

NAVSEA  
STANDARD ITEM

FY-03

ITEM NO: 009-22  
DATE: 30 AUG 2001  
CATEGORY: II

1. SCOPE:

1.1 Title: Shipboard Electric Cable; test

2. REFERENCES:

- a. ***SE000-01-IMB-010***, Navy Installation and Maintenance Book (NIMB),  
***Section IX (Source CD: N0002400003)***

3. REQUIREMENTS:

3.1 Accomplish **an** insulation resistance test of each electric cable using a 500 volt, direct current megger. Disconnect low voltage equipment associated with circuits to be tested to prevent damage during tests.

3.1.1 Minimum acceptable readings of cable conductors to ground and between conductors:

|  |             |
|--|-------------|
| Lighting Circuit   | 0.5 Megohm  |
| Power Circuit  | 1.0 Megohm  |
| Degaussing Circuit   | 0.1 Megohm  |
| Interconnecting Control Circuit                                  | 1.0 Megohm  |
| Interior Communication Circuit                                   | 0.2 Megohm  |
| Sound Powered Telephone Circuit<br>(with telephone disconnected) | 0.05 Megohm |

3.1.2 Minimum acceptable reading of coaxial cable:

| <u>LENGTH (FEET)</u> | <u>INSULATION RESISTANCE (MEGOHMS)</u> |
|----------------------|--|
| 100 (or less)        | 40,000                                 |
| 200                  | 20,000                                 |
| 500                  | 8,000                                  |
| 1,000                | 4,000                                  |

3.1.3 Discharge coaxial cable to ground following insulation resistance test.

3.2 Test each cable lead for continuity and complete circuit. Ensure terminal connections are tight.

3.3 Submit four legible copies of a report listing the results of the requirements of 3.1 and 3.2, including circuit number, lead numbers, and readings obtained, to the SUPERVISOR within 48 hours after completion of tests.

3.3.1 Identify defective cables by circuit number, lead numbers, type, size, approximate length, and readings obtained.

4. NOTES:

4.1 None.