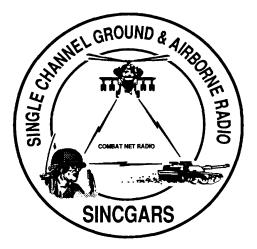
## **TECHNICAL BULLETIN**



INSTALLATION INSTRUCTIONS FOR INSTALLATION KIT ELECTRONIC EQUIPMENT MK-2357/VRC (NSN 5895-01-311-3004) (EIC: N/A) TO PERMIT INSTALLATION OF RADIO SETS AN/VRC-87/88/90 SERIES IN REPEATER SET RADIO AN/TRC-110 OR RADIO TERMINAL SET AN/TRC-117

Approved for public release; distribution is unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY

1 SEPTEMBER 1993

**TECHNICAL BULLETIN** 

NO. 11-5820-890-20-37

HEADQUARTERS, DEPARTMENT OF THE ARMY WASHINGTON, D.C., 1 SEPTEMBER 1993

### INSTALLATION INSTRUCTIONS FOR INSTALLATION KIT **ELECTRONIC EQUIPMENT MK-2357NRC** (NSN 5895-01-311-3004) (EIC: N/A) TO PERMIT INSTALLATION OF RADIO SETS AN/VRC-87/88/90 SERIES IN **REPEATER SET RADIO AN/TRC-110 OR RADIO TERMINAL SET AN/TRC-117**

### REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: AMSEL-LC-LM-LT, Fort Monmouth, New Jersey 07703-5007.

In either case a reply will be furnished direct to you.

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### 0.1 SCOPE.

This technical bulletin provides installation instructions for Installation Kit, Electronic Equipment MK-2357NRC, commonly referred to as the Mounting Kit (MK). The MK shall be installed into the following type of shelter(s):

- AN/TRC-110 Repeater Set Radio
- AN/TRC-117 Radio Terminal Set

The MK is used for installation of radio set components at field locations. The information contained in this technical bulletin is the official authorization to perform the installation at the unit maintenance level.

### NOTES

- This technical bulletin is not an authorization for requisition or turn-in of shelters.
- This technical bulletin does not establish quantity or types of shelters assigned to using units.

This technical bulletin does not contain information on the maintenance or replacement of the MKs. This information is contained in the MAC of TM 11-5820-890-20-2, TM 11-5820-890-20-4 and RPSTL of TM 11-5820-890-20P.

### 0.2 GENERAL INFORMATION.

The MK becomes operable when all the radio set components are installed in the shelter and correct power is supplied. Refer to TM 11-5820-890-20-1 or TM 11-5820-890-20-4 for installation, Operational (OP) Check instructions, and required maintenance procedures. Refer to TM 11-5820-890-20P for repair parts.

Included in the radio set ANNRC-87/88/90 Series are:

- Radio Set ANNRC-87/88/90 (for RT-1439NRC)
- Radio Set ANN/VRC-87A/88A/90A (for RT-1523(C)/U)

### 0.3 MAINTENANCE FORMS, RECORDS, AND REPORTS.

0.3.1 Reports of Maintenance and Unsatisfactory Equipment. See Section 4.2.2.3 for information.

**0.3.2 Report of Packing and Handling Deficiencies. See** Section 4.2.2.1 for information.

0.3.3 Discrepancy In Transportation Deficiency Report (TDR) (SF361). See Section 4.2.2.2 for information.

### 0.4 CONSOLIDATED INDEX OF ARMY PUBLICATIONS.

Refer to the latest issue of DA Pam 25-30 to determine whether there are new changes, or additional publications pertaining to the equipment.



### 1. PURPOSE OF INSTALLATION.

The Installation Kit Electronic Equipment MK-2357NRC (MK) contains the items needed to mount Radio Set ANNRC-87A/88A/90A in a Radio Repeater Set, AN/TRC-110 or Radio Terminal Set, AN/TRC-117. If Radio Set ANNRC-87/88/90 is to be installed, communications security equipment (TSEC/KY-57) will need to be installed also; see Section 5.4 for information.

### 2. END ITEM OR SYSTEM TO BE MODIFIED.

Not applicable.

### 3. APPLICATION TIMES.

**3.1 Time for Completion of Installation. Using** two people, a total **of 4 work** hours is required. Typical shelter downtime is 4 hours.

**3.2 Time for Installation of One Assembly or Component.** The following table lists the time required to install one component. All times have been rounded off to the nearest half hour. The sum of these items will not reflect the typical shelter downtime.

ITEM	SECTION	TIME	
Antenna AS-3900NRC Mounting Base, Electrical Equipment MT-6352NRC Loudspeaker, Permanent Magnet, LS-454/U	5.1 5.2 5.3	2.5 0.5 1.0	

### 4. PREPARATION FOR INSTALLATION.

This section explains how to prepare the shelter and MK for installation.

**4.1 Preparation of Shelter**. To prepare the shelter for installation, insure that the site includes adequate lighting and a power source when drilling is required. Inspect the shelter for damage that could affect installation. Have any such damage repaired before installing MK.

**4.1.1 Items to be Removed**. Remove existing ANNRC-12 radio family installation kit/harness. See TM 11-5820-401-20-2 for removing items used with intercom systems, or TM 1 1-5820-401-20-1 (used without intercom systems), and TM 9-2320-289-20.

### 4.1.2 Items to be Retained. Not applicable.

**4.2 Preparation of MK.** To prepare MK, unpack, inspect and check inventory.

**4.2.1 Precautions During Handling.** Observe these steps to prevent equipment damage.

- a. Keep dust cover in place on connectors.
- b. Do not disassemble or modify parts in MK unless authorized to do so.
- c. Keep mounting hardware covered and protected until needed.
- d. When exposed to moisture, rain or salt water, keep all parts dry to prevent corrosion.

### 4.2.2 Unpack and Inspect Equipment.

**4.2.2.1 Inspect Packaging for Evidence of Damage.** Any shipping damage should be reported on SF364 Report of Discrepancy (ROD) as prescribed in AR 735-11-2/DLAR 4140.55/NAVMATINST 4355.73A/AFR 400-64/MCO 4430.3F.

**4.2.2.2 Unpack and Inventory MK.** If any item is missing, fill out and forward Transportation Deficiency Report (TDR) (SF361) as described in **AR 55-38/NAVSUPINST 4610.33C/AFR 75-18/MCO** P4610.19D/DLAR **4500.15.** 

**4.2.2.3 Examine Each Item for Damage.** If any item is damaged, fill out and forward SF364 Report of Discrepancy (ROD) as prescribed in AR 735-11-2/DLAR 4140.55/NAVMATINST 4355.73A/AFR-400-64/MCO 4430.3F. All damages should be reported as prescribed in DA Pam 738-750, as contained in Maintenance Management Update.

### 4.3 MK, Distribution and Consumables.

**4.3.1 Items Supplied** In **MK and/or Required for Installation.** Use **Table 4-1** and Figure **4-1** to identify and inventory MK parts.

### 4.3.2 Distribution and Issue Instructions.

- a. US Forces: Do not requisition MK. They will be shipped automatically.
- b. US Army Depots: Requisition MK through supply channels.
- c. Multiservice: Instructions shall be included for multiservice modifications.

d. MAP/MAS Countries: Instructions shall be provided for MAP/MAS countries.

NSN	ITEM DESCRIPTION AND PART NUMBER	QUANTITY IN MK	SMR CODE	FIGURE ITEM NO.
5985-01-297-2971 5305-00-847-1159	Antenna, Vehicular AS-3900NRC (A3017899-1) Screw, Cap, Hexagon (3/8-16 x 1 3/4 in) MS35307-365 (4 Not Used)	1 4	PAOOFA PAOZZA	4-1, 2
5310-00-913-8881 5310-00-061-1258	Nut, Hexagon (3/8-16 in) MS51971-3 Washer, Lock, Internal/ External Toothed (3/8 in) MS45904-76	4 8	PAOZZA PAOZZA	
5310-00-889-2527	Washer, Lock, Internal/ External-Toothed (5/16 in) MS45904-72 (Not Used)	2	PAOZZA	
5306-00-225-9086	Bolt, Machine (5/16-24 x 5/8 in) MS90726-31 (Not Used)	1	PAOZZA	
5330-01-205-2864	Gasket (A3013655-1)	1	PAOZZA	
5975-01-1888873	Mounting Base, Electrical Equipment MT-6352VRC (A3013367-1)	1	PAOOFA	4-1, 1
5306-00-225-9089	Bolt, Machine (5/16-24 x 1 in) MS90726-34 (Not Used)	5	PAOZZA PAOZZA	
5310-00-889-2527	Washer Lock, Internal/External Toothed (5/16 in) MS45904-72 (2 Not Used)	10	PAOZZA	
5310-00-880-7746	Nut, Hexagon (5/16-24) MS51968-5 (Not Used)	5	TROLLA	
5995-01-219-7035	Cable Assembly, Radio Frequency CG-3855NRC	1	PAOZZA	4-1, 6
5965-00-876-2375	Loudspeaker, Permanent Magnet, LS-454/U	1	PAOZZA	4-1, 3
5965-00-043-3463	Handset, H-250/U	1	PAOZZA	4-1, 4
5975-00-111-3208	Strap, Tiedown, Electrical Components MS3567-5-9	9 10	PAOZZA	
5310-00-829-9981	Nut, Hexagon (5/16-18) MS35649-2312	5	PAOZZA	
4020-01-3418795	Fiber Rope Assembly, Single Leg (A3167672-1)	1	PAOZZA	4-1, 5
	Lead, Electrical (A301 3552-4)	1	PAOZZA	
	4			

Table 4-1. Parts List for Installation of Radio Set ANNRC-87/88/90 Series

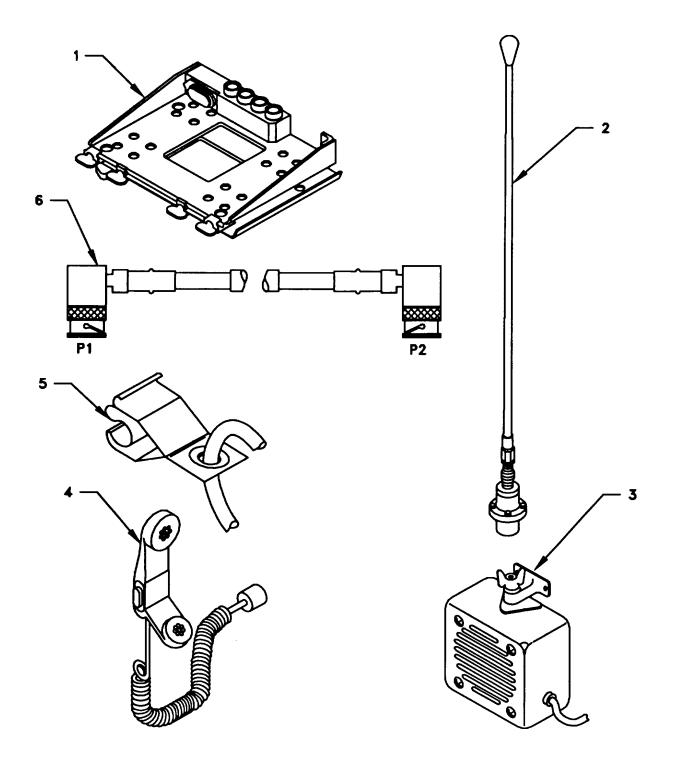
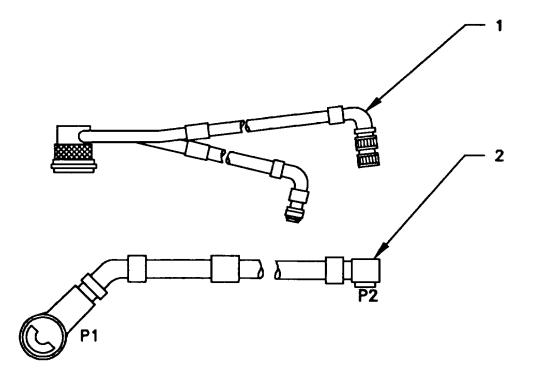
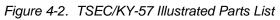


Figure 4-1(1). MK Illustrated Parts List

NSN	ITEM DESCRIPTION AND PART NUMBER	QUANTITY IN MK	SMR CODE	FIGURE ITEM NO.
5310-00-840-5785	Nut, Hexagon (1/4-20) MS35691-7	4	PAOZZA	
5995-01-222-4210	Cable Assembly, Special Purpose, Electrical CX-13292NRC (4 FT, 0 IN) (A3014034-1)	1	PAOZZA	4-2,1
5995-01-226-5482	Cable Assembly, Power, Electrical CX-13303NRC (2 FT, 6 IN) (A3014040-5)	1	PAOZZA	4-2, 2
5310-00-889-2528	Washer Lock, InternaVExternal-Toothed (1/4 in) MS45904-68	4	PAOZZA	

Table 4-2.	Additional Items	Required for	Installation wher	using RT-1439NRC





4.3.3 Consumable Materiels. The table below lists materiels required for installation but not supplied with MK.

NSN	NOMENCLATURE
8040-00-117-8510	Adhesive-Sealant, Clear, RTV
6850-00-880-7616	Silicone Compound, MIL-S-8660

# **4.4 Tools and Test, Measurement, and Diagnostic Equipment (TMDE) Required**. The following tools and TMDE are needed for installation.

NOMENCLATURE	NSN	QUANTITY
Radio Set'		1
Pocket Knife, Electrician's	5110-00-240-5943	1
Screwdriver, No. 2 Point Phillips, 4 in	5120-00-234-8913	1
Screwdriver, 1/4 in Flatblade, 4 in	5120-00-222-8852	1
Pliers, Round Nose	5120-00-240-6172	1
Pliers, Diagonal Cutting	5110-00-965-0974	1
Wrench, OpenBox: 1/4 in 1/2 in 9/16 in	5120-00-228-9503 5120-00-228-9506 5120-00-228-9507	1 1 1
Handle, Socket Wrench: Socket: 5/8 in 1/2 in 9/16 in 1/4 in	5120-00-240-5364 5120-00-237-4973 5120-00-237-0977 5120-00-227-6704 5120-00-235-5878	1 1 1 1 1

7

\* Use radio issued with your shelter if available.

### 5. INSTALLATION PROCEDURES.

This section describes where and how to install MK items in the shelter. See Figure 5-1 for an overall view of where the MK equipment, as well as radio components, will be installed. When installing MK equipment, be sure to read and follow instructions and illustrations carefully. If Radio Set ANNRC-87/88/90 is to be installed, communications security equipment (TSEC/KY-57) will need to be installed also; see Section 5.4 for information.

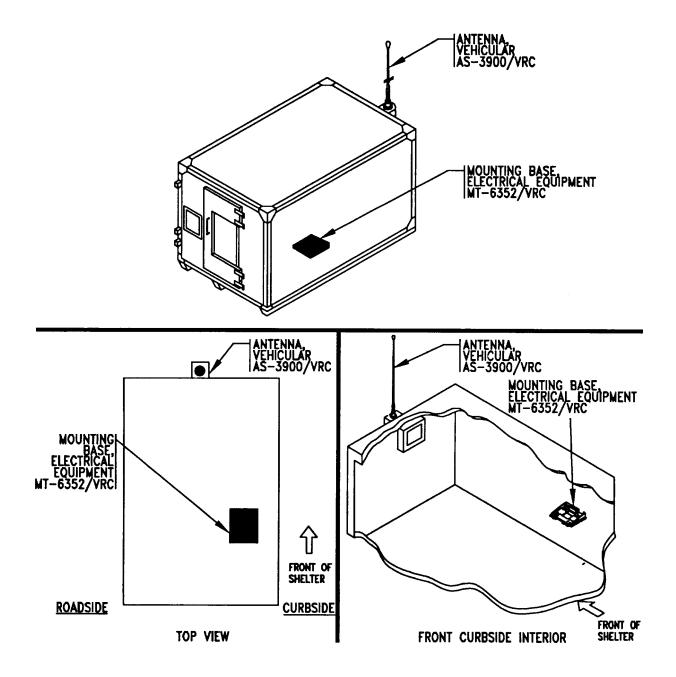


Figure 5-1(1). MK and Radio Installation: Mk Equipment Locations

5. INSTALLATION PROCEDURES. Continued.

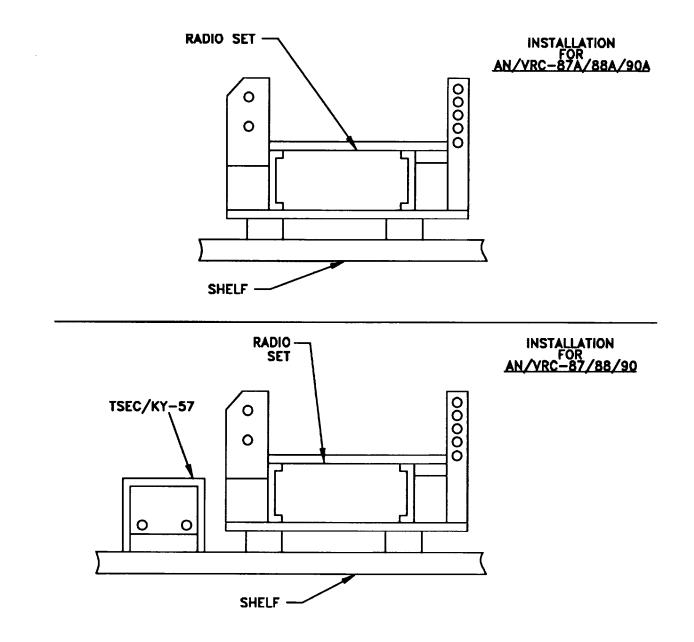
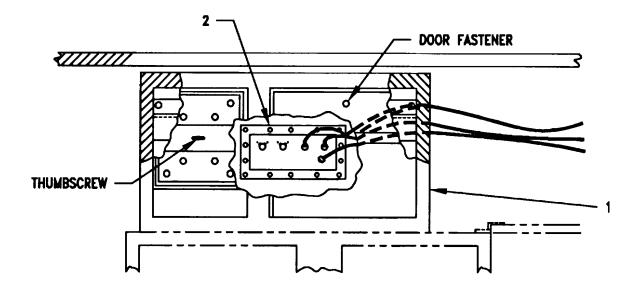


Figure 5-1(2). MK and Radio Installation: Radio Equipment Locations.

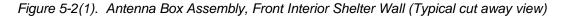
# 5.1 Installation of Antenna, Vehicular, AS-3900NRC.

**5.1.1 Installation of Antenna Base.** Use the following procedures to install the antenna base at location shown in Figure 5-1(1).

ITE	EM	ACTION	REMARKS
		NOTE	
	Two technicians a and one outside.	re required to install and wire the antenna on	the shelter, one inside
a.	Bracket and rack assembly (1).	On the front interior wall, top center, locate the fastener on the door of the rack assembly near the warning plate. See Figure 5-2(1).	
b.	Antenna box assembly (2).	Open the door to gain access to the inner side of the antenna box assembly.	
		NOTE	
	some shelters, it n the front of the	r dissimilarity of placement of the antenna mounay be necessary to remove the holder assembly rack assembly shown in Figure 5-2(1) to hel. If so, refer to the following steps. If not, go to	y, the box assembly or gain access to the
c.	Holder assembly. bracket and remove the ho and cushions.	Loosen thumbscrew on holder assembly older assembly	
d.	Rack assembly (1).	Remove and retain the existing screws, nuts, and washers holding the front of the rack assembly on the rack. See Figure 5-2(1).	Tools: 1/2 in socket and 1/2 in open/box wrench.



### 1. RACK ASSEMBLY 2. ANTENNA BOX ASSEMBLY



ITEM		ACTION	REMARKS
e.	Antenna box assembly (5).	Remove the existing fourteen panel bolts and remove both panel and antenna box assembly. Retain hardware. See Figure 5-2(2).	

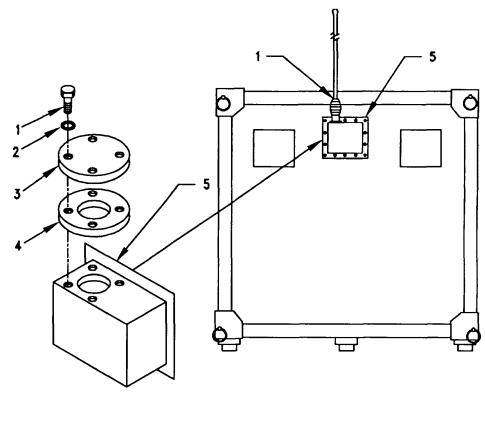
### NOTE

If the shelter antenna box is new or has never had an antenna installed on it, refer to step f. If not required, go to step g.

f. Four existing bolts (1), four existing washers (2), existing protective cover plate (3) and existing gasket (4).

Remove from antenna box assembly (5) and discard. See Figure 5-2(2).

Tools: 1/4 in socket and 1/4 in open/box wrench.



1. BOLT

- 2. WASHER
- **3. PROTECTIVE COVER PLATE**
- 4. GASKET
- 5. ANTENNA BOX ASSEMBLY

Figure 5-2(2). Antenna Box Assembly and Exterior Shelter View

ITEM	ACTION	REMARKS

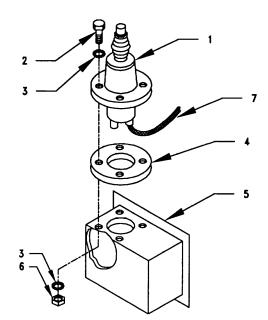
## NOTE

Apply a thin coat of adhesive-sealant to both sides of each internal/external-toothed (IET) washer during installation, and to the area of contact where IET washers are to be placed.

- g. Gasket (4). Place on antenna box assembly (5) and aline mounting holes. See Figure 5-2(3).
- h. Antenna base (1). Place on top of gasket (4) and antenna box assembly (5); then aline mounting holes.
- Four cap screws (2), eight internal/externaltoothed (IET) washers (3) and four nuts (6).

Install and secure.

Tools: 9/16 in socket and 9/16 in open/box wrench.



1. ANTENNA BASE

- 2. CAP SCREW (3/8-16 X 1 3/4 IN)
- 3. IET WASHER(3/8 IN)
- 4. GASKET
- 5. EXISTING ANTENNA BOX ASSEMBLY
- 6. NUT (3/8-16)
- 7. GROUND STRAP P/O ANTENNA

Figure 5-2(3). Antenna Base Installation

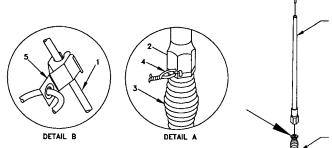
ITEM	ACTION	REMARKS
	NOTE	
	eding, plan the sequence of installing the RF ca assembly and panel bolts to the front shelter wal	
Antenna box assembly (2), ground strap (3), two IET washers (5), RF cable (6) and fourteen existing panel bolts (4).	Connect and secure RF cable (6) connector P1 to antenna base (1) connector J1, then route RF cable to interior of shelter. Attach ground strap (3) to the location where previous ground was attached with IET washers (5) and one existing bolt (4). Attach the antenna box assembly (2) to the shelter wall with the thirteen remaining existing panel bolts and the one previously attached. See Figure 5-2(4)	Tools: 1/2 in open/box wrench.
<ul> <li>Internal existing nuts</li> <li>(7) and washers (8).</li> </ul>	attached. See Figure 5-2(4). Have the person inside the shelter reinstall the washers and nuts previously removed on the inserted bolts. Tighten and secure. Reinstall rack assembly and holder assembly if previously deinstalled using original hardware.	Tools: 1/2in socket.
	SHELTER WALL 7 8 6 5 5	5
1. ANTENNA BASE 2. ANTENNA BOX ASSEMB 3. GROUND STRAP 4. EXISTING BOLTS	4>	

- 5. IET WASHER (5/16 IN)
- 6. RF CABLE CG-3855/VRC (18 FT, 0 IN)
- 7. EXISTING WASHERS
- 8. EXISTING NUTS

Figure 5-2(4). Antenna Base Installation

**5.1.2 Installation of Top Antenna Assembly**. The top antenna assembly includes two antenna elements. Use the following procedures to assemble, install and tiedown all antennas.

ACTION	REMARKS
Apply silicone compound to element Threads and assemble.	
Install and hand-tighten to antenna base (3).	
Install to antenna element (2) and antenna base (3). See Figure 5-2(5), Detail A.	
Cut and remove excess with diagonal cutting pliers.	
Attach clip to antenna element (1). See Figure 5-2(5), Detail B.	
Tie rope to shelter to position antenna in desired location.	
	<u>~ ۱</u>
	<ul> <li>Apply silicone compound to element Threads and assemble.</li> <li>Install and hand-tighten to antenna base (3).</li> <li>Install to antenna element (2) and antenna base (3). See Figure 5-2(5), Detail A.</li> <li>Cut and remove excess with diagonal cutting pliers.</li> <li>Attach clip to antenna element (1). See Figure 5-2(5), Detail B.</li> <li>Tie rope to shelter to position antenna in</li> </ul>



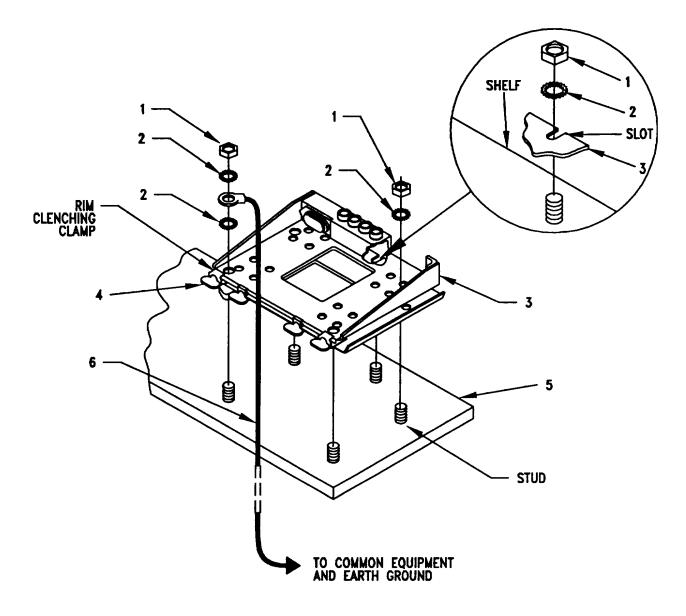
- 1. ANTENNA ELEMENT (UPPER)
- 2. ANTENNA ELEMENT (LOWER)
- 3. ANTENNA BASE
- 4. LOCK WIRE
- 5. FIBER ROPE ASSEMBLY

Figure 5-2(5). Top Antenna Assembly Installation

**5.2 Installation of Mounting Base**, Electrical Equipment MT-6352/VRC (mounting base). Remove and retain attaching bag of 5/16 in mounting hardware for installation. To insure good electrical grounding, any rust, corrosion or paint around mounting holes in radio shelf should be removed before installing the mounting base. See Figure 5-3 and perform the following steps.

	ITEM	ACTION	REMARKS
		NOTE	
		coat of adhesive-sealant to both sides of ea during installation, and to the area of contact w	
a.	Mounting base (3).	Place on mounting plate assembly over existing studs. See Figure 5-3.	
b.	Two outer thumbscrews (4).	Turn ccw until both sets of threads have cleared the studs.	
C.	Five nuts (1), six Internal/external- toothed (IET) washers (2) and electrical ground lead (6).	Install and secure to mounting base (3). Insure the other end of the ground lead is attached to a good metallic surface and any rust, corrosion or paint around the mounting hole should be removed before installing ground lead. See Figure 5-3.	Tools: 1/2 in socket.
d.	Two outer thumbscrews (4).	Tighten and secure.	

5.2 Installation of Mounting Base, Electrical Equipment, MT-6352/VRC (mounting base). Continued.



- 1. NUT (5/16-18 IN)
- 2. IET WASHER (5/16 IN)
- 3. MOUNTING BASE
- 4. THUMBSCREW
- 5. MOUNTING PLATE ASSEMBLY
- 6. LEAD ELECTRICAL GROUND

Figure 5-3. Mounting Base Installation

**5.3** Installation of Loudspeaker, Permanent Magnet LS-454/U (speaker). Mounting location for speaker may be determined by the shelter commander. Typical methods used for mounting the speaker are as follows:

Method A. See Figure 5-4(1).

- a. Determine speaker (3) location.
- b. Drill 13/32 in diameter hole through mounting surface.
- c. Insert stud on speaker (3) through drilled hole; then secure with lock washer (2) and wing nut (1).
- 1. WING NUT (P/O 3)
- 2. LOCK WASHER (P/O 3)
- 3. LS-454/U LOUDSPEAKER
- 4. CAP SCREW (1/4-20 X 1 IN)
- 5. SPEAKER BRACKET (P/O 3)
- 6. LOCK WASHER (1/4 IN)
- 7. NUT (1/4-20 IN)

Figure 5-4(1). Speaker Installation - A

Method B. See Figure 5-4(2).

### NOTE

Items (4), (6) and (7) are not supplied in kit.

- a. Determine speaker (3) location.
- b. Drill two 5/16 in diameter holes through mounting surface. Use bracket (5) as a template.
- c. Install and secure two cap screws (4), two lock washers (6) and two nuts (7) to speaker bracket (5) and mounting surface.
- d. Insert stud on speaker (3) through speaker bracket (5) hole; then secure with lock washer (2) and wing nut (1).

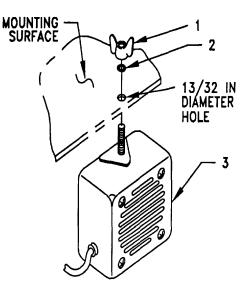


Figure 5-4(1). Speaker Installation-A

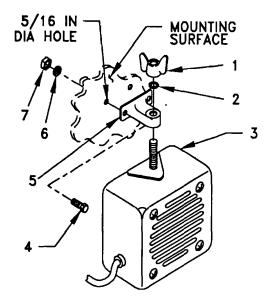


Figure 5-4(2). Speaker Installation -B.

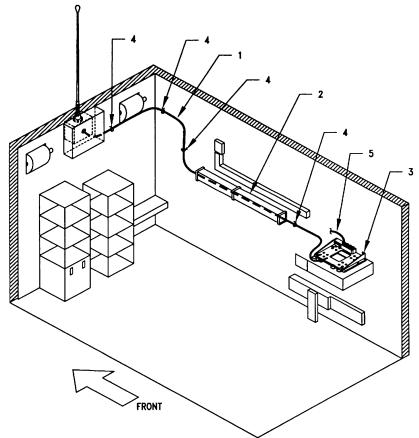
**5.4 Installation of Cables**. To accomplish the installation, leave tiedown straps loose enough to adjust cable slack and allow easy adjustment of equipment. When installation is complete, tighten and secure all tiedown straps.

## WARNING

Make sure station power source is positioned OFF or disconnected before installing cables.

	ITEM	ACTION	REMARKS
a.	a. Tiedown straps (4).	Install tiedown straps to retain RF cable; routing the cable around existing hardware and blower assembly. See Figure 5-5.	
b.	RF cable (1) and existing cover, electrical wiring (2).	Carefully remove the electrical wiring cover and route RF cable (1) in duct. Replace the electrical wiring cover. Dress the cable to the left side of mounting base (3). See Figure 5-5.	Tools: No. 2 Phillips screwdriver.
C.	Existing power cable (5).	Connect and secure to mounting base (3) connector J1.	

### 5.4 Installation of Cables. Continued.



- 1. RF CABLE CG-3855NRC (18 FT, 0 IN)
- 2. EXISTING COVER, ELECTRICAL WIRING
- 3. MOUNTING BASE
- 4. TIEDOWN STRAPS
- 5. EXISTING POWER CABLE

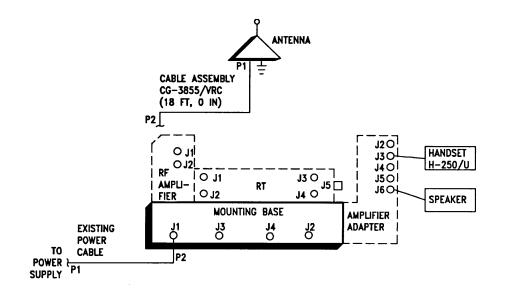


**5.5** Installation of MK-2499/VRC. For Radio Set ANNRC-87/88/90, install MK-2499NRC (TSEC/KY-57 security equipment) in the location shown in Figure 5-1(2) with four (4) each IET washers and nuts. Refer to section 5.6 for connection of cables.

**5.6 Post-Installation and Checkout**. After equipment is installed and cables are connected, perform the following steps.

ITEM	ACTION	REMARKS
a. Equipment.	Check for secure mounting. Check for loose parts, connectors, and mounting hardware.	
b. Cables.	Check for proper installation and connection of cables. See Figure 5-6 for cable connections. Unused cables should be stowed in appropriate place inside the shelter.	
c. Loop clamps.	Check that all have been properly installed and tightened.	
d. Protective covers.	Insure that all installed cables are covered when not in use or connected.	
e. Radio issued with shelter.	Install and connect cables. See TM 11- 5820-890-20-1 or TM 11-5820-890-20-4 for installation and operational (OP) checks and instructions.	
f. MK line replaceable units.	See TM 11-5820-890-20P for Repair Parts and Special Tools List (RPSTL) information.	

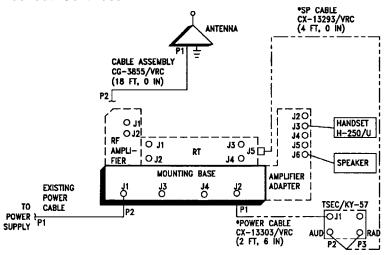
## 5.6 Post-Installation and Checkout. Continued.



		FROM			то	
CABLE ASSEMBLY	CABLE CONN.	UNIT	UNIT CONN.	CABLE CONN.	UNIT	UNIT CONN.
CG-3855NRC (18 FT, O IN)	P2	RF amplifier or RT	J1	P1	Antenna base	J1
Existing Power Cable	P2	Mounting base	J1	P1	Existing power supply	
Speaker Cable		Amplifier adapter	J6		Speaker	
Handset Cable		Amplifier adapter	J3		Handset	

Figure 5-6(1). Cable Diagram: For AN/VRC-87A/88A/90A

## 5.6 Post-Installation and Checkout. Continued.



		FROM			то	
CABLE ASSEMBLY	CABLE CONN.	UNIT	UNIT CONN.	CABLE CONN.	UNIT	UNIT CONN.
CG-3855NRC (18 FT, 0 IN)	P2	RF amplifier or RT	J1	P1	Antenna base	J1
Existing power cable	P2	Mounting base	J1	P1	Existing power supply	
Speaker Cable		Amplifier adapter	J6		Speaker	
Handset Cable		Amplifier adapter	J3		Handset	
*CX-13303NRC (2 FT, 6 IN)	P1	Mounting base	J2	P2	MT-6429NRC	J1
*CX-13293NRC (4 FT, O IN)	P1	RT	J5	P2 P3	TSEC/KY-57	AUD RAD

\* Not supplied In this MK.

Figure 5-6(2). Cable Diagram: For AN/VRC-87/88/90

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# APPENDIX A

### REFERENCES

AMDF	Army Master Data File (Microfiche)
AR 710-2	Supply Policy Below the Wholesale Level as Contained in Unit Supply UPDATE
AR 725-50 DA Pam 25-30	Requisitioning, Receipt and Issuing System in UPDATE Consolidated Index of Army Publications (Microfiche)
DA Pam 710-2-1	Using Unit Supply System Manual Procedures as Contained in Unit Supply UPDATE
SB 11-131-2	Vehicular Radio Sets and Authorized Installations (SINCGARS)
TM 11-5820-890-10-1	Operator's Manual (ICOM Radio Sets)
TM 11-5820-890-10-3	Operator's Manual (Non-ICOM Radio Sets)
TM 11-5820-890-20-1	Unit Maintenance Manual (ICOM Radio Sets)
TM 11-5820-890-20-2	Unit Maintenance Manual (ICOM Radio Sets)
TM 11-5820-890-20-4	Unit Maintenance Manual (Non-ICOM Radio Sets)
TM 11-5820-890-20P	Repair Parts and Special Tools List
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By Order of the Secretary of the Army:

GORDON R. SULLIVAN General, United States Army Chief of Staff

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MILTON H. HAMILTON Administrative Assistant to the Secretary of the Army 06484

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