

FED. SUPPLY CLASS

5320

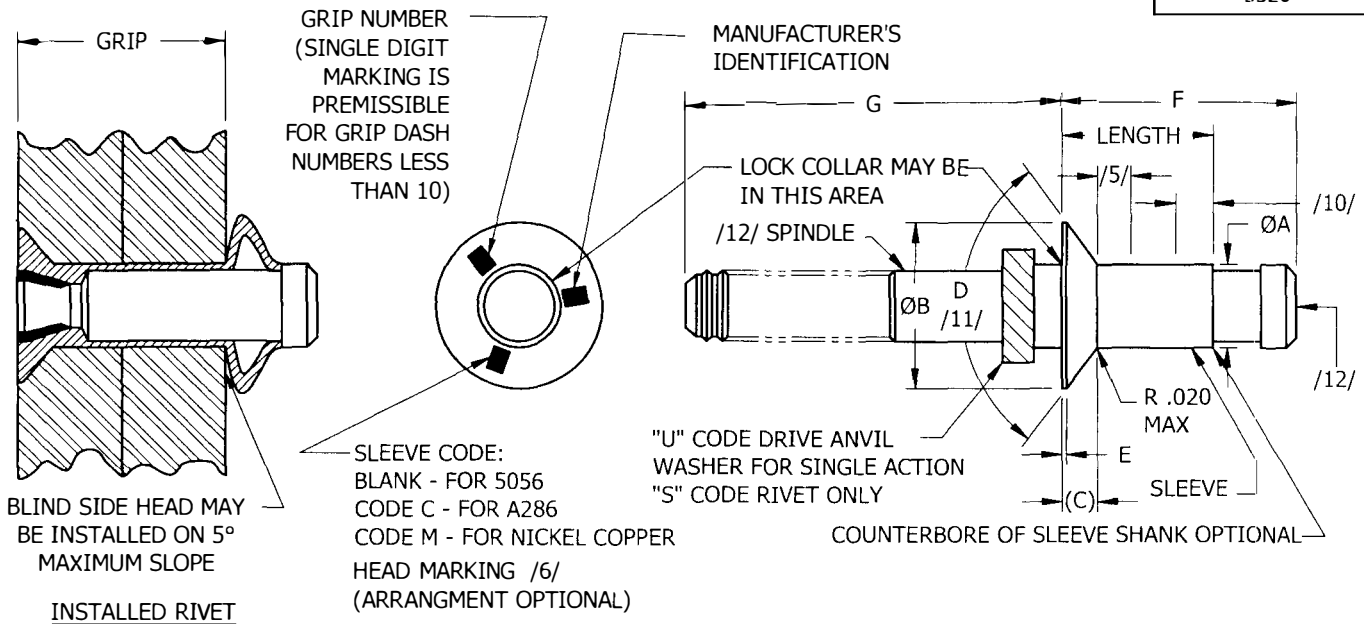


TABLE I - DASH NUMBERS & DIMENSIONS

DIAMETER DASH NUMBER	RIVET SIZE NOMINAL	ØA +.0035 -.001 /7/	ØB ± .004 /8/	(C)	D /11/		E AL ALLOY, A286, & NICKEL-COPPER	G MIN
					AL ALLOY	A286 & NICKEL-COPPER		
04	.125	.125	.225	.042				.788
05	.156	.156	.286	.055	100°	100°	.002 TO .015	.788
06	.190	.187	.353	.070	± 1.0°	± 1.5°		.788
08	.250	.250	.476	.095				1.000

MATERIAL:

SLEEVE:

COMPOSITION B: 5056 (UNS A95056) ALUMINUM PER QQ-A-430.  
COMPOSITION C: A286 CRES (UNS S66286) PER CHEMICAL REQUIREMENTS OF AMS5737.  
COMPOSITION M: NICKEL-COPPER (UNS N04400) PER QQ-N-281.

SPINDLE:

COMPOSITION B: 2024 (UNS A92024) ALUMINUM PER QQ-A-430.  
COMPOSITION C & M: A286 CRES (UNS S66286) PER CHEMICAL REQUIREMENTS OF AMS5737.

LOCK RING:

COMPOSITION B: 5056 (UNS A95056) ALUMINUM PER QQ-A-430.  
COMPOSITION C: A286 CRES (UNS S66286) PER CHEMICAL REQUIREMENTS OF AMS5737 OR 316 CRES (UNS S31600) PER AMS5690.  
COMPOSITION M: A286 CRES (UNS S66286) PER CHEMICAL REQUIREMENTS OF AMS5737, NICKEL-COPPER (UNS N04400) PER CHEMICAL REQUIREMENTS OF QQ-N-281, OR 316 CRES (UNS S31600) PER AMS5690.

⑨ COMPLETELY REVISED

PROCUREMENT SPECIFICATION <b>NAS1900</b>	CUSTODIAN <b>NATIONAL AEROSPACE STANDARDS COMMITTEE</b>	REVISION <b>9</b>
	TITLE <b>RIVET, BLIND, GENERAL PURPOSE, BULBED, 100° FLUSH HEAD, MECHANICALLY-LOCKED-SPINDLE</b>	CLASSIFICATION PART STANDARD <b>NAS1921</b> SHEET 1 OF 4

FINISH:

SLEEVE:

COMPOSITION B: NONE OR CHEMICAL FILM TREAT PER MIL-DTL-5541 CLASS 1A.  
 COMPOSITION C: PASSIVATE PER AMS2700, METHOD 1, CLASS 4,  
 CADMIUM PLATE PER AMS-QQ-P-416 TYPE II, CLASS 3, OR  
 ALUMINUM COATING PER NAS4006.  
 COMPOSITION M: NONE OR CADMIUM PLATE PER AMS-QQ-P-416 TYPE II, CLASS 3, OR  
 ALUMINUM COATING PER NAS4006.

SPINDLE:

COMPOSITION B: CHEMICAL FILM TREAT PER MIL-DTL-5541 CLASS 1A.  
 COMPOSITION C & M: PASSIVATE PER AMS2700, METHOD 1, CLASS 4.

LOCK RING:

COMPOSITION B: NONE OR CHEMICAL FILM TREAT PER MIL-DTL-5541 CLASS 1A.  
 COMPOSITION C: PASSIVATE PER AMS2700, METHOD 1, CLASS 4.  
 COMPOSITION M: PASSIVATE PER AMS2700, METHOD 1, CLASS 4 FOR CRES ONLY.

CODE:

FIRST DASH NUMBER DESIGNATES DIAMETER IN .0312 INCREMENTS.  
 SECOND DASH NUMBER DESIGNATES MAXIMUM GRIP IN .0625 INCREMENTS.  
 ADD "A" AFTER SECOND DASH NUMBER FOR ALUMINUM COATING PER NAS4006.  
 ADD "B" AFTER BASIC NUMBER FOR COMPOSITION B ALUMINUM RIVET.  
 ADD "C" AFTER BASIC NUMBER FOR COMPOSITION C A286 CRES RIVET.  
 ADD "M" AFTER BASIC NUMBER FOR COMPOSITION M NICKEL-COPPER RIVET.  
 ADD "P" AFTER SECOND DASH NUMBER TO DESIGNATE RIVET MAY BE SLOSH CLEANED WITH  
 MIL-C-38736 A-A-59281 CLEANER BEFORE INSTALLATION. RIVETS MAY BE LUBRICATED OR  
 NON-LUBRICATED AT OPTION OF MANUFACTURER.  
 ADD "S" AFTER FIRST DASH NUMBER TO DESIGNATE RIVET FOR USE WITH SINGLE ACTION (NON-  
 SHIFTING) HAND HELD INSTALLATION TOOLS OR IN AUTOMATED INSTALLATION  
 EQUIPMENT. /12/  
 ADD "U" AFTER SECOND DASH NUMBER TO DESIGNATE RIVET UTILIZING DRIVE ANVIL WASHER AS  
 PART OF RIVET ASSEMBLY. WASHER ALLOWS USE OF BLUNT NOSED INSTALLATION  
 TOOLING. AVAILABLE WITH "S" CODE ONLY.  
 ADD "W" AFTER SECOND DASH NUMBER FOR CADMIUM PLATED RIVET SLEEVE.  
 ADD "FC" AFTER SECOND DASH NUMBER FOR COMPOSITION B RIVETS TO SPECIFY CHEMICAL FILM  
 TREATMENT PER MIL-DTL-5541 CLASS 1A.

EXAMPLES OF PART NUMBER:

NAS1921B05-04 = 5056 ALUMINUM RIVET, Ø.156, .188 TO .250 GRIP RANGE, NO FINISH ON  
 SLEEVE OR LOCK RING.  
 NAS1921B05-04FC = 5056 ALUMINUM RIVET, Ø.156, .188 TO .250 GRIP RANGE, CHEMICAL FILM  
 TREAT ALL COMPONENTS PER MIL-DTL-5541, CLASS 1A.  
 NAS1921C05-04 = A286 CRES RIVET, Ø.156, .188 TO .250 GRIP RANGE, PASSIVATED FINISH.  
 NAS1921C05-04W = A286 CRES RIVET, Ø.156, .188 TO .250 GRIP RANGE, CADMIUM PLATED  
 SLEEVE.  
 NAS1921M05-04 = NICKEL-COPPER RIVET, Ø.156, .188 TO .250 GRIP RANGE, UNPLATED SLEEVE.  
 NAS1921M05-04W = NICKEL-COPPER RIVET, Ø.156, .188 TO .250 GRIP RANGE, CADMIUM PLATED  
 SLEEVE.  
 NAS1921M05-04A = NICKEL-COPPER RIVET, Ø.156, .188 TO .250 GRIP RANGE, ALUMINUM COATED  
 SLEEVE.

REVISION

9

**NAS1921**

SHEET 2

9 COMPLETELY REVISED

- NAS1921M05-04P = NICKEL-COPPER RIVET, Ø.156, .188 TO .250 GRIP RANGE, FOR SLOSH CLEANING IN MIL-C-38736 A-A-59281 CLEANER (LUBRICATION OPTIONAL).
- NAS1921M05S04P = NICKEL-COPPER RIVET, Ø.156, .188 TO .250 GRIP RANGE, REQUIRING SINGLE ACTION (NON-SHIFTING) INSTALLATION TOOLS, FOR SLOSH CLEANING IN MIL-C-38736 A-A-59281 CLEANER (LUBRICATION OPTIONAL).
- NAS1921M05S04U = NICKEL-COPPER RIVET, Ø.156, .188 TO .250 GRIP RANGE, WITH DRIVE ANVIL WASHER.

NOTES:

- (1) THIS RIVET IS INTENDED FOR GENERAL PURPOSE USE IN BOTH THICK SHEET STACKUP AND IN THIN SHEET OR DOUBLE DIMPLED APPLICATIONS.
- (2) UNLESS OTHERWISE SPECIFIED HEREIN, REFERENCED DOCUMENTS SHALL BE THE ISSUE IN EFFECT ON DATE OF MANUFACTURE. HOWEVER, EXISTING MATERIAL INVENTORY CERTIFIED TO A PREVIOUS REVISION OF THE APPLICABLE MATERIAL SPECIFICATION(S) IS ACCEPTABLE FOR USE UNTIL DEPLETION.
- (3) ADJUST HOLE SIZE WITHIN TYPE II LIMITS OF NASM33522.
- (4) UNLESS OTHERWISE SPECIFIED, PART INVENTORY MANUFACTURED TO PREVIOUS REVISIONS OF THE APPLICABLE DRAWING OR SPECIFICATION MAY BE PROCURED AND USED UNTIL STOCK IS DEPLETED.
- /5/ Ø.001 SHANK INCREASE PERMISSIBLE WITHIN .100 FROM BASE OF HEAD.
- /6/ MARKING OF ALUMINUM RIVETS MAY BE ON SPINDLE AT MANUFACTURER'S OPTION.
- /7/ "ØA" MAY BE .001 LARGER THAN SHOWN FOR CADMIUM PLATED OR ALUMINUM COATED SLEEVES.
- /8/ "B" IS THE THEORETICAL INTERSECTION DIAMETER FOR COUNTERSINK.
- /9/ BELOW .078 SHEET THICKNESS FOR Ø.125 AND .100 FOR Ø.156 DOUBLE DIMPLING, IS RECOMMENDED. IF DOUBLE DIMPLING CANNOT BE PERMITTED, USE GRIP DASH NUMBER 01. BELOW .100 FOR Ø.190 AND .126 FOR Ø.250, DOUBLE DIMPLING IS RECOMMENDED.
- /10/ "ØA" MAY BE .001 SMALLER BEYOND MINIMUM GRIP LENGTH.
- /11/ HEAD ANGLE "D" FOR RIVETS WITH "S" IN THE PART NUMBER MAY BE 108° MAXIMUM AND ARE FOR INSTALLATION IN COUNTERSINKS PER "D" IN ABOVE TABLE.
- /12/ RIVETS FOR USE WITH SINGLE ACTION (NON-SHIFTING) TOOLING SHALL BE IDENTIFIED WITH A DEPRESSED "S" ON SPINDLE HEAD OR COLOR CODED YELLOW ON SPINDLE, LOCATION OPTIONAL.
- (13) THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
- (14) DIMENSIONS IN INCHES AND APPLY AFTER FINISH UNLESS OTHERWISE SPECIFIED.
- (15) DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1982.
- /16/ AN ASTERISK "\*" INDICATES LOCATION OF THE RIVET COMPOSITION CODE LETTER.
- /17/ REFERENCE WEIGHTS ARE FOR DESIGN PURPOSE ONLY.

9 COMPLETELY REVISED

REVISION

9

**NAS1921**

SHEET 3

TABLE II – GRIP DASH NUMBERS /16/

GRIP DASH NO.	NAS1921*04 (Ø.125)				NAS1921*05 (Ø.156)				NAS1921*06 (Ø.190)				NAS1921*08 (Ø.250)			
	GRIP RANGE		LENGTH	F	GRIP RANGE		LENGTH	F	GRIP RANGE		LENGTH	F	GRIP RANGE		LENGTH	F
	MIN	MAX	MAX	MAX	MIN	MAX	MAX	MAX	MIN	MAX	MAX	MAX	MIN	MAX	MAX	MAX
/9/ 01	.057	.078	.213	.342	.075	.100	.238	.418	–	–	–	–	–	–	–	–
02	.063	.125	.260	.431	.080	.125	.263	.446	.100	.125	.287	.500	–	–	–	–
03	.126	.187	.323	.516	.126	.187	.336	.541	.126	.187	.350	.571	.126	.187	.427	.637
04	.188	.250	.385	.641	.188	.250	.398	.666	.188	.250	.412	.696	.188	.250	.460	.762
05	.251	.312	.448	.766	.251	.312	.461	.791	.251	.312	.475	.821	.251	.312	.522	.887
06	.313	.375	.510	.891	.313	.375	.523	.916	.313	.375	.537	.946	.313	.375	.585	1.012
07	.376	.437	.573	1.016	.376	.437	.586	1.041	.376	.437	.600	1.071	.376	.437	.647	1.137
08	.438	.500	.635	1.141	.438	.500	.648	1.166	.438	.500	.662	1.196	.438	.500	.710	1.262
09	.501	.562	.698	1.266	.501	.562	.711	1.291	.501	.562	.725	1.321	.501	.562	.772	1.387
10	.563	.625	.760	1.391	.563	.625	.773	1.416	.563	.625	.787	1.446	.563	.625	.835	1.512
11	–	–	–	–	.626	.687	.836	1.541	.626	.687	.850	1.571	.626	.687	.897	1.637
12	–	–	–	–	–	–	–	–	.688	.750	.912	1.696	.688	.750	.960	1.762
13	–	–	–	–	–	–	–	–	–	–	–	–	.751	.812	1.022	1.887
14	–	–	–	–	–	–	–	–	–	–	–	–	.813	.875	1.085	2.012

TABLE III – INSTALLED WEIGHTS /17/ /18/

GRIP DASH NO.	INSTALLED WEIGHT (REF) POUNDS PER 1000 PIECES											
	NAS1921*04 (Ø.125)			NAS1921*05 (Ø.156)			NAS1921*06 (Ø.190)			NAS1921*08 (Ø.250)		
	AL	A286	NICKEL-COPPER	AL	A286	NICKEL-COPPER	AL	A286	NICKEL-COPPER	AL	A286	NICKEL-COPPER
	B	C	M	B	C	M	B	C	M	B	C	M
01	.300	.890	.935	.510	1.457	1.512	–	–	–	–	–	–
02	.355	1.033	1.086	.616	1.756	1.817	1.029	2.851	2.949	–	–	–
03	.429	1.272	1.337	.744	2.126	2.205	1.218	3.373	3.497	2.495	7.208	8.039
04	.504	1.511	1.588	.871	2.496	2.593	1.408	3.895	4.045	2.820	8.147	9.087
05	.570	1.750	1.839	.999	2.866	2.981	1.597	4.417	4.593	3.145	9.085	10.134
06	.654	1.989	2.090	1.127	3.236	3.369	1.787	4.939	5.141	3.469	10.021	11.178
07	.738	2.228	2.341	1.255	3.606	3.757	1.976	5.461	5.689	3.793	10.958	12.222
08	.822	2.467	2.592	1.383	3.976	4.145	2.166	5.983	6.237	4.118	11.896	13.269
09	.906	2.706	2.843	1.511	4.346	4.533	2.355	6.505	6.785	4.442	12.803	14.313
10	.990	2.945	3.094	1.639	4.716	4.921	2.545	7.027	7.333	4.766	13.768	15.357
11	–	–	–	1.767	5.086	5.309	2.734	7.549	7.881	5.091	14.707	16.404
12	–	–	–	–	–	–	2.924	8.071	8.429	5.415	15.643	17.448
13	–	–	–	–	–	–	–	–	–	5.739	16.580	18.492
14	–	–	–	–	–	–	–	–	–	6.064	17.518	19.540

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9

**NAS1921**

SHEET 4

9 COMPLETELY REVISED