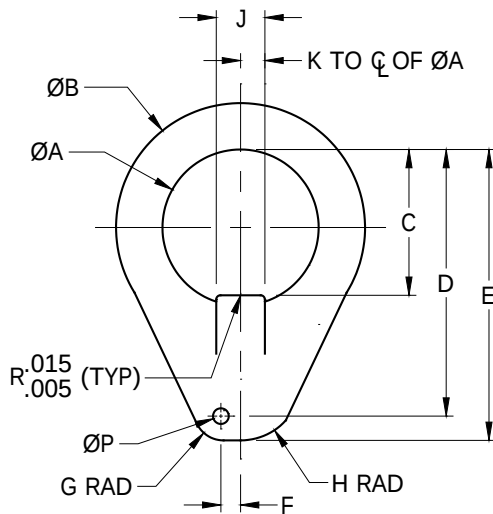
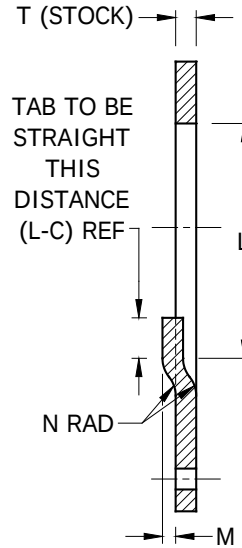


FED. SUPPLY CLASS

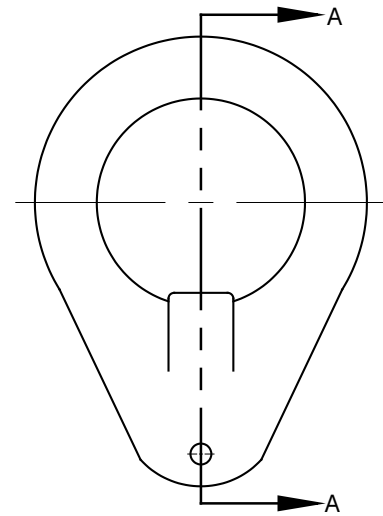
5310



NAS513
-4 THRU -20 INCLUSIVE



SECTION A-A
(TYP)



NAS513
-22 THRU -36 INCLUSIVE /3/

TABLE I - DIMENSIONS

DASH NO.	TERMINAL THREAD SIZE (REF)	ØA	ØB +.02 -.00	C	D ± .016	E ±.016	F ±.031	G RAD	H RAD	J ±.005	K	L ±.031	M ±.005	N RAD	T (REF)	ØP
4	1/4-28 UNF-3A	.272 ±.005	.44	.214 ±.005	.406	.500	.125	.094	.094	.052	.026 ±.005	.293	.036	.031	.050	.062
5	5/16-24 UNF-3A	.334 ±.005	.50	.273 ±.005	.484	.578	.125	.094	.094	.052	.026 ±.005	.355	.036	.031	.050	.062
6	3/8-24 UNF-3A	.396 ±.008	.56	.327 ±.008	.562	.656	.125	.094	.094	.082	.041 ±.005	.418	.036	.031	.050	.062
7	7/16-20 UNF-3A	.459 ±.008	.63	.386 ±.008	.625	.719	.125	.094	.094	.082	.041 ±.005	.463	.049	.031	.063	.062
8	1/2-20 UNF-3A	.520 ±.008	.75	.450 ±.008	.719	.813	.156	.094	.156	.082	.041 ±.005	.542	.049	.031	.063	.062
9	9/16-18 UNF-3A	.583 ±.008	.88	.496 ±.010	.812	.906	.188	.094	.156	.114	.057 ±.005	.597	.057	.062	.071	.071
10	5/8-18 UNF-3A	.647 ±.010	1.00	.559 ±.010	.937	1.031	.188	.094	.188	.114	.057 ±.005	.675	.057	.062	.071	.071
12	3/4-16 UNF-3A	.772 ±.010	1.12	.681 ±.010	1.062	1.156	.188	.094	.188	.114	.057 ±.005	.800	.057	.062	.071	.071
14	7/8-14 UNF-3A	.897 ±.010	1.31	.795 ±.010	1.250	1.344	.188	.094	.250	.142	.071 ±.007	.944	.066	.062	.080	.080
16	1 -14 NS-3A	1.022 ±.010	1.50	.918 ±.010	1.422	1.516	.188	.094	.250	.142	.071 ±.007	1.088	.074	.062	.090	.090

THIRD ANGLE PROJECTION	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 8
PROCUREMENT SPECIFICATION NONE	TITLE WASHER, ROD END, LOCKING (8)	CLASSIFICATION PART STANDARD

THIRD ANGLE PROJECTION		CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 8
PROCUREMENT SPECIFICATION NONE		TITLE WASHER, ROD END, LOCKING (8)	CLASSIFICATION PART STANDARD

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AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC.
1000 WILSON BLVD.
ARLINGTON, VA 22209

THIS DRAWING SUPERSEDES ALL ANTECEDENT STANDARD DRAWINGS FOR THE SAME PRODUCT AND SHALL BECOME EFFECTIVE NO LATER THAN SIX MONTHS FROM THE LAST REVISION DATE.

FORM 12-01

REVISION DATE: MARCH 31, 2015

ISSUE DATE: SEPTEMBER 15, 1952

TABLE I – DIMENSIONS CONTINUED

DASH NO.	TERMINAL THREAD SIZE (REF)	ØA	ØB +.02 -.00	C	D ± .016	E ±.016	F ±.031	G RAD	H RAD	J ±.005	K	L ±.031	M ±.005	N RAD	T (REF)	ØP
18	1 1/8-12 UNF-3A	1.147 ±.010	1.62	1.028 ±.010	1.547	1.656	.219	.109	.313	.174	.087 ±.007	1.213	.074	.062	.090	.090
20	1 1/4-12 UNF-3A	1.272 ±.010	1.75	1.154 ±.010	1.687	1.796	.219	.109	.313	.174	.087 ±.007	1.280	.096	.094	.112	.112
22	1 3/8-12 UNF-3A	1.397 ±.010	1.88	1.254 ±.010	1.859	1.969	-	-	.375	.236	.118 ±.007	1.405	.096	.094	.112	.112
24	1 1/2-12 UNF-3A	1.518 ±.010	2.00	1.379 ±.010	1.969	2.078	-	-	.375	.236	.118 ±.007	1.530	.096	.094	.112	.112
26	1 5/8-12 UN-3A	1.643 ±.010	2.12	1.495 ±.010	2.109	2.219	-	-	.375	.236	.118 ±.007	1.638	.109	.094	.125	.125
28	1 3/4-12 UN-3A	1.766 ±.010	2.25	1.607 ±.010	2.266	2.375	-	-	.500	.298	.149 ±.007	1.763	.109	.094	.125	.125
30	1 7/8-12 UN-3A	1.891 ±.010	2.38	1.732 ±.010	2.375	2.484	-	-	.500	.298	.149 ±.007	1.888	.109	.094	.125	.125
32	2 -12 UN-3A	2.016 ±.010	2.63	1.857 ±.010	2.594	2.703	-	-	.500	.298	.149 ±.007	2.076	.109	.094	.125	.125
34	2 1/8-12 UN-3A	2.141 ±.010	2.75	1.973 ±.010	2.750	2.860	-	-	.500	.298	.149 ±.007	2.201	.109	.094	.125	.125
36	2 1/4-12 UN-3A	2.266 ±.010	2.88	2.098 ±.010	2.875	2.984	-	-	.500	.298	.149 ±.007	2.326	.109	.094	.125	.125

MATERIAL: SPRING STEEL, 1095 (UNS G10950), AMS5121, CONDITION A.

HEAT TREAT: 180,000 TO 210,000 PSI, PER AMS2759, HARDNESS HRC 40-45.

FINISH: CADMIUM PLATE, PER AMS-QQ-P-416 TYPE II, CLASS 2.

CODE: DASH NUMBER DESIGNATES WASHER SIZE AS NOTED IN TABLE I.

PART NUMBER EXAMPLE: NAS513 - 4

DASH NO. FROM TABLE I. NAS513-4 = WASHER, ROD END, LOCKING, 1/4-28 UNJF-3A, SPRING STEEL, CADMIUM PLATED.

BASIC PART NUMBER.

- NOTES:
- (1) THIS WASHER IS INTENDED FOR USE WITH THE NAS509 JAM NUT FOR POSITIVE LOCKING OF ROD END TERMINALS TO HYDRAULIC PISTON RODS.
 - (2) WASHER FACE SURFACES MUST BE FLAT WITHIN .010 INCH.
 - (3) DIMENSIONS OF NAS513-4 THROUGH -20 APPLY TO NAS513-22 THROUGH -36 UNLESS OTHERWISE SPECIFIED.
 - (4) TOLERANCES UNLESS OTHERWISE SPECIFIED: DECIMALS ± .010 ANGLES ± 1°.
 - (5) 100% MAGNETIC PARTICLE INSPECTION PER ASTM E1444/E1444M. NO CRACKS ARE ALLOWED. MARK ACCEPTABLE PARTS BY DYEING THE ENTIRE PART GREEN.
 - (6) DIMENSIONS IN INCHES AND APPLY AFTER FINISH UNLESS OTHERWISE SPECIFIED.
 - (7) THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.

REVISION

8

NAS513
SHEET 2



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