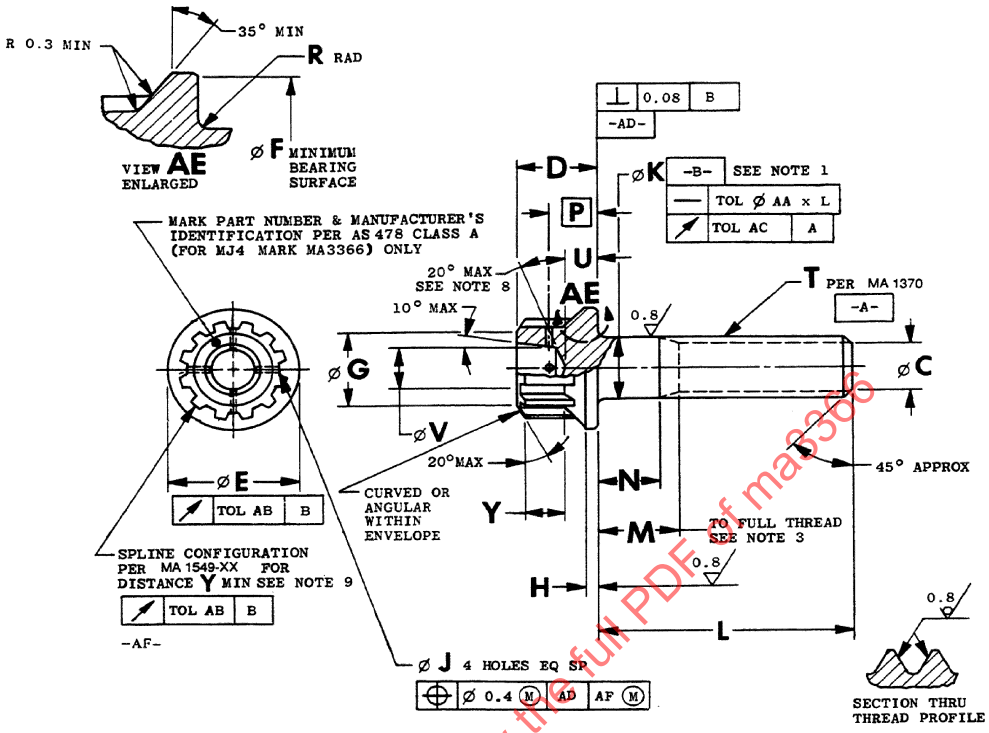
FEDERAL SUPPLY CLASS
5306

RATIONALE

MA3366 HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.



1. FOR PART NUMBERS WHERE DIMENSION **N** IS EQUAL OR LESS THAN ONE DIAMETER TO HEAD, THE THREAD PD SHALL REPLACE DATUM **B**
2. MATERIAL: CORROSION AND HEAT RESISTANT NICKEL BASE ALLOY AMS 5662 (UNS N07718)
3. PROCUREMENT SPECIFICATION: MA 3377
4. HARDNESS: 40-46 HRC OR EQUIVALENT.
5. FLUORESCENT PENETRANT INSPECTION: AMS 2645 . ACCEPTANCE CRITERIA PER MA 3377
6. **SURFACE TEXTURE: SYMBOLS PER ANSI Y14.36-1978; REQUIREMENTS PER ANSI/ASME B46.1-1985 UNLESS OTHERWISE SPECIFIED SURFACES TO BE 3.2 MICROMETRES Ra.**
7. PART NUMBER SHALL INCLUDE THE STANDARD NUMBER AND THE DASH NUMBER TO INDICATE DIAMETER AND LENGTH. EXAMPLE OF PART NUMBER:

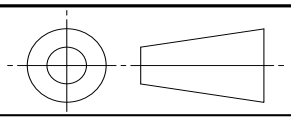
   MA3366-040018 = BOLT, MJ4x0.7 THREAD, 18 LONG

   MA3366-120116 = BOLT, MJ12X1.25 THREAD, 116 LONG
8. SHAPE OF BOTTOM OF HOLE MAY BE FLAT OR CURVED WITHIN DIMENSIONS SHOWN, NO HOLE IS REQUIRED ON DIAMETER 4.
9. WRENCHING CONFIGURATION SHALL BE IN ACCORDANCE WITH MA 1549 FOR THE APPLICABLE DASH NO. SEE TABLE I
10. BREAK EDGES 0.1-0.4, UNLESS OTHERWISE SPECIFIED.
11. DIMENSIONING AND TOLERANCING: ANSI Y14.5M-1982 . TOLERANCE GRADES PER ANSI B4.2-1978.
12. ALL DIMENSIONS IN SI MILLIMETRES UNLESS OTHERWISE SPECIFIED.
13. DO NOT USE UNASSIGNED PART NUMBERS.

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

SAE values your input. To provide feedback on this Technical Report, please visit
http://www.sae.org/technical/standards/MA3366

THIRD ANGLE PROJECTION



ISSUED 1987-07 REAFFIRMED 2015-05

CUSTODIAN: E-25

METRIC AEROSPACE STANDARD

BOLT, MACHINE - SPLINE DRIVE EXTENDED WASHER, DRILLED HEAD, FULL SHANK, LONG THREAD, AMS 5662, METRIC

MA3366
SHEET 1 OF 5

TO PLACE A DOCUMENT ORDER: **Tel: 877-606-7323 (inside USA and Canada)** **Tel: +1 724-776-4970 (outside USA)**
Fax: 724-776-0790 **Email: CustomerService@sae.org** **SAE WEB ADDRESS: http://www.sae.org**

TABLE I

PART NUMBER SEE NOTE 7	NOM DIA REF	THREAD T	C	D h15	E MAX	F MIN	G MIN	H MIN	J H13
MA3366-040XXX	4	MJ4x0.7-4h6h	2.6-3.1	5.02-5.50	8.3	7.5	6	0.8	1.00-1.14
MA3366-050XXX	5	MJ5x0.8-4h6h	3.0-4.0	5.92-6.50	9.1	8.3	7	1.0	1.00-1.14
MA3366-060XXX	6	MJ6x1-4h6h	3.7-4.7	6.92-7.50	10.6	9.8	8	1.2	1.40-1.54
MA3366-070XXX	7	MJ7x1-4h6h	4.7-5.7	7.62-8.20	12.1	11.3	9	1.4	1.40-1.54
MA3366-080XXX	8	MJ8x1-4h6h	5.7-6.7	8.02-8.60	13.6	12.8	10	1.6	1.40-1.54
MA3366-100XXX	10	MJ10x1.25-4h6h	7.4-8.4	9.40-10.10	16.7	15.7	12	2.0	1.60-1.74
MA3366-120XXX	12	MJ12x1.25-4h6h	9.4-10.4	10.70-11.40	19.9	18.8	14	2.4	1.60-1.74

TABLE I

NOM DIA REF	K h12	P	R	U	V	Y MIN	AA	AB	AC
4	3.88-4.00	3.5	0.2-0.4	———	———	2.5	0.0030	0.10	0.12
5	4.88-5.00	4.5	0.3-0.5	2.5-2.9	3.2-3.7	2.8	0.0030	0.13	0.12
6	5.88-6.00	5.2	0.5-0.7	2.8-3.2	4.1-4.6	3.5	0.0030	0.15	0.12
7	6.85-7.00	5.9	0.5-0.7	3.3-3.7	4.9-5.4	3.8	0.0030	0.18	0.15
8	7.85-8.00	6.3	0.5-0.7	3.7-4.1	5.2-5.7	3.9	0.0030	0.20	0.15
10	9.85-10.00	7.7	0.6-0.8	4.7-5.1	6.7-7.2	4.2	0.0025	0.25	0.15
12	11.82-12.00	8.8	0.6-0.9	5.6-6.0	8.0-8.5	4.5	0.0025	0.30	0.18

NOM DIA REF	WRENCHING CONFIGURATION DASH NO SEE NOTE 9
4	06
5	07
6	08
7	09
8	10
10	12
12	14

TABLE II

L LENGTH	MJ4x0.7-4h6h				MJ5x0.8-4h6h			
	DASH NO SEE NOTE 7	M MAX	N MIN	APPROX MASS kg/100	DASH NO SEE NOTE 7	M MAX	N MIN	APPROX MASS kg/100
17.7-18.3	040018	4.0	1.1	0.355	———	———	———	———
19.7-20.3	040020	6.0	3.1	0.374	050020	4.0	0.9	0.566
21.7-22.3	040022	8.0	5.1	0.393	050022	6.0	2.9	0.598
23.7-24.3	040024	10.0	7.1	0.412	050024	8.0	4.9	0.630
25.7-26.3	040026	12.0	9.1	0.431	050026	10.0	6.9	0.662
27.7-28.3	040028	14.0	11.1	0.450	050028	12.0	8.9	0.694
29.7-30.3	040030	16.0	13.1	0.469	050030	14.0	10.9	0.726
31.7-32.3	040032	18.0	15.1	0.488	050032	16.0	12.9	0.758
33.7-34.3	040034	20.0	17.1	0.507	050034	18.0	14.9	0.790
35.7-36.3	040036	22.0	19.1	0.526	050036	20.0	16.9	0.822
37.7-38.3	040038	24.0	21.1	0.545	050038	22.0	18.9	0.854
39.7-40.3	040040	26.0	23.1	0.564	050040	24.0	20.9	0.886
41.7-42.3	040042	28.0	25.1	0.583	050042	26.0	22.9	0.918
43.7-44.3	040044	30.0	27.1	0.602	050044	28.0	24.9	0.950
45.7-46.3	040046	32.0	29.1	0.621	050046	30.0	26.9	0.982
47.7-48.3	040048	34.0	31.1	0.640	050048	32.0	28.9	1.014
49.7-50.3	040050	36.0	33.1	0.659	050050	34.0	30.9	1.046
51.7-52.3	040052	38.0	35.1	0.678	050052	36.0	32.9	1.078
53.7-54.3	040054	40.0	37.1	0.697	050054	38.0	34.9	1.110
55.7-56.3	040056	42.0	39.1	0.716	050056	40.0	36.9	1.142
57.7-58.3					050058	42.0	38.9	1.174
59.7-60.3					050060	44.0	40.9	1.206
63.7-64.3					050064	48.0	44.9	1.270
67.7-68.3					050068	52.0	48.9	1.334

TABLE II (CONTINUED)

L LENGTH	MJ6x1-4h6h				MJ7x1-4h6h			
	DASH NO SEE NOTE 7	M MAX	N MIN	APPROX MASS kg/100	DASH NO SEE NOTE 7	M MAX	N MIN	APPROX MASS kg/100
21.7-22.3	060022	4.0	0.7	0.864	———	———	———	———
23.7-24.3	060024	6.0	2.5	0.910	070024	4.0	0.7	1.252
25.7-26.3	060026	8.0	4.5	0.955	070026	6.0	2.5	1.315
27.7-28.3	060028	10.0	6.5	1.002	070028	8.0	4.5	1.378
29.7-30.3	060030	12.0	8.5	1.050	070030	10.0	6.5	1.441
31.7-32.3	060032	14.0	10.5	1.094	070032	12.0	8.5	1.505
33.7-34.3	060034	16.0	12.5	1.140	070034	14.0	10.5	1.568
35.7-36.3	060036	18.0	14.5	1.186	070036	16.0	12.5	1.631
37.7-38.3	060038	20.0	16.5	1.232	070038	18.0	14.5	1.694
39.7-40.3	060040	22.0	18.5	1.278	070040	20.0	16.5	1.757
41.7-42.3	060042	24.0	20.5	1.324	070042	22.0	18.5	1.820
43.7-44.3	060044	26.0	22.5	1.370	070044	24.0	20.5	1.883
45.7-46.3	060046	28.0	24.5	1.416	070046	26.0	22.5	1.946
47.7-48.3	060048	30.0	26.5	1.462	070048	28.0	24.5	2.009
49.7-50.3	060050	32.0	28.5	1.508	070050	30.0	26.5	2.072
51.7-52.3	060052	34.0	30.5	1.554	070052	32.0	28.5	2.135
53.7-54.3	060054	36.0	32.5	1.600	070054	34.0	30.5	2.198
55.7-56.3	060056	38.0	34.5	1.646	070056	36.0	32.5	2.261
57.7-58.3	060058	40.0	36.5	1.692	070058	38.0	34.5	2.324
59.7-60.3	060060	42.0	38.5	1.738	070060	40.0	36.5	2.387
63.7-64.3	060064	46.0	42.5	1.830	070064	44.0	40.5	2.513
67.7-68.3	060068	50.0	46.5	1.922	070068	48.0	44.5	2.639
71.7-72.3	060072	54.0	50.5	2.014	070072	52.0	48.5	2.765
75.7-76.3	060076	58.0	54.5	2.106	070076	56.0	52.5	2.891
79.7-80.3	060080	62.0	58.5	2.198	070080	60.0	56.5	3.017
83.7-84.3	060084	66.0	62.5	2.290	070084	64.0	60.5	3.143
87.7-88.3					070088	68.0	64.5	3.270
91.7-92.3					070092	72.0	68.5	3.395
95.7-96.3					070096	76.0	72.5	3.521

TABLE II (CONTINUED)

L LENGTH	MJ8x1-4h6h				MJ10x1.25-4h6h			
	DASH NO SEE NOTE 7	M MAX	N MIN	APPROX MASS kg/100	DASH NO SEE NOTE 7	M MAX	N MIN	APPROX MASS kg/100
25.7-26.3	080026	4.0	0.7	1.762	———	—	—	———
27.7-28.3	080028	6.0	2.5	1.844	———	—	—	———
29.7-30.3	080030	8.0	4.5	1.926	———	—	—	———
31.7-32.3	080032	10.0	6.5	2.028	100032	6.0	2.0	3.253
33.7-34.3	080034	12.0	8.5	2.091	100034	8.0	4.0	3.382
35.7-36.3	080036	14.0	10.5	2.172	100036	10.0	6.0	3.511
37.7-38.3	080038	16.0	12.5	2.254	100038	12.0	8.0	3.640
39.7-40.3	080040	18.0	14.5	2.336	100040	14.0	10.0	3.769
41.7-42.3	080042	20.0	16.5	2.418	100042	16.0	12.0	3.898
43.7-44.3	080044	22.0	18.5	2.500	100044	18.0	14.0	4.027
45.7-46.3	080046	24.0	20.5	2.582	100046	20.0	16.0	4.156
47.7-48.3	080048	26.0	22.5	2.594	100048	22.0	18.0	4.285
49.7-50.3	080050	28.0	24.5	2.746	100050	24.0	20.0	4.414
51.7-52.3	080052	30.0	26.5	2.828	100052	26.0	22.0	4.543
53.7-54.3	080054	32.0	28.5	2.910	100054	28.0	24.0	4.672
55.7-56.3	080056	34.0	30.5	2.992	100056	30.0	26.0	4.801
57.7-58.3	080058	36.0	32.5	3.074	100058	32.0	28.0	4.930
59.7-60.3	080060	38.0	34.5	3.156	100060	34.0	30.0	5.059
63.7-64.3	080064	42.0	38.5	3.320	100064	38.0	34.0	5.317
67.7-68.3	080068	46.0	42.5	3.484	100068	42.0	38.0	5.575
71.7-72.3	080072	50.0	46.5	3.648	100072	46.0	42.0	5.833
75.7-76.3	080076	54.0	50.5	3.812	100076	50.0	46.0	6.091
79.7-80.3	080080	58.0	54.5	3.976	100080	54.0	50.0	6.349
83.7-84.3	080084	62.0	58.5	4.140	100084	58.0	54.0	6.603
87.7-88.3	080088	66.0	62.5	4.304	100088	62.0	58.0	6.865
91.7-92.3	080092	70.0	66.5	4.468	100092	66.0	62.0	7.123
95.7-96.3	080096	74.0	70.5	4.632	100096	70.0	66.0	7.377
99.7-100.3	080100	78.0	74.5	4.796	100100	74.0	70.0	7.639
103.7-104.3	080104	82.0	78.5	4.860	100104	78.0	74.0	7.897
107.7-108.3	080108	86.0	82.5	5.124	100108	82.0	78.0	8.155
111.7-112.3	080112	90.0	86.5	5.288	100112	86.0	82.0	8.413
115.7-116.3					100116	90.0	86.0	8.671
119.7-120.3					100120	94.0	90.0	8.929
123.7-124.3					100124	98.0	94.0	9.187
127.7-128.3					100128	102.0	98.0	9.445
131.7-132.3					100132	106.0	102.0	9.703
135.7-136.3					100136	110.0	106.0	9.961
139.7-140.3					100140	114.0	110.0	10.219