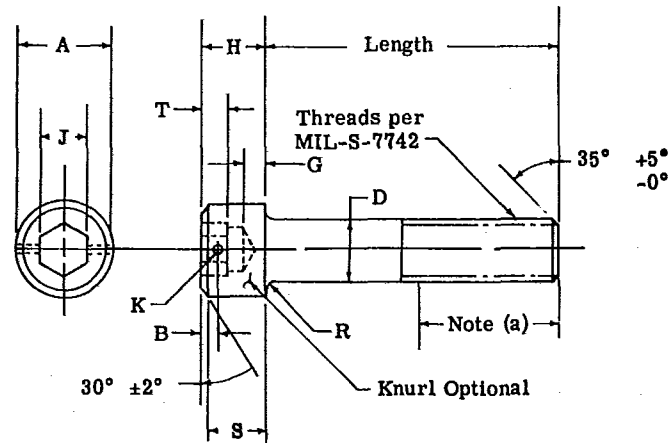


## NATIONAL AIRCRAFT STANDARDS COMMITTEE

AIRCRAFT INDUSTRIES ASSOCIATION OF AMERICA, INC., 610 SHOREHAM BUILDING, WASHINGTON 5, D. C.



| D SHANK DIA. |       |       | A DIA. |      | H HEIGHT |      | S HEIGHT |      | J WIDTH |      | T DEPTH | G    |
|--------------|-------|-------|--------|------|----------|------|----------|------|---------|------|---------|------|
| Nominal      | Max.  | Min.  | Max.   | Min. | Max.     | Min. | Max.     | Min. | Max.    | Min. | Min.    | Min. |
| 4-48NF3A     | .1120 | .1096 | .183   | .178 | .112     | .109 | .105     | .101 | .079    | .078 | .061    | .029 |
| 6-40NF3A     | .1380 | .1353 | .226   | .221 | .138     | .134 | .129     | .125 | .095    | .093 | .071    | .038 |
| 8-36NF3A     | .1640 | .1613 | .270   | .265 | .164     | .160 | .152     | .148 | .127    | .125 | .088    | .047 |
| 10-24NC3A    | .1900 | .1867 | .313   | .306 | .190     | .185 | .176     | .172 | .158    | .156 | .109    | .053 |
| 1/4-20UNC3A  | .2500 | .2464 | .375   | .367 | .250     | .244 | .232     | .226 | .190    | .188 | .126    | .080 |
| 5/16-18UNC3A | .3125 | .3084 | .438   | .429 | .313     | .306 | .289     | .283 | .221    | .218 | .163    | .100 |
| 3/8-16UNC3A  | .3750 | .3705 | .563   | .552 | .375     | .368 | .347     | .341 | .316    | .313 | .186    | .120 |
| 7/16-16UNC3A | .4375 | .4326 | .625   | .615 | .438     | .430 | .405     | .397 | .316    | .313 | .213    | .140 |
| 1/2-13UNC3A  | .5000 | .4948 | .750   | .739 | .500     | .492 | .462     | .454 | .378    | .375 | .245    | .160 |
| 5/8-11UNC3A  | .6250 | .6191 | .875   | .863 | .625     | .616 | .577     | .569 | .502    | .500 | .307    | .200 |

| SCREW SIZE | FILLET RADIUS |      | SAFETY WIREHOLE WHEN SPECIFIED |              |
|------------|---------------|------|--------------------------------|--------------|
|            | Min.          | Max. | K $\pm .005$<br>- .003         | B $\pm .010$ |
| 4          | .005          | .010 | .037                           | .034         |
| 6          | .005          | .010 | .037                           | .044         |
| 8          | .008          | .015 | .037                           | .049         |
| 10         | .008          | .015 | .037                           | .056         |
| 1/4        | .010          | .015 | .063                           | .075         |
| 5/16       | .010          | .020 | .063                           | .094         |
| 3/8        | .010          | .020 | .063                           | .113         |
| 7/16       | .015          | .020 | .063                           | .131         |
| 1/2        | .020          | .030 | .063                           | .150         |
| 5/8        | .025          | .035 | .063                           | .188         |

INACTIVE FOR DESIGN AFTER 30 APRIL 1962  
SEE DRAWING NAS1351 AND NAS1352

| INDEX OF CURRENT SHEETS |     |
|-------------------------|-----|
| SHEET                   | REV |
| 1                       | 2   |
| 2                       | 2   |

TITLE  
**SCREWS-SOCKET HEAD CAP**  
(NON-PREFERRED THREAD)

CLASSIFICATION  
STANDARD PART

**NAS 609**  
Documents  
SHEET 1 OF 2

# NATIONAL AIRCRAFT STANDARDS COMMITTEE

AIRCRAFT INDUSTRIES ASSOCIATION OF AMERICA, INC., 610 SHOREHAM BUILDING, WASHINGTON 5, D. C.

DASH NO. (UPPER FIGURE) AND COMPLETE THREAD LENGTH (LOWER FIGURE)

| SCREW<br>LENGTH         | THREAD SIZE |        |        |       |        |         |        |         |        |        |
|-------------------------|-------------|--------|--------|-------|--------|---------|--------|---------|--------|--------|
|                         | 4-48        | 6-40   | 8-36   | 10-24 | 1/4-20 | 5/16-18 | 3/8-16 | 7/16-14 | 1/2-13 | 5/8-11 |
| + .020<br>1/4 - .010    | 448-4       | 640-4  |        |       |        |         |        |         |        |        |
| + .020<br>3/8 - .010    | 448-6       | 640-6  | 836-6  | 3-6   | 4-6    | 5-6     | 6-6    |         |        |        |
| + .020<br>1/2 - .010    | 448-8       | 640-8  | 836-8  | 3-8   | 4-8    | 5-8     | 6-8    | 7-8     | 8-8    |        |
| + .020<br>5/8 - .010    | 448-10      | 640-10 | 836-10 | 3-10  | 4-10   | 5-10    | 6-10   | 7-10    | 8-10   |        |
| + .020<br>3/4 - .010    | 448-12      | 640-12 | 836-12 | 3-12  | 4-12   | 5-12    | 6-12   | 7-12    | 8-12   | 10-12  |
| + .020<br>7/8 - .010    | 448-14      | 640-14 | 836-14 | 3-14  | 4-14   | 5-14    | 6-14   | 7-14    | 8-14   | 10-14  |
| + .020<br>1 - .010      | 448-16      | 640-16 | 836-16 | 3-16  | 4-16   | 5-16    | 6-16   | 7-16    | 8-16   | 10-16  |
| + .025<br>1-1/4 - .013  | 448-20      | 640-20 | 836-20 | 3-20  | 4-20   | 5-20    | 6-20   | 7-20    | 8-20   | 10-20  |
| + .030<br>1-1/2 - .015  | 448-24      | 640-24 | 836-24 | 3-24  | 4-24   | 5-24    | 6-24   | 7-24    | 8-24   | 10-24  |
| + .035<br>1-3/4 - .018  | 448-28      | 640-28 | 836-28 | 3-28  | 4-28   | 5-28    | 6-28   | 7-28    | 8-28   | 10-28  |
| + .040<br>2 - .020      | 448-32      | 640-32 | 836-32 | 3-32  | 4-32   | 5-32    | 6-32   | 7-32    | 8-32   | 10-32  |
|                         | .75         | .75    | .75    | 1.00  | 1.00   | 1.13    | 1.25   | 1.38    | 1.50   | 1.75   |
| 2-1/4 <sup>+</sup> .031 |             | 640-36 | 836-36 | 3-36  | 4-36   | 5-36    | 6-36   | 7-36    | 8-36   | 10-36  |
|                         |             | .85    | .85    | 1.13  | 1.13   | 1.13    | 1.25   | 1.38    | 1.50   | 1.75   |
| 2-1/2 <sup>+</sup> .031 |             | 640-40 | 836-40 | 3-40  | 4-40   | 5-40    | 6-40   | 7-40    | 8-40   | 10-40  |
|                         |             | .94    | .85    | 1.25  | 1.25   | 1.25    | 1.25   | 1.38    | 1.50   | 1.75   |
| 3 ± .031                |             |        | 836-48 | 3-48  | 4-48   | 5-48    | 6-48   | 7-48    | 8-48   | 10-48  |
|                         |             |        | 1.13   | 1.50  | 1.50   | 1.50    | 1.50   | 1.50    | 1.50   | 1.75   |

Note: (a) Lengths above top heavy line are threaded as close to head as practical.

Lengths between heavy lines are threaded:

Coarse threads = 2 Diameter + 1/2 inch

Fine threads = 1-1/2 Diameter + 1/2 inch

Lengths below lower heavy line are threaded:

Coarse threads = 1/2 length

Fine threads = 3/8 length

**MATERIAL:** Steel - high grade alloy heat treated to Rockwell of C36-43 Corrosion Resistant Steel - AISI 302, 303, or 304 Tensile Strength 75,000 PSI

**FINISH:** Steel: Plated - Cadmium plate to Specification QQ-P-416 Type I Class 3  
Unplated - Steel, Black Oxide Finish  
Corrosion Resistant Steel - Passivate

## EXAMPLE OF PART NUMBER:

NAS609-4-8p = Socket head Cap Screw 1/4 Dia. 1/2 long Cadmium Plated Steel

First Dash No. = Diameter in 1/16 inch increments (See Dash No. Table)

Second Dash No. = Length in 1/16 increments.

Letter before First Dash No. = Material

C = Cres Steel, - = Steel

Letter following Second Dash No. = Finish

P = Cad. Plate, Omit for Black Oxide

Letter between Dash No. = H for Drilled Head, - Undrilled

**INACTIVE FOR DESIGN AFTER 30 APRIL 1962**  
**SEE DRAWING NAS1351 AND NAS1352**

Procurement Specification

② FF-S-86 Type I except as noted herein

**TITLE**  
**SCREWS-SOCKET HEAD CAP**  
**(NON-PREFERRED THREAD)**

**CLASSIFICATION**  
**STANDARD PART**

**NAS 609**  
**Documents**

THIS DRAWING SUPERSEDES ALL ANTECEDENT STANDARD DRAWINGS FOR THE SAME PRODUCT, AND SHALL BECOME EFFECTIVE

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31 May 1957

REVISION 1

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