

FED. SUPPLY CLASS

5306

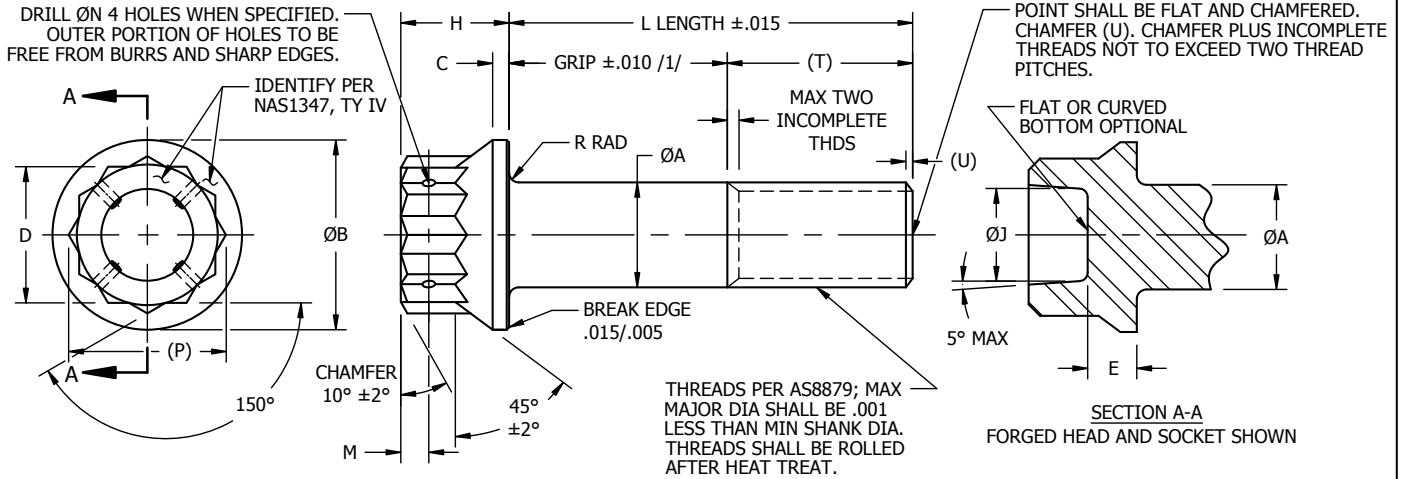


TABLE I – DIMENSIONS

| BASIC PART NUMBER | THREAD UNJF-3A | ØA /4/         | ØB ±.005 /4/ | C ±.010 | D /4/          | E MIN | H ±.010 | ØJ +.010 - .030 /4/ | M ±.011 | N ±.005 | (P)   | R            | (T)   | (U) | INSPECTION DATA /4/ |      |       |
|-------------------|----------------|----------------|--------------|---------|----------------|-------|---------|---------------------|---------|---------|-------|--------------|-------|-----|---------------------|------|-------|
|                   |                |                |              |         |                |       |         |                     |         |         |       |              |       |     | X                   | Y    | Z     |
| NAS1271           | .2500-28       | .2495<br>.2485 | .433         | .069    | .315<br>.306   | .135  | .300    | .180                | .062    | .037    | .360  | .041<br>.031 | .485  | .05 | .005                | .004 | .0045 |
| NAS1272           | .3125-24       | .3120<br>.3110 | .526         | .082    | .377<br>.368   | .162  | .348    | .215                | .070    | .055    | .431  | .041<br>.031 | .572  | .05 | .006                | .005 | .0045 |
| NAS1273           | .3750-24       | .3745<br>.3735 | .644         | .091    | .439<br>.430   | .197  | .388    | .260                | .070    | .055    | .502  | .057<br>.047 | .619  | .06 | .008                | .006 | .0045 |
| NAS1274           | .4375-20       | .4370<br>.4360 | .745         | .099    | .503<br>.494   | .228  | .435    | .320                | .070    | .055    | .576  | .057<br>.047 | .694  | .06 | .009                | .008 | .0060 |
| NAS1275           | .5000-20       | .4995<br>.4985 | .823         | .123    | .565<br>.556   | .254  | .504    | .380                | .094    | .055    | .648  | .057<br>.047 | .741  | .08 | .010                | .008 | .0060 |
| NAS1276           | .5625-18       | .5615<br>.5605 | .933         | .133    | .628<br>.619   | .287  | .557    | .440                | .094    | .055    | .720  | .057<br>.047 | .826  | .08 | .011                | .009 | .0060 |
| NAS1277           | .6250-18       | .6240<br>.6230 | 1.045        | .150    | .691<br>.682   | .327  | .618    | .500                | .094    | .055    | .794  | .073<br>.063 | .873  | .09 | .012                | .010 | .0060 |
| NAS1278           | .7500-16       | .7490<br>.7480 | 1.225        | .178    | .817<br>.808   | .380  | .711    | .570                | .094    | .055    | .939  | .073<br>.063 | .993  | .09 | .015                | .012 | .0060 |
| NAS1279           | .8750-14       | .8740<br>.8730 | 1.433        | .198    | .943<br>.934   | .438  | .808    | .650                | .125    | .055    | 1.083 | .073<br>.063 | 1.194 | .10 | .018                | .014 | .0090 |
| NAS1280           | 1.0000-12      | .9990<br>.9980 | 1.620        | .222    | 1.066<br>1.056 | .493  | .923    | .740                | .125    | .055    | 1.228 | .073<br>.063 | 1.382 | .10 | .020                | .016 | .0090 |

THIRD ANGLE PROJECTION

PROCUREMENT SPECIFICATION  
NAS4004  
NAS621 /7/

CUSTODIAN  
NATIONAL AEROSPACE STANDARDS COMMITTEE

TITLE  
BOLT, TWELVE POINT, EXTERNAL WRENCHING,  
TITANIUM ALLOY

REVISION  
9

CLASSIFICATION  
PART STANDARD

NAS1271 THRU NAS1280  
SHEET 1 OF 3

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC.  
1000 WILSON BLVD.  
ARLINGTON, VA 22209

THIS DRAWING SUPERSEDES ALL ANTECEDENT STANDARD DRAWINGS FOR THE SAME PRODUCT AND SHALL BECOME EFFECTIVE NO LATER THAN SIX MONTHS FROM THE LAST REVISION DATE.

FORM 12-01

REVISION DATE: NOVEMBER 21, 2014  
ISSUE DATE: MARCH 1960

MATERIAL: TITANIUM ALLOY – 6AL-4V (UNS R56400) PER AMS4928 OR AMS4967

HEAT TREATMENT:

DEVELOP BASIC MATERIAL PROPERTIES AS FOLLOWS, WITH CONTROLS PER AMS-H-81200 OR AMS2801:  
160 KSI Ft<sub>u</sub> MIN

FINISH: NO PROTECTIVE FINISH REQUIRED.

CODE: BASIC PART NUMBER DESIGNATES BOLT DIAMETER PER TABLE I  
GRIP DASH NUMBER DESIGNATES GRIP AND LENGTH PER TABLE II  
PREFIX DASH NUMBER WITH "H" TO INDICATE DRILLED HEAD BOLT

EXAMPLE OF PART NUMBER:

NAS1271-8 = .2500 DIA BOLT, .500 GRIP, UNDRILLED HEAD  
NAS1271H8 = .2500 DIA BOLT, .500 GRIP, DRILLED HEAD

NOTES:

- /1/ GRIP LENGTH - FROM UNDER SIDE OF HEAD TO END OF FULL CYLINDRICAL PORTION OF SHANK.
- (2) ANGLE - UNDER SIDE OF HEAD TO SHANK: 90° +30', -00'
- (3) SURFACE ROUGHNESS: HEAD TO SHANK FILLET, THREAD ROOT, THREAD SIDES, THREAD RUN-OUT: 16 MICROINCHES Ra; SHANK AND BEARING SURFACE OF HEAD: 63 MICROINCHES Ra; ALL OTHER SURFACES: 125 MICROINCHES Ra PER ASME B46.1.
- /4/ CONCENTRICITY – "ØA", "ØB", AND "ØJ" DIMENSIONS WITHIN "X" VALUES FIM.  
"D" AND "ØJ" DIMENSIONS WITHIN "Y" VALUES FIM.  
"ØA" AND THREAD PITCH DIMENSIONS WITHIN "Z" FIM.
- /5/ DASH NUMBER INDICATES PREFERRED LENGTHS IN .125 INCREMENTS. INTERMEDIATE OR LONGER LENGTHS IN .0625 INCREMENTS MAY BE OBTAINED BY SPECIFYING WHOLE GRIP DASH NUMBERS.
- (6) REMOVE ALL BURRS AND SHARP EDGES.
- /7/ PARTS MANUFACTURED TO NAS621 PROCUREMENT SPECIFICATION PRIOR TO JANUARY 1, 2001 MAY BE SUPPLIED TO DEPLETION.
- (8) THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
- (9) UNLESS OTHERWISE SPECIFIED, PART INVENTORY MANUFACTURED TO PREVIOUS REVISIONS OF THE APPLICABLE DRAWING OR SPECIFICATION MAY BE PROCURED AND USED UNTIL STOCK IS DEPLETED.
- ⑨ (10) UNLESS OTHERWISE SPECIFIED HEREIN, REFERENCED DOCUMENTS SHALL BE THE ISSUE IN EFFECT ON DATE OF MANUFACTURE. HOWEVER, EXISTING MATERIAL INVENTORY CERTIFIED TO A PREVIOUS REVISION OF THE APPLICABLE MATERIAL SPECIFICATION(S) IS ACCEPTABLE FOR USE UNTIL DEPLETION.
- (11) DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1982.

REVISION

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NAS1271-1280  
SHEET 2



Documents  
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