

# APPLICATION SPECIFICATION

NO 114-1007

## 1. SCOPE

This specification covers the requirements for application of .140 diameter MATE-N-LOK\* pin and socket contacts. These requirements are applicable to hand or automatic machine crimping tools. For specific wire and insulation ranges relative to the products covered in this specification see Figure 2 and 3.

## 2. NOMENCLATURE

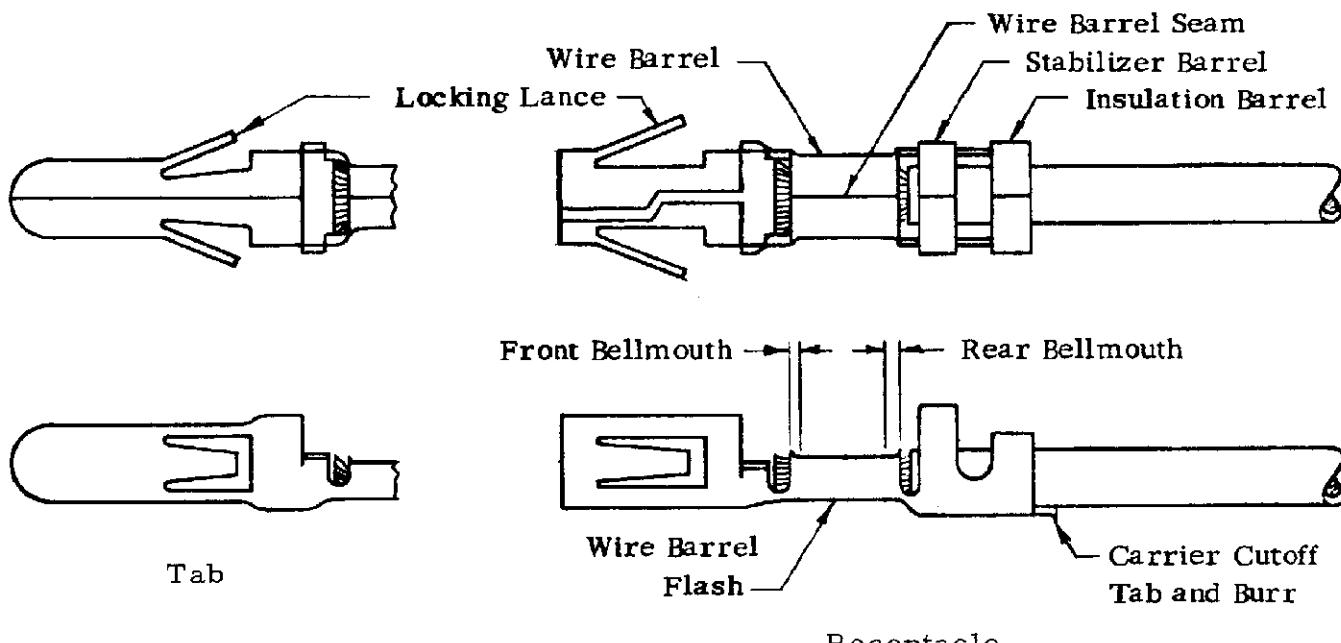


Figure 1

## 3. CRIMP AND DIMENSIONAL REQUIREMENTS

### 3.1. Wire Preparation

#### A. Strip Length

Insulation shall be stripped as indicated in Figure 2 and 3.

#### B. Workmanship

Reasonable care shall be taken not to nick, scrape or cut any strands or the solid wire during the stripping operation.

\*Trademark of AMP Incorporated.

© COPYRIGHT 1976 BY AMP INCORPORATED,  
HARRISBURG, PA. ALL INTERNATIONAL RIGHTS  
RESERVED. AMP INCORPORATED PRODUCTS COVERED BY  
U.S. AND FOREIGN PATENTS AND/OR PATENTS PENDING.

DIST	0	Was 108-1008	
1	LTR	REVISION RECORD	APP DATE

			DR <i>C.L. Tait</i> 10/27/76	CHK <i>J. Briner</i> 10/27/76	<b>AMP</b> AMP INCORPORATED Harrisburg, Pa.		
			APP <i>K.D. Menary</i> 10/27/76	LOC <i>B</i>			
SHEET 1 OF 4	NAME CONTACT, PIN AND SOCKET, MATE-N-LOK, .140 DIAMETER, APPLICATION OF						

### 3.2. Carrier Cutoff Tab and Burr

#### A. Cutoff Tab

Cutoff tab shall not exceed .015.

#### B. Burr

Burr on cutoff shall not exceed .005.

### 3.3. Wire Barrel Crimp

#### A. Crimp Dimensions and Type

Crimp height, width and type shall be as shown in Figure 2 and 3.

#### B. Wire Barrel Flash

Wire barrel flash shall not exceed .007.

#### C. Wire Barrel Seam

The wire barrel seam shall be closed adequately to confine all strands of the wire. There shall be no loose wire strands or wire strands embedded in the outside of the wire barrel.

#### D. Bellmouth

(1) Rear bellmouth length shall be .010-.030.

(2) Front bellmouth length shall be .015 maximum.

#### E. Conductor Location

(1) End of the wire shall be flush with the front end of the wire barrel or extend .094 maximum after crimping.

(2) Both insulation and conductor shall be visible between the stabilizer barrel and wire barrel when the insulation diameter is less than .150. Care shall be taken not to allow insulation to be crimped in the wire barrel. Both conductor and insulation shall be visible between the stabilizer barrel and insulation barrel when the insulation diameter is .150 or greater.

### 3.4. Insulation Barrel Crimp

#### A. Crimp Dimensions and Type

(1) Crimp width and type shall be as shown in Figure 2 and 3.

(2) Crimped insulation barrel shall not extend at any point more than .005 outside the .190 diameter of the stabilizer. Check using AMP Gage 578957 and 679648.

<b>AMP</b>		AMP INCORPORATED Harrisburg, Pa.		SHEET 2 OF 4	
LOC <b>B</b>	<b>A</b>	NO <b>114-1007</b>	REV <b>0</b>		
NAME CONTACT, PIN AND SOCKET, MATE-N-LOK, .140 DIAMETER, APPLICATION OF					

**B. Workmanship**

Reasonable care shall be taken not to cut or break the insulation during the crimping operation.

**3.5. Locking Lance**

Locking lance shall not be deformed.

**3.6. Stabilizer Barrel Crimp****A. Crimp Dimensions and Type**

- (1) Crimp diameter and type shall be as shown in Figure 2 and 3.
- (2) Crimped stabilizer barrel shall be concentric with the .162-.166 outside diameter dimension on socket within .015 diameter. Check using AMP Gage 578957 and 679648.
- (3) Crimped stabilizer barrel shall be concentric with the .138-.142 outside front diameter dimension on pin within .015 diameter. Check using AMP Gage 578957 and 679648.

**B. Twist or Roll**

There shall be no twist or roll in crimped portion that will impair usage of the contact.

SHEET <u>3 OF 4</u>	AMP		AMP INCORPORATED Harrisburg, Pa.	
LOC B	A	NO	114-1007	
REV 0				
NAME CONTACT, PIN AND SOCKET, MATE-N-LOK, .140 DIAMETER, APPLICATION OF				

Part Number	Wires Pin	Wire No	Size	Insulation Diameter	Strip Length	Wire Barrel Crimp		Insulation Barrel Crimp		Stabilizer Barrel Crimp			
						Width ± .002	Height ± .002	Crimper Type	Width Crimper Anvil	Type	Diameter, ± .005	Crimper Type	Anvil
61627	14	14	14	.149 or less	.250	.071	.061	F	.180	F	.190	O	O
		16	18	.149 or less	* .062	.055	.053	F	.180	F	.190	O	O
	20	20				.051							
	14	16	18	.150-.180	.312	.071	.061	F	.180	F	.190	O	O
350201	10	10	12	.149 or less	.250	.100	.082	F	.180	F	.190	O	O
		14	14	.150-.180	* .062	.070	.070	F	.180	F	.190	O	O
	10	12	12	.150-.180	.312	.100	.082	F	.180	F	.190	O	O
	14	14			* .031	.070							

Figure 2  
Automatic Machine Wire Crimp Dimensions

Part Number	Wires Pin	Wire No	Size	Insulation Diameter	Strip Length	Wire Barrel Crimp		Insulation Barrel Crimp		Stabilizer Barrel Crimp				
						Width ± .003	Height ± .003	Crimper Type	Width Crimper Anvil	Height max	Crimper Type	Diameter, ± .005	Crimper Type	Anvil
350369	14	14	16	.149 or less	.250	.066	.053	F	.160	.195	F	.190	O	O
		18	20	.149 or less	* .062	.090	.053	F	.160	.195	F	.190	O	O
	14	16	18	.150-.180	.312	.066	.053	F	.160	.195	F	.190	O	O
	18	20			* .031	.090	.053	F	.160	.195	F	.190	O	O
350391	10	10	12	.149 or less	.250	.095	.075	F	.160	.195	F	.190	O	O
		12	12	.150-.180	* .062	.140	.075	F	.160	.195	F	.190	O	O
	14	14			* .031	.073								
	14	14			.002	.095								
350390	10	10	12	.149 or less	.250	.095	.075	F	.160	.195	F	.190	O	O
		12	12	.150-.180	* .062	.140	.075	F	.160	.195	F	.190	O	O
	14	14			* .031	.073								
	14	14			.002	.095								

Figure 3

Hand Tool Wire Crimp Dimensions

<b>AMP</b>	<b>AMP INCORPORATED</b> Harrisburg, Pa.		
LOC <b>B</b>	<b>A</b>	NO 114-1007	REV 0
<b>SHEET</b> <b>4 OF 4</b>			
NAME CONTACT, PIN AND SOCKET, MATE-N-LOK, .140 DIAMETER, APPLICATION OF			