

MIL-C-24368/6(NAVY)
 25 March 1987
 SUPERSEDING
 DRAWING 803-1197214
 REV. L, 23 APRIL 1975
 IN PART

MILITARY SPECIFICATION SHEET

CONNECTOR ASSEMBLIES; DUAL PURPOSE, SUBMARINE SHORE
 POWER TRANSFER (AC) AND DSRV BATTERY CHARGING (DC), 500 VOLTS,
 400 AMPERES, 60 HERTZ, THREE-PHASE, SYMBOLS 1150 AND 1150.1

This specification is approved for use within the Naval Sea Systems Command, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the plug assemblies described herein shall consist of this specification and the latest issue of MIL-C-24368(NAVY).

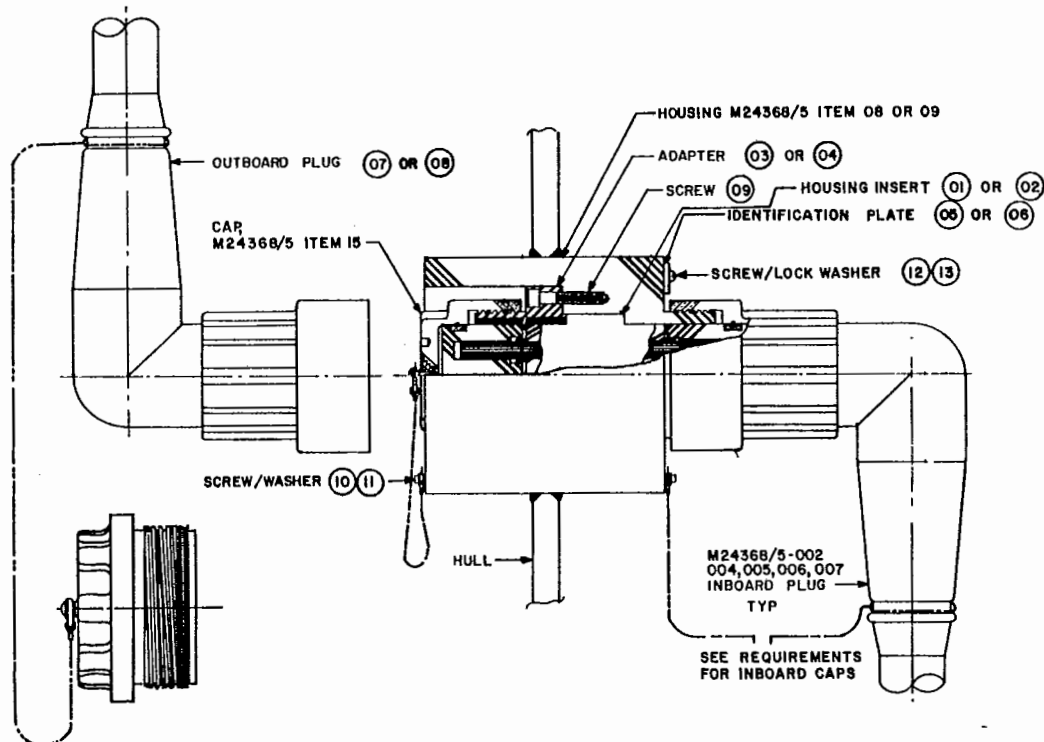


FIGURE 1. Submarine shore power connectors (angled body), typical.

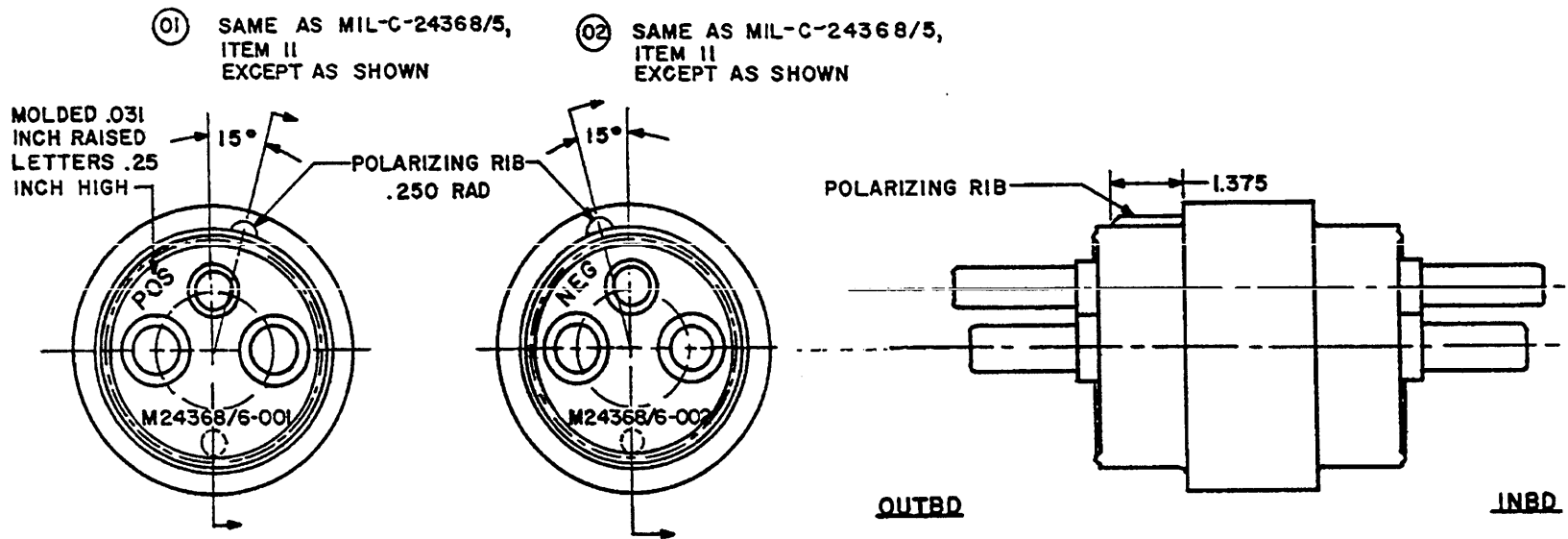
All dimensions in inches.

For tolerances other than specified herein, see dimensions and tolerances of MIL-C-24368.

AMSC N/A

FSC 5935

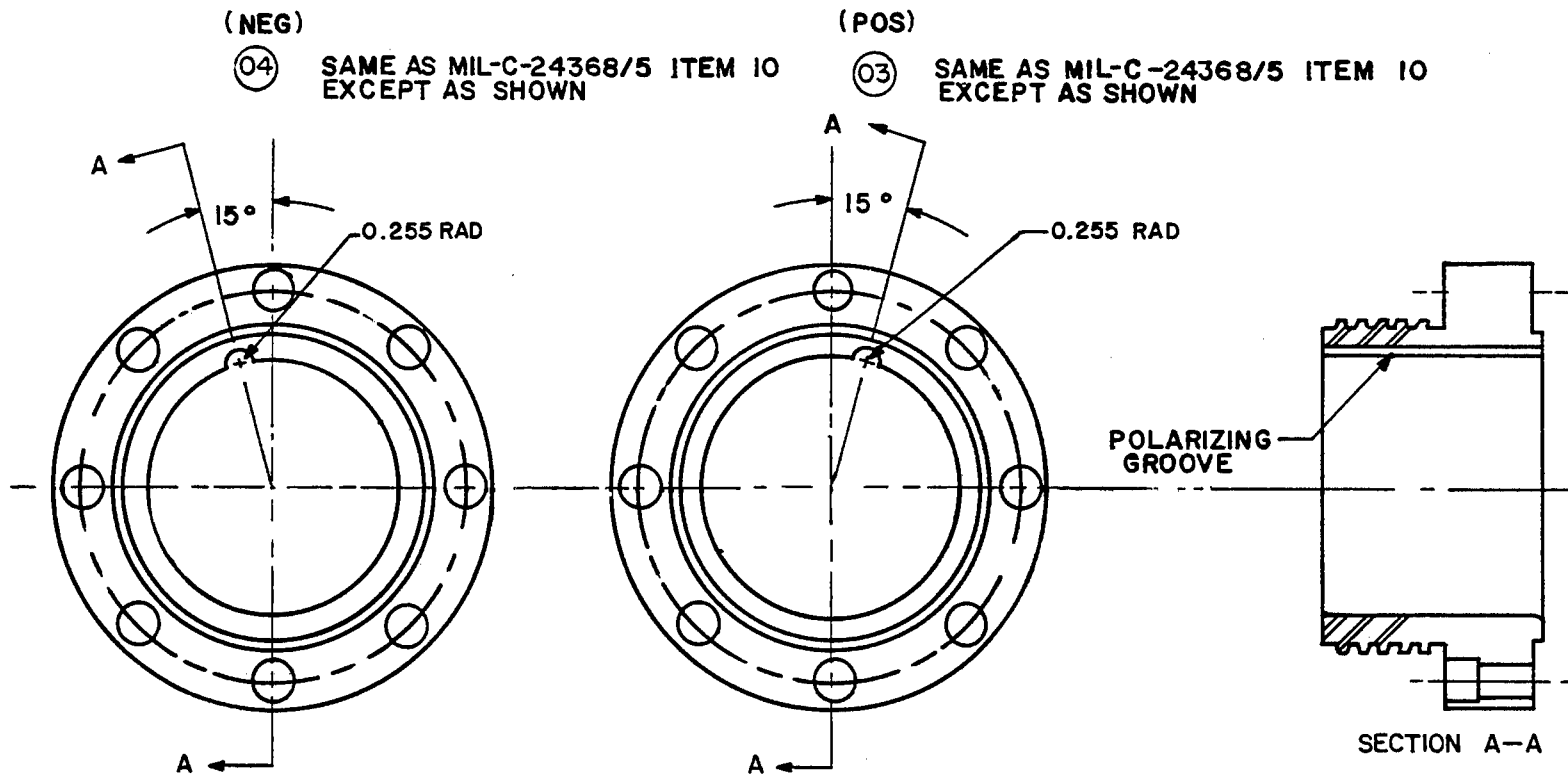
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FIGURE 2. Housing inserts, positive and negative. 01 02

3



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FIGURE 3. Adapters, positive and negative. (03) (04)

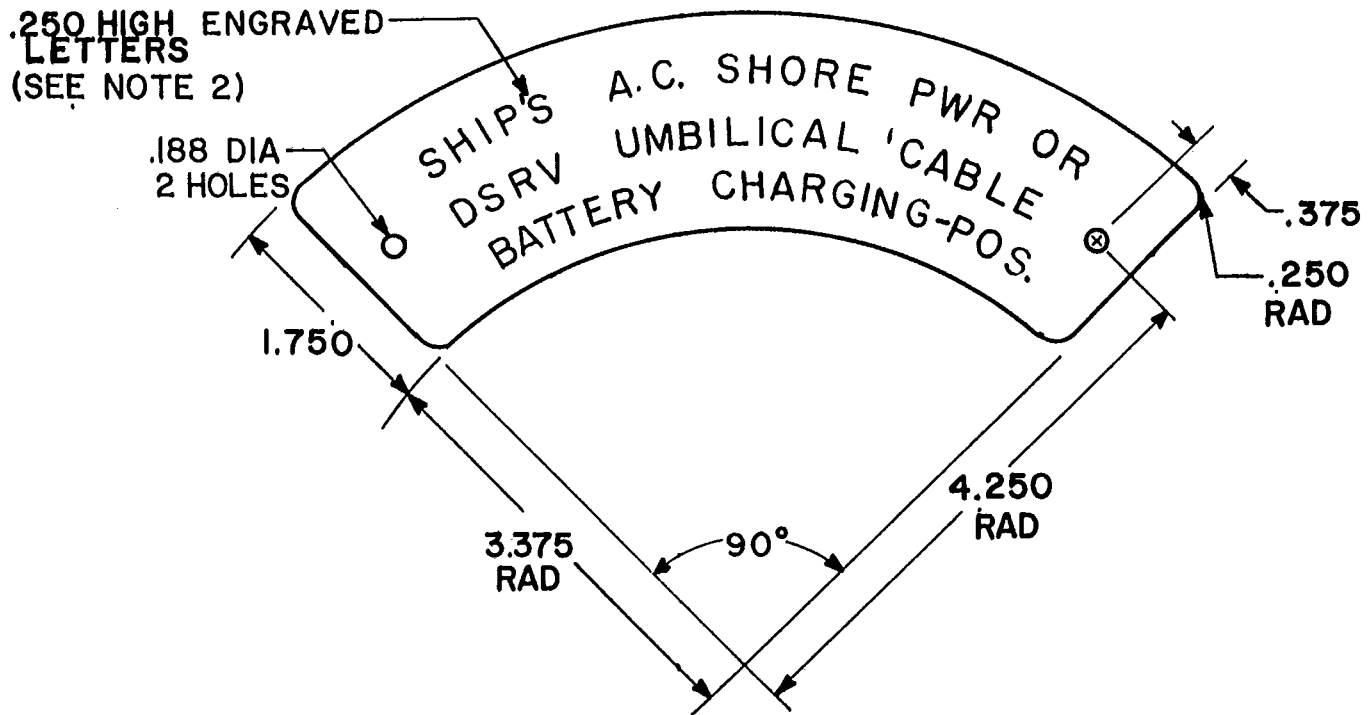
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⑤

⑥

SAME AS ITEM 05 EXCEPT
SUBSTITUTE "NEG" FOR "POS"



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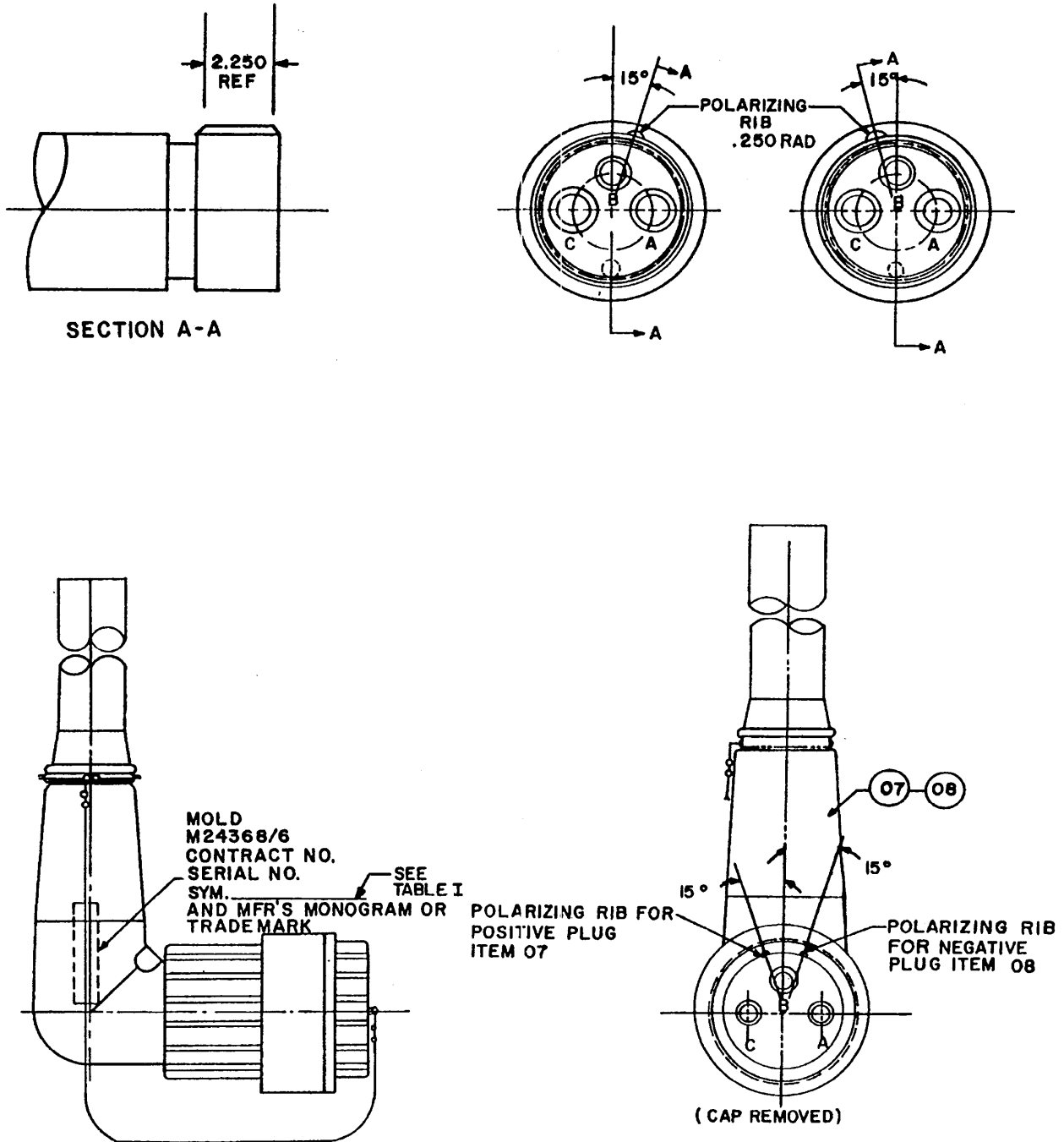
NOTES:

1. Material shall be 0.063 inch thick.
2. Engraved letters shall be filled with red enamel for item 05, and black enamel for item 06. Identification plates shall be installed for battery charging connector only.
3. Using plate as template, two holes 0.164 UNC-2B, 0.25 inch deep, shall be drilled in housing and plate shall be installed as shown on figure 1.

FIGURE 4. Identification plate. ⑤ ⑥

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SAME AS MIL - C - 24368 /5, FIGURE 5
EXCEPT AS SHOWN



OUTBOARD PLUG ASSEMBLIES SHALL BE SAME AS M24368/5-003 EXCEPT AS SHOWN.

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FIGURE 5. Outboard plug assemblies. (07) (08)

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REQUIREMENTS: (QUALIFICATION NOT REQUIRED)

SYMBOL NUMBERS: See table I.

DESIGN:

Electrical rating: 500 volts, 400 amperes, 60 hertz, three-phase and 170 volts, and 525 amperes dc.

Dimensions and configuration: See figures 1 through 5.

Typical installation: See figure 1.

Cable: Cable for inboard plug shall be THOF-500 conforming to MIL-C-915/6.

Unless otherwise specified, cable lengths shall be 15 feet as measured from cable end to rear of gland nut. Cable shall be attached directly to the female contacts with conductor insulation intact and flush at point of entry into the female contact. If armored cable is used, the armor shall be cut back a minimum of 6 inches from the female contacts to provide sufficient electrical clearance. However, armor shall terminate inside molding.

Conductor color coding: Cable conductor color coding shall be as follows: Phase A-Black; Phase B-White and Phase C-Red.

Standard parts: The standard parts shown in table II shall be used in the construction of the connectors specified herein.

QUALITY ASSURANCE:

- (a) Material certification: When specified in the contract or order, the contractor shall furnish satisfactory evidence that the materials for manufacturing items 01, 02, 03, 04 and 09 of table II conform to this specification.
- (b) For testing purposes, the housing insert assembled in the housing (less the plugs and caps) as shown on figure 1 shall be considered as the receptacle as specified in MIL-C-24368.
- (c) Plug assemblies (items 07 and 08) and housing inserts (items 01 and 02) shall be checked with a gauge to ensure proper alignment and size of the contacts.
- (d) Housing inserts (items 01 and 02) shall be subjected to the hydrostatic pressure test.
- (e) HI shock: Outboard plugs N/A.
- (f) Mechanical vibration: Outboard plugs N/A.
- (g) Impact: Housing insert N/A.
- (h) Mechanical shock: Housing insert N/A.

GENERAL INFORMATION:

Assignment of military part numbers and general information shall be as follows and as shown in table I.

- (a) Typical installation of submarine shore power connectors is shown in Drawing 803-5001027.
- (b) Spanner Wrench for use with cap assemblies (items 15 and 16) shall be J.H. Williams & Co. 3-inch face Spanner Wrench part no. 434, or equivalent.
- (c) Connectors specified herein were previously covered by Drawing 803-1197214.

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ORDERING DATA:

- (a) Specify cable length required if other than 15 feet.
- (b) Specify when material certification is required.
- (c) Specify type (military part number) of inboard plug assembly required (see footnote on table I).
- (d) Specify when caps for inboard plugs or housing inserts are required.

TABLE I. Assignment of military part numbers and general information.

Military part number ^{1/}	Item name	Figure	Symbol number	Remarks
M24368/6-001	Plug assy, positive, outboard	5	1150	Item 07
M24368/6-002	Plug assy, negative, outboard	5	1150.1	Item 08
M24368/6-003	Insert - positive	2		Item 01
M24368/6-004	Insert - negative	2		Item 02

^{1/} The inboard plug assemblies (symbol 1149) that mate with the outboard plug assemblies (via the housing) of this specification are covered in MIL-C-24368/5:

<u>Item</u>	<u>Military part no.</u>
Plug assy, straight, inboard	M24368/5-002
Plug assy, angled, inboard 0 degrees	M24368/5-004
Plug assy, angled, inboard 90 degrees	M24368/5-005
Plug assy, angled, inboard 180 degrees	M24368/5-006
Plug assy, angled, inboard 270 degrees	M24368/5-007

TABLE II. Standard parts.

Item no.	Description	Qty	Material/spec	Remarks
01	Housing insert - positive	1		Figure 2
02	Housing insert - negative	1		Figure 2
03	Adapter - positive	1		Figure 3
04	Adapter - negative	1		Figure 3
05	Identification plate - pos	1		Figure 4

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TABLE II. Standard parts. - Continued

Item no.	Description	Qty	Material/spec	Remarks
06	Identification plate - neg	1		Figure 4
07	Plug assy, positive, outboard	-		Figure 5
08	Plug assy, negative, outboard	-		Figure 5
09	Screw, cap, socket HD 0.50-13 UNC-2A x 2.25 L	8	CRES, com1	
10	Screw, cap, socket, HD 0.25-20 UNC-2A x 1.50 L	1	CRES, com1	
11	Washer, flat 0.265 id, 0.50 od, 0.062 thk	1	CRES, com1	
12	Screw, round head 0.164-32 UNC-2A x 0.25 L	2	CRES, com1	
13	Lockwasher, for 0.164 screw	2	CRES, com1	
14	Cable, THOF-500	AR	MIL-C-915/6	
15	Housing, recessed	1	Item 08 of MIL-C-24368/5	
16	Housing, flush	1	Item 09 of MIL-C-24368/5	
17	Cap, housing insert	1	Item 15 of MIL-C-24368/5	

Revision letters are not used to denote changes due to the extensiveness of the changes.

Review activity:
Navy - YD

Preparing activity:
Navy - SH
(Project 5935-N193-6)

User activity:
Navy - EC