1. INTRODUCTION

This specification covers the requirements for application of AMPMODU* Header Assemblies with ACTION PIN* Contacts on .100-inch centerline spacing.

NOTE: All dimensions, unless otherwise specified, are in inches.

2. REFERENCE DOCUMENTS

2.1. AMP Instruction Sheet IS 9054 covers insertion tooling for Double Row Header Assemblies.

2.2 AMP Instruction Sheet IS 9143 covers insertion tooling for Single Row Header Assemblies.

2.3. AMP Product Specification 108-25032 outlines performance requirements.

3. NOMENCLATURE

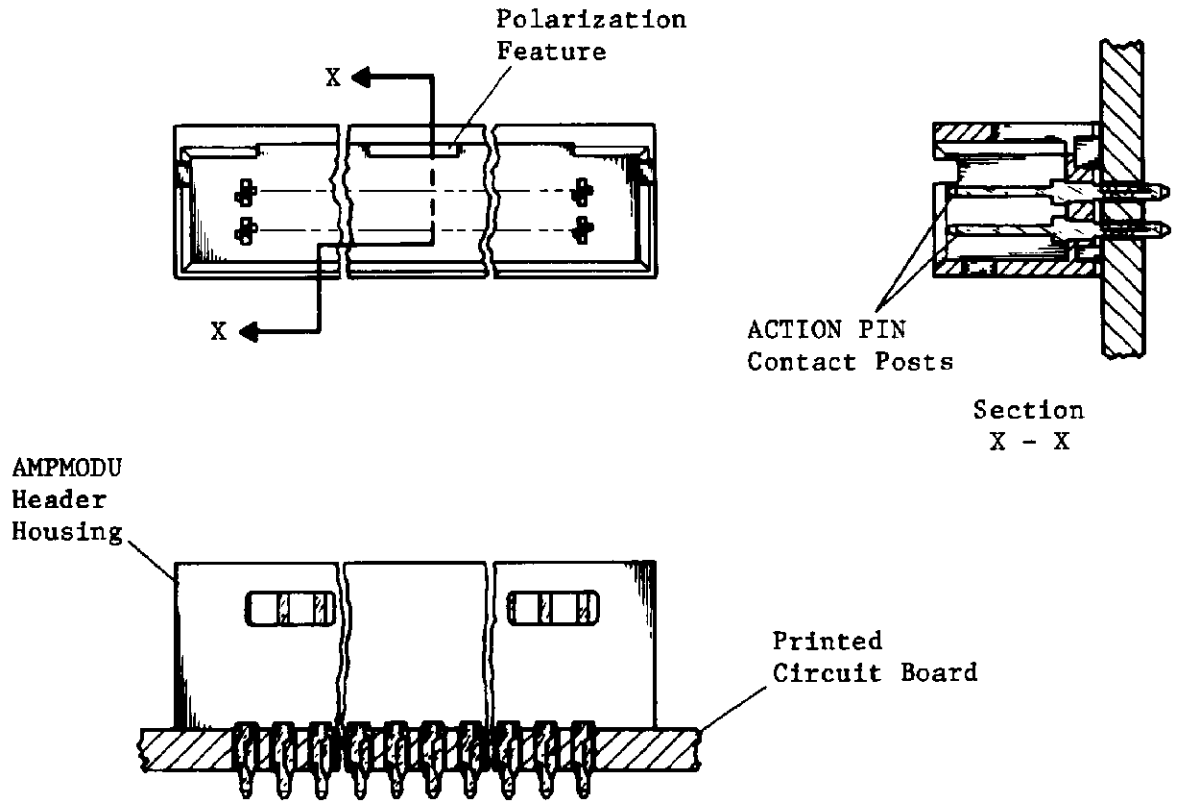

Fig. 1. Nomenclature

*TRADEMARK OF AMP INCORPORATED

LTR	REVISION RECORD	APP	DATE

APPLICATION SPECIFICATION

AMP | AMP INCORPORATED Harrisburg, Pa. 17105

ENGINEERING APPROVAL & DATE: TOM CLARK 12-16-86

NO. 114-25028

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TITLE: AMPMODU Header Assemblies with ACTION PIN Contacts

4. REQUIREMENTS

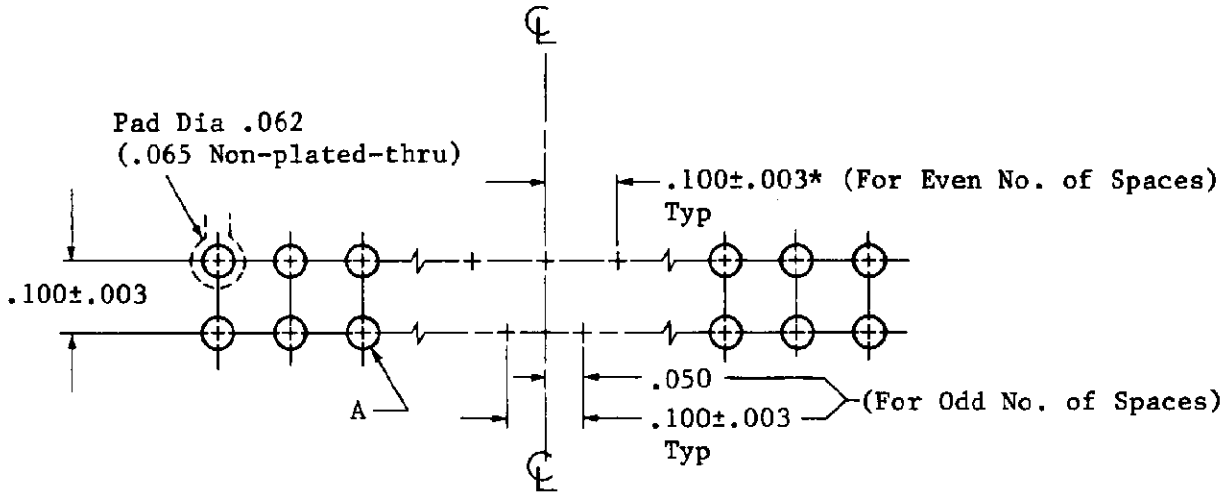
4.1. Printed Circuit Board

A. Board Thickness

(1) Boards with .062 nominal thickness shall be a minimum dimension of .059.

(2) **Boards with .093 nominal thickness shall be a minimum dimension of** .084.

B. Layout of PC Board shall be according to dimensions shown in Figure 2.



	"A" DIAMETER**		
	Nominal	After Plating	After Reflow
Plated-thru	.040±.003	.037-.043	.036-.043
Non-plated-thru	.0453±.001	—	—

* Tolerance noncumulative
** Use 1.15mm-dia drill

Fig. 2. PC Board Dimensions

C. Plating of Holes

(1) Copper plating thickness shall be .001 to .003 and shall register 150 (max) hardness (knoop) when tested.

(2) Tin/lead plating thickness shall be a minimum of .0003.

4.2. Required spacing in applications requiring housing removal tool clearance or robotic header assembly placement is shown in Figure 3.

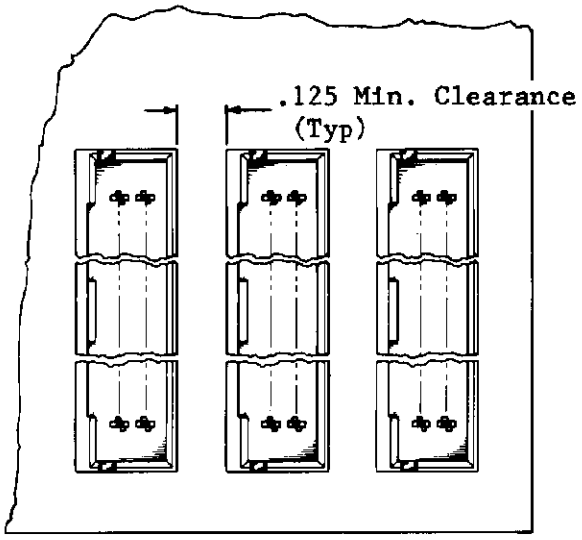


Fig. 3. Required Spacing

4.3. The force used to seat a standard AMPMODU ACTION PIN Header Assembly shall not exceed 40 lb per contact.

4.4. The minimum force required to remove an ACTION PIN contact is 10 lb for an .093 board and 5 lb for an .062 board.

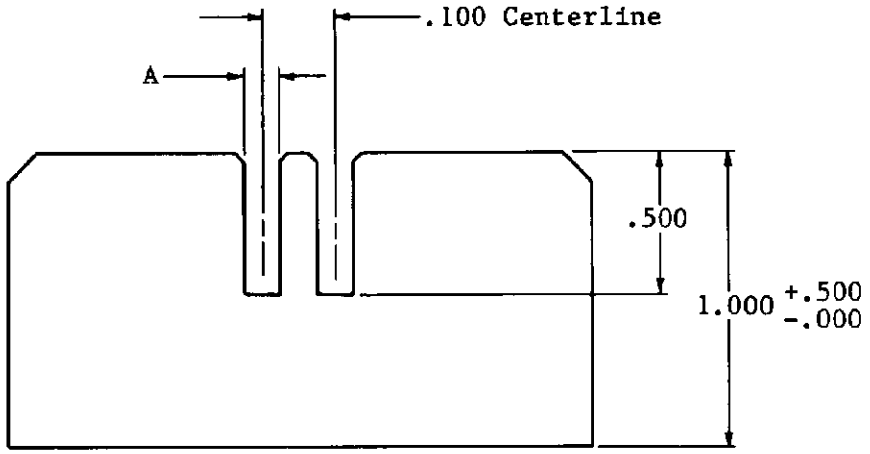
4.5. Contact posts shall not exceed the following rotation limitations when measured after seating of header assembly.

A. For mating end of post, limitation is ±2°0'.

B. For wire end of post, limitation is ±5°0'.

C. For all other post areas, limitation is ±10°0'.

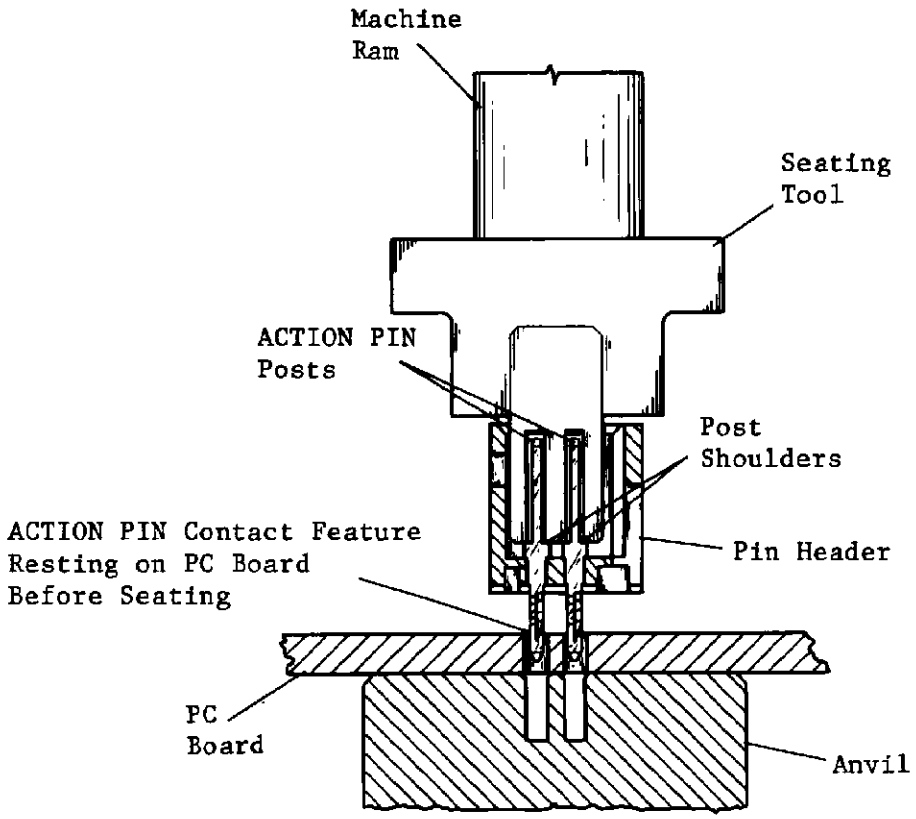
4.6. The customer shall supply an anvil which is slotted or drilled as a template to support the PC board, and which provides clearance for the posts during seating. Suggested design and dimensions are provided in Figure 4.



A - Slotted template, .062-wide slots
- Drilled template, .070-Dia holes

Fig. 4. Suggested Anvil Design

4.7. The appropriate AMP Seating Tool for AMPMODU ACTION PIN Header Assemblies shall be used in conjunction with the anvil when seating pin header assemblies (see IS 9054 and IS 9143). Use of the seating tool is illustrated in Figure 5.



NOTE: All post shoulders must be covered by tooling.

Fig. 5. Seating Tool

4.8. Seated header assembly shall meet the requirements of Figure 6.

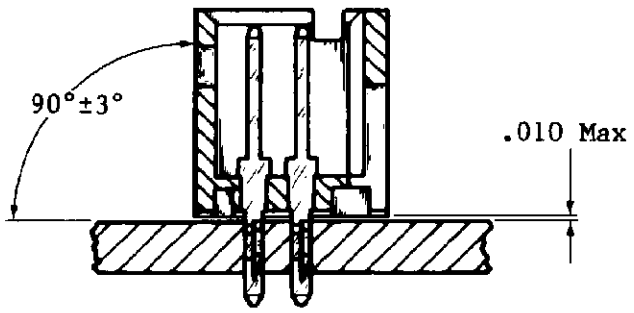


Fig. 6. Seated Header Assembly Requirements

5. TOOLING TYPES

5.1. For low-volume manufacturing, an arbor frame type of manual applicator may be used.

5.2. For higher-volume manufacturing, semi-automatic machine application is appropriate. Robotic application may also be employed.

6. QUALIFYING SUPPORT

AMPMODU Header Assemblies with ACTION PIN Contacts are either UL recognized and CSA certified or the qualifying support is pending.

7. VISUAL EXAMINATION

Figure 7 illustrates a typical AMPMODU ACTION PIN Header Assembly after it has been properly seated on a PC board.

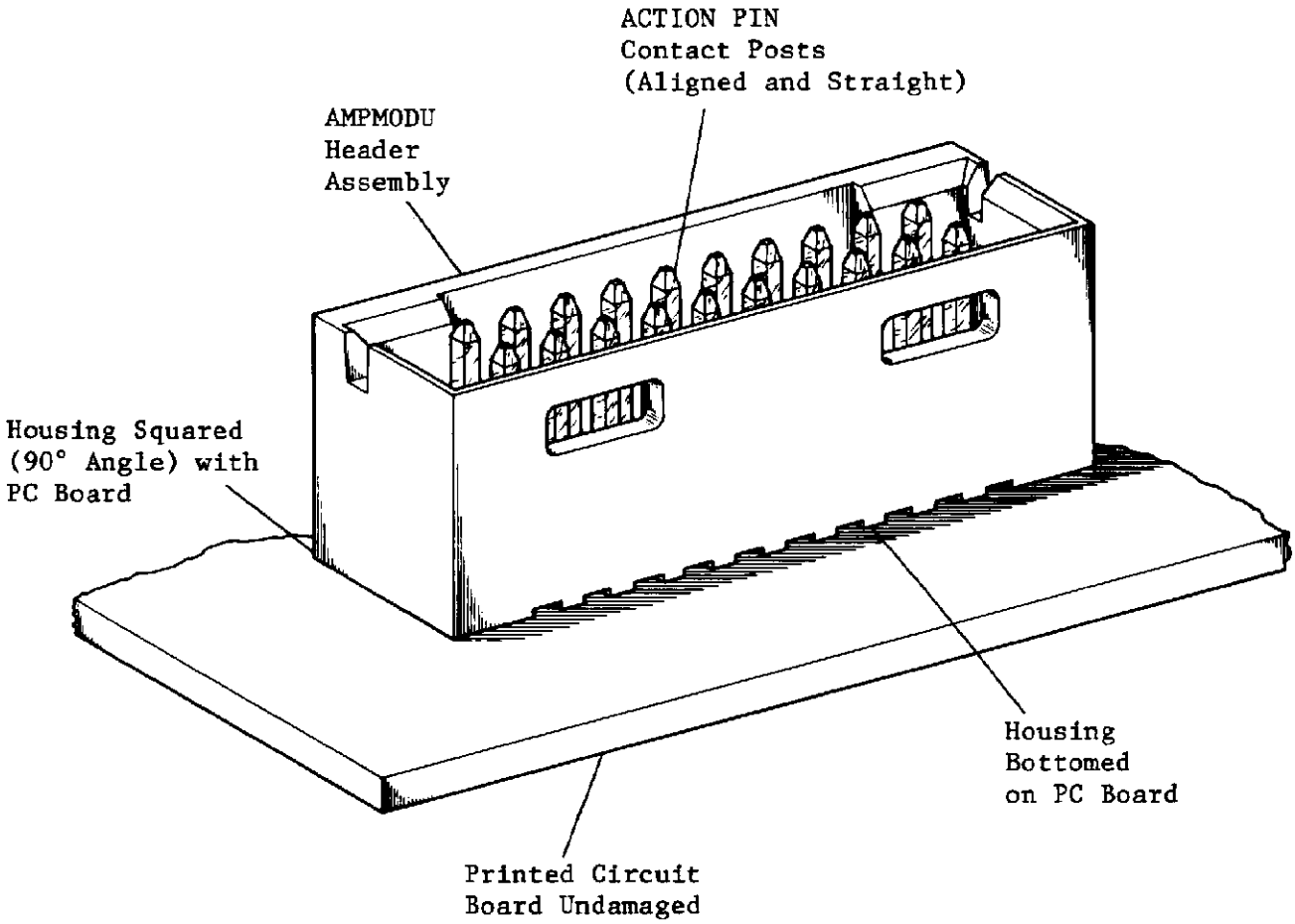


Fig. 7. AMPMODU ACTION PIN Header Assembly