

AMP

AMP INCORPORATED
Harrisburg, Pa. 17105

AMP ★ RIBBON CABLE RECEPTACLE KITS (For AMP Ribbon Cables 226298, 226463, and 226464)

Instruction Sheet

IS 2577

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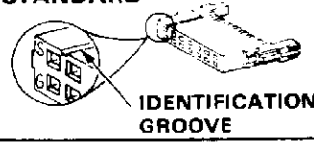
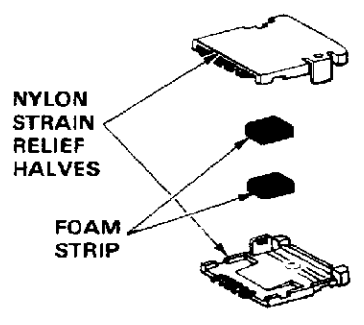
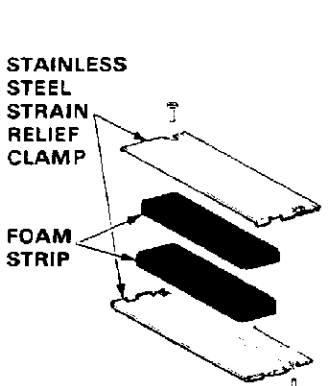
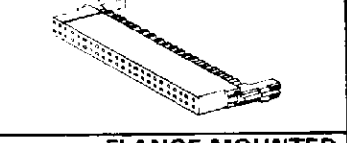
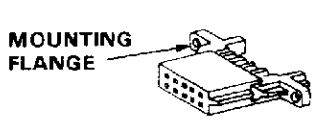
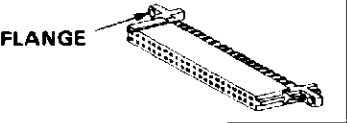

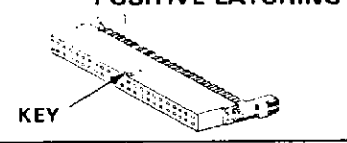
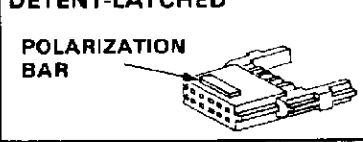
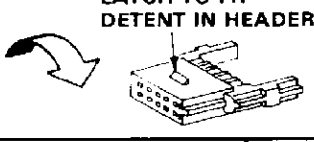

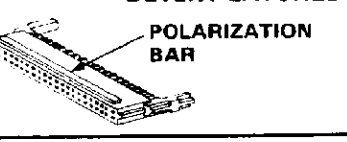
RECEPTACLE KIT, 4- TO 9-POSN Includes One Housing, Nylon Strain Relief Clamp (2 Halves), and Two Foam Strips				RECEPTACLE KIT, 10-POSN AND UP Includes One Housing, Stainless Steel Strain Relief Clamp (2 Halves), Two Foam Strips, and Two Screws			
SELECTION OF RECEPTACLE HOUSINGS		STRAIN RELIEF (Nylon), FOAM STRIPS		STRAIN RELIEF (Stainless Steel), FOAM STRIPS		SELECTION OF RECEPTACLE HOUSINGS	
STANDARD 						STANDARD 	
FLANGE-MOUNTED 						FLANGE-MOUNTED 	
POSITIVE LATCHING 						POSITIVE LATCHING 	
DETENT-LATCHED 		LATCH TO FIT DETENT IN HEADER 		LATCHES TO FIT DETENT IN HEADER 		DETENT-LATCHED 	
RIBBON COAXIAL CABLE				RECEPTACLE KITS			
NO. OF COAXIAL CONDUCTORS	PART NUMBERS			STANDARD	WITH MOUNTING FLANGES	POLARIZATION AND DETENT-LATCHING	POSITIVE LATCHING
	50 OHM	75 OHM	93 OHM				
2	226298-2	226463-2	226464-2	226634-1	226651-4	226733-1	--
3	226298-3	226463-3	226464-3	↓	↓	↓	--
4	226298-4	226463-4	226464-4	↓	↓	↓	221327-1
5	226298-5	226463-5	226464-5	226633-1	226651-5	226733-2	↓ -2
6	226298-6	226463-6	226464-6	226530-1	226651-6	226733-3	↓ -3
7	226298-7	226463-7	226464-7	226552-1	226651-7	226733-4	--
8	226298-8	226463-8	226464-8	227553-1	226651-8	226733-5	--
9	226298-9	226463-9	226464-9	226554-1	226651-9	226733-6	--
10	1-226298-0	1-226463-0	1-226464-0	226476-2	2-226651-7	2-226733-4	221327-4
10	1-226298-0	1-226463-0	1-226464-0	226476-1	1-226651-0	226733-7	221327-4
11	1-226298-1	1-226463-1	1-226464-1	226477-1	1-226651-3	1-226733-0	--
12	1-226298-2	1-226463-2	1-226464-2	↓	↓	↓	--
13	1-226298-3	1-226463-3	1-226464-3	↓	↓	↓	221327-5
14	1-226298-4	1-226463-4	1-226464-4	226478-1	1-226651-7	1-226733-4	--
15	1-226298-5	1-226463-5	1-226464-5	↓	↓	↓	--
16	1-226298-6	1-226463-6	1-226464-6	↓	↓	↓	--
17	1-226298-7	1-226463-7	1-226464-7	↓	↓	↓	221327-6
18	1-226298-8	1-226463-8	1-226464-8	226305-1	2-226651-0	1-226733-7	--
19	1-226298-9	1-226463-9	1-226464-9	↓	↓	↓	--
20	2-226298-0	2-226463-0	2-226464-0	↓	↓	↓	221327-7
21	2-226298-1	2-226463-1	2-226464-1	226479-1	2-226651-5	2-226733-2	--
22	2-226298-2	2-226463-2	2-226464-2	↓	↓	↓	--
23	2-226298-3	2-226463-3	2-226464-3	↓	↓	↓	--
24	2-226298-4	2-226463-4	2-226464-4	↓	↓	↓	--
25	2-226298-5	2-226463-5	2-226464-5	↓	↓	↓	221327-8

Fig. 1

1. INTRODUCTION

AMP Ribbon Cable receptacles (Figure 1) are terminated to AMP Ribbon Cables 226298, 226463,

and 226464 using AMP Applicator 220144-1 and Dies 220155. Refer to Figure 1 for part numbers of cables and receptacle kits.

Read these instructions thoroughly. Be sure also to read the instructions packaged with the applicator for installation of the dies, terminating procedure, and applicator and die maintenance.

NOTE

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

2. DESCRIPTION

A. AMP Ribbon Cables 226298, 226463, and 226464

Each insulated conductor of an AMP Ribbon Cable

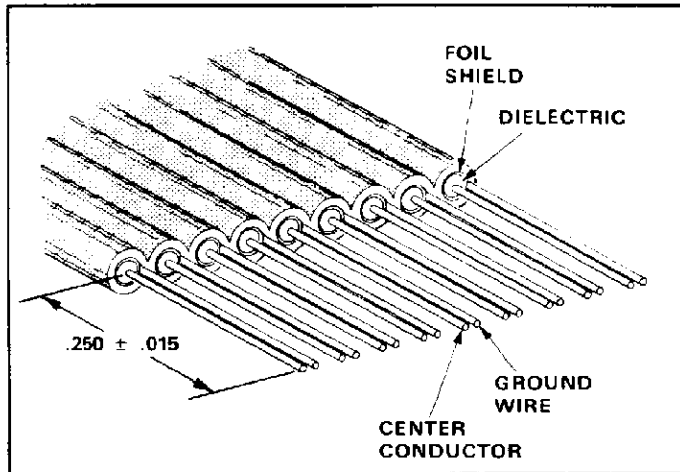


Fig. 2

consists of a center conductor, dielectric, foil shield, and a wire which is in continuous contact with the foil to prevent shorting (see Figure 2). The entire assembly is covered with an outer polyvinyl chloride (pvc) insulating jacket.

The ribbon cable must first be slitted and stripped before it is terminated.

The AMP Ribbon Cables listed here are available with three different impedance ratings: 50 ohm (Base Number 226298), 75 ohm (Base Number 226463), and 93 ohm (Base Number 226464).

B. AMP Ribbon Cable Receptacles

AMP Ribbon Cable receptacles mate with .025-in.-square posts on .100- x .100-in. centerlines. Each AMP Ribbon Cable receptacle kit includes one receptacle housing, two foam strips, and two component halves which are assembled as a strain relief clamp. Two screws are also provided with kits that include stainless steel strain relief clamps.

The strain relief clamps of four- to nine-position receptacles are made of glass-filled nylon; the clamps of receptacles larger than 10 positions are made of stainless steel. Those of 10-position receptacles are available in either nylon or stainless steel. In addition to these standard features, AMP Ribbon Cable receptacles are also available with mounting flanges, and

with polarization and detent-latching mechanisms. A keyed, positive latching receptacle is available for use with AMP-LATCH★ ejection-style pin headers equipped with Latch 499287-1.

A groove between the first two cavities provides for easy identification of the signal side of the standard and flange-mounted receptacles. The polarization bar identifies the signal side on the detent-latched receptacles. See Figure 1.

Following termination, the cable conductors are secured to the receptacle housing either with the foam strips or, if the customer desires, with hot-melt

TOLERANCES† ON RIBBON CABLE LEAD ASSEMBLIES	
LEAD LENGTH	TOLERANCE (in.)
Up to 12 in.	± 1/8
24 in.	± 1/4
48 in.	± 1/2
6 ft	± 3/4
8 ft	± 1.0
16 ft	± 2.0
25 ft	± 3.0
30 ft	± 4.0
40 ft	± 5.0
50 ft	± 6.0
75 ft	± 9.0
100 ft	± 12.0
150 ft	± 18.0
200 ft	± 24.0
250 ft	± 30.0
300 ft	± 36.0

† SLITTING TOLERANCE IS 1/2 IN. ON SLITS OF UP TO 24 IN., AND 1 IN. FOR SLITS LONGER THAN 24 IN.

Fig. 3

compound (see Paragraph 5, SECURING THE CONDUCTORS TO THE CONNECTOR).

3. CABLE PREPARATION

Select the appropriate AMP Ribbon Cable by referring to the chart in Figure 1, and proceed as follows:

1. Refer to Figure 3 for cable lead lengths and tolerances, and cut cable to desired length.
2. Slit cable. AMP recommends the SLITZ-IT 2 tool, available from K-G Devices Corp., Box 81, Dewitt, NY 13214.
3. Strip cable .250 ± .015 in. (see Figure 2). AMP recommends any one of the following "Gang" model stripping machines available from Carpenter Mfg. Co., Fairgrounds Drive, Manlius, NY 13104-0188:

Gang Stripper Model 47A Mechanical;
Gang Stripper Model 49A Pneumatic;
or Gang Cutter Model 95.

4. Refer to Figure 4, and position ribbon cable so that center conductor is to RIGHT of ground wire.
5. Use wire separator to bend center conduc-

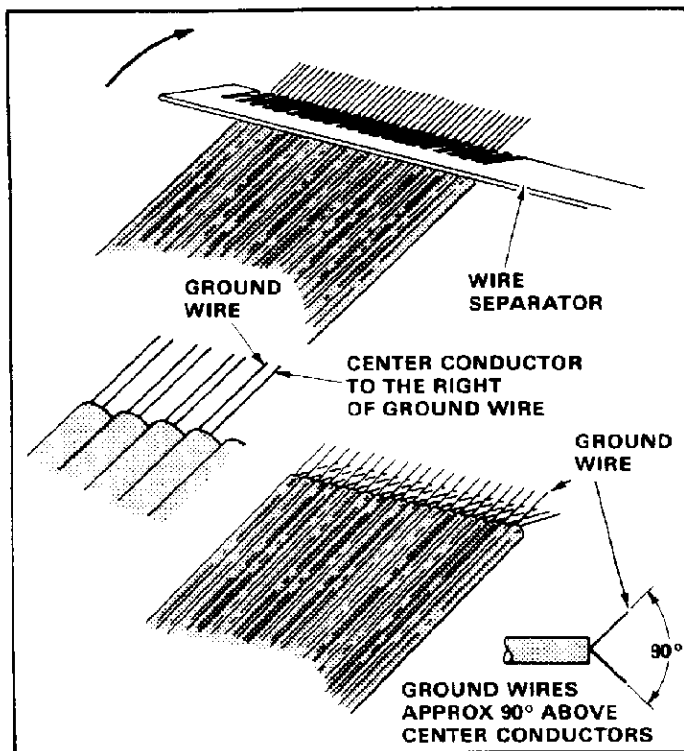


Fig. 4

tors DOWN to about 45° with respect to the plane of the cable.

6. Bend ground wires UP to approx. 90° with respect to the center conductors.

4. CABLE TERMINATION

Refer to IS 9071, packaged with the AMP applicator and dies, for instructions concerning terminating the ribbon cable to the receptacle.

5. SECURING THE CONDUCTORS TO THE CONNECTOR

A. Foam Strip Installation (Figure 5)

If desired, apply precut foam strip (part numbers of individual foam strips can be obtained from Figure 5) on each plastic or stainless steel clamp component as follows:

1. Remove paper backing from foam strip.
2. Position strip, adhesive side DOWN, on each clamp component. Ensure that strip is centered with edge of foam against shoulder of component, and that no foam spills over onto ears of receptacle housing when assembled to both clamp components.
3. Press foam strip against each clamp component.

B. Hot-Melt Compound (Figure 6)

A hot-melt compound may be applied across the

STAINLESS STEEL CLAMP COMPONENT		
3/8 IN.		
SHOULDER		
FOAM STRIP CENTERED		
NYLON CLAMP COMPONENT		
FOAM STRIP CENTERED ON TAPERED SECTION		
PART NO. OF FOAM STRIPS	RECEPTACLE SIZES	LENGTH + .000 - .062 (In., Unless Specified)
228097-1	--	30-ft (Bulk)
-2	4	.300
-3	5	.400
-4	6	.500
-5	7	.600
-6	8	.700
-7	9	.800
-8	10	.900
-9	11	1.00
1-	-0	1.10
1-	-1	1.20
1-	-2	1.30
1-	-3	1.40
1-	-4	1.50
1-	-5	1.60
1-	-6	1.70
1-	-7	1.80
1-	-8	1.90
1-	-9	2.00
2-	-0	2.10
2-	-1	2.20
2-	-2	2.30
2-	-3	2.40

Fig. 5

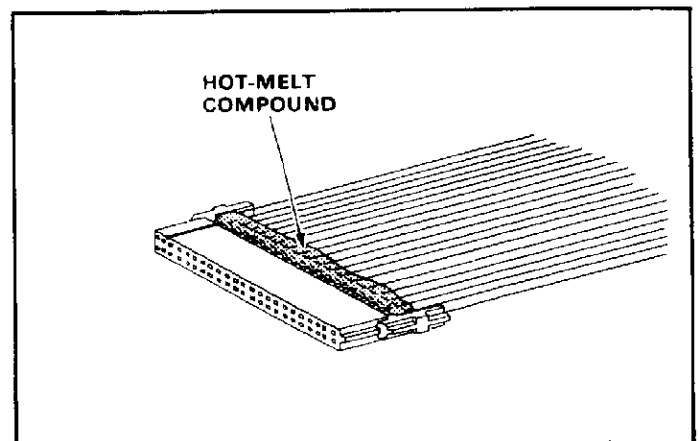


Fig. 6

center conductors and ground wires as an option to using foam packing. Use an appropriate applicator to apply the hot-melt compound. AMP recommends applying the compound with the Mercer Hot-Melt Applicator, Model 021SD*. Be sure to read the instructions packaged with the applicator before applying the hot-melt compound.

6. STRAIN RELIEF

Assemble the two strain relief clamp components over the receptacle housing as follows:

A. Nylon Clamp (Figure 7)

1. Hold the one component (half) of the strain relief clamp at an angle and insert teeth between grooves of receptacle. (Teeth fit under edge of

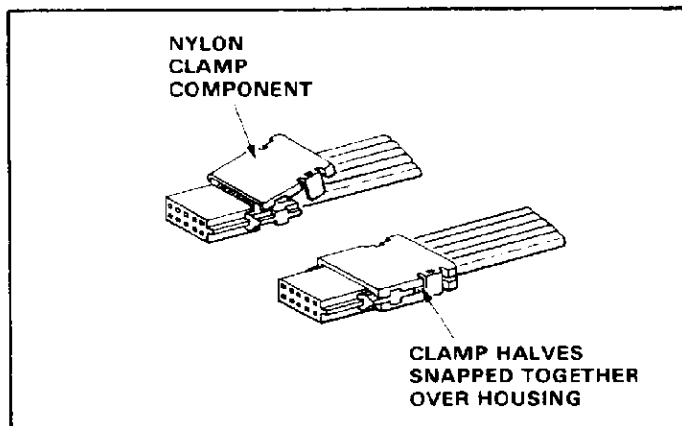


Fig. 7

receptacle and into cavities.)

2. Repeat Step 1 for opposite half and snap clamp together over receptacle.

B. Stainless Steel Clamp (Figure 8)

1. Assemble the two stainless steel clamp components over the receptacle housing as shown.
2. Secure the clamp components with the screws provided.

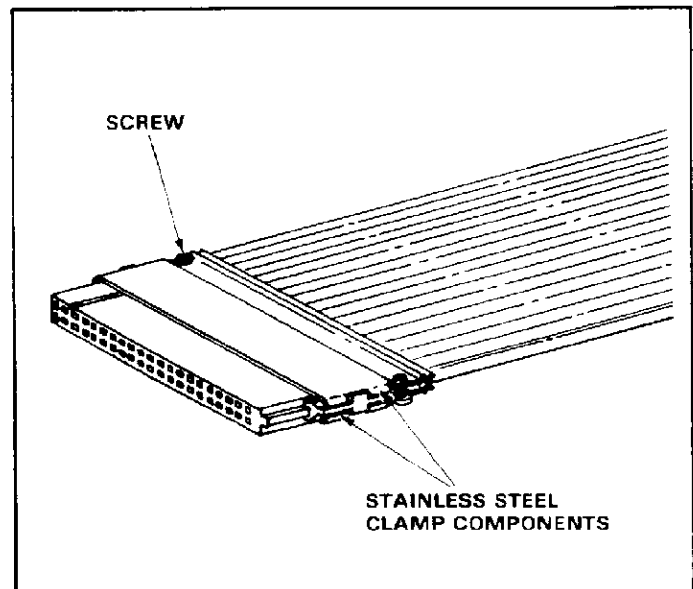


Fig. 8