

D-17-23

**NOTICE OF
ADOPTION**ADOPTION NOTICE 1
25 August 1988 for
MA3339-87
August 1987

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Society of Automotive Engineers, Inc.
400 Commonwealth Drive
Warrendale, PA 15096-0001

Title of Document: BOLT, MACHINE-SPLINED, EXTENDED WASHER, PD SHANK, LONG
THREAD, AMS 6322, CADMIUM PLATED, METRIC.

Date of Specific Issue Adopted: August 1987

Releasing Non-Government Standards Body: Society of Automotive Engineers, Inc.

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DLA - IS

(Project 5306-1241)

Review Activities:

Army - AR
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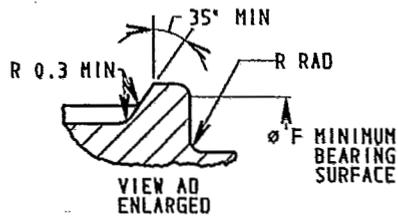
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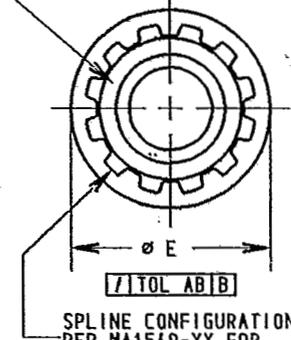
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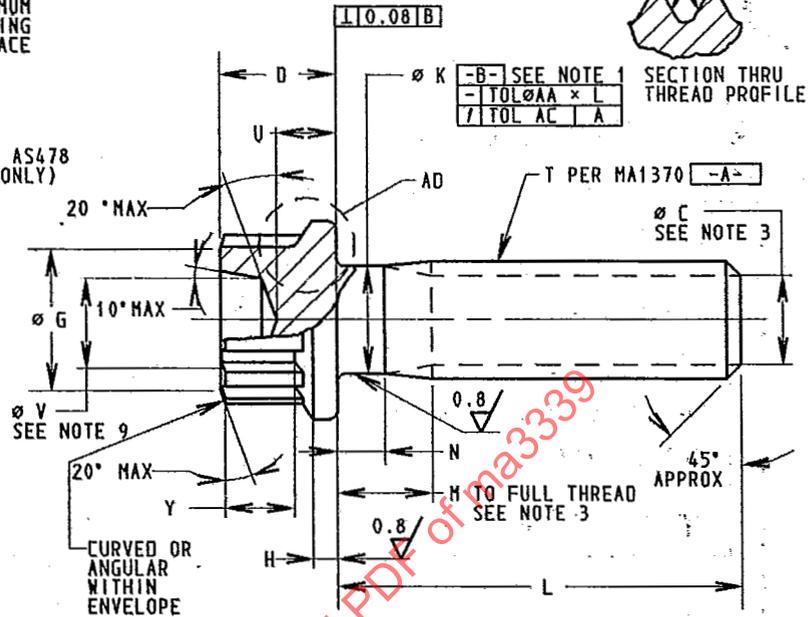


MARK PART NUMBER AND MANUFACTURER'S IDENTIFICATION PER AS478 CLASS A (FOR MJ4 MARK MA3339 ONLY)



SPLINE CONFIGURATION PER MA1549-XX FOR DISTANCE Y MIN SEE NOTE 10.

7/TOL AB/B

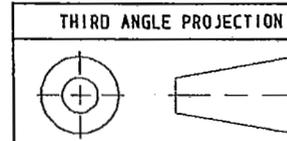


SECTION THRU THREAD PROFILE

- FOR PART NUMBERS WHERE DIMENSION N IS EQUAL OR LESS ONE DIAMETER TO THE HEAD, THE THREAD PD SHALL REPLACE DATUM B.
- MATERIAL: LOW-ALLOY STEEL AMS6322. (UNS G87400)
- PROCUREMENT SPECIFICATION: MA3376
- HARDNESS: 26-32 HRC OR EQUIVALENT.
- FINISH: CADMIUM PLATE PER AMS2400. DIMENSIONS ARE AFTER PLATING.
- MAGNETIC PARTICLE INSPECTION: AMS2640
- SURFACE TEXTURE: SYMBOLS PER ANSI Y14.36-1978; REQUIREMENTS PER ANSI B46.1-1985 UNLESS OTHERWISE SPECIFIED SURFACES TO BE 3.2 MICROMETRES Ra.
- PART NUMBER SHALL INCLUDE THE STANDARD NUMBER AND THE DASH NUMBER TO INDICATE DIAMETER AND LENGTH. EXAMPLE OF PART NUMBER:

MA3339-040024 = BOLT, MJ4X0.7 THREAD, 24 LONG.
 MA3339-120114 = BOLT, MJ12X1.25 THREAD, 114 LONG.

- SHAPE OF BOTTOM OF HOLE MAY BE FLAT OR CURVED WITHIN DIMENSIONS SHOWN, NO HOLE IS REQUIRED ON DIAMETER 4.
- 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 GRADES PER ANSI B4.2-1978.
- ALL DIMENSIONS IN SI MILLIMETRES UNLESS OTHERWISE SPECIFIED.
- DO NOT USE UNASSIGNED PART NUMBERS.
 AS, MA, & AMS ARE SAE PUBLICATIONS.
 ANSI IS AMERICAN NATIONAL STDS. INSTITUTE PUBLICATION.



PREPARED BY SAE COMMITTEE E-25, 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,
 AMS6322, CADMIUM PLATED, METRIC

MA3339

SHEET 1 OF 6

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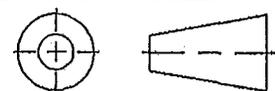
TABLE I

PART NUMBER SEE NOTE 8	NOM DIA REF	THREAD T	C	D h15	E MAX	F MIN	G MIN	H MIN
MA3339-040XXX	4	MJ4×0.7-4h6h	2.6-3.1	5.02-5.50	8.3	7.5	6	0.8
MA3339-050XXX	5	MJ5×0.8-4h6h	3.0-4.0	5.92-6.50	9.1	8.3	7	1.0
MA3339-060XXX	6	MJ6×1-4h6h	3.7-4.7	6.92-7.50	10.6	9.8	8	1.2
MA3339-070XXX	7	MJ7×1-4h6h	4.7-5.7	7.62-8.20	12.1	11.3	9	1.4
MA3339-080XXX	8	MJ8×1-4h6h	5.7-6.7	8.02-8.60	13.6	12.8	10	1.6
MA3339-100XXX	10	MJ10×1.25-4h6h	7.4-8.4	9.40-10.10	16.7	15.7	12	2.0
MA3339-120XXX	12	MJ12×1.25-4h6h	9.4-10.4	10.70-11.40	19.9	18.8	14	2.4

TABLE I (CONTD.)

NOM DIA REF	K	R	U	V	Y MIN	AA	AB	AC	WRENCHING CONFIGURATION DASH NO. SEE NOTE 10
4	3.42-3.68	0.2-0.4	--	--	2.5	0.0030	0.10	0.12	06
5	4.35-4.61	0.3-0.5	2.5-2.9	3.2-3.7	2.8	0.0030	0.13	0.12	07
6	5.22-5.48	0.5-0.7	2.8-3.2	4.1-4.6	3.5	0.0030	0.15	0.12	08
7	6.22-6.48	0.5-0.7	3.3-3.7	4.9-5.4	3.8	0.0030	0.18	0.15	09
8	7.22-7.48	0.5-0.7	3.7-4.1	5.2-5.7	3.9	0.0030	0.20	0.15	10
10	9.06-9.32	0.6-0.8	4.7-5.1	6.7-7.2	4.2	0.0025	0.25	0.15	12
12	11.06-11.32	0.6-0.9	5.6-6.0	8.0-8.5	4.5	0.0025	0.30	0.18	14

THIRD ANGLE PROJECTION



PREPARED BY SAE COMMITTEE E-25, GENERAL STANDARDS FOR AEROSPACE PROPULSION SYSTEMS

METRIC AEROSPACE STANDARD

BOLT, MACHINE-SPLINE EXTENDED
WASHER, PD SHANK, LONG THREAD,
AMS6322, CADMIUM PLATED, METRIC

MA3339

SHEET 2 OF 6

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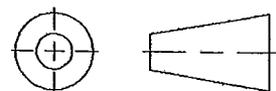
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TABLE II

L LENGTH	MJ4×0.7-4h6h				MJ5×0.8-4h6h			
	DASH NO. SEE NOTE 8	H MAX	N MIN	APPROX. MASS kg/100	DASH NO. SEE NOTE 8	H MAX	N MIN	APPROX. MASS kg/100
5.7-6.3	040006	1.8	0.4	0.237	--	--	--	--
7.7-8.3	040008	1.8	0.4	0.253	050008	2.1	0.5	0.353
9.7-10.3	040010	1.8	0.4	0.269	050010	2.1	0.5	0.379
11.7-12.3	040012	1.8	0.4	0.285	050012	2.1	0.5	0.405
13.7-14.3	040014	1.8	0.4	0.301	050014	2.1	0.5	0.430
15.7-16.3	040016	2.0	0.4	0.317	050016	2.1	0.5	0.456
17.7-18.3	040018	4.0	1.1	0.333	050018	2.1	0.5	0.481
19.7-20.3	040020	6.0	3.1	0.349	050020	4.0	0.9	0.507
21.7-22.3	040022	8.0	5.1	0.365	050022	6.0	2.9	0.532
23.7-24.3	040024	10.0	7.1	0.381	050024	8.0	4.9	0.558
25.7-26.3	040026	12.0	9.1	0.397	050026	10.0	6.9	0.583
27.7-28.3	040028	14.0	11.1	0.413	050028	12.0	8.9	0.609
29.7-30.3	040030	16.0	13.1	0.429	050030	14.0	10.9	0.635
31.7-32.3	040032	18.0	15.1	0.445	050032	16.0	12.9	0.660
33.7-34.3	040034	20.0	17.1	0.461	050034	18.0	14.9	0.686
35.7-36.3	040036	22.0	19.1	0.477	050036	20.0	16.9	0.711
37.7-38.3	040038	24.0	21.1	0.493	050038	22.0	18.9	0.737
39.7-40.3	040040	26.0	23.1	0.509	050040	24.0	20.9	0.762
41.7-42.3	040042	28.0	25.1	0.525	050042	26.0	22.9	0.788
43.7-44.3	040044	30.0	27.1	0.541	050044	28.0	24.9	0.813
45.7-46.3	040046	32.0	29.1	0.557	050046	30.0	26.9	0.839
47.7-48.3	040048	34.0	31.1	0.573	050048	32.0	28.9	0.864
49.7-50.3	040050	36.0	33.1	0.589	050050	34.0	30.9	0.890
51.7-52.3	040052	38.0	35.1	0.605	050052	36.0	32.9	0.916
53.7-54.3	040054	40.0	37.1	0.621	050054	38.0	34.9	0.941
55.7-56.3	040056	42.0	39.1	0.637	050056	40.0	36.9	0.967
57.7-58.3	--	--	--	--	050058	42.0	38.9	0.992
59.7-60.3	--	--	--	--	050060	44.0	40.9	1.018
63.7-64.3	--	--	--	--	050064	48.0	44.9	1.069
67.7-68.3	--	--	--	--	050068	52.0	48.9	1.120

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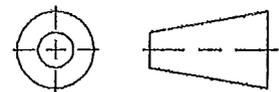
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TABLE II (CONTD.)

L LENGTH	MJ6×1-4h6h				MJ7×1-4h6h			
	DASH NO. SEE NOTE 8	M MAX	N MIN	APPROX. MASS kg/100	DASH NO. SEE NOTE 8	M MAX	N MIN	APPROX. MASS kg/100
9.7-10.3	060010	2.7	0.7	0.557	070010	2.7	0.7	0.772
11.7-12.3	060012	2.7	0.7	0.593	070012	2.7	0.7	0.823
13.7-14.3	060014	2.7	0.7	0.630	070014	2.7	0.7	0.875
15.7-16.3	060016	2.7	0.7	0.666	070016	2.7	0.7	0.926
17.7-18.3	060018	2.7	0.7	0.703	070018	2.7	0.7	0.978
19.7-20.3	060020	2.7	0.7	0.739	070020	2.7	0.7	1.029
21.7-22.3	060022	4.0	0.7	0.776	070022	2.7	0.7	1.080
23.7-24.3	060024	6.0	2.5	0.812	070024	4.0	0.7	1.132
25.7-26.3	060026	8.0	4.5	0.849	070026	6.0	2.5	1.183
27.7-28.3	060028	10.0	6.5	0.885	070028	8.0	4.5	1.235
29.7-30.3	060030	12.0	8.5	0.921	070030	10.0	6.5	1.286
31.7-32.3	060032	14.0	10.5	0.958	070032	12.0	8.5	1.338
33.7-34.3	060034	16.0	12.5	0.994	070034	14.0	10.5	1.389
35.7-36.3	060036	18.0	14.5	1.031	070036	16.0	12.5	1.441
37.7-38.3	060038	20.0	16.5	1.067	070038	18.0	14.5	1.492
39.7-40.3	060040	22.0	18.5	1.104	070040	20.0	16.5	1.544
41.7-42.3	060042	24.0	20.5	1.140	070042	22.0	18.5	1.595
43.7-44.3	060044	26.0	22.5	1.177	070044	24.0	20.5	1.646
45.7-46.3	060046	28.0	24.5	1.213	070046	26.0	22.5	1.689
47.7-48.3	060048	30.0	26.5	1.250	070048	28.0	24.5	1.749
49.7-50.3	060050	32.0	28.5	1.286	070050	30.0	26.5	1.801
51.7-52.3	060052	34.0	30.5	1.322	070052	32.0	28.5	1.852
53.7-54.3	060054	36.0	32.5	1.359	070054	34.0	30.5	1.904
55.7-56.3	060056	38.0	34.5	1.395	070056	36.0	32.5	1.955
57.7-58.3	060058	40.0	36.5	1.432	070058	38.0	34.5	2.007
59.7-60.3	060060	42.0	38.5	1.468	070060	40.0	36.5	2.058
63.7-64.3	060064	46.0	42.5	1.541	070064	44.0	40.5	2.161
67.7-68.3	060068	50.0	46.5	1.614	070068	48.0	44.5	2.264
71.7-72.3	060072	54.0	50.5	1.687	070072	52.0	48.5	2.367
75.7-76.3	060076	58.0	54.5	1.760	070076	56.0	52.5	2.470
79.7-80.3	060080	62.0	58.5	1.833	070080	60.0	56.5	2.573
83.7-84.3	060084	66.0	62.5	1.906	070084	64.0	60.5	2.676
87.7-88.3	--	--	--	--	070088	68.0	64.5	2.779
91.7-92.3	--	--	--	--	070092	72.0	68.5	2.882
95.7-96.3	--	--	--	--	070096	76.0	72.5	2.985

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