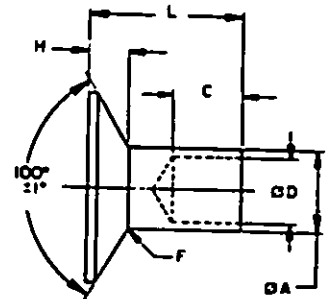
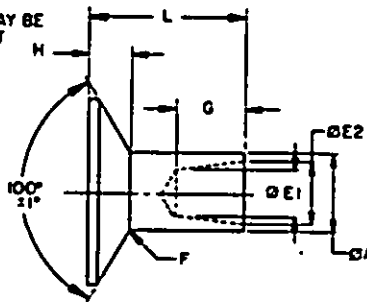
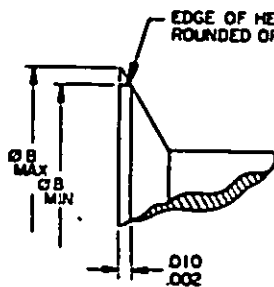


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5320

TYPE T

TYPE S

TABLE I.

NOMINAL SIZE		.061		.089		.123		.146		.188		.217		.252	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
BODY	ØA	.050	.061	.065	.089	.118	.123	.141	.146	.162	.188	.210	.217	.244	.252
HEAD 2/	ØB	.107	.124	.165	.186	.211	.240	.265	.304	.340	.386	.357	.450	.459	.510
HEAD THICKNESS	H	.021	.031	.034	.044	.040	.051	.053	.065	.066	.082	.080	.096	.092	.110
STRAIGHT HOLE	ØD	.039	.044	.062	.066	.064	.090	.100	.107	.134	.141	.155	.163	.176	.184
TAPER AT BOTTOM OF HOLE	ØE	.032		.050		.079		.085		.110		.136		.150	
TAPER AT END OF RIVET	ØE ₂	.042	.046	.064	.066	.091	.095	.106	.112	.139	.145	.156	.166	.181	.191
HOLE DEPTH (TAPER)	C	.042		.057		.082		.104		.130		.151		.183	
FILLET	F	.007		.010		.013		.016		.021		.025		.029	
HOLE DEPTH (STRAIGHT) NOM.															
CLINCH ALLOWANCE 1/	C	.046		.064		.094		.126		.155		.189		.219	
		.037		.054		.074		.089		.120		.140		.164	

- ①/ SEE NOTE 2
2/ SEE NOTE 3

REQUIREMENTS:

- ①. MATERIAL: BRASS, 1/8 OR 1/4 HARD, COMPOSITION 260 OR 270 (UNS C26000 OR UNS C27000), IN ACCORDANCE WITH QQ-B-321. CORROSION-RESISTANT STEEL, TYPE 302, 304, OR 305, (UNS S30200, UNS S30400, UNS S30500), IN ACCORDANCE WITH ASTM A473 AS APPLICABLE.
- ②. PROTECTIVE COATING AND SURFACE TREATMENT: NICKEL PLATING, CLASS 1, FULLY BRIGHT .0002 THICK, MINIMUM THICKNESS, IN ACCORDANCE WITH QQ-N-290. BLACK OXIDE IN ACCORDANCE WITH MIL-F-495. CORROSION-RESISTANT STEEL, CLEAN, DESCALE AND PASSIVATE IN ACCORDANCE WITH QQ-P-35.
- ③. SHEAR STRENGTH: BRASS RIVETS 35,000 PSI MIN. CORROSION-RESISTANT STEEL, RIVETS, 75,000 PSI MIN.
- ④. TOLERANCES: TOLERANCES ARE -.005 FOR DECIMAL DIMENSIONS, UNLESS OTHERWISE SPECIFIED. LENGTH TOLERANCES SHALL BE IN ACCORDANCE WITH ANSI B10.7.
- ⑤. PART NUMBER: THE PART NUMBER SHALL CONSIST OF THE BASIC MS SHEET NUMBER, FOLLOWED BY A TYPE CODE LETTER, "S" FOR A STRAIGHT HOLE AND "T" FOR A TAPER HOLE, A LENGTH AND DASH NUMBER TAKEN FROM TABLE II (FOR BRASS RIVETS) OR TABLE III (FOR CORROSION-RESISTANT STEEL RIVETS). BRASS RIVETS SHALL INCLUDE A FINISH CODE.

EXAMPLE: MS51499T11N

FINISH CODES FOR BRASS RIVETS

N - NICKEL

B - BLACK OXIDE

DASH NUMBER

TYPE CODE LETTER

S - STRAIGHT

T - TAPER

BASIC MS SHEET NUMBER

① DENOTES CHANGE(S)

INCH - POUND

ARMY-AR INTERNATIONAL TITLE
NAVY-OS
AIR FORCE-99
PROCUREMENT SPECIFICATION SUPERSEDES
FF-R-556

RIVET, TUBULAR, 100°,
COUNTERSUNK HEAD

MILITARY STANDARD
MS51499

PAGE 1 OF 3

REVISED ④ JAN 89

APPROVED 28 OCT 85

DD 672-1

5320-0659

USER ACTIVITIES:
ARMY-AT, ER
NAVY-MC

REVIEWER ACTIVITIES:
ARMY-GL, MI
AIR FORCE-82
DLA-IS
NSA-NS

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MS51499T11N INDICATES - RIVET, BRASS, TAPER HOLE, NICKEL PLATE FINISH, NOMINAL SIZE .061 AND LENGTH .250.

(A) MS51499S001 INDICATES - RIVET, STRAIGHT HOLE, CORROSION-RESISTANT STEEL, PASSIVATED, NOMINAL SIZE .061 AND LENGTH .062.

NOTES:

1. ALL DIMENSIONS ARE IN INCHES.
2. FOR REFERENCE ONLY, OPTIMUM VALUES VARY WITH CHARACTERISTICS OF MATERIALS TO BE RIVETED, AND SHOULD BE DETERMINED BY ACTUAL TEST IF POSSIBLE.
3. HEAD DIAMETER DIMENSIONS B MAX, B MIN ARE INCLUDED FOR ENGINEERING REFERENCE PURPOSES ONLY, NOT FOR INSPECTION PURPOSES. VALUES B MAX, B MIN ARE CALCULATED LIMITS RESULTING FROM TOLERANCES ON A, H AND HEAD ANGLES.
4. IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS STANDARD AND THE REFERENCES CITED HEREIN, THE TEXT OF THIS STANDARD SHALL TAKE PRECEDENCE.
5. REFERENCED GOVERNMENT (OR NON-GOVERNMENT) DOCUMENTS OF THE ISSUE LISTED IN THAT ISSUE OF THE DEPARTMENT OF DEFENSE INDEX OF SPECIFICATIONS AND STANDARDS (DODISS) SPECIFIED IN THE SOLICITATION FORM A PART OF THIS STANDARD TO THE EXTENT SPECIFIED HEREIN.

TABLE 11. DASH NUMBER- BRASS RIVETS

LENGTH L	NOM SIZE .061 DASH NO	LENGTH L	NOM SIZE .089 DASH NO	LENGTH L	NOM SIZE .123 DASH NO	LENGTH L	NOM SIZE .146 DASH NO	LENGTH L	NOM SIZE .188 DASH NO	LENGTH L	NOM SIZE .217 DASH NO	LENGTH L	NOM SIZE .252 DASH NO
.094	1	.125	61	.188	101	.219	201	.281	301	.344	401	.375	501
.109	2	.156	62	.219	102	.250	202	.312	302	.375	402	.406	502
.125	3	.188	63	.250	103	.281	203	.344	303	.406	403	.438	503
.141	4	.219	64	.281	104	.312	204	.375	304	.438	404	.469	504
.156	5	.250	65	.312	105	.344	205	.406	305	.469	405	.500	505
.172	6	.281	66	.344	106	.375	206	.438	306	.500	406	.531	506
.188	7	.312	67	.375	107	.406	207	.469	307	.531	407	.562	507
.203	8	.344	68	.406	108	.438	208	.500	308	.562	408	.594	508
.219	9	.375	69	.438	109	.469	209	.531	309	.594	409	.625	509
.234	10	.438	70	.469	110	.500	210	.562	310	.625	410	.656	510
.250	11	.500	71	.500	111	.531	211	.594	311	.656	411	.688	511
.266	12			.531	112	.562	212	.625	312	.688	412	.719	512
.281	13			.562	113	.594	213	.656	313	.719	413	.750	513
.297	14			.594	114	.625	214	.688	314	.750	414	.875	514
.312	15			.625	115			.719	315	.875	415	1.000	515
.328	16			.688	116			.750	316	1.000	416	1.250	516
.344	17			.750	117			.875	317	1.250	417	1.500	517
.359	18							1.000	318				
.375	19												
.391	20												
.406	21												
.422	22												
.438	23												
.453	24												
.469	25												
.484	26												
.500	27												

PA ARMY-AR	INTERNATIONAL INTEREST	TITLE RIVET, TUBULAR, 100°, COUNTERSUNK HEAD	MILITARY STANDARD MS51499
Other Cust NAVY-OS			
AIR FORCE-99			
PROCUREMENT SPECIFICATION FF-R-556	SUPERSEDES		PAGE 2 OF 3

USER ACTIVITIES:
ARMY-AT, ER
NAVY-MC

REVIEWER ACTIVITIES:

This military standard is approved 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 when applicable.

APPROVED 28 OCT 86
REVISED (A) FOR CHANGES SEE PAGES 1, 2 AND 3

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(A) TABLE III. DASH NUMBER-CORROSION, RESISTANT STEEL RIVETS.

LENGTH L	NOM SIZE .061 DASH NO	LENGTH L	NOM SIZE .089 DASH NO	LENGTH L	NOM SIZE .123 DASH NO	LENGTH L	NOM SIZE .146 DASH NO	LENGTH L	NOM SIZE .189 DASH NO	LENGTH L	NOM SIZE .217 DASH NO	LENGTH L	NOM SIZE .252 DASH NO
.062	601							.250	841			.281	961
.094	602							.312	842			.406	962
.125	603							.438	843			.438	963
.156	604							.469	844			.469	964
.188	605							.500	845			.500	965
.219	606							.531	846			.531	966
.250	607												
.281	608												

USER ACTIVITIES:
ARMY-AT, ER
NAVY-MC

REVIEWER ACTIVITIES:

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PA ARMY-AR INTERNATIONAL INTEREST TITLE
 Other Code NAVY-OS
 AIR FORCE-99
 PROCUREMENT SPECIFICATION SUPERSEDES
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MS51499

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APPROVED 28 OCT 85 REVISED (A) FOR CHANGES SEE PAGES 1, 2 AND 3