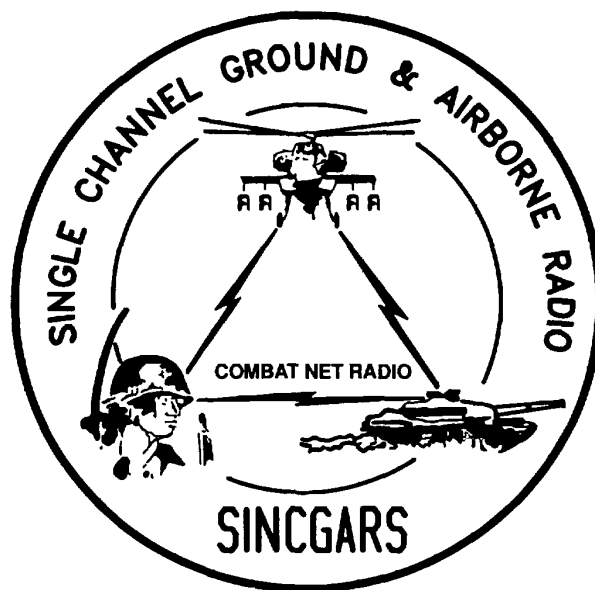**TECHNICAL BULLETIN**

**INSTALLATION KIT, ELECTRONIC EQUIPMENT
MK-2355/VRC (NSN 5895--01-309-4603) (EIC: N/A)
TO PERMIT INSTALLATION OF
RADIO SET AN/VRC-90 (DUAL) SERIES
IN A
METEOROLOGICAL DATA SYSTEM OA-9092/TMQ-31**

H E A D Q U A R T E R S ,   D E P A R T M E N T   O F   T H E   A R M Y

1 SEPTEMBER 1993

TECHNICAL BULLETIN

No. 11-5820-89020-41

INSTALLATION INSTRUCTIONS FOR
INSTALLATION KIT, ELECTRONIC EQUIPMENT
MK-2355/VRC (NSN 5895-01-3094603) (EIC: N/A)
TO PERMIT INSTALLATION OF
RADIO SET AN/VRC-90 (DUAL) SERIES
IN A
METEOROLOGICAL DATA SYSTEM OA-9092/TMQ-31

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-2355/VRC, commonly referred to as the Mounting Kit (MK). The MK shall be installed into the following type of shelter(s):

- Meteorological Data System OA-90921TMQ-31

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 11-5820-890-204 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 11-5820-890-2-1 or TM 11-5820-890-204 for installation, Operational (OP) Check instructions, and required maintenance procedures. Refer to TM 11-5820-890-20P for repair parts.

Included in the dual Radio Set AN/VRC-90 Series are:

- Radio Set AN/VRC-90 (for RT-1439/VRC)
- Radio Set AN/VRC-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 Packaging 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. W

The Installation Kit, Electronic Equipment MK-2355/VRC (MK), contains the items needed to mount two AN/VRC-90A radio sets in a Meteorological Data System OA-9092/TMQ-31 (shelter). If AN/VRC-90 radio sets are to be installed, communications security equipment (TSEC/KY-57) will need to be installed also. See section 5.5 for information.

2.   END ITEM OR SYSTEM TO BE MODIFIED.

Not applicable.

3.   APPLICATION TIMES.

3.1   Time for Completion of Installation. Using one person, a total of 3.5 work hours is required. Typical shelter downtime is 3.5 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 times will not reflect the typical shelter downtime.

ITEM	SECTION	TIME
Antenna AS-3900/VRC	5.1	0.5
Mounting Base, Electrical Equipment MT-6352/VRC	5.2	0.5
Cables	5.3	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 AN/VRC-12 radio family installation kit/harness. See TM 11-5820-401-20-2 for removing items used with intercom systems, or TM 11-5820-401-20-1 (used without intercom systems), and TM 9-6660-265-20.

4.12   List of Items to be Retained. Not applicable.

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

42.1   Precautions During Handling. Observe these steps to prevent equipment damage.

   a.   Keep dust covers 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 by 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 supplied to install dual Radio Set AN/VRC-90 Series. Refer to Table 4-2 and figure 4-2 to identify additional items required to install when using RT-1439/VRC.

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.

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Table 4-1. MK Parts List for Installation of Dual Radio Set AN/VRC-90 Series

NSN	ITEM DESCRIPTION AND PART NUMBER	QUANTITY IN MK	SMR CODE	FIGURE ITEM NO.
5985-01-297-2971	Antenna AS-3900/VRC (A3017899-1)	2	PAOOFA	4-1, 2
5305-00-847-1159	Screw, Cap, Hexagon (3/8-16 x 1 3/4 in)	8	PAOZZA	
5310-00-913-8881	Nut, Hexagon (3/8-16 in) MS51971-3	8	PAOZZA	
5310-00-061-1258	Washer, Lock, Internal/External-Toothed	16	PAOZZA	
5310-00-889-2527	Washer, Lock, Internal/External-Toothed (3/8 in) MS45904-76	4	PAOZZA	
5306-00-225-9086	Bolt, Machine (5/16-24 x 5/8 in) (5/16 in) MS45904-72 (Not Used)	2	PAOZZA	
5330-01-205-2864	Gasket (A3013655-1) MS90726-31 (Not Used)	2	PAOZZA	
5965-00-876-2375	Loudspeaker, Permanent Magnet LS-454/U	2	PAOZZA	4-1, 3
5975-01-188-8873	Mounting Base, Electrical Equipment MT-6352/VRC (A3013367-1)	2	PAOOFA	4-1, 1
5306-00-225-9089	Bolt, Machine (5/16-24 x 1 in) MS90726-34	10	PAOZZA	
5310-00-889-2527	Washer, Lock, Internal/External-Toothed (5/16 in) MS45904-72	20	PAOZZA	
5310-00-880-7746	Nut, Hexagon (5/16 - 24 in) MS51968-5	10	PAOZZA	
5995-01-225-1659	Cable Assembly, Radio Frequency CG-3855/VRC (2 FT, 0 IN) (A3014031-9)	2	PAOZZA	4-1, 6
5995-01-225-1662	Cable Assembly, Radio Frequency CG-3855/VRC (12 FT, 0 IN) (A3014031-12)	2	PAOZZA	4-1, 6
5340-00-809-1490	Clamp, Loop (1/4-1/4) MS21333-98	2	PAOZZA	
4020-01-341-8795	Fiber Rope Assembly, Single Leg (A3167672-1)	2	PAOZZA	4-1, 5
5965-00-043-3463	Handset H-250/U	2	PAOZZA	4-1, 4
5310-00-761-6882	Nut, Plain, Hexagon (1/4-20 in) MS51967-2	2	PAOZZA	
5305-00-225-3839	Screw, Cap, Hexagon (1/4-20 x 1 in) MS90725-8	4	PAOZZA	
5975-00-133-8696	Strap, Tiedown, Electrical Components MS3367-6-9	10	PAOZZA	
5310-00-889-2528	Washer, Lock, Internal-External Toothed (1/4 in) MS45904-68	4	PAOZZA	
5310-00-582-5965	Washer, Lock (1/4 in) MS35338-44	2	PAOZZA	
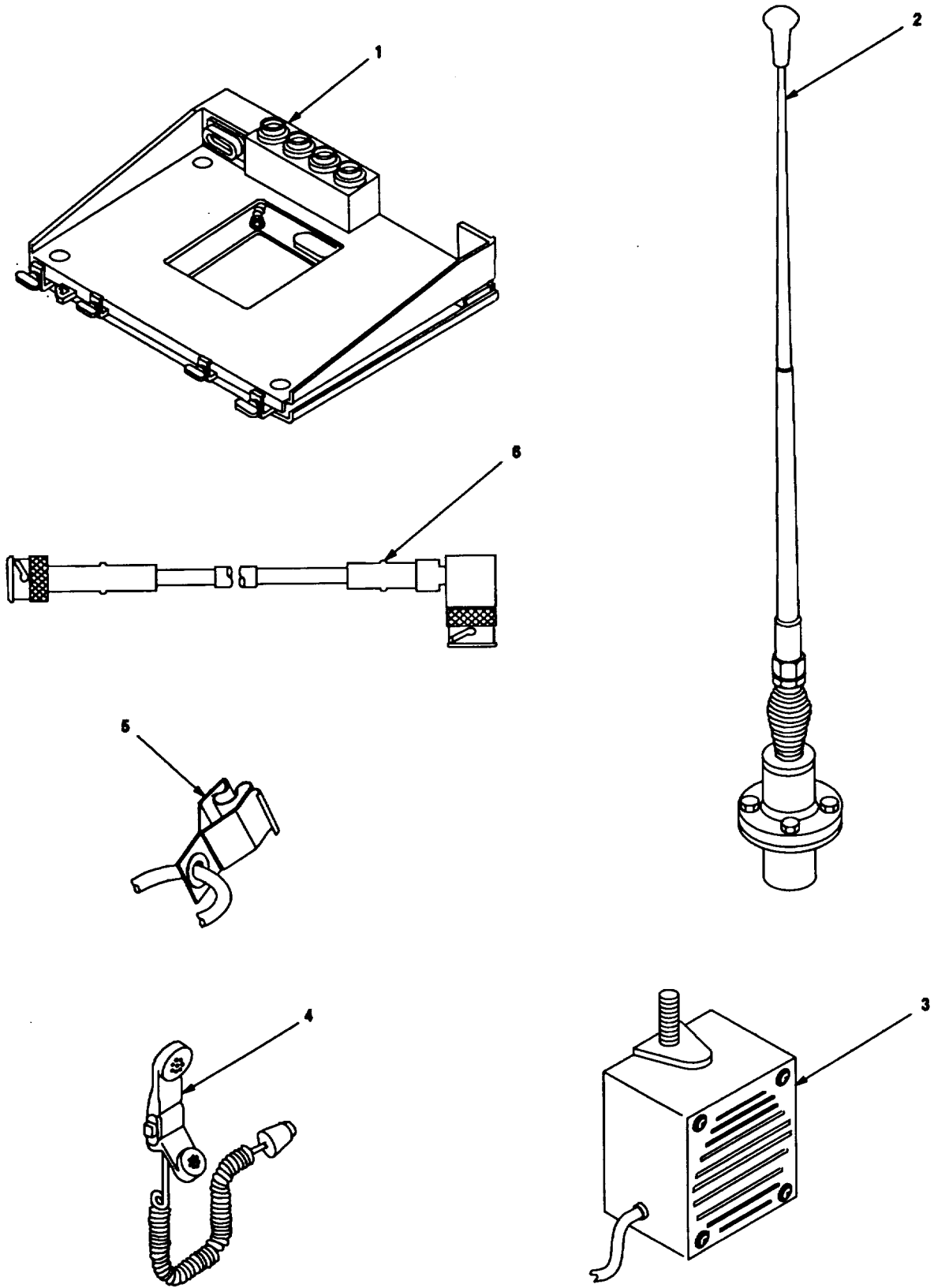
Figure 4-1. MK Illustrated Parts List

Table 4-2. Additional Items Required for Installation When Using RT-1439/VRC

NSN	ITEM DESCRIPTION AND PART NUMBER	QUANTITY IN MK	SMR CODE	FIGURE ITEM NO.
5995-01-222-4210	Cable Assembly, Special Purpose, Electrical CX-13293/VRC (4 FT, 0 IN) (A3014034-1)	2	PAOZZA	4-2, 1
5995-01-226-5482	Cable Assembly, Power, Electrical CX-13303/VRC (2 FT, 6 IN) (A3014040-5)	2	PAOZZA	4-2, 2

Figure 4-2. TSEC/KY-57 Illustrated Parts List

4.3.3   Consumable Materials. The table below lists materials 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

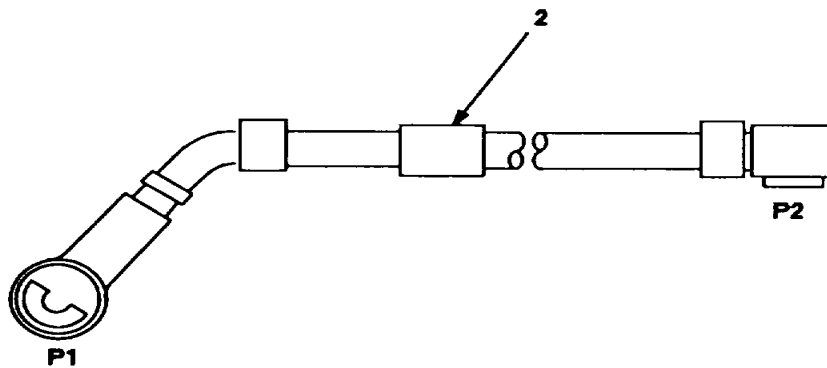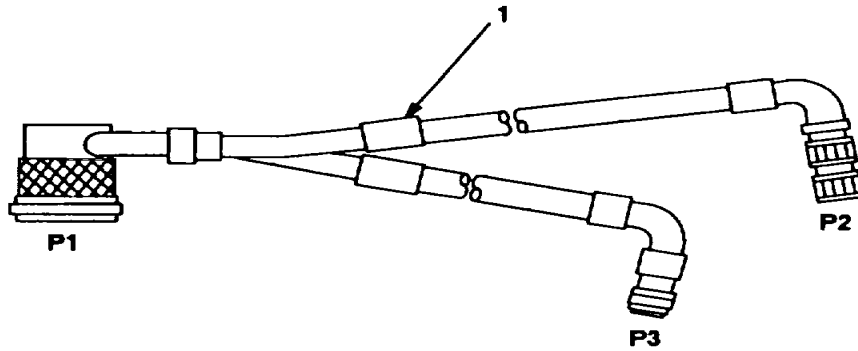**4.4   Tools and Test, Measurement, and Diagnostic Equipment (TMDE) Required.** The following tools and TMDE are needed for installation.

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, Open/Box: 7/16 in	5120-00-228-9505	1
1/2 in	5120-00-228-9506	
9/16 in	5120-00-228-9507	1
Handle, Socket Wrench	5120-00-240-5364	1
Socket: 7/16 in	5120-00-227-6703	1
1/2 in	5120-00-237-0977	1
9/16 in	5120-00-227-6704	1
Electric Drill	5130-00-889-8994	1
Drill Bit: 5/16	5133-00-227-9662	1
11/32	5133-00-227-9664	1
13/32	5133-00-227-9668	1

 * 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, typically will be installed. When installing MK equipment, be sure to read and follow instructions and illustrations carefully. If dual Radio Set AN/VRC-90 is to be installed,

MOUNTING BASE, ELECTRICAL EQUIPMENT MT-6352/VRC

ANTENNA AS-3900/VRC

FRONT OF SHELTER

ROADSIDE   CURBSIDE

ANTENNA AS-3900/VRC

MOUNTING BASE, ELECTRICAL EQUIPMENT MT-6352/VRC

FRONT OF SHELTER

TOP VIEW

MOUNTING BASE, ELECTRICAL EQUIPMENT MT-6352/VRC

POWER SUPPLY EQUIPMENT RACK

RADIO SHELF
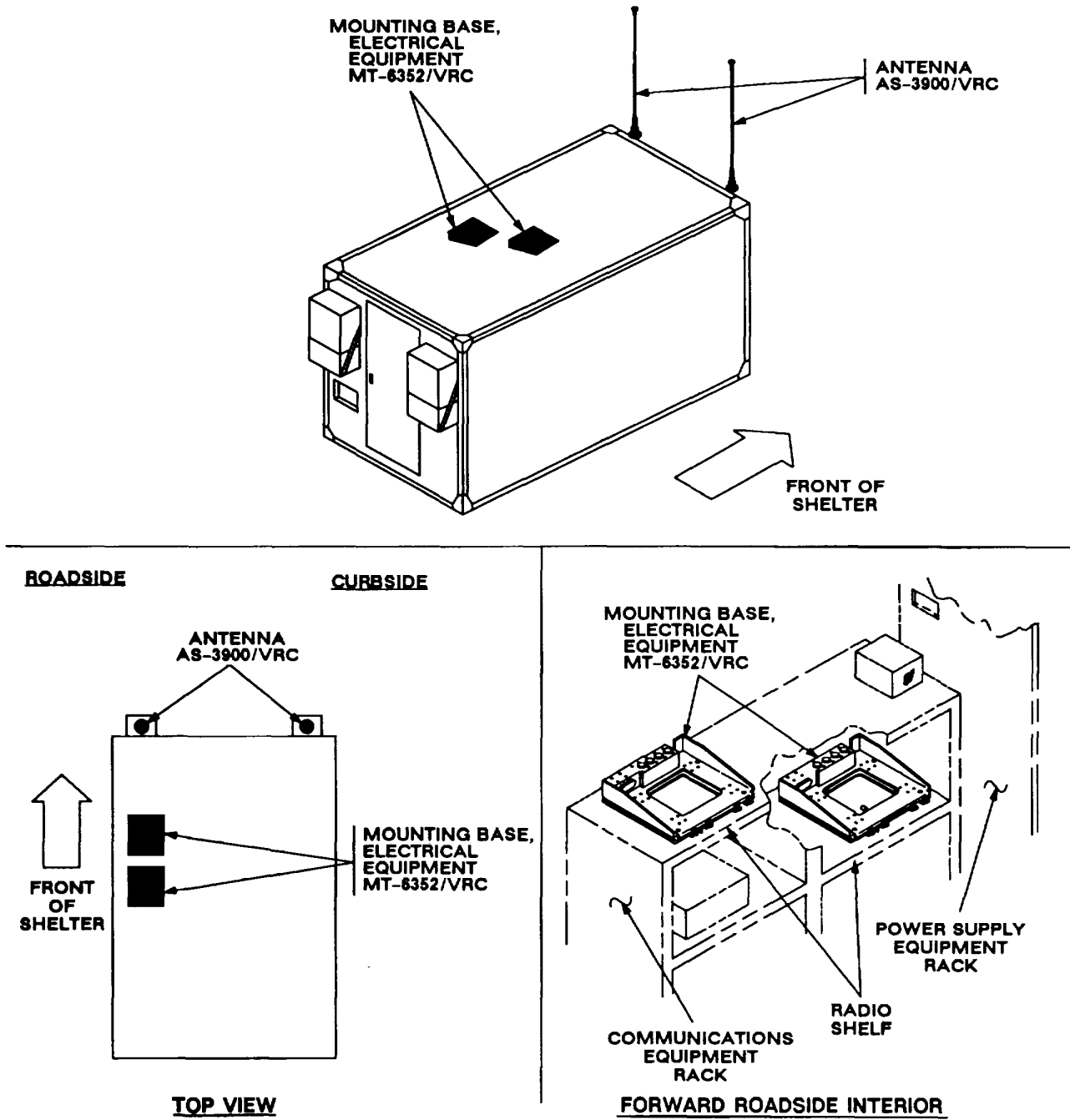
COMMUNICATIONS EQUIPMENT RACK

FORWARD ROADSIDE INTERIOR

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

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5. **INSTALLATION PROCEDURES. Continued**

RADIO SET

INSTALLATION
FOR DUAL
AN/VRC-90A

SWITCH
BOX
(REMOTE DATA
TERMINAL)

TOP
PLATE

RADIO
SHELF

RADIO
SHELF

RADIO SET
CONTROL
(C-2329A/GRA-29)

RADIO SET

COMMUNICATIONS EQUIPMENT RACK

RADIO SET

TSEC/KY-57

INSTALLATION
FOR DUAL
AN/VRC-90

SWITCH
BOX
(REMOTE DATA
TERMINAL)

TOP
PLATE

RADIO
SHELF

RADIO
SHELF

RADIO SET
CONTROL
(C-2329A/GRA-29)

RADIO SET

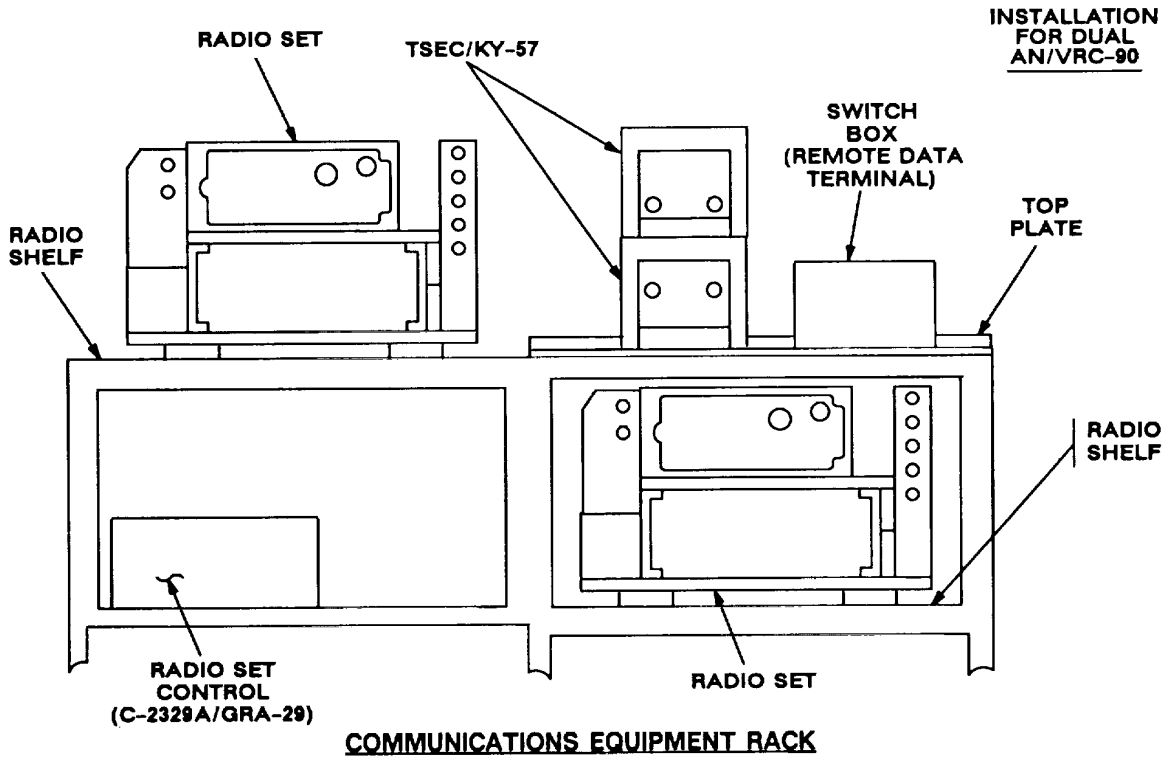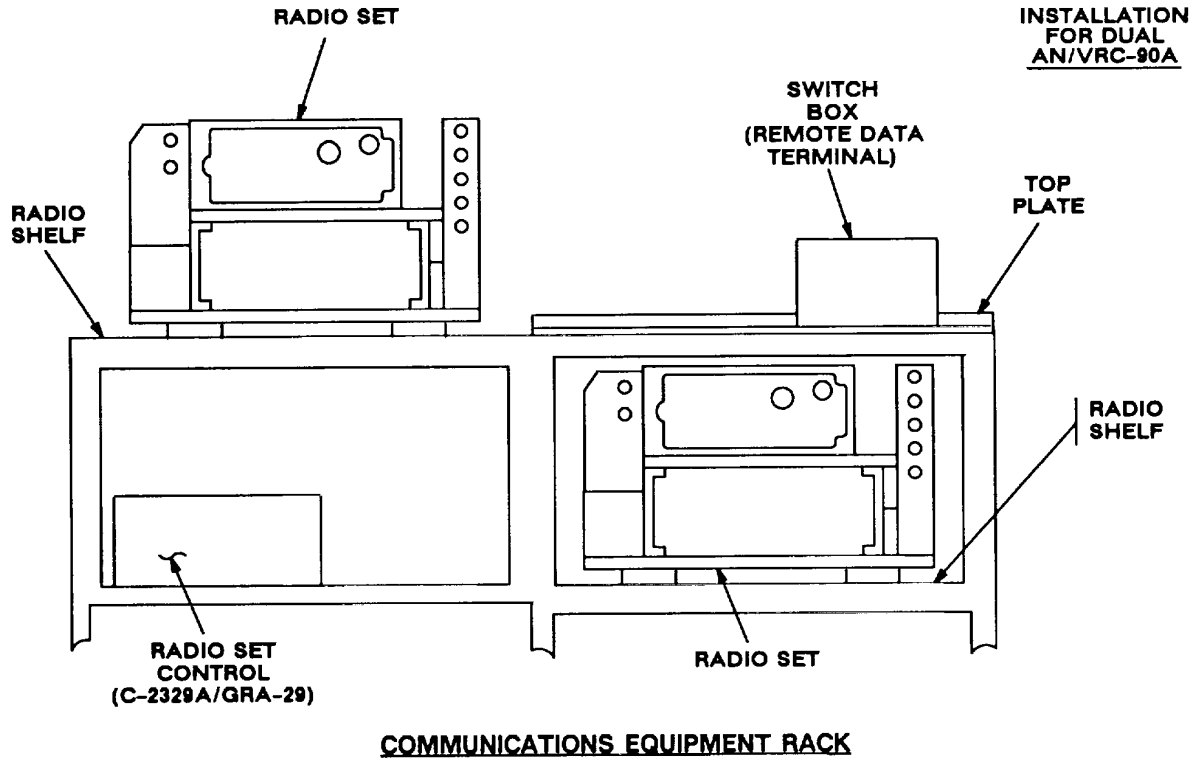**COMMUNICATIONS EQUIPMENT RACK**

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

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5.1   Installation of Antenna AS-3900/VRC (antenna). Use the following procedure to install both antennas. See figure 5-1 (1) for locations.

5.1.1   Installation of Antenna Base.

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 washer is to be placed.

a. Gasket (4).   Place on existing antenna bracket and
                                       align mounting holes. See figure 5-2.

b. Antenna base (3).   Place on top of gasket (4) and antenna
                                       bracket; then align mounting holes.

c. Four cap screws (1),   Install and secure to antenna base (3)   Tools: 9/16 in open/box
     eight internal/external   and antenna bracket.   wrench and 9/16 in socket.
     toothed (IET) washers
     (2) and four nuts (5).

d. Ground strap (7).   Insert through access hole in antenna
                                       bracket.

e. Ground strap (7), cap   Install and secure to ground strap (7)   Tools: 7/16 in socket.
     screw and two IET wash-   and existing mounting hole in shelter wall.
     ers (8).

1. CAP SCREW (3/8–16 x 1 3/4 in)
2. IET WASHER (3/8 in)
3. ANTENNA BASE
4. GASKET
5. NUT (3/8–16 in)
6. CAP SCREW (1/4–20 x 1 in)
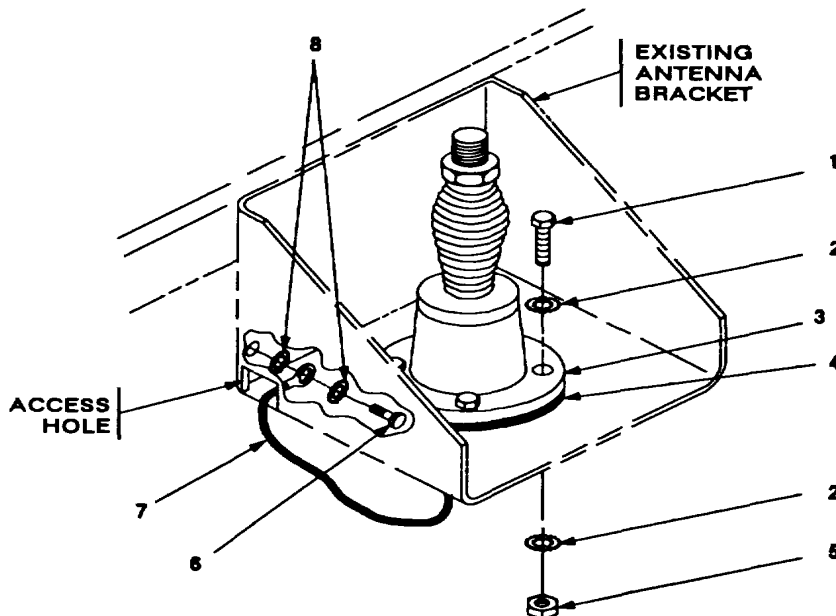7. GROUND STRAP
8. IET WASHER (1/4 in)

Figure 5-2. Antenna Base Installation: Front Wall

5.1.2 Installation of Top Antenna Assembly. The top portion of the antenna includes a lower element and an upper element (with installed cap). Use the following procedure to assemble, install and tie down all antennas.

ITEM	ACTION	REMARKS
a. Antenna elements (1, 2).	Apply silicone compound to element threads and assemble. See figure 5-3.	
b. Antenna element (2).	Install and hand-tighten to antenna base (3).	
c. Lock wire (4).	Install to antenna element (2) and antenna base (3). See figure 5-3, detail A. Cut and remove excess wire with diagonal cutting pliers.	
d. Fiber rope assembly (5).	Attach clip to antenna element (1). Tie rope to vehicle to position antenna in desired location. See figure 5-3, detail B.	
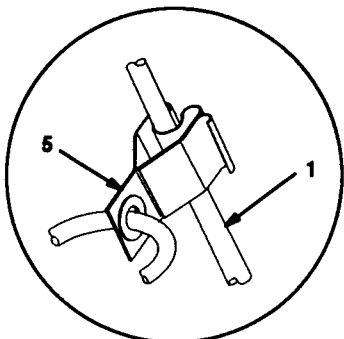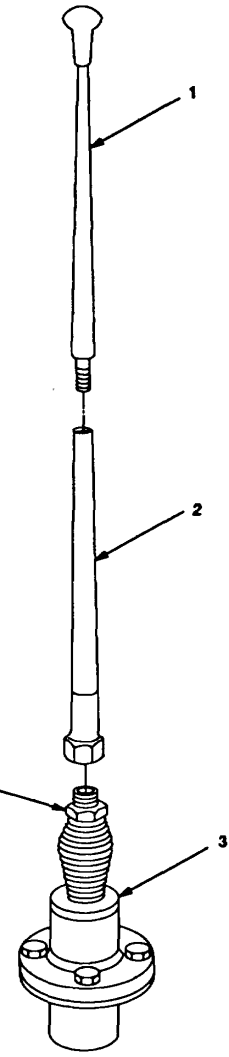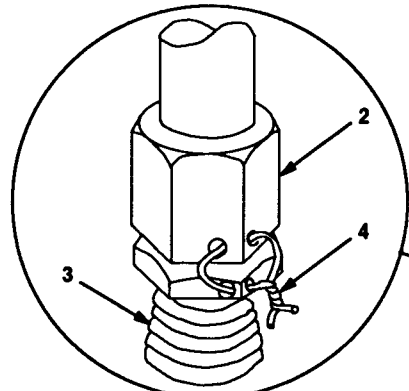
DETAIL B   DETAIL A

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

Figure 5-3. 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 5-4 and perform the following steps to install two mounting bases. See figure 5-1 for locations.
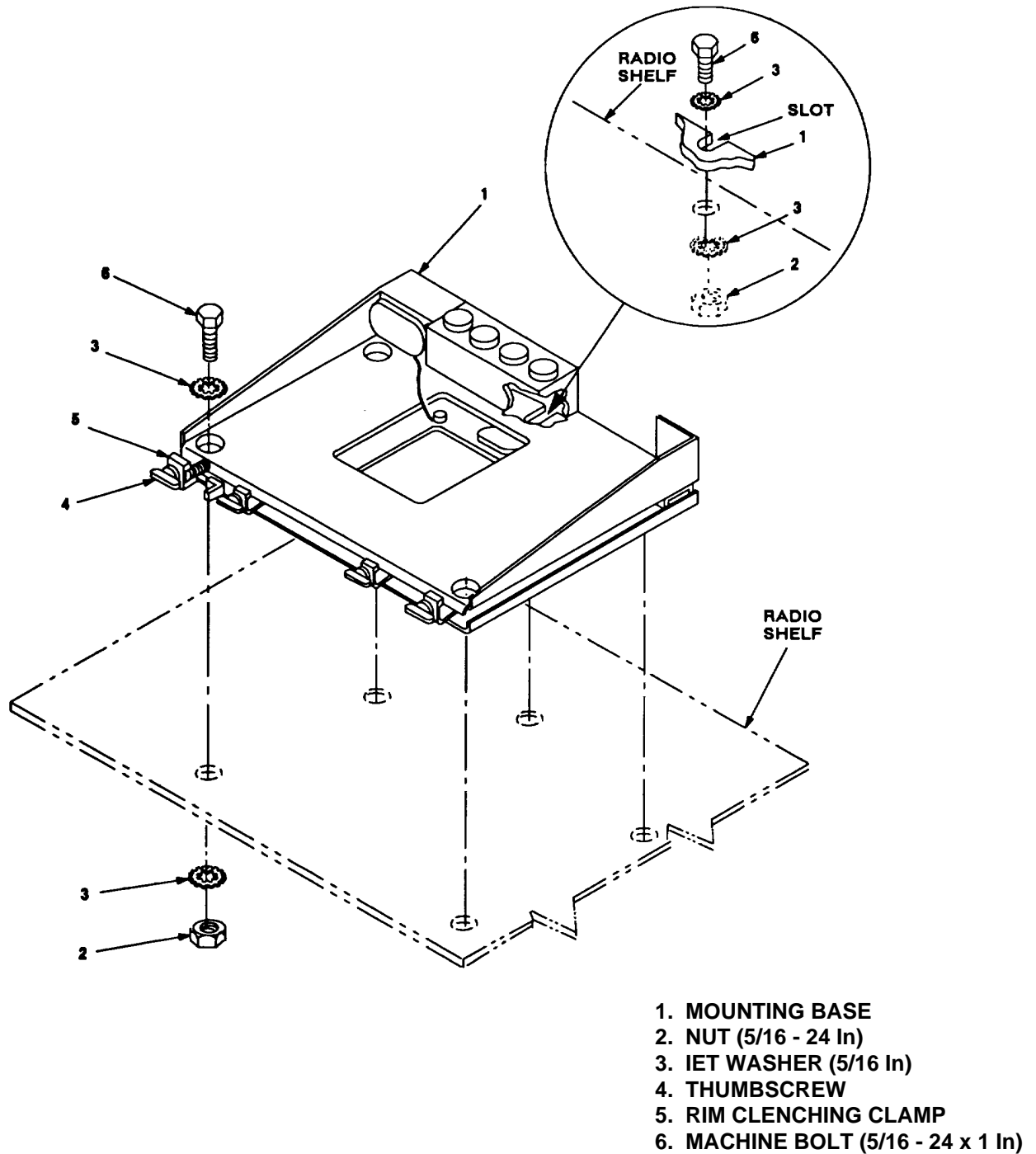
1. **MOUNTING BASE**
2. **NUT (5/16 - 24 In)**
3. **IET WASHER (5/16 In)**
4. **THUMBSCREW**
5. **RIM CLENCHING CLAMP**
6. **MACHINE BOLT (5/16 - 24 x 1 In)**

Figure 5-4. Mounting Base Installation

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

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 washer is to be placed.

ITEM	ACTION	REMARKS
a. Communications equipment rack.	If required, increase height of opening for lower right radio system to 9 1/8 in minimum. See figure 5-4.	
b. Mounting base (1).	Place on radio shelf over existing holes.	
c. Two outer thumbscrews (4).	Turn ccw until both sets of threads have cleared center of holes.	
d. Mounting base (1).	Aline four holes and rear slot with matching hole pattern in shelf.	
e. Five machine bolts (6), ten IET washers (3), and five nuts (2).	Install and secure to mounting base (1) and shelf.	Tools: 1/2 in socket and 1/2 in open/box wrench.
f. Two outer thumbscrews (4).	Tighten and secure to rim clenching clamps (5) and mounting base (1).	

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

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

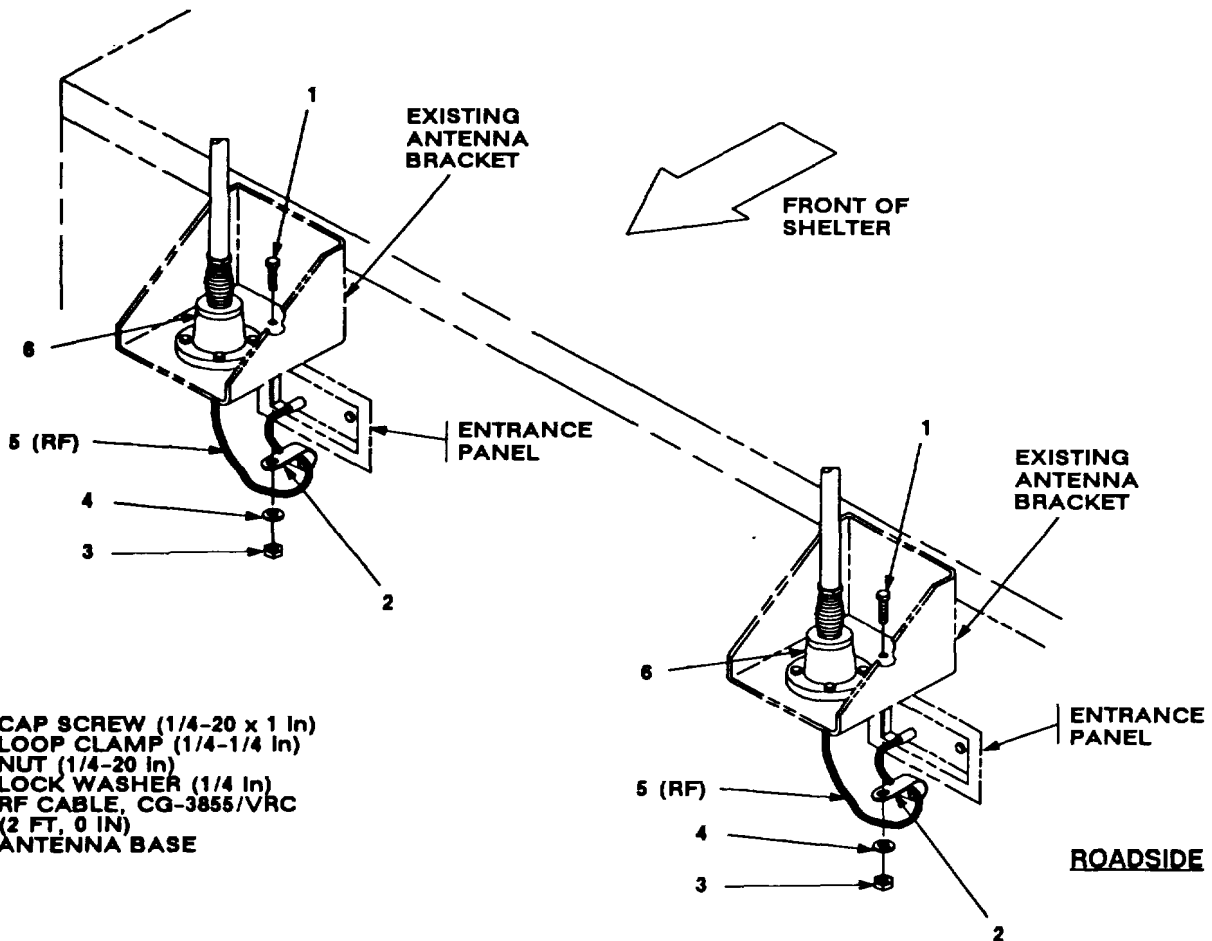| ITEM	ACTION	REMARKS
a. Two entrance panels.	Install existing connector covers on connectors J6 and J8. See figure 5-5 (1).	
b. Roadside RF cable (5) Connector P1.	Connect and secure to antenna base (6) Connector J1.	

CURBSIDE

1. CAP SCREW (1/4-20 x 1 In)
2. LOOP CLAMP (1/4-1/4 In)
3. NUT (1/4-20 In)
4. LOCK WASHER (1/4 In)
5. RF CABLE, CG-3855/VRC (2 FT, 0 IN)
6. ANTENNA BASE

Figure 5-5 (1). Cable Installation: Exterior RF Cabling

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5.3   Installation of Cables. Continued

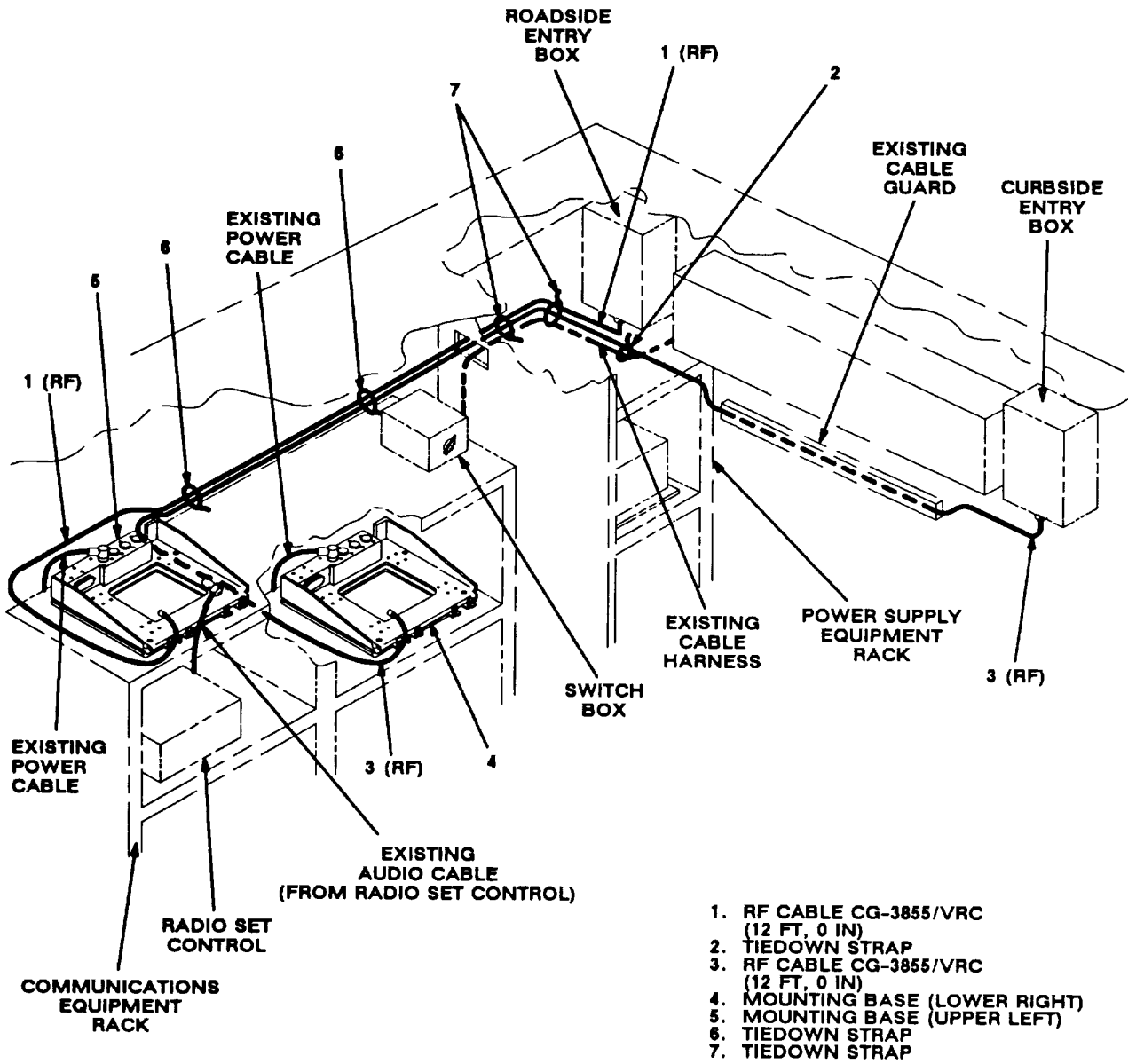| ITEM	ACTION	REMARKS
c. Roadside RF cable (5) connector P2.	Connect and secure to roadside entrance panel connector J9. See figure 5-5 (1).	
d. Curbside RF cable (5) connector P1.	Connect and secure to antenna base (6) connector J1.	
e. Curbside RF cable (5) connector P2.	Connect and secure to curbside entrance panel connector J7.	
f. Two loop clamps (2), two cap screws (1), two lock washers (4), and two nuts (3).	Wrap clamps around RF cables (5); then install and secure to mounting hole in each antenna bracket. See figure 5-5 (1) for locations.	Tools: 7/16 in socket and 7/16 in open/box wrench.
g. Existing cable guard on front wall.	Temporarily remove. See figure 5-5 (2).	
h. RF cable (3) connector P1.	Connect and secure to curbside entry box connector J17.	
i. RF cable (3).	Route along front wall to roadside entry box.	
j. Existing cable guard (removed in step f).	Position RF cable (3) inside; then reinstall to front wall.	
k. Tiedown strap (2).	Wrap around RF cable (3); then secure to existing cable harness on front wall. See figure 5-5 (2) for location(s).	
l. RF cable (1) connector P1.	Connect and secure to roadside entry box connector J19. See figure 5-5 (2).	
m. Two RF cables (1, 3).	Route through cable access hole to rear of communications equipment rack.	
n. Two tiedown straps (7).	Wrap around two RF cables (1, 3); then secure to existing cable harness in rear of power supply equipment rack. See figure 5-5 (2) for location(s).	

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5.3   Installation of Cables. Continued

Figure 5-5 (2). Cable Installation: Interior Cabling

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1. RF CABLE CG-3855/VRC
    (12 FT, 0 IN)
2. TIEDOWN STRAP
3. RF CABLE CG-3855/VRC
    (12 FT, 0 IN)
4. MOUNTING BASE (LOWER RIGHT)
5. MOUNTING BASE (UPPER LEFT)
6. TIEDOWN STRAP
7. TIEDOWN STRAP

5.3   Installation of Cables. Continued

ITEM	ACTION	REMARKS
o. RF cable (3).	Route along rear of communications equipment rack and down to mounting base (4). See figure 5-5 (2).	
p. RF cable (3) connector P2.	Position on top of mounting base (4).	
q. RF cable (1).	Route along rear edge of communications equipment rack and behind mounting base (5).	
r. RF cable (1) connector P2.	Position on top of mounting base (5).	
s. Two tiedown straps (6).	Wrap around two RF cables (1, 3); then secure to existing cable harness behind communications equipment rack. See figure 5-5 (2) for locations.	
t. Existing audio cable from switch box.	Position connector on top of mounting base (4). See figure 5-5 (2).	
u. Existing audio cable from radio set control.	Position connector on top of mounting base (5).	
v. Existing power cable	Connect and secure to mounting base (4) connector J1.	
w. Existing power cable	Connect and secure to mounting base (5) connector J1.	

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5.4   Installation of Loudspeaker, Permanent Magnet LD-454/U (speaker). Mounting location for speaker may be determined by the vehicle commander. Typical methods used for mounting the speaker are as follows

Method A. See figure 5-6 (1).

   a.   Determine speaker (3) location.

   b.   Drill 13/32 in diameter hole through
          mounting surface.

   c.   Insert speaker (3) stud through drilled hole;
          then secure with lock washer (2) and wing
          nut (1).

   1.   WING NUT (3/8-24 In)
   2.   LOCK WASHER *(3/18* In)
   3.   SPEAKER
   4.   CAP SCREW (1/4-20 x I In)
   5.   SPEAKER BRACKET
   6.   LOCK WASHER (1/4 In)
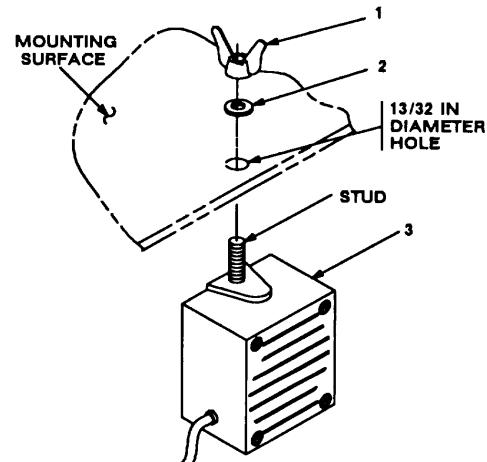   7.   NUT (114-20 In) Method B. See figure 5-
          6 (2).

Figure 5-6 (1). Speaker Installation - A

NOTE

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

   a.   Determine speaker (3) location.

   b.   Drill two 5/16 in diameter holes through
          mounting surface.

   c.   Install and secure two cap screws two lock
          washers (6) and two nuts to speaker bracket (5)
          and mounting surface.

   d.   Insert speaker (3) stud through speaker bracket
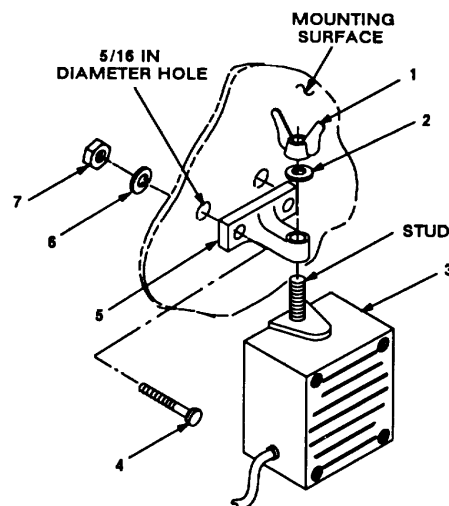   (5); then secure with lock washer (2) and wing
          nut (1).

Figure 5-6 (2). Speaker Installation - B

5.5 **Installation of MK-2499/VRC**. For Radio Set Ans/VRC-90m install MK-2499/VRC (TSEC/KY-57 security equipment) in the location shown in figure 5-1 (2). Use drilling dimensions shown in figure 5-7.
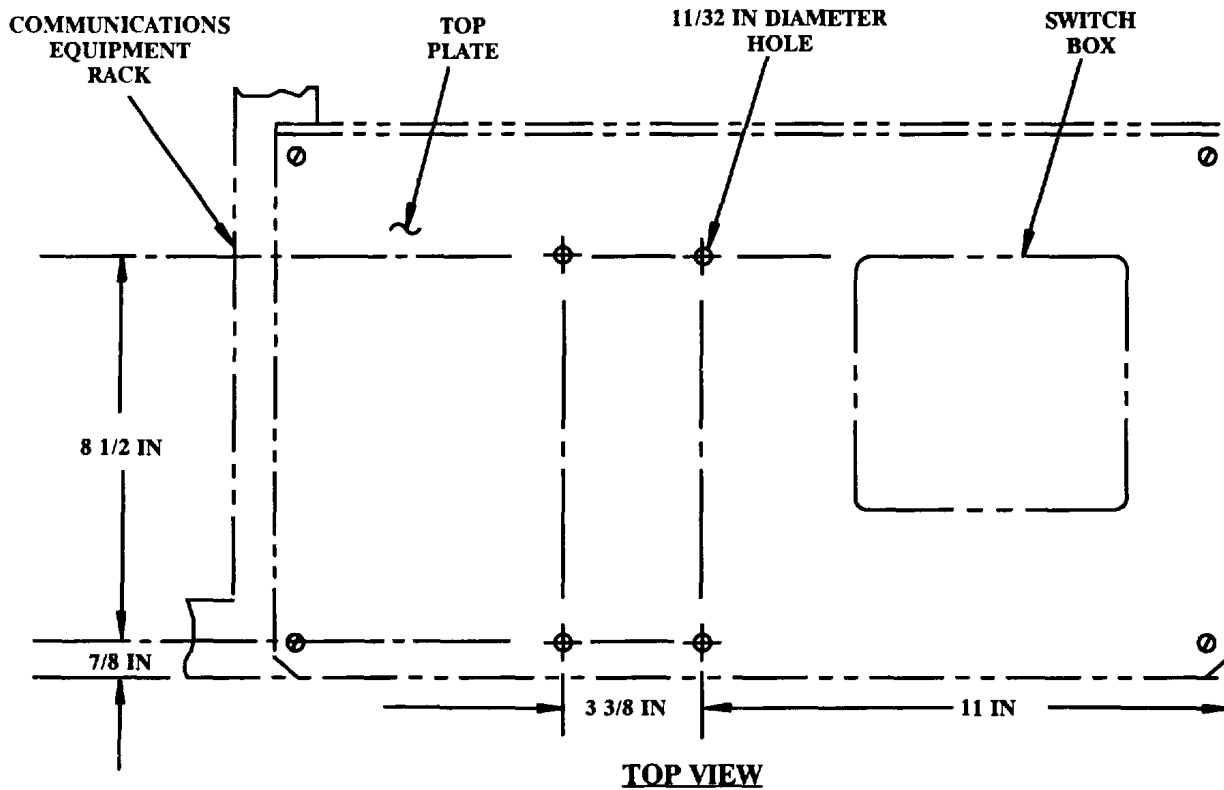

Figure 5-7. Drilling Pattern for MK-2499/VRC Installation

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

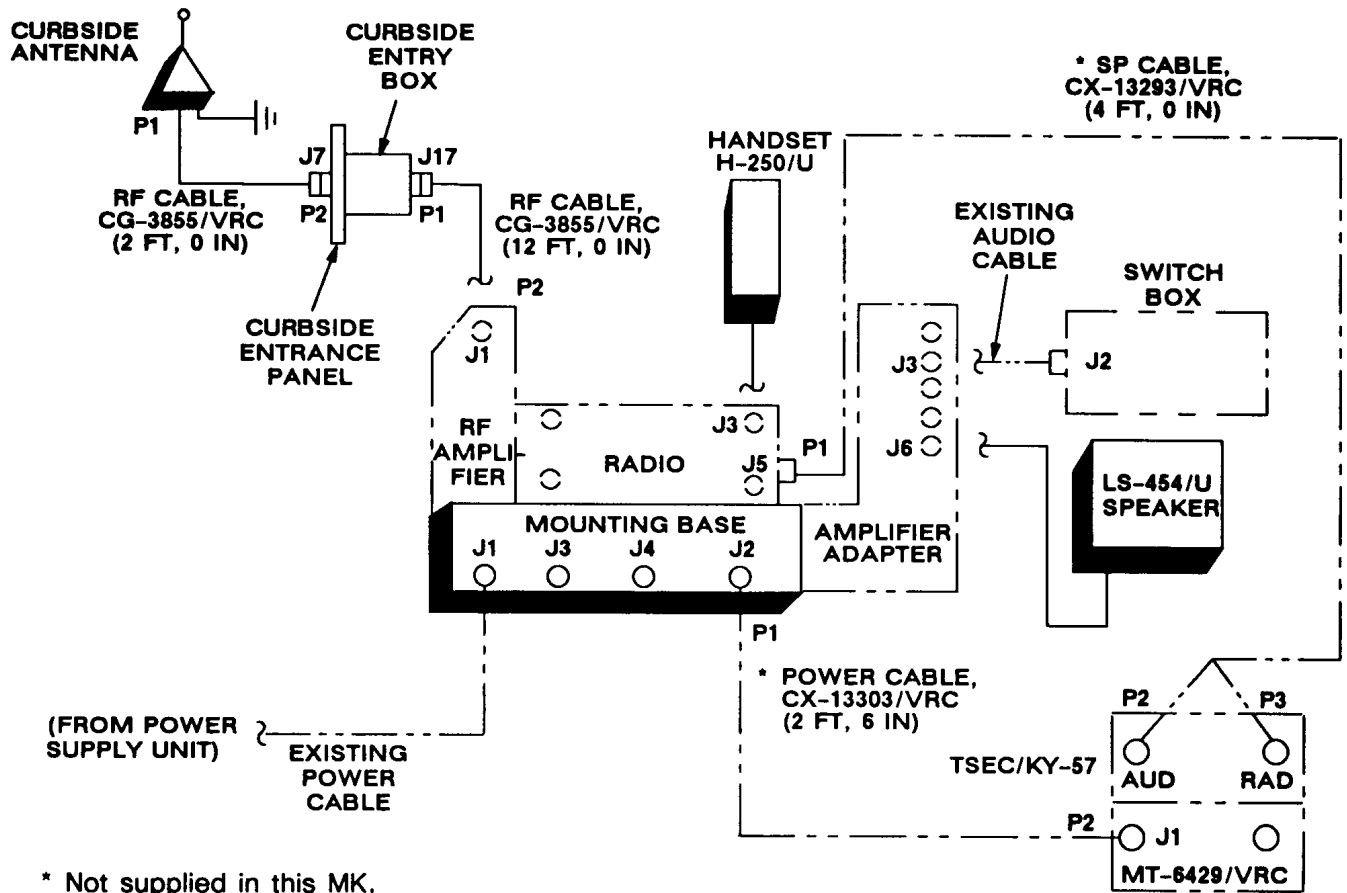| ITEM	ACTION	REMARKS
a. Equipment.	Check for secure mounting. Check for loose parts, connectors and mounting hardware.	
b. Cables.	Check for proper installation and connection of cables. See figure 5-8 for cable connections. Unused cables should be stowed in appropriate place inside the shelter.	
c. Protective covers.	Insure that all installed cables are covered when not in use or connected.	
d. 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) Check instructions.	
e. 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
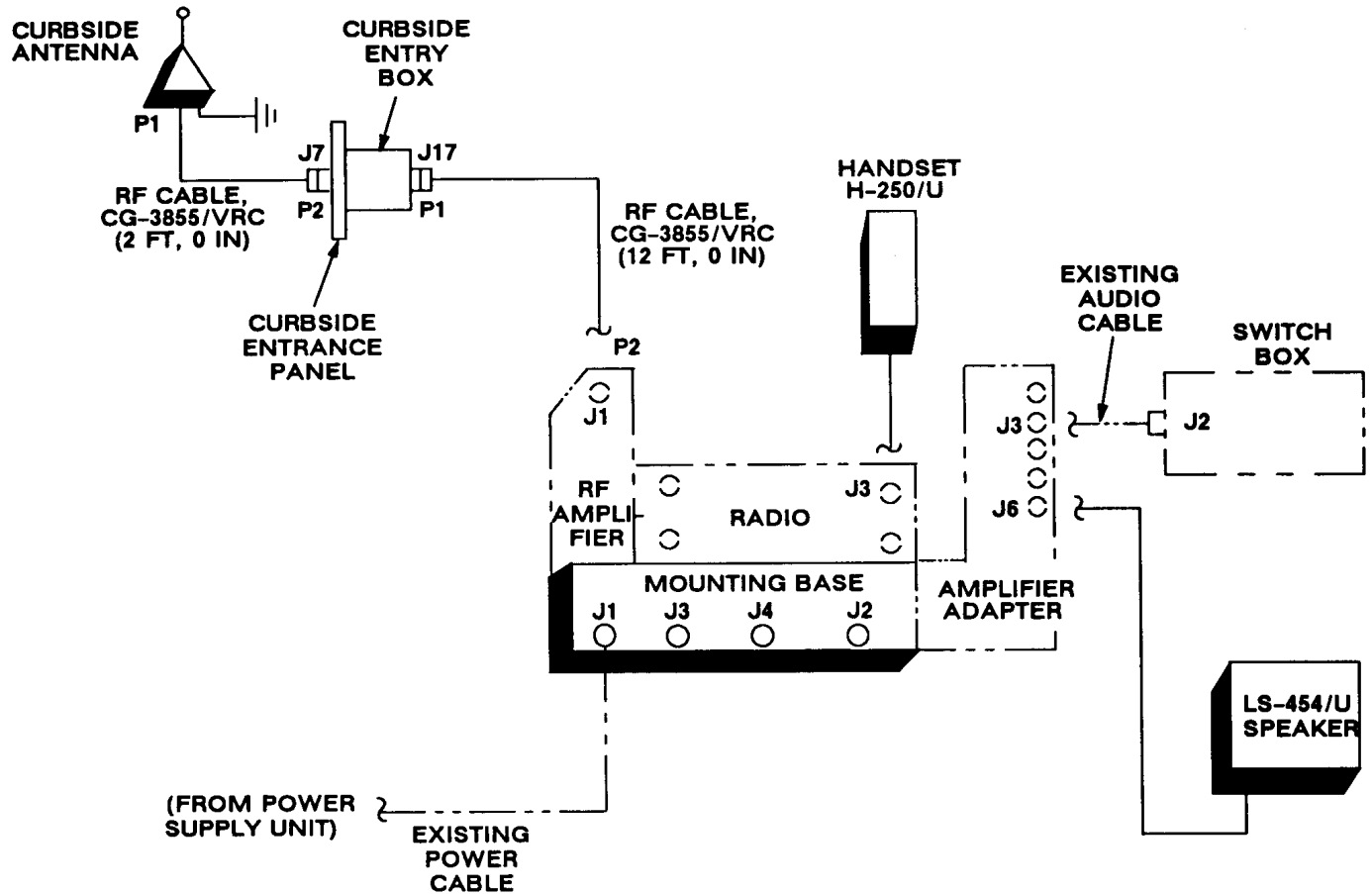
CABLE ASSEMBLY	FROM			TO		
	CABLE CONN.	UNIT	UNIT CONN.	CABLE CONN.	UNIT	UNIT CONN.
Existing power cable		Power supply unit			Mounting base	J1
CG–3855/VRC (12 FT, 0 IN)	P2	RF amplifier	J1	P1	Curbside entry box	J17
CG–3855/VRC (2 FT, 0 IN)	P1	Curbside antenna base	J1	P2	Curbside entrance panel	J7
Existing audio cable		Switch box	J2		Amplifier-adapter	J3
Handset cable		Handset			Radio	J3
Speaker cable		LS–454/U speaker			Amplifier-adapter	J6

Figure 5-8 (1). Cable Diagram: Radio Set AN/VRC-90A (Lower Right)
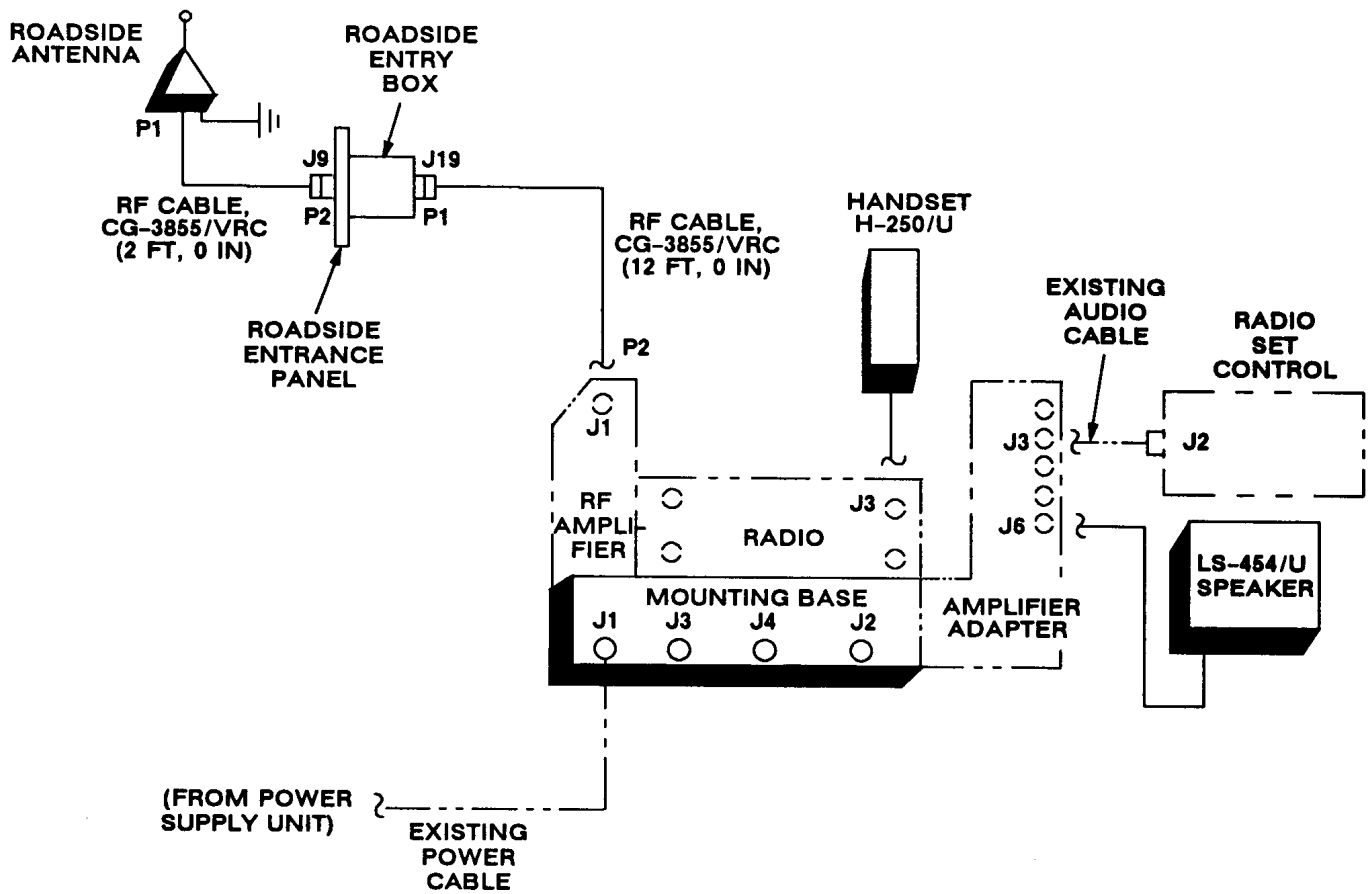
20

CABLE ASSEMBLY	FROM			TO		
	CABLE CONN.	UNIT	UNIT CONN.	CABLE CONN.	UNIT	UNIT CONN.
Existing power cable		Power supply unit			Mounting base	J1
CG-3855/VRC (12 FT, 0 IN)	P2	RF amplifier	J1	P1	Roadside entry box	J19
CG-3855/VRC (2 FT, 0 IN)	P1	Roadside antenna base	J1	P2	Roadside entrance panel	J9
Existing audio cable		Radio set control			Amplifier-adapter	J3
Handset cable		Handset			Radio	J3
Speaker cable		LS-454/U speaker			Amplifier adapter	J6

Figure 5-8 (2). Cable Diagram : Radio Set An/VRC-90 (Lower Right)

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* Not supplied in this MK.

CABLE ASSEMBLY	FROM			TO		
	CABLE CONN.	UNIT	UNIT CONN.	CABLE CONN.	UNIT	UNIT CONN.
Existing power cable		Power supply unit			Mounting base	J1
CG-3855/VRC (12 FT, 0 IN)	P2	RF amplifier	J1	P1	Curbside entry box	J17
* CX-13303/VRC (2 FT, 6 IN)	P1	Mounting base	J2	P2	MT-6429/VRC	J1
* CX-13293/VRC (4 FT, 0 IN)	P1	Radio	J5	P2 P3	TSEC/KY-57	AUD RAD
CG-3855/VRC (2 FT, 0 IN)	P1	Curbside antenna base	J1	P2	Curbside entrance panel	J7
Existing audio cable		Switch box	J2		Amplifier-adapter	J3
Handset cable		Handset			Radio	J3
Speaker cable		LS-454/U speaker			Amplifier-adapter	J6

Figure 5-8 (3). Cable Diagram : Radio Set An/VRC-90 (Lower Right)
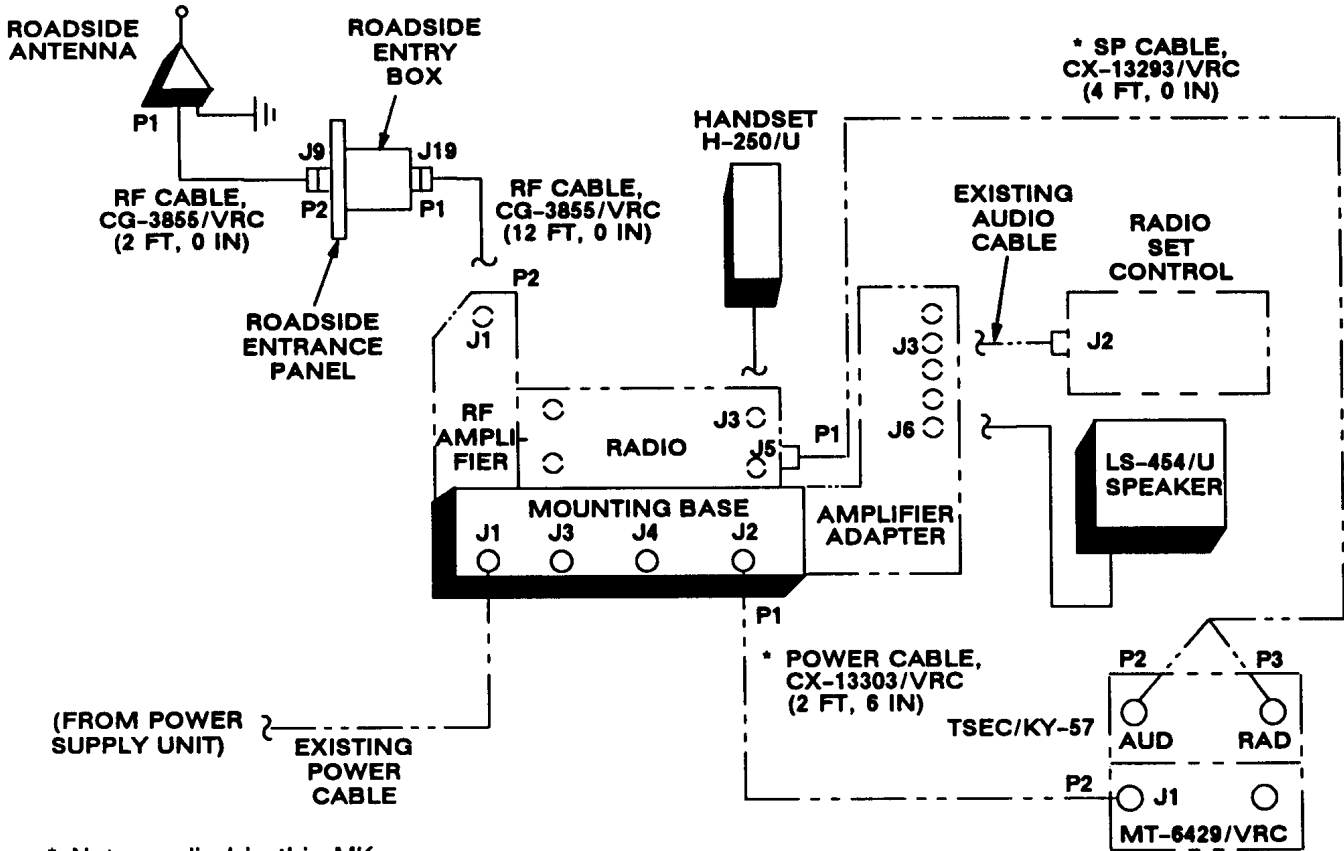
* Not supplied in this MK.

CABLE ASSEMBLY	FROM			TO		
	CABLE CONN.	UNIT	UNIT CONN.	CABLE CONN.	UNIT	UNIT CONN.
Existing power cable		Power supply unit			Mounting base	J1
CG-3855/VRC (12 FT, 0 IN)	P2	RF amplifier	J1	P1	Roadside entry box	J19
* CX-13303/VRC (2 FT, 6 IN)	P1	Mounting base	J2	P2	MT-6429/VRC	J1
* CX-13293/VRC (4 FT, 0 IN)	P1	Radio	J5	P2 P3	TSEC/KY-57	AUD RAD
CG-3855/VRC (2 FT, 0 IN)	P1	Roadside antenna base	J1	P2	Roadside entrance panel	J9
Existing audio cable		Radio set control			Amplifier-adapter	J3
Handset cable		Handset			Radio	J3
Speaker cable		LS-454/U speaker			Amplifier-adapter	J6

Figure 5-8 (2). Cable Diagram : Radio Set An/VRC-90 (Lower Right)

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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	Requisitioning, Receipt and Issuing System in UPDATE
DA Pam 25-30	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, Vol. 1)
TM 11-5820-890-20-2	Unit Maintenance Manual (ICOM Radio Sets, Vol. 2)
TM 11-5820-890-20-3	Unit Maintenance Manual, Handbook (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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