

APPLICATION SPECIFICATION

1. SCOPE

1.1. Content

This specification covers 3 cavity designs and the requirements for application of special latch type .300" box height MAG-MATE\* Standard Series terminals. These requirements are applicable to hand and automatic machine application tools. For specific terminal part numbers, wire and interface combinations, see Figure 11.

1.2. Reference Specification

For applicable performance requirements see AMP Specification 108-2012.

2. NOMENCLATURE

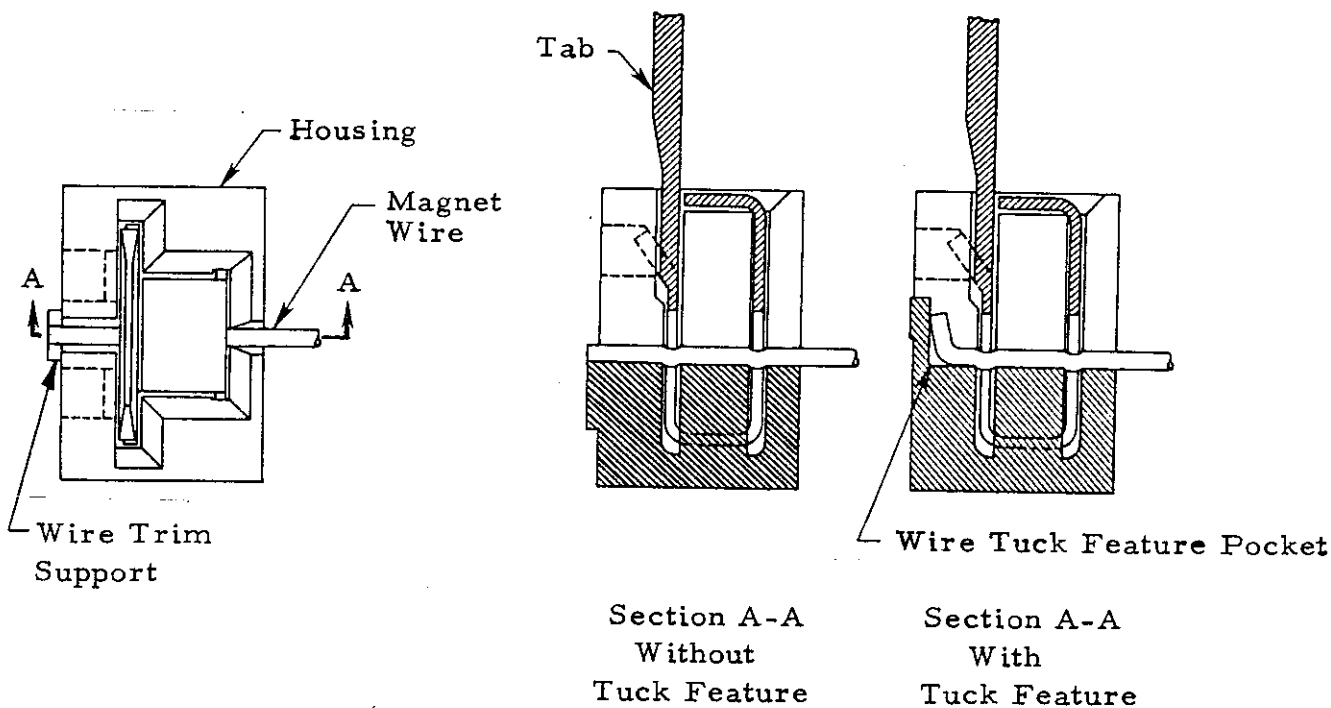


Figure 1

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B	Revised per ECN AF-2886 0710-0317-94	N.N	11/21/86	DEF <i>Thomas L. Christel</i> 5/12/85	<b>AMP</b>   AMP INCORPORATED Harrisburg, Pa. 17105
	A	Revise per ECN AF-1354	<i>COE</i>	12/16/85	
0	Release per ECN AF-1127	TLC	6/1/85	APP <i>Charles H. Altman</i> 4/17/85	LOC B
LTR	REVISION RECORD	APP	DATE	NO 114-2094	
SHEET 1 OF 10				TITLE TERMINAL, MAG-MATE STANDARD, .300 BOX HEIGHT, SPECIAL LATCH TYPE	
02				REV B	

### 3. REQUIREMENTS

#### 3.1. Cavity Design

Optional housing cavity that will accept special latch type MAG-MATE Standard Series terminals manufactured by AMP Incorporated shall be in accordance with the requirements specified in Para 3.1.A., 3.1.B. or 3.1.C. Customers are requested to supply AMP Engineering with drawings of their final design for review and approval and for insertion equipment compatibility.

##### A. Cavity Option 1

Cavity option 1 is a straight thru slot which leaves the trimmed end of magnet wire exposed and may be used in applications where isolation of conductor end is not required.

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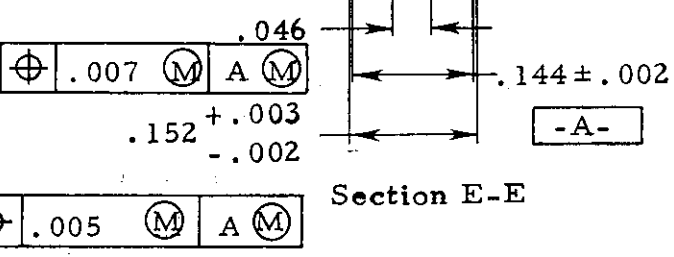
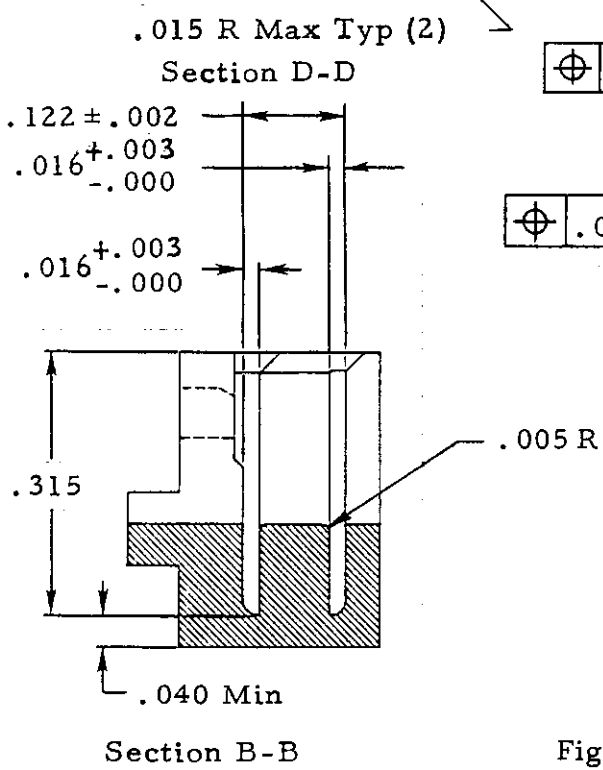
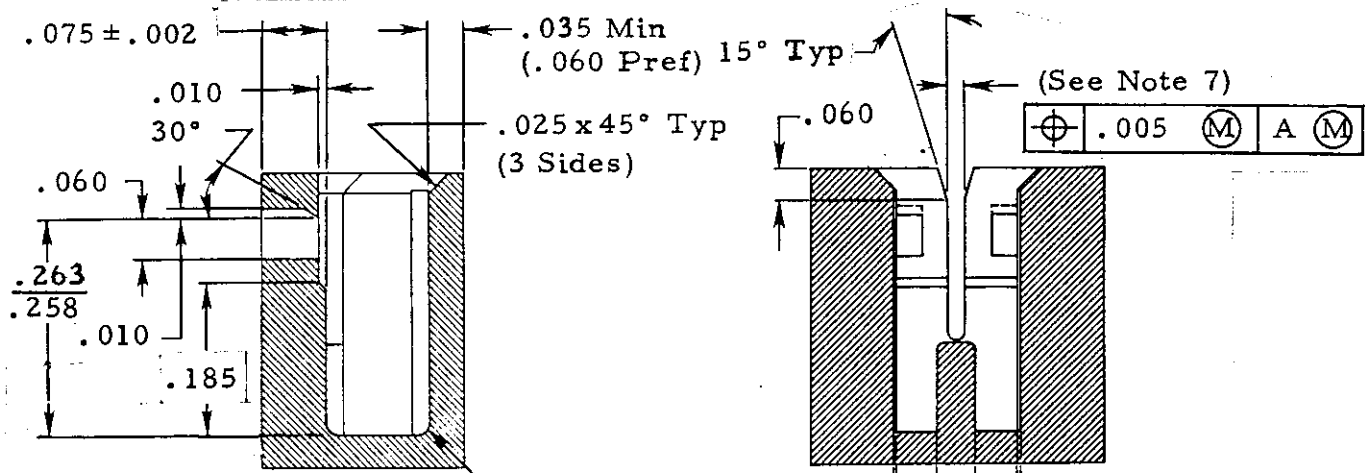
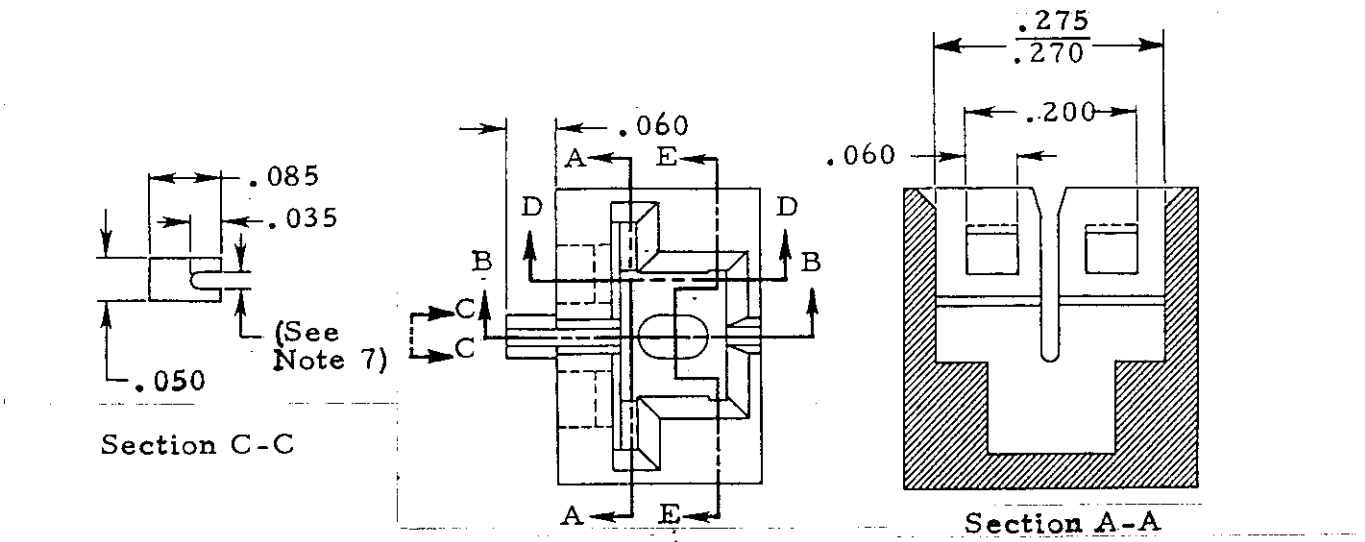


Figure 2 (cont)

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Notes:

1. All dimensions are in inches.
2. Tolerances unless otherwise specified are  $\pm .005$  and angles  $\pm 1^\circ$ .
3. Material shall be glass filled polyester or AMP Engineering approved equivalent.
4. Wall thickness on trim side shall be equal on multi-cavity housings to provide excess magnet wire trim by applicator.
5. Coil windings and other assembly components shall not extend above base of wire slot or obstruct proper seating of magnet wire in slot.
6. Wire trim support shall be on wire trim side only. Applicator will trim off both wire and wire trim support. Wire trim support is not necessary if magnet wire is hand trimmed.
7. Slot width should be .002-.004 smaller than the largest magnet wire outside diameter being terminated.
8. Draft angles shall be held within the feature tolerances.

Figure 2 (end)

Cavity Design Option 1

B. Cavity Option 2

Cavity option 2 has a tuck feature which allows the terminal to pull the exposed end of trimmed magnet wire into a pocket inside cavity for total magnet wire isolation.

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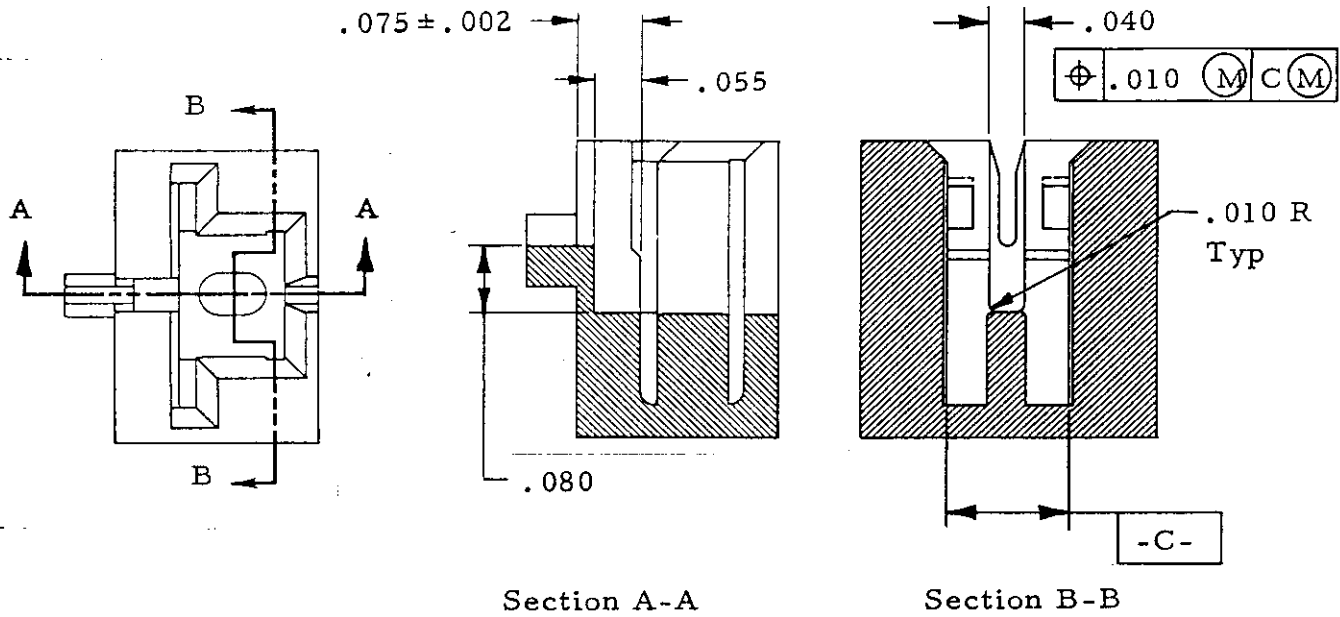
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Note: Same as Figure 2, except wire-tuck feature added.

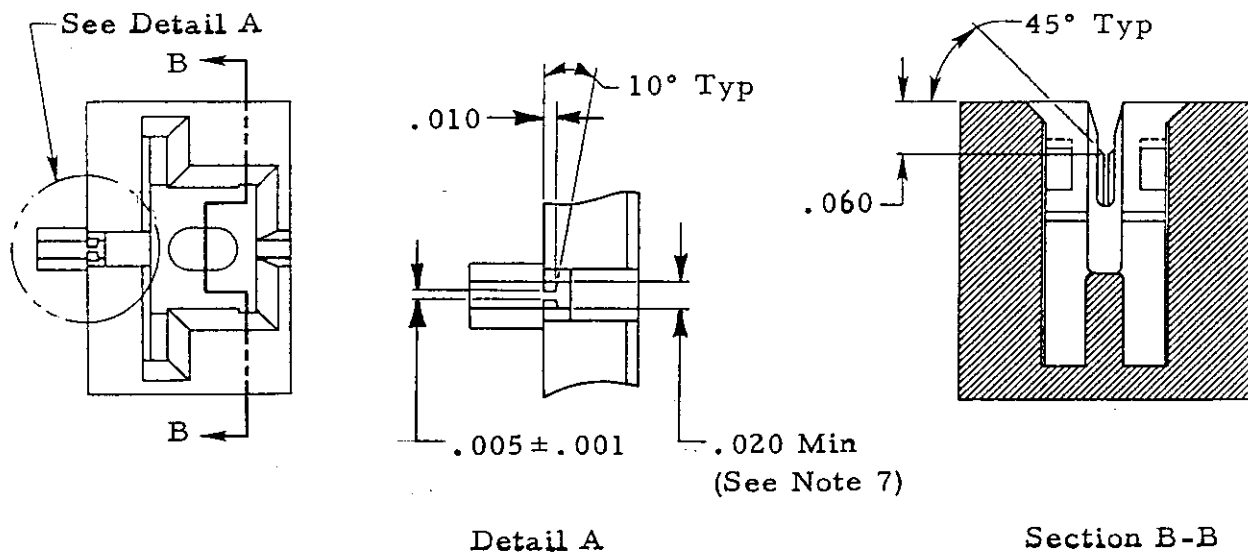
Figure 3

Cavity Design Option 2.

C. Cavity Option 3

Cavity option 3 contains a controlled flash to retain a broad range of magnet wire sizes in the cavity prior to terminal insertion. In addition, the wire tuck feature as specified in cavity option 2 may also be used in conjunction with cavity option 3.

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Note: Same as Figure 3, except wire slot flash added.

Figure 4

Cavity Design Option 3

D. Commoned Cavities

Cavity options 1, 2, or 3 may be commoned as indicated in Figure 5.

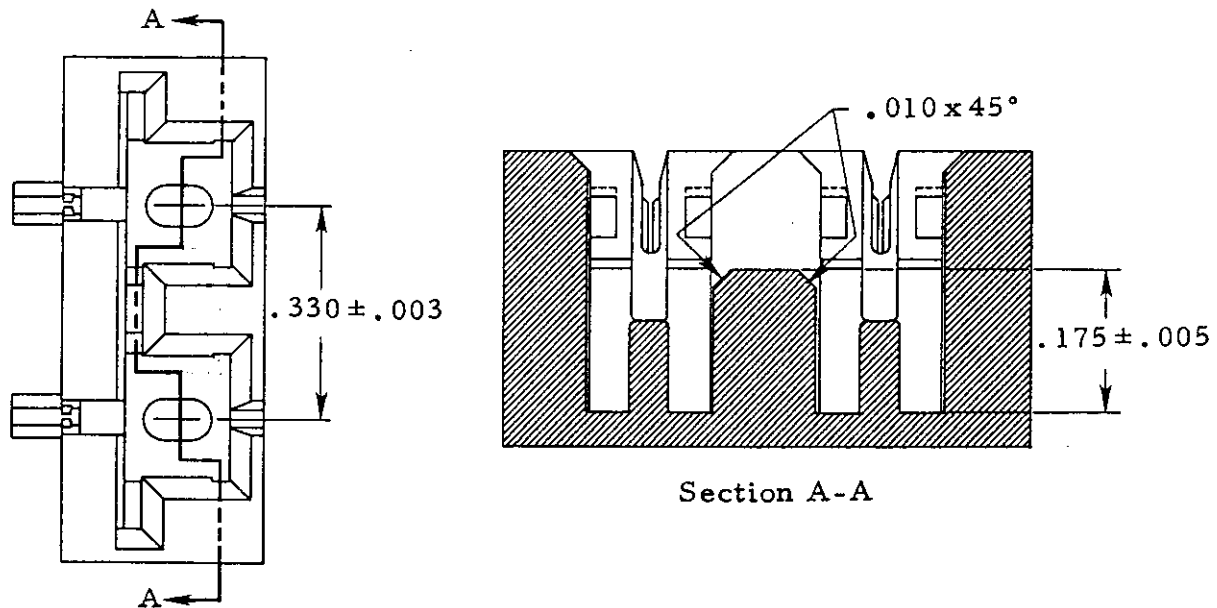


Figure 5

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### 3.2. Wire Placement

Magnet wire shall be prelaced at base of cavity wire slots before terminal insertion.

### 3.3. Terminal Insertion Depth

Terminal shall be inserted in housing cavity within the limits specified in Figure 6.

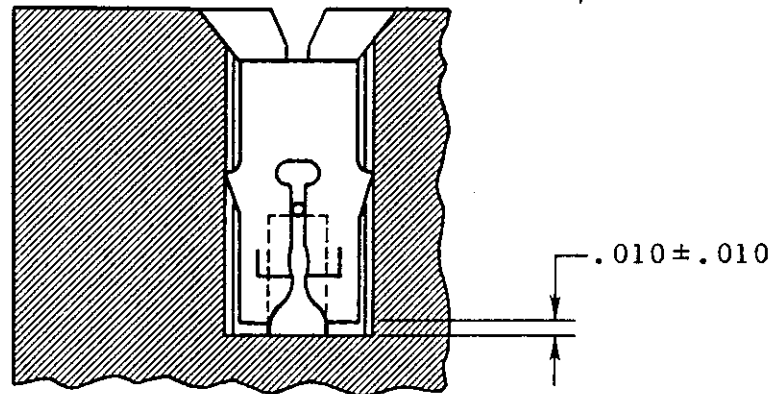


Figure 6

### 3.4. Wire Position

- A. Magnet wire shall contact top of cavity anvil as indicated in Figure 7 when terminals are inserted into cavity design option 1, (see Figure 2).

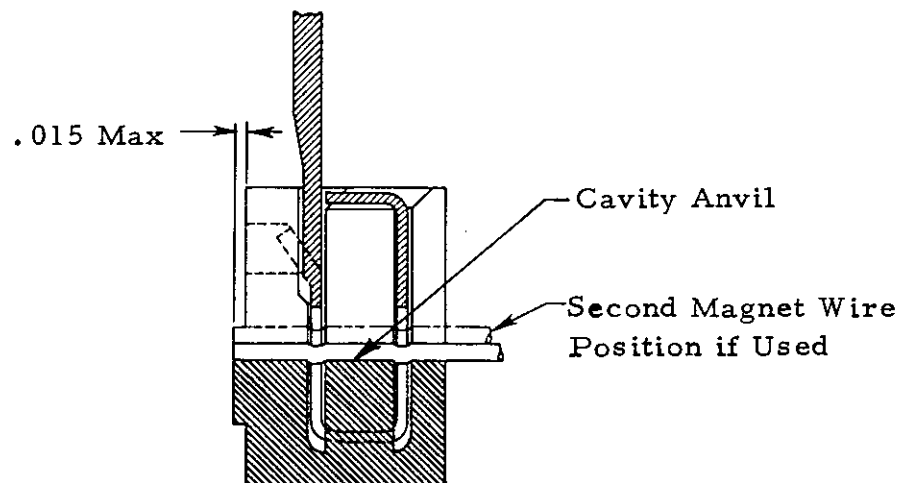


Figure 7

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- B. Magnet wire shall contact top of cavity anvil as indicated in Figure 8 when terminals are inserted in cavity design option 2 and 3 (see Figures 3 and 4) which contain a wire trim support and wire tuck feature pocket. These cavities contain a wire trim support on which the magnet wire rests prior to terminal insertion, and is removed during the application process. After termination the magnet wire is positioned within the confines of the wire tuck pocket as indicated in Figure 8.

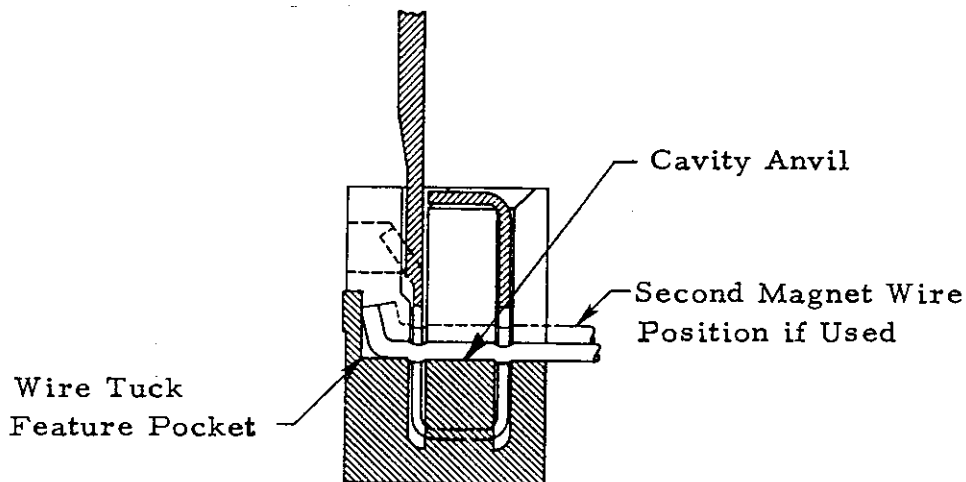


Figure 8

3.5. Terminal Cutoff Tab and Burr

A. Cutoff Tab

Terminal cutoff tabs shall be within the limits specified in Figure 9.

B. Burr

Burr on cutoff tabs shall not exceed .005.



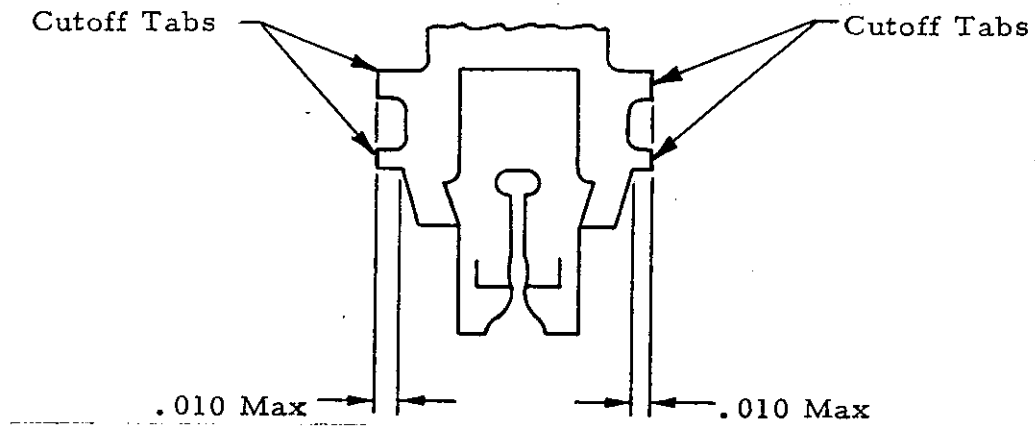


Figure 9

3.6. FASTON\* Tab

FASTON tab interface type product if bent shall be as indicated in Figure 10 after wire termination.

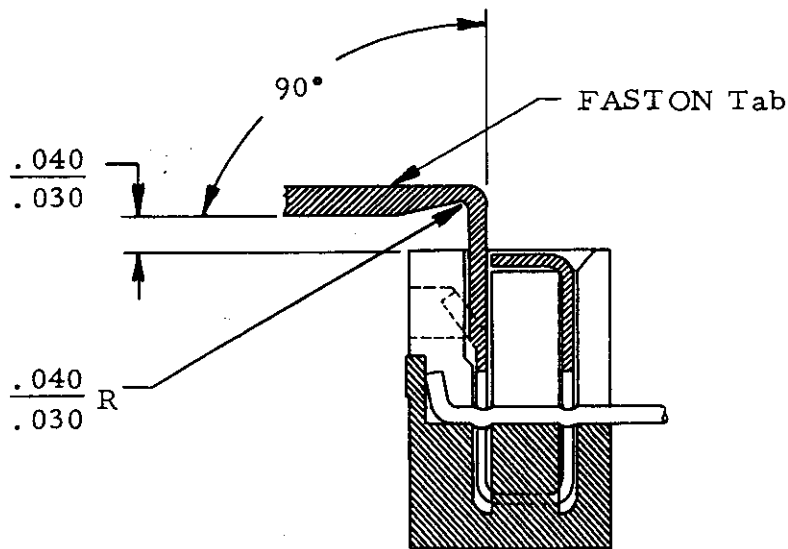


Figure 10

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Part Numbers		Magnet Wire				Interface Type
Strip	Loose Piece	Aluminum		Copper		
		Qty (a)	Size	Qty (a)	Size	
63128	63207	1 or 2	24-22	1 or 2	27-23	.250 x .032 FASTON Tab ↓
63132	63203	1 or 2	28-25	1 or 2	30-27	
63133	—	—	—	1 or 2	33-31	
63309	—	—	—	1 or 2	33-31	
63254	—	1 or 2	28-25	1 or 2	30-27	.187 x .020 FASTON Tab ↓
63255	—	—	—	1 or 2	33-31	
63256	—	1 or 2	24-22	1 or 2	27-23	

(a) Quantity denoting 1 or 2 will accept 2 magnet wires of the same type and size.

Figure 11

Part Numbers

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