



DRAWING NUMBER: **SPS - N-80221**
 ISSUE DATE: 4/17/79
 REVISION: 1
 REVISED AND REBRAN: 10/18/88
 2
 5/02/89
 3
 8/25/92
 4
 1/04/93
 5
 7/23/97
 6
 10/02/2000

DASH NUMBER	THREAD SIZE UNJF-3B	ØA		C	H		ØP	S	V	W		X	Y	AXIAL TENSILE STRENGTH LBS MIN	WEIGHT LBS/100 APPROX.
		MAX	MIN		MIN	MAX				MAX	MIN				
1032	.1900-32	.350	.287	.277	.250	.220	.080	.015	.251	.243	.003	.002	4,980	.24	
428	.2500-28	.438	.389	.347	.310	.280	.100	.020	.313	.305	.003	.002	8,890	.45	
524	.3125-24	.531	.491	.419	.385	.342	.120	.035	.376	.367	.003	.002	14,100	1.18	
624	.3750-24	.649	.609	.491	.455	.405	.152	.060	.439	.430	.003	.002	20,900	1.43	
720	.4375-20	.750	.705	.631	.520	.473	.168	.075	.564	.553	.003	.003	28,300	2.48	
820	.5000-20	.828	.783	.703	.600	.535	.190	.095	.627	.616	.003	.003	37,800	3.40	
918	.5625-18	.938	.893	.775	.680	.597	.230	.095	.690	.679	.004	.003	47,900	4.75	
1018	.6250-18	1.050	1.005	.881	.740	.660	.250	.110	.783	.772	.004	.003	59,900	6.15	
1216	.7500-16	1.230	1.185	1.059	.900	.785	.310	.120	.940	.928	.004	.003	86,900	12.73	
1414	.8750-14	1.438	1.393	1.200	1.060	.910	.350	.145	1.064	1.052	.005	.004	119,000	16.61	
1612	1.0000-12	1.625	1.580	1.344	1.210	1.035	.400	.170	1.190	1.177	.006	.004	155,000	21.27	
1812	1.1250-12	1.875	1.825	1.557	1.370	1.160	.450	.170	1.377	1.364	.007	.005	198,000	35.38	
2012	1.2500-12	2.125	2.075	1.699	1.510	1.285	.500	.210	1.502	1.489	.007	.006	247,000	48.97	
2212	1.3750-12	2.313	2.263	1.842	1.670	1.410	.550	.250	1.627	1.614	.008	.006	301,000	62.72	
2412	1.5000-12	2.500	2.450	1.986	1.820	1.535	.600	.290	1.752	1.739	.008	.007	361,000	78.50	

- MATERIAL: NICKEL ALLOY 718 PER AMS 5662.
- FINISH: 80221S-() =SILVER PLATE PER AMS 2410 (TOTAL COVERAGE)
 80221ST-() =SILVER PLATE PER AMS 2410 (THREADS ONLY)
 80221SM-() =SILVER PLATE PER AMS 2410 (TOTAL COVERAGE) PLUS DRY FILM LUBRICANT PER AS5272, TYPE I
 80221STM-() =SILVER PLATE PER AMS 2410 (THREADS ONLY) PLUS DRY FILM LUBRICANT PER AS5272, TYPE I
 80221C-() =CADMIUM PLATE PER QQ-P-416, TYPE I, CLASS 2
 80221CM-() =CADMIUM PLATE PER QQ-P-416, TYPE I, CLASS 2 PLUS DRY FILM LUBRICANT PER AS5272, TYPE I
 80221M-() =DRY FILM LUBRICANT PER AS5272, TYPE I (TOTAL COVERAGE) NO PLATE
 80221D-() =CADMIUM PLATE PER QQ-P-416, TYPE II, CLASS 2
- FLUORESCENT PENETRANT INSPECT PER ASTM E 1417. ACCEPTANCE CRITERIA PER SPS-I-700, LEVEL II.
- THREADS PER MIL-S-8879 BEFORE LUBRICATION.
- BEARING SQUARENESS WHEN MEASURED IN ACCORDANCE WITH NASM85730.
- BEARING SURFACE: FLAT TO CONCAVE WHEN CHECKED IN ACCORDANCE WITH SPS-G-1013.
- LOCKING TORQUE PER NASM85730 EXCEPT CODE "M" PARTS LIMITED TO 5 REUSE CYCLES.
- DESIGN AND USAGE LIMITATIONS: THE ULTIMATE TENSILE STRENGTH IS BASED ON 220 KSI AND THE CROSS SECTIONAL AREA AT BASIC PITCH DIAMETER. THESE NUTS ARE DESIGNED TO BE USED ON 3A EXTERNAL THREADS WITHIN THE LIMITATIONS OF MS33588.
- DIMENSIONS APPLY BEFORE LUBRICATION.
- DIMENSIONS IN INCHES.

INFORMATION ON THIS DOCUMENT IS A TRADE SECRET, PROPRIETARY, AND SHALL NOT BE USED OR REPRODUCED IN WHOLE OR IN PART WITHOUT WRITTEN AUTHORIZATION OF SPS TECHNOLOGIES.

TOLERANCES ±.010 AND ±2" SURFACE ROUGHNESS 125 UNLESS OTHERWISE NOTED	THIS PRODUCT DRAWING IS DRAFTED IN ACCORDANCE WITH ASME Y14.5M DATE: 10/18/88		FSCM NO. 56878 CUSTODIAN: JENKINTOWN, PA.	STANDARDS AND SPECIFICATIONS NASM85730 EXCEPT AS NOTED
DRAWN BY: R.L. SANDY APPROVED: M ZATAVESKI APPROVED: M LAWLER	DATE: 10/03/2000		TITLE NUT, DOUBLE HEXAGON, FLANGED, SELF-LOCKING CORROSION RESISTANT ALLOY, 220 KSI, APPLICATIONS TO 450°F. AND 900°F.	PART NUMBER: 80221() - () SHEET 1 OF 1