



REVIEW: AF, AV, IB, MR, MI, MW, NSA, OS
USER: AS, EL, CL, MC, SN

NOTES.

1. **MATERIAL.** Body for aluminum alloy rivet per QQ-A-430, composition 2117-T4 or 5056-M32. Body for carbon steel rivet per Federal Standard No. 66, AISI Nos. 11006 thru 11041. Pins (for aluminum alloy, composition 2117-T4 rivets) per Federal Standard No. 66, CRES 300 Series. Pins (for aluminum alloy, composition 5056-M32 rivets) per Federal Standard No. 66, CRES 305 only. Pins (for carbon steel rivets) per Federal Standard No. 66, CRES 300 Series or carbon steel.
2. **PROTECTIVE COATING:** Steel rivet bodies and pins shall be cadmium plated per QQ-P-616, type II, class 2. Corrosion resisting steel pins shall be passivated per QQ-P-35. Aluminum rivet bodies, composition 2117-T4 shall be anodized per MIL-A-8625 or chemically treated per MIL-C-5541. It is not necessary to anodize composition 5056-M32 aluminum rivet bodies.
3. **HEAT TREATMENT:** Rivets shall be heat treated in accordance with procurement specification.
4. **DIMENSIONS** All dimensions are in inches.
5. **TOLERANCES.**

Parameter	Aluminum Rivets	Steel Rivets
1/8	±.002	+.002 -.004
5/32	±.002	+.002 -.004
3/16	+.002 -.003	+.002 -.004
1/4	+.002 -.003	+.002 -.004
6. **PART NUMBER:** The MS part number consists of the MS number plus the dash number. Example: MS24662-3.
7. The slotted shanks of 1/8 inch rivets may produce 2 thru 4 expanding segments. Slotted rivet shanks above 1/8 inch may produce 3 or 4 expanding segments.
8. Illustrations are for identification and are not intended to restrict designs and shapes of rivets which otherwise conform to requirements.
9. For blind side protrusion, the maximum overall length less panel thickness shall be used.
10. For design feature purposes, this standard takes precedence over procurement documents referenced herein.
11. Referenced documents shall be of the issue in effect on date of invitations for bid.

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.

APPROVED 29 FEB 60 REVISED 30 JUN 1965 28 OCT 70

ENTIRE STANDARD REVISED

P.A. WC Other Cont YD 82	TITLE RIVET, BLIND - UNIVERSAL HEAD, DRIVE TYPE	MILITARY STANDARD MS24662
PROCUREMENT SPECIFICATION MIL-R-27384	SUPERSEDES In PART. MS20604 and MS20606	SHEET 1 OF 3

FED. SUP CLASS
5320

TABLE I

ALUMINUM		CARBON STEEL	DIA A SEE NOTE 1	HEAD HEIGHT B +0.010 -0.000	HEAD DIAMETER D	RECOMMENDED DRILL SIZE	GRIP LENGTH C		LENGTH L +0.030 -0.020
2117	5086						MIN	MAX	
DASH NUMBER									
1	170	4	0.125	0.054	0.250 ± 0.012	30 (0.125)	0.046	0.078	0.156
2	171	5					.079	.109	.188
3	172	6					.110	.140	.219
4	173	7					.141	.171	.250
5	174	8					.172	.202	.281
11	175	14					.204	.234	.312
12	176	16					.235	.265	.344
13	177	18					.266	.296	.375
14	178	20					.297	.328	.406
15	179	22					.329	.359	.438
21	180	24	.360	.390	.469				
22	181	26	.391	.421	.500				
31	182	28	0.156	0.067	0.312 ± 0.016	30 (0.161)	0.046	0.078	0.156
32	183	30					.079	.109	.188
33	184	32					.110	.140	.219
34	185	34					.141	.171	.250
35	186	36					.172	.202	.281
37	187	38					.204	.234	.312
38	188	40					.235	.265	.344
39	189	42					.266	.296	.375
40	190	44					.297	.328	.406
41	191	46					.329	.359	.438
47	192	48	0.188	0.080	0.375 ± 0.019	30 (0.191)	.360	.390	.500
48	193	50					.391	.421	.531
49	194	52					.422	.452	.562
50	195	54					.453	.483	.593
51	196	56					.484	.514	.625
52	197	58					.516	.546	.656
53	198	60					.547	.578	.688
54	199	62					.579	.609	.719
55	200	64					.610	.640	.750
150	201	66					0.250	0.107	0.500 ± 0.023
151	202	68	.110	.171	.281				
152	203	70	.172	.234	.344				
153	204	72	.235	.296	.406				
154	205	74	.297	.359	.469				
155	206	76	.360	.421	.531				
156	207	78	.422	.484	.594				
157	208	80	.483	.546	.656				
158	209	82	.547	.609	.719				
159	210	84	.610	.671	.781				
160	211	86	0.300	0.129	0.750 ± 0.031	F (0.357)	0.046	0.109	0.250
161	212	88					.110	.171	.281
162	213	90					.172	.234	.344
163	214	92					.235	.296	.406
164	215	94					.297	.359	.469
165	216	96					.360	.421	.531
166	217	98					.422	.484	.594
167	218	100					.483	.546	.656
168	219	102					.547	.609	.719
169	220	104					.610	.671	.781

REVISION: A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12, A13, A14, A15, A16, A17, A18, A19, A20, A21, A22, A23, A24, A25, A26, A27, A28, A29, A30, A31, A32, A33, A34, A35, A36, A37, A38, A39, A40, A41, A42, A43, A44, A45, A46, A47, A48, A49, A50, A51, A52, A53, A54, A55, A56, A57, A58, A59, A60, A61, A62, A63, A64, A65, A66, A67, A68, A69, A70, A71, A72, A73, A74, A75, A76, A77, A78, A79, A80, A81, A82, A83, A84, A85, A86, A87, A88, A89, A90, A91, A92, A93, A94, A95, A96, A97, A98, A99, A100, A101, A102, A103, A104, A105, A106, A107, A108, A109, A110, A111, A112, A113, A114, A115, A116, A117, A118, A119, A120, A121, A122, A123, A124, A125, A126, A127, A128, A129, A130, A131, A132, A133, A134, A135, A136, A137, A138, A139, A140, A141, A142, A143, A144, A145, A146, A147, A148, A149, A150, A151, A152, A153, A154, A155, A156, A157, A158, A159, A160, A161, A162, A163, A164, A165, A166, A167, A168, A169, A170, A171, A172, A173, A174, A175, A176, A177, A178, A179, A180, A181, A182, A183, 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APPROVED 20 FEB 60 REVISED (A) FOR CHANGES SEE SHEETS 1 AND 2 (B) FOR CHANGES SEE SHEET 1

P A VC DIM-COM TD 82	TITLE RIVET, BLIND-UNIVERSAL HEAD, DRIVE TYPE	MILITARY STANDARD MS 24662
DOCUMENT SPECIFICATION MIL-R-24662	SUPPLEMENTAL In part, MS20604 and MS20606	SHEET 1 OF 1

TABLE II - INTERCHANGEABILITY

The rivets covered by dash numbers given in Revision A of this standard and MS20604 in part, and MS20606 in part, are cancelled after 28 OCT 1970. Use the dash numbers given in the preceding sheets of this revision. The cancelled rivets cannot always replace the new rivets and should be used until existing stocks are depleted. Use only the new rivets for design and replacement. Replacement shall be in accordance with this table.

REVISED: AT, AV, JS, ME, ML, NU, RSR, BS
USER: AS, EL, GI, MC, SH

DASH NUMBER		DASH NUMBER		DASH NUMBER		DASH NUMBER		DASH NUMBER	
CANCELLED	NEW	CANCELLED	NEW	CANCELLED	NEW	CANCELLED	NEW	CANCELLED	NEW
MS24662	MS24662	MS24662	MS24662	MS20604 &	MS24662	MS20604 &	MS24662	MS20604 &	MS24662
"A" REV	"B" REV	"A" REV	"B" REV	MS20606	"B" REV.	MS20606	"B" REV.	MS20606	"B" REV
1	•	126	236	AD6H2	150	B5H2	182	M4H2	•
65	150	127	166	AD6H2	151	B5H2	183	M4H3	•
66	221	128	237	AD6H4	151	B5H2	184	M4H4	•
67	150	129	166	AD6H4	152	B5H4	184	M4H5	•
68	221	130	237	AD6H4	153	B5H4	183	M4H6	•
69	151	131	167	AD6H6	153	B5H4	186	M4H7	•
70	222	132	238	AD6H6	154	B5H4	187	M4H8	•
71	151	133	167	AD6H6	155	B5H4	188	M5H2	•
72	222	134	238	AD6H6	155	B5H6	188	M5H4	•
73	152	135	168	AD6H8	156	B5H6	189	M5H6	•
74	223	136	239	AD6H8	157	B5H6	190	M5H8	•
75	152	137	168	AD6H10	157	B5H6	191	M6H2	•
76	223	138	239	AD6H10	158	B5H6	192	M6H4	•
77	153	139	169	AD6H10	159	B5H8	192	M6H6	•
78	224	140	240	AD6H12	159	B5H8	193	M6H8	•
79	153			AD6H14	•	B5H8	194	M6H10	•
80	224	MS20604		AD8H2	160	B5H8	195	M6H12	•
81	154	AD3H1	•	AD8H2	161	B5H8	196	M6H14	•
82	225	AD3H2	•	AD8H4	161	B6H2	201	M8H2	•
83	154	AD3H3	•	AD8H4	162	B6H2	202	M8H4	•
84	225	AD3H4	•	AD8H4	163	B6H4	202	M8H6	•
85	155			AD8H6	163	B6H4	203	M8H8	•
86	226	MS20604		AD8H6	164	B6H4	204	M8H10	•
87	155	and		AD8H6	165	B6H6	204	M8H12	•
88	226	MS20606		AD8H8	165	B6H6	205	M8H14	•
89	156	AD4H1	3	AD8H8	166	B6H6	206	M8H16	•
90	227	AD4H2	3	AD8H8	167	B6H8	206		
91	156	AD4H2	5	AD8H10	167	B6H8	207	MS20604	
92	227	AD4H2	7	AD8H10	168	B6H8	208	NP3H1	•
93	157	AD4H3	7	AD8H10	169	B6H10	208	NP3H2	•
94	228	AD4H3	9	AD8H12	169	B6H10	209	NP3H3	•
95	157	AD4H3	11	AD8H14	•	B6H10	210	NP3H4	•
96	228	AD4H4	11	AD8H16	•	B6H12	210		
97	158	AD4H4	13			B6H14	•	MS20604	
98	229	AD4H4	15	MS20604		B8H2	211	and	
99	158	AD4H5	15	B3H1	•	B8H2	212	MS20606	
100	229	AD4H5	17	B3H2	•	B8H4	212	NP4H1	•
101	159	AD4H5	19	B3H3	•	B8H4	213	NP4H2	•
102	230	AD4H6	19	B3H4	•	B8H4	214	NP4H3	•
103	160	AD4H6	21			B8H6	214	NP4H4	•
104	231	AD4H6	23	MS20604		B8H6	215	NP4H5	•
105	160	AD4H7	23	and		B8H6	216	NP4H6	•
106	231	AD4H7	25	MS20606		B8H8	216	NP4H7	•
107	161	AD4H8	•	B4H1	170	B8H8	217	NP4H8	•
108	232	AD5H2	27	B4H2	170	B8H8	218	NP5H2	•
109	161	AD5H2	29	B4H2	171	B8H10	218	NP5H4	•
110	232	AD5H2	31	B4H2	172	B8H10	219	NP5H6	•
111	162	AD5H4	31	B4H3	172	B8H10	220	NP5H8	•
112	233	AD5H4	33	B4H3	173	B8H12	220	NP6H2	•
113	162	AD5H4	35	B4H3	174	B8H14	•	NP6H4	•
114	233	AD5H4	37	B4H4	174	B8H16	•	NP6H6	•
115	163	AD5H4	39	B4H4	175			NP6H8	•
116	234	AD5H6	39	B4H4	176	MS20604		NP6H10	•
117	163	AD5H6	41	B4H5	176	B3H1	•	NP6H12	•
118	234	AD5H6	43	B4H5	177	B3H2	•	NP6H14	•
119	164	AD5H6	45	B4H5	178	B3H3	•	NP6H2	•
120	235	AD5H6	47	B4H6	178	B3H4	•	NP6H4	•
121	164	AD5H8	47	B4H6	179			NP6H6	•
122	235	AD5H8	49	B4H6	180	MS20604		NP6H8	•
123	165	AD5H8	51	B4H7	180	and		NP6H10	•
124	236	AD5H8	53	B4H7	181	MS20606		NP6H12	•
125	165	AD5H8	55	B4H8	•	M4H1	•	NP6H14	•
								NP6H16	•

• No Replacement
•• Not Manufactured

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.

APPROVED 29 FEB 60 REVISED (A) FOR CHANGES SEE SHEETS 1 AND 2 (B) FOR CHANGES SEE SHEET 1

P.A. VC	TITLE	MILITARY STANDARD
Other Cont YD 82	RIVET, BLIND-UNIVERSAL HEAD, DRIVE TYPE	MS 24662
PROCUREMENT SPECIFICATION MIL-R-27384	SUPERSEDES In part MS20604 and MS20606	SHEET 3 OF