

APPLICATION SPECIFICATION

1. SCOPE

This specification covers 4 cavity designs and the requirements for application standard latch type 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 10.

2. NOMENCLATURE

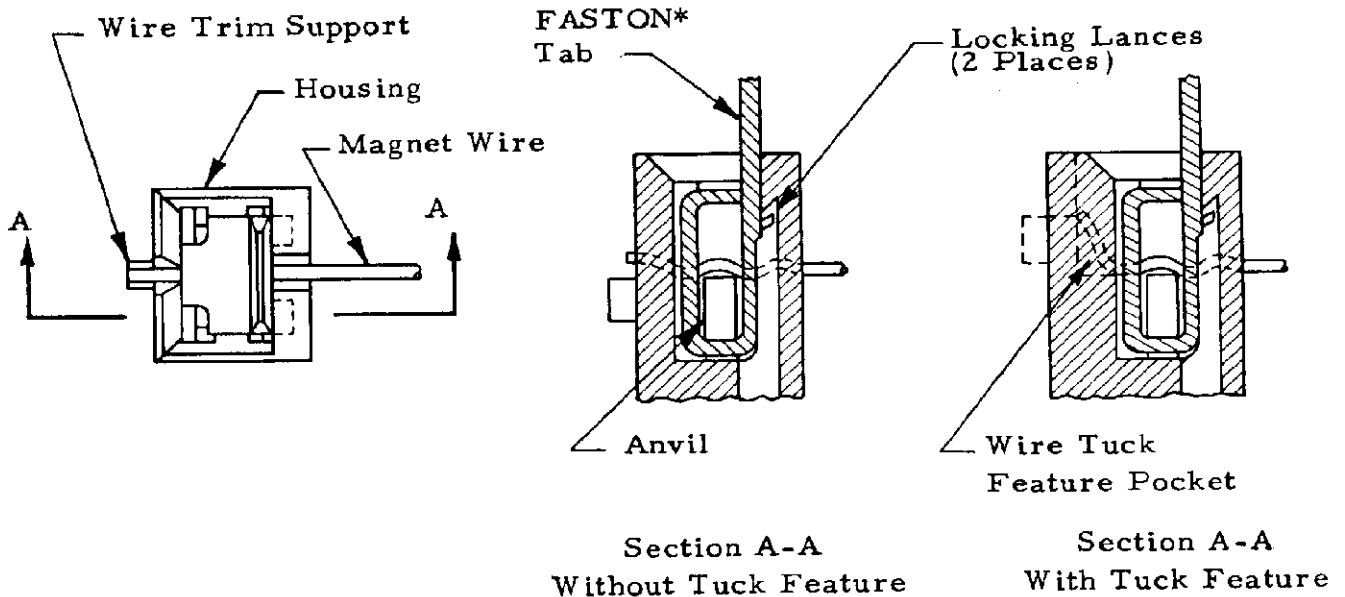


Figure 1

3. REQUIREMENTS

3.1. Cavity Design

Optional housing cavity designs that will accept standard 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., 3.1.C., or 3.1.D. Customers are requested to supply AMP Engineering with drawings of their final design for review and approval for insertion equipment compatibility.

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				DR. <i>Thomas L. Christen</i> 12/2/85	AMP AMP INCORPORATED Harrisburg, Pa. 17105			
				CHK <i>Nelson E. Raff</i> 12/5/85		NO 114-2067	REV D	LOC B
				APP <i>Charles M. Atkinson</i> 12/5/85				
D	Revise per ECN AF-1384	<i>TLC</i>	<i>12/6/85</i>	DIST 02	TITLE TERMINAL, MAG-MATE STANDARD SERIES, STANDARD LATCH TYPE			
LTR	REVISION RECORD	APP	DATE	PAGE 1 OF 8				

A. Cavity Option 1

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

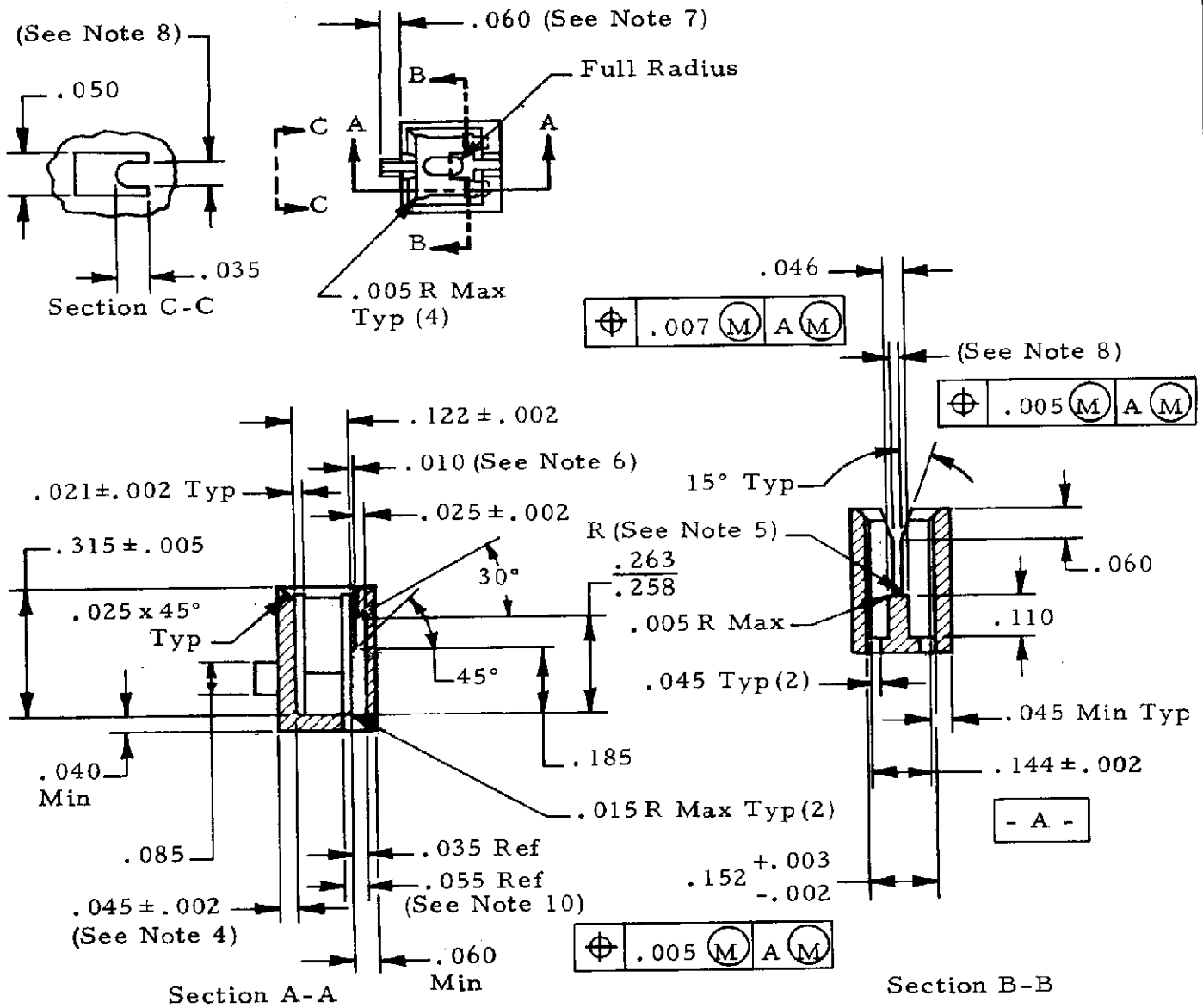


Figure 2 (cont)

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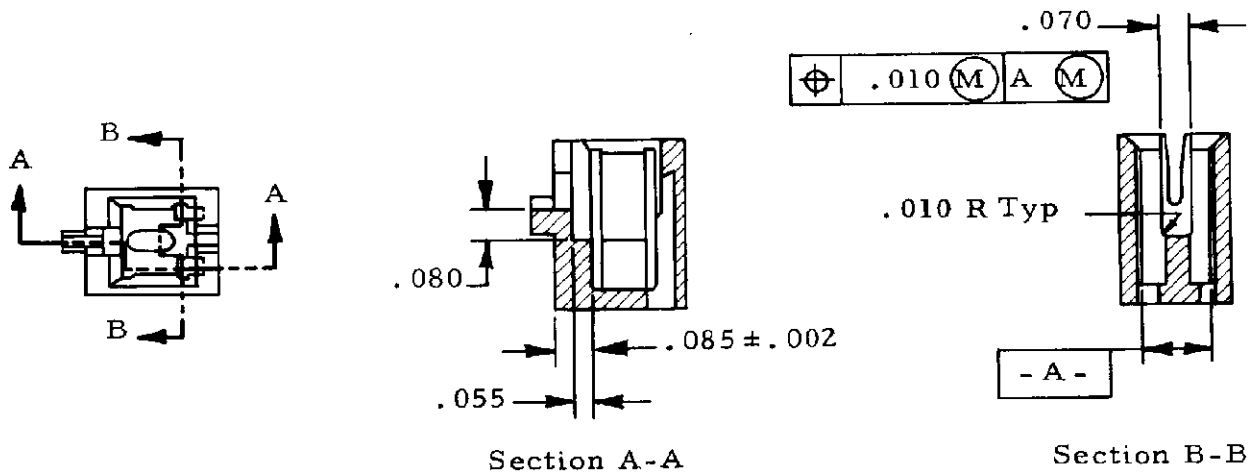
Notes:

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. Pocket for thick material area of premilled terminals.
7. 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.
8. Slot width should be .002-.004 smaller than the largest magnet wire outside diameter being terminated.
9. Draft angles shall be held within the feature tolerances.
10. This dimension may be increased to .157 reference to strengthen mold tooling.

Figure 2 (end)

B. Cavity Option 2

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



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

Figure 3
Cavity Design Option 2

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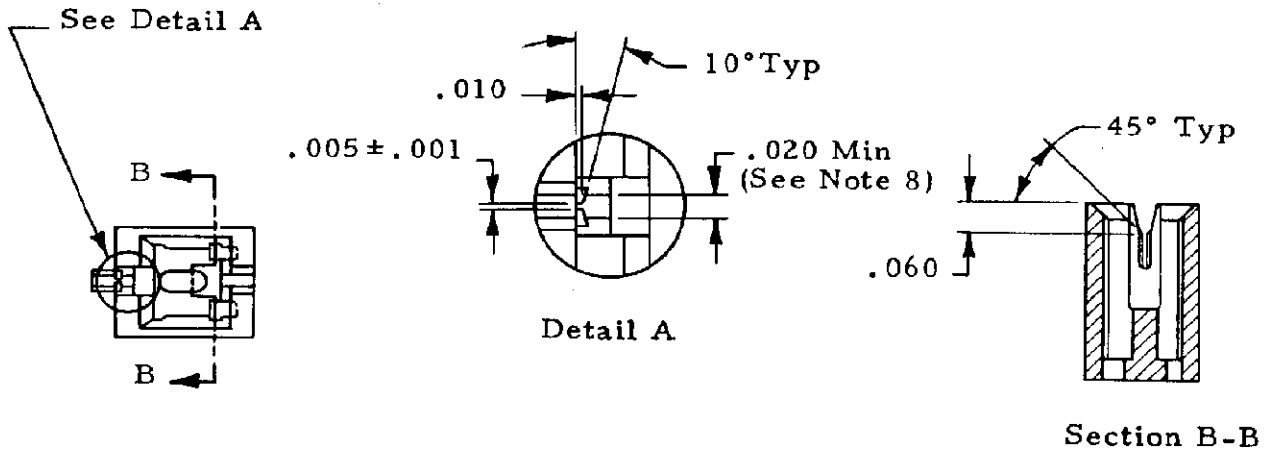
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C. Cavity Option 3

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.



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

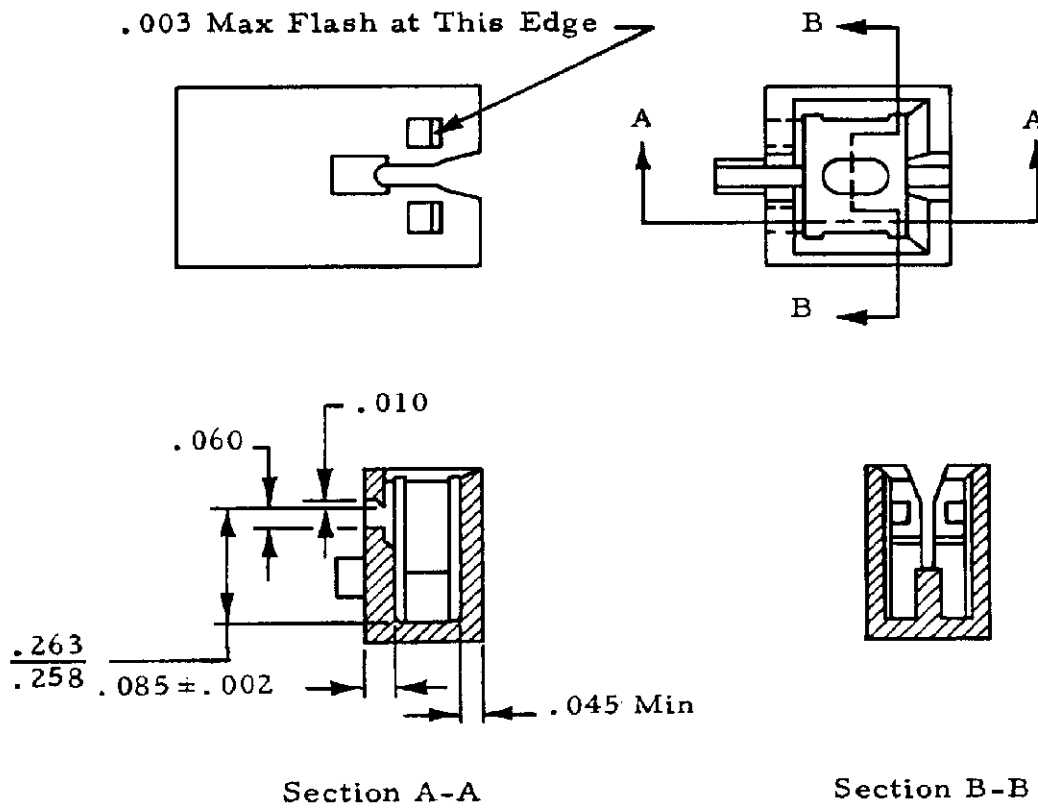
Figure 4

Cavity Design Option 3

D. Cavity Option 4

Cavity option 4 is the same basic cavity design as cavity option 1, except the locking latch pockets are cored from the side of the cavity rather than the bottom of the cavity as required by some mold designs. Wire tuck and/or wire slot flash features, as specified in cavity options 2 and 3, may also be used in this basic cavity design.

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Note: Same as Figure 2, except locking latch pockets provided thru side of cavity wall rather than bottom of cavity.

Figure 5

Cavity Design Option 4

3.2. Wire Placement

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

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3.3. Terminal Insertion Depth

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

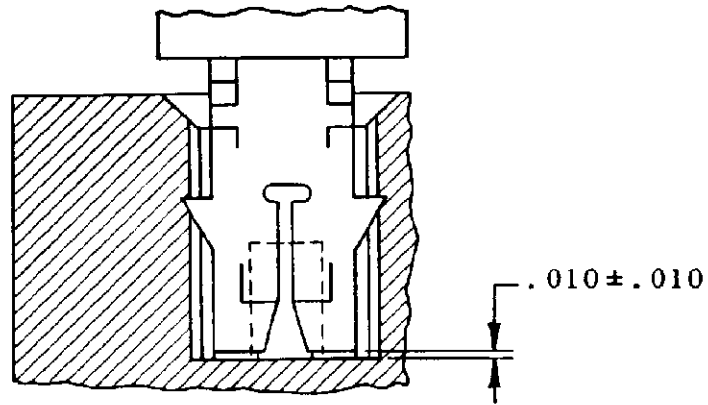


Figure 6

3.4. Wire Position

- A. Magnet wire shall contact the top of the cavity anvil as indicated in Figure 7 when terminal is inserted into cavity design option 1, see Figure 2.

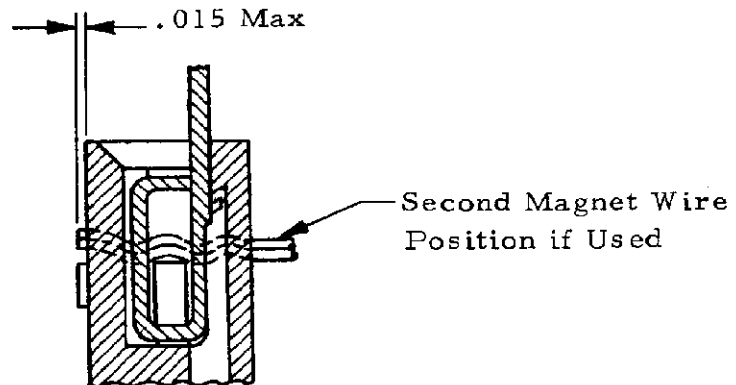


Figure 7

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- B. Magnet wire shall contact the top of the cavity anvil as indicated in Figure 8 when terminals are inserted in cavity design option 2, see Figure 3, which contains a wire trim support and wire tuck feature pocket. This cavity contains 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 feature pocket as indicated in Figure 8.

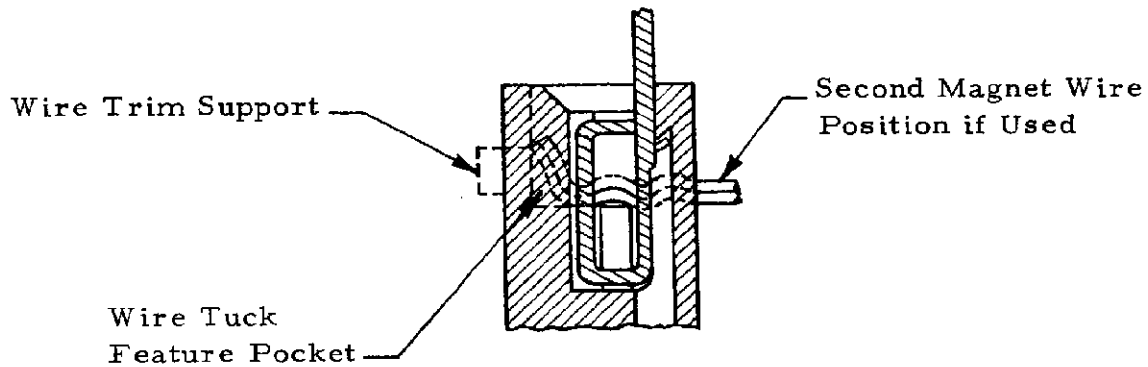


Figure 8

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.

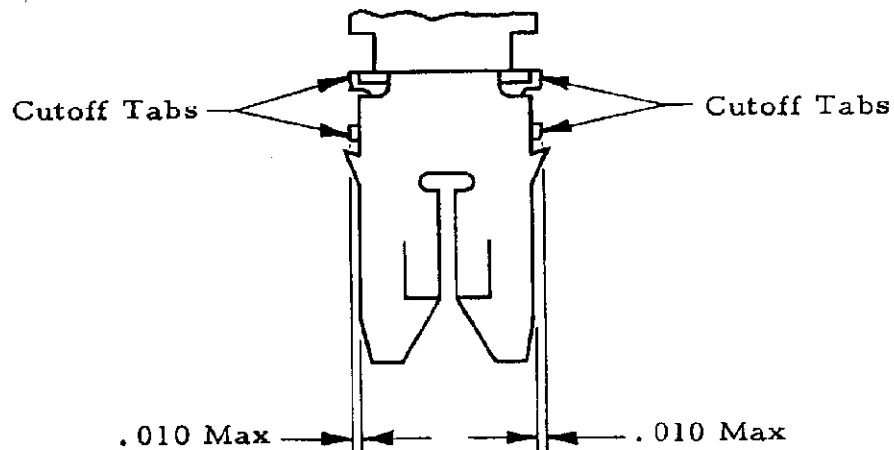


Figure 9

Part Numbers		Magnet Wire				Interface Type
Strip	Loose Piece	Aluminum		Copper		
		Qty(a)	Size	Qty(a)	Size	
62743		1 or 2	28-27	1 or 2	31-28	.187 x .020 FASTON Tab
63107	63204	1 or 2	25-23	1 or 2	27-23	
63108				1 or 2	33-31	
63109	63152	1 or 2	28-26	1 or 2	30-27	
63026				1 or 2	33-31	.250 x .032
63027		1 or 2	28-26	1 or 2	30-27	FASTON Tab

(a) Quantity denoting 1 or 2 will accept 2 magnet wires of the same size only in one terminal.

Figure 10

Part Numbers