

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

ORGANIZATIONAL MAINTENANCE REPAIR PARTS
AND SPECIAL TOOLS LISTS
MULTIMETERS AN/USM-33 AND AN/USM-33A
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*This manual supersedes TM 11-6625-314-12P, 27 November 1961.

**SECTION I
INTRODUCTION**

1-1. Scope

This manual lists repair parts and special tools required for the performance of organizational maintenance of the AN/USM-33 and AN/USM-33A. The PCCN for the equipment is GTEABN for all models.

1-2. General

This repair parts and special tools list is divided into the following sections:

a. *Prescribed Load Allowance (PLA)*--Section II. Not applicable.

b. *Repair Parts List*--Section III. A list of repair parts authorized for the performance of maintenance at the organizational level. This repair parts list is arranged in alphabetical order.

c. *Special Tools, Test and Support Equipment*--Section IV Not applicable.

d. *Index-Federal Stock Number and Reference Number Cross-Reference to Figure and Item Number* Section V. A list, in ascending numerical sequence, of all Federal stock numbers appearing in the listings, followed by a list, in alphanumeric sequence of all reference numbers appearing in the listings. Federal stock number and reference numbers are cross-referenced to each illustration figure and item number or reference designation appearance.

1-3. Explanation of Columns

The following provides an explanation of columns in the tabular list--

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

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

| <i>Code</i> | <i>Explanation</i> |
|-------------|---|
| PA- | Item procured and stocked for anticipated or known usage. |
| PB- | Item procured and stocked for insurance purposes because essentiality dictates that a minimum quantity be available in the supply systems. |
| PC- | Item procured and stocked and which otherwise would be coded PA except that it is deteriorative in nature. |
| PD- | Support item, excluding support equipment, procured for initial issue or outfitting and stocked only for subsequent or additional initial issue or outfittings. Not subject to automatic replenishment. |
| PE-- | Support equipment procured and stocked for |

| <i>Code</i> | <i>Explanation</i> |
|-------------|---|
| | initial issue or outfitting to specified maintenance repair activities. |
| PF-- | Support equipment which will not be stocked but which will be centrally procured on demand. |
| PG-- | Item procured and stocked to provide for sustained support for the life of the equipment. It is applied to an item peculiar to the equipment which because of probable discontinuance or shutdown of production facilities would prove uneconomical to reproduce at a later time. |
| KD- | An item of depot overhaul/repair kit and not purchased separately. Depot kit defined as a kit that provides items required at the time of overhaul or repair. |
| KF-- | An item of a maintenance kit and not purchased separately. Maintenance kit defined as a kit that provides an item that can be replaced at organizational or direct support or general support levels of maintenance. |
| KB- | Item included in both a depot overhaul repair kit and a maintenance kit. |
| MO-- | Item to be manufactured or fabricated at organizational level. |
| MF-- | Item to be manufactured or fabricated at direct support maintenance level. |
| MH-- | Item to be manufactured or fabricated at general support maintenance level. |
| MD-- | Item to be manufactured or fabricated at depot maintenance level. |
| AO-- | Item to be assembled at organizational level. |
| AF-- | Item to be assembled at direct support maintenance level. |
| AH-- | Item to be assembled at general support maintenance level. |
| AD-- | Item to be assembled at depot maintenance level. |
| XA-- | Item is not procured or stocked because the requirements of 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. |
| XC-- | Installation drawing, diagram instruction sheet, field service drawing, that is identified by manufacturers' part number. |
| XD-- | Support items can be requisitioned with justification. |

NOTE

Cannibalization or salvage may be used as a source of supply for any items source

coded above except those coded XA 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.

| <i>Code</i> | <i>Application/Explanation</i> |
|-------------|---|
| O-- | Support item is removed, replaced, used at the organizational level of maintenance. |

NOTE

A code "C" may be used in this position to denote crew or operator maintenance performed within organizational maintenance.

| | |
|-----|--|
| F-- | Support item is removed, replaced, used at the direct support maintenance level. |
| H-- | Support item is removed, replaced, used at the general support maintenance. |
| D-- | Support items that are removed, replaced, used at depot only. |

(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 the capability to perform complete repair (i.e., all authorized maintenance functions). When a maintenance code is not used a dash (-) sign is entered. For multi-service equipment/ systems or when a code is entered, this position will contain one of the following maintenance codes as assigned by the service(s) that require the code--

| <i>Code</i> | <i>Application/Explanation</i> |
|-------------|--|
| O-- | The lowest maintenance level capable of complete repair of the support item is the organizational level. |
| F-- | The lowest maintenance level capable of complete repair of the support item is direct support. |
| H-- | The lowest maintenance level capable of complete repair of the support item is general support. |
| D-- | The lowest maintenance level capable of complete repair of the support item is the depot level. |

L- Repair restricted to designated Specialized Repair Activity.

Z-- Non-repairable. No repair is authorized.

B-- No repair is authorized. The item may be reconditioned by adjusting, lubricating, etc., at the user level. No parts or special tools are procured for the maintenance of this item.

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

| <i>Code</i> | <i>Explanation</i> |
|-------------|---|
| Z-- | Nonrepairable item. When unserviceable, condemn and dispose at the level indicated in the first digit of the maintenance code. |
| O-- | Repairable item. When uneconomically repairable, condemn and dispose at organizational level. |
| F-- | Repairable item. When uneconomically repairable, condemn and dispose at the direct support level. |
| H-- | Repairable item. When uneconomically repairable, condemn and dispose at the general support level. |
| D-- | Repairable item. When beyond lower level repair capability, return to depot. Condemnation and disposal not authorized below depot level. |
| L-- | Repairable item. Repair, condemnation, and disposal not authorized below depot/Specialized Repair Activity level. |
| A-- | Item requires special handling or condemnation procedures because of specific reasons (i.e., precious metal content, high dollar value, critical material or hazardous material). |

b. *Federal Stock Number* Indicates the Federal stock number assigned to the item and will be used for requisitioning purposes.

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., and is the basis used to indicate quantities and allowances in subsequent columns. 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* This column indicates the quantity of the item used in the equipment.

f. *15-Day Organizational Maintenance Allowance.*

(1) The repair parts indicated by an asterisk in the allowance column represent those authorized for use at the organizational category, and will be requisitioned on an "as required" basis, until stockage is based on demand in accordance with AR 710-2.

(2) Major Army commanders are authorized to approve reduction in the range of support items authorized for use in units within their commands. Recommendations for increase in range of items authorized for use will be forwarded to Commander, US Army Electronics Command, ATN: AMSEL-MA-CRA, Fort Monmouth, NJ, 07703. Any changes approved will be reflected in a revision to the RP-STL.

(3) Allowance quantities are indicated in the special tools list section for special tools, TMDE, and other equipment.

g. *Illustration* This column is divided as follows:

(1) *Figure number.* Indicates the figure number of the illustration on which the item is shown in TM 11-6625-314-15.

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

1-4. Special Information

a. Usable on codes are included in column 3. Uncoded items are applicable to all models. Identification of the usable on codes used in this publication are-

| Code | Used on |
|------|------------|
| AMD | ANIJUSM-33 |
| AME | AN/SM-33A |

b. The following publication pertain to the equipment and its components:

TM 11-6625-314-15 Operator, Organizational, Field and Depot Maintenance Manual: Multimeter ANUSM-33.

1-5. Location of Repair Parts

a. This manual contains one cross-referenced index (sec V) to be used to locate a repair part when either the Federal stock number or reference number (manufacturer's part number) is known. The first column in the index is prepared in numerical or alphanumeric sequence in ascending order. The reference numbers (manufacturer's part numbers) are listed immediately following the listed Federal stock number in the index of Federal stock numbers.

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 V) and locate the Federal stock number or reference number. The FSN and reference number are cross-referenced to the applicable figure and item number or reference designation.

(2) Refer to the repair parts list (sec III) and to locate the figure number (col. 7a) and item number or reference designation (col. 7b) as noted in the FSN index.

c. When the figure and item number or reference designation are known, scrutinize columns 7a and 7b of the repair parts list (sec III) until the item is located.

d. When the FSN, reference number, figure number, item number and reference designation are not known, scrutinize column 3 of the repair parts list (sec III), which is arranged in alphabetical order.

1-6. Abbreviations

Not applicable.

1-7. Reporting of Equipment Publication Improvements

The reporting of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications) and forwarded direct to Commander, US Army Electronic Command, ATTN: AMSEL-MA-CRA, Fort Monmouth, NJ, 07703.

SECTION III

TM 11-6625-314-20P

| (1) SMR CODE | (2) FEDERAL STOCK NUMBER | (3) DESCRIPTION REFERENCE NUMBER & MFR CODE USABLE ON CODE | | (4) UNIT OF MEAS | (5) QTY INC IN UNIT | (6) 15-DAY ORGANIZATIONAL MAINTENANCE ALW | | | | (7) ILLUSTRATION | |
|------------------------|---------------------------------------|--|----|-------------------------------|-------------------------------------|---|-------------|--------------|---------------|-------------------------|--------------------|
| | | | | | | (a) 1-5 | (b) 6-20 | (c) 21-50 | (d) 51-100 | (a) FIGURE NO. | (B) ITEM NO. |
| | | | | | | | | | | | |
| PAOZZ | 5975-281-0046 | RG58CU (80044) CABLE NIPPLE, ELECTRICAL NO-REF-DESIG | EA | 2 | * | * | * | * | 6 | 3 | |
| PAOZZ | 5999-230-1212 | 49 (02871) CLIP,ELECTRICAL NO-REF-DESIG | EA | 2 | * | * | * | * | 6 | 1 | |
| PAOZZ | 5935-654-9705 | 48b (76545) TIP, CABLE NO-REF-DESIG..... | EA | 2 | * | * | * | * | 6 | 7 | |
| PAOZZ | 6625-646-8770 | 124-1013 (95325) GROUP 0002 MULTIMETER ME-79/USM-33 COVER, TONG, INSULATING NO-REF-DESIG | EA | 2 | * | * | * | * | 3 | 11 | |
| PAOZZ | 6625-646-8765 | 124-1048 (95325) GASKET NO-REF-DESIG COVER TO CASE..... | EA | 1 | * | * | * | * | 1 | 9 | |
| PAOZZ | 5355-619-9004 | 124-1050 (95325) KNOB NO-REF-DESIG | EA | 1 | * | * | * | * | 1 | 11 | |
| PAOZZ | 5305-619-2436 | 124-1000 (95325) SCREW,MACHINE NO-REF-DESIG (PECULIAR)..... | EA | 1 | * | * | * | * | 3 | 6 | |
| PAOZZ | 5935-654-9722 | 124-1066 (95325) CONNECTOR, NO-REF-DESIG..... | EA | 1 | * | * | * | * | 6 | 6 | |
| | | 124-1017 (95325) | | | | | | | | | |

SECTION V

TM 11-6625-314-20P

**CROSS- REFERENCE-INDEXES
NATIONAL STOCK NUMBER INDEX**

| STOCK NUMBER | FIG. | ITEM | STOCK NUMBER | FIG. | ITEM |
|---------------------|-------------|-------------|---------------------|-------------|-------------|
| 5305-619-2436 | 3 | 6 | 5999-230-1212 | 6 | 1 |
| 5355-619-9004 | 1 | 11 | 6145-542-6092 | 6 | |
| 5935-654-9705 | 6 | 7 | 6625-646-8765 | 1 | 9 |
| 5975-281-0046 | 6 | 3 | 6625-646-8770 | 3 | 11 |

| REFERENCE | MFR | FIG. | ITEM | REFERENCE | MRF | FIG. | ITEM |
|------------------|------------|-------------|-------------|------------------|------------|-------------|-------------|
| RGSBCU | 80044 | 6 | | 124-1053 | 95325 | 1 | 9 |
| 124-1000 | 95325 | 1 | 11 | 124-1066 | 95325 | 3 | 6 |
| 124-1013 | 95325 | 6 | 7 | 488 | 76545 | 6 | 1 |
| 124-1048 | 95325 | 3 | 11 | 49 | 02871 | 6 | 3 |

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 Ft Huachuca (10)
 WSMR (2)
 Ft Carson (10)
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 LBAD (14)
 SAAD (30)
 TOAD (14)
 LEAD (7)
 ATAD (10)
 Gen Dep (2)
 Sig Sec Gen Dep (2)
 Sig Dep (5)
 Sig FLDMS (1)
 USAERDAA (1)
 USAERDAW (1)
 MAAG (1)
 USARMIS (1)
 Ft Richardson (ECOM of) (2)
 WRAMC (1)
 Units org under fol TOE:
 (1 cy each)
 11-158
 29-134
 29-136

NG: Rate AG (3)

USAR: None

For explanation of abbreviations used, see AR 310-50.

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|----------|------------|------------|-----------|
|----------|------------|------------|-----------|

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THE METRIC SYSTEM AND EQUIVALENTS

WEIGHT MEASURE

1 Centimeter = 10 Millimeters = 0.01 Meters = 0.3937 Inches
 1 Meter = 100 Centimeters = 1000 Millimeters = 39.37 Inches
 1 Kilometer = 1000 Meters = 0.621 Miles

WEIGHTS

1 Gram = 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces
 1 Kilogram = 1000 Grams = 2.2 lb.
 1 Metric Ton = 1000 Kilograms = 1 Megagram = 1.1 Short Tons

LIQUID MEASURE

1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces
 1 Liter = 1000 Milliliters = 33.82 Fluid Ounces

SQUARE MEASURE

1 Sq. Centimeter = 100 Sq. Millimeters = 0.155 Sq. Inches
 1 Sq. Meter = 10,000 Sq. Centimeters = 10.76 Sq. Feet
 1 Sq. Kilometer = 1,000,000 Sq. Meters = 0.386 Sq. Miles

CUBIC MEASURE

1 Cu. Centimeter = 1000 Cu. Millimeters = 0.06 Cu. Inches
 1 Cu. Meter = 1,000,000 Cu. Centimeters = 35.31 Cu. Feet

TEMPERATURE

$5/9(^{\circ}\text{F} - 32) = ^{\circ}\text{C}$
 212° Fahrenheit is equivalent to 100° Celsius
 90° Fahrenheit is equivalent to 32.2° Celsius
 32° Fahrenheit is equivalent to 0° Celsius
 $9/5^{\circ}\text{C} + 32 = ^{\circ}\text{F}$

APPROXIMATE CONVERSION FACTORS

| TO CHANGE | TO | MULTIPLY BY |
|------------------------|----------------------|-------------|
| Inches | Centimeters | 2.540 |
| Feet | Meters | 0.305 |
| Yards | Meters | 0.914 |
| Miles | Kilometers | 1.609 |
| Square Inches | Square Centimeters | 6.451 |
| Square Feet | Square Meters | 0.093 |
| Square Yards | Square Meters | 0.836 |
| Square Miles | Square Kilometers | 2.590 |
| Acres | Square Hectometers | 0.405 |
| Cubic Feet | Cubic Meters | 0.028 |
| Cubic Yards | Cubic Meters | 0.765 |
| Fluid Ounces | Milliliters | 29.573 |
| its | Liters | 0.473 |
| arts | Liters | 0.946 |
| allons | Liters | 3.785 |
| Ounces | Grams | 28.349 |
| Pounds | Kilograms | 0.454 |
| Short Tons | Metric Tons | 0.907 |
| Pound-Feet | Newton-Meters | 1.356 |
| Pounds per Square Inch | Kilopascals | 6.895 |
| Miles per Gallon | Kilometers per Liter | 0.425 |
| Miles per Hour | Kilometers per Hour | 1.609 |

| TO CHANGE | TO | MULTIPLY BY |
|--------------------|------------------------|-------------|
| Centimeters | Inches | 0.394 |
| Meters | Feet | 3.280 |
| Meters | Yards | 1.094 |
| Kilometers | Miles | 0.621 |
| Square Centimeters | Square Inches | 0.155 |
| Square Meters | Square Feet | 10.764 |
| Square Meters | Square Yards | 1.196 |
| Square Kilometers | Square Miles | 0.386 |
| Square Hectometers | Acres | 2.471 |
| Cubic Meters | Cubic Feet | 35.315 |
| Cubic Meters | Cubic Yards | 1.308 |
| Milliliters | Fluid Ounces | 0.034 |
| Liters | Pints | 2.113 |
| Liters | Quarts | 1.057 |
| ers | Gallons | 0.264 |
| ms | Ounces | 0.035 |
| ograms | Pounds | 2.205 |
| Metric Tons | Short Tons | 1.102 |
| Newton-Meters | Pounds-Feet | 0.738 |
| Kilopascals | Pounds per Square Inch | 0.145 |
| ometers per Liter | Miles per Gallon | 2.354 |
| ometers per Hour | Miles per Hour | 0.621 |



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