



INSTALLATION INSTRUCTIONS FOR  
INSTALLATION KIT  
ELECTRONIC EQUIPMENT MK-2396NRC  
(NSN 5895-01-320-6855) (EIC: N/A)  
TO PERMIT INSTALLATION OF RADIO SETS  
ANNRC-87/88/90 SERIES, ANNRC-89/91 SERIES OR ANNRC-92A  
IN A  
TANK, COMBAT, FULL TRACKED M551/A2

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HEADQUARTERS, DEPARTMENT OF THE ARMY

1 SEPTEMBER 1993

TECHNICAL BULLETIN  
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 WASHINGTON, D.C., 1 SEPTEMBER 1993

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**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 Kti, Electronic Equipment MK-2396N/VRC, commonly referred to as the Mounting Kit (MK). The MK shall be installed into the following type of vehicle(s):

- Tank, Combat, Full Tracked M551/A2

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 vehicles.
- This technical bulletin does not establish quantity or types of vehicles 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 vehicle and correct power is supplied. Refer to TM 11-5820-890-201 or TM 11-5820-890-204 for installation, Operational (OP) Check instructions, and required maintenance procedures. Refer to TM 11-5820890-20P for repair parts.

Included in the radio set AN/VRC87/88/90 Series, ANVRC-9/91 Series or ANNRC-92A are:

- Radio Set ANNRC-7/88/90 or ANIVRC-89/91 (for RT-1439NRC)
- Radio Set ANNRC-87A/88A A, IANNRC89A/91A or ANNRC-92A (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-2396NRC (MK) contains the items needed to mount Radio Set ANVRC87A8A/90A or ANNRC-9A /91A/92A in a Tank, Combat, Full Tracked M551/A2 (vehicle). If Radio Set ANNRC-92A is authorized, see Section 5.4 for Instructions to install Mounting Base MT-6353NRC. If Radio Set ANNRC-7/88 0 or ANNRC89/91 is 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 4.5 work hours is required. Typical vehicle 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 vehicle downtime.

ITEM	SECTION	TIME
Antenna, Vehicular AS-3900NRC	5.1	0.5
Mounting Base, Electrical Equipment MT-6352/VRC	5.2	0.5
Cables	5.4	1.0

**4. PREPARATION FOR INSTALLATION.**

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

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

**4.1.1 Items to be Removed.** Remove existing ANVRC-12 radio family installation 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 9-2320-289-20.

**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 4355.73AIAFR 40064/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 P4610.19DIDLAR 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 73511-2/DLAR 4140.55/NAVMATINST 4355.73AIAFR400-6/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 Consumable.**

**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.

Table 4-1. Parts Lst for Installation of Radio Set ANNRC-87/88/90 Series,  
AN/VRC89/91 Series or ANNRC92A

NSN	ITEM DESCRIPTION AND PART NUMBER	QUANTITY IN MK	SMR CODE	FIGURE ITEM NO.
5985-01-297-2971	Antenna, Vehicular AS-3900/VRC (A3017899-1)	2	PAOOF A	4-1, 3
5305-00-847-1159	Screw, Cap, Hexagon (3/8-16 x 1 3/4 in) MS35307-365 (Not Used)	8	PAOZZA	
5310-00-913-8881	Nut, Hexagon (3/8-16 in) MS51971-3 (Not Used)	8	PAOZZA	4-1, 1
5310-00-061-1258	Washer, Lock, Internal/External-Toothed (3/8 in) MS45904-76 (8 Not Used)	16	PAOZZA	
5310-00-889-2527	Washer, Lock, Internal/External Toothed (5/16 In) MS45904-72 (Not Used)	4	PAOZZA	4-1, 6
5306-00-225-9086	Bolt, Machine (5/16-24 x 5/8 in) MS90726-31 (Not Used)	2	PAOZZA	
5330-01-205-2864	Gasket (A3013655-1)	2	PAOZZA	4-1, 5
5975-01-188-8873	Mounting Base, Electrical Equipment MT-6352VRC (A3013367-1)	1	PAOOF A	
5306-00-225-9089	Screw, Cap, Hexagon (5/16-24 x 1 in) MS90726-34	5	PAOZZA	4-1, 8
5310-00-889-2527	Washer Lock, Internal/External-Toothed (5/16 In) MS45904-72 (5 Not Used)	10	PAOZZA	
5310-00-880-7746	Nut, Hexagon (5/16-24) MS51968-5 (Not Used)	5	PAOZZA	4-1, 7
5995-01-303-4591	Cable Assembly, Special Purpose, Electrical CX-13313NRC (2 FT, 7 IN) (A3018360-1)	1	PAOZZA	
5995-01-225-0506	Cable Assembly, Special Purpose, Electrical CX-13300NRC (8 FT, 0 IN) (A3014044-8)	2	PAOZZA	4-1, 7
5995-01-222-4207	Cable Assembly, Power Electrical CX-13301NRC (1 FT, 0 IN) (A3014036-1)	1	PAOZZA	
5095-01-219-7029	Cable Assembly, Radio Frequency CG-3855/VRC (5 FT, 0 IN) (A3014031-2)	1	PAOZZA	4-1, 4
5995-01-219-7034	Cable Assembly, Radio Frequency CG-3855/VRC (15 FT, 0 IN) (A3014031-7)	1	PAOZZA	
4020-01-341-8795	Fiber Rope Assembly, Single Leg (A3167672-1)	2	PAOZZA	4-1, 2
5330-01-205-2864	Gasket (A3013655-1)	1	PAOZZA	
	Adapter Antenna Base (A3186930-1)	1	XBOZZA	4-1, 4
	Bolt, Machine (3/8-24 x 5 1/4 in) MS9454-50	4		
	Bolt, Machine (3/8-24 x 1 3/4 in) MS9454-22	4		4-1, 8
5995-00-111-3208	Strap, Tie down, Electrical Components MS3367-5-9	10		
	Lead, Electrical (A3013552-4)	1		4-1, 7
5305-00-984-6210	Screw, Machine, Pan-Head (No. 10-24 x 1/2 in) MS35206-263	2		
5310-00-080-9786	Washer, Lock, Internal/External-Toothed (No. 10) MS45904-60	4		
	4			

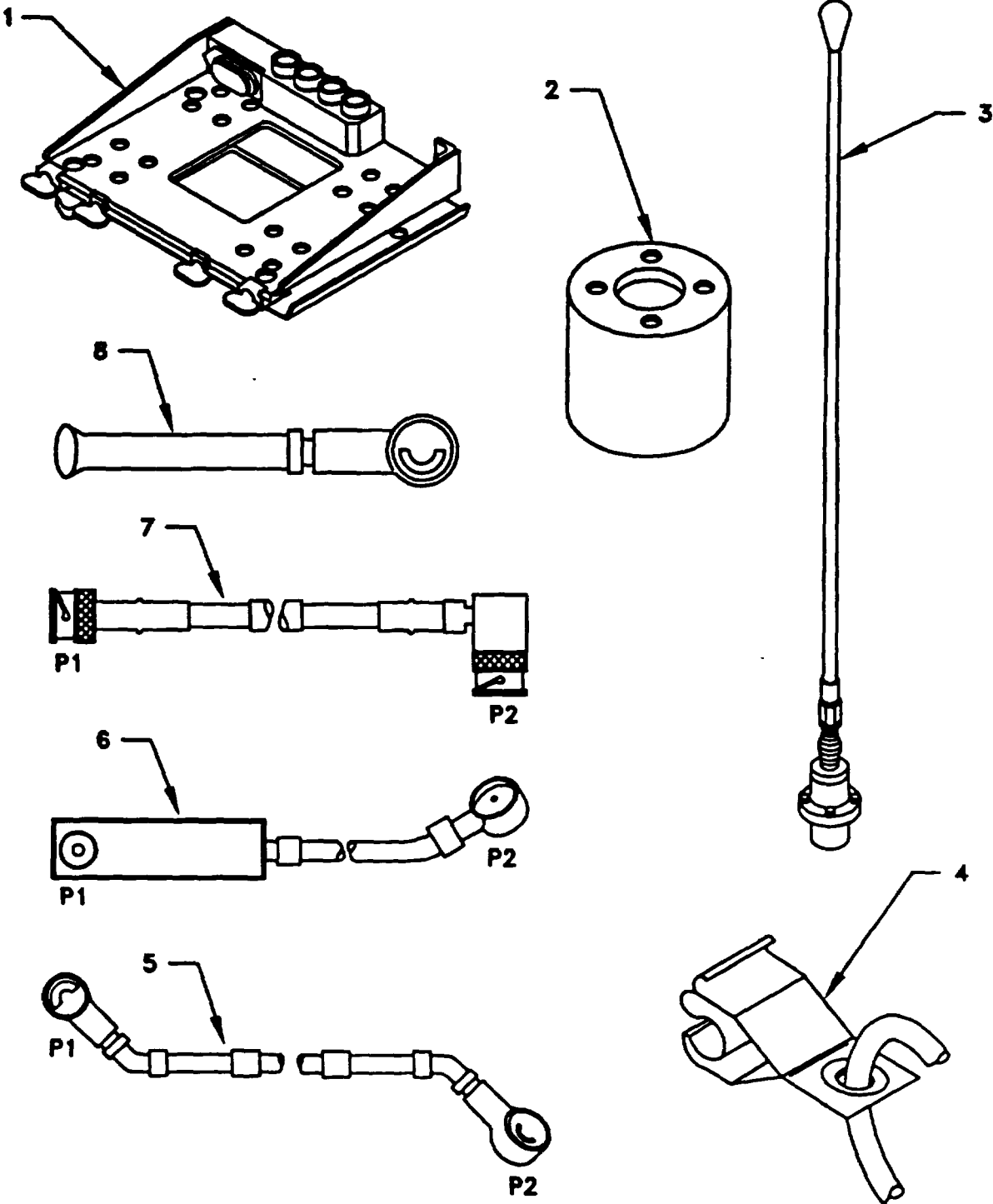


Figure 4-1. MK Illustrated Parts List 5



Table 4-2. Additional Items Required for Installation of Radio Set ANNRC-92A

NSN	ITEM DESCRIPTION AND PART NUMBER	QUANTITY IN MK	SMR CODE	FIGURE ITEM NO.
5975-01-235-1962	Mounting Base, Electrical Equipment MT-6353NRC (A3014053-1)	1	PAOFHA	4-2, 1
5306-00-225-9089	Bolt, Machine (5/16-24 x 1 in) MS90726-34	4	PAOZZA	
5310-00-880-7746	Nut, Hexagon (5/16-24 in) MS51968-5 (Not Used)	4	PAOZZA	
5310-00-889-2527	Washer, Lock Internal/External-Toothed (5/16 in) MS45905-72 (2 Not Used)	6	PAOZZA	
5310-00-081-4219	Washer, Flat (5/16 in) MS27183-12 (Not Used)	2	PAOZZA	
	Nut Strip (A3014064-1) (Not Used)	1	XBOZZA	4-2, 5
5975-00-111-3208	Strap, Tiedown, Electrical Components MS3367-5-9	4	PAOZZA	
5995-01-300-9324	Cable Assembly, Power, Electrical CX-13303NRC (4 FT, 6 IN) (A3014040-9)	1	PAOZZA	4-2, 4
5995-01-222-4209	Cable Assembly, Special Purpose, Electrical CX-13291NRC (3 FT, 0 IN) (A3014037-1)	1	PAOZZA	4-2, 2
5995-01-219-7025	Cable Assembly, Radio Frequency CG-3856NRC (5 FT, 0 IN) (A3014032-3)	1	PAOZZA	4-2, 3

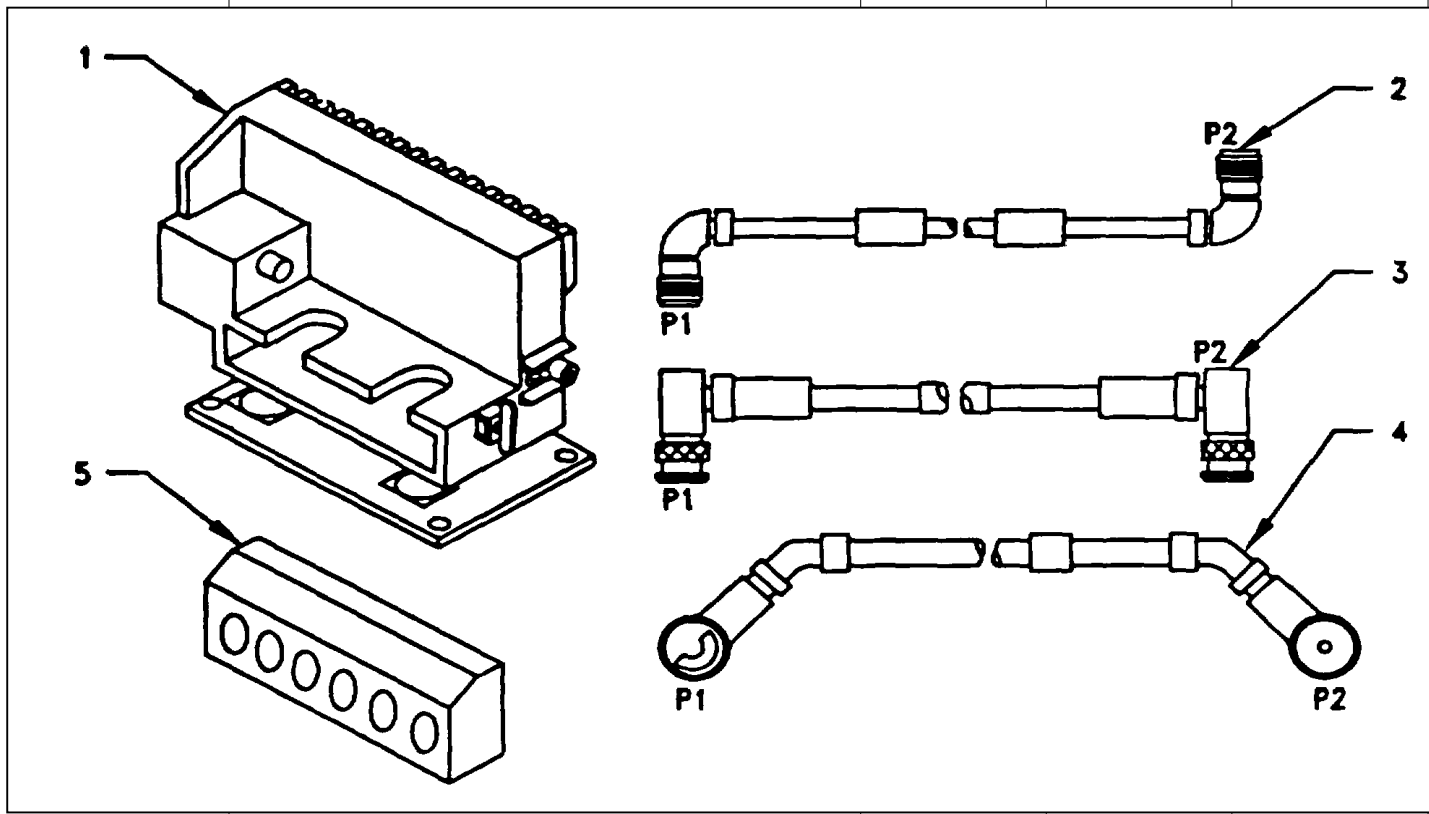


Figure 4-2. Additional Items Illustrated Parts List

Table 4-3. Additional Items Required for Installation When Using RT-1439NRC

NSN	ITEM DESCRIPTION AND PART NUMBER	QUANTITY IN MK	SMR CODE	FIGURE ITEM NO.
5995-01-222-4210	Cable Assembly, Special Purpose, Electrical CX-13293NRC (4 FT, 0 IN) (A3014034-1)	2	PAOZZA	4-3, 1
5995-01-225-1655	Cable Assembly, Power, Electrical CX-13303NRC (1 FT, 6 IN) (A3014040-6)	1	PAOZZA	4-3, 2
5995 01-226-482	Cable Assembly, Power, Electrical CX-13303NRC (2 FT, 6 IN) (A3014040-5)	1	PAOZZA	4-3, 3

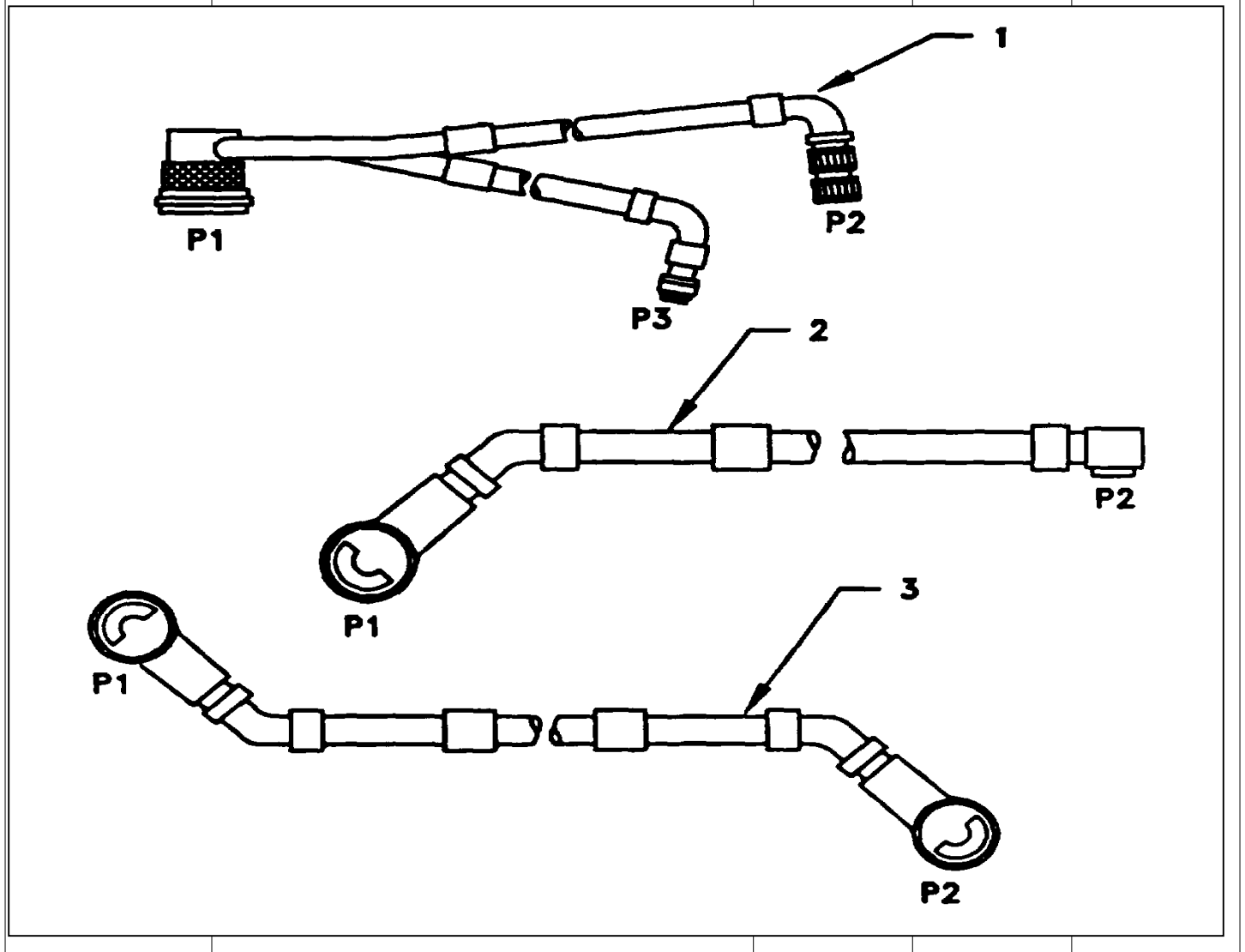


Figure 4-3. TSEC/KY-57 Illustrated Parts List 7

**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	511040-240-5943	1
Screw driver 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:		
	1/2 in 5120-00-228-9506	1
	9/16 in 5120-00-228-9507	1
Handle, Socket Wrench:	5120-00-240-5364	1
Socket:		
	1/2 in 5120-00-237-0977	1
	9/16 in 5120-00-227-6704	1

- Use radio issued with your vehicle if available.

**5. INSTALLATION PROCEDURES.**

This section describes where and how to install MK items in the vehicle. 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-92A is authorized, see Section 5.4 for instructions to Install Mounting Base MT-6353/RC. If Radio Set ANNRC-87/88/90 or ANNRC-89/91 is to be installed, communications security equipment (TSEC/KY-57) will need to be installed also; see Section 5.5 for information.

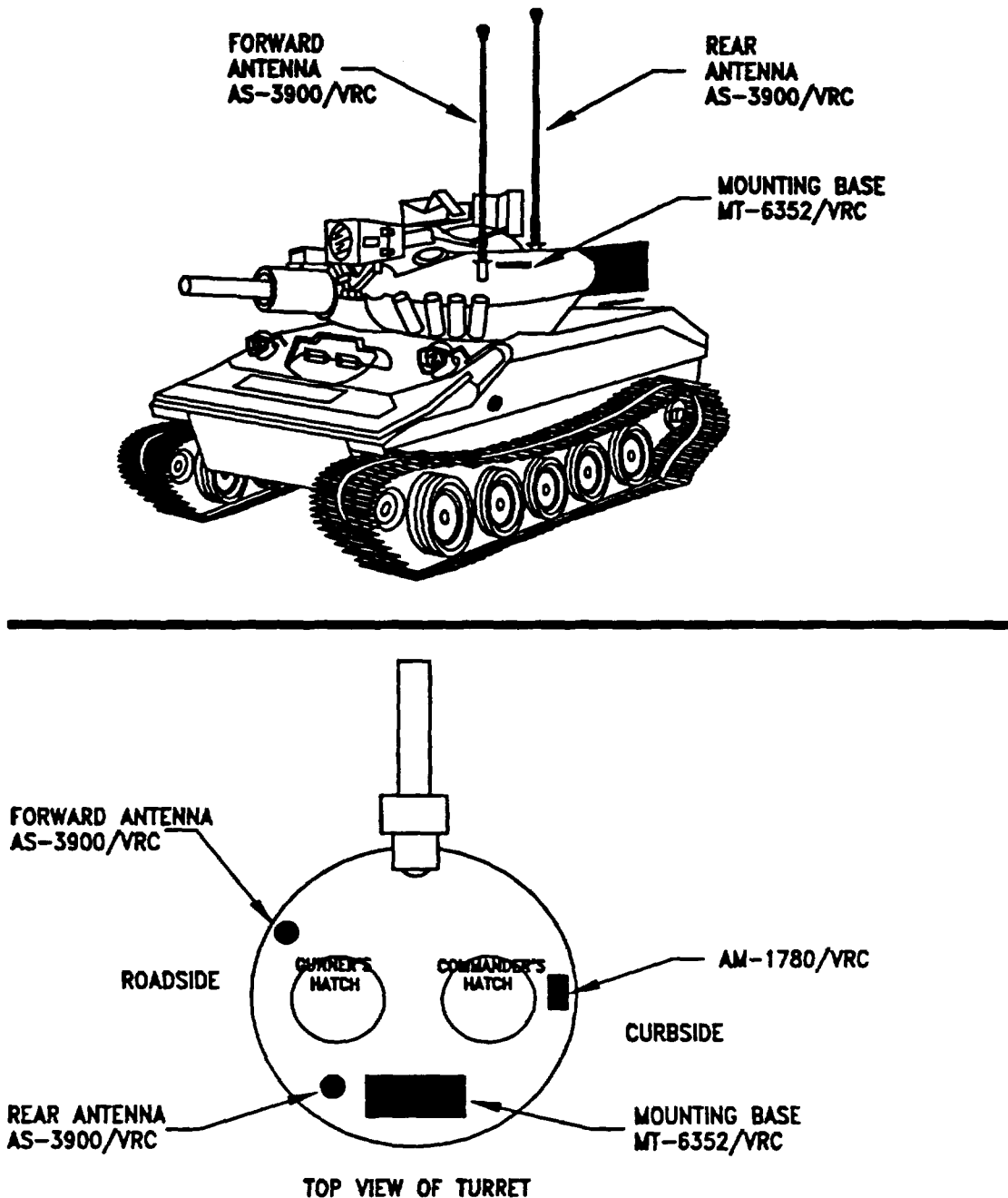


Figure 5-1(1). MK and Radio Installation: MK Equipment Locations

5. INSTALLATION PROCEDURES. Continued.

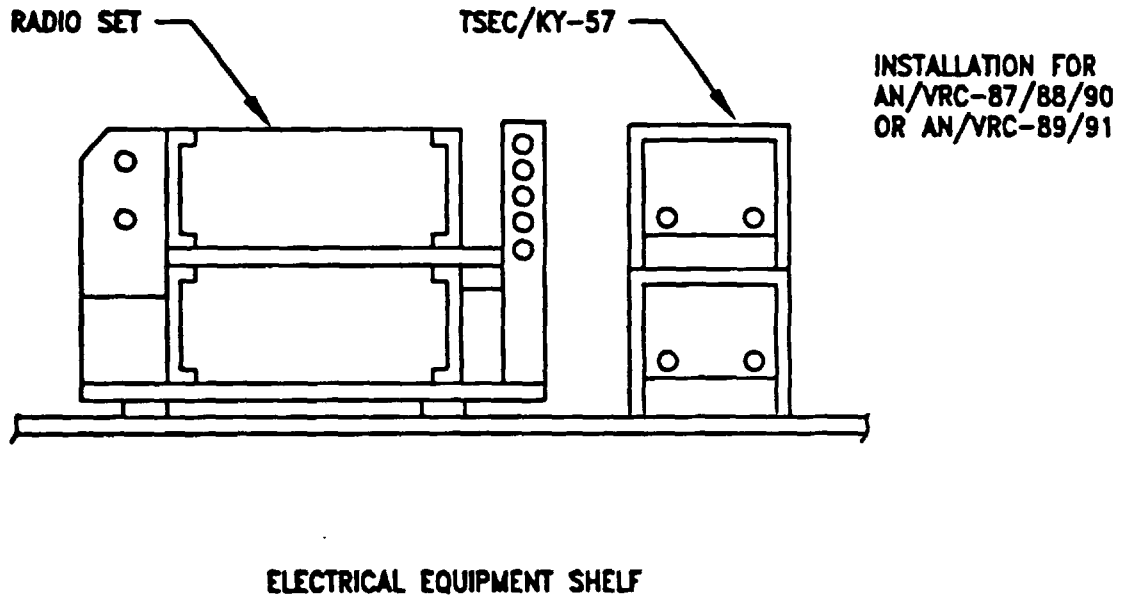
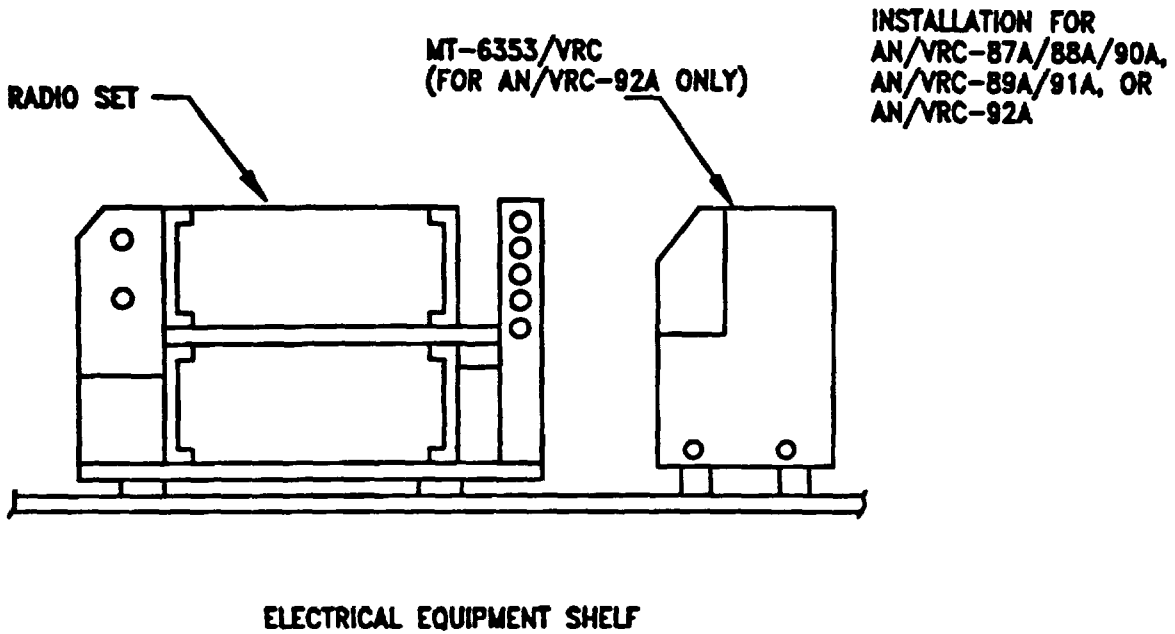


Figure 5-1(2). MK and Radio Installation: Radio Equipment Locations

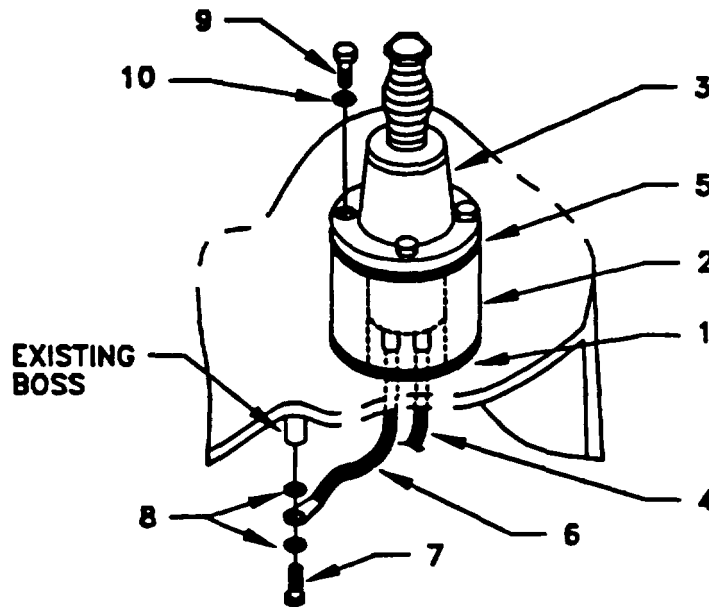
## 5.1 Installation of Antenna, Vehicular AS-3900/VRC (antenna).

**5.1.1 Installation of Forward Antenna Base.** Use the following procedures to install the forward antenna base. See Figure 5-1(1) for location.

ITEM	ACTION	REMARKS
<b>NOTE</b>		
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. Existing port cover.	Remove. See Figure 5-1(1) for location.	
b. Gasket (1).	Place on antenna port and align mounting holes.	
c. Antenna adapter (2)	Place on gasket (1) and align over mounting holes.	
d. Antenna base ground strap.	Remove from antenna base (3) and discard.	Tools: No. 2 Phillips screwdriver.
e. RF cable (4) connector P1.	Remove and retain the bottom two Mounting bolts securing the existing electrical equipment box blocking the interior antenna port and loosen the top two mounting bolts. Route RF cable (4) through the antenna port from the Inside and connect and secure to antenna base (3) connector J1.	Tools: 1/2 in socket.
f. Gasket (5).	Place on antenna adapter (2) and align over mounting holes.	
g. Lead, electrical (6).	Install and secure to antenna base (3). Route down through antenna adapter (2).	Tools: No. 2 Phillips screwdriver.
h. Antenna base (3).	Place on gasket (5) and align mounting holes.	
i. Lead, electrical (6), machine screw (7) and two internal/external-toothed (IET) washers (8).	Install and secure to existing boss. See Figure 5-2(1).	Tools: 1/2 in open box wrench.

## 5.1.1 Installation of Forward Antenna Base Continued.

ITEM	ACTION	REMARKS
j. Four machine bolts (9) and four IET washers (10).	Install and secure antenna base (3) and antenna adapter (2) to vehicle.	Tools: 9/16 in open/box wrench.
k. Existing electrical equipment box.	Reinstall the two mounting bolts removed in step e. Secure all four bolts for the electrical equipment box.	Tools: 1/2in socket



1. GASKET
2. ADAPTER, ANTENNA
3. ANTENNA BASE
4. RF CABLE CG4855NRC (15 FT, 0 IN)
5. GASKET (P/O ANTENNA)
6. LEAD, ELECTRICAL
7. MACHINE SCREW (NO. 10.24 X 112 IN)
8. IET WASHER (NO. 10)
9. MACHINE BOLT (3/8-24 X 5 1/4 IN)
10. IET WASHER (3 1/8 IN)

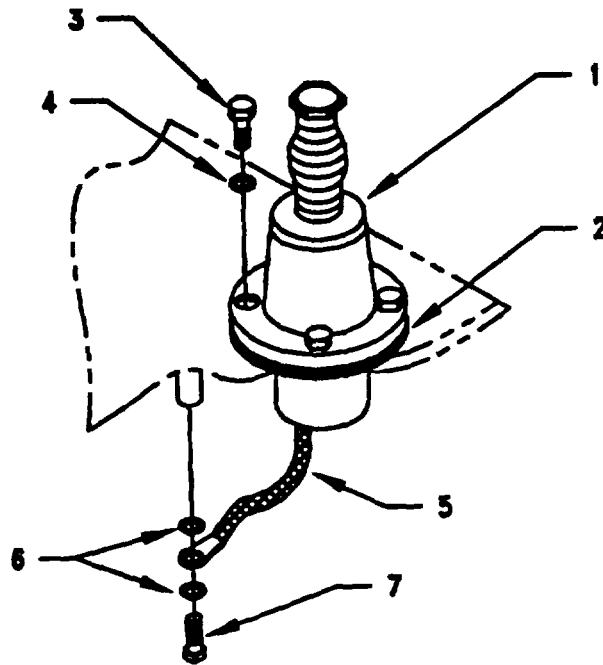
Figure 5-2(1). Forward Antenna Base Installation

**5.1.2 Installation of Rear Antenna Base.** Use the following procedures to install the rear antenna base. See Figure 5-1(1) for location.

ITEM	ACTION	REMARKS
<b>NOTE</b>		
Apply a thin cot 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. Existing port cover and gasket	Remove. See Figure 5-1(1) for location.	
b. Gasket (2).	Place on antenna port and align mounting holes. See Figure 5-2(2).	
c. Antenna base (1).	Place on top of gasket (2) and align mounting holes. See Figure 5-2(2).	
d. Four machine bolts (3) and four internal external-toothed (IET) washers (4).	Install and secure antenna base (1) to vehicle. See Figure 5-2(2).	Tools: 9/16 in open/box wrench.
e. Ground strap (5), two IET washers (6) and machine screw (7).	Install to tapped hole in existing boss. See Figure 5-2(2).	Tools: 1/2 in open/box wrench.



## 5.1.2 Installation of Rear Antenna Base. Continued

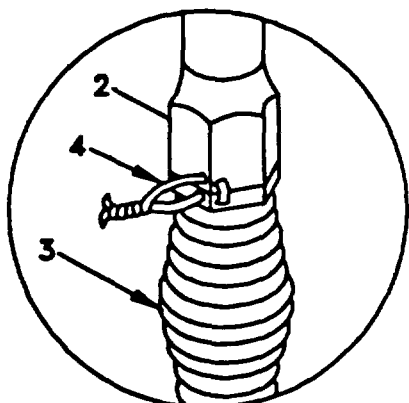
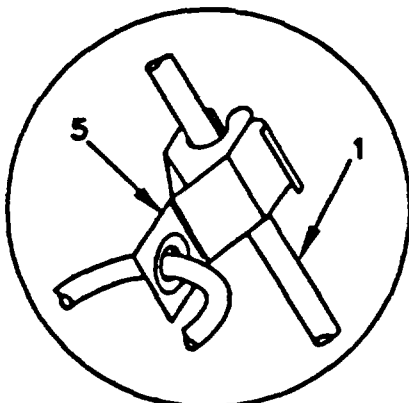
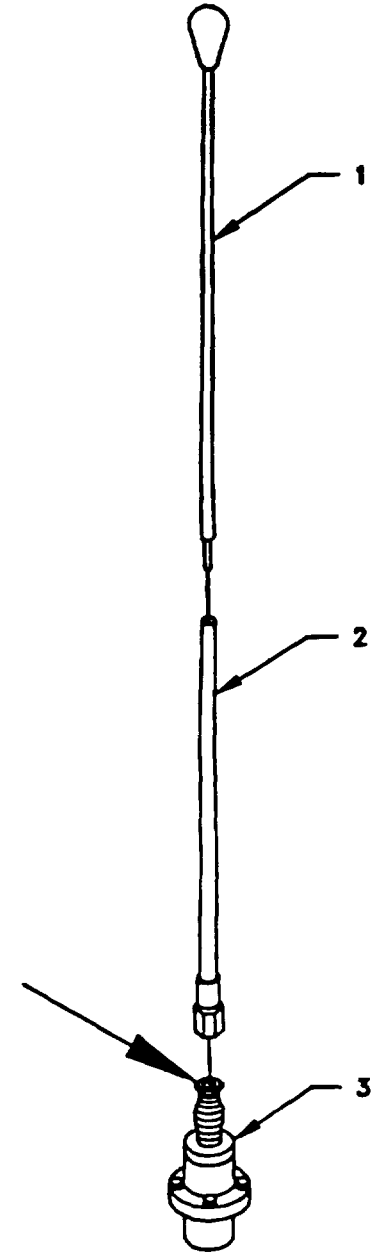


1. ANTENNA BASE
2. GASKET
3. MACHINE BOLT (3/824 X 1 3/4 IN)
4. IET WASHER (3/8 IN)
5. GROUND STRAP (P/O ANTENNA)
6. IET WASHER (NO. 10)
7. MACHINE SCREW (NO. 10-24 X 1/2 IN)

Figure 5-2(2). Rear Antenna Base Installation

**5.1.3 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 5-2(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 5-2(3), Detail A.	
	Cut and remove excess 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 5-2(3), Detail B.	



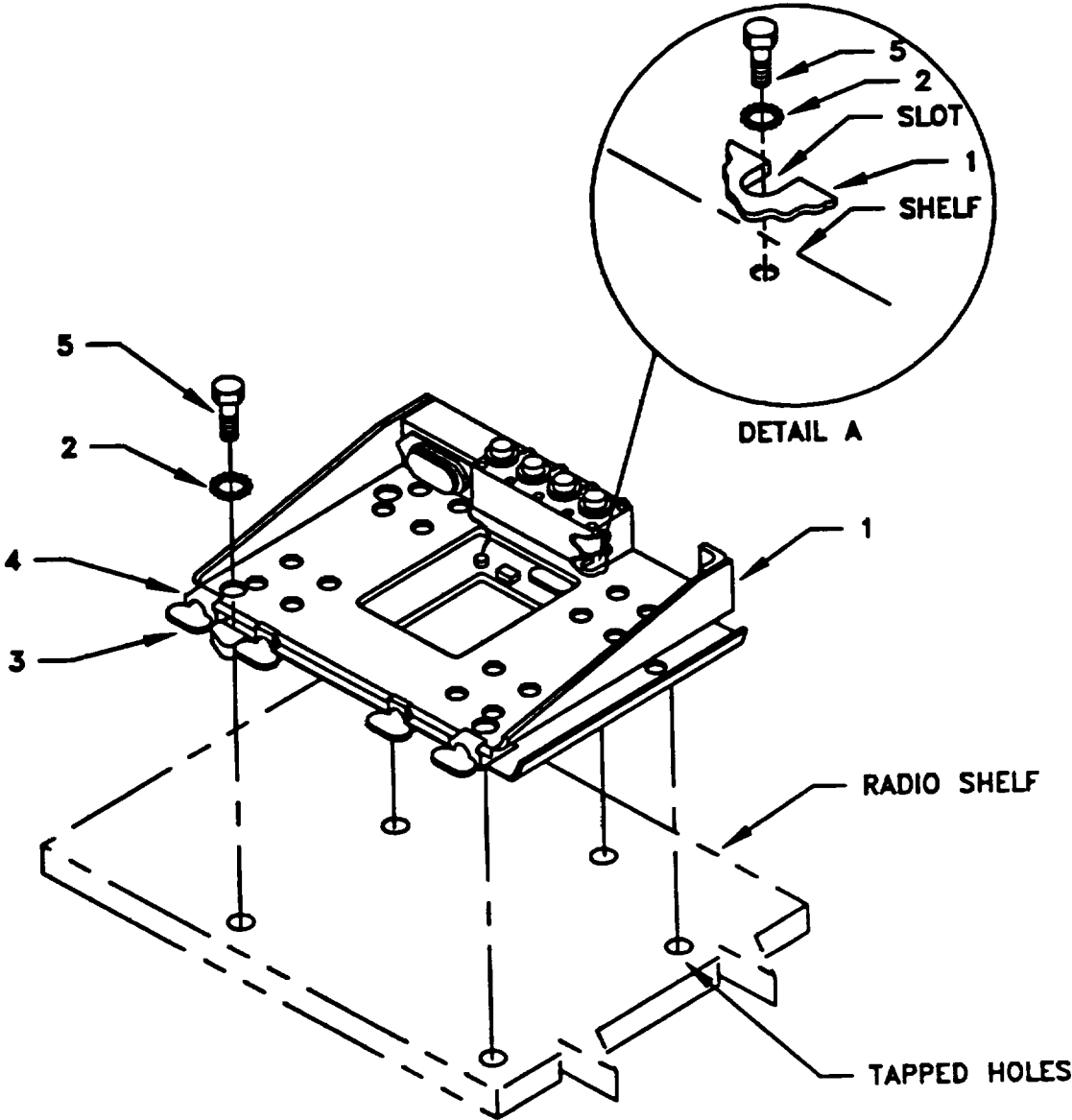
- 1. ANTENNA ELEMENT (UPPER)
- 2. ANTENNA ELEMENT (LOWER)
- 3. ANTENNA BASE
- 4. LOCK WIRE
- 5. FIBER ROPE ASSEMBLY

Figure 5-2(3). Top Antenna Assembly Installation

**5.2** Installation of Mounting Base, Electrical Equipment MT 6352/VRC (mounting base). Remove and retain attaching bag of 516 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
<b>NOTE</b>		
Apply a thin coat of adhesive-sealant to both sides of each internal/external-toothed (IET) washer before it is installed, and to the area of contact where IET washer is to be placed		
a. Mounting base (1).	Place on radio shelf See Figure 5-3.	
b. Two outer thumbscrews (3).	Turn ccw until both sets of threads have cleared center of holes. See Figure 5-3.	
c. Mounting base (1).	Align four holes and rear slot with matching bin hole pattern in radio shelf.	
d. Five machine bolts (5) and five IET washers (2).	Install and secure to mounting base (1) and shelf.	Tools: 1/2 in socket.
e. Two outer thumbscrews (3).	Tighten and secure to rim clenching clamps (4) and mounting base (1).	

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



- 1. MOUNTING BASE
- 2. IET WASHER (5/16 IN)
- 3. THUMBSCREW
- 4. RIM CLENCHING CLAMP
- 5. MACHINE BOLT (5/16-24 X 1 IN)

Figure 5-3. Mounting Base Installation

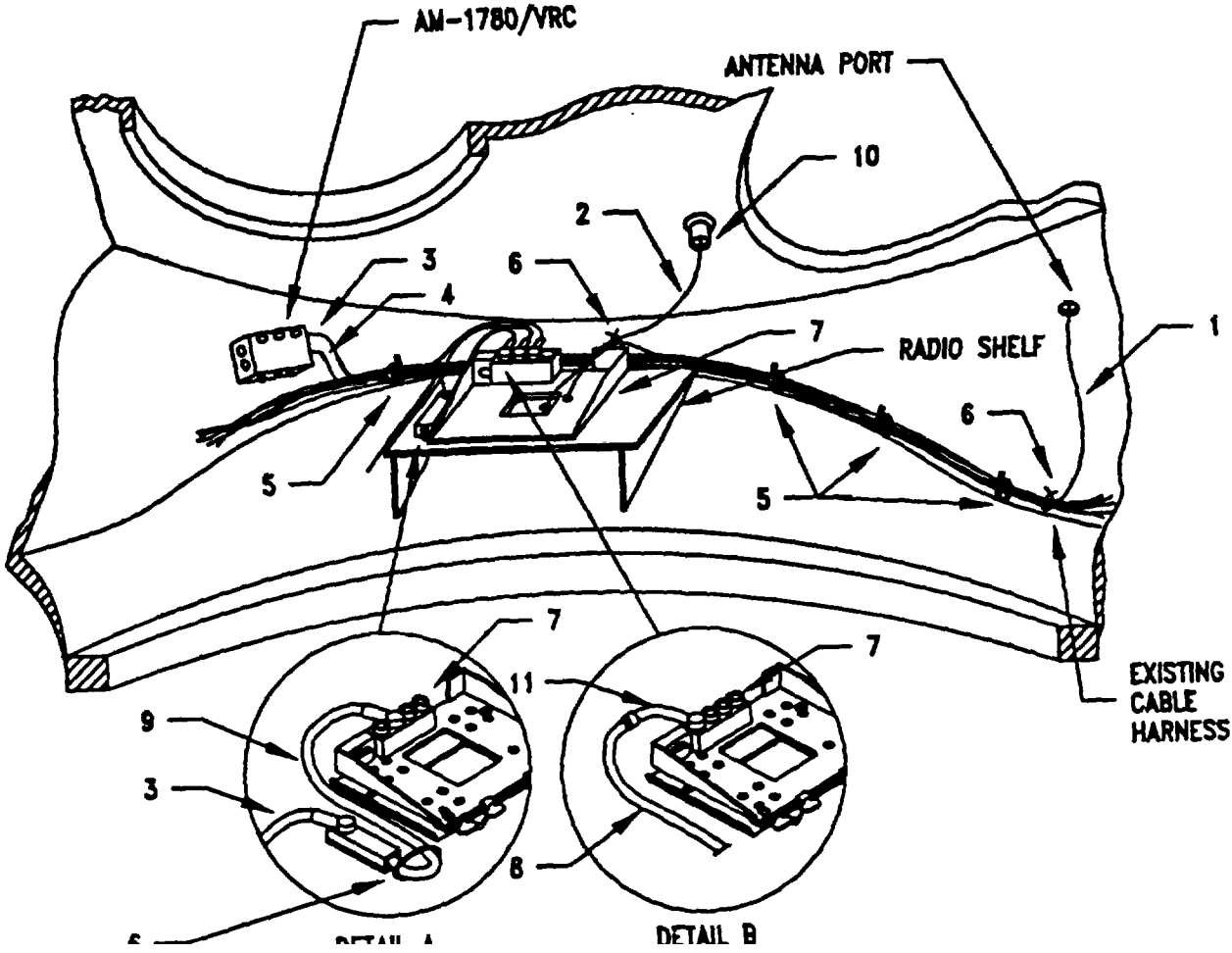
**5.3 Installation of Cable.** To accomplish the installation, leave loop clamps and tiedown straps loose enough to adjust cable slack and allow easy adjustment of equipment. When installation is complete, tighten and secure all clamps and tiedown straps.

**WARNING**

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

ITEM	ACTION	REMARKS
a. RF cable (1).	Route from antenna port along existing cable harness to radio shelf using existing plastic damps. See Figure 5-4.	
b. Tiedown strap (6).	Wrap around RF cable (1) and install loosely to existing cable harness. See Figure 5-4 for location.	
c. RF cable (2) connector P1.	Connect and secure to antenna base (10) connector J1.	
d. RF cable (2).	Route down to radio shell.	
e. Tiedown strap (6).	Wrap around RF cables (1, 2) and install loosely to existing cable harness. See Figure 5-4 for location.	
f. SP cable (4) connector P1.	Connect and secure to AM-1780NRC connector J503.	
g. SP cable (3) connector P1.	Connect and secure to AM-1780NRC connector J501.	
h. SP cables (3, 4).	Route along turret wall behind equipment and position near radio shell using existing plastic camps.	
i. SP cable (4) connector P2.	Connect and secure to mounting base (7) connector J4.	
j. SP cable (3) connector P2.	Connect and secure to SP cable (9) connector P1. See Figure 5-4, Detail A.	
k. SP cable (9) connector P2.	Connect and secure to mounting base (10) connector J3.	
l. All tiedown straps previously installed,	Tightly secure after cable slack has been adjusted. See Figure 5-4 for locations.	
m. Existing power cable (8) connector P2.	Connect and secure to power cable (11) connector P1. See Figure 5-4, Detail B.	
n. Power cable (11) connector P2.	Connect and secure to mounting base (7) connector J1.	

5.3 Installation of Cables. Continued



- 1. RF CABLE CG-3B55NRC (15 FT, 0 IN)
- 2. RF CABLE, CG3855NRC (5 FT, 0 IN)
- 3. SP CABLE, CX-13300NRC (8 FT, 0 IN)
- 4. SP CABLE, CX13300/VRC (8 FT, 0 IN)
- 5. EXISTING PLASTIC CLAMPS
- 6. TIEDOWN STRAP
- 7. MOUNTING BASE
- B. EXISTING POWER CABLE
- 9. SP CABLE, CX-13313/RC (2 FT, 7 IN)
- 10. ANTENNA BASE (REAR)
- 11. POWER CABLE, CX-13301NRC (1 FT, 0 IN)

Figure 5-4. Cable Installation

5.4 Installation of Mounting Base, Electrical Equipment MT-633NRC. If radio set ANNRC-92A is authorized, use the following instructions to install MT-6353NRC mounting base in the location shown in Figure 5-1(2). Refer to section 5.6 for connection of cables.

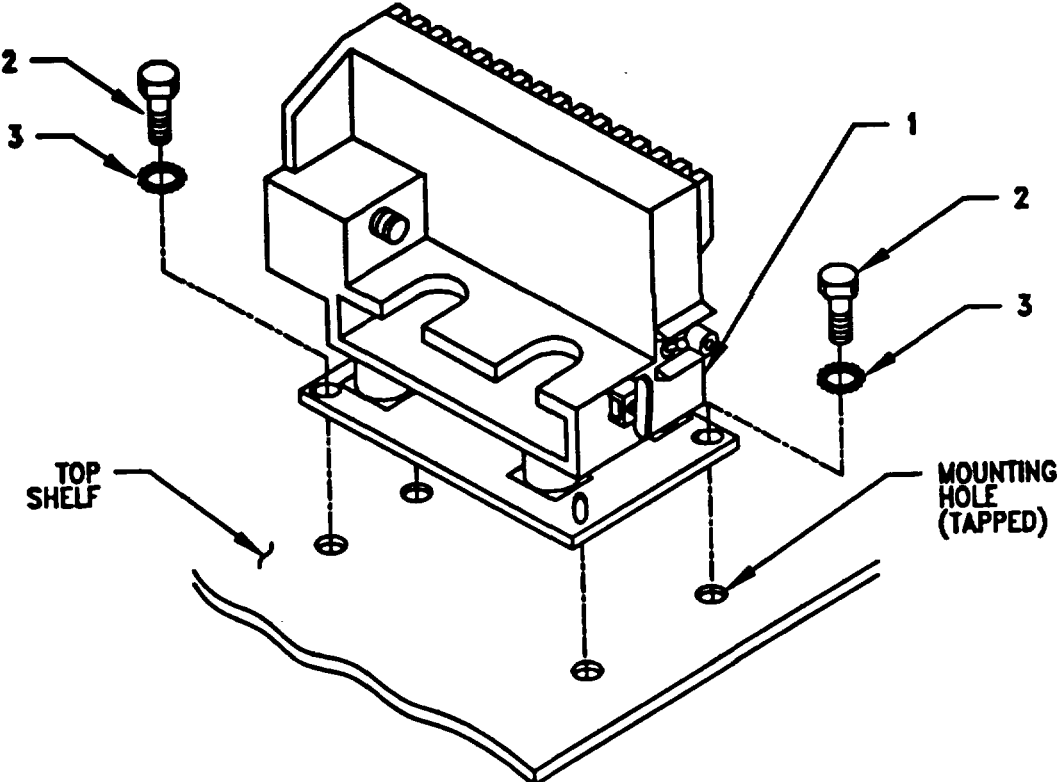
ITEM	ACTION	REMARKS
------	--------	---------

#### 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. Before proceeding, connect and secure CX-13291/VRC control cable and CX-1 3303NRC power cable to MT-6353/VRC mounting base. (Refer to Section 5-6, step b.)

- |   |  |                       |
|---|--|-----------------------|
| a MT-6353/VRC mounting base (1).                  | Place on top shelf of radio rack over mounting holes. Align front holes and rear slots with matching hole pattern in shelf. See Figure -5. |                       |
| b. Two machine bolts (2) and two IET washers (3). | Install and secure to rear slots in mounting base (1) and shell.   | Tools: 1/2 in socket. |
| c. Two machine bolts (2) and two IET washers (3). | Install and secure to front holes in mounting base (1) and shelf.  | Tools: 1/2 in socket. |

5.4 Installation of Mounting Base, Electrical Equipment MT-6353/VRC. Continued



- 1. MOUNTING BASE
- 2. MACHINE BOLT (56-24 X 1 IN)
- 3. IET WASHER (5116 IN)

Figure 5-5. MT.6353NRC Mounting Base Installation: Radio Rack

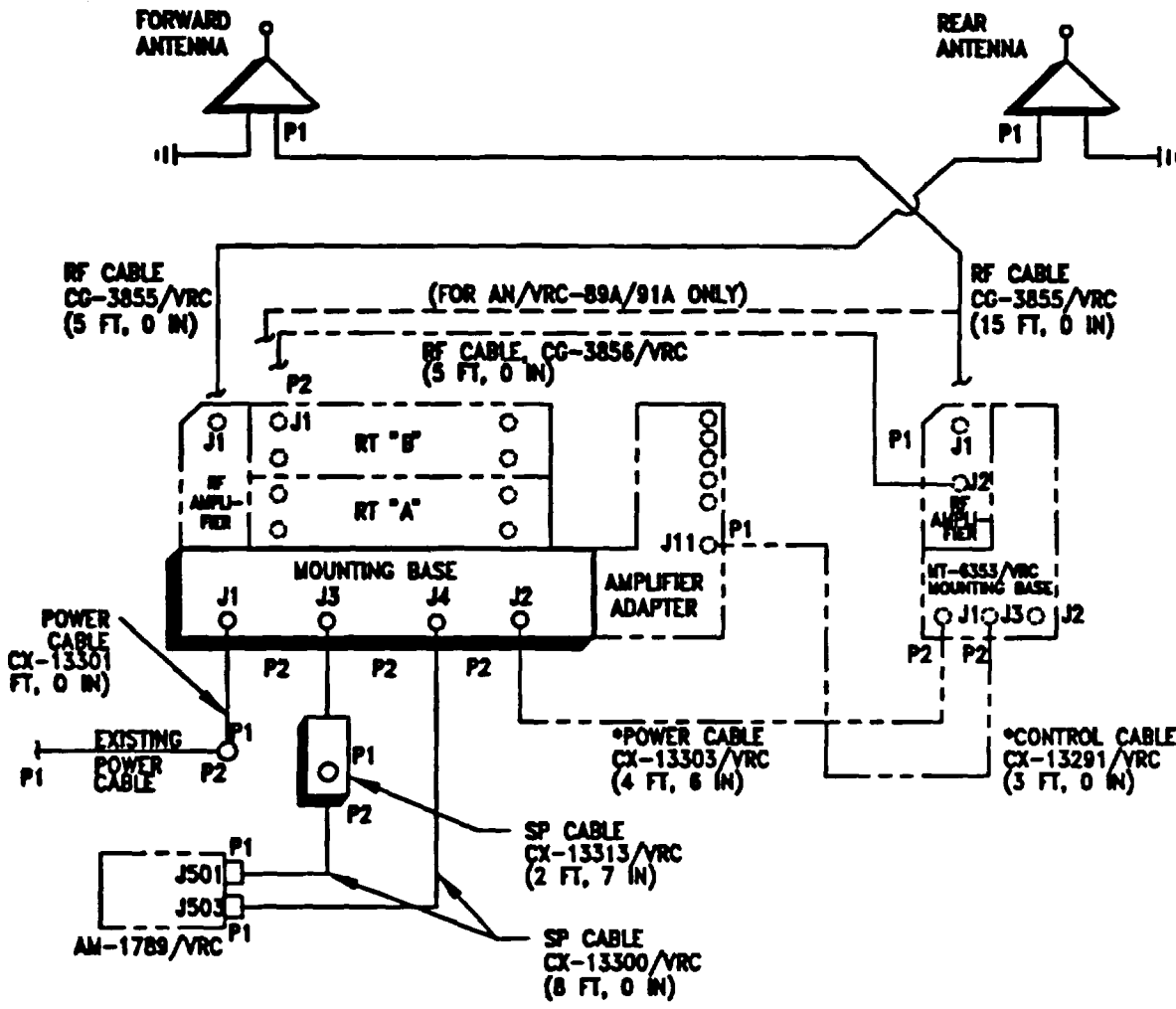


**5.5 Installation of MK-2499N/RC.** For radio set AN/VRC-87/88/90 or ANNRC-89/91, install MK-2499/VRC (TSECCKY-57 security equipment) In the location shown in Figure 5-1(2). Refer to Section 5.6 for connection of cables.

**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, connector, 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 vehicle..	
c. Loop clamps.	Check that all have been properly Installed and tightened.	
d. Protective covers.	Insure that al installed cables are covered when not in use or connected.	
e. Radio issued with vehicle.	Install and connect cables. See TM 11-58209020-1 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.



\*NOT SUPPLIED IN THIS MK

Figure 5-6(1). Cable Diagram for ANNRC-89A/91A or AN/VRC-92A

## 5.6 Post-Installation and Checkout. Continued.

CABLE ASSEMBLY	FROM			TO		
	CABLE CONN.	UNIT	UNIT CONN.	CABLE CONN.	UNIT	UNIT CONN.
CX-1301NRC (1 FT, 0 IN)	P2	Mounting base	J1	P1	Existing power cable	P2
Existing power cable	P2	CX-13301NRC (1 FT, 0 IN)	P1	P1	Power source	
CG.3855/VRC (5 FT, 0 IN)	P2	RF amplifier	J1	P1	Antenna base rear	J1
CG-3855/VRC (15 F, 0 IN)	P2	RT B or RF amplifier (MT-63NRC)	J1	P1	Antenna base forward	J1
CX-13313/VRC (2 FT, 7 IN)	P2	Mounting base	J3	P1	CX-13300/VRC (8 FT, 0 IN)	P2
CX-13300/VRC (8 FT 0 IN)	P2	CX-13313/VRC (2 FT, 7 IN)	P1	P1	AM-1780/VRC	J501
CX-13300/VRC (8 FT. 0 IN)	P2	Mounting base	J4	P1	AM-1780/VRC	J503
*CX-13291/VRC (3 FT, 0 ")	P1	Amplifier adapter	J11	P2	MT-6353/VRC Mounting base	J3
CG3856/VRC (5 FT, 0 IN)	P2	RT "B"	J1	P1	RF amplifier (MT-6353/VRC)	J2
*CX-13303VRC (4 FT, 6 IN)	P1	Mounting base	J2	P2	MT-6353/VRC Mounting base	J1

\* Not supplied in this MK.

Figure 5(1). Cable Diagram: For AN/VRC89A/91A or AN/VRC-92A (Continued)



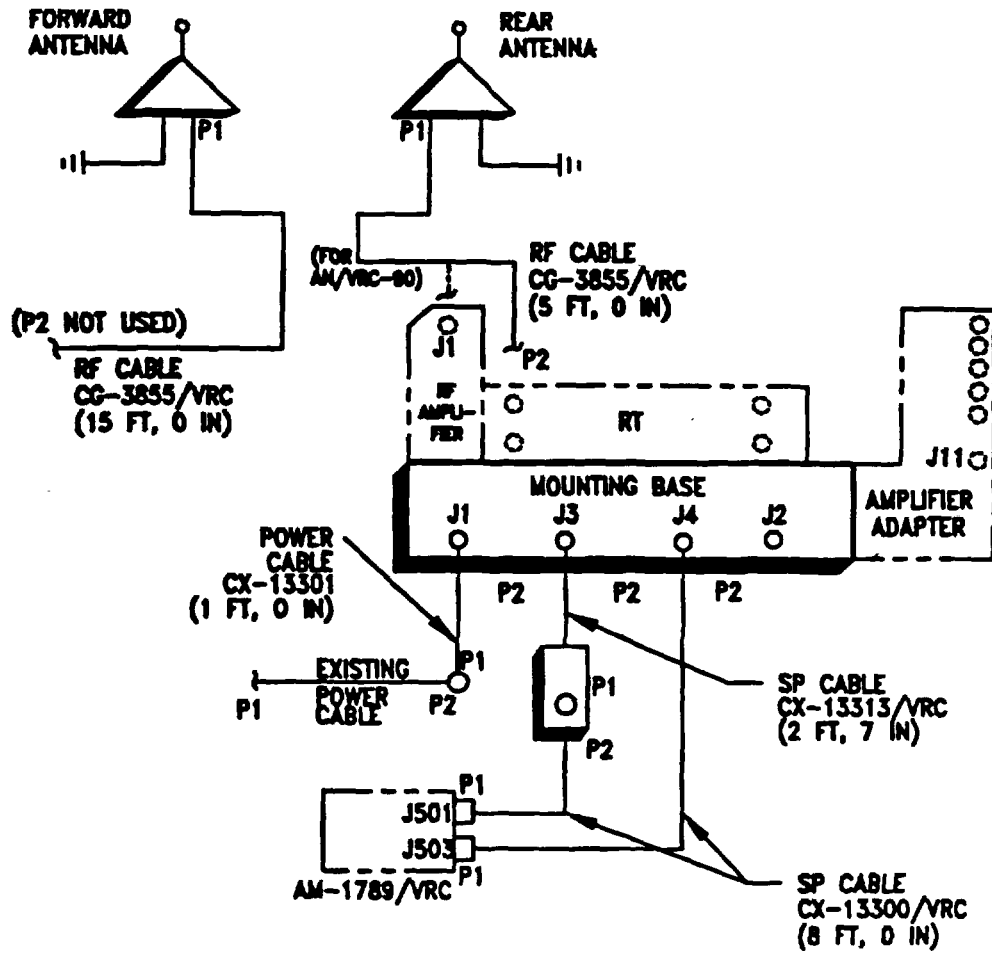
5.6 Post-installation and Checkout. Continued.

CABLE ASSEMBLY	FROM		TO			
	CABLE CONN.	UNIT	UNIT CONN.	CABLE CONN.	UNIT	UNIT CONN.
CX-13301NRC cable	P2	Mounting base	J1	P1	Existing power	P2
Existing power cable	P2	CX-13301/VRC (1 FT, 0 IN)	P1	P1	Power source	
CG-3855VRC (15 FT, 0 IN)	P2	RF amplifier	J1	P1	Antenna base forward	J1
CG-3855NRC (5 FT, 0 IN)	P2	RT 'B	J1	P1	Antenna base rear	J1
CX-13313/VRC (2 FT, 7 IN)	P2	Mounting base	J3	P1	CX-13300/VRC (8 FT, 0 IN)	P2
CX-13300/VRC (8 FT, 0 IN)	P2	CX-13313/VRC (2 FT, 7 IN)	P1	P1	AM-1780/VRC	J501
CX-13300/VRC (8 FT, 0 IN)	P2	Mounting base	J4	P1	AM-1780/VRC	J503
*CX-13303/VRC (1 FT, 6 IN)	P1	MT-6429/VRC	J2	P2	MT-6429/VRC	J1
*CX-13303/VRC (2 FT, 6 IN)	P1	Mounting base	J2	P2	MT-6429/VRC	J1
CX-13293/VRC (4 FT, 0 IN)	P1	RT 'B'	J5	P2 P3	TSEC/KY-57 "B"	AUD RAD
*CX-13293NRC (4 FT. 0 IN)	P1	RT 'A'	J5	P2 P3	TSEC/KY-57 'A'	AUD RAD

\* Not supplied in this MK.

Figure 5-6(2). Cable Diagram: For AN/VRC-8991 (Continued)

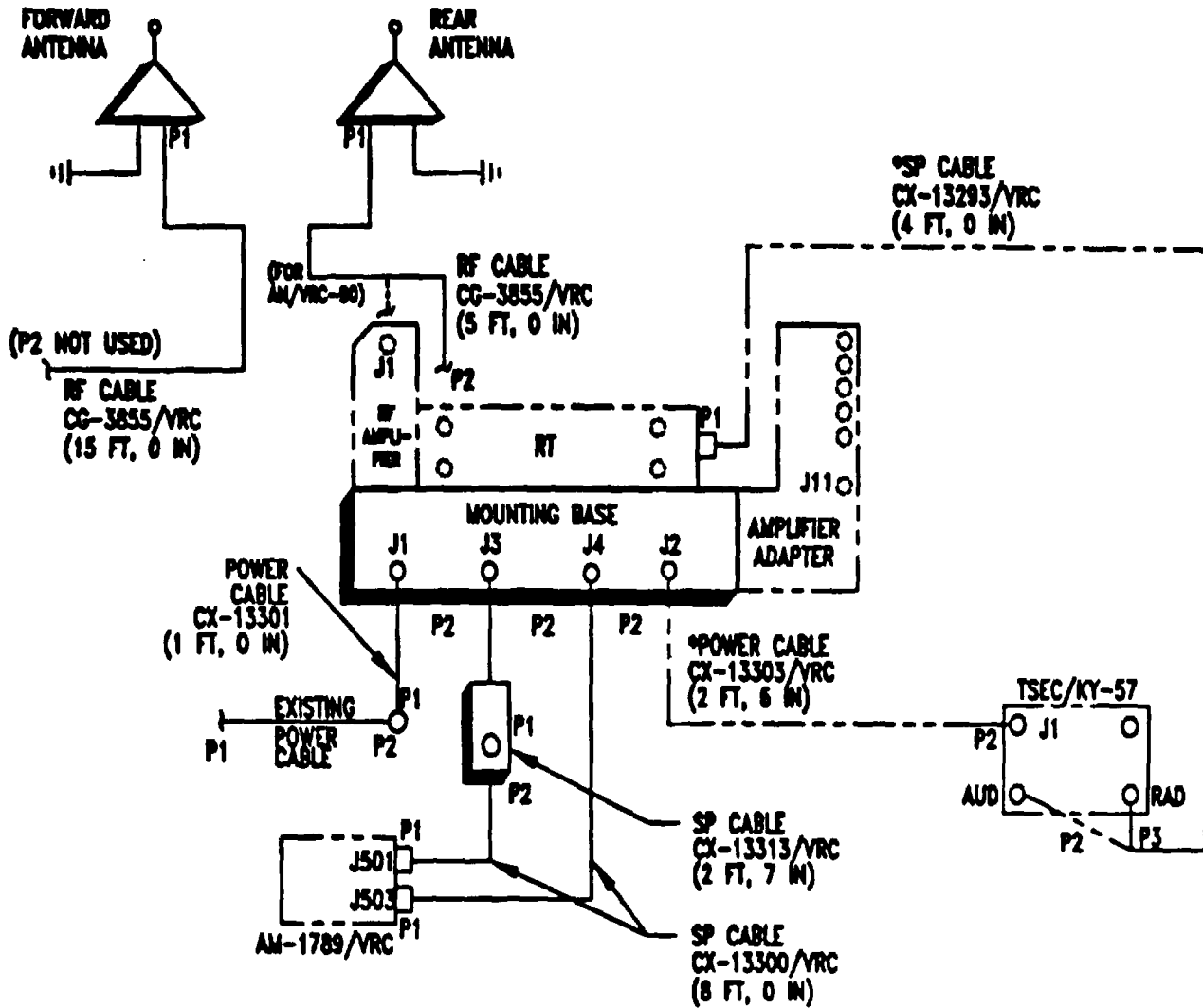
5.6 Post-Installation and Checkout. Continued



CABLE ASSEMBLY	CABLE CONN.	FROM		TO		
		UNIT	UNIT CONN.	CABLE CONN.	UNIT	UNIT CONN.
CX-13301/VRC (1 FT, 0 IN)	P2	Mounting base	J1	P1	Existing power cable	P2
Existing power cable	P2	CX-13301/VRC (1 FT, 0 IN)	P1	P1	Power source	
CX-13300/VRC (8 FT, 0 IN)	P2	CX-13313/VRC (2 FT, 7 IN)	P1	P1	AM-1780/VRC	J501
CX-13313/VRC (2 FT, 7 IN)	P2	Mounting base	J3	P1	CX-13300/VRC (6 FT, 0 IN)	P2
CG-3855/VRC (5 FT, 0 IN)	P2	RF amplifier or radio	J1	P1	Antenna base rear	J1
CX-13300/VRC (8 FT, 0 IN)	P2	Mounting base	J4	P1	AM-1780/VRC	J503

Figure 5-6(3). Cable Diagram: For ANNRC-87A188A/90A

5.6 Post-Installation and Checkout. Continued.



• NOT SUPPLIED IN THIS MK

Figure 5-6(4). Cable Diagram: For AN/VRC-87/88/90

5.6 Post-Installation and Checkout. Continued.

CABLE ASSEMBLY	FROM			TO		
	CABLE CONN.	UNIT	UNIT CONN.	CABLE CONN.	UNIT	UNIT CONN.
CX-13301/VRC	P2	Mounting base	J1	P1	Existing power cable	P2
Existing power cable	P2	CX-13301/VRC (1 FT, 0 IN)	P1	P1	Power source	
CX-13300/VRC (8 FT, 0 IN)	P2	CX-13313/VRC (2 FT, 7 IN)	P1	P1	AM-1780/VRC	J501
CX-13301/VRC (2 FT, 7 IN)	P2	Mounting base	J3	P1	CX-13300/VRC (8 FT, 0 IN)	P2
CG-3855/VRC (5 FT, 0 IN) '	P2	RF amplifier or RT	J1	P1	Antenna base rear	J1
CX-13300/VRC (8 FT, 0 IN)	P2	Mounting base	J4	P1	AM-1780/VRC	J503
*CX-13303/VRC (2 FT, 6 IN)	P1	Mounting base	J2	P2	MT-6429/VRC	J1
*CX-13293/VRC (4 FT, 0 IN)	P1	RT	J5	P2 P3	TSEC/KY-57	AUD RAD
* Not supplied in this MK.						

Figure 5-6(4). Cable Diagram: For AN/VRC-87/88/90 (Continued)



**APPENDIX A****REFERENCES**

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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 2530	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 11-5820-8900-1-1	Operators 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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**TB 11-5820-890-20-79**

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