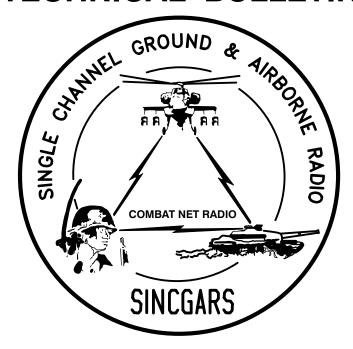
TECHNICAL BULLETIN



INSTALLATION INSTRUCTIONS FOR
INSTALLATION KIT, ELECTRONIC EQUIPMENT,
MK-2362/VRC (NSN 5895-01-302-0064) (EIC: N/A)
TO PERMIT INSTALLATION OF
RADIO SETS AN/VRC-87/88/90 SERIES
IN A

CARRIER, CARGO, TRACKED, 1 1/2 TON, SMALL UNIT SUPPORT VEHICLE (SUSV) M973 M923A, M1066, AND M1067

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HEADQUARTERS, DEPARTMENT OF THE ARMY

1 SEPTEMBER 1999

NO. 11-5820-890-20-47

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CARRIER, CARGO, TRACKED, 1 1/2 TON, SMALL UNIT SUPPORT VEHICLE (SUSV) M973, M923A, M1066, AND M1067

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 2028–2 located in back of this manual direct to: Commander, US Army Communications–Electronics Command Fort Monmouth, ATTN: AMSEL–LC–LEO–D–CS–CFO, Fort Monmouth, New Jersey 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 11-5820-890-20-47 dated 1 September 1993.

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0.1 SCOPE.

This technical bulletin provides Installation Instructions for Installation Kit, Electronic Equipment, MK-2362/VRC, commonly referred to as the Mounting Kit (MK). The MK shall be installed into the following type of vehicle(s):

Carrier, Cargo, Tracked, 1 1/2 Ton, Small Unit Support Vehicle (SUSV) M973, M923A, M1066, and M1067

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 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-87/88/90 Series is:

Radio Set AN/VRC-87/88/90 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 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.

The Installation Kipt, Electronic Equipment, MK-2362/VRC (MK) contains the items needed to mount Radio Set AN/VRC-87/88/90 Series in a Carrier, Cargo, Tracked, 1 1/2 Ton, Small Unit Support Vehicle (SUSV) M973, M923A, M1066, and M1067 (vehicle).

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 2.0 work hours is required. Typical vehicle downtime is 2.5 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 vehicle downtime.

| ITEM | SECTION | TIME |
|---|---------|------|
| Antenna AS-3900/VRC | 5.1 | 0.5 |
| Mounting Base, Electrical Equipment MT-6352/VRC | 5.2 | 1.5 |
| Cables | 5.3 | 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 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).
- **4.1.2** List of 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 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 Radio Set AN/VRC-87/88/90 series. Refer to Table 4–2 and figure 4–2 to identify additional items required to install for "D" and "F" Series Radio Sets.
- 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 87/88/90 Series

| NSN | ITEM DESCRIPTION AND PART NUMBER | QUANTITY IN MK | SMR CODE | FIGURE, ITEM NO. |
|--------------------------------------|---|-------------------|------------------|---------------------|
| 5985-01-297-2971 5305-00-847-1159 | Antenna AS-3900/VRC (A3017899-1) Screw, Cap, Hexagon (3/8-16 x 1 3/4 in) | 1 4 | PAOOFA PAOZZA | 4-1, 2 |
| 5310-00-913-8881 5310-00-061-1258 | MS35307-365 (Not Used) Nut, Hexagon (3/8-16 in) MS51971-3 Washer, Lock, Internal/External-Toothed | 4 8 | PAOZZA PAOZZA | |
| 5310-00-889-2527 | (3/8 in) MS45904-76 Washer, Lock, Internal/External-Toothed | 2 | PAOZZA | |
| 5306-00-225-9086 | (5/16 in) MS45904-72 Bolt, Machine (5/16-24 x 5/8 in) | 1 | PAOZZA | |
| 5330-01-205-2864 | MS90726-31 (Not Used) Gasket (A3013655-1) | 1 | PAOZZA | |
| 5965-00-876-2375 | Loudspeaker, Permanent Magnet LS-454/U | 1 | PAOZZA | 4-1, 5 |
| 5975-01-188-8873 | Mounting Base, Electrical Equipment MT-6352/VRC (A3013367-1) | 1 | PAOOFA | 4-1, 1 |
| 5306-00-225-9089 5310-00-889-2527 | · · · · · · · · · · · · · · · · · · · | 5 10 | PAOZZA PAOZZA | |
| 5310-00-880-7746 | · | 5 | PAOZZA | |
| 5995-01-219-1843 | Cable Assembly, Power, Electrical CX-13302/VRC (13 FT, 0 IN) (A3014039-2) | 1 | PAOZZA | 4-1, 7 |
| 5995-01-219-7031 | Cable Assembly, Radio Frequency CG-3855/VRC (9 FT, 0 IN) (A3014031-4) | 1 | PAOZZA | 4-1, 8 |
| 5306-00-225-8496 | Bolt, Machine (5/16-18 x 5/8 in) MS90725-31 | 1 | PAOZZA | |
| 5340-00-088-1254 5340-00-809-1490 | Clamp, Loop (5/8-1/4 in) MS21333-104 Clamp, Loop (1/4-1/4 in) MS21333-98 | 1 2 | PAOZZA PAOZZA | |
| 4020-01-341-8795 | Fiber Rope Assembly, Single Leg (A3167672-1) | 1 | PAOZZA | 4-1, 4 |
| 5965-00-043-3463 | Handset H-250/U | 1 | PAOZZA | 4-1, 3 |
| | Plate, Mounting - Antenna (A3018994-1) | 1 | XBOZZA | 4-1, 6 |
| 5305-00-543-4406 | Screw, Cap, Hexagon (3/8-16 x 3 in) MS35307-370 | 4 | PAOZZA | |
| 5305-00-432-4253 | | 3 | PAOZZA | |
| 5975-00-074-2072 | | 10 | PAOZZA | |
| 5310-00-933-8121 | Washer, Lock (1/4 in) MS35338-139 | 3 | PAOZZA | |

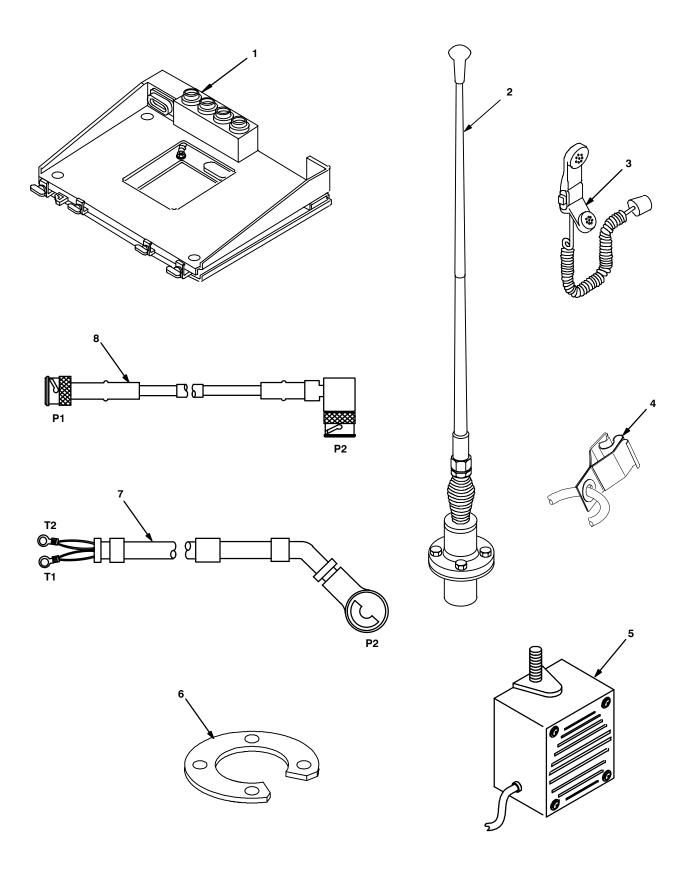


Figure 4-1. MK Illustrated Parts List

Table 4–2. Additional Items Required for Installation of Speaker for "D" and "F" Radio Sets

| NSN | ITEM DESCRIPTION AND PART NUMBER | QUANTITY | SMR CODE | FIGURE, ITEM NO. |
|------------------|---|----------|-------------|---------------------|
| 5965-01-222-1420 | Loudspeaker, Control-Unit LS-671/VRC (A3014065-1) | 1 | PAOFFA | 4–2, 1 |
| 5995-01-259-9283 | Cable Assembly, Special Purpose, Electrical CX–13292/VRC (8 FT, 0 IN) (A3014038–12) | 1 | PAOZZA | 4–2, 2 |
| | Plate, Mounting (A3014550-1) | 1 | XBOZZA | 4–2,3 |
| | | | | |

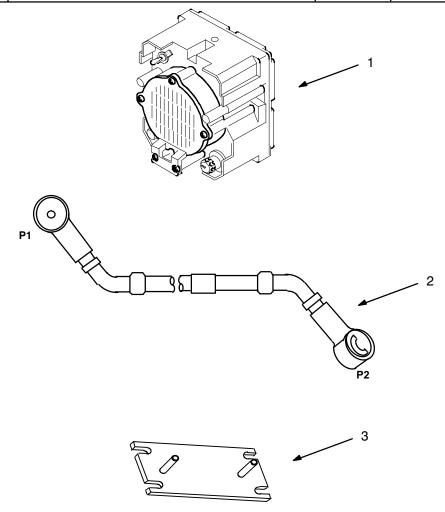


Figure 4-2. Illustrated Parts List for Table 4-2

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 |

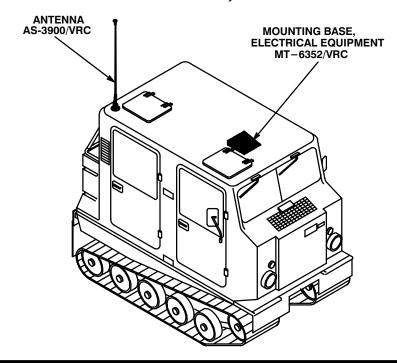
4.4 Tools and Test, Measurement and Diagnostic Equipment (TMDE) Required. The following tools and TMDE are needed for installation.

| NOMENCLATURE | NSN | QUANTITY |
|--|--|-------------|
| Radio Set* | | 1 |
| 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: 9/16 in 1/2 in | 5120-00-228-9507 5120-00-228-9506 | 1 1 |
| Handle, Socket Wrench Socket: 9/16 in 1/2 in | 5120-00-240-5364 5120-00-227-6704 5120-00-237-0977 | 1 1 1 |
| Electric Drill Drill Bits: No. 7 (.201 in) 5/16 in 13/32 in | 5130-00-889-8994 5133-00-227-9662 5133-00-227-9668 | 1 1 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 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.



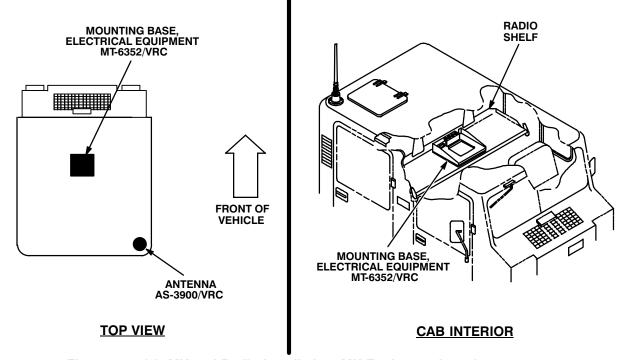


Figure 5-1 (1). MK and Radio Installation: MK Equipment Locations

5. INSTALLATION PROCEDURES. Continued.

INSTALLATION FOR AN/VRC-87/88/90 Series

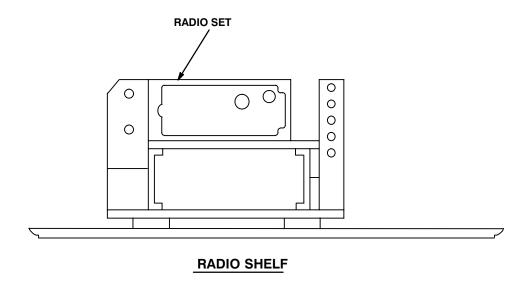


Figure 5-1 (2). MK and Radio Installation: Radio Equipment Locations

5.1 Installation of Antenna AS-3900/VRC (antenna). See figure 5-1 (1) for location.

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 (2). Apply a thin coat of silicone compound to both sides; then place on port and aline mounting holes. See figure 5–2.

b. Mounting plate (8), four cap screws (9), eight IET washers (7) and four nuts (6).

Refer to CAUTION below; then install and secure to antenna base (1) and port.

Ensure opening in mounting bracket is alined with existing tapped hole used to secure ground strap (4).

c. Ground strap (4), two IET washers (3) and machine bolt (5).

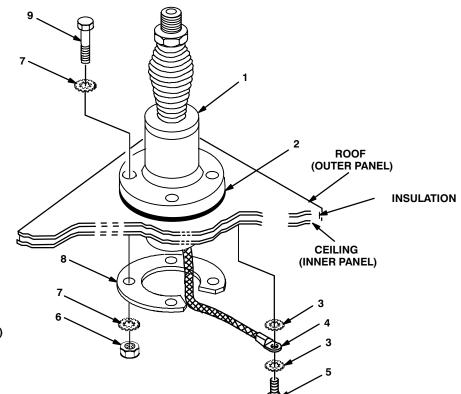
Install and secure to existing tapped hole in ceiling.

Tools: 9/16 in socket.

Tools: 1/2 in socket.

CAUTION

TO PREVENT DAMAGE TO VEHICLE, DO NOT OVER TIGHTEN ANTENNA MOUNTING HARDWARE.



- 1. ANTENNA BASE
- 2. GASKET
- 3. IET WASHER (5/16 in)
- 4. GROUND STRAP
- 5. MACHINE BOLT (5/16-18 x 5/8 in)
- 6. NUT (3/8-16 in)
- 7. IET WASHER (3/8 in)
- 8. MOUNTING PLATE
- 9. CAP SCREW (3/8-16 x 3 in)

Figure 5-2. Antenna Base Installation: Rear Curbside

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** Apply silicone compound to element Antenna elements (1, 2). threads and assemble. See figure 5-3. b. Antenna element (2). Install and hand-tighten to antenna base (3). 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. 3 DETAIL B DETAIL A **ANTENNA ELEMENT (UPPER)** 2. ANTENNA ELEMENT (LOWER) ANTENNA BASE 3. 4. **LOCK WIRE**

Figure 5-3. Top Antenna Assembly Installation

FIBER ROPE ASSEMBLY

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 equipment shelf should be removed before installing mounting base. See figure 5-4 and perform steps.

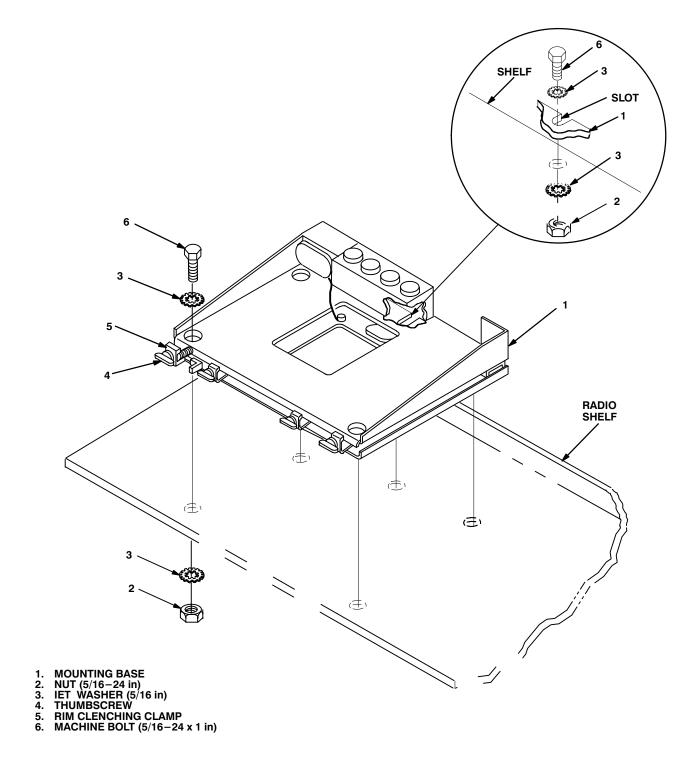


Figure 5-4. Mounting Base Installation: Radio Shelf

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.

a. Mounting base (1) and Remove a 2" square area of paint on the Tools: Electric grinder or existing radio shelf. underside of the mounting base (1) around equivalent. left front and rear mounting holes. Remove a 2" square area of paint on the existing radio shelf around the existing mounting holes that mate with left front and rear mounting of mounting base (1). Clean the paint removed areas and apply a thin coat of conductive anti-seize compound. b. Mounting base (1). Place on radio shelf. See figure 5-4. Two outer thumbscrews Turn ccw until both sets of threads have cleared center of holes. (4).d. Mounting base (1). Align four holes and rear slot with matching hole pattern in shelf. Tools: 1/2 in socket and e. Five machine bolts (6), Install and secure to mounting base ten IET washers (3) and (1) and shelf. 1/2 in open/box wrench. five nuts (2). f. Two outer thumbscrews Tighten and secure to rim clenching

clamps (5) and mounting base (1).

(4).

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 clamps and tiedown straps.

WARNING

| | Make sure vehicle power | source is positioned OFF or disconnected be | fore installing cables. |
|----|-----------------------------------|---|--|
| | ITEM | ACTION | REMARKS |
| a. | RF cable (5) connector P1. | Connect and secure to antenna base (6) connector J1. See figure 5-5 (1). | |
| b. | RF cable (5). | Route through curbside cable guard to radio shelf. | |
| C. | Mounting hole for loop clamp (4). | Drill a No. 7 (.201 in) diameter hole in curbside wall. See figure 5-5 (1) for location(s). | Tools: Electric drill and No. 7 drill bit. |
| | 6 | | ROADSIDE 2 , 3 (POWER) |

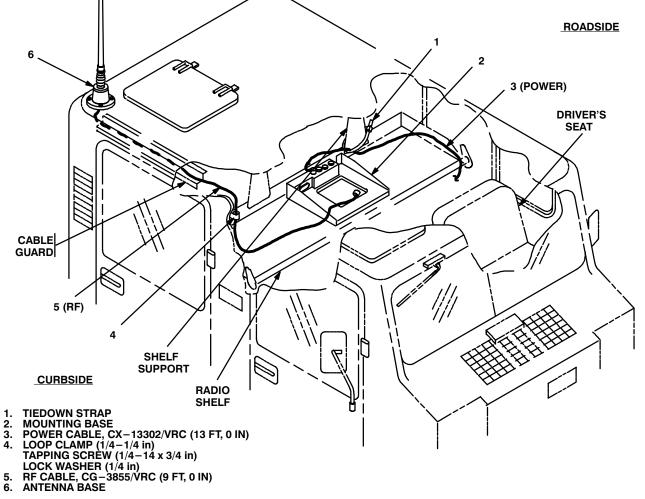


Figure 5-5 (1). Cable Installation: RF and Power Cabling

5.3 Installation of Cables. Continued

| | ITEM | ACTION | REMARKS |
|----|--|---|--|
| d. | Loop clamp (4), pan-head tapping screw (1/4-14 x 3/4 in) and lock washer (1/4 in). | Wrap clamp around RF cable (5); then install to hole drilled in step c. See figure 5-5 (1) for location(s). | Tools: Phillips screwdriver. |
| e. | RF cable (5) connector P2. | Position on top of mounting base (2). See figure $5-5$ (1). | |
| f. | Power cable (3) connector P2. | Position on top of mounting base (2). | |
| g. | Power cable (3). | Route across shelf and down roadside wall to floor behind driver's seat. See figure 5-5 (1). | |
| h. | Mounting hole for loop clamp (1). | Drill a No. 7 (.201 in) diameter hole in roadside wall. See figure 5-5 (2) for location(s). | Tools: Electric drill and No. 7 drill bit. |
| i. | Loop clamp (1), pan-head tapping screw (1/4-14 x 3/4 in) and lock washer (1/4 in). | Wrap clamp around power cable (3); then install to hole drilled in step h. | Tools: Phillips screwdriver. |
| j. | Power cable (3). | Route behind roadside kickplate to battery box. See figure $5-5$ (2). | |
| k. | Rear seat and battery box cover. | Temporarily remove from battery box. | Seat and battery box cover are not shown. |

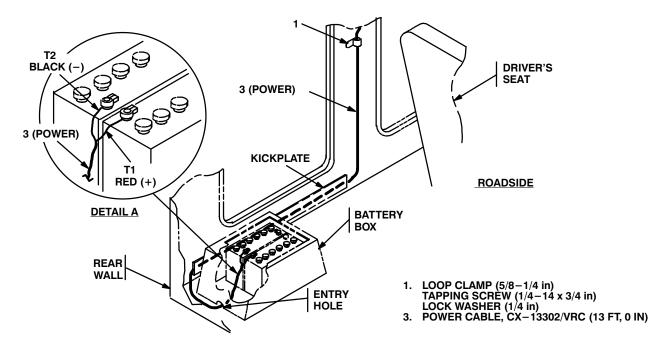


Figure 5-5 (2). Cable Installation: Power Cabling

5.3 Installation of Cables. Continued

| | ITEM | ACTION | REMARKS |
|----|--|--|---|
| l. | Power cable (3) terminal leads: T1 (red) and T2 (black). | Insert through battery box entry hole; then connect and secure to proper battery terminal posts. See figure 5–5 (2), detail A. | T1 connects to positive (+) post. T2 connects to negative (-) post. |
| m. | Rear seat and battery box cover. | Reinstall to battery box. See figure 5-5 (2). | Seat and battery box cover are not shown. |
| n. | Power cable (3) connector P2. | Connect and secure to mounting base (2) connector J1. See figure 5-5 (1). | |
| 0. | Tiedown strap (1). | Wrap around power cable (3), then secure to shelf support. See figure 5-5 (1) for location(s). | |

5.3.1 Installation of RF Cable (M923a, M1066, and M1067 Only.)

WARNING

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

| | ITEM | ACTION | REMARKS |
|----|---|--|--|
| a. | RF cable (2) connector P1. | Connect and secure to antenna base (1) connector J1. See Figure 5-5 (3). | |
| b. | RF cable (2). | Route along curbside wall to radio shelf. | |
| C. | Mounting holes for loop clamps (3). | Drill two No. 7 (.201 in) diameter holes in curbside wall. See Figure 5-5 (3) for location(s). | Tools: Electric drill and No. 7 drill bit. |
| d. | Two loop clamps (3) two pan-head tapping screws (1/4-1/4 x 3/4 in), and two lock washers (1/4 in) | Wrap clamps around RF cable (2); then install to holes drilled in step c. See Figure 5–5(3) for location(s). | Tools: Electric drill and No. 7 drill bit. |
| e. | RF cable (2) connector P2. | Position on top of mounting base. | |

5.3.1 Installation of RF Cable (M923a, M1066, and M1067 Only.) Continued.

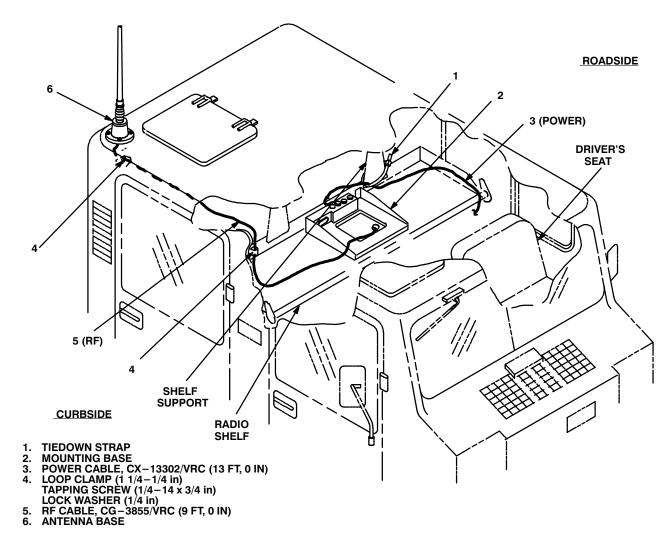


Figure 5-5 (3). RF Cable Installation: M923a, M1066, and M1067

5.4 Installation of Loudspeaker, Permanent Magnet LS-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 stud on speaker (3) through drilled hole; then secure with lock washer (2) and wing nut (1).
 - 1. WING NUT (3/8-24 in)
 - 2. LOCK WASHER (3/8 in)
 - 3. SPEAKER
 - 4. CAP SCREW (1/4-20 x 1 in)
 - 5. SPEAKER BRACKET
 - 6. LOCK WASHER (1/4 in)
 - 7. NUT (1/4-20 in)

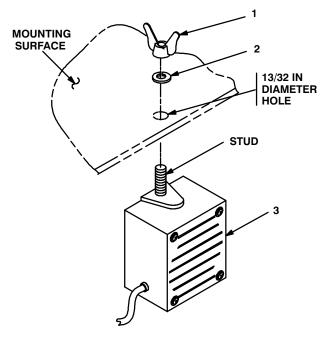


Figure 5-6 (1). Speaker Installation - A

Method B. See figure 5-6 (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.
- Install and secure two cap screws (4), two lock washers (6) and two nuts (7) to speaker bracket (5) and mounting surface.
- d. Insert speaker (3) stud through speaker bracket (5) hole; then secure with lock washer (2) and wing nut (1).

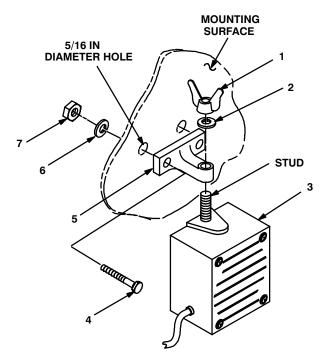


Figure 5-6 (2). Speaker Installation - B

5.5 Installation of Loudspeaker, Control—Unit, LS-671/VRC (speaker). Use the following procedures to install the speaker for "D" and "F" series radio sets. Mounting location on radio shelf may be determined by the vehicle commander.

| | ITEM | ACTION | REMARKS |
|----|--|---|---|
| a. | Mounting holes for plate, mounting (1). | Use plate, mounting (1) as a template and drill two 11/32 in diameter holes in radio shelf. See Figure 5–7. | Tools: Electric drill and 11/32 in drill bit. |
| b. | Plate, mounting (1). | Align bottom slots over holes drilled in step a. | |
| C. | Two machine bolts (2), four flat washers (3), two lock washers (4) and two nuts (5). | Install and secure to plate, mounting (1) and radio shelf. See Figure 5-7. | Tools: 1/2 in socket. |
| d. | Speaker (6). | Place on plate mounting (1). | |
| e. | Two externally-relieved body screws (7). | Thread through and secure to speaker (6) and plate, mounting (1). | |
| f. | Handset. | Connect and secure to speaker (6) connectorJ2. | |

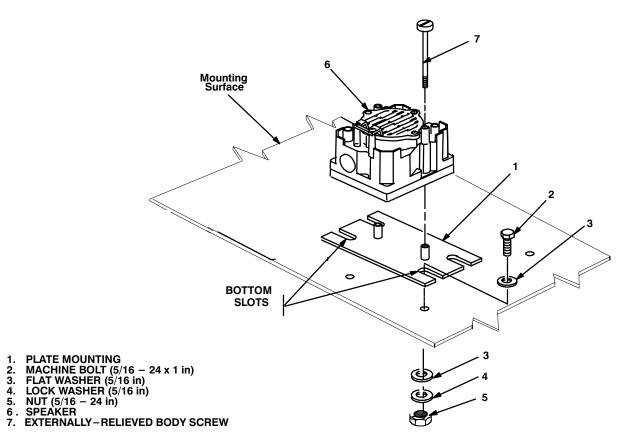
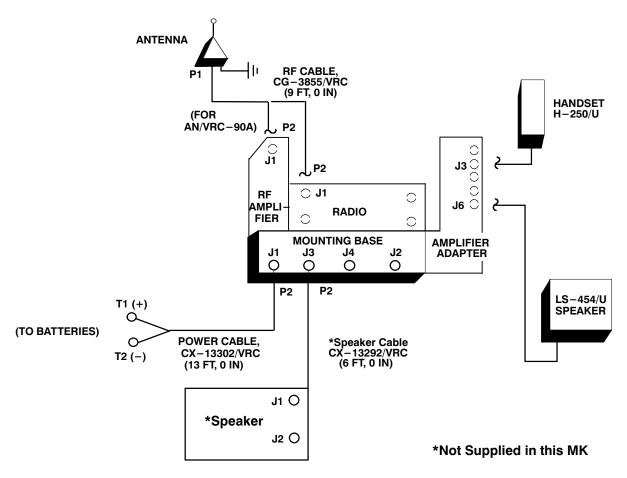


Figure 5-7. Speaker Installation

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 con-nected. | |
| 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) Check 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. |
| CX-13302/VRC (13 FT, 0 IN) | P2 | Mounting base | J1 | T1: Red (+) T2: Black (-) | Batteries | (+) Post (-) Post |
| CG-3855/VRC (9 FT, 0 IN) | P1 | Antenna base | J1 | P2 | RF amplifier or radio | J1 |
| CX-13292/VRC (6 FT, 0 IN) | P2 | Mounting Base | J3 | P1 | *Speaker | J1 |
| Speaker cable | | LS-454/U speaker | | | Amplifier-adapter | J6 |

Figure 5-8. Cable Diagram: For AN/VRC-89/91/92 Series

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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| 2-25 | | | | Recommend that the installation antenna alignment procedure be changed throughout to specify a 20 IFF antenna lag rather than 10 |
| | | | | REASON: Experience has shown the advanly a 10 lag, the antenna servo system is too sensitive to a gusting in excess of 25 knots, and has a tendency to rapidly, accelerate and decelerate as it hunts, cause strain to the drive train. Hunting is minimized by adjusting the age to 20 without degradation of operation. |
| 3-10 | 3-3 | | 3-1 | Item 5, Fractional co. In. Change 2 dB" to 3 dB". REAL TEAL COLUMN CHANGE 12 dB" to 3 dB". REAL TEAL COLUMN CHANGE 12 dB" to 3 dB". |
| 5-6 | 5-8 | | 5 | And new step f.1 to read, Replace cover plate removed in step d above." REASON: To replace the cover plate. |
| | | FO-3 | | ZONE C 3. On J1−2, change |
| PRINT | TED NAME, GF | RADE OR TIT | LE AND TEI | LEPHONE NUMBER SIGN HERE |

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