

# Cover Page

Standard: BACS12GU Rev: (R) 29-Mar-2016

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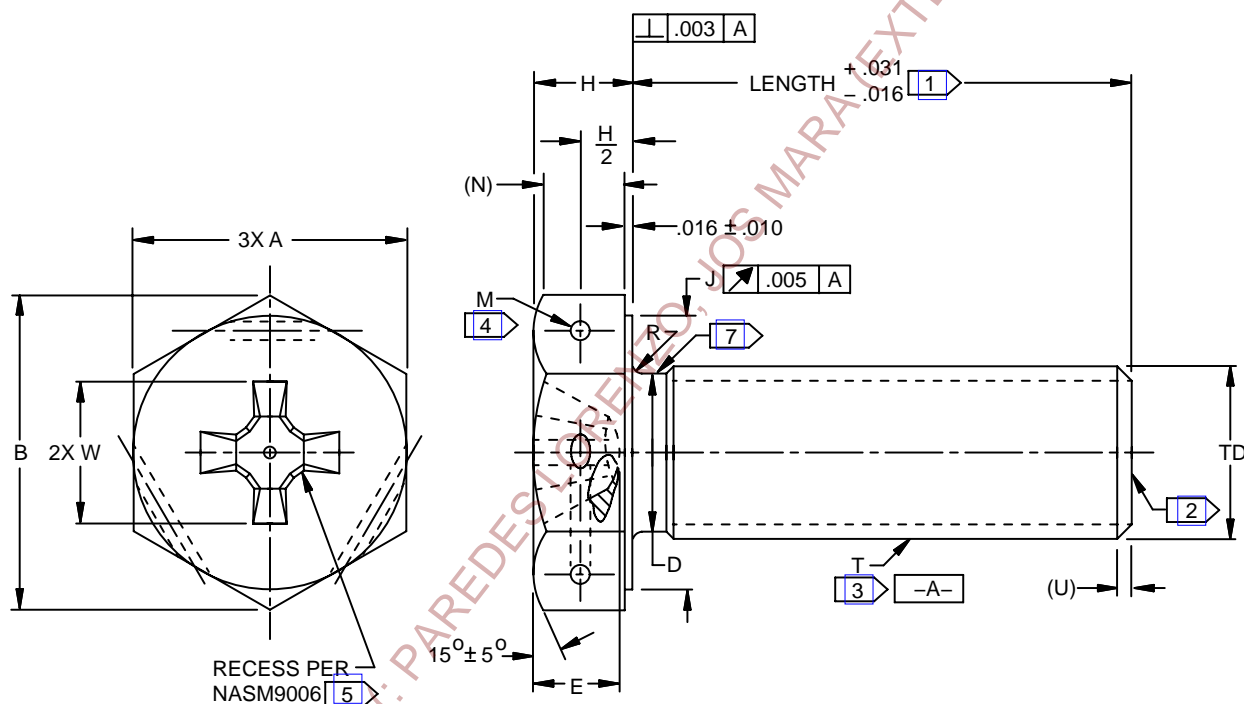
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Revision R  
29 March 2016  
Page 1 of 5

**FOR STATUS OF INACTIVATION SEE APPLICABILITY SECTION.**



DIMENSIONING AND TOLERANCING PER [ANSI Y14.5M-1982](#).  
DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED.  
DIMENSIONS APPLY AFTER FINISH UNLESS OTHERWISE SPECIFIED.

TABLE I

BOEING STANDARD NUMBER BACS12GU ⑧	T NOMINAL THREAD SIZE ③	A HEX	B MIN	Ø D	H	Ø J MIN ⑥	Ø M +.010 -.000	N REF	R
08	.1640-32 UNJC-3A	.251 .243	.277	.164 .141	.110 .096	.210	---	.056	.015 .005
3	.1900-32 UNJF-3A	.314 .305	.348	.190 .167	.120 .105	.272	.046	.062	.020 .010
4	.2500-28 UNJF-3A	.376 .367	.410	.250 .224	.140 .125	.335		.073	
5	.3125-24 UNJF-3A	.439 .429	.480	.312 .282	.171 .156	.398	.070	.102	
6	.3750-24 UNJF-3A	.502 .492	.552	.375 .345	.203 .188	.460		.131	.025 .015

BOEING STANDARD NUMBER BACS12GU ⑧	Ø TD ③		U REF	W	E PENETRATION	RECESS SIZE	ULTIMATE TENSILE MIN LBS
	MAX	MIN					
08	.1595	.1570	.039	.169 .156	.090 .067	2	2170
3	.1840	.1810		.184 .171	.105 .082		3180
4	.2440	.2410	.045	.247 .234	.118 .095	3	5820
5	.3060	.3020	.052	.317 .304	.148 .126	4	9260
6	.3680	.3640		.342 .329	.173 .151		14,000

## NOTES

- ① LENGTH DASH NUMBER IS IN .0625 INCREMENTS. MINIMUM COMPLETE THREAD LENGTH FOR SCREWS LONGER THAN DASH 32 (2.00) SHALL BE 1.75.
- ② POINT TO BE FLAT AND CHAMFERED PER [BPS-F-69](#).
- ③ THREADS PER [AS8879](#), EXCEPT MAJOR DIAMETER SHALL CONFORM TO "TD." BOEING AND BOEING SUBCONTRACTORS STOCKS WITH THREAD MAJOR DIAMETER PER [MIL-S-8879](#) MANUFACTURED BEFORE MAY 1, 2001, MAY BE USED UNTIL DEPLETED.
- ④ DRILL "M", 3 PLACES, WITHIN .010 OF CENTER OF HEX FLATS WHEN SPECIFIED BY PART NUMBER, SIZES 3 THROUGH 6 ONLY. HOLES TO BE FREE FROM BURRS AND SHARP EDGES.
- ⑤ ORIENTATION OF RECESS SLOTS TO HEX IS OPTIONAL.
- ⑥ "J" DIAMETER NOT TO EXCEED "A" DIMENSION.

BACS12GU

Revision R

Page 2 of 5

- 7> FOR FULL THREADED SCREWS, UNTHREADED LENGTH SHALL BE .032 + .032/ -.000.
- 8> SEE CODING UNDER USAGE AND APPLICATION INFORMATION SECTION FOR COMPLETE BOEING PART NUMBER.
- 9> HUCK LAKEWOOD (FORMERLY DEUTSCH FASTENER CORP) IS NO LONGER IN OPERATION. PARTS MANUFACTURED AT THAT FACILITY (CAGE CODE 97928) UNDER EITHER NAME PRIOR TO OCTOBER 1, 1999 MAY BE PROCURED AND USED UNTIL STOCKS ARE DEPLETED.
- 10> SPS TECHNOLOGIES (KEARNS) IS NO LONGER IN OPERATION. PARTS MANUFACTURED AT THAT FACILITY (CAGE CODE 0PTK6) PRIOR TO JUNE 30, 2002 MAY BE PROCURED AND USED UNTIL STOCKS ARE DEPLETED.
- 11> "K" CODED PARTS WITH [BMS10-85](#), TYPE I, CLASS B COATING MANUFACTURED PRIOR TO SEPTEMBER 1, 2004 MAY BE PROCURED AND USED UNTIL DEPLETED.
- 12> HUCK INTERNATIONAL INC (CARSON) IS NOW ALCOA FASTENING SYSTEMS - CARSON. THIS WAS A NAME CHANGE ONLY. PARTS MANUFACTURED UNDER THE HUCK NAME MAY BE PROCURED AND USED UNTIL STOCKS ARE DEPLETED.
- 13> ALCOA FASTENING SYSTEMS (TEMPLE) (FORMERLY FAIRCHILD - TEMPLE) IS NO LONGER IN OPERATION. PARTS MANUFACTURED AT THAT FACILITY (CAGE CODE 06950) UNDER EITHER NAME PRIOR TO SEPTEMBER 1, 2006 MAY BE PROCURED AND USED UNTIL STOCKS ARE DEPLETED.
- 14> FAIRCHILD FASTENERS (UNRUH) IS NOW ALCOA FASTENING SYSTEMS - UNRUH. THIS WAS A NAME CHANGE ONLY. PARTS MANUFACTURED UNDER THE FAIRCHILD NAME MAY BE PROCURED AND USED UNTIL STOCKS ARE DEPLETED.
- 15> SPS TECHNOLOGIES, LLC, DBA PB FASTENERS (CAGE CODE 27624) IS AN APPROVED SUPPLIER OF THIS PRODUCT. PARTS MANUFACTURED PRIOR TO DECEMBER 4, 2002 OR AFTER JUNE 1, 2010 MAY BE PROCURED AND USED BY BOEING AND ITS SUBCONTRACTORS.
- 16> REQUIRES A BOEING SUPPLIER QUALITY APPROVED FACILITY LISTED IN [D1-4426](#) FOR PHOSPHATE FLUORIDE TREATMENT IN ACCORDANCE WITH [BAC5861](#).

**PROCUREMENT SPECIFICATION**

[BPS-F-69](#) CLASS 160TT3 EXCEPT AS NOTED.

1. TENSILE VALUES PER [Table I](#).
2. SHEAR TEST NOT REQUIRED.
3. COLD WORKING OF HEAD TO SHANK FILLET NOT REQUIRED.
4. FATIGUE TEST NOT REQUIRED.

**MATERIAL**

6Al-4V TITANIUM ALLOY (UNS R56400) PER [AMS4928](#) OR [AMS4967](#).

**FINISH**

ALUMINUM PIGMENTED COATING PER [BMS10-85](#), TYPE I, CLASS A. 11

PHOSPHATE FLUORIDE TREATMENT PER [BAC5861](#). 16

**SURFACE TEXTURE**

PER [ASME B46.1](#). HEAD TO SHANK FILLET, THREAD ROOT, THREAD FLANKS AND SHANK, 32 MICROINCHES Ra; BEARING SURFACES OF HEAD, 63 MICROINCHES Ra; ALL OTHER SURFACES, 125 MICROINCHES Ra.

**MARKING**

HEAD TO BE MARKED WITH "GU" PLUS FIRST DASH NUMBER AND MANUFACTURER'S SYMBOL/INSIGNIA PER [MIL-HDBK-57](#) OR REGISTERED WITH THE U.S. PATENT AND TRADEMARK OFFICE (PTO) OF THE U.S. DEPARTMENT OF COMMERCE.

MARKING DEPRESSED .010 MAXIMUM, ARRANGEMENT OPTIONAL.

**PROCUREMENT** 9 10 13

3V FASTENERS INC (CAGE CODE 1ER65)

AIR INDUSTRIES CORPORATION (CAGE CODE 06725)

ALCOA FASTENING SYSTEMS - CARSON (CAGE CODE 17446) 12

ALCOA FASTENING SYSTEMS - UNRUH (CAGE CODE 1RC86) 14

MONOGRAM AEROSPACE FASTENERS (CAGE CODE 98524)

SPS TECHNOLOGIES, LLC, DBA PB FASTENERS, GARDENA CA (CAGE CODE 27624) 15

THE MANUFACTURERS LISTED IN [BPS-F-69SUP](#) AND THEIR AUTHORIZED DISTRIBUTORS ARE THE ONLY APPROVED SOURCES FOR THE ABOVE QUALIFIED PRODUCTS. SEE [BPS-F-69SUP](#) FOR PLANT ADDRESSES. NO CHANGES IN PRODUCT DESIGN, BASIC METHODS OF MANUFACTURE, PLANT SITE OR QUALITY LEVEL SHALL BE MADE WITHOUT PRIOR NOTIFICATION AND PRIOR APPROVAL IN WRITING FROM THE BOEING COMPANY. MANUFACTURERS OF COMPETITIVE PRODUCTS MAY APPLY TO A SUPPLIER MANAGEMENT DEPARTMENT OF THE BOEING COMPANY FOR QUALIFICATION. IF A MANUFACTURER IS SHOWN ON THIS STANDARD, BUT IS NOT LISTED IN THE SUPPLEMENT, CONTACT THE DIVISIONAL ENGINEERING STANDARDS FOCAL POINT OR ENGINEERING STANDARDS FOR VERIFICATION.

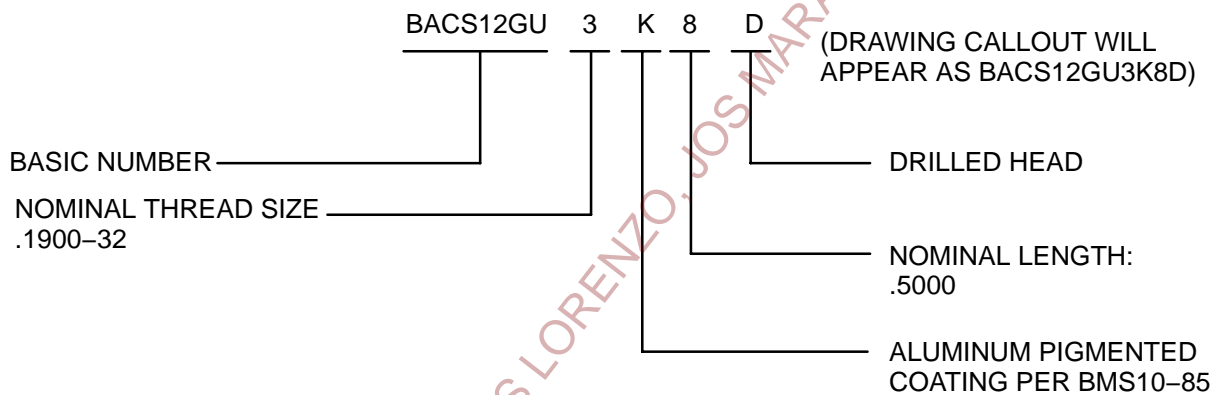
CODING

LETTER "K" FOLLOWING FIRST DASH NUMBER DESIGNATES ALUMINUM  
PIGMENTED COATING PER [BMS10-85](#), TYPE I.

SECOND DASH NUMBER DESIGNATES NOMINAL LENGTH IN .0625 INCREMENTS.

LETTER "D" FOLLOWING SECOND DASH NUMBER DESIGNATES DRILLED HEAD.

### EXAMPLE OF PART NUMBER



SEE [D-590-PREFACE](#) FOR INACTIVATION DEFINITIONS. SEE [00000-D-590-INFO](#) FOR LINKS TO SUPERSESSON CLASS DEFINITIONS AND FAQ.

## INACTIVATION APPLICABILITY

BACS12HN(5, 6)K( )D IS A CLASS II SUPERSESSION.