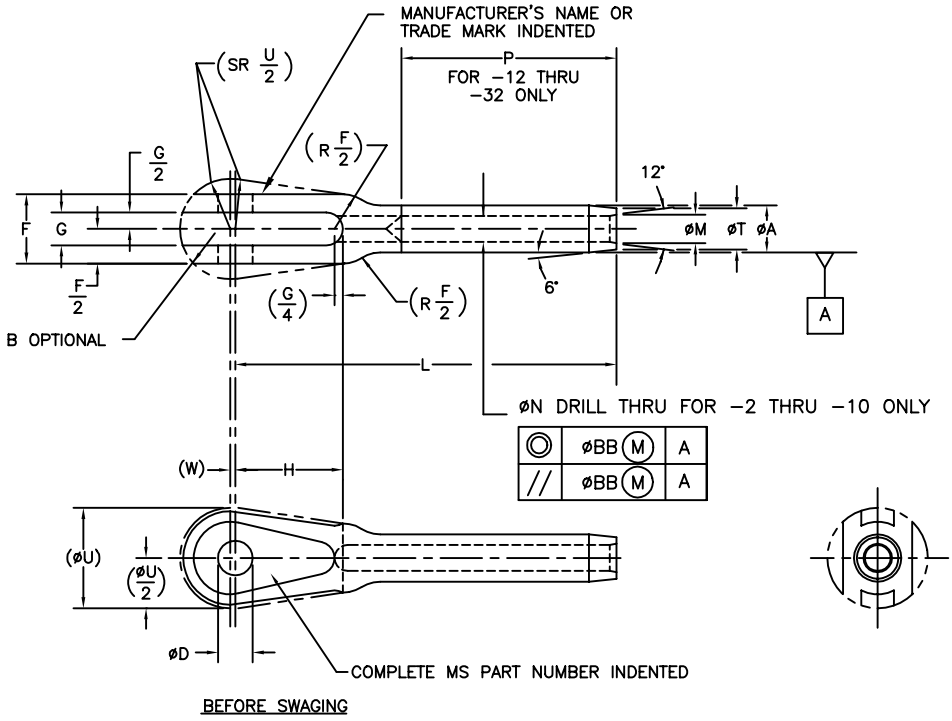
INCH–POUND
MS20667D
15 AUGUST 1997
SUPERSEDING
MS20667C
31 JANUARY 1979

MILITARY SPECIFICATION SHEET

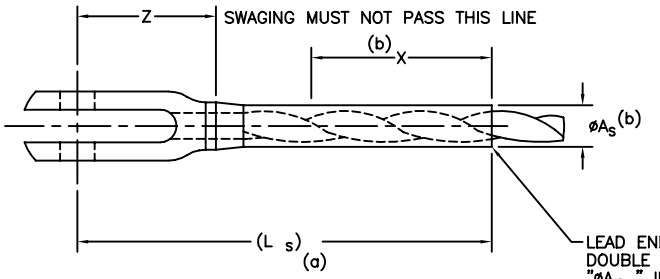
TERMINAL, WIRE ROPE, SWAGING, FORK END

THIS SPECIFICATION IS APPROVED FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE.

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING DOCUMENT LISTED IN THAT ISSUE OF THE DEPARTMENT OF DEFENSE INDEX OF SPECIFICATIONS AND STANDARDS (DODISS) SPECIFIED IN THE SOLICITATION: MIL–DTL–781.



BEFORE SWAGING



AFTER SWAGING

LEAD END AFTER SWAGING MAY HAVE DOUBLE THE TOLERENCE GIVEN FOR THE "øAs" IN AREA OF ORIGINAL TAPER PROVIDED THERE ARE NO RAPID DIMENSIONAL CHANGES IN CROSS SECTION OR EVIDENCE OF SPLITS, CRACKS, OR OTHER INJURIOUS DEFECTS.

(D) **ENTIRE DOCUMENT REVISED**

TABLE I. PART NUMBERS AND DIMENSIONS.

MS PART NUMBERS CORROSION RESISTANT STEEL	NOM CABLE DIA REF	(c) MINIMUM BREAKING STRENGTH	øA		øA$_S$		B RAD	øD		F +.010 −.005	G		H	L +.020 −.000
MS20667-2	.062 (1/16)	480	.160		.138		.130	.190		.218	.093		.500	1.572
MS20667-3	.093 (3/32)	920	.218		.190	+.000 −.005	.150			.254	.108		.670	1.945
MS20667-4	.125 (1/8)	2,000	.250		.219		.220			.383	.195	±.003	.735	2.352
MS20667-5	.156 (5/32)	2,800	.297		.250		.240	.250		.406	.202		.800	2.655
MS20667-6	.187 (3/16)	4,200	.359		.313		.310	.313	+.002 −.000	.543	.260		.880	3.071
MS20667-7	.218 (7/32)	5,600	.427		.375	+.000	.370			.625	.296	+.005	.970	3.440
MS20667-8	.250 (1/4)	7,000	.494		.438	−.007	.390	.375		.688	.313	−.003	1.070	3.806
MS20667-9	.281 (9/32)	8,000	.563	+.000	.500		.420	.438		.719	.327		1.170	4.120
MS20667-10	.312 (5/16)	9,800	.635	−.005	.563	+.000	.460			.765	.348		1.268	4.438
MS20667-12	.375 (3/8)	14,400	.703		.625	−.008	.497	.500		.830	.380	+.007	1.525	5.333
MS20667-14	.437 (7/16)	17,600	.781		.688			.562				−.003	1.776	6.102
MS20667-16	.500 (1/2)	22,800	.844		.750	+.000	.620	.625		1.035	.473		1.903	6.938
MS20667-18	.562 (9/16)	28,500	.984		.875	−.009	.744	.750		1.241	.567		2.375	7.750
MS20667-20	.625 (5/8)	35,000	1.109		1.000	+.000 −.010	.810	.875	+.005 −.000	1.351	.663		2.770	8.673
MS20667-24	.750 (3/4)	49,600	1.359		1.250	+.000	.870			1.451	.663	+.009	2.791	9.740
MS20667-28	.875 (7/8)	66,500	1.593	+.000	1.437	−.012	.993	1.000		1.656	.756	−.003	3.170	10.802
MS20667-32	1.000 (1)	85,400	1.812	−.010	1.625		1.117	1.125		1.864	.851		3.562	12.312

DASH NUMBER (SIZE)	L_S REF	øM		øN		P		øT		øU REF	W REF	X MIN	Z MIN	øBB (FIM)
−2	1.75	.090		.078				.138		.344		.70	.60	
−3	2.06	.119		.109				.190	+.000 −.005	.438		.80	.75	
−4	2.61	.154		.141				.219		.547	.031	1.05	.91	
−5	3.00	.188	+.010 −.000	.172				.250		.688		1.29	.96	
−6	3.24	.223		.203	+.005 −.000			.313		.781		1.31	1.13	.016
−7	3.74	.257		.234				.375	+.000	.906	.047	1.55	1.25	
−8	4.10	.291		.265				.438	−.007	.969		1.70	1.36	
−9	4.48	.326		.297				.500		1.156		1.89	1.43	
−10	4.86	.360		.328				.563		1.265		2.06	1.50	
−12	5.74	.430		.390	+.008	3.511		.625	+.000	1.500	.063	3.12	1.89	
−14	6.57	.514		.468	−.000	4.011	+.047	.688	−.008	1.750		3.57	2.16	.020
−16	7.50	.584	+.012 −.000	.531	+.009	4.698	−.000	.750	+.000	1.875		4.31	2.31	
−18	8.34	.653		.594	−.000	5.011		.875	−.009	2.340		4.51	2.81	
−20	9.36	.722		.656	+.010 −.000	5.511		1.000	+.000 −.010	2.730		5.04	3.23	.030
−24	10.31	.860		.781		6.511	+.062	1.250	+.000	2.750		5.80	3.30	
−28	11.56	1.013	+.015	.921	+.012 −.010	7.166	−.000	1.437	−.012	3.125	.093	6.31	3.70	.040
−32	13.22	1.151	−.000	1.046		8.229		1.625		3.510		7.26	4.15	

(a) REFERENCE DIMENSIONS ARE FOR DESIGN PURPOSES ONLY AND ARE NOT INSPECTION REQUIREMENT.

(b) SWAGED TERMINAL SHALL CONFORM TO øA$_S$ FOR LENGTH X.

(c) TO ACHIEVE THE MINIMUM BREAKING STRENGTH, FOR THE TERMINAL TEST ONLY, A GALVANIZED CARBON STEEL WIRE ROPE SHALL BE USED.

REQUIREMENTS:

1. MATERIAL: CORROSION RESISTANT STEEL, 303Se (UNS S30323) OR 304 (UNS S30400).
2. FINISH: FINISH IN ACCORDANCE WITH MIL-DTL-781.
3. SWAGE: SWAGE IN ACCORDANCE WITH MIL-DTL-6117.
4. TOLERANCES: UNLESS OTHERWISE SPECIFIED: DECIMALS ± .010, ANGLES ± 3°.

NOTES:

1. DIMENSIONS ARE IN INCHES.
2. INTERPRET DRAWING IN ACCORDANCE WITH ASME Y14.5M.
3. REMOVE BURRS AND BREAK SHARP EDGES.
4. INTERCHANGEABLY RELATIONSHIP; MS20667 AND AN667 PARTS IDENTIFIED BY THE SAME DASH NUMBER ARE UNIVERSALLY, FUNCTIONALLY, AND DIMENSIONALLY INTERCHANGEABLE.
5. IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS DOCUMENT AND THE REFERENCES CITED HEREIN, THE TEXT OF THIS DOCUMENT SHALL TAKE PRECEDENCE.
6. UNLESS OTHERWISE SPECIFIED, ISSUES OF REFERENCED DOCUMENTS ARE THOSE IN EFFECT AT THE TIME OF SOLICITATION.
7. MS20667 SUPERSEDES AN667.

8. CORROSION RESISTANT STEEL PARTS CAN BE UNIVERSALLY SUBSTITUTED CARBON AND ALLOY STEEL PARTS IN ACCORDANCE WITH THE SUBSTITUTION TABLE. CARBON AND ALLOY STEEL PARTS CANNOT BE SUBSTITUTED FOR CORROSION RESISTANT STEEL PARTS.

SUBSTITUTION TABLE

MS PART NUMBERS	
CORROSION RESISTANT STEEL	CARBON STEEL CAD. PLATED
MS20667-2	MS20667F2
MS20667-3	MS20667F3
MS20667-4	MS20667F4
MS20667-5	MS20667F5
MS20667-6	MS20667F6
MS20667-7	MS20667F7
MS20667-8	MS20667F8
MS20667-9	MS20667F9
MS20667-10	MS20667F10
MS20667-12	MS20667F12
MS20667-14	MS20667F14
MS20667-16	MS20667F16
MS20667-18	MS20667F18
MS20667-20	MS20667F20
MS20667-24	MS20667F24
MS20667-28	MS20667F28
MS20667-32	MS20667F32

CUSTODIANS:

NAVY - AS
ARMY - ME
AIR FORCE - 99

REVIEW:

ARMY - AR, MD
NAVY - MC, NAVAIR

PREPARING ACTIVITY:
DLA - IS

(PROJECT. 4030-0282