

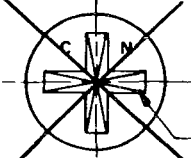
NATIONAL AEROSPACE STANDARD

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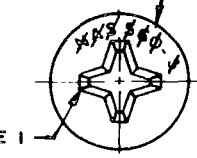
DEPRESSED HEAD MARKING PER NAS 1347, TYPE IV

HEAD MARKING - BASIC PART NO. AND APPLICABLE
 DASH NO. DEPRESSED BIG MARK
 MANUFACTURERS TRADE MARK MAY BE ADDED
 FOR "H" CODE PARTS, NO CODE LETTER REQUIRED
 FOR "X" CODE PARTS, ADD "X" TO BASIC NUMBER
 FOR "C" CODE PARTS, ADD "C" TO BASIC NUMBER

THIS HEAD MARKING MAY BE FURNISHED
 FROM SUPPLIERS STOCK UNTIL JUNE 30 1981



FREARSON RECESS

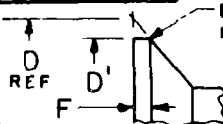


PHILLIPS RECESS

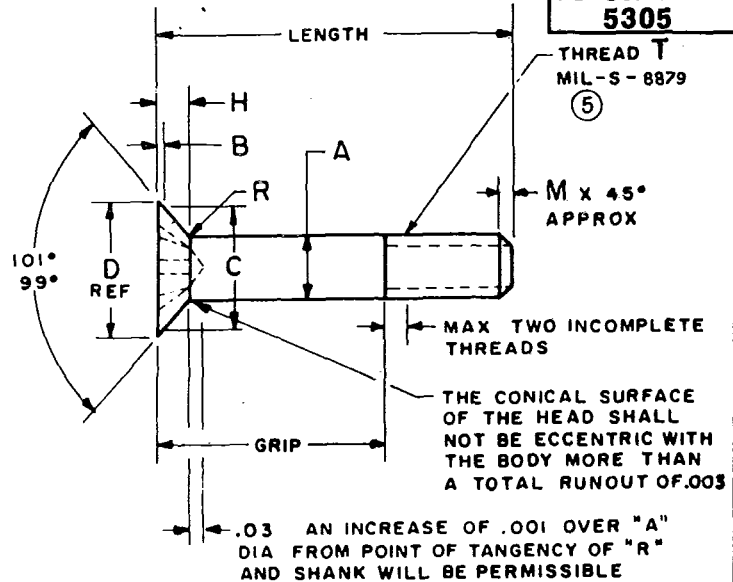
CODE "F"

CODE "K"

INACTIVE FOR DESIGN



EDGES OF HEAD
 MAY BE ROUNDED



FED SUP CLASS 5305

THREAD T MIL-S-8879

⑤

M x 45° APPROX

MAX TWO INCOMPLETE THREADS

THE CONICAL SURFACE OF THE HEAD SHALL NOT BE ECCENTRIC WITH THE BODY MORE THAN A TOTAL RUNOUT OF .003

.03 AN INCREASE OF .001 OVER "A" DIA FROM POINT OF TANGENCY OF "R" AND SHANK WILL BE PERMISSIBLE

FIRST DASH NO.	THREAD CLASS 3A (CLASS 2A)	A DIA		B HEAD PROTRUSION		C GAGE CIRCLE		D DIA (REF)		D' DIA ABS MIN WITH MAX F	F	H NOM REF	M		R RAD.	
		MAX	MIN	MAX	MIN	MAX	MIN	MAX SHARP	MIN SHARP				MAX	MIN	MAX	MIN
-2	.1640-32UNJC	.1640	.1610	.0276	.0238	.2671	.334	.323	.287	.015	.068	.031	.020	.010		
-3	.1900-32UNJF	.1890	.1860	.0299	.0259	.3147	.387	.375	.337	.016	.080	.031	.020	.010		
-4	.2500-28UNJF	.2490	.2460	.0353	.0307	.4245	.510	.496	.452	.018	.106	.031	.020	.010		
-5	.3125-24UNJF	.3115	.3085	.0409	.0357	.5389	.638	.622	.572	.021	.133	.047	.025	.010		
-6	.3750-24UNJF	.3740	.3710	.0466	.0407	.6532	.766	.748	.692	.023	.159	.047	.030	.015		
-7	.4375-20UNJF	.4365	.4325	.0522	.0457	.7676	.894	.874	.812	.026	.186	.047	.035	.015		
-8	.5000-20UNJF	.4990	.4950	.0578	.0507	.8820	1.022	1.000	.932	.028	.213	.047	.040	.020		
-9	.5625-18UNJF	.5615	.5575	.0633	.0557	.9964	1.150	1.126	1.052	.031	.240	.047	.045	.020		

MATERIAL: CODE "C": CRES, QQ-S-763, CLASS 304 CONDITION A, CLASS 321 OR 347 CONDITION A, OR CRES, ANSI/ASTM-A 493, TYPE 384 (ULT TS OF MATERIAL 75,000 PSI AT ROOM TEMPERATURE)
 CODE "H": CRES, AMS5735(A-286) OR AMS7733(DISCALLOY) EXCEPT ULT TS OF MATERIAL 140,000 PSI MIN AT ROOM TEMPERATURE, FABRICATED TO SPEC AMS7478
 CODE "X": CRES, AMS5668(INCONEL "X") (ULT TS 160,000 PSI MIN) AT ROOM TEMPERATURE

FINISH: FLASH CADMIUM PLATE .0001 MAX WHEN CODED "P" (NO PLATING FOR APPLICATIONS OVER 550°F)

CODE: FIRST DASH NO. DESIGNATES NOMINAL DIAMETER (SEE TABLE ABOVE)
 SECOND DASH NO. DESIGNATES GRIP AND LENGTH (SEE SHEET 2)
 ADD "C" AFTER BASIC PART NO. TO INDICATE LOW STRENGTH SCREWS
 ADD "H" AFTER BASIC PART NO. TO INDICATE HIGH TEMPERATURE SCREWS
 ADD "X" AFTER BASIC PART NO. TO INDICATE HIGH STRENGTH SCREWS
 ADD "K" AFTER MATERIAL CODE TO INDICATE PHILLIPS RECESS
 ADD "F" AFTER MATERIAL CODE TO INDICATE FREARSON RECESS
 ADD "P" AFTER FIRST DASH NO. TO INDICATE FLASH CADMIUM PLATING

EXAMPLE OF PART NO.: NAS560CK3P12 = NON MAGNETIC, LOW STRENGTH, PHILLIPS RECESS, FLASH CADMIUM PLATED, .1900 DIA SCREW, .750 GRIP

- NOTES:** 1. DIMENSIONING AND GAGING SIZES FOR THE ABOVE TYPES OF RECESSES SHALL CONFORM TO THE 1950 SUPPLEMENT TO HANDBOOK H-28 SCREW THREADS FOR FEDERAL SERVICES 1944.
 2. PHILLIPS RECESS SHALL CONFORM TO MS9006.
 3. REFERENCE DIMENSIONS ARE FOR DESIGN PURPOSES ONLY AND NOT AN INSPECTION REQUIREMENT
 4. REFER TO NAS518 AND NAS519 FOR FLUSHNESS GAGING DETAILS. HEAD PROFILE GAGES MAY BE USED BASED ON "B" AND "C" DIMENSIONS
 5. MAGNETIC PERMEABILITY SHALL BE LESS THAN 2.0 (AIR = 1.0) FOR A FIELD STRENGTH "H" = 200 OERSTEDS (MAGNETIC PERMEABILITY INDICATOR PER MIL-I-17214 OR EQUIVALENT)
 6. UNLESS OTHERWISE NOTED HEREON MIL-S-7839 SHALL BE APPLICABLE TO CODE "C" SCREWS, AMS7478 OR AMS7479 SHALL BE APPLICABLE TO CODE "H" AND "X" SCREWS, STRESS RUPTURE IS NOT APPLICABLE TO "H" AND "X" SCREWS.
 7. DIMENSIONS IN INCHES
 8. BOLT MANUFACTURERS MAY SUPPLY BOLTS WITH MIL-S-7742 THREADS, INCLUDING .1640-32UNC-2A, UNTIL JUNE 30, 1981. BOLTS WITH MIL-S-7742 THREADS MAY BE USED TO DEPLETION.

INACTIVE FOR DESIGN
 AFTER 25 June 1980, NO
 SUPERSEDING STANDARD

LIST OF ACTIVE SHEETS	SHEET NO.	REV NO.
1	5	
2	4	

CUSTODIAN: NATIONAL AEROSPACE STANDARDS COMMITTEE

PROCUREMENT SPECIFICATION	TITLE	CLASSIFICATION STANDARD PART
NOTED	SCREW-MACHINE, NON MAGNETIC HIGH TEMPERATURE, STRUCTURAL, 100° FLUSH HEAD	NAS 560 SHEET 1 OF 2

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APPROVAL DATE 13 Jan. 1956 REVISION 1 31 July 1958 2 30 Nov. 1958 3 15 Aug. 1961 4 15 Nov. 1979 5 25 JUNE 1980

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THIS DRAWING SUPERSEDES ALL ANTECEDENT STANDARD DRAWINGS FOR THE SAME PRODUCT, AND SHALL BECOME EFFECTIVE FOR VENDOR MANUFACTURERS NOT LATER THAN 6 MONTHS AFTER THE LATEST DATE OF APPROVAL SHOWN

NATIONAL AEROSPACE STANDARD

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THIS DRAWING SUPERSEDES ALL ANTECEDENT STANDARD DRAWINGS FOR THE SAME PRODUCT AND SHALL BECOME EFFECTIVE FOR VENDOR MANUFACTURING NOT LATER THAN 6 MONTHS AFTER THE LATEST DATE OF APPROVAL SHOWN.

(4)

SECOND DASH NO.	GRIP $\pm .015$	LENGTH FOR SIZES INDICATED $\pm .030 - .015$								SECOND DASH NO.	GRIP $\pm .015$
		.1640-32*	.1900-32	.2500-28	.3125-24	.3750-24	.4375-20	.5000-20	.5625-10		
-00		.348	.400	.526	.614					-00	
-0		.410	.463	.589	.677					-0	
-1		.472	.526	.651	.739	.708	.790			-1	
-2	.125	.535	.588	.714	.802	.833	.915	.856	1.039	-2	.125
-3	.168	.598	.651	.776	.864	.895	.977	.949	1.102	-3	.168
-4	.250	.660	.713	.838	.926	.957	1.039	1.073	1.226	-4	.250
-5	.312	.722	.775	.901	.989	1.020	1.102	1.136	1.289	-5	.312
-6	.375	.785	.838	.964	1.052	1.083	1.165	1.199	1.352	-6	.375
-7	.438	.846	.901	1.026	1.114	1.145	1.227	1.261	1.414	-7	.438
-8	.500	.910	.963	1.088	1.176	1.207	1.289	1.323	1.476	-8	.500
-9	.562	.972	1.025	1.151	1.239	1.270	1.352	1.386	1.539	-9	.562
-10	.625	1.035	1.088	1.214	1.302	1.333	1.415	1.449	1.602	-10	.625
-11	.688	1.098	1.151	1.276	1.364	1.395	1.477	1.511	1.664	-11	.688
-12	.750	1.160	1.213	1.338	1.426	1.457	1.539	1.573	1.726	-12	.750
-13	.812	1.222	1.275	1.401	1.489	1.520	1.602	1.636	1.789	-13	.812
-14	.875	1.285	1.338	1.464	1.552	1.583	1.665	1.699	1.852	-14	.875
-15	.938	1.348	1.401	1.526	1.614	1.645	1.727	1.761	1.914	-15	.938
-16	1.000	1.410	1.463	1.588	1.676	1.707	1.789	1.823	1.976	-16	1.000
-17	1.062	1.472	1.525	1.651	1.739	1.770	1.852	1.886	2.039	-17	1.062
-18	1.125	1.535	1.588	1.714	1.802	1.833	1.915	1.949	2.102	-18	1.125
-19	1.188	1.598	1.651	1.776	1.864	1.895	1.977	2.011	2.164	-19	1.188
-20	1.250	1.660	1.713	1.838	1.926	1.957	2.039	2.073	2.226	-20	1.250
-21	1.312	1.722	1.775	1.901	1.989	2.020	2.102	2.136	2.289	-21	1.312
-22	1.375	1.785	1.838	1.964	2.052	2.083	2.165	2.199	2.352	-22	1.375
-23	1.438	1.848	1.901	2.026	2.114	2.145	2.227	2.261	2.414	-23	1.438
-24	1.500	1.910	1.963	2.088	2.176	2.207	2.289	2.323	2.476	-24	1.500
-25	1.562	1.972	2.025	2.151	2.239	2.270	2.352	2.386	2.539	-25	1.562
-26	1.625	2.035	2.088	2.214	2.302	2.333	2.415	2.449	2.602	-26	1.625
-27	1.688	2.098	2.151	2.276	2.364	2.395	2.477	2.511	2.664	-27	1.688
-28	1.750	2.160	2.213	2.338	2.426	2.457	2.539	2.573	2.726	-28	1.750
-29	1.812	2.222	2.275	2.401	2.489	2.520	2.602	2.636	2.789	-29	1.812
-30	1.875	2.285	2.338	2.464	2.552	2.583	2.665	2.699	2.852	-30	1.875
-31	1.938	2.348	2.401	2.526	2.614	2.645	2.727	2.761	2.914	-31	1.938
-32	2.000	2.410	2.463	2.588	2.676	2.707				-32	2.000

(4) *.1640 SIZE NOT PREFERRED FOR NEW DESIGN

RATED STRENGTH (POUNDS) (REFERENCE PURPOSES ONLY)						
DASH NO.	LOW STRENGTH (CODE "C")		HIGH TEMPERATURE (CODE "H")		HIGH STRENGTH HIGH TEMPERATURE (CODE "X")	
	Ult Tensile	Single Shear	Ult Tensile	Single Shear	Ult Tensile	Single Shear
-2	1050	900	1940	1710	2250	1900
-3	1500	1200	2800	2280	3200	2700
-4	2700	2100	5050	4000	5750	4550
-5	4350	3350	8060	6280	9200	7100
-6	6550	4850	12300	9070	14000	10300
-7	8850	6600	16600	12320	18900	14300
-8	11900	8600	21600	16180	25900	18300
-9	15100	11000	28300	20560	32400	23900

The tensile values have been computed based on the average of mean pitch and minor diameters, using room temperature ultimate tensile strengths.

GRIP LENGTHS IN ADDITION TO THOSE TABULATED ARE AVAILABLE IN .125 INCH INCREMENTS BY USE OF SIGNIFICANT DASH NUMBERS

INACTIVE FOR DESIGN
AFTER 25 June 1980, NO
SUPERSEDING STANDARD

CUSTODIAN: NATIONAL AEROSPACE STANDARDS COMMITTEE

PROCUREMENT SPECIFICATION NOTED	TITLE SCREW-MACHINE, NON MAGNETIC HIGH TEMPERATURE, STRUCTURAL, 100° FLUSH HEAD	CLASSIFICATION STANDARD PART
		NAS 560 2

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