

RATIONALE

FEDERAL SUPPLY CLASS
4730

1. UPDATED THE SIZE 02 THRU 08 ACROSS CORNER HEX DIMENSIONS TO CURRENT ARP1942 DIMENSIONS - DIMENSION G IN TABLE 1A
2. ADDED CADMIUM NOTE WITH CURRENT DESIGN MANUAL WORDING.
3. ADDED CODE LETTER A MATERIAL SOLID FILM LUBRICANT AS1701 REQUIREMENT IN NOTE 4A AND DELETED "SUFFIX CODE X - SOLID FILM LUBE NOT REQUIRED".
4. ADDED MATERIAL CODE S IN NOTE 1 AND DELETED AMS-QQ-S-763 IN 1D, E, F, & G
5. ADDED DUPLEX SEAL FOR MATERIAL CODE D AND W PARTS WITHOUT SUFFIX N DRY FILM LUBRICANT IN NOTE 3C AND 3F.
6. REVISED NOTE 6, PROCURMENT SPECIFICATION AND COMBINE WITH NOTE 8
7. DELETED NOTE 8
8. DELETED NOTE 9: "INVENTORIED PARTS CONFORMING TO THE PREVIOUS ISSUES MAY BE USED TO DEPLETION"

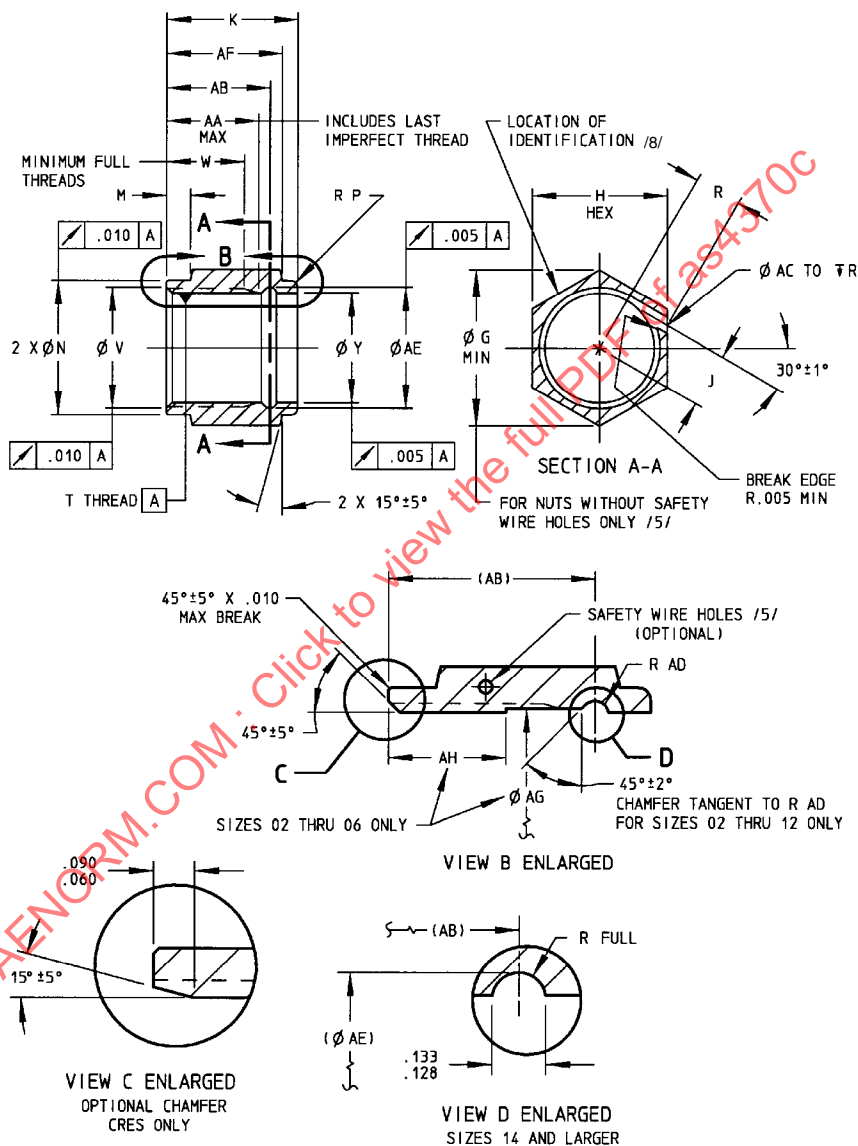
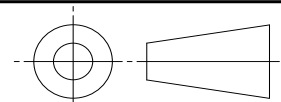


FIGURE 1 - NUT, FITTING, RETAINED

THIRD ANGLE PROJECTION



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /6/

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

NUT, FITTING, RETAINED

SAE AS4370C
SHEET 1 OF 5

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ISSUED 1997-04 REAFFIRMED 2004-07 REVISED 2008-07

TABLE 1A - DIMENSIONS

BASIC NO. AS4370 /15/ SIZE CODE	NOM TUBE SIZE REF	T THREAD PER AS8879	G MIN /5/	H	J	K ±.010	M ±.015	N
02	.125	.3125-24UNJF-3B	.492	.428- .440	.136	.591	.109	.432
03	.188	.3750-24UNJF-3B	.564	.490- .502	.167	.594	.141	.490
04	.250	.4375-20UNJF-3B	.635	.552- .565	.194	.640	.125	.557
05	.312	.5000-20UNJF-3B	.706	.615- .628	.224	.687	.125	.620
06	.375	.5625-18UNJF-3B	.775	.678- .691	.252	.718	.156	.682
08	.500	.7500-16UNJF-3B	.990	.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 /15/ 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

TABLE 1C - DIMENSIONS AND WEIGHTS

BASIC NO. AS4370 /15/ 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:

NOTICE

THIS DOCUMENT REFERENCES A PART WHICH CONTAINS CADMIUM AS A PLATING MATERIAL. CONSULT LOCAL OFFICIALS IF YOU HAVE QUESTIONS CONCERNING CADMIUM'S USE.

/1/ MATERIAL:

- a. DASH AS CODE LETTER - TYPE 4130, CONDITION F, CARBON STEEL ALLOY PER AMS-S-6758 OR AMS6370.
- b. CODE LETTER A - TYPE A286, CONDITION STA, CORROSION RESISTANT STEEL PER AMS5731, AMS5732, AMS5734 OR AMS5737.
- c. CODE LETTER D - TYPE 2024-T6 OR T851, ALUMINUM ALLOY PER AMS-QQ-A-225/6, AMS4112.
- d. CODE LETTER J - TYPE 304, CONDITION A, CORROSION RESISTANT STEEL PER AMS5639.
- e. CODE LETTER K - TYPE 316, CONDITION A, CORROSION RESISTANT STEEL PER AMS5648.
- f. CODE LETTER R - TYPE 321, CONDITION A, CORROSION RESISTANT STEEL PER AMS5645.
- g. CODE LETTER S - TYPE 347, CONDITION A, CORROSION RESISTANT STEEL, PER AMS5646.
- h. CODE LETTER T - TYPE 6AL-4V, CONDITION A, TITANIUM ALLOY PER AMS-T-9047 OR AMS4928.
- i. CODE LETTER W - TYPE 7075-T73 OR T7351, ALUMINUM ALLOY PER AMS-QQ-A-225/9 OR AMS4124.

2. HEAT TREATMENT:

- a. CODE LETTER A - IF THE RAW MATERIAL IS PROCURED IN THE SOLUTION TREATED CONDITION, AGE TO 28-40 HRC, 130 KSI UTS MIN, PER AMS-H-6875 OR AMS2759/3.
- b. CODE LETTER D AND W - IF THE RAW MATERIAL IS PROCURED IN THE SOLUTION TREATED CONDITION, AGE TO THE FINAL CONDITION PER AMS2770.

/3/ FINISH:

- a. DASH AS MATERIAL CODE LETTER - CADMIUM PLATE PER AMS-QQ-P-416 TYPE II, CLASS 2, DYE BLACK.
- b. MATERIAL CODE LETTER A - PASSIVATE PER AMS2700, TYPE 2 OR 8.
- c. MATERIAL CODE LETTER D - ANODIZE PER AMS2472 OR MIL-A-8625 TYPE II, CLASS 2, AND SHALL BE DUPLEX SEALED. PARTS WITH SUFFIX CODE N SHALL NOT BE DUPLEX SEALED.
 - 1. FOR FLARED FITTINGS, DYE BLUE (FINISH CODE LETTER B) SIMILAR 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, S - PASSIVATE PER AMS2700, TYPE 6 OR 7.
- e. MATERIAL CODE LETTER T - FLUORIDE-PHOSPHATE CONVERSION COAT PER AMS2486 OR ANODIZE PER AMS2488. FINAL COLOR TO BE SIMILAR TO 36076 THROUGH 36176 OF FED-STD-595.
- f. MATERIAL CODE LETTER W - ANODIZE PER AMS2472 OR MIL-A-8625 TYPE II, CLASS 2, DYED BROWN SIMILAR TO COLOR 10080 OF FED-STD-595 AND SHALL BE DUPLEX SEALED. PARTS WITH SUFFIX CODE N SHALL NOT BE DUPLEX SEALED.

/4/ SOLID FILM LUBRICANT:SUFFIX LETTER N:

- a. MATERIAL CODE LETTER A - PARTS SHALL BE COATED ON THE INTERNAL SURFACES ONLY PER AS1701, CLASS III. MINOR OVERSPRAY IS PERMISSIBLE.
- b. MATERIAL CODE LETTER D, J, K, R, S, T AND W - PARTS SHALL BE COATED ON THE INTERNAL SURFACES ONLY PER AS5272, TYPE I. MINOR OVERSPRAY IS PERMISSIBLE.

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

/6/ THIS PART SHALL BE MANUFACTURED BY AN ACCREDITED MANUFACTURER LISTED ON THE NADCAP QUALIFIED MANUFACTURER LIST (QML) FOR THIS PRODUCT TYPE. www.eauditnet.com THE QUALIFICATION SHALL BE DETERMINED AT THE ASSEMBLY LEVEL.

7. INTENDED USE: THIS PART REPLACES MS27073 SWIVEL NUT FOR USE ON FLARED AND FLARELESS FITTINGS. USE WITH AS1791 RETAINER WIRE.

/8/ 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.

9. A 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, INCLUDING TECHNICAL REVISIONS. CHANGE BARS AND (R) ARE NOT USED IN ORIGINAL PUBLICATIONS, NOR IN DOCUMENTS THAT CONTAIN EDITORIAL CHANGES ONLY.

10. INTERPRETATION OF DRAWING PER ARP4296.

11. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M; 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.