TECHNICAL MANUAL

DIRECT SUPPORT MAINTENANCE MANUAL INCLUDING REPAIR PARTS LIST

FOR

**TEST SET, ELECTRICAL CIRCUIT,
BOMB DISPENSER: A/E 24T-79
(NSN 4925-00-915-5735)**

This copy is a reprint which includes current pages from Change 1.

H E A D Q U A R T E R S , D E P A R T M E N T O F T H E A R M Y
MARCH 1975

WARNING

Methylethylketone is extremely harmful and volatile. Avoid inhaling vapors or exposing skin to liquid. Use only in a well-ventilated area.

CHANGE

NO. 1

HEADQUARTERS,
DEPARTMENT OF THE ARMY
WASHINGTON, DC, 25 February 1977

Direct Support Maintenance Manual
(including Repair Parts List):
TEST SET, ELECTRICAL CIRCUIT, BOMB
DISPENSER: A/E 24T-79 (NSN 4925-00-915-5735)

TM 9-4925-227-30, 31 March 1975, is changed as follows:

1. Remove old pages and insert new pages as indicated below. New or changed material is indicated by a vertical bar in the margin of the page. Added or revised illustrations are indicated by a vertical bar adjacent to the identification number.

Remove pages	Insert pages
1-1 and 1-2	1-1 and 1-2
2-1 and 2-2	2-1 and 2-2
A-1 and A-2	A-1 and A-2
B-1 through B-4	B-1 through B-4

2. File this change sheet in front of the publication for reference purposes.

By Order of the Secretary of the Army:

BERNARD W. ROGERS
General, United States Army
Chief of Staff

Official:

PAUL T. SMITH
Major General, United States Army
The Adjutant General

Distribution:
To be distributed in accordance with DA Form 12-40, Direct and General Support maintenance requirements for Mine Dispersing Subsystem.

TECHNICAL MANUAL

No. 9-4925-227-30

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, *31 March 1975*

DIRECT SUPPORT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS LIST)

FOR

TEST SET, ELECTRICAL CIRCUIT, BOMB DISPENSER: A/E 24T-79 (NSN 4925-00-915-5735)

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CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope

a. This manual is for use by direct support (DS) personnel responsible for the maintenance of the Test Set, Electrical Circuit, Bomb Dispenser: A/E 24T-79. It contains information on the care, handling, inspection, testing, and maintenance of the test set. This publication also contains a repair parts list.

b. The maintenance instructions in this publication are intended for maintenance specialists who have been thoroughly trained in maintenance practices.

c. The lowest maintenance level assigned responsibility to repair this test set and its support equipment (other than minor repairs) is on the DS level (designated TOE 29 series). When DS repair companies are not available, or when there is more work than can be accomplished by DS personnel in the allotted time, General Support (GS) personnel will perform the functions specified for DS personnel.

1-2. Forms, Records, and Reports

a. General. Department of the Army Maintenance forms and reporting procedures are prescribed in TM 38-750. Accidents involving injury to personnel or damage to materiel will be reported on DA Form 285 (Accident Report) in accordance with AR 385-40. All shipments received in damaged or otherwise unsatisfactory condition because of deficiencies in preservation, packaging, marking, storage, or handling shall be reported on DD Form 6 (Report of Packaging and Handling Deficiencies) in accordance with AR 700-58. Reports of improper shipment or damage caused by transportation discrepancies shall be reported on SF 361 (Discrepancy in Shipment Report) in accordance with AR 55-38.

b. Reporting of Errors. 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 Blank Forms) and forwarded direct to Commander, Picatinny Arsenal, ATTN: SARPA-AD-M-F, Dover, NJ 07801.

Section II. DESCRIPTION AND DATA

1-3. Description

a. Use. The Bomb Dispenser Electrical Circuit Test Set A/E 24T-79, as used with the Aircraft Mine Dispersing Subsystem M56, is utilized to test the resistance of the ejection cartridge M198, the continuity of the dispenser SUU-13D/A circuitry, and the dispenser RADHAZ filter circuit.

b. General. The test set (fig. 1-1) consists of a battery operated Simpson Ohmmeter, Model 362, or its equivalent, in conjunction with a test set switch (referred to in the text of this manual as a 48-position test set switch) (see 16, fig. B-2), an electrical connector (5, fig. B-1), and a fourposition selector switch, all mounted on the test set panel (1, fig. B-l). The test set panel is mounted in a moisture-proof, aluminum case (fig. B-3), which also contains two test cables (fig. B-4 and B-5).

(1) The 48-position test set switch provides for electrical connections with the cartridge to be tested (figs. 1-2 and B-1). (Only 40 positions on the switch are used.)

(2) The four-position selector switch (figs. 1-1 and B-1) allows for the choice of two resistance ranges, a meter adjustment setting, and an OFF setting. The high resistance range measures resistances up to 25 ohms; the low resistance range measures resistances up to 5 ohms. The meter ADJUST position (fig. B-1) is used for adjustment of the ohmmeter pointer. The input power for operation of the test set is from one self-contained, 1.5 volt type "C" dry cell battery.

(3) There are two test cable assemblies:

(a) The cable assembly (fig. B-4) contains 41 wires and has pin connectors at each end.

(b) The test set accessory cable (fig. B-5) is a two-wire cable with a 55-socket connector at one end and two test probes at the other end. Pin

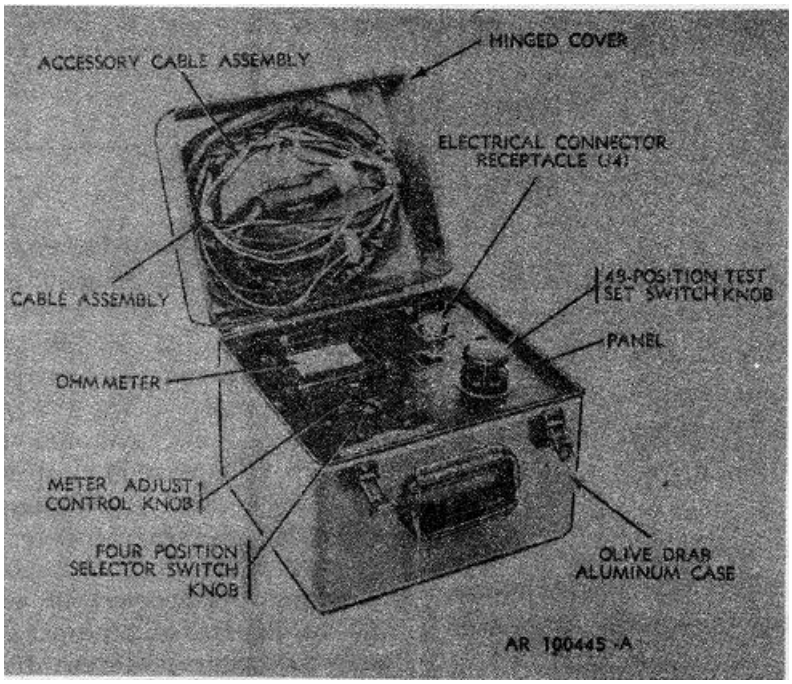

Figure 1-1. Test set, electrical circuit, bomb dispenser; A/E 24T-79.

D of the connector is wired to the red probe and pin BB is wired to the black probe.

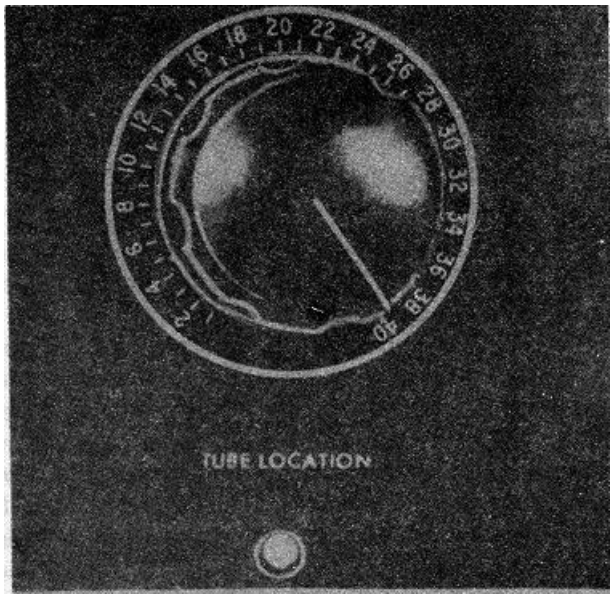

Figure 1-2. Knob and dial for the 48-position test set switch.

NOTE

Refer to TM 9-1345-201-30&P for use of the test cables.

1-4. Tabulated Data

Test Set, Electrical Circuit, Bomb Dispenser:
A/E 24T-79:

Dimensions:
Outside Case Size:
Length .....12-3/4 in.
Width.....10-1/2 in.
Height.....10-7/8 in.

Panel:
Length .....12 in.
Width.....0.125-in.stock aluminum
Height.....9-5/8 in.
Paint Olive drab (Federal Std 595)

CHAPTER 2
DIRECT SUPPORT MAINTENANCE INSTRUCTIONS

Section I. FUNCTIONING OF EQUIPMENT

2-1. General

a. The test set A/E 24T-79 is used for testing the resistance and continuity of the 40 ejection cartridge firing circuits of the Aircraft Mine Dispersing Subsystem M56. The various hookups of the cables are illustrated in figure 2-1 through 2-4.

b. This calibration test plug (figs. 2-5 and 2-6) is used to check for proper functioning of the 48-position test set switch and the cable assembly (P/N 9209966) continuity and resistance.

c. Maintenance or repair of the test set is not authorized at Conventional Ammunition Ordnance Companies or Ammunition Sections of Supply and Support Battalions other than adjustment (para 2-5) of the meter.

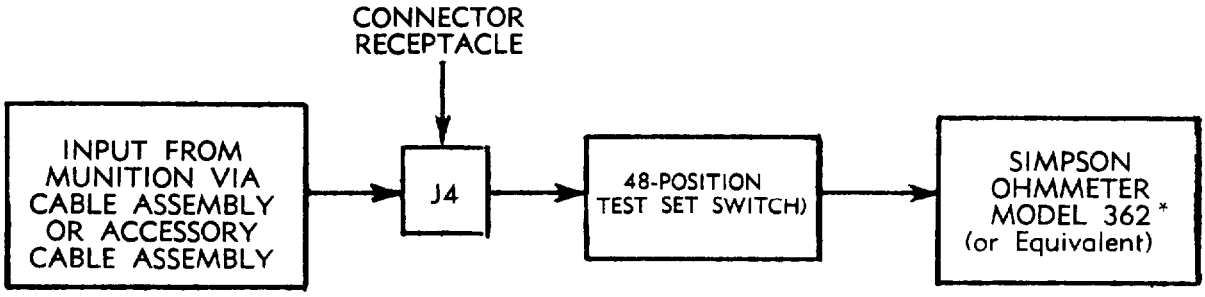

Figure 2-1. Functional block diagram of A/E 24T-79 test set connected to the munition.

Section II. OPERATIONAL TESTS

2-2. Scope

This section includes standard checks, tests, and adjustments performed on the test set A/E 24T-79. The procedures given can be used to determine the serviceability of the equipment, to adjust the ohmmeter for use, or to determine malfunctions (para 2-8 and table 2-2).

2-3. Inspection

Inspect the test set and test cables for:

a. Missing, broken, or jammed knobs. Knobs should be secure, alined with markings, and able to rotate easily.

b. Cracked, dented, or warped case.

c. Missing test cable or accessory cable assemblies.

2-4. Ohmmeter Calibration

The ohmmeter must be recalibrated every 100 to 180 days (as locally directed), when the last calibration date is unknown, or when the test set has been handled roughly.

2-5. Meter Adjustment

a. To prevent erroneous readings, the meter adjustment must be performed in temperatures that approximate the ambient temperatures found during the use of the test set.

b. Perform meter adjustment as follows:

(1) Turn the four position selector switch to ADJUST (fig. 1-1)

(2) Aline meter pointer with the ADJUST line on the meter by turning the meter adjustment control knob (fig. 1-1).

NOTE

Test leads are not shorted to make pointer adjustment.

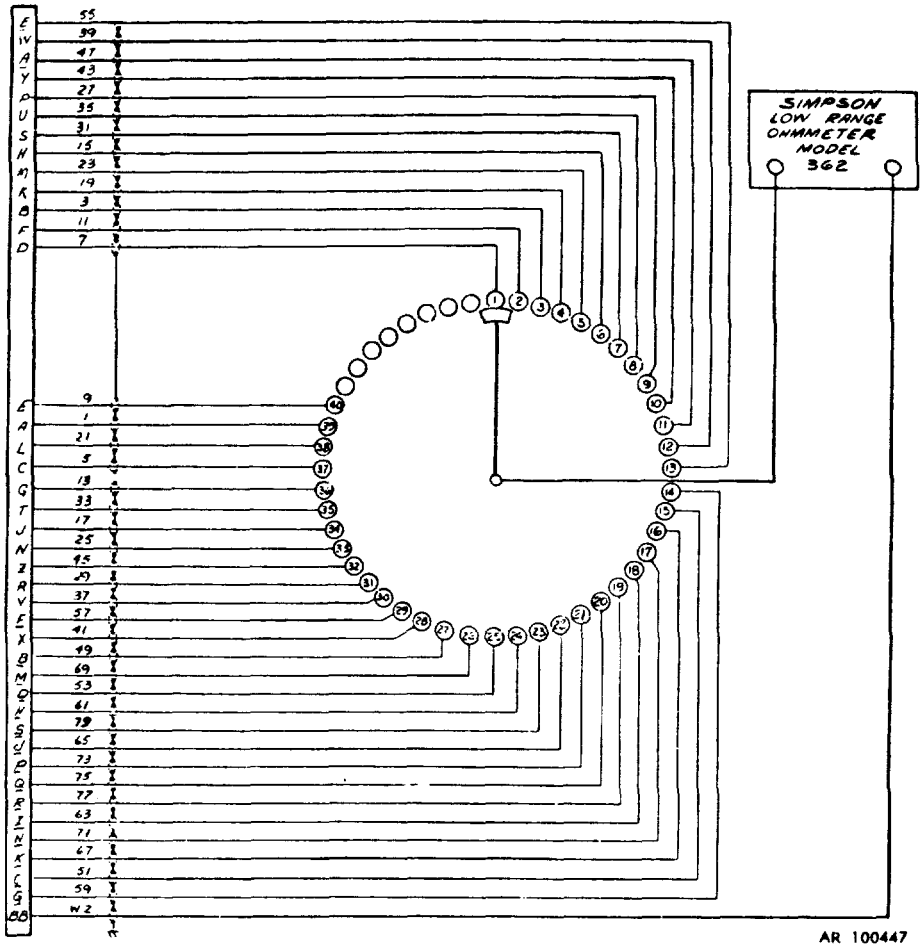

Figure 2-2. Schematic diagram of the bomb dispenser electrical circuit test set A/E 24T-79.

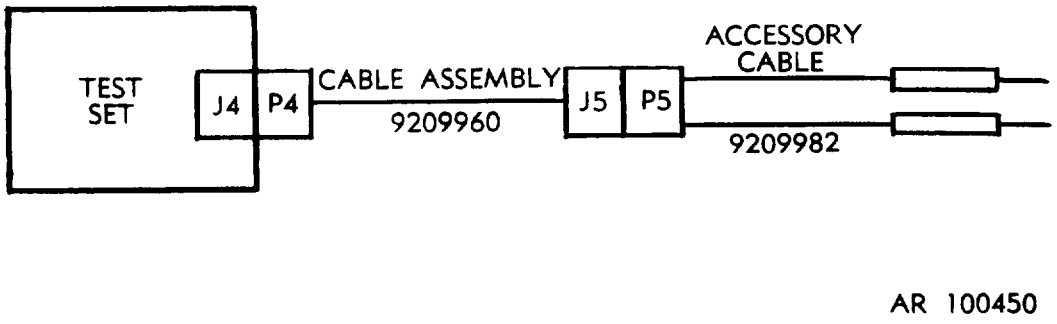

Figure 2-3. Test set arrangement for testing dispenser circuitry continuity and ejection cartridge resistance.

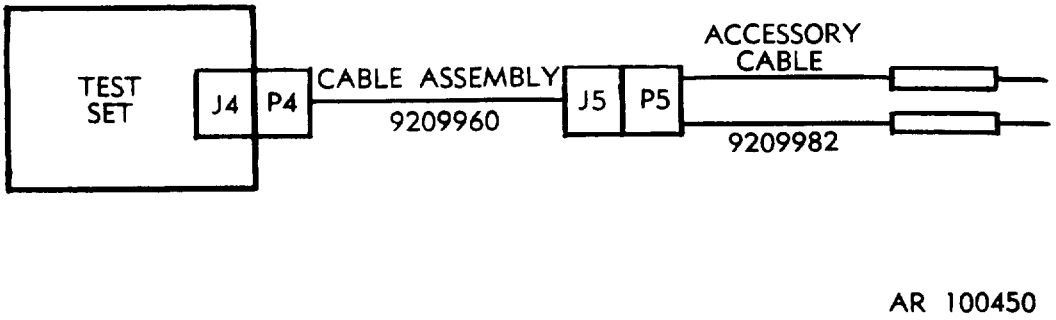

Figure 2-4. Test set-up for general continuity and resistance tests.

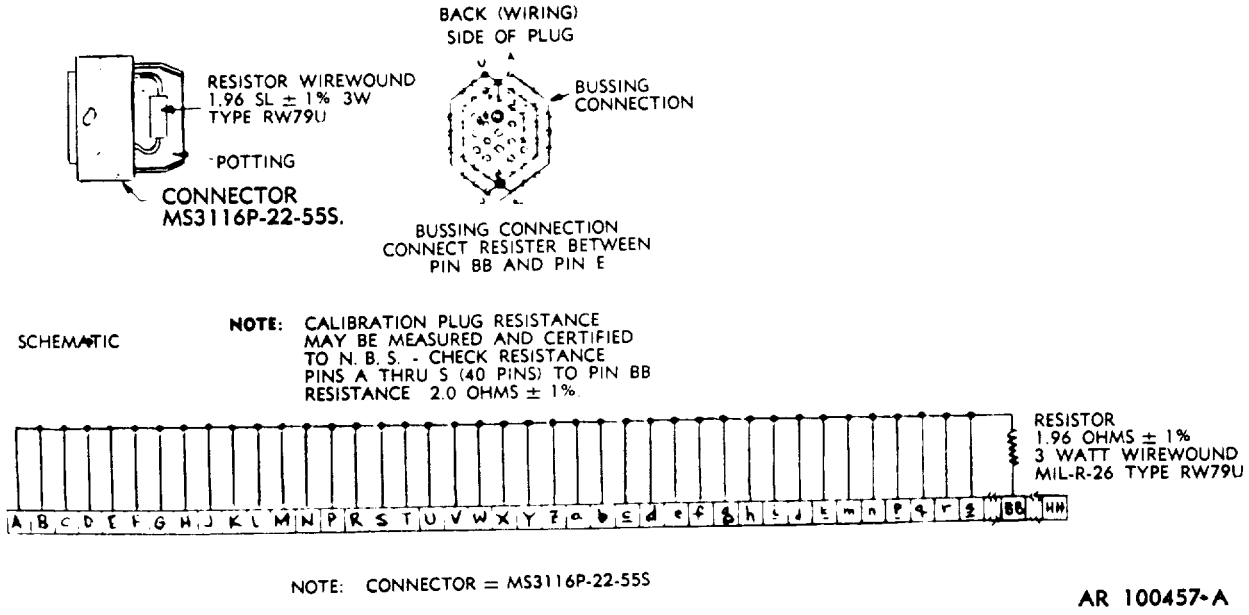

Figure 2-5. Calibration test plug.

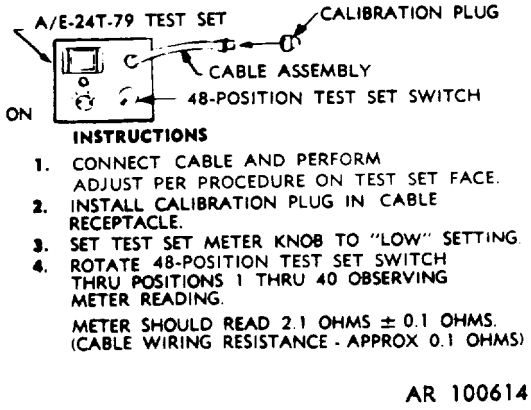

Figure 2-6. Application of calibration test plug.

Figure 2-7. Continuity and resistance testing of test set wiring.

2-6. Continuity and Resistance Tests for Test Set Wiring

The test set and cable assembly are tested together (fig. 2-7). The ohmmeter must have been adjusted in accordance with procedures outlined in paragraph 2-5b.

a. Connect test cable assembly plug P4 to test set receptacle J4.

b. Connect calibration plug to receptacle J5 of the cable assembly.

c. Adjust test set function switch to LOW position.

d. Determine the resistance in each of the 40 circuits by turning the knob for the 48-position test set switch and observing the ohmmeter readings.

e. In all cases, the resistance should be 2.1 ohms+0.1 ohm. If not, refer to table 2-1 (Continuity) and table 2-2 (Troubleshooting) to determine the cause and location of the fault.

Table 2-1. Continuity

TEST SET switch	Readings from BB to	TEST SET switch	Readings from BB to	TEST SET switch	Readings from BB to	TEST SET switch	Readings from BB to
1	D	11	a	21	P	31	R
2	F	12	W	22	j	32	Z
3	B	13	e	23	s	33	N
4	K	14	g	24	h	34	J

Table 2-1. Continued

TEST SET switch	Readings from BB to	TEST SET switch	Readings from BB to	TEST SET switch	Readings from BB to	TEST SET switch	Readings from BB to
5	M	15	c	25	d	35	T
6	H	16	k	26	m	36	G
7	S	17	n	27	b	37	C
8	U	18	i	28	X	38	L
9	p	19	r	29	f	39	A
10	Y	20	q	30	V	40	E

2-7. Test Set Cable Assembly and Accessory Cable

Check test cable and accessory cable assemblies for continuity and resistance. The resistance across any circuit should be 0.1 ohms. Inspect connectors for bent or broken pins.

a. Cable Assembly. Using an ohmmeter, check the resistance in the cable by touching ohmmeter (not A/E 24T-79 ohmmeter) leads to corresponding pins at each end of the cable (e.g., A and A).

b. Accessory Cable. There are three steps required when testing the accessory cable assembly for continuity. First, test for continuity between pin D of plug P5 and the red test probe. Second, test for continuity between Pin BB and the black test probe. Third, assure that the cable has not shorted out by testing for continuity between the test probes.

Section III. TROUBLESHOOTING

2-8. Scope

a. This section contains instructions for isolating and correcting most malfunctions of the test set. Table 2-2 lists malfunctions, probable causes, and remedial actions. For any observed malfunction, inspect or test the equipment for the presence of the suggested causes, in the order given, and correct as suggested or as is found necessary.

b. Although this manual cannot list all possible malfunctions, tests, inspections, or corrective actions, reasonable completeness is desired. If a malfunction is discovered which is not listed or whose solution is not obvious or corrected by the listed remedial actions, report the deficiency to Commander, Picatinny Arsenal, SARPA-AD-M-C, Dover, NJ 07801, on DA Form 2028, in accordance with TM 38-750.

NOTE

Before using this table, be sure all normal operational tests have been conducted (section II).

Table 2-2. Field Maintenance Troubleshooting Procedures

Trouble	Probable cause	Corrective action
1. Ohmmeter needle fails to deflect (approx. full-scale) when functions switch is turned to "ADJUST, HIGH or LOW" position (without test cable and calibration plug connected)	*a.* Battery missing.. *b.* Defective battery. *c.* Defective ohmmeter.	*a.* Install battery *b.* Replace battery. *c.* Replace ohmmeter.
2. Ohmmeter shows no resistance reading in one or several of the 48-position test set switch locations (with test cable and calibration plug connected).	*a.* No electrical continuity from ohmmeter to test set connector J4 due to broken wire, pin or solder joints. *b.* No electrical continuity from ohmmeter to 48-position test set switch due to broken wire, pin or solder joints. *c.* No electrical continuity from 48-position test set switch to test set connector J4 due to broken wires, pins or solder joints. *d.* Electrical continuity failure in cable assembly. *e.* Defective 48-position test set switch. *f.* Defective calibration plug (fig. 2-5).	*a.* Inspect and correct as required. *b.* Inspect and correct as required. *c.* Inspect and correct as required. *d.* Replace cable assembly. e. Replace switch. *f.* Replace calibration plug.
3. Ohmmeter shows resistance less than 1.9 or greater than 2.1 ohms in any position of the 48-position test set switch knob.	*a.* Defective calibration plug (fig. 2-5). *b.* Defective cable assembly (short circuit between cables).	*a.* Replace calibration plug. *b.* Replace cable assembly.
4. Test set accessory cable continuity failure.	*a.* Defective test set accessory cable (due to lack of continuity between pin D of connector and red probe or between pin BB and black test probe. *b.* Defective cable assembly. *c.* Defective test set circuit.	*a.* Replace test set accessory cable. *b.* Replace cable assembly. *c.* Repeat trouble procedure #2 (above).

Section IV. DIRECT SUPPORT MAINTENANCE

2-9. Scope

This section includes instructions for overhauling and repairing the test set A/E 24T-79. See paragraph 2-13 for repairs requiring the disassembly of the test set. No special tools are required.

2-10. Replacement of Parts

The replacement of unserviceable or defective components is authorized when no specific corrective measure is given in table 2-2 or below. For example, the replacement of control knobs is authorized.

2-11. Repairing Broken Wires and Defective Solder Connections

Repair broken wires and defective circuits according to the following standards:

a. Soldering shall be performed in accordance with MIL-S-6872B.

b. Replace defective wires with wires of the same gage and same color code.

c. Replace damaged or cut lacing with lacing twine, MIL-T-731, Type P, Class 2, or equivalent.

d. Replace insulating tubing with same size tubing, MIL-I-7444, or equivalent.

2-12. Repairing Cable Assembly and Accessory cable

The only authorized repair of test or accessory cable assemblies involves the straightening and realining of bent connector pins. If wires or connector pins are broken, the cable shall be replaced. Use a socket pin to straighten bent pins.

2-13. Repairs Requiring Disassembly

a. General. Paragraphs 2-13*b, c, d, f, g,* and *h* involve inspections, maintenance, and repairs that require the disassembly of the test set. Perform the basic disassembly as follows:

(1) Position the electrical circuit test set so that the panel faces up.

(2) Remove the six outermost mounting screws and flat washers from the test set panel (4 and 5, fig. B-2).

(3) Lift test set panel assembly out of the case and place it on a clean work bench.

b. Visual Inspection.

(1) Inspect wiring and cables for corrosion, breaks, defective insulation, and defective solder connections.

(2) Inspect components for the following: (a) Defective solder connections.

(b) Loose mounting.

(c) Breaks or corrosion.

c. Electrical Inspection.

Switches and connectors that are suspected of being defective shall be checked for continuity. If necessary, isolate the components being tested by unsoldering the leads.

d. Cleaning.

WARNING

Methylethylketone is extremely harmful and volatile. Avoid inhaling vapors or exposing skin to liquid. Use only in well-ventilated area.

(1) Apply methylethylketone, specification TT-M-261, to all exposed electrical connections and contacts with a clean brush or cloth.

(2) After cleaning with methylethylketone, wipe all components with a clean, lint-free cloth.

e. Lubrication.

Lubrication is not needed.

f. Replacement of Ohmmeter Battery.

(1) Remove the four pan head machine screws (1, fig. B-2), with their washers and nuts (2 and 3, fig. B-2) from the meter shield frame (test set frame, 6, fig. B-1), on the face of the panel, and lift out the shield frame and the shield (19, fig. B-2).

(2) Remove the eight machine screws (1 and 9, fig. B-2), eight lock washers (2, fig. B-2) and eight nuts (3, fig. B-2) from can (14, fig. B-2), and lift out can.

(3) Remove the four screws from the back of the ohmmeter (13, fig. B-2), and lift cover.

NOTE

At this point the battery will be accessible. It is not necessary to separate the meter from the panel to replace the battery.

(4) Remove battery, clean battery terminals, and install new battery (fig. B-2).

(5) Reassemble ohmmeter by reversing above sequence.

g. Replacement of Ohmmeter.

Replace ohmmeter if it cannot be accurately calibrated.

(1) Remove shield frame and RF shield from face of test set in accordance with paragraph 2-13f.

(2) Remove can and two rubber pads (15, fig. B-2) in accordance with paragraph 2-13f(2).

(3) Place test set panel assembly face up on work bench.

(4) Remove ohmmeter knobs from face of test set panel by loosening the set screws.

NOTE

The ohmmeter is still attached to the test set panel by two wires.

(5) Separate the test set panel from the ohmmeter by raising the panel slightly.

(6) Disconnect the two wires from the ohmmeter by loosening the thumb screws.

(7) Remove the two extenders (11, fig. B-2) from the ohmmeter by loosening the set screws (12, fig. B-2).

(8) Lift the shaft seals (18, fig. B-2) out of the two knob shafts.

(9) To reassemble the test set with a new or repaired ohmmeter, reverse the above sequence. Assure that the two rubber pads (15, fig. B-2) are positioned at the shaft end of the ohmmeter.

h. Replacement of Defective 48-Position Test Set Switch.

(1) Unsolder all wires from switch.

(2) Loosen two set screws on side of knob (3, fig. B-1).

(3) Remove two binding head machine screws located on switch plate.

(4) Replace switch by reversing the above sequence.

2-14. Reassembly

Reverse the disassembly procedure (para 2-13 a).

APPENDIX A
REFERENCES

A-1. INDEX

Index of Administrative Publications ..... DA Pam 310-1
Index of Blank Forms ..... DA Pam 310-2
Index of Technical Manuals, Technical Bulletins, Supply Manuals (types 7, 8, and 9), Supply Bulletins, and Lubrication Orders ..... DA Pam 310-4
Index of Supply Catalogs and Supply Manuals (excluding types 7, 8, and 9) ..... DA Pam 310-6
Military Publications: US Army Equipment Index of Modification Work Orders ..... DA Pam 310-7

A-2. FORMS

Accident Report ..... DA Form 285
Recommended Changes to Publications and Blank Forms ..... DA Form 2028
Equipment Maintenance Log (Consolidated) ..... DA Form 2409
Report of Packaging or Handling Deficiencies ..... DD Form 6
Discrepancy in Shipment Report ..... SF 361

A-3. Regulations

Reporting of Transportation Discrepancies in Shipments ..... AR 55-38
Military Traffic Management Regulation ..... AR 55-355
Publications, Blank Forms, and Printing ..... AR 310-1
Dictionary of United States Army Terms ..... AR 310-25
Authorized Abbreviations and Brevity Codes ..... AR 310-50
Department of the Army Supplement to DOD 5200. 1-R (DODISPR) ..... AR 380-5
Accident Reporting and Records ..... AR 385-40
Packaging of Materiel ..... AR 700-15
Classification, Reclassification, Maintenance, Issuance and Reporting of Maintenance Training Aircraft ..... AR 700-42
Requisitioning, Receipt and Issue System ..... AR 725-50
Army Materiel Maintenance Concepts and Policies ..... AR 750-1
Defense Disposal Manual ..... DOD 4160.21 -M

A-4. Technical Bulletins

Calibration Requirements for the Maintenance of Army Materiel ..... TB 43-180

A-5. Technical Manuals

Use and Care of Handtools and Measuring Tools ..... TM 9-243
Direct Support Maintenance Manual (Including Repair Parts & Special Tools List) Mine Dispersing Subsystem, Aircraft: M56 (NSN 1345-00-313-1398) ..... TM 9-1345-201-30&P
Organizational, & Direct Support Maintenance Manual (Including Repair Parts & Special Tools List) for Dispenser Control Panel With Aircraft Wiring Harness (NSN 1345-00-143-6536) ..... TM 9-1345-207-23
Organizational, & Direct Support Maintenance Manual (Including Repair Parts List) for Test Set, Electrical Circuit, Bomb Dispenser: A/E 24T-80 (NSN 4925-00-339-1059) ..... TM 9-4925-228-23
Organizational & Direct Support Maintenance Manual (Including Repair Parts & Special Tools List)for Test Set Dispenser Control Panel (NSN 4925-00-143-4144) ..... TM 9-4925-229-23
Preservation, Packaging, and Packing of Military Supplies and Equipment, Preservation and Packaging (Volume I) ..... TM 38-230-1
Preservation, Packaging, and Packing of Military Supplies and Equipment, Packing (Volume II) ..... TM 38-230-2
The Army Maintenance Management Systems (TAMMS) ..... TM 38-750
Calibration Procedures for Impedance Equipment ..... *T.O. 33K2-4-1-2

A-6. Supply Catalogs

Federal Supply Catalog Identification List: Miscellaneous Hardware .....SC 5340-IL
FSC Group 81, Containers, Packaging, and Packing Supplies-Class 8140-Ammunition
Boxes, Packages, and Special Containers .....Pub Unit 91

*Copies may be obtained from Newark Air Force Base, Newark, Ohio.

APPENDIX B
DIRECT SUPPORT REPAIR PARTS LIST

Section I. INTRODUCTION

B-1. Scope

This appendix lists repair parts and special purpose test equipment required for performance of Direct Support maintenance of the Bomb Dispenser Electrical Circuit Test Set A/E 24T-79. (No special tools are required for this test set).

B-2. General

a. Section II of this appendix provides the list of repair parts authorized for use in the performance of maintenance. 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, with the parts in each group listed in figure and item number sequence. Bulk materials are listed in National Stock Number (NSN) sequence.

b. Section III of this appendix is the Special Purpose Test Equipment List.

B-3. Explanation of Columns

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

a. Illustration. This column is divided as follows:

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

(2) *Item number*. The number used to identify each item called out in the illustration.

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

(1) *Source code*. Source codes are assigned to support items to indicate the manner of acquiring support items for maintenance, repair, or overhaul of end items. Source codes are entered in the first and second positions of the Uniform SMR Code format as follows:

Code	*Definition*
PA	Item procured and stocked for anticipated or known usage.
PF	Support equipment which will not be stocked but which will be centrally procured on demand.

NOTE

Cannibalization or salvage may be used as a source of supply for any items source coded above, 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) The maintenance code entered in the third position will indicate the lowest maintenance level authorized to remove, replace, and use the support item. The maintenance code entered in the third position will indicate the following level of maintenance:

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

(b) 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). This position will contain the following maintenance code:

Code	*Application/Explanation*
Z	Nonreparable. No repair is authorized.

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

Recoverability Codes	*Definition*
Z	Nonreparable item. When unserviceable, condemn and dispose at the level indicated in position 3.

c. National Stock Number. Indicates the National stock number assigned to the item and will be used for requisitioning purposes.

d. Part Number. Indicates the primary number used by the manufacturer (individual company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications standards, and inspection requirements, to identify an item or range of items.

NOTE

When a stock numbered item is requisitioned, the repair part received may have a different part number than the part being replaced.

e. Federal Supply Code for Manufacturer (FSCM). The FSCM is a 5-digit numeric code listed in SB 708-42 which is used to identify the manufacturer, distributor, or Government agency, etc.

f. Description. Indicates the Federal item name and, if required, a minimum description to identify the item. Items that are included in kits are listed below the name of the kit with the quantity of each item in the kit indicated in the quantity incorporated in unit column.

g. Unit of Measure (U/M). Indicates the standard of the basic quantity of the listed item as 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.

h. Quantity Incorporated in Unit. Indicates the quantity of the item used in the breakout shown on the illustration figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column in lieu of quantity indicates that no specific quantity is applicable, (e.g., shims, spacers, etc.).

B-4. Abbreviations

AWG..... American Wire Gage
ed ..... cadmium
dia ..... diameter
hex ..... hexagon
i.d ..... inside diameter
in ..... inch
lg ..... long
mfg ..... manufacturing
o.d ..... outside diameter
pan hd..... panhead
phos ..... phosphor
pltd ..... plated
rd ..... round
S ..... steel
thk ..... thick
UNC ..... Unified National Coarse Thread
UNF . ..... Unified National Fine Thread

Section II. REPAIR PARTS LIST

(1) ILLUSTRATION (a) FIG NO.	(1) ILLUSTRATION (b) ITEM NO.	(2) SMR CODE	(3) FEDERAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION	(7) U/M	(8) QTY INC IN UNIT
			4925-00-915-5735	9209981 9209965		GROUP 01 -TEST SET, ELEC-TRICAL CIRCUIT, BOMB DISPENSER A/E 24T-79 0101 - TEST SET PANEL ASSEMBLY		
B-1	1	XAFF		9209970	19203	PANEL, TEST SET: Aluminum sheet; 12 in max. 1;9.63 in. max w., 0.125 in. thk.; color, black.	ea	1
B-1	2	PAFZZ	4925-00-604-7578	9209978	19203	DIAL,, TEST SET: Aluminum; 2.75 in. dia., 0.06 in. thk; graduate scale numbers 2 thru 40.	ea	1
B-1	3	PAFZZ	5355-01-013-3076	9209979	19203	KNOB: Bakelite; color, black; 2.03 in. dia, two set screws.	ea	1
B-1	4	PFFZZ	9905-0(-606-3522	9209980	19203	PLATE., IDENTIFICATION: Metal foil; adhesive back; black background; 4 in. l., 1.1 in. 2w.	ea	1
B-1	5	PAFZZ	5935-00-827-1547	MIS3112E-22-55SSS	96906	(CONNECTOR, RECEPTACLE ELECTRI-CAL: Mating end qty I, contact qty 55, contact max a.c. voltage 600 v., contact surface treatment gold plate over copper, connector locking bayonet pin.	ea	1
B-1	6	PFFZZ	4925-00-604-7570	9209975	19203	FRAME, TEST SET: Aluminum alloy; 5.4 in. 1.: 3 in. height.	ea	1
B-2	1	PAFZZ	5305-00-889-2999	MS35206-217	96906fi	SCREW, MACHINE: S, cd-pltd, panhd, No. 4- 32 UNC-2A x 0.500 in. lg.	ea	8
B-2	2	PAFZZ	5310-00-193-7577	MS35333-36	9690)6	WASHER, LOCK: S, cd-pltd, i.d. 0.112, o.d. 0.255, 0.018 thk.	ea	12
B-2	3	PAFZZ	5310-00-934-9739	MS35649-242	96fi906	NUT, PLAIN HEX: S, cd-pltd, No. 4-40 UNC-2B	ea	16

(1) ILLUSTRATION (a) FIG NO.	(1) ILLUSTRATION (b) ITEM NO.	(2) SMR CODE	(3) FEDERAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION	(7) U/M	(8) QTY INC IN UNIT
						GROUP 01 -TEST SET, ELECTRICAL CIRCUIT, BOMB DISPENSER A/E 24T-79-Continued		
						0101--TEST SET PANEL ASSEMBLY-Continued		
B-2	4	PAFZZ	5305-00-995-3444	MS35207-266	96906	SCREW, MACHINE: pan-hd, S, cd-pltd, No. 10-32 UNF-2A x 0.875	ea	16
B-2	5	PAFZZ	5310-00-809-8546	MS27183-8	96906	WASHER, FLAT: S, cd-pltd, 0.190 in. i.d., 0.437 in. o.d., 0.036 in. thk, rd-shaped.	ea	6
B-2	6	PAFZZ	5305-00-889-2997	MS35206-215	96906	SCREW, MACHINE, PAN HEAD: S, cd-pltd, No. 4-32 UNC-2A x 0.375	ea	4
B-2	7	PAFZZ	5940-00-156-7345	MS77067-2	96906	TERMINAL, LUG: phos bronze, No. 2, screw size No. 6 hole dia 0.153, AWG 12 to 20	ea	4
B-2	8	PAFZZ	5310-00-559-0070	MS35333-38	96906	WASHER, LOCK: S, 0.176fii.d., 0.340 o.d., 0.023 thk.	ea	4
B-2	9	PAFZZ	5305-00-597-6264	MS35190-225	96906	SCREW, MACHINE: S, cd-pltd, fl-csk-hd, No. 4-40-UNC-2A x 0.500 in lg.	ea	4
B-2	10	PFFZZ	4925-01-005-2821	9209969	19203	COVER: Aluminum sheet, 7 in. 1., 4.2 w., 0.125 in thk.	ea	1
B-2	11	PFFZZ	4925-00-604-7529	9209971	19203	EXTENDER, OHMMETER SWITCH: Steel bar, 1.3 in. 0/a 0.76 in. large diameter, 0.52 in. hd, height, 0.25 in. shaft diameter.	ea	2
B-2	12	PAFZZ	5305-00-226-6956	MS51973-29	96906	SET-SCREW: (attaching hardware) alloy S, cd-pltd, 32 UNC-3A x 0.250.	ea	2
B-2	13	PAFZZ	6625-00-815-8523	920996fi7	19203	OHMMETER: (Model 362, mfd by 55026)	ea	1
B-2	14	XBFZZ	9209968	19203		CAN, TEST SET: Aluminum sheet, 7.1 in. 1., 3 in. h., 4.3 in. w.	ea	1
B-2	15	PFFZZ	4925-00-604-7553	9209973	19203	PAD, TEST SET: Cellular rubber, 1.8 in. 1., 0.8 in. w., 0.6 in. thk.	ea	2
B-2	16	PFFZZ	4925-00-604-7574	9209977	19203	SWITCH, TEST SET, SINGLE POLE: (mfg part No.1 13-DM-40, mfd by 17870).	ea	1
B-2	17	PAFZZ	5305-00-889-3002	MS35206-242	96906	SCREW, MACHINE : (attaching hardware) carbon S, cd-pltd, No. 8-32 UNC-2A x 0.312.	ea	2
B-2	18	PFFZZ	4925-00-604-7531	9209972	19203	SEAL, SHAFT: Wire mesh, 0.7 in. o.d. 0.16 in.i.d.,0.2 in. thk.	ea	3
B-2	19	PAFZZ	4925-00-604-7554	9209974	19203	SHIELD, TEST SET: Wire mesh, plexiglas and foil imbedded in polastrip frame, 4 in. 1., 3 in. w, 0.3 in. thk, mfg part No. POLA-V V, (mfd by 12881).	ea	1
						0102-CASE, TEST SET:		
B-3	-	PFFZZ	4925-00-606-3521	9209985	19203	Aluminum with neoprene gaskets.	ea	1
						GROUP 02-CABLE ASSEMBLY, TEST SET:		
B-4	-	PAFZZ	6625-00-137-8288	9209966	19203	48 in. l., consists of electrical plug connectors, wire, and cable sleeving.	ea	1
						GROUP 03-TEST SET ACCESSORY CABLE:		
B-5	-	PAFZZ	6625-00-137-8287	9209982	19203	10 ft o/a. l., electrical connector, test probes.	ea	1

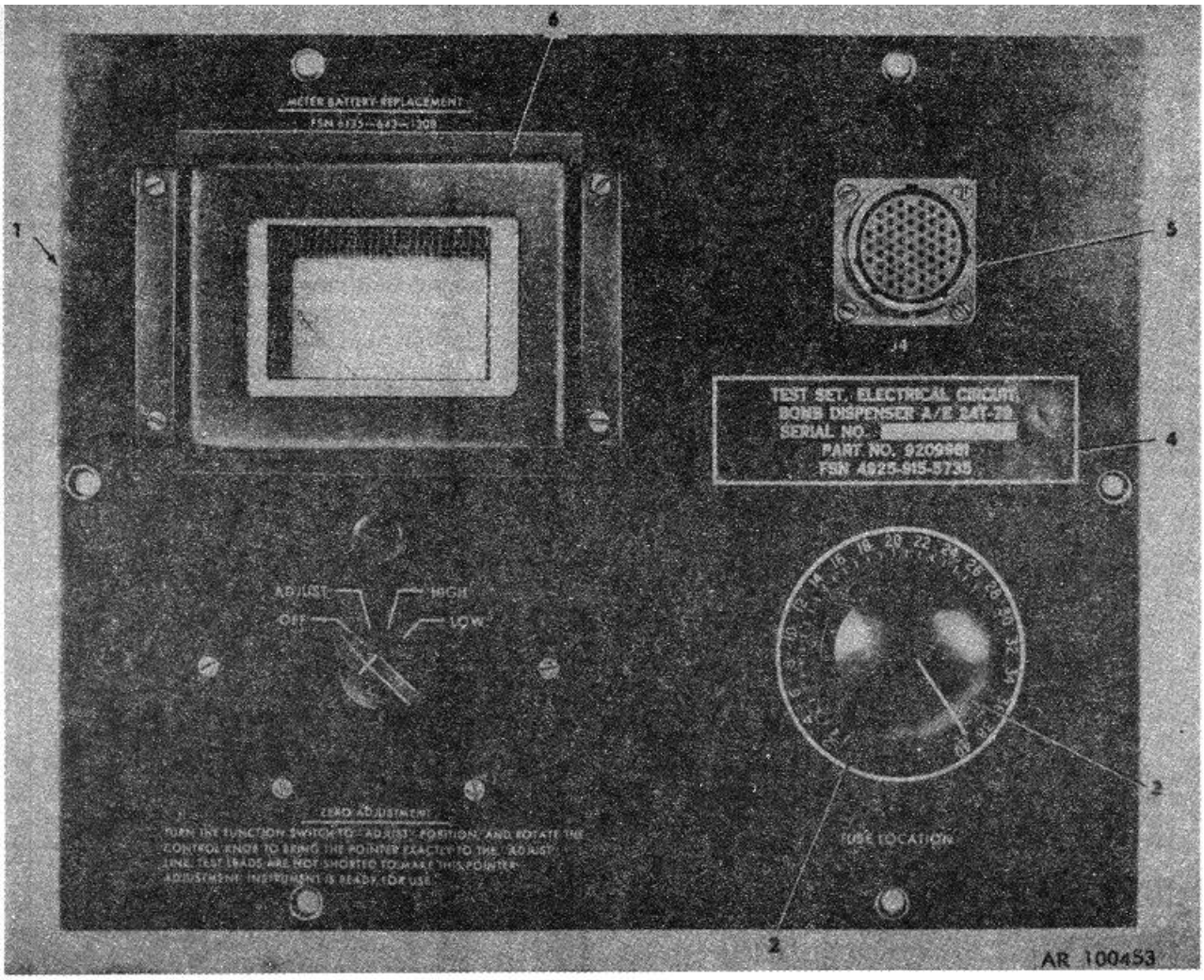

Figure B-1. Test set, electrical circuit, bomb dispenser: A/E 24T-79.

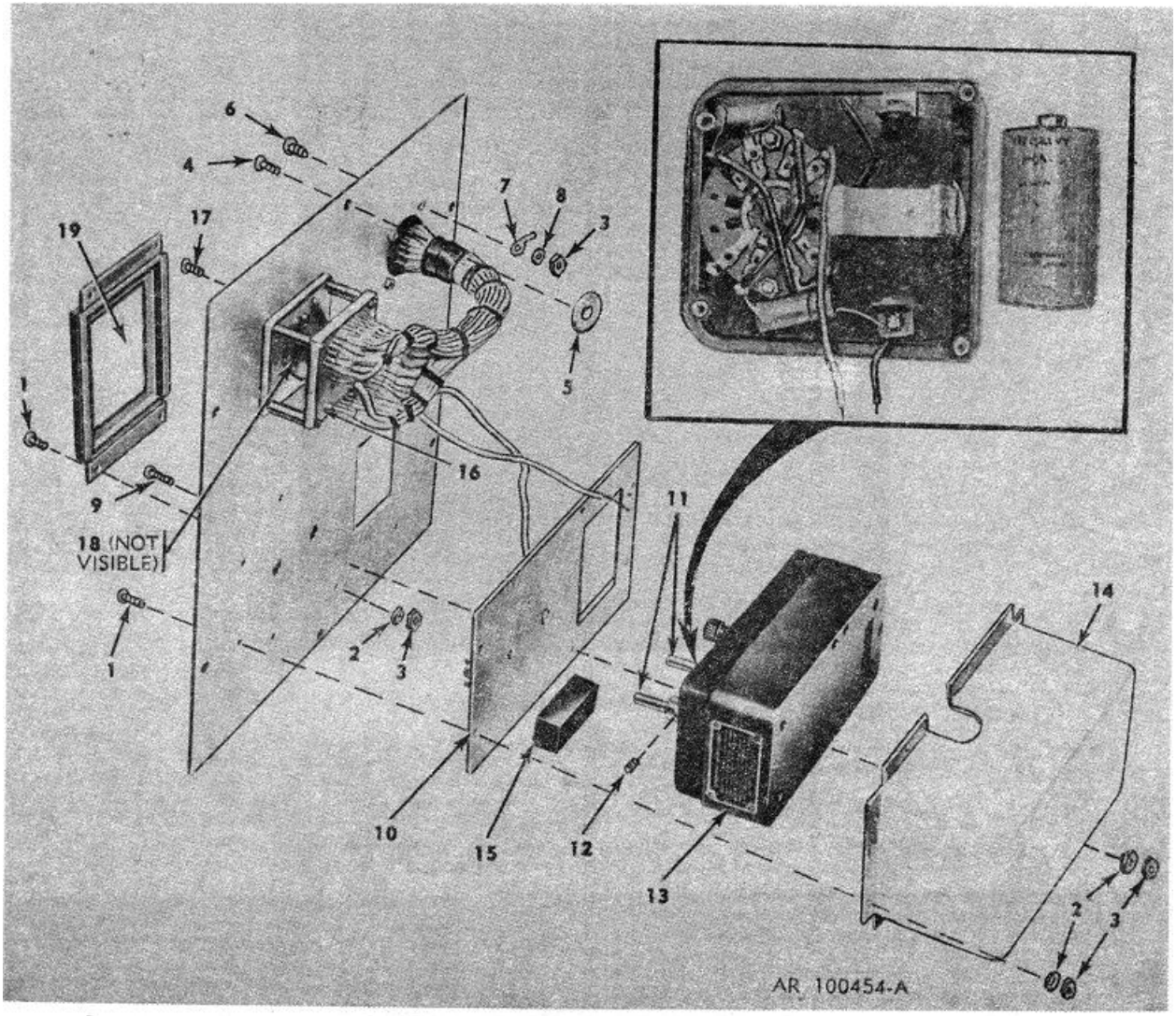

Figure B-2. Test set panel.

Section III. SPECIAL PURPOSE TEST EQUIPMENT LIST

B-5. Test Equipment List

Test equipment used with the test set is listed in table B-1.

Table B-1. Test Equipment

Type designation	Alternate type designation or equipment	Nomenclature	Use
4925-00-370-3566	.....	Calibration plug	Table 2-2

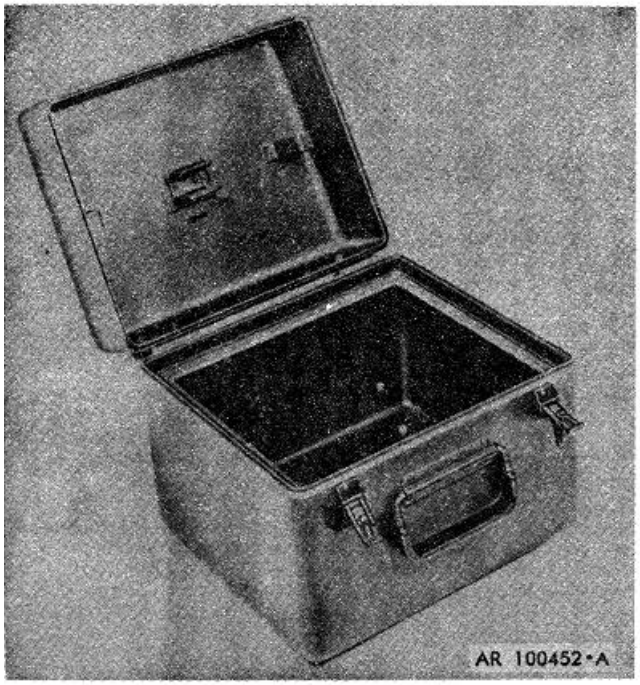

Figure B-3. Test set case.

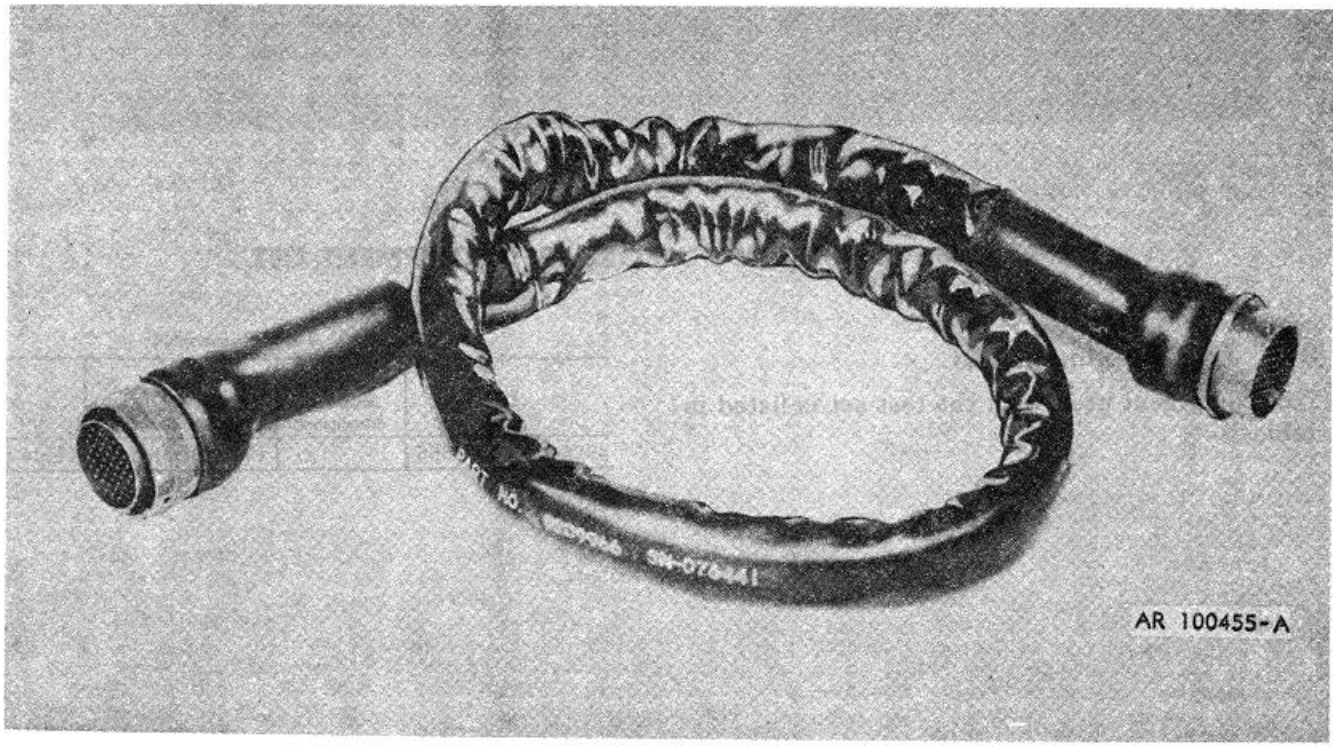

Figure B-4. Test set cable assembly.

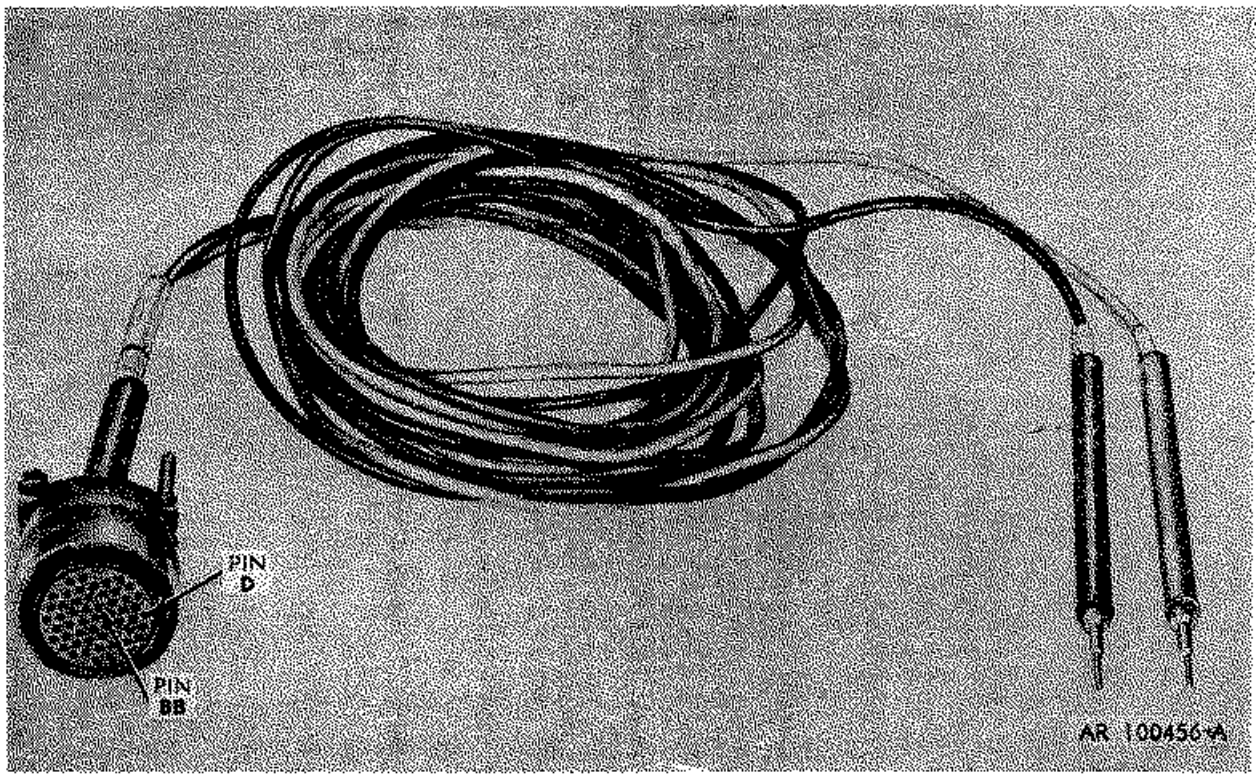

Figure B-5. Test set accessory cable.

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FRED C. WEYAND
General, United States Army
Chief of Staff

Official:

VERNE L. BOWERS
Major General, United States Army
The Adjutant General

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The Metric System and Equivalents

Linear Measure

1 centimeter = 10 millimeters = .39 inch
1 decimeter = 10 centimeters = 3.94 inches
1 meter = 10 decimeters = 39.37 inches
1 dekameter = 10 meters = 32.8 feet
1 hectometer = 10 dekameters = 328.08 feet
1 kilometer = 10 hectometers = 3,280.8 feet

Weights

1 centigram = 10 milligrams = .15 grain
1 decigram = 10 centigrams = 1.54 grains
1 gram = 10 decigram = .035 ounce
1 decagram = 10 grams = .35 ounce
1 hectogram = 10 decagrams = 3.52 ounces
1 kilogram = 10 hectograms = 2.2 pounds
1 quintal = 100 kilograms = 220.46 pounds
1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

1 centiliter = 10 milliters = .34 fl. ounce
1 deciliter = 10 centiliters = 3.38 fl. ounces
1 liter = 10 deciliters = 33.81 fl. ounces
1 dekaliter = 10 liters = 2.64 gallons
1 hectoliter = 10 dekaliters = 26.42 gallons
1 kiloliter = 10 hectoliters = 264.18 gallons

Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches
1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

Approximate Conversion Factors

To change	*To*	*Multiply by*	*To change*	*To*	*Multiply by*
inches	centimeters	2.540	ounce-inches	Newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29,573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	Newton-meters	1.356	metric tons	short tons	1.102
pound-inches	Newton-meters	.11296			

Temperature (Exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

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