# OPERATOR, ORGANIZATIONAL, DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE MANUAL INSTRUCTIONS FOR INSTALLING RADIO SETS AN/VRC-46, AN/VRC-53, OR AN/GRC-125 INSTALLATION UNIT IN MOBILE FLOATING ASSAULT BRIDGE/FERRY

# Headquarters, Department of the Army, Washington, D.C. 23 August 1966

			Paragraph	Page
CHAPTER	1.	INTRODUCTION		-
		Scope	· 1-1	3
		Index of publications	1-2	3
		Forms and records	1-3	3
CHAPTER	2.	INSTALLATION		
Section	Ι.	Service upon receipt of equipment		
		Unpacking	· 2-1	5
		Checking unpacked equipment	2-2	5
	II.	Equipment installation		
		Tools required for installation	2-3	5
		Installation instructions	2-4	5
APPENDIX		REFERENCES		7

# **CHAPTER 1**

# INTRODUCTION

## 1-1. Scope

This manual provides instructions for mounting the installation unit (FSN 5820-082-4077) that permits mounting Radio Set AN/VRC-46, AN/VRC-53, or AN/GRC-125 in Mobile Floating Assault Bridge/Ferry.

## 1-2. Index of Publications

Refer to the latest issue of DA Pam 310-4 to determine whether there are new editions, changes, or additional publications pertaining to this equipment. DA Pam 310-4 is an index of current technical manuals, technical bulletins, supply manuals, supply bulletins, lubrication orders, and modification work orders available through publications supply channels. The index lists the individual parts (-10, -20, -35P, etc) and the latest changes to and revisions of each publication.

#### 1-3. Forms and Records

a. Reports of Maintenance and Unsatisfactory

*Equipment.* Use equipment forms and records in accordance with instructions in TM 38-750.

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

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

## CHAPTER 2

#### INSTALLATION

# Section I. SERVICE UPON RECEIPT OF EQUIPMENT

#### 2-1. Unpacking

Move the packing boxes close to the location where the installation is to take place and unpack the parts of the installation unit. Be careful not to lose any of the parts.

## 2-2. Checking Unpacked Equipment

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

*b.* See that the equipment is complete as listed in the packing slip. If a packing slip is not available, the completeness of the installation unit can be determined

by comparing the parts received with the items listed on the installation drawings (figs. 2-2 and 2-3). Report all discrepancies in accordance with TM 38-750, Shortage of a minor assembly or part that does not affect proper installation or functioning of the equipment should not prevent the equipment from being installed.

*c.* When vehicles with radio sets are to be turned in or transferred, communication equipment will be removed and reinstalled in new replacement vehicles. Additional items which are required to complete installations should be requisitioned as individual items. To determine the Federal stock number of authorized items in the installation unit, refer to SB 11-131.

# Section II. EQUIPMENT INSTALLATION

#### 2-3. Tools Required for Installation

The tools required for installation of Radio Set AN/VRC-46, AN/VRC-53, or AN/GRC-125 are part of Tool Kit, Radar Repairman TK-87/U, and Tool Kit, Supplementary, Radar and Radio Repair TK-88/U. The following additional items are needed:

- a. 1 electric drill (3/8 inch).
- *b.* 1 set of drill bits (1/16 inch to 3/8 inch).

#### 2-4. Installation Instructions

*a.* To accomplish the installation, follow the instructions shown on figures 2-1, 2-2, and 2-3.

*b.* The following additional information is provided:

- (1) To drill the correct size holes for the sheet metal screws which hold the plastic cable clamps, select a drill bit that is slightly smaller in diameter than the screw.
- (2) When the installation is completed, check the tightness of all bolts and screws.

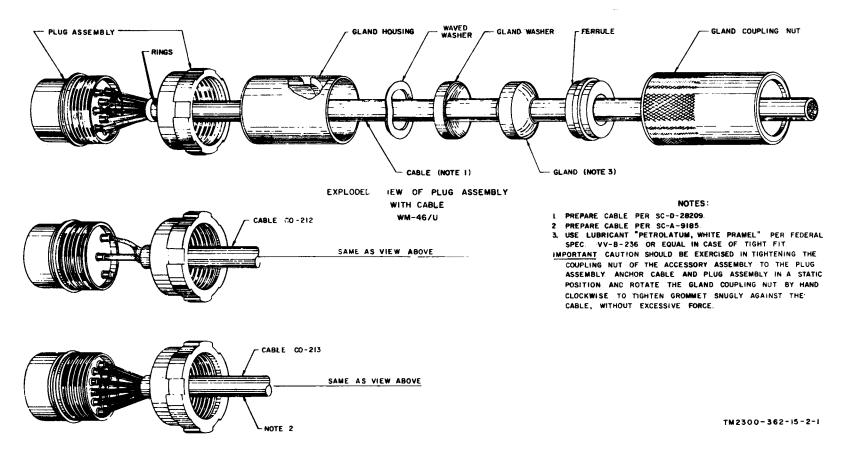


Figure 2-1. Assembly of waterproof vehicle terminal box plugs

# APPENDIX

# REFERENCES

DA Pam 310-4	Index of Technical Manuals, Technical Bulletins, Supply Manuals (types 7, 8, and 9) Supply Bulletins, Lubrication Orders, and Modification Work Orders
SB 11-131	Vehicular Radio Sets and Authorized Installations
SB 38-100	Preservation, Packaging, and Packing Materials, Supplies, and Equipment Used by the Army
TB SIG 364	Field Instructions for Painting and Preserving Electronic Command Equipment
TM 11-5820-401-10	Operator's Manual; Radio Sets AN/VRC-12 and AN/VRC-43, -44, -45, -46, -47, -48, and -49
TM 11-5820-401-20	Organizational Maintenance Manual (Including Repair Parts and Special Tool Lists): Radio Sets AN/VRC-12 and AN/VRC- 43, -44, -45, -46, -47, -48, and -49
TM 11-5820-401-35	DS, GS, and Depot Maintenance Manual: Radio Sets AN/VRC- 12 and AN/VRC-43, -44, -45, -46, -47, -48, and -49
TM 38-750	Army Equipment Record Procedures

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11-117	55-87
11-127	55-88
11-155	55-97
11-157	55-128
	56-139
11-158	
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11-216	55-157
11-217	55-202
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11-500 (AA-AC)	57-102
None.	

*NG*: None. *USAR*: None.

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

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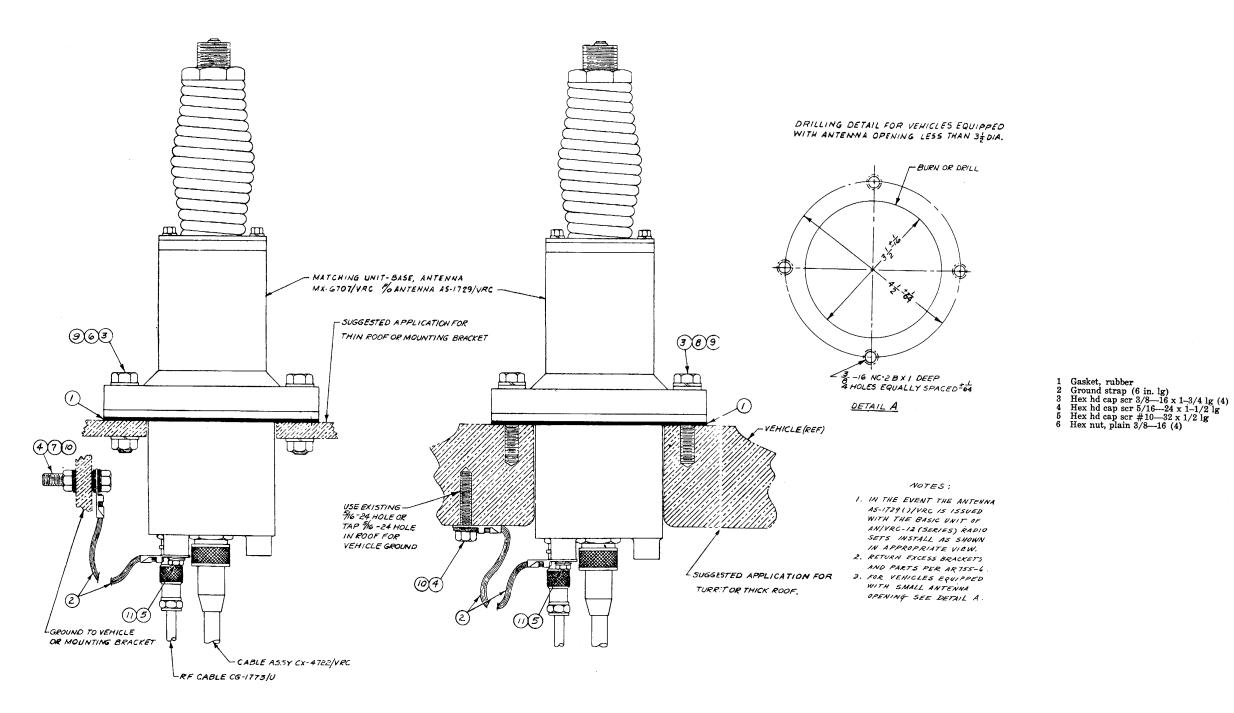


Figure 2-2. Drilling details for Antenna AS-1729()/VRC.



- 7 Hex nut, plain 5/16-24 8 Washer, split 3/8 13/32 ID (4) 9 Washer, flat 13/32 ID-13/16 OD (4)
- 10 Lockwasher 5/16 IET (3)
- 11 Lockwasher #10 IET (2)

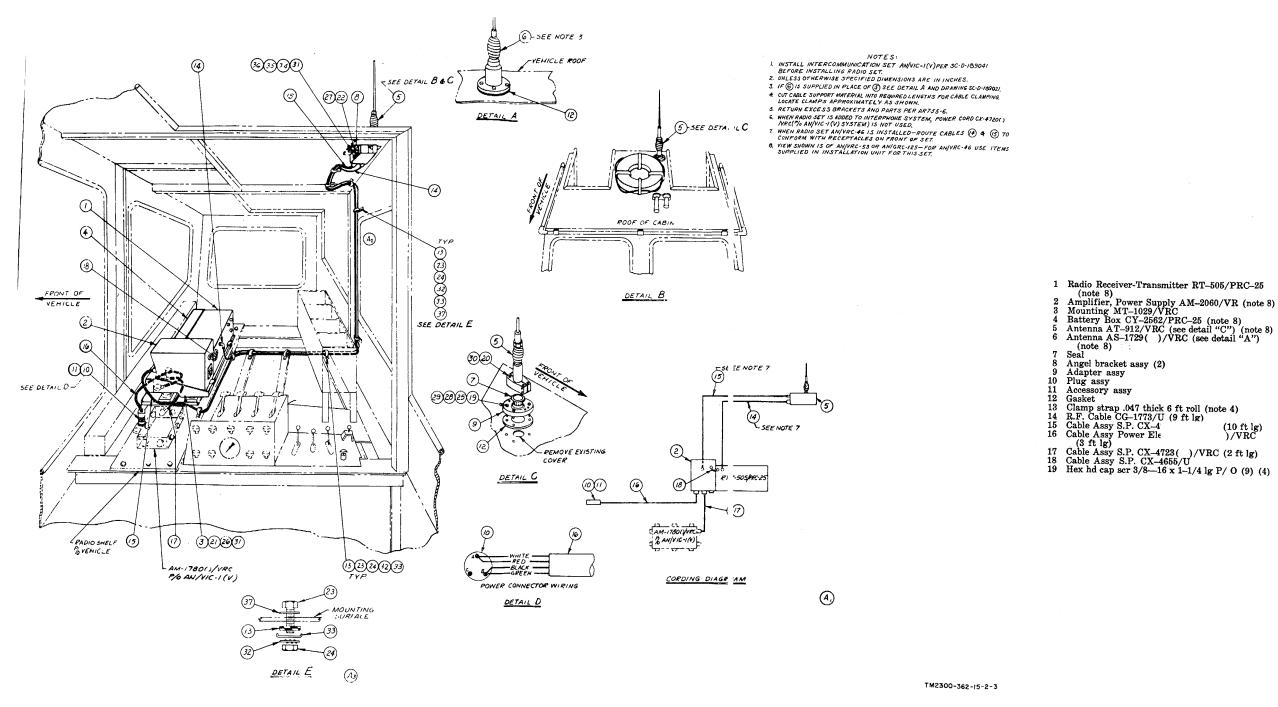


Figure 2-3. Installation of Radio Set AN/VRC-46, AN/VRC-53, or AN/GRC-125 in mobile floating assault bridge/ferry.

 Hex hd cap scr 5/16—18 x 2-1/4 lg P/O (9) (4)
Slotted hex hd cap scr 5/16—24 x 3/4 lg P/O (3) (5)
Slotted hex hd cap scr 1/4—28 x 5/8 lg P/O (5) (10)
Hex hd cap scr 1/4—20 x 3/4 lg (10)
Hex nut, plain 1/4—20 (10)
Hex nut, plain 3/8—16 P/O (9) (4)
Hex nut, plain 5/16—24 P/O (3) (5)
Lockwasher, 1/4 IET P/O (5) (10)
Lockwasher, split 3/8 P/O (9) (4)
Lockwasher, split 3/8 P/O (9) (4)
Lockwasher, split 5/16 IET P/O (3) & (8) (14)
Lockwasher, 5/16 IET P/O (3) & (8) (14)
Lockwasher, 1/4 IT (10)
Retainer (for 1/4 scr) Per SC-B-279928 (10)
Hex hd cap scr 5/16—18 x 1 lg (4) Radio Receiver-Transmitter RT-505/PRC-25 (note 8)
Amplifier, Power Supply AM-2060/VR (note 8)
Mounting MT-1029/VRC
Battery Box CY-2562/PRC-25 (note 8)
Antenna AT-912/VRC (see detail "C") (note 8)
Antenna AS-1729()/VRC (see detail "A") (note 8)
Seal 34 Hex hd cap scr 5/16-18 x 1 lg (4) 35 Hex nut, plain 5/16-18 P/O (8) (4) 36 Washer, flat 5/16 (4)

37 Washer, flat 1/4 (5)

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