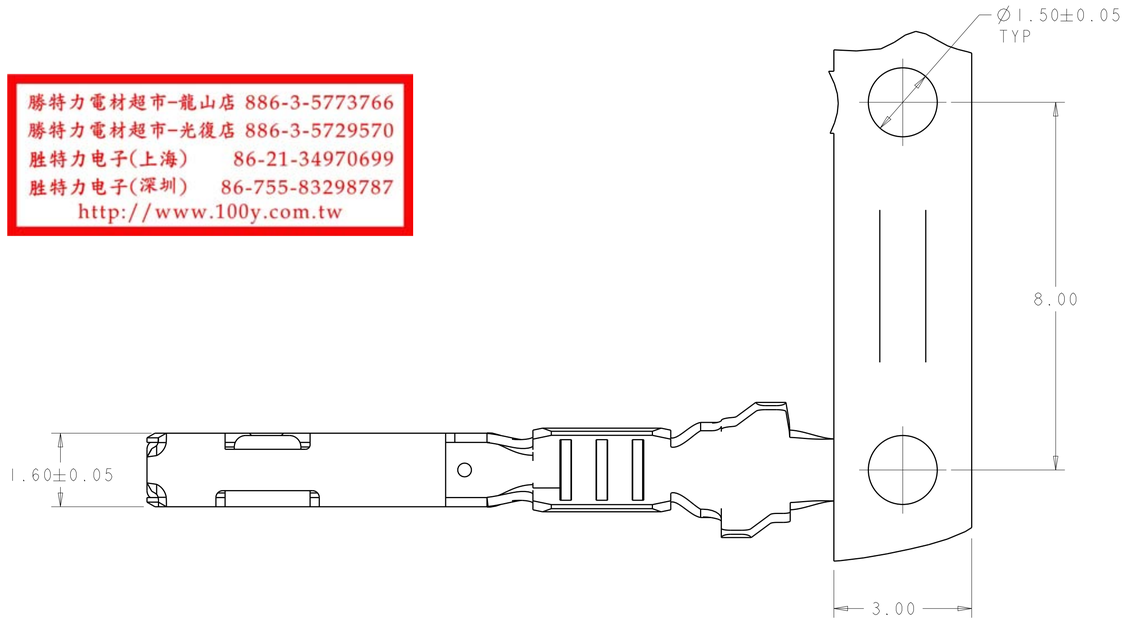
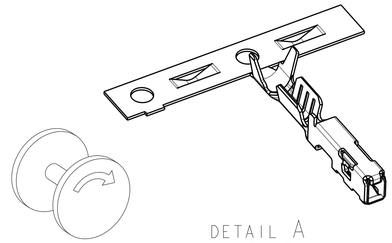
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REVISIONS

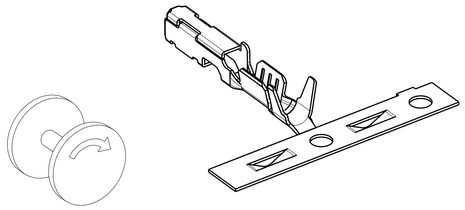
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	C	REVISED PER ECR-16-005516	25APR2016	DLD	CJS

勝特力電材超市-龍山店 886-3-5773766
勝特力電材超市-光復店 886-3-5729570
胜特力电子(上海) 86-21-34970699
胜特力电子(深圳) 86-755-83298787
http://www.100y.com.tw

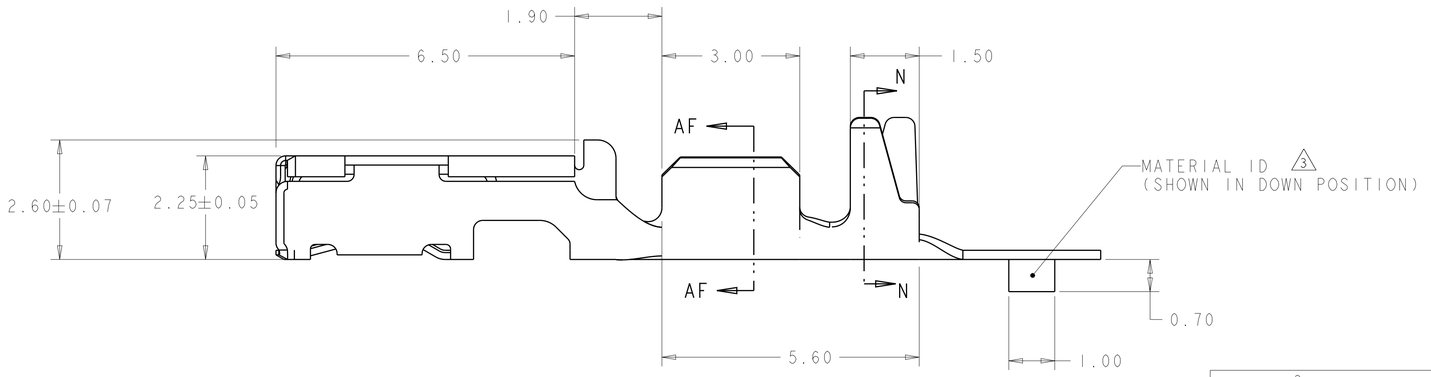


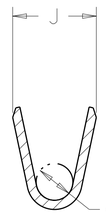


DETAIL A
SCALE 5:1

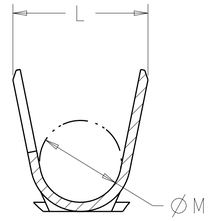


DETAIL B
REQUIRED REELING DIRECTION
FOR TE APPLICATORS
SCALE 5:1





SECTION AF-AF



SECTION N-N

1. MATERIAL: COPPER ALLOY
2. FINISH: PRE-PLATED WITH 1.00µm MIN BRIGHT TIN
3. MATERIAL ID FEATURE IN "DOWN" POSITION.
4. THE INTENTED TEMPERATURE RANGE FOR THIS TERMINAL IS -40°C TO +100°C.
5. TERMINAL HAS NYE LUBRICANTS NYETACT 568J-50-UV PERFORMANCE LUBE/GREASE APPLIED. THIS IS A WHITISH COLORED LUBE. AMOUNT AND VISIBILITY MAY VARY.

INSULATION DIAMETER	REELING	M	L	K	J	FINISH	WIRE SIZE	PART NUMBER
0.13mm² = 0.85-1.05 0.35mm² = 1.10-1.40	DETAIL B	1.40	2.40	0.80	1.85	2 3	2X 0.13mm² 0.35mm²	1924955-8
0.85-1.05	DETAIL B	0.85	1.82	0.65	1.50	2 3	26 [0.13mm²]	1924955-7
0.13mm² = 0.85-1.05 0.35mm² = 1.10-1.40	DETAIL A	1.40	2.40	0.80	1.85	2 3	2X 0.13mm² 0.35mm²	1924955-6
0.85-1.05	DETAIL A	0.85	1.82	0.65	1.50	2 3	26 [0.13mm²]	1924955-5
2.06 MAX	DETAIL B	1.78	2.94	1.00	1.96	2 3	18 [0.75mm²]	1924955-4
1.50-1.85	DETAIL B	1.78	2.94	0.80	1.82	2 3	20-22 [0.5-0.35mm²]	1924955-3
2.06 MAX	DETAIL A	1.78	2.94	1.00	1.96	2 3	18 [0.75mm²]	1924955-2
1.50-1.85	DETAIL A	1.78	2.94	0.80	1.82	2 3	20-22 [0.5-0.35mm²]	1924955-1

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: mm
TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ±-
1 PLC ±-
2 PLC ±0.15
3 PLC ±-
4 PLC ±-
ANGLES ±-
MATERIAL 1
FINISH - SEE TABLE

DWN F. KINSEY 17DEC2007
CHK F. KINSEY 17DEC2007
APVD I. MYER 17DEC2007
PRODUCT SPEC 108-2296
APPLICATION SPEC 114-13183
WEIGHT -

TE Connectivity

NAME CONTACT, 0.64mm, FEMALE, GENERATION Y, UNSEALED APPLICATIONS

SIZE A1 | CAGE CODE 00779 | DRAWING NO C-1924955 | RESTRICTED TO -

CUSTOMER DRAWING | SCALE 15:1 | SHEET 1 OF 1 | REV C

NOTE
All numerical values are in metric units [with U.S. customary units in brackets]. Dimensions are in millimeters. Unless otherwise specified, dimensions have a tolerance of ±0.13 mm and angles have a tolerance of ±2°. Figures and illustrations are for identification only and are not drawn to scale.

1. INTRODUCTION

This specification covers the requirements for application of Generation Y 0.64 mm Contacts. These contacts will accept symmetrical constructed (Type “A”) wire in a wire size range of 0.13 and 0.35 to 0.75 mm [26 and 22-18 AWG] as shown in the table in Figure 2.

When corresponding with TE Connectivity Personnel, use the terminology provided in this specification to facilitate inquiries for information. Basic terms and features of this product are provided in Figure 1.

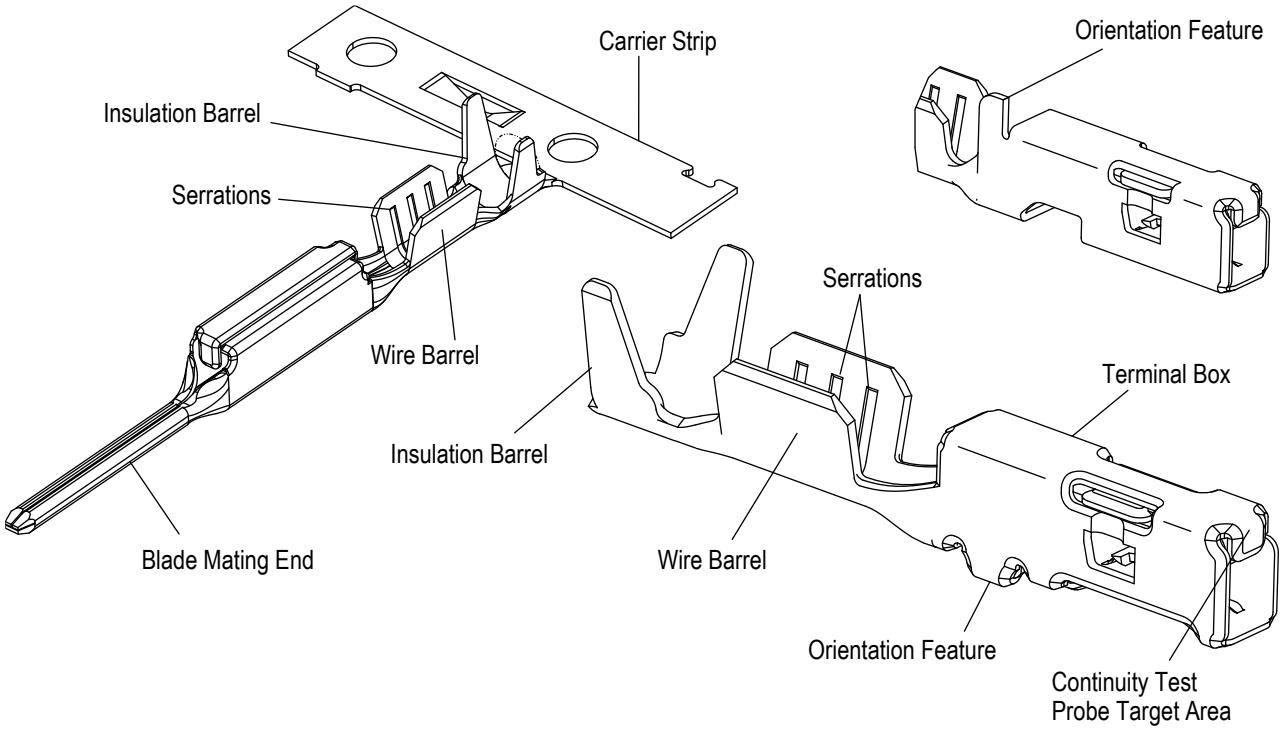


Figure 1

2. REFERENCE MATERIAL

2.1. Revision Summary

- Updated Section L, Side-to-Side bend to 2 degrees to match details in Figure 5.

2.2. Customer Assistance

Reference Product Base Part Numbers 1456841 (socket), 1924275 (blade) and Product Code M008 are representative of Generation Y 0.64 mm Contacts. Use of these numbers will identify the product line and help you to obtain product and tooling information. Such information can be obtained through a local TE Representative, by visiting our website at www.te.com, or by calling PRODUCT INFORMATION or the TOOLING ASSISTANCE CENTER at the numbers at the bottom of this page.

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2.3. Drawings

Customer Drawings for product part numbers are available from our website at www.te.com. If there is a conflict between the information contained in the Customer Drawings and this specification or with any other technical documentation supplied, the information contained in the Customer Drawings takes priority.

2.4. Instructional Material

The following list includes available instruction sheets (408-series) that provide assembly procedures for operation, maintenance and repair of tooling; and customer manuals (409-series) that provide setup, operation, and maintenance of machines:

408-3295	Preparing Reel of Contacts for Application Tooling
408-7424	Checking Terminal Crimp Height or Gaging Die Closure
408-8040	Heavy Duty Miniature Quick-Change Applicators (Side Feed Type)
408-8053	Conversion Guide for Miniature Quick-Change Applicators
408-8059	General Preventative Maintenance for Applicators
408-9816	Handling of Reeled Products
408-10227	PRO-CRIMPER* III Hand Tool 2063291-1 with Die Assembly 2063291-2
408-10389	Ocean Side-Feed Applicators
409-5128	Basic AMP-O-LECTRIC* Model “K” Terminating Machine 471273-[ ]
409-5842	AMP-O-LECTRIC Model “G” Terminating Machines 354500-[ ]
409-5866	AMPOMATOR* CLS IV Lead-Making Machine

3. REQUIREMENTS

3.1. Safety

Do not stack product shipping containers so high that the containers buckle or deform.

3.2. Storage

A. Ultraviolet Light

Prolonged exposure to ultraviolet light may deteriorate the chemical composition used in the product material.

B. Reeled Contacts

When using reeled contacts, store coil wound reels horizontally and traverse wound reels vertically.

C. Shelf Life

The product should remain in the shipping containers until ready for use to prevent deformation to components. The product should be used on a first in, first out basis to avoid storage contamination that could adversely affect performance.

D. Chemical Exposure

Do not store product near any chemical listed below as they may cause stress corrosion cracking in the material.

Alkalies	Ammonia	Citrates	Phosphates Citrates	Sulfur Compounds
Amines	Carbonates	Nitrites	Sulfur Nitrites	Tartrates

3.3. Materials

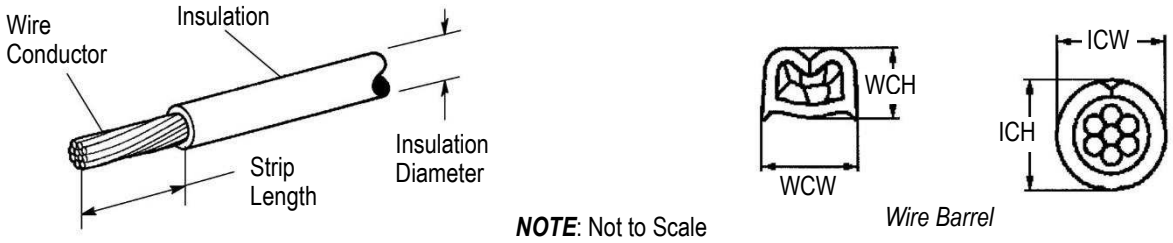
The socket contact is made from a copper alloy. Contacts are available with tin plate.

3.4. Wire Size and Preparation

The contacts will accept symmetrically stranded metric and AWG wire sizes as shown in the tables in Figure 2.

CAUTION
DO NOT nick, scrape, or cut the wire conductor during the stripping operation.

NOTE
The applied crimp dimension (within the functional range of the product) is dependent on the termination tooling being used. Refer to the documentation (applicator logs and instruction sheets) supplied with the termination tooling for the applied crimp height. See Section 5, TOOLING.



NOTE: Not to Scale

Wire Barrel

TABLE 2A

WIRE SIZE		INSULATION DIAMETER	STRIP LENGTH†	WIRE BARREL		INSULATION BARREL	
mm²	AWG			WCH	WCW	ICH ±0.10	ICW ±0.05
0.13	26	0.85-1.05	4.0-4.5	0.68 ±0.02	1.067 ±0.05	1.30 ±0.05	1.30
2 x 0.13	2 x 26	0.85-1.05	4.3-4.5	0.84 ±0.02	1.168 ±0.05	1.90 ±0.05	1.60
0.35	22	1.10-1.40	4.0-4.5	0.91 ±0.03	1.168 ±0.05	1.60 ±0.05	1.60
0.35	22	1.50-1.85	4.0-4.5	0.90 ±0.05	1.40 ±0.10	2.00	1.60
0.50	20	1.50-1.85	4.0-4.5	0.95 ±0.05	1.40 ±0.10	1.90-2.30	1.60
0.75	18	1.60-2.06	4.0-4.5	1.05 ±0.05	1.60 ±0.05	2.25	1.60

†Strip length is dependent on wire and insulation type used. Actual strip length may vary from the value provided above so long as the requirements of Figure 3 are met.

TABLE 2B (APPLICABLE WIRE DATA)

WIRE SIZE▲		WIRE STRUCTURE	NUMBER OF STRANDS	MAX DIA OF STRANDS	CMA CALCULATED	INSULATION DIAMETER
mm²	AWG					
0.13●	26	Symmetrical	7	0.16	277.8	0.85-1.05
0.35	22	Symmetrical	7	0.27	791	1.10-1.85
0.50	20	Symmetrical	7	0.32	976.5	1.50-1.85
0.75	18	Symmetrical	19	0.24	1696.3	1.60-2.06

▲These crimp dimensions and terminal qualification are based on wire that is of symmetrical Type "A" construction. See table 2B above. It is the responsibility of the user to perform crimp qualification for any deviations from these parameters.
●Qualification completed with Delphi M5647 (CuMg02) wire.

Figure 2

3.5. Crimped Contact Requirements

The contact shall be located in desired tooling and crimped according to the instructions packaged with that tooling. See Section 5, TOOLING, of this document for details on tooling options.

CAUTION
Wire insulation shall NOT be fully cut or broken during the crimping operation, nor shall the insulation be crimped into the contact wire barrel. Reasonable care should be taken by tooling operators to provide undamaged wire terminations.

CAUTION
Wire stripping tool jaws may leave corrugated indentations on the surface of the wire insulation. This is especially severe with cross-linked polyethylene (high temperature) insulation.

A. Wire Barrel Crimp

The crimp applied to the wire portion of the contact is the most compressed area and is most critical in ensuring optimum electrical and mechanical performance of the crimped contact. The contact wire barrel crimp height must be within the dimension provided in Figure 2.

NOTE
Wire brush height must not be above the wire barrel crimp.

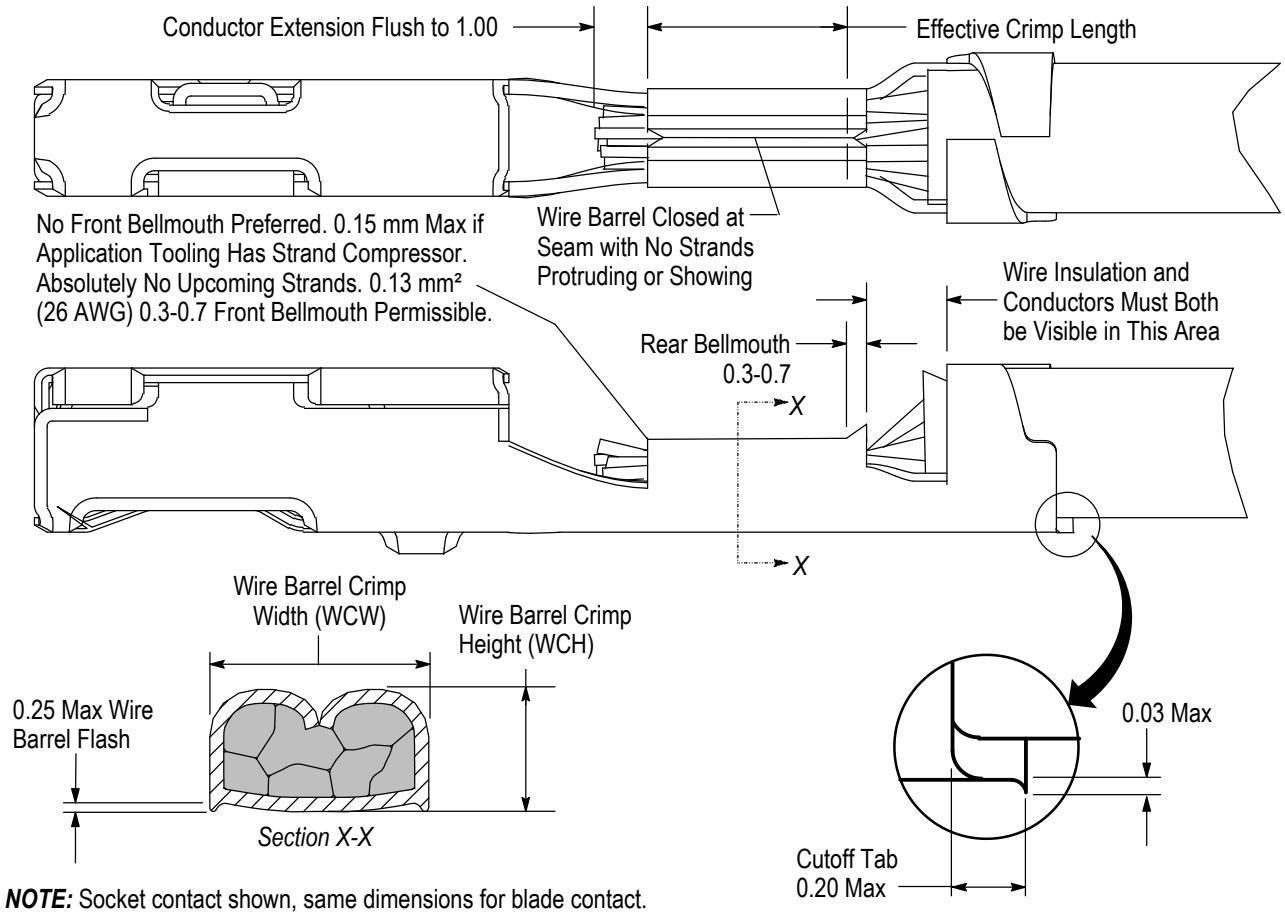
B. Effective Crimp Length

For optimum crimp effectiveness, the crimp must be within the area shown and must meet the crimp dimensions provided in Figure 3. Effective crimp length shall be defined as that portion of the wire barrel, excluding bellmouth(s), fully formed by the crimping tool. Instructions for adjusting, repairing, and inspecting tools are packaged with the tools. See Section 5, TOOLING.

C. Bellmouths

The rear bellmouth shall be as shown and conform to the dimensions given in Figure 3. It is preferred that no front bellmouth exist. However, if the tooling has strand compressor, then there can be 0.15 mm maximum front bellmouth.

NOTE
Upcoming strands are not permissible under any circumstance if product is being used in a sealed system.



NOTE: Socket contact shown, same dimensions for blade contact.

Figure 3

D. Cutoff Tabs

The cutoff tab shall be cut to the dimensions shown in Figure 3.

E. Burrs

The cutoff burr shall not exceed the dimensions shown in Figure 3.

F. Wire Barrel Flash

The wire barrel flash shall not exceed the dimensions shown in Figure 3, Section X-X.

G. Insulation Barrel Crimp

The insulation barrel shall grip the insulation firmly without fully cutting into it. Care must be taken to prevent cutting, nicking, or scraping of the insulation. Insulation crimp shall comply with width dimensions provided in Figure 2.

H. Wire Location

The wire conductor and insulation must be visible in the transition area between the wire and insulation barrels.

I. Conductor Extension

The conductor may extend beyond the wire barrel to the maximum shown. No strands may extrude over the height of the conductor crimp.

NOTE
Conductor extension may need to be kept to a minimum to avoid upcoming strands, especially when dealing with sealed applications.

J. Wire Barrel Seam

The wire barrel seam must be closed with no evidence of loose wire strands visible in the seam.

K. Twist and Roll

There shall be no twist, roll, deformation or other damage to the mating portion of the crimped contact that will impair usage of the contact. See Figure 4.

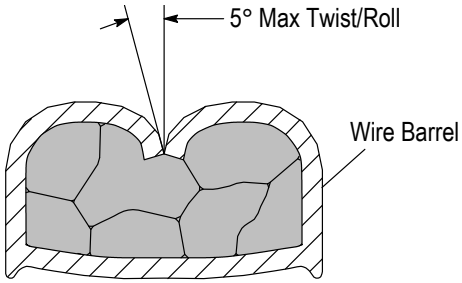


Figure 4

L. Straightness

The force applied during crimping may cause some bending between the crimped wire barrel and the mating portion of the contact. Such deformation is acceptable within the limits provided in Figure 5.

- Upward bend of the crimped contact shall not exceed 2°
- Downward bend of the crimped contact is not acceptable
- Side-to-side bend of the crimped contact shall not exceed 2°
- Deformation of the terminal box after crimping is not acceptable

NOTE
Periodic inspections must be made to ensure crimped contact information is consistent as shown.

3.6. Contact Repair

Once a contact has been damaged, it cannot be used. It must be cut from the wire and replaced with a new contact. Recommend using extraction tool made from the dimensions provided in Figure 6 to remove the terminal from the connector. If the TPA is removed to facilitate terminal removal, then the wider blade is recommended. If the TPA is pulled back to a pre-stage position, but remains in the connector, then the narrower blade is required. Refer to the individual connector instruction sheet for insertion and removal procedures.

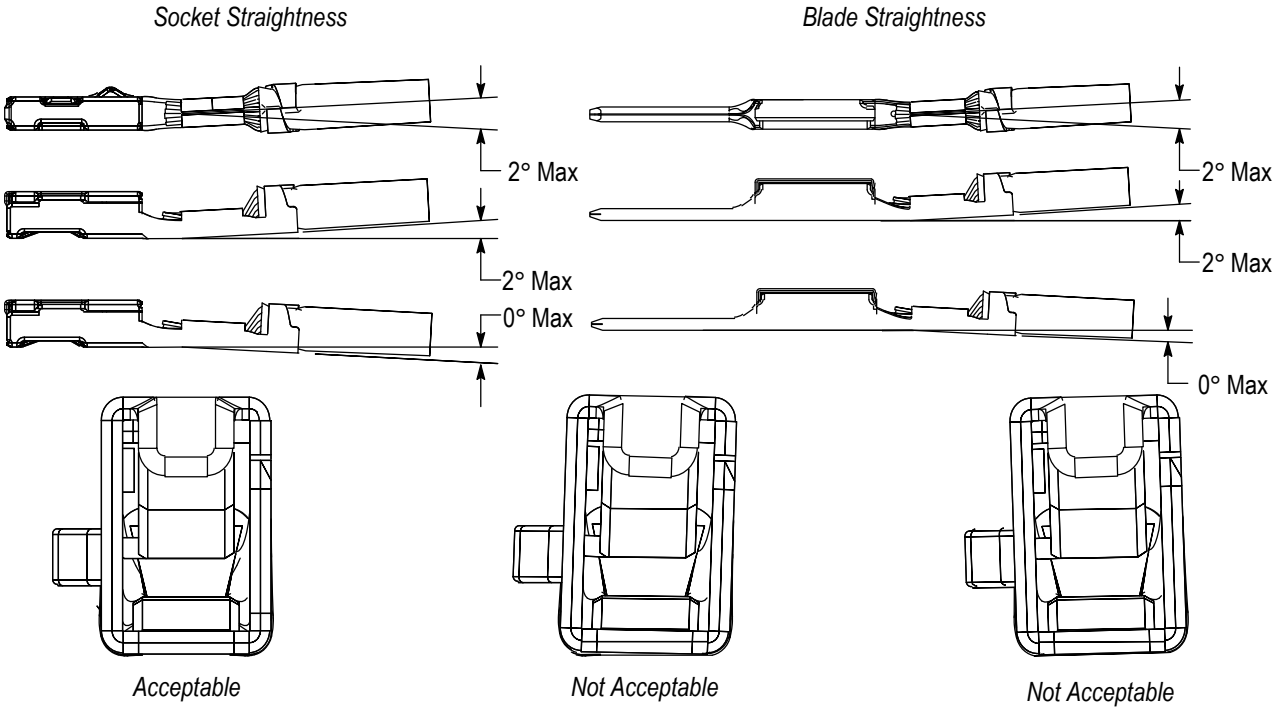
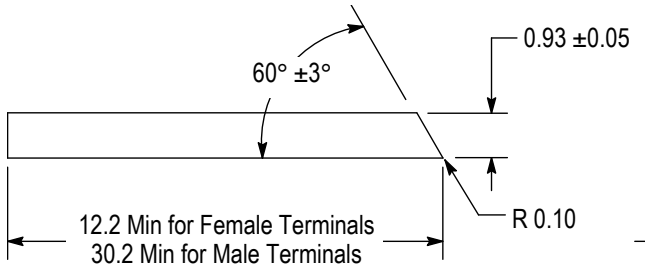


Figure 5

NOTE
The smaller tool width, as defined by dimension letter "A", can be used with the TPA removed. However, it will be difficult to find the plastic connector latch and this tool may slip off of the latch.

DANGER
The tool described is small and sharp. Care should be taken to cap the tool to prevent personal injury or damage to the tool.



DIM "A"	TPA Status
1.10	Present
1.55	Removed

Figure 6

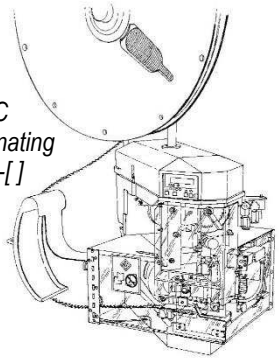
4. QUALIFICATIONS

Generation Y 0.64 mm Contacts are SAE/USCAR21 Qualified. This contact is not required to be agency approved.

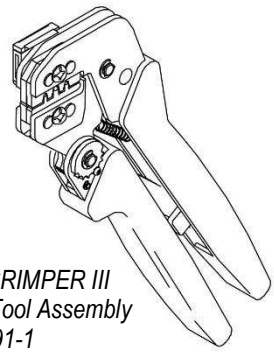
5. TOOLING (See Figure 7)

- **Applicators**
  Applicators are designed for the full wire size range of strip-fed, precision formed contacts, and provide for high volume, heavy duty production requirements. The applicators can be used in bench or floor model power units.
- **Hand Tools**
  Hand crimping tools are designed for prototype, low-volume applications, and repair.

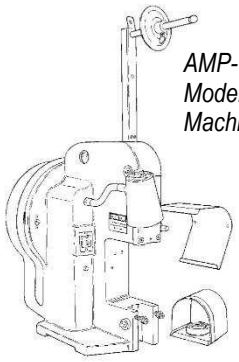
- **Power Units**
  A power unit is an automatic or semi-automatic device used to assist in the application of a product. Power unit includes the power source used to supply the force or power to an applicator.



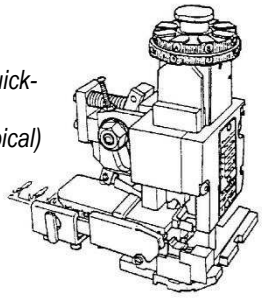
AMP-O-LECTRIC Model "G" Terminating Machine 354500-[ ]



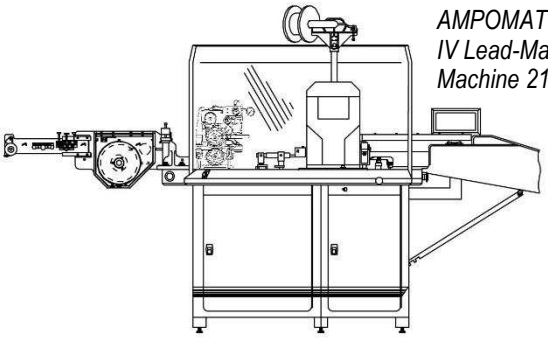
PRO-CRIMPER III Hand Tool Assembly 2063291-1



AMP-O-LECTRIC Model "K" Terminating Machine 565435-[ ]



Heavy Duty Quick-Change Mini-Applicator (Typical)



AMPOMATOR CLS IV Lead-Making Machine 217500-[ ]

WIRE SIZE		INSUL DIA	TERMINAL P/N (Typ)▪	APPLICATOR (DOCUMENT) for POWER UNIT (DOCUMENT)			HAND TOOL (408-10227)
mm²	AWG			CLS 217500-[ ] (409-5866)	MODEL "K" 565435-[ ] (409-5128)	MODEL "G" 354500-[ ] (409-5842)	
0.13	---	0.85-1.05	1924955-7 1924968-7	1855452-1 (408-8040)	1855452-2 (408-8040)	1855452-3 (408-8040)	---
---	26			2151831-[ ] (408-10389) Preferred†			
2 x 0.13	---	0.85-1.05	1924955-8 1924968-8	1855453-1 (408-8040)	1855453-2 (408-8040)	1855453-3 (408-8040)	---
---	2 x 26			2151832-[ ] (408-10389) Preferred†			
0.35	---	1.10-1.40	1924955-8 1924968-8	2266673-[ ] (408-10389)			---
---	22						
0.35	---	1.50-1.85	1924955-3 1924968-3	1385873-1 (408-8040)	1385873-2 (408-8040)	1385873-3 (408-8040)	2063291-1
---	22			2151725-[ ] (408-10389) Preferred†			
0.50	---	1.50-1.85	1924955-3 1924968-3	1385873-1 (408-8040)	1385873-2 (408-8040)	1385873-3 (408-8040)	2063291-1
---	20			2151725-[ ] (408-10389) Preferred†			
0.75	---	1.60-2.06	1924955-4 1924968-4	1852097-1 (408-8040)	1852097-2 (408-8040)	1852097-3 (408-8040)	2063291-1
---	18			2151830-[ ] (408-10389) Preferred†			

†See applicator drawing for appropriate dash number based on application equipment needs. ▪This typical terminal part number list is for reference only. To ensure you have the proper applicator for the terminal part number, visit the TE Applicator Look-Up Application at the address:
http://www.te.com/en/products/application-tooling/applicator-search.html

Figure 7

6. VISUAL AID

The illustration below shows a typical application of this product. This illustration should be used by production personnel to ensure a correctly applied product. Applications which do not appear correct should be inspected using the information in the preceding pages of this specification and in the instructional material shipped with the product or tooling.

NOTE: SOCKET CONTACT SHOWN, BLADE CONTACT HAS SAME REQUIREMENTS.

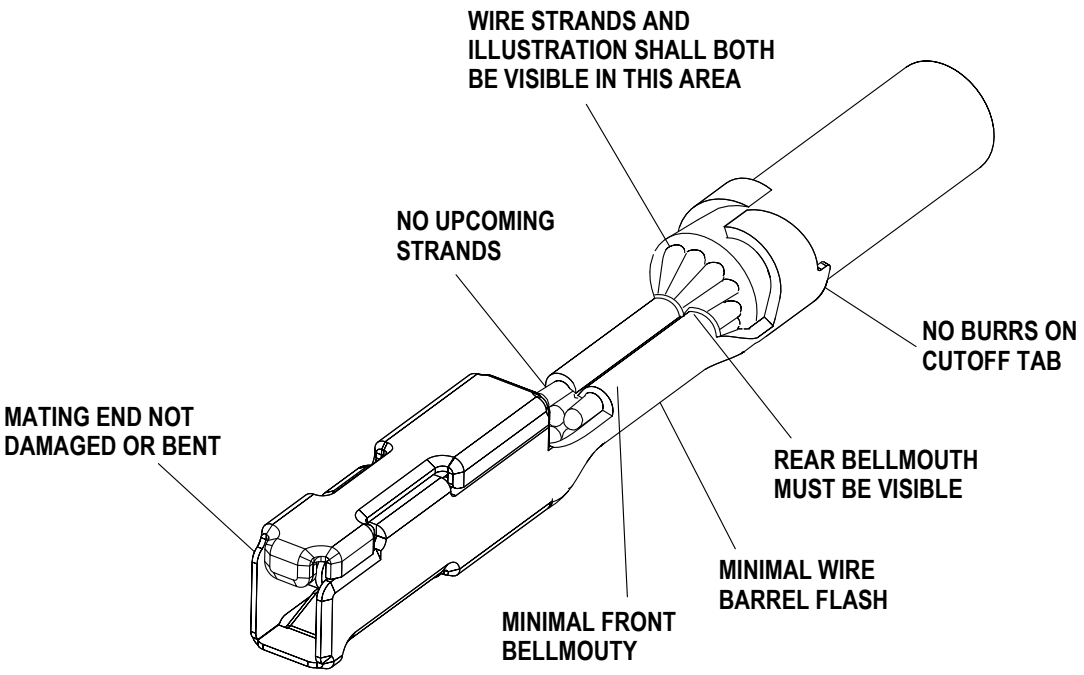


FIGURE 8. VISUAL AID