

114-5023

Application Specification
Crimping of .250 Series FASTON Receptacle

1. Scope:

This specification covers the crimping requirements for the .250 Series FASTON Receptacles.

2. Applicable Products:

Table 1

Contact Form	Contact Number	Application Tooling	Tooling Catalog No.
Strip Form	170224-1	Mini Applicator	722713-2
Strip Form	170224-2	Mini Applicator	722713-2

3. Applicable Wires:

Table 2


Wire size	Standard Composition, No. of Strands/Standard Dia. (mm)	Calculated Cross Sectional Area (mm ²)	Outer Diameter (mm)	Applicable Specifications
* 0.5 mm ² (AWG#20)	20 / 0.18	0.51	2.6	JIS-C-3306
	21 / 0.18	0.53		UL-1015
* 0.75 mm ² (AWG#18)	30 / 0.18	0.76	2.8	JIS-C-3316
* 1.25 mm ² (AWG#16)	50 / 0.18	1.27	3.1	JIS-C-3306
* 1.3 mm ² (AWG#16)	26 / 0.26	1.38	3.2	UL-1015
* 2.0 mm ² (AWG#14)	37 / 0.26	1.96	3.4	JIS-C-3306
3.0 mm ² (AWG#12)	41 / 0.32	3.29	3.8	JIS-C-3406
3.5 mm ² (AWG#11)	45 / 0.32	3.61	4.1	JIS-C-3316
5.0 mm ² (AWG#10)	65 / 0.32	5.23	4.6	JIS-C-3406

Wires marked * shall be mainly used for the two- and three-wire crimp.

NUMBER 114-5023

AMP SECURITY CLASSIFICATION Customer Release

PRINT DIST

		DR <i>[Signature]</i> 10-18-86				AMP (Japan), Ltd.		TOKYO, JAPAN	
		APP <i>[Signature]</i> 10-18-86				LOC	NO	114-5023	
B	Revised RFA-323	<i>[Signature]</i>	10/18/86	SHEET		NAME Application Specification			
LTR	REVISION RECORD	DR	CHK	DATE	1 OF 6		Crimping of .250 Series FASTON Receptacle		

4. Nomenclature:

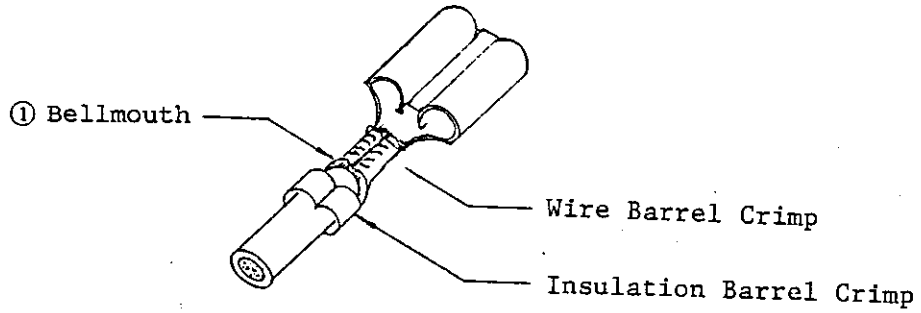


Fig. 1

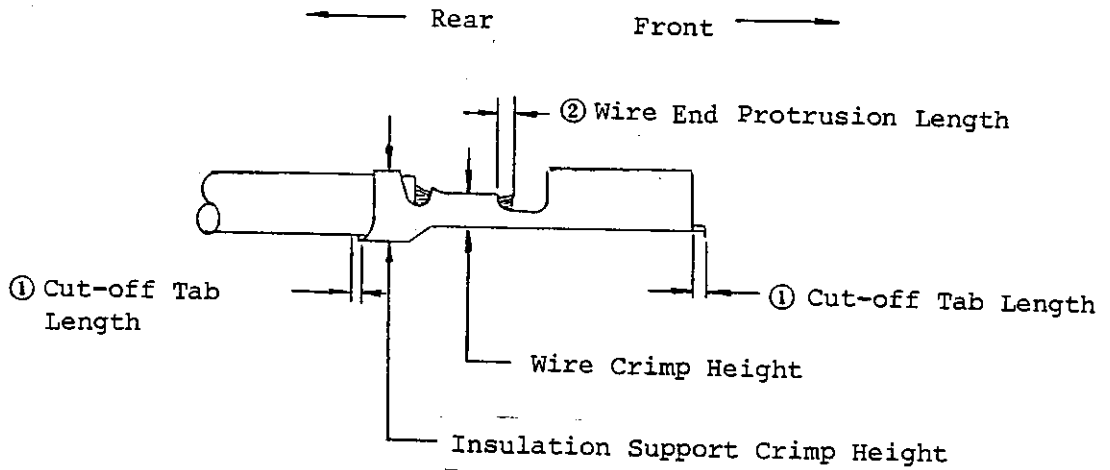
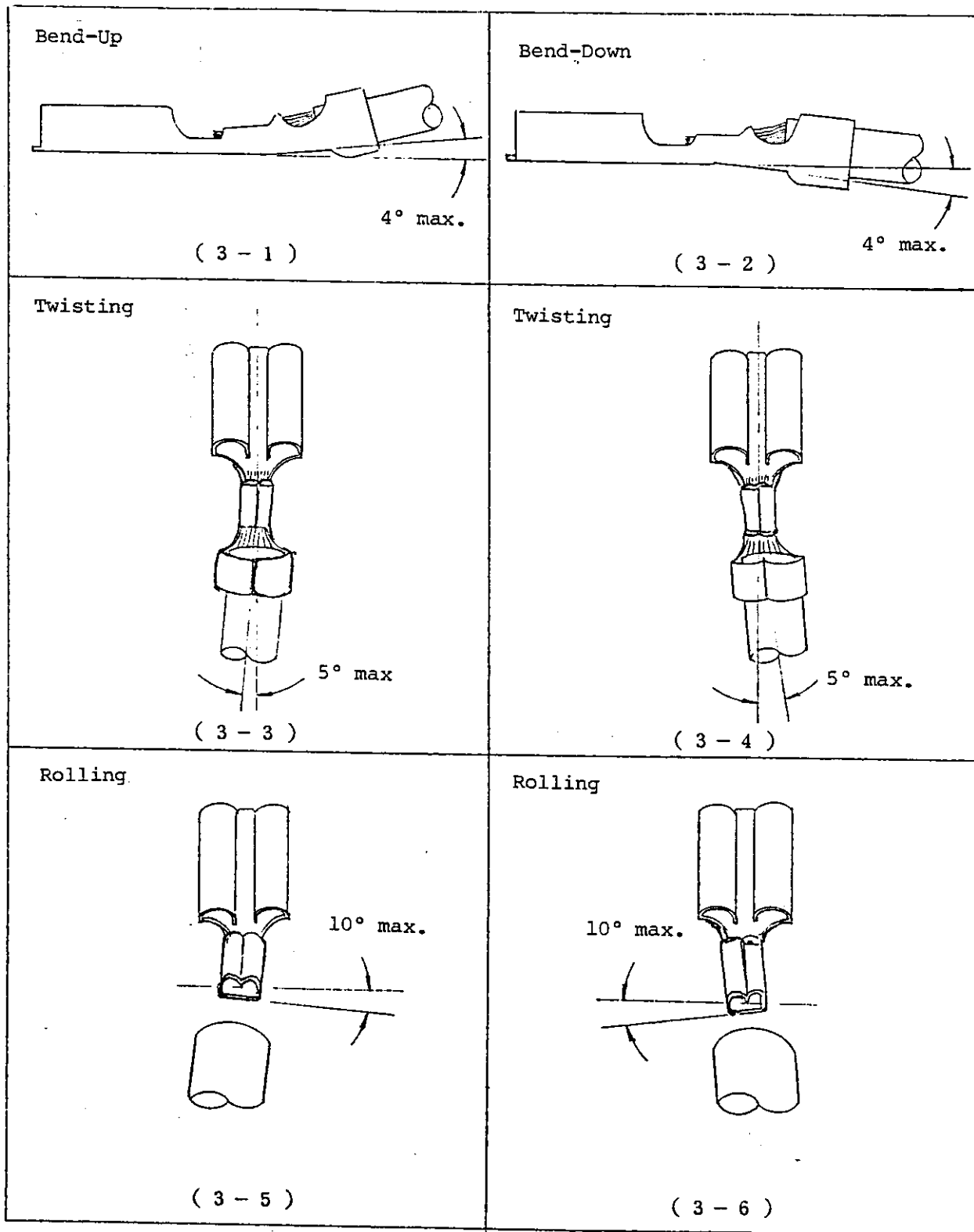


Fig. 2

SHEET			AMP (Japan), Ltd. TOKYO, JAPAN	
2 OF 6	LOC	NO	114-5023	REV.
	J	A		B
NAME Application Specification Crimping of .250 Series FASTON Receptacle				

Fig. 3




SHEET			AMP (Japan), Ltd. TOKYO, JAPAN
3 OF 6	LOC J A	NO 114-5023	REV. B
NAME Application Specification Crimping of .250 Series FASTON Receptacle			

5. Crimping Specifications:

5.1 Crimping Requirements:

Table 3

No.	Checking Items	Details	Required Limits	Remarks
1	Insulation Stripping Length	(1) One-Wire Crimp	Refer to Table 4	
		(2) Two-Wire Crimp		
		(3) Three-Wire Crimp		
2	Allowable Limits of Crimped Deformation	(1) Bend-Up	4° max.	Fig. 3 3-1 3-2 3-5, 3-6 3-3, 3-4
		(2) Bend-Down		
		(3) Rolling	10° max.	
		(4) Twisting	5° max.	
3	Cut-off Tab Length		0.5 mm max.	Fig. 2- 1
4	Wire End Protrusion Length		Crimped wire end must be protruding out of crimped wire barrel, but it must not exceed 0.7 mm from the front edge of wire barrel.	Fig. 2- 2
5	Bellmouth		0.2 to 0.7 mm on the rear side	Fig. 1- 1

SHEET			AMP (Japan), Ltd. TOKYO, JAPAN	
4 OF 6	LOG J	A	NO 114-5023	REV. B
NAME Application Specification Crimping of .250 Series FASTON Receptacle				


5.2 Crimp Data

Table 4

Contact Part Number	Application Tooling and Tool Number	Wire Size		Wire Specification	Insulation Stripping Length ± 0.5 (mm)	Wire Crimp			Width of Insulation Barrel Crimp (mm)	Crimp Tensile Strength (kg)
		Pc.	(mm ²)			Width (mm)	Crimp Height (mm)	Letter of disk		
170224-1	Mini-Applicator	1	2.0	JIS-C-3306	4.5	3.81 "F"	1.98	C	5.59 "F"	28
		1	3.0	JIS-C-3406	4.5		2.23	B		30
		1	5.0	JIS-C-3406	4.5		2.64	A		36
170224-2	722713-2	2	0.5+1.25	JIS-C-3306	5.5	3.81 "F"	1.89	D	5.59 "F"	4
		3	0.5+0.5+1.3	JL-1015	6.0		1.98	C		8

Notes:

1. Applicable wire insulation diameter must be within 3.0 and 5.0 mm.
2. For two- and three-wire crimp, wires shall be put together as shown in Fig. 4, and then crimped. The insulation diameters for two- and three-wire crimp shall be as specified in Fig. 4.
3. Table 4 shows the combination of wires with minimum wire range for two-wire crimp and with the maximum insulation outer diameter for three-wire crimp.
4. Crimp height of insulation barrel crimp must not exceed 5.6 mm.
5. Tolerances of wire crimp heights must be within ± 0.05 mm.
6. When crimping more than one wire at the same time, the tensile strength of the minimum size wire shall indicate the allowable tensile strength of the whole crimped lead wires.

SHEET				AMP (Japan), Ltd.	
5 OF 6				TOKYO, JAPAN	
LOG	J	A	NO	114-5023	REV. B
NAME Application Specification					
Crimping of .250 Series FASTON					
Receptacle					

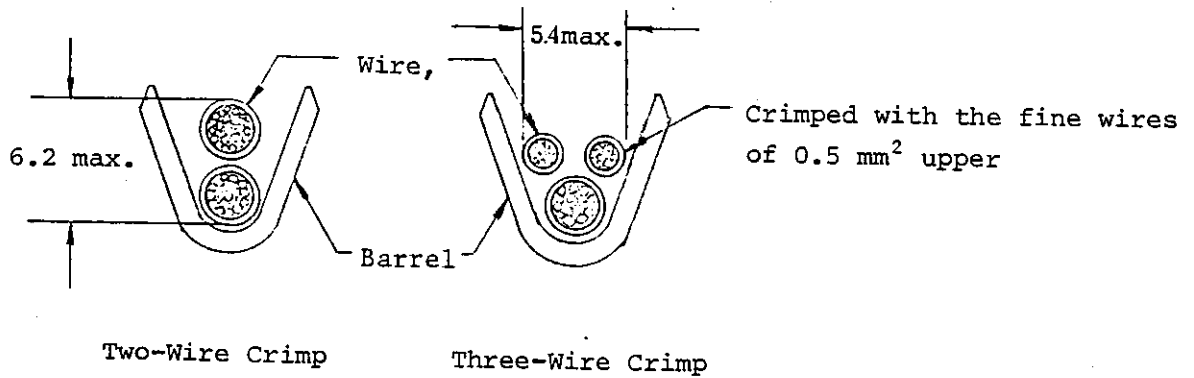


Fig. 4

5.3 Cautions in Crimping Operation:

- 5.3.1 When stripping wire insulation, be careful not to cut or nick the strands with the conductors arranged in the same length and straight.
- 5.3.2 Care should be taken to keep the inside of wire barrel clean without being contaminated by greasy or oily dirt and foreign particles. This contamination can result in detrimental affection to the terminated contact surfaces.
- 5.3.3 Check to ensure that there are no improperly crimped contacts or loosened seams through which any of the misgripped conductors should protrude.
- 5.3.4 Care should be taken not to allow any portion of insulations to be crimped together with the stripped wire ends into the wire barrel.
- 5.3.5 After crimping, the insulations must be secured by the insulation support barrel.

SHEET	AMP		AMP (Japan), Ltd. TOKYO, JAPAN	
6 OF 6	LOG	NO	114-5023	REV.
	J	A		B
NAME Application specification Crimping of .250 Series FASTON Receptacle				