

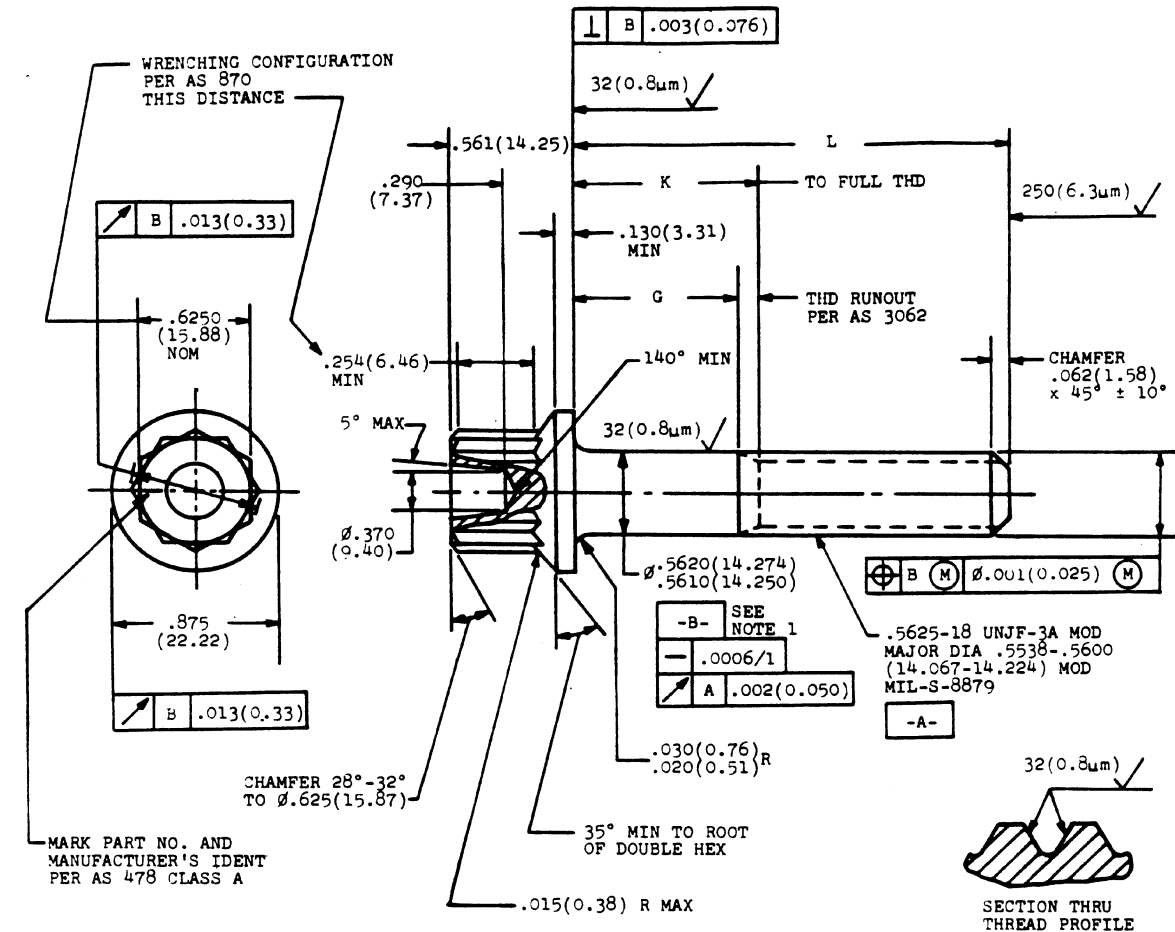
RATIONALE

THIS DOCUMENT HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE 5-YEAR REVIEW POLICY.

AS3173

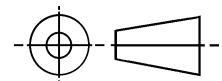
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1. FOR PART NUMBERS AS3173-03 THRU AS3173-15 THE THREAD PD SHALL REPLACE DATUM B.
2. MATERIAL: CORROSION AND HEAT RESISTANT ALLOY AMS 5643.
3. MANUFACTURING SPECIFICATION: AMS 7474.
4. FLUORESCENT PENETRANT INSPECTION PER AMS 2645.
5. SURFACE TEXTURE: ANSI B46.1-1962, UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES (3.2 MICROMETRES) EXCEPT UPSET HEAD.
6. BREAK SHARP EDGES .003-.015(0.08-0.38) UNLESS OTHERWISE SPECIFIED.
7. DIMENSIONS IN INCHES. METRIC CONVERSIONS ARE IN PARENTHESIS. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS ±.010(0.25), ANGULAR DIMENSIONS ±5°. INTERNATIONAL SYSTEM UNITS (SI) SHOWN ARE FOR REFERENCE ONLY.
8. HEAD TO SHANK FILLET SHALL BE COLD ROLLED PER AMS 7474 AFTER HEAT TREATMENT TO REMOVE ALL VISUAL EVIDENCE OF GRINDING OR TOOL MARKS EXCEPT THAT DISTORTIONS AT A IN FIGURE 2 OF THE SPECIFICATION SHALL NOT BE PERMITTED ON THE HEAD BEARING AREA AND SHALL BE PERMITTED ON THE SHANK DIAMETER ONLY IF THE DISTORTION DOES NOT CAUSE THE SHANK DIAMETER TO EXCEED .5625(14.287) DIAMETER.
9. DIMENSIONING AND TOLERANCING: ANSI Y14.5-1973.
10. DO NOT USE UNASSIGNED PART NUMBERS.

THIRD ANGLE PROJECTION



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

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

BOLT, MACHINE - DOUBLE HEX EXTENDED WASHER HEAD, CLOSE TOLERANCE SHANK, AMS 5643, .5625-18, UNJF-3A

AS3173
SHEET 1 OF 2

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AS3173

PART NUMBER	L		G MIN		K MAX		APPROX MASS		PART NUMBER	L		G MIN		K MAX		APPROX MASS	
	INCH	mm	INCH	mm	INCH	mm	LB/100	kg/100		INCH	mm	INCH	mm	INCH	mm	LB/100	kg/100
AS3173-03	1.066	27.08	.077	1.96	.198	5.02	12.09	5.48	AS3173-46	3.753	95.33	2.764	70.21	2.885	73.27	30.69	13.92
AS3173-04	1.128	28.65	.139	3.54	.260	6.60	12.52	5.68	AS3173-47	3.816	96.93	2.827	71.81	2.948	74.87	31.12	14.12
AS3173-05	1.190	30.23	.201	5.11	.322	8.17	12.95	5.87	AS3173-48	3.878	98.50	2.889	73.39	3.010	76.45	31.56	14.32
AS3173-06	1.253	31.83	.264	6.71	.385	9.77	13.38	6.07	AS3173-49	3.940	100.08	2.951	74.96	3.072	78.02	31.99	14.51
AS3173-07	1.316	33.43	.327	8.31	.448	11.37	13.82	6.27	AS3173-50	4.003	101.68	3.014	76.56	3.135	79.62	32.43	14.71
AS3173-08	1.378	35.00	.389	9.89	.510	12.95	14.25	6.46	AS3173-51	4.066	103.28	3.077	78.16	3.198	81.22	32.87	14.91
AS3173-09	1.440	36.58	.451	11.46	.572	14.52	14.68	6.66	AS3173-52	4.128	104.85	3.139	79.74	3.260	82.80	33.29	15.10
AS3173-10	1.503	38.18	.514	13.06	.635	16.12	15.11	6.85	AS3173-53	4.190	106.43	3.201	81.31	3.322	84.37	33.72	15.29
AS3173-11	1.566	39.78	.577	14.66	.698	17.72	15.55	7.05	AS3173-54	4.253	108.03	3.264	82.91	3.385	85.97	34.16	15.50
AS3173-12	1.628	41.35	.639	16.24	.760	19.30	15.98	7.25	AS3173-55	4.316	109.63	3.327	84.51	3.448	87.57	34.60	15.69
AS3173-13	1.690	42.93	.701	17.81	.822	20.87	16.41	7.44	AS3173-56	4.378	111.20	3.389	86.09	3.510	89.15	35.02	15.89
AS3173-14	1.753	44.53	.764	19.41	.885	22.47	16.84	7.64	AS3173-57	4.440	112.78	3.451	87.66	3.572	90.72	35.46	16.08
AS3173-15	1.816	46.13	.827	21.01	.948	24.07	17.28	7.84	AS3173-58	4.503	114.38	3.514	89.26	3.635	92.32	35.89	16.28
AS3173-16	1.878	47.70	.889	22.59	1.010	25.65	17.71	8.03	AS3173-59	4.566	115.98	3.577	90.86	3.698	93.92	36.33	16.48
AS3173-17	1.940	49.28	.951	24.16	1.072	27.22	18.14	8.23	AS3173-60	4.628	117.55	3.639	92.44	3.760	95.50	36.76	16.67
AS3173-18	2.003	50.88	1.014	25.76	1.135	28.82	18.58	8.43	AS3173-61	4.690	119.13	3.701	94.01	3.822	97.07	37.19	16.87
AS3173-19	2.066	52.48	1.077	27.36	1.198	30.42	19.01	8.62	AS3173-62	4.753	120.73	3.764	95.61	3.885	98.67	37.62	17.06
AS3173-20	2.128	54.05	1.139	28.94	1.260	32.00	19.44	8.82	AS3173-63	4.816	122.33	3.827	97.21	3.948	100.27	38.06	17.26
AS3173-21	2.190	55.63	1.201	30.51	1.322	33.57	19.87	9.01	AS3173-64	4.878	123.90	3.889	98.79	4.010	101.85	38.49	17.46
AS3173-22	2.253	57.23	1.264	32.11	1.385	35.17	20.31	9.21	AS3173-65	4.940	125.48	3.951	100.36	4.072	103.42	38.92	17.65
AS3173-23	2.316	58.83	1.327	33.71	1.448	36.77	20.74	9.41	AS3173-66	5.003	127.08	4.014	101.96	4.135	105.02	39.35	17.85
AS3173-24	2.378	60.40	1.389	35.29	1.510	38.35	21.18	9.61	AS3173-67	5.066	128.68	4.077	103.56	4.198	106.62	39.79	18.05
AS3173-25	2.440	61.98	1.451	36.86	1.572	39.92	21.60	9.80	AS3173-68	5.128	130.25	4.139	105.14	4.260	108.20	40.22	18.24
AS3173-26	2.503	63.58	1.514	38.46	1.635	41.52	22.04	10.00	AS3173-69	5.190	131.83	4.201	106.71	4.322	109.77	40.64	18.44
AS3173-27	2.566	65.18	1.577	40.06	1.698	43.12	22.47	10.19	AS3173-70	5.253	133.43	4.264	108.31	4.385	111.37	41.09	18.64
AS3173-28	2.628	66.75	1.639	41.64	1.760	44.70	22.91	10.39	AS3173-71	5.316	135.03	4.327	109.91	4.448	112.97	41.52	18.83
AS3173-29	2.690	68.33	1.701	43.21	1.822	46.27	23.33	10.58	AS3173-72	5.378	136.60	4.389	111.49	4.510	114.55	41.95	19.03
AS3173-30	2.753	69.93	1.764	44.81	1.885	47.87	23.77	10.78	AS3173-73	5.440	138.18	4.451	113.06	4.572	116.12	42.38	19.22
AS3173-31	2.816	71.53	1.827	46.41	1.948	49.47	24.21	10.98	AS3173-74	5.503	139.78	4.514	114.66	4.635	117.72	42.82	19.42
AS3173-32	2.878	73.10	1.889	47.99	2.010	51.05	24.64	11.17									
AS3173-33	2.940	74.68	1.951	49.56	2.072	52.62	25.06	11.37									
AS3173-34	3.003	76.28	2.014	51.16	2.135	54.22	25.51	11.57									
AS3173-35	3.066	77.88	2.077	52.76	2.198	55.82	25.94	11.77									
AS3173-36	3.128	79.45	2.139	54.34	2.260	57.40	26.37	11.96									
AS3173-37	3.190	81.03	2.201	55.91	2.322	58.97	26.80	12.16									
AS3173-38	3.253	82.63	2.264	57.51	2.385	60.57	27.23	12.35									
AS3173-39	3.316	84.23	2.327	59.11	2.448	62.17	27.67	12.55									
AS3173-40	3.378	85.80	2.389	60.69	2.510	63.75	28.10	12.75									
AS3173-41	3.440	87.38	2.451	62.26	2.572	65.32	28.53	12.94									
AS3173-42	3.503	88.98	2.514	63.86	2.635	66.92	28.96	13.14									
AS3173-43	3.566	90.58	2.577	65.46	2.698	68.52	29.40	13.33									
AS3173-44	3.628	92.15	2.639	67.04	2.760	70.10	29.83	13.53									
AS3173-45	3.690	93.73	2.701	68.61	2.822	71.67	30.26	13.73									