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REV.
A

AS3563

FEDERAL SUPPLY CLASS
5310

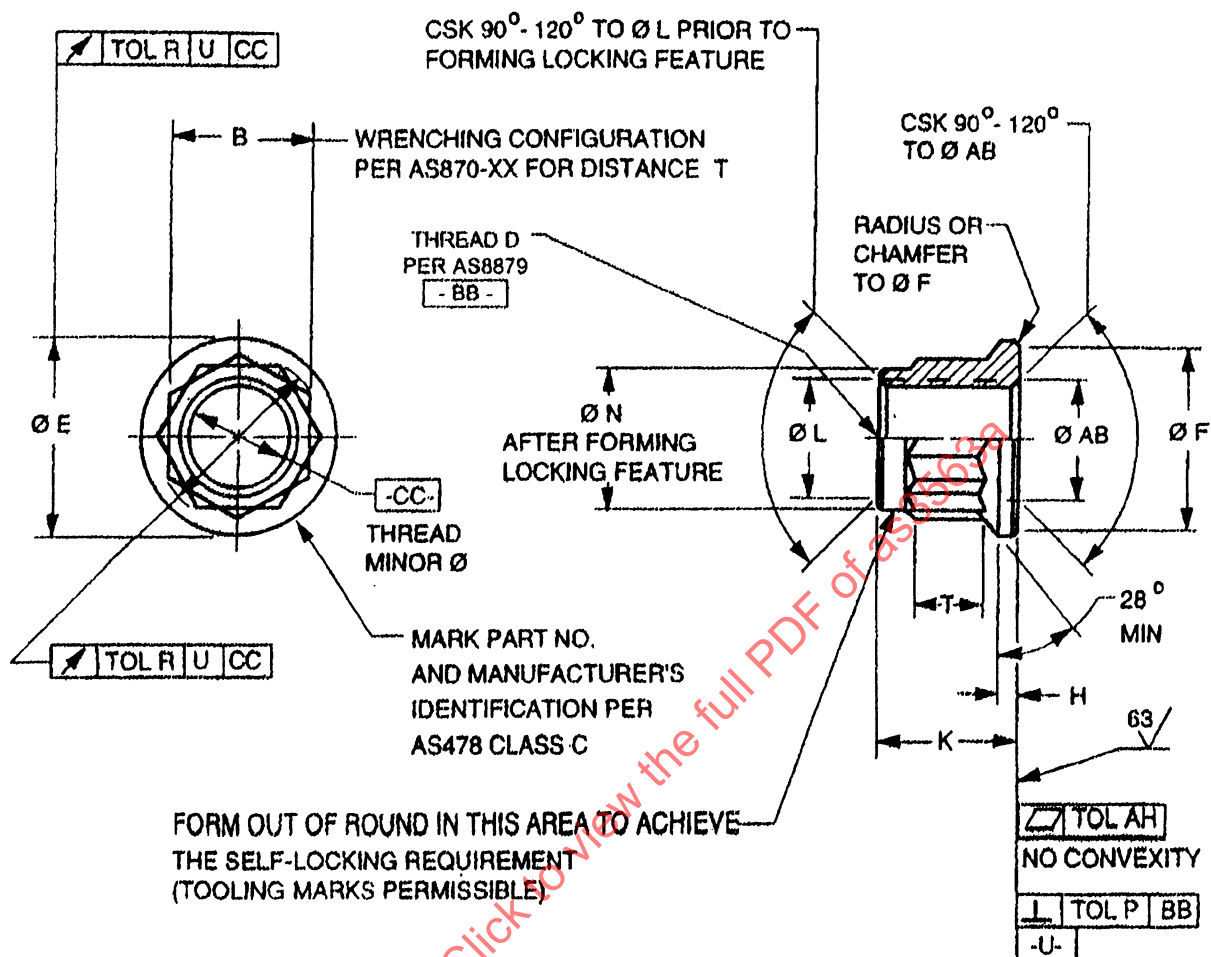
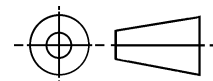


FIGURE 1

THIRD ANGLE PROJECTION



PREPARED BY SAE COMMITTEE E-25, GENERAL STANDARDS FOR AEROSPACE PROPULSION SYSTEMS

SAE The Engineering Society
For Advancing Mobility
Land Sea Air and Space
INTERNATIONAL
400 Commonwealth Drive, Warrendale, PA 15096-0001

AEROSPACE STANDARD

(R) NUT, SELF-LOCKING, DOUBLE HEXAGON, SOLID
FILM LUBRICATED, EXTENDED WRENCH PAD,
160 ksi, 800 °F, UNS S66286

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ISSUED 1995-10 REVISED 2002-06

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TABLE 1A

PART NUMBER	THREAD D	B NOM	DASH NO.	E MAX	F MIN	AB	H MIN	K MAX
AS3563-09	.190-32 UNJF-3B	.2500	08	.340	.325	.190-.220	.045	.305
AS3563-10	.250-28 UNJF-3B	.3125	10	.450	.410	.250-.280	.045	.400
AS3563-11	.3125-24 UNJF-3B	.3750	12	.525	.495	.312-.342	.060	.455
AS3563-12	.375-24 UNJF-3B	.4375	14	.600	.560	.375-.405	.070	.520
AS3563-13	.4375-20 UNJF-3B	.5625	18	.690	.650	.438-.468	.080	.595
AS3563-14	.500-20 UNJF-3B	.6250	20	.780	.740	.500-.532	.100	.680
AS3563-15	.5625-18 UNJF-3B	.6875	22	.880	.840	.562-.597	.110	.758
AS3563-16	.625-18 UNJF-3B	.7812	25	.970	.925	.625-.660	.120	.850
AS3563-17	.750-16 UNJF-3B	.9375	30	1.230	1.180	.750-.785	.130	1.032

TABLE 1B

PART NUMBER	L	N MAX	T MIN	P	R	AH	APPROX MASS LB/100
AS3563-09	.190-.210	.262	.082	.004	.006	.0014	.28
AS3563-10	.250-.270	.326	.130	.005	.007	.0014	.51
AS3563-11	.312-.332	.392	.170	.005	.008	.0016	.83
AS3563-12	.375-.395	.458	.210	.005	.009	.0016	1.34
AS3563-13	.438-.458	.588	.230	.005	.010	.0020	2.74
AS3563-14	.500-.520	.654	.260	.006	.012	.0020	3.34
AS3563-15	.562-.582	.720	.320	.006	.014	.0020	4.92
AS3563-16	.625-.645	.817	.370	.007	.015	.0020	7.12
AS3563-17	.750-.770	.980	.500	.007	.016	.0020	13.01

NOTES:

- MATERIAL: CORROSION AND HEAT RESISTANT STEEL AMS 5731 OR 5734 (UNS S66286).
HEAT TREATMENT: AFTER FORMING, NUTS SHALL BE PRECIPITATION HEAT TREATED PER AMS 2754/3 TO MEET THE HARDNESS SPECIFIED IN NOTE 4.
- PROCUREMENT SPECIFICATION: AS4393 EXCEPT AS FOLLOWS:
 - COATING: SOLID FILM LUBRICANT PER AS1701, TYPE VI, IN LIEU OF SILVER PLATE PER AMS 2411.
 - PRETREATMENT: PRIOR TO APPLYING THE SOLID FILM LUBRICANT, NUTS MAY BE PLATED WITH COPPER (AMS 2418) OR NICKEL (AMS 2403) TO .0001 MAXIMUM THICKNESS.
 - DIMENSIONS APPLY AFTER PRETREATMENT PLATING AND BEFORE COATING WITH SOLID FILM LUBRICANT.
 - BAKE AT 800 °F ± 15 °F IN LIEU OF 1200 °F FOR NUTS TESTED AFTER BAKE.
- HARDNESS: 32 TO 39 HRC.
- BREAK SHARP EDGES .003 TO .015, UNLESS OTHERWISE SPECIFIED.
- FLUORESCENT PENETRANT INSPECTION PER ASTM E 1417, TYPE 1, SENSITIVITY LEVEL 2, PRIOR TO PRETREATMENT OR COATING. ACCEPTANCE CRITERIA PER AS3071.
- SURFACE TEXTURE: SYMBOLS PER ASME Y14.36; REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 µin Ra.
- DIMENSIONING AND TOLERANCING: ANSI Y14.5-1982 (ASME PUBLICATION).

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