

# APPLICATION SPECIFICATION

## 1. SCOPE

This specification covers the requirements for application of AMP-LEAF\* 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 5 and 6.

## 2. NOMENCLATURE

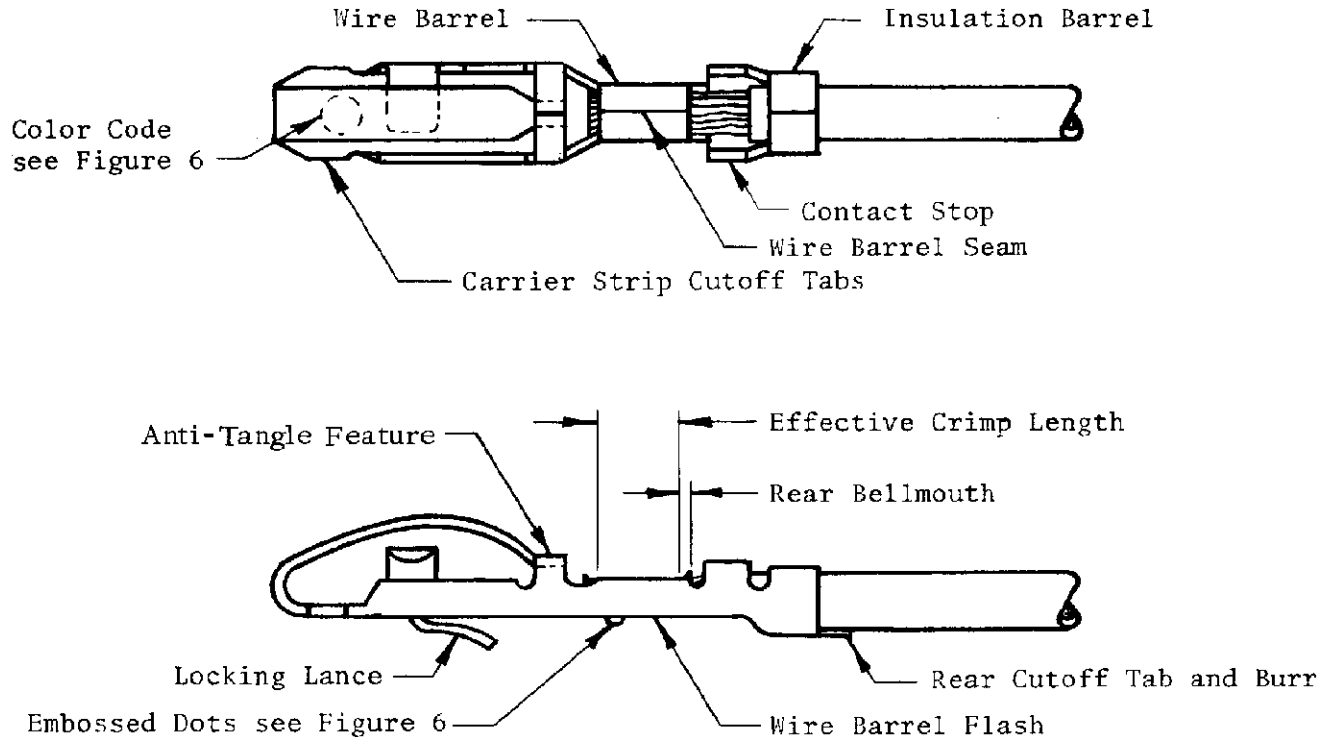


Figure 1

## 3. CRIMP AND DIMENSIONAL REQUIREMENTS


### 3.1. Wire Preparation

#### A. Strip Length

Insulation shall be stripped as indicated in Figure 5 and 6.

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				DR <i>C.E. Fitz</i> 7-4-75	 <b>AMP INCORPORATED</b> Harrisburg, Pa.		LOC <b>B</b>	NO <b>A</b>	REV <b>0</b>	
				CHK <i>Don Busby</i> 7-4-75						
				APP <i>R. Showman</i> 9-4-75						
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DIST <b>9</b>	0	Was 108-9205								
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B. Workmanship

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

3.2. Rear Cutoff Tab and Burr

A. Cutoff Tab

Cutoff tab shall not exceed .015.

B. Burr

Burr on cutoff shall not exceed .003.

3.3. Carrier Strip Cutoff Tabs

Carried strip cutoff tabs shall not exceed the limits specified in Figure 2. There shall be no damage to the contact during the cutoff operation.

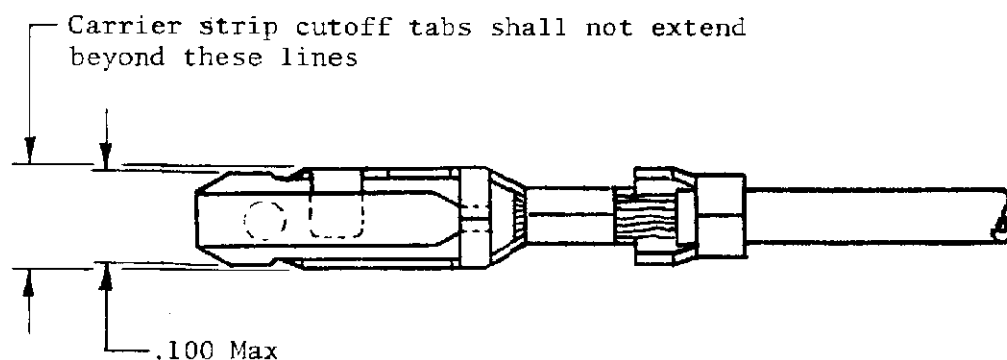


Figure 2

3.4. Wire Barrel Crimp

A. Crimp Dimensions and Type


Crimp height, width and type shall be as shown in Figure 5 and 6, and are based on average wire size in each range.

B. Effective Crimp Length

Effective crimp length shall be .085 min, and is defined as that portion of the barrel, excluding bellmouth, fully formed by the crimping tool.

C. Wire Barrel Flash

Wire barrel flash shall not exceed .005.

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D. Wire Barrel Seam

Wire barrel seam shall be completely closed and there shall be no evidence of loose wire strands or wire strands visible in the seam.

E. Bellmouth

(1) Rear bellmouth length shall be .005 min.

F. Conductor Location

(1) End of the wire shall be flush with the front end of the wire barrel or extend .010 max after crimping.

(2) Both insulation and conductor shall be visible between the insulation barrel and wire barrel. Care shall be taken not to allow insulation to be crimped in the wire barrel.

3.5. Insulation Barrel Crimp

A. Crimp Type

Crimp type shall be as shown in Figure 5 and 6.

B. Workmanship

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

3.6. Locking Lance

Locking lance shall not be deformed.


3.7. Contact Stop

A. Width

Contact stop width shall be .105 - .114, when measured nearest the wire barrel.

B. Height

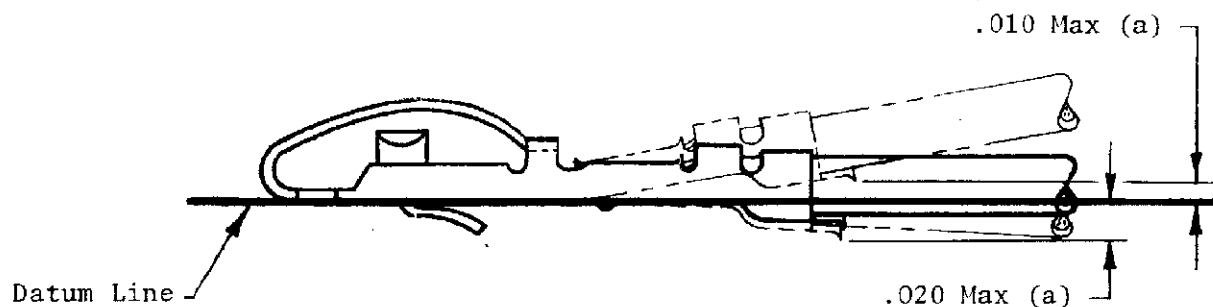
Contact stop height shall not exceed .114, when measured from the datum line shown in Figure 3.

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## 3.8. Alignment

## A. Straightness

- (1) The contact, including the cutoff tab and burr shall not be bent above or below the datum line more than the amount shown in Figure 3.



- (a) Except PN 42702, 42702LP, 42839, 60029, 66063, 583204, 583267, 583267LP, 583268, 583586, 583990 and 583992 which may be bent .020 max above the datum line and .015 max below.

Figure 3

- (2) The side to side bending of the contact shall not exceed the limits specified in Figure 4.

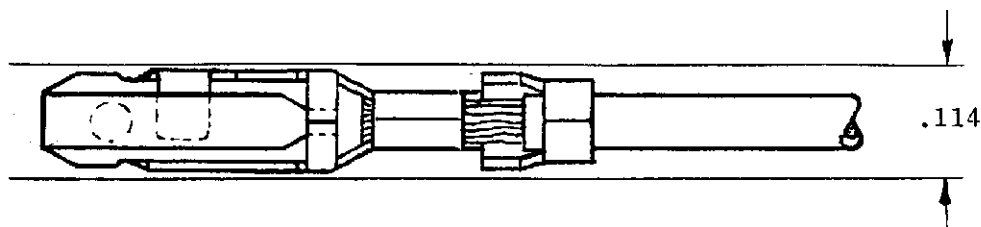



Figure 4

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B. Twist or Roll


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

Part No	Wires		Strip Length	Wire Barrel Crimp			Insulation Barrel Crimp
	No	Size		Width	Height ±.002	Crimper Type	Crimper Type
42702	1	26	.156 .125	.055	.029	F	F or O
60029 (a)		24			.030		
66063 (a)		22			.033		
583204		26			.032		
583267	2	26		.062	.037		
583586	1	22			.041		
42717		20			.047		
60030 (a)		18			.039		
583271		24			.043		
583361		22					
583555	2	20		.080	.054		
60151	2	18			.063		
583269	1	16		.090	.052		
583622							
60151							

(a) Without anti-tangle feature.

Figure 5

Automatic Machine Wire Crimp Dimensions

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Part Number		Wires		Strip Length	Wire Barrel Crimp		Color Code	Insulation Barrel Crimp	Hand Tool Part No	
With Anti-Tangle	Without Anti-Tangle	No	Size		Height $\pm .002$	Crimper Type		Crimper Type	With Anti-Tangle	Without Anti-Tangle
583989	42717 LP	2	22	.156 .125	.0445	F	Green (a)	F or O	90017-2	90017 or 90017-2
583994	42840	1	18				Green (a)			
	583271 LP	1	22		.0385		Green (b)			
	583272	1	20							
583990	42702 LP	1	26		.0305	F	Orange		90028-2	90028 or 90028-2
583992	42839	1	24							
	583267 LP	1	22							
	583268					F	Green		90028-2	90028 or 90028-2
583989	42717 LP	2	24		.0405					
583994	42840	2	22							
	583271 LP	1	20							
	583272	1	18							
583991	60151 LP	2	18		.0645	F	Violet		90031-6	90031 or 90031-6
583993	66029									
	583269 LP									
	583270									
583994	42717 LP	1	20		.0415	F	Green		90101-2	90101 or 90101-2
583989	42840									
	60151 LP	2	20		.0545		Violet			
583993	66028					F				
583991	60151 LP	1	16		.0520		Violet		90031-7	90031 or 90031-7
583991	66028									
583993	583269 LP									
	583270									

(a) Coded by 2 embossed dots on bottom of wire barrel.

(b) Coded by 1 embossed dot on bottom of wire barrel.

Figure 6  
Hand Tool Wire Crimp DimensionsAMP INCORPORATED  
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