

USER SYMBOLS:  
REVISOR SYMBOLS:  
AIR FORCE - 11  
ARMY - AV  
DLA - GS

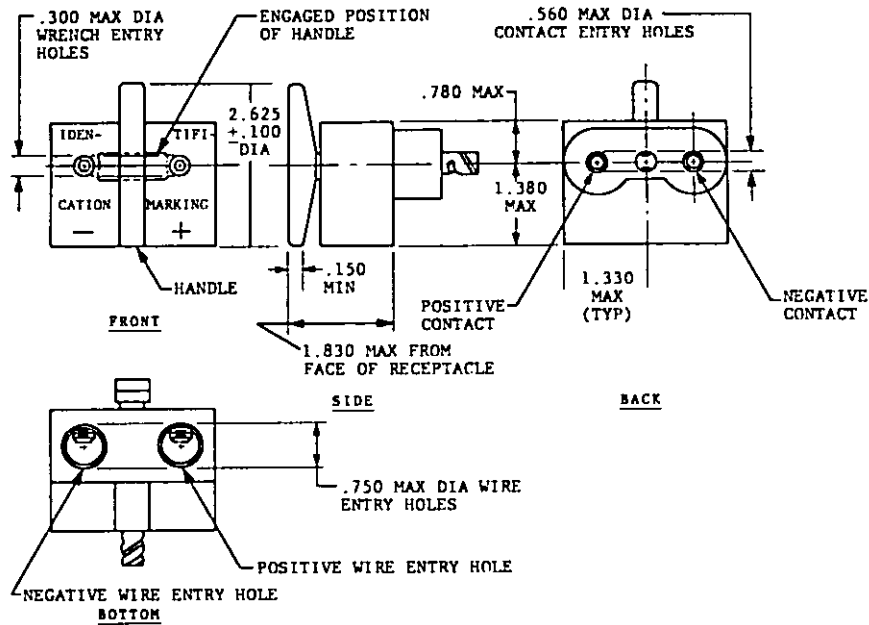


FIGURE 1. MS3349-1 (INACTIVE FOR NEW DESIGN)

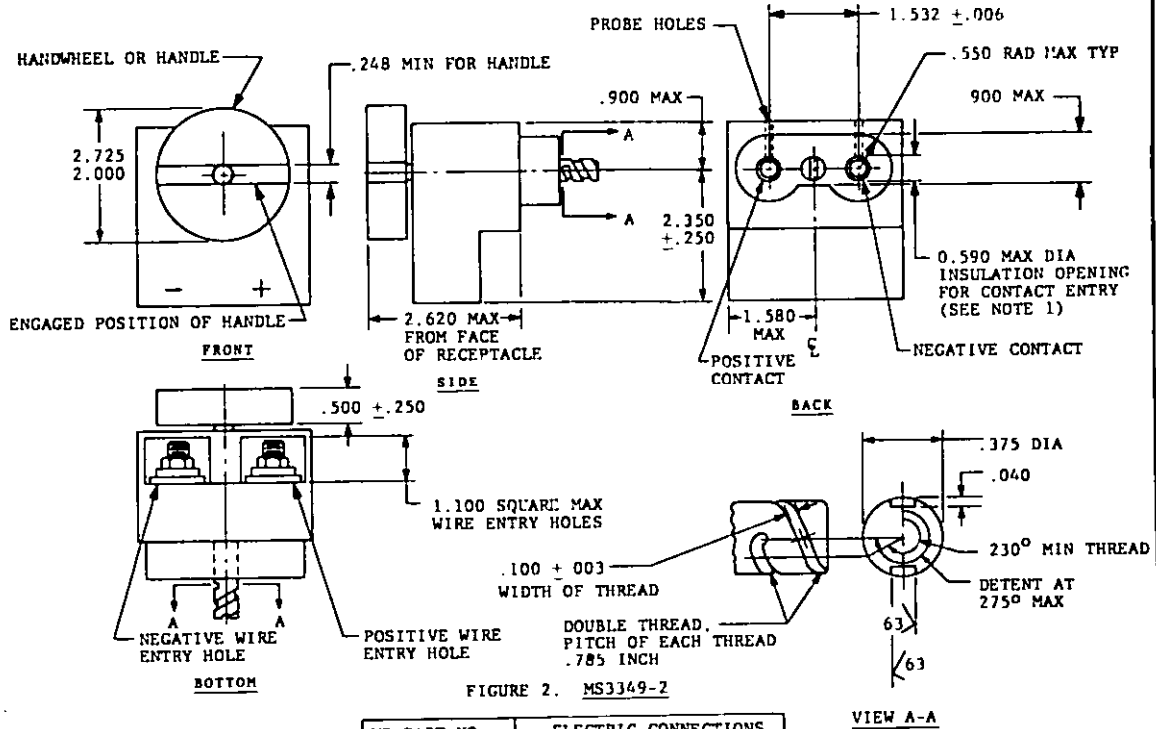


FIGURE 2. MS3349-2

MS PART NO.	ELECTRIC CONNECTIONS
MS3349-1	SOCKETS AND SETSCREWS
MS3349-2	TERMINAL POSTS
MS3349-3	TERMINAL POSTS

ENTIRE STANDARD REVISED

P.A.  
NAVY - AS  
Other Cust  
  
AIR FORCE - 85  
ARMY - 8  
NAVY - AS  
  
PROCUREMENT SPECIFICATION  
MIL-P-18148

TITLE  
PLUG, ELECTRIC, TWO-WIRE, AIRCRAFT STORAGE BATTERY  
  
SUPERSEDES

MILITARY STANDARD  
**MS3349**  
SHEET 1 OF 3

"Revision/issue information is current as of the date of this document. Per future coordination of changes to this document, draft circulation should be based on the information in the current 'DDIGG.'"

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APPROVED 1 MAY 68  
REVISED 4 JUN 71  
6 APR 79  
1 JUNE 84

FED. SUP CLASS  
5935

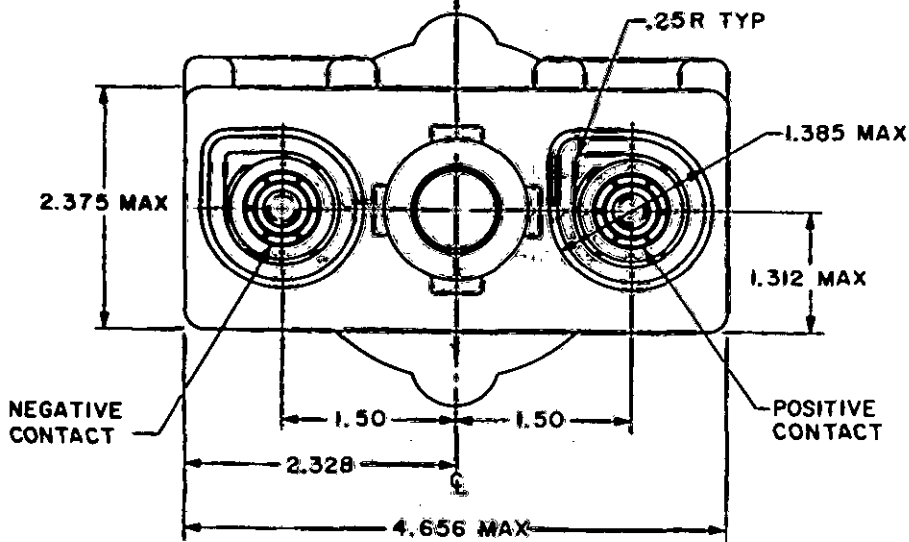
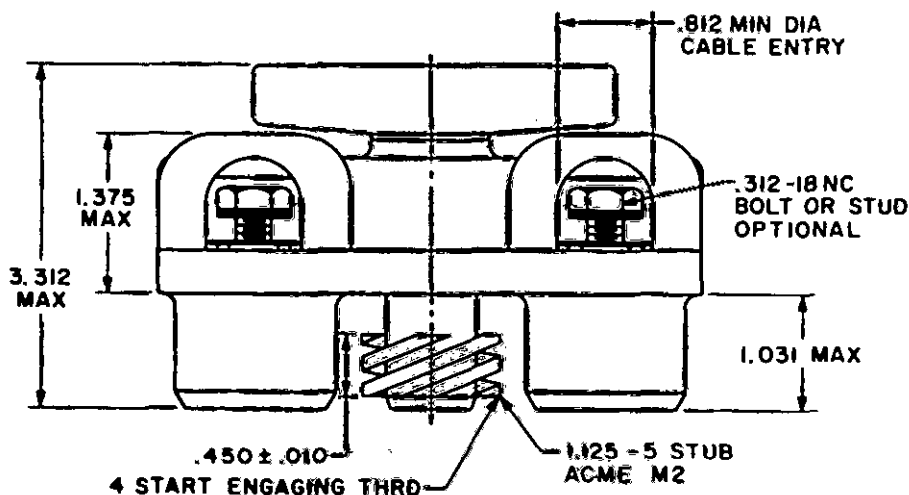
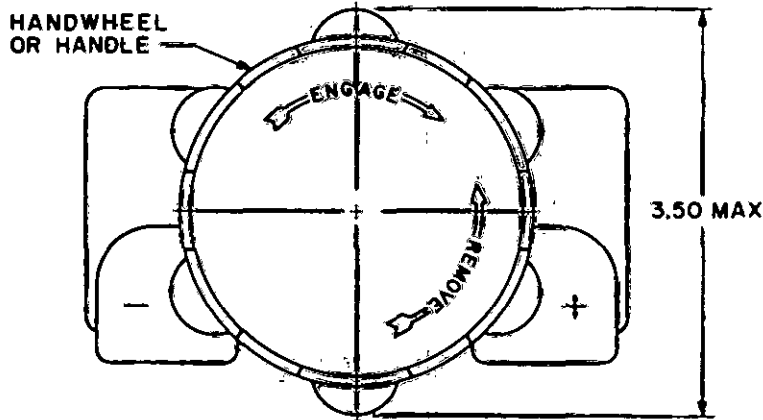


FIGURE 3. MS3349-3

REVIEWER SYMBOLS:  
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APPROVED 1 MAY 68 REVISED (C) FOR CHANGES SEE SHEETS 1, 2 AND 3

P.A. NAVY - AS Other Cust	TITLE
AIR FORCE - 99 ARMY - ER NAVY - AS	PLUG. ELECTRIC, TWO-WIRE, AIRCRAFT STORAGE BATTERY
PROCUREMENT SPECIFICATION	SUPERSEDES
MIL-P-18148	

MILITARY STANDARD	
MS3349	
SHEET 2	OF 3

**REQUIREMENTS**

1. THE MS3349-1, MS3349-2 AND MS3349-3 PLUGS SHALL CONFORM TO MIL-P-18148 FOR TWO-WIRE PLUGS EXCEPT AS MODIFIED BY THE FOLLOWING.
  - 3.3 DIMENSIONS - ADD: THE DIMENSIONS OF EACH PLUG SHALL BE AS SHOWN IN FIGURES 1, 2, & 3.
2. THE FOLLOWING ADDITIONS AND DELETIONS SHALL APPLY TO MS3349-2 ONLY.
  - 3.5.1 ELECTRIC CONNECTIONS OF TWO-WIRE PLUGS. DELETE AND ADD: "EACH TWO-WIRE PLUG SHALL INCLUDE AS ITS ELECTRIC CONNECTIONS TWO POSTS HAVING THREADS CONFORMING TO MIL-S-7742 FOR 5/16-INCH NOMINAL SIZE. EACH PLUG SHALL HAVE TWO WIRE ENTRY HOLES ON THE BOTTOM ONLY. THE PLUG SHALL BE USABLE WITH TWO WIRES CONFORMING TO MIL-W-5086/2 FOR TYPE 2, AND ALSO WITH TWO WIRES CONFORMING TO MIL-C-5756, OF ANY SIZE UP TO AND INCLUDING 000, WITH SUITABLE TERMINAL LUGS CONFORMING TO MS20659 INSTALLED ON THEM. THE LEFT WIRE ENTRY HOLE, AS VIEWED LOOKING AT THE FRONT (HANDLE OR HANDWHEEL) FACE OF THE PLUG, SHALL ACCOMMODATE THE WIRE CONNECTED TO THE NEGATIVE CONTACT, AND THE RIGHT WIRE ENTRY HOLE SHALL ACCOMMODATE THE WIRE CONNECTED TO THE POSITIVE CONTACT. THE PLUG SHALL BE MADE SO THAT THE WIRES WILL ENTER IT VERTICALLY AND IN A PLANE PARALLEL TO THE FACE OF THE RECEPTACLE. "-" AND "+" SHALL BE MARKED ON THE FRONT OF THE PLUG SO AS TO IDENTIFY THE WIRES ENTERING THE HOLES. EACH PLUG SHALL INCLUDE TWO NUTS, TWO FLAT WASHERS, AND TWO LOCKWASHERS TO INSTALL THE TERMINAL LUGS ON ITS ELECTRIC CONNECTIONS. "-" AND "+" SHALL BE MARKED ON THE INSIDE OF THE PLUG SO AS TO IDENTIFY THE ELECTRIC CONNECTIONS. THE PLUG SHALL BE MADE SO THAT IT IS NOT POSSIBLE TO ASSEMBLE IT WITH ANY MARKING NOT IN ITS PROPER LOCATION. PROBE HOLES OF .188 DIAMETER SHALL BE INCORPORATED IN THE PLUG BODY TO ALLOW MONITORING OF BATTERY VOLTAGE AT BATTERY TERMINAL POSTS WITH VOLTMETER PROBES WHEN THE PLUG IS ENGAGED WITH THE BATTERY RECEPTACLE. NO PART OF THE ELECTRIC CIRCUIT OF THE PLUG SHALL BE EXPOSED THROUGH THE WIRE, PROBE, AND CONTACT ENTRY HOLES.

3.6.1 MECHANICAL OPERATION OF TWO-WIRE PLUGS. REPLACE "HANDLE" WHEREVER IT OCCURS WITH "HANDLE OR HANDWHEEL". THE MINIMUM TORQUE REQUIRED TO DISENGAGE THE PLUG SHALL BE FIVE (5) INCH POUNDS.

3.7 MAXIMUM WEIGHT. - DELETE 0.65 POUNDS AND REPLACE WITH MAXIMUM WEIGHTS SHOWN BELOW.

PART NO.	MAX. WT. (LBS.)
MS3349-2	0.75
MS3349-3	1.060

3.8 IDENTIFICATION MARKING. - ADD: IDENTIFICATION MARKINGS SHALL BE ON HANDWHEEL OR PLUG FACE.

ADD: 3.10 MATERIAL. THE PLUGS SHALL CONTAIN NO ADHESIVE TYPE MATERIAL, AND IF AN INSERT IS USED TO REDUCE THE CONTACT ENTRY HOLE DIAMETER IT SHALL SHOW NO SIGN OF DISTORTION OR DETERIORATION THROUGHOUT THE TEST REQUIREMENTS OF THIS SPECIFICATION.

3. THE FOLLOWING ADDITIONS AND DELETIONS SHALL APPLY TO MS3349-3 ONLY:

GENERAL: REPLACE "MS3509", WHEREVER IT OCCURS IN MIL-P-18148, WITH "RECEPTACLE ADAPTER AS SHOWN IN FIGURE 2 OF MIL-B-83769".

4.6.20 VIBRATION. REPLACE "PROCEDURE XII OF MIL-E-5272" WITH "PROCEDURE XII, CURVE B, OF MIL-E-5272".

4.6.24 IMMERSION. DELETE "(d) POTASSIUM HYDROXIDE (KOH) OF SPECIFIC GRAVITY 1.1-4 HOURS".

**NOTES:**

1. THIS DIMENSION IS THE DIAMETER OF CLEARANCE HOLES IN THE SHROUD OF INSULATING MATERIAL SURROUNDING THE FEMALE CONTACTS OF THE PLUG. THIS DIMENSION IS NOT CRITICAL TO THE MATING OF BATTERY AND PLUG. EXCEPT THAT THE MALE PINS OF THE BATTERY MUST NOT BE IMPEDED IN THEIR APPROACH TO THE FEMALE CONTACT WITHIN THE SHROUD OF THE PLUG. THUS, A MINIMUM DIMENSION WOULD BE 0.375 INCH PLUS A SMALL ALLOWANCE FOR A "SLIP-FIT" CLEARANCE.

2. ALL DIMENSIONS ARE IN INCHES. ALL RECURRENT DIMENSIONS ARE TYPICAL.

CERTAIN PROVISIONS OF THIS STANDARD ARE THE SUBJECT OF INTERNATIONAL STANDARDIZATION AGREEMENT (ASCC AIR STD 12/18). WHEN REVISION OR CANCELLATION OF THIS STANDARD IS PROPOSED WHICH WILL EFFECT OR VIOLATE THE INTERNATIONAL AGREEMENT CONCERNED, THE PREPARING ACTIVITY WILL TAKE APPROPRIATE RECONCILIATION ACTION THROUGH INTERNATIONAL STANDARDIZATION CHANNELS, INCLUDING DEPARTMENTAL STANDARDIZATION OFFICES, IF REQUIRED.

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P.A. NAVY - AS Other Cust  AIR FORCE - 99 ARMY - EA NAVY - AS	TITLE	MILITARY STANDARD
	PLUG, ELECTRIC, TWO-WIRE, AIRCRAFT STORAGE BATTERY	<b>MS3349</b>
PROCUREMENT SPECIFICATION MIL-P-18148	SUPERSEDES	SHEET 3 OF 3