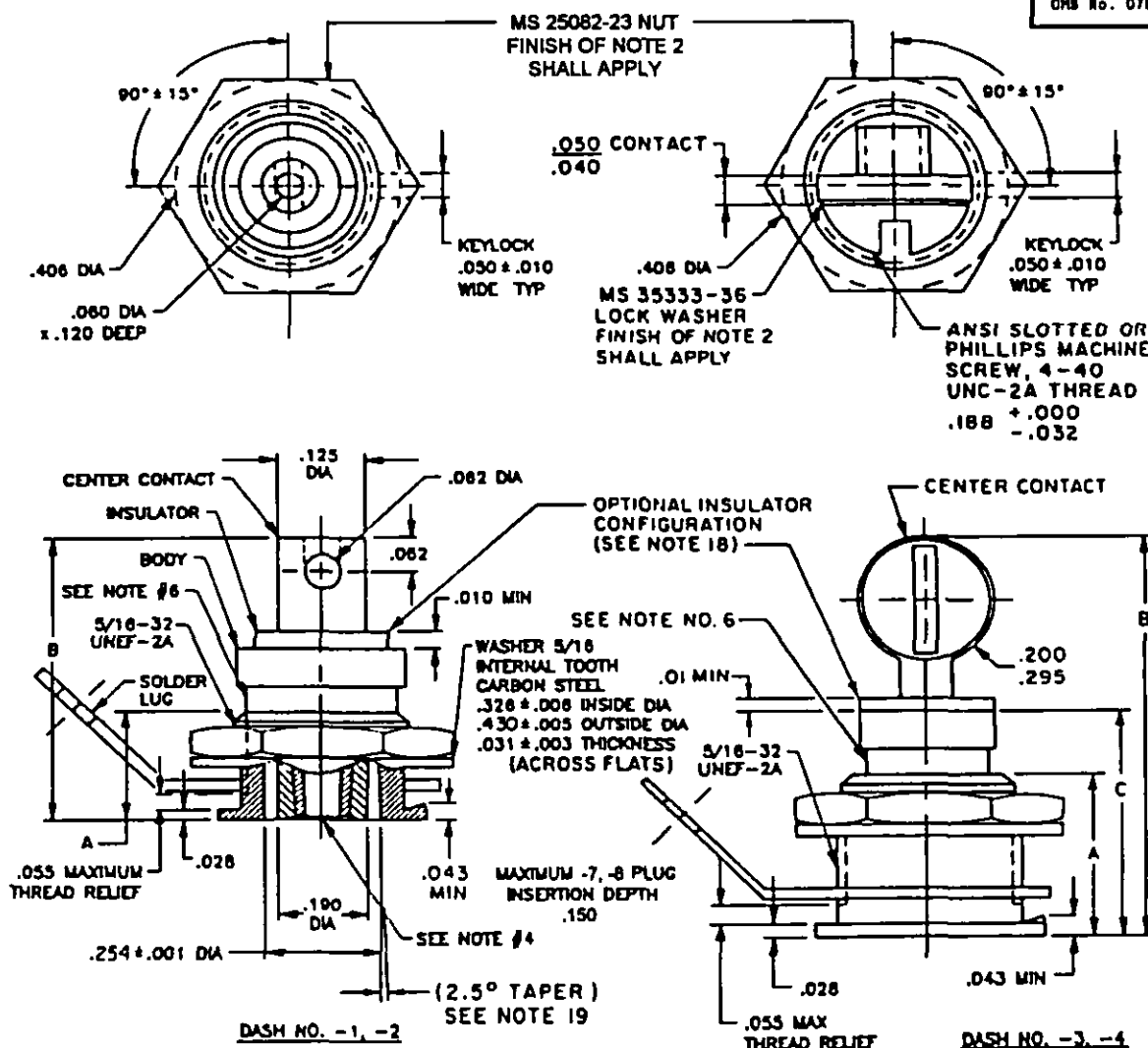


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DASH NO	DIMENSION		TERMINAL TYPE	DIM
	A	B		
-1	.250 ± .010	.590 MAX	SOLDER	—
-2	.375 ± .010	.718 MAX	SOLDER	—
-3	.250 ± .010	.750 MAX	SCREW	.400
-4	.375 ± .010	.875 MAX	SCREW	.525

# PANEL GROUND TYPE RECEPTACLES CENTER CONTACT POSITIVE

## ① ENTIRE STANDARD REVISED

PREPARING ACTIVITY: NAVY-AS  
CUSTOMANS: ARMY-AV NAVY-AS  
AIR FORCE-II DIA-  
REVIEW: NAVY-MC, SH  
USER  
PROJECT NUMBER 5935-N300

MILITARY SPECIFICATION SHEET  
TITLE CONNECTOR, RECEPTACLES,  
PLUGS, ADAPTOR, EL, EMBEDDED,  
PRINTED CIRCUIT BOARD LAMP  
LIGHTING PANELS

SPECIFICATION SHEET NUMBER  
**MS 90335D** 5 JAN 96  
SUPERSEDING  
MS 90335C 12 FEB 1990  
AMSC - N/A FSC 5635

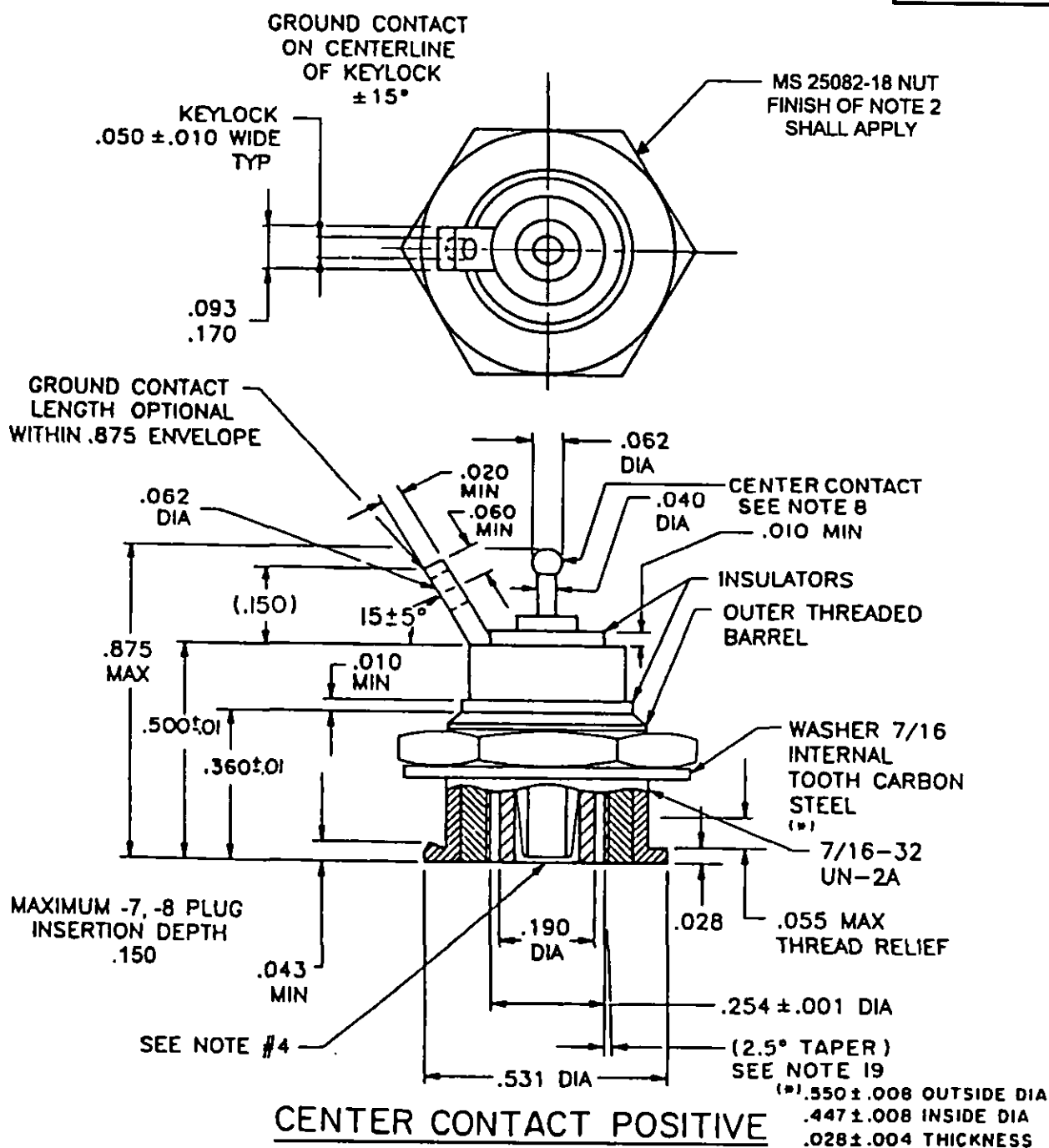
DISTRIBUTION STATEMENT A Approved for public release; distribution is unlimited

Page 1 of 6

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DEPARTMENT OF DEFENSE

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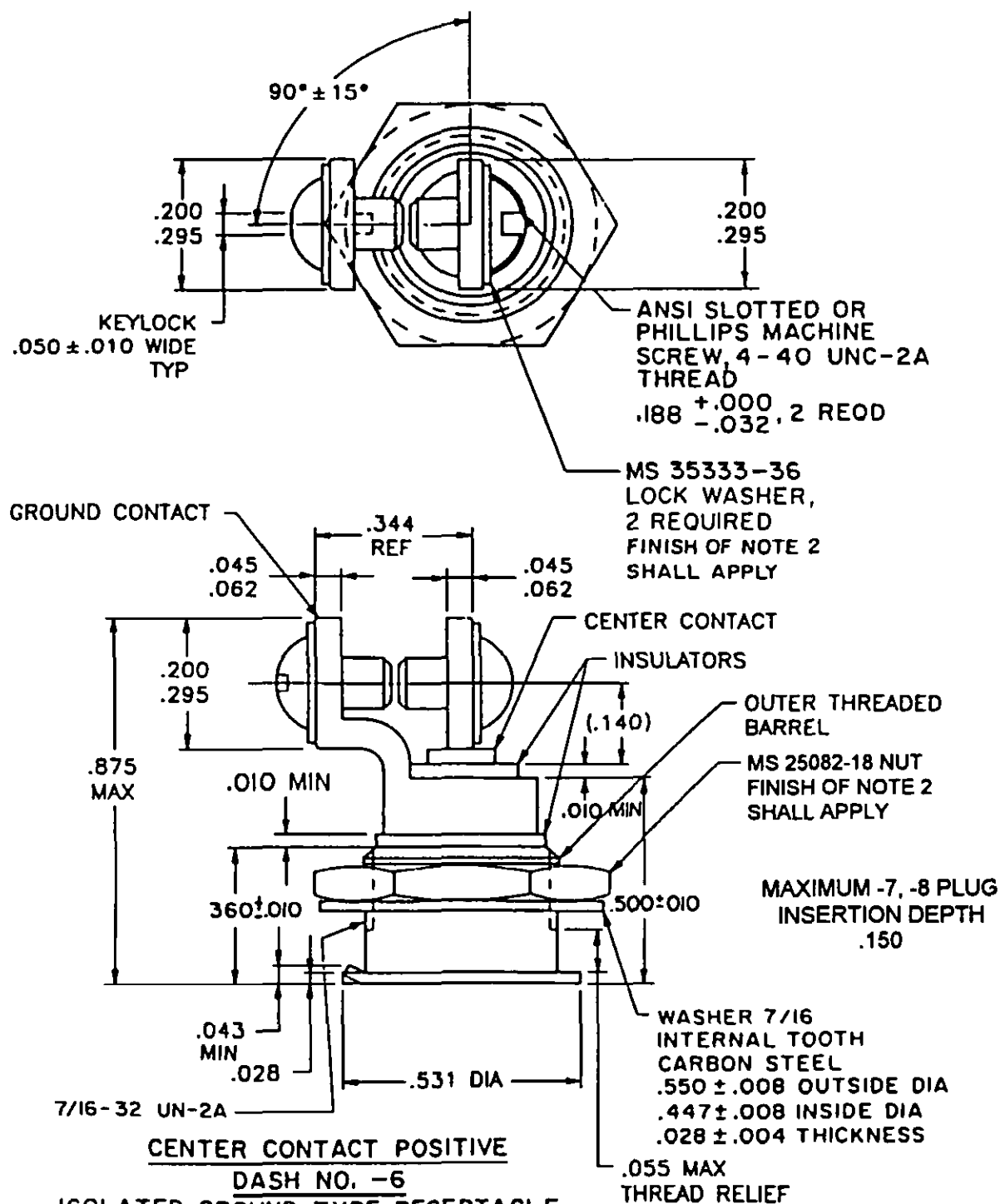
CENTER CONTACT POSITIVE .447  
DASH NO. -5 .028  
 ISOLATED GROUND TYPE RECEPTACLE

Ⓓ ENTIRE STANDARD REVISED

PREPARING ACTIVITY: NAVY-AS CUSTODIANS: ARMY- AV      NAVY-AS AIR FORCE-11      OLA- REVIEW: NAVY- MC, SH USER. PROJECT NUMBER 5935-N300	MILITARY SPECIFICATION SHEET TITLE CONNECTOR, RECEPTACLES, PLUGS, ADAPTOR, EL, EMBEDDED, PRINTED CIRCUIT BOARD LAMP LIGHTING PANELS	SPECIFICATION SHEET NUMBER <b>MS 90335D</b> 5 JAN 96 SUPERSEDING MS 90335C 12 FEB 1990 AMSC - N/A      FSC 5935
DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited		Page <u>2</u> of <u>6</u>

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DEPARTMENT OF DEFENSE.



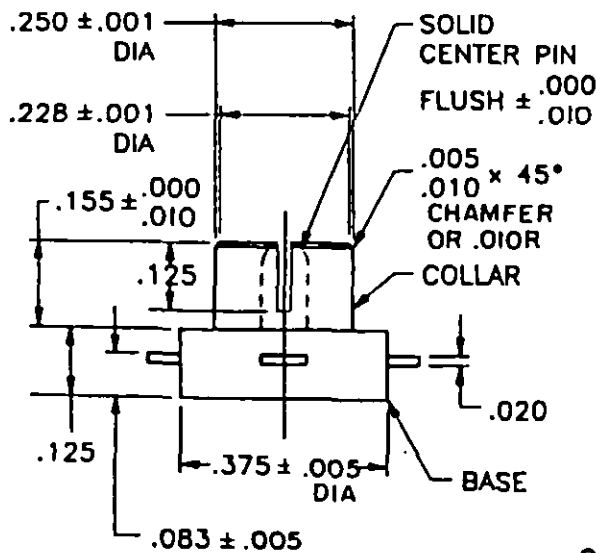
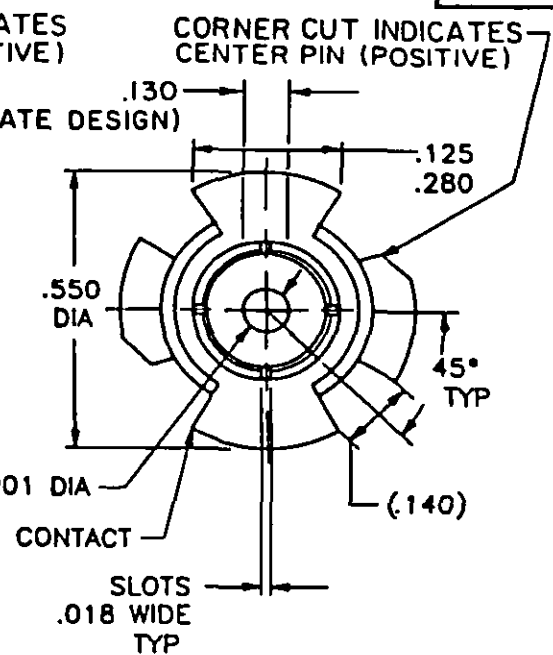
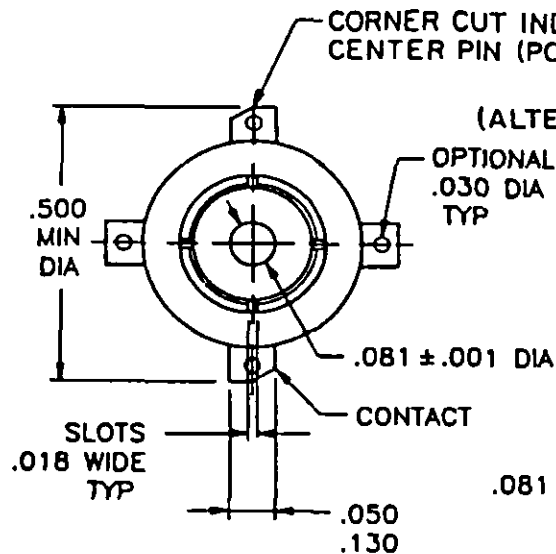
ENTIRE STANDARD REVISED

PREPARING ACTIVITY: NAVY-AS CUSTOMER: ARMY-AV      NAVY-AS AIR FORCE-II      DIA- REVIEW: NAVY- MC, SH USER PROJECT NUMBER: 5935-N300	MILITARY SPECIFICATION SHEET TITLE: CONNECTOR, RECEPTACLES, PLUGS, ADAPTOR, EL, EMBEDDED, PRINTED CIRCUIT BOARD LAMP LIGHTING PANELS	SPECIFICATION SHEET NUMBER <b>MS 90335D</b> 5 JAN 96 SUPERSEDING MS 90335C 12 FEB 1990 AMSC - N/A      FSC 5935
DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited		Page <u>3</u> of <u>6</u>

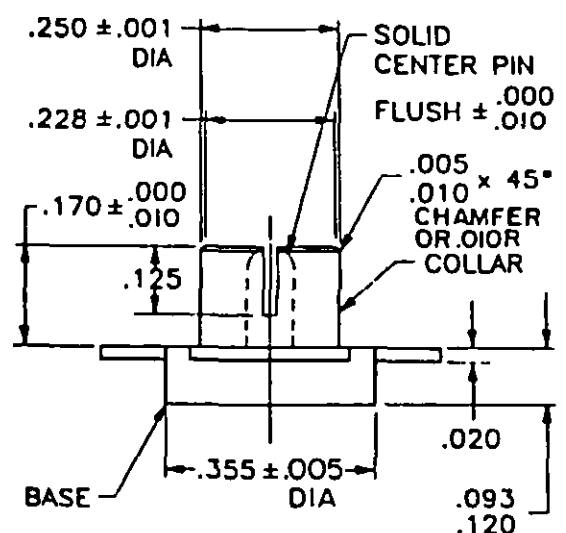
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Form approved  
OMB No. 0704-0188



CENTER CONTACT POSITIVE  
DASH NO. -7  
FOR EMBEDDED  
APPLICATION



CENTER CONTACT TAB BENDS MAY BE EXPOSED.

CENTER CONTACT POSITIVE  
DASH NO. -8  
FOR PRINTED CIRCUIT  
BOARD APPLICATION

Ⓓ ENTIRE STANDARD REVISED

PREPARING ACTIVITY: NAVY-AS

CUSTODIANS: ARMY-AV NAVY-AS

AIR FORCE-II DLA-

REVIEW: NAVY-MC, SH  
USER

PROJECT NUMBER: 5935-N300

MILITARY SPECIFICATION SHEET

TITLE CONNECTOR, RECEPTACLES,  
PLUGS, ADAPTOR, EL, EMBEDDED,  
PRINTED CIRCUIT BOARD LAMP  
LIGHTING PANELS

SPECIFICATION SHEET NUMBER

**MS 90335D** 5 JAN 98

SUPERSEDING  
MS 90335C 12 FEB 1990

AMSC - N/A

FSC 5835

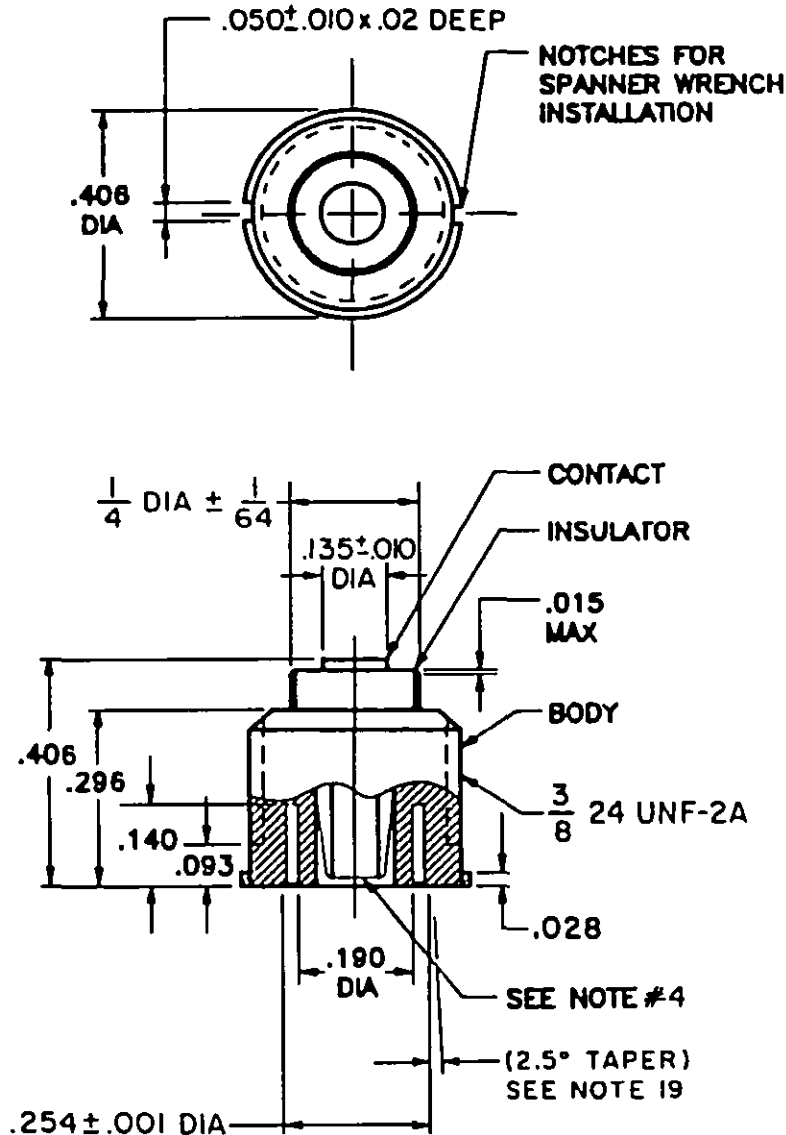
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Page 4 of 6

DD FORM 672 MAY 1988

REPLACES EDITION OF THIS FORM AND DERIVATIVE

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INCHES	MM
.001	.03
.002	.05
.003	.08
.004	.10
.005	.13
.006	.15
.010	.25
.015	.38
.018	.46
.020	.51
.028	.71
.030	.76
.031	.79
.032	.81
.040	1.02
.043	1.09
.045	1.14
.050	1.27
.055	1.40
.060	1.52
.062	1.57
.070	1.78
.081	2.06
.083	2.11
.093	2.36
.100	2.54
.120	3.05
.124	3.15
.125	3.18
.130	3.30
.135	3.43
.140	3.56
.155	3.94
.170	4.32
.188	4.78
.190	4.83
.200	5.08
.210	5.33
.228	5.79
.242	6.10
.250	6.35
.257	6.40
.254	6.45
.280	7.11
.290	7.37
.295	7.49
.296	7.52
.297	7.54
.310	7.87
.312	7.92
.320	8.13
.326	8.28
.344	8.74
.355	9.02
.360	9.14
.375	9.52
.390	9.91
.400	10.16
.406	10.31
.430	10.92
.437	11.10
.441	11.20
.500	12.70
.520	13.21
.525	13.34
.531	13.49
.550	13.97
.563	14.30
.577	14.66
.590	14.99
.715	18.16
.718	18.24
.750	19.05
.805	20.45
.875	22.23
.906	23.01

**CENTER CONTACT POSITIVE**  
**DASH NO. -9**  
**ADAPTOR**

① ENTIRE STANDARD REVISED

PREPARING ACTIVITY: NAVY-AS  
CUSTODIANS ARMY-AV NAVY-AS  
AIR FORCE-II OLA-  
REVIEW: NAVY-MC, SH  
USER  
PROJECT NUMBER: 5935-N300

MILITARY SPECIFICATION SHEET  
TITLE CONNECTOR, RECEPTACLES,  
PLUGS, ADAPTOR, EL, EMBEDDED,  
PRINTED CIRCUIT BOARD LAMP  
LIGHTING PANELS

SPECIFICATION SHEET NUMBER  
**MS 90335D** 5 JAN 88

SUPERSEDING  
MS 90335C 12 FEB 1990

AMSC - N/A

FSC 5935

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited

Page 5 of 6

DD FORM 672 MAY 1980

REPLACES EDITION OF THIS FORM AND OBSOLETE

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

## NOTES:

1. MATERIAL: DASH NO. -1, -2, -3, -4, -5, -6, -7, -8: BODY - BRASS PER ASTM B16, TEMPER H02; INSULATOR - POLYTETRAFLUOROETHYLENE PER ASTM D1710; CENTER CONTACT - BERYLLIUM COPPER PER ASTM B196, TEMPER T004, HEAT TREAT PER MIL-H-7198.  
DASH NO. -1, -2, -3, -4: SOLDER LUG - BRASS PER ASTM B36, TEMPER H02.  
DASH NO. -5, -6: GROUND CONTACT - BRASS PER ASTM B16, TEMPER H02.  
DASH NO. -7: CENTER PIN - BRASS PER ASTM B16, TEMPER H02; COLLAR - BERYLLIUM COPPER PER ASTM B196, TEMPER T004, HEAT TREAT PER MIL-H-7198. BASE INSULATOR - METHACRYLATE PER L-P-380, CLEAR; ALTERNATE BASE INSULATORS - POLYVINYLIDENE FLUORIDE PER MIL-P-48122B, TYPE I, GRADE E, NATURAL; POLYCARBONATE PER ASTM D3833 PC110B30720E01F02, CLEAR.  
DASH NO. -8: CENTER PIN - BRASS PER ASTM B16, TEMPER H02; COLLAR - BERYLLIUM COPPER PER ASTM B196, TEMPER T004, HEAT TREAT PER MIL-H-7198; BASE INSULATOR - POLYVINYLIDENE FLUORIDE PER 48122B, TYPE I, GRADE E, NATURAL.
2. FINISH: DASH NO. -1, -2, -3, -4, -5, -6, -7, -8: CENTER & GROUND CONTACTS - GOLD PLATED PER MIL-G-45204, TYPE II, GRADE C, CLASS 0 (.000030 MIN THK), OVER COPPER STRIKE PER MIL-C-14660.  
DASH NO. -1, -2, -3, -4, -5, -6, -7, -8: HARDWARE - ELECTRODEPOSITED NICKEL PER QQ-N-280, CLASS 1, GRADE F (.0004), OVER COPPER PER MIL-C-14660.  
DASH NO. -5, -6: OUTER THREADED BARREL - ELECTRODEPOSITED NICKEL PER QQ-N-280, CLASS 1, GRADE F (.0004 THK), OVER COPPER PER MIL-C-14660.  
DASH NO. -1, -2, -3, -4: SOLDER LUG - TIN PLATED PER MIL-T-10727, TYPE I (ELECTRODEPOSITED), .0003-.0008 THK OVER COPPER FLASH PER MIL-C-14480.
3. DIMENSIONS IN INCHES. TOLERANCES: DECIMALS  $\pm .005$  UNLESS OTHERWISE SPECIFIED. DRAWINGS NOT SHOWN TO SCALE.
4. DASH NO. -1, -2, -3, -4, -5, -6, -7, -8: FEMALE CENTER CONTACT FINGERS CLOSED DOWN UNIFORMLY TO MEET 4 OZ MINIMUM WITHDRAWAL FORCE WITH .078 DIA PIN, BEFORE AND AFTER 3 INSERTIONS OF .082 DIA PIN.  
TO ENSURE ELECTRICAL CONTINUITY, BODY OF DASH NO. -1, -2, -3, -4, -5, -6 SHALL MEET A MINIMUM WITHDRAWAL FORCE OF 1 LB. WHEN MATED WITH -7, -8 PLUG WITH CENTER CONTACT REMOVED AND INSERTED TO MINIMUM INSERTION DEPTH OF .130 FOR -7, .125 FOR -8.
5. WHEN MATED WITH -7, -8 PLUG THAT HAS BEEN INSERTED TO .140  $\pm .006$  DEPTH THE WITHDRAWAL FORCE SHALL NOT EXCEED 10 LBS. AND SHALL NOT BE LESS THAN 3 LBS.
6. CAPTIVATION OF INSULATOR AND CENTER CONTACT WILL MAINTAIN 12 POUNDS FORCE WHEN APPLIED FROM INTERFACE END.
7. DASH NO. -8: SCREW LOCATIONS OPTIONAL PROVIDING MAXIMUM LENGTH OF .875 IS NOT EXCEEDED.
8. CENTER CONTACT OF -8 MAY BE SAME AS CENTER CONTACT ON DASH NUMBERS -1, -2, -3.
9. DASH NO. -7, -8: COLLAR TO HAVE MINIMUM OF 4 SLOTS AND MAXIMUM OF 8 SLOTS.
10. DASH NO. -8: ALL 4 CONTACTS SHOULD BE FULLY SOLDERED TO PRINTED CIRCUIT BOARD. VARIATION IN SOLDER TAB SIZE (.125-.280) IS INTENDED TO ALLOW FOR SPACE LIMITATIONS: FOR NEW DESIGN THE LARGER TAB AS SHOWN ON THE DRAWING IS PREFERRED. OPTIONAL CONSTRUCTION: PLUG COLLAR MAY SCREW INTO BASE PROVIDING MATING INTERFACE DIMENSIONS ARE MAINTAINED. FINAL PART MUST BE ASSEMBLED TOGETHER USING CONDUCTIVE CEMENT AND OFFER .130-.135 INSERTION DEPTH INTO FEMALE RECEPTACLE.
11. DASH NO. -8: ADAPTOR FOR CONVERTING TYPE III INFORMATION PLATES TO TYPE IV, TYPE V OR TYPE VI INFORMATION PLATES.
12. DASH NO. -1, -2, -3, -4: TO INCORPORATE SOLDER LUG PER DASH NUMBER SHEET FOR GROUNDING PURPOSES. SEE MIL-P-7788 FOR INTENDED USE.
13. DASH NO. -1, -2, -3, -4, -5, -6, -7, -8: MANUFACTURER'S IDENTIFICATION TO BE PERMANENTLY STAMPED IN METAL PART OF RECEPTACLE.
14. THIS DRAWING IS APPLICABLE FOR MIL-P-7788 PANELS UTILIZING A SINGLE ELECTRICAL CIRCUIT. ALL MIL-P-7788 PANELS WHICH REQUIRE MULTIPLE ELECTRICAL CIRCUITS SHALL USE MIL-C-66302/108 AND /109 CONNECTOR PLUG AND RECEPTACLE. MIL-C-66302/108/109 MAY ALSO BE USED FOR SINGLE CIRCUIT LIGHT PANELS.
15. METRIC EQUIVALENTS (TO THE NEAREST .01 MM) ARE GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED UPON 1 INCH = 25.4 MM.
16. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BIDS, OR REQUEST FOR PROPOSAL, EXCEPT THAT REFERENCED ADOPTED INDUSTRY DOCUMENTS SHALL GIVE THE DATE OF THE ISSUE ADOPTED.
17. FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.
18. INSULATOR SHALL NOT EXCEED DIAMETER OF BODY.
19. ANGULAR TOLERANCE OF 2.5 DEG. TAPER IS CONTROLLED BY THE REQUIREMENTS OF NOTE 5.
20. THE CURRENT CAPABILITY OF THE MS90336 IS REGULATED BY THE CURRENT CAPACITY OF THE WIRE USED.
21. MANUFACTURERS ARE PERMITTED TO SUPPLY MS90336C CONNECTORS UNTIL 8 JANUARY 1987 OR DEplete THEIR INVENTORIES, WHICHEVER COMES FIRST.

## ① ENTIRE STANDARD REVISED

PREPARING ACTIVITY: NAVY-AS

CUSTODIANS: ARMY-AV NAVY-AS

AIR FORCE-II DIA-

REVIEW: NAVY-MC, SH

USER:

PROJECT NUMBER: 5935-N300

## MILITARY SPECIFICATION SHEET

TITLE: CONNECTOR, RECEPTABLES,  
PLUGS, ADAPTOR, EL, EMBEDDED,  
PRINTED CIRCUIT BOARD LAMP  
LIGHTING PANELS

SPECIFICATION SHEET NUMBER

MS 90335D 5 JAN 96

SUPERSEDING  
MS 90335C 12 FEB 1990

AMSC - N/A

FSC 5935

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited

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DD FORM 672 MAY 1988

REPLACES EDITIONS OF THIS FORM AND DERIVATIVES

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