TECHNICAL MANUAL

OPERATOR'S AND ORGANIZATIONAL MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS

TEST SET, CONVERTER SUBASSEMBLY-VIDEO CONVERTER AN/AAM-35

This copy is a reprint which includes current pages from Changes 1 through 3.

HEADQUARTERS, DEPARTMENT OF THE ARMY

JULY 1970

WARNING

DEATH or SERIOUS INJURY may result from hazards in this equipment. READ and OBSERVE the following warnings.

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WARNING

The fumes of trichloroethane are toxic. Provide thorough ventilation whenever used. DO NOT use near an open flame. Trichloroethane is not flammable, but exposure of the fumes to an open flame converts the fumes to highly toxic, dangerous gases.

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HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, *2 July 1970*

Operator's and Organizational Maintenance Manual
Including Repair Parts and Special Tools Lists
TEST SET, CONVERTER SUBASSEMBLY-VIDEO CONVERTER
AN/AAM-35
(NSN 6625-00-403-1064)

LIST OF TABLES

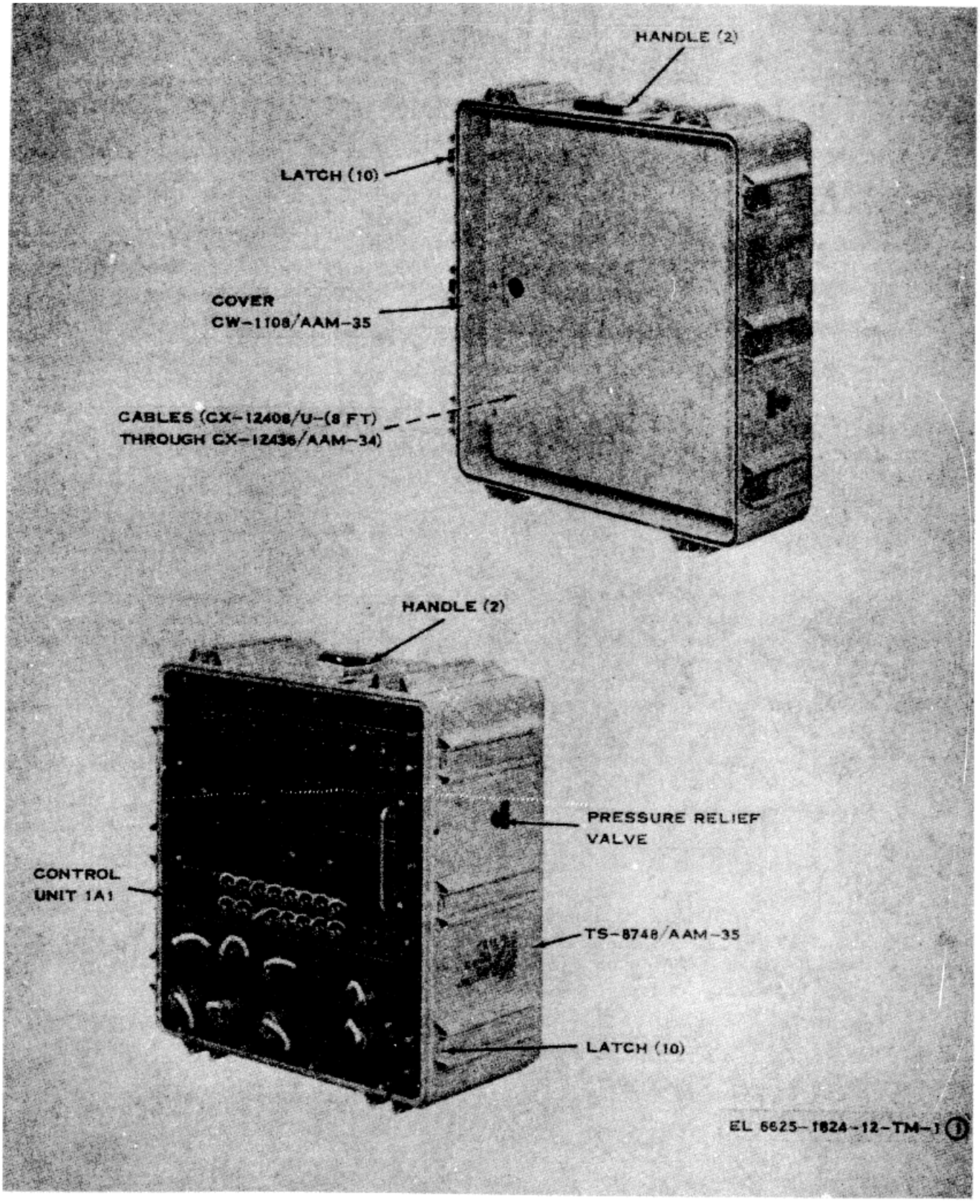

Figure 1-1 Test Set, Converter Subassembly-
Video Converter AN/AAM-35
(part 1 of 3)

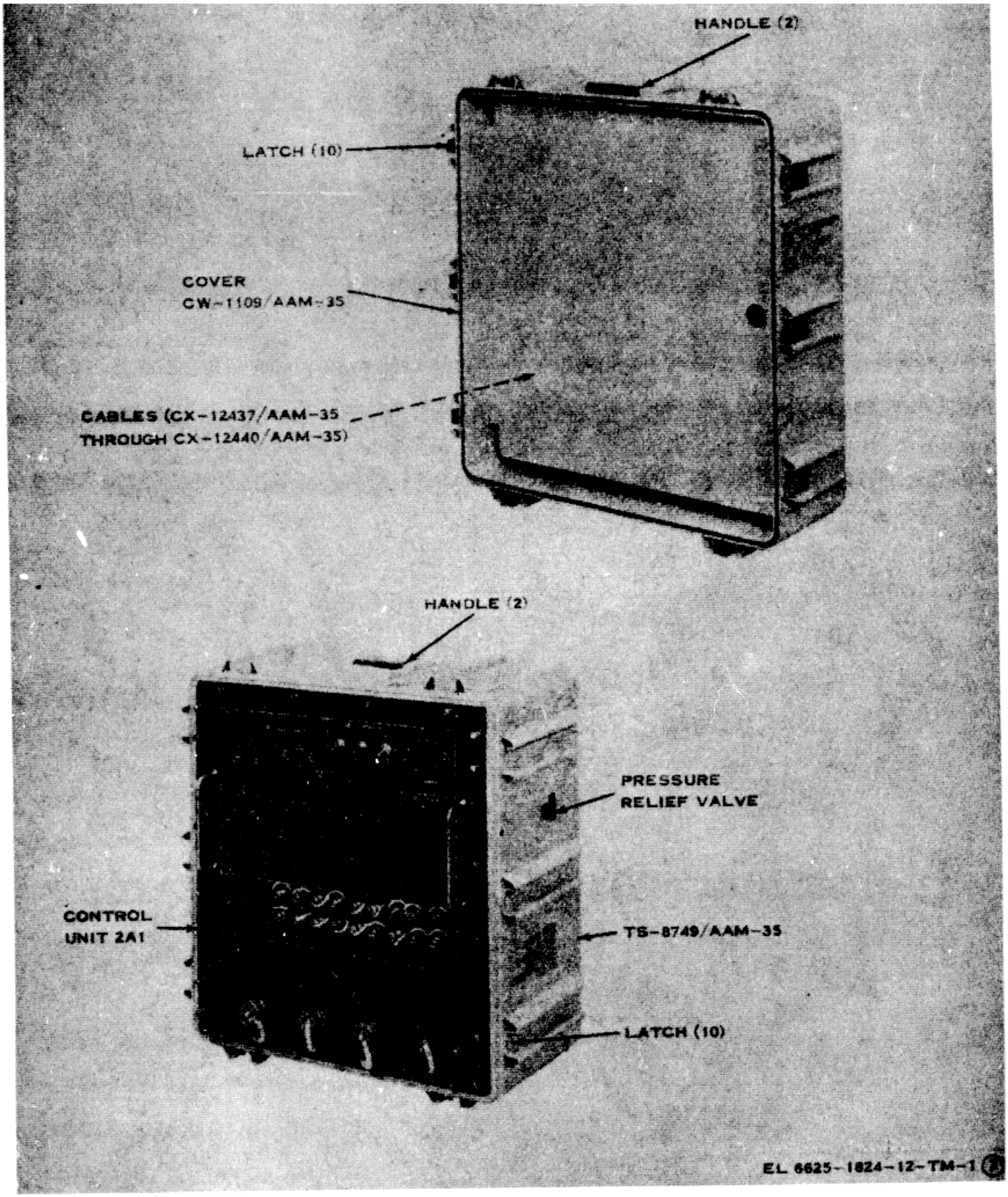

Figure 1-1. Test Set, Converter Subassembly-Video Converter AN/AAM-35, components (part 2 of 3)

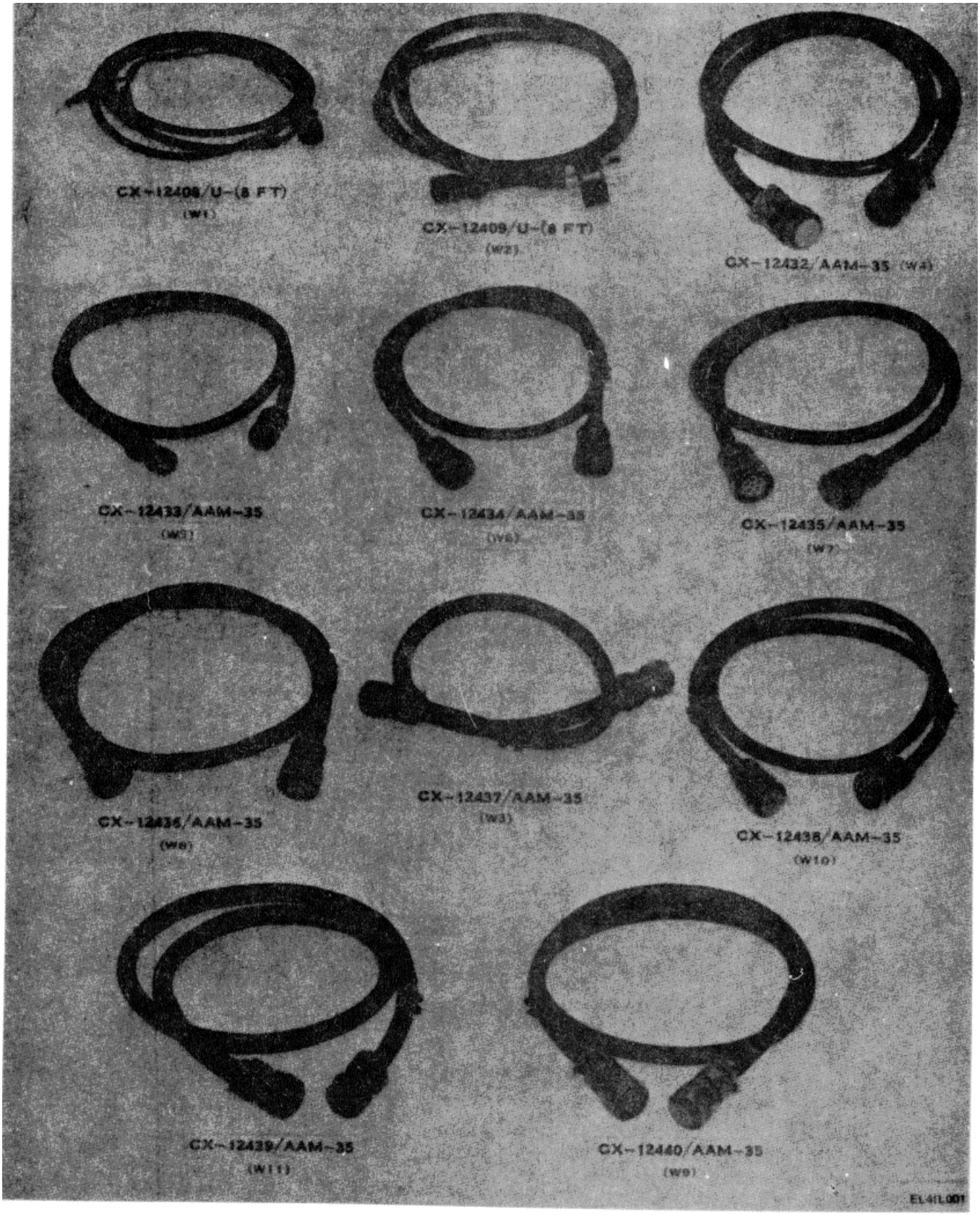

Figure 1-2. Test Set, Converter Subassembly-Video Converter components (part 3 of 3)

CHAPTER 1
INTRODUCTION

Section I. General

1. Scope of Manual

a. This manual describes Test Set, Converter Subassembly-Video Converter AN/AAM-35 (con verter test set) and covers its installation, opera tion and operator and organizational mainte nance. It includes instructions for operation under usual and unusual conditions, preventive an periodic maintenance services, and replacement (parts available to organizational repairmen.

b. Instructions for using Test Set, Converter Subassembly-Video Converter AN/AAM-35 to test Infrared Detecting Set AN/AAS-24 are contained in TM 11-5850-241-34.

c. Appendix A contains references; appendix contains the basic issue items list and items troop installed or authorized list; appendix C contain the maintenance allocation chart; and appendix contains the organizational maintenance repair parts and special tools list.

1-2. Indexes of Publications

a. Refer to the latest issue of DA Pam 310-4 t determine whether there are any new edition. changes, or additional publications pertaining t the equipment. b. Refer to the latest issue of DA Pam 310-7 t determine whether there are modification work orders (MWO's) pertaining to the equipment.

1-3. Forms and Records

a. Reports of Maintenance and Unsatisfactory

Equipment. Maintenance forms, records, and re ports which are to be used by maintenance personnel at all maintenance levels are listed I 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 DLAR 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 4610.33B/AFR 7518/ MCO P4610.19C and DLAR 4500.15.

1-3.1. Reporting of Errors

The reporting of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Report should be submitted on DA Form 2028 *(Recommended* Changes to Publications and Blank Forms) and forwarded direct to Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-MA-Q Fort Monmouth, New Jersey 07703.

1-3.2. Reporting Equipment Improvement

Recommendations (EIR)

EIR's will be prepared using DA Form 2407, Maintenance Request. Instructions for preparing EIR's are provided in TM 38750, The Army Maintenance Management System. EIR's should be mailed direct to Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN, DRSEL-MA-Q, Fort Monmouth, New Jersey 07703. A reply will be furnished direct to you.

1-3.3 Destruction of Army Electronics

Materiel

Destruction of Army electronics materiel to prevent enemy use shall be in accordance with TM 750-244-2.

Section II. DESC

1-4. **Purpose and Use**

a. Test Set, Converts Subassembly-Video Con verter AN/AAM-35 provides facilities for bench testing Converter Subassembly MX-8358/AAS-24 and Converter, Video CV-2666/AAS-24 of Detecting Set, Infrared AN/AAS-24. When used with additional test equipment (para 1-10), the converter test set facilitates the following tests.

(1) Converter Subassembly MiX-8358/AAS-24.

(a) Write video test.
(b) Write horizontal sweep test.
(c) Write vertical sweep test.
(d) Read vertical sweep test.
(e) Read horizontal sync test.
(f) Power supplies test.
(g) Hotspot marking test.
(h) Bit logic test.

(*2) Converter, Video CV-2666/AAS-24.*

(a) Write video test.
(b) Write horizontal deflection current test.

(c) Write vertical deflection current sample test.
(d) Hotspot marking test.
(e) Read horizontal current sample test.
(f) Read video test.
(g) Video converter focus test.
(h) Video converter tube burnspot test.
(i) Video converter alignment test.

(b) The converter test set is used to facilitate the special test requirements of the units under test. These requirements include measuring internal power supply voltages, generating and measuring special test signals, furnishing control functions and providing accessible test points. Control functions of the converter test set select one of the tests specified in a above. During tests, control functions are used to adjust signal parameters, select paths to the external test equipment and the units under test and control signals in the converter test set.

1-5. Technical Characteristics

a. Input Power.

(1) 115 +11.5 volts alternating current (vac), 400 +20 hertz (Hz), 3-phase, 4-wire, 1.5 amperes (amp) maximum (max.) per phase.

(2) +27 +2.0 volts direct current (vdc), 0.8 amp max.

b. Power Outputs.

(1) 115 +11.5 vac, 400 +20 Hz, 3phase, 4-wire, 0.75 amp per phase max.
(2) +27 +2.0 vdc, 0.4 amp max.
(3) +250 +5.0 vdc, 250 milliamperes (ma) max.
(4) +150 -+1.0 vdc, 100 ma max.
(5) +15 _+0.02 vdc, 3.0 amp max. (measured at printed circuit board).
(6) -15 +0.02 vdc, 3.0 amp max. (measured at printed circuit board).
(7) +6.3 +0.01 vdc, 1.2 amp max. (measured at printed circuit board).
(8) +5.0 -+0.5 vdc, 500 ma max. (measured at printed circuit board).

c. Test Set Subassembly MX-8 7841AAM-35 Output Signals.

(1) Video gate.
(2) Video gate.
(3) Velocity/height test.
(4) Hot spot.
(5) Bit voltage.
(6) Slew zero degree.
(7) Controls.
(a) FIELD OF VIEW.
(b) SLEW.
(c) HOTSPOT.
(d) BACKGND.
(e) SIM TEST/VIDEO.
(f) V/H.
(g) VIDEO.
(8) Frame hold.
(9) Video.

d. Test Set Subassembly MX-87491AAM-.5 Output Signals.'

(1) Indicator vertical sync.
(2) Read horizontal sync.
(3) Vertical sync.
(4) Read vertical sweep.
(5) Write horizontal sweep.
(6) Composite write blanking.
(7) Write vertical sweep.
(9) Background bias.
(10) Write focus test activate.
(11) Read focus test activate.
(12) Write static focus.
(13) Read static focus.
(14) Focus align.
(15) Storage tube protect.
(16) Frame hold.
(17) Simulated video.
(18) Video gate.
(19) Controls.
(a) FIELD OF VIEW.
(b) BACKGND.
(c) WRT FOCUS.
(d) FRAME HOLD.
(e) Focus ALIGNMENT.
(20) Auxiliary deflection.
(21) Skew correction.
(22) Read vertical step.
(23) Hot spot trigger.
(24) Resolution video.

1-6. Items Comprising an Operable Equipment

				Dimensions (in.)			
FSN	Qty	Nomenclature, part No., and mfr code	Weight (lbs)	Height	Depth	Width	No.
		NOTE The part number is followed by the applicable 6-digit Federal supply code for manufacturers (FSCM) identified in SB 708-42 and used to identify manufacturer, distributor,- or agency, etc.					
662-403-1064	1	Test Set, Converter Subassembly- Video Converter AN/AAM-35					1-1
		Consisting of:					
		Test Set, Converter Subassembly No. 1	150.0	23.75	21.46	22.18	1-1
	1	Consisting of:					
6625-489-2669		Cable Assembly, Special Purpose, Electrical CX-12432/AAM-35 (1W4)	2.0	60 (lg)	.....	.....	1-1
6625-489-6102	1	Cable Assembly, Special Purpose, Electrical CX-12483/AAM-85 (1W5)	1.0	60 (lg)			1-1
6625-489-2670	1	Cable Assembly, Special Purpose, Electrical CX-123434/AAM-5 (1W6)	1.0	60 (lg)			1-1
6625-489-0462	1	Cable Assembly, Special Purpose, Electrical CX-1234S/AAM-85 (1W7)	1.5	60 (lg)			1-1

FSN	QTY	Nomenclature part No., mfr code	Weight (lbs)	Dimensions (in.)			Fig. No.
				Height	Depth	Width	
6625-242-5796	1	Cable Assembly, Special Purpose, Electrical CX-123436/AAM-35 (1W8)	2.1	60 (lg)			1-1
6625-196-2844	1	Cable Assembly, Power, Electrical CX-12408/U (8 ft) (1W1)	1.6	96 (lg)			1-1
6625-470-4315	1	Cable Assembly, Power, Electrical CX-12409/U (8 ft) (1W2)	1.5	96 (lg)	.....	.....	1-1
6625-408-5053	1	Test Set, Subassembly MX-8748/ AAM-35 (1MP3)	125	23.75	13.71	22.18	1-1
		Test Set, Converter Subassembly, No. 2: 692580-1 (96214) Consisting of:	107.85				1-1
6625-489-2671	1	Cable Assembly, Special Purpose, Electrical CX-12437/AAM-35 (2W3)	1.5	36 (lg)			1-1
6625-489-0467	1	Cable Assembly, Special Purpose, Electrical CX-12438/AAM-35 (2W10)	1.7	60 (lg)			1-1
6625-242-5797	1	Cable Assembly, Special Purpose, Electrical CX-12439/AAM-35 (2W11)	2.4	60 (lg)			1-1
6625-489-6140	1	Cable Assembly, Special Purpose, Electrical CX-12440/AAM-35 (2W9)	2.25	60 (lg)			1-1
6625-409-8158	1	Test Set, Subassembly MX-8749/ AAM-35 (2MP2)	100	23.75	13.71	22.18	1-1

1-6.1. Expendable Consumable Supplies and Materials

Expendable consumable supplies and materials are listed in table 1-1.

Table 1-1. Expendable Consumable Supplies and Materials

The supplies and materials listed in this table are required for operation of this equipment and are authorized to be requisitioned by SB 700-50. The FSN for the applicable unit of issue required can be found in appropriate supply catalogs. 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.

Item	*Description*	*Ref No. and FSCM*	*PSC*
1	Cleaning Compound	.....	6180
2	Lubricating Oil, General Purpose, Preservative (PL-Special)	.....	9150
3	Insulation Tape, Electrical (Pressure Sensitive, Adhesive Plastic Tape)	.....	5970
4	Fine Sandpaper	.....	5350

1-7. Common Names

Common names are listed in table 1-2.

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Table 1-2. Common Names

Nomenclature	*Common name*
Test Set, Converter Subassembly Video Converter AN/AAM-35	*Converter test set*
Test Set Subassembly MX-8748 AAM-35	*Converter unit 1*
Test Set Subassembly MX-8749/ AAM-35	*Converterunit2*
Cover, Test Set Subassembly CW-1108/AAM-35 CW-over /AAM-35	*Cover 1*
Cover, Test Set Subassembly CW-1109/AAM-35	*Cover 2*
Electronic Control Unit No. 1 Assembly lAl	*Control unit 1Al*
Electronic Control Unit No. 2 Assembly 2A1	*Control unit 2Al*

1-8. Reference Designators

Reference designators are listed in table 1-3.

1-9. Description of Test Set, Converter Sub-assembly-Video Converter AN/AAM-35

The converter test set is comprised of Test Set Subassembly MX-8748/AAM-35 (converter unit 1) and Test Set Subassembly MX-8749/AAM-35 (converter unit 2). Converter units 1 and 2 each consist of an electronic control unit and cables in a portable transit case. Each transit case has a removable cover held in place by 10 clamp-type latches. When unscrewed, two pressure relief valves located on each transit case equalize pressure. Four handles on each transit case facilitates carrying the converter test set. Cover 1 provides storage for seven

Table 1-3. Reference Designator

Reference designator	*Nomenclature*	*Manufacturer's part number*
1MP3	Test Set Subassembly MX-S748/AAM-35	692589-1
1A1	Electronic Control Unit No. 1 Assembly	692597-1
1A1A1	-15 Vdc Power Supply	725081-1
1A1A2	IC Power Supply	725084-1
1A1A3	+150/+250 Vdc Power Supply	692469-1
1A1A4	+150/+250 Vdc Power Supply	692469-1
1A1A5	Storage Tube Filament Supply	725087-1
1A1A6	Terrain Calibration Indicator (tci) and Converter Subassembly-Video Converter(-vc) Power Control	692367-1
1A1A7	Cs-Vc Simulator	692412-1
1A1A8	Video Interface	725090-1
1A1A9	Sync Interface	692466-1
1A1A1O	Hot Spot Generator	692400-1
1A1A11	Loads Board No. 1	692406-1
1A1A12	Loads Board No. 2	692409-1
1A1A13	Heatsink Assembly	692233-1
1A1A14	Heatsink Assembly	695916-1
1A1A15	Filter Assembly	694753-2
2MP2	Test Set Subassembly MX-8749/AAM-35	692606 1
2A1	Electronic Control unit No. 2 Assembly	692614-1
2A1A1	100 kHz Oscillator	725093-1
2A1A2	Sync Generator	725096-1
2A1AS	Read Vertical Sweep Generator	725099-1
2A1A4	Write Horizontal Sweep Generator	725102-1
2A1A5	Write Horizontal Slew and Field-of-View (fov) Adder	725105-1
2A1A6	Write Video Amplifier	725108-1
2A1A7	Velocity/Height (v/h) Clock Pulse Generator	725111-1
2A1A8	Write Vertical Sweep Generator	725114-1
2A1A9	Erase Vertical Sweep Generator	725117-1
2A1A10	Auxiliary Deflection Logic	725120-1
2A1All	Dither Generator	725123**-1**
2A1A12	Cs-Vc Sweep and Blanking	692472-1
2A1A13	Storage Tube Protect, Loads, and Video Amplifier	692415-1
2A1A14	+15 Vdc Power Supply	692235-1

cables. Cover 2 provides storage for four cables. Control unit 1A1 and control unit 2A1 contain all the operating controls, indicators, switches, connectors, and cables, when connected, required to test Converter Subassembly MX-8358/AAS-24 and Video Converter CV-2666/AAS-24 units of Detecting Set, Infrared AN/AAS-24. Control unit 1A1 and control unit 2A1 provide test jacks for connection to external test equipment. The external test equipment monitors test signals to the converter test set and the units under test.

1-10. Additional Equipment Required

The additional equipment listed in table 1-4 is used with the converter test set to test Converter Subassembly MX-B358/AAS-24 and Video Con- verter CV-2666/AAS-24.

Table 1-4. Additional Equipment Required

Nomenclature	*Applicable publication*
Oscilloscope, AN/USM-281 A (HP model 180A(oscilloscope)	TM 11-6625-1703-15
Function Generator, Wavetek 111 (function generator)	Commercial publication
Digital Readout AN/USM-207 (frequency counter)	TM 11-6625-700-10
Digital Voltmeter, Non-Linear Systems (model X-2) with dual-function converter part number 3742 and ac converter part number 3746 (dvm)	Commercial publication

CHAPTER 2

INSTALLATION

2-1. General

This chapter contains instructions for unpacking, checking upon receipt, power connections and preoperational checks of Test Set, Converter Sub-assembly-Video Converter AN/AAM-35.

2-2. Packaging Data.

(fig. 2-1)

The converter test set is shipped in two cleated plywood shipping containers. Each shipping container is lined on all sides, top and bottom with foam padding. The converter test set cables are packed in each converter unit cover. Each con- verter unit, including the shipping containers, measures 31 by 30 by 38 inches. Converter unit 1 weighs approximately 160 pounds; converter unit 2 weighs approximately 160 pounds and each con- verter unit occupies a volume of 15 cubic feet.

2-3. Unpacking the Equipment

The converter test set unit I and 2 are shipped in similar shipping containers. To remove converter unit 1 and converter unit 2 from the shipping containers proceed as follows.

WARNING

Two men are required to lift the con-
verter test sets, unit I and 2.

a. Place both shipping containers on a suitable, clean work area, making certain the tops are up.

b. Carefully remove the tops and one side of the shipping containers, and with one man on each side, grasp converter unit 1 or converter unit 2 handles and li1t the converter test set from the shipping containers.

c. Place the converter test set on a work bench.

d. Unscrew the pressure relief valves on converter unit I and 2 two turns to equalize pressure.

e. Open the covers on converter units I and 2 and remove all cables. Place the cables on the work bench.

f. Replace the covers on the shipping containers and retain the containers for future use (ground storage or reshipment).

2-4. Checking Unpacked Equipment

a. Inspect the equipment for physical damage that may have occurred during shipment. If the equipment has been damaged, fill out and forward DD Form 6 (para 1-3b).

b. Check to see that the equipment is complete as listed on the packing slip. If a packing slip is not available, check the equipment against the basic issue items list (app B). Report all discrepancies in accordance with para 1-3c. The equipment should be placed in service even though a minor assembly or part that does not affect proper functioning is missing.

c. Check to see if the equipment has been modi-fied. If the equipment has been modified, the MWO number will appear on the front panel near the nomenclature plate. Check also to see if all MWO's current at the time the equipment is placed in use have been applied (DA Pam 310-7).

d. Check the latest issue of DA Pam 310-4 and its latest changes to see if you have the latest editions of all applicable maintenance literature.

2-5. Installation Instructions

Initial installation of the converter test set re- quires the connection of two power cables between converter unit 1 and input power. In addition, a cable must be connected between converter units 1 and 2.

a. On control unit lAl set the 28 VDC, the 115 VAC 30 circuit breakers, and the power mode switch to OFF (fig. 3-1).

b. Connect cable Wl between control unit connector lAIJ1 and the 28-volt dc source.

c. Connect cable W2 between control unit connector 1A1J2 and the 115-volt ac, 400-Hz, 3-phase, 4-wire source.

d. Connect cable W3 from control unit connector 1AlJ3 to control unit connector 2AIJ1 (fig. 3-2).

2-6. Initial Checking of Equipment

Upon completion of installation, the converter test set will be given an initial checkout by performing the preliminary starting procedure (para 3-6) and the stopping procedure (para 3-7).

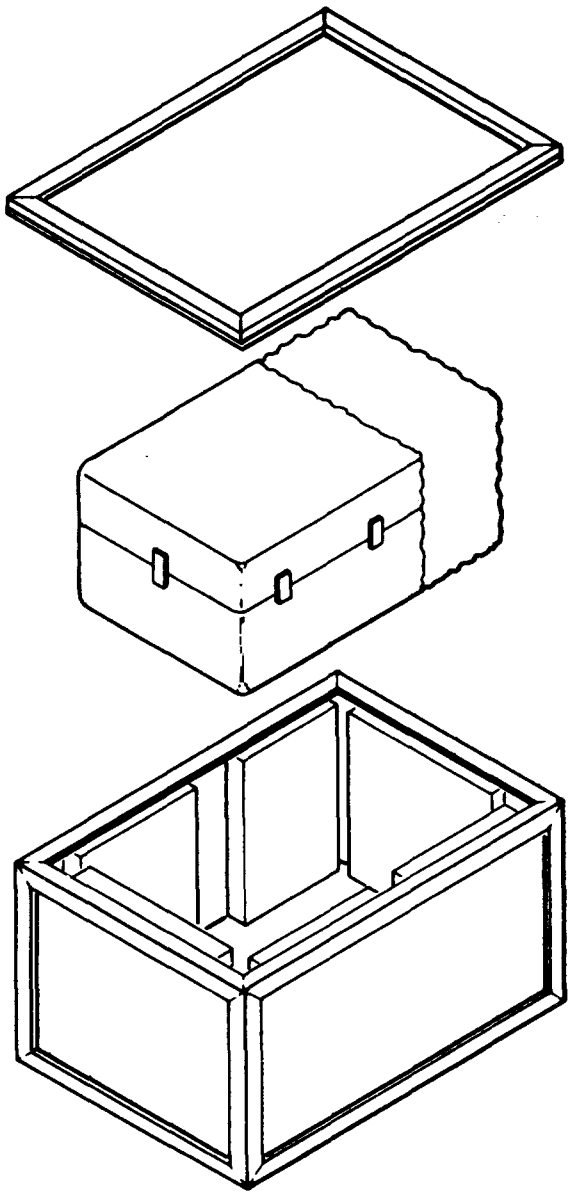

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Figure -1. Converter unit 1and converter unit 2, packaging.

CHAPTER 3

OPERATION

Section I. OPERATOR'S CONTROLS, INDICATORS, AND CONNECTORS

3-1. Control and Indicator Functions

a*, Control Unit 1A1* (fig. 8-1). The controls and indicators for control unit 1A1 are listed in table 3-1.

Table 3-1 . Control *Unit 1A1 Control and Indicator Functions*

Control or indicator	*Function*
PRIMARY TEST POINTS:	
HORIZ SWP (4-position rotary switch).	Selects the following signals from the unit under test for monitoring at HORIZ SWP test jack.
	Sw pos — *Selects*
	100 KHZ OSC — 100 kHs oscillator output.
	WRT SWP GEN — Write horizontal sweep generator output.
	WRT SWP — Processed sweep voltage or slew fov adder output.
	RD HORIZ SYNC — Read horizontal sync pulse from sync generator output.
VERT SWP (6-position rotary switch).	Selects the following signals from the unit under test for monitoring at VERT SWP test jack.
	Sw pos — *Selects*
	CLK PULSE — Write clock pulse output.
	WRT SWP V — Write vertical sweep voltage output.
	COMP SWP V — Vertical composite sweep voltage output.
	TDI SYNC — Read vertical sync (also tdi vertical sync).
	RD SYNC — Read vertical sync generator output.
	RD SWP V Read vertical sweep voltage output.
PWR SUP TEST (2-position toggle switch).	*Sw pos* — *Selects*
	FULL — Applies full load to power supplies of unit under test.
	NOM — Removes load from power supplies of unit under test.
COUNTER (4-position rotary switch).	Selects the following signals for monitoring at CRT test jack.
	Sw pos — *Selects*
	VID GATE — Control unit 1Al video gate signal output.
	V/H CLK PULSE — Unit under test v/h clock pulse output.
	BLANK PULSE — Unit under test write vertical blank output.
	100 KHZ OSC — Control unit lAl 100 kHz oscillator output,
HOT SPOT (2-position toggle switch)	*Sw pos* — *Action*
	ON — Applies unit under test hotspot generator output to LRU-A test jack.
	OFF — Removes unit under test hotspot generator output from LRU-A test jack.
VIDEO (8-position rotary switch).	Selects the following signals from unit under test for monitoring at control unit 1A1 test jacks.
	VID A — Channel A video to TEST 7 test jack.
	VID B — Channel B video to TEST 8 test jack.
	WRT VID — Write video amplifier output to TEST 1 test jack.

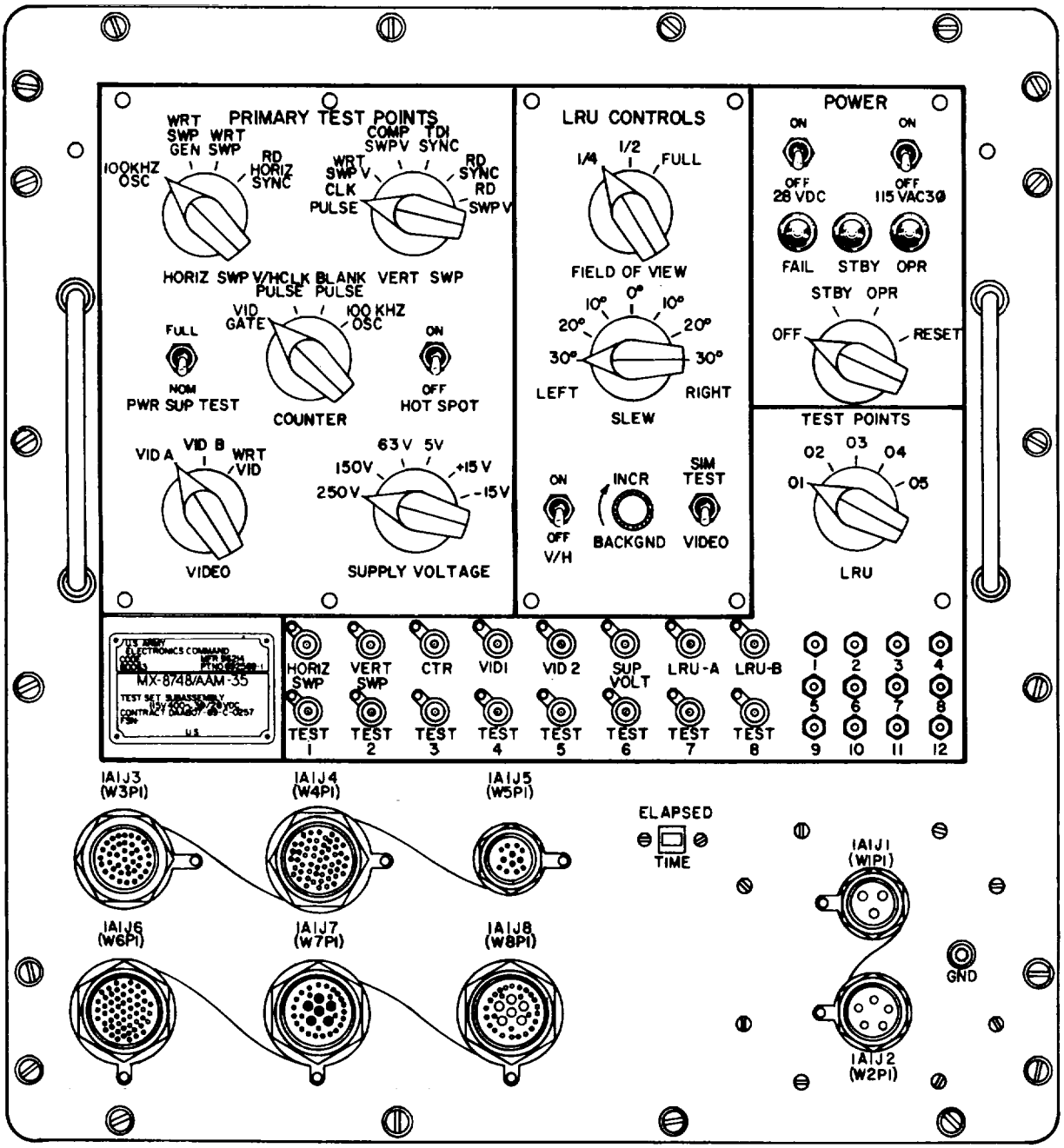

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Figure 3-1. Control unit 1A1, controls, indicators, and connectors.

Table 3-1. Control Unit 1A1 Control and Indicator-Continued

Control or indicator	*function*
SUPPLY VOLTAGE test jack (6-position rotary witch).	Selects the following voltages from the unit under test for monitoring at SUP VOLT'
	Sw pos — *Selects*
	250 V — Output of 250vdc power supply.
	150 V — Output of 150-vdc regulator.
	5.8 V — Output of 156.8 vdc Storage Tube Filament Supply.
	5 V — Output of 5-vdc regulator.
	+16 V — Output of positive 15-vdc regulator.
	-15 V — Output of negative 16-vdc regulator.
LRU CONTROLS:	
FIELD OF VIEW (8-position rotary switch).	Applies control voltages representative of field of view to the unit under test.
	Sw pos — *Action*
	1/4 — Control voltage corresponds to y full field of view or a 4X expansion of displayed signal.
	1/2 — Control voltage corresponds to a p full field of view or a 2X expansion of displayed signal.
	FULL — Selects full field of view for display.
SLEW (7-position rotary switch).	Applies a dc control voltage to the unit under test that co rresponds to a lateral movement left or right of center in increments of 0, 10, 20, or 30 degrees.
V/H (2-position toggle switch).	*Sw pos* — *Action* ON — Selects minimum v/h to test interface level detector in unit under test. Applies the signal to test point 10. OFF — Selects simulated v/h.
BACKGROUND (potentiometer).	Adjusts write video gain from write video amplifier of unit under test.
SIM TEST/VIDEO (2-position toggle switch)	*Sw pos* — *Action* SIM TEST — Applies simulated video to unit under test. VIDEO — Applies video to unit under test.
POWER:	
28 VDC (2-position circuit breaker).	Controls operating voltages to converter test set and unit under test.
	Sw pos — *Action*
	ON — Applies 28 volts dc to control unit 1A1.
	OFF — Removes 28 volts dc from control unit 1A1.
115 VAC 30 (2-position circuit breaker)	*Sw pos* — *Action* ON — Applies filtered 115-vac, 400-Hz, 3-phase power to converter test set. OFF — Removes filtered 115-vac, 400-Hz, 3-phase power from converter test set.
FAIL (Press to test lamp assembly)	Lights when a fail indication is received; extinguished by RESET position of power mode switch.
STBY (Press to test lamp assembly).	Lights when power mode switch is set to STBY. Lights when fail indication is received to indicate standby condition is present.
OPR (Press to test lamp assembly)	Lights when power mode switch is set to OPR. Lamp is extinguished when fail indication is received, lights when power mode switch is momentarily se t to RESET
Power mode switch (4-position rotary switch)	*Sw pos* — *Action* OFF — Removes filtered 1li-vac, 400-Hz, 8-phase power and filtered 28-volt dc power from control unit 1A1 and unit under test and extinguishes all lamps. STBY — Applies ac and dc power to control unit 1A1 printed circuit board power supplies only and illuminates STBY lamp. OPR — Applies ac and dc power to control unit A1l, control unit 2A1, and unit under test and illuminates OPR lamp.

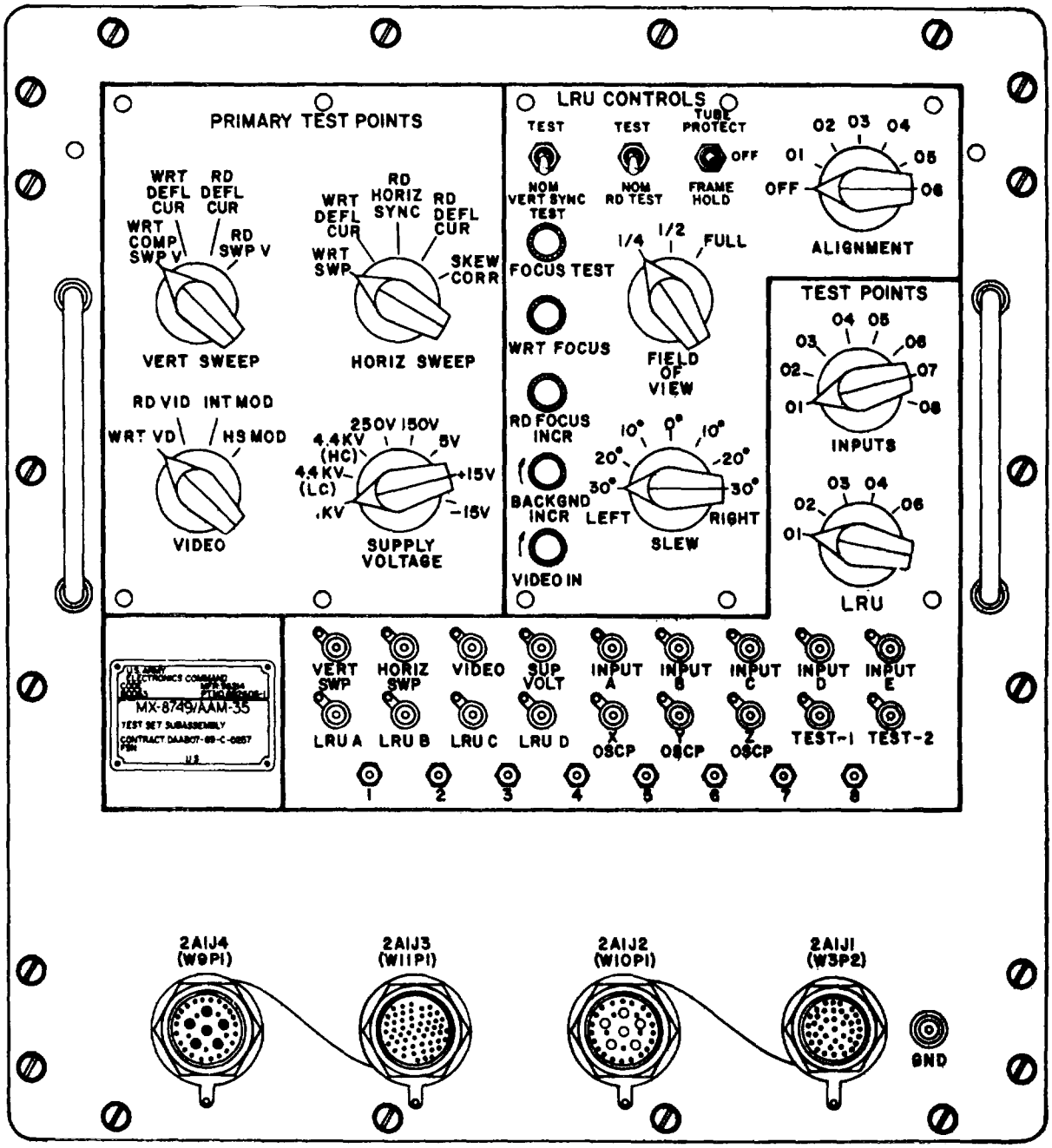

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Figure 3-2. Control unit tA1, controls and connectors.

Table 3-1. Control Unit 1A1 Control and Indicator

	Sw pos	*Action*
	RESET (momentary position)	Restores ac and dc power to control unit 1A1, control unit 2A1, and unit under test and extinguishes FAIL lamp, after a fail indication is received.
TEST POINTS: LRU switch (65-podition rotary witch).		Selects unit under test points to be monitored at LRU-A, LRU-B, and test jack 1.
ELAPSED TIME:		Indicates total operating time of the converter subassembly-video converter test mt. (meter).

*b. Control U*nit *2A1 (fig.3 -*2). The control functions for control unit 2A1 are listed in table 3-2.

Table 3-2. Control Unit 2A1 Control Functions

PRIMARY TEST POINTS:

VERT SWEEP (4-position rotary switch). Selects the following signals for monitoring at control unit 2A1 VERT SWP test jack.

Sw pos	*Selects*
WRT COMP SWP	Write vertical composite sweep voltage to the u nit under test.
WRT DEFL CUR	Write vertical deflection current monitor voltage waveform of unit under test.
RD DEFL CURT	Read vertical deflection current monitor voltage waveform of unit under test.
RD SWP V	Read vertical sweep voltage input waveform to unit under test.

HORIZ SWEEP (5-paition rotary switch). Selects the following signals for monitoring at control unit 2A1 HORIZ SWEEP test Jack.

Sw pos	*Action*
WRT SWP	Control unit 2A1 write horizontal sweep voltage output.
WRT DEFL CUR	Unit under test write horizontal deflection current.
RD HORIZ SYNC	Control unit 2A1 read horizontal deflection current.
RD DEFL CUR	Unit under test read horizontal deflection current.
SKEW CORR	Control unit 2A1 write horizontal skew correction waveform.

VIDEO (4-position rotary switch). Selects the following signals for monitoring at control unit 2A1 VIDEO test jack.

Sw pos	*Action*
WRT VID	Unit under test write video signal.
RD VID	Unit under test read video signal.
INT MOD	Control unit 2A1 Calibration indicator video sample signal.
HS MOD	Control unit 2A1 write video signal.

SUPPLY VOLTAGE (8-position rotary switch). Selects the following voltages for monitoring at control unit 2A1 SUP VOLT test jack.

Sw pos	*Action*
I KV	Unit under test 1 KV regulator sample.
4.4 KV (LC)	Unit under test 4.4 KV low current regulator sample.
4.4 KV (HC)	Unit under test 4.4 KV high current regulator sample.
250 V	Control unit 1A1 250-vdc regulator.
150 V	Control unit 1A1 150-vdc regulator.
5 V	Control unit 1A1 5-vdc regulator.
+15 V	Control unit 2A1 +1F-vdc regulator.
- 15 V	Control unit 1A1 -16-vdc regulator.

Table 3-2. Control Unit 2A1 Control Functions-Continued

Control	*Function*
LRU CONTROLS:	
VERT SYNC TEST (2-position momentary switch)	Controls functions in unit under test. *Sw* — *Action* TEST — Produces a half vertical frame on oscilloscope display. NOM — Produces normal oscilloscope display.
RD TEST (2-position toggle switch)	*Sw pos* — *Action* TEST — Removes +15 and -15 vdc from unit under test read horizontal and read vertical printed circuits. NOM — Applies +15 and -15 vdc to unit under test read vertical printed circuits.
TUBE PROTECT FRAME HOLD (3-position, center off momentary contact switch).	*SW pos* — *Action* TUBE PROTECT — Applies a storage tube protect signal to unit under test which disables high voltage power supplies. OFF — Removes storage tube protect and frame hold signals from unit under test. FRAME HOLD — Applies frame hold signal to unit under test.
ALIGNMENT (7-position rotary switch).	*Sw pos* — *Action* OFF — Selects normal operation of unit under test. 01 — Selects forward current applied to unit under test write focus coils and storage tube protect circuitry is bypassed. 02 — Removes forward current from unit under test write focus coils and bypasses storage tube protect circuitry. 03 — Selects reverse current applied to unit under test write focus coils and bypasses storage tube protect circuitry. 04 — Selects forward current applied to unit under test read focus coils and bypasses storage tube protect circuitry. 05 — Removes current from unit under test read focus coils and bypasses storage tube protect circuitry. 06 — Selects reverse current applied to unit under test read focus coils and bypasses storage tube protect circuitry.
FOCUS TEST (potentiometer).	Adjusts the unit under test read or write focus control voltage for alignment test.
WRT FOCUS (potentiometer).	Adjust unit under test write focus control voltage.
RD FOCUS (potentiometer).	Adjusts unit under test read focus control voltage.
BACKGND (potentiometer).	Adjusts background brightness of displayed picture.
VIDEO IN (potentiometer).	Adjusts write video input to unit under test.
FIELD OF VIEW (3-position rotary switch	Applies control voltages representative of field of view to the unit under test. *Sw pos* — *Action* 1/4 — Control voltage corresponds to yx full field of view or a 4X expansion of displayed signal. 1/2 — Control voltage corresponds to a X full field of view or a 2X expansion of displayed signal. FULL — Selects full field of view for display.
SLEW (7-position rotary switch).	Applies control voltage to unit under test that corresponds to lateral movements to the left or right of center in increments of 0, 10, 20, or 30 degrees.
TEST POINTS:	Controls voltage comparator and monitors internal functions of converter test set.
INPUTS (8-position rotary switch).	Selects internal waveforms of converter test set to be monitored at the test jacks.
LRU (6-position rotary switch)	Selects test points from the unit under test to be monitored at the test jacks.

3-2. Connectors

a. *Control Unit 1A1 Connectors (fig. 3*-1). The connectors, associated cables, and destination for control unit 1A1 are listed in table 3-3.

Table 3-3. Control Unit 1A1 *Connectors*

Control unit connector	*Connects cable assembly*	*To*
1A1J1	W1	Dc power source.
1A1J2	W2	Ac power source.
1A1J3	W8-	Converter unit 2.
1A1J4	W4	Unit under test.
1A1J5	W5	Unit under test
1A1J6	W6	Unit under test
1A1J7	W7	Unit under test
1A1J8	W8	Unit under test
GND	Ground lead (not provided with converter test set).	Ground.

*b. Control Unit 2A1 Connector*s (fig. 3-2). The connectors, associated cables, and destination for control unit 2A1 are listed in table -4.

Table 3-4. Control Unit 2A1 Connectors

Control unit connector	*Connects cable assembly*	*To*
2AIJ1	W3	Converter unit 1.
2A1J2	W10	Unit under test.
2A1J38	W11	Unit under test.
2A1J4	W9	Unit under test.
GND	Ground lead (not provided with converter tes1t set).	Ground.

3-3. Test Points

a. Control Unit 1A1 Test Points (fig. 3-1). The test points and functions for control unit 1A1 are listed in table 3-5.

*Table 3-5. Control Un*it *1A1 Test Point Functions*

HORIZ SWP	HORIZ SWP switch selected.
VERT SWP	VERT SWP switch selected.
CRT	COUNTER switch selected.
VID 1	Video 1 input to control unit 1A1.
VID 2	Video 2 input to control unit 1Al.
SUP VOLT	SUPPLY VOLTAGE switch selected.
LRU-A	LRU switch selected.
LRU-B	LRU switch selected.

Table 3-5. Control Unit 1A1 Test Point Functions---Continued

Test point	*Function*
TEST 1	Write grid switching video sample.
TEST 2	Video sample (calibration indicator
TEST 3	Video gate.
TEST 4	Simulated gated video.
TEST 5	Hot spot
TEST 6	Hot spot.
TEST 7	Video 1 input to control unit 2A1.
TEST 8	Video 2 input to control unit 2A1.
1	LRU switch selected.
2	SLEW switch selected.
3	+6.3-vdc.
4	6.3-vdc return.
5	Display fail.
6	28-vdc return.
7	Storage tube supply.
8	Storage tube supply return.
9	V/h fov.
10	V/h test out.
11	Storage tube 28-vdc.
12	Ground bus.

b. Control Unit 2A1 Test Points (fig. 3-2). The test points and functions for control unit 2A1 are listed in table 3-6.

Table 3-6 Control Unit 2a1 Test Point Functions

VERT SWP	VERT SWEEP switch selected.
HORIZ SWP	HORIZ SWEEP switch selected.
VIDEO	VIDEO switch selected.
SUP VOLT	SUPPLY VOLTAGE switch selected.
INPUT A	INPUTS switch selected.
INPUT B	INPUTS switch selected.
INPUT C	INPUTS switch selected.
INPUT D	INPUTS switch selected.
INPUT E	INPUTS switch selected.
LRU-A	LRU switch selected.
LRU-B	LRU switch selected.
LRU-C	LRU switch selected.
LRU-D	LRU switch selected.
X OSCP	Horizontal sweep.
Y OSCP	Vertical sweep.
Z OSCP	Read video amplified and blanked.
TEST-1	Spare.
TEST-2	Spare.
1	SLEW switch selected.
2	Slew voltage generator.
3	Focus test out.
4	28-vdc return.
5	+15-vdc.
6	-15-vdc.
7	Spare
8	Ground bus.

Section II. OPERATION UNDER USUAL CONDITIONS

3-4. Operating Procedures

To operate the converter test set perform the following procedures.

a. Preparation for use (para -5).

b. Preliminary starting procedure (para 3-6).

c. Test procedure for unit under test (TM 11-850-24134).

d. Stopping procedure (para 3-7).

3-5. Preparation for Use

a. Place converter units 1 and 2 on the bench where they are to be used.

b. Remove the covers from converter units 1 and 2. Remove cables from covers (fig. 1-1).

c. On control unit 1A1 set the 28 VDC and the 115 VAC 3S circuit breakers to OFF; set power mode switch to OFF (fig. 3-1).

d. Connect cable W1 between control unit connector 1A1JI (fig. 3-1) and the 28-vdc source.

e. Connect cable W2 between control unit connector 1A1J2 and the 115-vac, 400-Hz, 3-phase,4-wire source.

f. Connect cable W3 between control unit connector 1A1J3 and control unit connector 2AlJ1.

3-6. Preliminary Starting Procedure

(fig. 81)

a. On control unit 1A1 set 28 VDC circuit breaker to ON.

b. On control unit 1A1 set 115 VAC 38 circuit breaker to ON.

c. On control unit 1A1 set power mode switch to STBY and verify that STBY indicator lights.

3-7. Stopping Procedure

(fig. 31)

a. On control unit 1A1 set power mode switch to OFF.

b. On control unit 1A1 set 28 VDC circuit breaker to OFF.

c. On control unit 1A1 set 115 VAC 30 circuit breaker to OFF.

d. Disconnect all cables from the converter test set and store in covers (fig. 1-1).

e. Replace covers on converter test set and secure latches.

Section III. OPERATION UNDER UNUSUAL CONDITIONS

3-8. Operation at Low Temperatures

Freezing or subfreezing temperatures affect the efficient use of the converter test set. Extreme changes from cold to warm areas such as movement of the equipment to a heated area will cause condensation. To maintain operating efficiency under these conditions, exercise the following precautions.

a. Operate the converter test set in a heated area**.**

b. When cold equipment is brought into a warn area, allow the equipment to reach room temperature. Wipe condensation off with a clean, dry cloth before putting the converter test set into operation.

3-9. Operation in Tropical Climates

In tropical climates, moisture conditions are more acute than normal. Ventilation in closed areas is usually very poor, and the high relative humidity causes condensation of moisture on the equipment. Wipe the converter test set with a clean, dry cloth, and turn the converter test set on once a day to eliminate moisture.

3-10. Operation in Desert Climates

a. When operated in desert climates, sand, dust, or dirt will reach the moving parts of the con- verter test set causing binding of controls and switches. Foreign particles in connectors may cause faulty operation and test results. Make the operating area as dustproof as possible with avail- able materials. If the converter test set is installed in a tent, secure the sidewalls with sand to prevent their flapping in the wind. When the equipment is not in use, secure the removable cover to the equipment.

b. A drastic fall in temperature at night often causes condensation. To prevent condensation, cover the converter test set with a tarpaulin or similar covering material.

c. Wipe off accumulated sand, dust, dirt, or condensation with a clean, dry cloth. Inspect connectors and clean as necessary before making test connections.

CHAPTER 4

MAINTENANCE INSTRUCTIONS

Section I. OPERATOR'S MAINTENANCE

4-1. Scope of Operator's Maintenance

The maintenance duties assigned to the operator of the converter test set are listed below, together with a reference to the paragraphs covering the specific maintenance functions. The materials required for operator's maintenance are listed in paragraph 4-2.

a. Operator's daily preventive maintenance checks and services (para 4-5).

b. Cleaning (para 4-6).

c. Operator's weekly preventive maintenance checks and services (para 4-7).

4-2. Materials Required for Operator's Maintenance

The following materials are required to perform operator's maintenance on the converter test set.

a. Cleaning compound trichloroethane.

b. Cleaning cloth.

c. Cleaning brush.

4-3. Preventive Maintenance

Preventive maintenance is the systematic care, servicing, and inspection of equipment to prevent the occurrence of trouble, to reduce downtime, and to insure that the equipment is serviceable.

a. Systematic Care. The procedures given in paragraphs 4-5, 4-6, and 4-7 cover routine systematic care and cleaning essential to proper up- keep and operation of the equipment.

b. Preventive Maintenance Checks and Services. The preventive checks and services (para 4-5 and 4-7) outline functions to be performed at specific intervals. These checks and services are to maintain Army equipment in a serviceable condition; that is, in good physical condition and in good operating condition. To assist operators in maintaining serviceability, the charts indicate what to check, how to check, and the normal conditions; the *Re*fer*ence* column lists the paragraph that contains additional information. If the defect cannot be remedied by the operator, higher category of maintenance is required. Records and re- ports of these checks and services must be made in accordance with the requirements set forth in TM 38-750.

4-4. Preventive Maintenance Checks and Services Periods

Preventive maintenance checks and services of the converter test set are required on a daily and weekly basis.

a. Paragraph 4-5 specifies the checks and serve ices that must be accomplished daily and under the following conditions:

(1) When the equipment is initially installed.

(2) When the equipment is reinstalled after removal for any reason.

(3)At least once each week if the equipment is maintained in standby condition.

b. Paragraph 4-7 specifies additional checks and services that must be performed weekly.

4-5. Operator's Daily Preventive Maintenance Checks and Services

The operator's daily preventive maintenance checks and services are listed in chart **4-**

4-6. Cleaning

Inspect the exteriors of the converter test set. The exterior surfaces should be free of dust, dirt, grease, and fungus.

a. Remove dust and loose dirt with a clean, soft cloth.

WARNING

The fumes of trichloroethane are toxic. Provide thorough ventilation whenever

Chart 4-1. Operator's Daily Checks and Services

Sequences No.	*Item*	*Procedure*	*Reference*
1	Exterior surfaces	Clean exterior surfaces, including control panels of co nverter test set. Clean inside storage areas of removable cover.	Para 4-6
2	Connectors	Check connectors on equipment and cables for security of attachment, proper fit, and cleanliness.	Para 4-6c
3	Controls and indicators	During operation of equipment (sequence No. 4), observe that each control and indicator functions properly. Mechanical action of each knob, dial, and switch should be smooth and free of external or internal binding. Tighten loose controls as required.	None
4	Operation	When operating equipment (chap 3), be alert for any unusual performance or condition.	None

used. DO NOT use near an open flame. Trichloroethane is not flammable, but exposure of the fumes to an open flame converts the fumes to highly toxic, dangerous gases.

b. Remove grease, fungus, and ground-in-dirt from the transit case; use a cloth dampened (not wet) with cleaning compound.

c. Remove dust or dirt from plugs and connectors with a brush.

d. Clean the front panel and control knobs; use a soft, clean cloth. If dirt is difficult to remove, dampen the cloth with water; use mild soap if necessary.

4-7. Operator's Weekly Preventive Maintenance Checks and Services

The operator's weekly preventive maintenance checks and services are listed in chart 42.

Chart 4-2. Operator's Weekly Checks and Services

Sequences No.	*Item*	*Procedure*	*Reference*
1	Cables	Inspect cable assemblies (fig. 1-1) for signs of mechanical damage, such as chafed, cracked, or frayed insulation. Refer damaged cables to higher category maintenance for repair.	None
2	Gaskets	Inspect gaskets of transit cases for looseness, deterioration, or damage. If gaskets require replacement, refer to higher category maintenance.	None

Section II. ORGANIZATIONAL MAINTENANCE

4-8. Scope of Organizational Maintenance

a. This section contains instructions cover organizational maintenance of the converter 1 set. It includes instructions for performing preventive and periodic maintenance services, troubleshooting, and repair functions to be accomplished by the organizational repairman.

b. Organizational maintenance of the converter test set includes-

(1) Organizational monthly preventive maintenance checks and services (para 412).

(2) Organizational quarterly prevent maintenance checks and services (para 4-13)

(3) Touchup painting (para 4-15).

(4) Troubleshooting (para 4-18).

(5) Replacement of defective lamps (para 4-19)

4-9. Tools and Materials Required

Authorized organizational maintenance repair parts appear in appendix D. The tools and materials required for organizational maintenance are listed below.

a. Tools. The tools required for organizational maintenance are provided in Tool Kit, Electronic Equipment TK-101/G.

b. Materials. The materials required are listed in table 41.

Table 4-1. Materials Required

Materials	*Federal stock No.*
Trichloroethane cleaning compound (1 pint)_	6810-464-0272
Cleaning cloth	
Lubricating oil, general purpose preventive (PLSpecial)	9150-185-0629
Insulation tape, electrical (pressure sensitive adhesive plastic tape)	5970-644-268e
Paintbrush (1 inch)	

4-10. Organizational Preventive Maintenance

a. Preventive maintenance is the responsibility of all categories concerned with the equipment and includes the inspection, testing, and repair or replacement of parts, subassemblies, or units that inspection and test indicate would probably fail before the next scheduled periodic service Preventive maintenance checks and services of test set at the organizational category are m at monthly and quarterly intervals unless other-} wise directed by the commanding officer. *b*. Maintenance forms and records to be u and maintained on this equipment are specified in TM 38750.

4-11. Organizational Monthly Maintenance

Perform the maintenance functions indicated the monthly checks and services chart (chart 4-3) once each month. A month is defined as approximately 30 calendar days of 8-hour-per-day opera- tion. If the equipment is used more often or under adverse conditions, the monthly preventive maintenance checks and services should be performed at 20- or 15-day intervals. Adjustment of the maintenance interval must be made to compensate for any unusual operating conditions. Equipment maintained in a standby condition must have monthly preventive maintenance checks and services performed on it. Equipment in limited storage (requires service before operation) does not re- quire monthly preventive maintenance.

4-12. Organizational Monthly Preventive Maintenance Checks and Services

The organizational monthly preventive maintenance checks and services are listed in chart 4-3

Chart 4-3. Organizational; Monthly Checks and Services

Sequences No.	*Item*	*Procedure*	*Reference*
1	Cables	Inspect cable assemblies (fig. 1-1) for cuts or other damage. Repair cut in- sulation by covering cut with plastic insulation tape.	None
2	Handles, latches, etc.	Inspect handles, latches, hinges, screws, and other such hardware for loose- ness. Tighten or replace as required.	None
3	Metal	Inspect exposed metal parts of equipment for rust and corrosion. Clean and touchup paint as required.	Para 4-15

4-13. Organizational Quarterly Maintenance

Periodic weekly and monthly services constitute a part of the quarterly preventive maintenance checks and services and must be performed con currently. All deficiencies or shortcomings will be recorded in accordance with the requirements of TM 38-750.

4-14. Organizational Quarterly Preventive Maintenance Checks and Services

The organizational quarterly preventive mainte nance checks and services are listed in chart 4-4 Remove rust and corrosion from metal surfaces by lightly sanding them with fine sandpaper. Brush two thin coats of paint (only on those parts meant to be painted) on the bare metal to protect it from further rust or corrosion. Refer to the applicable cleaning and refinishing practices specified in TM 9-213 and TB 746-10. Refer to SB 11-573 for paint to be used.

4-15. Touchup Painting

Remove rust and corrosion from metal surfaces by lightly sanding them with fine sandpaper. Brush two thin coats of paint (only on those parts meant to be painted) on the bare metal to protect it from further rust or corrosion. Refer to the applicable cleaning and refinishing practices specified in TM 9-213 and TB 745-10. Refer to SB 11-573 for paint to be used.

4-16. Lubrication

No lubrication is required.

Chart 4-4. Organizational Quarterly Checks and Services

Sequences No.	*Item*	*Procedure*	*Reference*
1	Publications	Check to see that all pertinent publications are current, comp lete, and serviceable. Requisition pertinent publications not on hand.	DA Pam 310-4 and app A.
2	Modifications	Determine whether new applicable MWO's have been published. All URGENT MWO's must be applied immediately. All NORMAL MWO's must be scheduled (TM 38-750).	DA Pam 310-7.
3	Completeness	Check to see that equipment is complete	App B.
4	Paint	Inspect equipment for condition of paint. If surfaces bear only slight scratches, retouch these with paint. If surfaces bear many scratches, turn equipment in for higher category maintenance painting.	Para 4-15.
5	Operation	a. Prepare converter test set for use	*a.* Para 3-5.
		b. Apply power to converter test set	*b.* Para 3-6.
		c. .Observe STBY and OPR lamps and verify each lamp lights	*c.* Para 3-6.
		d. Set converter test set to STBY	*d.* Para 3-6.
		e. Perform stopping procedure	*e.* Para 3-7.

Section III. TROUBLESHOOTING

4-17. Preliminary Troubleshooting

Troubleshooting of the converter test set is bas upon the operational check contained in the quarterly preventive maintenance checks and services chart. To troubleshoot the converter test set, pa form sequence number 5 in the quarterly checks and services chart (chart 4-4) and proceed until an abnormal condition or result is observed. Pt form the checks and corrective measures indicated in the troubleshooting chart 4-5. If the corrective measures indicated do not result in correction of the trouble, higher category of maintenance is required.

4-18. Troubleshooting

The troubleshooting procedures for the converter test set are listed in chart 4-5.

Chart 4-5. Troubleshooting

Sequences No.	*Symptom*	*Probable Trouble*	*Corrective Action*
1	Any indicator does not light	Defective indicator lamp	Replace lamp (para 4-19).
2	All indicators do not light	Defective power cables	Replace power cables.
3	STBY indicator does not light	Defective power to indicator lamp	Higher category maintenance required.
4	FAIL indicator lights	Defective power supplies	Higher category maintenance required.
5	ELAPSED TIME meter fails to operate.	Defective ELAPSED TIME meter	Higher category maintenance required.

4-19. Lamp Removal and Replacement Procedure

a. Unscrew the metal lampholder counterclockwise until free.

b. Grasp the lamp base at its rim and pull from the lampholder.

c. If a new lamp is required, press it into the holder and screw the holder into its panel socket.

CHAPTER 5

SHIPMENT, LIMITED STORAGE, AND DEMOLITION TO PREVENT ENEMY USE

Section I. SHIPMENT AND LIMITED STORAGE

5-1. Repackaging for Shipment and Limited Storage

a. Repackaging of equipment for shipment extended storage normally will be performed a packaging facility or by a repackaging tea Should emergency packaging be required, select the materials from those listed in SB 381(Package the equipment in accordance with t original packaging so far as possible, using avail able materials.

b. The exact procedure for repackaging depends upon the material available and the conditions under which the equipment is to be stored or shipped. In most cases, the original shipping container will be available for repackaging; ho ever, if this container is not readily available use the packaging procedures outlined in T 38-230 and paragraph 5-2b.

c. The converter test set may be stored f limited periods in the transit case with the cover closed.

5-2. Packaging Procedure

a. Original Shipping Container Available.

(1) Remove the cover from the shipping container.

(2) Place the converter unit 1 or 2 in container as shown in figure 2-1, making certain that polyurethane foam cushioning material is in place on bottom of container and along sides.

(3) Place cushioning material (4 pieces) top of converter unit 1 or 2 and replace and secure the cover.

NOTE

This procedure must be followed for both converter units 1 and 2 converter test set.

b. Original Shipping Container Not Available.

(1) Select a cleated plywood box, conforming to Military Specification MI-601, of the approxirnate size of the original container (para 2-2). If a plywood container is not available, use a suitable wooden box.

(2) Cut 3-inch polyurethane foam cushioning material (MILP-26514) to proper size to provide cushioning for the top, bottom, and four sides of the container (fig. 2-1).

(3) Place foam inside container on bottom and four sides, using Adhesive MILA-140, if necessary, to hold in place.

NOTE

If container is slightly larger than orig-nal container, it may be necessary to provide additional cushioning material to in- sure proper fit of the converter test set.

(4) Place the converter test set in the containers making certain that cushioning material is in place along sides.

(5) Place cushioning material on top of the converter test set.

(6) Place covers on the containers and secure in place with nails, spaced sufficiently close together to ensure that covers are securely attached to containers.

Section II. DEMOLITION TO PREVENT ENEMY USE

5-3. Authority for Demolition

The demolition procedures given in paragraph 5-4 will be used to prevent the enemy from using or salvaging this equipment. Demolition of the equipment will be accomplished only upon the order of the commander.

5-4. Methods of Destruction

Any or all of the methods of destruction below may be used. The time available for destruction will be the major factor in determining the method to be used. The tactical situation will also determine the manner of destruction.

a. Smash. Use sledges, axes, hammers, bars, or any other heavy tools available to al] components.

b. Cut. Cut cables, cording, and component wiring. Use any available sharp instruments

c. Burn. Burn as much of the equipment as possible. Use gasoline, oil, or flamethrowers. Burn the instruction literature first. Pour gasoline on the cut cables and component wiring and ignite them Use incendiary grenades to complete the destruction of unit interiors.

WARNING

Be extremely careful with explosives and incendiary devices. Use these items on when the need is urgent.

d. Explode. Use explosives to complete demolition, or to cause maximum damage, whet does not permit other means. Powder charges and grenades are usually most effective for destruction of small parts and wiring.

e. Dispose. Bury or scatter destroyed parts or throw them into nearby waterways.

5-5. Priorities for Destruction

Destroy the equipment and documents in accordance with the priorities listed below when lack of time prevents complete destruction of the equipment.

a. Destroy confidential equipment and confidential documents before unclassified equipment and unclassified documents.

b. Destroy essential parts, and the same parts on all like equipment, before nonessential parts.

c. Apply the priorities for destruction of component parts of a major item also to destruction of similar components in repair parts storage areas.

d. Destroy the equipment types in accordance with priorities for destruction in table 5-1.

Table 5-1. Priorities for Destruction

Priority	*Equipment* type
1	The converter test set maintenance manuals.
2	100 kHz oscillator 2A1A1.
3	Write horizontal sweep generator 2A1A4.
4	Sync generator 2A1A2.
5	Simulator 1A1A7, video interface 1A1A8, 0and sync interface 1A1A9.
6	Control unit 1A1 and control unit 2A1 panels.

APPENDIX A
REFERENCES

The following publications contain information applicable to the operation and maintenance of Test Set, Converter Subassembly-Video Converter, AN/AAM-35.

DA Pam 310-4	Index of Technical manuals, Technical Bulletins, Supply Manuals (type 7, 8, and 9), Supply Bulletins and Lubrication Orders.
DA Pam 310-7	U.S. Army Equipment Index of Modification Work Orders.
SB 11-573	Painting and Preservation Supplies Available for Field Use for Electronics Command Equipment.
SB 38-100P	reservation, Packaging, Packing and Marking Materials, Supplies, and Equipment Used by the Army.
TB 746-10	Field Instructions for Painting and Preserving Electronics Command Equipment.
TM 38-230	Preservation, Packaging, and Packing of Military Supplies and Equipment: Preservation and Packaging.
TM 38-750	The Army Maintenance Management System (TAMMS).
TM 11-58&0-241-34/1	DS and GS Maintenance Manual: Detecting Set, Infrared AN/AAS-24 (Volume 1 of 2)
(C) 11-5850-241-34/	2DS and GS Maintenance Manual: Detecting Set, Infrared AN/AAS-24 (Volume 2 of 2) (U).
TM 11-6625-1703-15	Operator, Organizational, DS, GS, and Depot Maintenance Manual Including Repair Parts and Special Tools List: Oscilloscope AN/USM-281A.
TM 11-6625-700-10	Operator's Manual: Digital Readout, Electronic Counter AN/USM-207.

APPENDIX B
BASIC ISSUE ITEMS LIST (BIIL) AND ITEMS TROOP INSTALLED OR AUTHORIZED LIST (ITIAL)

B-1. Scope

This appendix lists only basic issue items require by the crew/operator for installation, operation, an maintenance of the Test Set, Converter Sub

B-2. General

This Basic Issue Items and Items Troop Installed c Authorized List is divided into the following sections:

a. Basic Issue Items List - Section II. A list in alphabetical sequence, of items which are furnished with, and which must be turned in with the end item

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

B-3. Explanation of Columns

The following provides an explanation of column 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 in the illustration.

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.

(*1) 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.

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

d. Unit of Measure (U/M). Indicates the standard of 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.

e. Quantity Furnished With Equipment (Basic Issue Items Only.) Indicates the quantity of the basic issue item furnished with the equipment.

Section II. BASIC ISSUE ITEMS LIST

(1) IILLUSTRATION (A) FIG. NO.	(1) IILLUSTRATION (B) ITEM NO.	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION PART NUMBER & FSCM USABLE ON CODE	(4) QTY FURN WITH EQUIP
1-1	1MP	6625-480-7641	COVER, TEST SET SUBASSEMBLYCW-1108/AAM-35	1
1-1	2MP1	6625-489-0435	COVER, TEST SET SUBASSEMBLY CW-1109/AAM-35	1

APPENDIX C

MAINTENANCE ALLOCATION

Section 1. INTRODUCTION

C-1. General

This appendix provides a summary of the maintenance operations covered in the equipment literature for Test Set, Converter Subassembly-Video Converter AN/AAM-35. It authorizes categories of maintenance for specific maintenance function 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 a: defined as follows:

a. Inspect. To determine serviceability of item by comparing its physical, mechanical and electrical characteristics with established standards.

b. Test. To verify serviceability and to detect incipient electrical or mechanical failure by use special equipment such as gages, meters, etc. This accomplished with external test equipment a: does not include operation of the equipment a: operator type tests using internal meters or indicating devices.

c. Service. To clean, to preserve, to charge, and to add fuel, lubricants, cooling agents, and air. If it is desired that elements, such as painting and lubricating, be defined separately, they may be listed.

d. Adjust. To rectify to the extent necessary to bring into proper operating range.

e. Align. To adjust two or more components or assemblies of an electrical or mechanical system so that their functions are properly synchronize. This does not include setting the frequency control knob of radio receivers or transmitters to the desired frequency.

f. Calibrate. To determine the corrections to be made in readings of instruments of test equipment used in precise measurement. Consists of the comparison of two instruments, one which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared with the certified standard.

g. Install, To set up for use in an operational environment such as an encampment, site, or vehicle.

h. Replace. To replace unserviceable items with serviceable like items.

i. Repair. To restore an item to serviceable condition through correction of specific failure or unserviceable condition. This function includes, but is not limited to welding, grinding, riveting, straightening, and replacement of parts other than the trial and error replacement of running spare type items such as fuses, lamps, or electron tubes.

j. Overhaul. Normally, the highest degree of maintenance performed by the Army to minimize time work in process and is consistent with quality and economy of operation. It consists of that maintenance necessary to restore an item to completely serviceable condition as prescribed by maintenance standards in technical publications for each item of equipment. Overhaul normally does not return an item to like new, zero mileage, or zero hour condition.

Rebuild. The highest degree of material maintenance.

k. It consists of restoring equipment as nearly as possible to new condition in accordance with original manufacturing standards. Rebuild is performed only when required by operational considerations or other paramount factors and then only at the depot maintenance category. Rebuild reduces to zero the hours or miles the equipment, or component thereof, has been in use.

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

C-3. Explanation of Format

a. *Column 1, Group Number*. Column 1lists group numbers, the purpose of which is to identify components, assemblies, subassemblies and modules with the next higher assembly.

b. *Column 2, functional group*. Column 2 lists the noun names of components, assemblies, subassemblies and modules on which maintenance authorized.

c. *Column 3, Maintenance Functions*. 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:

Code	*Maintenance category*
C	Operator/crew
0	Organizational maintenance
F	Direct support maintenance
H	General support maintenance
D	Depot maintenance

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

e. Column 5, Remarks. Self-explanatory.

C-4. Explanation for Format of Section III, Tool and Test Equipment Requirements

The columns in Section III, Tool and Test Equipment Requirements, are as follows:

a. Tools or Test Equipment Reference Code. Not used.

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.

allocation chart (sec. II).

e. Tool Number. The numbers in this column coincide with the numbers in the tools and equipment column of the maintenance

SECTION II. MAINTENANCE ALLOCATION CHART

(1) GROUP NUMBER	(2) FUNCTIONAL GROUP COMPONENT ASSEMBLY	(3) MAINTENANCE FUNCTIONS											(4) TOOLS AND EQUIPMENT	(5) REMARKS
		INSPECT	TEST	SERVICE	ADJUST	ALIGN	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL	REBUILD		
1	Test Set Subassembly	O		O				O	O				6	
	MX-8748/AAM-35		H		H	H	*			H			3, 4	*Calibration team
													5, 7	
											D	D	1, 2, 3, 4, 5, 7	
1A1	Control Unit 1		H						H	H			3, 4, 5, 7, 10	
											D		1, 2, 3, 4, 5, 7	
1A1A1	Power Supply, - 15 Vdc		H		H				H				3, 5, 7,	
											D	D	3, 5, 7, 8,	
1A1A3	Power Supply, +150/+250 Vdc		H		H				H				3, 5, 7,	
											D	D	3, 5, 7, 8	

SECTION II. MAINTENANCE ALLOCATION CHART

(1) GROUP NUMBER	(2) FUNCTIONAL GROUP COMPONENT ASSEMBLY	(3) MAINTENANCE FUNCTIONS											(4) TOOLS AND EQUIPMENT	(5) REMARKS
		INSPECT	TEST	SERVICE	ADJUST	ALIGN	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL	REBUILD		
1A1A4	Power Supply, +150/+250 Vdc		H		H				H				3, 5, 7	
											D	D	3, 5, 7, 8	
1A1A5	Filament Supply, Storage Tube		H		H				H				3, 5, 7,	
											D	D	3, 5, 7, 8	
1A1A6	Power control, TCI and Cs-Vc		H		H				H				3, 4, 5, 7	
											D	D	3, 4, 5, 7, 8	
1A1A8	Video Interface		H						H				3, 4, 5, 7	
											D	D	3, 4, 5, 7, 8	
1A1A9	Sync Interface		H						H				3, 4, 5, 7	
											D	D	3, 4, 5, 7, 8	
1A1A10	Generator, Hot Spot		H						H				3, 4, 5, 7	
											D	D	3, 4, 5, 7, 8	
1A1A11	Loads Board No.1		H						H				3, 4, 5, 7	
											D	D	3, 4, 5, 7, 8	

SECTION II. MAINTENANCE ALLOCATION CHART

(1) GROUP NUMBER	(2) FUNCTIONAL GROUP COMPONENT ASSEMBLY	(3) MAINTENANCE FUNCTIONS											(4) TOOLS AND EQUIPMENT	(5) REMARKS
		INSPECT	TEST	SERVICE	ADJUST	ALIGN	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL	REBUILD		
1A1A12	Loads Board No. 2		H						H				3, 5, 7	
										D	D		3, 5, 7, 8	
1A1A13	Assembly, Heatsink		H						H				4, 5, 7	
										D	D		4, 5, 7, 8	
1A1A14	Assembly, Heatsink		H						H				3, 4, 5, 7	
										D	D		3, 4, 5, 7, 8, 9	
1A1A15	Assembly, Filter		H						H	H			3, 7	
											D		3, 5, 7	
W1, W2	Cable Assemblies, Dc, Ac,	O							O					
W4	Interconnecting		H							H			3, 5	
through											D		3, 5	
W8														
2	Test Set Subassembly	O		O				O	O				6	
	MX-8749/AAM-35		H		H	H	*			H			2, 3, 4, 5, 7	*Calibration team
											D	D	1, 2, 3, 4, 5, 7	

SECTION II. MAINTENANCE ALLOCATION CHART

(1) GROUP NUMBER	(2) FUNCTIONAL GROUP COMPONENT ASSEMBLY	(3) MAINTENANCE FUNCTIONS										(4) TOOLS AND EQUIPMENT	(5) REMARKS
		INSPECT	TEST	SERVICE	ADJUST	ALIGN	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL	REBUILD	
2A1	Control Unit 2		H					H	H				3, 4, 5, 7, 10
											D		3, 4, 5, 7
2A1A1	Oscillator, 100 kHz		H					H					3, 4, 5
										D	D		3, 4, 5, 8
2A1A2	Generator, Sync		H		H			H					3, 4, 5
										D	D		1, 3, 4, 5, 7, 8
2A1A3	Generator, Read Vertical Sweep		H		H			H					4, 5, 7
										D	D		4, 5, 7, 8
2A1A4	Generator, Write Horizontal Sweep		H		H			H					4, 5, 7
										D	D		4, 5, 7, 8
2A1A5	Slew, Write Horizontal and Fov		H		H			H					4, 5, 7
	Adder									D	D		4, 5, 7, 8
2A1A6	Amplifier, Write Video		H		H			H					4, 5, 7
										D	D		4, 5, 7, 8
2A1A7	Generator, V/h Clock Pulse		H		H			H					4, 5, 7
										D	D		1, 4, 5, 7, 8

SECTION II. MAINTENANCE ALLOCATION CHART

(1) GROUP NUMBER	(2) FUNCTIONAL GROUP COMPONENT ASSEMBLY	(3) MAINTENANCE FUNCTIONS										(4) TOOLS AND EQUIPMENT	(5) REMARKS
		INSPECT	TEST	SERVICE	ADJUST	ALIGN	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL	REBUILD	
2A1A8	Generator, Write Vertical Sweep		H		H				H				4, 5, 7
										D	D		1, 2, 4, 5, 7, 8, 9
2A1A9	generator, Erase Vertical Sweep		H		H				H				4, 7
										D	D		4, 7, 8
2A1A10	Logic, Auxiliary Deflection		H		H				H				4, 7
										D	D		4, 7, 8
2A1A11	Generator, Dither		H		H				H				3, 4, 5, 7
										D	D		1, 2, 3, 45, 7, 8
2A1A12	Sweep and Blanking, Cs-Vc		H		H				H				3, 4, 5, 7
										D	D		1, 2, 3, 4, 5, 7, 8
2A1A13	Storage Tube Protect, Loads and Video Amplifier		H						H				2, 3, 4, 5, 7
										D	D		3, 4, 5, 7
										D	D		8, 9, 11

SECTION II. MAINTENANCE ALLOCATION CHART

(1) GROUP NUMBER	(2) FUNCTIONAL GROUP COMPONENT ASSEMBLY	(3) MAINTENANCE FUNCTIONS										(4) TOOLS AND EQUIPMENT	(5) REMARKS
		INSPECT	TEST	SERVICE	ADJUST	ALIGN	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL	REBUILD	
2A1A14	Power supply, +15 Vdc		H		H				H				3, 5, 7
										D	D		3, 5, 7, 8
2A1A15	Assembly, Heatsink		H						H				3, 5, 7
										D	D		3, 5, 7, 8
W3, W9	Cable Assemblies, Interconnecting	O							O				
through			H							H			3, 5
W11											D		3, 5

TOOL AND TEST EQUIPMENT REQUIREMENTS				
TOOLS AND EQUIPMENT	**MAINTENANCE CATEGORY**	**NOMENCLATURE**	**FEDERAL STOCK NUMBER**	**TOOL NUMBER**
	D	Digital Readout, Electronic Counter AN/USM-207	6625-911-6368	1
	H, D	Generator, signal SG-769/U (Wavetek 111)	Commercial	2
	H, D	Multimeter TS- 352B/U	6625-553-0142	3
	H, D	Oscilloscope AN/USM-218A	6625-053-3112	4
	H, D	Tool Kit, Electronic Equipment TK-105/G	5180-605-0079	5
	O	Tool Kit, Electronic Equipment TK-101/G	5180-064-5178	6
	H, D	Digital Voltmeter (non-Linear Systems Model X-2; two required) with dual function converter, part number 37-42, and AC converter, part number 37-45.	Commercial	7
	D	Test Set, Electronic Circuit Plug-In Unit AN/AAM-39	6625-459-3403	8
	D	Pulse Generator, Hewlett-Packard Model 222A	Commercial	9
	H	Maintenance Kit, Electronic Equipment MK-1172/AAS-24	5850-434-5539	10
	D	Signal Generator AN/USM-264		11

APPENDIX D
ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST

Section 1. INTRODUCTION

D-1. Scope
This appendix lists repair parts and special tools required for the performance of organization maintenance of the Test Set, Converter Subassembly-Video Converter AN/AAM35.

D-2. General
This Repair Parts and Special Tools List is divide into the following sections:

a. *prescribed Load Allowance (PLA)-Section II* A composite listing of the repair parts, special tools, test and support equipment having quantitative allowances for initial stockage at the organizational level.

b. Repair Parts-Section III. A list of Test Set, Converter Subassembly-Video Converter AN\/AAM-35 repair parts authorized for the performance of maintenance at the organizational level figure and item number sequence.

c. Special Tools, Test and Support Equipme7 Not applicable.

D-3. Explanation of Columns
The following provides an explanation of column

a. Source, Maintenance, and Recoverability Codes (SMR), Column 1.

(1) Source code indicates the selection status and source for the listed item. Source codes are-

Code	*Explanation*
P	-Repair parts which are stocked in or supplied from the GSA/DSA, or Army supply system, and authorized for use at indicated maintenance categories.
M	-Repair parts which are not procured stocked, but are to be manufactured in indicated maintenance levels.
A-	Assemblies which are not procured or stocked as such, but are made up of two or more units. Such component units carry individual stock numbers and descriptions, are procured and stocked separately, and can be assembled to form the required assembly at indicated maintenance categories.
X1	Repair parts which are not procured or stocked. The requirement for such items will be filled by use of the next higher assembly or component.
X2	Repair parts which are not stocked. The indicated maintenance category requiring such repair parts will attempt to obtain same through cannibalization. Where such repair parts are not obtain- able through cannibalization, requirements will be requisitioned, with accom- panying justification, through normal Supply channels.
G	Major assemblies that are procured with PEMA funds for initial issue only as ex- change assemblies at DSU and GSU level. These assemblies will not be stocked above DS and GS level or returned to depot supply level.

(2) Maintenance code indicates the lowest category of maintenance authorized to install the listed item. The maintenance level codes are—

Code	*Explanation*
C	Crew or operator maintenance.
0	Organizational maintenance.
F	Direct support maintenance.
H	General support maintenance.
D	Depot maintenance.

(3) Recoverability code indicates whether unserviceable items should be returned for recovery or salvage. Items not coded are expendable. Recoverability codes are-

Code	*Explanation*
R	Repair parts and assemblies which a economically reparable at DSU and GS activities and are normally furnished supply on an exchange basis.
S	Repair parts and assemblies which are economically reparable at DSU and GSU activities and which normally are furnished by supply on an exchange basis When items are determined by a *GSU to be uneconomically reparable,* they will be evacuated to a depot for evaluation and analysis before final disposition.
T	High dollar value recoverable repair parts which are subject to special handling and are issued on an exchange basis Such repair parts normally are repaired. or overhauled at depot maintenance activities.
U	Repair parts specifically selected for salvage by reclamation units because precious metal content, critical materials or high dollar value reusable casings or castings.

b. Federal Stock Number, Column 2. This column indicates the Federal stock number assignee to the item and will be used for requisitioning purposes.

c. Description, Column 3. This column indicate, the Federal item name and any additional description of the item required. The abbreviation "w/e", when used as part of the nomenclature, indicates the Federal stock number includes all armament, equipment, accessories, and repair parts issued with the item. A part number or other reference number is followed by the applicable five-digit Federal supply code for manufacturers in parentheses. Repair parts quantities included in the kits, sets, and assemblies are shown in front of the repair part name, Material required for manufacture or fabrication is identified.

d. Unit of Measure (U/M), Column 4. A 2-character alphabetic abbreviation indicating the amount or quantity of the item upon which the allowances are based; e.g., ft, ea, pr, etc.

e. Quantity Incorporated in Unit, Column 5. This column indicates the quantity of the item used in the unit. A "V" appearing in this column in lieu of a quantity indicates that a definite, quantity cannot be indicated (e.g., shims, spacers, etc.).

f. 15-Day Organizational Maintenance Allowance,. Column 6.

(1) The allowance columns are divided into four subcolumns. Indicated in each subcolumn opposite the first appearance of each item is the total quantity of items authorized for the number of equipments supported. Subsequent appearances of the same item will have the letters "REF" in the allowance columns. Items authorized for use as required but not for initial stockage are identified with an asterisk in the allowance column.

(2) The quantitative allowances for organizational level of maintenance represents one initial prescribed load for a 15-day period for the number of equipments supported. Units and organizations authorized additional prescribed loads will multiply the number of prescribed loads authorized by the quantity of repair parts reflected in the density column applicable to the number of items supported to obtain the total quantity of repair parts authorized.

(3) Organizational units providing maintenance for more than 100 of these equipments shall determine the total quantity of parts required by converting the equipment quantity to a decimal factor by placing a decimal point before the next to last digit of the number to indicate hundredths, and multiplying the decimal factor by the parts quantity authorized in the 51-100 allowance column. *Example,* authorized allowance for 51-100 equipments is 40; for 150 equipments multiply 40 by 1.50 or 60 parts required.

(4) Subsequent changes to allowances will be limited as follows: No change in the range of items is authorized. If additional items are considered necessary, recommendation should be forwarded to the Maintenance Engineering Directorate, AMSEL-ME-NMP-RS.Fort Monmouth, N. J., 07703. for exception or revision to the allowance list. Revisions to the range of items authorized will be made by the Maintenance Engineering Directorate based upon engineering experience, demand data, or TAERS information

g. Illustration, Column 7. This column is divide as follows:

(1) Figure Number, Column 7a. Indicates t] figure number of the illustration in which the item is shown.

(2) Item Number, Column 7b. Indicates the callout number used to reference the item in the illustration.

D-4. Special Information

a. Parts which require manufacture or assembly at a category higher than that authorized for installation will indicate in the source column the higher category.

b. For end items authorized mandatory stockage of repair parts by the Department of the Arm on a case-by-case basis, the mandatory stockage items are indicated by a plus "+" sign as the first character in the end item density columns of both the Repair Parts List and the Prescribed Los Allowance for each such authorized allowance quantity.

D-5. How to Locate Repair Parts Locate the sequence number in the Repair Parts List Sequence Number/SMR Code column which is in ascending alpha-numeric order, to find the repair part.

D-6. Abbreviations Not applicable.

D-7. Federal Supply Codes for Manufacturers

Code	*Manufacturer*
71468	ITT Cannon Electric Corp.
91146	ITT Cannon Electric, Salem, Mass, Div.
96906	Military Standards

SECTION II PRESCRIBED LOAD ALLOWANCE

(1) FEDERAL STOCK NUMBER	(2) DESCRIPTION	(3) 15-DAY ORG MAINT ALLOWANCE			
		(A) 1-5	(B) 6-20	(C) 21-50	(D) 51-100
5355-616-7669	KNOB, CONTROL: MS91528-2D2B (96906)	*	*	2	2
5355-985-6888	KNOB, CONTROL: MS91528-2M2B (96906)	*	2	2	3

SECTION III REPA IR PARTS FOR ORGANIZATIONAL MAINTENANCE

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REF NUMBER & MFR CODE / USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 15-DAY ORGANIZATIONAL MAINTENANCE ALW (a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(7) ILLUS-TRATION (a) FIG NO.	(b) ITEM NO.
A003 P—O-S	6625-489-2669	CABLE ASSEMBLY, SPECIAL PURPOSE,ELECTRICAL CX-12432/AAM35	EA	1	*	*	*	2	1-1	1W4
A013 P—O-S	6625-489-6102	CABLE ASSEMBLY, SPECIAL PURPOSE,ELECTRICAL CX-12433/AAM-35	EA	1	*	*	*	2	1-1	1W5
A021 P—O-S	6625-489-2670	CABLE ASS$ BLY, SPECIAL PURPOSE,ELECTRICAL CX-12434/AAM-35	EA	1	*	*	.*	2	1-1	1W6
A030 P—O-S	6625-489-0462	CABLE ASSEMBLY, SPECIAL PURPOSE,ELECTRICAL CX-12435/AA-35	EA	1	*	*	*	2	1-1	1W7
A042 P--0-S	6625-242-5796	CABLE ASSEMBLY, SPECIAL PURPOSE,ELECTRICAL CX-12436/AAM-35	EA	1	*	*	*	2	1-1	1W8
A054 P—O-S	6625-196-2844	CABLE ASSEMBLY, POWER, ELECTRICAL CX-12408/U-(8 FT)	EA	1	*	*	*	2	1-1	1W1
A061 P—O-S	6625-470-4315	CABLE ASSIEMBLY, POWER, ELETRICAL CI-12409/U-(8 FT)	EA	1	*	*	*	2	1-1	1W2
A285 P—O—	5355-616-7669	KNOB, CONTROL: MS91528-2D2B (96906)	EA	6	*	*	2	2	1-1	1A1MP2MP22
A286 P—O—	5355-985-6888	KNOB, CONTROL: MS91528-2N2B (96906)	EA	18	*	2	2	3	1-1	1A1MP2MP23
A287 P—O—	5355-985-6888	KNOB, CONTROL: NS91528-2N2B (96906)	EA	REF	REF	REF	REF	REF	1-1	1A1MP2MP24
A288 P—O—	5355-985-6888	KNOB, CONTROL:S891528-2N2B (96906)	EA	REF	REF	REF	REF	REF	1-1	1A1MP2MP25
A289 P—O—	5355-985-6888	KNOB, CONTROL: MS91528-212B (96906)	EA	REF	REF	REF	REF	REF	1-1	1A1MP2MP26
A290 P—O—	5355-985-6888	KNOB, CONTROL: MS91528-2N2B (96906)	EA	REF	REF	REF	REF	REF	1-1	1A1MP2MP27
A291 P—O—	5355-985-6888	KNOB, CONTROL: NS91528-2N2B (96906)	EA	REF	REF	REF	REF	REF	1-1	1A1MP2MP28
A292 P—O—	5355-985-6888	KNOB, COITROL: NS91528-2M2B (96906)	EA	REF	REF	REF	REF	REF	1-11	A1MP2MP29
A293 P—O—	5355-985-6888	KNOB, CONTROL: IM91528-2M2B (96906)	EA	REF	REF	REF	REF	REF	1-1	1A1MP2MP30
A294 P—O—	5355-985-6888	KNOB, CONTROL: NS91528-212B (96906)	EA	REF	REF	REF	REF	REF	1-1	1A1MP2MP31
B165 P—O-S	6625-489-2671	CABLE ASSEMBLY, SPCIAL PURPOSE, CX-12437/AAM-35	EA	1	*	*	*	2	1-1	2W3
B174 P—O-S	6625-489-0467	CABLE ASSEMBLY, SPECIAL PURPOSE, CX-12438/MAA-35	EA	1	*	*	*	2	1-1	2W10
B187 P—O-S	6625-242-5797	CABLE ASSEMBLY, SPECIAL PURPOSE,ELECTRICAL CX-12439/AAM-35	EA	1	*	*	*	2	1-1	2W11
B196 P—O-S	6625-489-6140	CABLE ASSEMBLY, SPECIAL PURPOSE,ELECTRICAL CX-12440/AAM-35	EA	1	*	*	*	2	1-1	2W9
B646	5355-616-7669	KNOB, CONTIIOL:MS91528-2D2B (96906)	EA	REF	REF	REF	REF	REF	1-1	2A1MP33MP33
B657 P--0--	5355-616-7669	KNOB, CONTROL:NS91528-2D2B (96906)	EA	REF	REF	REF	REF	REF	1-1	2A1MP33MP34
B648 P—O—	5355-616-7669	KNOB, CONTROL: MS91528-2D2B (96906)	EA	REF	REF	REF	REF	REF	1-1	2A1MP33MP35
B649 P—O—	5355-616-7669	KNOB, CONTROL: MS91528-2D2B (96906)	EA	REF	REF	REF	REF	REF	1-1	2A1MP33MP36
B650 P—O—	5355-616-7669	KNOB, CONTROL: MS91528-2D2B (96906)	EA	REF	REF	REF	REF	REF	1-1	2A1MP33MP37
B651 P—O—	5355-985-68888	KNOB, CONTROL: MS91528-2M2B (96908)	EA	REF	REF	REF	REF	REF	1-1	2A1MP33MP38

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REF NUMBER & MFR CODE / USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 15-DAY ORGANIZATIONAL MAINTENANCE ALW (a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(7) ILLUS-TRATION (a) FIG NO.	(b) ITEM NO.
B652 P—O—	5355-985-6888	KNOB, CONTROL: MS91528-2M2B (96906)	EA	REF	REF	REF	REF	REF	1-1	2A1MP33MP39
B653 P—O—	5355-985-6888	KNOB, CONTROL: MS91528-2M2B (96906)	EA	REF	REF	REF	REF	REF	1-1	2A1MP33MP40
B654 P__O__	5355-985-6888	KNOB, CONTROL: MS91528-2M2B (96906)	EA	REF	REF	REF	REF	REF	1-1	1 2A1MP33MP41
B655 P—O—	5355-985-6888	KNOB, CONTROL: MS91528-2M2B (96906)	EA	REF	REF	REF	REF	REF	1-1	2A1MP33MP42
B656 P—O—	5355-985-6888	KNOB, CONTROL: MS91528-2M2B (96906)	EA	REF	REF	REF	REF	REF	1-1	2A1MP33MP43
B657 P__O__	5355-985-6888	KNOB, CONTROL: MS91528-2M2B (96906)	EA	REF	REF	REF	REF	REF	1-1	1 2A1MP33MP44
B658 P—O—	5355-985-6888	KNOB, CONTROL: MS91528-2M2B (96906)	EA	REF	REF	REF	REF	REF	1-1	2A1MP33MP45
B659 P__O__	5355-985-6888	KNOB, CONTROL: MS91528-2M2B (96906)	EA	REF	REF	REF	REF	REF	1-1	1 2A1MP33MP46

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