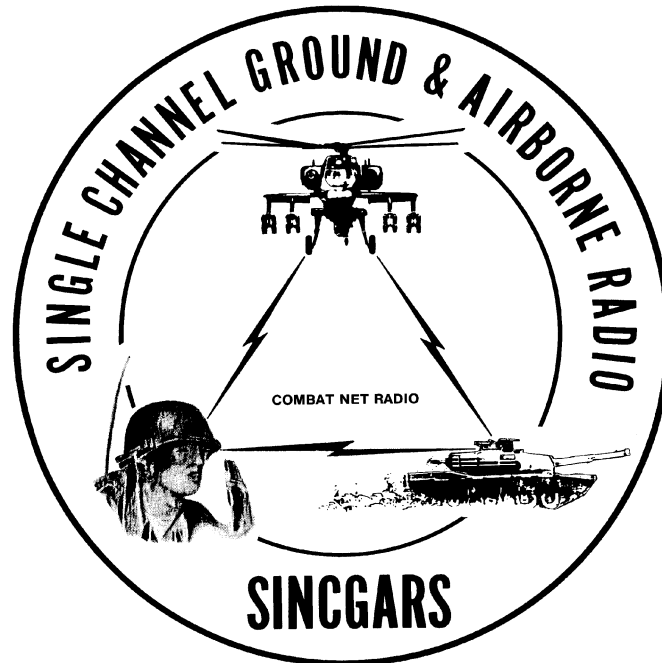


**TECHNICAL BULLETIN**



**INSTALLATION INSTRUCTIONS FOR  
INSTALLATION KIT,  
ELECTRONIC EQUIPMENT, MK-2835/VRC  
(NSN 5895-01-423-7007) (EIC: N/A)  
TO PERMIT INSTALLATION OF RADIO SETS  
AN/VRC-89/91/92 SERIES  
IN A  
COMMUNICATIONS RELAY GROUP AN/MRC-137**

Approved for public release; distribution is unlimited.

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**HEADQUARTERS, DEPARTMENT OF THE ARMY**

**1 SEPTEMBER 1999**

**INSTALLATION INSTRUCTIONS FOR  
INSTALLATION KIT  
ELECTRONIC EQUIPMENT MK-2835/VRC  
(NSN 5895-01-423-7007) (EIC: N/A)  
TO PERMIT INSTALLATION OF RADIO SETS  
AN/VRC-92 SERIES  
IN A  
COMMUNICATIONS RELAY GROUP AN/MRC-137**

**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 Fort Monmouth, ATTN: AMSEL-LC-LEO-D-CS-CFO, Fort Monmouth, NJ 07703-5000. The Fax number is 732-532-1413, DSN 992-1413. You may also e-mail your recommendation to AMSEL-LC-LEO-PUBS-CHG@cecom3.monmouth.army.mil.

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

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\*This manual supersedes TB 11-5820-890-20-96, 1 July 1997

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## 0.1 SCOPE.

This technical bulletin provides installation instructions for Installation Kit, Electronic Equipment MK-2835/VRC, commonly referred to as the Mounting Kit (MK). The MK shall be installed into the following type of vehicle(s):

- Communications Relay Group AN/MRC-137

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 11-5820-890-20-1 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 AN/VRC-92 Series is:

- Radio Set AN/VRC-92 Series (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-2835/VRC (MK) contains the items needed to mount Radio Set AN/VRC-92 Series in a Communications Relay Group AN/MRC-137. See Section 5.5 for instructions to install Mounting Base MT-6353/VRC.

## 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 4.0 work hours is required. Typical vehicle downtime is 4.5 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 items will not reflect the typical vehicle downtime.

ITEM	SECTION	TIME
Antenna AS-3900/VRC	5.1	1.0
Mounting Base, Electrical Equipment MT-6352/VRC	5.3	1.5
Cables	5.4	0.5

## 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 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 9-2320-289-20.

**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 supplied to install Radio Set AN/VRC-92 Series.

#### **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 List for Installation of Radio Set AN/VRC-92 Series.

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, 2
5305-00-847-1159	Screw, Cap, Hexagon (3/8-16 x 1-3/4 in) MS35307-365	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 (3/8 in) MS45904-76	16	PAOZZA	
5310-00-889-2527	Washer, Lock, Internal/External-Toothed (5/16 in) MS45904-72 (Not Used)	4	PAOZZA	
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) (Not Used)	2	PAOZZA	
5975-01-188-8873	Mounting Base, Electrical Equipment MT-6352/VRC (A3013367-1)	1	PAOOF A	4-1, 1
5306-00-225-9089	Bolt, Machine (5/16-24 x 1 in) MS90726-34 (1 Not Used)	5	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 in) MS51968-5	5	PAOZZA	
5995-01-218-4703	Cable Assembly, Special Purpose, Electrical, CX-13292/VRC (4 FT, 0 IN) (A3014038-2)	2	PAOZZA	4-1, 8
5995-01-219-7029	Cable Assembly, Radio Frequency, CG-3855/VRC (5 FT, 0 IN) (A3014031-2)	1	PAOZZA	4-1, 9
5965-01-222-1420	Loudspeaker, Control-Unit, LS-671/VRC (A3014065-1)	2	PAOZZA	4-1, 4
4020-01-341-8795	Fiber Rope Assembly, Single Leg (A3167672-1)	1	PAOZZA	4-1, 5
	Plate, Mounting (A3253191-1)	1	XBOZZA	4-1, 7
	Bracket, Angle (A3253192-1)	2	XBOZZA	4-1, 6
5965-00-043-3463	Handset, H-250/U	2	PAOZZA	4-1, 3
5305-00-984-7350	Screw, Machine (5/16-24 x 1 in) MS25191-308	6	PAOZZA	
5310-00-880-7744	Nut, Hexagon (5/16-18 in)	4	PAOZZA	
5310-00-081-4219	Washer, Flat (5/16 in) MS27183-12	6	PAOZZA	
5310-00-407-9566	Washer, Lock (5/16 in) MS35338-45	6	PAOZZA	
5975-00-111-3208	Strap, Tiedown, Electrical Components MS3367-5-9	10	PAOZZA	

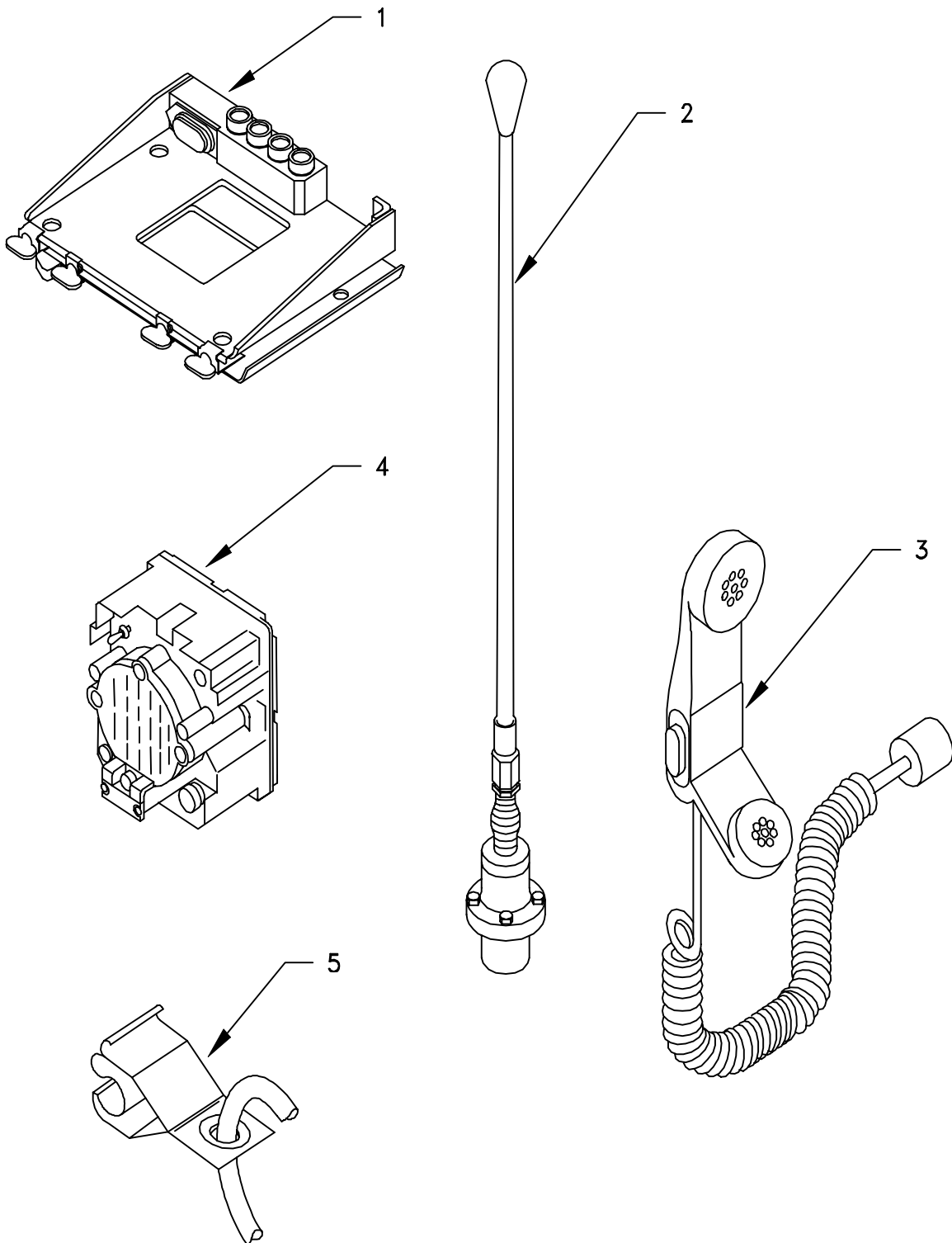


Figure 4-1(1). MK Illustrated Parts List



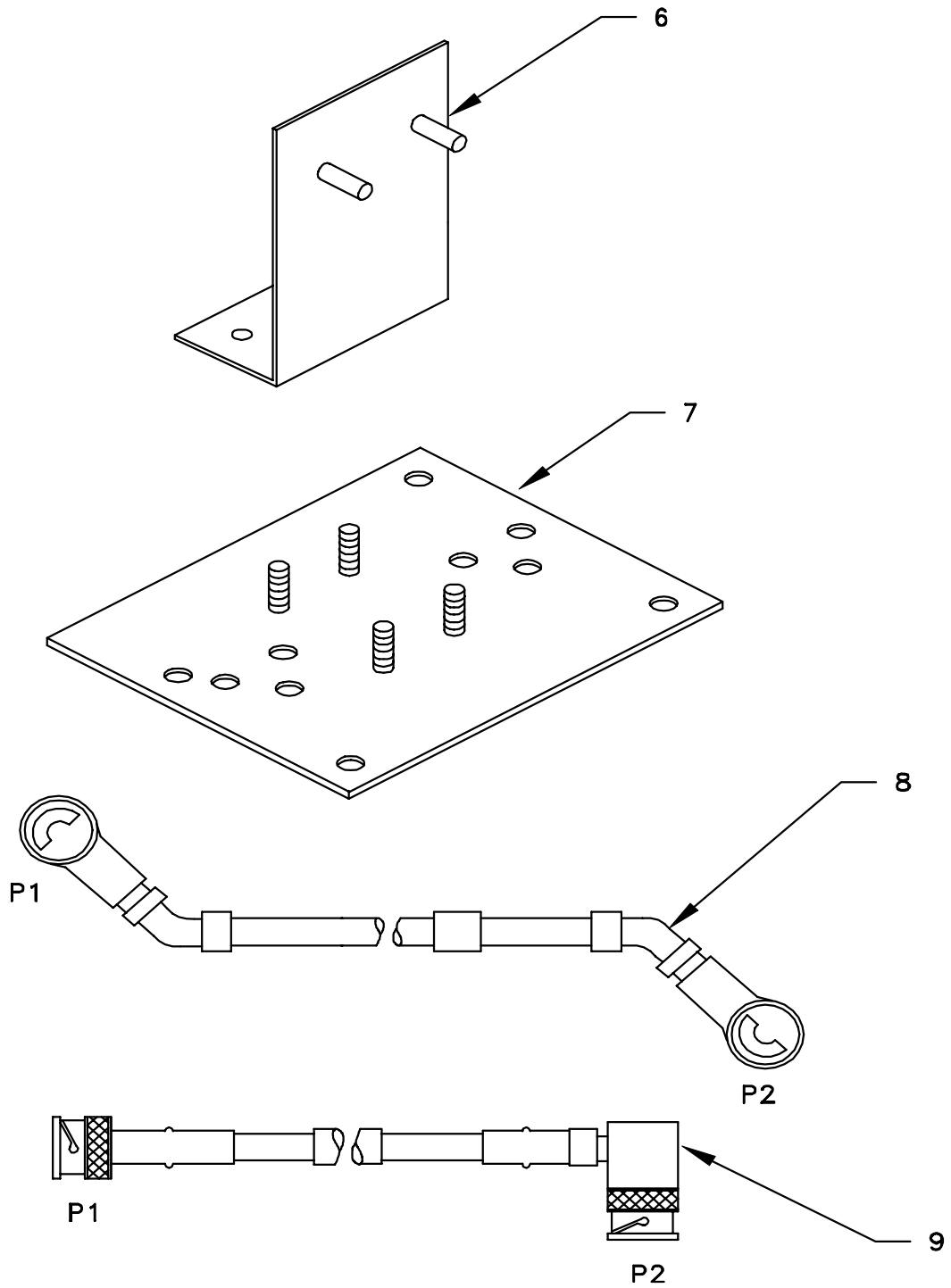
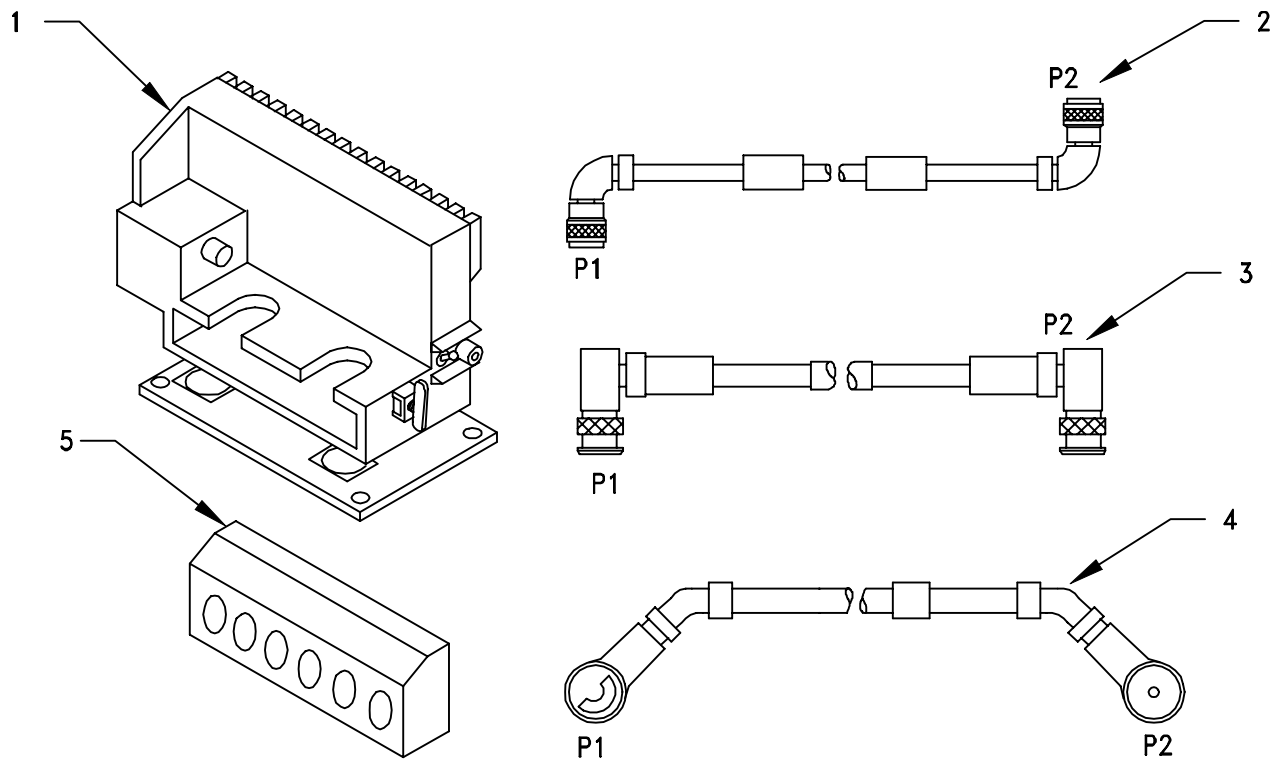


Figure 4-1(2). MK Illustrated Parts List

**Table 4.2. Additional Items Required for Installation of Radio Set AN/VRC-92 Series**

NSN	ITEM DESCRIPTION AND PART NUMBER	QUANTITY IN MK	SMR CODE	FIGURE, ITEM NO.
5975-01-235-1962	Mounting Base, Electrical Equipment MT-6353/VRC (A3014053-1)	1	PAOFFA	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 (1 Not Used)	2	PAOZZA	
5310-00-889-2527	Washer, Lock, Internal/External Toothed (5/16 in) MS45904-72 (Not Used)	6	PAOZZA	
5310-00-081-4219	Washer, Flat (5/16 in) MS27183-12 (Not Used)	2	PAOZZA	
5975-00-111-3208	Nut Strip (A3014064-1) (Not Used)	1	XBOZZA	
5975-00-111-3208	Strap, Tiedown, Electrical Components MS3367-5-9	4	PAOZZA	
5995-01-300-9324	Cable Assembly, Power, Electrical CX-13303/VRC (4 FT, 6 IN) (A3014040-9) (Not Used)	1	PAOZZA	4-2, 4
5995-01-222-4209	Cable Assembly, Special Purpose, Electrical CX-13291/VRC (3 FT, 0 IN) (A3014037-1)	1	PAOZZX	4-2, 2
5995-01-219-7025	Cable Assembly, Radio Frequency CG-3856/VRC (5 FT, 0 IN) (A3014032-3	1	PAOZZA	4-2, 3



**Figure 4-2. Illustrated Parts List for Table 4-2**

**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
8030-00-292-1102	Conductive Anti-seize Compound

**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
Electric Grinder or equivalent		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:		
1/2 in	5120-00-228-9506	1
9/16 in	5120-00-228-9507	1
Handle, Socket Wrench:		
Socket		
1/2 in	5120-00-240-5364	1
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 vehicular and 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. To install MT-6353/VRC mounting base, see section 5.5 for instructions.

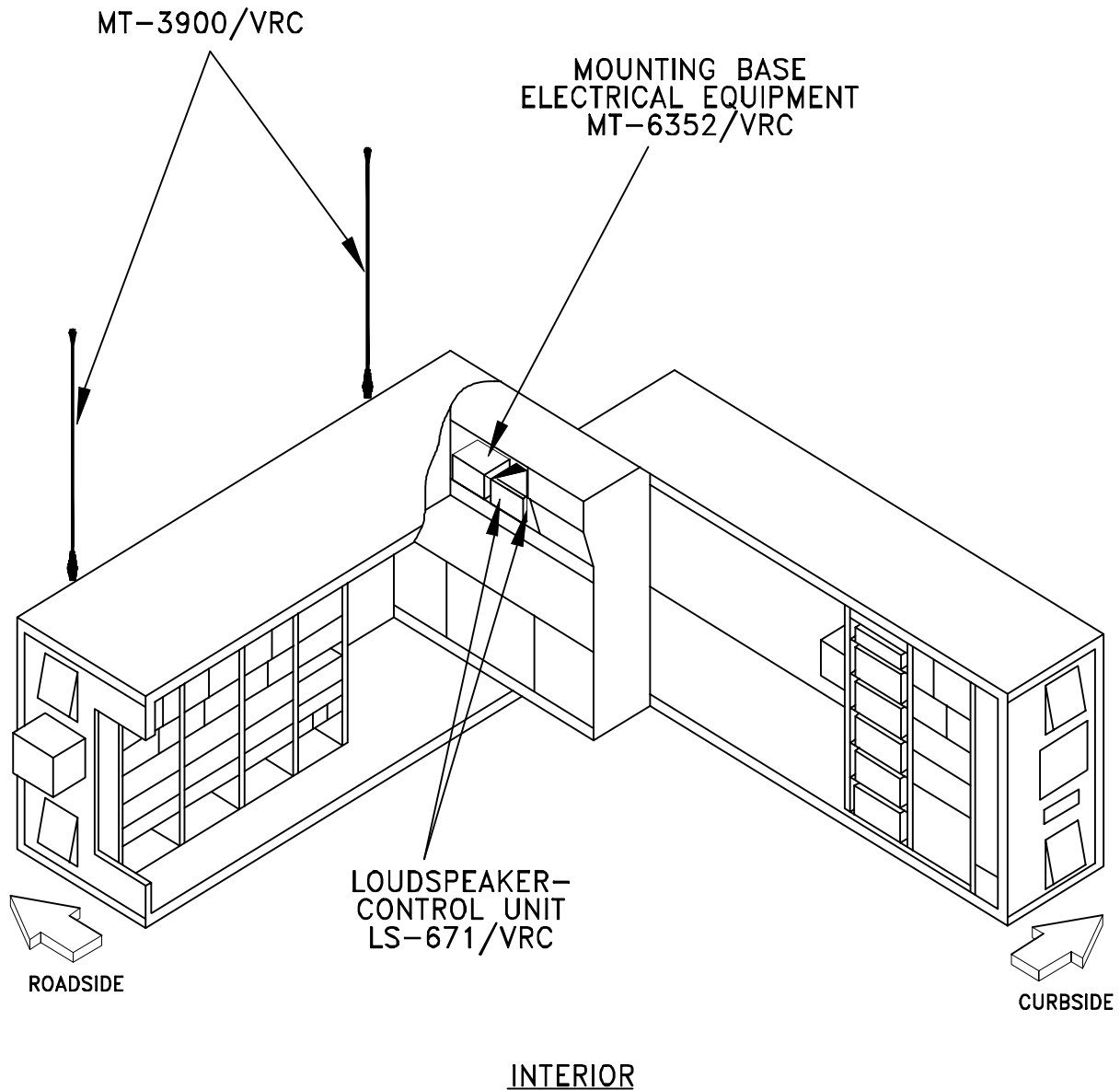
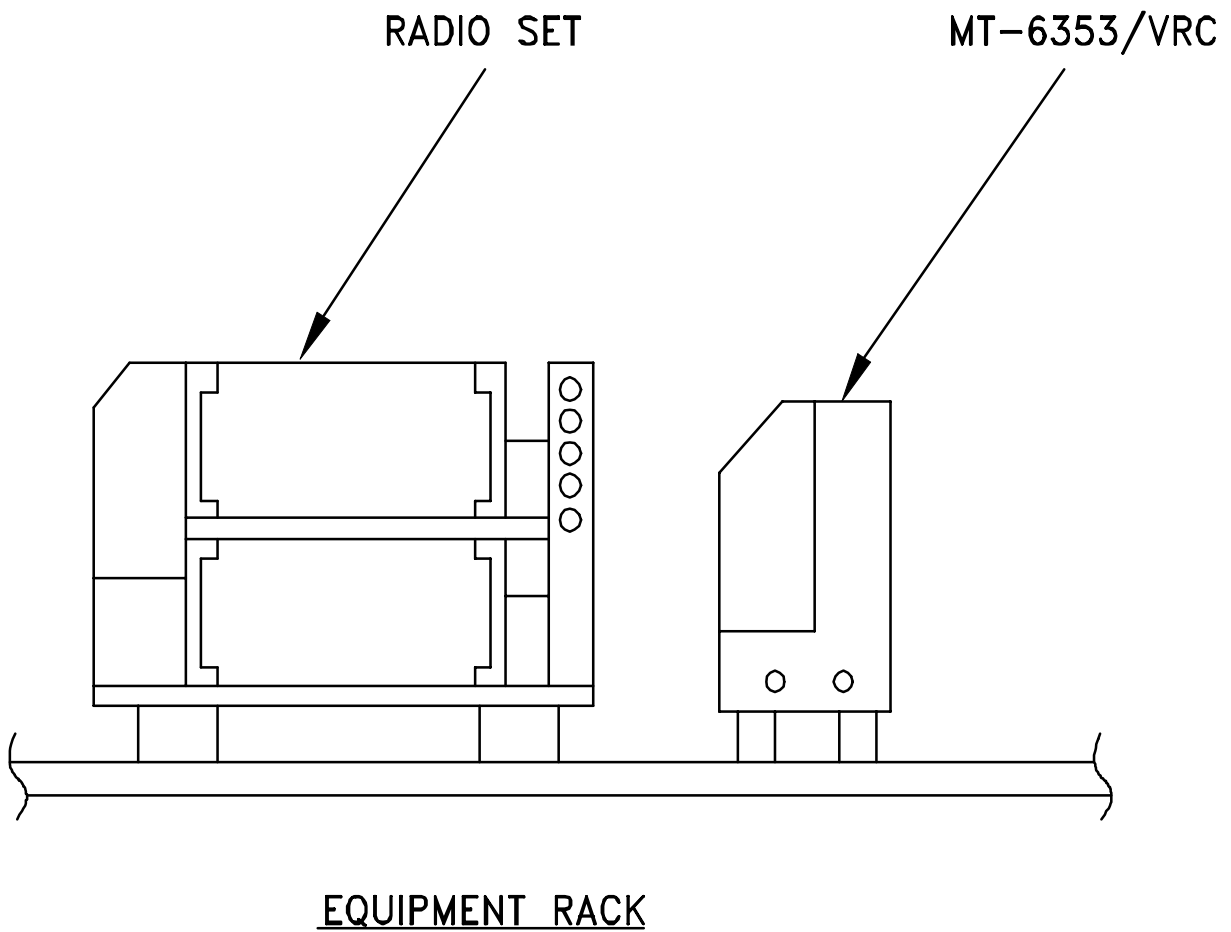


Figure 5-1(1). MK and Radio Installation: MK Equipment Locations

**5. INSTALLATION PROCEDURES.** Continued.



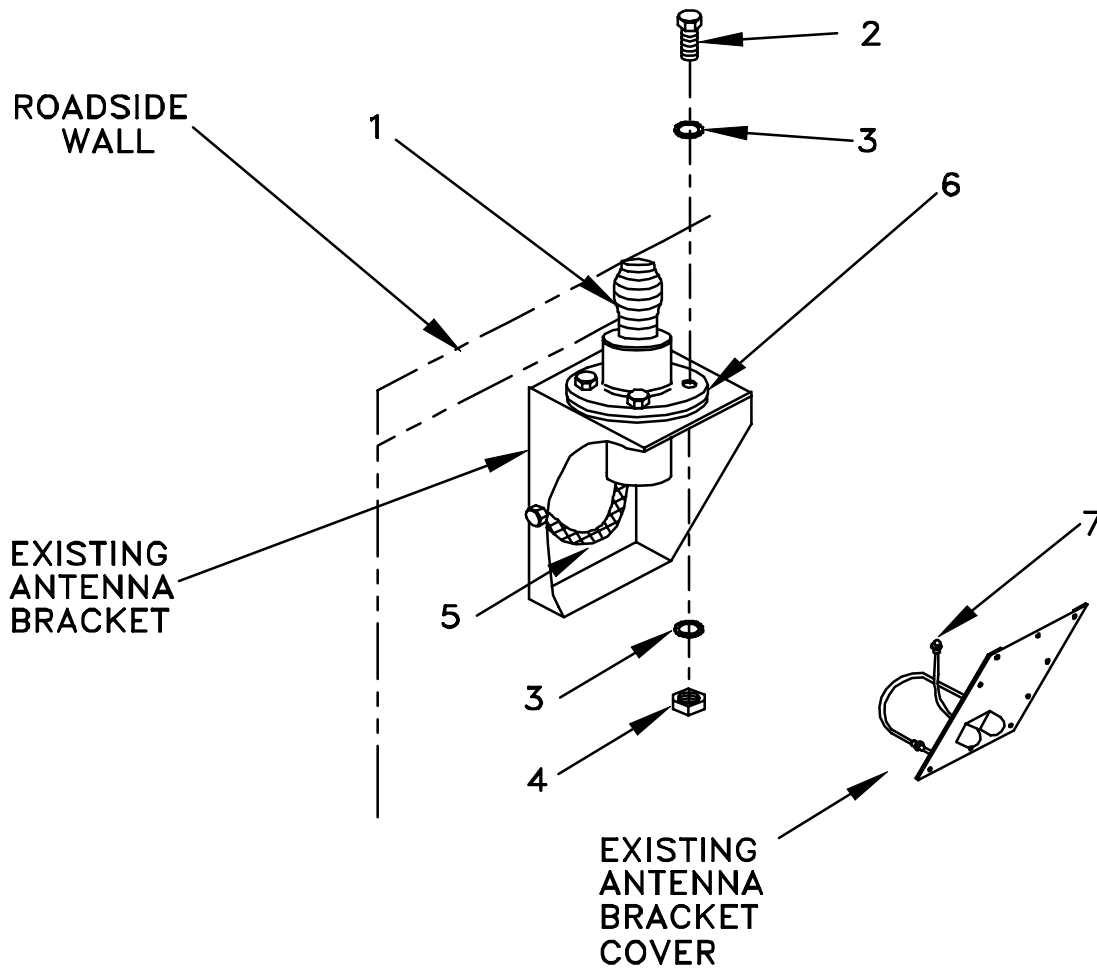
**Figure 5-1(2). MK and Radio Installation: Radio Equipment Locations**

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

**5.1.1 Installation of Roadside Rear Antenna Base.** Use the following procedures to install the roadside rear 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 antenna bracket.	De-install and retain the existing cover plate and mounting hardware.	
b. Antenna base (1).	Place on top of existing gasket (6) and antenna bracket; then align mounting holes. See Figure 5-2.	
c. Four cap screws (2), eight IET washers (3), and four nuts (4).	Install and secure to antenna base (1) and antenna bracket.	Tools: 9/16 in socket and 9/16 in open/box wrench.
d. Ground strap (5) and existing mounting hardware.	Install and secure to side of antenna bracket.	
e. Existing RF cable (7).	Attach existing RF cable (7) connected to cover plate to connector J1 of antenna base (1).	
f. Existing antenna bracket cover plate.	Re-install to existing antenna bracket.	

5.1.1 Installation of Roadside Rear Antenna Base. Continued.



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

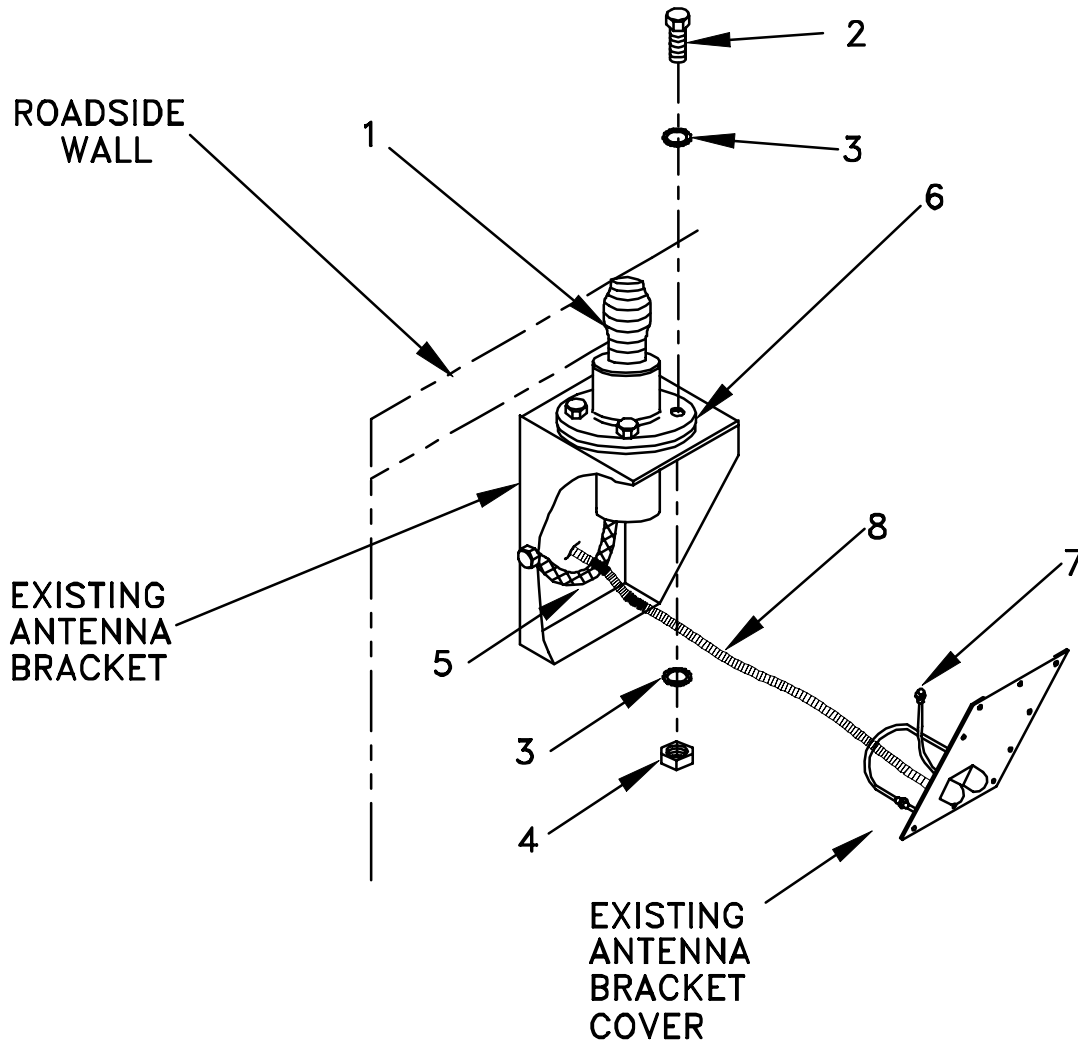
Figure 5-2(1). Antenna Base Installation: Roadside Rear Antenna Base

**5.1.2 Installation of Roadside Front Antenna Base.** Use the following procedures to install the roadside front 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 antenna bracket.	De-install and retain the existing cover plate and mounting hardware.	
b. Antenna base (1).	Place on top of existing gasket (6) and antenna bracket; then align mounting holes. See Figure 5-2.	
c. Four cap screws (2), eight IET washers (3), and four nuts (4).	Install and secure to antenna base (1) and antenna bracket.	Tools: 9/16 in socket and 9/16 in open/box wrench.
d. Ground strap (5) and existing mounting hardware.	Install and secure to side of antenna bracket.	
e. RF cable (8).	Connect RF cable (8) connector P1 to the connector on the cover plate that the existing internal RF cable was connected to. Route RF cable (8) into the shelter and to the right front of the mounting base MT-6352.	
f. Existing RF cable (7).	Attach existing RF cable (7) connected to cover plate to connector J1 of antenna base (1).	
g. Existing antenna bracket cover plate.	Re-install to existing antenna bracket.	



5.1.2 Installation of Roadside Front Antenna Base. Continued.

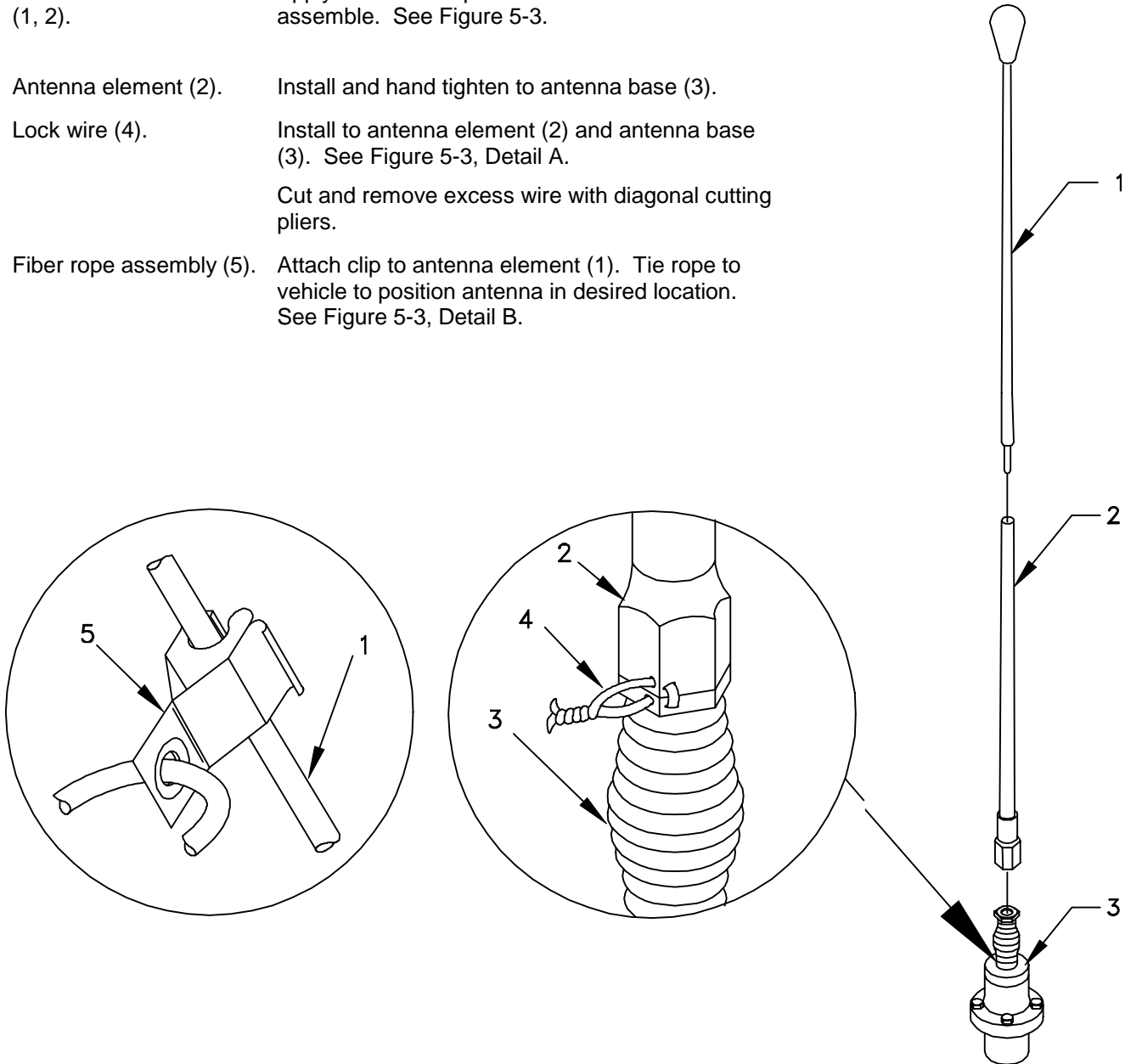


- 1. ANTENNA BASE
- 2. CAP SCREW (3/8-16 X 1 3/4 IN)
- 3. IET WASHER (3/8 IN)
- 4. NUT (3/8-16 IN)
- 5. GROUND STRAP (P/O ANTENNA)
- 6. EXISTING RFI GASKET
- 7. EXISTING RF CABLE
- 8. RF CABLE, CG-3855/VRC (5 FT, 0 IN)

Figure 5-2(2). Antenna Base Installation: Roadside Front Antenna Base

**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 5-3.	
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.	

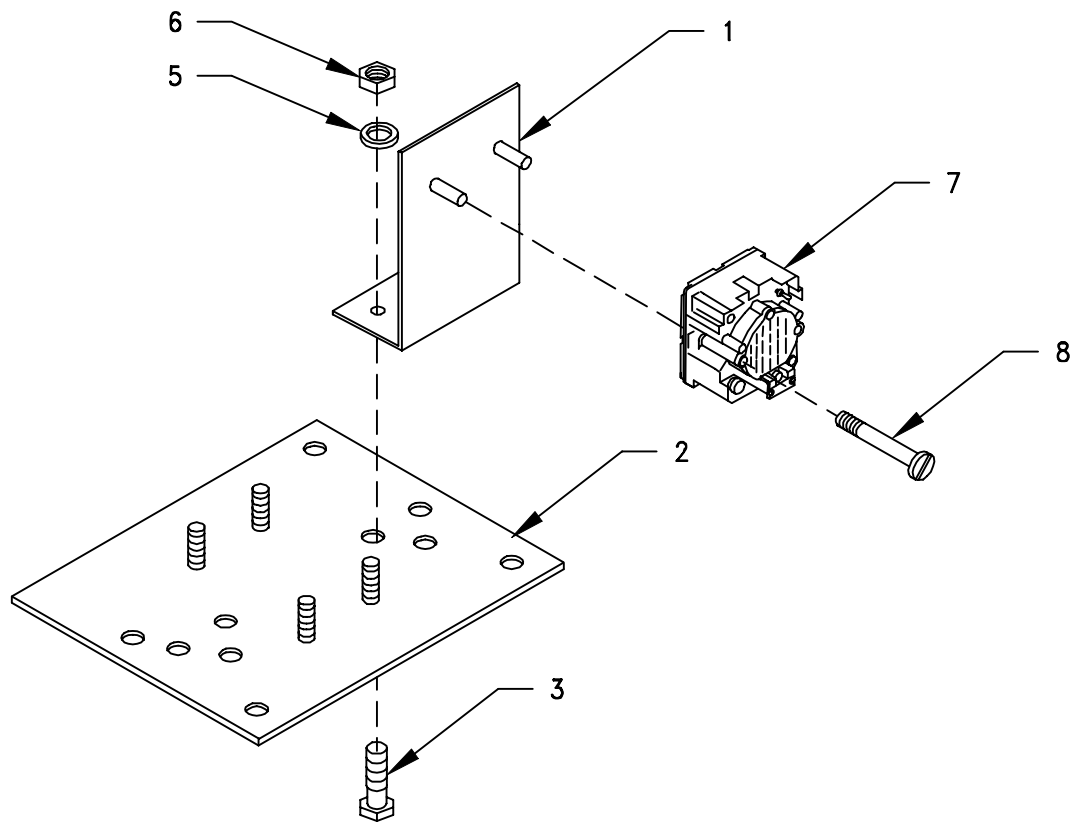


- 1. ANTENNA ELEMENT (UPPER)
- 2. ANTENNA ELEMENT (LOWER)
- 3. ANTENNA BASE
- 4. LOCK WIRE
- 5. FIBER ROPE ASSEMBLY

Figure 5-3. Top Antenna Assembly Installation

**5.2 Installation of Loudspeaker, Control-Unit, LS-671/VRC (speaker).** Use the following procedures to install both speakers. See Figure 5-1 (1) for locations.

ITEM	ACTION	REMARKS
a. Bracket, angle (1).	Place on mounting plate (2) and align mounting holes. See Figure 5-4 (1).	
b. Three machine screws (3), three flat washers (4), three lock washers (5), and three nuts (6).	Install and secure to speaker bracket (1) and mounting plate (2).	Tools: 1/2 in socket and phillips screwdriver.
c. Speaker (7).	Place on bracket angle (1).	
d. Two externally-relieved body screws (8).	Thread through and secure to speaker (7) and bracket, angle (1).	Tools: Flatblade screwdriver.
e. Handset.	Connect and secure to speaker (7) connector J2.	

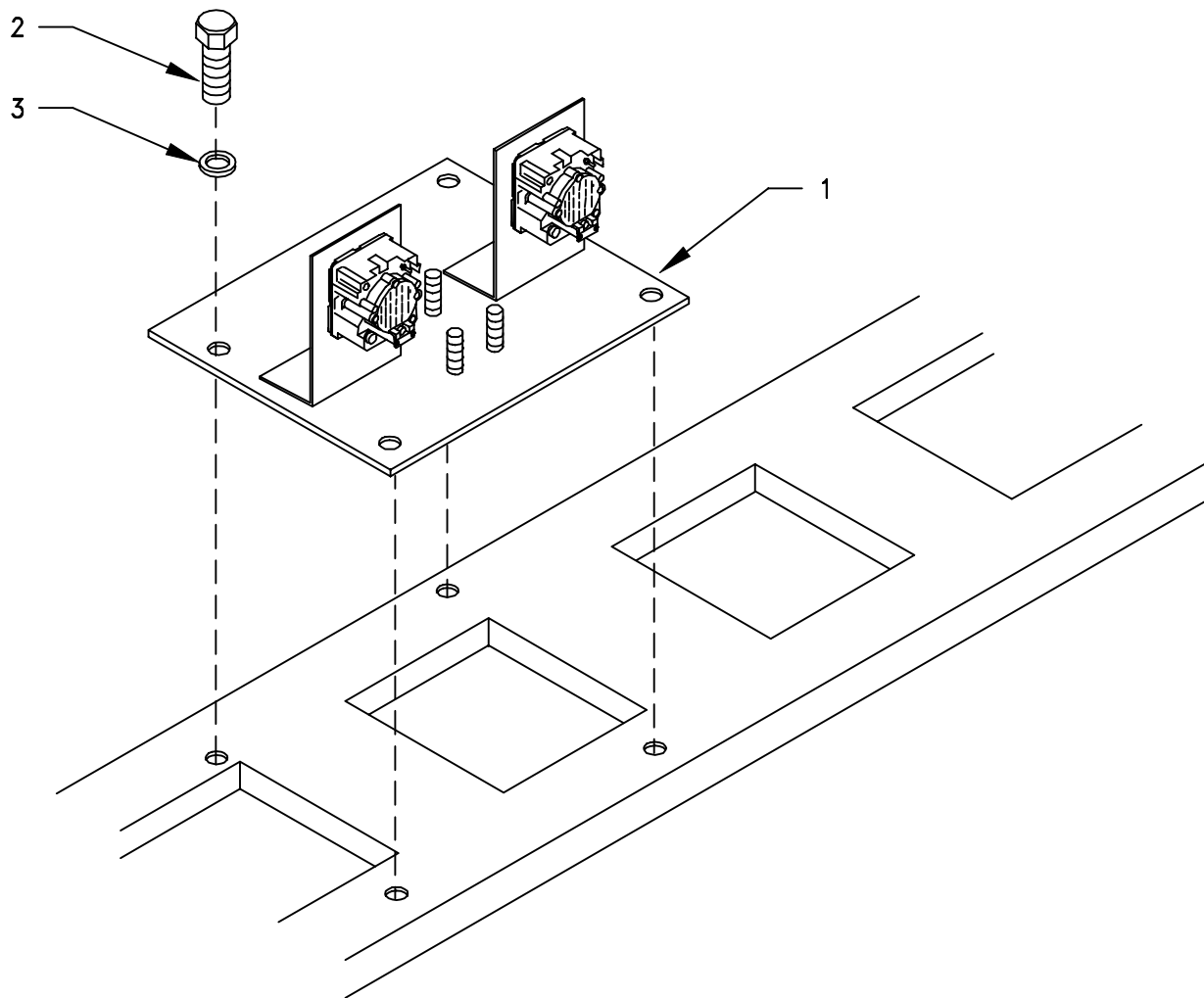


- |                                      |                             |
|--------------------------------------|-----------------------------|
| 1. BRACKET, ANGLE                    | 5. LOCK WASHER (5/16 IN)    |
| 2. MOUNTING PLATE                    | 6. NUT (5/16-24 IN)         |
| 3. MACHINE SCREW (5/16-24 X 1 IN FH) | 7. SPEAKER                  |
| 4. FLAT WASHER (5/16 IN)             | 8. BODY SCREW (P/O SPEAKER) |

Figure 5-4 (1) Loudspeaker Installation

**5.2 Installation of Loudspeaker, Control-Unit, LS-671/VRC (speaker). Continued.**

ITEM	ACTION	REMARKS
a. Existing equipment rack and mounting plate.	Remove a 1" diameter area of paint on the underside of mounting base (1) around all mounting holes. Remove a 1" square area of paint on the shelf around all mounting holes. Clean the paint removed areas and apply a thin coat of conductive anti-seize compound.	Tools: Electric grinder or equivalent.
b. Mounting plate (1).	Place on existing equipment rack over existing tapped holes. See Figure 5-4(2).	
c. Four machine bolts (2) and four IET washers (3).	Install and secure to mounting plate (1) and equipment rack. See Figure 5-4(2).	Tools: 1/2 in socket



1. MOUNTING PLATE  
2. MACHINE BOLT (5/16-24 X 1 IN)

3. IET WASHER (5/16 IN)

**Figure 5-4 (2) Mounting Plate Installation**

**5.3 Installation of Mounting Base, Electrical Equipment MT-6352/VRC (mounting base).** Remove and retain attaching bag of 5/16 mounting hardware. To insure good electrical grounding, any rust, corrosion or paint around mounting holes in radio rack should be removed before installing the mounting base. See Figure 5-1(1) for location; then see Figure 5-5 and perform the following steps.

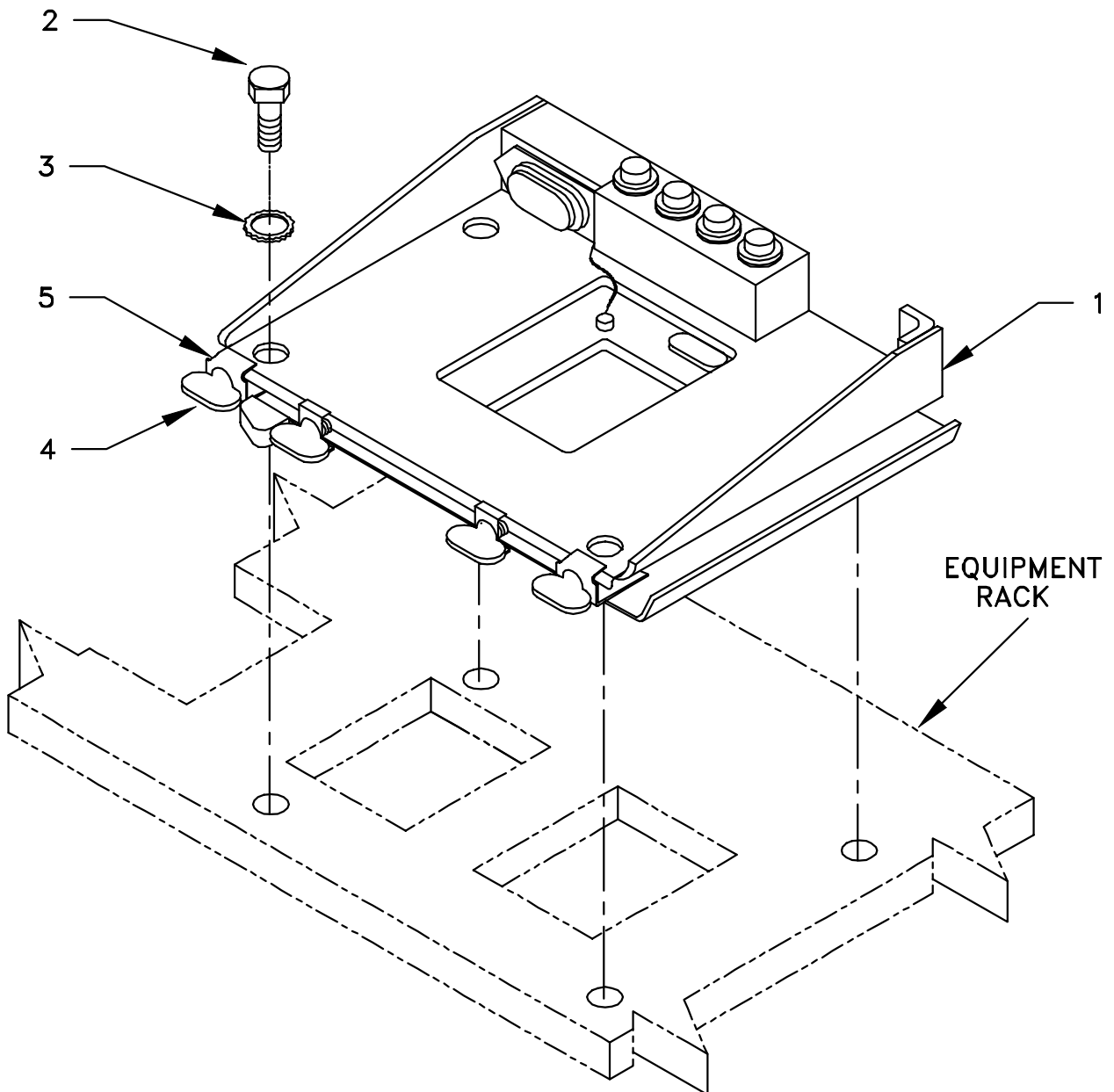
ITEM	ACTION	REMARKS
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**NOTE**

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. Existing mounting rack and mounting base (1).                                | Remove a 1" diameter area of paint on the underside of the mounting base (1) around four matching mounting holes. Remove a 1" diameter area of paint on the existing shelf around the mounting holes. Clean the paint removed areas and apply a thin coat of conductive anti-seize compound. | Tools: Electric grinder or equivalent.           |
| b. Mounting base (1).   | Place on rack over existing holes. See Figure 5-5..  |  |
| c. Two outer thumbscrews (4).   | Turn ccw until both sets of threads have cleared center of holes.  |  |
| d. Mounting base (1).   | Align four holes with matching hole pattern in rack.   |  |
| e. Four machine bolts (2) and four internal/external toothed (IET) washers (3). | Install and secure to mounting base (1) and rack.  | 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).  |  |

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



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

Figure 5-5. Mounting Base Installation

**5.4 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, clips and tiedown straps.

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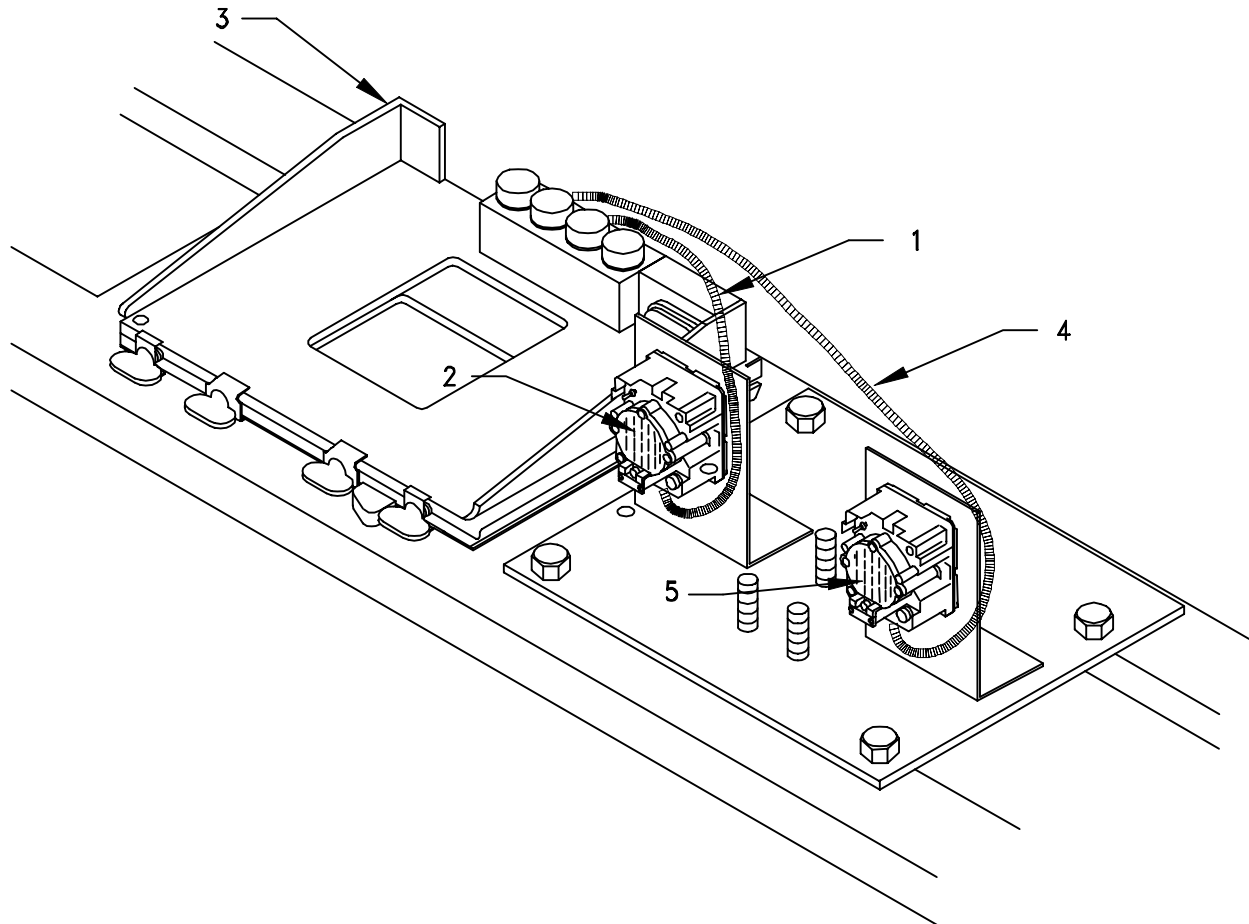
**WARNING**

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

ITEM	ACTION	REMARKS
a. Existing RF cables.	Route to right front of MT-6352/VRC and MT-6353/VRC.	
b. Speaker cable (1) connector P1.	Connect and secure to speaker (2) connector J1. See Figure 5-6.	
c. Speaker cable (1) connector P2.	Connect and secure to mounting base (3) connector J3.	
d. Speaker cable (4) connector P1.	Connect and secure to speaker (5) connector J1.	
e. Speaker cable (4) connector P2.	Connect and secure to mounting base (3) connector J4.	
f. Existing power cables.	Connect and secure to MT-6352/VRC connector J1 and MT-6353/VRC connector J1.	

5.4 Installation of Cables. Continued.



1. SPEAKER CABLE, CX-13292/VRC (4 FT, 0 IN)
2. SPEAKER
3. MOUNTING BASE
4. SPEAKER CABLE, CX-13292/VRC (4 FT, 0 IN)
5. SPEAKER

Figure 5-6 Cable Installation: Speaker Cabling



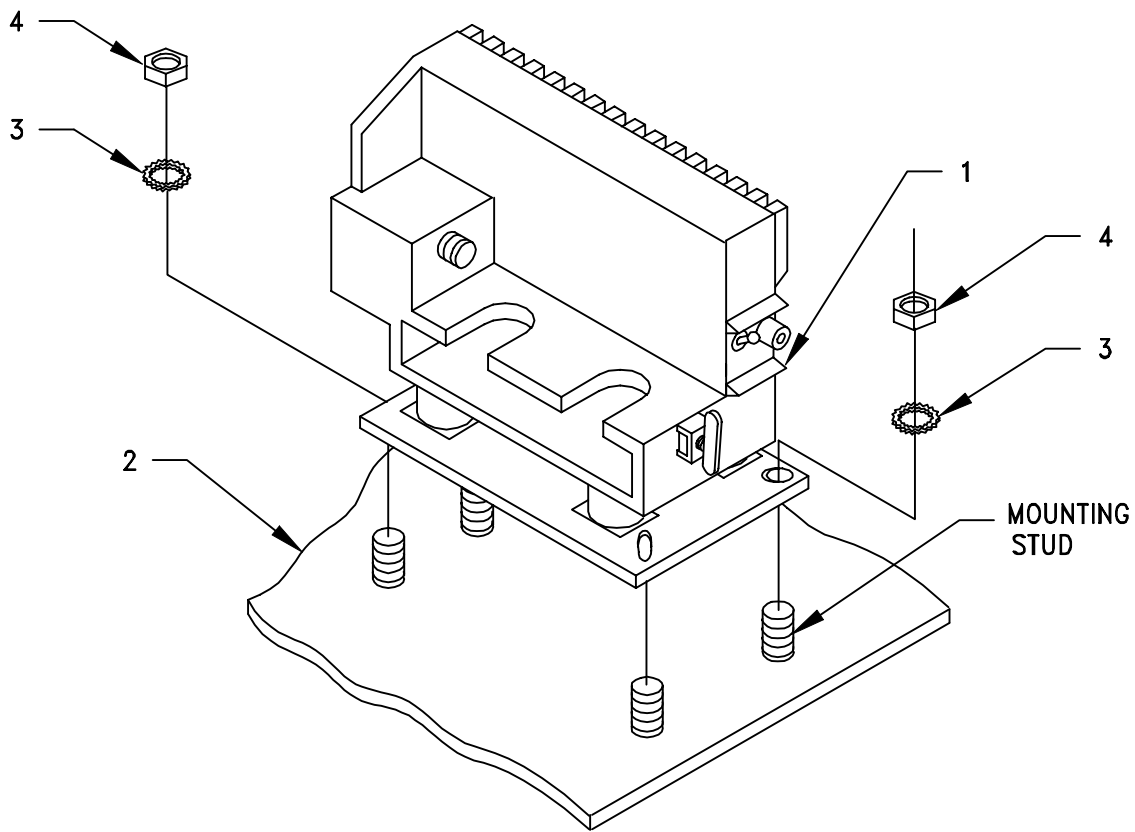
**5.5 Installation of Mounting Base, Electrical Equipment MT-6353/VRC.** Use the following instructions to install MT-6353/VRC mounting base. Refer to Section 5.6 for connection of cables.

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 existing power cable to MT-6353/VRC mounting base. (Refer to Section 5.6, step b.)

- |  |   |                      |
|--|---|----------------------|
| a. MT-6353/VRC mounting base (1).                                      | Place on mounting plate (2) over studs. See Figure 5-7.                                   |                      |
| b. Four Internal/external toothed (IET) washers (3) and four nuts (4). | Install and secure MT-6353/VRC mounting base (1) to the four studs on mounting plate (2). | Tools: 1/2 in socket |



- 1. MOUNTING BASE
- 2. MOUNTING PLATE
- 3. ET WASHER (5/16 IN)
- 4. NUT (5/16-18 IN)

**Figure 5-7. MT-6353/VRC Mounting Base 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 vehicle.	
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 vehicle.	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.

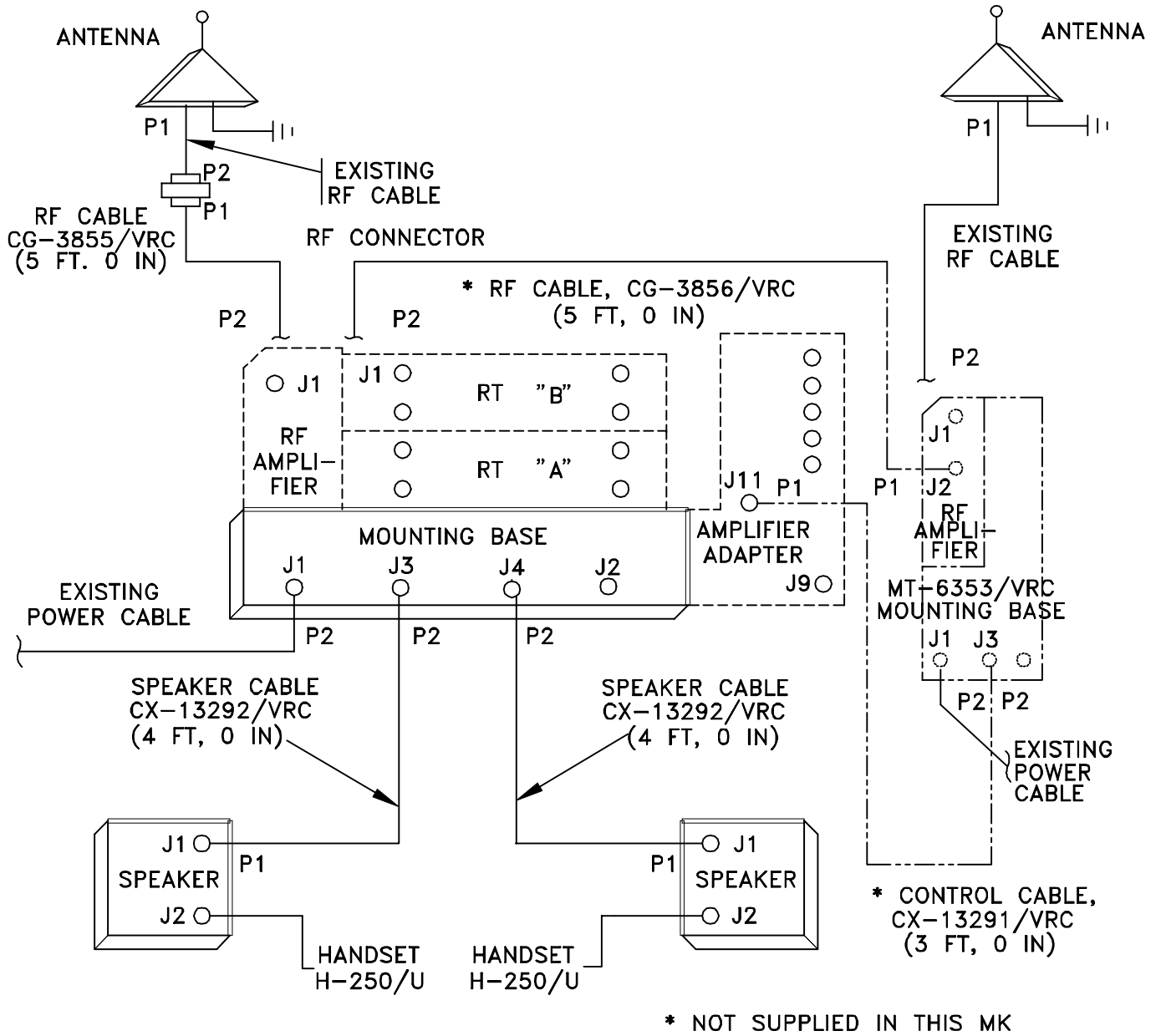


Figure 5-8. Cable Diagram: For AN/VRC-92 Series

## 5.6 Post-Installation and Checkout. Continued.

CABLE ASSEMBLY	FROM			TO		
	CABLE CONN.	UNIT	UNIT CONN.	CABLE CONN.	UNIT	UNIT CONN.
Existing power cable	P2	Mounting base	J1			
CX-13292/VRC (3 FT, 0 IN)	P1	Mounting base	J3	P1	Speaker	J1
CX-13292/VRC (3 FT, 0 IN)	P2	Mounting base	J4	P1	Speaker	J3
Existing RF cable	P2	RF amplifier	J1	P1	Roadside antenna base	J1
Existing RF cable	P2	RF amplifier (MT-6353/VRC)	J1	P1	Roadside antenna base	J1
CG-3855/VRC (5 FT, 0 IN)	P2	RF Amplifier	J1	P1	Roadside front antenna bracket	Cover plate
*CX-13291/VRC (3 FT, 0 IN)	P1	Amplifier-adapter	J11	P2	MT-6353/VRC mounting base	J3
*CG-3856/VRC (5 FT, 0 IN)	P2	RT "B"	J1	P1	RF amplifier (MT-6353/VRC)	J2
Existing power cable				P2	MT-6353/VRC mounting base	J1

\*Not supplied in this MK.

Figure 5-8. Cable Diagram: For AN/VRC-92 Series. Continued.



## APPENDIX A

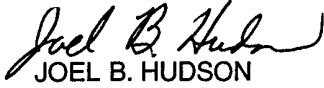
### REFERENCES

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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 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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		FO-3	

Recommend that the installation antenna alignment procedure be changed throughout to specify a 20 IFF antenna lag rather than 10

REASON: Experience has shown that with only a 10 lag, the antenna servo system is too sensitive to gusting in excess of 25 knots, and has a tendency to rapidly accelerate and decelerate as it hunts, causing strain to the drive train. Hunting is minimized by adjusting the lag to 20 without degradation of operation.

Item 5, Functional column. Change  2 dB" to  3 dB".

REASON: The adjustment procedure for the TRANS POWER FAULT indicator call for a 3 dB (500 watts) adjustment to light the TRANS POWER FAULT indicator.

Add new step f.1 to read,  Replace cover plate removed in step d above."

REASON: To replace the cover plate.

ZONE C 3. On J1-2, change  +24 VDC" to  +5 VDC".

REASON: This is the output line of the 5 VDC power supply. +24 VDC is the input voltage.

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