



NOTE

All numerical values are in metric units [with U.S. customary units in brackets]. Dimensions are in millimeters [and inches]. Unless otherwise specified, dimensions have a tolerance of ± 0.13 [$\pm .005$] and angles have a tolerance of $\pm 2^\circ$. Figures and illustrations are for identification only and are not drawn to scale.

1. INTRODUCTION

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.

Basic terms and features of this product are provided in Figure 1.

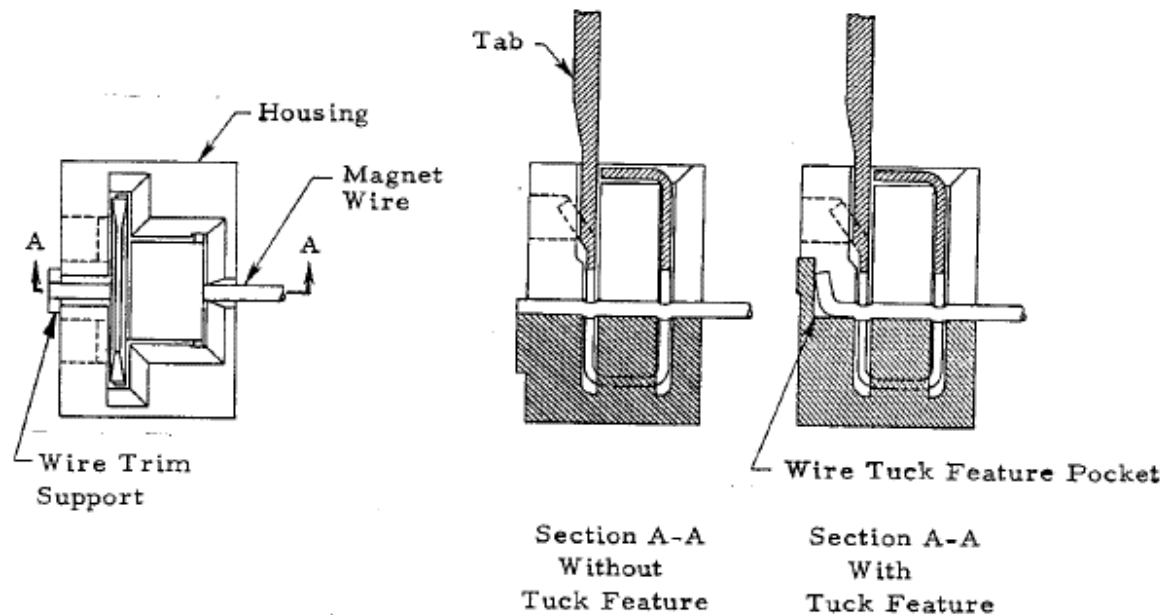


Figure 1

2. REFERENCE MATERIAL

2.1. Revision Summary

- Updated document to corporate requirements.
- Added Paragraph 3.2.A and 3.2.B.

2.2. Customer Assistance

Reference Product Base Part Number 63128 and Product Code 1039 are representative of MAG-MATE Standard .300" Box Height Terminal with Special Latch Type. Use of these numbers will identify the product line and help you to obtain product and tooling information when visiting www.te.com or calling the number at the bottom of page 1.

2.3. Drawings

Customer drawings for product part numbers are available from www.te.com. Information contained in the customer drawing takes priority.

2.4. Specifications

Product Specification [108-2012](#) provides product performance and test results.

3. REQUIREMENTS

3.1. Safety

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

3.2. Storage

A. Storage Temperature and Humidity

Products should be stored at room temperature and low ambient humidity. The temperature and humidity should be in the range as per DIN IEC68 (15-35°C, 25-75% relative humidity). Products should not be exposed to extreme temperatures, intense humidity or damaging mediums (acid or base atmospheres, aggressive agents, etc.)

B. Durability of Products

These products have a normally unlimited durability, provided they are stored in their original packing and at normal storage temperature and humidity. Exceptions are solderable products, tubes and cables. Solderable products will be solderable only within 6 months after delivery.

C. Ultraviolet Light

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

D. 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.

E. 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. Cavity Design

Optional housing cavity that will accept special latch type MAG-MATE Standard Series terminals manufactured by TE Connectivity shall be in accordance with the requirements specified in Paragraph 3.3.A, 3.3.B, and 3.3.C. Customers are requested to supply TE Connectivity engineering with drawings of their final design for review and approval and for insertion equipment capability.

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. See Figure 2.

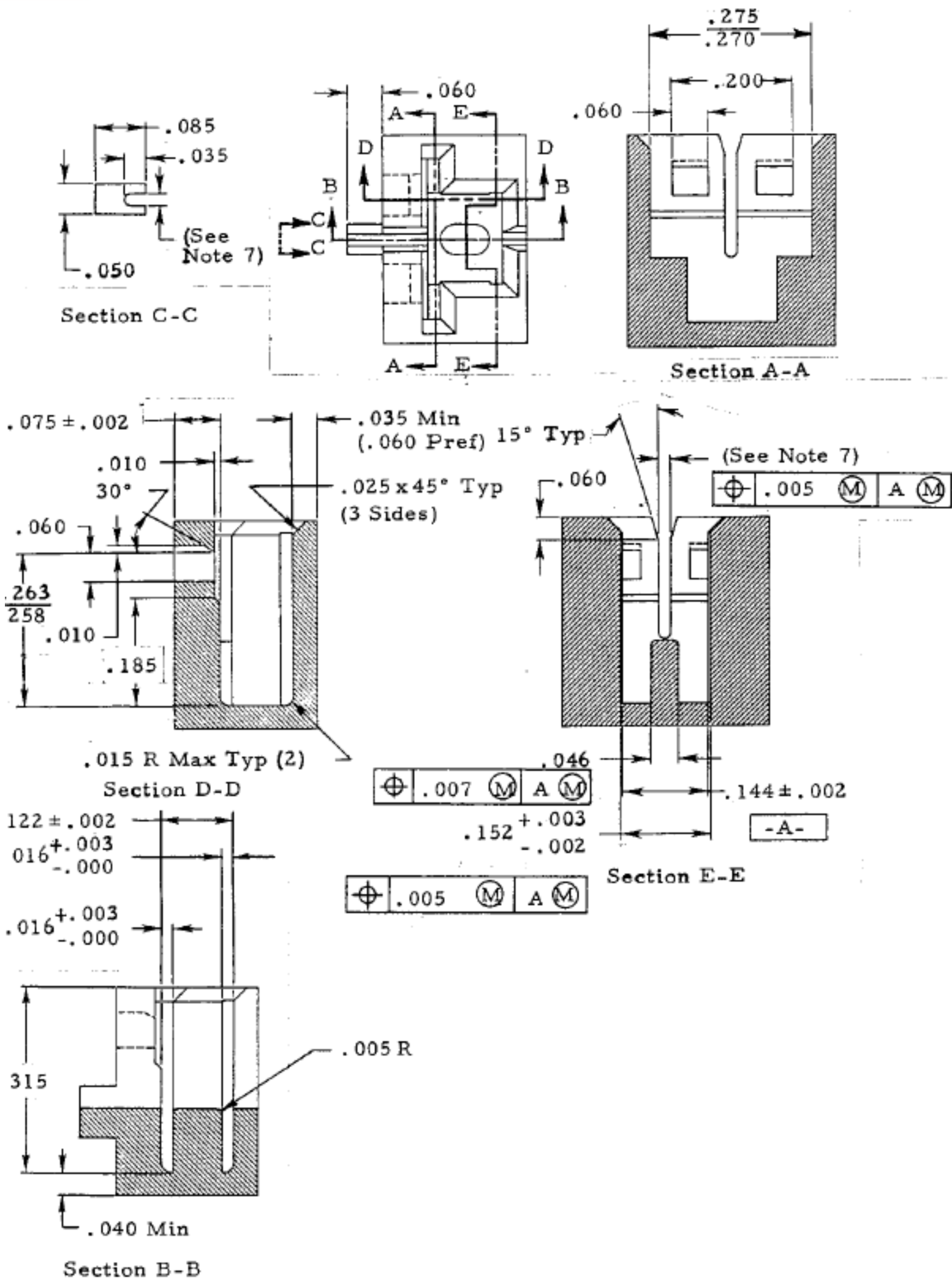


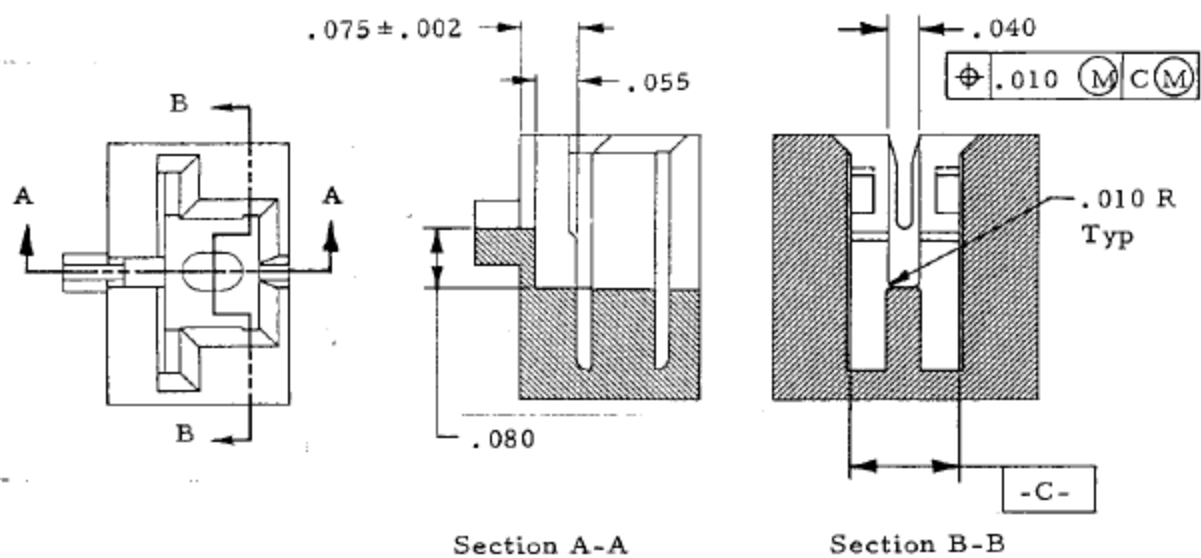
Figure 2

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NOTE

- (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 TE Connectivity Engineering approval 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 trims 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.

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. See Figure 3.


Figure 3
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NOTE

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

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. See Figure 4.

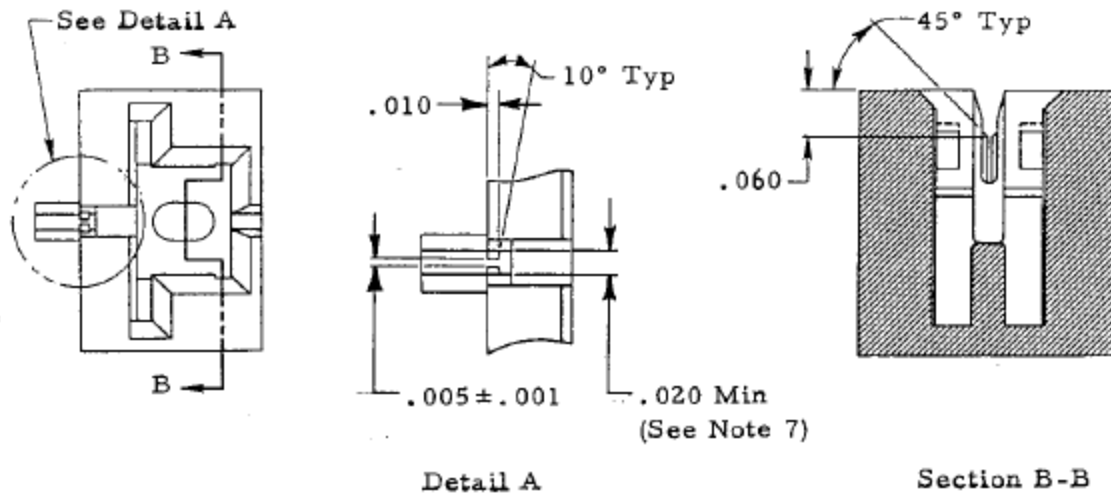


Figure 4

i **NOTE**
Same as Figure 3, except wire slot flash added.

D. Commoned Cavities

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

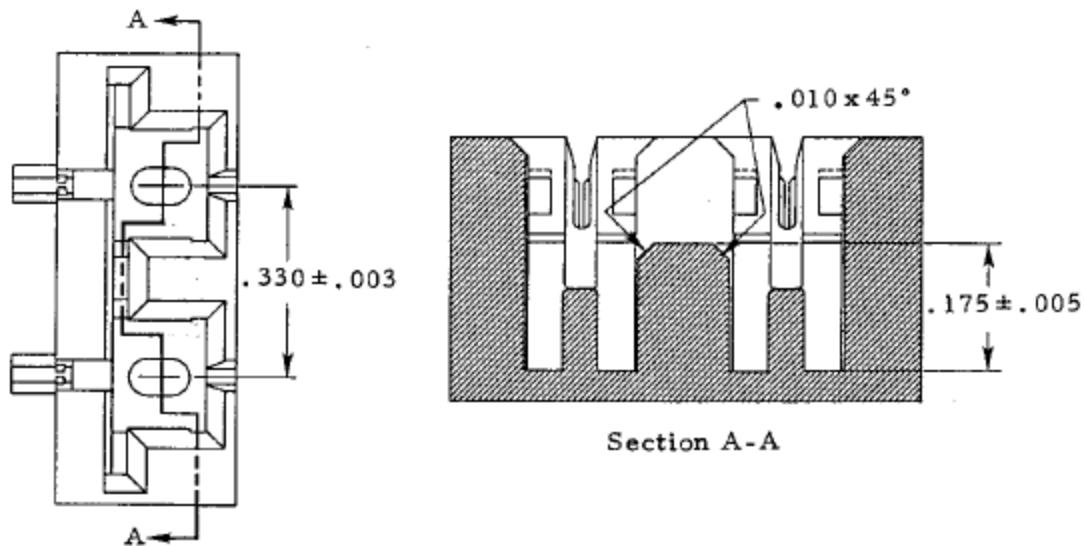


Figure 5

3.4. Wire Placement

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

3.5. Terminal Insertion Depth

Terminal shall be inserted in housing cavity within the limits specified in

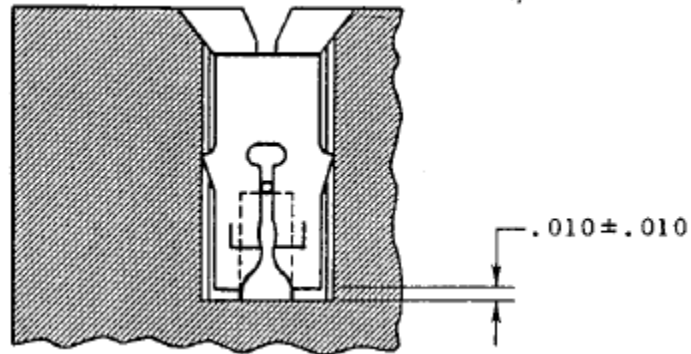


Figure 6

3.6. Wire Position

1. 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).

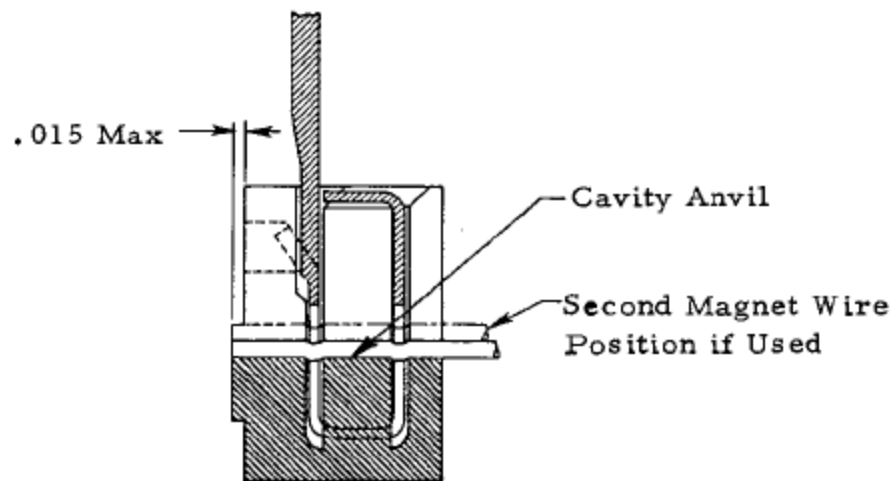


Figure 7

2. Magnet wire shall contact top of cavity anvil as indicated in Figure 8 when terminals are inserted in cavity design options 2 and 3 (see Figure 3 and Figure 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.

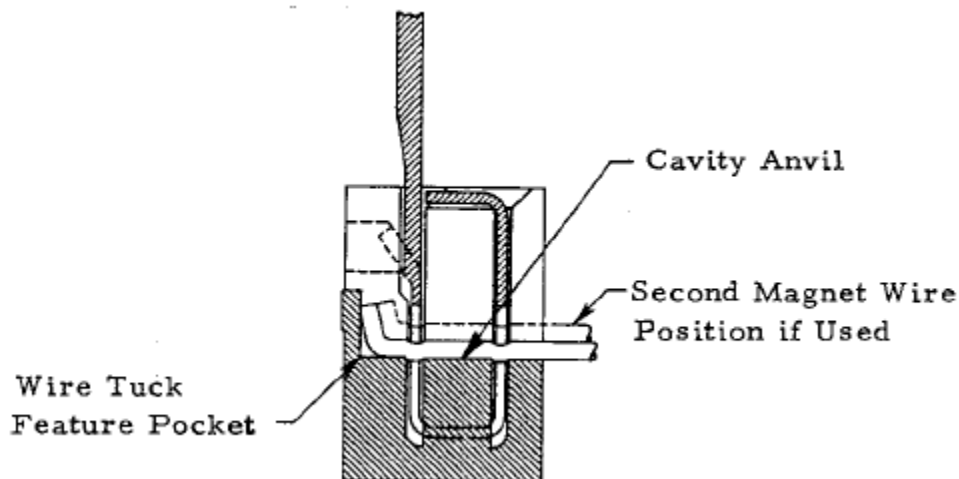


Figure 8

3.7. 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.

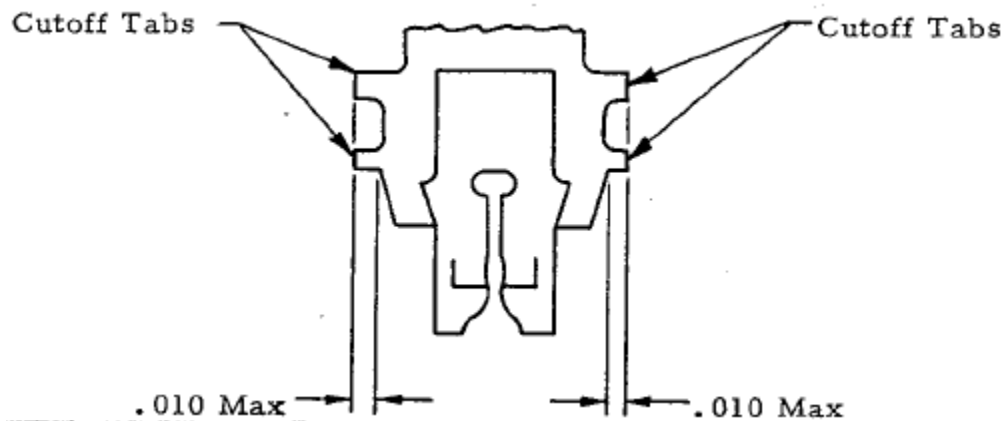


Figure 9

3.8. FASTON[®] Tab

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

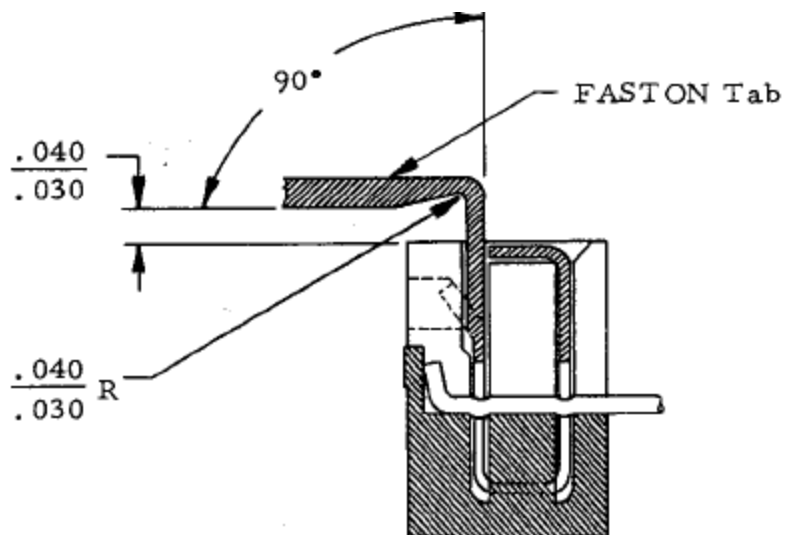


Figure 10

Part Numbers		Magnet Wire				Interface Type
Strip	Loose Piece	Aluminum		Copper		
		Quantity (a)	Size [AWG]	Quantity (a)	Size [AWG]	
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	.250 x .032 FASTON Tab
63255	—	—	—	1 or 2	33-31	
63256	—	1 or 2	24-22	1 or 2	27-23	

Figure 11


NOTE

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