

TM 11-6806-654-14&P

TECHNICAL MANUAL

**OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT
MAINTENANCE MANUAL
INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS**

**NORTHERN RADIO UNIVERSAL SHELF TYPE 1026 MODEL 6
WITH EXTENDER CARD TYPE 2128**

(NSN 5605-00-011-7367)

8.

HEADQUARTERS, DEPARTMENT OF THE ARMY
May 1975

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WASHINGTON, DC, 29 May 1975

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NORTHERN RADIO UNIVERSAL SHELF TYPE 1026 MODEL 6
WITH EXTENDER CARD TYPE 2128
(NSN 5805-00-611-7367)

Current as of 15 March 1975

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This technical manual is an authentication of the manufacturer's commercial literature and does not conform with the format and content specified in AR 310-3, Military publications. This technical manual does, however, contain available information that is essential to the operation and maintenance of the equipment.

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CHAPTER 1

INTRODUCTION

1-1. Scope

This manual describes Northern Radio Universal Shelf Type 1026 Model 6 and Extender Card Model 2128 and covers their operation, and organizational, direct and general support. Appendix A contains a list of applicable references, appendix B contains the repair parts and special tools list, and appendix C contains the maintenance allocation.

1-2. Indexes of Publications

a. Refer to the latest issue of DA Pam 310-4 to determine whether there are new editions, changes, or additional publications pertaining to this equipment.

b. Refer to the latest issue of DA Pam 310-7 to determine if there are modification work orders (MWO's) pertaining to this equipment.

1-3. Forms and Records

a. Reports of Maintenance and Unsatisfactory Equipment. Maintenance forms, records, and reports which are to be used by maintenance personnel at all maintenance levels are listed in and prescribed by TM 38-750.

b. Report of Packaging and Handling Deficiencies. Fill out and forward DD Form 6 (Packaging Improvement Report) as prescribed in AR 700-58/NAVSUPINST 4030.29/AFR 71-13/MCO P4030.29A, and DSAR 4145.8.

c. Discrepancy in Shipment Report (DISREP) (SF 361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-38/NAVSUPINST 4610.33A/AFR 75-18/MCO P4610.19B, and DSAR 4500.15.

d. Reporting of Equipment Publication Improvements. The reporting of errors, omissions, and recommendations for improving this manual by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications and

Blank Forms), and forwarded direct to Commander, US Army Electronics Command, ATTN: AMSEL-MA-Q, Fort Monmouth, NJ 07703.

1-4. Purpose and Use

Universal Shelf, Type 1026 Model 6, is designed to mount appropriate printed circuit modules in data communication string concept circuits of four modules each. Appropriate modules may be selected from the following list which is not necessarily all inclusive.

| Nomenclature | Part Number |
|-------------------------------------|--------------------------|
| (2600 Hz) SF Signaling Unit _ _ _ _ | Type 1013 Model 1 |
| Four Wire Termination Set _ _ _ _ | Type 1018 Model 1 |
| Strappable Pads _ _ _ _ _ | Type 1014 Model 2 |
| Line Amplifiers _ _ _ _ _ | Type 1015 Model 2 |
| E & M to 20 Hz Converters _ _ _ _ | Type 1022 Models 2 and 4 |
| Signaling Extension Unit _ _ _ _ | Type 1021 Model 2 |
| Echo Suppressors _ _ _ _ _ | Type 1017 Model 1 |
| Strappable Pad and Amplifier _ _ | Type 1033 Model 3 |

1-5. Description

Universal Shelf Type 1026 Model 6 mounts in a standard 19-inch relay rack. All power and signal requirements are furnished to the printed circuit cards through dual row 17 pin (34 pins) edge card connectors mounted in the shelf, and wired to signal distribution block TB1 on the rear of the shelf.

1-6. Technical Characteristics

Unit capacity _ _ _ _ _ 3 string concept circuits of 4 modules each.

Circuit terminations _ _ All input and output circuits are terminated on the 80 terminal signal distribution block on the rear of the shelf.

Operating tempera-

ture _ _ _ _ _ 0°C to 60°C.

Storage temperature _ -55° C to +70° C.

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1-7. Items Comprising an Operable Equipment

| FSN | Item | Qty | Dimensions(in.) | | | Weight (lb) |
|------------------|---|-----|-----------------|-------|-------|----------------------|
| | | | Height | Width | Depth | |
| 5805-00-611-7367 | Northern Radio Co. Universal Shelf Type 1026 Model 6 | 1 | 3½ | 19 | 17 | 7¼ (Less modules) |
| | Northern Radio Co. Extender Card Type 2128 | 1 | | | | |

CHAPTER 2

INSTALLATION

2-1. Mounting.

The Type 1026 Model 6 shelf should be thoroughly inspected for any signs of mechanical damage due to rough handling in shipment. If no signs of mechanical damage exist, mount the shelf in the assigned position of a standard 19-inch equipment rack or cabinet.

2-2. Primary Power and Grounding Requirements

The Type 1026 Model 6 shelf is completely wired and ready to receive Northern Radio components as listed in paragraph 1-4. The rack in which the shelf is mounted should be connected to the station ground system by AWG No. 6 (or larger) cable.

2-3. Cabling Requirements

The connectors (receptacles) for plug-in mating of the printed circuit card assemblies are prewired to the terminals of a signal distribution block mounted on the rear of the shelf.

2-4. Post Installation Test Equipment

The only equipment required for post installation

tests is Multimeter AN/USM-210 or equivalent.

2-5. Initial Checking

The initial checking of the shelf consists of inspecting the unit for mechanical damage caused by rough handling in shipment and for possible loose connections, components, or broken wires.

2-6. Installation Instructions

The shelf should be handled carefully to avoid any mechanical damage to it or its components. To install the shelf, determine the location in the relay rack and secure it with four screws, two on each side of the front panel of the shelf. Use stainless steel screws, size 10, 32 threads per inch, equipped with plastic washers.

2-7. Electrical Connections

All external input and output connections are made to the terminals of the signal distribution block on the rear of the shelf. Refer to the schematic diagrams of the printed circuit assembly to be installed in the shelf, and to figures 3-1 and 3-2 to identify the appropriate terminals for the connections.

CHAPTER 3

DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE

3-1. General

The direct support and general support maintenance of the Type 1026 Model 6 shelf consists of inspection, replacement of mechanically damaged receptacles in which the printed circuit board edge card connectors mate, broken signal distribution block, broken wiring, and continuity testing the wiring of the repaired shelf.

3-2. Continuity Test

The electrical connections between the terminal block and 12 edge card receptacles (connectors) shall be given a continuity test to ascertain that the wiring is correct and that there is good electrical contact. Refer to figures 3-1 and 3-2 and to table 3-1; verify all connections.

Table 3-1. Wiring Table

| From | To | From | To | From | To |
|--------|--------|--------|--------|--------|--------|
| TB1-1 | J1-17 | TB1-31 | J12-10 | TB1-61 | Blank |
| TB1-2 | J5-17 | TB1-32 | Blank | TB1-62 | Blank |
| TB1-3 | J9-17 | TB1-33 | J1-9 | TB1-63 | Blank |
| TB1-4 | Blank | TB1-34 | J5-9 | TB1-64 | Blank |
| TB1-5 | J1-16 | TB1-35 | J9-9 | TB1-65 | J1-6 |
| TB1-6 | J5-16 | TB1-36 | Blank | | J5-6 |
| TB1-7 | J9-16 | TB1-37 | J1-8 | | J9-6 |
| TB1-8 | Blank | TB1-38 | J5-8 | TB1-66 | Blank |
| TB1-9 | J4-15 | TB1-39 | J9-8 | TB1-67 | Blank |
| TB1-10 | J8-15 | TB1-40 | Blank | TB1-68 | Blank |
| TB1-11 | J12-15 | TB1-41 | J1-1 | TB1-69 | J1-23 |
| TB1-12 | Blank | TB1-42 | J5-1 | | J5-23 |
| TB1-13 | J4-14 | TB1-43 | J9-1 | | J9-23 |
| TB1-14 | J8-14 | TB1-44 | Blank | TB1-70 | Blank |
| TB1-15 | J12-14 | TB1-45 | J1-7 | TB1-71 | Blank |
| TB1-16 | Blank | TB1-46 | J5-7 | TB1-72 | Blank |
| TB1-17 | J1-13 | TB1-47 | J9-7 | TB1-73 | J1-4 |
| TB1-18 | J5-13 | TB1-48 | Blank | | J5-4 |
| TB1-19 | J9-13 | TB1-49 | J1-5 | | J9-4 |
| TB1-20 | Blank | TB1-50 | J5-5 | TB1-74 | J1-3 |
| TB1-21 | J1-12 | TB1-51 | J9-5 | | J5-3 |
| TB1-22 | J5-12 | TB1-52 | Blank | | J9-3 |
| TB1-23 | J9-12 | TB1-53 | Blank | TB1-75 | Blank |
| TB1-24 | Blank | TB1-54 | Blank | TB1-76 | Blank |
| TB1-25 | J4-11 | TB1-55 | Blank | TB1-77 | J1-2 |
| TB1-26 | J8-11 | TB1-56 | Blank | | J5-3 |
| TB1-27 | J12-11 | TB1-57 | Blank | | TB1-78 |
| TB1-28 | Blank | TB1-58 | Blank | TB1-78 | J9-2 |
| TB1-29 | J4-10 | TB1-59 | Blank | TB1-79 | Blank |
| TB1-30 | J8-10 | TB1-60 | Blank | TB1-80 | Blank |

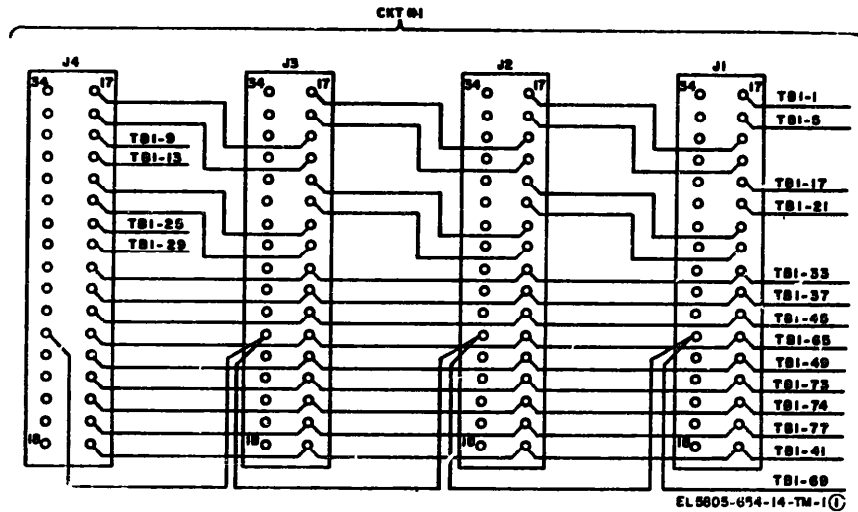


Figure 3-1 ①. Universal mounting shelf type 1026 model 6, wiring diagram (sheet 1 of 4).

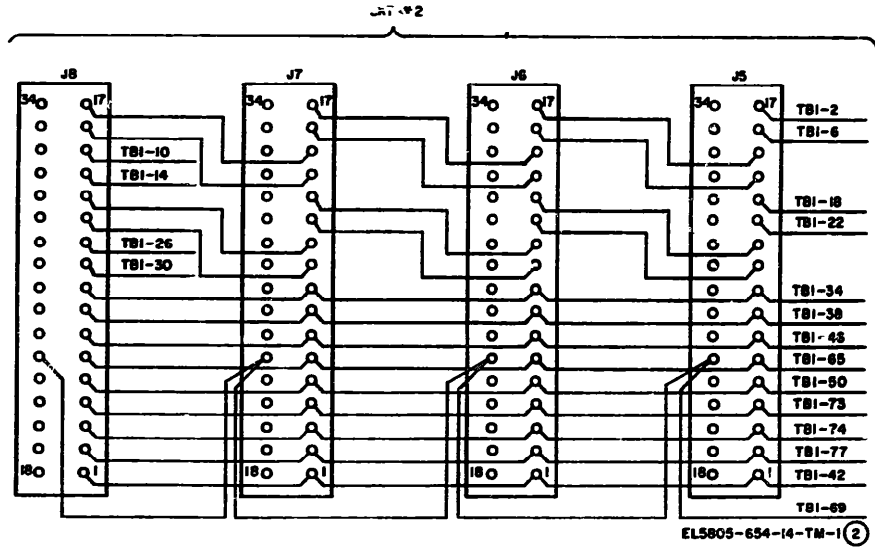


Figure 3-1 ②. Universal mounting shelf type 1026 model 6, wiring diagram (sheet 2 of 4).

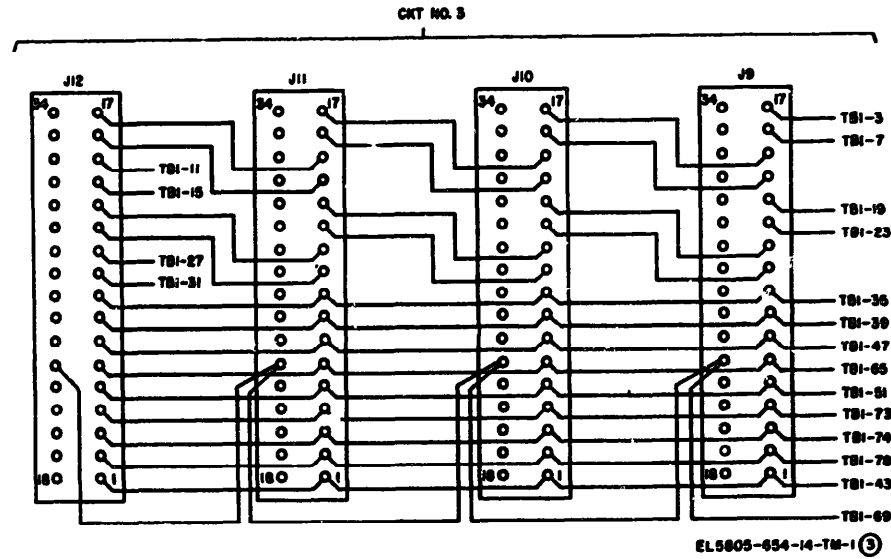


Figure 3-1③. Universal mounting shelf type 1026 model 6, wiring diagram (sheet 3 of 4).

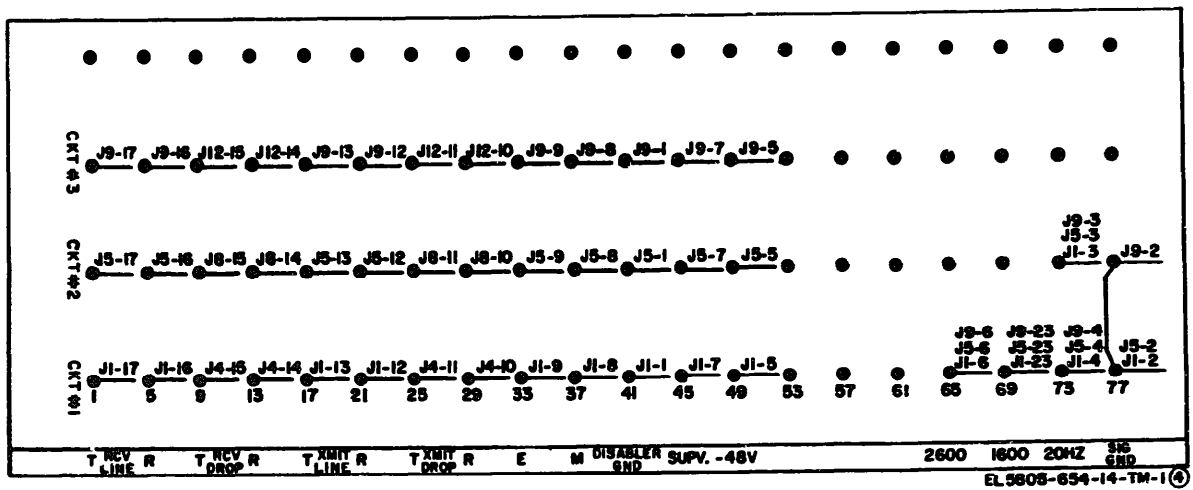


Figure 3-1④. Universal mounting shelf type 1026 model 6, wiring diagram (sheet 4 of 4).

| | | | | | | | | | | | | | | | | | | | | | |
|------|-----|---|------|-----|---|------|------|---|------|------|---|---|---|-----|------|-----|--|------|------|-----|-----|
| T | RCV | R | T | RCV | R | T | XMIT | R | T | XMIT | R | E | N | DBL | BLPV | -40 | | 2800 | 1800 | 20 | 516 |
| LINE | | | DROP | | | LINE | | | DROP | | | | | END | | V | | KHZ | | END | |

LOCATE AT REAR
OF TERMINAL BLK.

| | | | | |
|--|-----|-----|-----|--|
| | CKT | CKT | CKT | |
| | 1 | 2 | 3 | |

WHEN FACING REAR
LOCATE ON RIGHT SIDE
OF TERMINAL BLK

EL 5805-654-14-TN-2

Figure 3-2. Universal mounting shelf type 1026 model 6,
terminal block identification.

CHAPTER 4

EXTENDER CARD TYPE 2128

4-1. Purpose

Extender Card Type 2128 provides a means of maintaining the circuit connections to a printed circuit module and extends the module to a position allowing access to its components for testing.

4-2. Description

Extender Card Type 2128 is a printed circuit card containing a 17-pin edge card receptacle (connector) and a bracket, to support a module mated in the receptacle, as shown in figure 4-1. The extender card contains 17 printed circuit

lands which connect the contacts of the receptacle pin-to-pin with the edge card connector on the rear of the extender card, as shown in figure 4-2.

4-3. Operation

When tests are to be made on components of a printed circuit module, under operating conditions, the module is removed from the mounting shelf and replaced with the extender card. The module is then mated in the receptacle of the extender card and its circuits are identical to the circuit arrangement when the module was mated in the shelf.

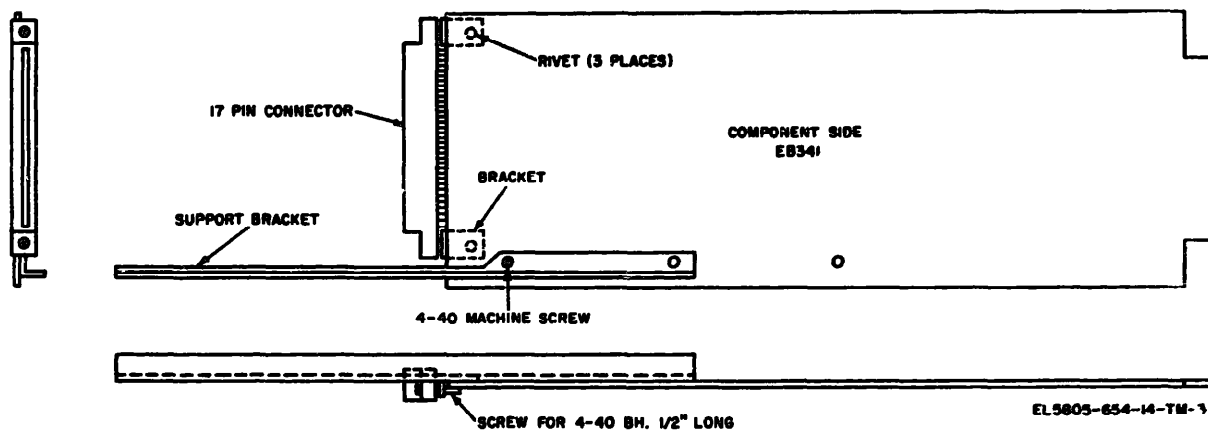


Figure 4-1. Extender card type 2128, assembly drawing.

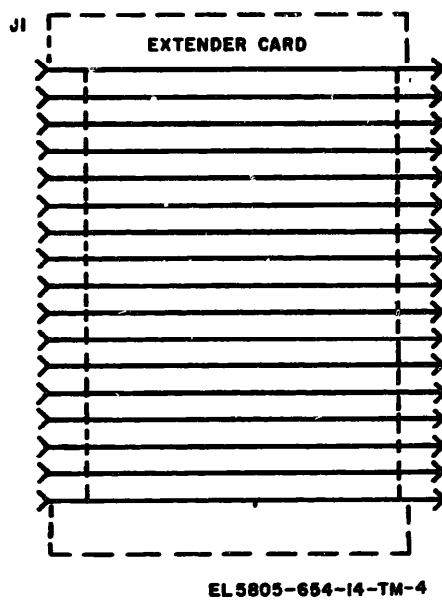


Figure 4-2. Extender card type 2128, schematic diagram.

APPENDIX A

REFERENCES

| | |
|---------------|---|
| DA Pam 310-4 | Index of Technical Manuals, Technical Bulletins, Supply Manuals, (Types 7, 8, and 9), Supply Bulletins, and Lubrication Orders. |
| DA Pam 310-7 | US Army Equipment Index of Modification Work Orders. |
| SB 38-100 | Preservation, Packaging, Packing and Marking Materials, Supplies, and Equipment Used by the Army. |
| TB SIG 355-1 | Depot Inspection Standard for Repaired Signal Equipment, |
| TB SIG 355-2 | Depot Inspection Standard for Refinishing Repaired Signal Equipment. |
| TB SIG 355-3 | Depot Inspection Standard for Moisture and Fungus Resistant Treatment. |
| TB SIG 746-10 | Field Instructions for Painting and Preserving Electronics Command Equipment. |
| TM 38-750 | The Army Maintenance Management Systems (TAM MS). |

APPENDIX B

**OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT,
AND GENERAL SUPPORT MAINTENANCE REPAIR PARTS
AND SPECIAL TOOLS LIST (INCLUDING DEPOT
MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS)**

Section I. INTRODUCTION

B-1. Scope

This appendix lists repair parts required for the performance of direct support, general support, and depot maintenance of Universal Shelf Type 1026, Model 6 with Extender Card Type 2128.

NOTE

No repair parts authorized for stockage at organizational maintenance.

B-2. General

This repair parts list is divided into the following sections:

a. Basic Issue Items List--Section II. Not applicable.

b. Items Troop Installed or Authorized List--Section III. Not applicable.

c. Repair Parts for Organizational Maintenance--Section IV. Not applicable.

d. Special Tools, Test and Support Equipment for Organizational Maintenance--Section V. Not applicable.

e. Repair Parts for Direct Support, General Support, and Depot Maintenance--Section VI. A list of repair parts authorized for performance of maintenance at the direct support, general support, and depot levels. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending numerical sequence.

f. Special Tools, Test and Support Equipment for Direct Support, General Support, and Depot Maintenance--Section VII. Not applicable.

g. Index-Federal Stock Number and Reference Number Cross-Reference to Figure Number and Reference Designation--Section VIII. A list, in ascending numerical sequence, of all Federal stock numbers appearing in the listings, fol-

lowed by a list in alphanumeric sequence, of all reference numbers appearing in the listings. Federal stock numbers and reference numbers are cross-referenced to each illustration figure number and reference designation.

h. Index-Reference Designation Cross-Reference to Page Number--Section IX. A list of reference designations cross-referenced to page numbers.

B-3. Explanation of Columns

The following provides an explanation of columns found in the tabular listings.

a. Source, Maintenance, and Recoverability Codes (SMR).

(1) Source code. Indicates the manner of acquiring support items for maintenance, repair, or overhaul of end items. Source codes are:

| Code | Explanation |
|------|--|
| PA | --Item procured and stocked for anticipated or known usage. |
| PD | --Support item, excluding support equipment, procured for initial issue or outfitting and stocked only for subsequent or additional initial issues or outfittings. Not subject to automatic replenishment. |
| MF | --Item to be manufactured or fabricated at direct support maintenance level. |
| XA | --Item is not procured or stocked because the requirements for the item will result in the replacement of the next higher assembly. |
| XB | --Item is not procured or stocked. If not available through salvage requisition. |

NOTE

Cannibalization or salvage may be used as a source of supply for any items source coded above except those coded XA, XD, and aircraft support items as restricted by AR 700-42.

(2) Maintenance code. Maintenance codes are assigned to indicate the levels of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the Uniform SMR Code format as follows:

(a) Use (third position). The maintenance code entered in the third position indicates the lowest maintenance level authorized to remove, replace, and use the support item. The maintenance code entered in the third position indicates one of the following levels of maintenance:

| Code | Application/Explanation |
|------|--|
| F-- | Support item is removed, replaced, used at the direct support maintenance level. |

(b) Repair (fourth position). The maintenance code entered in the fourth position indicates whether the item is to be repaired and identifies the lowest maintenance level with capability to perform complete repair (i.e., all authorized maintenance functions). This position will contain the following maintenance code:

| Code | Application/explanation |
|------|--|
| Z-- | Non-repairable. No repair is authorized. |

(3) Recoverability code. Recoverability codes are assigned to support items to indicate the disposition action or unserviceable item. Recoverability code is entered in the fifth position of the uniform SMR Code Format as follows:

| Code | Definition |
|------|---|
| Z-- | Non-repairable item. When unserviceable, condemn and dispose at the level indicated in the first digit of the maintenance code. |

b. Federal Stock Number. Indicates the Federal stock number assigned to the item.

NOTE

For requisitioning purpose, the Federal stock number must be converted to the National stock number by adding "-00-" after the Federal stock classification (FSC) code (first four digits). For example, FSN 6625-553-0142 converts to NSN 6625-00-553-0142.

c. Description. Indicates the Federal item name and a minimum description required to

identify the item. The last line indicates the reference number followed by the applicable Federal Supply Code for Manufacturer (FSCM) in parentheses. The FSCM is used as an element in item identification to designate manufacturer or distributor or Government agency, etc., and is identified in SB 708-42.

d. *Unit of Measure (U/M)*. Indicates the standard or basic quantity by which the listed item is used in performing the actual maintenance function. This measure is expressed by a two character alphabetical abbreviation, e.g., ea, in, pr, etc. When the unit of measure differs from the unit of issue, the lowest unit of issue that will satisfy the required units of measure will be requisitioned.

e. *Quantity Incorporated in Unit*. Indicates the quantity of the item used in the breakdown shown on the illustration figure, which is prepared for a functional group, subfunctional group, or an assembly. Subsequent appearances of the same item in the same assembly are indicated by the letters "REF."

f. *30-Day DS/GS Maintenance Allowances*. The repair parts indicated by asterisk entries in separate allowance columns for DS and GS represent those authorized for use at that category of maintenance to be requisitioned on an "as required" basis.

g. *1-Year Allowances Per 100 Equipments Contingency Planning Purposes*. Column intentionally left blank.

h. *Depot Maintenance Allowances Per 100 Equipments*. This column indicates that the items identified with an asterisk are authorized to be requisitioned as required.

i. *Illustrations*. This column is divided as follows:

(1) *Figure number*. Indicates the figure number of the illustration on which the item is shown.

(2) *Item number or reference designation*. Indicates the reference designation used to identify the item on the illustration.

B-4. Special Information

(Not applicable).

B-5. How to Locate Repair Parts

a. This appendix contains two cross-reference indexes (sec VIII and IX) to be used to locate repair part when either the Federal stock number, reference number (manufacturer part number), or reference designation is known. The first column in each index is prepared in numerical or alphanumeric sequence

ascending order. Where a Federal stock number is not listed, refer to the reference number (manufacturer's part number) immediately following the Federal stock number.

b. When the Federal stock number or reference number is known, follow the procedures given in (1) and (2) below.

(1) Refer to the index of Federal stock numbers (sec VIII) and locate the Federal stock number or reference number. The FSN or reference number is cross-referenced to the applicable figure number and reference designation.

(2) When the reference designation is determined, refer to the reference designation index (sec IX). The reference designations are listed in alphanumeric ascending order and are

cross-referenced to the page number on which they appear in the repair parts list (sec VI). Refer to the page number noted in the index and locate the reference designation in the repair parts list.

c. When the reference designation is known, follow the procedure given in b(2) above.

d. When neither the FSN, reference number, nor reference designation is known, identify the part in the illustration and follow directions given in c above; or scrutinize column 3 of the repair parts list.

B-6. Abbreviations

(Not applicable)

(Next printed page is B-5)

SECTION VI REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE

| (1) SIB CODE | (2) FEDERAL STOCK NUMBER | (3) DESCRIPTION REFERENCE NUMBER & MFR CODE | (4) UNIT OF MEAS | (5) QTY INC IN UNIT | (6) 30 DAY GS MAINT ALLOWANCE | | | (7) 30 DAY GS MAINT ALLOWANCE | | | (8) 1 YR ALT PER EQUIP CATEGORY | (9) DEPOT MAINT ALT PER 100 | (10) ILLUSTRATIONS | |
|--------------------|-----------------------------------|--|---------------------------|---------------------------------|-------------------------------------|--------------|---------------|-------------------------------------|--------------|---------------|--|---|-----------------------|--|
| | | | | | (a) 120 | (b) 21 50 | (c) 51 100 | (a) 120 | (b) 21 50 | (c) 51 100 | | | (a) FIG NO | (b) ITEM NO OR REFERENCE DESIGNATION |
| | | | | | | | | | | | | | | |
| | | GROUP 01 SHELF ASSEM LY UNIVERSAL MOUNT 1026-6 | | | | | | | | | | | B-1 | A1 |
| XBFZZ | | BAR, FRONT PANEL FASTENING 760-3-12 (88183) | EA | 1 | | | | | | | | | B-1 | A1NP1 |
| PAFZZ | 5305-054-5649 | SCREW, MACHINE MS51957-15 (96906) | EA | 7 | * | * | * | * | * | * | | * | B-1 | A1NP1M1 |
| XBFZZ | | BAR, TERMINAL BOARD MOUNTING 1026-4-07 (88183) | EA | 1 | | | | | | | | | B-1 | A1NP2 |
| PAFZZ | 5305-050-9229 | SCREW, MACHINE MS51957-63 (96906) | EA | 5 | * | * | * | * | * | * | | * | B-1 | A1NP2M2 |
| PAFZZ | 5310-595-6772 | WASHER, FLAT MS15795-808 (96906) | EA | 2 | * | * | * | * | * | * | | * | B-1 | A1NP2M3 |
| XBFZZ | | BRACKET, CONNECTOR MOUNTING 760-3-13 (88183) | EA | 1 | | | | | | | | | B-1 | A1NP3 |
| PAFZZ | 5310-934-9761 | NUT, PLAIN, HEXAGON MS35649-264 (96906) | EA | 8 | * | * | * | * | * | * | | * | B-1 | A1NP3M4 |
| PAFZZ | 5305-054-6652 | SCREW, MACHINE MS51957-28 (96906) | EA | 8 | * | * | * | * | * | * | | * | B-1 | A1NP3M5 |
| PAFZZ | 5305-054-6654 | SCREW, MACHINE MS51957-30 (96906) | EA | 6 | * | * | * | * | * | * | | * | B-1 | A1NP3M6 |
| PAFZZ | 5310-579-0079 | WASHER, LOCK MS35333-37 (96906) | EA | 10 | * | * | * | * | * | * | | * | B-1 | A1NP3M7 |
| XBFZZ | | BRACKET, MOUNTING 1026-3-11 (88183) | EA | 2 | | | | | | | | | B-1 | A1NP4 |
| PAFZZ | 5305-054-6650 | SCREW, MACHINE MS51957-26 (96906) | EA | 6 | * | * | * | * | * | * | | * | B-1 | A1NP4M8 |
| XBFZZ | | BRACKET, TERMINAL BOARD MTG 1026-3-12 (88183) | EA | 2 | | | | | | | | | B-1 | A1NP5 |
| PAFZZ | 5305-054-5649 | SCREW, MACHINE MS51957-15 (96906) | EA | 4 | * | * | * | * | * | * | | * | B-1 | A1NP5M9 |
| PAFZZ | 5310-559-0070 | WASHER, LOCK MS35333-38 (96906) | EA | 4 | * | * | * | * | * | * | | * | B-1 | A1NP5M10 |
| PAFZZ | | CONNECTOR, ELECTRIC CARD EDGE K600-100-34MA (95238) | EA | 12 | * | * | * | * | * | * | | * | B-1 | A1J1 |
| PAFZZ | 5310-934-9748 | NUT, PLAIN, HEXAGON MS35649-244 (96906) | EA | 2 | * | * | * | * | * | * | | * | B-1 | A1J1M11 |
| PAFZZ | 5305-054-5651 | SCREW, MACHINE MS51957-17 (96906) | EA | 2 | * | * | * | * | * | * | | * | B-1 | A1J1M12 |
| PAFZZ | 5310-193-7577 | WASHER, LOCK MS35333-36 (96906) | EA | 2 | * | * | * | * | * | * | | * | B-1 | A1J1M13 |
| PAFZZ | | CONNECTOR, ELECTRIC CARD EDGE K600-100-34MA (95238) | EA | REF | * | * | * | * | * | * | | * | B-1 | A1J2 |
| PAFZZ | | CONNECTOR, ELECTRIC CARD EDGE K600-100-34MA (95238) | EA | REF | * | * | * | * | * | * | | * | B-1 | A1J3 |
| PAFZZ | | CONNECTOR, ELECTRIC CARD EDGE K600-100-34MA (95238) | EA | REF | * | * | * | * | * | * | | * | B-1 | A1J4 |
| PAFZZ | | CONNECTOR, ELECTRIC CARD EDGE K600-100-34MA (95238) | EA | REF | * | * | * | * | * | * | | * | B-1 | A1J5 |
| PAFZZ | | CONNECTOR, ELECTRIC CARD EDGE K600-100-34MA (95238) | EA | REF | * | * | * | * | * | * | | * | B-1 | A1J6 |
| PAFZZ | | CONNECTOR, ELECTRIC CARD EDGE K600-100-34MA (95238) | EA | REF | * | * | * | * | * | * | | * | B-1 | A1J7 |
| PAFZZ | | CONNECTOR, ELECTRIC CARD EDGE K600-100-34MA (95238) | EA | REF | * | * | * | * | * | * | | * | B-1 | A1J8 |
| PAFZZ | | CONNECTOR, ELECTRIC CARD EDGE K600-100-34MA (95238) | EA | REF | * | * | * | * | * | * | | * | B-1 | A1J9 |
| PAFZZ | | CONNECTOR, ELECTRIC CARD EDGE K600-100-34MA (95238) | EA | REF | * | * | * | * | * | * | | * | B-1 | A1J10 |
| PAFZZ | | CONNECTOR, ELECTRIC CARD EDGE K600-100-34MA (95238) | EA | REF | * | * | * | * | * | * | | * | B-1 | A1J11 |

SECTION VI REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (Continued)

| (1) SNR CODE | (2) FEDERAL STOCK NUMBER | (3) DESCRIPTION REFERENCE NUMBER & NRC CODE | (4) UNIT OF MEAS | (5) QTY REQ IN UNIT | (6) 30-DAY GS MAINT ALLOWANCE | | | (7) 30-DAY GS MAINT ALLOWANCE | | | (8) 1 YR ALW PER EQUIP CATEGORY | (9) DEPOT MAINT ALW PER 100 | (10) ILLUSTRATIONS | |
|--|-----------------------------------|--|--|---------------------------------|-------------------------------------|--------------|---------------|-------------------------------------|--------------|---------------|--|---|-----------------------|--|
| | | | | | (a) 1-20 | (b) 21-40 | (c) 51-100 | (a) 1-20 | (b) 21-40 | (c) 51-100 | | | (a) FIG NO | (b) ITEM NO OR REFERENCE DESIGNATION |
| | | | | | | | | | | | | | | |
| PAFZZ | 5305-054-5647 | CONNECTOR, ELECTRIC CARD EDGE K600-100-34WA (95238) | EA | REF | * | * | * | * | * | * | * | B-1 | A1J12 | |
| MFFZZ | | DECALCOMANIA, UNIVERSAL SHELF 5-0971 (88183) | EA | 1 | | | | | | | | B-1 | A1MP6 | |
| XBFZZ | | PANEL, LEFT SIDE 5-0929-03 (88183) | EA | 1 | | | | | | | | B-1 | A1MP7 | |
| XBFZZ | | PANEL, RIGHT SIDE 5-0930-4 (88183) | EA | 1 | | | | | | | | B-1 | A1MP8 | |
| MFFZZ | | PLATE, FRONT 5-0955 (88183) | EA | 2 | | | | | | | | B-1 | A1MP9 | |
| PAFZZ | | SCREW, MACHINE MS51957-13 (96906) | EA | 4 | * | * | * | * | * | * | * | B-1 | A1MP9M14 | |
| XBFZZ | | STRIP, BOTTOM GUIDE 1026-4-05 (88183) | EA | 1 | | | | | | | | B-1 | A1MP10 | |
| PAFZZ | | 5305-054-6650 | SCREW, MACHINE MS51957-26 (96906) | EA | 4 | * | * | * | * | * | * | B-1 | A1MP10M15 | |
| PAFZZ | | 5310-579-0079 | WASHER, LOCK MS35333-37 (96906) | EA | 4 | * | * | * | * | * | * | B-1 | A1MP10M16 | |
| XBFZZ | | STRIP, TOP GUIDE 1026-4-06 (88183) | EA | 1 | | | | | | | | B-1 | A1MP11 | |
| PAFZZ | | 5310-934-9061 | NUT, PLAIN, HEXAGON MS35649-264 (96906) | EA | 4 | * | * | * | * | * | * | B-1 | A1MP11M17 | |
| PAFZZ | | 5305-054-6652 | SCREW, MACHINE MS51957-28 (96906) | EA | 4 | * | * | * | * | * | * | B-1 | A1MP11M18 | |
| PAFZZ | 5305-054-6654 | SCREW, MACHINE MS51957-30 (96906) | EA | 3 | * | * | * | * | * | * | B-1 | A1MP11M19 | | |
| PAFZZ | 5310-579-0079 | WASHER, LOCK MS35333-37 (96906) | EA | 4 | * | * | * | * | * | * | B-1 | A1MP11M20 | | |
| PAFZZ | 5940-798-0737 | TERMINAL BLOCK PJ104 (70674) | EA | 1 | * | * | * | * | * | * | B-1 | A1TB1 | | |
| PAFZZ | 5305-050-9929 | SCREW, MACHINE MS51957-63 (96906) | EA | 3 | * | * | * | * | * | * | B-1 | A1TB1M21 | | |
| PAFZZ | 5310-576-5752 | WASHER, LOCK MS35333-39 (96906) | EA | 3 | * | * | * | * | * | * | B-1 | A1TB1M22 | | |
| GROUP: 02 EXTENDER CARD ASSEMBLY NRC2128 | | | | | | | | | | | | | | |
| XAFZZ | | BRACKET, CONNECTOR MOUNTING 9-1219 (88183) | EA | 2 | | | | | | | | B-2 | A2MP1 | |
| XAFZZ | | BRACKET, UNIT SUPPORT 9-1221 (88183) | EA | 1 | | | | | | | | B-2 | A2MP2 | |
| PAFZZ | 5305-054-5647 | SCREW, MACHINE MS51957-13 (96906) | EA | 1 | * | * | * | * | * | * | * | B-2 | A2MP2M1 | |
| XAFZZ | 5935-828-4151 | CONNECTOR, ELECTRIC 600-121-17XA (95238) | EA | 1 | | | | | | | | B-2 | A2J1 | |
| PAFZZ | 5305-054-5651 | SCREW, MACHINE MS51957-17 (96906) | EA | 2 | * | * | * | * | * | * | * | B-2 | A2J1M2 | |
| PAFZZ | 5310-550-3715 | WASHER, LOCK MS35333-70 (96906) | EA | 2 | * | * | * | * | * | * | * | B-2 | A2J1M3 | |
| XAFZZ | | PRINTED WIRING BOARD 9-1222 (88183) | EA | 1 | | | | | | | | B-2 | A2E1 | |

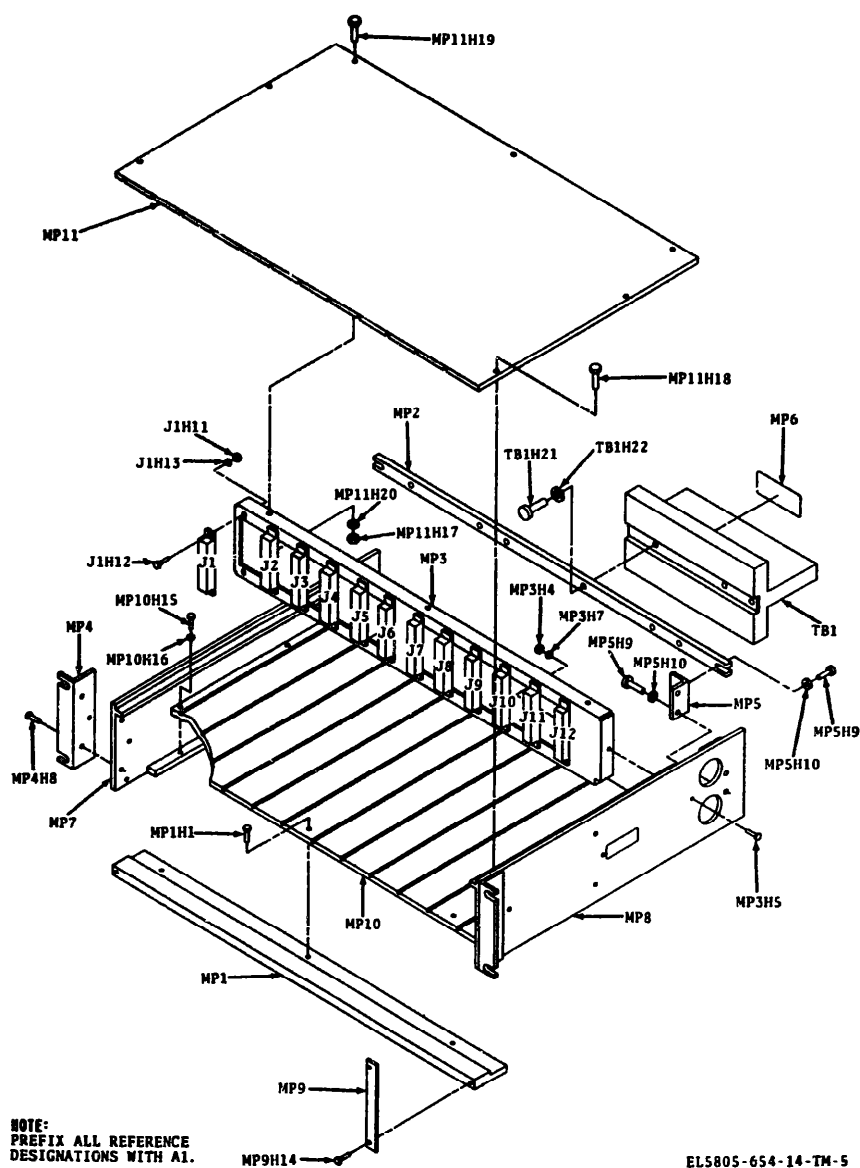


Figure B-1. Shelf assembly, universal mount A1.

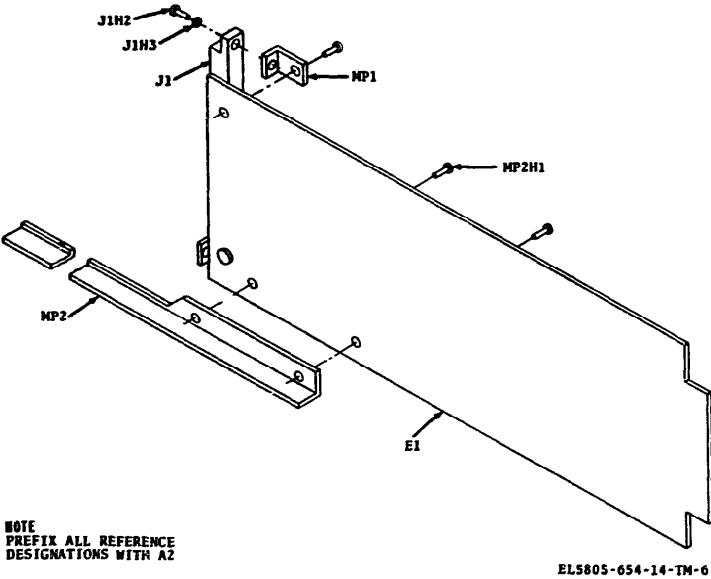


Figure B-2. Extender card assembly A2.

SECTION VIII. INDEX-FEDERAL STOCK NUMBER AND REFERENCE NUMBER
CROSS-REFERENCE TO FIGURE NUMBER AND REFERENCE DESIGNATION

| STOCK NUMBER | | FIG NO | REF DES | STOCK NUMBER | | FIG NO | REF DES |
|---------------|--|-----------|------------|---------------|--|-----------|------------|
| 5305-050-9229 | | B-1 | A1MP2H2 | 5310-193-7577 | | B-1 | A1J1H13 |
| | | B-1 | A1T81H21 | 5310-550-3715 | | B-2 | A2J1H3 |
| 5305-054-5647 | | B-1 | A1MP9H14 | 5310-559-0070 | | B-1 | A1MP5H10 |
| | | B-2 | A2MP2H1 | 5310-576-5752 | | B-1 | A1T81H22 |
| 5305-054-5649 | | B-1 | A1MP1H1 | 5310-579-0079 | | B-1 | A1MP3H7 |
| | | B-1 | A1MP5H9 | | | B-1 | A1MP10H16 |
| 5305-054-5651 | | B-1 | A1J1H12 | | | B-1 | A1MP11H20 |
| | | B-2 | A2J1H2 | 5310-595-6772 | | B-1 | A1MP2H3 |
| 5305-054-6650 | | B-1 | A1MP4H8 | 5310-934-9061 | | B-1 | A1MP11H17 |
| | | B-1 | A1MP10H15 | 5310-934-9748 | | B-1 | A1J1H11 |
| 5305-054-6652 | | B-1 | A1MP3H5 | 5310-934-9761 | | B-1 | A1MP3H4 |
| | | B-1 | A1MP11H18 | 5935-828-4151 | | B-2 | A2J1 |
| 5305-054-6654 | | B-1 | A1MP3H6 | 5940-798-0737 | | B-1 | A1T81 |
| | | B-1 | A1MP11H19 | | | | |

| REFERENCE NO. | | MFR CODE | FIG NO | REF DES | REFERENCE NO | | MFR CODE | FIG NO | REF DES |
|------------------|--|-------------|-----------|------------|-----------------|--|-------------|-----------|------------|
| K600-100-34WA | | 95238 | B-1 | A1J1 | MS51957-17 | | 96906 | B-1 | A1J1H12 |
| | | | B-1 | A1J2 | | | | B-2 | A2J1H2 |
| | | | B-1 | A1J3 | MS51957-26 | | 96906 | B-1 | A1MP4H8 |
| | | | B-1 | A1J4 | | | | B-1 | A1MP10H15 |
| | | | B-1 | A1J5 | MS51957-28 | | 96906 | B-1 | A1MP3H5 |
| | | | B-1 | A1J6 | | | | B-1 | A1MP11H18 |
| | | | B-1 | A1J7 | MS51957-30 | | 96906 | B-1 | A1MP3H6 |
| | | | B-1 | A1J8 | | | | B-1 | A1MP11H19 |
| | | | B-1 | A1J9 | MS51957-63 | | 96906 | B-1 | A1MP2H2 |
| | | | B-1 | A1J10 | | | | B-1 | A1T81H21 |
| | | | B-1 | A1J11 | PJ104 | | 70674 | B-1 | A1T81 |
| | | | B-1 | A1J12 | 1026-3-11 | | 88183 | B-1 | A1MP4 |
| MS15795-808 | | 96906 | B-1 | A1MP2H3 | 1026-3-12 | | 88183 | B-1 | A1MP5 |
| MS35333-36 | | 96906 | B-1 | A1J1H13 | 1026-4-05 | | 88183 | B-1 | A1MP10 |
| MS35333-37 | | 96906 | B-1 | A1MP3H7 | 1026-4-06 | | 88183 | B-1 | A1MP11 |
| | | | B-1 | A1MP10H16 | 1026-4-07 | | 88183 | B-1 | A1MP2 |
| | | | B-1 | A1MP11H20 | 1026-6 | | 88183 | B-1 | A1 |
| MS35333-38 | | 96906 | B-1 | A1MP5H10 | 5-0929-03 | | 88183 | B-1 | A1MP7 |
| MS35333-39 | | 96906 | B-1 | A1T81H22 | 5-0930-4 | | 88183 | B-1 | A1MP8 |
| MS35333-70 | | 96906 | B-2 | A2J1H3 | 5-0955 | | 88183 | B-1 | A1MP9 |
| MS35649-244 | | 96906 | B-1 | A1J1H11 | 5-0971 | | 88183 | B-1 | A1MP6 |
| MS35649-264 | | 96906 | B-1 | A1MP3H4 | 600-121-17XA | | 95238 | B-2 | A2J1 |
| | | | B-1 | A1MP11H17 | 760-3-12 | | 88183 | B-1 | A1MP1 |
| MS51957-13 | | 96906 | B-1 | A1MP9H14 | 760-3-13 | | 88183 | B-1 | A1MP3 |
| | | | B-2 | A2MP2H1 | 9-1219 | | 88183 | B-2 | A2MP1 |
| MS51957-15 | | 96906 | B-1 | A1MP1H1 | 9-1221 | | 88183 | B-2 | A2MP2 |
| | | | B-1 | A1MP5H9 | 9-1222 | | 88183 | B-2 | A2E1 |

SECTION IX. INDEX-REFERENCE DESIGNATION
CROSS-REFERENCE TO PAGE NUMBER

| REFERENCE DESIGNATION | PAGE NO | REFERENCE DESIGNATION | PAGE NO | REFERENCE DESIGNATION | PAGE NO |
|--------------------------|------------|--------------------------|------------|--------------------------|------------|
| A1 | B-5 | A1MP10H15 | B-6 | A1MP5H10 | B-5 |
| A1J1 | B-5 | A1MP10H16 | B-6 | A1MP5H9 | B-5 |
| A1J1H11 | B-5 | A1MP11 | B-6 | A1MP6 | B-6 |
| A1J1H12 | B-5 | A1MP11H17 | B-6 | A1MP7 | B-6 |
| A1J1H13 | B-5 | A1MP11H18 | B-6 | A1MP8 | B-6 |
| A1J10 | B-5 | A1MP11H19 | B-6 | A1MP9 | B-6 |
| A1J11 | B-5 | A1MP11H20 | B-6 | A1MP9H14 | B-6 |
| A1J12 | B-5 | A1MP2 | B-5 | A1TB1 | B-6 |
| A1J2 | B-5 | A1MP2H2 | B-5 | A1TB1H21 | B-6 |
| A1J3 | B-5 | A1MP2H3 | B-5 | A1TB1H22 | B-6 |
| A1J4 | B-5 | A1MP3 | B-5 | A2 | B-6 |
| A1J5 | B-5 | A1MP3H4 | B-5 | A2E1 | B-6 |
| A1J6 | B-5 | A1MP3H5 | B-5 | A2J1 | B-6 |
| A1J7 | B-5 | A1MP3H6 | B-5 | A2J1H2 | B-6 |
| A1J8 | B-5 | A1MP3H7 | B-5 | A2J1H3 | B-6 |
| A1J9 | B-5 | A1MP4 | B-5 | A2MP1 | B-6 |
| A1MP1 | B-5 | A1MP4H8 | B-5 | A2MP2 | B-6 |
| A1MP1H1 | B-5 | A1MP5 | B-5 | A2MP2H1 | B-6 |
| A1MP10 | B-6 | | | | |

APPENDIX C

MAINTENANCE ALLOCATION

Section I. INTRODUCTION

C-1. General

This appendix provides a summary of the maintenance operations covered in the equipment literature for Northern Radio Universal Shelf Type 1026 Model 6. It authorizes categories of maintenance for specific maintenance functions on repairable items and components and the tools and equipment required to perform each function. This appendix may be used as an aid in planning maintenance operations.

C-2. Maintenance Functions

Maintenance functions will be limited to and defined as follows:

a. Inspect. To determine the serviceability of an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through examination.

b. Test. To verify serviceability and to detect incipient failure by measuring the mechanical or electrical characteristics of an item and comparing those characteristics with prescribed standards.

c. Service. Operations required periodically to keep an item in proper operating condition, i.e., to clean, preserve, drain, paint, or to replenish fuel/lubricants/hydraulic fluids or compressed air supplies.

d. Adjust. Maintain within prescribed limits by bringing into proper or exact position, or by setting the operating characteristics to the specified parameters.

e. Align. To adjust specified variable elements of an item to about optimum or desired performance.

f. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments or test measuring and diagnostic equipment used in precision measurement. Consists of the comparison of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.

g. Install. The act of emplacing, seating, or fixing into position an item, part, module (component or assembly) in a manner to allow the proper functioning of the equipment/system.

h. Replace. The act of substituting a serviceable like-type part, subassembly, module (component or assembly) in a manner to allow the proper functioning of an equipment/system.

i. Repair. The application of maintenance services (inspect, test, service, adjust, align, calibrate, replace) or other maintenance actions (welding, grinding, riveting, straightening, facing, remachining, or resurfacing) to restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module/component/assembly end item or system.

j. Overhaul. That maintenance effort (service/action) necessary to restore an item to a completely serviceable/operational condition as prescribed by maintenance standards (e.g., DMWR) in pertinent technical manuals. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.

k. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of material maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (hours, miles, etc.) considered in classifying Army equipment/components.

l. Symbols. The uppercase letter placed in the appropriate column indicates the lowest level at which that particular maintenance function is to be performed.

C-3. Explanation of Format

a. Column 1, Group Number. Column 1 lists group numbers, the purpose of which is to match

components, assemblies, subassemblies, and modules with the next higher assembly.

b. Column 2, Functional Group. Column 2 lists the next higher assembly group and the item names of components, assemblies, subassemblies; and modules within the group for which maintenance is authorized.

c. Column 3, Maintenance Function. Column 3 lists the maintenance category at which performance of the specific maintenance function is authorized. Authorization to perform a function at any Category also includes authorization to perform that function at higher categories. The codes used represent the various maintenance categories as follows:

(1) Use of symbols. The following symbols are used to prescribe work function responsibility:

| Code | Maintenance category |
|--------|----------------------|
| C----- | Operator/crew |
| O----- | Organizational |
| F----- | Direct support |
| H----- | General support |
| D----- | Depot |

(2) Work measurement time. The active repair time required to perform the maintenance function is included directly below the symbol identifying the category of maintenance. The skill levels used to obtain the measurement times approximate those found in typical TOE units. Active repair time is the average aggregate time required to restore an item (subassembly, assembly, component, module, end item, or system) to a serviceable condition under typical field operating conditions. This time includes

preparation time, fault isolation/diagnostic time, and QA/QC time in addition to the time required to perform specific maintenance functions identified for the tasks authorized in the maintenance allocation chart. This time is expressed in man-hours and carried to one decimal place (tenths of hours).

d. Column 4, Tools and Equipment. Column 4 specifies, by code, those tools and equipment required to perform the designated function. The numbers appearing in this column refer to specific tools and test equipment which are identified in table I.

e. Column 5, Remarks. Self-explanatory.

C-4 Explanation of Format of Table I, Tool and Test Equipment Requirements

The columns in Table I, Tool and Test Equipment Requirements, are as follows:

a. Tools and Equipment. The numbers in this column coincide with the numbers used in the tools and equipment column of the Maintenance Allocation Chart. The numbers indicate the applicable tool for the maintenance function.

b. Maintenance Category. The codes in this column indicate the maintenance category normally allocated the facility.

c. Nomenclature. This column lists tools, test, and maintenance equipment required to perform the maintenance functions.

d. Federal Stock Number. This column lists the Federal stock number of the specific tool or test equipment.

e. Tool Number. Not used.

MAINTENANCE ALLOCATION CHART

| (1) GROUP NUMBER | (2) FUNCTIONAL GROUP COMPONENT ASSEMBLY NOMENCLATURE | (3) MAINTENANCE FUNCTIONS | | | | | | | | | | (4) TOOLS AND EQUIPMENT | (5) REMARKS | |
|------------------------|---|------------------------------|------|---------|--------|-------|-----------|---------|---------|----------|----------|-------------------------------|----------------|--|
| | | INSPECT | TEST | SERVICE | ADJUST | ALIGN | CALIBRATE | INSTALL | REPLACE | REPAIR | OVERHAUL | | | REBUILD |
| 0 1 | SHELF ASSEMBLY UNIVERSAL MOUNT 1026-G | | | | | | | | | F 1.0 | | | 1,2 | See note. |
| 0 2 | EXTENDER CARD ASSEMBLY NRC2128 | | | | | | | | | F 0.4 | | | 1,2 | |
| | | | | | | | | | | | | | | NOTE Direct support (F) main- tenance operations for fixed plant equipment located OCONUS, will be performed by OFF-SITE (Area-Maintenance and Supply Facility, AMSF) personnel. |

TABLE 1. **TOOL AND TEST EQUIPMENT REQUIREMENTS**

| TOOLS AND EQUIPMENT | MAINTENANCE CATEGORY | NOMENCLATURE | FEDERAL STOCK NUMBER | TOOL NUMBER |
|---------------------|----------------------|-----------------------|----------------------|-------------|
| 1 | F | MULTIMETER AM/USM-215 | 6625-019-0815 | |
| 2 | F | TOOL KIT TK-105/G | 5180-610-8177 | |

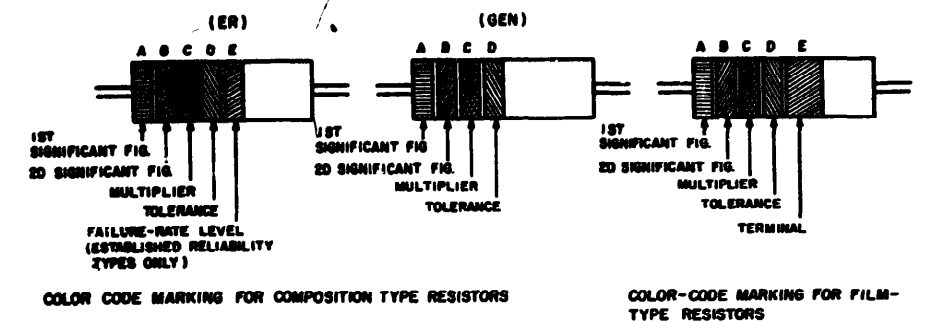


TABLE 1
COLOR CODE FOR COMPOSITION TYPE AND FILM TYPE RESISTORS.

| BAND A | | BAND B | | BAND C | | BAND D | | BAND E | |
|-----------------|--------------------------|-----------------|---------------------------|--------|------------|--------|--|--------|--------------------|
| COLOR | FIRST SIGNIFICANT FIGURE | COLOR | SECOND SIGNIFICANT FIGURE | COLOR | MULTIPLIER | COLOR | RESISTANCE TOLERANCE (PERCENT) | COLOR | FAILURE RATE LEVEL |
| BLACK | 0 | BLACK | 0 | BLACK | 1 | | | BROWN | M=1.0 |
| BROWN | 1 | BROWN | 1 | BROWN | 10 | | | RED | P=0.1 |
| RED | 2 | RED | 2 | RED | 100 | | | ORANGE | R=0.01 |
| ORANGE | 3 | ORANGE | 3 | ORANGE | 1,000 | | | YELLOW | S=0.001 |
| YELLOW | 4 | YELLOW | 4 | YELLOW | 10,000 | SILVER | ±10 (COMP TYPE ONLY) | | |
| GREEN | 5 | GREEN | 5 | GREEN | 100,000 | GOLD | ±5 | | |
| BLUE | 6 | BLUE | 6 | BLUE | 1,000,000 | RED | ±2 (NOT APPLICABLE TO ESTABLISHED RELIABILITY) | | |
| PURPLE (VIOLET) | 7 | PURPLE (VIOLET) | 7 | | | | | | |
| GRAY | 8 | GRAY | 8 | SILVER | 0.01 | | | | |
| WHITE | 9 | WHITE | 9 | GOLD | 0.1 | | | | SOLDERABLE |

BAND A — THE FIRST SIGNIFICANT FIGURE OF THE RESISTANCE VALUE (BANDS A THRU D SHALL BE OF EQUAL WIDTH)

BAND B — THE SECOND SIGNIFICANT FIGURE OF THE RESISTANCE VALUE.

BAND C — THE MULTIPLIER (THE MULTIPLIER IS THE FACTOR BY WHICH THE TWO SIGNIFICANT FIGURES ARE MULTIPLIED TO YIELD THE NOMINAL RESISTANCE VALUE)

BAND D — THE RESISTANCE TOLERANCE

BAND E — WHEN USED ON COMPOSITION RESISTORS, BAND E INDICATES ESTABLISHED RELIABILITY FAILURE-RATE LEVEL (PERCENT FAILURE PER 1,000 HOURS) ON FILM RESISTORS, THIS BAND SHALL BE APPROXIMATELY 1-1/2 TIMES THE WIDTH OF OTHER BANDS, AND INDICATES TYPE OF TERMINAL

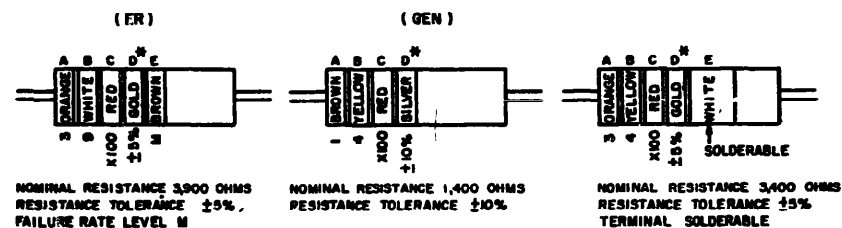
RESISTANCES IDENTIFIED BY NUMBERS AND LETTERS (THESE ARE NOT COLOR CODED)

SOME RESISTORS ARE IDENTIFIED BY THREE OR FOUR DIGIT ALPHA NUMERIC DESIGNATORS. THE LETTER R IS USED IN PLACE OF A DECIMAL POINT WHEN FRACTIONAL VALUES OF AN OHM ARE EXPRESSED FOR EXAMPLE:

2R7 = 2.7 OHMS 10R0 = 10.0 OHMS

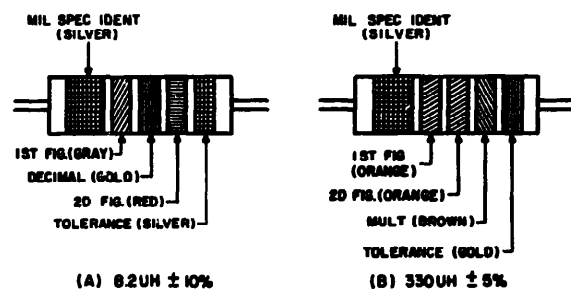
FOR WIRE-WOUND-TYPE RESISTORS COLOR CODING IS NOT USED, IDENTIFICATION MARKING IS SPECIFIED IN EACH OF THE APPLICABLE SPECIFICATIONS

EXAMPLES OF COLOR CODING



* IF BAND D IS OMITTED, THE RESISTOR TOLERANCE IS ±20% AND THE RESISTOR IS NOT MIL-STD.

A COLOR CODE MARKING FOR MILITARY STANDARD RESISTORS



COLOR CODING FOR TUBULAR ENCAPSULATED R.F. CHOKES. AT A, AN EXAMPLE OF OF THE CODING FOR AN 82UH CHOKES IS GIVEN AT B, THE COLOR BANDS FOR A 330UH INDUCTOR ARE ILLUSTRATED

TABLE 2
COLOR CODING FOR TUBULAR ENCAPSULATED R.F. CHOKES.

| COLOR | SIGNIFICANT FIGURE | MULTIPLIER | INDUCTANCE TOLERANCE (PERCENT) |
|--------|--------------------|------------|--------------------------------|
| BLACK | 0 | 1 | |
| BROWN | 1 | 10 | 1 |
| RED | 2 | 100 | 2 |
| ORANGE | 3 | 1,000 | 3 |
| YELLOW | 4 | | |
| GREEN | 5 | | |
| BLUE | 6 | | |
| VIOLET | 7 | | |
| GRAY | 8 | | |
| WHITE | 9 | | |
| NONE | | | 20 |
| SILVER | | | 10 |
| GOLD | DECIMAL POINT | | 5 |

MULTIPLIER IS THE FACTOR BY WHICH THE TWO COLOR FIGURES ARE MULTIPLIED TO OBTAIN THE INDUCTANCE VALUE OF THE CHOKE COIL.

B COLOR CODE MARKING FOR MILITARY STANDARD INDUCTORS.

CAPACITORS, FIXED, VARIOUS-DIELECTRICS, STYLES CM, CN, CY, AND CB

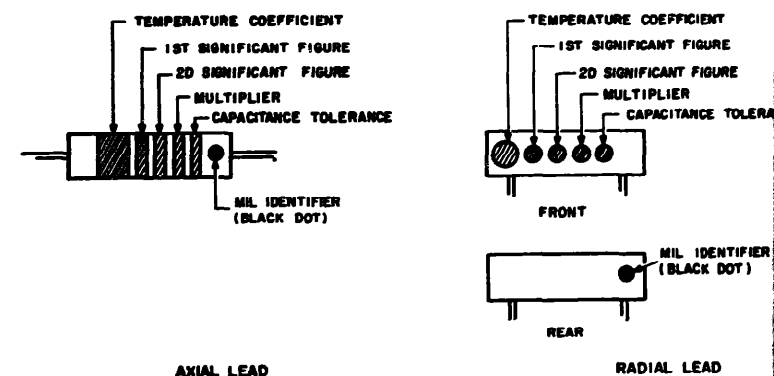
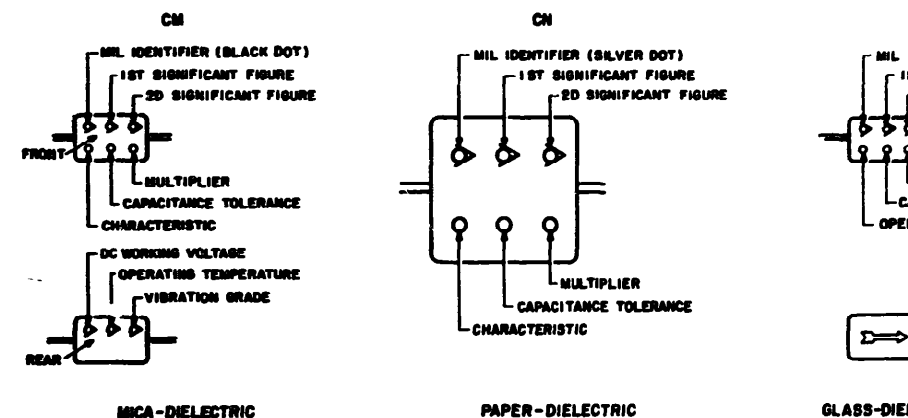
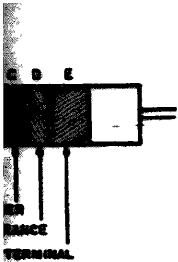


Figure FO-1. Color code marking for MIL STD resistors, inductors, and capacitors.



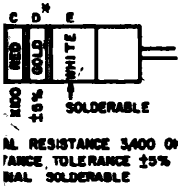
MARKING FOR FILM-RES.

| BAND E | | |
|--------|--------------------|------------|
| COLOR | FAILURE RATE LEVEL | TERMINAL |
| BROWN | M=1.0 | SOLDERABLE |
| RED | P=0.1 | |
| ORANGE | R=0.01 | |
| YELLOW | S=0.001 | |
| WHITE | | |

FAILURE RATE LEVEL

TERMINAL

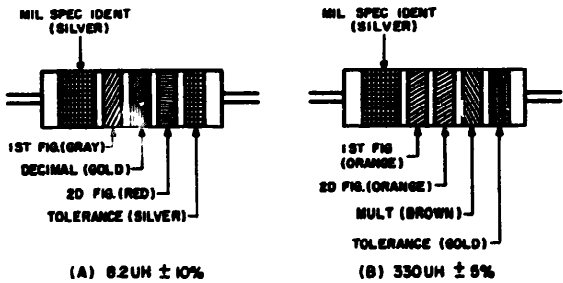
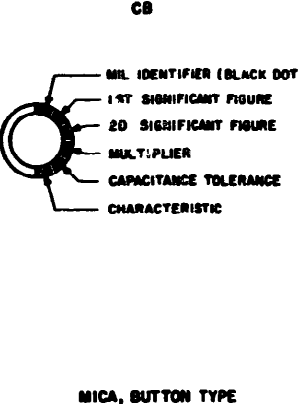
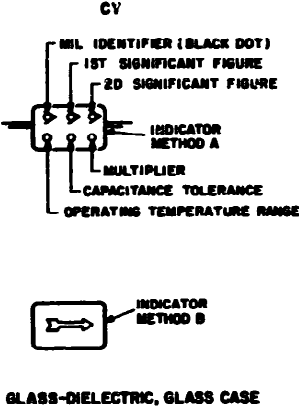
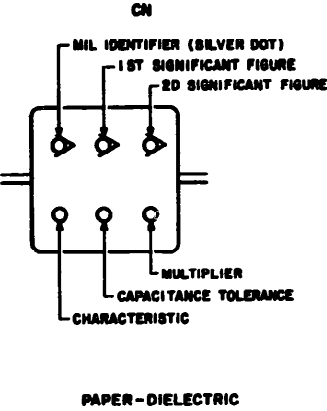
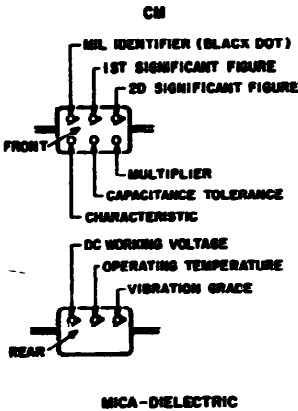
TERMINAL



TYPE RESISTORS
R IS NOT MIL-STD.

B. COLOR CODE MARKING FOR MILITARY STANDARD INDUCTORS.

CAPACITORS, FIXED, VARIOUS-DIELECTRICS, STYLES CM, CN, CY, AND CB.

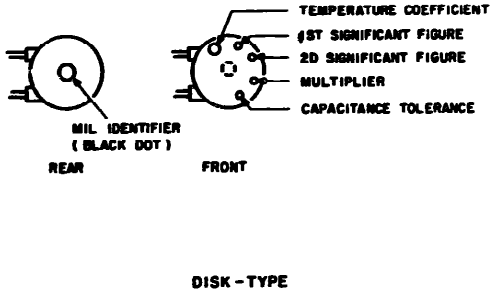
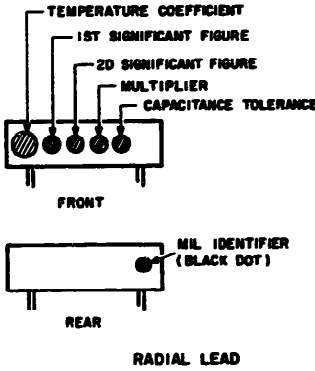
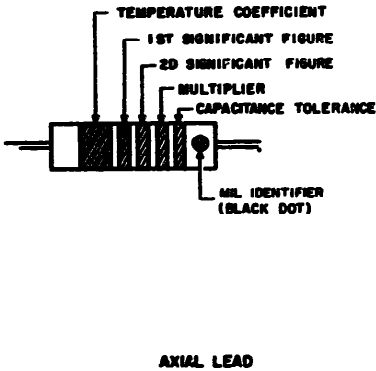


COLOR CODING FOR TUBULAR ENCAPSULATED R.F. CHOKES. AT A, AN EXAMPLE OF THE CODING FOR AN 0.2uH CHOKES IS GIVEN. AT B, THE COLOR BANDS FOR A 330uH INDUCTOR ARE ILLUSTRATED.

TABLE 2
COLOR CODING FOR TUBULAR ENCAPSULATED R.F. CHOKES.

| COLOR | SIGNIFICANT FIGURE | MULTIPLIER | INDUCTANCE TOLERANCE (PERCENT) |
|--------|--------------------|------------|--------------------------------|
| BLACK | 0 | 1 | |
| BROWN | 1 | 10 | 1 |
| RED | 2 | 100 | 2 |
| ORANGE | 3 | 1,000 | 3 |
| YELLOW | 4 | | |
| GREEN | 5 | | |
| BLUE | 6 | | |
| VIOLET | 7 | | |
| GRAY | 8 | | |
| WHITE | 9 | | |
| NONE | | | 20 |
| SILVER | | | 10 |
| GOLD | DECIMAL POINT | | 5 |

MULTIPLIER IS THE FACTOR BY WHICH THE TWO COLOR FIGURES ARE MULTIPLIED TO OBTAIN THE INDUCTANCE VALUE OF THE CHOKE COIL.



C. COLOR CODE MARKING FOR MILITARY STANDARD CAPACITORS

TABLE 3 - FOR USE WITH STYLES CM, CN,

| COLOR | MIL ID | 1ST SIG FIG | 2D SIG FIG | MULTIPLIER | CAPACITANCE |
|-----------------|--------|-------------|------------|------------|-------------|
| BLACK | 0 | 0 | 0 | 1 | |
| BROWN | 1 | 1 | 1 | 10 | |
| RED | 2 | 2 | 2 | 100 | ±2% |
| ORANGE | 3 | 3 | 3 | 1,000 | |
| YELLOW | 4 | 4 | 4 | 10,000 | |
| GREEN | 5 | 5 | 5 | | ±5% |
| BLUE | 6 | 6 | 6 | | |
| PURPLE (VIOLET) | 7 | 7 | 7 | | |
| GRAY | 8 | 8 | 8 | | |
| WHITE | 9 | 9 | 9 | | |
| GOLD | | | | 0.1 | |
| SILVER | CN | | | 0.01 | ±10% |

TABLE 4 - TEMPERATURE COMPENSATING

| COLOR | TEMPERATURE COEFFICIENT | 1ST SIG FIG | 2D SIG FIG | MULTIPLIER |
|-----------------|-------------------------|-------------|------------|------------|
| BLACK | 0 | 0 | 0 | 1 |
| BROWN | -30 | 1 | 1 | 10 |
| RED | -80 | 2 | 2 | 100 |
| ORANGE | -150 | 3 | 3 | 1,000 |
| YELLOW | -220 | 4 | 4 | |
| GREEN | -330 | 5 | 5 | |
| BLUE | -470 | 6 | 6 | |
| PURPLE (VIOLET) | -750 | 7 | 7 | |
| GRAY | | 8 | 8 | 0.0 |
| WHITE | | 9 | 9 | 0.1 |
| GOLD | +100 | | | 0.1 |
| SILVER | | | | 0.0 |

1. THE MULTIPLIER IS THE NUMBER BY WHICH THE CAPACITANCE IN UUF
2. LETTERS INDICATE THE CHARACTERISTICS DES MIL-C-250, MIL-C-11272B, AND MIL-C-108
3. LETTERS INDICATE THE TEMPERATURE RANGE MIL-C-11015D
4. TEMPERATURE COEFFICIENT IN PARTS PER
- * OPTIONAL CODING WHERE METALLIC PIGMENT

Figure FO-1. Color code marking for MIL STD resistors, inductors, and capacitors.

Figure 1 consists of four schematic diagrams labeled (a) through (d), each representing a different type of electronic component. Each diagram includes labels for various internal and external features:

- (a) MICA-DIELECTRIC:** Shows a component with a multiplier, capacitance tolerance, operating temperature, and vibration grade. It also has a front view and a rear view.
- (b) PAPER-DIELECTRIC:** Shows a component with a multiplier, capacitance tolerance, and operating temperature. It also has a front view and a rear view.
- (c) GLASS-DIELECTRIC, GLASS CORE:** Shows a component with a multiplier, capacitance tolerance, operating temperature, and vibration grade. It also has a front view and a rear view.
- (d) MICA, BUTTON TYPE:** Shows a component with a multiplier, capacitance tolerance, operating temperature, and vibration grade. It also has a front view and a rear view.

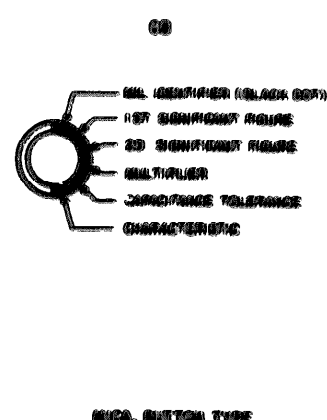
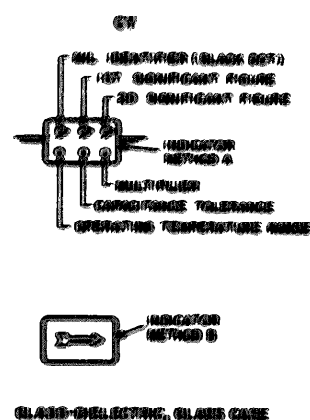
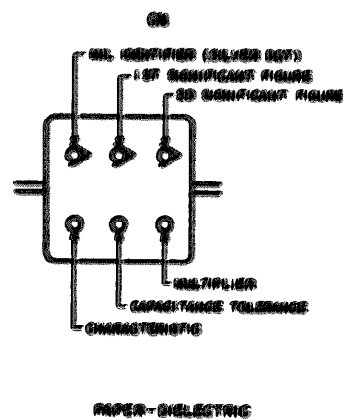
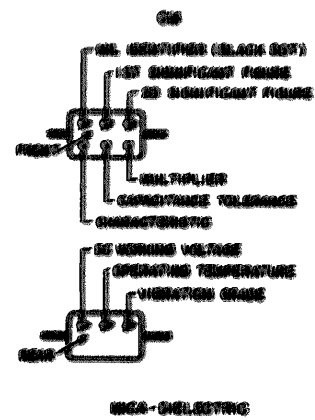


TABLE 3 - FOR USE WITH STYLES 60, 61, 67 AND 68.

| COUNCIL | COUNCIL NO. | 1ST DISTRICT | 2ND DISTRICT | MAY 7th 1900 | COUNCIL VOTING TABLE | | | | MAY 7th 1900 | | | | TOTAL VOTES | PERCENTAGE | |
|----------|-------------|--------------|--------------|--------------|----------------------|------|------|------|--------------|-----|-----|-----|-------------|------------|------|
| | | | | | 1ST | 2ND | 3RD | 4TH | 1ST | 2ND | 3RD | 4TH | | | |
| CLARK | 1 | 1 | 1 | 1 | | | 100% | 100% | | A | | | 100% | 100% | 100% |
| BRADY | | 1 | 1 | 10 | | | | | | B | E | | | | |
| WED | | 2 | 2 | 100 | 100% | | 100% | 100% | C | | | | 100% | 100% | |
| WILLIAMS | | 3 | 3 | 1,000 | | 100% | | | | D | | D | 100 | | |
| WILLIAMS | | 4 | 4 | 10,000 | | | | | | E | | | | 100% | 100% |
| WILLIAMS | | 5 | 5 | | 100% | | | | | F | | | 100 | | |
| WILLIAMS | | 6 | 6 | | | | | | | | | | | 100% | 100% |
| WILLIAMS | | 7 | 7 | | | | | | | | | | | | |
| WILLIAMS | | 8 | 8 | | | | | | | | | | | | |
| WILLIAMS | | 9 | 9 | | | | | | | | | | | | |
| WILLIAMS | | | | 100 | | | 100% | 100% | | | | | | | |
| WILLIAMS | 100 | | | 10,000 | 100% | 100% | 100% | 100% | | | | | | | |

[illegible]

FIGURE 1. AT A, AN EXAMPLE OF
AT B, THE COLOR BANDS FOR

| UNLATED S.F. CHANGES | |
|----------------------|--|
| | NUMBER OF S.F. CHANGES (PERCENT) |
| 1 | |
| 2 | |
| 3 | |
| | |
| | |
| | |
| | |
| | |
| 20 | |
| 10 | |
| 5 | |

THE TWO COLOR FIGURE
FRANCE VALUE OF THE

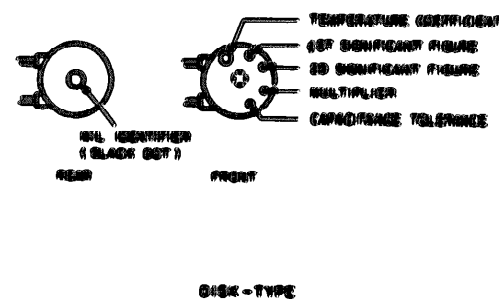
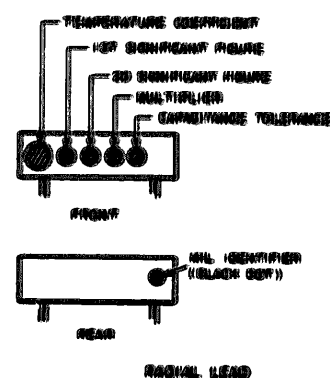
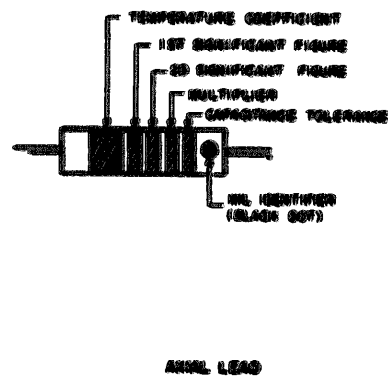


TABLE 4 - TEMPERATURE COMPENSATION, STYLE CC

| COLOR | TEMPERATURE COEFFICIENT | HET OH P/W | SD OH P/W | MULTIPLIER | CAPACITANCE TOLERANCE | | HET OH P/W |
|-------------------|----------------------------|------------------|-----------------|------------|----------------------------|----------------------------|------------------|
| | | | | | CAPACITANCE CODE NO. 10 | CAPACITANCE CODE NO. 10 | |
| BLACK | 0 | 0 | 0 | 1 | | ±20 UUF | 00 |
| BROWN | -20 | 1 | 1 | 10 | ±1% | | |
| RED | -50 | 2 | 2 | 100 | ±2% | ±0.25 UUF | |
| ORANGE | -100 | 3 | 3 | 1,000 | | | |
| YELLOW | -200 | 4 | 4 | | | | |
| GREEN | -300 | 5 | 5 | | ±5% | ±0.5 UUF | |
| BLUE | -470 | 6 | 6 | | | | |
| PURPLE (EXTRA) | -700 | 7 | 7 | | | | |
| GRAY | | 8 | 8 | 0.01* | | | |
| WHITE | | 9 | 9 | 0.1* | ±10% | | |
| GOLD | +100 | | | 0.1 | | ±10 UUF | |
| SILVER | | | | 0.01 | | | |

- 1 THE MULTIPLIER IS THE NUMBER BY WHICH THE TWO SIGNIFICANT (BIG) FIGURES ARE MULTIPLIED TO OBTAIN THE CONCENTRATION IN USP.
- 2 LETTERS INDICATE THE CHARACTERISTICS DESIGNATED IN APPLICABLE SPECIFICATIONS: ML-C-2, ML-C-2SD, ML-C-H172, AND ML-C-1000C RESPECTIVELY.
- 3 LETTERS INDICATE THE TEMPERATURE RANGE AND VOLTAGE-TEMPERATURE LIMITS DESIGNATED IN ML-C-H172.
- 4 TEMPERATURE COEFFICIENT IN PARTS PER MILLION PER DEGREE CENTIGRADE.
- 5 OPTIONAL CODING WHERE METALLIC PIGMENTS ARE UNDESIRABLE.

C. COLOR CODE MARKING FOR MILITARY STANDARD CAPACITORS

OC-PM 912-72

Figure FO-1. Color code marking for MIL STD resistors, inductors, and capacitors.

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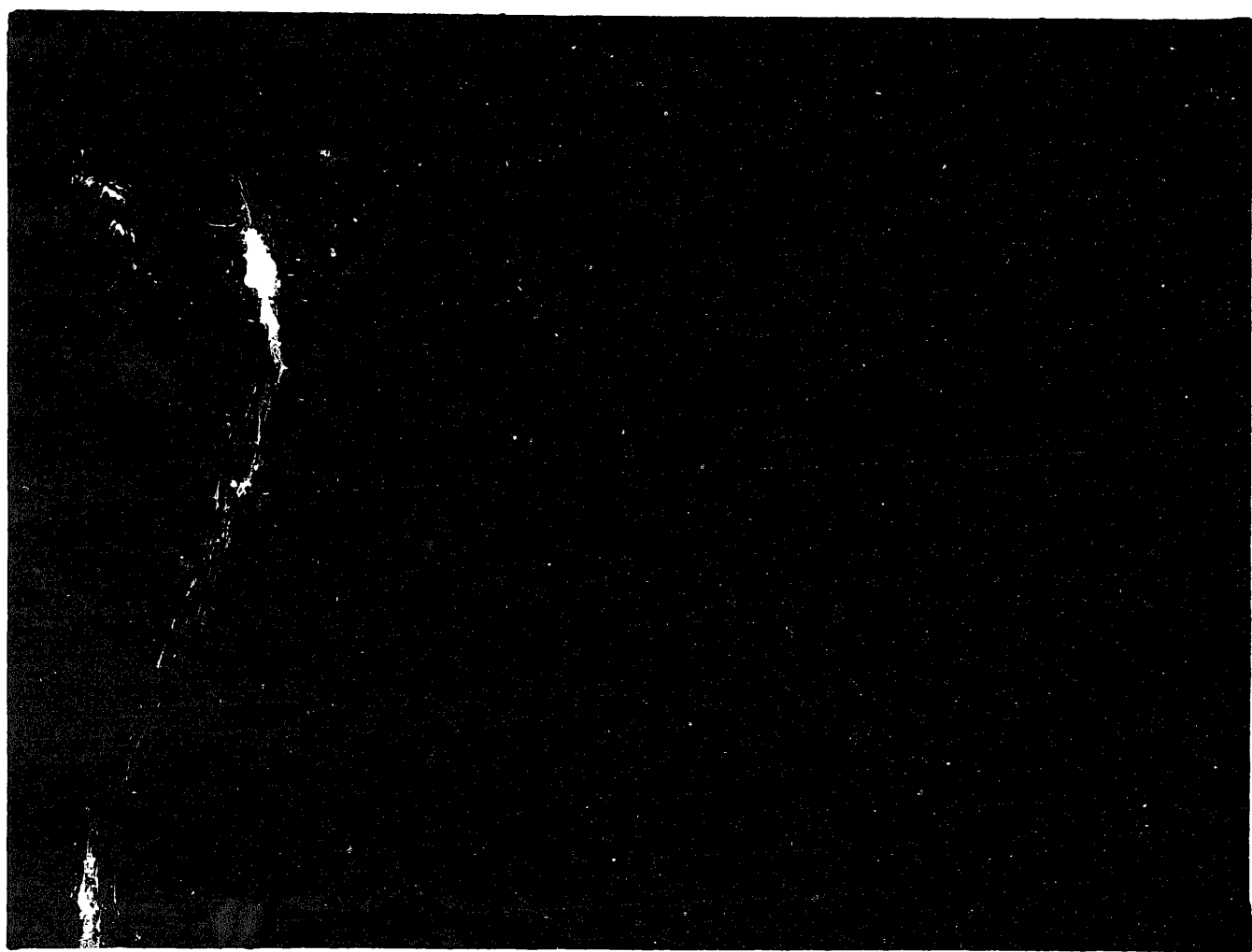


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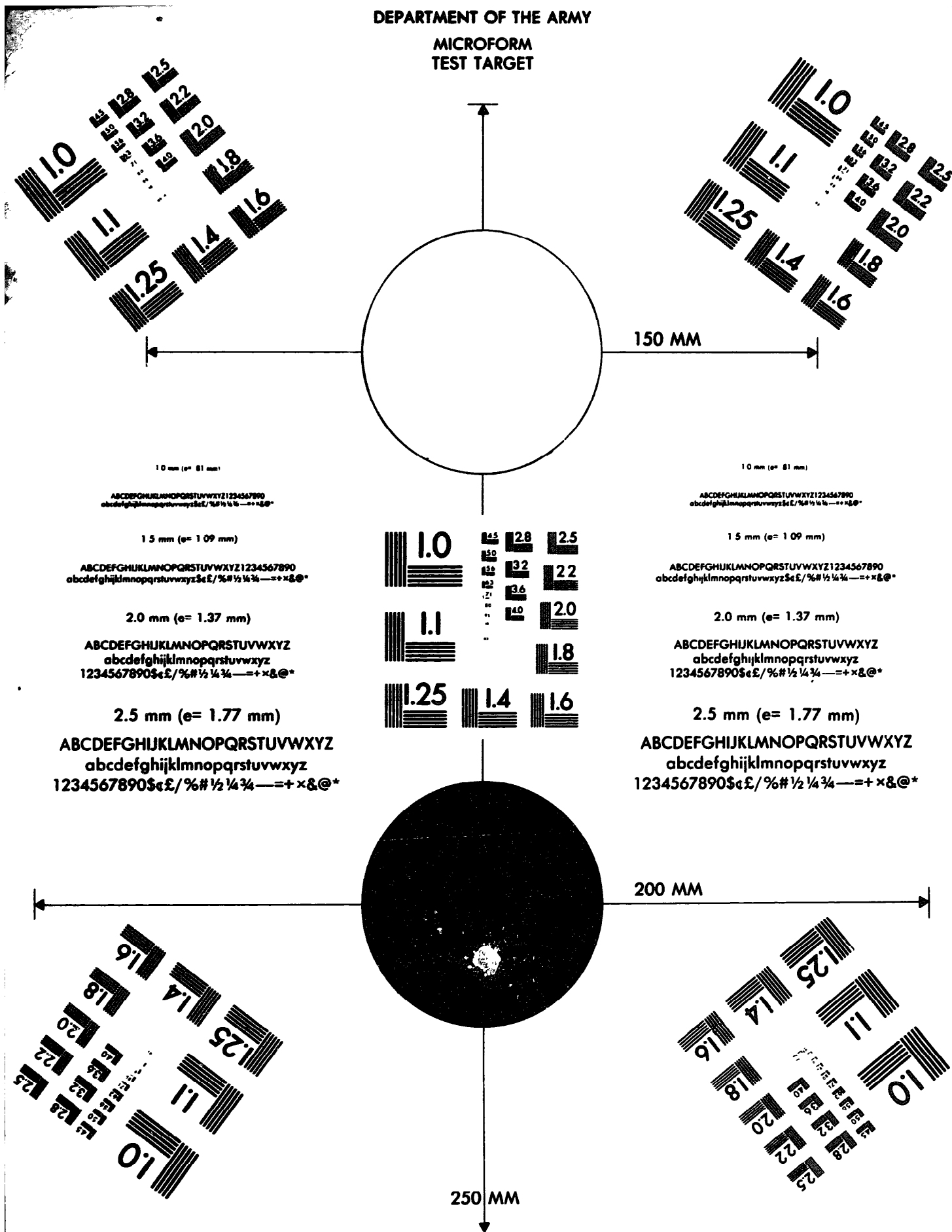
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