

INCH-POUND

MS27786E

14 February 2024

SUPERSEDING

MS27786D

w/AMENDMENT 1

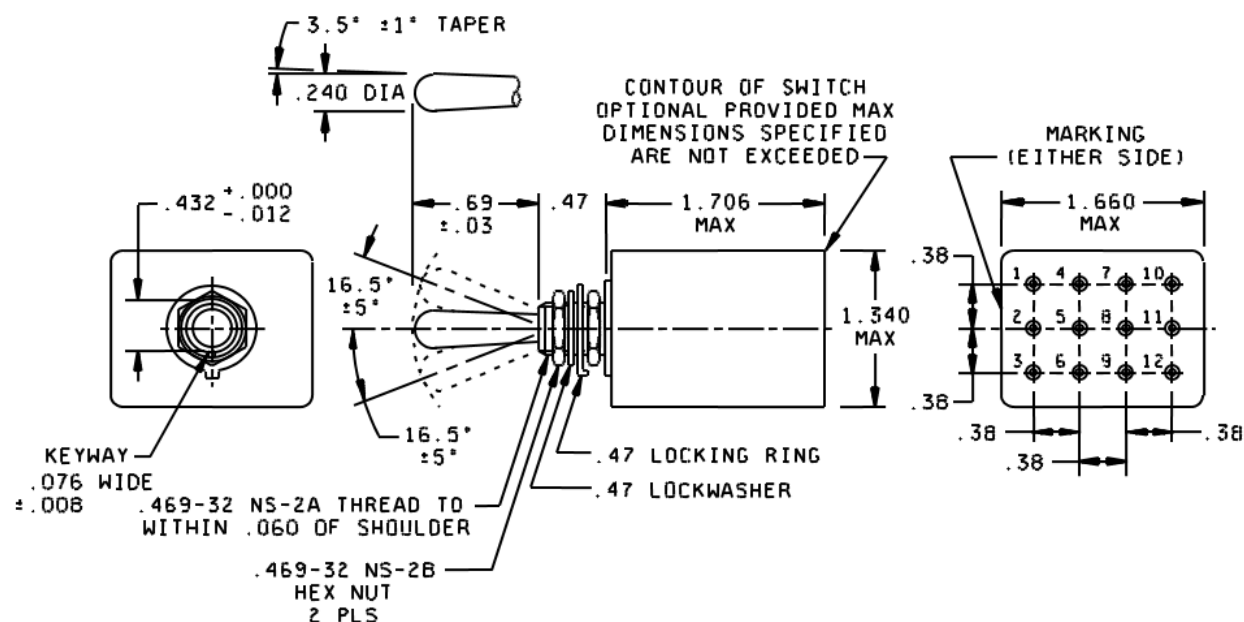
23 January 2014

DETAIL SPECIFICATION SHEET

SWITCH, TOGGLE, FOUR POLE, ENVIRONMENTALLY SEALED, INTEGRATED WIRE TERMINALS

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The complete requirements for acquiring the switch described herein shall consist of this specification and the latest issue of [MIL-DTL-3950](#).



NOTES:

1. Dimensions are inches.
2. Unless otherwise specified, tolerance is $\pm .020$ for two place decimals and $\pm .005$ for three place decimals.
3. For hardware detail specifications see appendix of [MIL-DTL-3950](#).
4. Contact installing/ removal tool in accordance with M81969/14-11 per [SAE-AS81969/14](#).
5. Grommet sealing plug, in accordance with MS27488-20-2 per [MS27488](#).
6. Terminal shall adequately accept a wire contact within dimensional limits of M39029/1-101 per [SAE-AS39029/1](#).
7. 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.

FIGURE1. Dimensions and configuration

AMSC N/A

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REQUIREMENTS

The Sealing grommet shall seal on a smooth wire insulation of .040 to .083 diameters

The terminal end of switch shall be color coded red to indicate contact size

Direction of internal mechanism movement is opposite to the direction of the toggle movement

Sealing plugs may be used in nonfunctional grommet holes.

Maximum weight is .21pound.

Electrical rating: See table I.

TABLE I. Detail Requirements.

MS Part Number	Circuit with toggle lever in			Current capacity (amperes) 28 volts DC			Current capacity (amperes) 115 volts, 60 and 400 hertz AC		
	Keying Side	Center	Opposite keying side	Lamp- load circuit	Resistive circuit	Inductive circuit	Lamp- Load circuit	Resistive circuit	Inductive circuit
MS27786-1	1-2 4-5 7-8 ON 10-11	2-3 4-5 7-8 ON 11-12	2-3 5-6 8-9 ON 11-12	5	7.5	7.5	4	7.5	7.5
MS27786-2	1-2 MOM. 4-5 7-8 ON 10-11	2-3 4-5 7-8 ON 11-12	2-3 5-6 8-9 ON 11-12	4	7.5	7.5	2	7.5	7.5
MS27786-3	1-2 MOM. 4-5 7-8 ON 10-11	2-3 4-5 7-8 ON 11-12	2-3 MOM. 5-6 8-9 ON 11-12						
MS27786-21	1-2 7-8 4-5 ON 10-11	OFF	2-3 8-9 5-6 ON 11-12	5	7.5	7.5	4	7.5	7.5
MS27786-22	OFF	NONE	2-3 8-9 5-6 ON 11-12						
MS27786-23	1-2 7-8 4-5 ON 10-11	NONE	2-3 8-9 5-6 ON 11-12						
MS27786-24	NONE	OFF	2-3 8-9 5-6 ON 11-12	4	7.5	7.5	2	7.5	7.5
MS27786-25	NONE	MOM. OFF	2-3 8-9 5-6 ON 11-12						
MS27786-26	1-2 MOM. 7-8 4-5 ON 10-11	NONE	2-3 8-9 5-6 ON 11-12						
MS27786-27	1-2 MOM. 7-8 4-5 ON 10-11	OFF	2-3 MOM. 8-9 5-6 ON 11-12						
MS27786-28	1-2 MOM 7-8 4-5 ON 10-11	OFF	NONE						
MS27786-29	MOM. OFF	NONE	2-3 8-9 5-6 ON 11-12						
MS27786-30	1-2 MOM. 7-8 4-5 ON 10-11	NONE	OFF						
MS27786-31	1-2 MOM. 7-8 4-5 ON 10-11	OFF	2-3 8-9 5-6 ON 11-12						
MS27786-32	NONE	1-2 7-8 4-5 ON 10-11	2-3 MOM 8-9 5-6 ON 11-12	5	7.5	7.5	4	7.5	7.5
MS27786-33	NONE	1-2 7-8 4-5 ON 10-11	2-3 8-9 5-6 ON 11-12						

Test Requirements

Test shall be performed in accordance with [MIL-DTL-3950](#) except

- a) During all tests. Switches shall be fully wired with appropriate wire and terminal contacts.
- b) Contact voltage drop- the contact 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.

Referenced documents

[MIL-DTL-3950](#)
[MS27488](#)
[SAE-AS39029/1](#)
[SAE-AS81969/14](#)

The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the previous issue.

Custodians:

Army – CR
Navy – AS
Air Force – 85
DLA – CC

Preparing activity
DLA – CC

(Project 5930-2024-006)

Review activities

Army – AR, AV, MI
Navy – EC, MC

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil/>.