

WIRE		PATCHTIP						CRIMPING TOOL	
SIZE (AWG)	INSUL DIA (Max)	KIT*	FRONT TERMINAL ASSY	SLEEVE	SPACER	FERRULE	SHIELD CLIP	HAND TOOL	DIE ASSY
24 or 26	.047	425867-1	1-425442-6	425868-1	21388-4	328666	421260-2	402660	402954
22	.050	425867-2	1-425442-7	425868-1	21388-4	↓	↓	↓	↓
24 or 26 Tw Pr	.047	425867-3	425442-1	425868-2	Not Incl				
22 Tw Pr	.050	425867-4	425442-4	425868-2	Not Incl	↓	↓	↓	↓

* EACH KIT INCLUDES FRONT TERMINAL ASSY, SLEEVE, SPACER, FERRULE, AND SHIELD CLIP.
† NOT USED WITH TWISTED-PAIR APPLICATION.

Fig. 1

1. INTRODUCTION

This instruction sheet (IS) provides assembly of the AMP Patchboard Unshielded Patchtip Kits listed in Figure 1. These kits are recommended for making semi-permanent, unshielded single-lead patchcords for front boards of AMP patchboard systems. Read this material thoroughly before starting assembly.

NOTE All dimensions presented on this instruction sheet are in inches, unless otherwise stated.

2. DESCRIPTION (Figure 1)

Each kit includes a front terminal assembly, a spacer, a sleeve, a ferrule, and a shield clip. The front terminal assembly consists of an outer shell, a dielectric, and a center contact.

3. ASSEMBLY PROCEDURES

Determine the wire size and insulation diameter of your conductor(s), then refer to the chart in Figure 1 and select the matching patchtip kit.

Proceed as follows:

- Slide ferrule (folded end first) onto wire(s). Slide sleeve onto single conductor wire or onto center conductor wire of twisted-pair application. Strip the wire(s) to the length indicated in Figure 2. Do NOT cut or nick the wire strands.

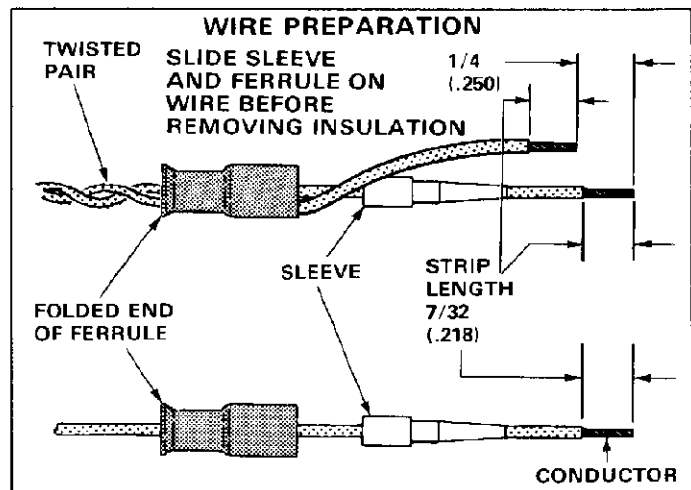


Fig. 2

NOTE If production practice dictates, the sleeve and ferrule may be installed after the stripping procedure. However, care must be used to prevent deformation of the wire strands.

- Position wire(s):

a. Single Wire

Place spacer over support sleeve of shell. Insert conductor into wire barrel of center contact until bottomed.

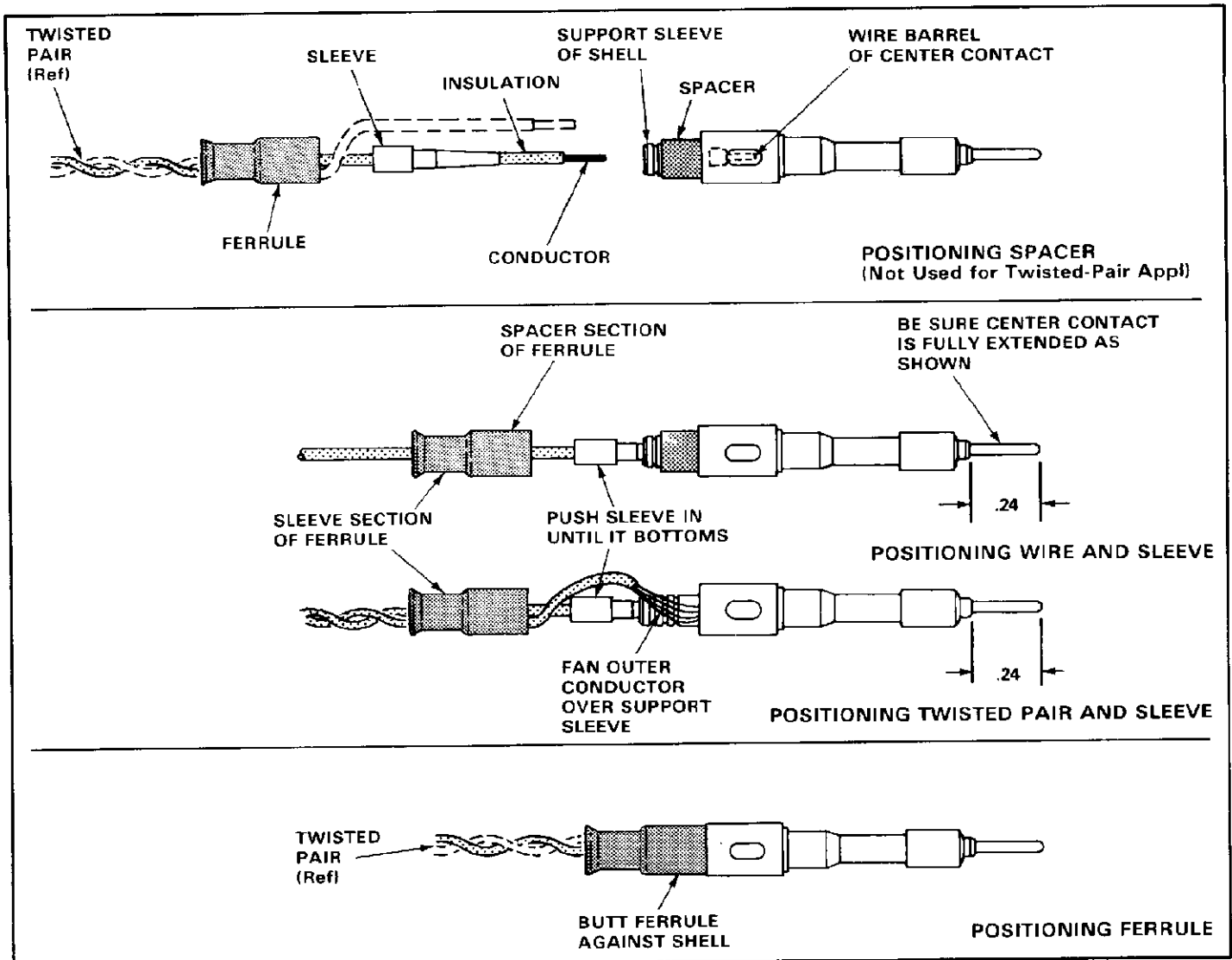


Fig. 3

b. Twisted-Pair Wire

Insert center conductor into wire barrel of center contact until bottomed. Fan outer conductor strands and place them over support sleeve of shell.

CAUTION

Be sure center contact is fully extended.

3. Push sleeve into shell until it bottoms. Slide ferrule over sleeve and spacer (outer conductor strands for twisted-pair application). Ferrule must butt against shell, or bottom on conductor strands.
4. The assembly is now ready to be crimped.

4. CRIMPING PROCEDURES

Refer to the chart in Figure 1, and determine the appropriate hand tool or die assembly to be used.

The crimping section of the hand tool or die assembly features three crimping die sets (an upper and lower

die per set). One die set crimps the wire barrel portion of the center contact, one set crimps the spacer section of the ferrule, and one set crimps the sleeve section of the ferrule. All three crimps are made at the same time. See Figure 4.

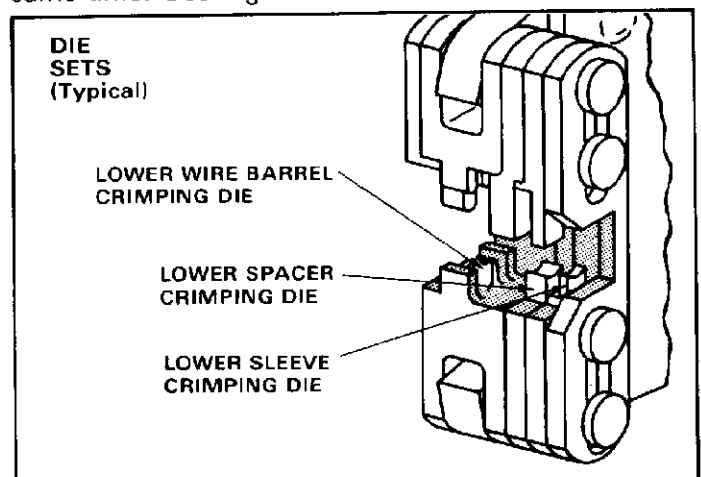


Fig. 4

A. Hand Tool Application (Figure 5)

The hand tool feature a CERTI-CRIMP★ ratchet which assures full crimping of the assembly.

Once engaged, the ratchet will not release until the tool handles have been FULLY closed. Proceed as follows:

1. Make sure ratchet is released — squeeze tool handles together and allow them to open FULLY. Position assembly in crimping section, making sure wire barrel crimping die set is aligned with front terminal crimping ports.
2. Push front terminal DOWN so that lower wire barrel crimping die enters lower crimping port, and spacer section of ferrule is bottomed on lower spacer crimping die.
3. Hold assembly in this position and squeeze tool handles together just enough so die sets hold assembly in place. Make certain upper wire barrel crimping die is aligned with upper crimping port.

4. Squeeze tool handles together until ratchet releases. Allow tool handles to open FULLY and remove crimped assembly from tool.

5. Check assembly to be sure it is properly crimped. Make certain wire barrel has been crimped without damaging crimping ports. Be sure wire or ferrule have not moved during crimping procedure. Test center contact for conductivity.

B. Die Assembly Application (Figure 6)

The die assemblies feature an ejector to facilitate removal of the crimped assembly. The die assemblies are designed for use in AMP Hand Crimping Tool 69710, or AMPORAPOWER★ Pneumatic Tool 69365-2. Install appropriate die assembly according to instructions packaged with tool — AMP Instruction Sheet IS 2095 packaged with hand tool 69710, or AMP Customer Manual CM 1983 packaged with pneumatic tool 69365-2. Proceed as follows:

1. Open die assembly FULLY. Position assembly (to be crimped) between ejector and stationary (upper) crimping dies, making sure wire barrel crimping die set is aligned with front terminal crimping ports.
2. Push front terminal UP so that upper wire barrel crimping die enters upper crimping port, and spacer section of ferrule is against upper spacer crimping die.

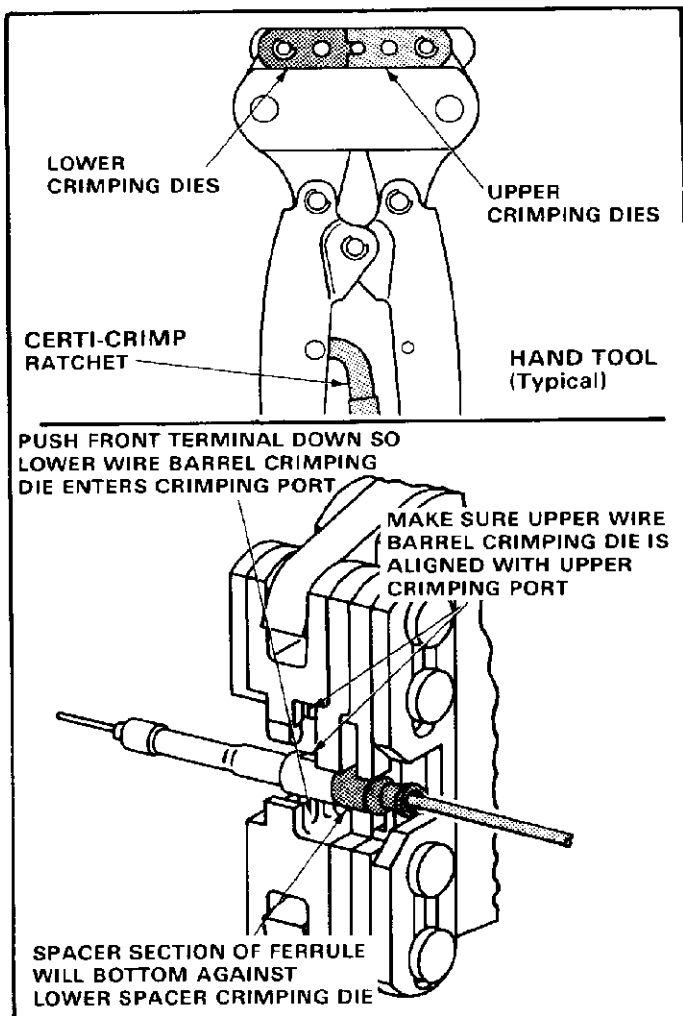


Fig. 5

NOTE

If using hand tool 69710, crimp the assembly according to Paragraph A (Hand Tool Application), Steps 3 through 5.

If using pneumatic tool 69365-2, continue with the following Steps 3 through 5.

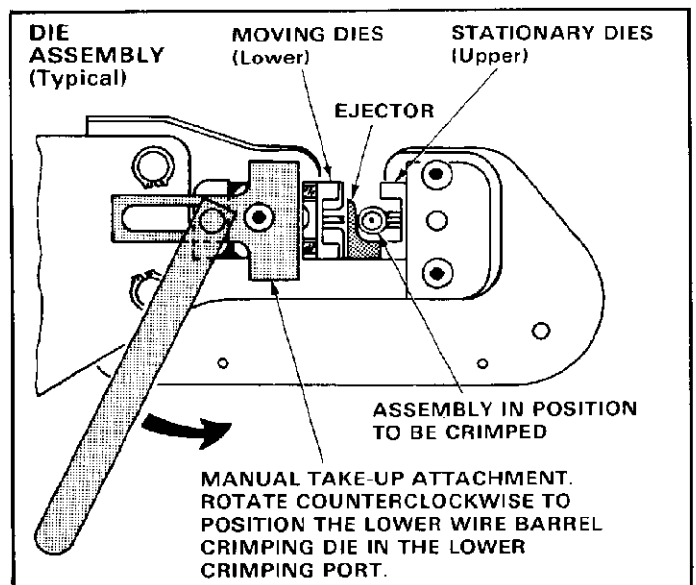


Fig. 6

3. Hold assembly in this position and rotate manual take-up lever COUNTERCLOCKWISE until moving (lower) wire barrel crimping die enters lower crimping port.

4. Depress pneumatic tool crimping button to crimp assembly. Release crimping button and remove crimped assembly from tool.

5. Check assembly to be sure it is properly crimped. Make certain wire barrel has been crimped without damaging crimping ports. Be sure wire or ferrule have not moved during crimping procedure. Test center contact for conductivity.

5. ATTACHING SHIELD CLIP (Figure 7)

1. Place open side of shield clip against section of shell containing crimping ports.

2. Push clip DOWN until it spreads open slightly and snaps over shell.

3. Rotate clip until it seats in crimping ports. The assembly is now ready for use.

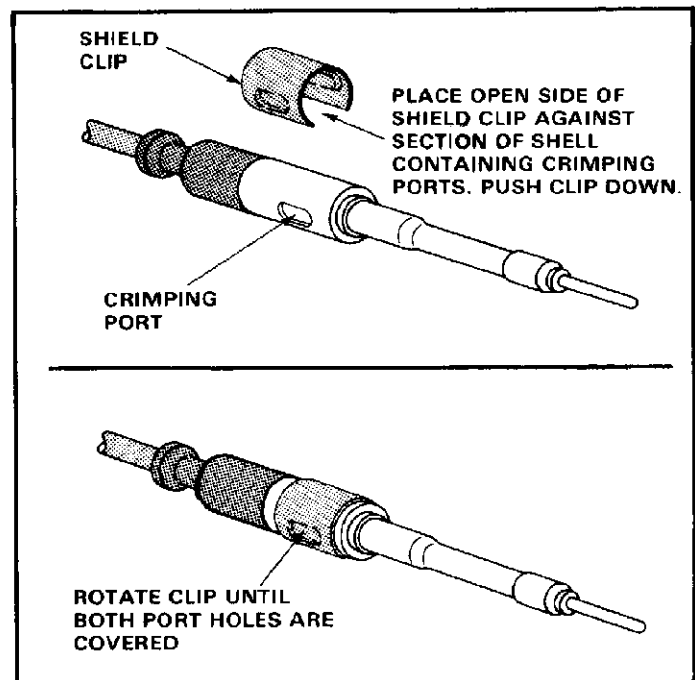


Fig. 7