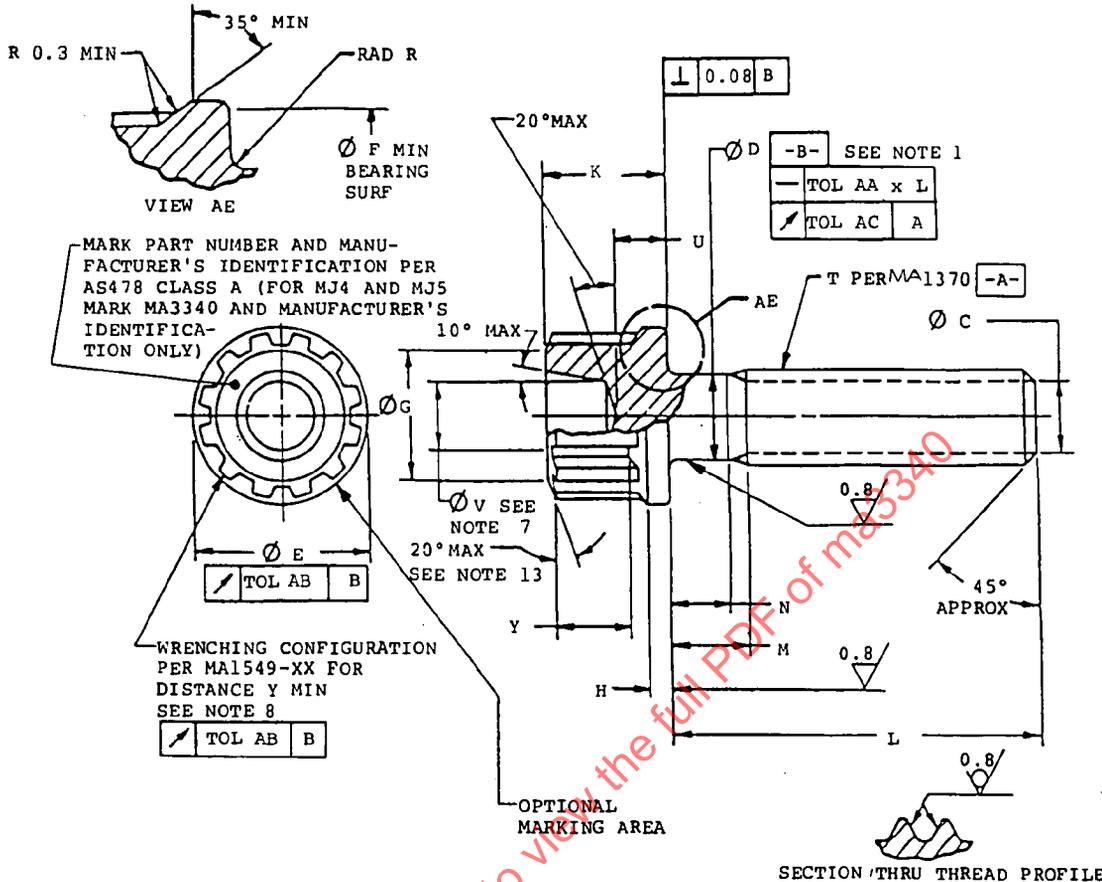


MA3340

FEDERAL SUPPLY CLASS

5306

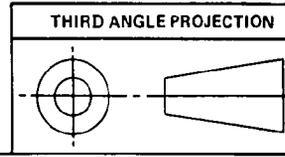


- FOR PART NUMBERS WHERE DIMENSION N IS EQUAL TO OR LESS THAN ONE TIMES THE NOMINAL DIAMETER OF THE THREAD, THE THREAD PD SHALL REPLACE DATUM B.
- MATERIAL: CORROSION AND HEAT RESISTANT NICKEL ALLOY AMS 5662. (UNS N07709)
- PROCUREMENT SPECIFICATION: MA3377
- FLUORESCENT PENETRANT INSPECTION PER AMS 2645. ACCEPTANCE CRITERIA PER MA3377
- SURFACE TEXTURE: SYMBOLS PER ANSI Y14.36-1978; REQUIREMENTS PER ANSI B46.1-1985 UNLESS OTHERWISE SPECIFIED SURFACES TO BE 3.2 MICROMETERS Ra
- PART NUMBER SHALL INCLUDE THE STANDARD NUMBER AND THE DASH NUMBER TO INDICATE DIAMETER AND LENGTH. EXAMPLE OF PART NUMBER:

MA3340-040020 = BOLT MJ4x0.7 THREAD 20MM LONG
 MA3340-120104 = BOLT MJ12x1.25 THREAD 104MM LONG

- SHAPE OF BOTTOM OF HOLE MAY BE FLAT OR CURVED WITHIN DIMENSIONS SHOWN. NO HOLE IS REQUIRED ON DIAMETER MJ4.
- WRENCHING CONFIGURATION SHALL BE IN ACCORDANCE WITH MA1549. FOR THE APPLICABLE DASH NUMBER SEE TABLE I.
- BREAK EDGES 0.1-0.4, UNLESS OTHERWISE SPECIFIED.
- DIMENSIONING AND TOLERANCING: ANSI Y14.5M-1982, TOLERANCE GRADE PER ANSI B4.2-1978
- ALL DIMENSIONS IN SI MILLIMETERS UNLESS OTHERWISE SPECIFIED.
- DO NOT USE UNASSIGNED PART NUMBERS.
- CURVED OR ANGULAR WITHIN ENVELOPE.
- HARDNESS: 40-46 HRC OR EQUIVALENT

MA, AS AND AMS ARE SAE PUBLICATIONS.
 ANSI IS AMERICAN NATIONAL STANDARDS INSTITUTE PUBLICATION.



PREPARED BY SAE COMMITTEE E25, GENERAL STANDARDS FOR AEROSPACE PROPULSION SYSTEMS

SAE The Engineering Society
 For Advancing Mobility
 Land Sea Air and Space®

400 Commonwealth Drive
 Warrendale, PA 15096

METRIC AEROSPACE STANDARD

BOLT, MACHINE-SPLINE EXTENDED WASHER,
 PD SHANK, LONG THREAD, AMS 5662, METRIC

MA3340

SHEET 1 OF 5

SAE Technical Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user." SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

ISSUED 12-87 REVISED

MA 3340

FEDERAL SUPPLY CLASS
5306

TABLE I

PART NUMBER SEE NOTE 6	NOM DIA REF	THREAD T	C	K h15	E MAX	F MIN	G MIN	H MIN	D
MA3340-4XXX	4	MJ4x0.7-4h6h	2.6-3.1	5.02-5.50	8.3	7.5	6	0.8	3.42- 3.68
MA3340-5XXX	5	MJ5x0.8-4h6h	3.0-4.0	5.92-6.50	9.1	8.3	7	1.0	4.35- 4.61
MA3340-6XXX	6	MJ6x1-4h6h	3.7-4.7	6.92-7.50	10.6	9.8	8	1.2	5.22- 5.48
MA3340-7XXX	7	MJ7x1-4h6h	4.7-5.7	7.62-8.20	12.1	11.3	9	1.4	6.22- 6.48
MA3340-8XXX	8	MJ8x1-4h6h	5.7-6.7	8.02-8.60	13.6	12.8	10	1.6	7.22- 7.48
MA3340-10XXX	10	MJ10x1.25-4h6h	7.4-8.4	9.4-10.10	16.7	15.7	12	2.0	9.06- 9.32
MA3340-12XXX	12	MJ12x1.25-4h6h	9.4-10.4	10.7-11.4	19.8	18.8	14	2.4	11.06-11.32

NOM DIA REF	R	U	V	Y MIN	AA	AB	AC	WRENCHING CONFIGURATION DASH NO. SEE NOTE 9
4	0.2-0.4	----	----	2.5	0.0030	0.10	0.12	06
5	0.3-0.5	2.5-2.9	3.2-3.7	2.8	0.0030	0.13	0.12	07
6	0.5-0.7	2.8-3.2	4.1-4.6	3.5	0.0030	0.15	0.12	08
7	0.5-0.7	3.3-3.7	4.9-5.4	3.8	0.0030	0.18	0.15	09
8	0.5-0.7	3.7-4.1	5.2-5.7	3.9	0.0030	0.20	0.15	10
10	0.6-0.8	4.7-5.1	6.7-7.2	4.2	0.0025	0.25	0.15	12
12	0.6-0.9	5.6-6.0	8.0-8.5	4.5	0.0025	0.30	0.18	14

TABLE II

L LENGTH	MJ4x0.7-4h6h				MJ5x0.8-4h6h			
	DASH NO. SEE NOTE 6	M MAX	N MIN	Mass kg/ 100	DASH NO. SEE NOTE 6	M MAX	N MIN	Mass kg/ 100
5.7-6.3	040006	1.8	0.4	0.232				
7.7-8.3	040008	1.8	0.4	0.248	050008	2.1	0.5	0.366
9.7-10.3	040010	1.8	0.4	0.264	050010	2.1	0.5	0.392
11.7-12.3	040012	1.8	0.4	0.280	050012	2.1	0.5	0.418
13.7-14.3	040014	1.8	0.4	0.296	050014	2.1	0.5	0.443
15.7-16.3	040016	2.0	0.4	0.312	050016	2.1	0.5	0.469
17.7-18.3	040018	4.0	1.1	0.328	050018	2.1	0.5	0.495
19.7-20.3	040020	6	3.1	0.344	050020	4.0	0.9	0.520
21.7-22.3	040022	8	5.1	0.360	050022	6	2.9	0.546
23.7-24.3	040024	10	7.1	0.376	050024	8	4.9	0.571
25.7-26.3	040026	12	9.1	0.392	050026	10	6.9	0.596
27.7-28.3	040028	14	11.1	0.408	050028	12	8.9	0.622
29.7-30.3	040030	16	13.1	0.424	050030	14	10.9	0.647
31.7-32.3	040032	18	15.1	0.439	050032	16	12.9	0.673
33.7-34.3	040034	20	17.1	0.455	050034	18	14.9	0.698
35.7-36.3	040036	22	19.1	0.471	050036	20	16.9	0.724
37.7-38.3	040038	24	21.1	0.487	050038	22	18.9	0.749
39.7-40.3	040040	26	23.1	0.503	050040	24	20.9	0.774
41.7-42.3	040042	28	25.1	0.519	050042	26	22.9	0.800
43.7-44.3	040044	30	27.1	0.535	050044	28	24.9	0.825
45.7-46.3	040046	32	29.1	0.551	050046	30	26.9	0.850
47.7-48.3	040048	34	31.1	0.566	050048	32	28.9	0.876
49.7-50.3	040050	36	33.1	0.582	050050	34	30.9	0.901
51.7-52.3	040052	38	35.1	0.598	050052	36	32.9	0.927
53.7-54.3	040054	40	37.1	0.614	050054	38	34.9	0.952
55.7-56.3	040056	42	39.1	0.630	050056	40	36.9	0.978
57.7-58.3					050058	42	38.9	1.003
59.7-60.3					050060	44	40.9	1.028
63.7-64.3					050064	48	44.9	1.079
67.7-68.3					050068	52	48.9	1.130

METRIC AEROSPACE STANDARD

BOLT, MACHINE-SPLINE EXTENDED WASHER,
PD SHANK, LONG THREAD, AMS 5662, METRIC

MA 3340

SHEET 2 OF 5

ISSUED 12-67

MA3340

FEDERAL SUPPLY CLASS
5306

TABLE II (Continued)

L LENGTH	MJ6x1-4h6h				MJ7x1-4h6h			
	DASH NO. SEE NOTE 6	M MAX	N MIN	Mass kg/ 100	DASH NO. SEE NOTE 6	M MAX	N MIN	Mass kg/ 100
9.7-10.3	060010	2.7	0.7	0.570	070010	2.7	0.7	0.793
11.7-12.3	060012	2.7	0.7	0.606	070012	2.7	0.7	0.845
13.7-14.3	060014	2.7	0.7	0.643	070014	2.7	0.7	0.896
15.7-16.3	060016	2.7	0.7	0.679	070016	2.7	0.7	0.948
17.7-18.3	060018	2.7	0.7	0.716	070018	2.7	0.7	1.000
19.7-20.3	060020	2.7	0.7	0.753	070020	2.7	0.7	1.052
21.7-22.3	060022	4.0	0.7	0.789	070022	2.7	0.7	1.103
23.7-24.3	060024	6	2.5	0.826	070024	4.0	0.7	1.155
25.7-26.3	060026	8	4.5	0.862	070026	6	2.5	1.206
27.7-28.3	060028	10	6.5	0.898	070028	8	4.5	1.257
29.7-30.3	060030	12	8.5	0.935	070030	10	6.5	1.308
31.7-32.3	060032	14	10.5	0.971	070032	12	8.5	1.360
33.7-34.3	060034	16	12.5	1.007	070034	14	10.5	1.411
35.7-36.3	060036	18	14.5	1.044	070036	16	12.5	1.462
37.7-38.3	060038	20	16.5	1.080	070038	18	14.5	1.513
39.7-40.3	050040	22	18.5	1.116	070040	20	16.5	1.565
41.7-42.3	050042	24	20.5	1.152	070042	22	18.5	1.616
43.7-44.3	050044	26	22.5	1.189	070044	24	20.5	1.668
45.7-46.3	050046	28	24.5	1.225	070046	26	22.5	1.718
47.7-48.3	050048	30	26.5	1.261	070048	28	24.5	1.770
49.7-50.3	060050	32	28.5	1.298	070050	30	26.5	1.821
51.7-52.3	060052	34	30.5	1.334	070052	32	28.5	1.872
53.7-54.3	060054	36	32.5	1.370	070054	34	30.5	1.923
55.7-56.3	060056	38	34.5	1.406	070056	36	32.5	1.974
57.7-58.3	060058	40	36.5	1.443	070058	38	34.5	2.026
59.7-60.3	060060	42	38.5	1.479	070060	40	36.5	2.077
63.7-64.3	060064	46	42.5	1.552	070064	44	40.5	2.179
67.7-68.3	060066	50	46.5	1.624	070066	48	44.5	2.282
71.7-72.3	060072	54	50.5	1.697	070072	52	48.5	2.384
75.7-76.3	060076	58	54.5	1.770	070076	56	52.5	2.487
79.7-80.3	060080	62	58.5	1.842	070080	60	56.5	2.589
83.7-84.3	060084	66	62.5	1.915	070084	64	60.5	2.692
87.7-88.3					070088	68	64.5	2.794
91.7-92.3					070092	72	68.5	2.896
95.7-96.3					070096	76	72.5	2.999

SAENORM.COM · Click to view the full PDF of ma3340

ISSUED 12-87 REVISED

METRIC AEROSPACE STANDARD

BOLT, MACHINE-SPLINE EXTENDED WASHER,
PD SHANK, LONG THREAD, AMS 5662, METRIC

MA3340

SHEET 3 OF 5

MA 3340

FEDERAL SUPPLY CLASS

5306

TABLE II (Continued)

MJ8x1-4h6h					MJ10X1.25-4h6h			
L LENGTH	DASH NO. SEE NOTE 6	M MAX	N MIN	Mass kg/100	DASH NO. SEE NOTE 6	M MAX	N MIN	Mass kg/100
9.7-10.3	080010	2.7	0.7	1.071				
11.7-12.3	080012	2.7	0.7	1.140				
13.7-14.3	080014	2.7	0.7	1.210	100014	3.3	0.8	2.205
15.7-16.3	080016	2.7	0.7	1.279	100016	3.3	0.8	2.133
17.7-18.3	080018	2.7	0.7	1.348	100018	3.3	0.8	2.241
19.7-20.3	080020	2.7	0.7	1.417	100020	3.3	0.8	2.350
21.7-22.3	080022	2.7	0.7	1.486	100022	3.3	0.8	2.458
23.7-24.3	080024	2.7	0.7	1.556	100024	3.3	0.8	2.566
25.7-26.3	080026	4	0.7	1.625	100026	3.3	0.8	2.674
27.7-28.3	080028	6	2.5	1.694	100028	3.3	0.8	2.783
29.7-30.3	080030	8	4.5	1.762	100030	4.0	0.8	2.891
31.7-32.3	080032	10	6.5	1.831	100032	6	2	2.999
33.7-34.3	080034	12	8.5	1.900	100034	8	4	3.106
35.7-36.3	080036	14	10.5	1.968	100036	10	6	3.213
37.7-38.3	080038	16	12.5	2.037	100038	12	8	3.321
39.7-40.3	080040	18	14.5	2.106	100040	14	10	3.428
41.7-42.3	080042	20	16.5	2.175	100042	16	12	3.536
43.7-44.3	080044	22	18.5	2.243	100044	18	14	3.643
45.7-46.3	080046	24	20.5	2.312	100046	20	16	3.750
47.7-48.3	080048	26	22.5	2.381	100048	22	18	3.858
49.7-50.3	080050	28	24.5	2.450	100050	24	20	3.965
51.7-52.3	080052	30	26.5	2.518	100052	26	22	4.072
53.7-54.3	080054	32	28.5	2.587	100054	28	24	4.178
55.7-56.3	080056	34	30.5	2.656	100056	30	26	4.287
57.7-58.3	080058	36	32.5	2.724	100058	32	28	4.394
59.7-60.3	080060	38	34.5	2.793	100060	34	30	4.502
63.7-64.3	080064	42	38.5	2.931	100064	38	34	4.717
67.7-68.3	080068	46	42.5	3.068	100068	42	38	4.931
71.7-72.3	080072	50	46.5	3.206	100072	46	42	5.146
75.7-76.3	080076	54	50.5	3.343	100076	50	46	5.361
79.7-80.3	080080	58	54.5	3.480	100080	54	50	5.576
83.7-84.3	080084	62	58.5	3.618	100084	58	54	5.790
87.7-88.3	080088	66	62.5	3.755	100088	62	58	6.005
91.7-92.3	080092	70	66.5	3.893	100092	66	62	6.220
95.7-96.3	080096	74	70.5	4.030	100096	70	66	6.435
99.7-100.3	080100	78	74.5	4.168	100100	74	70	6.650
103.7-104.3	080104	82	78.5	4.305	100104	78	74	6.864
107.7-108.3	080108	86	82.5	4.443	100108	82	78	7.079
111.7-112.3	080112	90	86.5	4.580	100112	86	82	7.294
115.7-116.3					100116	90	86	7.508
119.7-120.3					100120	94	90	7.723
123.7-124.3					100124	98	94	7.938
127.7-128.3					100128	102	98	8.153
131.7-132.3					100132	106	102	8.368
135.7-136.3					100136	110	106	8.582
139.7-140.3					100140	114	110	8.798

ISSUED 12-87 REVISED

METRIC AEROSPACE STANDARD

BOLT, MACHINE-SPLINE EXTENDED WASHER, PD SHANK, LONG THREAD, AMS 5662, METRIC

MA 3340

SHEET 4 OF 5