NUMBER: 114 - 5002

SECURITY CLASSIFICATION: Customer Release

114 - 5002
Application Specification
(Tentative)
Crimping "L-JETRONIC*" Mini-Spring Contact

1. Scope:

This specification covers the requirements for crimping "L-JETRONIC*" Mini-spring contacts of the part numbers as shown below, with the use of automatic crimping machine.

Applicable Part Numbers: 925590 Receptacle Contact
925595 " "

Reference: Use housing P/N 925201 for encapsulating contacts.

1.1 This specification is applied to the portions as indicated in Fig. 1 and Fig. 2.

1.2 The nomenclature used in this specification shall be according to the terms as shown in Fig. 1.

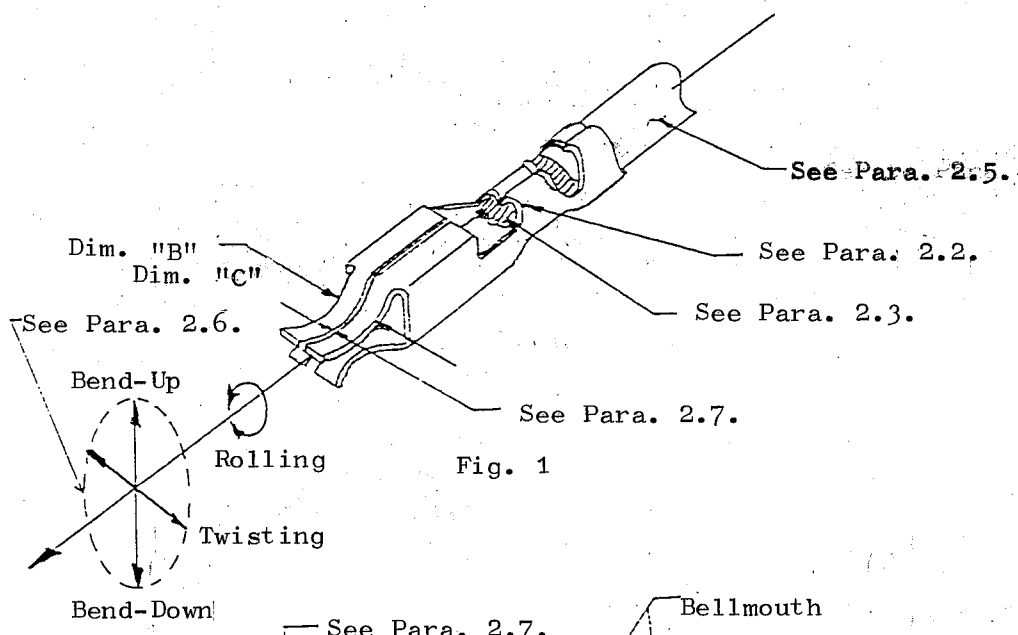

Fig. 1

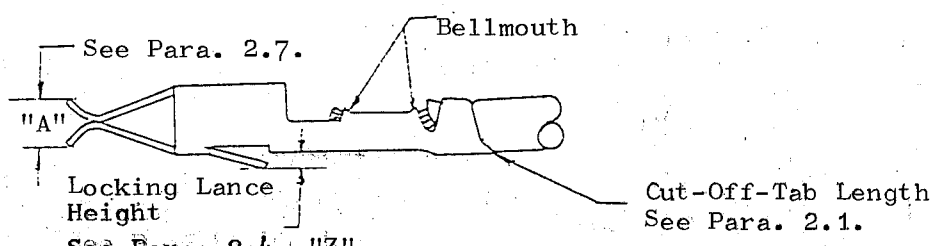

Fig. 2

LTR	REVISION RECORD	DR	CHK	DATE
0	Released 74-163		DJ	7/28/94

DR. 7-28-94
CHK. 7-28-94
APP. 7-28-94

SHEET 1 OF 4

AMP
AMP (Japan), Ltd.
Kawasaki, Japan

LOC		NO.	REV.
J	A	114 - 5002	0

NAME
Crimping "L-JETRONIC*"
Mini-Spring Contact

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2. Crimping of contacts shall be conforming to the requirements specified in the following paragraphs.

2.1 The length of cut-off tab shall be 0.5mm max.

2.2 The length of bellmouth shall be 0.5mm max. for either rear and front bellmouth formings.

2.3 The wire end protrusion length beyond the front edge of wire barrel shall be 1.2mm maximum.

2.4 The height of locking lance tip end "Z" shall be within the range between 0.6mm and 1.0mm.

2.5 The wires to be used for crimping shall be conforming to the items shown in Table 2, and in principle only one wire should be applied. When two or more wires are desired for use in crimping, consult AMP-Japan Engineering for their applicability.

2.6 The allowable deviative deformation of contact after crimping, such as bend-up, bend-down, twisting and rolling shall be as specified below.

Bend-Up	3° max.	Twisting	5° max.
Bend-Down	3° max.	Rolling	5° max.

Note: The deviative deformation defines the deflected angle of contact axis of crimped contact from the intact contact axis, when measured after crimping.

2.7 The spring contact pieces (4 pieces) at the tip ends of contact shall be symmetrically appearing without presence of remarkable deformation, flaws, tip-off and cracks, and they shall be dimensionally located each other within the ranges as specified below.

Dimension "A" 1.90 - 2.25mm, Dimension "B" 2.55 - 2.90mm,

Dimension "C" 0.28 - 0.5mm

2.8 Contact crimp height shall be conforming to the values specified in Table 1. Contact crimp height is obtained by measuing with the use of micrometer with modified measuring head and pin appropriately provided for crimp height measuring. The general tolerance of crimp height shall be within $\pm$0.05mm.

Contact Part No.	Wire Size mm^2	Wire Size (AWG)	Crimp Height mm	Crimp Height (inch)	Crimp Width mm	Crimp Width (inch)	Insulation Barrel Crimp Width mm	Insulation Barrel Crimp Width (inch)
925590	0.5	(#20)	1.24	(.049)	2.28	(.090)"F"	3.30	(.130) "F"
	0.85	(#18)	1.37	(.054)				
	1.25	(#16)	1.52	(.060)				
925595	0.85	(#18)	1.30	(.051)	2.79	(.110)"F"	3.94	(.155) "F"
	1.25	(#16)	1.42	(.056)				
	2.0	(#14)	1.65	(.065)				

Table 1

3. Supplemetal Instructions:

3.1 After crimping, wire barrel seam shall appear neatly straight in closure symmetrically. However, slight deviation from symmetric forming is permissible on condition that no bend back nor warpage is present.

3.2 No wire conductors shall be loosing out from the wire barrel seam, and not any conductors shall loose out without barrel crimping.

3.3 Insulation stripping length shall be within the range of 3.8mm and 4.0mm, and no wire insulation shall be crimped in wire barrel.

3.4 When stripping the wire insulation, care must be taken not to damage or cut-off of the wire conductors.

3.5 Keep clean and neat order of operating location lest the crimping contact should be contaminated by matallic particles and foreign matters. Oily or greasy contamination inside the wire barrel crimp will result spoil of wire conductor contact due to resistance by oil film. Care must be taken not contaminate the contact barrel.

Appendix

The wire barrel crimp shall have the mechanical crimp tensile strength as specified in Table 2.

Wire Size		Composition of Wire Conductors		Crimp Tensile Strength
mm^2	(AWG)	No. of Conductors	Diameter of a Conductor	kg (min.)
0.5	(#20)	7	0.32mm	8.0
0.85	(#18)	11	0.32mm	12.0
1.25	(#16)	16	0.32mm	18.0
2.0	(#14)	26	0.32mm	25.0

Table 2

Crimp Tensile Strength Test Method:

Prepare test specimen, by crimping the contact to the wire of 150mm in length. Securely fasten the contact end and the free end of the wire respectively on tensile testing machine.
Apply an axial pull-off load to the wire crimp by operating the head to travel with the speed at a rate of 100mm a minute.
The crimp tensile strength is determined when the wire barrel crimp is broken or loose off.