

CHAPTER 5

SHIPMENT, LIMITED STORAGE, AND DEMOLITION TO PREVENT ENEMY USE

Section I. SHIPMENT AND LIMITED STORAGE

46. Disassembly of Equipment

- a. Operate all switches and their controls to their safety positions (par. 15d) and disconnect the tube tester from the ac power supply.
- b. Remove the power cord plug from the ac source.
- c. Wind the power cord around the brackets on the front panel and insert the plug into the dummy power cord receptacle that is mounted on the front panel.
- d. Close the case and latch it securely.

47. Repackaging for Shipment or Limited Storage (fig. 11)

The exact procedure for repackaging depends on the material available and the conditions under which the equipment is to be shipped or stored. Adapt the procedures outlined below whenever circumstances permit. The information concerning the original packaging (pars. 8 and 9) will also be helpful.

- a. *Material Requirements.* The following materials are required for packaging the tube tester. For stock numbers of materials, consult SB 38-100.

Material	Quantity
Waterproof wrapping paper -----	18 sq ft
Fiberboard, corrugated, single-face (flexible) -----	35 sq ft
Tape, pressure-sensitive adhesive, waterproof (3-inch) -----	12 ft
Tape, paper, gummed (sealing and securing) (3-inch) -----	10 ft
Strapping, flat, steel (5/8" x 0.02-inch) -----	13 ft
Strapping seals -----	2 each
Wooden shipping box (19 1/4 x 18 1/4 x 10 5/8 inches inside dimensions).	1 ea

b. Packaging.

- (1) Package each technical manual within a close-fitting bag fabricated of waterproof paper. Seal each bag with waterproof pressure-sensitive tape.
- (2) Running spares are stored in designated positions on the inside cover and chassis (figs. 1 and 8) of the tube tester.
- (3) Package the tube tester in a double wrap of flexible corrugated fiberboard. Secure the ends of the package with waterproof pressure-sensitive tape.

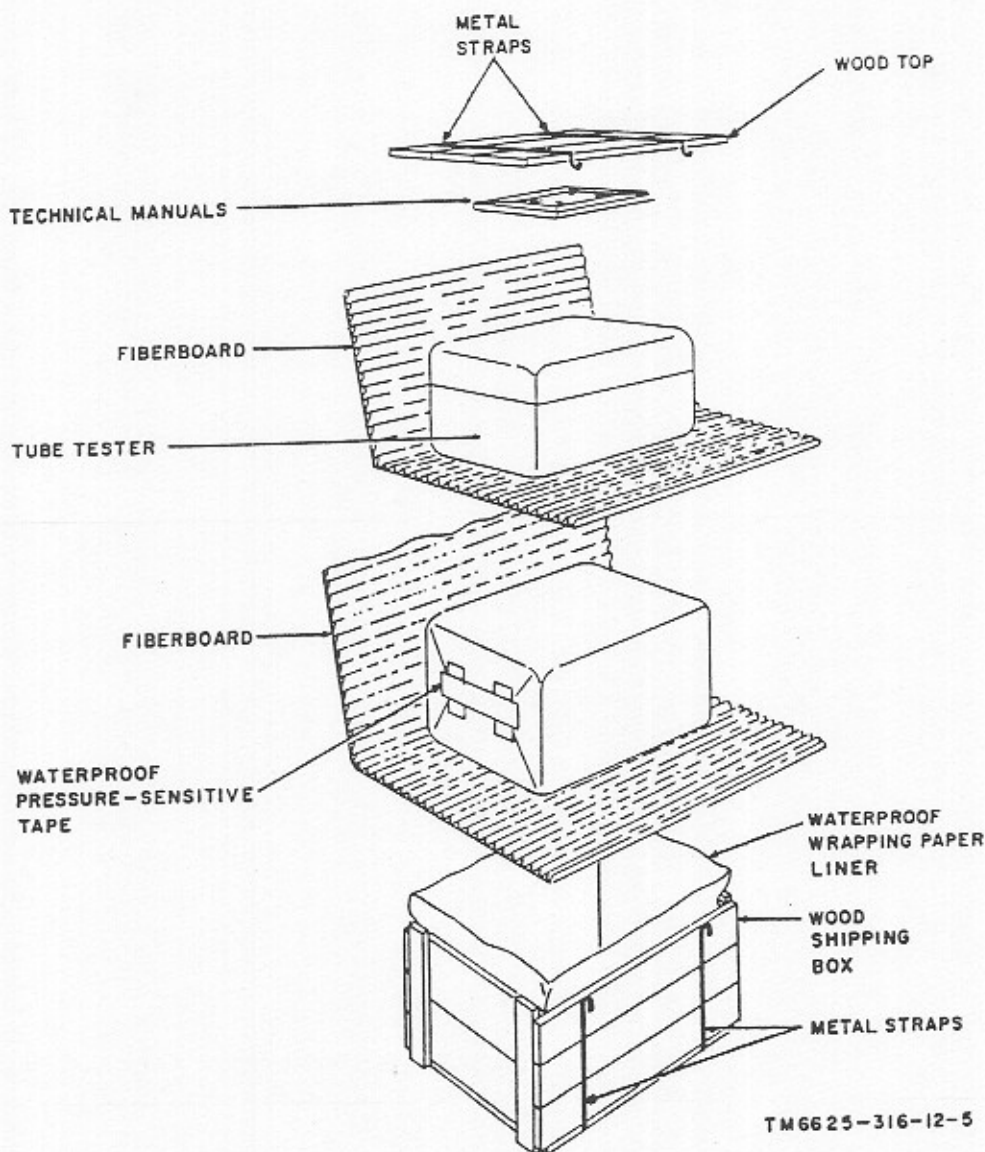


Figure 11. Field repackaging diagram.

c. Packing.

- (1) Line the wooden shipping box with waterproof wrapping paper.
- (2) Place the wrapped tube tester in the wooden shipping box.
- (3) Seal the waterproof wrapping paper liner with waterproof pressure-sensitive tape.
- (4) Place the wrapped technical manuals on top of the sealed waterproof wrapping paper liner and secure them with waterproof pressure-sensitive tape.
- (5) Nail the wooden cover in place.
- (6) For intertheater shipment, secure the wooden shipping box with metal strapping.

Section II. DEMOLITION OF MATERIEL TO PREVENT ENEMY USE

48. Authority for Demolition

The destruction procedures outlined in paragraph 49 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.

49. Methods of Destruction

Any or all of the methods of destruction given below may be used. The time available will be the major determining factor for the methods to be used when destruction of the equipment is undertaken. The tactical situation also will determine in what manner the destruction order will be carried out.

a. Smash. Smash meters, switches and controls, the instrument panel and chassis, tubes, capacitors, resistors, transformers, the roll chart housing, and the case; use sledges, axes, handaxes, pickaxes, hammers, crowbars, or heavy tools.

b. Cut. Cut cords and wiring; use axes, handaxes, or machetes.

Warning: Be extremely careful with explosive and incendiary devices. Use these items only when the need is urgent.

c. Burn. Burn cords, wiring, the tube test data roll chart, and technical manuals; use gasoline, kerosene, oil, flamethrowers, or incendiary grenades.

d. Bend. Bend the panel, case, and chassis.

e. Disposal. Bury or scatter the destroyed parts in slit trenches, foxholes, or other holes, or throw them into streams.

APPENDIX I

REFERENCES

Following is a list of references applicable and available to the operator and unit repairman of Test Set, Electron Tube TV-2(*)/U:

- | | |
|--------------------|--|
| FM 21-5 | Military Training. |
| FM 21-6 | Techniques of Military Instruction. |
| FM 21-30 | Military Symbols. |
| SB 38-100 | Preservation, Packaging, and Packing Materials, Supplies, and Equipment Used by the Army. |
| AR 320-5 | Dictionary of United States Army Terms. |
| AR 320-50 | Authorized Abbreviations and Brevity Codes. |
| TM 11-6625-316-12P | Operator's and Organizational Maintenance Repair Parts and Special Tools List and Maintenance Allocation Chart for Electron Tube Test Sets TV-2/U, TV-2B/U, and TV-2B/U. |

APPENDIX II

MAINTENANCE ALLOCATION

1. Scope

a. This appendix assigns maintenance functions and repair operations to be performed by the lowest appropriate maintenance echelon. It also specifies the tools and other equipment authorized at each echelon to perform the assigned maintenance functions.

b. Columns in the maintenance allocation chart are as follows:

- (1) *Part or component.* This column shows only the nomenclature or standard item name. Additional descriptive data are included only where clarification is necessary to identify the part. Components and parts comprising a major end item are listed alphabetically. Assemblies and subassemblies are in alphabetical sequence with their components listed alphabetically immediately below the assembly listing.
- (2) *Maintenance function.* This column indicates the various maintenance functions allocated to the echelon capable of performing the operations.
 - (a) *Service.* To clean, to preserve, and to replenish fuel and lubricants.
 - (b) *Inspect.* To verify serviceability and to detect incipient electrical or mechanical failure by scrutiny.
 - (c) *Test.* To verify serviceability and to detect incipient electrical or mechanical failure by use of special equipment such as gages, meters, and other test devices.
 - (d) *Replace.* To substitute service assemblies, subassemblies, and parts for unserviceable components.
 - (e) *Repair.* To restore an item to serviceable condition through correction of a specific failure or unserviceable condition. This function includes but is not limited to, inspecting, cleaning, preserving, adjusting, replacing, welding, riveting, and straightening.
 - (f) *Rebuild.* To restore an item to a standard as near as possible to original or new condition in appearance, performance, and life expectancy. This is accomplished

through the maintenance technique of complete disassembly of the item, inspection of all parts or components, repair or replacement of worn or unserviceable elements using original manufacturing tolerances and/or specifications and subsequent reassembly of the item.

- (3) *1st, 2d, 3d, 4th, 5th echelon.* The symbol X indicates the echelon responsible for performing that particular maintenance operation, but does not necessarily indicate that repair parts will be stocked at that level. Echelons higher than the echelon marked by X are authorized to perform the indicated operation.
- (4) *Tools required.* This column indicates codes assigned to each individual tool equipment, test equipment, and maintenance equipment referenced. The grouping of codes in this column of the maintenance allocation chart indicates the tool, test, and maintenance equipment required to perform the maintenance function.
- (5) *Remarks.* Entries in this column will be utilized when necessary to clarify any of the data cited in the preceding columns.

c. Columns in the allocation of tools for maintenance functions are as follows:

- (1) *Tools required for maintenance functions.* This column lists tools, test, and maintenance equipment required to perform the maintenance functions.
- (2) *1st, 2d, 3d, 4th, 5th echelon.* The dagger (†) symbol indicates the echelons allocated the facility.
- (3) *Tool code.* This column lists the tool code assigned.

2. Maintenance by Using Organizations

When this equipment is used by Signal services organizations organic to the theater headquarters or communication zones to provide theater communications, those maintenance functions allocated up to and including fourth echelon are authorized to the organization operating this equipment.

3. Mounting Hardware

The basic entries of the maintenance allocation chart do not include mounting hardware such as screws, nuts, bolts, washers, brackets, clamps, etc.

APPENDIX III

BASIC ISSUE ITEMS LIST

Section I. INTRODUCTION

1. Scope

a. General. This appendix lists items supplied for initial operation and for running spares. The list includes parts and material issued as *part* of the major end item, and all items authorized for basic operator maintenance of the equipment. End items of the equipment are issued on the basis of allowances prescribed in equipment authorization tables and other documents that are a basis for requisitioning.

b. Columns. The columns are as follows:

- (1) *Source, maintenance, and recoverability code.* Not used.
- (2) *Federal stock number.* This column lists the 11-digit Federal stock number.
- (3) *Designation by model.* Not used.
- (4) *Description.* Nomenclature or the standard item name and brief identifying data for each item are listed in this column. When requisitioning, enter the nomenclature and description.
- (5) *Unit of issue.* The unit of issue is the supply term by which the individual item is counted for procurement, storage, requisitioning, allowances, and issue purposes.
- (6) *Expendability.* Expendable items are indicated by the letter X; nonexpendable items are indicated by NX.
- (7) *Quantity authorized.* Under "Items Comprising an Operable Equipment," the column lists the quantity of items supplied for the initial operation of the equipment. Under "Running Spares and Accessory Items", the quantities listed are those issued initially with the equipment as spare parts. The quantities are authorized to be kept on hand by the operator for maintenance of the equipment.
- (8) *Illustration.* The "Item No." column lists the reference symbols used for identification of the items in the illustration or text of the manual. The numbers in the "Figure

No." column refer to the illustrations where the part is shown.

2. Critical Items

A zero slash (Ø) in the "Description" column indicates items that are expected to fail during the first year; also items that will make the equipment inoperative if they fail.

BY ORDER OF THE SECRETARY OF THE ARMY:

G. H. DECKER,
General, United States Army,
Chief of Staff.

Official:

R. V. LEE,
Major General, United States Army,
The Adjutant General.

Distribution:

Active Army:

To be distributed in accordance with DA Form 12-7 requirements for TM 11-series (unclas); plus the following:

USASA (2)	11-39	44-437
CNGB (1)	11-55	44-445
Tech Stf, DA (1) except	11-56	44-446
CSigO (18)	11-57	44-447
DASA (5)	11-58	44-448
US ARADCOM (2)	11-96	44-535
US ARADCOM Rgn (2)	11-97	44-536
MDW (1)	11-98	44-537
Seventh USA (2)	11-117	44-544
EUSA (2)	11-155	44-545
Corps (2)	11-157	44-546
USASCS (128)	11-158	44-547
Units org under fol TOE:	11-237	44-548
(Two copies to each unless	11-500	44-549
otherwise indicated):	(AA-AE) (4)	55-157
7	11-555	57
7-52	11-557	
9-47	11-587	
9-87	11-592	
9-227	11-597	
9-377	17	
9-500 (AA-AC)	29-51	
9-510 (AA-AC)	29-55	
11-5	29-56	
11-6	32-56	
11-7	32-57	
11-8	39-51	
11-15	39-52	
11-16	39-61	
11-37	44-435	
11-38	44-436	

NG: State AG (3); units—same as Active Army except allowance is one copy to each unit.

USAR: None.

For explanation of abbreviations used, see AR 320-50.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
PART OR COMPONENT	MAINTENANCE FUNCTION	1ST ECH	2ND ECH	3RD ECH	4TH ECH	5TH ECH	TOOLS REQUIRED	REMARKS
TEST SET, ELECTRON TUBE TV-2/U; TV-2A, B/U	service		X				5	Visual only
	inspect		X			X	2, 4	
	test		X			X	1, 3, 6	
	repair					X		
	calibrate					X		
	rebuild					X		
ADAPTERS, TEST	replace	X						Fabricate if required
CABLE ASSEMBLY, POWER ELECTRICAL	replace		X					
CABLE, POWER, ELECTRICAL	replace		X					
CONNECTOR, PLUG, ELECTRICAL	replace		X					
CAPACITORS	replace				X			Fabricate if required
CASE, ELECTRONIC EQUIPMENT	replace				X			
	repair				X			
CATCH, LUGGAGE	replace		X					
GASKET	replace		X					Fabricate if required
HANDLE	replace				X			Fabricate if required
HINGE	repair					X		Fabricate if required
COVER, ELECTRONIC EQUIPMENT	replace				X			Fabricate if required
	repair				X			Fabricate if required
HINGE	replace				X			Fabricate if required
	repair				X			Fabricate if required
OPERATING, INSTRUCTIONS	replace				X			Fabricate if required
ROLL CHART HOUSING ASSEMBLY	replace				X			Fabricate if required
	repair				X			

(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
TOOLS REQUIRED FOR MAINTENANCE FUNCTIONS									
1ST ECH	2ND ECH	3RD ECH	4TH ECH	5TH ECH	TOOL CODE	REMARKS			
TV-2/U; TV-2A, B/U (continued)									
					1	METER TEST SET TS-682/GSM-1			
					2	MULTIMETER AM/URM-105			
					3	TEST SET, ELECTRON TUBE AM/USM-31			
					4	TOOL EQUIPMENT TK-21/G			
					6	TOOLS AND TEST EQUIPMENT AVAILABLE TO THE REPAIRMAN USER BECAUSE OF HIS ASSIGNED MISSION			
					6	VOLTMETER, METER ME-30/U			

TV-2/U; TV-2A, B/U

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
PART OR COMPONENT	MAINTENANCE FUNCTION	1ST ECH	2ND ECH	3RD ECH	4TH ECH	5TH ECH	TOOLS ACQUIRED	REMARKS
TV-2/U; TV-2A, B/U (Continued)								
CHART (for tube test settings)	replace				X			
GEAR, SPUR	replace				X			
PIN, STRAIGHTENER, ELECTRON TUBE	replace	X						Available in tool kit TE-113 and TE-41
ROLLER, CHART	replace				X			
SPRING (for chart roller)	replace				X			
STRIKE, CATCH	replace				X			
	repair				X			Fabricate if required
CLAMP, ELECTRICAL	replace				X			
CLIP, ELECTRICAL	replace				X			
CONNECTORS	replace		X					
ELECTRON TUBES	replace	X						
FUSE, CARTRIDGE	replace	X						
FUSEHOLDER	replace				X			
GALVANOMETER	replace				X			
INSULATOR, BUSHING	replace				X			
INSULATOR, CLIP	replace		X					
INSULATOR, WASHER	replace				X			
KNOBS	replace		X					
LAMP, GLOW	replace	X						
LENS, INDICATOR LIGHT	replace		X					
LIGHT, INDICATOR	replace				X			
MULTIMETER, REPLACEMENT	replace				X			
RESISTORS	replace				X			
RETAINER, ELECTRON TUBE	replace		X					
SHIELD, ELECTRON TUBE	replace		X					
SOCKETS, ELECTRON TUBE	replace				X			
STAY, FOLDING	replace				X			
SWITCHES	replace				X			
TRANSFORMER, POWER, STEP-UP AND STEP-DOWN	replace				X			
VOLTMETER	replace				X			
WIRE, WS-16/U; WS-17/U	replace				X			

TV-2/U; TV-2A, B/U

(1) SOURCE MAINTENANCE AND RECOVERABILITY CODE	(2) FEDERAL STOCK NUMBER	(3) DESIGNATION BY MODEL	(4) DESCRIPTION	(5) UNIT OF ISSUE	(6) EXPENDABILITY	(7) QUANTITY AUTHORIZED	(8) ILLUSTRATIONS	
							FIGURE NO.	ITEM NO.
			ITEMS COMPRISING AN OPERABLE EQUIPMENT					
			TEST SET, ELECTRON TUBE TV-2/U; TV-2A, B/U					
	8625-669-0263		TEST SETS, ELECTRON TUBE TV-2 U; TV-2A, B U	ea	NX			
	Ord thru AGC		TECHNICAL MANUAL 11-6635-315-12	ea	X	2		
			TEST SET, ELECTRON TUBE: TV-2/U; TV-2A, B/U, (Basic component)	ea	NX	1	1	
			RUNNING SPARES AND ACCESSORY ITEMS					
			TEST SET, ELECTRON TUBE TV-2/U; TV-2A, B/U					
	8960-188-0800		3 ELECTRON TUBE: JAN type 6X4W	ea	X	1	7	V2 V3
	8960-100-7323		3 ELECTRON TUBE: JAN type B3	ea	X	1	7	V1
	8920-189-0846		3 FUSE, CARTRIDGE: Littelfuse No. 312003	ea	X	5	9	F1 F2
	8240-223-9100		LAMP, GLOW: GE No. NE51	ea	X	1	1	11C 12C