

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

DEPARTMENT OF THE AIR FORCE TECHNICAL ORDER

TM 11-5820-200-10
TO 31S3-3 MC364-21

OPERATOR'S MANUAL

REPRODUCING
EQUIPMENT MC-364-D
AND PUBLIC ADDRESS
SET AN/UIH-2

This reprint includes all changes in effect at the time of
publication; changes 6, 8, and 9..

DEPARTMENTS OF THE ARMY AND AIR FORCE
AUGUST 1958

WARNING

HIGH VOLTAGE
is used in this equipment

DEATH ON CONTACT
may result if safety precautions are
not observed.

When making repairs, be sure that no power is applied to the equipment.

Change }
No.9 }

HEADQUARTERS
DEPARTMENTS OF THE ARMY
WASHINGTON, D.C., 21 December 1973

Operator's Manual
PUBLIC ADDRESS SET AN/UIH-2;
REPRODUCING EQUIPMENT MC-364-D;
LOUDSPEAKER LS-148/U; REPRODUCERS,
SOUND RP-104/UIH AND RP-104A/UIH;
AND TURNTABLE MX-932/U

TM 11-5830-200-10/TO 31S3-3 MC364-21,11 August 1958, is changed as follows:

Page 2. Change the title of paragraph 1.1 to:
Indexes of Publications

Paragraph 2 is superseded as follows:

2. Forms and Records

a. *Reports of Maintenance and Unsatisfactory Equipment.* Maintenance forms, records, and reports which are to be used by maintenance personnel at all maintenance levels are listed in and prescribed by TM 38-750.

b. *Report of Packaging and Handling Deficiencies.* Fill out and forward DD Form 6 (Report of Packaging and Handling Deficiencies) as prescribed in AR 700-58 (Army)/NAVSUP PUB 378 (Navy)/AFR 71-4 (Air Force)/and MCO P4030.29 (Marine Corps).

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 (Army)NAVSUP PUB 459 (Navy)/AFM 75-34 (Air Force)/and MCO P4610.19 (Marine Corps).

Paragraph 2.1 is added as follows:

2.1. Reporting of Equipment Publication Improvements

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

Page 7. Change the title of paragraph 5 to:
Table of Components and Dimensions

Page 8. After paragraph 5, paragraphs 5.1 and 5.2 are added as follows:

5.1. Items Comprising an Operable Equipment

FSN	Qty	Nomenclature, part No., and mfr code	Usable on code
<p>NOTE The part number in followed by the applicable 5-digit Federal supply code far manufacturers (FSCM) identified in SB 708-42 and used to identify manufacturer, distributor, or Government agency, etc.</p>			

FSN	Qty	Nomenclature, part No., and mfr code	* Usable on code
5830-503-1079 5995-164-6599	1	Public Address Set, AN/UIH-2 Cable Assembly, Special Purpose. Electrical: CX-1207/U; (Used w/MIC MX-923/U) (Not installed).	
5965-677-1447 5995-170-8776	1 2	Loudspeaker Assembly LS-148/U (Not installed) Including Cable Assembly CX-1235/U: (Connects AMP to SPK) (Not installed).	
5965-295-8965 5835-503-1167	1 1	Microphone, Dynamic M-43/U: (Not installed) Reproducer, Sound RP-104/UIH-2; RP-104A/UIH-2 (Not installed) Including.	
		NOTE	
		In the usable-on code column, number 1 refers to RP-104/UIH-2; number 2 refers to RP-104A/UIH-2	
5835-392-9573	1	Adapter: cylindrical; 1-37/6-4 in. dia x 0.059 in thk mtd by 0.285 mtg hole; used to diminish hole of 45 rpm records, Websterch: part No. G12P5023 (Not installed)	1.2
5995-164-7894 5830-161-3947 5965-677-1447	1 1 1	Power Cable Assembly CX-1508/U (Not installed) Reproducing Equipment MC-364-D Loudspeaker Assembly LS-148/U	1.2
		Including:	
5995-170-8776	2	Cable Assembly CX-1235/U: (Connects AMP to SPK) (Not installed)	
5965-295-8965	1	Microphone Dynamic M-43/U: (See bulletin SB-11-262) Not installed).	
		NOTE	
5835-164-7309	1	Turntable MX-932/U (Installed in equip) In the usable-on code column, number 1 refers to MX-938/U as procured on Order No. 14700-PH-48: and 21794-PH-50 (from MC Elroy), 8302-PH-49 (20950) and 20506-PH-49 and 14690-PH50 (74279) number 2 refers to MX-932/U as procures on Order No. 3272-PH-52 (34840).	
6150-549-4858	1	Cable Assembly Power Electrical: 2 cond, No. 18 AWG; 300 v max working: UL type SJ modified; 25 ft lgo/a incl terminations: term fitting on 1st end, 1 male connector. term fitting on 2nd end, 1 female connector: 19-307. Sea View Elec (For orders 3272P-52, 3351-P-52 and 3554-P-52) (Not installed).	2
5995-164-7894	1	Cable, Assembly, Power, Electrical CX-1208/U: (For order 21794-PH-50 and 2183-PH-50) (Not installed)	1
5995-283-7001	1	Cable, Assembly, Power, Electrical: 2 cond; stranded No. 18 AWG. 600 v max; 25 ft lg o/a; incl terminations; UA- 21431, 88421 (For orders 14700-PH48, 8302-PH49, 2506- PH-49. 14960-PH 50 (Not installed..	

5.2. Expendable Consumable Items

A list of expendable consumable items required for operation appears in table 1-1.

Table 1-1. Expendable Consumable Supplies and Materials

The supplies and material 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 the manufacturer, distributor, or Government agency; etc, and is identified in SB 708-42.

Table 1-1. Expendable Consumable Supplies and Material-Continued

Items	Description	Ref. No. and FSCM	FSC
1	Stylus, Reproducing; osmium point and shank 60 deg angle point; 0.001 in. rad; shank 5/16 in. lg x .001 in. dia x 1/16 in. h o/a; Astatic type A-1M (Not mounted)		5835
2	Stylus, Reproducing; osmium point and shank, 60 deg angle point; 0.003 in rad; shank 5/16 in. lg x 0.003 in. dia x 1/16 in. h Astatic type No. A-3M (Not mounted).		5835
3	Stylus, Reproducing; sapphire point, 0.001 in. rad; gold p/brass shank 5-32in. lg x 3/64in. dia x 1/32 in. h; Astatic 5474-16 (Not mounted).	A-1	
4	Stylus, Reproducing; Perma No.130; 0.0027in. rad point; gold p/brass shank 5/32 in. lg x 3/64 in. dia x 1/32 in. h; Astatic 5474 (Not mounted).	A-3	5935
5	Stylus, Reproducing; osmium point; 46 deg angle; reproduces 10 in. dia record; Perma type 100 (Not mounted).	P1202	5835

Page 22, appendix II, is superseded as follows:

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

Section I. INTRODUCTION

1. Scope

This appendix lists basic issue items and items troop installed or authorized required by the crew/operator for installation, operation, and maintenance of Public Address Set AN/UIH-2; Reproducing Equipment MG-364-D; Loudspeaker LS-148/U; Reproducers, Sound RP - 104/UIH and RP-104A/UIH; and Turntable MX-932/U.

2. General

This basic issue items and items troop installed or 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. A list, in alphabetical sequence, of items which, at the discretion of the unit commander, may accompany the end item, but are not subject to be turned in with the end item

3. Explanation of Columns

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

a. Illustration. This column is divided as follows:

(1) Figure Number. This column indicates the figure number of the illustration in which the item is shown.

(2) Item Number. Not applicable.

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

c. Part Number. This column 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.

d. 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.

e. Description. This column indicates the Federal item name and a minimum description required to identify the item.

f. Unit of Measure (U/M). This column indicates the standard or 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.

g. Quantity Furnished with Equipment (Basic Issue Items Only). This column indicates the quantity of the basic issue item furnished with the equipment.

h. Quantity Authorized (Items Troop Installed or Authorized Only). Column indicates the quantity of the item authorized to be used with the equipment

4. Special Information

Usable-on codes are included in the description column. Uncoded items are applicable to all models Identification of the usable-on codes are as follows:

Code	Used on
1	Loudspeaker Assembly LS-18/U
2	Reproducer Sound RP-104/UIH-2
3	Reproducer Sound RP-104A/UIH-2
4	MX-932/U as procured on Order Nos 14700-PH-48. 21794-PH-50 from MC Elroy. 8302-PH-49 from Espey Co and 20506-PH-49. 14690-PH-50 from Siltronic Co
5	MX-932/U as procured on Order Nos 3272-PH-52 from Lanagen and Hoke

Section II. BASIC ISSUE ITEMS LIST

(1) Illustration		(2) Federal stock number	(3) Part number	(4) FSCM	(5) Description Usable on Code	(6) Unit of meas	(7) Qty furn with equip
(A) Fig. no.	(B) Item no						
		5965-284-6631	SM-B-147765	80063	CABINET, ELECTRICAL. WOOD: OLIVE DRAB; 15-1/2 IN. LG X 14-12 IN. W X 8-1/2 IN. DEEP; CONTAINS SPEAKER, SPARES AND MIC BOX (FOR ORDER 7758-PH-54 ONLY) (NOT INSTALLED)	EA	2
		5965-823-0174	SC-D-27272	80063	CABINET, ELECTRICAL, EQUIPMENT: WOOD; OLIVE DRAB; 15 IN. LC X 14 IN. W X 8-3/8 IN. H (CONTAINS SPEAKER. SPARES. AND MICROPHONE BOX) (NOT INSTALLED)	EA	2
		5965-816-6316	SM-D-147769	80063	CASE, LOUDSPEAKER: WOOD; OLIVE DRAB; 15-1/2 IN. LG X 14-1/2 IN. W X 8-1/2 IN. DEEP; (CONTAINS SPEAKER ONLY USED ON ORDER 7558-PH-54 ONLY) (NOT INSTALLED)	EA	2
		5965-284-6632	SC-D-27284	80063	CASE, LOUDSPEAKER: WOOD OLIVE DRAB; 15 IN. LG X 14 IN. W X 8-3/8 IN. DEEP (CONTAINS SPEAKER ONLY) (NOT INSTALLED)	EA	2

Section II. BASIC ISSUE ITEMS LIST

(1) *Illustration		(2) Federal stock number	(3) Part number	(4) FSCM	(5) Description Usable on code	(6) Unit of meas	(7) Qty furn with equip
(A) Fig no.	(B) Item no.						
3		5965-546-6821	G80P5005		COVER ELECTRICAL EQUIPMENT CABINET: PLYWOOD; OLIVE DRAB; 14-5/8 IN. LG X 14-1/4 IN. W X 1-3/4 IN. H; WEBSTERCH (NOT INSTALLED)	EA	4
3		5965-392-8620	SC-B-27293	80063	STRAP, CARRYING; CAN- VAS, OLIVE DRAB; 10-1/4 IN. LG X 1 IN. W; 2 NICKEL PLATED SNAP FASTENERS USED AS HAND GRIP FOR CARRYING SPEAKER CASE (NOT INSTALLED)	EA	2

Section III. ITEMS TROOP INSTALLED OR AUTHORIZED LIST

(1) Federal stock number	(3) Part number	(3) FSCM	(4) Description Usable on code	(5) Unit of meas	(6) Qty auth
6625-224-5193	60		DISK, STROBOSCOPE: TO CHECK OPERAT- ING SPEED ON PHONOGRAPH TURN- TABLE: CARD BOARD; 7 IN. DIA X 1/32 IN. THK; CLARKSTAN (NOT INSTALLED)	EA	1
6625-224-5194	F-25		DISK, STROBOSCOPE: SPEED RANGE 33-173 RPM TO 78 RM U W 50 OR 60 Hz PER SEC VIEWING LIGHT; O/A DIM 6-1/4 IN. DIA X 0.009 IN. THK; CARDBOARD; FRANKLIN PHOTO INDUS(NOT INSTALLED)	EA	1
6230-408-3418	G53P5031		STROBOSCOPE: FLASHING LIGHT SYN- CHRONIZATION; 115 OR 230 V 50 TP 56 Hz SINGLE PH. 12 W; WEBSTERCH (NOT INSTALLED)	EA	2

By Order of the Secretary of the Army:

CREIGHTON W. ABRAMS
General, United States Army
Chief of Staff

Official:

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

Distribution:

Active Army:

USASA (2)
CNGB (1)
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COE (1)
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USAARENBD (1)
USAMB (10)
AMC (1)
TRADOC (2)
ARADCOM (2)
ARADCOM Rgn (2)
OS Maj Comd (4)
LOGCOMDS (3)
MICOM (2)
TECOM (2)
USAIB (2)
USACC (4)
MDW (1)
Armies (2)
Corps (2)
HISA (ECOM) (21)
Svc Colleges (1)
USASESS (10)
USAADS (2)
USAFAS (2)
USAARMS (2)
USAIS (2)
USAES (2)
USAINTS (3)
WRAMC (1)
USACDCEC (1U)
ATS (1)
USAMPS (2)
USACHS (2)
USAAVNS (2)
USAMAPS (2)
USMA (2)

Instl (2) except:

Fort Gordon (10)
Fort Huachuca (10)
Ft Richardson (ECOM Ofc) (2)
Fort Carson (5)
WSMR (1)

Army Dep (2) except:

LBAD (14)
SAAD (30)
TOAD (14)
ATAD (10)

USA Dep (2)

Sig Sec USA Dep (2)

Sig Dep (2)

Sig FLDMS (1)

USAERDAA (1)

USAERDAW (1)

MAAG (1)

USARMIS (1)

USWACC (2)

USAMCFSA (2)

AV Comm Gen (1)

Units org under fol TOE

(1 copy each):

11-95
11-97
11-98
11-117
11-158
11-500 AA-AC
19-35
19-36
19-256
19-316
29-111
29-134
29-136

NG: State AG (3); Units same as Active Army.

USAR: None

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

CHANGE }
No. 8 }

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D. C., 15 March 1968

Operator's Manual

PUBLIC ADDRESS SET AN/UIH-2; REPRODUCING EQUIPMENT
MC-364-D; LOUDSPEAKER LS-148/U; REPRODUCERS, SOUND
RP-104/UIH AND RP-104A/UIH; AND TURNTABLE MX-932/U

TM 11-5830-200-10, 11 August 1958, is changed as follows:

Note. The parenthetical reference to previous Changes (example: "page 1 of C6") indicates that pertinent material was published in that Changes.

Page 2, paragraph 1. (As added by C 7, 24 July 63) Add paragraph 1.1 after paragraph 1.

1.1. Indexes of Equipment Publications

a. DA Pam 310-4. Refer to the latest issue of DA Pam 3 10-4 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

6. DA Pam 310-7. Refer to the latest issue of DA Pam 310-7 to determine whether there are modification work orders (MWO's) pertaining to the equipment.

Page 1 of C 6 and as changed by C 7, 24 Jul. 63) Delete paragraph 2 and substitute:

2. Forms and Records

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

b. Reports of Packaging and Handling Deficiencies. Fill out and forward DD Form 6 (Report of Packaging and Handling Deficiencies) as prescribed in AR 700-58 (Army), NAVSUP Publication 378 (Navy), AFR 71-4 (Air Force), and MCO P4610-5 (Marine Corps).

c. Discrepancy in Shipment Report (DISREP) (SF361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF361) as prescribed in AR 55-38 (Army), NAVSUP Publication 459 (Navy), AFM 75-34 (Air Force), and MCO P4610.19 (Marine Corps).

d. Report of Equipment Manual Improvements. Report of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form

*This changes supersedes C 7, 24 July 1963.

2028 (Recommended Changes to DA Publications) and forwarded direct Commanding General, U.S. Army Electronics Command, ATTN: AMSEL-ME-NMP-AD, Fort Monmouth, N.J., 07703.

Page 10, paragraph 9, chart. Add the following to the chart:

Control or indicator	Function
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Note. The following applies only to public address sets procured on contract No. DAA BO5-67-C-2335.

Motor switch (fig. 7.1).....	Sw pos	Function
	ON	Starts turntable motor.
	OFF	stops turntable motor.

Control or indicator	Function	
speed selector lever	Sw pos	
	16	Operator turntable at 16 rpm.
	33	Operator turntable at 33 rpm.
	45	Operator turntable at 45 rpm.
	78	Operates turntable at 78 rpm.

Page 13, figure 7. Add figure 7.1 after figure 7.

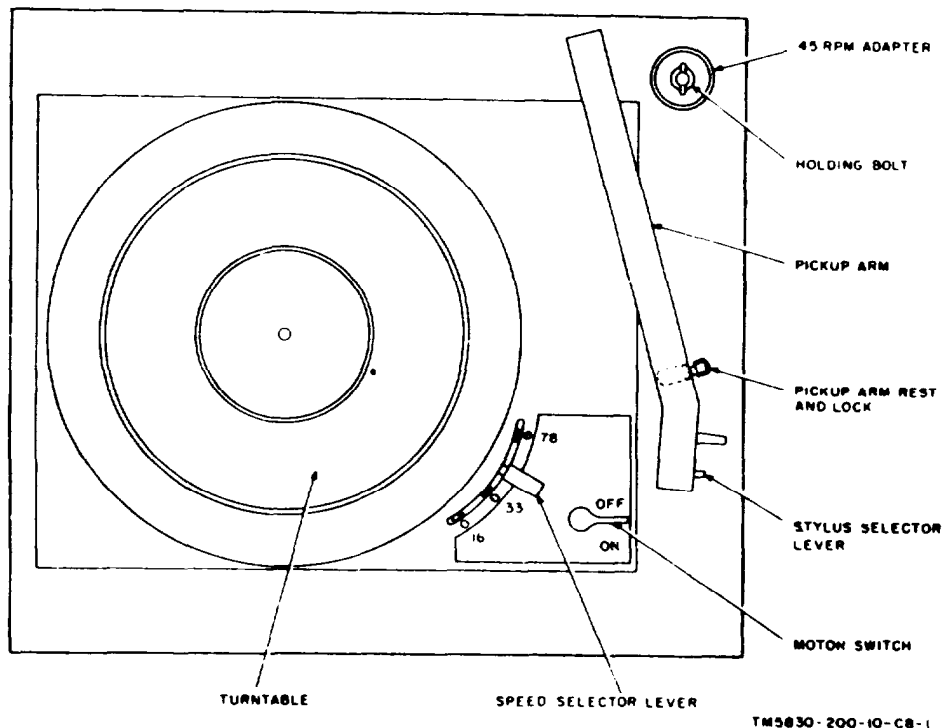


Figure 7.1. Turntable supplied with public address sets procured on contract No. D- . AA BO5-67-C-2335. top view.

Page 16. Delete paragraphs 18, 19, and 20 (as changed by C 7, 24 Jul. 63) and substitute:

18. Scope of Operator's Maintenance

The maintenance duties assigned to the

operator of the public address set are listed below together with a reference to the paragraph covering the specific maintenance function. The duties assigned do not require tools or test equipment other than those issued with the public address set,

- a. Daily preventive maintenance checks and services (para 20.1).
- b. Weekly preventive maintenance checks and services (para 20.2).
- c. Cleaning (para 20.3).
- d. Replacement of POWER indicator lamp and fuse.

19. 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 20.1, 20.2, and 20.3 cover routine systematic care and cleaning essential to proper upkeep and operation of the equipment.

b. *Preventive Maintenance Checks and Services.* The preventive maintenance checks and services charts (para 20.1 and 20.2) outline functions to be performed at specific intervals. These checks and services are to maintain Army electronic equipment in a combat serviceable condition; that is, in good general (physical) condition and in good operating condition. To assist operators in maintaining combat serviceability, the charts indicate what to check,

now to check, and what the normal conditions are; the *References* column lists the illustrations, paragraphs, or manuals that contain detailed repair or replacement procedures. If the defect cannot be remedied by the operator, higher category of maintenance or repair is required. Records and reports of these checks and services must be made in accordance with the requirements set forth in TM 38-750.

20. Preventive Maintenance Checks and Services Periods

Preventive maintenance checks and services of the public address set are required daily and weekly. Paragraphs 20.1 and 20.2 specify the items to be checked and serviced. In addition to the routine daily and weekly checks and services, the equipment should be rechecked and serviced immediately before going on a mission and as soon after completion of the mission as possible.

(As added by C 7, 24 Ju1 63) Add paragraphs 20.1, 20.2, and 20.3 after paragraph 20.

20.1. Daily Preventive Maintenance Checks and Services Chart

<i>Sequence No.</i>	<i>Item to be inspected</i>	<i>Procedure</i>	<i>References</i>
1	Completeness	Inspect equipment for completeness	Appx II.
2	Cleanliness	See that equipment is clean	Para 20.3.
3	Fuse and lamp	See that FUSE and POWER lamps are properly rested.	Fig. 4.
4	Controls	While making operational checks, observe that the mechanical action of knobs, levers, and switches is smooth and free of external or internal bindings.	

20.2. Weekly Preventive Maintenance Checks and Services Chart

<i>Sequence No.</i>	<i>Item to be inspected</i>	<i>procedure</i>	<i>Referencea</i>
1	Exterior surfaces	Check to see that all exterior surfaces are free of rust, fungus, or paint chipping.	
2	Cords and cables	Check to see that power cord and signal cables are free of cut-s or breaks. Clean the signal cable plugs and connectors. Check for loose connections.	
3	Reproducer head	Inspect the stylus for secure mounting and for excessive wear. Excessive wear is indicated by a flat spot on the stylus tip, or by too much noise in the loudspeakers during playback.	Para 21.

20.3 Cleaning

Inspect the exterior of the public address set. The exterior surfaces should be clean and free of dust, dirt, grease, and fungus.

a. Remove dirt and moisture from the cables, recorder panels, loudspeaker, and microphone.

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

WARNING: Cleaning compound is flammable and its fumes are toxic. Provide adequate ventilation. DO NOT use near a flame.

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

d. Remove dust or dirt from plugs, jacks, and stylus with a brush.

e. If dirt is difficult to remove from the exterior surfaces, use a clean, soft cloth dampened with water; mild soap may be used for more effective cleaning.

Page 17. As deleted by C 7, 24 July 1963, delete figure 8.

Page 18. As deleted by C 7, 24 July 1963, delete figure 9.

Page 22, appendix I (page 1 of C 6 and as added by C 7, 24 Jul63).

Delete appendix I and substitute:

APPENDIX I
REFERENCES

The following publications contain information applicable to the operator of the public address set:

- AR 380-5 Safeguarding Defense Information
- DA Pam 310-4 Index of Technical Manuals, Technical Bulletins, Supply Manuals (Types 7, 8, and 9), Supply Bulletins, and Lubrication Orders.
- DA Pam 310-7 U.S. Army Equipment Index of Modification Work Orders.
- TM 11-2093-10 Operator's Manual: Code Practice Equipments EE-94-F, EE-95-F, EE-96-D, EE-96-E, and EE-96-F, and Telegraphic Code Trainers AN/FGC-T1, AN/FGC-T2, AN/FGC-T3, and AN/FGC-T4.
- TM 11-2332-10 Operator's Manual: Projector PH-222-C and Projector, Still Picture AP-9(l),
- TM 11-5533 Code Recorder RD-60/U.
- TM 38-750 Army Equipment Record Procedures.

By Order of the Secretary of the Army:

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

Official:

KENNETH G. WICKHAM,
Major General, United States Army,
The Adjutant General.

Distribution:

Active Army:

USASA (2)	Instl (2) except	
CNGB (1)	Fort Gordon (10)	
ACSC-E (2)	Fort Huachuca (10)	
Dir of Trans (1)	WSMR (6)	
C of Engrs (1)	Fort Carson (25)	
TSG (1)	Fort Knox (12)	
C of SptS (1)	Army Dep (2) except	
USAARENBD (2)	LBAD (14)	
USACDC Agcy (1)	SAAD (30)	
USAMC (5)	TOAD (14)	
USCONARC (5)	ATAD (10)	
ARADCOM (5)	SIAD (6)	
ARADCOM Rgn (2)	TEAD (5)	
OS Maj Comd (4)	Gen Dep (2)	
LOGCOMD (2)	Sig Set Gen Dep (5)	
USAMICOM (4)	Sig Dep (12)	
USASTRATCOM (4)	Sig FLDMS (2)	
USAESC (70)	AMS (1)	
MDW (1)	USAERDAA (2)	
Armies (2)	USAERDAW (13)	
Corps (2)	USACRREL (2)	
USAC (3)	USABIOLABS (5)	
15th USASA Fld Sta (5)	USAPA (5)	
Svc Colleges (2)	MAAG (2)	
Br Svc Sch (2) except	USARMIS (2)	
USASCS (20)	USARMA (2)	
USASESS (30)	USAG, Arllngon Hall (5)	
USACHS (5)	Arsenal, Rocky Mountain (5)	
USACMLCS (5)	Units org under fol TOE:	
USAMPS (6)	(2 copies each)	
USAAVNS (5)	11-7	11-557
USMAPS (6)	11-57	11-587
USWACC (5)	11-97	11-592
USATC Armor (2)	11-98	11-597
USATC Inf (2)	11-117	19-35
USASTC (2)	11-155	19-36
WRAMC (1)	11-157	19-256
Army Pic Cen (2)	11-387	19-316
USACDCEC (10)	11-500(AA-AC,FG, FH, FJ, FK, FL)	

NG: State AC (3). Units- same as Active Army except allowance of one copy per unit.

USAR: None.

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

OPERATOR'S MANUAL

PUBLIC ADDRESS SET AN/UIH-2; REPRODUCING EQUIPMENT MC-364-D;
LOUDSPEAKER LS-148/U; REPRODUCERS, SOUND RP-104/UIH AND RP-104A/UIH
AND TURNTABLE MX-932/U

TM 11-5830-200-10 }
TO 31S3-3MC364-21 }
CHANGES No. 6 }

DEPARTMENTS OF THE ARMY
AND THE AIR FORCE
WASHINGTON 25, D.C., 27 August 1962

TM 11-5830-200-10, 11 August 1958, is changed as follows :

The title is changed as shown above. (As changed by C 4, 29 Sep 60)

Page 2, paragraph 1. (As deleted by C 1, 19 Jan 59). Delete subparagraph c.

Paragraph 2. Delete subparagraph d and substitute the following:

d. Comments or Suggestions. Any comments concerning omissions and discrepancies in Appendix II will be prepared on DA Form 2082 and forwarded direct to Commanding Officer, U.S. Army Signal Materiel Support Agency, ATTN: SIGMS-ML, Fort Monmouth, N.J.

Page 7, paragraph 5, line 3. (As changed by C 4, 29 Sep 60). After "spare parts," insert: for Turntable MX-932/U.

Page 8, paragraph 5b. (As changed by C 3,

4 Mar 60). Delete subparagraph b and substitute :

b. Spare parts for Turntable MX-932/U.

Quantity	Item
1	Electron Tube type 5Y3WGTA
1	Electron Tube type 6SL7WGT
1	Electron Tube type 6V6GTY
5	Cartridge Fuse (FSN 5920-284-8706)
1	Lamp ML-52 (FSN 6240-155-8406)
1	Reproducing Stylus (FSN 5830-170-4808)

Page 22. (As changed by C 1, 19 Jan 59). Designate the existing appendix (References) as appendix I.

Appendix I. Add the following reference. A maintenance allocation chart is contained in TM 11-5830-200-20.

APPENDIX II (SUPERSEDED)

BASIC ISSUE ITEMS

Section I. INTRODUCTION

1. Scope

This appendix lists items supplied for initial operation and for running spares. The list includes tools, accessories, parts, and material issued as part of the major end item. The list

includes all items authorized for basic operator maintenance of the equipment. End items of equipment are issued on the basis of allowances prescribed in equipment authorization tables and other documents that are a basis for requisitioning.

* These changes supersede C 4, 29 September 1960, and C 5, 24 July 1961.

2. Columns

a. *Source, Maintenance and Recoverability Code.* Not used.

b. *Federal Stock Number.* This column lists the 11-digit Federal stock number.

c. *Designation by model.* The dagger (†) indicates the model and/or procurement in which the part is used and further, by its position, designates the figure number by which the item is identified.

d. *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.

e. *Unit of Issue.* The unit of issue is each unless otherwise indicated and is the supply

term by which the individual item is counted for procurement, storage, requisitioning, allowances, and issue purposes.

f. *Expendability.* Nonexpendable items are indicated by NX. Expendable items are not annotated.

g. *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.

h. *Illustration.* The "Figure No." column lists the figure and reference numbers used for identification of the items in the illustration.

(1)				(2)		(3)				(4)				(5)	(6)	(7)	(8)		(9)
SOURCE MAINTENANCE AND RECOVERABILITY CODE				FEDERAL STOCK NUMBER		DESIGNATION BY MODEL				DESCRIPTION				UNIT OF ISSUE	EXPENDABILITY	QUANTITY AUTHORIZED	ILLUSTRATIONS		
																	FIGURE NO	ITEM NO	
										PUBLIC ADDRESS SET UN/UIH-2 GROUP I									
				5830-503-1079						PUBLIC ADDRESS SET, AN/UIH-2; low output; operating power requirements, AC, 115 v or 230 v, 50 to 60 cycles, single phase; input channel data, 1 channel, 50 ohms input impedance 1 channel; 3.4 and 1.7 ohms output impedance. Reproduces record disk or transcription which have been recorded laterally					NX				
										ITEMS COMPRISING AN OPERABLE EQUIPMENT									
				Ord thru AGC						TECHNICAL MANUAL TM 11-5830-200-10 (Not installed)						2			
				5995-164-6599						CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL: CX-1207/U: (Used w/MIC MX-923/U) (Not installed)						1			
				5965-677-1447						LOUDSPEAKER ASSEMBLY LS-148/U (Not installed)					NX	1	3		
				5965-295-8965						MICROPHONE, DYNAMIC M-43/U (Not installed)					NX	1			
				5835-503-1167						REPRODUCER, SOUND RP-104/UIH-2; RP-104A/UIH-2 (Not installed)						1	6,7		
										GROUP Ia LOUDSPEAKER ASSEMBLY LS-148/U									
				5965-284-6631						CABINET, ELECTRICAL EQUIPMENT: Wood, olive drab; 15-1/2 in lg x 14-12 in w x 8-1/2 in Deep; contains speaker, spares and mic box, Sig dwg No. SM-B-147765; (For order 7558-PH-54 only) (Not installed)					NX	1			
				5965-823-0174						CABINET, ELECTRICAL EQUIPMENT: Wood olive drab; 15 in lg x 14 in w 8-3/8 in h; Sig dwg SC-D-27272; (Contains speaker, spares and microphone box) (Not i nstalled)						1			
				5995-170-8776						CABLE ASSEMBLY CX-1235/U: (Connects AMP to SPK) (Not installed)						2	1		
				5965-816-6316						CASE , LOUDSPEAKER: Wood, olive drab; 15-1/2 in lg x 14-1/2 in w 8-1/2 in deep; Sig dwg SM-D-147769; (Contains speaker only used on order 7558-PH-54 only) (Not installed)						1			
				5965-284-6632						CASE, LOUDSPEAKER: Wood olive drab; 15 in lg x 14 in w x 8-3/8 in deep; Sig dwg No. SC-D-27284; (Contains speaker only) (Not installed)						1			
				5965-546-6821						COVER ELECTRICAL EQUIPMENT CABINET: plywood; olive drab; 14-5/8 in lg x 4-1/4 in w x 1-3/4 in h; Websterch: part/dwg No. G8OP5005 (Not installed)						2	3		

AN/UIH-2; MC-364-D; (INCL LS-148/U; RP-104/UIH-2; RP-104/UIH-2; MS-932/U)

(1)				(2)		(3)				(4)				(5)	(6)	(7)	(8)		(9)
SOURCE MAINTENANCE AND RECOVERABILITY CODE				FEDERAL STOCK NUMBER		DESIGNATION BY MODEL				DESCRIPTION				UNIT OF ISSUE	EXPENDABILITY	QUANTITY AUTHORIZED	ILLUSTRATIONS		
																	FIGURE NO	ITEM NO	
						1	2												
				5965-392-8620												1	3		
				5835-392-9573		†										1	6 7		
				5995-164-7894		†	†									1	1		
				6625-224-5193		†	†									1			
				6230-408-3418		†	†									1			
				5830-161-3947												NX			
				Ord thru AGC													2		
				5965-677-1447												NX	1		
				5965-295-8965												NX	1		
				5835-164-7309												NX	1	5	
				5965-284-6631												NX	1		

AN/UIH-2; MC-364-D; (INCL LS-148/U; RP-104/UIH-2; RP-104/UIH-2; MS-932/U)

(1)				(2)				(3)				(4)				(5)	(6)	(7)	(8)		(9)	
SOURCE MAINTENANCE AND RECOVERABILITY CODE				FEDERAL STOCK NUMBER				DESIGNATION BY MODEL				DESCRIPTION				UNIT OF ISSUE	EXPENDABILITY	QUANTITY AUTHORIZED	ILLUSTRATIONS			
																			FIGURE NO	ITEM NO		
								1	2					AN/UIH-2; MC-364-D (INCL LS-148/U; RP-104/UIH-2; RP-104A/UIH-2; MX-932/U) (continued)								
				5965-823-0174										CABINET ELECTRICAL EQUIPMENT: Wood; olive drab; 15 in lg x 14 in w x 8-3/8 in h; Sig dwg SC-D-27272: (Contain speaker, spares and microphone box) (Not installed)						1		
				5995-170-8776										CABLE ASSEMBLY CX-1235/U: (Connect AMP TO SPK) (Not installed)						2	1	
				5965-816-6316										CASE, LOUDSPEAKER: Wood; olive drab; 15-1/2 in lg x 14-1/2 in w x 8-1/2 in deep; Sig dwg SM-D-147769; (Contain speaker only used on order 7558-PH-54 only) (Not installed)						1		
				5965-284-6632										CASE, LOUDSPEAKER: Wood olive drab; 15 in lg x 14 in w x 8-3/8 in deep; Sig Dwg SC-D-27284; (Contains speaker only) (Not installed)						1		
				5965-546-6821										COVER, ELECTRICAL EQUIPMENT CABINET: plywood; olive drab: 14-5/8 in lg x 14-1/4 in w x 1-3/4 in h; Wedsterc; part/dwg No. G80F5005 (Not installed)						2	3	
				5965-392-8620										STRAP, CARRYING: Canvas. Olive drab; 10-1/4 in lg x 1 in w; 2 nickel plated Snap fastners; used as hanger: p for carrying speaker case; Sig dwg No. SC-B-27293 (Not installed)						1	3	
								1	2					GROUP IIB TURNTABLE MX-932/U								
														NOTE: Model Column 1 refers to MX-932/U as procured on Order Nos. 14700-PH-48, 21794-PH-50 from MC Elroy, 8302-PH-49 from Espey Co and 20506-PH-49, 14690-PH-50 from Siltronic Co. Column 2 refers to MX-932/U as procured on Order Nos. 3272-PH-52 from Lanagen and Hoke.								
				6150-549-4858					†					CABLE ASSEMBLY POWER ELECTRICAL: 2 cond; No. 18 AWG; 300 v max working; UL type SJ Modified 25 ft lg o/a incl termination; term fitting on 1st end, 1 male connector, Term fitting on 2 nd end, 1 female connector; Sea View Elec part No. 19-307; (For orders 3272-P-52, 3351-P-52 and 3554-P-52) (Not installed)						1		
				5995-164-7894					†					CABLE ASSEMBLY POWER, ELECTRICAL CX-1208/U: (For order 21794-PH-50 and 2183-PH-50) (Not installed)						1	1	
				5995-283-7001					†					CABLE ASSEMBLY, POWER ELECTRICAL: 2 cond; stranded No. 18 AWG; 600 v max; 25 ft lg o/a; incl termination; Federal Telephone and Radio part No. UA-21431 (For orders 14700-PH-48, 8302-PH-49, 2506-PH-49, 14960-PH-50) (Not installed)								

AN/UIH-2; MC-364-D; (INCL LS-148/U; RP-104/UIH-2; RP-104/UIH-2; MS-932/U)

(1)				(2)		(3)				(4)				(5)	(6)	(7)	(8)		(9)
SOURCE MAINTENANCE AND RECOVERABILITY CODE				FEDERAL STOCK NUMBER		DESIGNATION BY MODEL				DESCRIPTION				UNIT OF ISSUE	EXPENDABILITY	QUANTITY AUTHORIZED	ILLUSTRATIONS		
																	FIGURE NO	ITEM NO	
						1	2												
				6625-224-5194		†	†												
				6230-408-3418		†	†												
				5835-392-9573		†											11	6	
							†										11	7	
				5835-503-2559		†											1		
				5835-503-2560		†											1		
				5960-262-0218		†	†										1		
				5960-188-0883		†	†										1		
				5960-116-9927		†	†										1		
				5920-501-1658			†										5		

AN/UIH-2; MC-364-D; (INCL LS-148/U; RP-104/UIH-2; RP-104/UIH-2; MS-932/U)

(1)				(2)		(3)				(4)				(5)	(6)	(7)	(8)		(9)
SOURCE MAINTENANCE AND RECOVERABILITY CODE				FEDERAL STOCK NUMBER		DESIGNATION BY MODEL				DESCRIPTION				UNIT OF ISSUE	EXPENDABILITY	QUANTITY AUTHORIZED	ILLUSTRATIONS		
																	FIGURE NO	ITEM NO	
						1	2												
				5920-284-6787		†										5			
				6240-155-8706		†	†									1			
				5035-243-0595			†									1			
				5935-243-0594			†									1			
				5835-665-1417		†										1			
				5935-545-8219		†										1			
				5960-262-0128		†	†									1			
				5960-188-0883		†	†									1			
				5960-116-9927		†	†									1			
				5920-284-6787		†	†									5			
				6240-155-8706		†	†									1			
				5835-170-4808		†	†									1			

AN/UIH-2; MC-364-D; (INCL LS-148/U; RP-104/UIH-2; RP-104/UIH-2; MS-932/U)

BY ORDER OF THE SECRETARY OF THE ARMY AND THE AIR FORCE:

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NC: State AG (3); Units-dame as Active Army except allowance is one copy to each unit.

USAR: None.

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

TECHNICAL MANUAL }
 No. 11-5830-200-10 }
 TECHNICAL ORDER }
 No. 31S3-3 MC364-21 }

DEPARTMENTS OF THE ARMY
 AND THE AIR FORCE
 WASHINGTON 25, D. C., 11 August 1958

REPRODUCING EQUIPMENT MC-364-D AND PUBLIC ADDRESS SET AN/UIH-3

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* This manual supersedes so much of TM 11-436, 9 September 1947, and C 2, 9 March 1954, as pertains to operating instructions.

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1. Scope

a. This manual describes Reproducing Equipment MC-364-D and Public Address Set AN/UIH-2 and covers operation and operator's maintenance. It includes operation under usual and unusual conditions, cleaning and inspection of the equipment, and replacement of parts available to first echelon maintenance.

b. Official nomenclature followed by (*) is used to indicate all models of the equipment covered in this manual. Thus, Sound Reproducer RP-104 (*)/UIH-2 represents Sound Reproducers RP-104/UIH-2 and RP-104A/UIH-2.

c. The following supply manuals contain maintenance parts information pertaining to this manual :

SIG 7 & 8 AN/UIH-2 Public Address Set AN/UIH-2.

SIG 7 & 8 LS-148/U. Loudspeaker Assembly LS-148/U.

SIG 7 & 8 MC-364... Reproducing Equipment MC-364-A, B, C, D.

SIG 7 & 8 MX-932/U Turntable MX-932/U.

d. The terms listed below are used herein.

Disk A complete phonograph record, or the blank used in a sound recorder.

Record A commercial phonograph pressing. The term is also applied to instantaneous recording disks.

Transcription An electrical recording, such as a high-fidelity 331/3 rpm record (usually 16 inches), containing part or all of a radio program for use in broadcast studios.

2. Forms and Records

a. *Unsatisfactory Equipment Reports.*

(1) Fill out and forward DA Form 468 (Unsatisfactory Equipment Report) to the Commanding Officer, U. S. Army Signal Equipment Support Agency, Fort Monmouth, N. J., as prescribed in AR 700-38.

(2) Fill out and forward AFTO Form 29 (Unsatisfactory Report) to the Commander, Air Materiel Command, Wright-Patterson Air Force Base, Ohio, as prescribed in AFTO 00-35D-54.

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) and AFR 71-4 (Air Force).

c. *Preventive Maintenance Forms.* Prepare DA Form 11-238 (figs. 8 and 9) (Maintenance Check List for Signal Equipment (Sound Equipment, Radio, Direction Finding Radar, Carrier, Radiosonde and Television)) in accordance with instructions on the form.

d. *Parts List Form.* Forward DA Form 2028 (Recommended Changes to DA Technical Manual Parts Lists or Supply Manuals 7, 8, and 9) direct to the Commanding Officer, U. S. Army Signal Equipment Support Agency, Fort Monmouth, N. J., for comments on parts listings.

e. *Comments on Manual.* Forward all other comments on this publication direct to the Commanding Officer, U. S. Army Signal Publications Agency, Fort Monmouth, N. J.

Section II. DESCRIPTION AND DATA

3. Purpose and Use

a. Purpose. The MC-364-D (fig. 1) and the AN/UIH-2 are portable sound reproducers that provide facilities for sound amplification either for entertainment purposes or, in conjunction with a film strip projector, for training purposes.

b. Use. Either equipment can be used as a sound reproducer, with a record as a source of sound ; as a public address system, with a microphone as a source of sound; or as a mixer, with both a record and a microphone as sources of sound.

4. Technical Characteristics

a. Major Components (fig. 1).

Turntable MX-932/U :

Power requirements.	115 or 230 volts, 50 to 60 cps, single phase.
Power output _ _ _	10 watts.
Maximum gain :	
Microphone channel.	130 db.
Sound reproducer channel.	Approximately 130 db.
Frequency response :	
Microphone channel.	70 to 9,000 cps, ± 2 db variation.
Sound reproducer channel.	70 to 4,000 cps, ± 2 db variation.
Impedance :	
Input, microphone channel.	50 ohms.
Input, sound reproducer channel.	Approximately 3 megohms.
output _ _ _ _ _	3.4 ohms.
Turntable motor:	
Type _ _ _ _ _	Single-phase, shaded-pole, ac, induction.
Speed (looking at load end).	33 1/3 and 78 rpm.
Sound reproducer cartridge.	Crystal-type, high temperature, cutoff frequency 4,000 cps, with standard groove reproducing stylus.

Number of electron tubes. 5.

Reproducing medium :

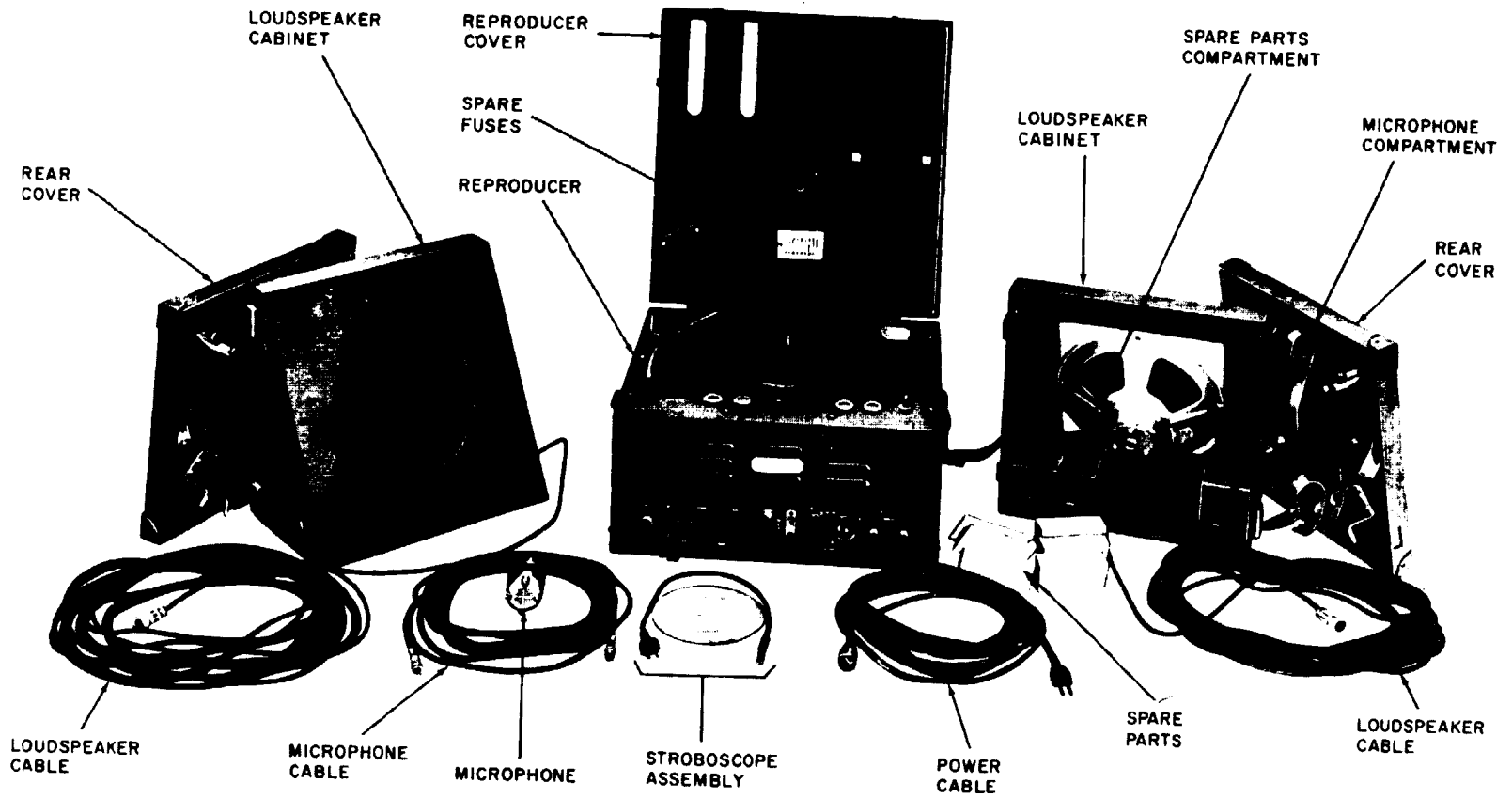
Type Disk (record).
Disk size _ _ _ _ 10, 12, or 16 inches in diameter.

Reproducing time :

10-inch disk :
 3 1/3 rpm 6 1/2 minutes each side.
 78 rpm.. 3 minutes each side.
12-inch disk :
 33 1/3 rpm. 8 1/2 minutes each side.
 78 rpm- 4 minutes each side.
16 -inch disk :
 33 1/3 rpm 13 minutes each side.
 78 rpm_ 6 minutes each side.

Sound Reproducer RP-104(*)/UIH-2:

Power requirements.	115 or 230 volts, 50 to 60 cps, single phase.
Power output -	10 watts.
Maximum gain:	
Microphone channel.	130 db.
Sound reproducer channel.	Approximately 130 db.
Frequency response :	
Microphone channel.	70 to 9,000 cps, ± 2 db variation.
Sound reproducer channel.	70 to 3,000 cps, ± 2 db variation.
Impedance :	
Input, microphone channel.	50 ohms.
Input, sound reproducer channel.	Approximately 3 megohms.
output	3 ohms.
Turntable motor:	
Type _ _ _ _ _	Single-phase, shaded-pole, ac, induction.
Speed (looking at load end).	33 1/3, 45, and 78 rpm.



TM436-10-5

Figure 1. Public address set, component parts.

Sound reproducer cartridge - Ceramic-type, cutoff frequency, 3,000 cps, turn-over - type cartridge, removable microgroove reproducing stylus on one side, standard groove reproducing stylus on other side.

Number of electron tubes - 5.

Reproducing medium :

Type ----- Disk (record).

Disk size --- 7, 10, 12, or 16 inches in diameter.

Reproducing time :

Standard groove:

10-inch disk :
33 1/3 6 1/2 minutes each side.

78 rpm 3 minutes each side.

12-inch disk :
33 1/3 8 1/2 minutes each side.

78 rpm 4 minutes each side.

16-inch disk :
33 1/3 13 minutes each side.

78 rpm 6 minutes each side.

Microgroove:

7-inch disk, 45 rpm 7 minutes each side.

10-inch disk, 33 1/3 rpm 13 minutes each side.

12-inch disk, 33 1/2 rpm 17 1/2 minutes each side.

Microgroove extended play, 45 rpm 10 1/2 minutes each side.

b. *Minor Components* (figs. 2 and 3).

Dynamic Microphone M-23/U :

Type ----- Dynamic, unidirectional.
Frequency response. 60 to 7,500 cps.
Output impedance. 30 to 50 ohms.

Dynamic Microphone M-43/U :

Type ----- Dynamic, omnidirectional.
Frequency response. 160 to 4,500 cps.
Output impedance. 150 ohms.

Loudspeaker Assembly LS-148/U :

Number of loudspeakers - 2.

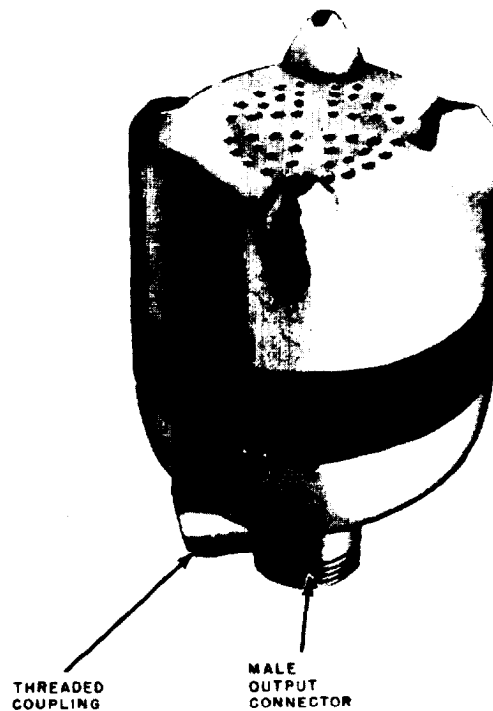
Type ----- Dynamic, permanent magnet.

Frequency response. 80 to 6,000 cps.

Output power (peak). 6 watts.

Input impedance. 3.2 ohms.

Interconnecting cables 4.



TM436-10-8

Figure 2. Dynamic Microphone M-23/U.

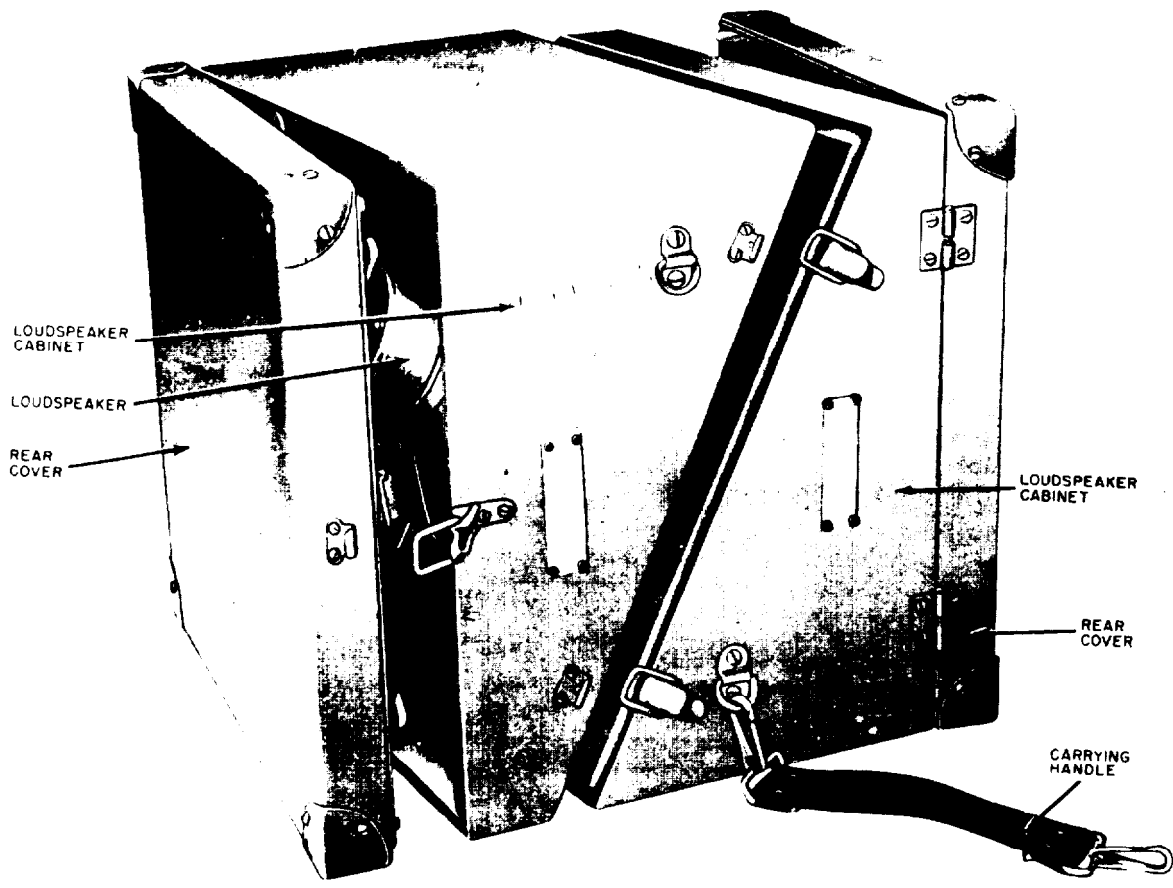


Figure 3. Loudspeaker Assembly LS-148/U

5. Table of Components
(fig 1)

MC-364-D and Public Address Set AN/UIH-2 are listed in a below, and the spare parts in b below :

The components of Reproducing Equipment

a. Components.

MC-364-D	AN/UIH-2	Quantity	Component	Dimensions (in.)	Weight (lb)
(*)		1	Turntable MX-932/U_____	19 3/8 x 19 x 11 _____	46
	(*)	1	Sound Reproducer RP-104 (*) /UIH-2.	19 3/16 x 19 1/8 x 9 _____	61
(*)	(*)	1	Dynamic Microphone M-23/U_ _ _	4 3/16 long x 2 1/16 dia.	
		1	or Dynamic Microphone M-43/U_ _ _ _	3 15/16 long x 2 1/16 dia.	
(*)	(*)	1	Loudspeaker Assembly LS-148/U consisting of: 2 ea loudspeaker cabinet and cover. 2 ea Power Cable Assembly CX-1236/U.	16 1/4 x 14 5/8 x 14 1/4 _____ 50 feet long.	42
(*)	(*)	1	Reproducing stylus, standard groove.		
(*)	(*)	1	Sound reproducer cartridge_ _ _ _		
(*)	(*)	1	Special Purpose Cable CX-1207/U.	25 feet long.	
		1	or Special Purpose Cable CX-2150/U.	25 feet long.	
(*)	(*)	1	Stroboscope assembly, consisting of: 1 ea stroboscope_____	25 long.	
			1 ea stroboscope disk _ _ _ _ _	2 1/2 dia.	
(*)		1	Electrical power cable assembly-.	25 feet long.	
	(*)	1	Adapter, 45 rpm_____	1 37/64, dia.	
	(*)	1	Power Cable Assembly CX-1208/U.	25 feet long.	
	(*)	1	Reproducing stylus, microgroove.		
	(*)	1	Wrench, socket head screw _ _ _ _ _	2 1/6 long.	
(*)	(*)	1 set	Spare parts (b below) _____		

b. Spare Parts.

MC-364 -D	AN /UIH-2	Quantity	Item
		11	Adapter, 45 rpm (Federal stock No. 5935-392-9573).
(*)	(*)	1	Electron tube type 5Y3WGTA.
(*)	(*)	1	Electron tube type 6SL7WGT.
(*)	(*)	1	Electron tube type 6V6GTY.
(*)	(*)	5	Cartridge fuse, 5-ampere (Federal stock No. 5920-221-4519).
(*)	(*)	1	Lamp LM-52 (Federal stock No. 6240-144-8706).
	(*)	1	Sound reproducer cartridge (Federal stock No. 5835-503-2560).
	(*)	1	Reproducing stylus, micro-groove (Federal stock No. 5835-503-2610).
	(*)	1	Reproducing stylus, standard groove (Federal stock No. 5835-545-8219).
(*)		1	Reproducing stylus, standard groove (Federal stock No. 5834-170-4808).

6. Common Names

Nomenclature	Common name
Reproducing Equipment MC-364-D or Public Address Set AN/UIH-2.	Public address set.
Turntable MX-932/U or Sound Reproducer RP-104 (*) /UIH-2.	Reproducer.
Dynamic Microphone M-23/U or Dynamic Microphone M-43/U.	Microphone.
Loudspeaker Assembly LS-148/U.	Loudspeaker assembly.
Power Cable Assembly CX-1235/U.	Loudspeaker cable.

Nomenclature	Common name
Electrical power cable assembly (MC-364-D) or Power Cable Assembly CX-1208/U (AN/UIH-2).	Power cable.
Special Purpose Cable CX-1207/U or Special Purpose Cable CX-2150/U.	Microphone cable.
Sound reproducer cartridge --	Cartridge.

7. Description of Public Address Set

The public address set consists of a reproducer (*a* below) and the minor components (*b* below) required for public address type reproduction of recorded information or for amplifying speech.

a. Reproducer (fig. 1). The front and top of the reproducer can be reached by raising the hinged lid. The connectors and some operating controls and switches are located on the front of the reproducer. The turntable, the sound reproducer arm (pick-up arm), and the balance of the controls and switches are located on top of the reproducer.

b. Minor Components.

- (1) *Microphone* (fig. 2). The microphone (housed in the microphone compartment of the loudspeaker assembly) has a connector to accommodate the microphone cable connector ((3) below). The base of the microphone has a threaded coupling so that the unit can be mounted on a stand.
- (2) *Loudspeakers* (fig. 3). Each loudspeaker is housed in a section (cabinet) of the loudspeaker assembly case, and has two connectors to accommodate the loudspeaker cable connectors ((3) below).
- (3) *Cables* (fig. 1). Four cables are provided for interconnection of the equipment. The cables are stored in the covers of the loudspeaker assembly.
 - (a) *Loudspeaker cables.* The loudspeaker cables each are 50 feet long. Each cable has three connectors; two for connection to a loudspeaker and one for connection to the reproducer.

- (b) *Microphone cable.* The microphone cable is 25 feet long and has two connectors ; one for connection to the microphone and one for connection to the reproducer.
- (c) *Power cable.* The power cable is 25 feet long and has two connectors; *one* for connections to the reproducer and one for connection to the source of power.

Note. The power cable supplied with the MX-932/U and the power cable supplied with the RP-104(*) /UIH-2 are not interchangeable.

8. Differences in Models

Reproducing Equipment MC-364-D and Public Address Set. AN/UIH-2 are alike, except for minor differences in the reproducers. The following chart lists the differences:

Item	MX-932/U	RP-104/UIH-2	RP-104A/UIH-2
Turntable speeds _____	33 1/3 and 78 rpm _____	33 1/3, 45, and 78 rpm _____	33 1/3, 45, and 78 rpm _____
Sound reproducer cartridge,	Crystal, one side pick-up--	Ceramic, turnover-type, two side pick-up.	Ceramic, turnover-type, two side pick-up.
Reproducing stylus _____	Standard groove _____	Standard groove and mi- crogroove.	Standard groove and mi- crogroove.
Speed controls _____	Lever-type controls _____	Lever-type controls _____	Knob-type controls.
Motor support _____	Motor support yoke secured by two wing nuts.	Motor support yoke secured by one wing nut.	Rubber shock mounts.
Power cable _____	Electrical power cable assembly.	Power Cable Assembly CX-1208/U.	Power Cable Assembly CX-1208/U.

CHAPTER 2

OPERATING INSTRUCTIONS

Note. Unpacking and installation of the public address set should be performed by second echelon personnel.

Section I. OPERATION UNDER USUAL CONDITIONS

9. Controls and Indicator

Only those controls and indicator which may be used by the operator are listed below. Do not change the position of the other controls or change any of the cable connections.

Control or indicator	Function										
POWER indicator (fig. 4).	When lighted, indicates power is applied to reproducer.										
MIC control _____	Controls volume of microphone channel.										
PHONO Control _____	Controls volume of sound reproducer channel.										
TONE-POWER OFF control.	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 15%;">Position</th> <th style="text-align: left;">Function</th> </tr> </thead> <tbody> <tr> <td>1 through 10</td> <td>Controls tone of output signal.</td> </tr> <tr> <td>1</td> <td>Applies power to reproducer.</td> </tr> <tr> <td>0</td> <td>Disconnects, power from reproducer.</td> </tr> </tbody> </table>	Position	Function	1 through 10	Controls tone of output signal.	1	Applies power to reproducer.	0	Disconnects, power from reproducer.		
Position	Function										
1 through 10	Controls tone of output signal.										
1	Applies power to reproducer.										
0	Disconnects, power from reproducer.										
SPEED CHANGE control (MX-932/U) (fig. 5).	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Two-position lever adjustment :</th> </tr> <tr> <th style="text-align: left; width: 15%;">Position</th> <th style="text-align: left;">Function</th> </tr> </thead> <tbody> <tr> <td>33 1/3 rpm</td> <td>Operates turntable at 33 1/3 rpm.</td> </tr> <tr> <td>78 rpm</td> <td>Operates turntable at 78 rpm.</td> </tr> </tbody> </table>	Two-position lever adjustment :		Position	Function	33 1/3 rpm	Operates turntable at 33 1/3 rpm.	78 rpm	Operates turntable at 78 rpm.		
Two-position lever adjustment :											
Position	Function										
33 1/3 rpm	Operates turntable at 33 1/3 rpm.										
78 rpm	Operates turntable at 78 rpm.										
SPEED change control (RP-104/UIH-2) (fig. 6).	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Three-position lever adjustment :</th> </tr> <tr> <th style="text-align: left; width: 15%;">Position</th> <th style="text-align: left;">Function</th> </tr> </thead> <tbody> <tr> <td>33 1/3 r.p.m.</td> <td>Operates turntable at 33 1/3 rpm.</td> </tr> <tr> <td>45 r.p.m.</td> <td>Operates turntable at 45 rpm.</td> </tr> <tr> <td>78.26 r.p.m.</td> <td>Operates turntable at 78 rpm.</td> </tr> </tbody> </table>	Three-position lever adjustment :		Position	Function	33 1/3 r.p.m.	Operates turntable at 33 1/3 rpm.	45 r.p.m.	Operates turntable at 45 rpm.	78.26 r.p.m.	Operates turntable at 78 rpm.
Three-position lever adjustment :											
Position	Function										
33 1/3 r.p.m.	Operates turntable at 33 1/3 rpm.										
45 r.p.m.	Operates turntable at 45 rpm.										
78.26 r.p.m.	Operates turntable at 78 rpm.										

Control or indicator	Function								
Speed change control (RP-104A/UIH-2) (fig. 7).	Three-position rotary adjustment :								
	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 15%;">Position</th> <th style="text-align: left;">Function</th> </tr> </thead> <tbody> <tr> <td>33</td> <td>Operates turntable at 33 1/3 rpm.</td> </tr> <tr> <td>45</td> <td>Operates turntable at 45 rpm.</td> </tr> <tr> <td>78</td> <td>Operates turntable at 78 rpm.</td> </tr> </tbody> </table>	Position	Function	33	Operates turntable at 33 1/3 rpm.	45	Operates turntable at 45 rpm.	78	Operates turntable at 78 rpm.
	Position	Function							
33	Operates turntable at 33 1/3 rpm.								
45	Operates turntable at 45 rpm.								
78	Operates turntable at 78 rpm.								
Motor switch (fig. 6, 6, or 7).	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 15%;">Position</th> <th style="text-align: left;">Function</th> </tr> </thead> <tbody> <tr> <td>ON</td> <td>Starts turntable motor.</td> </tr> <tr> <td>OFF</td> <td>Stops turntable motor.</td> </tr> </tbody> </table>	Position	Function	ON	Starts turntable motor.	OFF	Stops turntable motor.		
	Position	Function							
ON	Starts turntable motor.								
OFF	Stops turntable motor.								
Stylus selector lever (RP-104(*)/UIH-2) (fig. 6 or '7).	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 15%;">Position</th> <th style="text-align: left;">Function</th> </tr> </thead> <tbody> <tr> <td>78</td> <td>Places standard groove reproducing stylus in operating position.</td> </tr> <tr> <td>33-45</td> <td>Places micro-groove reproducing stylus in operating position.</td> </tr> </tbody> </table>	Position	Function	78	Places standard groove reproducing stylus in operating position.	33-45	Places micro-groove reproducing stylus in operating position.		
	Position	Function							
	78	Places standard groove reproducing stylus in operating position.							
33-45	Places micro-groove reproducing stylus in operating position.								

10. Modes of Operation

To operate the equipment for any particular mode of operation, refer to the appropriate paragraph listed below.

- a. Playback; reproducing recorded information (par. 11).
- b. Public address; amplifying speech (par. 12).
- c. Mixer; amplifying speech during playback (par. 13).

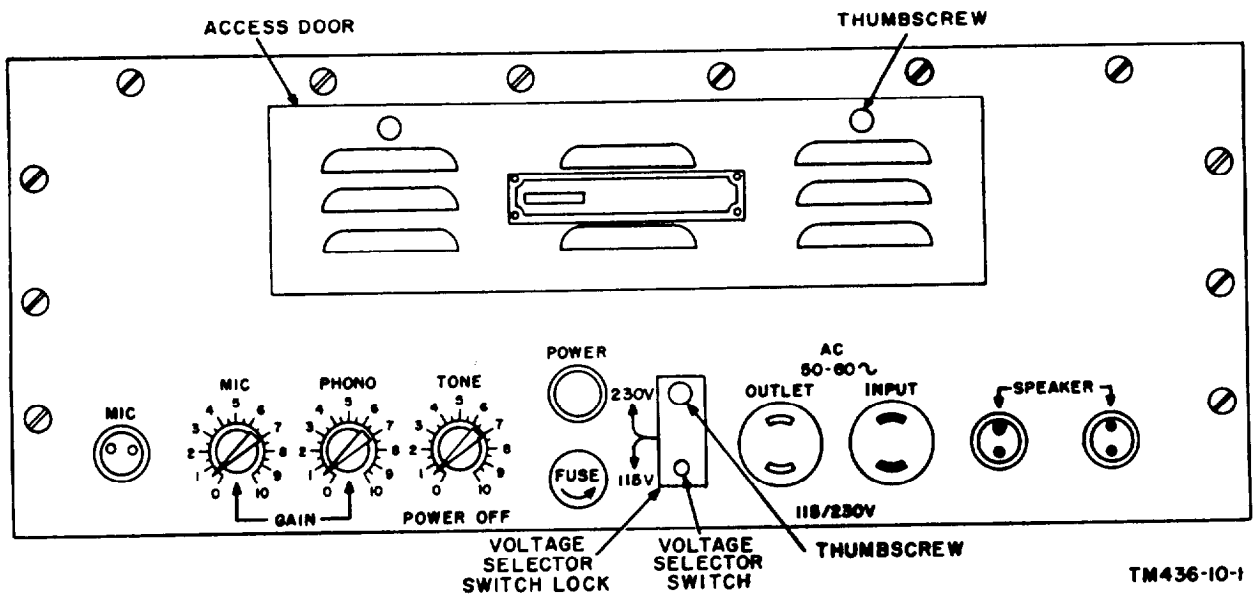


Figure 4. Reproducer, front view.

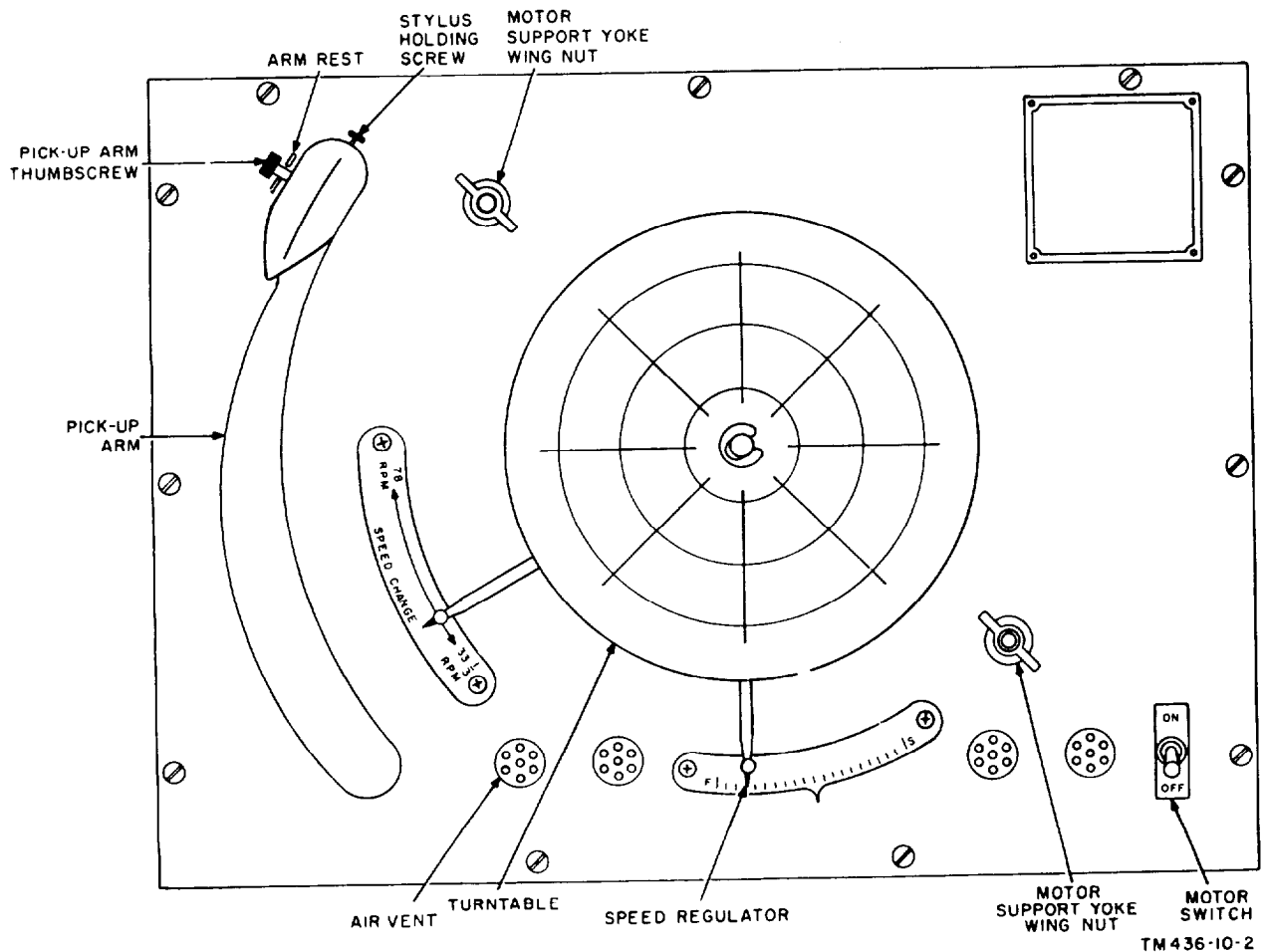


Figure 5. MX-932/U, top view.

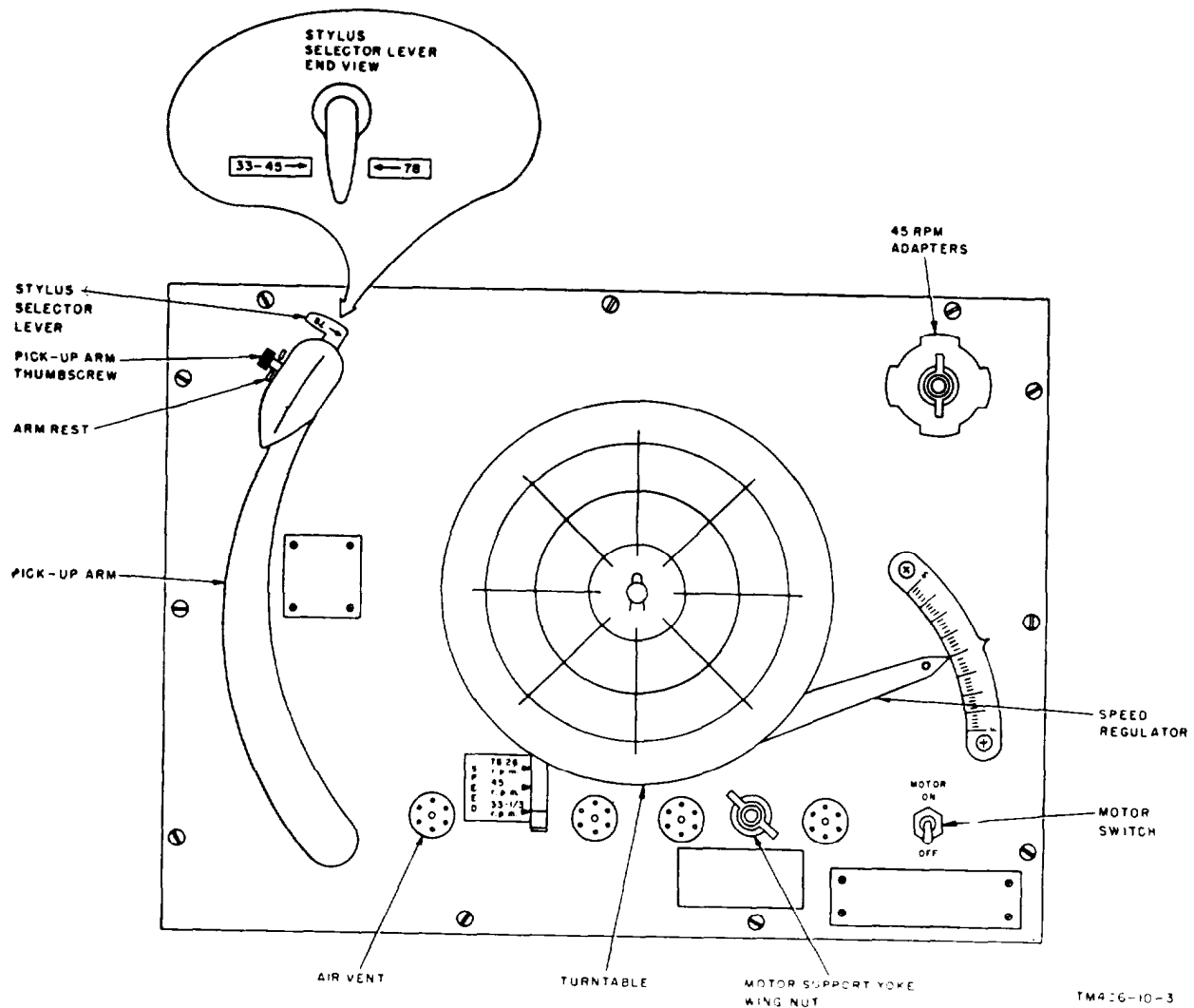


Figure 6. RP-104/UIH-2, top view.

11. Playback

To operate the public address set to reproduce recorded information, proceed as follows :

a. Starting Procedure.

- (1) Remove the stylus shield (RP-104 (*)/UIH-2). Loosen the pick-up arm thumbscrew (fig. 5, 6, or 7).
- (2) Turn the TONE-POWER OFF control (fig. 4) to its extreme clockwise position. The POWER indicator will light. Allow at least 1 minute for the reproducer to warm up.
- (3) Turn the PHONO control to 5 and the MIC control to 0.
- (4) Rub the thumb across the reproducing stylus (stylus) in the sound reproducer cartridge (cartridge). Clicking noises in the loudspeakers indicate that the reproducer is ready for use.
- (5) Move the motor switch (fig. 5, 6, or 7) to ON.
- (6) Move the speed change control to the desired revolution; per minute (rpm) position. In the RP-104(*)/UIH-2, also move the stylus selector lever (fig. 6 or '7) to the desired rpm position.

Caution: Move the speed change control only when the turntable motor

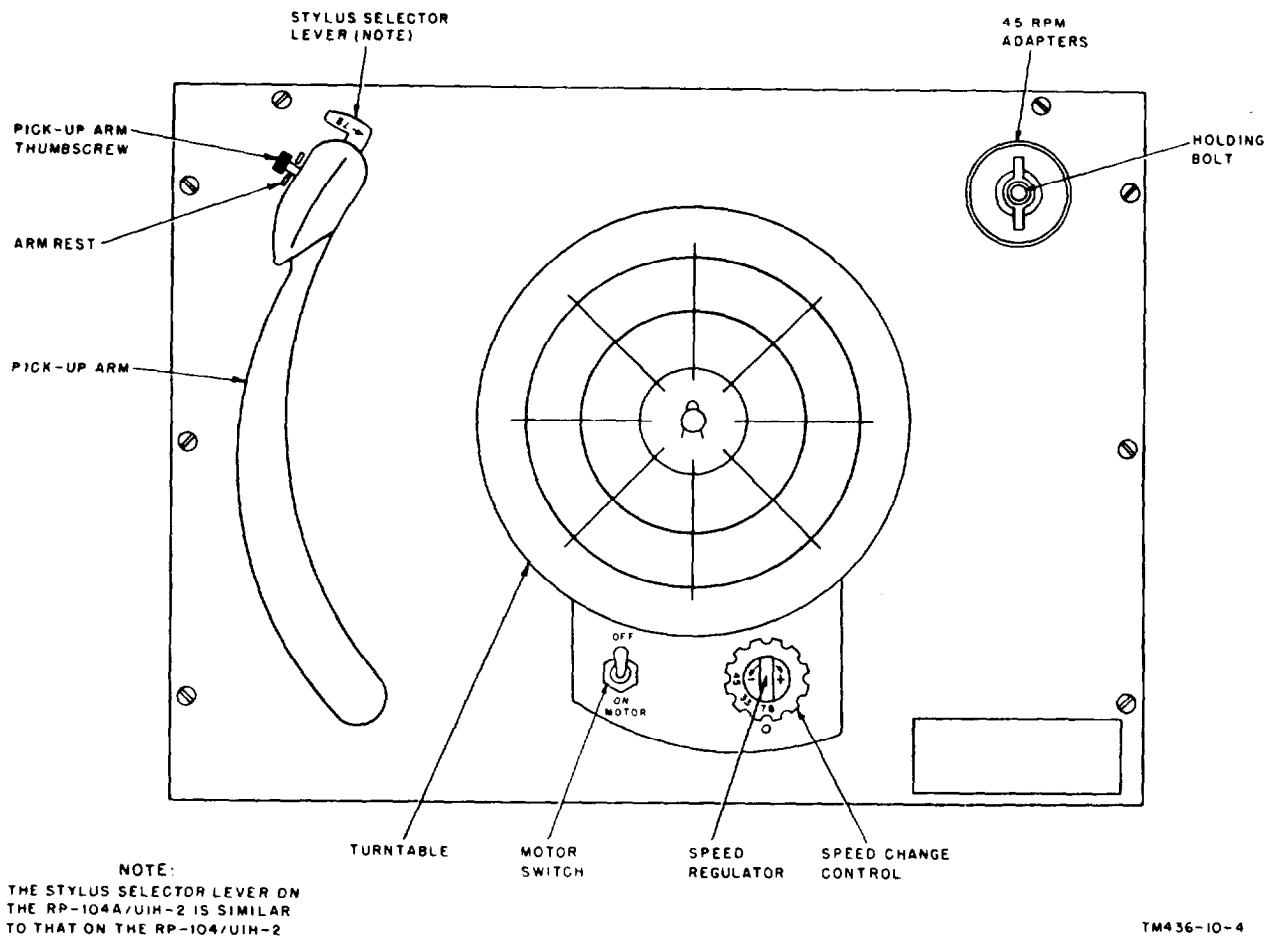


Figure 7. RP-104A/UIH-B, top view.

is running. Do not move the speed regulator since this is an adjustment which must be made by maintenance personnel. On the RP-104 (*) /UIH-2, be sure that the proper stylus has been selected. A standard groove stylus will ruin a microgroove record. All 33 1/3 and 45 rpm records use the microgroove stylus and cannot be played on the MX-932/U. Most 33 1/3 rpm transcriptions (16-inch records) require a standard groove stylus. Check the record or the transcription to determine which stylus to use.

- (7) If a 45-rpm record is being used (RP-104 (*) /UIH-2) insert a 45-rpm adapter into the record as follows:
 - (a) Tilt the adapter until three of the four retaining lips slide into position.

- (b) Snap the fourth retaining lip into position. The adapter must be flush with the record.

b. Operating Procedure.

- (1) Place a record on the turntable (fig. 5, 6, or 7).
- (2) Remove the pick-up arm from the arm rest and gently place the stylus in the lead-in groove or at any other selected point on the record.

Note. Most records start at the rim; however, some 33 1/3-rpm records start at the center. If a record starts at the center it will be indicated on the record label or title plate.

- (3) If necessary, readjust the PHONO control (fig. 4) for the volume level desired. Volume will depend on the size of the audience and the auditorium (or other area).

- (4) Turn the TONE-POWER OFF control slowly counterclockwise until the desired tone quality is obtained.
- (5) When the record reproduction is complete, do not allow the stylus to ride in the last groove longer than necessary. Gently lift the pick-up arm and replace it on the arm rest.
- (6) If another record is to be reproduced, proceed as follows:
 - (a) Move the motor switch to OFF.
 - (b) Remove the reproduced record and place another one on the turntable.
 - (c) Follow the procedures given in (2) through (5) above.

c. Stopping Procedure.

- (1) Move the motor switch (fig. 5, 6, or 7) to OFF.
- (2) Remove the record from the turntable. If a 45-rpm record has been used (RP-104 (*)/UIH-2) remove the 45-rpm adapter and replace it on the holding bolt (fig. '7).
- (3) Secure the pick-up arm to the arm rest. Replace the stylus shield (RP-104 (*)/UIH-2).
- (4) Turn the TONE-POWER OFF control (fig. 4) to 0. The POWER indicator will go out.
- (5) Turn the PHONO control to 0.

12. Public Address

To operate the equipment as a public address system, proceed as follows:

a. Starting Procedure.

- (1) Turn the TONE-POWER OFF control (fig.4) to its extreme clockwise position. The POWER indicator will light. Allow at least 1 minute for the reproducer to warm up.
- (2) Turn the PHONO control to 0.
- (3) Turn the MIC control to 0.
- (4) Perform the following while speaking into the microphone :

Note. Use a natural speaking voice with the lips approximately 6 inches away from the microphone.

- (a) Gradually turn the MIC control clockwise until the desired output volume is obtained from the loud-

speakers. If a howl is heard, from the loudspeakers, reposition them as far away from the microphone as possible.

- (b) Turn the TONE-POWER OFF control slowly counterclockwise until the desired tone quality is obtained. The final position of the TONE-POWER OFF control depends largely on the voice quality of the microphone user. Readjustment may be necessary during operation (**b** below).

b. Operating Procedure. When the microphone user begins to speak, perform the following :

- (1) Readjust the MIC control (fig. 4) as necessary to obtain the desired output volume. Volume will depend on the voice of the speaker, the size of the audience, and the auditorium (or other operating area).
- (2) Readjust the TONE-POWER OFF control to obtain the desired tone output.
- (3) Make any necessary volume and tone adjustments while the microphone is being used.

Note. The reproducer operator should remain at the reproducer while the microphone is being used.

c. Stopping Procedure.

- (1) Turn the TONE-POWER OFF control to 0. The POWER indicator will go out.
- (2) Turn the MIC control to 0.

13. Mixer Operation

To operate the public address set for both playback and public address, proceed as follows :

a. Starting Procedure.

- (1) Prepare the equipment for playback operation (par. 11a(1) through (7)).
- (2) Prepare the equipment for public address operation (par. **12a (4)**).

b. Operating Procedure.

- (1) Start the playback operation (par. 11b(1) through (4)) and have the microphone user talk in a low voice.
- (2) During mixer operation, adjust the MIC and PHONO controls (fig. 4) for any of the following.

- (a) Low playback volume and high speech volume.
 - (b) Low speech volume and high playback volume.
 - (c) Fade-in or fade-out effect of either the speech or the playback.
- (3) To change a record in the course of the mixer operation, gently lift the pick-up arm and replace it on the arm rest.
- (a) Move the motor switch (fig. 5, 6, or 7) to OFF.
 - (b) Remove the reproduced record and place another on the turntable.
 - (c) Place the pick-up arm on the record.
- c. Stopping Procedure.*
- (1) Move the motor switch to OFF, and the TONE-POWER OFF, PHONO, and MIC controls (fig. 4) to 0.
 - (2) Remove the record from the turntable (fig. 5, 6, or 7). If a 45-rpm adapter has been used (RP-104 (*)/UIH-2, remove the adapter (fig. 6 or 7) and replace it on the reproducer.
 - (3) Secure the pick-up arm to the arm rest (fig. 5, 6, or 7) by tightening the pick-up arm thumbscrew. Replace the stylus shield (RP-104 (*)/UIH-2 (fig. 6 or 7).

Section II. OPERATION UNDER UNUSUAL CONDITIONS

14. General

Operation of the public address set may be more difficult in regions where extreme cold, heat, humidity, and moisture conditions prevail. Paragraphs 15 through 17 provide operational information that may be used to minimize the effects of regional extremes.

15. Operation in Arctic Climates

Subzero temperatures and climatic conditions associated with cold weather affect the operation of the public address set.

a. If equipment that has been exposed to the cold is brought into a warm room, moisture will gather on the equipment and cause changes in operating characteristics. Dry the equipment thoroughly.

b. Cover the public address set immediately after use to retain equipment operating temperatures for a longer time.

16. Operation in Tropical Climates

Moisture conditions are more acute in tropical, swampy areas. The high relative humidity causes condensation on the equipment when the temperature of the equipment drops below that of the surrounding air. Adequate ventilation will minimize this condition. Dry the equipment thoroughly before operating it.

17. Operation in Desert Climates

Provide means for keeping dust and sand from entering the moving parts of the public address set. Grit, resulting from the mixture of lubricant and sand, will damage the equipment. Clean more often, cover the equipment when not in use. Protect the equipment from the direct rays of the sun, if possible.

CHAPTER 3

OPERATOR'S MAINTENANCE INSTRUCTIONS

18. Scope of Operator's Maintenance

a. The maintenance duties normally performed by the operator of the public address set are given in *b*) below. They do not require special tools or test equipment.

b). Operator's maintenance for the public address set consists of preventive maintenance (par. 20) and trouble shooting (par. 21).

19. Maintenance Items Required

There are no tools supplied with the equipment for operator's maintenance. The following items are required for operator's maintenance :

- a. Lint-free cloth.
- b. Cleaning Compound (Federal stock No. 7930-395-9542).
- c. Stiff-bristled brush.

20. Preventive Maintenance

a. *DA Form 11-238*. *DA Form 11-238* (figs. 8 and 9) is a preventive maintenance check list to be used by the operator. Items not applicable to the public address set are lined out. References in the ITEM block are to items in this

paragraph that contain additional maintenance information pertinent to the item. Instructions for use of the form appear on the form.

b. *Items*. The information given below supplements *DA Form 11-238*. The item numbers correspond to the ITEM numbers on the form.

Item	Maintenance procedure
2	Remove dirt and moisture from the cables, recorder panels, the loudspeakers, and the microphone.
5 and 6	Clean all exposed metal surfaces with a lint-free cloth slightly moistened with Cleaning Compound. Warning: Cleaning Compound is flammable and its fumes are toxic. Do not use near a flame; provide adequate ventilation.
10	Check the seating of the FUSE and the POWER indicator. Inspect the stylus for secure mounting and for excessive wear. Excessive wear is indicated by a flat spot on the stylus tip, or by too much noise in the loudspeakers during playback.

ADDITIONAL ITEMS FOR 2D AND 3D ECHELON INSPECTIONS		CONDITION
26. CHECK ANTENNA FOR CORROSION AND CORRECT. CHECK FOR DAMAGED INSULATORS AND REFLECTORS.		
27. CHECK FOR NORMAL OPERATION		
28. CHECK SWAGING ON OPENING. REMOVE CAPTIVES		
<p>IF DEFICIENCIES NOTED ARE NOT CORRECTED DURING THE INSPECTION, INDICATE ACTION TAKEN FOR CORRECTION.</p> <p>ITEMS 3 AND 10. PHONO CONTROL KNOB CRACKED. REPORTED TO HIGHER ECHELON FOR REPLACEMENT</p>		

MAINTENANCE CHECK LIST FOR SIGNAL EQUIPMENT SOUND EQUIPMENT, RADIO, DIRECTION FINDING RADAR, CARRIER, RADIOSONDE AND TELEVISION (AR 750-625)		
EQUIPMENT NOMENCLATURE PUBLIC ADDRESS SET AN/UIH-2		
EQUIPMENT SERIAL NUMBER 1378		
<p style="text-align: center;">INSTRUCTIONS</p> <p>This form may be used for a period of one month by using the correct dates and weeks of the month. It is to be used as a Preventive Maintenance check list for Signal equipment in actual use, or for a check on equipment prior to issue.</p> <ol style="list-style-type: none"> For detailed Preventive Maintenance instructions see: <ol style="list-style-type: none"> The Technical Manual (in <i>TW 11 series</i>) for the equipment. (See DA Pamphlet Number 310-4) The Supply Bulletin (SB 11-100 series) for the equipment. (See DA Pamphlet Number 310-4) The Department of the Army Lubrication Order. (See DA Pamphlet Number 310-4) The following action will be taken by either the Communications Officer/Chief for 1st echelon, or the Inspector for higher echelon: <ol style="list-style-type: none"> Enter Equipment Nomenclature and Serial Number. Strike out items that do not apply to the equipment. Operator/Inspector will enter in the columns entitled CONDITION, on the proper line, a notation regarding the condition, using symbols specified under LEGEND. After operator completes each daily inspection he will initial over the appropriate dates under "Daily Condition for Month", then return form to his supervisor. 		
TYPE OF INSPECTION		
OPER- ATOR	2/3 ECH- ELON	SIGNATURE
✓		6 APRIL 1958 <i>S P Clitney</i>

FOLD

DA FORM 11-238
MAY 57

REPLACES DA FORMS 11-238, 1 NOV 55; 11-239, 11-244, 11-245, 11-246, 11-249, 11-250, AND 11-251; WHICH ARE OBSOLETE.

Figure 8. DA Form 11-238, pages 1 and 4.

LEGEND for marking conditions: Satisfactory, Y Adjustment, Repair or Replacement required, X Defect corrected, (X)							DAILY CONDITION FOR MONTH OF APRIL, 1958																					
NO.	DAILY ITEM	WEEKLY					2D 3D ECH	ADDITIONAL ITEMS FOR 2D AND 3D ECHELON INSPECTIONS	CONDITION																			
		1ST	2D	3D	4TH	5TH																						
1	COMPLETENESS AND GENERAL CONDITION OF EQUIPMENT (Apparatus, receiver, carrying cases, cables, microphones, tubes, spare parts, technical manuals). PAR. 5																											
2	CLEAN DIRT AND MOISTURE FROM ANTENNA MICRO-PHONES, COMPONENT PANELS PAR. 20b																											
3	INSPECT CONTROLS FOR NORMAL OPERATION. TAP CONTROLS LIGHTLY FOR EVIDENCE OF CUT-OUT FROM LOOSE CONTACTS																											
4	CHECK FOR NORMAL OPERATION OF EQUIPMENT BE ALERT FOR UNUSUAL OPERATION OR CONDITION PAR. 11, 12, AND 13																											
5	CLEAN AND TIGHTEN EXTERIORS OF CASES, RACKS, MOUNTS, AND MOUNTING LINES. PAR. 20b	✓					15	INSPECT SEATING OF READILY ACCESSIBLE PLUG-OUT ITEMS: TUBES, LAMPS, FUSES, SOLENOIDS, CONNECTORS, MONITORS, PLUG-IN COILS.																				
6	INSPECT BASES, MOUNTS, ANTENNA TOWERS AND EXPOSED METAL SURFACES FOR RUST, CORROSION. PAR. 20b	✓					16	INSPECT RELAYS AND CIRCUIT BREAKERS FOR LOOSE MOUNTINGS, BAD CONTACTS, MIS-ALIGNMENT OF CONTACTS AND SPRINGS, PROPER SPRING TENSION.																				
7	INSPECT CORDS, CABLE, WIRE, AND MOUNTS FOR CUTS, KINKS, BREAKS, FRAYING, UNDUCE STRAIN	✓					17	INSPECT VARIABLE CAPACITORS FOR DIRT, MIS-ALIGNMENT OF PLATES, LOOSE MOUNTINGS, MOISTURE.																				
8	CHECK ANTENNA CUT WIRE FOR PROPER TENSION OR DAMAGE.						18	INSPECT RESISTORS, BUSBARS AND INSULATORS FOR CRACKS, SWELLING, CLUSTERING, MOISTURE, DISCOLORATION.																				
9	INSPECT CANVAS AND LEATHER ITEMS FOR MILDEW, TEARS, FRAYING.	✓					19	CLEAN AND TIGHTEN SWITCHES, TERMINAL BLOCKS, RELAYS, RELAY CASES AND INTERIORS OF SWITCHES AND SOLENOIDS NOT READILY ACCESSIBLE.																				
10	INSPECT ACCESSIBLE ITEMS FOR LOOSENESS: SWITCHES, KNOBS, WASHERS CONNECTORS, RELAYS TRANSFORMERS, MOTORS, PILOT LIGHTS, RELAYS ETC. PAR. 20b	X					20	INSPECT TERMINAL BLOCKS FOR LOOSE CONNECTIONS, CRACKS AND BREAKS.																				
11	CLEAN AND/OR INSPECT AIR FILTERS, BRASS NAME PLATES, GAUGE AND METER WINDOWS.	✓					21	INSPECT TERMINALS OF LARGE FIXED CAPACITORS AND RESISTORS FOR DIRT, CORROSION, LOOSE CONTACTS.																				
12	INSPECT BATTERIES CAPACITORS FOR DIRT, LOOSE TERMINALS, CRACKS, CORROSION, DAMAGED CASES. INSPECT DRY BATTERIES FOR LEAKAGE.						22	INSPECT TRANSFORMERS, CHOKES, POTENTIOMETERS AND RHEOSTATS FOR OVERHEATING AND OIL LEAKAGE.																				
ADDITIONAL ITEMS FOR 2D AND 3D ECHELON INSPECTIONS							CONDITION	23	INSPECT GENERATORS, AMP LINES, DIMMERS FOR BRUSH WEAR, SPRING TENSION, AGING AND FITTING OF COMMUTATOR.																			
13	INSPECT SHELTERS AND COVERS FOR ADEQUACY OF WEATHER PROOFING, TEARS, FRAYING.						24	INSPECT CATHODE RAY TUBES FOR BURN, OVERHEATING.																				
14	INSPECT TERMINAL BLOCKS, RELAYS, SWITCHES, CONTACTS, RESISTORS, CAPACITORS, TRANSFORMERS, MOTORS, PILOT LIGHTS, BATTERIES, BATTERIES, BATTERIES.						25	INSPECT WATERBASE CAPACITORS FOR LEAKS, CORROSION, DAMAGED CASES.																				

CONTINUED ON PAGE 4

Figure 9. DA Form 10-11, pages 2 and 3.

21. Equipment Performance Checklist

a. *General.* This checklist outlines a procedure for systematically checking equipment performance. All corrective measures that can be performed by the operator are given in the *Corrective measures* column. If the corrective action does not correct the fault, additional maintenance must be performed by higher echelon maintenance personnel. This maintenance is described in the appropriate technical

manual. The operator should note on the repair tag how the equipment performed and the corrective measures taken. Start at the beginning of the check list and follow each step in sequence to locate the trouble. However, if trouble is suspected in a particular area, check that point first and continue the steps in the order listed.

b. *Procedure.* Operate the public address set as described in the checklist below.

	Item NO.	Item	Action	Normal indication	Corrective measures
P R E P A R A T O R Y	1	MIC and PHONO controls (fig. 4).	Turn to 0.		
	2	TONE-POWER OFF control.	Turn to 0.		
	3	Motor switch (fig. 5, 6, or 7).	Turn to OFF.		
O P E R A T I O N	4	TONE-POWER OFF control.	Turn to extreme clockwise position.	POWER indicator lights.	Replace POWER indicator lamp. Replace defective fuse (fig. 4). Check power cable connections. Turn in equipment for repair.
O P E R A T I O N	5	PHONO control ---	Turn to 5 ; rub thumb across stylus (two on RP-104(*)/UIH-2).	Clicking noises heard in loudspeakers.	Check loudspeaker cable connections Report to higher echelon for stylus replacement. Turn in equipment for repair.
	6	MIC control -----	Turn to 5 ; speak into microphone.	Output from loudspeakers heard clearly.	Check microphone cable connections. Reposition loudspeakers (if howl is heard). Turn in equipment for repair.
	7	Motor switch (fig. 5, 6, or 7).	Move to ON -----	Turntable rotates -----	Loosen motor support yoke (MX-932/U or RP-104/UIH-2). Turn in equipment for repair.
	8	Speed change control--	Move to each speed position.	Turntable speed changes.	Turn in equipment for repair.

		Item	Action	Normal indication	Corrective measures
OPERATION	9	Pick-up arm _____	Place record on turntable, select proper speed, and then place pick-up arm on record.	Output from loudspeakers heard clearly.	Remove dust or dirt from record. Change record. Select proper speed change control position. Turn in equipment for repair.
	10	TONE-POWER OFF control.	Rotate from extreme clockwise position to 1, and then to desired tone output.	Tone varies from treble to bass and then to desired tone.	Turn in equipment for repair.
	11	PHONO and MIC controls.	Speak into microphone while record playback is in progress: a. Turn PHONO control to 1 and MIC control to 3. b. Turn MIC control to 1 and PHONO control to 3.	a. Speech output louder than playback output. b. Playback output louder than speech output.	a. Turn in equipment for repair. b. Turn in equipment for repair.
STOP	12	Pick-up arm (fig. 5, 6, or 7).	Remove pick-up arm from record and secure in arm rest.		
	13	Motor switch _____	Move to OFF _____	Turntable stops rotating.	Turn in equipment for repair.
	14	Record _____	Remove from turntable-		
	15	TONE-POWER OFF control (fig. 4).	Turn to 0 _____	POWER indicator goes out.	Turn in equipment for repair.
	16	PHONO and MIC controls.	Turn to 0.		

CHAPTER 4
SHIPMENT AND LIMITED STORAGE AND DEMOLITION
TO PREVENT ENEMY USE

22. Shipment and limited Storage

Disassembly and repacking of the public address set for shipment or limited storage should be performed by second echelon personnel.

23. Demolition To Prevent Enemy Use

a. Authority for Demolition. Demolition of the public address set will be accomplished only upon the order of the commander. Use the destruction procedure outlined in *b* below to prevent further use of the equipment.

b. Methods of Destruction. Use any of the following methods to destroy the equipment.

- (1) *Smash.* Smash the reproducer, loud-speaker assembly, microphone, and records; use sledges, axes, handaxes,

pickaxes, hammers, crowbars, or other heavy tools to destroy the equipment.

- (2) *Cut.* Cut the cables and the loud-speaker diaphragms; use axes, handaxes, or machetes.
- (3) *Burn.* Burn the equipment cases, technical manual, and any other combustible items; use gasoline, kerosene, flame throwers, or incendiary grenades.
- (4) *Explode.* If explosives are necessary, use firearms, grenades, or TNT.
- (5) *Dispose.* Bury or scatter the destroyed parts in slit trenches, fox holes, or other holes, or throw them into streams.

APPENDIX

REFERENCES

The following publications contain information applicable to the operator of the public address set:

AR 380-5 Military Security (Safeguarding Security Information).

TM 11-2093-10 Code Practice Equipment EE-94-F, EE-95-F, EE-96-D, EE-96-E, and EE-96-F,

[AG 676.5 (20 Jun 58)]

and Telegraphic Code Trainers AN/FGC-T1 and AN/FGC-T4, Operator's Manual.

TM 11-2332-10 Projector PH-222-C and Still Picture Projector AP-9 (1), Operator's Manual.

TM 11-5533 Code Recorder RD-60/U.

BY ORDER OF THE SECRETARIES OF THE ARMY AND THE AIR FORCE:

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DISTRIBUTION:

Active Army :

ASA (2)
CNGB (1)
Technical Stf, DA (1) except CsigO (30)
Technical Stf Bd (1)
USCONARC (5)
USA Arty Bd (1)
USA Armor Bd (Incl ea Test Sec) (1)
USA Inf Bd (1)
USA Air Def Bd (Incl ea Test Sec) (1)
USA Abn & Elct Bd (1)
USA Avn Bd (1)
USA Arctic Test Bd (1)
US ARADCOM (Incl ea Rgn Comd) (2)
OS Maj Comd (5)
Log Comd (5)
MDW (1)
Armies (6)
Corps (2)
Div (2)
Ft & Camp (2)
Svc College (5)
Br Svc Sch (5) except USASCS (25)
Gen Depot (2) except Atlanta Gen Depot
(None)
Sig Sec, *Gen Depot* (10)
Sig Depot (17)
Port of Emb (OS) (2)
OS SUP Agcy (2)
Sig Fld Maint Shop (3)
Sig Lab (6)
USA Sig Pub Agcy (8)
Army Pictorial Cen (2)
USASSA (Phila, Pa) (13)
SP Wpn Comd (5)
White Sands Sig Agcy (13)
USA Elct PG (1)
Dugway PG (5)

Jefferson PG (5)
USA Corn Agcy (2)
WRAMC (1)
USAMS (1)
Engr Maint Cen (1)
AFIP (1)
USA Sig Corn Engr Agcy (1)
Mil Dist (1)
USA Corps (Res) (1)
Sectors, USA Corps (Res) (1)
JBUSMC (2)
Mil Mis (2)
Units org under the fol TOE:
8-650 (2)
11-5 (2)
11-6 (2)
11-7 (2)
11-16 (2)
11-55 (2)
11-56 (2)
11-57 (2)
11-127 (2)
11-128 (2)
11-500 (AA-AE) (2)
11-537 (2)
11-557 (2)
11-587 (2)
11-592 (2)
11-597 (2)
19-256 (2)
20-300 (2)
30-500 (AA-AG) (2)
33-67 (2)
39-51 (2)
39-61 (2)
39-71 (2)

NG: State AG (6) ; units-same as Active Army except allowance is one copy to each unit.

USAR: *None.*

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

