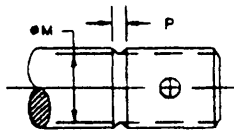
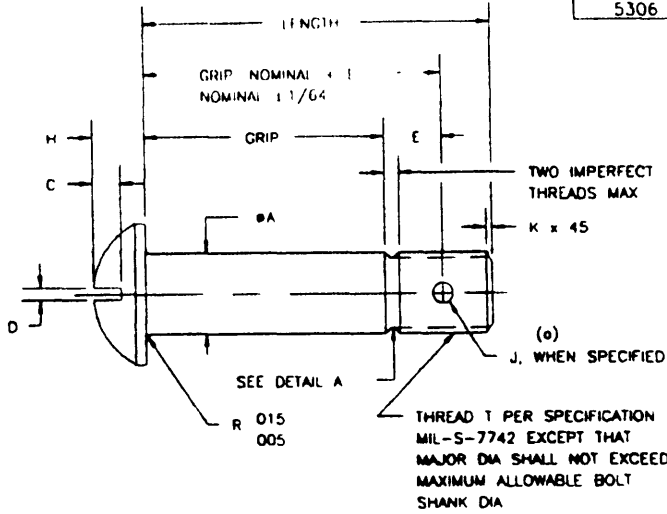


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 16 NOV 42 REVISED 4 23 DEC 52 5 15 JUN 66 6 29 MAY 69 7 25 MAY 83 8 APR 95 9 20 JUL 95 10 10 NOV 95 11 22 MAR 96

MARK WITH A DOUBLE X RAISED OR DEPRESSED .010 INCH MAX ONLY ONE X NEED BE VISIBLE AFTER SLOTTING HEAD MARKING MAY INCLUDE MANUFACTURER'S MARKINGS



DETAIL A
ALTERNATE CONSTRUCTION



11 BASIC AN PART NO	THREAD T 11	#A + .000 - .002	#B	C	D	E REF	H	#J DRILL + .010 - .000	K + .016	#M + .005	P	RATED STRENGTH, POUNDS	
												SINGLE SHEAR AT FULL DIA	(b) TENSILE
AN21	NO 6-40UNF-3A	.136	5/16	3/64	1/32	5/32	5/64	.038	.031	.100	1/32	1,060	510
AN22	NO 8-36UNF-3A	.162	3/8	1/16	3/64	5/32	3/32	.070	.031	.120	1/32	1,500	760
AN23	NO 10-32UNF-3A	.186	3/8	1/16	3/64	3/16	3/32	.070	.031	.141	3/64	2,125	1,105
AN24	1/4-28UNF-3A	.248	1/2	3/32	1/16	3/16	1/8	.076	.031	.196	3/64	3,680	2,040
AN25	5/16-24UNF-3A	.311	5/8	7/64	5/64	3/16	5/32	.076	.047	.250	1/16	5,750	3,250
AN26	3/8-24UNF-3A	.373	11/16	9/64	3/32	7/32	3/16	.106	.047	.313	1/16	8,280	5,050
AN27	7/16-20UNF-3A	.436	13/16	5/32	3/32	7/32	7/32	.106	.047	.360	1/16	11,250	6,800
AN28	1/2-20UNF-3A	.497	7/8	11/64	7/64	1/4	1/4	.106	.047	.422	1/16	14,700	9,250
AN29	9/16-18UNF-3A	.560	1	3/16	7/64	5/16	9/32	.141	.062	.482	5/64	18,700	11,800
AN30	5/8-18UNF-3A	.622	1-1/8	3/16	1/8	5/16	5/16	.141	.062	.545	5/64	23,000	15,050
AN32	3/4-16UNF-3A	.747	1-5/16	13/64	9/64	3/8	3/8	.141	.062	.660	3/32	33,150	22,000
AN34	7/8-14UNF-3A	.871	1-1/2	7/32	5/32	7/16	7/16	.141	.078	.773	3/32	45,050	30,000
(d) AN36	1-14NF-3A	.998	1-3/4	15/64	11/64	1/2	1/2	.141	.078	.898	3/32	56,900	40,350
AN37	1-12UNF-3A	.996	1-3/4	15/16	11/64	1/2	1/2	.141	.078	.898	3/32	58,900	40,350

- (a) COTTER PIN HOLE CENTERLINE SHALL BE WITHIN .010 INCH OF BOLT CENTER LINE FOR 5/16 DIAMETER BOLTS AND SMALLER, AND WITHIN .015 INCH FOR 3/8 DIAMETER BOLTS AND LARGER COTTER PIN HOLE TO BE NORMAL TO BOLT CENTERLINE WITHIN Z
- (b) RATED TENSILE STRENGTHS APPLICABLE ONLY WHEN SHEAR NUT AN320 OR THIN NUT AN364 IS USED
- (c) GRIP LENGTH OF BOLTS SHALL BE MEASURED FROM THE UNDERSIDE OF THE HEAD TO THE END OF THE FULL CYLINDRICAL PORTION OF THE SHANK
- (d) 1-4 NF-3 THREAD PITCH INACTIVE FOR DESIGN AFTER 15 JUNE 1966

REQUIREMENTS

- 11 1. MATERIAL NON-CORROSION RESISTING STEEL, 4130 (UNS G41300) PER MIL-S-6758 OR 8740 (UNS G87400) PER MIL-S-6049
- 2. FINISH CADMIUM PLATE, SPECIFICATION QQ-P-416 TYPE II, CLASS 2
- 3. ADD A AFTER DASH NUMBER FOR BOLT WITHOUT COTTER PIN HOLE
- 4. EXAMPLES OF PART NUMBERS AN21-14 = NO 6 BOLT, 29/32 INCH LONG, WITH COTTER PIN HOLE
AN21-14A = NO 6 BOLT, 29/32 INCH LONG, WITHOUT COTTER PIN HOLE
- 5. POSITION OF SLOT IN HEAD RELATIVE TO COTTER PIN HOLE OPTIONAL

NOTES

- 1. DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED, TOLERANCES DECIMALS ± .010 FRACTIONS ± 1/64 ANGLES ± 5°
- 2. BOLTS SHALL BE FREE FROM ALL HANGING BURRS AND SLIVERS WHICH MIGHT BECOME DISLODGED UNDER USAGE COUNTERSINKING OF DRILLED HOLES IS OPTIONAL
- 3. LENGTHS LONGER THAN THOSE TABULATED ON SHEETS 2 AND 3 ARE AVAILABLE IN 1/8 INCH INCREMENTS BY USE OF SIGNIFICANT DASH NUMBERS
- 4. IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS DOCUMENT AND THE REFERENCES CITED HEREIN THE TEXT OF THIS DOCUMENT SHALL TAKE PRECEDENCE
- 5. UNLESS OTHERWISE SPECIFIED ISSUES OF REFERENCED DOCUMENTS ARE THOSE IN EFFECT AT THE TIME OF SOLICITATION

11 DENOTES CHANGE(S)

REVIEWER SYMBOLS

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23. SUBMITTAL STATEMENT: APPROVED FOR PUBLIC RELEASE, DISTRIBUTION IS LIMITED
 NOTE: This drawing was approved by joint action of the Air Force and Navy Departments as the Air Force-Navy standard for this product. This drawing is a precedent of precedent standards for the same product and shall become effective for the procurement of air force equipment as of the date of approval shown hereon. Design not later than 8 months after the latest date of approval shown.

DA P A S AIR FORCE NAVY AERONAUTICAL STANDARDS

Other Govt ARMY AV AIR FORCE 95

BOLT CLEVIS

AN21 THRU AN37

FORMER ANA STANDARD AND AIR FORCE AND NAVY STANDARD ISSUES OF AN21 THRU AN37

REVIEWER SYMBOLS

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25.7.2.1.1. APPROVED FOR PUBLIC RELEASE. DISTRIBUTION IS LIMITED.
NOTE: This drawing was approved by joint action of the Air Force and Navy. It does not meet the Air Force-Navy standard for this product. This drawing is not to be used for the procurement of aeronautical supplies or for use in the design, development, or production of aeronautical equipment after the latest date of approval shown hereon.

DASH NO	AN21		AN22		AN23		AN24		AN25		AN26		AN27	
	GRIP	LENGTH	GRIP	LENGTH	GRIP	LENGTH	GRIP	LENGTH	GRIP	LENGTH	GRIP	LENGTH	GRIP	LENGTH
5	1/16	11/32	1/16	11/32										
6	1/8	13/32	1/8	13/32										
7	3/16	15/32	3/16	15/32										
8	1/4	17/32	1/4	17/32	3/16	17/32	3/16	17/32						
9	5/16	19/32	5/16	19/32	1/4	19/32	1/4	19/32	1/4	39/64	1/4	39/64		
10	3/8	21/32	3/8	21/32	5/16	21/32	5/16	21/32	5/16	43/64	5/16	43/64		
11	7/16	23/32	7/16	23/32	3/8	23/32	3/8	23/32	3/8	47/64	3/8	47/64		
12	1/2	25/32	1/2	25/32	7/16	25/32	7/16	25/32	7/16	51/64	7/16	51/64	3/8	51/64
13	9/16	27/32	9/16	27/32	1/2	27/32	1/2	27/32	1/2	55/64	1/2	55/64	7/16	55/64
14	5/8	29/32	5/8	29/32	9/16	29/32	9/16	29/32	9/16	59/64	9/16	59/64	5/8	59/64
15	11/16	31/32	11/16	31/32	5/8	31/32	5/8	31/32	5/8	63/64	5/8	63/64	9/16	63/64
16	3/4	1-1/32	3/4	1-1/32	11/16	1-1/32	11/16	1-1/32	11/16	1-3/64	11/16	1-3/64	5/8	1-3/64
17	13/16	1-3/32	13/16	1-3/32	3/4	1-3/32	3/4	1-3/32	3/4	1-7/64	3/4	1-7/64	11/16	1-7/64
18	7/8	1-5/32	7/8	1-5/32	13/16	1-5/32	13/16	1-5/32	13/16	1-11/64	13/16	1-11/64	3/4	1-11/64
19	15/16	1-7/32	15/16	1-7/32	7/8	1-7/32	7/8	1-7/32	7/8	1-15/64	7/8	1-15/64	13/16	1-15/64
20	1	1-9/32	1	1-9/32	15/16	1-9/32	15/16	1-9/32	15/16	1-19/64	15/16	1-19/64	7/8	1-19/64
21	1-1/8	1-11/32	1-1/8	1-11/32	1	1-11/32	1	1-11/32	1	1-23/64	1	1-23/64	15/16	1-23/64
22	1-1/4	1-13/32	1-1/4	1-13/32	1-1/8	1-13/32	1-1/8	1-13/32	1-1/8	1-27/64	1-1/8	1-27/64	1	1-27/64
23	1-3/8	1-15/32	1-3/8	1-15/32	1-1/4	1-15/32	1-1/4	1-15/32	1-1/4	1-31/64	1-1/4	1-31/64	1-1/8	1-31/64
24	1-1/2	1-17/32	1-1/2	1-17/32	1-3/8	1-17/32	1-3/8	1-17/32	1-3/8	1-35/64	1-3/8	1-35/64	1-1/4	1-35/64
25	1-5/8	1-19/32	1-5/8	1-19/32	1-1/2	1-19/32	1-1/2	1-19/32	1-1/2	1-39/64	1-1/2	1-39/64	1-3/8	1-39/64
26	1-3/4	1-21/32	1-3/4	1-21/32	1-5/8	1-21/32	1-5/8	1-21/32	1-5/8	1-43/64	1-5/8	1-43/64	1-1/2	1-43/64
27	1-7/8	1-23/32	1-7/8	1-23/32	1-3/4	1-23/32	1-3/4	1-23/32	1-3/4	1-47/64	1-3/4	1-47/64	1-5/8	1-47/64
28	1-1/2	1-25/32	1-1/2	1-25/32	1-7/8	1-25/32	1-7/8	1-25/32	1-7/8	1-51/64	1-7/8	1-51/64	1-3/4	1-51/64
29	1-9/16	1-27/32	1-9/16	1-27/32	1-1/2	1-27/32	1-1/2	1-27/32	1-1/2	1-55/64	1-1/2	1-55/64	1-7/8	1-55/64
30	1-5/8	1-29/32	1-5/8	1-29/32	1-9/16	1-29/32	1-9/16	1-29/32	1-9/16	1-59/64	1-9/16	1-59/64	1-1/2	1-59/64
31	1-11/16	1-31/32	1-11/16	1-31/32	1-5/8	1-31/32	1-5/8	1-31/32	1-5/8	1-63/64	1-5/8	1-63/64	1-9/16	1-63/64
32	1-3/4	2-1/32	1-3/4	2-1/32	1-11/16	2-1/32	1-11/16	2-1/32	1-11/16	2-3/64	1-11/16	2-3/64	1-5/8	2-3/64
34					1-13/16	2-5/32	1-13/16	2-5/32	1-13/16	2-11/64	1-13/16	2-11/64	1-3/4	2-11/64
36					1-15/16	2-9/32	1-15/16	2-9/32	1-15/16	2-19/64	1-15/16	2-19/64	1-7/8	2-19/64
38					2-1/16	2-13/32	2-1/16	2-13/32	2-1/16	2-27/64	2-1/16	2-27/64	2	2-27/64
40					2-3/16	2-17/32	2-3/16	2-17/32	2-3/16	2-35/64	2-3/16	2-35/64	2-1/8	2-35/64
42					2-5/16	2-21/32	2-5/16	2-21/32	2-5/16	2-43/64	2-5/16	2-43/64	2-1/4	2-43/64
44					2-7/16	2-25/32	2-7/16	2-25/32	2-7/16	2-51/64	2-7/16	2-51/64	2-3/8	2-51/64
46					2-9/16	2-29/32	2-9/16	2-29/32	2-9/16	2-59/64	2-9/16	2-59/64	2-1/2	2-59/64
48					2-11/16	3-1/32	2-11/16	3-1/32	2-11/16	3-3/64	2-11/16	3-3/64	2-5/8	3-3/64
50					2-13/16	3-5/32	2-13/16	3-5/32	2-13/16	3-11/64	2-13/16	3-11/64	2-3/4	3-11/64
52					2-15/16	3-9/32	2-15/16	3-9/32	2-15/16	3-19/64	2-15/16	3-19/64	2-7/8	3-19/64
54					3-1/16	3-13/32	3-1/16	3-13/32	3-1/16	3-27/64	3-1/16	3-27/64	3	3-27/64
56					3-3/16	3-17/32	3-3/16	3-17/32	3-3/16	3-35/64	3-3/16	3-35/64	3-1/8	3-35/64
58					3-5/16	3-21/32	3-5/16	3-21/32	3-5/16	3-43/64	3-5/16	3-43/64	3-1/4	3-43/64
60					3-7/16	3-25/32	3-7/16	3-25/32	3-7/16	3-51/64	3-7/16	3-51/64	3-3/8	3-51/64
62					3-9/16	3-29/32	3-9/16	3-29/32	3-9/16	3-59/64	3-9/16	3-59/64	3-1/2	3-59/64
64					3-11/16	4-1/32	3-11/16	4-1/32	3-11/16	4-3/64	3-11/16	4-3/64	3-5/8	4-3/64
66					3-13/16	4-5/32	3-13/16	4-5/32					3-3/4	4-11/64
68					3-15/16	4-9/32	3-15/16	4-9/32					3-7/8	4-19/64
70					4-1/16	4-13/32	4-1/16	4-13/32					4	4-27/64
72					4-3/16	4-17/32	4-3/16	4-17/32					4-1/8	4-35/64
74					4-5/16	4-21/32	4-5/16	4-21/32					4-1/4	4-43/64
76					4-7/16	4-25/32	4-7/16	4-25/32					4-3/8	4-51/64
78					4-9/16	4-29/32	4-9/16	4-29/32					4-1/2	4-59/64
80					4-11/16	5-1/32	4-11/16	5-1/32					4-5/8	5-3/64
82					4-13/16	5-5/32	4-13/16	5-5/32					4-3/4	5-11/64
84					4-15/16	5-9/32	4-15/16	5-9/32					4-7/8	5-19/64
86													5	5-27/64
88													5-1/8	5-35/64
90													5-1/4	5-43/64
92													5-3/8	5-51/64

APPROVED 16 NOV 42 REVISED 4 23 DEC 52 5 15 JUN 66 6 29 MAY 69 7 25 MAY 83 8 APR 95 9 20 JUL 95 10 10 NOV 95 11 22 MAR 96

AIR FORCE NAVY AERONAUTICAL STANDARD

Other Cust: AIR FORCE 99

STANDARD ISSUES OF AN21 THRU AN37

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

FORM NO. 5306 1950

22 Mar 95

11 Nov 95

10 Jul 95

20 Jul 95

9 Apr 95

8 Apr 95

25 May 83

7 May 69

29 May 66

15 Jun 66

23 Dec 52

REVISD 4 5 NOV 42

REVIEWER S-UBDLS

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2.5 REVISION STATEMENT A APPROVED FOR PUBLIC RELEASE... DOWNSIDE COMPANY

Table with columns for DASH NO, AN28, AN29, AN30, AN32, AN34, AN36, AN37. Each column contains sub-columns for GRIP and LENGTH with various alphanumeric codes.

PA DIA I AIR FORCE NAVY AERONAUTICA STANDARD... DOLT CLEVIS... FORMER ANA STANDARD AND AIR FORCE AND NA... STANDARD CODES 5 AN21 THRU AN37