

FIGURE 1

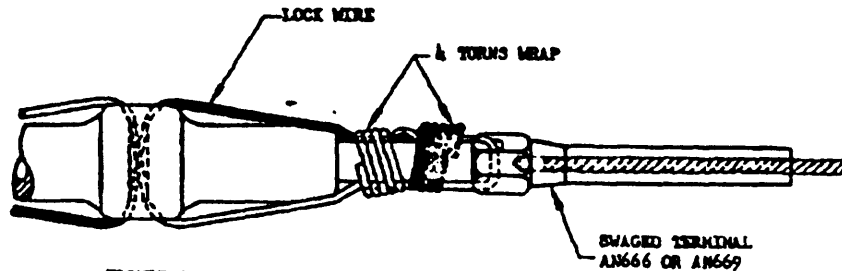


FIGURE 2

**METHOD OF ASSEMBLING LOCK WIRE, TURNBUCKLES, AND TERMINALS**

ALL LOCK WIRE USED IN THE SAFETYING OF TURNBUCKLES SHALL BE CARBON STEEL, CORROSION-RESISTANT STEEL, NICKEL-CHROMIUM-IRON ALLOY (INCONEL), NICKEL-COPPER ALLOY (MONEL) OR ALUMINUM ALLOY IN ACCORDANCE WITH DRAWING AN995 OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BIDS. THE MINIMUM LOCK-WIRE DIAMETER SHALL BE IN ACCORDANCE WITH TABLE I.

TABLE I

CABLE DIAMETER	1/16	3/32 OR 1/8	5/32, 3/16, 7/32, 1/4, 9/32, 5/16
TURNBUCKLE, AN155 DASH NO	-5S, -8S OR -8L	-16S, -16L, -32S OR -32L	-32S, -32L, -64S, -64L, -80L, -125L OR -175L
CARBON STEEL	.032	.041	.047
MONEL			.060
INCONEL	.020	.032	.043
CORROSION-RESISTANT STEEL			.047
ALUMINUM ALLOY	.032	.041	.047

FOR GENERAL PRACTICES FOR SAFETY WIRING, SEE STANDARD MS33560.

AFTER TURNBUCKLE HAS BEEN ADJUSTED TO ITS LOCKING POSITION, TWO SAFETY WIRES SHALL BE PASSED THROUGH THE HOLE IN THE CENTER OF THE TURNBUCKLE BARREL, AND THE ENDS OF THE WIRES SHALL BE BENT 90 DEGREES TOWARDS THE ENDS OF THE TURNBUCKLE BARREL, AS SHOWN IN FIGURE 1. THE ENDS OF THE WIRES SHALL BE PASSED THROUGH THE HOLE IN THE TURNBUCKLE EYES OR BETWEEN THE JAWS OF THE TURNBUCKLE FORK, AS APPLICABLE. THE WIRES SHALL THEN BE BENT BACK TOWARD THE CENTER OF THE TURNBUCKLE AND EACH WRAPPED FOUR TIMES AROUND THE SHANK, BINDING THE WRAPPING WIRES IN PLACE AS SHOWN IN FIGURE 1. WHEN A SWAGED TERMINAL IS BEING SAFETYED, ONE WIRE SHALL BE PASSED THROUGH THE HOLE PROVIDED FOR THIS PURPOSE IN THE TERMINAL, LOOPED OVER THE FREE END OF THE OTHER WIRE AND BOTH ENDS SHALL BE WRAPPED AROUND THE SHANK AS SHOWN IN FIGURE 2.

PRIOR TO SAFETYING, BOTH THREADED TERMINALS SHALL BE SCREWED AN EQUAL NUMBER OF TURNS (SEE TABLE II) INTO THE TURNBUCKLE BARREL AND SHALL BE SCREWED IN SUFFICIENTLY THAT NOT MORE THAN THREE THREADS OF ANY TERMINAL ARE EXPOSED OUTSIDE THE BARREL EXCEPT FOR AN AN666 TERMINAL. TABLE III LISTS THE ACCEPTABLE LENGTH THAT THREADS OF AN666 TERMINAL SHOULD EXTEND FROM THE AN155 TURNBUCKLE BARREL.

**INACTIVE FOR DESIGN AFTER 1 MAY 1967. USE MS33736.**

TABLE II

TURNBUCKLE	NO. OF TURNS
SHORT FOR 1/16 CABLE	5 TO 7
SHORT FOR 1/8 CABLE	2 TO 3
LONG FOR 3/32 CABLE	10
LONG FOR 5/32 CABLE	6 TO 8
LONG FOR 3/16 CABLE	10

TABLE III

CABLE DIA	THREAD	MAXIMUM THREAD EXTENSION
1/16	6-40	.75
3/32	18-32	
1/8	1/4-28	
5/32	5/16-24	.85
3/16	3/8-24	
1/4	7/16-20	1.00
9/32	1/2-20	1.10

THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BID. THIS IS A DESIGN STANDARD, NOT TO BE USED AS A PART NUMBER.

THIS DOCUMENT HAS BEEN PROMULGATED BY THE DEPARTMENT OF DEFENSE AS THE MILITARY STANDARD TO LIMIT THE SELECTION OF THE ITEM, PRODUCT, OR DESIGN COVERED HEREIN IN ENGINEERING, DESIGN, AND PROCUREMENT. THIS STANDARD SHALL BECOME EFFECTIVE NOT LATER THAN 90 DAYS AFTER THE LATEST DATE OF APPROVAL FROM.

CUSTODIANS Navy - BuAer Force	OTHER INT. A - N - AF -	<b>MILITARY STANDARD</b>	<b>MS33591</b> (ASG)
		TURNBUCKLES, LOCK WIRING OF	
PROCUREMENT SPECIFICATION NONE	SUPERSEDES: AN10182		SHEET 1 OF 1

APPROVED 19 Jul 57 REVISED 4 25 Sep 57 B 1 May 67