

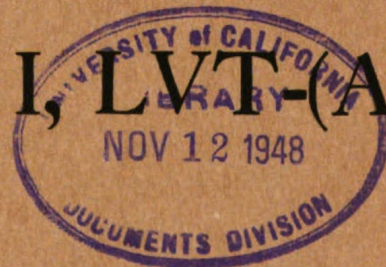
TM 11-2752

US Army

WAR DEPARTMENT TECHNICAL MANUAL

4
4
0113
12
TM 11-2752
1945

INSTALLATION OF RADIO AND INTERPHONE EQUIPMENT IN VEHICLE, LANDING, TRACKED (ARMORED) MARK I, LVT-(A)-1



RESTRICTED. DISSEMINATION OF RESTRICTED MATTER.
No person is entitled solely by virtue of his grade or position to knowledge or possession of classified matter. Such matter is entrusted only to those individuals whose official duties require such knowledge or possession. (See also paragraph 23b, AR 380-5, 15 March 1944.)

UNCLASSIFIED BY
WD CIR 353 1945

WAR DEPARTMENT • JANUARY 1945

Digitized by Google

Original from
UNIVERSITY OF CALIFORNIA

INSTALLATION OF RADIO
AND INTERPHONE EQUIPMENT
IN VEHICLE, LANDING, TRACKED
(ARMORED) MARK I, LVT-(A)-1



WAR DEPARTMENT

JANUARY 1945

RESTRICTED. DISSEMINATION OF RESTRICTED MATTER.

No person is entitled solely by virtue of his grade or position to knowledge or possession of classified matter. Such matter is entrusted only to those individuals whose official duties require such knowledge or possession.

(See also paragraph 23b, AR 380-5, 15 March 1944.)

United States Government Printing Office

Digitized by Google

Washington : 1945

Original from
UNIVERSITY OF CALIFORNIA

RESTRICTED

WAR DEPARTMENT
Washington 25, D. C., 31 January 1945

TM 11-2752, Installation of Radio and Interphone Equipment in Vehicle, Landing, Tracked (Armored) Mark I, LVT-(A)-1, is published for the information and guidance of all concerned.

[AG 300.7 (10 Jan 45)]

BY ORDER OF THE SECRETARY OF WAR:

G. C. MARSHALL
Chief of Staff

OFFICIAL:

J. A. ULIO
Major General
The Adjutant General

DISTRIBUTION:

AAF (2) ; AGF (2) ; ASF (2) ; T of Opn (2) ; Dept (2) ; Def Comd (2) ;
Arm & Sv Bd (2) ; S Div ASF (1) ; Tech Sv (2) ; Sv C (2) ; PE (2) ;
Gen Oversea SOS Dep (Sig Sec) (2) ; Dep 11 (2) ; Gen & Sp Sv Sch (2) ;
USMA (2) ; WDGS Lib (5) ; Lab 11 (2) ; A (2) ; Three (3) copies to
each of the following: T/O & E 9-7; 9-9; 9-57; 9-65; 9-67; 9-76;
9-127; 9-197; 9-317; 9-325; 9-327; 9-328; 9-377; 11-107; 11-127;
11-587; 11-592; 11-597; 17-115; 17-117; 17-127

For explanation of symbols, see FM 21-6.

15036E

RESTRICTED

CONTENTS

U113
12
TMM1: 275'2
★ ★ 1945

SECTION I. Guide to use of this manual.

	<i>Paragraph</i>	<i>Page</i>
Purpose	1	1
Equipment	2	1
Holes and brackets	3	1
Preliminary check	4	1
Operating check	5	1

II. Ignition noise suppression in Vehicle, Landing, Tracked, (Armored), Mark I, LVT-(A)-1.

General	6	2
Procedure	7	2

III. Radio Set SCR-508-() or SCR-528-() and associated interphone equipment.

Required parts	8	3
Assembly and installation	9	4

M609679

RESTRICTED

DESTRUCTION NOTICE

WHY —To prevent the enemy from using or salvaging this equipment for his benefit.

WHEN—When ordered by your commander.

- HOW**
1. Smash—Use sledges, axes, handaxes, pickaxes, hammers, crow-bars, heavy tools.
 2. Cut—Use axes, handaxes, machetes.
 3. Burn—Use gasoline, kerosene, oil, flame throwers, incendiary grenades.
 4. Explosives—Use firearms, grenades, TNT.
 5. Disposal—Bury in slit trenches, fox holes, other holes. Throw in streams. Scatter.

USE ANYTHING IMMEDIATELY AVAILABLE FOR DESTRUCTION OF THIS EQUIPMENT

- WHAT**
1. Smash—All vacuum tubes, crystals, control dials, coupling coils, transformers, speakers in receivers, external loudspeakers, microphones, headsets, dynamotors, and cable connectors.
 2. Cut—All connecting wires, cording and cabling.
 3. Burn—All equipment, and all associated training, technical, and installation manuals.
 4. Bury or scatter—All remains, after destroying their usefulness.

DESTROY EVERYTHING

RESTRICTED

SAFETY NOTICE

This equipment uses high voltages which are dangerous to life. Observe all safety precautions.

- 1. Make no adjustment with the power switch on.**
- 2. Do not operate the equipment with the shields removed.**
- 3. Do not connect power to any unit of the radio set until operating instructions have been read completely.**

RESTRICTED

SECTION I

GUIDE TO USE OF THIS MANUAL

1. Purpose

This manual provides methods and procedure, based upon actual field experience, for installation of radio and interphone equipment in Vehicle, Landing, Tracked (Armored), Mark I, LVT-(A)-1. Items required to make a complete operating installation are listed for each set. Official nomenclature followed by empty parentheses, such as Headset HS-30-(), is used to indicate any model of equipment regardless of its procurement.

2. Equipment

Installations covered include the following radio sets:

SCR-508-()

SCR-528-()

3. Holes and brackets

Brackets required for installation of the radio set are normally drilled and installed prior to delivery of Vehicle, Landing, Tracked (Armored), Mark I, LVT-(A)-1. Drilling in-

structions are given in this manual for any other necessary holes and brackets. Do not relocate any holes or brackets unless absolutely necessary.

4. Preliminary Check

Study the illustrations, the installation methods outlined, and any subsequent changes to this manual before proceeding with installations.

Caution: Vehicle, Landing, Tracked (Armored), Mark I, LVT-(A)-1 has a 12-volt electrical system. Before installing the radio sets, be sure they are designed for 12-volt operation, or tubes may burn out or dynamotors may be damaged.

5. Operating Check

Carefully study the Technical Manual covering the radio set before trying to operate it; then, make a thorough operating check to determine whether the equipment has been properly installed and is in working order.

RESTRICTED

SECTION II

IGNITION NOISE SUPPRESSION IN VEHICLE, LANDING, TRACKED (ARMORED), MARK I, LVT-(A)-1

6. GENERAL

Excessive ignition or other electrical noises may interfere with the operation of radio equipment in Vehicle, Landing, Tracked (Armored), Mark I, LVT-(A)-1. The Technical Manual issued with the vehicle will be helpful in locating the source of the noise, since it describes the suppression system used. Instructions for operating radio equipment used in the vehicle also should be studied.

7. PROCEDURE

Locate and suppress ignition noises as follows:

a. Start the motor of the vehicle and turn on the radio set. Put the receiver sensitivity control at *maximum*; then, listening to the receiver output with a headset, slowly tune the receiver over the entire range of frequencies to be used for communication.

b. When the frequency (or frequencies) with greatest noise level is found, turn off the vehicle engine. If this noise continues, the source is outside the ignition system. If noise stops, the trouble is in the ignition system.

c. Start the engine again. Adjust the receiver sensitivity control until engine noises can be distinguished easily from static, etc. Interference may then be identified as follows:

<i>Interference</i>	<i>Usual source</i>
Popping sound: corresponds to ignition firing; stops when engine is turned off; accelerates when engine is raced.	Ignition system.
Intermittent, clicking sound: lingers for several seconds when ignition is turned off.	Generator regulator.

<i>Interference</i>	<i>Usual source</i>
Whining sound; varies with speed of engine; ceases only when generator stops rotating.	Generator.
Sparkling, or continuous crackling noise.	Brushes and commutator of generator.

d. Interference from other electrical parts and circuits of the vehicle, such as panel gauges and heater fans, can usually be identified by turning off the gauges, fans, or other suspected mechanisms individually.

e. If the source of interference still cannot be found by any of the preceding methods, connect a probe antenna (fig. 11) to the antenna terminal of the radio set. Slowly move the loop of the probe antenna over the various parts of the electrical system of the vehicle. Keep the loop close to, but not in contact with, the part being examined. Noise from interference-producing parts should be heard in the receiver.

f. Usually interference can be eliminated by cleaning, tightening, or replacing noise-producing parts. Examine and tighten all suppressor and shielding components, and all connections and grounding bonds. Clean the surface under them. This will assure good electrical contact between wires and terminals, and between metal casings and the frame of the vehicle. (Insulated but ungrounded metal parts absorb and reradiate electrical noises.)

g. If interference persists, suppressor components should be checked by substituting new ones. If a replacement is not available, disconnect the suspected component, and test capacitors, resistors, and chokes within it. Replace any that are defective.

RESTRICTED

SECTION III

**RADIO SET SCR-508-(), OR SCR-528-()
AND ASSOCIATED INTERPHONE EQUIPMENT**

8. Required Parts

Items necessary for installation of Radio Set Landing, Tracked (Armored), Mark I, LVT-SCR-508-(), or SCR-528-() in Vehicle, (A)-1 are listed below:

Quantity		Stock No.	Item
Radio Set SCR-508-()	Radio Set SCR-528-()		
4 1	4 1	2A262	Antenna A-62, phantom.
4 1	4 1	2Z2599-264	Chest CH-264.
4, 5 2	4, 5 2	6Z3147	Connector No. 61007 and Bondnut BL-50.
4 1	4 1	2Z3396	Cover BG-96.
4 2	4 1	3H1634	Dynamotor DM-34.
4 1	4 1	3H1635	Dynamotor DM-35.
1, 4 1	1, 4 1	2A2081-15	Mast Base AB-15/GR.
1, 4 2	1, 4 2	2A2417	Mast Section MS-117 (1 spare).
1, 4 2	1, 4 2	2A2418	Mast Section MS-118 (1 spare).
1 2	1 2	2A2416	Mast Section MS-116 (1 spare).
4 1	4 1	2Z6721-237	Mounting FT-237-().
4 2	4 1	2C4403	Radio Receiver BC-603-().
4 1	4 1	2C6494	Radio Transmitter BC-604-().
4 1	4 1	2Z8056	Roll BG-56-().
4 2	4 2	6D13113	TM 11-600.
4 6 ft.	4 6 ft.	1B128	Wire W-128.
5 3 ft.	5 3 ft.	3E2213	Cordage CO-213.
5 9	5 9	2Z307-26	Gas Mask Adapter, Navy type No. CW-10327.
5 1	5 1	6L50-508V86	Hardware kit.
2, 3, 5 7	2, 3, 5 7	2B1055-1	Headset-Microphone Assembly AN/URA-1.
3, 5 1	3, 5 1	2Z5731-337	Impedance Matching Kit MX-337/UR.
		2Z3265-66	1 Coupling Unit CU-66/UR.
			1 Bracket (fig. 7).
		3E2213	4 ft. Cordage CO-213.
			6 in. spaghetti.
			3 Screw, hex., hd., cap, 5/16-24x 1/2".
			3 Lockwasher, 5/16-inch I.E.T.
			2 Clamp (fig. 12) No. 6.
5 1	5 1		Mast base bracket (fig. 2).
5 1	5 1	2B1617	Microphone T-17.
5 2	5 2	2B1567	Microphone Cover M-367.
5 4	5 4	2C7609	Remote Control Unit, Navy type No. 23429.

¹If basic unit contains Mast Base MP-48 or MP-48-A, and Mast Section MS-52 and MS-53 in place of Mast Base AB-15/GR, with Mast Section MS-116, MS-117, and MS-118, use Mast Section MS-51 and Clamp MC-423 in place of Mast Section MS-116.

²If Headset-Microphone Assembly AN/URA-1 is not available, use 6 Microphone T-45, 7 Headset HS-30 (one spare), 6 Cord CD-318, 7 Cord CD-307-A (one spare), and 7 Cord CD-933 (one spare).

³If Impedance Matching Kit MX-337/UR is not available, delete 5 Headset-Microphone Assembly AN/URA-1 and use 6 Microphone T-45, 6 Cord CD-318, 7 Headset HS-30 (one spare), 7 Cord CD-307-A (one spare), and 7 Cord CD-604 (one spare).

⁴Part of Basic Unit SCR-508-() 2S508/12 or Basic Unit SCR-528-() 2S528/12.

⁵Part of Installation Unit SCR-508-() 2S508-V86/50 or Installation Unit SCR-528-() 2S508-V86/50.

RESTRICTED

9. Assembly and Installation

Components of Radio Set SCR-508-(), or SCR-528-() and associated interphone equipment should be installed in Vehicle, Landing, Tracked (Armored), Mark I, LVT-(A)-1 as shown in figure 5 and as directed below:

<i>Part and location</i>	<i>Method and materials</i>
Radio cabinet and mast base bracket.	Install radio cabinet as shown in figures 1 and 5, item 27, if not already installed. Weld mast base bracket (fig. 2), to cab on starboard side as shown in figure 1, view A-A.
Antenna A-62, phantom, and bracket. (See figs. 3 and 6.)	See position 3, figure 3. Attach phantom antenna to bracket (fig. 6) as shown in figure 3. Remove two screws and lock-washers from left front corner of Mounting FT-237-(), and secure bracket, with antenna attached to mounting, with two No. 10—32 x 5/8 screws supplied.
Cordage CO-213.-----	Cut two 36-inch lengths of Cordage CO-213. Strip 6 inches of outer rubber covering from each end of one 36-inch length of cordage. Strip 6 inches of outer rubber covering from one end of other 36-inch length of cordage and 3 inches of outer rubber covering from other end. Cut exposed part of inner and outer shields, on both ends of each of the lengths of cordage, with a pointed instrument. Divide wires of both shields and form two pigtail leads by twisting wires together. Strip insulation from about 1/2 inch of black lead at point exposed by separation of shield. Twist pigtails formed from the shields around the exposed conductor of black lead and solder joint using a minimum of solder. The black lead is used for ground connection as shown in figure 4. Strip insulation from about 1 inch of the tip of black lead and 1/2 inch of insulation off each of the other leads. Solder-tin tips.
Mounting FT-237-() and Impedance Matching Kit MX-337/UR.	Secure Mounting FT-237-() to floor of upper radio cabinet located in driver's compartment on starboard side. (See fig. 5.) Secure the Coupling Unit CU-66/UR on bracket (fig. 7) with hardware provided. Secure bracket (fig. 7) with coupling unit attached to radio cabinet as shown in figure 5. Connect 3-inch leads from one end of 36-inch length of Cordage CO-213, with 1-inch lengths of spaghetti tubing (item 28, fig. 5) over each lead, to terminals on Coupling Unit CU-66/UR. (See fig. 4.) Slip 1-inch lengths of spaghetti tubing over the terminals and tape ends of unused wires. Connect other end of cordage to terminal strip on Mounting FT-237-(). (See fig. 4.) Cord CO-278, supplied with Mounting FT-237-(), is passed through hole in right end of mounting and connected to terminal block located near terminal strip in Mounting FT-237-(). Pass other 36-inch length of Cordage CO-213, with 6-inch prepared leads, through other hole in right end of Mounting FT-237-() and connect wires to Terminal Strip TS-401. (See fig. 4.)

RESTRICTED

Part and location

Connector No. 61007 and
Bondnut BL-50.

Radio Transmitter BC-604-
(), and Radio Receiver
BC-603-().

Dynamotor DM-35, in cabinet
of Radio Transmitter BC-
604-().

Dynamotor DM-34, in cabinet
of Radio Receiver BC-603-
(). (Two Dynamotors
DM-34 and two Radio Re-
ceivers BC-603-() re-
quired for Radio Set SCR-
508-().)

Radio Transmitter BC-604-
(), including necessary
crystals, on Mounting FT-
237-().

Radio Receiver BC-603-(),
on Mounting FT-237-().
(Two Radio Receivers BC-
603-() required for Radio
Set SCR-508-().)

Remote Control Unit, Navy
type No. 23429 for use with
low impedance accessories.

Method and materials

Install Connector No. 61007 and Bondnut BL-50 through knockout holes in top of terminal box located on inside of radio cabinet. Pass Cordage CO-213 and Cord CO-278 from Mounting FT-237-() through connectors. Make connections to terminal strip inside radio terminal box. (See fig. 4.) Secure with Sta-kon terminals supplied.

Radio Transmitter BC-604-() and Radio Receiver BC-603-() used in LVT installations must have modification for receiver disabling and additional modification for increased audio output. Units having receiver disabling modification are identified by the letter "M" stamped after nomenclature on nameplate; for example BC-603-DM. Units modified for increased audio output will be identified by MWO number lettered on unit. See MWO SIG 11-600-4 and MWO SIG 11-600-6.

If dynamotor is not already installed in transmitter, install it as follows: Remove crystal case from transmitter cabinet by loosening two screw locks on front panel and pulling crystal case out. Loosen four screw locks holding cover on top of transmitter and remove cover. Dynamotor unit is fastened in left rear of transmitter chassis with four bolts in its base. Replace crystal case and top cover.

In case Dynamotor DM-34 is not already installed in receiver, install it as follows: Remove chassis from receiver cabinet by loosening screw lock in rear center of cabinet. Dynamotor unit is fastened on top rear of receiver chassis with four bolts in its base. Replace chassis in case.

Mount in position as shown in view of upper radio cabinet (fig. 5), by means of thumbscrew locking devices.

Mount in position as shown in view of upper radio cabinet (fig. 5), by means of thumbscrew locking devices.

Remote Control Unit, Navy type No. 23429 is supplied wired for operation of Navy TCS Radio Equipment and must be modified for operation with Radio Set SCR-508-() or SCR-528-(). Modify remote control unit using Coupling Unit CU-66/UR with Microphone Assembly AN/URA-1 (fig. 4) and as follows: Remove the jumpers between terminals 6 and 8 and between terminals 10 and 11. Retain the

RESTRICTED

Part and location

Method and materials

Remote Control Unit, Navy type No. 23429 for use with high impedance accessories.

jumper between terminals 5 and 9 and add a jumper between terminals 9 and 10. Remove the Radio I. C. switch from the remote control units. Turn switch 180° and replace in remote control units so that switch will be open when in "Radio" position.

Remote Control Unit, Navy type No. 23429 (item 6, fig. 5) located on three junction boxes and radio cabinet terminal box provided.

When Coupling Unit CU-66/UR is not available, modify for use with Headset HS-30 (fig. 8) and as follows: Remove jumpers between terminals 6 and 8, terminals 5 and 9, and terminals 10 and 11. Connect a jumper between terminals 5 and 10. Remove Radio I. C. switch from remote control unit. Turn switch 180° and replace in remote control unit so that switch will be open in the "Radio" position.

Headset-Microphone Assembly AN/URA-1.

Remove covers from three junction boxes and from radio cabinet terminal box. Place rubber gasket supplied with remote control unit over rims of boxes. Connect leads from remote control unit to numbered terminals in boxes (fig. 4) and secure remote control units to four boxes.

Mast Base AB-15/GR with Wire W-128. (See fig. 9.)

Use Impedance Matching Kit MX-337/UR employing Coupling Unit CU-66/UR when Radio Set SCR-508-() or SCR-528-() is wired for low impedance load. (See fig. 4.) When Headset-Microphone Assembly AN/URA-1 is not available substitute Headset HS-30 with Cords CD-933 and CD-307-A and Microphone T-45 with Cord CD-318 for use with impedance matching kit. If Impedance Matching Kit MX-337/UR is not available, wire Radio Set SCR-508-() or SCR-528-() for high impedance load. (See fig. 8.) In this case do not use Headset-Microphone Assembly AN/URA-1. Headset HS-30 with Cords CD-604 and CD-307 and Microphone T-45 with Cord CD-318 will be used. Microphone T-17 is carried as a spare and may be used as a substitute microphone.

Disassemble Mast Base AB-15/GR by holding the lower insulator and turning the body of mast base counterclockwise. Install mast base on mast base bracket (fig. 2) located on cab above radio cabinet as follows: Place insulator (item 5, fig. 9) over hole in mast base bracket. Place small neoprene washer item 4 over item 5 and place plain washer item 3 over item 4. Insert body of mast base, item 2, through hole in items 3, 4, 5, 6, and mast base bracket. Insert bolt, item 8, into item 2 from underside and turn item 2 clockwise until mast base is tightened securely. Connect Wire W-128 to binding post on bottom of Mast Base AB-15/GR and route wire through Connector No. 61007 and Bondnut BL-50 in top of radio cabinet and connect to "A" antenna binding post on Radio Transmitter BC-604-(). If Mast Base AB-15/GR is not available substitute Mast Base MP-48

RESTRICTED

<i>Part and location</i>	<i>Method and materials</i>
	or MP-48-A with suitable waterproofed cover. See figure 10 for assembly of Mast Base MP-48 or Mast Base MP-48-A.
Mast Sections MS-116, MS-117, and MS-118.	Screw mast sections together. Screw assembled mast sections into Mast Base AB-15/GR. When mast sections are removed stow in Roll BG-56-(). If Mast Sections MS-51, MS-52, and MS-53 are used with Mast Base MP-48 or Mast Base MP-48-A place Clamps MC-423 and MC-424 over joints to prevent loss of sections.
Chest CH-264	When used with Radio Set SCR-528-(), Chest CH-264 shall be placed on Mounting FT-237-() in space provided for a second radio receiver. When used with Radio Set SCR-508-(), Chest CH-264 shall be placed in any convenient place recommended by the using organization.
Cover BG-96	Place cover over the radio set.

RESTRICTED

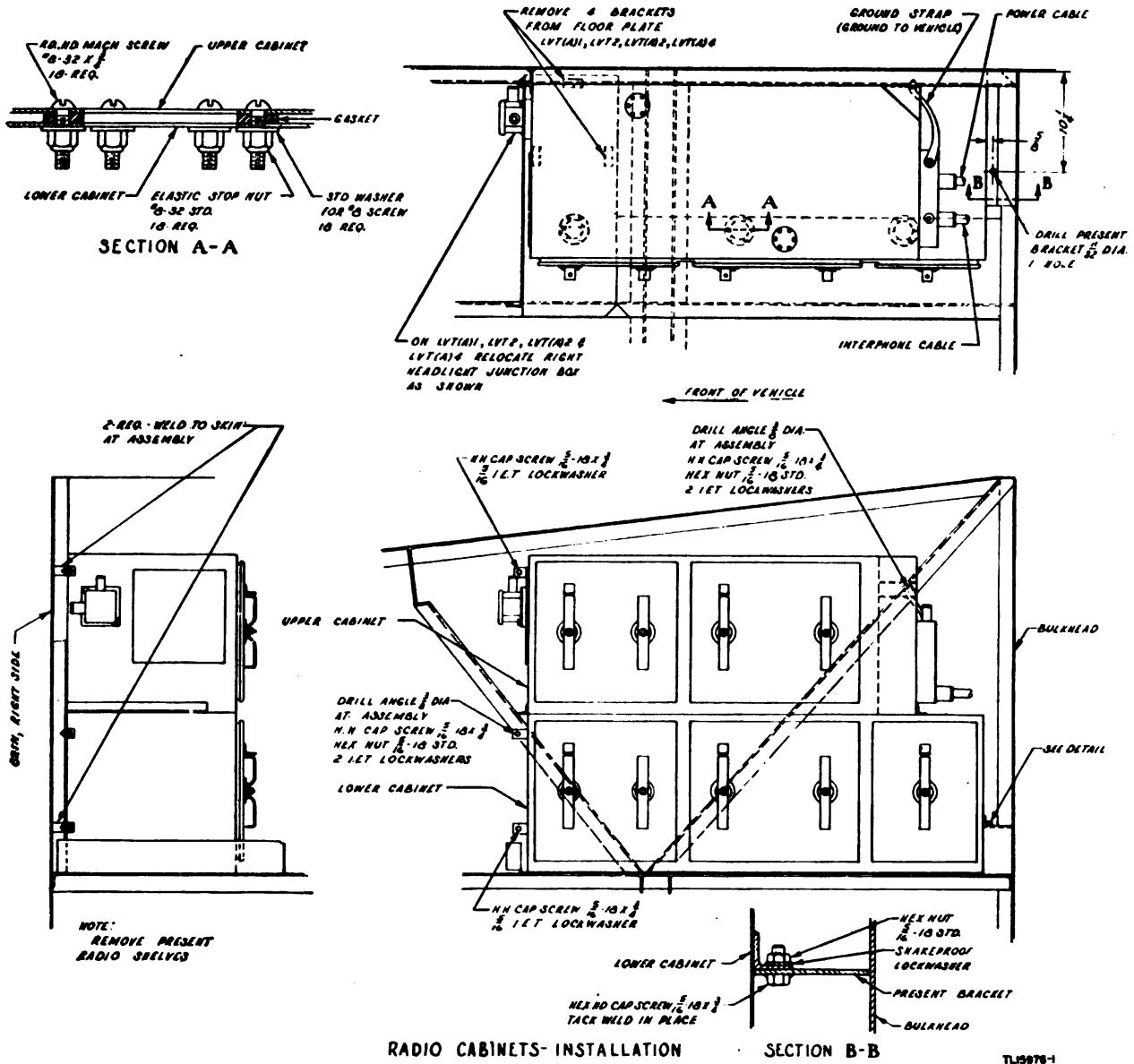
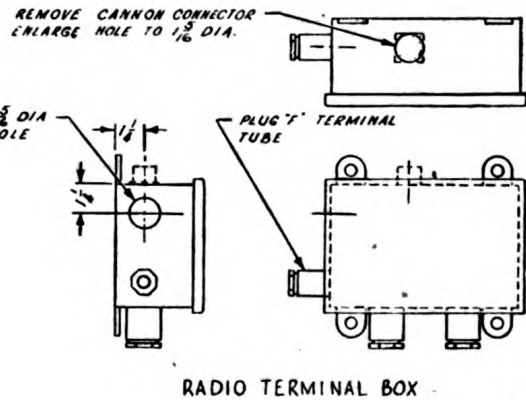
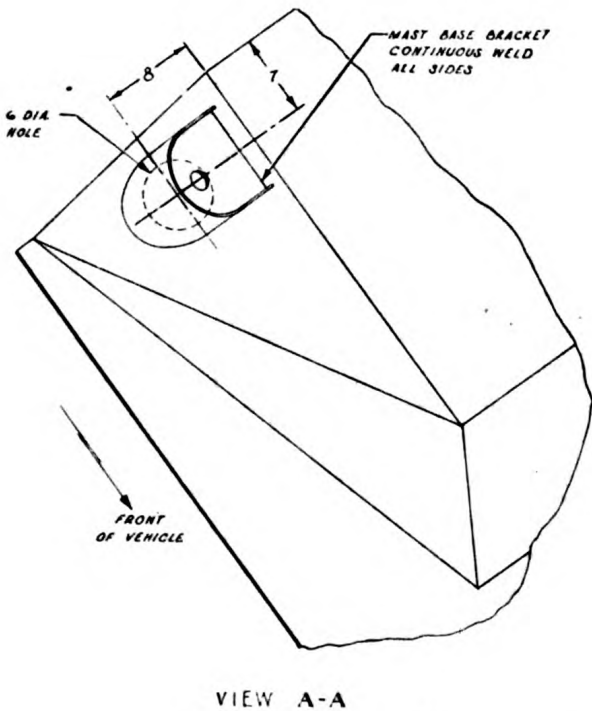
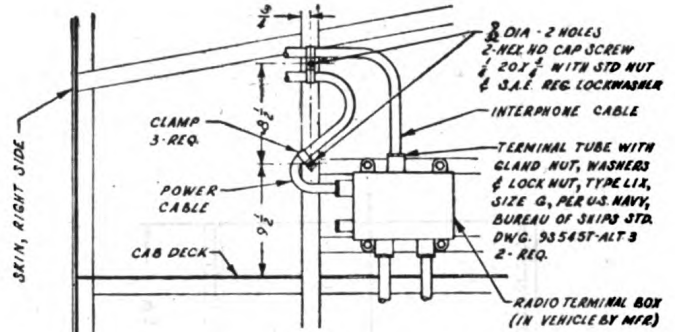
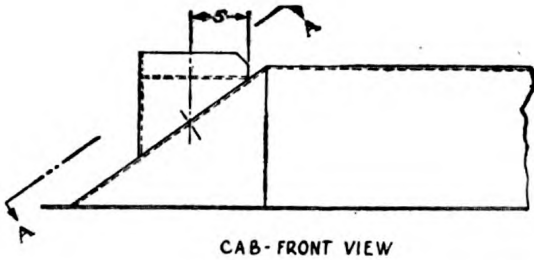


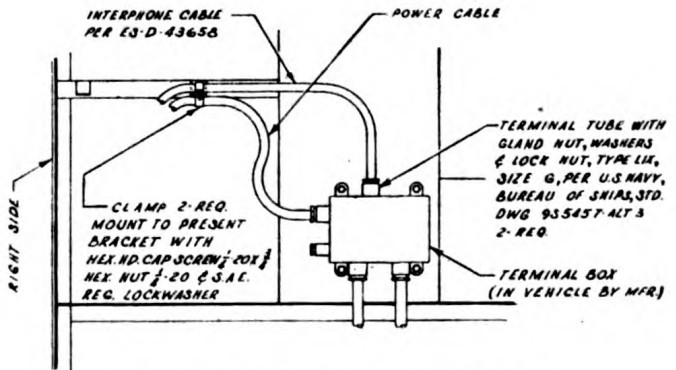
Figure 1. Modification of LVT-(A)-1, LVT-2, LVT-(A)-2, LVT-4 and

RESTRICTED



LOCATION OF MAST BASE BRACKET, LVT(A) 1

NOTE:
DIMENSIONS WHERE NOT SHOWN OTHERWISE ARE IN INCHES.
BREATHER PIPE FROM OIL TANK UNDER DECK OF CAB IN LVT 4 INTERFERES WITH INSTALLATION OF LOWER RADIO CABINET. REMOVE BREATHER PIPE. ELONGATE PRESENT HOLE IN DECK 2 INCHES TOWARD BULKHEAD. ROTATE TEE PIPE FITTING UNDER DECK 90° TOWARD REAR OF VEHICLE. REBEND AND REINSTALL BREATHER PIPE SO THAT IT ENTERS ENGINE COMPARTMENT AS FORMERLY.



TL9976-2

LVT-(A)-4 for installation of Radio Sets SCR-508-() or SCR-528-().

RESTRICTED

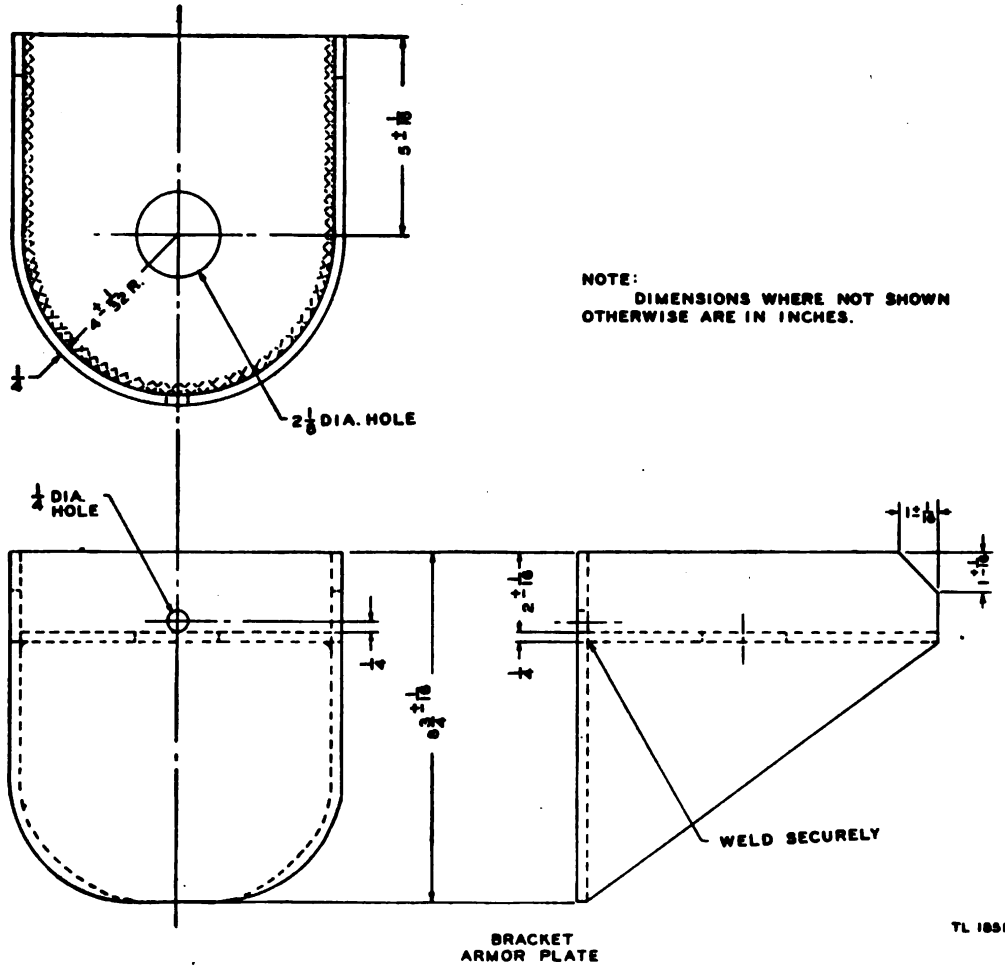
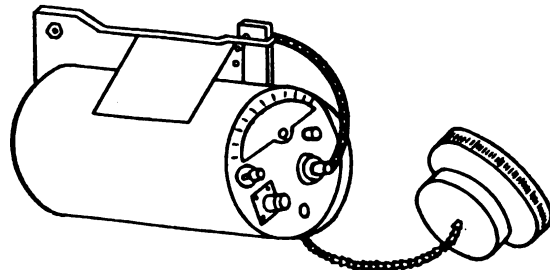
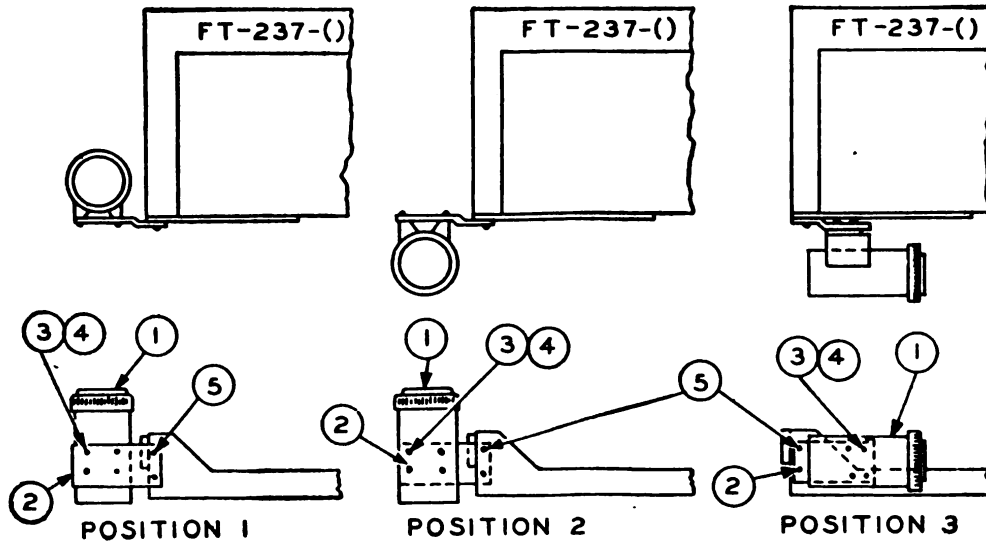


Figure 2. Mast base bracket.

RESTRICTED



APPLICATION OF GROUND CLIP

ITEM NO.	NAME OF ITEM AND REMARKS	QUAN. REQ.
1	ANTENNA A-62 (PHANTOM)	1
2	BRACKET	1
3	RD. HD. MACH. SCR. #6-32 X 1/2" FURN. WITH #1	4
4	LOCKWASHER #6 STD. FURN. WITH #1	4
5	RD. HD. MACH. SCR. # 10-32 X 5/8"	2

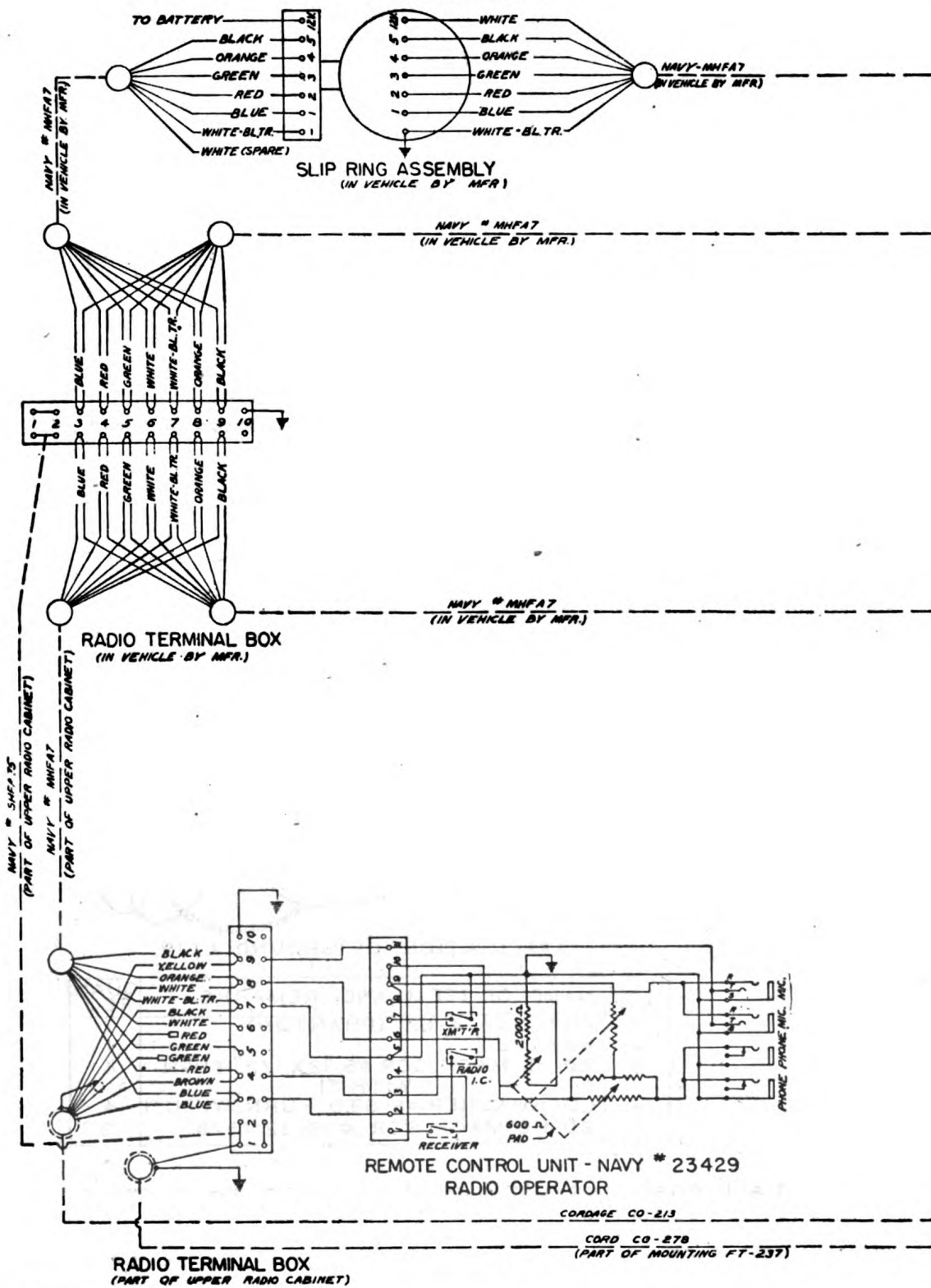
NOTE :

1. FOR ALL POSITIONS USE TIP OF BRACKET TO RECEIVE THE GROUND CLAMP OF ANTENNA A-62.
2. USE LONGER SCREW (5) WHEN INSTALLING BRACKET (2) ON MOUNTING FT-237-() AND RE-APPLY TOOTH-TYPE LOCK-WASHERS.

TL13376

Figure 3. Antenna A-62, phantom, on Mounting FT-237-() .

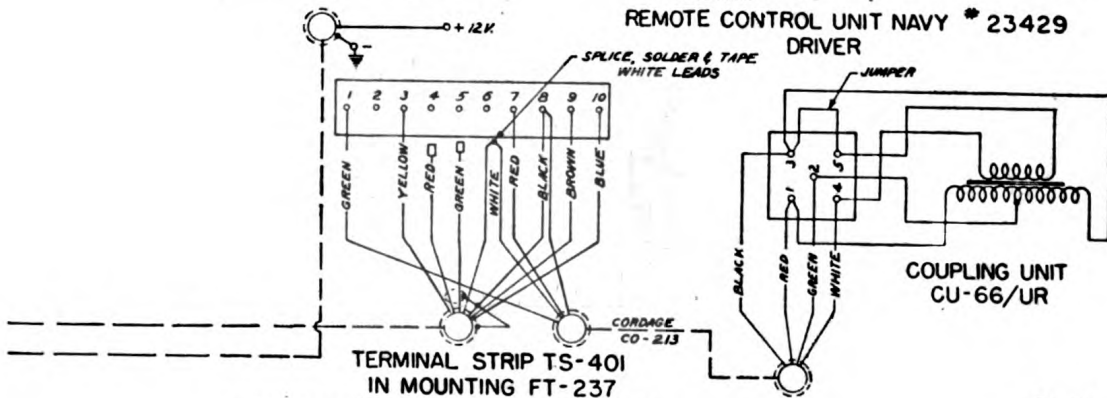
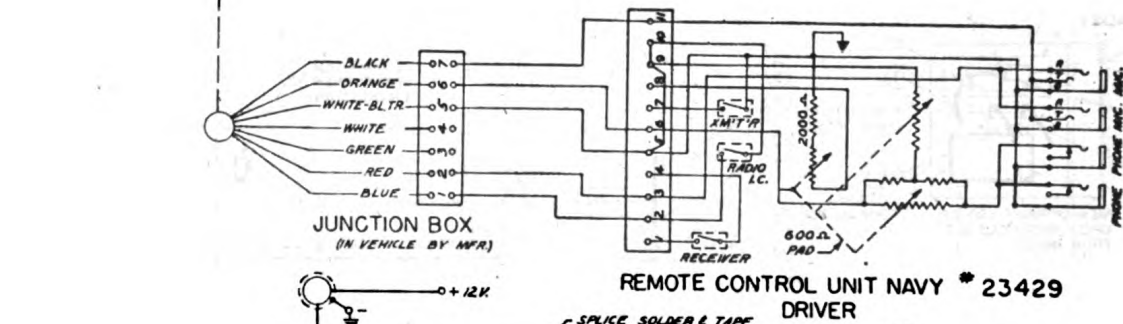
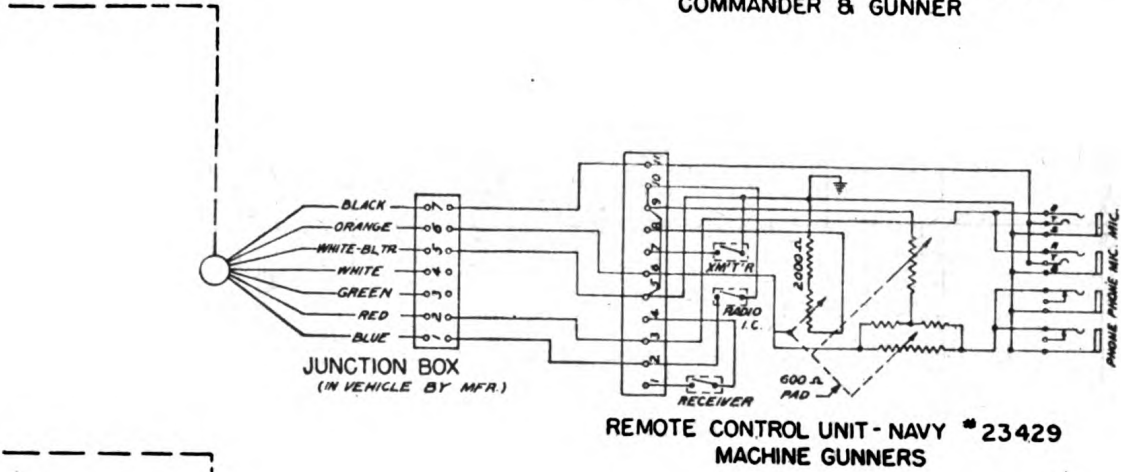
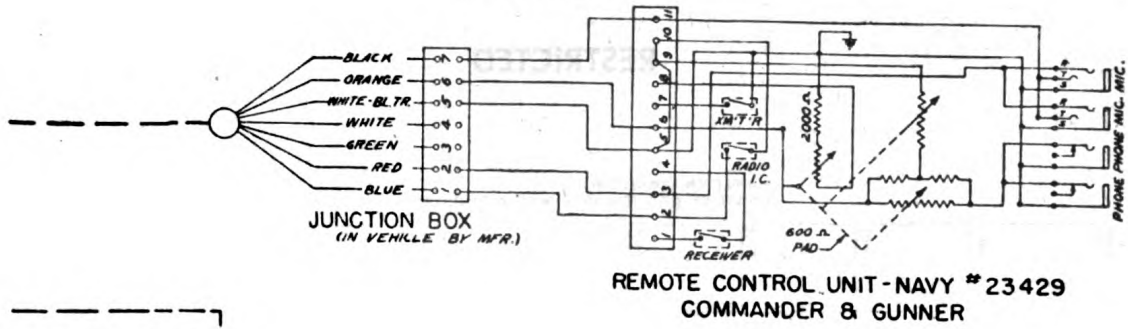
RESTRICTED



NOTE:
 SHIELD OF CORDAGE CO-213 AND SHIELD OF TWISTED PAIR OF LEADS IN CORDAGE SHALL BE SECURELY GROUNDED AT EACH END.
 TAPE ENDS OF UNUSED LEADS.
 RADIO SET SCR-508 OR SCR-528 WHICH HAS BEEN MODIFIED TO PROVIDE INCREASED AUDIO OUTPUT WILL INCLUDE A JUMPER, 1-7, ON TERMINAL STRIP TS-401 OF MOUNTING FT-237. THIS JUMPER MUST BE REMOVED WHEN INTERPHONE SYSTEM IS WIRED AS SHOWN.
 NAVY TYPE 23429 REMOTE CONTROL UNITS ARE WIRED FOR OPERATION WITH NAVY TCS EQUIPMENT. TO ADAPT THEM FOR USE WITH RADIO SET SCR-508 OR SCR-528 WITH COUPLING UNIT CU-68/UR THE FOLLOWING IS NECESSARY.

Figure 4. Wiring diagram of interphone system for Radio Set SCR-508-() or SCR-528-()

RESTRICTED



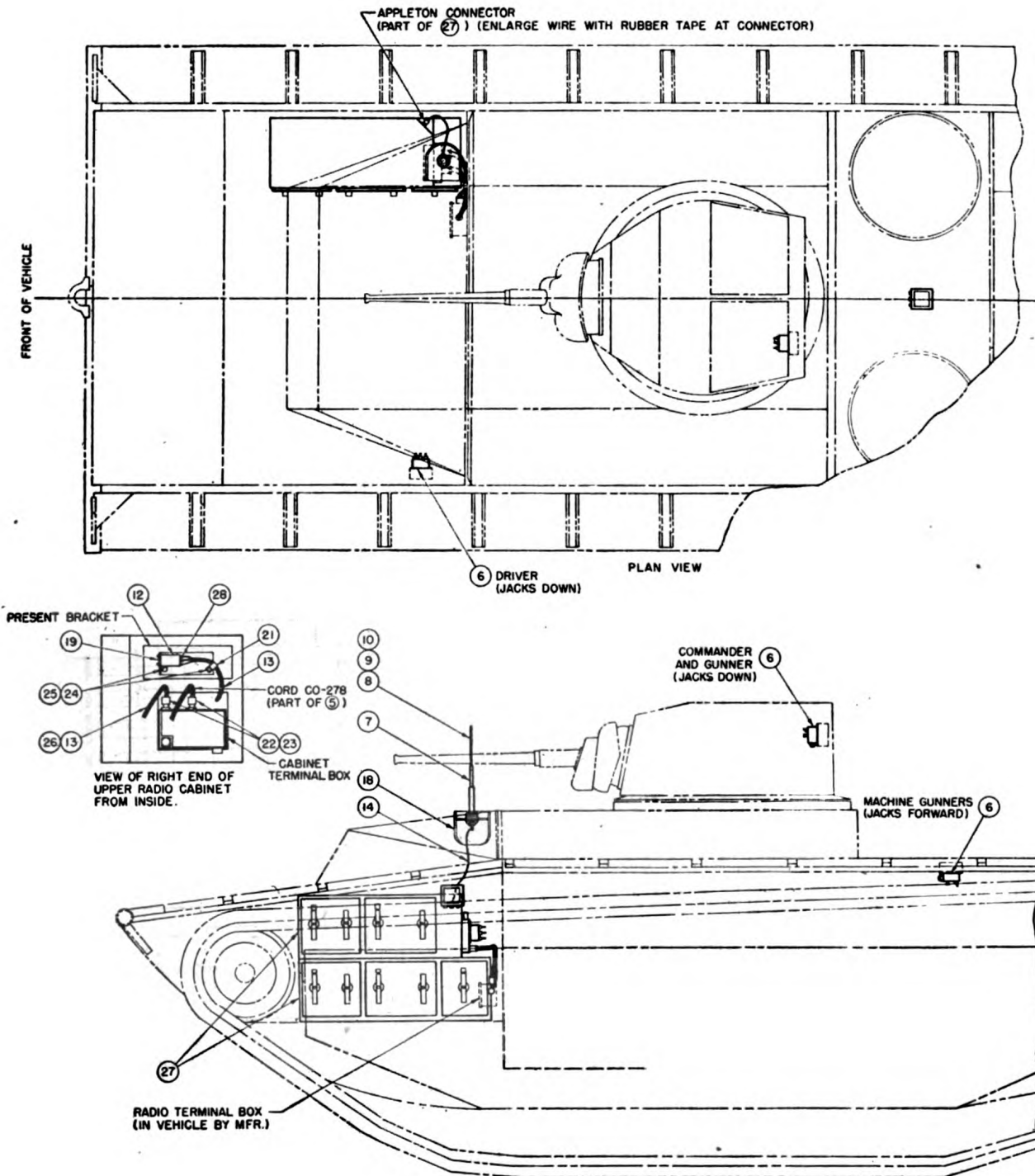
- A. REMOVE JUMPERS 8-8 AND 10-11. ADD JUMPER 9-10.
 B. RELOCATE LEADS ON TERMINAL STRIP PER DIAGRAM.
 C. ROTATE THE "RADIO I.C." SWITCH 180° IN PANEL TO MAKE SWITCH OPEN IN "RADIO" POSITION.
- NAVY TYPE 23429 REMOTE CONTROL UNIT INTERCONNECTING WIRES ARE NOT COLOR CODED. WIRES MUST BE TRACED FROM NUMBERED TERMINAL BLOCK.
 USE HEADSET-MICROPHONE ASSEMBLY AN/URA-1; OR IF NOT AVAILABLE, HEADSET NS-30 WITH LOW IMPEDANCE ACCESSORIES MAY BE SUBSTITUTED. IF COUPLING UNIT CU-66/UR IS NOT AVAILABLE REFER TO WIRING DIAGRAM PER FIGURE 8, AND USE HEADSET NS-30 WITH HIGH IMPEDANCE ACCESSORIES.
 FOR INSTALLATION OF SCR-508 OR SCR-526 SEE FIGURE 5.

for low impedance combination in Vehicle, Landing, Tracked (Armored), Mark I, LVT-(A)-1.

RESTRICTED

Original from
UNIVERSITY OF CALIFORNIA

RESTRICTED



TL 18509-1

Figure 5. Installation of Radio Set SCR-508-() or SCR-528-() and associated

RESTRICTED

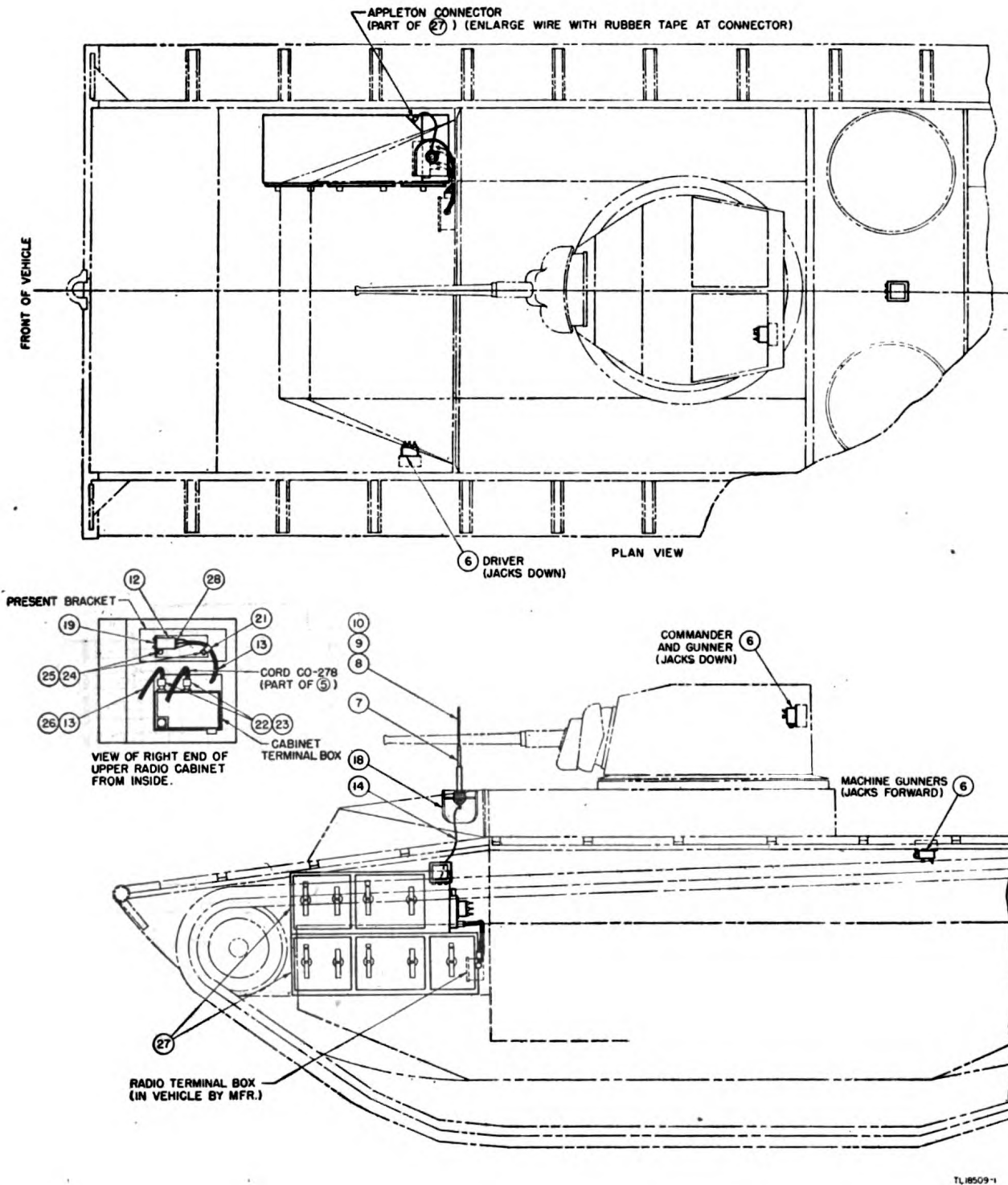
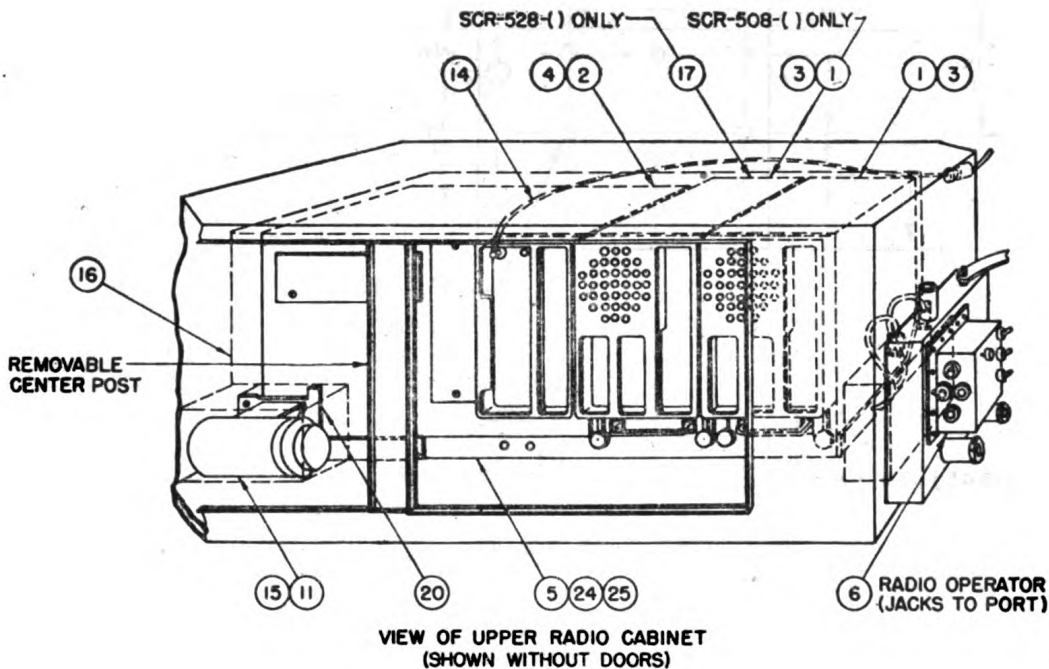


Figure 5. Installation of Radio Set SCR-508-() or SCR-528-() and associated

RESTRICTED



VIEW OF UPPER RADIO CABINET
(SHOWN WITHOUT DOORS)

NOTES:

1. FOR ADDITIONAL COMPONENTS AND SPARE PARTS, SEE COMPONENT PARTS LIST.
2. REMOVE JUNCTION BOX COVERS AND COVER PROVIDED ON OUTSIDE OF CABINET TERMINAL BOX. REPLACE WITH 6 USING HARDWARE PROVIDED FOR COVERS.
3. IF 7 TO 10 INCLUSIVE ARE NOT AVAILABLE, USE MAST BASE MP-48 OR MP-48-A; MAST SECTIONS MS-51, MS-52 AND MS-53 AND CLAMPS MC-423 AND MC-424.
4. CUT 14 AND 15 TO PROPER LENGTH. TIN ENDS FOR ANTENNA CONNECTIONS.
5. FOR RADIO SET SCR-508-(), 17 IS TO BE STOWED IN THE VEHICLE AT THE DISCRETION OF THE USING ARM.
6. BEFORE INSTALLING RADIO EQUIPMENT, MODIFY VEHICLE AS PER FIG. 1.
7. 20 AND NECESSARY HARDWARE ARE PROVIDED WITH 11.
8. HARDWARE REQUIRED FOR MOUNTING TO 19 IS PROVIDED WITH 12.
9. FOR INSTALLATION OF 7 FOR USE WITH 14 SEE FIG. 9.
10. 27 INCLUDES EXTERNAL POWER AND INTERPHONE CABLES.
11. IF 12 IS NOT AVAILABLE, DO NOT USE ONE 13 19 21 TWO 24 OR TWO 25 AND WIRE INTERPHONE SYSTEM. SEE FIG. 8 USING HIGH IMPEDANCE HEADSET AND CORD COMBINATION. IF 12 IS AVAILABLE, INSTALL AS SHOWN AND WIRE INTERPHONE SYSTEM PER FIG. 4 USING LOW IMPEDANCE HEADSET AND CORD COMBINATION.
12. 12 ONE 13 19 21 TWO 25 AND 29 ARE CONTAINED IN IMPEDANCE MATCHING KIT MX-337UR.

ITEM NO.	NAME OF ITEM	QUAN. REQ.	
		RADIO SET SCR-528	RADIO SET SCR-508
1	RADIO RECEIVER BC-603-()	1	2
2	RADIO TRANSMITTER BC-604-()	1	1
3	DYNAMOTOR DM-34	1	2
4	DYNAMOTOR DM-35	1	1
5	MOUNTING FT-237-()	1	1
6	REMOTE CONTROL UNIT NAVY TYPE #23429 SEE NOTE 2	4	4
7	MAST BASE AB-15/GR SEE NOTE 9	1	1
8	MAST SECTION MS-116	1	1
9	MAST SECTION MS-117 SEE NOTE 3	1	1
10	MAST SECTION MS-118	1	1
11	ANTENNA PHANTOM A-62 SEE NOTE 7	1	1
12	COUPLING UNIT CU-66/UR SEE NOTES 8 AND 11	1	1
13	CORDAGE CO-213 36 IN. LONG	2	2
14	WIRE W-128 SEE NOTES 4 AND 9	1	1
15	WIRE W-128 20 IN. LONG SEE NOTE 4	1	1
16	COVER BG-96	1	1
17	CHEST CH-264 SEE NOTE 5	1	1
18	MAST BASE BRACKET PER FIG. 2	1	1
19	BRACKET PER FIG. 7	1	1
20	BRACKET PER FIG. 6 SEE NOTE 7	1	1
21	CLAMP #6 PER FIG. 12	1	1
22	APPLETON CONNECTOR #61007	2	2
23	APPLETON BONDNUT #BL-50	2	2
24	HEX. HEAD CAP SCREW 5/16-24 X 9/16 LONG	10	10
25	SHAKEPROOF LOCKWASHER CAT. 4018-24 FOR 5/16 SCREW	10	10
26	T AND B "STA-KON" TERMINAL	5	5
27	RADIO CABINET KIT STOCK ORDER #5700200 SEE NOTE 10	1	1
28	AMPHENOL SPAGHETTI CAT. #9746-133	AS REQ.	AS REQ.

TL 18509-2

interphone system in Vehicle, Landing, Tracked (Armored), Mark I, LVT-(A)-1.

RESTRICTED

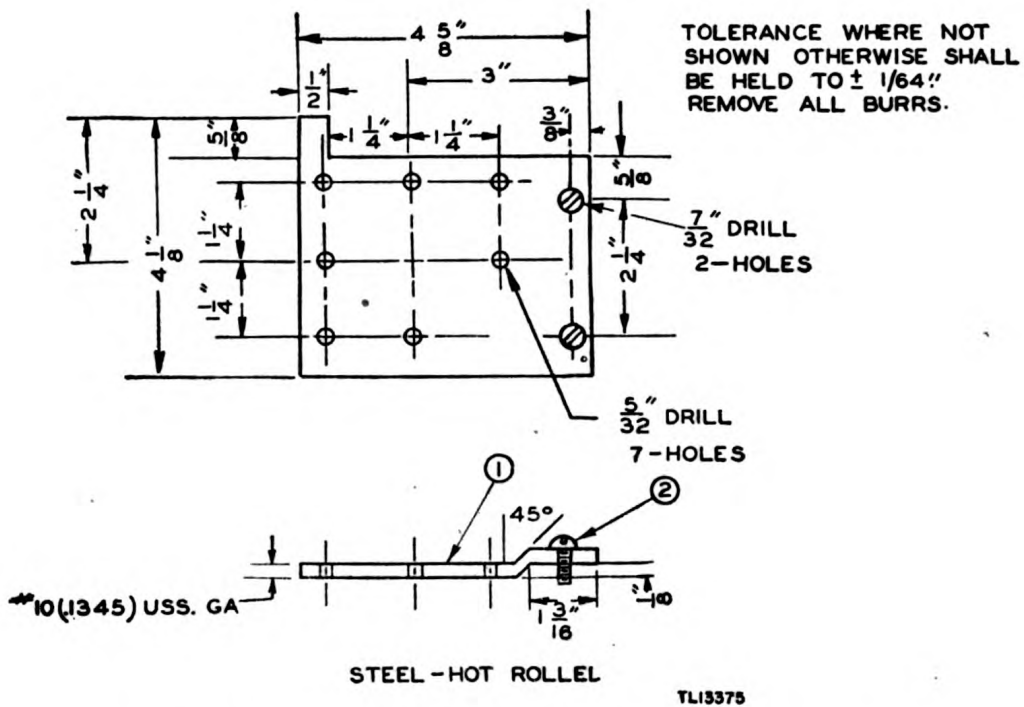
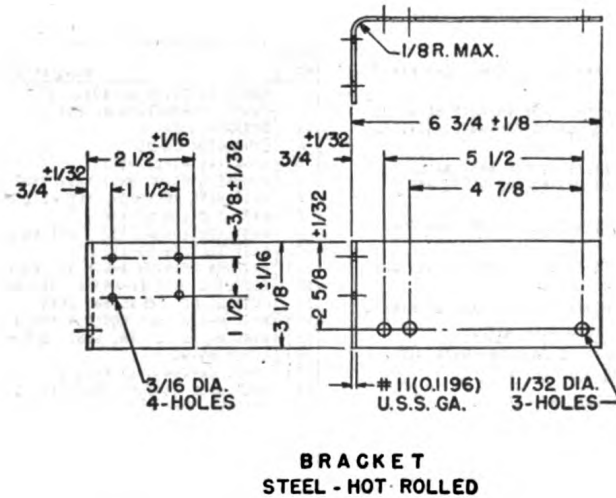


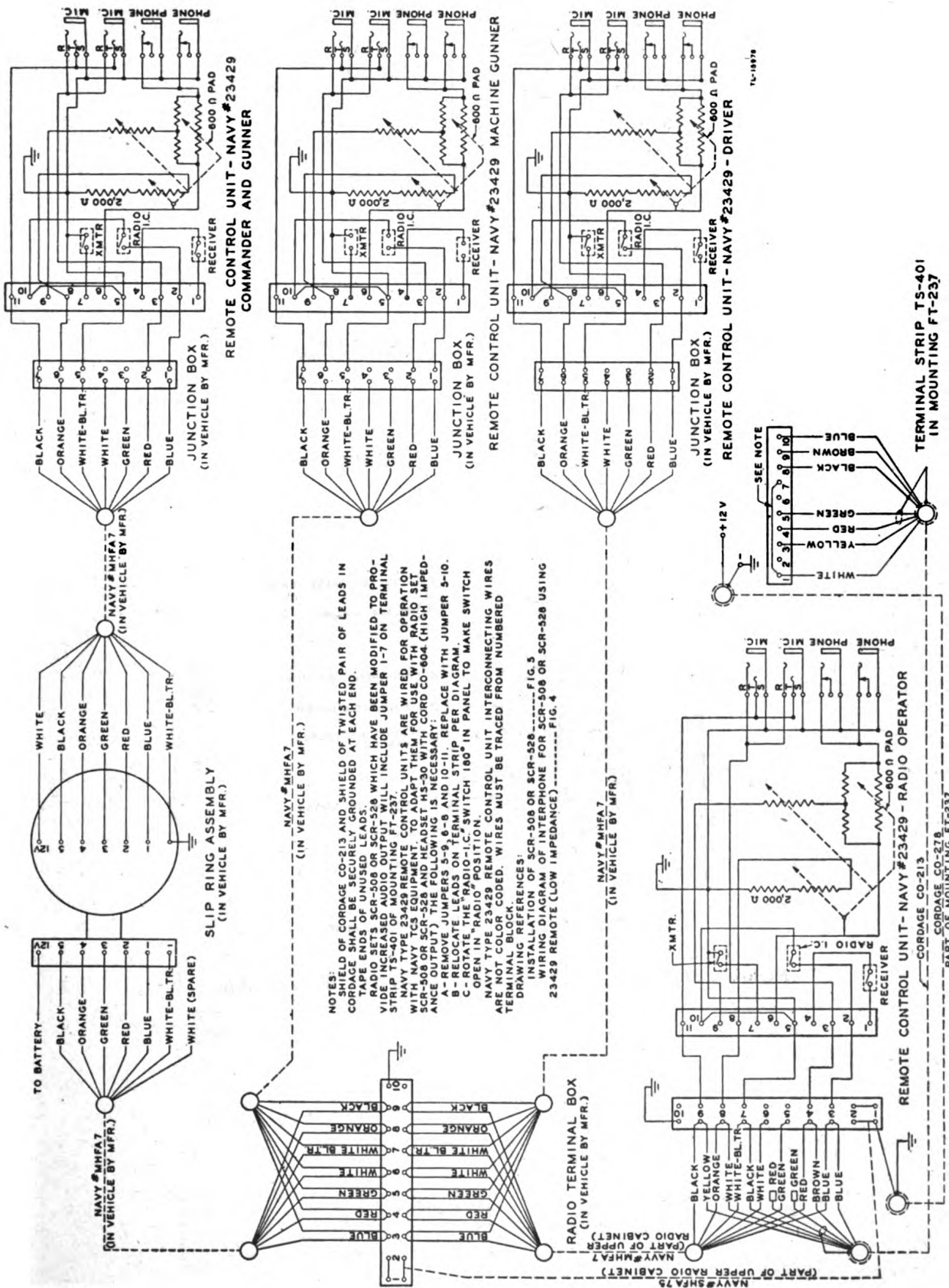
Figure 6. Bracket for Antenna A-62, phantom, assembly and details.



NOTE
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES.

TL 18512

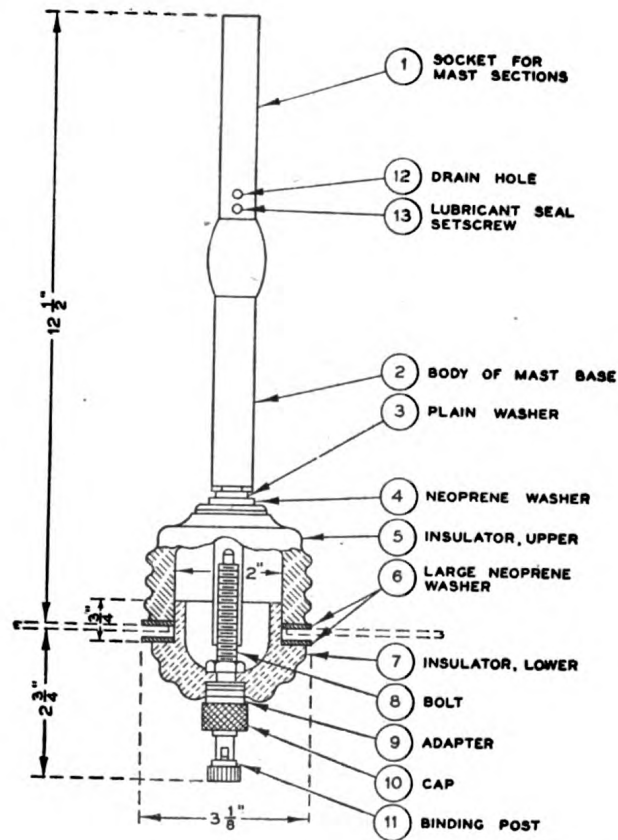
Figure 7. Bracket for Coupling Unit CU-66/UR.



NOTES:
 SHIELD OF CORDAGE CO-213 AND SHIELD OF TWISTED PAIR OF LEADS IN CORDAGE SHALL BE SECURELY GROUNDED AT EACH END.
 TAPE ENDS OF UNUSED LEADS.
 RADIO SETS SCR-508 OR SCR-528 WHICH HAVE BEEN MODIFIED TO PROVIDE TAPED END MODIFICATION FT-237
 STRIP TS-401 MODIFICATION FT-237
 NAVY TYPE 23429 REMOTE CONTROL UNITS ARE WIRED FOR OPERATION WITH NAVY TCS EQUIPMENT. TO ADAPT THEM FOR USE WITH RADIO SET SCR-508 OR SCR-528 AND HEADSET HS-30 WITH CORD CO-604 (HIGH IMPEDANCE OUTPUT) THE FOLLOWING IS NECESSARY: PLEASE WITH JUMPER 5-10.
 A - REMOVE JUMPERS 5-9 AND 10 AND 1011 PER D. C. GRAM
 B - REMOVE JUMPER 5-10 AND 1011 PER D. C. GRAM
 C - ROTATE THE "RADIO-I.C." SWITCH 180° IN PANEL TO MAKE SWITCH OPEN IN "RADIO" POSITION.
 NAVY TYPE 23429 REMOTE CONTROL UNIT INTERCONNECTING WIRES ARE NOT COLOR CODED. WIRES MUST BE TRACED FROM NUMBERED TERMINAL BLOCK.
 DRAWING REFERENCES:
 INSTALLATION OF SCR-508 OR SCR-528 ----- FIG. 5
 WIRING DIAGRAM OF INTERPHONE FOR SCR-508 OR SCR-528 USING 23429 REMOTE (LOW IMPEDANCE) ----- FIG. 4

Figure 8. Wiring diagram of interphone system for Radio Set SCR-508-() or SCR-528-() in high impedance combination in Vehicle, Landing, Tracked (Armored), Mark I, LVT-(A)-1.

RESTRICTED



TL13371

Figure 9. Mast Base AB-15/GR, assembly for Wire W-128 lead-in.

RESTRICTED

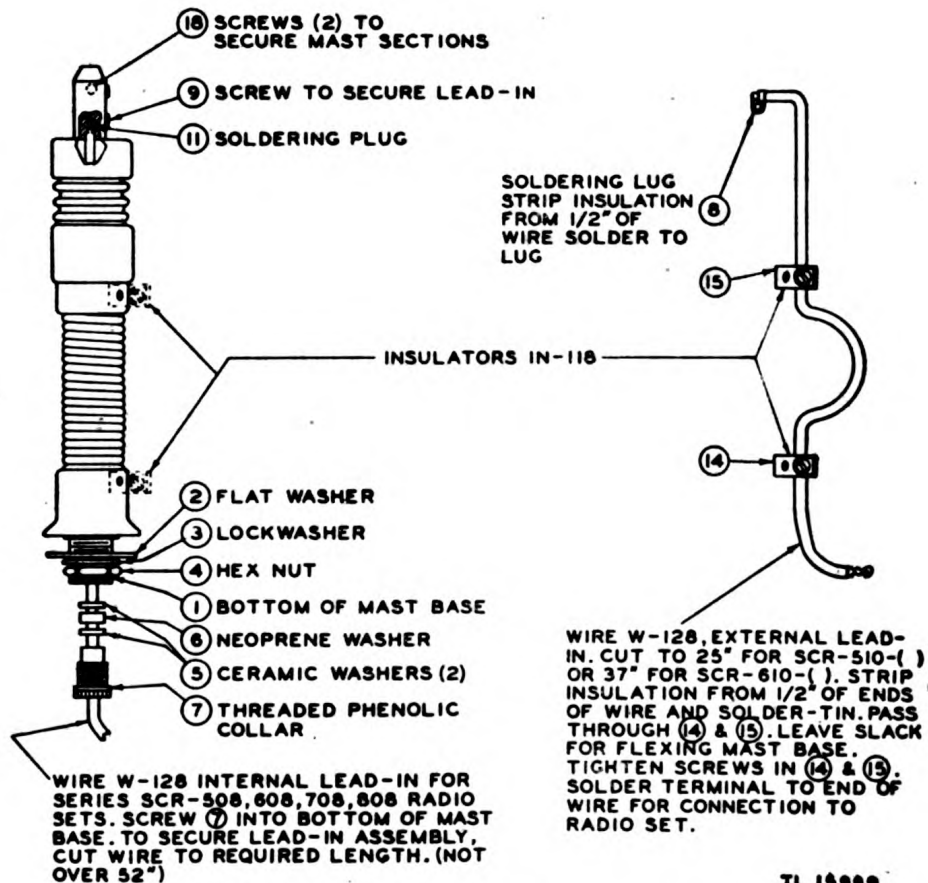
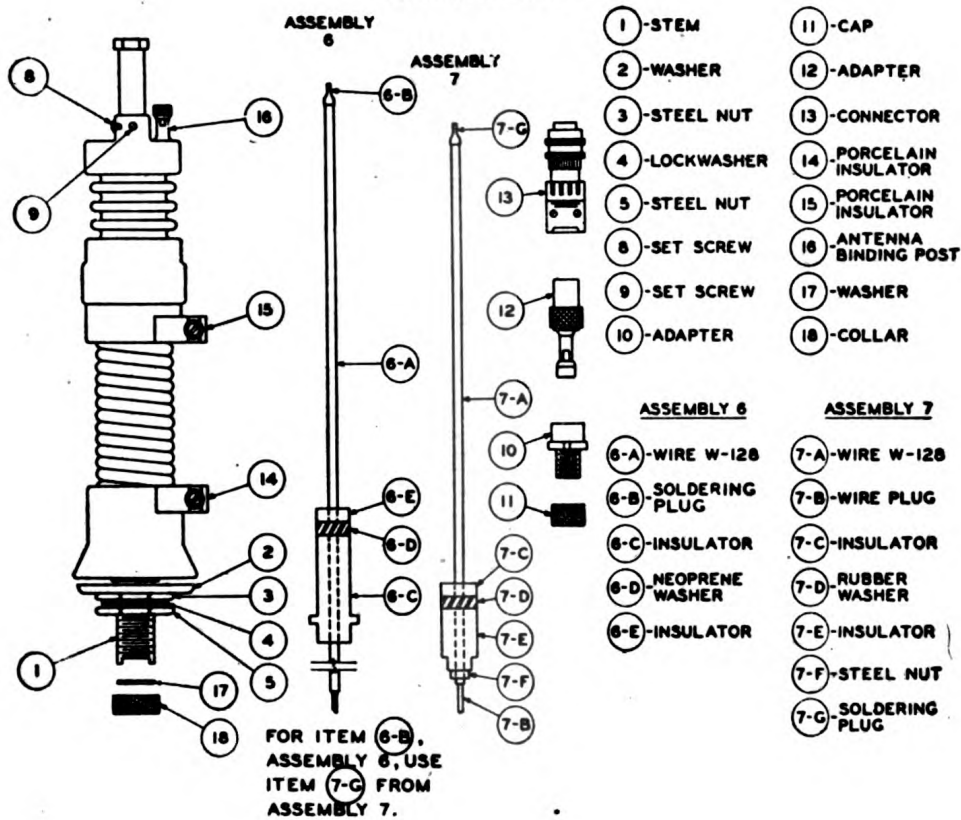


Figure 10. Mast Base MP-48 or MP-48-A, assembly for installation.

RESTRICTED

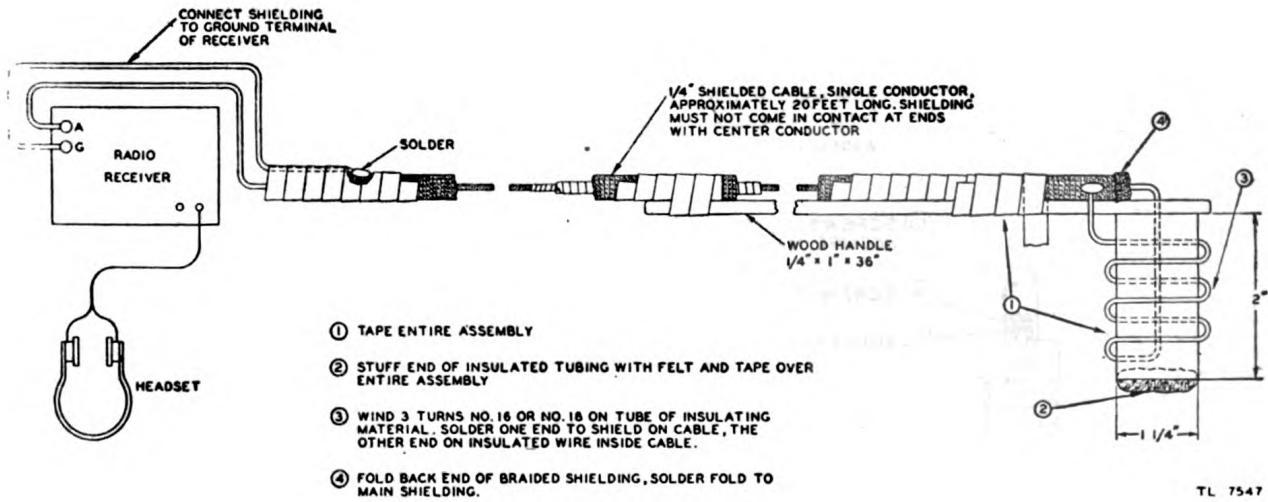
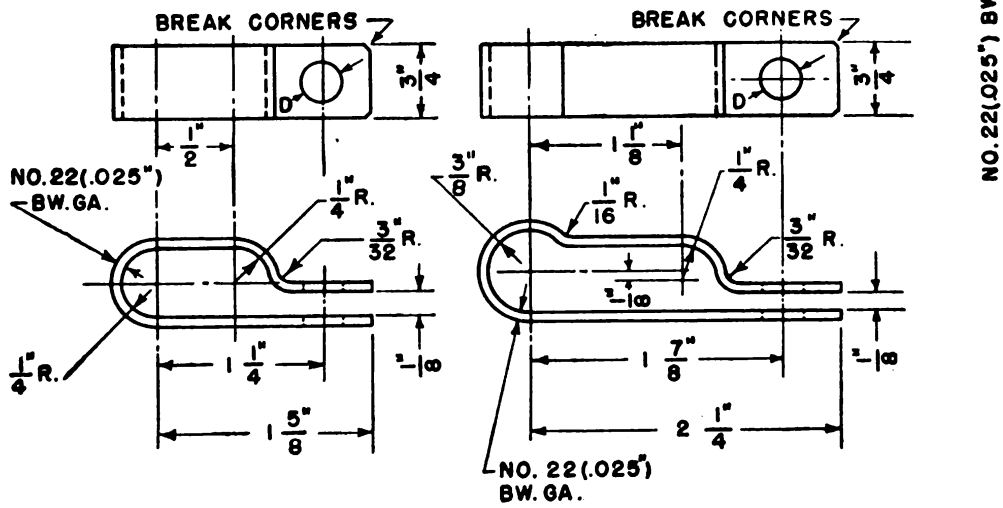
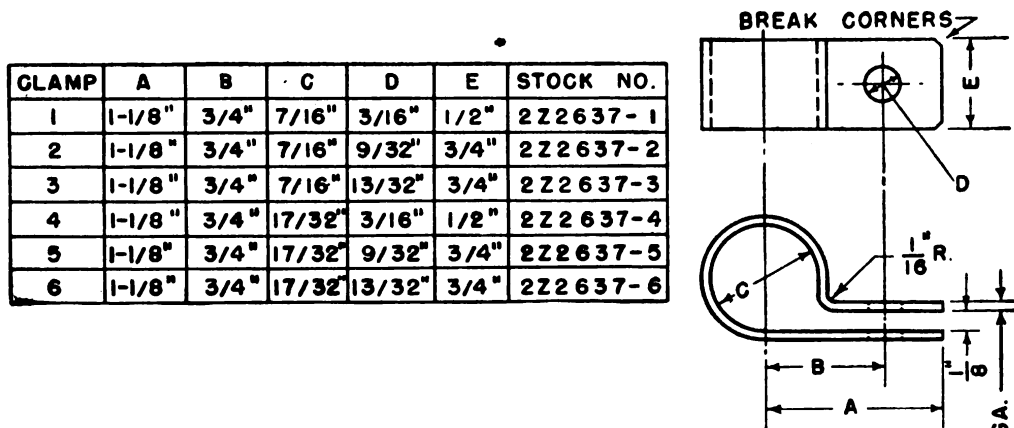


Figure 11. Probe antenna.

RESTRICTED



CLAMP	D	STOCK NO.
7	3/16"	2Z2637-7
8	9/32"	2Z2637-8
9	13/32"	2Z2637-9

CLAMP	D	STOCK NO.
10	9/32"	2Z2637-10
11	13/32"	2Z2637-11

NOTE:
TOLERANCES $\pm 1/32"$

TL13319

Figure 12. Clamp for radio cordage.

U. S. GOVERNMENT PRINTING OFFICE: 1945—628193

