APPLICATION SPECIFICATION

1. SCOPE

1.1. Content

This specification covers the requirements for application of the single row AMPMODU* MT (Mass Terminated) interconnection system. These requirements are applicable to hand, bench and semiautomatic application tools. Specific wire and insulation ranges relative to the products covered in this specification are 20-30 AWG solid and stranded discrete wire, jacketed cable and round conductor flat cable with a maximum conductor insulation outside diameter of .050. For insulation outside diameter smaller than .028 or wire containing more than 7 strands consult AMP Engineering. For specific component part numbers relative to the products covered in this specification see Figure 8.

1.2. Design

Connectors consist of a housing which contains preloaded contacts and a strain relief cover. All components are available individually.

A. Housing

Housing consists of 1 row of contact cavities which have a centerline spacing of .100. The AMP trademark, date code and part number and first cavity identification dot on each housing is color coded to correspond to the applicable contact wire size contained in the housing, see Figure 9. Mass terminated insulation displacement contacts contained in these housings may be replaced with crimp type contacts; applied in accordance with AMP Specification 114-25003; where 2 wire circuit, oversized insulation, or field serviceability requirements exist. Housing contains an easily accessible locking lance cavity for contact removal.

B. Covers

Snap-on covers are available for all housing assembly sizes.

*Trademark of AMP Incorporated.

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DR Harry D English 9-27-83
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APP Stephen M Young 9-28-83

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LOC B | NO 114-25019 | REV 0

SHEET 1 OF 8

TITLE CONNECTOR, SINGLE ROW, AMPMODU MT INTERCONNECTION SYSTEM, APPLICATION OF

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DIST 25

C. Contact

Each contact contains 2 cantilever contact springs, 2 anti-overstress tabs, post stop, locking lance, 2 wire slots, and a wraparound insulation barrel. Post stop feature prevents over insertion of a post contact, while protecting terminated conductors in the wire slots and wrap type wire terminations on the post contact from being dislodged. Wraparound insulation barrel is intended to provide additional strain relief for terminated wires.

1.3. Reference Specifications

For applicable performance requirements see AMP Specification 108-25018 and 108-25015.

2. NOMENCLATURE

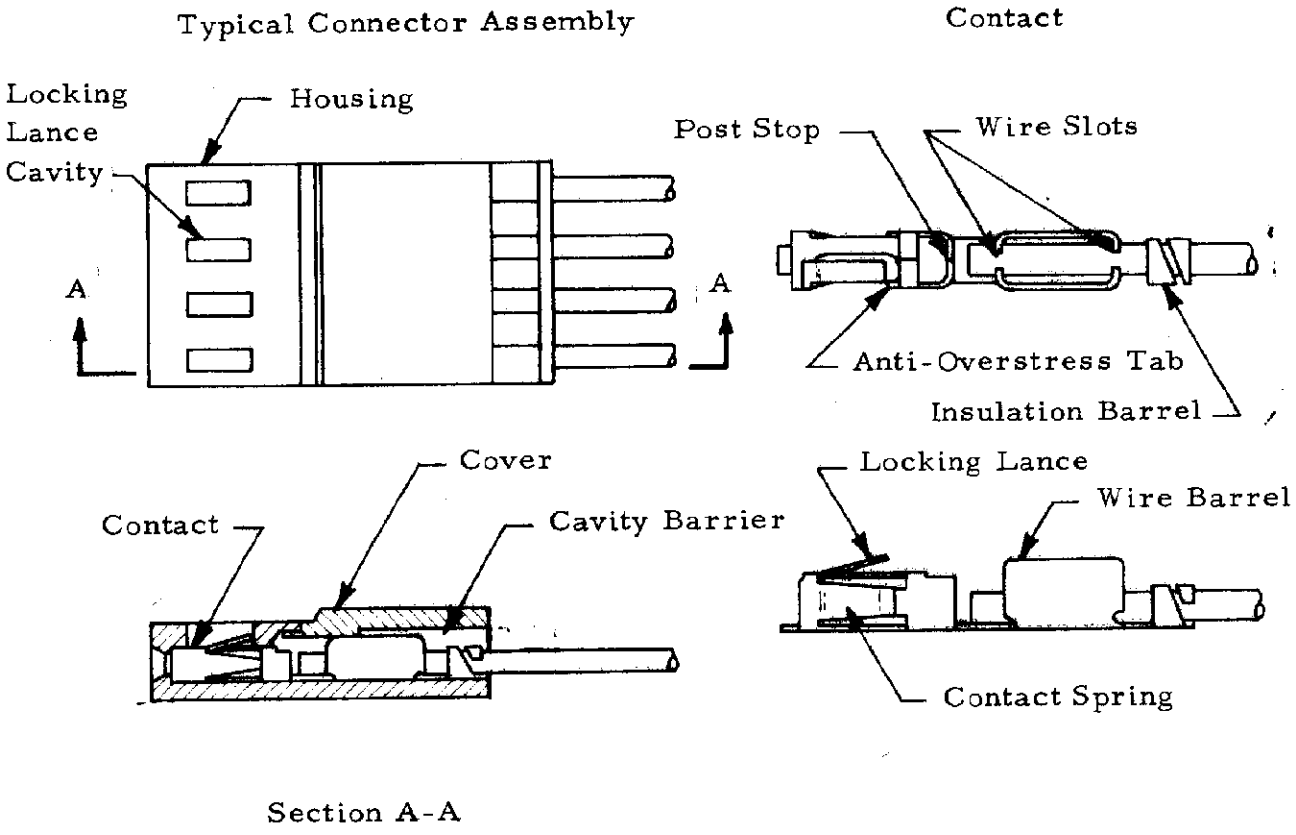

Figure 1

3. REQUIREMENTS

3.1. Wire Preparation

A. Discrete Wire

No preparation required.

B. Jacketed Cable

(1) Cable insulating jacket shall be stripped as indicated in Figure 4.

(2) Care shall be taken not to cut the individual conductor insulation during the jacket stripping operation.

C. Round Conductor Flat Cable

(1) Ends of the cable shall be cut perpendicular to the edge of the cable within the limits shown in Figure 2.

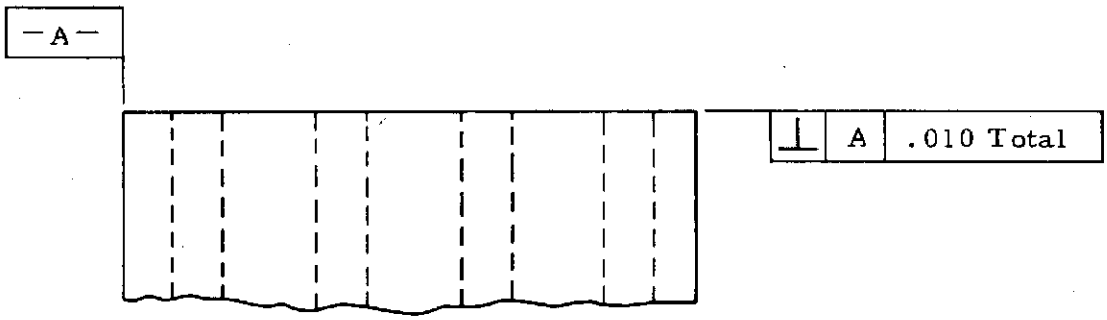

Figure 2

(2) Cable shall be slit into individual wires as indicated in Figure 4.

(3) Care shall be taken not to cut the individual conductor insulation during the cable slitting operation.

(4) When using .100 centerline cable, the interconnecting web between conductors shall be removed as shown in Figure 3.

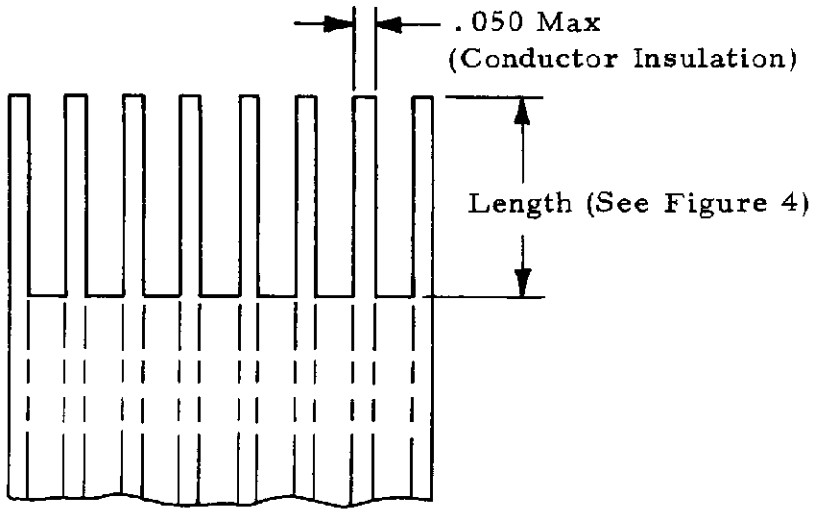

Figure 3

3.2. Tooling

AMP tooling is designed to terminate the insulated conductor in the contact wire slots, and form the insulation barrel during termination. Figure 4 provides a tooling selection guide and is dependent upon customer needs. For assistance in tool selection contact AMP Engineering.

Tooling Part Number	Wire Size, AWG	Terminations per Cycle, maximum	Cable Preparation Length			Tool Description
			Discrete Wire	Jacketed Cable Jacket Strip Length	Ribbon Cable Slit Length	
91403-1	20-30	1	(a)	1.50	2.00	Self Indexing Manual Pistol Grip Tool (b)
91404-1	20-30	1	(a)	1.50	2.00	Self Indexing Pneumatic Pistol Grip Tool (b)
58020-6	20-30	1	(a)	1.50	2.00	Discrete Wire Bench Terminator

(a) No preparation required.
(b) Requires single row conversion kit PN 527030-1.

Figure 4

3.3. Termination

A. Position connector housing in tool in accordance with the applicable tooling Instruction Sheet.

B. Locate prepared conductors in tooling or connector housing in accordance with the applicable tooling Instruction Sheet.

C. Make all required terminations.

D. Remove terminated housing from tooling.

3.4. Inspection

A. Terminated conductors shall meet the requirements specified in Figure 5.

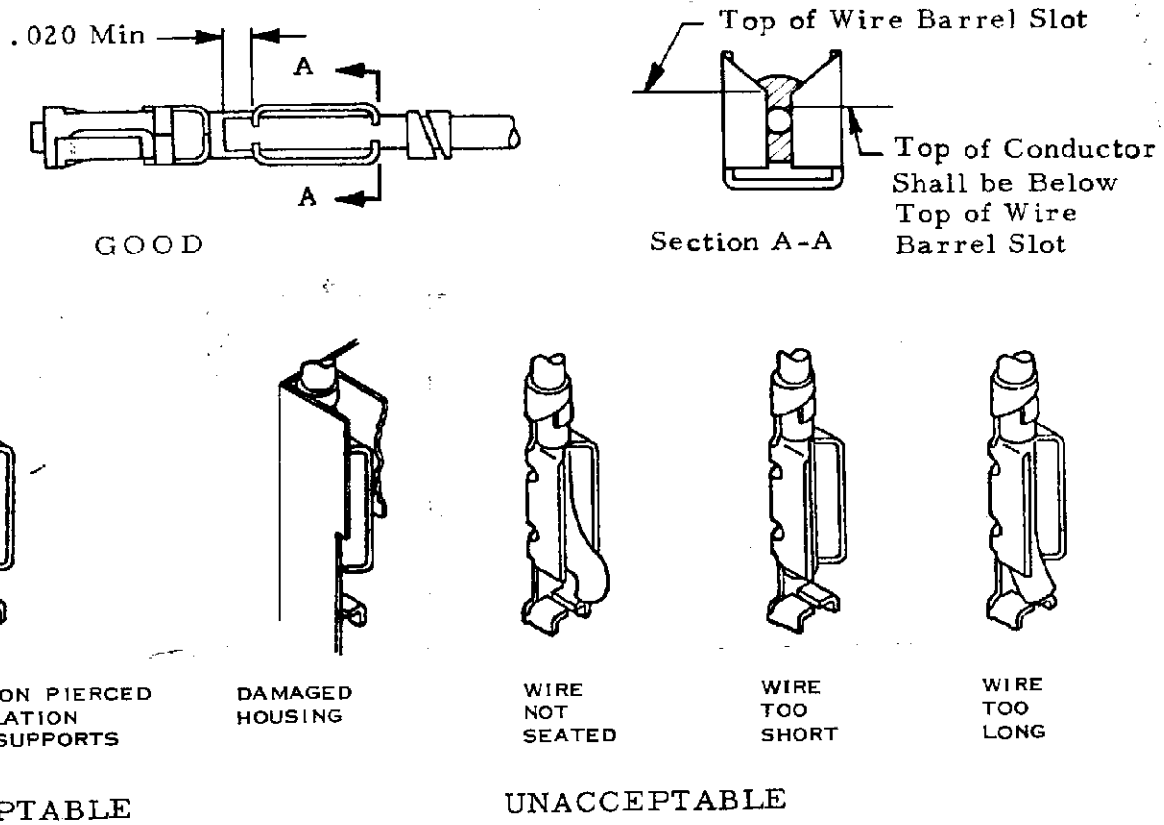

Figure 5

B. There shall be no deformation of the wire slots after termination.

C. Insulation barrel shall be closed adequately to confine the conductor insulation. Its primary function is to prevent the conductor from being lifted from the wire slots.

3.5. Workmanship

There shall be no signs of housing or contact damage, as a result of the termination process, that would affect product performance.

3.6. Assembly

Covers shall be assembled on the terminated connector housing as follows:

A. Hold cover at a slight angle to the housing, as indicated in Figure 6, and align cover tabs with rear of contact cavities.

B. Insert cover tabs into rear of contact cavities.

C. Rotate cover towards housing until it seats on housing cavity barriers and locking latch is fully engaged.

D. Covers may be removed by lifting rear of cover to disengage locking latch.

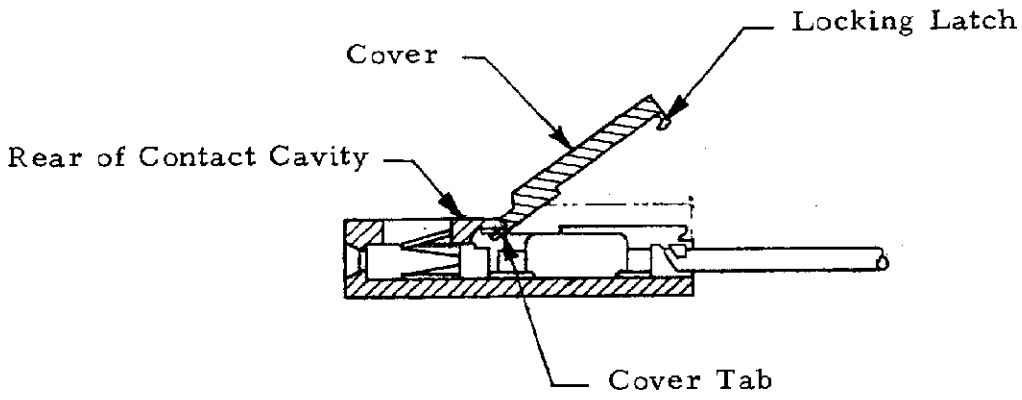

Figure 6

3.7. Contact Extraction

Individual contacts may be removed from the housing using AMP extraction tool PN 91052-1, by depressing the contact locking lance as follows:

A. Align tool tip with back of locking lance cavity as indicated in Figure 7.

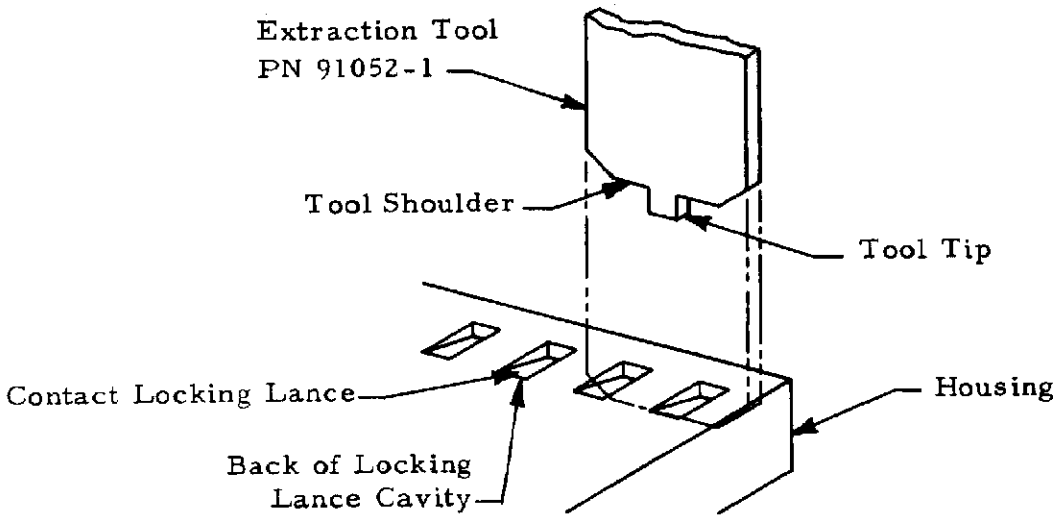

Figure 7

B. Insert tip of tool into lance cavity until tool shoulder bottoms on housing.

C. Keep tool bottomed on housing and remove contact from housing.

Housing Assembly	Cover
102745	102744
102746	
102747	
102867	
102874	
103064	
103065	
103066	
103197	
103198	
103199	
103280	
103281	
103282	
103283	
103284	
103285	

Figure 8

Wire Size	Color Code
26-30 AWG	Yellow
22-26 AWG	White
20-22 AWG	Green

Figure 9
Housing Color Codes