

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

REV.
B

AS4370

FEDERAL SUPPLY CLASS

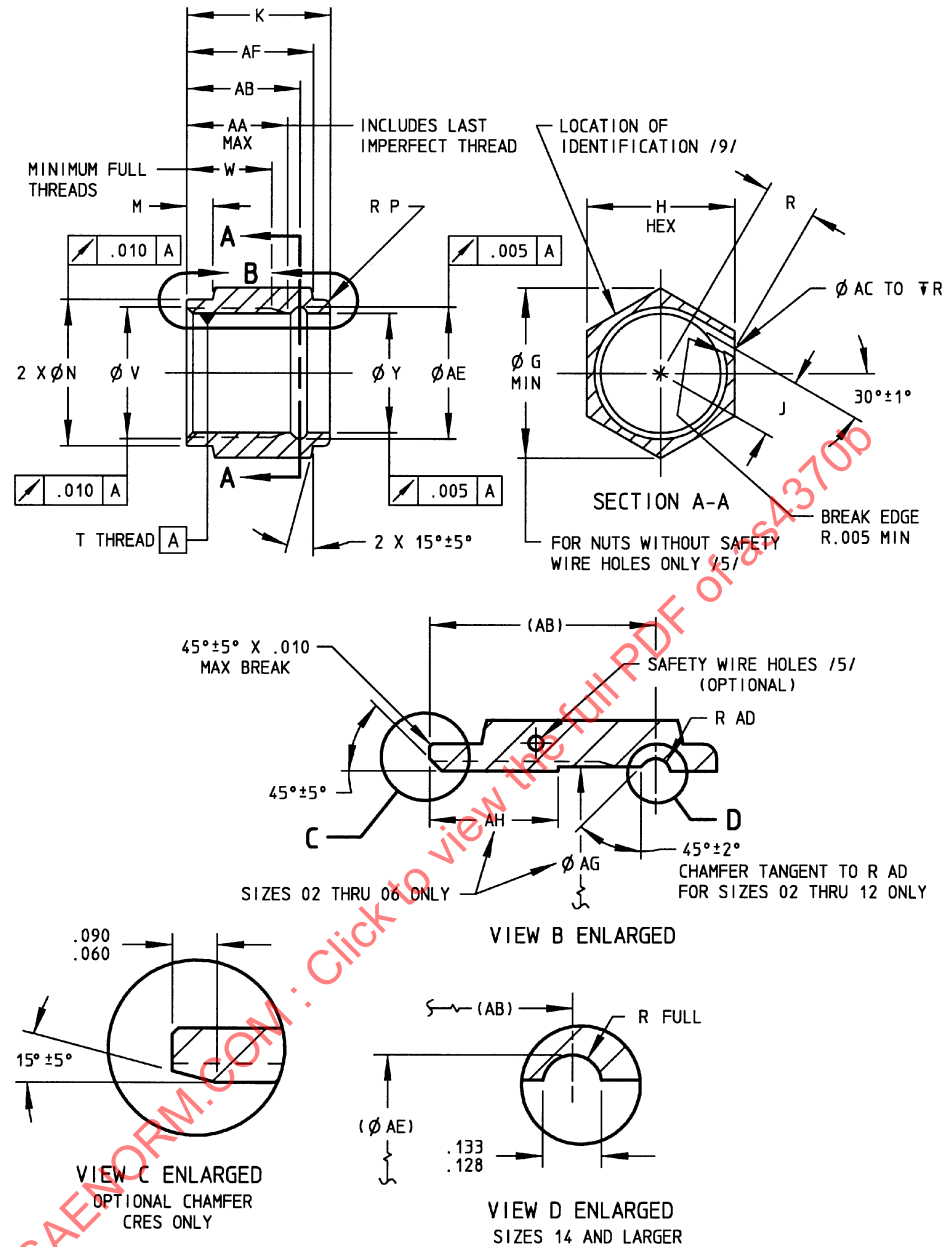
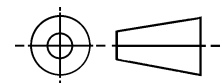


FIGURE 1 - NUT, FITTING, RETAINED

THIRD ANGLE PROJECTION



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /6/ AS4444

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

NUT, FITTING, RETAINED

AS4370
SHEET 1 OF 5

**REV.
B**

Copyright 2004 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 877-606-7323 (inside USA and Canada)

Fax: 724-776-0790

Tel: 724-776-4970 (outside USA)

Email: custsv@sa.org

SAE WEB ADDRESS: <http://www.sae.org>

ISSUED 1997-04 REVISED 1999-01 REAFFIRMED 2004-07

REV. B	TABLE 1A - DIMENSIONS									
	BASIC NO. AS4370 /17/ SIZE CODE	NOM TUBE SIZE REF	T THREAD PER AS8879	G MIN /5/	H	J	K ±.010	M ±.015	N	
AS4370	02	.125	.3125-24UNJF-3B	.495	.428- .440	.136	.591	.109	.432	
	03	.188	.3750-24UNJF-3B	.568	.490- .502	.167	.594	.141	.490	
	04	.250	.4375-20UNJF-3B	.638	.552- .565	.194	.640	.125	.557	
	05	.312	.5000-20UNJF-3B	.709	.615- .628	.224	.687	.125	.620	
	06	.375	.5625-18UNJF-3B	.780	.678- .691	.252	.718	.156	.682	
	08	.500	.7500-16UNJF-3B	.993	.865- .878	.341	.843	.156	.870	
	10	.625	.8750-14UNJF-3B	1.120	.990-1.003	.396	.968	.172	.995	
	12	.750	1.0625-12UNJ-3B	1.400	1.238-1.253	.485	1.015	.125	1.245	
	14	.875	1.1875-12UNJ-3B	1.540	1.363-1.380	.549	1.134	.172	1.360	
	16	1.000	1.3125-12UNJ-3B	1.650	1.488-1.505	.610	1.125	.219	1.495	
	20	1.250	1.6250-12UNJ-3B	1.993	1.800-1.817	.766	1.218	.312	1.807	
	24	1.500	1.8750-12UNJ-3B	2.338	2.109-2.135	.893	1.406	.359	2.120	
	32	2.000	2.5000-12UNJ-3B	3.025	2.734-2.760	1.200	1.734	.438	2.745	
TABLE 1B - DIMENSIONS										
BASIC NO. AS4370 /17/ SIZE CODE	P ±.015	R ±.015	V ±.010	W	Y	AA MAX	AB ±.004	AC		
02	-	.172	.331	.350	.2719- .2799	.401	.462	.077		
03	.031	.190	.394	.378	.3344- .3418	.414	.475	.077		
04	.031	.210	.456	.403	.3888- .3970	.439	.500	.077		
05	.031	.230	.519	.401	.4513- .4591	.481	.550	.086		
06	.047	.250	.581	.413	.5084- .5166	.505	.573	.086		
08	.047	.306	.769	.484	.6892- .6977	.581	.660	.101		
10	.047	.347	.894	.542	.8055- .8152	.693	.762	.101		
12	.062	.439	1.082	.537	.9814- .9914	.691	.780	.131		
14	.062	.475	1.208	.563	1.1064-1.1164	.768	.866	.131		
16	.077	.512	1.332	.563	1.2314-1.2414	.778	.875	.131		
20	.093	.602	1.645	.563	1.5439-1.5539	.862	.959	.131		
24	.093	.710	1.895	.661	1.7939-1.8039	1.008	1.105	.131		
32	.110	.893	2.520	.844	2.4189-2.4289	1.242	1.340	.131		
SAE Aerospace An SAE International Group										
AEROSPACE STANDARD										
NUT, FITTING, RETAINED										
AS4370 SHEET 2 OF 5										
REV. B										

REV.
B

AS4370

TABLE 1C - DIMENSIONS AND WEIGHTS

BASIC NO. AS4370 /17/ SIZE CODE	AD ±.001	AE	AF ±.010	AG	AH ±.010	LB/100 NOM REF ALUM	LB/100 NOM REF STEEL/CRES	LB/100 NOM REF TI
02	.038	.341-.347	-	.298	.310	.456	1.29	.732
03	.038	.401-.411	.540	.360	.310	.636	1.80	1.02
04	.038	.456-.466	.551	.415	.345	.833	2.35	1.34
05	.043	.526-.536	.609	.477	.345	1.03	2.90	1.65
06	.043	.583-.593	.656	.534	.345	1.24	3.50	1.99
08	.050	.776-.786	.754	-	-	2.02	5.70	3.24
10	.050	.891-.901	.858	-	-	2.85	8.03	4.57
12	.065	1.097-1.107	.875	-	-	5.12	14.4	8.21
14	-	1.227-1.237	.923	-	-	6.30	17.8	10.1
16	-	1.347-1.357	.983	-	-	7.09	20.0	11.4
20	-	1.659-1.669	1.077	-	-	9.63	27.2	15.4
24	-	1.912-1.922	1.234	-	-	16.3	45.9	26.1
32	-	2.537-2.547	1.515	-	-	27.9	78.9	44.8

NOTES:

/1/ MATERIAL:

- a. CODE LETTER NONE - TYPE 4130, CONDITION F, CARBON STEEL ALLOY PER MIL-S-6758 OR AMS 6370.
- b. CODE LETTER A - TYPE A286, CONDITION STA, CORROSION RESISTANT STEEL PER AMS 5731, AMS 5732, AMS 5734 OR AMS 5737.
- c. CODE LETTER D - TYPE 2024-T6 OR T851, ALUMINUM ALLOY PER AMS-QQ-A-225/6, AMS 4112.
- d. CODE LETTER J - TYPE 304, CONDITION A, CORROSION RESISTANT STEEL PER QQ-S-763 OR AMS 5639.
- e. CODE LETTER K - TYPE 316, CONDITION A, CORROSION RESISTANT STEEL PER QQ-S-763 OR AMS 5648.
- f. CODE LETTER R - TYPE 321, CONDITION A, CORROSION RESISTANT STEEL PER QQ-S-763 OR AMS 5645.
- g. CODE LETTER T - TYPE 6AL-4V, CONDITION A, TITANIUM ALLOY PER MIL-T-9047 OR AMS 4928.
- h. CODE LETTER W - TYPE 7075-T73 OR T7351, ALUMINUM ALLOY PER AMS-QQ-A-225/9 OR AMS 4124.

2. HEAT TREATMENT:

- a. CODE LETTER A - IF THE RAW MATERIAL IS PROCURED IN THE SOLUTION TREATED CONDITION, AGE TO 28.8-39.2 HRC, 130 KSI UTS MIN, PER MIL-H-6875 OR AMS 2759/3.
- b. CODE LETTER D AND W - IF THE RAW MATERIAL IS PROCURED IN THE SOLUTION TREATED CONDITION, AGE TO THE FINAL CONDITION PER AMS-H-6088 OR AMS 2770.

/3/ FINISH:

- a. MATERIAL CODE LETTER NONE - CADMIUM PLATE PER QQ-P-416 TYPE II, CLASS 2, DYE BLACK.
- b. MATERIAL CODE LETTER A - PASSIVATE PER AMS-QQ-P-35, TYPE II OR VIII.
- c. MATERIAL CODE LETTER D - ANODIZE PER AMS 2472 OR MIL-A-8625 TYPE II, CLASS 2, EXCEPT DUPLEX SEAL SHALL NOT BE USED.
 1. FOR FLARED FITTINGS, DYE BLUE (FINISH CODE LETTER B) SIMULATOR TO COLOR 15123 OF FED-STD-595.
 2. FOR FLARELESS FITTINGS, DYE GREEN (FINISH CODE LETTER G) SIMILAR TO COLOR 14187 OF FED-STD-595.
- d. MATERIAL CODE LETTER J, K, R - PASSIVATE PER AMS-QQ-P-35, TYPE VI OR VII.
- e. MATERIAL CODE LETTER T - FLUORIDE-PHOSPHATE CONVERSION COAT PER AMS 2486 OR ANODIZE PER AMS 2488. FINAL COLOR TO BE SIMILAR TO 36076 THROUGH 36176 OF FED-STD-595.
- f. MATERIAL CODE LETTER W - ANODIZE PER AMS 2472 OR MIL-A-8625 TYPE II, CLASS 2, EXCEPT DUPLEX SEAL SHALL NOT BE USED, DYE BROWN SIMILAR TO COLOR 10080 OF FED-STD-595.

/4/ SOLID FILM LUBRICANT:

- a. SUFFIX LETTER N - PARTS SHALL BE COATED ON THE INTERNAL SURFACES ONLY PER AS5272, TYPE I (MIL-L-46010, TYPE I). MINOR OVERSPRAY IS PERMISSIBLE. SOLID FILM LUBRICANT IS MANDATORY ON MATERIAL CODE LETTERS J, K AND R IN SIZE CODES OF 16 THRU 32.
- b. SUFFIX LETTER X - SOLID FILM LUBRICANT IS NOT REQUIRED.

/5/ SAFETY WIRE HOLES: SUFFIX CODE LETTER L PARTS SHALL HAVE SAFETY WIRE HOLES PER AS1043, STYLE A.

/6/ OTHER APPLICABLE PROCUREMENT SPECIFICATIONS: MIL-A-5070, AS4841, AS4842, AS4843 AND AS4875.

7. INTENDED USE: THIS PART REPLACES MS27073 SWIVEL NUT FOR USE ON FLARED AND FLARELESS FITTINGS. USE WITH AS1791 RETAINER WIRE.
8. PARTS SHALL BE QUALIFIED TO THE PROCUREMENT SPECIFICATIONS IN A COMPLETE ASSEMBLY. USERS OF THIS STANDARD ARE ADVISED TO CONTROL SOURCE APPROVAL(S) BY STANDARD PAGE SUPPLEMENT SHEETS OR SIMILAR MEANS.
- 9/ IDENTIFICATION: MARK PER AS478 CLASS C, D OR METHOD 7A3, 15A3 OR 15B. MARK MANUFACTURER'S NAME, TRADEMARK OR CAGE CODE, LETTERS "AS" FOR SIZES 06 AND SMALLER AND "AS4370" FOR SIZES 08 AND LARGER, AND MATERIAL CODE LETTER ON HEX FLAT.
10. INVENTORIED PARTS CONFORMING TO THE PREVIOUS ISSUE MAY BE USED TO DEPLETION.
11. THE CHANGE BAR (I) LOCATED IN THE LEFT MARGIN IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, NOT EDITORIAL CHANGES, HAVE BEEN MADE TO THE PREVIOUS ISSUE OF THIS DOCUMENT. AN (R) SYMBOL TO THE LEFT OF THE DOCUMENT TITLE INDICATES A COMPLETE REVISION OF THE DOCUMENT.
12. INTERPRETATION OF DRAWING PER ARP4296.
13. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36; REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125 μ in Ra. SURFACES OF HEX FLATS MAY BE 250 μ in Ra.
14. BREAK EDGES .003 TO .015 UNLESS OTHERWISE SPECIFIED.
15. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
16. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS $\pm$.005, ANGULAR DIMENSIONS $\pm$ 0°30'.