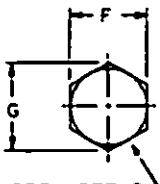
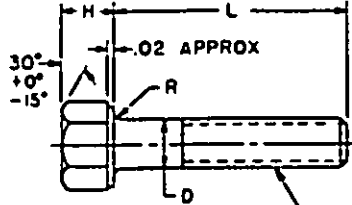
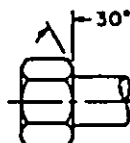


MAXIMUM: A, 15, 47, M1, MU, NSA, OS, PS  
 MINIMUM: AS, ME, CL, MC, 1D

This military standard is mandatory for use by all Departments and Agencies  
 of the Department of Defense. Selection for all new engineering and design  
 applications and for repetitive use shall be made from this document.

FED. SUP CLASS 5305							
 <p>SEE NOTE 6</p>	 <p>30° APPROX</p>	 <p>OPTIONAL DESIGN</p>					
TABLE 1							
NOMINAL SIZE		1/4	5/16	3/8	7/16	1/2	9/16
B THREAD UNC-2A		20	18	16	14	13	12
D BODY DIAMETER	MAX MIN	.2500 .2450	.3125 .3065	.3750 .3690	.4375 .4305	.5000 .4930	.5625 .5545
F WIDTH ACROSS FLATS	MAX MIN	.4175 .4250	.5000 .4900	.5625 .5510	.6250 .6120	.7000 .6860	.8125 .7980
G WIDTH ACROSS CORNERS	MAX MIN	.505 .464	.577 .537	.650 .625	.722 .695	.800 .740	.918 .810
H HEAD HEIGHT	MAX MIN	.165 .150	.211 .195	.243 .226	.291 .272	.323 .302	.371 .345
R RADIUS	MAX MIN	.025 .015	.025 .015	.025 .015	.025 .015	.025 .015	.045 .020
• MIN TENSILE STRENGTH - LBS		2,440	4,190	6,200	8,900	11,300	14,500
L LENGTH	TOLERANCE	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.
.175	±.011	101	127	153			
.1875		102	128	154			
.200		103	129	155			
.2125		104	130	156			
.225		105	131	157			
.2375		106	132	158			
.250		107	133	159			
.2625		108	134	160			
.275	±.002	109	135	161			
.2875		110	136	162			
.300		111	137	163			
.3125		112	138	164			
.325		113	139	165			
.3375		114	140	166			
.350		115	141	167			
.3625	±.004	116	142	168			
.375		117	143	169			
.3875		118	144	170			
.400		119	145	171			
.4125		120	146	172			
.425		121	147	173			
.4375		122	148	174			
.450		123	149	175			
.4625		124	150	176			
.475		125	151	177			
.4875		126	152	178			
.500		127					
.5125		128					
.525		129					
.5375	130						
.550	131						
.5625	132						
.575	133						
.5875	134						
.600	135						
.6125	136						
.625	137						
.6375	138						
.650	139						
.6625	140						
.675	141						
.6875	142						
.700	143						
.7125	144						
.725	145						
.7375	146						
.750	147						
.7625	148						
.775	149						
.7875	150						
.800	151						
.8125	152						
.825	153						
.8375	154						
.850	155						
.8625	156						
.875	157						
.8875	158						
.900	159						
.9125	160						
.925	161						
.9375	162						
.950	163						
.9625	164						
.975	165						
.9875	166						
1.000	167						
1.125	168						
1.250	169						
1.375	170						
1.500	171						
1.750	172						
2.000	173						
2.250	174						
2.500	175						
2.750	176						
3.000	177						
3.250	178						
3.500	179						
3.750	180						
4.000	181						
4.250	182						
4.500	183						
4.750	184						
5.000	185						
5.250	186						
5.500	187						
5.750	188						
6.000	189						
NOTE: For notes and additional sizes see sheet 2. For interchangeability table see sheet 1.							
(D) For changes see sheet 2.							
P.A. VC Other Code SH 82	TITLE SCREW, CAP, HEXAGON HEAD (FINISHED HEXAGON BOLT), STEEL, CORROSION RESISTING, PASSIVATED, UNC-2A					MILITARY STANDARD <b>MS 35307</b>	
PROCUREMENT SPECIFICATION FF-S-65	SUPERSEDES (BCA11.1, 1.2, 2, 3.3) in part, BUB137 and BUB137.1					SHEET 1 OF 3	

APPROVED 4 MAR 54 REVISED 4 7 MAY 63 5 AUG 65 14 OCT 68 1 MAY 1969

This military standard is mandatory for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document.

HEATHLEY, AV, IS, AT, MI, MU, NSA, OS, BS  
1. SHERMAN, ME, CL, MC, YD

TABLE II							FED. SUP CLASS
							5305
NOMINAL SIZE	5/8	3/4	7/8	1	1-1/8	1-1/4	
B THREAD UNC-2A	11	10	9	8	7	7	
D BODY DIAMETER	MAX MIN	.6250 .6170	.7500 .7410	.8750 .8660	1.0000 .9900	1.1250 1.1140	1.2500 1.2390
F WIDTH ACROSS FLATS	MAX MIN	.9175 .9220	1.1250 1.1000	1.3125 1.2950	1.5000 1.4690	1.6875 1.6310	1.8750 1.8120
G WIDTH ACROSS CORNERS	MAX MIN	1.053 1.051	1.299 1.254	1.516 1.465	1.732 1.675	1.949 1.859	2.165 2.066
H HEAD HEIGHT	MAX MIN	.403 .375	.453 .455	.563 .531	.627 .591	.718 .658	.813 .749
R RADIUS	MAX MIN	.045 .020	.045 .020	.065 .040	.095 .060	.095 .060	.095 .060
* MIN TENSILE STRENGTH - LBS (D)	18,050	23,350	32,300	42,400	53,400	67,800	
L LENGTH	TOLERANCE		DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.
	SIZE 3/4 AND UNDER	SIZE 7/8 AND OVER					
.625	+0	-0	455	456			
.750	-0.031	-0.062	457	458	502		
.875			459	460	503	524	
1.000							
1.125			459	462	504	525	
1.250	+0	-0	460	463	505	526	565
1.375	-0.062	-0.125	461	464	506	527	566
1.500			462	465	507	528	567
1.750			463	466	508	529	568
2.000			464	467	509	530	569
2.250			465	468	510	531	570
2.500			466	469	511	532	571
2.750			467	470	512	533	572
3.000			468	471	513	534	573
3.250			469	472	514	535	574
3.500	+0	-0	470	473	515	536	575
3.750	-0.094	-0.156	471	474	516	537	576
4.000			472	475	517	538	577
4.250			473	476	518	539	578
4.500			474	477	519	540	579
4.750			475	478	520	541	580
5.000			476	479	521	542	581
5.500			477	500	522	543	582
6.000			478	501	523	544	583

NOTES:

- MATERIAL: Corrosion-resisting steel, 300 series, in accordance with procurement specification.
- PROTECTIVE COATING: Passivated in accordance with procurement specification.
- MAGNETIC PERMEABILITY: These fasteners have a magnetic permeability of 2.0 maximum (air = 1.0) for a field strength of H = 200 oersteds using a magnetic indicator in accordance with MIL-1-17214.
- THREADS: The threads shall be in accordance with Screw-Thread Standards for Federal Services, Handbook H25.
- THREAD LENGTH: Minimum thread length shall be twice the diameter plus 1/4 inch. The tolerance shall be plus 3/16 inch or 2-1/2 threads, whichever is greater. On screws that are too short for minimum thread lengths, the distance from the bearing surface of the head to the first complete thread shall not exceed the length of 2-1/2 threads for sizes up to and including 1 inch and 3-1/2 threads for sizes larger than 1 inch.
- HEAD MARKING: Heads shall be marked in accordance with MIL-HDBA-131. Raised markings are preferred, stampings are acceptable.
- DIMENSIONS: All dimensions are in inches, unless otherwise specified.
- PART NUMBER: The MS part number consists of the MS number, plus the dash number.  
Example: MS35307-301.
- Based on minimum ultimate tensile strength of 50,000 p.s.i. for diameters thru 5/8 inch, and 70,000 p.s.i. for diameters over 5/8 inch. Breaking strengths are calculated by the stress areas indicated in Screw-Thread Standards for Federal Services, Handbook H25.
- Referenced documents shall be of the issue in effect on date of invitations for bid.
- For design feature purposes, this standard takes precedence over procurement documents referenced herein.

P.A. WC	TITLE	MILITARY STANDARD
Other Cont SH B2	SCREW, CAP, HEXAGON HEAD (FINISHED HEXAGON BOLT), STEEL, CORROSION RESISTING, PASSIVATED, UNC-2A	MS35307
PROCUREMENT SPECIFICATION FF-S-85	SUPERSEDES: (HCA11.1, 1.2, 2, 3.3) in part, BUBX17 and BUBX17.1	SHEET 2 OF

FED. SUP CLASS  
5305

INTERCHANGEABILITY TABLE

The screws covered by dash numbers given in original issue of this standard are cancelled after 7 May 63. Use the dash numbers given in the preceding sheets of this standard. The cancelled screws cannot always replace the new screws and should be used until existing stocks are depleted. Use only the new screws for design and replacement. Replacement should be in accordance with this table.

TABLE III

DASH NUMBERS		DASH NUMBERS		DASH NUMBERS		DASH NUMBERS		DASH NUMBERS	
CANCELLED	NEW	CANCELLED	NEW	CANCELLED	NEW	CANCELLED	NEW	CANCELLED	NEW
MS35307	MS35307	MS35307	MS35307	MS35307	MS35307	MS35307	MS35307	MS35307	MS35307
1	301	55	355	113	415	172	472	229	529
2	302	59	359	116	416	173	473	230	530
3	303	60	360	117	417	174	474	231	531
4	304	61	361	118	418	175	475	232	532
5	305	62	362	119	419	176	476	233	533
6	306	63	363	120	420	177	477	234	534
7	307	64	364	121	421	178	478	235	535
8	308	65	365	122	422	179	479	236	536
9	309	66	366	123	423	180	480	237	537
10	310	67	367	124	424	181	481	238	538
11	311	68	368	125	425	182	482	239	539
12	312	69	369	126	426	183	483	240	540
13	313	70	370	127	427	184	484	241	541
14	314	71	371	128	428	185	485	242	542
15	315	72	372	129	429	186	486	243	543
16	316	73	373	130	430	187	487	244	544
17	317	74	374	131	431	188	488	245	545
18	318	75	375	132	432	189	489	246	546
19	319	76	376	133	433	190	490	247	547
20	320	77	377	134	434	191	491	248	548
21	321	78	378	135	435	192	492	249	549
22	322	79	379	136	436	193	493	250	550
23	323	80	380	137	437	194	494	251	551
24	324	81	381	138	438	195	495	252	552
25	325	82	382	139	439	196	496	253	553
26	326	83	383	140	440	197	497	254	554
27	327	84	384	141	441	198	498	255	555
28	328	85	385	142	442	199	499	256	556
29	329	86	386	143	443	200	500	257	557
30	330	87	387	144	444	201	501	258	558
31	331	88	388	145	445	202	502	259	559
32	332	89	389	146	446	203	503	260	560
33	333	90	390	147	447	204	504	261	561
34	334	91	391	148	448	205	505	262	562
35	335	92	392	149	449	206	506	263	563
36	336	93	393	150	450	207	507	264	564
37	337	94	394	151	451	208	508	265	565
38	338	95	395	152	452	209	509	266	566
39	339	96	396	153	453	210	510	267	567
40	340	97	397	154	454	211	511	268	568
41	341	98	398	155	455	212	512	269	569
42	342	99	399	156	456	213	513	270	570
43	343	100	400	157	457	214	514	271	571
44	344	101	401	158	458	215	515	272	572
45	345	102	402	159	459	216	516	273	573
46	346	103	403	160	460	217	517	274	574
47	347	104	404	161	461	218	518	275	575
48	348	105	405	162	462	219	519	276	576
49	349	106	406	163	463	220	520	277	577
50	350	107	407	164	464	221	521	278	578
51	351	108	408	165	465	222	522	279	579
52	352	109	409	166	466	223	523	280	580
53	353	110	410	167	467	224	524	281	581
54	354	111	411	168	468	225	525	282	582
55	355	112	412	169	469	226	526	283	583
56	356	113	413	170	470	227	527	284	584
57	357	114	414	171	471	228	528	285	585

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MANUFACTURER, IS, AT, MI, MU, NSA, OS, DS  
INSTRUMENTS, ME, GL, NC, ID

APPROVED 4 MAR 54 REVISED 7 MAY 63 5 AUG 63 14 OCT 68 FOR CHANGES SEE SHEET 2.

P.A. 60

Other Cost 2H

TITLE

SCREW, CAP, HEXAGON HEAD (FINISHED HEXAGON BOLT),  
STEEL, CORROSION RESISTING, PASSIVATED, UNC-2A

MILITARY STANDARD

MS35307

PROCUREMENT SPECIFICATION  
FF-N-55SUPERSEDES (BOLT) 1, 1.2, 2, 3, 3.1 in part, BOLT 17 and  
BOLT 17.1

SHEET 1 OF