### APPLICATION SPECIFICATION

#### 1. SCOPE

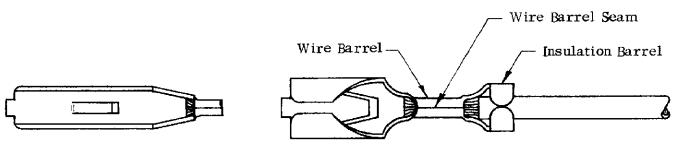
#### 1.1. Content

This specification covers the requirements for application of 187 series FASTIN-FASTON\* tab and receptacle contacts. These requirements are applicable to automatic machine crimping tools. For specific wire and insulation ranges relative to the products covered in this specification, see Figure 4.

# 1.2. Reference Specification

For applicable performance requirements, see AMP Specification 108-2002.

#### 2. NOMENCLATURE



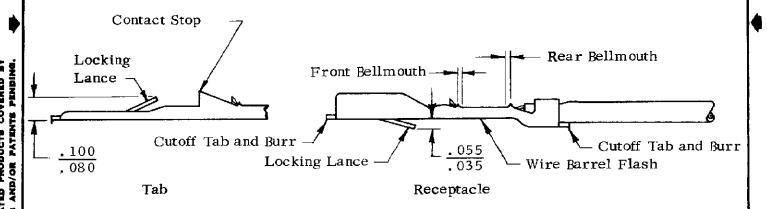


Figure 1

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OIKU Diam					CHK C. Muyer	AMP INCORPORATED Harrisburg, Pa.					
	В	Add Para 3.7.B.,	BL	12-31 -80	APP O	-7-81	B A	NO I	14-2023	REV B	
02		Rev Figl, Add	92	-80	SHEET	CONTACT, TAB AND RECEPTACLE,					
	LTR	Para 1.2. & Retyped REVISION RECORD	APP	DATE	1 OF <u>4</u>	FASTIN-FASTON, 187 SERIES, APPLICATION OF					

# 3. CRIMP AND DIMENSIONAL REQUIREMENTS

# 3.1. Wire Preparation

A. Strip Length

Insulation shall be stripped as indicated in Figure 4.

B. Workmanship

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

# 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 4.

B. Wire Barrel Flash

Wire barrel flash shall not exceed . 005.

C. 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.

- D. Bellmouth
  - (1) Rear bellmouth length shall be .015 .025.
  - (2) Front bellmouth length shall be .005 .015.
- E. Conductor Location
  - (1) End of the wire shall be flush with the front end of the wire barrel or extend .030 maximum 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.

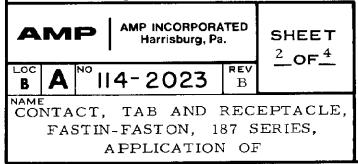
### 3.4. Insulation Barrel Crimp

A. Crimp Dimensions and Type

Crimp height, width and type shall be as shown in Figure 4.

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 and shall meet requirements of Figure 1 after crimping.

# 3.6. Contact Stop

Contact stop shall not be deformed and shall meet requirements of product drawing after crimping.

# 3.7. 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 2. Check using gage 92-103186.

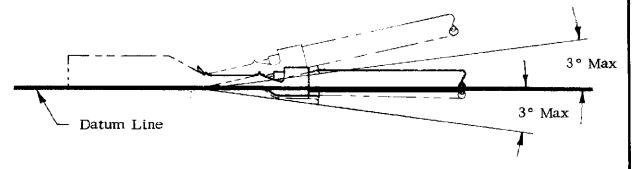


Figure 2

(2) The side to side bending of the contact shall not exceed the limits specified in Figure 3. Check using gage 92-103186.

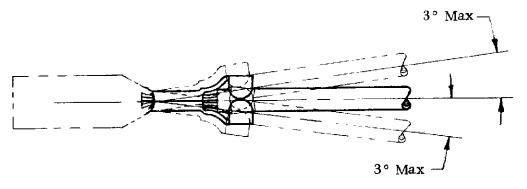
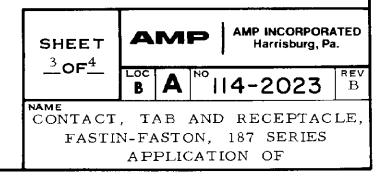


Figure 3



#### B. Assembly

The following list of Do's and Don'ts are to be followed when assembling contacts into housing cavities.

#### (1) Do's

- (a) Do insert contacts fully so as to hear a click.
- (b) Do insert contacts into housings before lacing harness.
- (c) Do reset contact locking lances before second insertion.
- (d) Do check for proper insertion by pulling back lightly.
- (e) Do ensure proper handling of contacts to eliminate lance deformation.

#### (2) Don'ts

- (a) Don't insert contact into housing at an angle.
- (b) Don't rock connectors while mating.
- (c) Don't tie harness closer than 1.50 inches to back of housing.
- (d) Don't dress wires sharply to one side of housing.

#### C. Housing

After tab contacts are assembled into tab housing, alignment of mating half of housing shall be checked by inserting an unloaded mating receptacle housing gage, P76-7358 colored red, to ensure that there is no interference of tab contacts in the mating receptacle housing. After mating, the red colored housing gage shall fall freely from the tab contact housing assembly when held in a vertical position.

#### D. Twist or Roll

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

Donat	Wires		Ilation	Strip	Wire Barrel Crimp			Insulation Barrel Crimp	
Part Numbers	No	Size	Insulation Diameter	Length ±.015	Width	Height ±.002	Type Crimper	Width	Type Crimper
	1	20				.055			
60434	1	18	.090130	.2 <b>2</b> 5	.080	.060	F	.180	F
Tab	1	16				.069			
	2	20	(2) .110 max			.064			
	1	22	.090130	.225	.080	.045	F	.180	F
60435	1	20				.047			
Receptacle	1	18				.052			
	1	16				.060			

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NAME CONTACT, TAB AND RECEPTACLE, FASTIN-FASTON, 187 SERIES, APPLICATION OF

Figure 4

Automatic Machine Wire

Crimp Dimensions