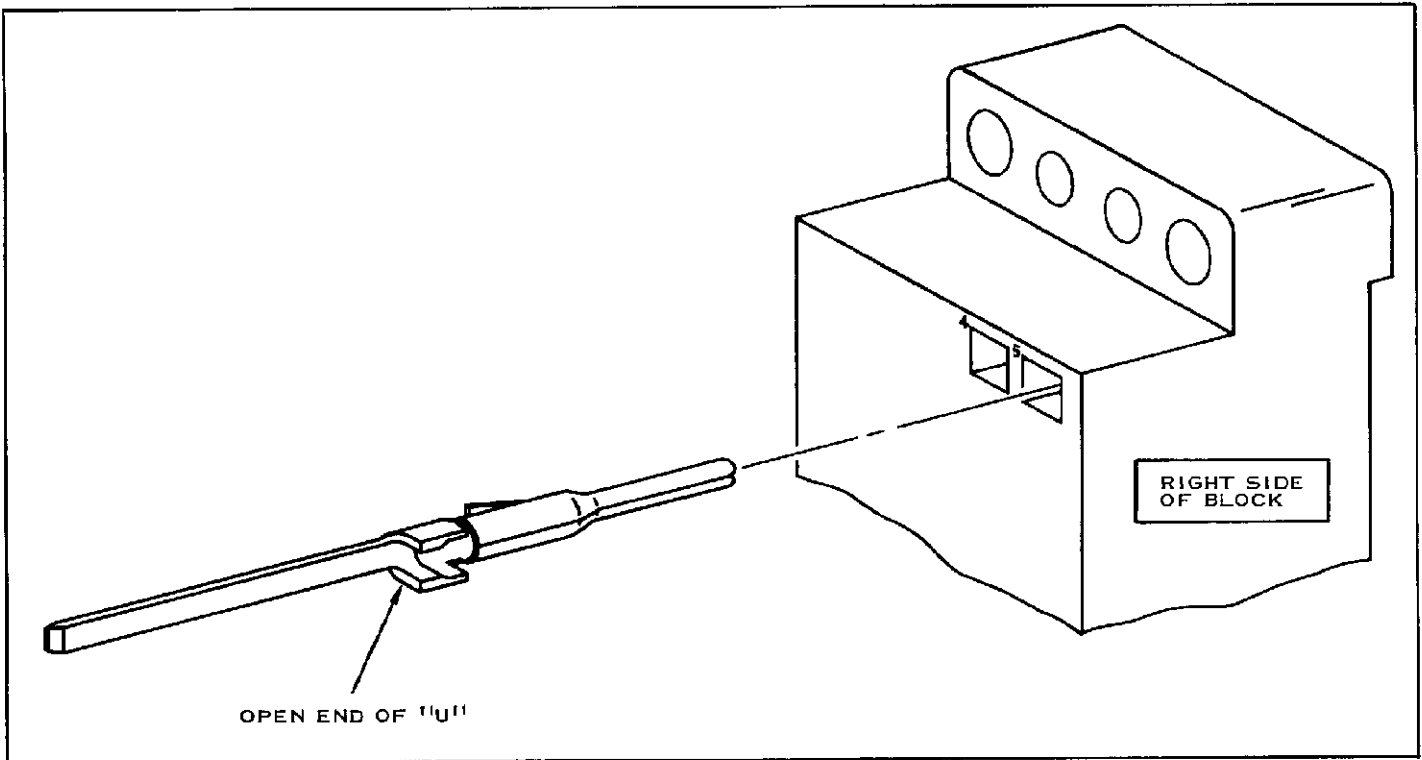


FIGURE 9

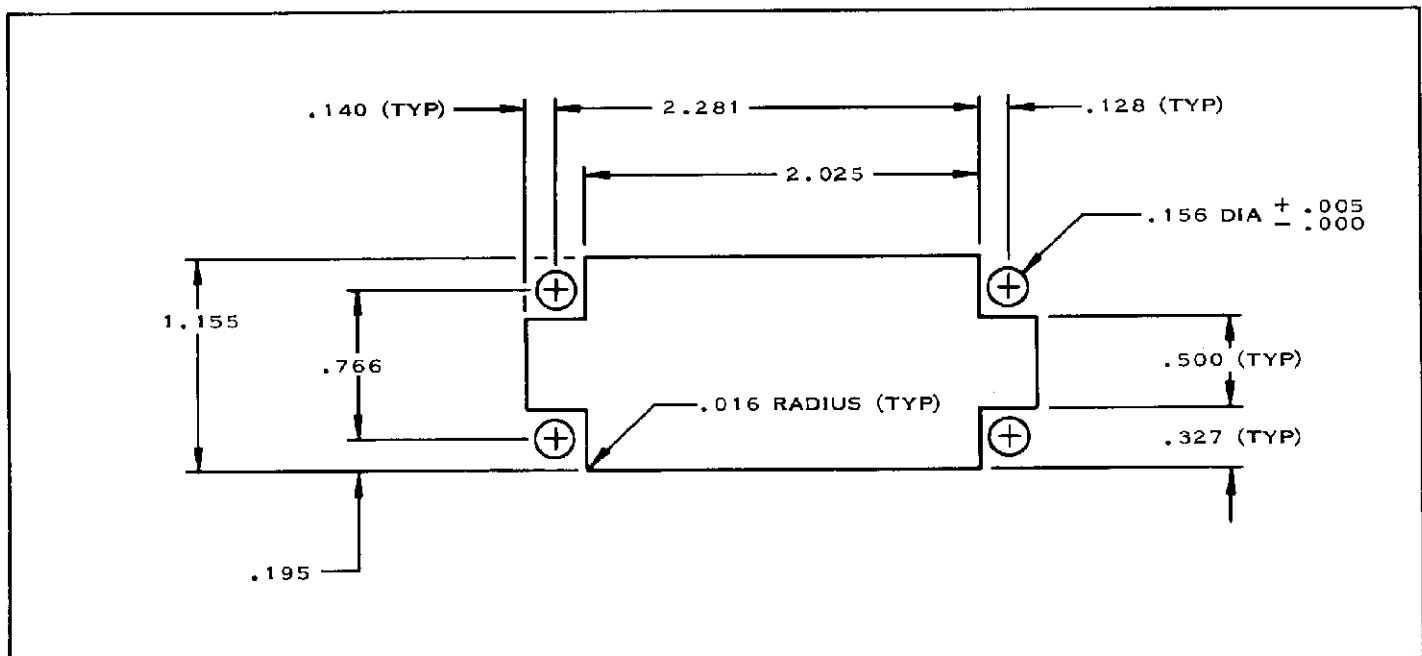


FIGURE 10