

TM 11-5985-243-12

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

ORGANIZATIONAL MAINTENANCE MANUAL

COUPLER, ANTENNA CU-1638/GR

ANC-101



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Organizational Maintenance Manual
COUPLER, ANTENNA CU-1638/CR

TM 11-5985-243-12, 13 July 1966, is changed as follows:

Page 1-1, paragraph 1-3. Delete subparagraph c, and substitute:

c. *Reporting of Equipment Manual Improvements.* DA Form 2028 (Recommended Changes to DA Publications) will be used for reporting discrepancies and recommendations improving this equipment publication. The form will be completed by the individual using the manual and forwarded direct to Commanding General, U.S. Army Electronics Command, ATTN: AMSEL-MR-NMP-AD, Fort Monmouth, N.J. 07703.

Page A2-2, appendix II. Add the following:

Federal stock number	Description	Unit of issue	Qty in unit	Qty auth	Item or symbol number
5960-752-0218	Transistor, 13209; 2N297A.....	ea	2	1	10.1, 10.2.

TECHNICAL MANUAL }
 No. 11-5985-243-12 }

WASHINGTON, D.C., 13 July 1966
 HEADQUARTERS
 DEPARTMENT OF THE ARMY

Organizational Maintenance Manual
COUPLER, ANTENNA CU-1638/GR

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CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope

This manual describes Coupler, Antenna CU-1638/GR (fig. 1-1) and covers its installation, operation, operator's maintenance, preventive and periodic maintenance, and organizational maintenance. Hereafter, in this manual, Coupler, Antenna CU-1638/GR will be referred to as the coupler.

1-2. Index of Publications

Refer to the latest issue of DA Pam 310-4

to determine whether there are new editions, changes, or additional publications pertaining to this equipment. Department of the Army Pamphlet No. 310-4 is an index of current technical manuals, technical bulletins, supply manuals (types 7, 8, and 9) supply bulletins, lubrication orders, and modification work orders available through publications supply channels. The index lists the individual parts (10, -20, -35P, etc) and the latest changes to and revisions of each equipment publication.

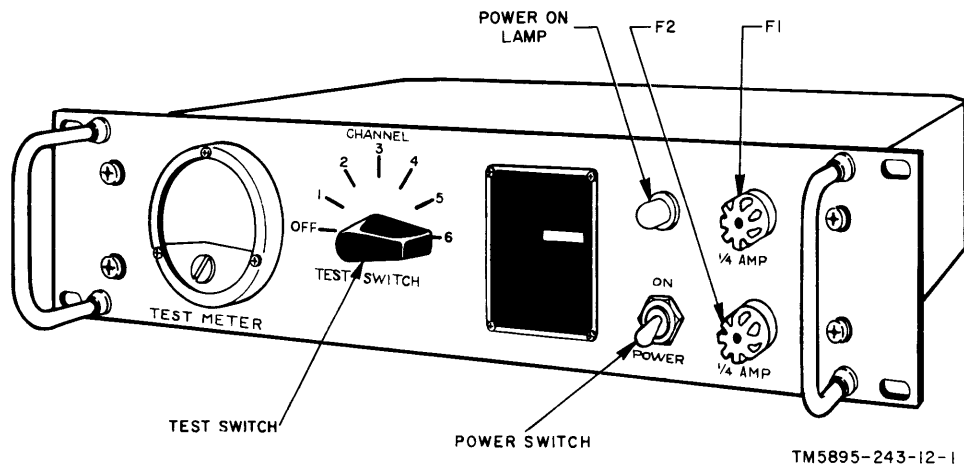


Figure 1-1. Coupler, Antenna CU-1638/GR.

1-3. Forms and Records

a. *Reports of Maintenance and Unsatisfactory Equipment.* Use equipment forms and records in accordance with instructions in TM 38-750.

b. *Report of Damaged or Improper Shipment.* Fill out and forward DD Form 6 (Report of Damaged or Improper Shipment) as prescribed in AR 700-58 (Army), NAVSANDA Publications 378 (Navy), and AFR 71-4 (Air Force).

c. *Reporting of Equipment Manual Im-*

provements. The direct reporting by the individual user of errors, omissions, and recommendations for improving this manual is authorized and encouraged. DA Form 2028 (Recommended Changes to DA Publications) will be used for reporting these improvement recommendations. This form will be completed using pencil, pen, or typewriter and forwarded direct to Commanding General, U. S. Army Electronics Command, ATTN: AMSEL-MR-NMP-CM, Fort Monmouth, N. J. 07703.

CHAPTER 2

INSTALLATION AND OPERATING INSTRUCTIONS

Section I. SERVICE UPON RECEIPT OF EQUIPMENT

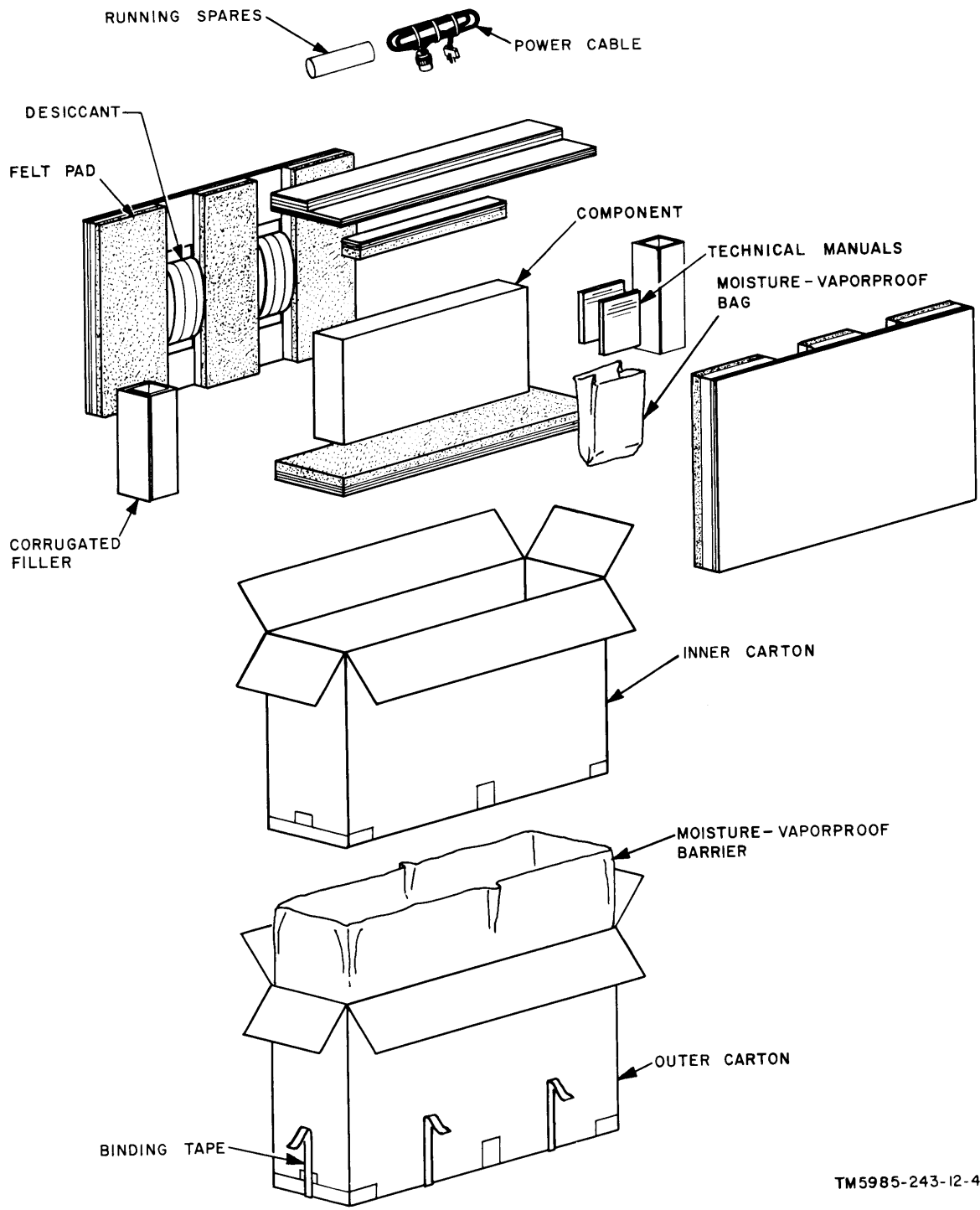
2-1. Unpacking

a. Packaging Data. When packed for shipment, the coupler is placed in a fiberboard carton and then in a moisture-vapor proof bag inside another fiberboard carton. A typical shipping container and its contents are shown in figure 2-1.

b. Removing Contents. Perform the pro-

cedures outlined below when unpacking the equipment.

- (1) Open the carton and the moisture-vapor proof barrier within the carton.
- (2) Remove the inner carton.
- (3) Open the inner carton and remove the contents.



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Figure 2-1. Typical packing and packaging.

2-2. Checking Unpacked Equipment

a. Inspect the equipment for possible damage incurred during shipment. If the equipment has been damaged, report the damage on DD Form 6 (para 1-3).

b. See that the equipment is complete as listed on the packing slip or in the table of components (para 1-6). Report all discrepancies in accordance with TM 38-750.

c. If the equipment has been used or reconditioned, see whether it has been changed by a modification work order (MWO). If the equipment has been modified, the MWO number will appear on the front panel near the nomenclature plate. See whether the MWO number and appropriate notations concerning the modification have been entered in the equipment manual.

Note. Current MWO's applicable to the equipment are listed in DA Pam 310-4.

2-3. Siting and Shelter Requirements

The coupler mounts in a standard 19-inch equipment rack and may be located any place that has an alternating-current (ac) primary power source available and keeps the equipment within the operating environmental limits given in paragraph 1-5.

2-4. Tools and Materials Required for Installation

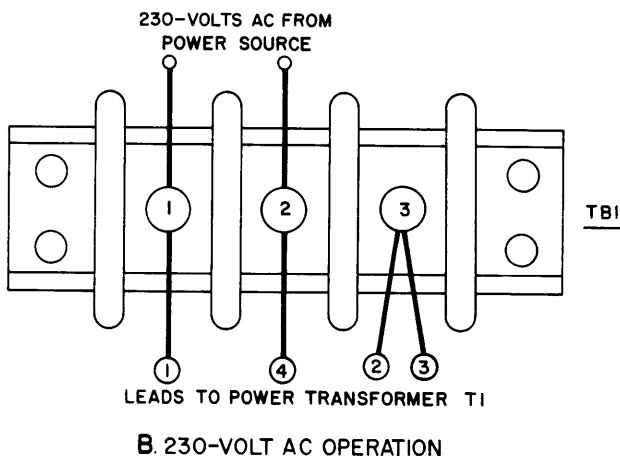
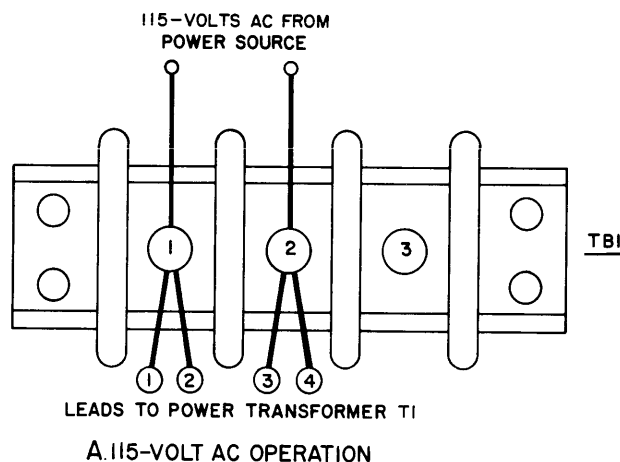
The appropriate screws and a screwdriver are the only items needed for installation of the coupler.

2-5. Installation, Connections, and Adjustments of Coupler, Antenna CU-1638/GR

Caution: Avoid installing the coupler near equipment that generates excessive heat.

a. Determine whether you have access to the rear of the rack mount assembly (not furnished as part of the equipment) after installation of the coupler. If not, perform the following procedures before mounting the coupler into the rack. (See note at the end of c below.)

- (1) Insure that the front panel POWER switch (fig. 1-1) is off.
- (2) Attach a coaxial cable from the antenna to input connector 1J7 on the rear panel of the coupler (fig. 2-3).
- (3) Attach coaxial cables from the receivers to output connectors 1J1 through 1J6, on the back panel. Any one or all of these connectors may be used at one time.
- (4) See that 1TB1 (fig. 2-2) inside the coupler is wired properly for the primary source voltage (115 or 230 volts ac) to be used.



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Figure 2-2. Terminal board 1TB1, 115-volt and 230-volt ac wiring.

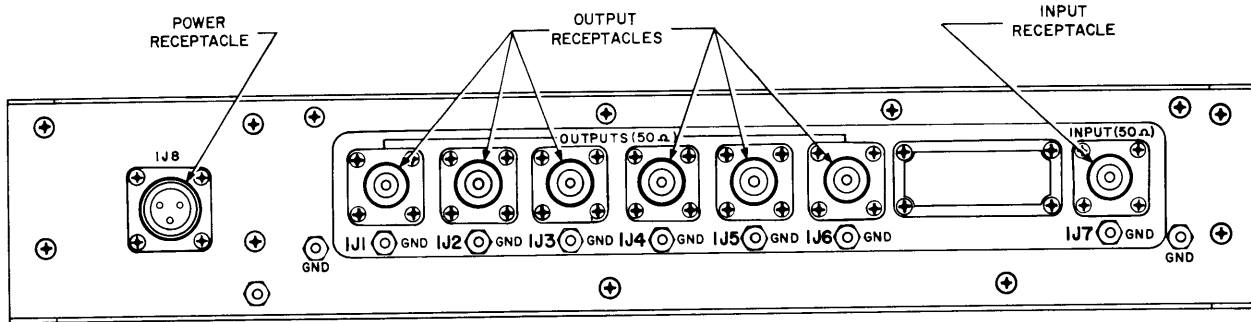
- (5) Connect the power cable furnished with the equipment to 1J8 on the back panel and connect the other end to the primary power source.
- (6) Mount the coupler in the rack.

b. If there is access to the rear of the rack assembly after mounting the coupler, per-

form the procedures given in a(6) above first, and then perform a(1) through a(5).

c. There are no adjustments to be made on the coupler prior to operating it.

Note. For best operation of this equipment, connect all ground points on the back of the coupler together with heavy bus wire prior to installation.



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Figure 2-3. Coupler, Antenna CU-1638/GR, rear panel.

Section II. OPERATION UNDER USUAL CONDITIONS

Note. This section covers only items used by the operator; items used by maintenance personnel are covered in instructions for the appropriate maintenance category.

2-6. Coupler, Antenna CU-1638/GR, Controls and Indicator (fig. 1-1)

Control or indicator	Function
POWER switch	Turns coupler on and off.
TEST switch	Selects output channel under test.
TEST METER	Indicates channel output level.

2-7. Starting and Operating Procedures

Caution: Be sure the coupler is wired for the available voltage (para 2-5a(4)).

a. Turn the POWER switch on.

b. Turn the TEST SWITCH to OFF. The coupler is now in operation. No tuning is required by the operator to provide proper operation.

2-8. Stopping Procedure

Turning the POWER switch off deenergizes the coupler.

Section III. OPERATION UNDER UNUSUAL CONDITIONS

2-9. Desert and Dusty Areas

When operated in desert and dusty areas, large amounts of sand may enter the equipment. Try to keep the equipment as free of sand and dust as possible.

2-10. Jungle and Tropical Areas

When the equipment is used in jungle or

tropical areas, it may become covered with fungus growths because of the heat and high relative humidity. The high humidity causes moisture to collect on the equipment when the temperature of the equipment becomes lower than the surrounding air. Keep the equipment dry by wiping it with a dry cloth.

CHAPTER 3

OPERATOR'S MAINTENANCE INSTRUCTIONS

3-1. Scope of Operator's Maintenance

The maintenance duties assigned to the operator of the coupler are listed below, with references to the paragraphs covering the specific maintenance function. The duties assigned do not require special tools or test equipment.

- a. Preventive maintenance checks and services para 3-2 — 3-4).
- b. Cleaning (para 3-5).
- c. Repairs (para 3-6).

3-2. Preventive Maintenance

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

a. *Systematic Care.* The procedures given in paragraphs 3-4 and 3-5 cover routine systematic care and cleaning essential to the proper upkeep of the equipment.

b. *Preventive Maintenance Checks and Services.* The preventive maintenance checks and services chart (para 3-4) outlines the specific functions to be performed daily by the operator. These checks and services are

to maintain Army electronic equipment in a combat-serviceable condition; that is, in good physical and in good operating condition. To assist operators in maintaining combat serviceability, the chart indicates what to check, how to check, and the normal conditions; the references column lists the illustrations, paragraphs, or manuals that contain supplementary information. If the defect cannot be remedied by the corrective action indicated, higher level maintenance or repair is required. Records and reports of these checks and services must be made in accordance with the requirement set forth in TM 38-750.

3-3. Preventive Maintenance Checks and Services Periods

Preventive maintenance checks and services of the coupler are required daily. Paragraph 3-4 specifies checks and services that must be accomplished daily or under special conditions listed below.

- a. When the equipment is initially installed.
- b. At least once each week if the equipment is maintained in a standby condition.
- c. When the equipment is reinstalled after being removed for any reason.

3-4. Operator's Daily Preventive Maintenance Checks and Services Chart

Sequence No.	Item to be inspected	Procedure	References
1	Exterior surfaces -----	Clean all exterior surfaces -----	Para 3-5
2	Switches -----	See that the mechanical action of each switch is smooth and is free of internal and external binding.	
3	Operation -----	Perform the operating procedures -----	Para 2-7.
4	TEST METER -----	See that TEST METER indicates in or above the operating (green) range when the TEST SWITCH is at any of the CHANNEL settings.	Higher level repair.

Note. Be sure to return the TEST SWITCH to OFF after checks are completed.

3-5. Cl aning

Inspect the exterior of the coupler. The exterior surfaces should be free of dirt, grease, and fungus.

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

Warning: Prolonged breathing of cleaning compound is dangerous; make certain that adequate ventilation is provided. Cleaning compound is flammable; *do not* use near a flame. Avoid contact with the skin; wash off any that spills on your hands.

b. Remove grease, ground-in dirt from the case; use a cloth dampened (not wet) with Cleaning Compound (FSN 7930-395-9542).

c. Remove dirt from jacks and receptacles with a brush.

d. Clean the panel, meter, and control knobs with a soft, clean cloth. Use mild soap if necessary.

3-6. R pairs

a. *Replacement of Power On Lamp* (fig. 1-1).

- (1) Turn the power on lamp and the lens assembly counterclockwise and remove them.
- (2) Pull the defective lamp from the lens assembly.
- (3) Insert a new lamp into the socket, and turn it clockwise.
- (4) To replace the lens assembly, turn it clockwise. Do not overtighten it, but be sure it is sufficiently tight.

b. *Replacement of Fuses* (fig. 1-1-).

- (1) Depress the fuse cap, and at the same time, rotate it counterclockwise.
- (2) Remove the fuse and replace it with a new one. Make certain that the replacement is of the correct rating.
- (3) Replace the fuse cap.

CHAPTER 4

ORGANIZATIONAL MAINTENANCE INSTRUCTIONS

4-1. Scope of Organizational Maintenance

a. This chapter contains instructions covering organizational maintenance for the coupler.

b. Organizational maintenance consists of the following:

- (1) Preventive maintenance (para 4-4).
- (2) Touchup painting (para 4-5).
- (3) Troubleshooting (para 4-6).

4-2. Tools and Test Equipment Required

Tool kit, Radar and Radio Repairman TK-87/U is required for organizational maintenance. No test equipment is required.

4-3. Quarterly Preventive Maintenance

Quarterly preventive maintenance checks and services of the coupler are required. Periodic daily services constitute a part of the quarterly preventive maintenance checks and services and must be performed concurrently. All deficiencies and shortcomings will be recorded in accordance with the requirements of TM 38-750. Perform all the checks and services listed in the organizational quarterly preventive maintenance checks and services chart (para 4-4) in the sequence listed.

Warning: Shut off the equipment before performing the above checks.

4-4. Organizational Quarterly Preventive Maintenance Checks and Services Chart

Sequence No.	Item to be inspected	Procedure	References
1	Completeness -----	See that the equipment is complete (appx II).	
2	Installation -----	See that the equipment is properly installed.	Para 2-5.
3	Cleanliness -----	See that the equipment is clean -----	Para 3-5.
4	Preservation -----	Check all surfaces for evidence of fungus. Remove rust and corrosion and spot-paint bare spots.	Para 4-5.
5	Publications -----	See that all publications are complete, serviceable, and current.	DA Pam 310-4.
6	Modifications -----	Check DA Pam 310-4 to determine if new applicable MWO's have been published. All <i>urgent</i> MWO's must be applied immediately. All <i>routine</i> MWO's must be scheduled.	TM 38-750 and DA Pam 310-4.
7	Fuses -----	See that all operating fuses are of correct value. Check spare fuses for proper value and quantity.	
8	Mounting -----	See that all bolts, units, and washers are correctly positioned and properly tightened.	Para 2-5.
9	Knobs and switches -----	While making operating checks, observe that the mechanical action of each knob and switch is smooth and free of external or internal binding.	Fig. 1-1.

Sequence No.	Item to be inspected	Procedure	References
10	TEST METER -----	See that TEST METER indicates in or above operating (green) range when TEST SWITCH is set to any of six CHANNEL settings.	
11	Spare parts -----	Check all spare parts for general condition and method of storage. There should be no evidence of overstock, and all shortages must be on valid requisitions.	
12	Cables -----	See that all cables are tight.	

4-5. Touchup Painting Instructions

When the finish on any metal parts of the equipment has been badly scarred, damaged, or corroded, lightly sand it with fine sandpaper. Use No. 000 sandpaper and cleaning compound to clean the surface down to the bare metal. Refer to applicable cleaning and refinishing practices specified in TB SIG 364.

Warning: Prolonged breathing of cleaning compound is dangerous; make certain that adequate ventilation is provided. Cleaning compound is flammable; *do not* use near a flame! Avoid contact with the skin; wash off any that spills on your hands.

4-6. Troubleshooting Coupler Antenna CU-1638/GR

a. Power On Lamp. If the power on lamp does not light when the POWER switch is turned ON, check for the following:

- (1) Defective 1/4 AMP fuses (front panel).
- (2) Improper seating of 1P8 in 1J8 (fig. 2-3) or lack of primary power.

b. TEST METER Level. The TEST METER level should be in or above the operating (green) range area when the TEST SWITCH is turned to any one of the CHANNEL positions. If the level is below the green area, proceed as follows:

- (1) The TEST METER is calibrated to give an indication in the operating (green) range when the output of the channel under test is terminated into a 50-ohm load. Remove the coaxial line connector from the receiver for the channel or channels in question and check the TEST METER level. It should indicate slightly above the green area. If the indication is slightly above the green area, the trouble is not in the coupler, but in the coaxial line connected to it or the equipment associated with it.
- (2) If there is no indication any position of the TEST SWITCH, higher maintenance level repair is required.

4-7. Troubleshooting Chart

Item No.	Trouble symptom	Probable trouble	Corrective action
1	Power on lamp does not light when POWER switch is set to ON.	<i>a.</i> Fuse F1 or F2 (fig. 1-1) is defective. <i>b.</i> Power cable is loose or disconnected.	<i>a.</i> Replace defective fuse. <i>b.</i> Tighten power cable plug. Higher level repair required.
2	TEST METER indicates below green area only on certain settings of TEST SWITCH.	Loose or defective cables to receivers corresponding to switch settings.	Tighten associated cables. Higher level repair required.
3	TEST METER indicates below green area on all settings of TEST SWITCH.	Defect in Coupler.	Higher level repair required.

CHAPTER 5

SHIPMENT AND LIMITED STORAGE AND DEMOLITION TO PREVENT ENEMY USE

Section I. SHIPMENT AND LIMITED STORAGE

5-1. Disassembly of Equipment

Disassembly procedures for the coupler consist of the following:

- a. Disconnect the ac power cable from the primary power source.
- b. Disconnect the power cable from the coupler.
- c. Disconnect the input cable from the coupler.
- d. Disconnect all output cables from the coupler.
- e. Remove the coupler from the rack mount assembly by removing the four screws from the front panel.

5-2. Repackaging for Shipment or Limited Storage

The exact procedure for repackaging depends on the material available and the conditions under which the equipment is to be shipped or stored. Adapted the procedures outlined below whenever possible.

a. *Material Requirements.* The following materials are required for packaging the

coupler. For stock numbers of materials, consult SB 38-100.

Material	Quantity
Waterproof paper	10 sq. ft.
Waterproof tape	10 ft.
Cotton twine	25 ft.
Corrugated cardboard	10 sq. ft.
Adhesive tape	10 ft.
Filler material	3 lbs.

b. Packaging.

- (1) Cushion the coupler on all surfaces with pads of filter material. Place the cushioned unit within a wrap of corrugated cardboard. Secure the wrap with waterproof tape.
- (2) Wrap the above package with waterproof paper and seal with waterproof tape.

c. *Packing.* Place the unit, wrapped as directed in *b* above, in a wooden box. Cushion the unit with filler material, to prevent movement of unit in box, before nailing top on the box.

Section II. DEMOLITION OF MATERIEL TO PREVENT ENEMY USE

5-3. Authority for Demolition

Demolition of the equipment will be accomplished only upon order of the commander. The destruction procedures outlined in paragraph 5-4 will be used to prevent further use of the equipment.

5-4. Methods of Destruction

Use any of the following methods to destroy the equipment.

a. *Smash.* Smash the controls, coils, switches, capacitors, transistors, transformers, and meter; use sledges, axes, handaxes, pickaxes, hammers, or crowbars.

b. *Cut.* Cut the power cable and all cables in the coupler; use axes, handaxes, or matchetes.

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

c. *Burn.* Burn cables and technical manuals; use gasoline, kerosene, oil, flamethrowers, or incendiary grenades.

d. *Bend.* Bend panel and cabinet.

e. *Explode.* If explosives are necessary, use firearms, grenades, or TNT.

f. *Dispose.* Bury or scatter the destroyed parts in slit trenches or foxholes or throw them into streams.

APPENDIX I

REFERENCES

Following is a list of applicable references available to the operator and organizational maintenance repairman of Coupler, Antenna CU-1638/GR:

- | | |
|--------------|--|
| DA PAM 310-4 | Index of Technical Manuals, Technical Bulletins, Supply Manuals (Types 7, 8, and 9), Supply Bulletins, Lubrication Orders, and Modification Work Orders. |
| SB 38-100 | Preservation, Packaging, and Packing Materials, Supplies and Equipment Used by the Army. |
| TB SIG 364 | Field Instruction for Painting and Preserving Electronics Command Equipment. |
| TM 38-750 | Army Equipment Record Procedures. |

APPENDIX II

BASIC ISSUE ITEMS

Section I. INTRODUCTION

A2-1. General

This appendix lists items for Coupler, Antenna CU-1638/GR, the component items comprising it, and the items which accompany it, or are required for installation, operation, or operator's maintenance.

A2-2. Explanation of Columns

An explanation of the columns in section II is given below.

a. Source, Maintenance, and Recoverability Codes (col. 1.) Not used.

b. Federal Stock Number, Column 2. The Federal stock number for the item is indicated in this column.

c. Description, Column 3. The Federal item name, a five-digit manufacturer's code and part number are included in this column.

d. Unit of Issue, Column 4. The unit used as a basic of issue (e.g.) ea, pr, ft, yd, etc) is noted in this column.

e. Quantity Incorporated in Unit Pack, Column 5. Not used.

f. Quantity Incorporated in Unit, Column 6. The total quantity of the item used in the equipment is given in this column.

g. Quantity Authorized, Column 7. The total quantity of an item required to be on hand and necessary for the operation and maintenance of the equipment is given in this column.

h. Illustration, Column 8.

(1) *Figure number, column 8a.* The number of the illustration in which the item is shown is indicated in this column.

(2) *Item or symbol number, column 8b.* The callout number used to reference the item in the illustration appears in this column.

A2-3. Federal Supply Codes.

This paragraph lists the Federal supply code with the associated manufacturer's name.

Code	Manufacturer
81349	Military specifications
96906	Military standards

SECTION II. BASIC ISSUE ITEMS LIST

(1) SOURCE CD	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION						(4) UNIT OF ISSUE	(5) QTY INC IN UNIT PACK	(6) QTY INC IN UNIT	(7) QTY AUTH	(8) ILLUSTRATIONS	
		MODEL	1	2	3	4	5					6	(A) FIGURE NUMBER
	5820-930-2640											1-1	
	ORD THRU AGC							ea		1			
	5920-280-3529							ea		2		1-1	F1, F2
	6240-155-7836							ea		1		1-1	DS1

APPENDIX III

MAINTENANCE ALLOCATION

Section I. INTRODUCTION

A3-1. General

This appendix provides a summary of the maintenance operations covered in the equipment literature for Coupler, Antenna CV-1638/GR. It authorizes categories of maintenance for specific maintenance functions on repairable items and components and the tools and equipment required to perform each function. This appendix may be used as an aid in planning maintenance operations.

A3-2. Explanation of Format for Maintenance Allocation Chart

a. Group Number. Group numbers correspond to the reference designation prefix assigned in accordance with ASA Y32.16, Electrical and Electronics Reference Designations. They indicate the relation of listed items to the next higher assembly.

b. Component Assembly Nomenclature. This column lists the item names of component units, assemblies, subassemblies, and modules on which maintenance is authorized.

c. Maintenance Function. This column indicates 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
O/C-----	Operator/Crew
O-----	Organization Maintenance
F-----	Direct Support Maintenance
H-----	General Support Maintenance
D-----	Depot Maintenance

d. Tools and Equipment. The numbers appearing in this column refer to specific tools and equipment which are identified by these numbers in section III.

e. Remarks. Self explanatory.

A3-3. Explanation of Format for Tool and Test Equipment Requirements

The columns in the tool and test equipment requirements chart are as follows:

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

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

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

d. Federal Stock Numbers. This column lists the Federal stock number.

e. Tool Number. Not used.

SECTION II. MAINTENANCE ALLOCATION CHART

MAINTENANCE ALLOCATION CHART

GROUP NUMBER	COMPONENT ASSEMBLY NOMENCLATURE	MAINTENANCE FUNCTIONS											TOOLS AND EQUIPMENT	REMARKS			
		INSPECT	TEST	SERVICE	ADJUST	ALIGN	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL	REBUILD					
	COUPLER, ANTENNA CU-1638/GR	0/c 0	0/c 0	0/c 0	F H											9 5 2,3,4,6,8 1,2,3,4,6,7,8 9 10 10 6*	Exterior and interior Continuity and input voltage Continuity, voltage, signal Final testing Replace fuses and lamp and lens cap All repairs Adjust power supply voltage R7 in P.C. Board 1A9 if the P.C. Board is replaced *Printed circuit module boards are authorized for replacement at direct support organizations

SECTION III. TOOL AND TEST EQUIPMENT REQUIREMENTS

TOOL AND TEST EQUIPMENT REQUIREMENTS

TOOLS AND EQUIPMENT	MAINTENANCE CATEGORY	NOMENCLATURE	FEDERAL STOCK NUMBER	TOOL NUMBER
1	H,D	CU-1638/GR (continued)	6625-542-6407	
2	F,H,D	MULTIMETER ME-26B/U	6625-973-3986	
3	F,H,D	ELECTRONIC VOLTMETER AN/URM-145	6625-868-8353	
4	F,H,D	SIGNAL GENERATOR AN/GRM-50	6625-987-6603	
5	0	OSCILLOSCOPE AN/USM-140	6625-581-2036	
6	F,H,D	MULTIMETER AN/URM-105	6625-242-5023	
7	H,D	MULTIMETER TS-352/U	5985-993-1377	AH (Air Force)
8	F,H,D	ATTENUATOR, VARIABLE TRANSMISSION HEWLETT-PACKARD TYPE #355C	6625-893-2628	
9	0	TEST SET, TRANSISTOR TS-1836/U	5180-856-1578	
10	F,H,D	TOOL KIT, RADIO REPAIRMAN TK-115/G TOOL KIT ELECTRONIC EQUIPMENT TK-100/G	5180-605-0079	

By Order of the Secretary of the Army

HAROLD K. JOHNSON,
General, United States Army,
Chief of Staff.

Official:

J. C. LAMBERT,
Major General, United States Army,
The Adjutant General.

Distribution:

Active Army:

USASA (2)
CNGB (1)
CC-E (7)
Dir of Trans (1)
CofEngrs (1)
TSG (1)
CofSptS (1)
USACDCEA (1)
USACDCBBA (1)
USACDCCEA (1)
USACDCOA (1)
USACDCQMA (1)
USACDCTA (1)
USACDCADA (1)
USACDCARMA (1)
USACDCAVNA (1)
USACDCARTYA (1)
USACDCSWA (1)
USACDCCEA, (Ft Huachuca) (1)
USACDCEC (10)
USAMC (5)
USCONARC (5)
ARADCOM (5)
ARADCOM Rgn (2)
OS Maj Comd (4)
LOGCOMD (2)
USAMICOM (4)
USASMC (2)
USAECOM (30)
USASCC (4)
MDW (1)
Armies (2)
Corps (2)
USAC (3)
1st Cav Div (5)
USATC (2)
USMA (2)
Svc Colleges (2)
Br Svc Sch (2) except
USASESCS (90)
USASPTCP (17)

WRAMC (1)
Instl (2) except
Ft Monmouth (70)
Ft Gordon (10)
Ft Knox (12)
Ft Hancock (4)
Ft Huachuca (10)
Ft Carson
Army Pic Cen (2)
Army Dep (2) except
SAAD (30)
TOAD (14)
FTWOAD (10)
LEAD (7)
SHAD (3)
NAAD (5)
SVAD (5)
CHAD (3)
ATAD (10)
LBAD (14)
Gen Dep (2)
Sig Sec, Gen Dep (5)
Sig Dep (12)
Sig FLDMS (2)
AMS (1)
USACCREL (2)
USAERDAA (2)
USARERDAW (13)
Units org under fol TOE: (2-each):
11-57
11-97
11-98
11-117
11-127
11-155
11-157
11-158
11-500(AA-AC)
11-587
11-592
11-597

NG: State AG (3).

USAR: None.

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