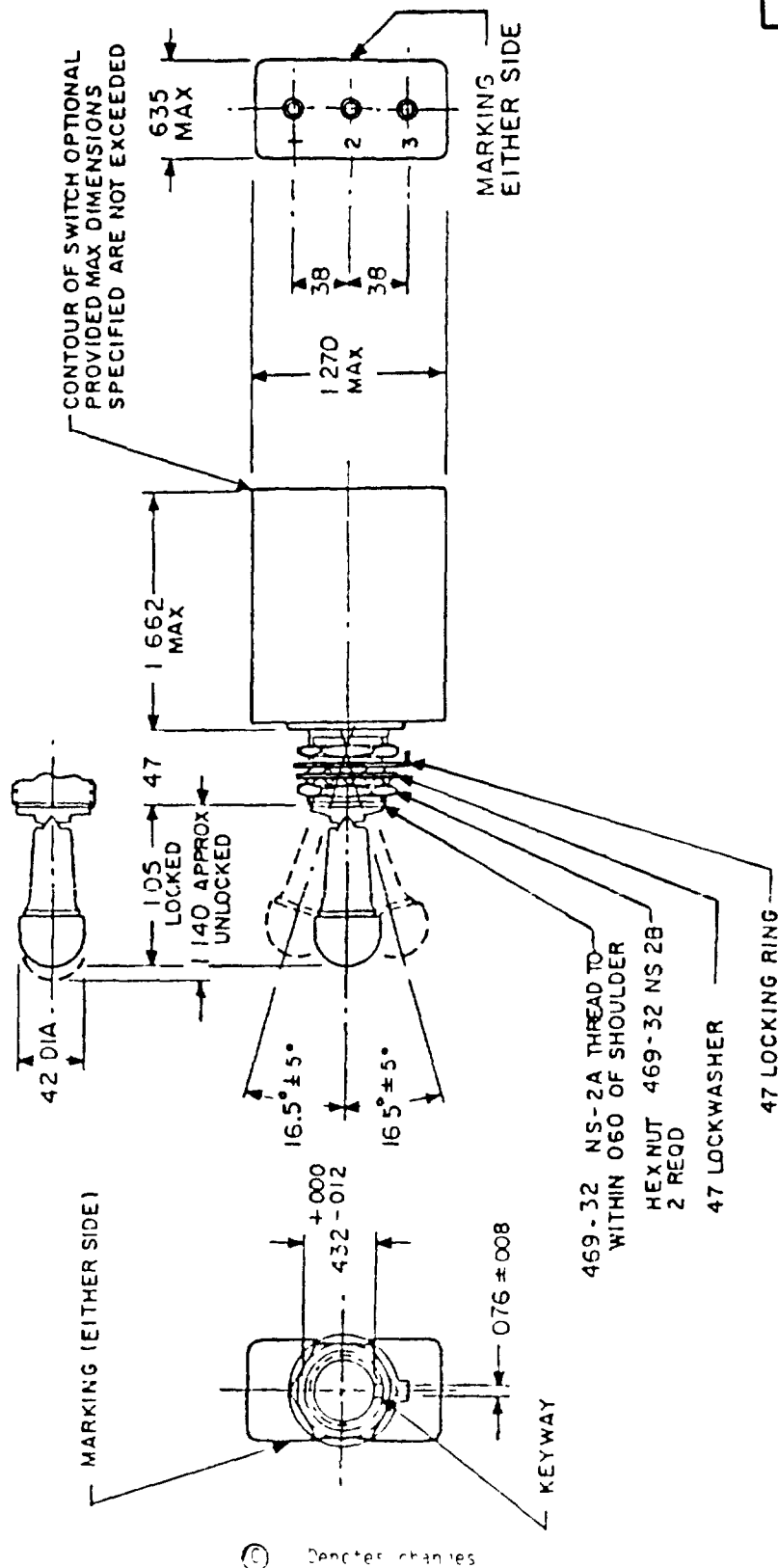


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<b>APPROVED</b>	15 May 1972	<b>REVISED</b>	(A) 14 Mar 1974	(B) 25 Apr 1975	(C) 28 Sep 1987
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F n Air Force - 85 Other Cust Army - CP Navy - AS	International interest	TITLE SWITCH, TOGGLE, ONE POLE, ENVIRONMENTALLY SEALED, LEVER-LOCK, INTEGRATED WIRE TERMINALS	MILITARY STANDARD
			MS27787
Procurement Specification MIL-S-3950		SUPERSEDES	PAGE 1 OF 4

DD FORM 672  
1 MAY 73

(Coordinated) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

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5930User activities  
Army -  
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Army - AV  
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Inches	mm	Inches	mm
.005	0.13	.432	10.97
.008	0.20	.469	11.91
.012	0.30	.47	11.9
.020	0.51	.635	16.13
.060	1.52	1.05	26.7
.076	1.93	1.140	28.96
.38	9.7	1.270	32.26
.42	10.7	1.662	42.21

## NOTES

1. Dimensions are inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is  $\pm .020$  (0.51 mm) for two place decimals and  $\pm .005$  (0.13 mm) for three place decimals.
4. For hardware detail specifications see appendix of MIL-S-3950.
5. Contact installing/removal tool in accordance with M81969/14-02.
6. Grommet sealing plug, in accordance with MS27488A20.
7. The sealing grommet shall seal on a smooth wire insulation of .040 (1.02 mm) to .083 (2.11 mm) diameters.
8. Terminal shall adequately accept a wire contact within dimensional limits of M39029/1-101.
9. The terminal end of switch shall be color coded red to indicate contact size.
10. Direction of internal mechanism movement is opposite to the direction of the toggle movement.
11. Sealing plugs may be used in nonfunctional grommet holes.
12. Maximum weight is .108 pound.
13. Locking arrangement. Positive locking shall be accomplished and shall prevent motion of the toggle lever until the locking mechanism is manually released.
14. The force required to release the locking mechanism shall be 3 to 5 pounds.
15. The locking means at the top of the toggle bushing shall be capable of withstanding a torque of 20 inch-pounds applied in both directions immediately following the humidity test.
16. Part number example. MS27787-21A (locking combination 'A').
17. In the event of a conflict between the text of this standard and the reference cited herein, the text of this standard shall take precedence.
18. Referenced 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.

For changes see page 2

REVISED

15 May 1972

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P A Air Force - 85 Other Cust Army - ER Navy - AS	International interest	TITLE SWITCH, TOGGLE, ONE POLE, ENVIRONMENTALLY SEALED, LEVER-LOCK, INTEGRATED WIRE TERMINALS	MILITARY STANDARD MS27787
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User activity Air Force - 11

Army - AV  
Navy - [C]  
Air Force - gn  
JLA - ES

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Review activities

## Locking combinations

A	LOCKED IN THREE POSITIONS (KEYING SIDE)	B	LOCKED IN CENTER AND DOWN POSITIONS (KEYING SIDE)	D	LOCKED OUT OF CENTER POSITION	E	LOCKED IN CENTER POSITION	F	LOCKED IN UP POSITION (OPPOSITE KEYING)	G	LOCKED IN DOWN POSITION (KEYING SIDE)	H	LOCKED OUT OF CENTER AND DOWN POSITION (KEYING SIDE)
J	LOCKED OUT OF CENTER AND UP POSITION (OPPOSITE KEYING)	K	LOCKED IN CENTER AND UP POSITION (OPPOSITE KEYING)	L	LOCKED OUT OF DOWN POSITION (KEYING SIDE)	M	LOCKED OUT OF AND INTO UP POSITION (OPPOSITE KEYING)	N	LOCKED OUT OF UP POSITION (OPPOSITE KEYING)	P	LOCKED OUT OF AND INTO DOWN POSITION (KEYING SIDE)	FIGURES A THROUGH P DO NOT REPRESENT DETAILS OF CON- STRUCTION THEY SCHEMATICALLY ILLUSTRATE LOCKING CONFIGURATIONS AND MOMENTARY POSITIONS	

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P A Air Force - 85 Other Cust Army - ER Navy - AS	International interest	TITLE SWITCH, TOGGLE, ONE POLE, ENVIRONMENTALLY SEALED, LEVER-LOCK, INTEGRATED WIRE TERMINALS	MILITARY STANDARD <b>MS27787</b>
Procurement Specification MIL-S-3950		SUPERSEDES	PAGE 3 OF 4

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Review activities  
Army - AV  
Navy - FC  
Air Force - 99  
DLA - ES

User activity  
Air Force - 11

P A		International interest	TITLE		MILITARY STANDARD	
Air Force - 85 Other Cust Army - ER Navy - AS			SWITCH, TOGGLE, ONE POLE, ENVIRONMENTALLY SEALED, LEVER-LOCK, INTEGRATED WIRE TERMINALS		MS27787	
Procurement Specification MIL-S-3950			SUPERSEDES			PAGE 4 OF 4
Detail requirements						
MS part number	Available locking combinations	Circuit with toggle lever in	Current capacity (amperes) 28 volts dc	Current capacity (amperes) 115 volts, 60 and 400 hertz ac	Inductive circuit	Resistive circuit
IMS27787-21	All	Keying side 1-2 On Center Off Opposite 2-3 On				
IMS27787-22	D, F, G	Off None 2-3 On	5	7.5	3	7.5
IMS27787-23	D, F, G	1-2 On None 2-3 On				
IMS27787-24	E, F, K, M	None Off 2-3 On				
IMS27787-25	F	None Mom Off 2-3 On				
IMS27787-26	F	1-2 Mom on None 2-3 On				
IMS27787-27	E, L, N	1-2 Mom. on Off 2-3 Mom. on				
IMS27787-28	E	1-2 Mom. on Off None	4	7.5	2	7.5
IMS27787-29	F	Mom. off None 2-3 On				
IMS27787-30	F	1-2 Mom. on None Off				
IMS27787-31	E, F, K, L, M, N	1-2 Mom on Off 2-3 On				
IMS27787-32	E	None On 1-2 2-3 Mom on				
IMS27787-33	E, F, K, M	None On 1-2 2-3 On	5	7.5	3	7.5
Test requirements						
Test shall be performed in accordance with MIL-S-3950 except						
a. During all tests, switches shall be fully wired with appropriate wire and terminal contacts. b. Contact voltage drop - the contact voltage drop with two terminals and the switch contact in series shall not exceed 8 millivolts measured from one wire contact through the contacts to the other wire contacts						
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