

Figure 1

### 1. INTRODUCTION

This instruction sheet provides information for the assembly of AMP\* miniature coaxial contacts to coaxial cable, twisted wire pairs, shielded wire, and various manufacturers' cables. Cable preparation, crimping, and contact insertion and extraction instructions are also given. Selection of the contacts, tools and appropriate dies, and applicable cables can be found in AMP Catalog 82046. Read this sheet and all referenced material before starting.

**NOTE**

Dimensions on this sheet are in millimeters [with inch equivalents in brackets]. Figures are not drawn to scale.

Reasons for reissuing this sheet are in Section 9.

### 2. DESCRIPTION

The miniature coaxial contact assembly is a crimp, snap-in type, designed for high density, multiple-circuit applications. Contacts consist of both a pin and socket assembly, each having a specific ferrule and a retention spring which is common to all assemblies. See Figure 1.

### 3. CABLE PREPARATION

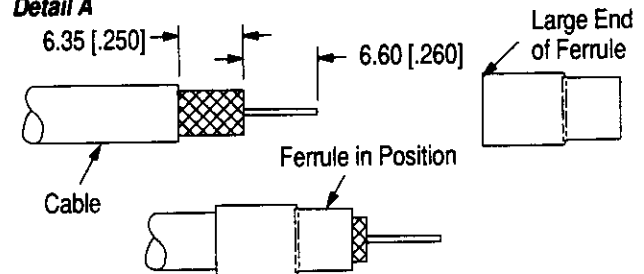
#### 3.1. Coaxial and Shielded Cable (Figure 2)

1. Slide ferrule on cable or wire.
2. Strip cable or wire to dimensions shown.

**NOTE**

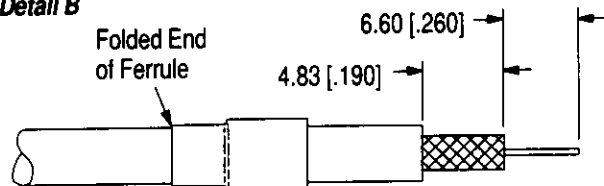
All coaxial and shielded cables are stripped as shown in Figure 2, Detail A or B. Under certain production conditions, it is desirable and permissible to slide the ferrule onto the cable after stripping; however, care must be used to prevent damage to the conductor and shield.

**Detail A**



**Note:** This strip length is applicable to Miniature Coaxial Contacts 201097-[ ] and 201098-[ ] only.

**Detail B**



**Note:** This strip length applies to all miniature coaxial contacts except 201097-[ ] and 201098-[ ] ■.

- For special wire, send sample of wire and/or specifications for engineering recommendation.

Figure 2

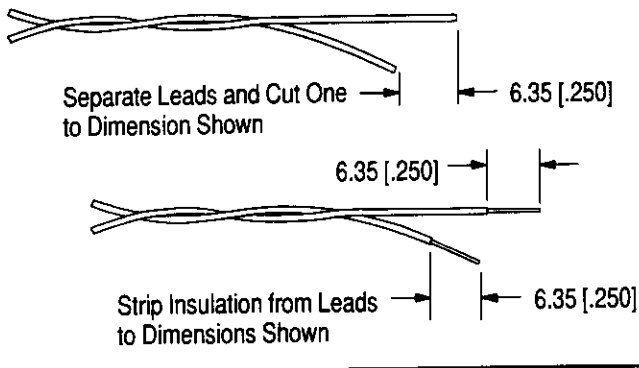


Figure 3

**3.2. Twisted Pair (Figure 3)**

1. Separate the insulated leads to approximately 44.45 [1.72] from end.
2. Cut one insulated lead to dimension shown.
3. Strip insulation from both leads to dimension shown.

**4. CONTACT AND CABLE ASSEMBLY**

**4.1. Coaxial and Shielded Cable (Figure 4)**

1. Flare braid as shown.
2. Insert conductor into contact as far as it will go. Braid passes over and around the support sleeve on contact.
3. Slide ferrule forward and over braid until ferrule bottoms against collar on contact.
4. Contact is now ready to be crimped. Refer to Section 5, CRIMPING PROCEDURE.

**CAUTION**

Excess braid or flare on ferrule extending beyond diameter of collar could prevent insertion of crimped contact into the connector. If flaring of the end of the ferrule occurs, position ferrule approximately .381 [.015] behind collar before crimping. Do NOT allow ferrule on large cables to be pushed over collar.

**4.2. Twisted Pair (Figure 5)**

1. Slide ferrule on wire, folded end first.
2. Insert longer lead into contact as far as possible.
3. Lay shorter (outside) lead on support sleeve of the shell.

**NOTE**

When size 22 stranded wire is used with Pin Contact 201143-5 and Socket Contact 201144-5, first "fan" strands of short (outside) lead, then lay wire against support sleeve.

4. Slide ferrule forward and over outside wire until ferrule bottoms against contact. See Figure 5.
5. Assembly can now be crimped. Refer to Section 5, CRIMPING PROCEDURE.

**NOTE**

Shorter (outside) lead must be in position shown in Figure 5 when crimped.

**5. CRIMPING PROCEDURE**

After contacts have been assembled on wire, they can be crimped by hand tools or interchangeable dies, in the appropriate hand tool frame. Refer to AMP Instruction Sheet 408-1770-2 for instructions on the use of the hand tools listed on the instruction sheet. See 408-1770-3 for information concerning the use of interchangeable dies.

**NOTE**

Dust cap on socket contact should not be removed from socket until you are ready to insert the crimped socket into the connector.

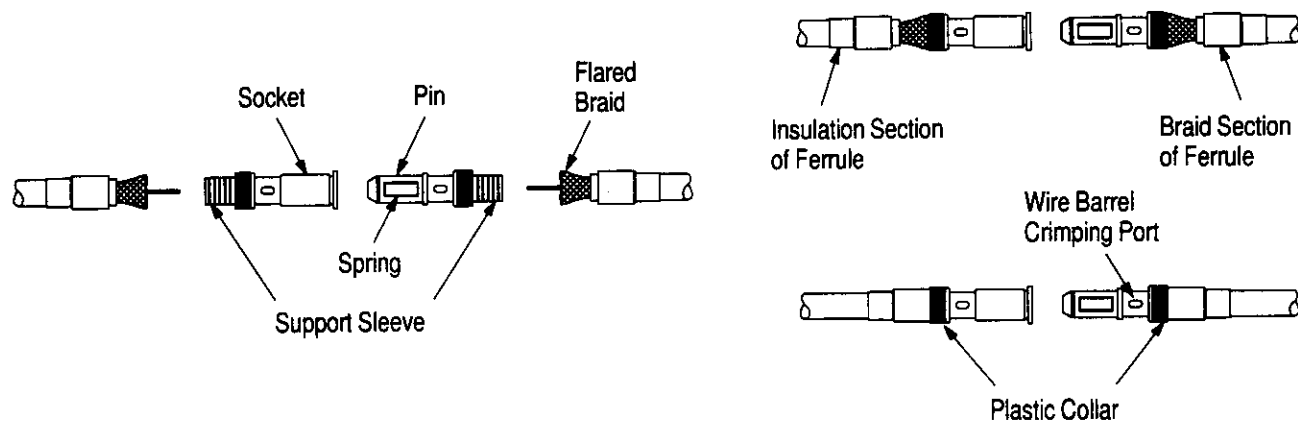


Figure 4

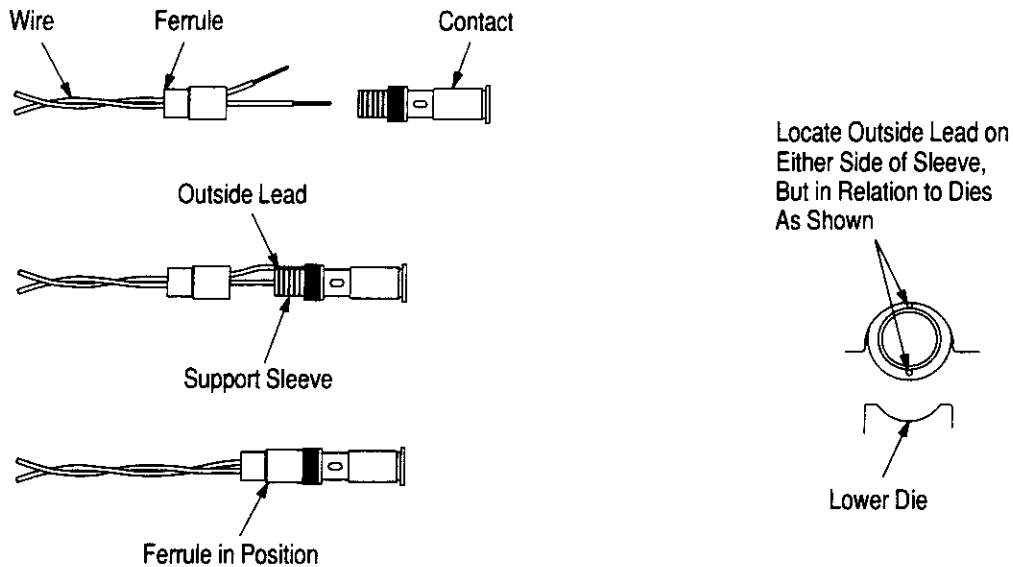


Figure 5

**6. ATTACHING RETENTION SPRING** (Figure 6)

Retention Spring 201142-2 is attached to the contact after the contact has been crimped. It is used to hold the contact in its proper position in the connector cavity.

Attach retention spring as follows:

1. Place open side of spring against section of contact containing crimping ports. Note that tines point toward ferrule.

2. Push spring down until it spreads open slightly and snaps over contact.
3. Rotate spring on contact until spring covers the crimping ports.

**7. CONTACT INSERTION AND EXTRACTION**

AMP miniature coaxial contacts are inserted by hand into multiple-contact connectors.

AMP Extraction Tool 305183-8 is recommended for extracting miniature coaxial contacts from their connectors. Refer to 408-1216 (packaged with tool) for proper extraction procedures.

**8. REPLACEMENT**

Contact your local AMP representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 1-717-986-7605 or write to:

CUSTOMER SERVICE (038-035)  
 AMP INCORPORATED  
 PO BOX 3608  
 HARRISBURG PA 17105-3608

**9. REVISION SUMMARY**

Revisions to this document include:

Per EC 0220-0724-95:

- Updated format
- Changed dimensions in Figure 2

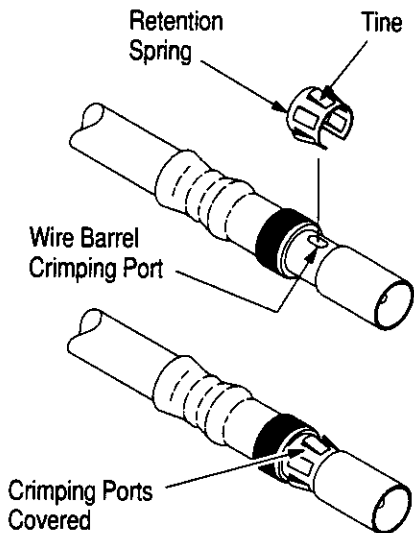


Figure 6