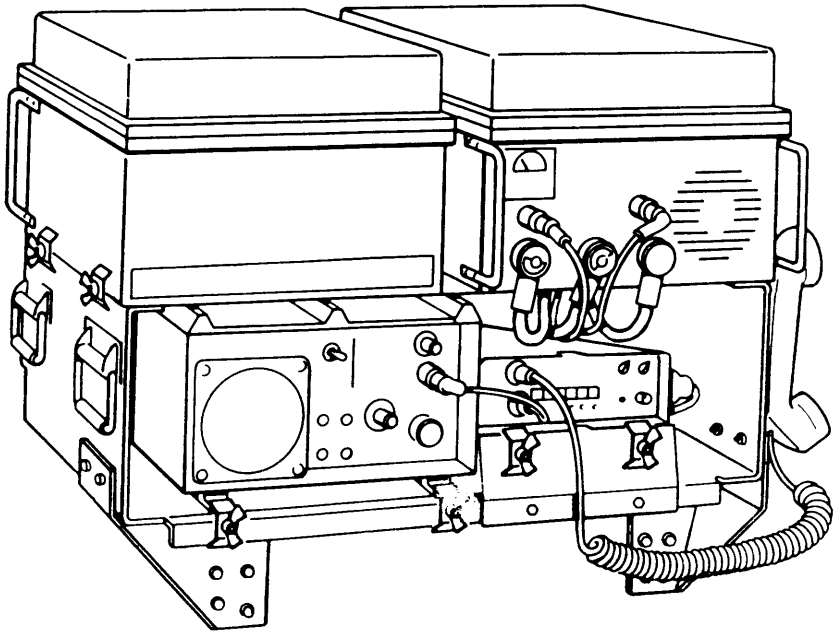
TM 11-2300-475-13 & P-1

TECHNICAL MANUAL

OPERATOR'S, ORGANIZATIONAL, AND DIRECT SUPPORT MAINTENANCE MANUAL, INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST FOR INSTALLATION KIT, ELECTRONIC EQUIPMENT MK-2462/GRC-193A (NSN 5820-01-189-9794)



IN TRUCK CARGO, 1-1/4 TON, 4x4, M882, OR M1008A1 (CUCV) FOR RADIO SET AN/GRC-193A

HEADQUARTERS, DEPARTMENT OF THE ARMY

1 SEPTEMBER 1987

CHANGE

No 1

HEADQUARTER
DEPARTMENT OF THE ARMY
Washington, DC, 1 July 1988

OPERATOR'S, ORGANIZATIONAL AND DIRECT SUPPORT MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST INSTALLATION KIT, ELECTRICAL EQUIPMENT MK-2462/GRC-193A (NSN 5820-01-189-9794) IN TRUCK CARGO, 1-1/4 TON, 4x4, M882 OR M1008A1 (CUCV) FOR RADIO SET AN /GRC-193A

TM 1l-2300-475-13&P-l, 1 September 1987, is changed as follows:

1. Remove old pages and insert new pages as indicated below. New or changed material is indicated by a vertical bar in the margin of the page. Added or revised illustrations are indicated by a vertical bar adjacent to the identification number.

Remove pages	*Insert pages*
C/(D blank)	C/(D blank)
l-7 through l-9/(1-10 blank)	1-7 through 1-9/(1-10 blank)
2-7 and 2-8	2-7 and 2-8
C-3 through C-6	C-3 through C-6

2. File this change sheet in front of the publication for reference purposes.

By Order of the Secretary of the Army:

CARL E. VUONO
General, United States Army
Chief of Staff

Official:

R.L. DILWORTH
Brigadier General, United States Army
The Adjutant General

DISTRIBUTION:
To be distributed in accordance with DA Form 12-51 Operator, Unit , and DS/GS requirements for AN/GRC-193A.

5 SAFETY STEPS TO FOLLOW IF SOMEONE IS THE VICTIM OF ELECTRICAL SHOCK

1. DO NOT TRY TO PULL OR GRAB THE INDIVIDUAL
2. IF POSSIBLE, TURN OFF THE ELECTRICAL POWER
3. IF YOU CANNOT TURN OFF THE ELECTRICAL POWER, PULL, PUSH, OR LIFT THE PERSON TO SAFETY USING A DRY WOODEN POLE OR A DRY ROPE OR SOME OTHER INSULATING MATERIAL
4. SEND FOR HELP AS SOON AS POSSIBLE
5. AFTER THE INJURED PERSON IS FREE OF CONTACT WITH THE SOURCE OF ELECTRICAL SHOCK, MOVE THE PERSON A SHORT DISTANCE AWAY AND IMMEDIATELY START ARTIFICIAL RESUSCITATION

WARNING

Observe all **WARNINGS** and Cautions when performing any instruction or procedure to prevent personal injury or equipment damage.

WARNING

When drilling near the gas tank, drill only in an adequately ventilated area and ensure that neither gasoline nor gasoline fumes are escaping from gas cans or the gas tank. Failure to observe this warning could result in an **Explosion** that could result in damage to equipment and/or loss of life.

WARNING

Failure to ground the drill properly could result in an electrical **Shock** that could cause serious injury or death.

WARNING

Failure to wear safety glasses or goggles while drilling in metal could cause serious eye damage, including **Loss of Sight.**

WARNING

Two persons are required to lift and install the Mounting Base, the Power Amplifier, and the Antenna Coupler when performing this procedure, in accordance with **MIL-STD 1472B** Human Engineering Design Criteria For Military Systems, Equipment and Facilities. One person should not attempt these steps alone.

WARNING

Make sure power control (VOLUME) on RT is in fully CCW position (OFF).

WARNING

DO NOT CLEAN THE EQUIPMENT IF THE POWER IS ON.

WARNING

THE FOLLOWING PROCEDURE REQUIRES THE BREAKING OF RADIO SILENCE. UNAUTHORIZED VIOLATION OF RADIO SILENCE COULD RESULT IN COURT MARTIAL OR POSSIBLE DEATH FROM HOSTILE ACTION.

WARNING

Adequate ventilation should be provided while using TRICHLOROTRIFLUOROETHANE. **Prolonged breathing of vapor should be avoided. The solvent should not be used near heat or open flame; the products of decomposition are toxic and irritating. Since** TRICHLOROTRIFLUOROETHANE **dissolves natural oils, prolonged contact with skin should be avoided. When necessary, use gloves which the solvent cannot penetrate. If the solvent is taken internally, consult a physician immediately.**

WARNING

RF RADIATION HAZARD

During 100 watt (power output) operation, personnel must remain 15-20 cm (6 inches) from the antenna. During 400 watt operation, the minimum safe distance from the antenna is 1 meter (3 feet).

TECHNICAL MANUAL

No. 11-2300-475-13 & P-1

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 1 September 1987

OPERATOR'S, ORGANIZATIONAL AND DIRECT SUPPORT MAINTENANCE MANUAL, INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST INSTALLATION KIT, ELECTRONIC EQUIPMENT MK-2462/GRC-193A (NSN 5820-01-189-9794) IN TRUCK CARGO, 1-1/4 TON, 4 X 4, M882 OR M1008A1 (CUCV) FOR RADIO SET AN/GRC-193A

REPORTING 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 the back of this manual direct to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: AMSEL,-ME-MP, Fort Monmouth, New Jersey 07703-5000. In either case, a reply will be furnished direct to you.

HOW TO USE THIS MANUAL

This manual is designed to help you install, operate, and maintain Radio Set AN/G RC-193A in Truck, Cargo, 1-1/4 Ton, 4 x 4, M882 or M10081A1 (CUCV) using the MK-2462/GRC-193A Electronic Equipment Installation Kit.

Paragraphs in this manual are numbered by chapter and order of appearance within a chapter. A subject index appears at the beginning of each chapter listing sections that are included in that chapter. A more specific subject index is located at the beginning of each section to help you find the exact paragraph you 're looking for.

Warning pages are located in the front of this manual. You should learn all warnings before operating, installing, or performing maintenance procedures on the equipment.

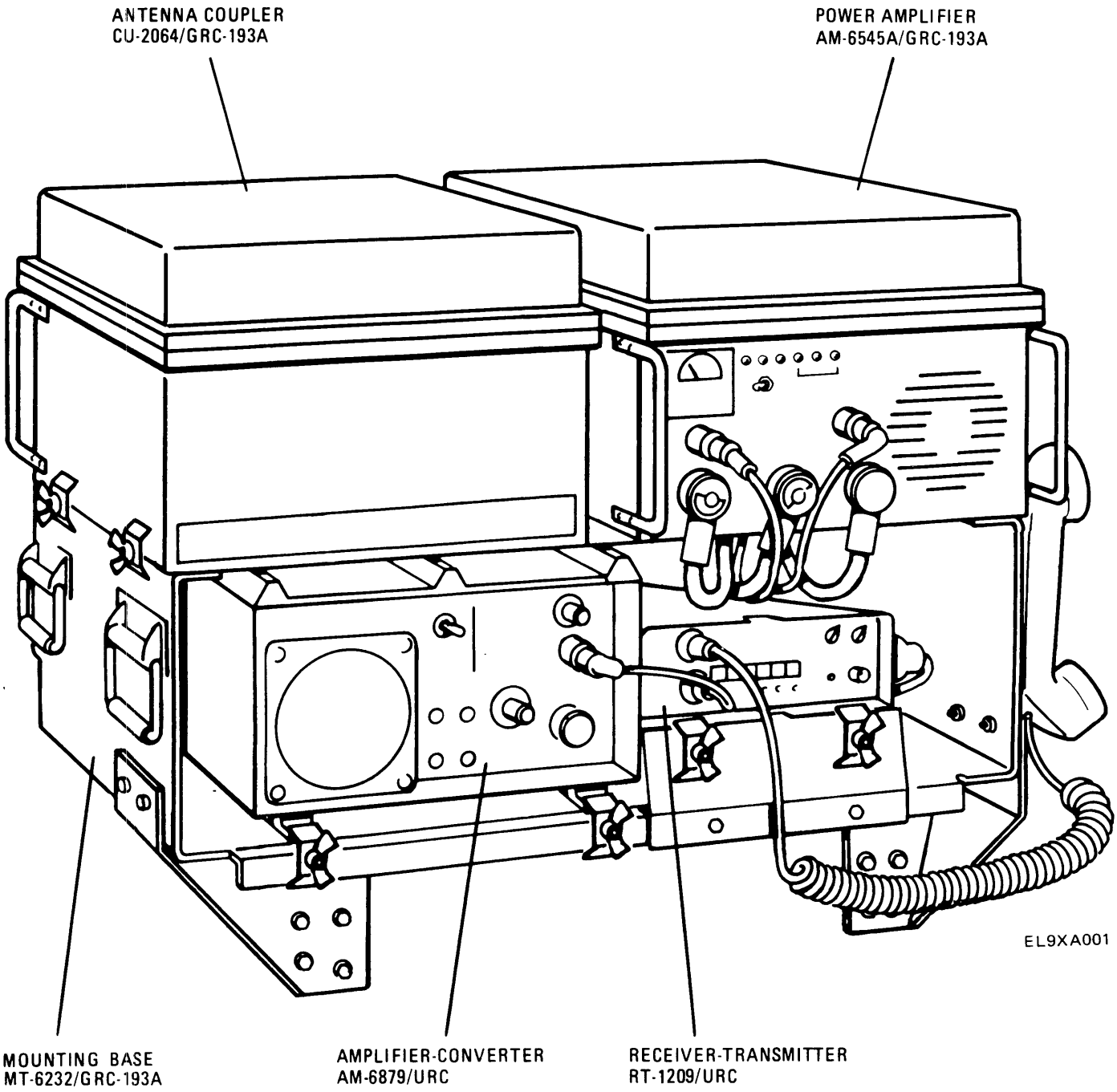
Read all preliminary material found at the beginning of each task. It contains important information and safety instructions necessary to complete procedures.

Instructions for installation are located in paragraph 2-6.

Instructions for performing PMCS are located in paragraphs 3-3 and 3-7.

There is a Maintenance Allocation Chart (MAC) located in appendix B, which is current as of July 1986.

Measurements in this manual are given in both US standard and metric units.



INSTALLATION KIT, ELECTRONIC EQUIPMENT
MK-2462/GRC-193A

CHAPTER 1

INTRODUCTION

Section I. GENERAL INFORMATION

1-1. SCOPE.

This manual provides instructions for installing Installation Kit, Electronic Equipment MK-2462/GRC-193A (kit) (NSN 5820-01-189-9794), in Truck, Cargo, 1-1/4 Ton, 4 x 4, M882 or M1008A1 (CUCV). This installation allows the mounting of Radio Set AN/GRC-193A.

1-2. CONSOLIDATED INDEX OF ARMY PUBLICATIONS AND BLANK FORMS.

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

1-3. MAINTENANCE FORMS, RECORDS, AND REPORTS.

REPORTS OF MAINTENANCE AND UNSATISFACTORY EQUIPMENT

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by **DA Pam 738-750** as contained in Maintenance Management Update.

REPORT OF PACKAGING AND HANDLING DEFICIENCIES

Fill out and forward SF **364** (Report of Discrepancy (ROD)) as prescribed in **AR 735-11-2/DLAR 4140.55/NAVMATINST 4355.73B/AFR 400-54/MCO 4430.3H.**

DISCREPANCY IN SHIPMENT REPORT (DISREP) (SF 361)

Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in **AR 55-38/NAVSUPINST 4610.33 C/AFR 75-18/MCO P4610.19D,** and **DLAR 4500.15.**

1-4. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR).

If your equipment needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about the design. Put it on an SF 368 (Quality Deficiency Report). Mail it to Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: AMSEL-PA-MA-D, Fort Monmouth, New Jersey 07703-5000. We'll send you a reply.

1-5. NOMENCLATURE CROSS-REFERENCE LIST.

This list contains common names used in place of official nomenclature in this manual.

COMMON NAME	OFFICIAL NOMENCLATURE
M882 INSTALLATION KIT	INSTALLATION KIT, ELECTRONIC EQUIPMENT MK-2462/GRC-193A

1-6. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE.

Destruction of Army electronics materiel to prevent enemy use shall be in accordance with **TM 750-244-2.**

1-7. PREPARATION FOR STORAGE AND SHIPMENT.

Equipment shall be prepared for storage or shipment by performing preventive maintenance checks and services (PMCS) as prescribed in the PMCS charts included in this manual. These procedures should also be done when removing equipment from storage to ensure operational readiness.

Packing of equipment for storage or shipment will normally be performed at a packing facility or by a packaging team.

1-8. DISPOSITION OF UNUSED PARTS

Dispose of unused parts in accordance with **DOD 4160.21-M** and **AR 755-2.**

1-9. LIST OF ABBREVIATIONS.

The following is a list of abbreviations used in this manual.

ABBREVIATIONS

AAL	Additional Authorization List
AC	Amplifier-Converter
AC or ac	Alternating Current
A m p s	Amperes
ANT	Antenna
ANT CPLR CB	Antenna Coupler Circuit Breaker
AVG	Average
C	Celsius (Centigrade)
C O E I L	Components of End Item List
C O N T	Control
CU	Antenna Coupler
CW	Continuous Wave
D-RCV	Data Receive
D-TR	Data-Transmit/Receive
dB	Decibel
DC or dc	Direct Current
DISREP	Discrepancy in Shipment Report
EIR	Equipment Improvement Recommendations
E M I	Electromagnetic Interference
F	Fahrenheit
FSCM	Federal Supply Code for Manufacturers
F S K	Frequency-Shift Keying
F T	Foot or Feet
H F	High Frequency
H z	Hertz
kg	Kilograms
k H z	Kilohertz
lb	Pounds
LSB	Lower Sideband
MAC	Maintenance Allocation Chart
MHz	Megahertz
mW	Milliwatts
msec	millisecond
NVIS	Near Vertical Incidence Skywave
PA	Power Amplifier
PA CB	Power Amplifier Circuit Breaker
P E P	Peak-Envelope Power
PMCS	Preventive Maintenance Checks and Services
PTT	Push-To-Talk
RDY	Ready
rf	Radio Frequency
RFI	Radio Frequency Interference
ROD	Report of Discrepancy
RT	Receiver Transmitter
SINAD	The ratio of signal plus noise plus distortion over the noise plus distortion
SSB	Single Sideband
SPKR	Speaker
TMDE	Test Measurement and Diagnostic Equipment

ABBREVIATIONS	
T T Y	Teletypewriter
TUN	Tune
U/M	Unit of Measure
U H F	Ultra High Frequency
USB	Upper Sideband
u V	Microvolts
VHF	Very High Frequency
V-RCV	Voice-Receive
V-TR	Voice Transmit/Receive
X M T	Transmit

1-10. DEFINITION OF UNUSUAL TERMS.

Nominal	The stated or specified value as opposed to the actual value.

Section II. EQUIPMENT DESCRIPTION

1-11. PURPOSE AND USE.

The MK-2462/GRC-193A Electronic Equipment Installation Kit is a grouping of items used to modify Truck, Cargo, 1-1/4 Ton, 4 x 4, M882 or M1008A1 (CUCV) for the installation of Radio Set AN/GRC-193A as shown in the installation drawings on the following pages.

1-12. DESCRIPTION OF COMPONENTS.

The installation kit is made up of the components listed below. When applicable, attaching hardware is enclosed in a bag and fastened to the equipment.

a. Mounting Base, Electrical Equipment MT-6232/GRC-193A, 755017B0700 is a rack unit for Radio Set AN/GRC-193A used with Truck, Cargo, 1-1/4 Ton, 4 x 4, M882 or M1008A1 (CUCV).

b. Installation Kit, 755017B092 1 is an installation kit containing brackets, cables, and hardware used with the MT-6232 Mounting Base.

c. AB-652 Antenna Mast Base, (NSN 5820-00-078-4770).

d. MS-116-A Antenna Section SC-D-12521 (NSN 5985-00-199-8831) (Quantity 3).

e. MS-117-A Antenna Section SC-D-12521 (NSN 5985-00-115-7149).

f. MS-118-A Antenna Section SC-D-12521 (NSN 5985-00-238-7474).

g. Antenna Tip Assembly SC-D-446046 (NSN 5985-00-930-7223).

h. CF-475B Cover SM-D-500428 (NSN 5820-00-078-4769).

i. Antenna Guard Assembly, SC-C-446008 (NSN 5820-00-493-3055).

j. Clamp SC-B-19491 (NSN 5340-00-286-2491).

k. Rope SM-B-500418 (NSN 4020-00-073-3276 (20 ft./2 ea.)).

l. Antenna Adapter 755017B0765.

m. Installation Instructions 755017B0922.

1-13. PARTS IDENTIFICATION LIST.

The following list of parts is for identification during installation and does not constitute a bill of material (BOM). This list of parts is used with the installation drawings in paragraph 1-14 to locate and

identify the parts for-installation of the AN/GRC-193A Radio Set in the M882 or M1008A1 vehicles, using the MK-2462 Electronic Equipment Installation Kit.

PARTS IDENTIFICATION LIST

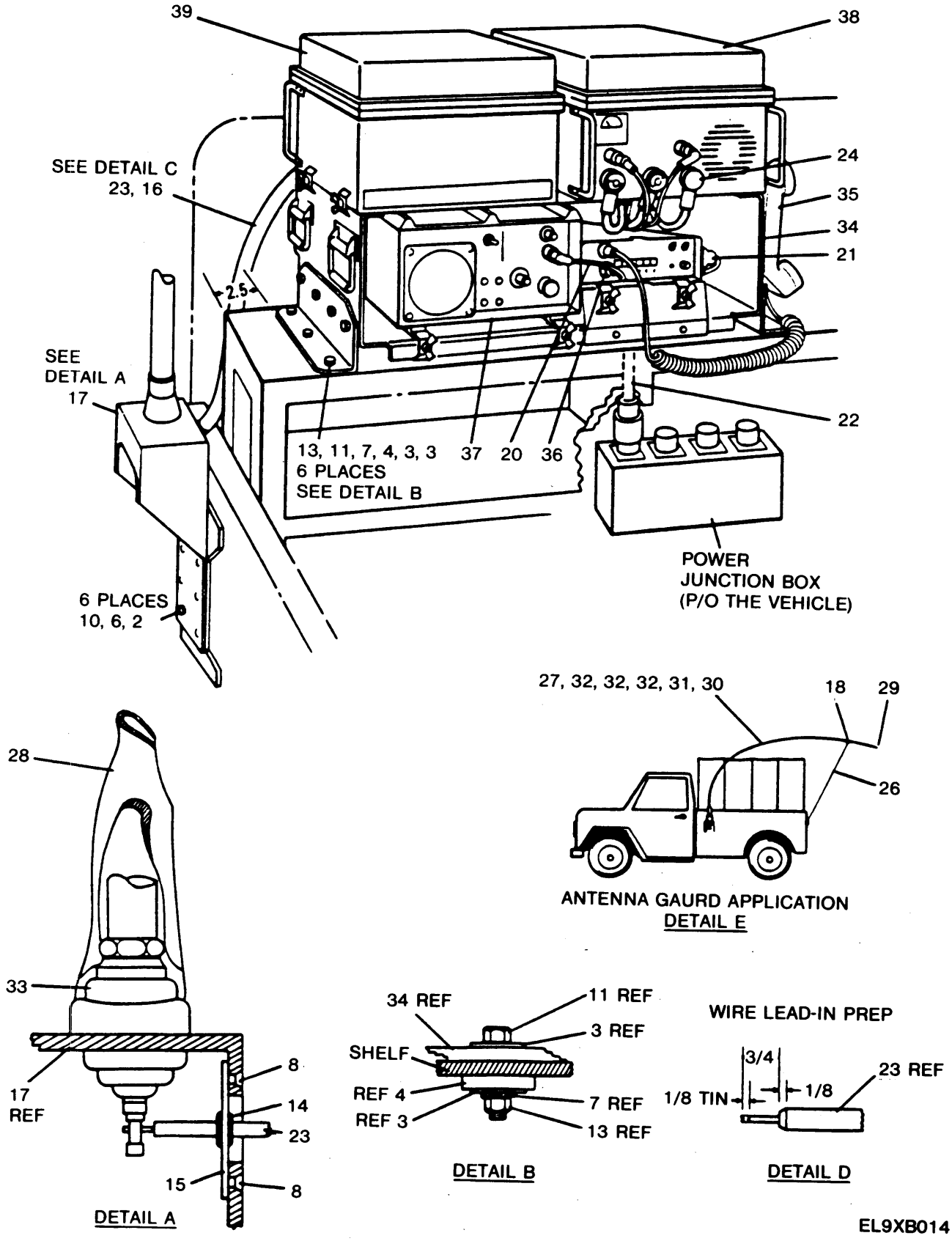
ITEM NO,	QTY	FSCM NO.	PART NUMBER	DESCRIPTION
1	3	96906	MS15795-808	WASHER, FLAT NO. 18
2	6	96906	MS15795-610	WASHER, FLAT NO. 1/4
3	12	96906	MS15795-814	WASHER, FLAT NO. 3/8
4	6	80372	755017B0846	WASHER, FLAT, BACKING
5	3	96906	MS35338-138	WASHER, LOCK NO. 18
6	6	96906	MS35338-139	WASHER, LOCK NO. 1/4
7	6	96906	MS35338-141	WASHER, LOCK NO. 3/8
8	4	96906	MS51959-45	SCREW, 8-32 X 1/2 LG 82”
9	3	96906	MS51958-65	SCREW 10-32 X 3/4 LG
10	6	96906	MS35387-308	BOLT, 1/4-20 X 1.8 LG
11	6	96906	MS35387-364	BOLT< 3/8-16x 1-1/2 LG
12	3	96906	MS35650-104	NUT, 18-32
13	6	96906	MS35690-610	NUT3/8-16
14	1	96906	MS35489-80	GROMMET, RUBBER
15	1	80372	755017B0847	PLATE, LEAD IN
16	1	80372	75017B0728-2	TUBING, PVC
17	1	80063	SC-D-856120	MOUNT, ANTENNA
18	1	80063	SC-D-19491	CLAMP
19	3	96906	MS25281-R14	CLAMP
20	1	80372	755017A1811	CABLE, AUDIO
21	1	80372	755017A1810	CABLE, CONTROL
22	1	80372	755017B0740	CABLE, POWER
23	1	80063	SM-C-502924	CABLE, ANTENNA, CX-10171/U
24	1	80372	755017B0832-2	DRILL BIT, 5/16
25	1	80372	755017B0832-6	DRILL BIT, 7/16
26	2	80063	SM-B-500418	ROPE, 20 FT LONG
27	1	80063	SC-C-446008	ANTENNA GUARD ASSEMBLY
28	1	80063	SM-D-500428	ANTENNA SHEATH
29	1	80063	SC-C-446046	ANTENNA TIP ASSEMBLY
30	1	80063	SC-D-12521	MASTER SECTION, ANTENNA, MS-118-A
31	1	80063	SC-D-12521	MASTER SECTION, ANTENNA, MS-117-A
32	3	80063	SC-D-12521	MASTER SECTION, ANTENNA, MS-116-A
33	1	80063	SC-D-49679	MASTER BASE, ANTENNA, AB-652
34	1	80372	755017B0700	MOUNTING BASE, MT-6232/GRC-193A
35	1	80058	H-250/U	HANDSET

PARTS IDENTIFICATION LIST (CONTINUED)

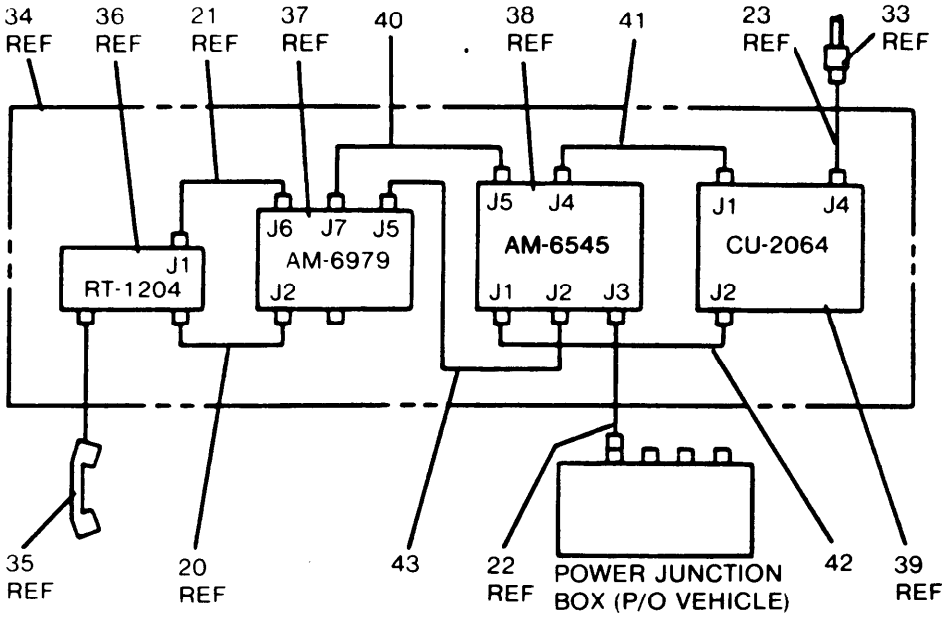
ITEM NO.	QTY	FSCM NO.	PART NUMBER	DESCRIPTION
36	1	80372	755017A0150	RECEIVER-TRANSMITTER, RT-1209/URC
37	1	80372	755017A1800	AMPLIFIER CONVERTER< AM-6379/URC
38	1	80372	755017A3000	AMPLIFIER, POWER, AM-6545
39	1	80372	755017A8000	COUPLER, ANTENNA, CU-2064
40	1	80372	755017B0512	CABLE, ASSY, COAX, PA-AM
41	1	80372	755017B0714	CABLE, ASSY, COAX, PA-CU
42	1	80372	755017B0731	CABLE, ASSY, CNTRL, PA-CU
43	1	80372	755017B0735	CABLE, ASSY, CNTRL, PA-AM
44	1	80372	755017B0140	CABLE, COAX
45	1	80372	755017B0110	CABLE, CNTRL
46	1	80063	RC-435/U	REEL, CABLE
47	1	80372	755017B0769	CPLR & ANT BASE ASSY
48	1	80063	SC-C-446079	ROD,GROUND
49	1	80063	SC-C-446047-1	BRAID, 52 IN LG
50	2	80063	SC-C-446047-2	TERMINAL
51	1	80372	755017B765	ADAPTER<ANTENNA
52	1	80063	AS-2259/GR	ANTENNA, NVIS
53	1	80063	MS35307-308	BOLT, 1/4-20x 1 LG
54	1	80063	MS35338-139	WASHER, LOCK, NO. 1/4
55	1	80063	MS15795-810	WASHER, FLAT, NO. 1/4
56	1	80063	A3017188	ANTENNA BRACKET

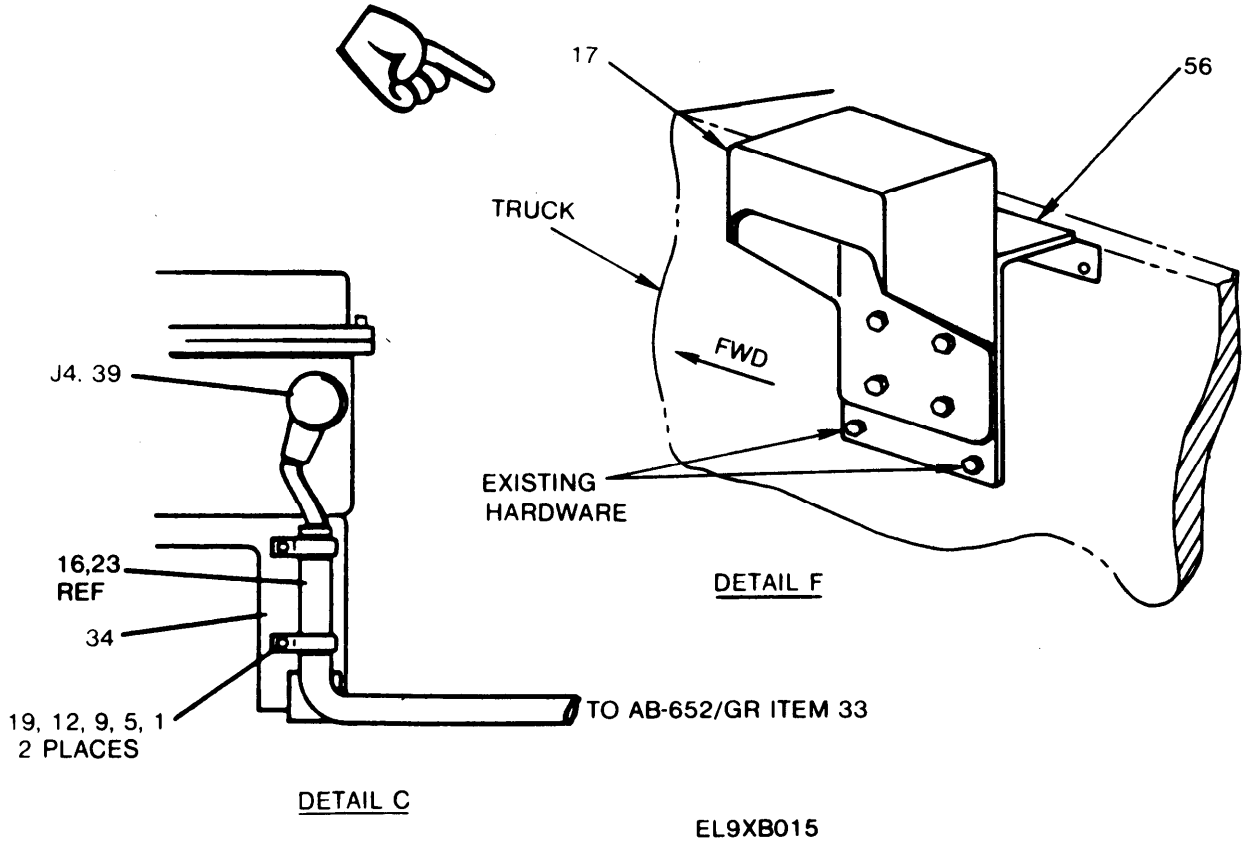
1-14. INSTALLATION DRAWINGS.

The following installation drawing used with the parts identification list locate and identify the pieces that comprise the MK-2462/GRC-193A Electronic Equipment Installation Kit.


39
38
SEE DETAIL C
23, 16
24
35
34
21
2.5
SEE
DETAIL A
17
22
13, 11, 7, 4, 3, 3
6 PLACES
SEE DETAIL B
37
20
36
POWER
JUNCTION BOX
(P/O THE VEHICLE)
6 PLACES
10, 6, 2
27, 32, 32, 32, 31, 30
18
29
26
ANTENNA GAURD APPLICATION
DETAIL E
28
33
17
REF
8
14
23
15
8
DETAIL A
34 REF
11 REF
3 REF
SHELF
REF 4
REF 3
7 REF
13 REF
DETAIL B
WIRE LEAD-IN PREP
3/4
1/8 TIN
1/8
23 REF
DETAIL D
EL9XB014

CORDING DIAGRAM





EL9XB015

CHAPTER 2

SERVICE UPON RECEIPT AND INSTALLATION

Section I. UNPACKING, PREPARATION AND REQUIRED TOOLS AND EQUIPMENT

WARNING

Observe all **WARNINGS** and Cautions when performing any instruction or procedure to prevent personal injury or equipment damage.

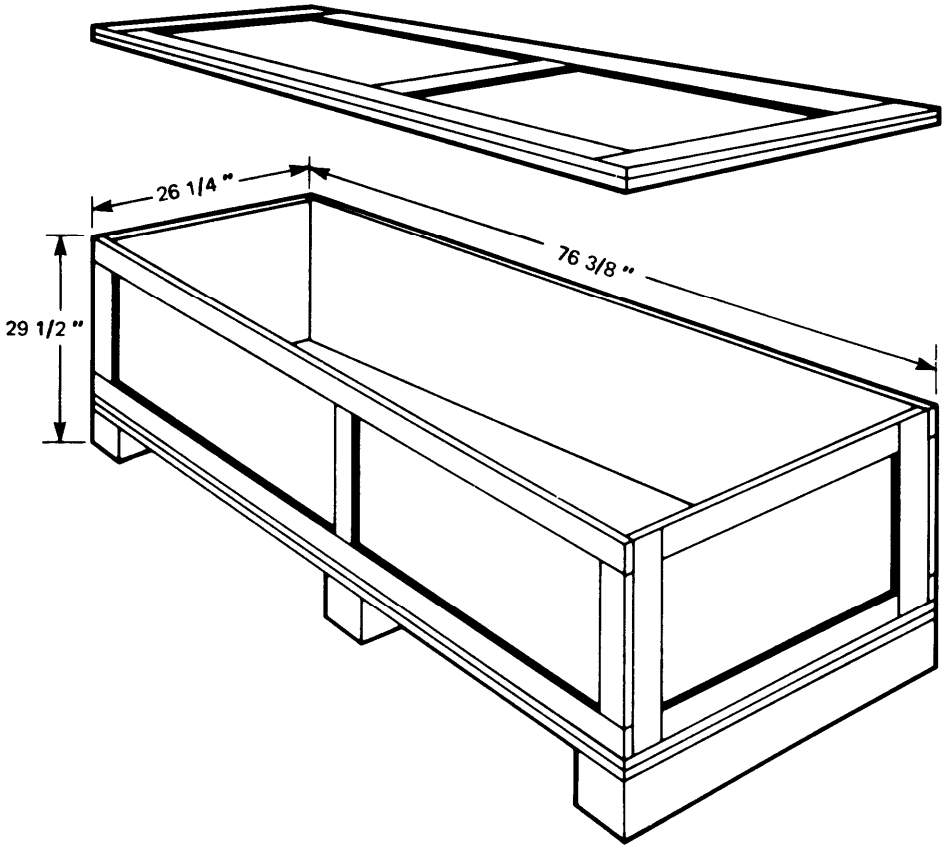
2-1. UNPACKING.

When packed for shipment, the components of the installation kit are contained in individual cartons. All cartons are usually packed in a large cardboard carton which mayor may not be installed inside a wooden packing crate. When packed for overseas shipment, the cardboard carton is enclosed in moistureproof paper.

Unpack the equipment from the case as follows:

CAUTION

Do not open case with pry bar or crowbar, equipment within case maybe damaged.



EL9XAO11

1. Cut and fold back any metal straps around wooden packing case.
2. Remove nails from cover and one side of wooden packing case.
3. Remove cover and one side.
4. Open moistureproof barrier cover in outer carton and remove carton from case.
5. Open carton and moistureproof barrier covering inner carton.
6. Remove inner carton and open.
7. Remove contents from inner carton. Save cartons, inner blocking, fillers, etc., for future limited storage of installation kit.

2-2. CHECKING UNPACKED EQUIPMENT.

1. Inspect the equipment for damage incurred during shipment. If any damage has been found, report on **SF 364 (Report of Discrepancy (ROD)).**
2. See that the installation kit supplied is complete as listed on the packing slip. If a packing slip is not available, check the kit against the list of kit items in appendix B. Report all discrepancies in accordance with DA Pam 738-750. Shortage of minor assembly or spare part which does not affect usage should not prevent use of the kit.

3. Check that all applicable **Modification Work Orders (MWO'S)** have been applied to the equipment. Current MWO'S for the equipment will be listed in DA Pam 25-30.

2-3. PREPARATION FOR INSTALLATION.

To perform the installation of the MK-2462/GRC-193A Electronic Equipment Installation Kit a suitable site must be selected. The installation procedure calls for holes to be drilled in the vehicle; therefore, electrical power should be available to operate an electrical drill and to provide lighting if necessary.

2-4. TOOLS AND EQUIPMENT REQUIRED.

The following tools and equipment are required for the installation of the MK-2462/GRC-193A Electronic Equipment Installation Kit.

1. Tool Kit, Electronic Equipment TK-105/G.
2. Portable drop light.
3. Hammer, Ball-peen, 16 oz.
4. Center punch, 1/2x6-inch.
5. 5/16-inch drill bit (NSN 5133-00-227-9662).
6. 7/16-inch drill bit (NSN 5133-00-227-9670).
7. Tape measure.

Section Il. INSTALLATION

2-5. WARNINGS AND PRECAUTIONS.

Before installing the MK-2462/GRC-193A, read the instructions below. Observe all **WARNINGS** and Cautions while performing the installation procedure.

WARNING

When drilling near the gas tank, drill only in an adequately ventilated area and ensure that neither gasoline nor gasoline fumes are escaping from gas cans or the gas tank. Failure to observe this warning could result in an **Explosion** that could result in damage to equipment and/or loss of life.

WARNING

Failure to ground the drill properly could result in an electrical **Shock** that could cause serious injury or death.

WARNING

Failure to wear safety glasses or goggles while drilling in metal could cause serious eye damage, including **Loss of Sight.**

1. Ensure that all electrical equipment, including the drill, is properly grounded.
2. Always wear safety glasses or goggles when drilling in metal.
3. Ensure that vehicle is close to power source for operation of electrical equipment.
4. Move kit close to where equipment will be installed.
5. Remove all burrs and sharp edges after drilling, and remove metal shavings and chips from vehicle.
6. Read and follow instructions and figures carefully.

2-6. INSTALLATION PROCEDURES.

Before starting, familiarize yourself with the entire installation procedure. Identify all major parts and components of radio set and installation kit as shown in paragraph 1-13, Parts Identification, and paragraph 1 -14, Installation Drawings.

Refer to installation drawings paragraph 1-14, as required in the following steps of this procedure.

WARNING

Two persons are required to lift and install the mounting base, the power amplifier, and the antenna coupler when performing this procedure, in accordance with **MIL-STD 1472B** Human Engineering Design Criteria For Military Systems, Equipment, and Facilities. One person should not attempt these steps alone.

2-6.1. Preliminary Procedures.

Before proceeding, remove all accessory items from the vehicle that would be in the way during installation.

2-6.2. Installation of MT-6232/GRC-193A Mounting Base.

To install the MT-6232/GRC-193A Mounting Base, (item number 34). Perform the following steps:

NOTE

If Power Amplifier AM-6545A (item 38), Antenna Coupler CU-2064 (item 39), Mounting Base MT-6232 (item 34), Receiver Transmitter RT-1209 (item 36), and Amplifier-Converter AM-6879 (item 37) are received as separate units, omit steps (l), (2), and (3).

1. Remove AM-6545A Power Amplifier (item 38) and CU-2064 Antenna Coupler (item 39) from the MT-6232/GRC-193A Mounting Base (item 34) by disconnecting all front panel connectors, loosening the thumbscrew clamp fasteners, moving the units slightly sideways, and lifting up. Set power amplifier (item 38) and antenna coupler (item 39) aside for reinstallation in a later step.

2. Remove AM-6879/URC Amplifier Converter (item 37) from MT-6232 Mounting Base (item 34) by disconnecting all rear panel connectors and audio cable (item 20) from the front panel. Loosen the thumbscrew clamp fasteners and pull forward on the unit. Set the AM-6879/URC Amplifier-Converter aside for reinstallation in a later step.

3. Remove RT-1209/URC Receiver-Transmitter (item 36) from mounting base (item 34) by disconnecting audio cable (item 20) and control cable (item 21), loosening thumbscrew clamp fasteners and lifting the unit up and out. Set the receiver-transmitter aside for reinstallation in a later step.

4. Do not remove the side mounting brackets that are already attached to Mounting Base MT-6232/GRC-193A (item 34).

5. Place the Mounting Base (item 34) on the left-hand side of the shelf located behind the cab in the bed of the truck as shown in installation drawings. Position the Mounting Base 2-1/2 inches from the left edge of the shelf and flush with the front edge of the shelf. Scribe each of the six mounting hole positions located on the side mounting brackets. Remove the mounting base from the shelf.

6. Center punch the six mounting hole positions on the vehicle shelf. Using a 7/16-inch drill bit, drill six holes in the vehicle shelf on the marked positions.

7. Reposition mounting base (item 34) on vehicle shelf and fasten it to the shelf using the 3/8-inch bolts, nuts, lockwashers, backing flatwashers, and flatwashers (items 13,11,7,4, and 3) provided. Place a flatwasher under each bolt head (see detail B), insert bolt down through the mounting base (item 34) and the vehicle shelf. On the underside of the truck shelf, use the backing flatwasher (item 4) followed by a flatwasher (item 3), a lockwasher (item 7), and a nut (item 13) on each bolt. Tighten the bolts firmly.

8. Remove the grounding strap from Amplifier-Converter AM-6879/URC by removing the retaining bolt. Save the bolt and grounding strap for later use in installations requiring separate grounding of Amplifier Converter AM-6879/URC.

9. Loosen the thumbscrews attaching the four mounting clamps on the upper level of Mounting Base MT-6232/GRC-193A (item 34).

10. Facing the front of the mounting base, position Amplifier-Converter AM-6879/URC (item 39) in front of the lower left compartment of the Mounting Base and make the following cable connections to cables clamped within the Mounting Base before sliding the amplifier-converter into the compartment:

    a. Connect RF cable assembly (item 40) P2 to jack J7 on the rear of amplifier-converter.

    b. Connect cable assembly (item 43) P1 to jack J5 on the rear of amplifier-converter.

    c. Connect control cable assembly (item 21) P1 to jack J6 on rear of the amplifier-converter.

    d. Connect the audio cable (item 20) P2 to AUDIO jack J2 on the amplifier-converter.

11. Slide the amplifier-converter into the compartment and tighten the thumbscrew clamps that retain it in the compartment.

12. Facing the rear of the mounting base (from the roadside of vehicle), slide all of the loose cable ends out through the cutout in the right rear of the mounting base.

13. Facing the front of the mounting base, position the power cable (item 22) through the right hand lower compartment of the mounting base with the connector that connects to power amplifier AM-6545 extending about 6 inches out of the front of the mounting base

14. Clamp the power cable to the top and rear of the right hand compartment by removing the nut and the clamping bracket already installed at each location, placing the clamp around the cable, and reinstalling the clamp and nut.

15. Install Power Amplifier AM-6545A (item 38) in the right-hand top position on the mounting base and tighten the thumbscrew clamp fasteners. Make the following cable connections:

    a. Connect control cable assembly (item 42) P1 to jack J1 on the power amplifier.

    b. Connect control cable assembly (item 43) P2 to jack J2 on the power amplifier

    c. Connect RF cable assembly (item 41) P2 to jack J4 on the power amplifier.

    d. Connect RF cable assembly (item 40) P1 to jack J5 on the power amplifier.

16. Facing the front of the mounting base, install Receiver-Transmitter RT-1209/URC (item 36) in the lower right hand compartment of the mounting base and tighten the thumbscrew clamp fasteners. Make the following cable connections to the receiver-transmitter:

    a. Connect audio cable (item 20) from the amplifier-converter to the lower AUDIO jack on the front panel of the receiver-transmitter.

b. Connect control cable (item 21) P2 to Jack J1 on the right hand side of the receiver-transmitter. Tighten the two connector retaining screws.

17. Install Antenna Coupler CU-2064 (item 39) in the left-hand top position of mounting base (item 34) and tighten thumbscrew clamp fasteners. Make the following cable connections:

a. Connect control cable assembly (item 41) to P1 to jack J1.

b. Connect RF cable assembly (item 42) P2 to jack J2.

18. Connect the ground strap attached to the mounting base to either of the grounding studs on the antenna coupler, using the wingnut to secure the strap.

19. Install power cable (item 22) from vehicle power junction box(+26.5 Vdc primary power source) to Power Amplifier AM-6545A (item 38) jack J3 as shown in installation drawings. Pass the power cable (item 22) through the corner of mounting base (item 34) and down to the power source distribution box. Do not connect power cable to power amplifier jack J3 at this time.

2-6.3. Installation of Antenna Assembly.

Perform the following steps as indicated:

1. Install lead-in plate (item 15) on antenna mount (item 15) using the four 8-32x1/2-inch countersunk screws (item 8) provided.

2. Bolt the antenna mount (item 17) to the antenna bracket on the left-hand side of the M882 Cargo Truck as shown in details A and E, of paragraph 1-14, using the 1/4 X 20 bolts, lockwashers, and flatwashers (items 10,6, and 2) provided. Place a lockwasher (item 6) under each bolt head followed by a flatwasher (item 2) for each mounting hole. Tighten all bolts firmly.

NOTE

When installing antenna mount (ITEM 17) onto the M1008A1 (CUCV) the existing roadside forward antenna bracket must be replaced with antenna bracket (ITEM 56) as shown in detail F.

3. Install the AB-652 antenna mast base (item 36) to the antenna mount (item 17) as described below. Unscrew the lower section of the antenna mast base from the upper section. Separate the two rubber gaskets between the sections and use one on each side of the mounting hole in the antenna mount (item 17). Place the upper section of the antenna mast base through the upper gasket and through the mounting hole. With the lower gasket in place, screw the lower section of the antenna mast base onto the upper section and tighten, making sure the two gaskets remain centered. Tighten firmly.

4. Thread bottom section of antenna mast (item 32) securely onto the antenna mast base.

5. Slide antenna sheath (item 28) over bottom antenna mast section.

6. Thread together the other four antenna mast sections securely. Thread the two item (32 sections together, then thread the item 31 section onto the item 32 section and, finally, the item 30 section onto the item 31 section.

7. Slide the antenna guard assembly (item 27) onto the top section of the four assembled antenna mast sections.

8. Push the antenna tip assembly (item 29) firmly onto the end of the top section of the four assembled antenna mast sections. Make sure it locks securely into place.

9. Thread the bottom section of the four assembled antenna mast sections onto the bottom section installed in the antenna mast base.

10. Connect CX-1017/U antenna cable (item 23) to jack J4 of CU-2064 Antenna Coupler (item 39) and insert cable through PVC tubing (item 16). Install rubber grommet (item 14) in hole in lead-in plate (item 15) as shown in detail A. Insert the loose end of antenna cable (item 23) covered by the PCV tubing (item 16).

NOTE

Moisten the outside of the tubing if necessary to lubricate it before inserting tubing through grommet.

11. Cut and trim antenna cable (item 23) as shown in detail D of paragraph 1-14. Attach antenna cable (item 23) to AB-652 Antenna Mast Base (item 33) as shown in (detail A.

12. Secure antenna cable (item 23) encased in tubing (item 16) to the rear of the MT-6232/GRC-193A Mounting Base using the clamps (item 19) and #10 nuts, screws, lockwashers, and flatwashers (items 12, 9, 5, and 1) provided.

13. Make sure VOLUME switch on Receiver-Transmitter is fully CCW (OFF) position before performing next step.

14. Connect power cable (item 27) to jack J3 of Power Amplifier AM-6545 (item 40).

15. Refer to TM11-5820-924-13 for Radio Set AN/GRC-193A and perform the operational checkout procedure to determine of all of the equipment is operating normally. If planned operational check will last more than a few minutes, start vehicle engine to avoid discharging batteries.

CHAPTER 3

MAINTENANCE INSTRUCTIONS

Section I. OPERATOR'S MAINTENANCE

3-1. SCOPE OF OPERATOR'S MAINTENANCE.

Operator's maintenance consists of cleaning and inspections. The person performing maintenance checks will observe the following instructions.

3-2. MATERIAL REQUIRED FOR MAINTENANCE.

The material required for operator maintenance is listed below and shown in Appendix E.

a. Cleaning cloth.

b. Trichlorotrifluoroethane.

c. Soft brush.

3-3. OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS).

To ensure operational readiness of Electronic Equipment Installation Kit MK-2462/GRC-193A, it must be inspected at definite intervals so that defects may be found and corrected before they result in serious damage or failure. The Preventive Maintenance Checks and Services **(PMCS)** which must be done are listed on page 3-2.

The Preventive Maintenance Checks and Services procedures are required to keep your equipment in good operating condition. They include (B) before installation, (D) during installation, and (A) after installation.

Perform the before and after checks if you are the assigned operator and have not operated the equipment since the last check or if you are operating the equipment for the first time.

If the equipment fails to operate, see operator troubleshooting procedures in chapter 3, section I of this manual. Use **DA Pam 738-750** as a guide for reporting problems and using forms.

Routine checks like equipment inventory, cleaning components, checking for frayed and damaged cables, replacing items not in use, checking for loose hardware and safety wires, and corrosion on receptacles and connectors are not listed in the **PMCS** tables. You should do these things any time you see they need to be done as a matter of good preventive maintenance. If you find a routine check in the **PMCS,** it was listed because other operators reported problems with this item.

The **ITEM NO.** column in the **PMCS** table is to be used as source number for the **TM** number column on **DA Form 2404,** Equipment Inspection and Maintenance Worksheet, for recording **PMCS** results.

The **EQUIPMENT IS NOT READY/AVAILABLE IF:** column tells you why your equipment cannot be used if the **ITEM TO BE INSPECTED** does not meet **PROCEDURE** needs.

NOTE

Always keep in mind the **WARNINGS** and cautions when doing PMCS or any routine checks.

OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES

ITEM NO.	INTERVAL			ITEM TO BE INSPECTED	PROCEDURE	FOR READINESS REPORTING EQUIPMENT IS NOT READY/AVAILABLE IF:
	E	D	A			
				WARNING **DO NOT CLEAN THE EQUIPMENT IF THE POWER IS ON.**		
1	*	*	*	Exterior surfaces	Clean the exterior surfaces of the units comprising the AN/GRC-193A.	
2	*	*	*	Intercabling and connectors	Check all interconnecting cables and connectors for cracks and breaks. Check to see that the bonding jumper grounds the equipment. Replace cables that have cuts, cracks, or broken connectors.	Cables have been cut, have cracks and breaks, or the bonding jumper is missing.

OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (CONTINUED)

ITEM NO.	INTERVAL			ITEM TO BE INSPECTED	PROCEDURE	FOR READINESS REPORTING EQUIPMENT IS NOT READY/AVAILABLE IF:
	B	D	A			
3	●	●	●	Meter face (glass)	Check to see that the meter faces (glass) are not loose or broken.	Glass on either the AM-6545A/GRC-193A or the RT-1209/URC is loose or broken.
4			●	Fuses	Check fuses on AM-6879/URC for correct value or quantity.	Fuses are not the correct value.
5			●	CU-2064 and AM-6545A fan intake and output louvers	Check to see that there are no items in front or in back of the CU-2064 or the AM-6545A that will obstruct air flow through the units.	Air is not moving through the intakes or outputs.
6			●	Rubber seals on AM-6545A circuit breakers	Check to ensure that the seals on AM-6545A circuit breakers are not damaged or missing.	Rubber seals are broken or missing.
7		●	●	Knobs, controls, and switches	While making the operational checks, observe that the mechanical action of each knob, switch, and control is smooth and free of external or internal binding.	
				WARNING **THE FOLLOWING PROCEDURE REQUIRES THE BREAKING OF RADIO SILENCE. UNAUTHORIZED VIOLATION OF RADIO SILENCE COULD RESULT IN COURT MARTIAL OR POSSIBLE DEATH FROM HOSTILE ACTION .**		
8		*		Operational checks	Operate the equipment on an authorized frequency to verify its capabilities.	Signals transmitted are not received, are not clear, or the AN/GRC-193A will not transmit or receive.

OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (CONTINUED)

ITEM NO.	INTERVAL			ITEM TO BE INSPECTED	PROCEDURE	FOR READINESS REPORTING EQUIPMENT IS NOT READY/AVAILABLE IF:
	E	D	A			
9	●			Antenna Tip Cap	Check to see that the tip cap is secured to the tip of the top element. If cap is not available, make covering for tip of antenna using electrical or masking tape.	Antenna tip is not covered. NOTE: The equipment is operable, but it is recommended that this item be fixed.
10	●			Antenna Tiedown (Whip)	The antenna should be pulled down to an angle that will not endanger personnel or interfere with powerlines.	Antenna angle can cause injury to personnel or contact powerlines. NOTE: The equipment is operable, but it is recommended that this item be fixed.
11	*			Voice or CW Operation	Check to see that all interconnect cables are connected per FO-1 in TM 11-5820-924-13.	System interconnect cables not connected as shown in FO-1 of System manual TM 11-5820-924-13.
12	*			Secure Voice Operation	Check to see that all interconnect cables are connected per FO-2 in system manual TM 11-5820-924-13.	System interconnect cables not connected as shown in FO-2 of system manual TM 11-5820-924-13.
13	*			TTY Operation (XMT Only)	Check to see that the teletypewriter is connected to the Amplifier-Converter terminals marked TTY KEY.	Teletypewriter not connected to Amplifier-Converter TTY KEY terminals correctly.
14	*			TTY Operation (XMT/REC)	Check to see that the teletypewriter is connected to the Amplifier-Converter terminals marked TTY KEY or DC LOOP.	Teletypewriter not connected to Amplifier-Converter terminals marked TTY KEY or DC LOOP.

OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (CONTINUED)

ITEM NO.	INTERVAL B	INTERVAL D	INTERVAL A	ITEM TO BE INSPECTED	PROCEDURE	FOR READINESS REPORTING EQUIPMENT IS NOT READY/-AVAILABLE IF:
15	* NOTE: This task will be accomplished by organizational or Higher Category of Maintenance			DC Loop Current	Determine the correct loop drive current. Connect an AN/PSM-45 Digital Multi meter to the METER terminals on the Amplifier-Converter, set to read DC volts on the zero to 1 volt scale. Turn the VOLUME/OFF/MAC control on the Receiver-Transmitter clockwise until the power is ON. Wait 1 minute for the RT to warm up. Using a screwdriver, adjust the DC LOOP ADJ screw until the AN/PSM-45 meter reads 0.20 for 20 MA operation or 0.60 for 60 MA operation.	DC loop current is incorrect (Either 20 mA or 60 mA).

If your equipment fails to operate, troubleshoot equipment using operator troubleshooting chart (chapter 3, section I). Report any deficiencies using **DA Form 2404.**

3-4. CLEANING.

Inspect all components of installation kit. All exterior surfaces must be free of dust, grease, and fungus.

a. Remove dust and dirt with a clean soft cloth.

W A R N I N G

Adequate ventilation should be provided while using TRICHLOROTRIFLUOROETHANE. Prolonged breathing of vapor should be avoided- The solvent should not be used near heat or open flame; the products of decomposition are toxic and irritating. Since TRICHLORO-TRIFLUOROETHANE dissolves natural oils, prolonged contact with skin should be avoided. When necessary, use gloves which the solvent cannot penetrate. If the solvent is taken internally, consult a physician immediately.

b. Remove grease, ground-in dirt, and fungus from the equipment using a dampened (not wet) cloth with trichlorotrifluoroethane.

c. Clean cables with a soft cloth. If necessary, use a dampened cloth with a mild soap to remove dirt from the cables.

Section II. ORGANIZATIONAL MAINTENANCE

3-5. SCOPE OF ORGANIZATIONAL MAINTENANCE.

This section contains instructions covering organizational maintenance of the kit. Organizational maintenance includes:

a. Quarterly preventive maintenance.

b. Touchup Painting.

3-6. TOOLS AND MATERIALS REQUIRED.

a. Tool Kit, Electronic Equipment TK-101/G.

b. Multi meter AN/RM-105.

d. Trichlorotrifluoroethane.

3-7. QUARTERLY PREVENTIVE MAINTENANCE.

Quarterly maintenance will be scheduled in accordance with the requirements of **DA Pam 738-750 (TAMMS).** All deficiencies will be noted and recorded, and those not corrected during inspection and service will be reported immediately to a higher maintenance category by use of forms and procedures specified in **DA Pam 738-750 (TAMMS).** Daily services constitute a part of the quarterly maintenance checks and must be performed concurrently. Perform all checks and services as specified in TM 9-2320-266-20.

3-8. TOUCHUP PAINTING.

When the finish on any metal parts of the equipment has been scarred, damaged, or corroded, lightly sand it with fine sandpaper and clean the surface down to the bare metal. Refer to the applicable cleaning and refinishing practices specified in TB 43-0118.

3-9. REMOVAL OF INSTALLATION KIT.

When truck, cargo, 1-1/4 ton, 4 x 4, M882 or M1008A1 (CUCV) has to be turned back to supply, the installation kit must be removed and placed in administrative storage. All installation holes must be filled, repaired, repainted, and equipment configuration changes returned to original condition.

Section III. DIRECT SUPPORT MAINTENANCE

3-10. SCOPE OF DIRECT SUPPORT MAINTENANCE.

This section contains instructions covering direct support maintenance of the MK-2462/GRC-193A installation kit.

a. Direct support maintenance includes all organizational maintenance procedures and is performed only by those personnel who have the training required to perform such maintenance.

b. Included in the full range of direct support maintenance is repair and replacement of components authorized at the direct support level of maintenance.

c. The normal standard equipment condition to start a maintenance task is power off.

d. All tasks at the direct support level can be done by one technician.

e. Direct support maintenance for this equipment consists of removal, troubleshooting and, if necessary, repair of cable assemblies by connector replacement. Troubleshoot by performing continuity tests using referenced schematic diagrams in TM 11-5820-924-13.

3-11. DIRECT SUPPORT TROUBLESHOOTING.

a. Direct support troubleshooting consists of determining which items allocated for replacement at the direct support maintenance level are at fault.

b. The schematic or wiring diagrams required by the repair technician to troubleshoot the cable assemblies authorized for replacement on the MT-6232/GRC-193A Mounting Base are listed and shown in Technical Manual TM 11-5820-924-13, Radio Set AN/GRC-193A.

3-12. DIRECT SUPPORT MAINTENANCE INSTRUCTIONS.

RF Cable Assembly 755017B0714 Removal.

1. Using a wrench, remove the No. 8-32 nut, the No. 8 lockwasher, the No. 8 flatwasher, and the 755017A9052 cable clamp holding cable assembly 755017B0714 to the MT-6232/GRC-193A mounting base.

2. Remove the 755017B0714 cable assembly.

RF Cable Assembly 755017B0714 Installation.

1. Position replacement Cable Assembly into mounting position.

2. Install cable clamp, flatwasher, Iockwasher, and nut onto the staked stud, in three places.

3. Apply two drops of locking compound to threaded studs.

4. Using a wrench, tighten the nuts until the cable clamps are snug on the cable assembly.

RF Cable Assembly 755017B0512 Removal.

1. Using a wrench, remove the No. 8-32 nut, the No. 8 Iockwasher, the No. 8 flatwasher, and the 755017A9052 cable clamp holding cable assembly 755017B0512 to the MT-6232/GRC-193A mounting base.

2. Remove the 7555017B0512 cable assembly.

RF Cable Assembly 755017B0512 Installation.

1. Position replacement Cable Assembly into mounting position.

2. Install cable clamp, flatwasher, lockwasher, and nut onto the staked stud, in three places.

3. Apply two drops of locking compound (item 4, Appendix F) to threaded studs.

4. Using a wrench, tighten the nuts until the cable clamps are snug on the cable assembly.

Control Cable Assembly 755017B0731 Removal.

1. Using a wrench, remove the No. 8-32 nut, the No. 8 Iockwasher, the No. 8 flatwasher, and the 755017A9052 cable clamp holding cable assembly 755017B0731 to the MT-6232/GRC-193A mounting base.

2. Remove the 755017B0731 cable assembly.

Control Cable Assembly 755017B0731 Installation.

1. Position replacement cable assembly into mounting position.

2. Install cable clamp, flatwasher, Iockwasher, and nut onto the staked stud, in three places.

3. Apply two drops of locking compound (item 4, Appendix F) to threaded studs.

4. Using a wrench, tighten the nuts until the cable clamps are snug on the cable assembly.

Control Cable Assembly 755017B0735 Removal.

1. Using a wrench, remove the No. 8-32 nut, the No. 8 Iockwasher, the No. 8 flatwasher, and the 755017A9052 cable clamp holding cable assembly 755017B0735 to the MT-6232/GRC-193A mounting base.

2. Remove the 755017B0735 cable assembly.

Control Cable Assembly 755017B0735 Installation.

1. Position replacement cable assembly into mounting position.
2. Install cable clamp, flatwasher, lockwasher, and nut onto the staked stud, in three places.
3. Apply two drops of locking compound (item 4, Appendix F) to threaded studs.
4. Using a wrench, tighten the nuts until the cable clamps are snug on the cable assembly.

Power Cable Assembly 755017B0740 Removal.

1. Using a wrench, remove the No. 8-32 nut, the No. 8 lockwasher, the No. 8 flatwasher, and the MS21919G9 cable clamp holding cable assembly 755017B0740 to the MT-6232/GRC-193A mounting base, in two places.
2. Remove the 755017B0740 cable assembly.

Cable Assembly 755017B0740 Installation.

1. Position replacement cable assembly into mounting position.
2. Install cable clamp, flatwasher, lockwasher, and nut onto the staked stud, in two places.
3. Apply two drops of locking compound (item 4, Appendix F) to threaded studs.
4. Using a wrench, tighten the nuts until the cable clamps are snug on the cable assembly.

General Cable Assembly Repair.

1. Refer to system technical manual Radio Set AN/GRC-193A TM 11-5820-924-13 for schematics and wiring diagrams of system interconnect cables.
2. Replace unserviceable cable connectors with serviceable like cable connectors, using the soldering techniques indicated in technical bulletin TB SIG 222 Solder and Soldering.

APPENDIX A

REFERENCES

AR 735-11-2	Report of Item and Packaging Deficiencies
AR 755-2	Disposal of Excess, Surplus, Foreign Excess, Captured, and Unwanted Materiel
CTA 50-970	Expendable/Durable Items (Except Medical, Class V, Repair Parts and Heraldic Items)
DA Form 2404	Equipment Inspection and Maintenance Worksheet
DA Form 2028	Recommended Changes to Publications and Blank Forms
DA Pam 25-30	Consolidated Index of Army Publications and Blank Forms
DA Pam 738-750	The Army Maintenance Management System (TAMMS)
MIL-STD-1472B	Human Engineering Design Criteria For Military Systems, Equipment, and Facilities
SB 11-131	Vehicular Radio Sets and Authorized Installation
SB 38-100	Preservation, Packaging, Packing and Marking Materials, Supplies, and Equipment Used by the Army
SF 361	Discrepancy in Shipment Report
SF 364	Report of Discrepancy (ROD)
SF 368	Quality Deficiency Report
TB SIG 222	Solder and Soldering
TB SIG 291	Safety Measures to be Observed When Installing and Using Whip Antennas, Field-type Masts, Towers, Antennas, and Metal Poles that are Used with Communications, Radar and Direction Finder Equipment
TB 43-0118	Field Instructions for Painting and Preserving Electronics Command Equipment, Including Camouflage Pattern Painting of Electrical Equipment Shelters

TM 9-2320-266-20	Organizational Maintenance Manual: Truck, Cargo: 1 1/4-Ton, 4 X 4, M880 (NSN 2320-00-579-8942), M881 (2320-00-579-8943), M882 (2320-00-579-8957), M883 (2320-00-579-8959), M884 (2320-00-579-8985), M885 (2320-00-579-8989); 1 1/4-Ton, 4 X 2, M890 (2320-00-579-8991), M891 (2320-00-579-9046); M892 (2320-00-579-9052); Truck, Ambulance: 1 1/4-Ton, 4 X 4, M886 (2310-00-579-9078); 1 1/4-Ton, 4 X 2, M893 (2310-00-579-5679) and Truck, Telephone Maintenance: 1 1/4-Ton, 4 X 4, M888 (2350-01-044-0333)
TM 11-5820-924-13	Operator's, Organizational, and Direct Support Maintenance Manual for Radio Set AN/GRC-193A
TM 11-6625-203-12	Operator's and Organizational Maintenance for Multi meters, ANAJRM-105 and AN/URM-105C (including Multi meters ME-77/U, and ME-77C/U)
TM 750-244-2	Procedures for Destruction of Electronic Materiel to Prevent Enemy Use (Electronics Command)

APPENDIX B

MAINTENANCE ALLOCATION CHART

ELECTRONIC EQUIPMENT INSTALLATION KIT

Section L INTRODUCTION

B-1. GENERAL.

This appendix provides a summary of the maintenance operations for the MK-2462/GRC-193A. It authorizes categories of maintenance for specific maintenance functions on repairable items and components and the tools and equipment required to perform each function. This appendix may be used as an aid in planning maintenance operations.

B-2. MAINTENANCE FUNCTION (SECT. II).

Maintenance functions will be limited to and defined as follows:

a. Inspect. To determine the serviceability of an item by comparing its Physical mechanical and/or electrical characteristics with established standards through examination.

b. Test. To verify serviceability and to detect incipient failure by measuring the mechanical or electrical characteristics of an item and comparing those characteristics with prescribed standards.

c. Service. Operations required periodically to keep an item in proper operating condition, i.e., to clean (decontaminate), to preserve, to drain, to paint, or to replenish fuel, lubricants, hydraulic fluids, or compressed air supplies.

d. Adiust. To maintain, within prescribed limits, by bringing into proper or exact position, or by setting the operation characteristics to the specified parameters.

e. Align. To adjust specified variable elements of an item to bring about optimum or desired performance.

f. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments or test measuring and diagnostic equipment used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.

g. Install. The act of emplacing, seating, or fixing into position an item, part, module (component or assembly) in a manner to allow the proper functioning of the equipment or system.

h. Replace. The act of substituting a serviceable like type part, subassembly, or module component or assembly) for an unserviceable counterpart.

i. Repair. The application of maintenance services inspect, test, service, adjust, align, calibrate replace) or other maintenance actions (welding, grinding, riveting, straightening, facing, remachining, or resurfacing) to restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly), end item, or system.

j. Overhaul. That maintenance effort (service/action) necessary to restore an item to a completely serviceable/operational condition as prescribed by maintenance standards (i.e., DMWR) in appropriate technical publications. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.

k. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like-new condition in accordance with original manufacturing standards. Rebuild is the highest degree of material maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (hours, miles, etc.) considered in classifying Army equipment/components.

B-3. COLUMN ENTRIES.

a. Column 1, Group Number. Column 1 lists group numbers, the purpose of which is to identify components, assemblies, subassemblies, and modules with the next higher assembly.

b. Column 2, Component/Assembly. Column 2 contains the noun names of components, assemblies, subassemblies, and modules for which maintenance is authorized.

c. Column 3, Maintenance Functions. Column 3 lists the functions to be performed on the item listed in column 2. When items are listed without maintenance functions, it is solely for the purpose of having the group numbers in the MAC and RPSTL coincide.

d. Column 4, Maintenance Category. Column 4 specifies, by the listing of a "worktime" figure in the appropriate subcolumn(s), the lowest level of maintenance authorized to perform the function listed in column 3. This figure represents the active time required to perform that maintenance function at the indicated category of maintenance. If the number or complexity of the tasks within the listed maintenance function vary at different maintenance categories, appropriate "work time" figures will be shown for each category. The number of task-hours specified by the "work time" figure represents the average time required to restore an item (assembly, subassembly, component, module, end item or system) to a serviceable condition under typical field operating conditions. This time includes preparation time, troubleshooting time, and quality assurance/quality control time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the maintenance allocation chart. Subcolumns of column 4 are as follows:

C - Operator/Crew

O — Organizational

F — Direct Support

H — General Support

D — Depot

e. Column 5, Tools and Equipment. Column 5 specifies by code, those common tool sets, (not individual tools) and special tools, test and support equipment required to perform the designated function.

f. Column 6, Remarks. Column 6 contains an alphabetic code which leads to the remark in Section IV, Remarks, which is pertinent to the item opposite the particular code.

B-4. TOOL AND TEST EQUIPMENT REQUIREMENTS (SECT. III).

a. Tool or Test Equipment Reference Code. The numbers in this column coincide with the numbers used in the tools and equipment columns of the MAC. The numbers indicate the applicable tool or test equipment for the maintenance function.

b. Maintenance Cateqory. The codes in this column indicate the maintenance category allocated the tool or test equipment.

c. Nomenclature. This column lists the noun name and nomenclature of the tools and test equipment required to perform the maintenance functions.

d. National/NATO Stock Number. This column lists the National/NATO Stock Number of the specific tool or test equipment.

e. Tool Number. This column Iists the manufacturer's part number of the tool followed by the Federal Supply Code for manufacturers (5-digit) in parentheses.

B-5. REMARKS (SECT. IV).

a. Reference Code. This code refers to the appropriate item in Section II, column 6.

b. Remarks. This column provides the required explanatory information necessary to clarify items appearing in Section Il.

Section II. MAINTENANCE ALLOCATION CHART FOR INSTALLATION KIT, ELECTRICAL EQUIPMENT MK-2462/GRC-193A

(1) GROUP NUMBER	(2) COMPONENT ASSEMBLY	(3) MAINT. FUNCTION	(4) MAINTENANCE CATEGORY					(5) TOOLS AND TEST EQUIP.	(6) REMARKS
			C	O	F	H	D		
00	INSTALLATION KIT	INSTALL		5.0				2, 5	
	MK-2462/GRC-193A	INSPECT		1.0					A
	755017B0920 (NSN	REPLACE		2.2				2, 4	
	5820-01-189-9794)	REPAIR			2.2			1, 3, 4	B
		SERVICE	0.1						D
01	MOUNTING BASE	INSPECT		0.5					A
	MT-6232/GRC-193A	TEST		0.5				2, 4	
	755017B0700	REPLACE		2.0				2	
		REPAIR			1.0			1, 3, 4	B
0101	CABLE ASSY/RF	INSPECT		0.5					A
	755017B0714	TEST		0.5				2, 4	
		REPLACE		0.5				2	
		REPAIR			1.0			1, 3, 4	C
0102	CABLE ASSY/RF	INSPECT		0.5					A
	755017B0512	TEST		0.5				2, 4	
		REPLACE		0.5				2	
		REPAIR			1.0			1, 3, 4	C
0103	CABLE ASSY S/P ELEC	INSPECT		0.5					A
	755017B0731	TEST		0.5				2, 4	
		REPLACE		0.5				2	
		REPAIR			1.0			1, 3, 4	C
0104	CABLE ASSY S/P ELEC	INSPECT		0.5					A
	755017B0735	TEST		0.5				2, 4	
		REPLACE		0.5				2	
		REPAIR			1.0			1, 3, 4	C
02	INSTALLATION KIT	INSTALL		1.0				2	
	MK-6232/GRC-193A	REPLACE		1.0				2	
	755017B0921	REPAIR			0.5			3, 4	B
0201	CABLE ASSY PWR	INSPECT		0.5					A
	755017B0740	TEST		0.5				2, 4	
		REPLACE		0.5				2	
		REPAIR			1.0			1, 3, 4	C
03	ANTENNA MAST	INSPECT		0.5					A
	BASE AB-652 (NSN	REPLACE		0.5				2	
	5920-00-078-4770)	REPAIR			0.1			2	B

SECTION III TOOLS AND TEST EQUIPMENT REQUIREMENTS FOR
INSTALLATION KIT, ELECTRICAL EQUIPMENT MK-2462/GRC-193A

TOOLS OR TEST EQUIPMENT REF CODE	MAINTENANCE CATEGORY	NOMENCLATURE	NATIONAL/AUTO STOCK NUMBER	TOOL NUMBER
1	F	TOOL KIT,ELECTRONIC EQUIPMENT TK-100/G 80058	5180-00-605-0079	TK-100/G
2	O	TOOL KIT,ELECTRONIC EQUIPMENT TK-101/G 80058	5180-00-064-5178	TK-101/G
3	F	TOOL,KIT,ELECTRONIC EQUIPMENT TK-105/G 80058	5180-00-610-8177	TK-105/G
4	O,F	MULTIMETER,DIGITAL AN/PSM-45 80058	6625-01-139-2512	AN/PSM-45
5	O	SHOP EQUIPMENT, AUTOMOBILE 80058	4910-00-754-0654	

Section IV. REMARKS FOR INSTALLATION KIT, ELECTRICAL EQUIPMENT MK-2462/GRC-193A

REFERENCE CODE	REMARKS
A	INSPECT INSTALLATION KIT FOR COMPLETENESS AND DAMAGE.
B	REPAIR BY REPLACING UNSERVICEABLE ITEM WITH SERVICEABLE ITEM.
C	REPAIR BY REPLACEMENT OF CABLE CONNECTORS.
D	SEE SERVICE MAINTENANCE ROUTINE SCHEDULE.

APPENDIX C

COMPONENTS OF END ITEM AND BASIC ISSUE ITEMS LISTS

Section L INTRODUCTION

C-1 . SCOPE.

This appendix lists components of end item and basic issue items for Installation Kit MK-2462/GRC-193A to help you inventory items required for safe and efficient operation.

C-2. GENERAL.

The Components of End Item and Basic Issue Items Lists are divided into the following sections:

a. Section II. Components of the End Item. These items when assembled, comprise the Installation Kit MK-2462/GRC-193A and must accompany it whenever it is transferred or turned in. The illustrations will help you identify these items.

b. Section III. Basic Issue Items. These are the minimum essential items required to place the Installation Kit MK-2462/GRC-193A in operation, to operate it, and to perform emergency repairs.

C-3. EXPLANATION OF COLUMNS.

a. Illustration. This column is divided as follows:

1. Figure number. Indicates the figure number of the illustration on which the item is shown.
2. Item number. The number used to identify item called out in the illustration.

b. National Stock Number. Indicates the National stock number assigned to the item and which will be used for requisitioning.

c. Part Number. Indicates the primary number used by the manufacturer, which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and the inspection requirements to identify an item or range of items. Following the part number, the Federal Supply Code for Manufacturers (FSCM) is shown in parentheses.

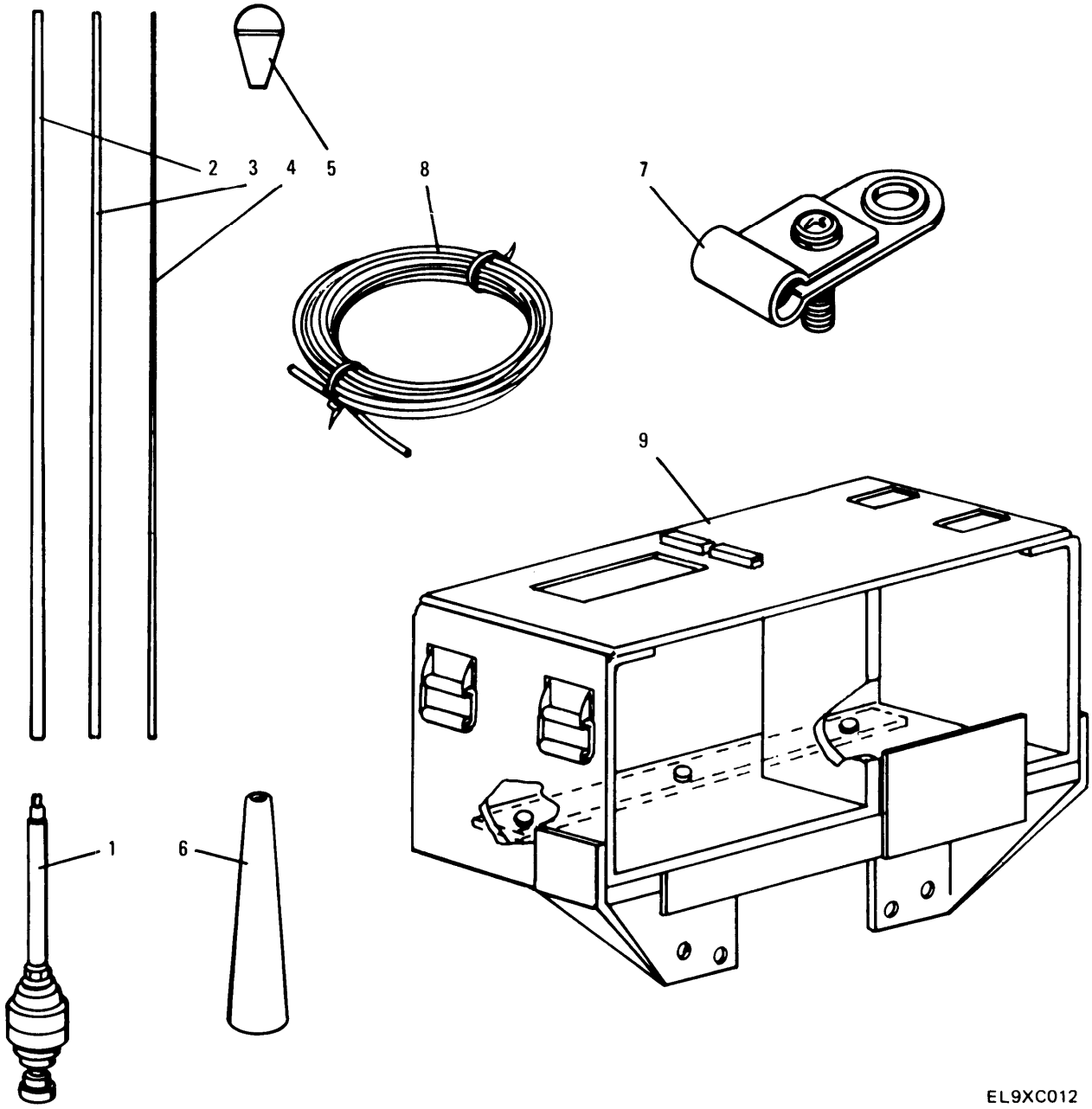
d. Description. Indicates the Federal item name and, if required, a minimum description to identify the item.

e. Location. The physical location of each item listed is given in this column. The lists are designed to inventory all items in one area of the major item before moving to an adjacent area.

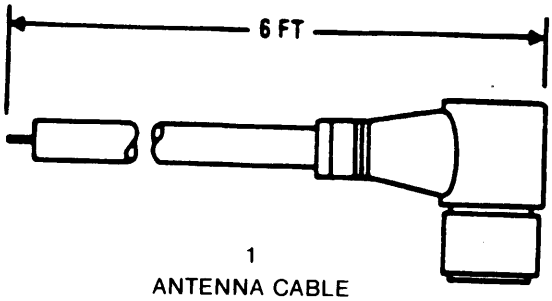
f. Usable on Code. Not applicable.

g. Quantity Required (Qty Reqd). This column lists the quantity of each item required for a complete major item.

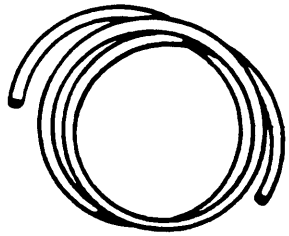
Section II. COMPONENTS OF END ITEM



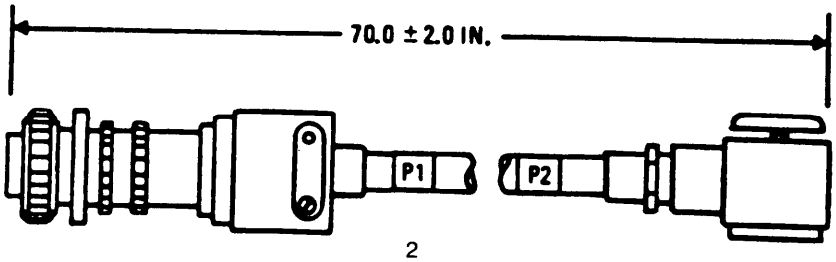
(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION FSCM AND PART NUMBER USABLE ON CODE	(4) U/M	(5) QTY RQR
1	5820-00-078-4770	MAST BASE,ANTENNA (80058)AB-652/GR	EA	1
2	5820-00-199-8831	ANTENNA SECTION (80063) MS-116-A	EA	3
3	5985-00-115-7149	ANTENNA SECTION (80063) MS-117-A	EA	1
4	5985-00-238-7474	ANTENNA SECTION (80063) MS-118-A	EA	1
5	5995-00-930-7223	ANTENNA TIP ASSEMBLY (80063) SC-D-446046	EA	1
6	5820-00-078-4769	COVER,ANTENNA (80063)SM-D-500428	EA	1
7	5340-00-286-2491	CLAMP ASSEMBLY,ANTENNA (80063)SC-B-19491	EA	1
8	4020-00-073-3276	ROPE (80063)SM-B-500418	FT	40
9	5820-01-133-3974	MOUNTING,BASE,ELECTRICAL EQUIPMENT (80058)MT-6232/GRC-193A 755017B0700	EA	1



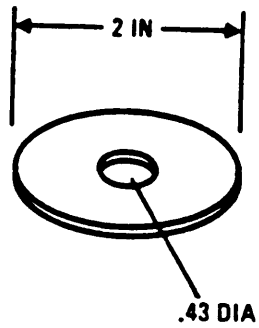
1
ANTENNA CABLE



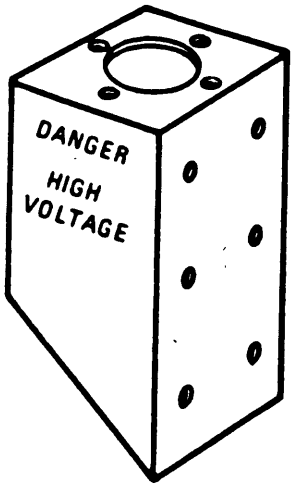
5
PVC TUBING



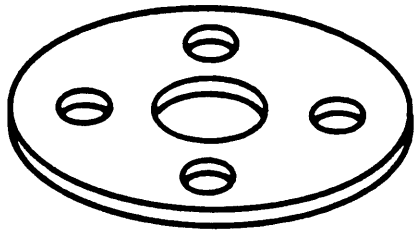
2
POWER CABLE ASSY



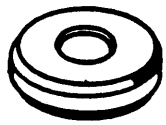
6
SPECIAL FLAT WASHER



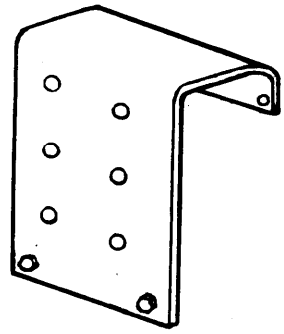
3
ANTENNA MOUNT



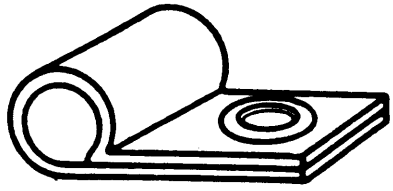
7
LEAD IN PLATE



8
GROMMET



4
ANTENNA BRACKET



9
CLAMP

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION FSCM AND PART NUMBER	USABLE ON CODE	(4) U/M	(5) QTY RQR
1		CABLE,ANTENNA (96906)SM-C-502924		EA	1
2		CABLE,POWER (80372)75501-17B-740		EA	1
3		MOUNT,ANTENNA (96906)SC-D-866120-1		EA	1
4		ANTENNA BRACKET A3017188		EA	1
5		TUBING,PVC (80372)755017B0728-2		EA	AR
6		WASHER,FLAT(SPECIAL) (80372)755017B0847		EA	6
7		PLATE,LEAD-IN (80372)755017B0847		EA	1
8		GROMMET,RUBBER (96906)MS35489-80		EA	1
9		CLAMP (96906)MS25281-R14		EA	3

SECTION III. BASIC ISSUE ITEMS

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION FSCM AND PART NUMBER	USABLE ON CODE	(4) U/M	(5) QTY RQR
		TM 11-2300-475-13 & P-1		EA	1

SECTION III. BASIC ISSUE ITEMS

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION FSCM AND PART NUMBER	USABLE ON CODE	(4) U/M	(5) QTY RQR
		TM 11-2300-475-13 & P-1		EA	1

APPENDIX D

ADDITIONAL AUTHORIZATION LIST

Section I. INTRODUCTION

D-1. SCOPE.

This appendix lists additional items you are authorized for the support of the MK-2462/GRC-193A.

D-2. GENERAL.

This list identifies items that do not have to accompany the MK-2462/GRC-193A and that do not have to be turned in with it. These items are all authorized to you by CTA, MTOE, TDA, or JTA.

D-3. EXPLANATION OF LISTING.

National stock numbers, decryptions, and quantities are provided to help you identify and request the additional items you require to support this equipment. The items are listed in alphabetical sequence by item name under the type document (i. e., CTA, MTOE, TDA, or JTA) which authorizes the item(s) to you.

a. Column (l), National Stock Number. This column indicates the national stock number assigned to the item.

b. Column (2), Description. This column indicates the national item name and, if required, a minimum description to identify and locate the item. The last line of each item description indicates the vender part number, if available, followed by the FSCM (in parentheses).

c. Column (3), Unit of Measure (UNIT OF MEAS.). This column indicates the measure used in performing the actual operation/maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr).

d. Column (4), Quantity Authorized (QTY AUTH.). Indicates the quantity of the item authorized to be used with/on the equipment.

SECTION II. ADDITIONAL AUTHORIZATION LIST

(1) NATIONAL STOCK NUMBER	(2) DESCRIPTION PART NUMBER(FSCM)	USABLE ON CODE	(3) UNIT OF MEAS.	(4) QTY AUTH.
5133-00-227-9662	DRILL BIT, 5/16-INCH(96906)		EA	1
5133-00-227-9666	DRILL BIT, 3/8-INCH (96906		EA	1

APPENDIX E
REPAIR PARTS AND SPECIAL TOOLS LIST

SECTION I
INTRODUCTION

E-1. Scope

This manual lists and authorizes spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE), and other special support equipment required for performance of organizational and direct support maintenance of the MK-2462/GRC-193A. It authorizes the requisitioning, issue, and disposition of spares, repair parts and special tools as indicated by the source, maintenance and recoverability (SMR) codes.

E-2. General

This Repair Parts and Special Tools List is divided into the following sections:

a. Section II. Repair Parts List. A list of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending numeric sequence, with the parts in each group listed in ascending item number sequence. Figure numbers are listed directly beneath the group header.

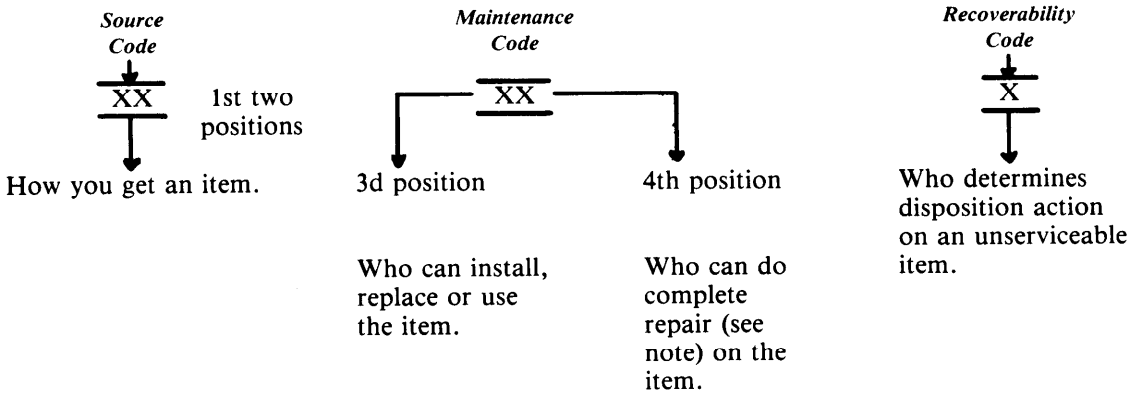
b. Section III. Special Tools List. Not applicable.

Section IV. National Stock Number and Part Number Index. A list, in National item identification number (NIIN) sequence, of all National stock numbered items appearing in the listings, followed by a list in alphameric sequence of all part numbers appearing in the listings. National stock numbers and part numbers are cross-referenced to each illustration figure and item number appearance.

E-3. Explanation of Columns (Section II and III)

a. Item No. (Column (1)). Indicates the number used to identify items called out in the illustration.

b. SMR Code (Column (2)). The source, maintenance, and recoverability (SMR) code is a five-position code containing supply/requisitioning information, maintenance category authorization criteria, and disposition instruction, as shown in the following breakout:



NOTE

Complete repair: Maintenance capacity, capability, and authority to perform all corrective maintenance tasks of the "Repair" function in a use/user environment in order to restore serviceability to a failed item.

(1) *Source Code.* The source code tells you how to get an item needed for maintenance, repair, or overhaul of an end item/equipment. Explanations of source codes follows:

Code	*Explanation*
PA PB PC PD PE PF PG	Stocked items; use the applicable NSN to request/requisition items with these source codes. They are authorized to the category indicated by the code entered in the third position of the SMR code. **NOTE** Items coded PC are subject to deterioration.
KD KF KB	Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance category indicated in the third position of the SMR code. The complete kit must be requisitioned and applied.
MO— Made at org/ AVUM category MF — Made at DS/ AVUM category MH— Made at GS category ML — Made at Specialized Repair Activity (SRA) MD— Made at Depot	Items with these codes are not to be requested/requisitioned individually. They must be made from bulk material which is identified by the part number in the description and usable on code (UOC) column and listed in the Bulk Material group of the repair parts list. If the item is authorized to you by the third position code of the SMR code, but the source code indicates it is made at a higher category, order the item from the higher category of maintenance.
AO — Assembled by org/ AVUM category AF — Assembled by DS/ AVIM category AH — Assembled by GS category AL — Assembled by SRA AD — Assembled by Depot	Items with these codes are not to be requested/requisitioned individually. The parts that make up the assembled item must be requisitioned or fabricated and assembled at the category of maintenance indicated by the source code. If the third position code of the SMR code authorizes you to replace the item, but the source code indicates the item is assembled at a higher category, order the item from the higher category of maintenance.

XA — Do not requisition an "XA" coded item. Order its next higher assembly.
XB — If an "XB" item is not available from salvage, order it using the FSCM and part number given.
XC — Installation drawing, diagram, instruction sheet, field service drawing, that is identified by manufacturers part number.
XD — Item is not stocked. Order an "XD" coded item through normal supply channels using the FSCM anti part number given, if no NSN is available.

NOTE

Cannibalization or controlled exchange, when authorized, maybe used as a source of supply for items with the above source codes, except for those source coded "XA" or those aircraft support items restricted by requirements of AR 750-1.

(2) Maintenance Code. Maintenance codes tell you the category of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the SMR code as follows:

(a) The maintenance code entered in the third position tells you the lowest maintenance category authorized to remove, replace, and use an item. The maintenance code entered in the third position will indicate authorization to one of the following categories of maintenance.

Code ***Application/Explanation***

C –- Crew or operator maintenance done within organizational or aviation maintenance.
O –- Organizational or aviation unit category can remove, replace, and use the item.
F –- Direct support or aviation intermediate category can remove, replace, and use the item.
H –- General support category can remove, replace, and use the item.
L -- Specialized repair activity can remove, replace, and use the item.
D –- Depot category can remove, replace, and use the item.

(b) The maintenance code entered in the fourth position tells whether or not the item is to be repaired and identifies the lowest maintenance category with the capability to do complete repair (i. e., perform all authorized repair functions). This position will contain one of the following maintenance codes:

NOTE

Some limited repair may be done on the item at a lower category of maintenance, if authorized by the Maintenance Allocation Chart (MAC) and SMR codes.

Code ***Application/Explanation***

o --- Organizational or aviation unit is the lowest category that can do complete repair of the item.
F --- Direct support or aviation intermediate is the lowest category that can do complete repair of the item.
H --- General support is the lowest category that can do complete repair of the item.
L --- Specialized repair activity (designate the specialized repair activity) is the lowest category that can do complete repair of the item.
D --- Depot is the lowest category that can do complete repair of the item.
z --- Nonreparable. No repair is authorized.
B --- No repair is authorized. (No parts or special tools are authorized for the maintenance of a "B" coded item.) However, the item may be reconditioned by adjusting, lubricating, etc., at the user category.

(3) Recoverability Code. Recoverability codes are assigned to items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifth position of the SMR Code as follows:

Recoverability codes	***Application/Explanation***
z	— Nonreparable item. When unserviceable, condemn and dispose of the item at the category of maintenance shown in the third position of SMR Code.
o	— Reparable item. When uneconomically reparable, condemn and dispose of the item at organizational or aviation unit category.
F	— Reparable item. When uneconomically reparable, condemn and dispose of the item at the direct support or aviation intermediate category.
H	— Reparable item. When uneconomically reparable, condemn and dispose of the item at general support category.
D	— Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item not authorized below depot category.
L	— Reparable item. Condemnation and disposal not authorized below specialized repair activity (SRA).
A	— Item requires special handling or condemnation procedures because of specific reasons (e.g., precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals/directives for specific instructions.

c. FSCM (Co/umn (3)). The Federal Supply Code for Manufacturer (FSCM) is a 5-digit numeric code which is used to ideniify the manufacturer, distributor, or Government agency, etc., that supplies the item.

d. Part Number (Column (4)). Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering ch-swings, specifications, standards, and inspection requirements to identify an item or range of items.

NOTE

When you use a NSN to requisition an item, the item you receive may have a different part number from the part ordered.

e. Description and Usable on Code (UOC)(Column (5)). This column includes the following information.

(1) The Federal item name and, when required, a minimum description to identify the item.

(2) The statement “END OF FIGURE” appears just below the last item description in Column (5) for a given figure in both section II and section III.

f. Qty (Column (6)). Indicates the quantity of the item used in the breakout shown on the illustration figure, which is prepared for a functional group, subfunctional group, or an assembly. A “V” appearing in this column in lieu of a quantity indicates that the quantity is variable and the quantity may vary from application to application.

E-4. Explanation of Columns (Section IV)

a. National Stock Number (NSN) Index.

(1) *Stock number column.* This column lists the NSN by National item identification number (NIIN) sequence. The NIIN consists of the last nine digits of the NSN. When using this column to locate an item, ignore the first four digits of the NSN. When requisitioning items use the complete NSN (13 digits).

(2) *Fig. column.* This column lists the number of the figure where the item is identified/located. The illustrations are in numerical sequence in sections II and III.

(3) *Item column.* The item number identifies the item associated with the figure listed in the adjacent Fig. column. This item is also identified by the NSN listed on the same line.

b. Part Number Index. Part numbers in this index are listed by part number in ascending alphameric sequence.

(1) FSCM column. This column lists the Federal supply code for manufacturer (FSCM).

(2) Part number column. This column indicates the part number assigned to the item.

(3) Stock number column. This column lists the National stock number for the associated part number and manufacturer identified in the part number and FSCM columns to the left.

(4) Fig. column. This column lists the number of the figure where the item is identified/located in sections II and 111.

(5) Item column. The item number is that number assigned to the item as it appears in the figure referenced in the adjacent figure number column.

E-5. Special Information

National Stock Numbers. National stock numbers (NSN's) that are missing from P source coded items have been applied for and will be added to this TM by future change/revision when they are entered in the Army Master Data File (AMDF). Until the NSN's are established and published, submit exception requisitions to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: AMSEL-MM, Fort Monmouth, NJ 07703-5000 for the part required to support your equipment.

E-6. How to Locate Repair Parts

a. When National stock number or part number is not known.

(1) First. Using the table of contents, determine the assembly group or subassembly group to which the item belongs. This is necessary since figures are prepared for assembly groups and subassembly groups, and listings are divided into the same groups.

(2) Second. Find the figure covering the assembly group or subassembly group to which the item belongs.

(3') Third. Identify the item on the figure and note the item number.

(4) Fourth. Refer to the Repair Parts List for the figure to find the part number for the item number noted on the figure.

(5) Fifth. Refer to the Part Number Index to find the NSN, if assigned.

b. When National stock number or part number is known.

(1) *First.* Using the Index of National stock numbers and part numbers, find the pertinent National stock number or part number. The NSN index is in National item identification number (NIIN) sequence (para 4a(1)). The part numbers in the part number index are listed in ascending alphameric sequence (para 4 *b).* Both indexes cross-reference you to the illustration figure and item number of the item you are looking for.

(1) *Second.* After finding the figure and item number, verify that the item is the one you're looking for, then locate the item number in the repair parts list for the figure.

E-7. Abbreviations

Not applicable.

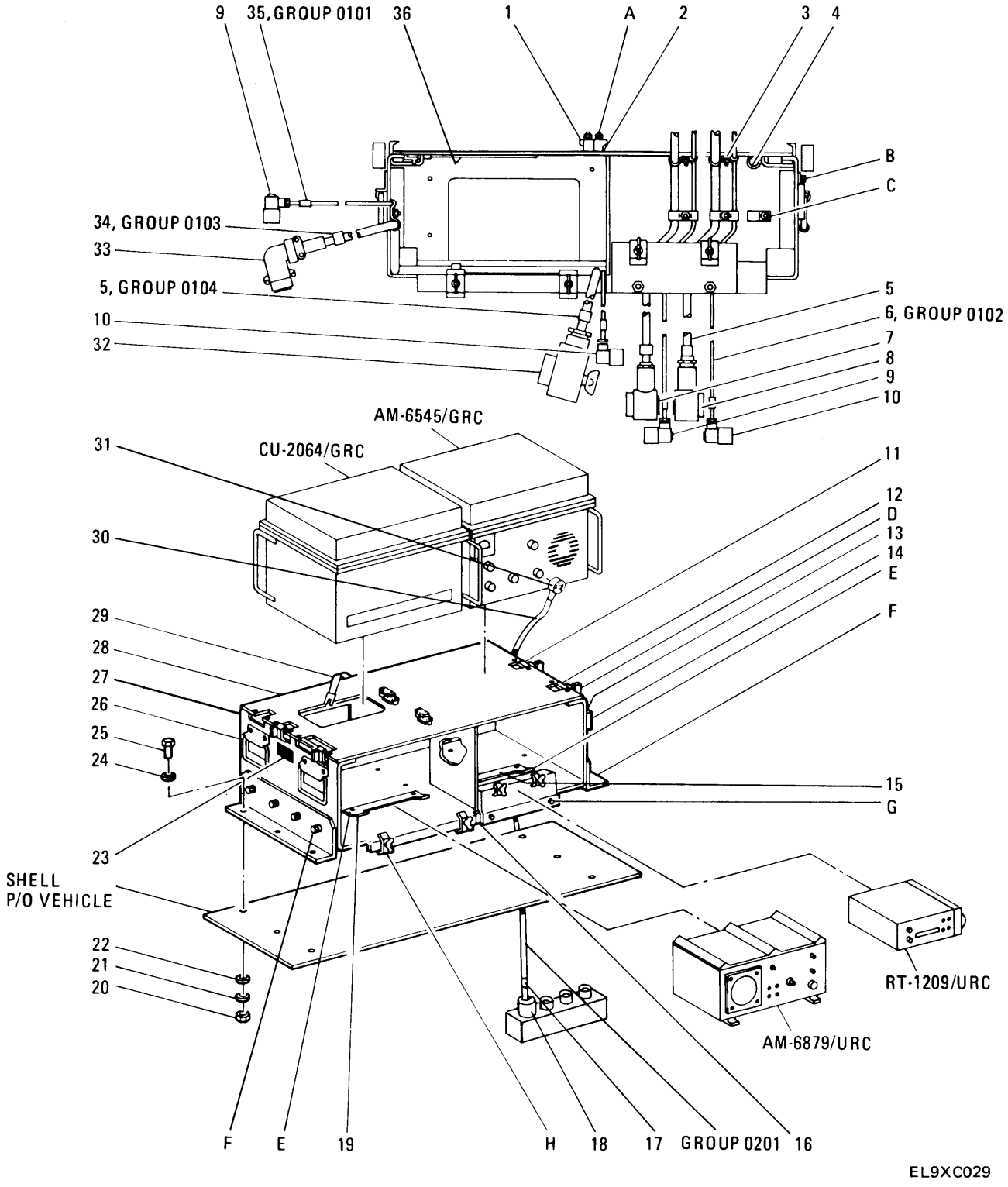
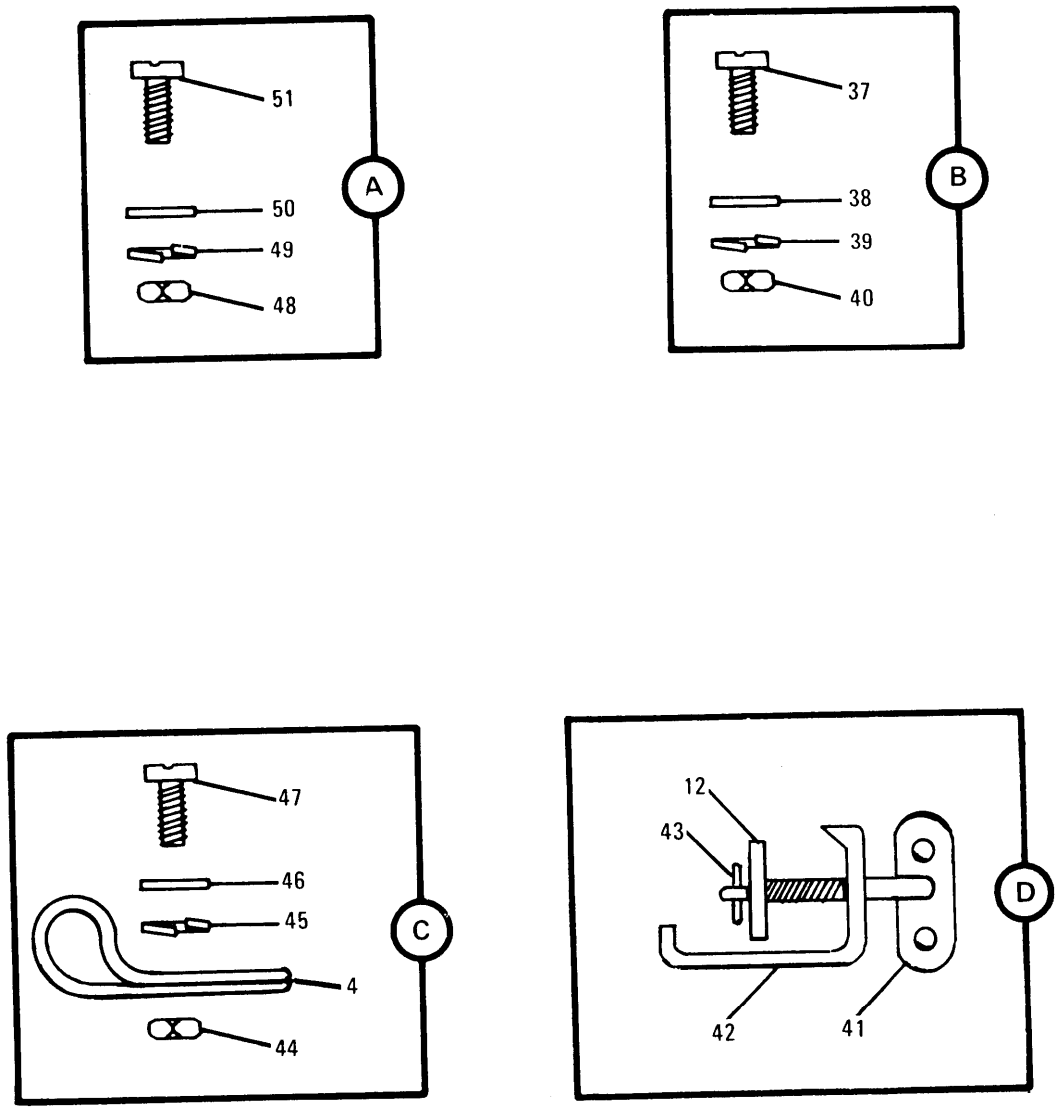


Figure E-1. Installation Kit, Electronic Equipment, MK-2462/GRC-193A (Excluding Antenna Equipment Group 03) (Sheet 1 of 3)



EL9XC031

Figure E-1. Installation Kit, Electronic Equipment, MK-2462/GRC-193A (Excluding Antenna Equipment Group 03) (Sheet 2 of 3)

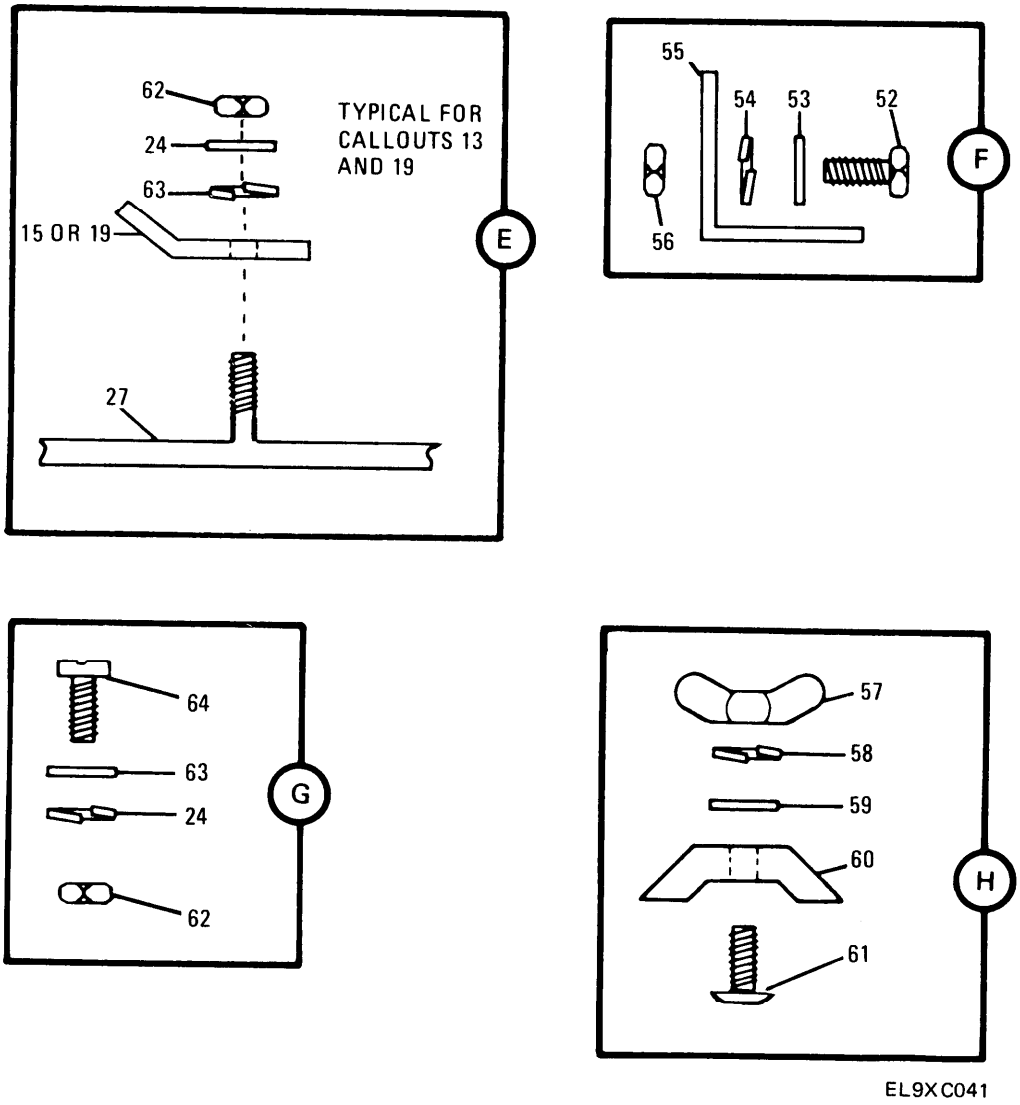


Figure E-1. Installation Kit, Electronic Equipment, MK-2462/GRC-193A (Excluding Antenna Equipment Group 03) (Sheet 3 of 3)

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
				GROUP 00 INSTALLATION KIT MK-2462/GRC-193A	
				FIGURE E-1	
1	PAFZZ	14304	755017B0713	SPACER PA	2
2	XBFZZ	80372	755017B0705	BLOCK WEDGE	4
3	XBFZZ	80372	755017A9052	RETAINER,CABLE	6
4	XBFZZ	96906	MS21919G9	CLAMP,LOOP	2
5	PAOFF	14304	755017B0735	CABLE ASSY SPECIAL	1
6	PAOFF	14304	755017B0512	CABLE ASSY RADIO FR	1
7	PAFZZ	77820	PT08SE-14-15S	CONNECTOR,PLUG,ELEC	1
8	XBFZZ	25330	UW1326FD15	CONNECTOR,PLUG,ELEC	1
9	PAFZZ	91836	KN-59-06	CONNECTOR,PLUG,ELEC	2
10	PAFZZ	91836	KN-59-06	CONNECTOR,PLUG,ELEC	2
11	XBFZZ	80372	755017B0709	BLOCK RETAINER	3
12	XBFZZ	80372	755017B0710	BLOCK RETAINER	3
13	XBFZZ	80372	755017B0707	BRKT MIC HANGER	1
14	XBFZZ	80372	755017B0708	BLOCK MIC HANGER	1
15	XBFZZ	80372	755017B0730	CLAMP RT PLATE	1
16	XBFZZ	80372	755017B0734	PLATE SUPPORT	1
17	XBFZZ	80372	755017A9038	PLATE CONTACT	2
18	XBFZA	77820	10-214622-2P	CONNECTOR,PLUG,ELEC	1
19	XBFZZ	80372	755017B0703	CLAMP AM PLATE	1
20	PAFZZ	96906	MS51971-3	NUT,PLAIN,HEXAGON	6
21	PAFZZ	96906	MS35338-141	WASHER,LOCK	6
22	PAFZZ	96906	MS15795-814	WASHER,FLAT	12
23	XBFZZ	80372	755017B0706	PLATE IDENTIFICATIO	1
24	PAFZZ	96906	MS35338-140	WASHER,LOCK	8
25	PAFZZ	96906	MS35307-364	SCREW,CAP,HEXAGON H	6
26	XBFZZ	98003	HA955-SS-2-RG	HANDLE	4
27	XBFZZ	80372	755017B0701	RACK MOUNTING	1
28	PAOFF	80058	MT-6232/GRC-193A	MOUNTING BASE,ELECT	1
29	PAFZZ	80372	755017A9048-3	STRAP GROUND	1
30	PAOFF	14304	755017B0740	CABLE ASSY PWR ELEC	1
31	PAFZZ	81349	UW1220FA17	CONNECTOR,PLUG,ELEC	1
32	PAFZZ	81349	MW10M(M)D17	CONNECTOR,PLUG,ELEC	1
33	PAFZZ	81349	MW10M(M)D17	CONNECTOR,PLUG,ELEC	1
34	PAOFF	14304	755017B0731	CABLE ASSY S/P ELEC	1
35	PAOFF	14304	755017B0714	CABLE ASSY RF	1
36	PAFZZ	96906	MS51957-47	SCREW,MACHINE	1
37	PAFZZ	96906	MS24693-C31	SCREW,MACHINE	2
38	PAFZZ	96906	MS15795-805	WASHER,FLAT	2
39	PAFZZ	96906	MS35338-136	WASHER,LOCK	2
40	PAFZZ	96906	MS35649-264	NUT,PLAIN,HEXAGON	2
41	PAFZZ	80063	SM-C-415027	THUMBSCREW	4
42	PAFZZ	80063	SM-C-415032	CLAMP	4
43	PAFZZ	96906	MS24665-86	PIN,COTTER	4
44	PAFZZ	96906	MS35649-284	NUT,PLAIN,HEXAGON	10
45	PAFZZ	96906	MS35338-137	WASHER,LOCK	30
46	PAFZZ	96906	MS15795-807	WASHER,FLAT	30
47	PAFZZ	96906	MS51957-45	SCREW,MACHINE	20

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
48	PAFZZ	96906	MS35649-2254	NUT,PLAIN,HEXAGON	2
49	PAFZZ	96906	MS35338-139	WASHER,LOCK	6
50	PAFZZ	96906	MS15795-810	WASHER,FLAT	6
51	PAFZZ	96906	MS24693-C94	SCREW,MACHINE	8
52	PAFZZ	96906	MS24693-C278	SCREW,MACHINE	12
53	PAFZZ	96906	MS15795-808	WASHER,FLAT	16
54	PAFZZ	96906	MS35338-138	WASHER,FLAT	16
55	XBFZZ	80372	755017B0726	BRACKET ANGLE SLIDE	2
56	PAFZZ	96906	MS35650-104	NUT,PLAIN,HEXAGON	16
57	PAFZZ	96906	MS35425-70	NUT,PLAIN,WING	4
58	PAFZZ	96906	MS35338-139	WASHER,LOCK	6
59	PAFZZ	80063	SM-B-415025-2	WASHER,FLAT	4
60	XBFZZ	80372	755017B0704	CLAMP UNIVERSAL	4
61	PAFZZ	96906	MS35307-306	SCREW,CAP,HEXAGON H	2
62	PAFZZ	96906	MS51971-2	NUT,PLAIN,HEXAGON	8
63	PAFZZ	96906	MS15795-812	WASHER,FLAT	16
64	PAFZZ	96906	MS35307-334	BOLT,MACHINE	8

END OF FIGURE

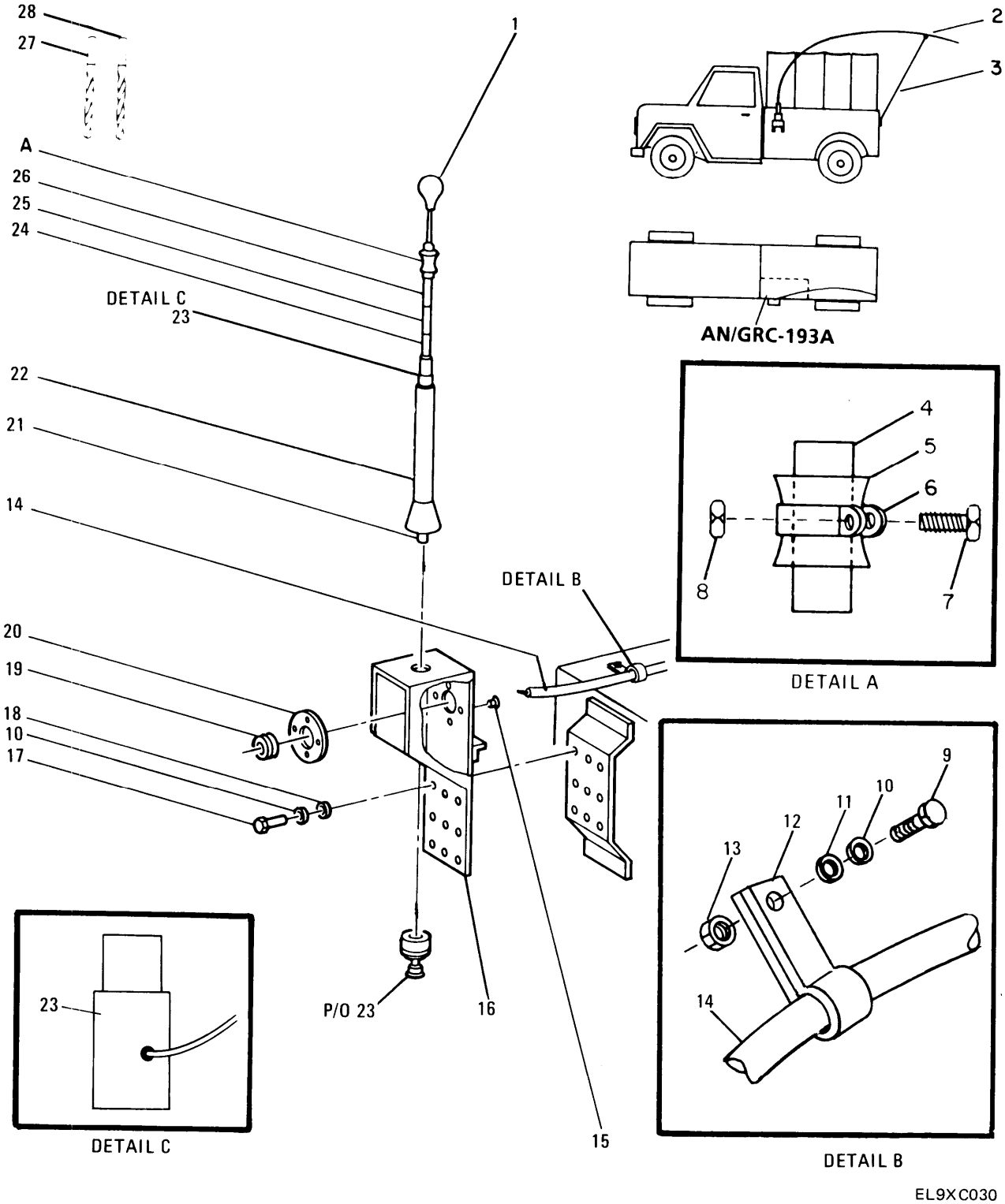


Figure E-2. Antenna Equipment

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
				GROUP 03 ANTENNA MAST BASE, AB-652	
				FIGURE E-2	
1	PAFZZ	80063	SC-C-446046	ANTENNA TIP ASSEMB	1
2	PAFZZ	80063	SC-B-19491	CLAMP ASSY,ANTENNA	1
3	XBFZZ	80063	SM-B-500418	ROPE	40
4	PAFZZ	80063	SC-C-446008	SLEEVE,ANTENNA SUPP	1
5	XBFZZ	80063	SC-C-446008-1	ANTENNA GUARD	1
6	PAFZZ	80063	SC-C-446008-2	CLAMP PLASTIC	2
7	PAFZZ	80063	SC-C-446008-3	SCREW,MACHINE	2
8	PAFZZ	80063	SC-C-446008-4	NUT PLAIN HEX	2
9	PAFZZ	96906	MS51959-45	SCREW,MACHINE	4
10	PAFZZ	96906	MS35338-138	WASHER,LOCK	3
11	PAFZZ	96906	MS15795-808	WASHER,FLAT	3
12	PAFZZ	96906	MS25281-R14	CLAMP,LOOP	3
13	PAFZZ	96906	MS35650-104	NUT,PLAIN,HEXAGON	3
14	PAFZZ	80058	CX-10171/U	LEAD,ELECTRICAL	1
15	PAFZZ	96906	MS35307-308	SCREW,CAP,HEXAGON H	6
16	XBFZZ	80063	SC-D-866120-1	MOUNT ANTENNA	1
17	PAFZZ	96906	MS51958-65	SCREW,MACHINE	3
18	PAFZZ	14304	755017B0845	WASHER FLAT	6
19	PAFZZ	96906	MS35489-80	GROMETT,NONMETALLIC	3
20	XBFZZ	80372	755017B0847	PLATE LEAD	1
21	PAOZZ	80058	AB-652/GR	BASE,MAST	1
22	PAFZZ	80063	SM-D-500428	COVER,ANTENNA	1
23	PAFZZ	14304	755017B0765	ADAPTER,ANTENNA TO	1
24	PAFZZ	80063	MS-118-A	ANTENNA ELEMENT	1
25	PAFZZ	80063	MS-117-A	ANTENNA ELEMENT	1
26	PAFZZ	80063	MS-116-A	MAST SECTION	3
27	XBFZZ	80372	755017B0832-6	DRILL BIT	1
28	XBFZZ	80372	755017B0832-2	DRILL BIT	1
				END OF FIGURE	

NATIONAL STOCK NUMBER INDEX

STOCK NUMBER	FIGURE NO.	ITEM NO.	STOCK NUMBER	FIGURE NO.	ITEM NO.
5305-00-021-3740	E-1	25	5310-00-974-6623	E-1	24
5340-00-051-6819	E-2	12	5310-00-984-7042	E-1	21
5305-00-054-6670	E-1	47	5995-00-985-8014	E-2	14
5305-00-054-6672	E-1	36	5310-01-064-8787	E-1	57
5305-00-059-3661	E-2	17	5340-01-082-3032	E-1	42
5820-00-078-4769	E-2	22	5820-01-133-3974	E-1	28
5820-00-078-4770	E-2	21	5985-01-192-8599	E-2	23
5985-00-115-7149	E-2	25	5995-01-214-6359	E-1	5
5985-00-199-8831	E-2	26	5995-01-214-6361	E-1	34
5305-00-207-8253	E-2	15	5995-01-214-6364	E-1	35
5985-00-238-7474	E-2	24	5995-01-214-6365	E-1	6
5315-00-239-8019	E-1	43	5995-01-215-6170	E-1	30
5310-00-250-9477	E-1	48	5310-01-246-9493	E-2	18
5935-00-333-1799	E-1	9			
	E-1	10			
5305-00-451-2924	E-1	41			
5310-00-476-6669	E-1	59			
5820-00-493-3055	E-2	4			
5306-00-543-4405	E-1	64			
5325-00-579-6134	E-2	19			
5310-00-582-5677	E-1	50			
5310-00-619-1148	E-1	53			
	E-2	11			
5310-00-625-5756	E-1	63			
5305-00-702-4523	E-1	61			
5310-00-722-5998	E-1	38			
5305-00-724-7878	E-1	51			
5305-00-764-0068	E-2	9			
5310-00-767-0445	E-1	62			
5310-00-773-7618	E-1	22			
5935-00-780-9126	E-1	31			
5305-00-781-5666	E-1	52			
5935-00-815-2325	E-1	32			
	E-1	33			
5935-00-878-1452	E-1	7			
5310-00-880-5978	E-1	46			
5305-00-903-2195	E-1	37			
5310-00-913-8881	E-1	20			
5310-00-929-6395	E-1	39			
5985-00-930-7223	E-2	1			
5310-00-933-8119	E-1	45			
5310-00-933-8120	E-1	54			
	E-2	10			
5310-00-933-8121	E-1	49			
	E-1	58			
5310-00-934-9759	E-1	44			
5310-00-934-9761	E-1	40			
5310-00-934-9765	E-1	56			
	E-2	13			
5985-00-935-8653	E-2	2			

NATIONAL STOCK NUMBER AND PART NUMBER INDEX

PART NUMBER INDEX

FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM
80058	AB-652/GR	5820-00-078-4770	E-2	21
80058	CX-10171/U	5995-00-985-8014	E-2	14
98003	HA955-SS-2-RG		E-1	26
91836	KN-59-06	5935-00-333-1799	E-1	9
			E-1	10
80063	MS-116-A	5985-00-199-8831	E-2	26
80063	MS-117-A	5985-00-115-7149	E-2	25
80063	MS-118-A	5985-00-238-7474	E-2	24
96906	MS15795-805	5310-00-722-5998	E-1	38
96906	MS15795-807	5310-00-880-5978	E-1	46
96906	MS15795-808	5310-00-619-1148	E-1	53
			E-2	11
96906	MS15795-810	5310-00-582-5677	E-1	50
96906	MS15795-812	5310-00-625-5756	E-1	63
96906	MS15795-814	5310-00-773-7618	E-1	22
96906	MS21919G9		E-1	4
96906	MS24665-86	5315-00-239-8019	E-1	43
96906	MS24693-C278	5305-00-781-5666	E-1	52
96906	MS24693-C31	5305-00-903-2195	E-1	37
96906	MS24693-C94	5305-00-724-7878	E-1	51
96906	MS25281-R14	5340-00-051-6819	E-2	12
96906	MS35307-306	5305-00-702-4523	E-1	61
96906	MS35307-308	5305-00-207-8253	E-2	15
96906	MS35307-334	5306-00-543-4405	E-1	64
96906	MS35307-364	5305-00-021-3740	E-1	25
96906	MS35338-136	5310-00-929-6395	E-1	39
96906	MS35338-137	5310-00-933-8119	E-1	45
96906	MS35338-138	5310-00-933-8120	E-1	54
			E-2	10
96906	MS35338-139	5310-00-933-8121	E-1	49
			E-1	58
96906	MS35338-140	5310-00-974-6623	E-1	24
96906	MS35338-141	5310-00-984-7042	E-1	21
96906	MS35425-70	5310-01-064-8787	E-1	57
96906	MS35489-80	5325-00-579-6134	E-2	19
96906	MS35649-2254	5310-00-250-9477	E-1	48
96906	MS35649-264	5310-00-934-9761	E-1	40
96906	MS35649-284	5310-00-934-9759	E-1	44
96906	MS35650-104	5310-00-934-9765	E-1	56
			E-2	13
96906	MS51957-45	5305-00-054-6670	E-1	47
96906	MS51957-47	5305-00-054-6672	E-1	36
96906	MS51958-65	5305-00-059-3661	E-2	17
96906	MS51959-45	5305-00-764-0068	E-2	9
96906	MS51971-2	5310-00-767-0445	E-1	62
96906	MS51971-3	5310-00-913-8881	E-1	20
80058	MT-6232/GRC-193A	5820-01-133-3974	E-1	28
81349	MW10M(M)D17	5935-00-815-2325	E-1	32
			E-1	33
77820	PT08SE-14-15S	5935-00-878-1452	E-1	7
80063	SC-B-19491	5985-00-935-8653	E-2	2

NATIONAL STOCK NUMBER AND PART NUMBER INDEX

PART NUMBER INDEX

FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM
80063	SC-C-446008	5820-00-493-3055	E-2	4
80063	SC-C-446008-1		E-2	5
80063	SC-C-446008-2		E-2	6
80063	SC-C-446008-3		E-2	7
80063	SC-C-446008-4		E-2	8
80063	SC-C-446046	5985-00-930-7223	E-2	1
80063	SC-D-866120-1		E-2	16
80063	SM-B-415025-2	5310-00-476-6669	E-1	59
80063	SM-B-500418		E-2	3
80063	SM-C-415027	5305-00-451-2924	E-1	41
80063	SM-C-415032	5340-01-082-3032	E-1	42
80063	SM-D-500428	5820-00-078-4769	E-2	22
81349	UW1220FA17	5935-00-780-9126	E-1	31
25530	UW1326FD15		E-1	8
77820	10-214622-2P		E-1	18
80372	755017A9038		E-1	17
80372	755017A9048-3		E-1	29
80372	755017A9052		E-1	3
14304	755017B0512	5995-01-214-6365	E-1	6
80372	755017B0701		E-1	27
80372	755017B0703		E-1	19
80372	755017B0704		E-1	60
80372	755017B0705		E-1	2
80372	755017B0706		E-1	23
80372	755017B0707		E-1	13
80372	755017B0708		E-1	14
80372	755017B0709		E-1	11
80372	755017B0710		E-1	12
14304	755017B0713		E-1	1
14304	755017B0714	5995-01-214-6364	E-1	35
80372	755017B0726		E-1	55
80372	755017B0730		E-1	15
14304	755017B0731	5995-01-214-6361	E-1	34
80372	755017B0734		E-1	16
14304	755017B0735	5995-01-214-6359	E-1	5
14304	755017B0740	5995-01-215-6170	E-1	30
14304	755017B0765	5985-01-192-8599	E-2	23
80372	755017B0832-2		E-2	28
80372	755017B0832-6		E-2	27
14304	755017B0845	5310-01-246-9493	E-2	18
80372	755017B0847		E-2	20

APPENDIX F

EXPENDABLE SUPPLIES AND MATERIALS LIST

Section I. INTRODUCTION

F-I. SCOPE.

This appendix lists expendable supplies and materials you will need to operate and maintain the MK-2462/GRC-193A. These items are authorized to you by CTA 50-970, Expendable/Durable Items (Except Medical, Class V, Repair Parts, and Heraldic Items).

F-2. EXPLANATION OF COLUMNS.

a. Column (1) Item Number. This number is assigned to the entry in the listing and is referenced in the narrative instructions to identify the material (e. g., "Use cleaning compound, item 3, App. F").

b. Column (2) Level. This column identifies the lowest level of maintenance that requires the listed item.

C-Operator/Crew

O-Organizational Maintenance

F-Direct Support Maintenance

c. Column (3) National Stock Number. This is the National stock number assigned to the item; use it to request or requisition the item.

d. Column (4) Description. Indicates the Federal item name and, if required, a description to identify the item. The last line for each item indicates the part number followed by the Federal Supply Code for Manufacturer (FSCM) in parentheses, if applicable.

e. Column (5) Unit of Measure (U/M). Indicates the measure used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr). If the unit of measure differs from the unit of issue, requisition the lowest unit of issue that will satisfy your requirements.

SECTION II EXPENDABLE SUPPLIES AND MATERIALS LIST

(1) ITEM NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) DESCRIPTION (FSCM)	(5) U/M
1	C	7920-00-178-8315	BRUSH,DUSTING, BRISTLE	EA
2	C	8305-00-205-3496	CLOTH,COTTON CHEESECLOTH CCCC 440(81348)	SQ YD
3	C	6850-00-984-5853	COMPOUND,CLEANING (TRICHLOROTRIFLUOROETHANE) FREON PCA(18845)	QT
4	O	8030-01-144-0608	SEALING COMPOUND(LOCKTITE) 59251 50CC(05972)	EA
5	C	4020-00-073-3276	ROPE SM-B-500418(80372)	FT

INDEX

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

SOMETHING WRONG WITH THIS PUBLICATION?

FROM (PRINT YOUR UNIT'S COMPLETE ADDRESS)
Commander
Stateside Army Depot
ATTN: AMSTA-US
Stateside, N.J. 07703-5007

DATE SENT
10 July 1975

PUBLICATION NUMBER	PUBLICATION DATE	PUBLICATION TITLE
TM 11-5840-340-12	23 Jan 74	Radar Set AN/PRC-76

BE EXACT PIN-POINT WHERE IT IS

PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO
2-25	2-28		
3-10	3-3		3-1
5-6	5-8		
		F03	

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

Recommend that the installation antenna alignment procedure be changed throughout to specify a 2^{o} IFF antenna lag rather than 1^{o}.

REASON: Experience has shown that with only a 1^{o} lag, the antenna servo system is too sensitive to wind 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 2^{o} without degradation of operation.

Item 5, Function column. Change "2 db" to "3db."

REASON: The adjustment procedure for the TRANS POWER FAULT indicator calls 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 e.1, 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.

PRINTED NAME GRADE OR TITLE AND TELEPHONE NUMBER
SSG I. M. DeSpiritof 999-1776

SIGN HERE
I. M. DeSpiritof

DA FORM 1 JUL 79 2028-2

PREVIOUS EDITIONS ARE OBSOLETE.

P S --IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS

TEAR ALONG PERFORATED LINE

FILL IN YOUR UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

POSTAGE AND FEES PAID
DEPARTMENT OF THE ARMY
DOD 314

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE $300

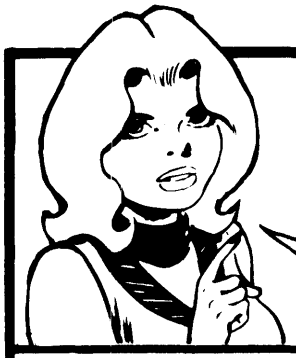
SAMPLE

Commander
US Army Communications-Electronics Command
and Fort Monmouth
ATTN: AMSEL-ME-MP
Fort Monmouth, New Jersey 07703-5007

TEAR ALONG PERFORATED LINE

TEAR ALONG PERFORATED LINE

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



SOMETHING WRONG WITH THIS PUBLICATION?

FROM (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER	PUBLICATION DATE	PUBLICATION TITLE
TM 11-2300-475-13 & P-1	1 Sept 1987	Installation Kit, Electronic Equipment MK-2462/GRC-193A

BE EXACT PIN-POINT WHERE IT IS

PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

PRINTED NAME GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

DA FORM 1 JUL 79 2028-2

PREVIOUS EDITIONS ARE OBSOLETE.

P S --IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS

REVERSE OF DA FORM 2028-2

FILL IN YOUR UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE $300

POSTAGE AND FEES PAID
DEPARTMENT OF THE ARMY
DOD 314

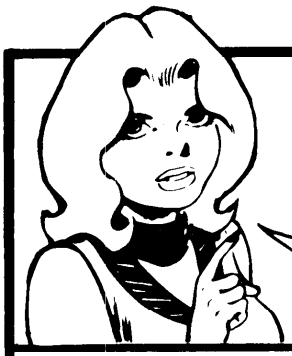
U.S. MAIL

TEAR ALONG PERFORATED LINE

Commander
US Army Communications-Electronics Command
and Fort Monmouth
ATTN: AMSEL-ME-MP
Fort Monmouth, New Jersey 07703-5007

TEAR ALONG PERFORATED LINE

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN. . JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL!

SOMETHING WRONG WITH THIS PUBLICATION?

FROM (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER	PUBLICATION DATE	PUBLICATION TITLE
TM 11-2300-475-13 & P-1	1 Sept 1987	Installation Kit, Electronic Equipment MK-2462/GRC-193A

BE EXACT PIN-POINT WHERE IT IS

PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

PRINTED NAME GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

DA FORM 1 JUL 79 2028-2

PREVIOUS EDITIONS ARE OBSOLETE.

P S --IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS

REVERSE OF DA FORM 2028-2

TEAR ALONG PERFORATED LINE

FILL IN YOUR UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

POSTAGE AND FEES PAID
DEPARTMENT OF THE ARMY
DOD 314

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE $300

Commander
US Army Communications-Electronics Command
and Fort Monmouth
ATTN: AMSEL-ME-MP
Fort Monmouth, New Jersey 07703-5007

TEAR ALONG PERFORATED LINE

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

SOMETHING WRONG WITH THIS PUBLICATION?

FROM (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER	PUBLICATION DATE	PUBLICATION TITLE
TM 11-2300-475-13 & P-1	1 Sept 1987	Installation Kit, Electronic Equipment MK-2462/GRC-193A

BE EXACT PIN-POINT WHERE IT IS

PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

PRINTED NAME GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

DA FORM 1 JUL 79 2028-2

PREVIOUS EDITIONS ARE OBSOLETE.

P S --IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS

REVERSE OF DA FORM 2028-2

FILL IN YOUR UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE $300

POSTAGE AND FEES PAID
DEPARTMENT OF THE ARMY
DOD 314

U.S. MAIL

TEAR ALONG PERFORATED LINE

Commander
US Army Communications-Electronics Command
and Fort Monmouth
ATTN: AMSEL-ME-MP
Fort Monmouth, New Jersey 07703-5007

By Order of the Secretary of the Army:

CARL E. VUONO
General, United States Army
Chief of Staff

Official:

R.L. DILWORTH
Brigadier General, United States Army
The Adjutant General

DISTRIBUTION:

To be distributed in accordance with DA Form 12-51 literature requirements for MK-2458/GRC; MK-2459/GRC; MK-2461/GRC.