

INCH-POUND

A-A-59427  
20 APRIL 1999

## COMMERCIAL ITEM DESCRIPTION

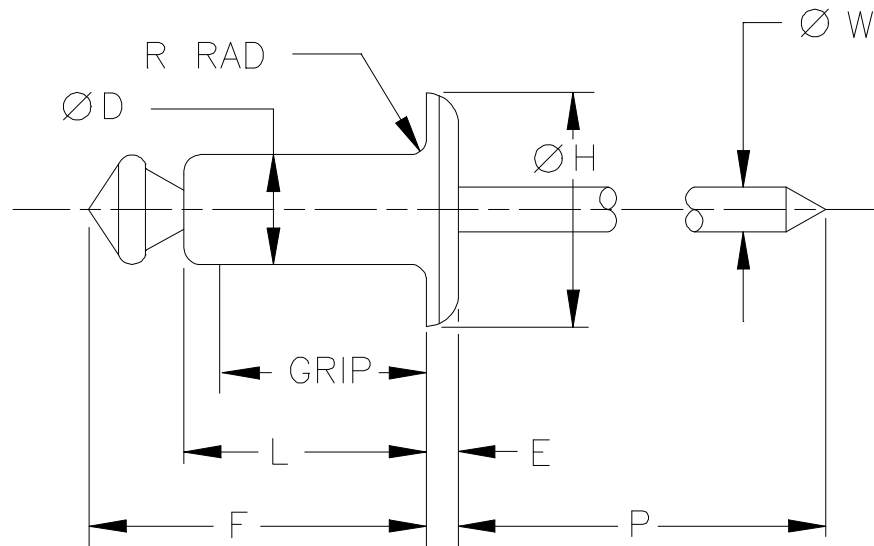
RIVETS, BLIND, NONSTRUCTURAL, RETAINED MANDREL,  
OPEN END, LARGE DOMED HEAD, ALUMINUM ALLOY, CARBON STEEL

This General Services Administration has authorized the use of this Commercial Item Description for all Federal agencies.

1. SCOPE: This Commercial Item Description (CID) covers the requirements for pull-stem expandable blind rivets. These rivets are intended for rapid and permanent non-structural fastening applications in which access is available to one side only.

2. SALIENT CHARACTERISTICS:

2.1 Blind rivets furnished under this CID shall conform to the materials, strengths, and dimensions as specified in Table I, II, and III and as shown in Figure 1 below.

FIGURE 1. RIVETS

BENEFICIAL COMMENTS, RECOMMENDATIONS, ADDITIONS, DELETIONS, CLARIFICATIONS, ETC., AND DATA WHICH MAY IMPROVE THIS DOCUMENT SHOULD BE SENT TO: DEFENSE INDUSTRIAL SUPPLY CENTER, ATTN: DISC-AEEB, 700 ROBBINS AVENUE, PHILADELPHIA, PA 19111-5096.

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TABLE I. MATERIAL COMBINATION SYMBOLS AND STRENGTHS

SYMBOL	MATERIAL COMBINATION	RIVET DIA	MINIMUM SHEAR LOAD LBS	MINIMUM TENSION LOAD LBS
A	Body: 5056 Al Alloy (UNS A95056)	.125	170	220
	Mandrel: 1006-1038 Steel (UNS G10060-G10380)	.188	380	500
B	Body: 5052 Al Alloy (UNS A95052)	.125	120	150
	Mandrel: 2024 Al Alloy (UNS A92024)	.188	260	320
D	Body: 1006-1010 Steel (UNS G10060-G10100)	.125	260	310
	Mandrel: 1030-1038 Steel (UNS G10300-G10380)	.188	540	680

TABLE II. BASIC DIMENSIONS

NOM DIA. SIZE CODE	NOM DIA	BASIC DIMENSIONS							RECOMMENDED HOLE SIZE
		ØD	ØH	E	R MAX	ØW NOM	F MAX	P MIN	
4	.125	.128	.390	.065	.020	.076	L MAX	1.00	.129-.133
		.122	.360	.034			+ .120		
6	.188	.191	.650	.092	.025	.114	L MAX	1.00	.192-.196
		.183	.600	.067			+ .160		

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TABLE III. DASH NUMBERS AND DIMENSIONS

DASH NUMBER			L	RECOMMENDED GRIP RANGE
A	B	D		
A402	B402	D402	.235-.275	.063-.125
A404	B404	D404	.360-.400	.188-.250
A406	B406	D406	.485-.535	.313-.375
A408	B408	D408	.610-.670	.376-.500 <u>1/</u>
A504	B504	D504	.385-.425	.188-.250
A506	B506	D506	.510-.550	.251-.375
A508	B508	D508	.635-.695	.376-.500
A606	B606	D606	.535-.575	.251-.375
A608	B608	D608	.660-.700	.376-.500
A610	B610	D610	.785-.850	.501-.625
A612	B612	D612	.910-.980	.626-.750

1/ When applicable, supplier may provide a dash 407, with a grip range of .376-.437.

2.2 Materials shall be of the type and grade specified in Table I.

2.3 Surface finish.

2.3.1 Carbon steel mandrels shall be zinc plated or phosphate coated.

2.3.2 Aluminum alloy rivets shall be furnished either chemically treated or anodically treated at the supplier's option

2.4 Workmanship. Rivets shall be of uniform quality and free from injurious seams and other injurious defects.

2.5 Single shear load. The shear test shall be performed in accordance with Test Method 20 of MIL-STD-1312, or equivalent and shall conform to the data specified in Table I.

2.6 Tension load. The tension test shall be performed in accordance with Test Method 8 of MIL-STD-1312, or equivalent and shall conform to the data specified in Table I.

2.7 Packaging requirements The requirements for packaging shall be in accordance with ASTM D3951.

### 3. QUALITY ASSURANCE PROVISIONS.

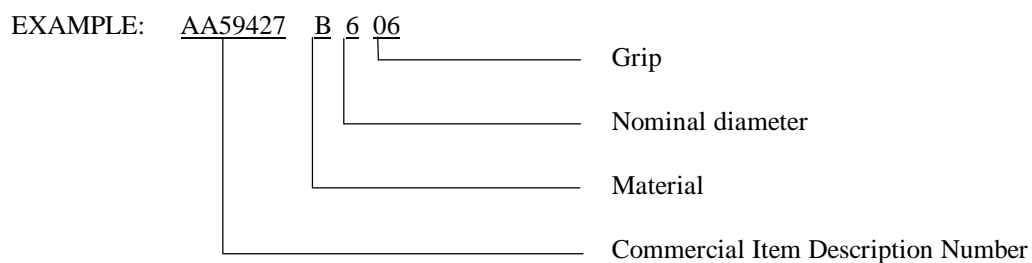
3.1 Product conformance. The products provided shall meet the salient characteristics of this commercial item description, conform to the producer's own drawings, specifications, standards, and the quality assurance practices, and be the same product offered for sale in the commercial market. The government reserves the right to require proof of such conformance.

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4. NOTES

4.1 All dimensions are in inches.

4.2 The part number shall consist of the basic Commercial Item Description Number followed by a dash number from Table III. The dash number consists of a material combination symbol from Table I, a nominal body diameter size code from Table II, and a grip range code from Table III.



AA59427B606 Indicates -

Rivet, blind, nonstructural, retained  
mandrel, open-end, domed head, 5052  
(UNS A95052) aluminum alloy body, 2024  
(UNS A92024) aluminum alloy mandrel;  
nominal body diameter size, .188;  
grip range, .251-.375.

Military Interests:

Custodians:

Army - AR  
Navy - AS  
Air Force - 99

Preparing Activity:  
DLA-IS

Review Activities:

Army - AV, MI  
Air Force - 11, 82  
National Security Agency-NS

(Project No. 5320-0956)

# STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

## INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3 and 8. In block 1, both the document number and revision letter should be given.
  2. The submitter of this form must complete blocks 4, 5, 6 and 7.
  3. The preparing activity must provide a reply within 30 days from receipt of the form.
- NOTE: This form may not be used to request copies of documents, or to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual.

### I RECOMMEND A CHANGE:

**1. DOCUMENT NUMBER**  
A-A-59427

**2. DOCUMENT DATE (YYMMDD)**  
990420

### 3. DOCUMENT TITLE:

**RIVETS, BLIND, NONSTRUCTURAL, RETAINED MANDREL, OPEN END, LARGE DOMED HEAD, ALUMINUM ALLOY, CARBON STEEL**

### 4. NATURE OF CHANGE

### 5. REASON FOR RECOMMENDATION

### 6. SUBMITTER

**a. NAME (Last, First, Middle Initial)**

**b. ORGANIZATION**

**c. ADDRESS (Include Zip Code)**

**d. TELEPHONE (Include Area Code)**  
(1) Commercial  
(2) AUTOVON (If applicable)

**7. DATE SUBMITTED (YYMMDD)**

### 8. PREPARING ACTIVITY DLA-IS

**a. NAME**

Emelia Altomari

**b. TELEPHONE (Include Area Code)**

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(2) (DSN) 442-6827

**c. ADDRESS (Include Zip Code)**

Defense Industrial Supply Center  
700 Robbins Avenue  
Bldg. 3 (Code DISC-AESD)  
Philadelphia, PA 19111-5096

**IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT:**

Defense Quality and Standardization Office  
5203 Leesburg Pike, Suite 1403  
Falls Church, VA 22041  
TELEPHONE (703) 756-2340 AUTOVON 289-2340