

**INSTALLATION INSTRUCTIONS FOR
 AMPHENOL®/MATRIX®
 MS STANDARD MIL-C-5015 CRIMP REAR RELEASE CONNECTORS**

SECTION I: DESCRIPTION

1.1 This connector series meets the requirements of MIL-C-5015, and incorporates the use of crimp type contacts which are rear insertable and removable.

SECTION II: INSTALLATION

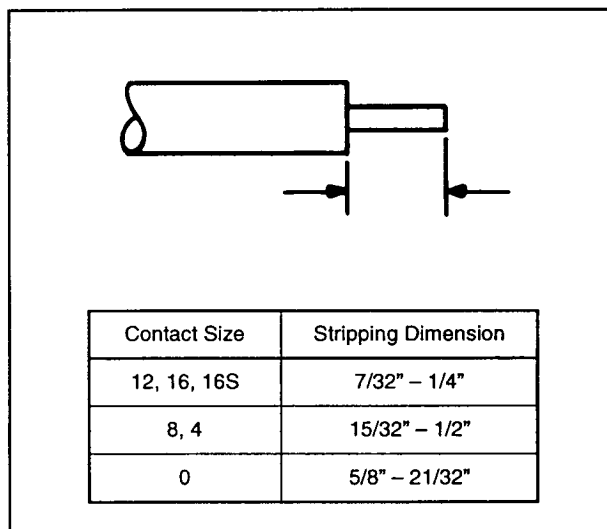
2.1 PREPARATION OF WIRE

- a. Cut wire or cable to required length.
- b. Strip each wire. **DO NOT CUT** or nick strands. Hot wire stripping methods are recommended in order to avoid damage to the wire strand. See Figure 2 for stripping dimensions.

2.2 Check to be sure strands of conductors are not separated. If necessary, reform by lightly twisting the strands together.

2.4 The recommended crimping tool for the sizes 16, 16S, 12, 8, 4 and 0 contacts are listed below in Table I

Figure 2: STRIPPING DIMENSIONS



2.3 CRIMPING

Table I: CRIMPING TOOLS

Contact Size	Wire Range		Finished Wire Dia. Range		Color Code	Crimping Tool Part Number	Turret or Positioner Part Number
	AWG	mm ²	Inch	mm			
16S	20-16	0.5-1.4	.053-.103	1.34-2.62	Red/White	M22520/1-01	M22520/1-02
16	20-16	0.5-1.4	.053-.103	1.34-2.62	Blue/White	M22520/1-01	M22520/1-02
12	14-12	2-3	.085-.158	2.15-4.01	Yell./White	M22520/1-01	M22520/1-02
8	10-8	5-8.5	.132-.255	3.35-6.48	White/Red	M22520/23-01	M22520/23-02
4	6-4	13-21	.237-.370	6.01-9.40	White/Blue	M22520/23-01	M22520/23-04
0	2-0	34-60	.360-.550	9.14-13.97	White/Yell.	M22520/23-01	M22520/23-05

All tools are available from the MS approved tool manufacturer.

- 2.5 Install turret head in the applicable M22520 crimp tool. Select positioner desired from color-coded data plate on side of turret head. Raise the selector knob and rotate it until the desired selector number is opposite the index mark. Selector numbers for particular wire size and contact size combinations are called out on the data plate on the side of the turret head.
- 2.6 Insert stripped end of wire into contact wire well and apply pressure until it is positively bottomed. Check visually to make sure the wire strands are visible in the contact inspection hole. With the wire in place, insert the contact through the indenter opening into the turret positioner. Squeeze handles together until the ratchet releases. Handle will return to a fully opened position. Remove crimp contact and wire.
- 2.7 Make a final visual check to be sure contacts are properly crimped and the ends of wires are visible in the contact inspection hole.

2.8 INSTALLING CONTACTS

2.9 Slide any back accessories over the wires in proper sequence.

2.10 CONTACT INSERTION

2.11 The tool used to insert contacts is a combination extract/insert tool Military Part No. M81969/14-(). See Table II below for the applicable insertion/removal tool for the contact size being used.

INSERTION/REMOVAL TOOLS

Contact Size	Color Code	Military Part Number	Amphenol/Matrix Part Number
16	Blue/White	M81969/14-03	6500-001-0016
12	Yell./White	M81969/14-04	6500-001-0012
8	White/Red	M81969/14-06	6500-018-0008
4	White/Blue	M81969/14-07	6500-018-0004
0	White/Yell.	M81969/14-08	6500-018-0000

2.12 Slip the insertion end of the applicable M81969/14-() tool over the wire insulation and slide forward until the tool bottoms against the rear shoulder of the contact. Keep the wire taut so that the contact shoulder remains firmly against the tool. Use care to provide alignment with the contact, tool, and insert cavity in order to prevent any loading against the side wall of the insert cavity during insertion. Insert contact firmly into rear of grommet hole until it bottoms. Remove tool and pull gently (no intermittent tugging or excessive pulling) on wire to assure contact is properly retained.

2.13 Fill any unused holes in the connector with an uncrimped contact and a sealing plug.

2.14 ASSEMBLE BACK ACCESSORIES

2.15 Slide back accessories forward and thread onto rear of connector.

SECTION III: CONTACT EXTRACTION

3.1 Loosen any back accessories and slide back on wire.

3.2 Slip white end of the applicable M81969/14-() tool (from Table II) over wire insulation and slide forward until tool bottoms against the rear shoulder of the contact. Apply a slight forward pressure on the tool and pull on wire simultaneously. Contact and tool should come out together.