

MIL-STD-15-2

30 October 1961

SUPERSEDING

MIL-STD-15A

(See Foreword)

MILITARY STANDARD

ELECTRICAL WIRING EQUIPMENT SYMBOLS FOR SHIPS' PLANS PART 2



**UNITED STATES
GOVERNMENT PRINTING OFFICE
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MIL-STD-15-2
30 October 1961

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Electrical Wiring I

MIL-STD-15-2

1. This standard is mandatory for use effective 30 October 1961.

2. Recommendations for changes to the Standardization Manual, D.C., with the following exceptions:

- (a) Number of pages
- (b) Item classification
- (c) Present title
- (d) Proposed title
- (e) Reason for change
- (f) Reference to other standards
- (g) Any other pertinent information

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FOREWORD

Standard MIL-STD-15-2 contains a listing of graphical drawing symbols for electrical and electronic parts and recommendations as to their use. These symbols should be used by all who have occasion to prepare electrical or electronic schematic drawings for the Departments of the Army, the Navy, and the Air Force.

During the preparation of Standard MIL-STD-15-2 it was recognized that a need existed for the coordination of drafting symbols and drafting practices used by the Military, to make them compatible with those in private industry and accepted nationwide industry standards.

The symbols contained in Standard MIL-STD-15A were considered carefully in the preparation of Standard MIL-STD-15-2 and where there was no good reason for making a change, their use was adopted. In many instances symbols generally accepted in practice were selected, even though more definitive pictorial symbols could have been devised. Certain new symbols have been included to cover items which have come into use since Standard MIL-STD-15A was adopted, or to more clearly identify given types of items. Certain symbols that relate to obsolete items, and to items covered by other standards were omitted.

Since the symbols used in chapters 4 and 5 of Standard MIL-STD-15A, dated 1 April 1954 have limited and specific applications, Standard MIL-STD-15 is being published in three parts as follows:

Part 1—Graphical Symbols for Electrical and Electronic Diagrams.

Part 2—Electrical Wiring Equipment Symbols for Ships' Plans

The symbols contained in Part 2, herein, constitute those formerly contained in chapter 4 of Standard MIL-STD-15A.

Part 3—Electrical Wiring Symbols for Architectural and Electrical Layout Drawings.

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ELECTRICAL WIRING EQUIPMENT SYMBOLS FOR SHIPS' PLANS

1. SCOPE

1.1 Purpose. The purpose of this standard is to establish a uniform system of graphic symbols for use on drawings and plans of shipboard (marine) electrical installations. Standard electrical symbol designations shown in the Standard Electrical Symbol List NAV-SHIPS 250-560-3 provide a means of correlating graphical symbols, when shown on drawings, with parts lists and descriptions of and instructions concerning the wiring.

1.2 Scope. This standard establishes the principles governing the formation and application of symbols for electrical wiring equipment to be used on ships' plans and provides a general list of such symbols. It does not cover electronic equipments aboard ship, which will be found in Standard MIL-STD-15-1, although it does cover wiring appliances used in their power supply systems.

1.3 Abbreviations shall be in accordance with Standard MIL-STD-12. Letter combinations used as parts of the graphical symbols are not abbreviations.

1.4 Items are identified by colloquial names to facilitate identification of parts. For standard item names see Part I of the Federal Item Identification Guides for Supply Cataloging, H6-1.

1.5 A buildup (composite) symbol can be contrived from basic symbols.

2. REFERENCED DOCUMENTS

2.1 Not applicable.

3. DEFINITIONS

3.1 Not applicable.

4. LIST OF SYMBOLS FOR MARINE EQUIPMENT

4.1 The graphic symbols (items) in this list are arranged by item number indicating a generic class. The item number is not significant other than to distinguish between classes. The initial decimal portion of the complete item number indicates a further breakdown of symbols by type or functional designation, usually in alphabetical sequence. Further decimal subordinations indicate a symbol designed for a specific single function arranged alphabetically in order of the name modifiers. Thus the use of this decimal, item-numbering system for each symbol permits changes and revisions, or insertions, to be made conveniently, and without regard for paragraph and section numbering.

4.2 To locate the symbol for a specific part, find the item number under the colloquial or functional name in the index.

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LIST OF SYMBOLS

1 APPLIANCES; MISCELLANEOUS WIRING (GENERAL)



2 BOXES, GENERAL



2.1 Buildup examples

2.1.1 Branch



2.1.2 Connection



2.1.3 Distribution



2.1.4 Junction



3 BUS TRANSFER EQUIPMENT

3.1 Automatic:

3.1.1 AC without phase failure



3.1.2 AC with phase failure



3.1.3 DC



3.2 Nonautomatic or push button control

3.2.1 AC



3.2.2 DC



4 CASUALTY POWER SUPPLY EQUIPMENT



5 COMMUNICATION EQUIPMENT

5.1 Annunciator for torpedo panel



5.2 Box, plug and receptacle, gyrocompass repeater



5.3 Box, switch, telephone



5.4 Dimmer for torpedo firing panel



5.5 Fire alarm system mercurial thermostat



5.6 Indicators



5.7 Jacks



5.8 Panel, sector control for air defense



5.9 Panel, torpedo firing



5.10 Plugs, telephone



6 CONTROLLER, MOTOR (GENERAL)



6.1 Buildup examples

6.1.1 Controller with low voltage release, recloses upon return of power



6.1.2 Controller with low voltage protection, remains open upon return of power



7 COUNTER, SHAFT REVOLUTION



LIST OF SYMBOLS

8 FANS

8.1 Fan, portable bracket



8.2 Fan, overhead



9 HEATERS

9.1 Heater, general



9.2 Heater, portable radiant



10 LIGHTING UNITS

10.1 Bulkhead



10.2 Bulkhead, berth



10.3 Hand lantern



10.4 Navigational



10.5 Night light



10.6 Overhead



10.7 Overhead, magazine



10.8 Portable



10.9 Special



10.10 Overhead, fluorescent



Arrows show direction of tubes

10.11 Overhead fluorescent with separately controlled red and white sections



10.12 Overhead fluorescent



Short arrow shows direction of maximum intensity when sidewise light distribution is asymmetrical

10.13 Overhead, fluorescent with separately controlled red and white sections



Short arrow shows direction of maximum intensity

11 PLUG



12 RECEPTACLE OR OUTLET



13 SWITCH

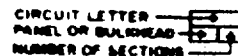
13.1 Push button



13.2 On-off



13.3 Selector

CIRCUIT LETTER
PANEL OR BULKHEAD
NUMBER OF SECTIONS

13.4 Snap



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LIST OF SYMBOLS

13.5 Transfer



13.6 Water switch



14 SWITCH AND RECEPTACLE



15 SWITCH (CONTACT MAKER) (GENERAL)



15.1 Buildup examples

15.2 Sensitive switch type



15.3 Motor operated



15.4 Pressure operated



15.5 Temperature operated



16 SOUND MOTION PICTURE EQUIPMENT

16.1 Amplifier, motion picture



16.2 Monitor, loudspeaker



16.3 Panel, control



16.4 Phonograph unit



16.5 Projector



16.6 Rectifier, arc



17 TELEPHONE EQUIPMENT

17.1 Box, jack, with volume control



17.2 Box, telephone ringer



17.3 Hand set, sound powered telephone



17.4 Telephone, wall type



"A" represents type letter

17.5 Telephone desk type



"A" represents type letter

18 TRANSMITTERS, INDICATORS, RECORDERS

For the following and any other similar applications:

- Anemometer
- Engine control
- Wind direction and intensity
- Engine order and revolution telegraph
- Steering telegraph and rudder angle indicator
- Shaft revolution
- Oil burner telegraph
- Underwater log system
- Shaft torsion

18.1 Indicators



The number of lines used in the symbol signify that the indicator is double, triple, etc.
See items 5.6 and 18.5 for special indicators

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LIST OF SYMBOLS

18.2 Transmitter and indicator combination



18.3 Recorders



18.4 Transmitters



18.4.1 Master transmitter



18.5 Special indicators

18.5.1 Salinity indicator



18.5.2 Shaft revolution indicators, frequency-control unit



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Copies of this standard for military use may be obtained as indicated in the general provisions of the Department of Defense Index of Specifications and Standards.

The title and identifying symbol should be stipulated when requesting copies of military standards.

Custodians:

Army—SigC
Navy—Ships
Air Force—AMC

Preparing activity:

Navy—Ships
(Project DRPR-601-88)

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