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TM 11-2757

WAR DEPARTMENT TECHNICAL MANUAL

T7-539

INSTALLATION OF RADIO AND INTERPHONE EQUIPMENT IN VEHICLE, UTILITY, ARMORED M39 (T41) or T41E1

RESTRICTED. DISSEMINATION OF RESTRICTED MATTER.
No person is entitled solely by virtue of his grade or position
to knowledge or possession of classified matter. Such matter
is entrusted only to those individuals whose official duties
require such knowledge or possession. (See also paragraph
23b, AR 380-5, 15 March 1944.)

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RADIO AND INTERPHONE
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MAY 1945

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WASHINGTON 25, D. C., 4 May 1945

TM 11-2757, Installation of Radio and Interphone Equipment in Vehicle, Utility, Armored, M39 (T41) or T41E1, is published for the information and guidance of all concerned.

[AG 300.7 (10 Apr 45)]

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DESTRUCTION NOTICE

WHY — To prevent the enemy from using or salvaging this equipment for his benefit.

WHEN — When ordered by your commander.

HOW —

1. Smash — Use sledges, axes, handaxes, pickaxes, hammers, crowbars, heavy tools.
2. Cut — Use axes, handaxes, machetes.
3. Burn — Use gasoline, kerosene, oil, flame throwers, incendiary grenades.
4. Explosives — Use firearms, grenades, TNT.
5. Disposal — Bury in slit trenches, fox holes, other holes. Throw in streams. Scatter.

USE ANYTHING IMMEDIATELY AVAILABLE FOR DESTRUCTION OF THIS EQUIPMENT

WHAT —

1. Smash — All vacuum tubes, crystals, control dials, coupling coils, transformers, speakers in receivers, external loudspeakers, microphones, headsets, dynamotors, and cable connectors.
2. Cut — All connecting wires, cording, and cabling.
3. Burn — All equipment, and all associated training, technical, and installation manuals.
4. Bury or scatter — All remains, after destroying their usefulness.

DESTROY EVERYTHING

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SAFETY NOTICE

This equipment uses high voltages which are dangerous to life. Observe all safety precautions.

1. Make no adjustments inside the equipment with the power switch on.
2. Do not operate the equipment with the shields removed.
3. Do not connect power to any unit of these radio sets until operating instructions have been read completely.

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SECTION I

GUIDE TO USE OF THIS MANUAL

1. Purpose

This manual provides methods and procedure, based upon actual field experience, for installation of radio and interphone equipment in Vehicle, Utility, Armored, M39 (T41) or T41E1. Items required to make a complete operating installation are listed for each set. Official nomenclature followed by empty parentheses, such as Headset HS-30-(), is used to indicate any model of equipment regardless of its procurement.

2. Equipment

Installations covered include Interphone Equipment RC-99 and the following Radio Sets:

SCR-506-()	SCR-608-A
SCR-610-()	SCR-608-B

3. Holes and Brackets

Brackets required for installation of the radio set are normally drilled and installed prior to delivery of Vehicle, Utility, Armored, M39

(T41) or T41E1. Drilling instructions are given in this manual for any other necessary holes and brackets. Do not relocate any holes or brackets unless absolutely necessary.

4. Preliminary Check

Study the illustrations, the installation methods outlined, and any subsequent changes to this manual before proceeding with installations.

Caution: Vehicle, Utility, Armored, M39 (T41) or T41E1 has a 24-volt electrical system. Before installing the radio sets, be sure they are designed for 24-volt operation, or tubes may burn out or dynamotors may be damaged.

5. Operating Check

Carefully study the Technical Manual covering the radio set before trying to operate it; then, make a thorough operating check to determine whether the equipment has been properly installed and is in working order.

SECTION II

IGNITION NOISE SUPPRESSION

6. General

Excessive ignition or other electrical noises may interfere with the operation of radio equipment in Vehicle, Utility, Armored, M39 (T41) or T41E1. The Technical Manual issued with the vehicle will be helpful in locating the source of the noise, since it describes the suppression system used. Instructions for operating radio equipment used in the vehicle also should be studied. For further information on noise suppression see T M11-483.

7. Procedure

Locate and suppress ignition noises as follows:

a. Start the motor of the vehicle and turn on

the radio set. Put the receiver sensitivity control at *maximum*; then, listening to the receiver output with a headset, slowly tune the receiver over the entire range of frequencies to be used for communication.

b. When the frequency (or frequencies) with greatest noise level is found, turn off the vehicle engine. If this noise continues, the source is outside the ignition system. If noise stops, the trouble is in the ignition system.

c. Start the engine again. Adjust the receiver sensitivity control until engine noises can be distinguished easily from static, etc. Interference may then be identified as follows:

Interference	Usual source
Popping sound: corresponds to ignition firing; stops when engine is turned off; accelerates when engine is raced.	Ignition system.
Intermittent, clicking sound: lingers for several seconds when ignition is turned off.	Generator regulator.
Whining sound: varies with speed of engine; ceases only when generator stops rotating.	Generator.
Sparking, or continuous crackling noise.	Brushes and commutator of generator.

d. Interference from other electrical parts and circuits of the vehicle, such as panel gauges and heater fans, can usually be identified by turning off the gauges, fans, or other suspected mechanisms individually.

e. If the source of interference still cannot be found by any of the preceding methods, connect a probe antenna (fig. 17) to the antenna terminal of the radio set. Slowly move the loop of the probe antenna over the various parts of the electrical system of the vehicle. Keep the loop close to, but not in contact with, the part being examined. Noise from interference-producing parts should be heard in the receiver.

f. Usually interference can be eliminated by

cleaning, tightening, or replacing noise-producing parts. Examine and tighten all suppressor and shielding components, and all connections and grounding bonds. Clean the surface under them. This will assure good electrical contact between wires and terminals, and between metal casings and the frame of the vehicle. (Insulated but ungrounded metal parts absorb and reradiate electrical noises.)

g. If interference persists, suppressor components should be checked by substituting new ones. If a replacement is not available, disconnect the suspected component, and test capacitors, resistors, and chokes within it. Replace any that are defective.

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SECTION III

RADIO SET SCR-506-()

8. Required Parts

Items necessary for the installation of Radio Set SCR-506-() in Vehicle, Utility, Armored, T41E1 are listed below:

Basic unit Stock No. 2S506/24

Quantity	Stock No.	Item
e1	2A275-27	Antenna A-27, phantom
e1	2A224	Antenna AN-24
2	6Z3147	Connector No. 61007 and Bondnut BL-50
1	3E1314	Cord CD-314
e1	2Z2599-263	Chest CH-263
1	3H1641	Dynamotor DM-41-() (includes spare brushes)
1	3H1643	Dynamotor DM-43-() (includes spare brushes)
be1		Guy set consisting of—
1	2Z525	Bag BG-125
1	2A1312	Guy GY-12
1	2A1336-42	Guy GY-42
1	2A3129	Reel RL-29
4	2A3327	Stake GP-27, includes spare
e3	3G586	Insulator IN-86
e1	3Z3445	Key J-45
1	2A6303.1	Loudspeaker LS-3
a1	2A2088-65	Mast Base MP-65
a9	2A2416	Mast Section MS-116, includes three spares
a2	2A2417	Mast Section MS-117, includes spare
a2	2A2418	Mast Section MS-118, includes spare
1	2Z6721-253	Mounting FT-253-() (includes hardware)
1	2C4452	Radio Receiver BC-652-() (includes tubes and Crystal Unit DC-24 installed and set of spare tubes)
1	2C6530-653	Radio Transmitter BC-653-() (includes set of tubes and fuses)
e1	2Z8056	Roll BG-56
e50 ft	6Z7926	Rope RP-5
e2	6D13136	TM 11-630
15 ft	1B146	Wire W-146

Installation unit Stock No. 2S506-V91/50

Quantity	Stock No.	Item
1	2Z1250.66	Bracket, for Loudspeaker LS-3 (fig. 10)
1	2Z1250.80	Bracket, for phantom antenna (fig. 11)
ce2	4B417-4	Chest Set TD-4
1	6C18-41	Cover CW-41/U
1	6L50-506-V91	Hardware bag
de2	2B800-16	Headset H-16/U, includes spare
2	3G604	Insulator IN-104, includes spare
e1	2B1617	Microphone T-17
e1	2B1645	Microphone T-45
e2	2B1567	Microphone Cover MC-367

^aMast Base MP-57 (stock No. 2A2088-57) or MP-37 (stock No. 2A2087), Cover BG-67-A (stock No. 2Z3367), Mast Sections MS-49, MS-50, MS-51, MS-52, and MS-53 (stock No. 2A2349, 2A2350, 2A2351, 2A2352, and 2A2353 respectively), and Clamps MC-421, MC-422, MC-423, and MC-424 (stock No. 2Z2651-421 to 2Z2651-424 inclusive), may replace Mast Base MP-65 and Mast Sections MS-116, MS-117, and MS-118, in the basic unit.

^bWhen the basic unit contains Mast Sections MS-49 to MS-53 inclusive, with Mast Base MP-57, Guy Set GY-40 should be used in

place of Guy GY-12, Guy GY-42, Reel RL-29, Bag BG-125 and Stakes GP-27.

^cWhen Chest Set TD-4 is not available, 2 Cord CD-307-A (stock No. 3E1307-5.5) and 1 Cord CD-318-B (stock No. 3E1318) will be used.

^dIf Headset H-16/U is not available, 2 Headset HS-30-U (stock No. 2B830U) and 2 Cord CD-604 (stock No. 3E1604) will be used.

^eThese items are not installed, but must be stowed in the vehicle at the discretion of the using organization.

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9. Assembly and Installation

Components of Radio Set SCR-506-() should be installed as shown in figure 3 and as directed below:

<i>Part and location</i>	<i>Method and materials</i>
Mounting FT-253-(), Power Cords CO-280, connector No. 61007, and Bondnut BL-50 on floor of left sponson (items 5, 11, 13, and 14).	Secure spacer plates (item 21) provided to mounting feet of Mounting FT-253-(). Place Mounting FT-253-() on radio mounting plate (item 24) on floor of left sponson as shown in figure 3 and secure with hardware provided. Use a toothed lockwasher under head of each screw as shown in detail A. Secure Power Cord CO-280 (item 11), part of Mounting FT-253-(), to terminal block on mounting. Route power cords to vehicle terminal box (item 26) located on left wall of vehicle underneath front seat in crew compartment and install connectors and bondnuts through knock-out holes in terminal box to secure power cords. (One of the cords may be cut in two, and terminals soldered on ends, leaving one complete cord to be returned to stock to avoid waste.) Secure power cords along left wall of vehicle with clamps (item 17) as shown in figure 3.
Bracket (fig. 10), Loudspeaker LS-3, and Cover CW-41/U (items 19, 20, and 34, fig. 3).	Secure bracket (fig. 10) on floor of left sponson, toward the rear of radio mounting plate, with hardware provided as shown in figure 3. Remove screws from outer edge of loudspeaker front panel. Place Cover CW-41/U over panel and secure by replacing original screws. Secure Loudspeaker LS-3 to bracket (fig. 10) by means of four screws provided on back of loudspeaker.
Bracket (fig. 11), and Antenna A-27, phantom (item 22).	Secure bracket (fig. 11) on floor of left sponson, as shown in figure 3, with three 1/4-inch 20 x 3/4-inch screws and 1/4-inch lockwashers supplied. Secure Antenna A-27, phantom, in bracket (fig. 11) by means of provided clamp and wingnuts.
Radio Receiver BC-652-() and Dynamotor DM-41-() (items 1 and 3, fig. 3).	If Dynamotor DM-41-() is supplied not installed, remove screws around edge of radio receiver front panel and screw in rear center of cabinet. Pull radio receiver chassis from cabinet, put dynamotor into place indicated, and secure with snap slide fasteners. Installing proper dynamotor and inserting Plug P-250 in socket automatically adjusts receiver circuits for correct operating voltage. The nameplate on front panel of receiver should be turned to indicate 24-volt operation. Place Radio Receiver BC-652-() on Mounting FT-253-() and secure with thumbscrews provided.

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Part and location

Method and materials

Radio Transmitter BC-653-() and Dynamotor DM-43-() (items 2 and 4, fig. 3).

If Dynamotor DM-43-() is supplied not installed, slide it into the dynamotor compartment at lower right end of radio transmitter and secure with five screws provided. Remove patch cover plate located on top of radio transmitter, extreme right, and see that the six connector links are in position for 24-volt operation, as indicated by arrow on link terminal strip. Voltage indicator plate on dynamotor panel should be turned to indicate 24-VOLTS. Place Radio Transmitter BC-653-() on Mounting FT-253-() and secure with thumb-screws provided.

Insulator IN-104 (item 16, fig. 3).

Remove screw from right edge of front panel of Radio Transmitter BC-653-() above Dynamotor DM-43-(). Drill and retap the screw hole in transmitter for No. 10-32 screw. Install Insulator IN-104 in tapped hole, as shown in figure 3.

Mast Base MP-65 (item 6, fig. 3).

Install Mast Base MP-65 on small corrugated plate located on top of vehicle, left side, directly above right end of Radio Transmitter BC-653-() as follows: Refer to figure 12. Disassemble Mast Base MP-65 by holding body of mast base and turning the bolt and binding post assembly, item 10, in a counterclockwise direction. Place insulator, item 4, over hole in small corrugated plate. Note that a neoprene washer, item 5, is cemented to each insulator, item 4 and item 6. Place phenolic washer, item 3, over item 4 and insert body of mast base, item 2, through hole in items 3 and 4 and corrugated plate. Insert bolt and binding post, item 10, through hole in lockwasher, item 9, plain washer, item 8, phenolic washer, item 7, and lower insulator, item 6, respectively. Insert bolt and binding post assembly, item 10, into item 2, from underneath, and turn item 10 clockwise while holding item 2 until the mast base is tightened securely. If Mast Base MP-65 is not available, Mast Base MP-37 or MP-57 and Cover BG-67 may be substituted. See figure 16 for assembly of Mast Base MP-37 or MP-57.

Wire W-146 (item 10, fig. 3).

Cut Wire W-146 to proper length and strip and solder-tin about one inch of each end. Connect one end to Mast Base MP-65, route the wire through Insulator IN-104 and connect other end to antenna binding post on Radio Transmitter BC-653-().

Cord CD-314 (item 12, fig. 3).

Use Cord CD-314 to connect Loudspeaker LS-3 to Radio Receiver BC-652-().

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Part and location

Mast Sections MS-116, MS-117, and MS-118 (items 7, 8, and 9, fig. 3).

Chest CH-263.

Method and materials

For vehicular use, 3 Mast Sections MS-116, 1 MS-117, and 1 MS-118 are to be used. For stationary operation, 3 additional Mast Sections MS-116 are used. Screw mast sections together and screw into Mast Base MP-65. When mast sections are removed and disassembled, stow them in Roll BG-56. When Mast Sections MS-49, MS-50, MS-51, MS-52, and MS-53 are used with Mast Base MP-37 or MP-57, place Clamps MC-421, MC-422, MC-423, and MC-424 on joints to prevent loss of sections.

Use for spare headset, tubes, and spare parts. Refer to chart on Chest CH-263 for proper location of items. Stow Chest CH-263 in a convenient place in vehicle at discretion of using organization.

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SECTION IV

RADIO SET SCR-608-B AND ASSOCIATED INTERPHONE EQUIPMENT

10. Required Parts

Items necessary for the installation of Radio Set SCR-608-B and associated interphone equipment in Vehicle, Utility, Armored, T41E1 are listed below:

Basic unit Stock No. 2S608B/24

Quantity	Stock No.	Item
1	2A283	Antenna A-83, phantom
^a 1	2Z1140	Box BX-40
^a 1	6F796	Chest CH-96
1	6Z3147	Connector No. 61007 and Bondnut BL-50
1	2Z3396	Cover BG-96
2	3H1636	Dynamotor DM-36-()
1	3H1637	Dynamotor DM-37-()
^e 1	2A2081-15	Mast Base AB-15/GR
^e 2	2A2417	Mast Section MS-117, includes spare
^e 2	2A2418	Mast Section MS-118, includes spare
1	2Z6721-237	Mounting FT-237-()
2	2C4460-683BM	Radio Receiver BC-683-BM
1	2C6530-684BM	Radio Transmitter BC-684-BM
^a 1	2Z8056	Roll BG-56
^a 2	6D13102	TM 11-620
6 ft	1B128	Wire W-128

Installation unit Stock No. 2S608B-V91/50

Quantity	Stock No.	Item
^b 6	4B417-4	Chest Set TD-4
^c 1	2C675-739-A	Control Box BC-739-A, includes Mounting FT-507, connectors and bondnuts, and necessary hardware
38 ft	3E2213	Cordage CO-213
1	6L50-608B-V91	Hardware bag
^d 6	2B800-16	Headset H-16/U
^c 3	2C1738H	Interphone Control Box BC-606-H
^e 2	2A2416	Mast Section MS-116, includes spare
1	2B1617	Microphone T-17 (spare with Cover MC-367)
5	2B1645	Microphone T-45
2	2B1567	Microphone Cover MC-367, includes spare for Microphone T-17

^aThese items are not installed but are stowed in the vehicle at the discretion of the using organization.

^bIf Chest Set TD-4 is not available, 6 Cord CD-307-A (stock No. 3E1307-5.5) and 6 Cord CD-318-B (stock No. 3E1318B) should be used.

^cInterphone Control Box BC-606-A, -B, -C, -D, -E, -F, -G and Control Box BC-739 may replace Interphone Control Box BC-606-H

and Control Box BC-739-A, if suitable waterproofing is applied.

^dIf Headset H-16/U is not available, 6 Headset HS-30-U (stock No. 2B830U) and 6 Cord CD-604 (stock No. 3E1604) should be used.

^eIf the basic unit contains Mast Base MP-48-A and Mast Sections MS-52 and MS-53 instead of Mast Base AB-15/GR and Mast Sections MS-117 and MS-118, 2 Mast Section MS-51 (stock No. 2A2351) and 2 Clamp MS-423 (stock No. 2Z2651-423) should be supplied in installation unit in place of 2 Mast Section MS-116.

II. Assembly and Installation

Components of Radio Set SCR-608-B and associated interphone equipment should be installed as shown in figures 1 and 4 and as directed below:

<i>Part and location</i>	<i>Method and materials</i>
Cordage CO-213 (items 13, 14, 15, and 16, fig. 1).	Figure 1 lists the approximate lengths of cordage required for connecting interphone components. <i>Wire as much of the equipment as possible before installing in vehicle.</i> Prepare cordage as directed below: Cut cordage to proper lengths. Strip back 3½ inches of outer rubber covering and 2½ inches of inner and outer shields from each end of length of cordage for interphone control boxes. Strip back 6 inches of outer rubber covering and 5 inches of shields from each end of length of cordage for connections to Mounting FT-237-(). Using a pointed instrument, separate weave of exposed 1-inch ends of shield braids, and twist separated wires so as to form a pigtail. Strip 1 inch of insulation from tip of black lead, and ½ inch of insulation from all other leads on each end of all lengths of cordage. Strip ½ inch of insulation from black lead at point nearest junction of outer rubber covering and exposed shields so that pigtail formed from shields can be joined around exposed part of black lead. Solder joint formed using a minimum of solder. Solder-tin tips of all leads. Black lead is used for ground connection as shown in figure 4.
Mounting FT-237-() on radio mounting plate in right sponson of vehicle (item 5, fig. 1).	Route appropriate length of Cordage CO-213 (item 13, fig. 1) and Cord CO-278 (item 12, fig. 1) through holes in right end of Mounting FT-237-() and secure, with clamps provided, at terminal board inside mounting. Route Cordage CO-213 (item 16, fig. 1) through left end of Mounting FT-237-(). Connect Cordage CO-213 (items 13 and 16, fig. 1) to terminals on terminal strip as shown in figure 4. Connect Cord CO-278 to power terminal block inside mounting and near terminal strip. Secure Mounting FT-237 to radio mounting plate provided in right sponson of vehicle, using hardware provided, and apply I.E.T. lockwashers, as shown in figure 1, detail A.
Control Box BC-739-A (item 18, fig. 1).	Secure Control Box BC-739-A on Mounting FT-507, supplied with each control box, and locate on mounting plate (item 29, fig. 1) with mounting studs and hex. nuts provided, as shown in figure 1. Remove patch cords from Control Box BC-739-A when not required for connection to Radio Set SCR-506-(). Route Cordage CO-213 (item 15, fig. 1) as shown in figure 1. Remove sweated disc from upper left side of control box, place

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Part and location

Method and materials

- rubber washer over threaded stem of connector No. 61007, insert stem of connector through hole in control box, and secure with Bondnut BL-50. Loosen packing nut on connector, insert prepared cordage through connector, and tighten packing nut. Solder ends of cordage wires to terminal strip as shown in figure 4. When Control Box BC-739 is supplied, secure control box directly to mounting plate in vehicle and apply suitable waterproofing to control box.
- Interphone Control Box BC-606-II** (item 17, fig. 1). Secure driver's and co-driver's Interphone Control Box BC-606-H supplied with Mounting FT-507 to interphone brackets furnished, forward in vehicle hull, using mounting studs and hex. nuts provided, as shown in figure 1. Secure commander's control box, supplied with Mounting FT-507, to interphone bracket located on right side of vehicle, using mounting studs and hex. nuts provided, as shown in figure 1. Connect cordage as shown in figures 1 and 4, and secure with connectors and bondnuts as explained for Control Box BC-739-A. When modification of commander's and co-driver's control boxes incorporating spring loaded switches is required, refer to figure 4, detail A, for diagram of connections. When Interphone Control Box BC-606-H including Mounting FT-507 is not available, Interphone Control Box BC-606-A, -B, -C, -D, -E, -F, or -G may be substituted and secured directly to interphone brackets. Apply suitable waterproofing to boxes.
- Mast Base AB-15/GR and Wire W-128** (items 6 and 10, fig. 1). Locate Mast Base AB-15/GR on right side of vehicle as shown in figure 1. Install mast base as follows: Refer to figure 13. Disassemble Mast Base AB-15/GR by holding lower insulator and turning body of mast base counterclockwise. Place insulator, item 5, over mounting hole in vehicle. Note that a neoprene washer, item 6, is cemented to each insulator, item 5 and item 7. Place small neoprene washer, item 4, over item 5, and place plain washer, item 3, over item 4. Insert body of mast base, item 2, through hole in items 3, 4, 5, 6, and mounting hole in vehicle. Insert bolt, item 8, with insulator, item 7, attached, into it 2 from underneath. Turn item 2 clockwise until mast base is tightened securely. Cut a 25-inch length of Wire W-128, strip and solder-tin $\frac{1}{2}$ inch from each end, and connect wire to binding post on bottom of mast base. Connect other end of wire to TR post on Mounting FT-237-(). If Mast Base AB-15/GR is not available, Mast Base MP-48 or MP-48-A may be substituted. See figure 14 for assembly of substitutes. Remove internal lead-in from mast base and use external lead-in.

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Part and location

Method and materials

Radio Transmitter BC-684-BM and Dynamotor DM-37-() (items 1 and 3, fig. 1) on Mounting FT-237-() (item 5, fig. 1).

If Dynamotor DM-37-() is not already installed, proceed as follows: Loosen two screw locks securing crystal drawer to front panel of Radio Transmitter BC-684-BM and pull out drawer. Loosen four screw locks securing cover on top of radio transmitter and remove cover. Plug dynamotor unit into receptacle on left rear of radio transmitter chassis and tighten hold-down screws in its base. Place crystal units in crystal drawer. Replace cover and crystal drawer. Place radio transmitter on Mounting FT-237-() (item 5, fig. 1) and secure by means of thumbscrew locking devices on right end.

Radio Receiver BC-683-BM and Dynamotor DM-36-() (items 2 and 4, fig. 1) on Mounting FT-237-() (item 5, fig. 1).

If Dynamotor DM-36-() is not already installed, proceed as follows: Loosen screw lock in rear center of case of Radio Receiver BC-683-BM and remove chassis from case. Plug dynamotor into receptacle on radio receiver chassis and tighten the hold-down screws in its base. Replace receiver chassis in case. Place radio receiver on Mounting FT-237-() (item 5, fig. 1) and secure by means of thumbscrew locking devices.

Antenna A-83, phantom (item 19, fig. 1).

Remove No. 10-32 x $\frac{3}{8}$ -inch roundhead screw from lower left front corner of Mounting FT-237-(). Secure Antenna A-38, phantom, with bracket attached, to left front corner of Mounting FT-237-(), using No. 10-32 x $\frac{1}{2}$ -inch screw in original tapped hole.

Connector No. 61007 and Bondnut BL-50 (item 26 and 27, fig. 1).

Install through knock-out hole in vehicle terminal box (item 28, fig. 1) for power cord, Cord CO-278 (item 12) from Mounting FT-237-(). Secure power cord in place. Secure items 12, 13, and 14 in place with clamps (items 20, 21, and 22) as shown in figure 1.

Mast Sections MS-116, MS-117, and MS-118 (items 7, 8, 9, fig. 1) and Roll BG-56.

Screw mast sections together and screw assembled antenna into Mast Base AB-15/GR. Place spare mast sections in Roll BG-56. When antenna is not in use, place the mast sections in Roll BG-56. Stow Roll BG-56 in convenient place in vehicle, as recommended by using organization. When Mast Sections MS-51, MS-52, and MS-53 are supplied for use with Mast Base MP-48 or MP-48-A, place Clamps MC-423 and MC-424 on joints of assembled antenna to prevent loss of sections.

Box BX-40.

Stow 30 crystal units, supplied with Radio Transmitter BC-684-BM, in Box BX-40. Place Box BX-40 in Chest CH-96.

Chest CH-96.

Stow spare headsets, cords, tubes, etc., in Chest CH-96. Stow Chest CH-96 in convenient place in vehicle, as recommended by using organization.

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SECTION V

RADIO SET SCR-608-A

12. Required Parts

Items necessary for the installation of Radio Set SCR-608-A in Vehicle, Utility, Armored, T41E1 are listed below:

Basic unit Stock No. 2S608/24

Quantity	Stock No.	Item
1	2A283	Antenna A-83, phantom
a ¹	2Z1140	Box BX-40
a ¹	6F796	Chest CH-96
1	6Z3147	Connector No. 61007 and Bondnut BL-50
1	2Z3396	Cover BG-96
2	3H1636	Dynamotor DM-36-()
1	3H1637	Dynamotor DM-37-()
d ¹	2A2081-15	Mast Base AB-15/GR
d ²	2A2417	Mast Section MS-117, includes spare
d ²	2A2418	Mast Section MS-118, includes spare
1	2Z6721-237	Mounting FT-237-()
2	2C4460-683A	Radio Receiver BC-683-A
1	2C6530-684A	Radio Transmitter BC-684-A
a ¹	2Z8056	Roll BG-56
a ²	6D13102	TM 11-620
6 ft	1B128	Wire W-128

Installation unit Stock No. 25608-V91/50

Quantity	Stock No.	Item
ab ²	4B417-4	Chest Set TD-4
ac ²	2B800-16	Headset H-16/U
1	6L50-608V91	Hardware bag
d ²	2A2416	Mast Section MS-116, includes spare
a ¹	2B1617	Microphone T-17
a ²	2B1567	Microphone Cover MC-367
a ¹	2B1645	Microphone T-45

^aThese items are not installed but are stowed in the vehicle at the discretion of the using organization.

^bIf Chest Set TD-4 is not available, 2 Cord CD-307 (stock No. 3E1307-5.5) and 1 Cord CD-318-B (stock No. 3E1318B) should be used.

^cIf Headset H-16/U is not available, 2 Headset HS-30 (stock No.

2B830) and 2 Cord CD-604 (stock No. 3E1604) should be used.

^dIf basic unit contains Mast Base MP-48-A or MP-48 and Mast Sections MS-52 and MS-53 in place of Mast Base AB-15/GR and Mast Sections MS-117 and MS-118, Mast Section MS-51 (stock No. 2A2351) and Clamp MC-423 (stock No. 2Z2651-423) should be used with installation unit in place of Mast Section MS-116.

13. Assembly and Installation

Components of Radio Set SCR-608-A should be installed as shown in figure 2 and as directed below:

<i>Part and location</i>	<i>Method and materials</i>
Mounting FT-237-() and Power Cord CO-278 in right sponson of vehicle (items 5 and 11, fig. 2).	Connect Cord CO-278 to terminal block inside Mounting FT-237-(). Secure Mounting FT-237-() to radio mounting plate in right sponson, with hardware provided, and apply I.E.T. lockwashers as shown in figure 2, detail A.

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<i>Part and location</i>	<i>Method and materials</i>
Mast Base AB-15/GR and Wire W-128 (items 6 and 10, fig. 2).	Locate Mast Base AB-15/GR on right side of vehicle as shown in figure 2. Install mast base as follows: Refer to figure 13. Disassemble Mast Base AB-15/GR by holding lower insulator, item 7, and turning body of mast base, item 2, counterclockwise. Place upper insulator, item 5, over mounting hole in vehicle. Note that a neoprene washer, item 6, is cemented to each insulator, item 5 and item 7. Place small neoprene washer, item 4, over item 5, and place plain washer, item 3, over item 4. Insert body of mast base, item 2, through hole in items 3, 4, 5, 6, and mounting hole in vehicle. Insert bolt, item 8, with insulator, item 7, attached, into item 2, from underneath. Turn item 2 clockwise until mast base is tightened securely. Cut a 25-inch length of Wire W-128, strip and solder-tin 1/2-inch from each end, and connect wire to binding post on bottom of mast base. Connect other end of wire to TR post on Mounting FT-237-(). If Mast Base AB-15/GR is not available, Mast Base MP-48 or MP-48-A may be substituted. See figure 14 for assembly of substitutes. Remove internal lead-in from mast base and use external lead-in.
Radio Transmitter BC-684-A and Dynamotor DM-37-() (items 2 and 4, fig. 2), on Mounting FT-237-().	If Dynamotor DM-37-() is not already installed, proceed as follows: Loosen two screw locks securing crystal drawer to front panel of Radio Transmitter BC-684-A and pull out drawer. Loosen four screw locks securing cover on top of radio transmitter and remove cover. Plug dynamotor unit into receptacle on left rear of radio transmitter chassis and tighten hold-down screws in its base. Place crystal units in crystal drawer. Replace cover and crystal drawer. Place Radio Transmitter BC-684-A on Mounting FT-237-() and secure by means of provided thumbscrew locking devices on right end.
Radio Receiver BC-683-A and Dynamotor DM-36-() (items 1 and 3, fig. 2), on Mounting FT-237-().	If Dynamotor DM-36-() is not already installed, proceed as follows: Loosen screw lock in rear center of case of Radio Receiver BC-683-A and remove chassis from case. Plug dynamotor into receptacle on receiver chassis, and tighten hold-down screws in its base. Replace receiver chassis in case. Place radio receiver on Mounting FT-237-() and secure by means of thumbscrew locking devices.
Antenna A-83, phantom (item 19, fig. 1).	Remove No. 10-32 x 3/8-inch roundhead screw from lower left front corner of Mounting FT-237-(). Secure antenna A-83, phantom, with bracket attached, to left front corner of Mounting FT-237-() using No. 10-32 x 1/2-inch screw in original tapped hole.

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<i>Part and location</i>	<i>Method and materials</i>
Connector No. 61007 and Bondnut BL-50 (items 13 and 14, fig. 2).	Install through knock-out hole in vehicle terminal box (item 22, fig. 2) for power cord, Cord CO-278, from Mounting FT-237-(). Secure power cord in place. Secure cord (item 11, fig. 2) in place with clamps as shown in figure 2.
Mast Sections MS-116, MS-117, and MS-118 (items 7, 8, and 9, fig. 2).	Screw mast sections together and screw the assembled antenna into Mast Base AB-15/GR. When antenna is not in use, place mast sections in Roll BG-56 and stow in a convenient place in vehicle as recommended by using organization. When Mast Sections MS-51, MS-52, and MS-53 are used with Mast Base MP-48 or MP-48-A, place Clamps MC-423 and MC-424 on joints of assembled antenna to prevent loss of sections.
Box BX-40.	Place 30 crystal units, supplied with Radio Transmitter BC-684-A, in Box BX-40. Place Box BX-40 in Chest CH-96.
Chest CH-96.	Stow spare headsets, tubes, parts, etc., in Chest CH-96. Stow Chest CH-96 in convenient place in vehicle, as recommended by using organization.

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SECTION VI

RADIO SET SCR-610-()

14. Required Parts

Items necessary for the installation of Radio Set SCR-610-() in Vehicle, Utility, Armored, M39 (T41) or T41E1 are listed below:

Basic unit Stock No. 2S610/24

Quantity	Stock No.	Item
^a 1	6Q349	Alignment Tool TL-207
^a 1	2A2290	Antenna A-29-C
^a 1	3B879	Case CS-79
^a 1	2Z1890-137	Case CS-137
^a 2	2A2352/1	Fitting
^a 1	2B613	Handset TS-13
^a 2	3G1250-64.15	Insulator (used with Rope RP-5)
^a 2	3G586	Insulator IN-86
^b 1	2A2081-15	Mast Base AB-15/GR
1	2Z6721-250	Mounting FT-250-()
^b 2	2A2416	Mast Section MS-116, includes spare
^b 2	2A2417	Mast Section MS-117, includes spare
^b 2	2A2418	Mast Section MS-118, includes spare
1	3H4496-120	Power Supply Unit PE-120-()
1	2C5379	Radio Receiver and Transmitter BC-659-()
^a 1	2Z8056	Roll BG-56
^a 15 ft	6Z7926	Rope RP-5
^a 2	2Z9019	Strap ST-19
^a 2	6D13037	TM 11-615
1	3H6711	Vibrator VB-11
^a 27 ft	1B29	Wire W-29
6 ft	1B128	Wire W-128
1	6Z3147	Connector No. 61007 and Bondnut BL-50

Basic unit Stock No. 2S610-V91/50

Quantity	Stock No.	Item
1	3A39	Battery BA-39
1	3A40	Battery BA-40
1	3A41	Battery BA-41
^{ad} 1	4B417-4	Chest Set TD-4
1	2Z3400-153	Cover BG-153
1	6L50-610-V91	Hardware bag
^{ac} 1	2B800-16	Headset H-16/U
1	2B1645	Microphone T-45

^aThese items are not installed but must be stowed in the vehicle at the discretion of the using organization.

^bIf Mast Base AB-15/GR with Mast Sections MS-116, MS-117, and MS-118 are not available, Mast Base MP-48 or MP-48-A and Mast Sections MS-51, MS-52, and MS-53, with Clamps MC-423 and MC-424 and Cover BG-108 may be substituted in T41E1. A coaxial lead-in will be required for Mast Base MP-48 or MP-48-A when substituted in M39 (T41) installation, consisting of Terminal Box TM-210,

Terminal Box TM-211, and 5 feet of Cable WC-562. If these terminal boxes are not available it will be necessary to relocate Mast Base MP-48 or MP-48-A in order to permit use of 36-inch lead-in of Wire W-128.

^cWhen Headset H-16/U is not available, one Headset HS-30 with one Cord CD-604 may be substituted.

^dIf Chest Set TD-4 is not available, one Cord CD-307-A and one Cord CD-318-A should be used.

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15. Assembly and Installation

Components of Radio Set SCR-610-() should be installed as shown in figures 7 and 8 and as directed below:

<i>Part and location</i>	<i>Method and materials</i>
Mounting FT-250-() (item 4, fig. 8), in right front ammunition compartment (for M39).	Secure Mounting FT-250-() to mounting shelf, located in right front ammunition compartment with 1/4-20 x 1/2-inch screws and 1/4-inch lockwashers provided, as shown in figure 8.
Mounting FT-250-() (item 4, fig. 7), in right sponson (for T41E1).	Secure Mounting FT-250-() in right sponson with 1/4-20 x 1/2-inch screws and 1/4-inch lockwashers provided, as shown in figure 7.
Power Supply Unit PE-120-() and Vibrator VB-11 (items 2 and 3, fig. 7; items 2 and 3, fig. 8), on Mounting FT-250-().	Open case of Power Supply Unit PE-120-() and remove chassis cover. Place Vibrator VB-11 in its socket. Make certain that connector link is in BC-659 position, that change-over plug is set for 24-volt operation (arrow pointing to 24 volts), and that tubes are pressed down firmly in their sockets. Replace cover on chassis and close lid of power supply unit. Place Power Supply Unit PE-120-() on Mounting FT-250-() in position shown in figure 7 for T41E1, or figure 8 for M39, and secure with hook fasteners. Route power cord, furnished with Power Supply Unit PE-120-(), to vehicle terminal box (item 16, figs. 7 and 8), located on bulkhead in driver's compartment above co-driver's seat. Install connector No. 61007 and Bondnut BL-50 (items 10 and 11, figs. 7 and 8), in knock-out hole in vehicle terminal box for power cord. Secure power cord with provided clamps, as shown in figures 7 and 8.
Radio Receiver and Transmitter BC-659-() and Battery BA-41 (item 1, figs. 7 and 8).	If Battery BA-41 is not already installed in Radio Receiver and Transmitter BC-659-(), install it as follows: Remove receiver-transmitter chassis from case. Remove cover of battery compartment located on chassis near front panel. Place Battery BA-41 into compartment, being careful to engage plug into socket of battery. Replace battery compartment cover. Make sure that all tubes are pressed down firmly in their proper sockets, and that crystals for desired operating frequencies are in their proper sockets with retaining clip in position. See that two toggle switches near left side of chassis are in the ON position. Place Radio Receiver and Transmitter BC-659-() on Power Supply Unit PE-120-() in position as shown in figure 7 for T41E1 and figure 8 for M39, and secure with snap slide fasteners.

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Part and location

Method and materials

Mast Base AB-15/GR (item 5, figs. 7 and 8).

Locate Mast Base AB-15/GR as shown in figure 7 for T41E1 and figure 8 for M39. Refer to figure 13. Disassemble Mast Base AB-15/GR by holding lower insulator, item 7, and turning body of mast base, item 2, counterclockwise. Place upper insulator, item 5, over mounting hole in vehicle. Note that a neoprene washer, item 6, is cemented to each insulator, item 5 and item 7. Place small neoprene washer, item 4, over item 5, and place plain washer, item 3, over item 4. Insert body of mast base, item 2, through hole in items 3, 4, 5, 6, and mounting hole in vehicle. Insert bolt, item 8, with insulator item 7, attached, into item 2, from underneath. Turn item 2 clockwise until mast base is tightened securely.

Wire W-128 (item 12, figs. 7 and 8) and terminal.

Cut a 37-inch length of Wire W-128. Strip insulation from $\frac{1}{2}$ inch of each end of wire, and solder-tin tips. *Caution: Wire W-128 must be exactly 36 inches from binding post on bottom of Mast Base AB-15/GR to antenna terminal at rear of Radio Receiver and Transmitter BC-659-().* Solder terminal, found in hardware bag, to one tip of wire and connect it to antenna terminal at rear of receiver transmitter. Connect the other tip of wire to binding post on bottom of mast base. When Radio Receiver and Transmitter BC-659-() is supplied with Terminal Box TM-218 installed, do not solder terminal to Wire W-128. Place connecting link in Terminal Box TM-218 in wire lead-in position.

Mast Sections MS-116, MS-117, and MS-118 (items 6, 7, and 8, figs. 7 and 8).

Screw Mast Sections MS-116, MS-117, and MS-118 together. Screw assembled sections into Mast Base AB-15/GR. When mast sections are removed, stow them in Roll BG-56. If Mast Sections MS-51, MS-52, and MS-53 with Clamps MC-423 and MC-424 are supplied for use with Mast Base MP-48 or MP-48-A, place clamps over joints of assembled mast sections to prevent loss of sections. Place Cover BG-108 over Mast Base MP-48 or MP-48-A when mast sections are not in use. When Mast Base AB-15/GR and Mast Sections MS-116, MS-117, and MS-118 are not available, substitution of antenna systems must be made. See figure 14 for installation with Wire W-128 external lead-in for use in T41E1. Remove inner conductor, assembly 7, from Mast Base MP-48. See figure 15, views A and B, for substitute antenna system in M39. If Radio Receiver and Transmitter BC-659-() is equipped with Terminal Box TM-218, replace Terminal Box TM-218 with the following items: Insulator, antenna mounting block (stock No. 3G1838); block and bushing assembly (stock

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SECTION VII

Method and materials

No. 2Z734-1); box, antenna junction (stock No. 2Z5692); gasket, block insulator (stock No. 2A245A/G1); cap screw (stock No. 6L4909-10). Installation of above named items makes it possible to use Terminal Box TM-210, which is necessary for antenna installations as shown in figure 15, view A or B. If Terminal Boxes TM-210 and TM-211 are not available, relocate Mast Base MP-48 or MP-48-A by drilling 2 1/8-inch hole in top rail of vehicle (M39 only) directly above antenna terminal on radio set, and install for wire lead-in as shown in figure 14. Cut Wire W-128 to proper operating length, as recommended in TM 11-615.

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SECTION VII

INTERPHONE EQUIPMENT RC-99

16. Required Parts

Items necessary for installation of Interphone Equipment RC-99 in Vehicle, Utility, Armored, M39 (T41) or T41E1 are listed below:

Basic unit Stock No. 2S99/24

Quantity	Stock No.	Item
4	6Z3147	Connector No. 61007 and Bondnut BL-50
^c 2	2C675-739-A	Control Box BC-739-A, including Mounting FT-507, connectors, bondnuts, and necessary hardware
1	2C1738	Interphone Control Box BC-606-H
1	2C1637	Interphone Amplifier BC-667
^d 2	6D13033	TM 11-702

Installation unit Stock No. 2S99-V91/50

Quantity	Stock No.	Item
^{ad} 6	4B417-4	Chest Set TD-4
^c 1	2C675-739-A	Control Box BC-739-A, including Mounting FT-507, connectors, bondnuts and necessary hardware
35 ft	3E2213	Cordage CO-213
1	6L50-99-V91	Hardware bag
^{bd} 6	2B800-16	Headset H-16/U
^d 6	2B1645	Microphone T-45

^aIf Chest Set TD-4 is not available, 6 Cord CD-307-A and 6 Cord CD-318 shall be used.

^bIf Headset H-16/U is not available, 6 Headset HS-30-() and 6 Cord CD-604 shall be used.

^cIf basic unit contains Control Box BC-739, requisition 3 Control

Boxes BC-793-A for installation unit. If Control Box BC-739-A cannot be supplied, Control Box BC-739 may be used if properly water-proofed.

^dThese items are not installed but shall be stowed in the vehicle at discretion of using organization.

17. Assembly and Installation

Components of Interphone Equipment RC-99 should be installed as shown in figure 6 and as directed below:

Part and location

Cordage CO-213 (items 4, 5, 6, 7, and 8, fig. 6).

Method and materials

Figure 6 lists approximate lengths of cordage required for connecting interphone components. *Wire as much of the equipment as possible before installing in vehicle.* Cut cordage (items 4 and 5) entering control boxes to length required and strip back 3½ inches of outer rubber covering and 2½ inches of inner and outer shields. Cut cordage entering interphone Amplifier BC-667 (items 6, 7, and 8) to lengths required and strip back 8½ inches of outer rubber covering of end entering interphone amplifier and 7½ inches of the shields. Prepare opposite ends in same manner as for cordage entering control boxes. Strip about ½ inch of insulation from black lead of all exposed ends at a point exposed

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Part and location

Method and materials

- by separation of shields. Separate 1-inch exposed ends of shield braids with blunt-pointed instrument and twist loose wires of shielding to form a pigtail. Twist pigtail around prepared portion of black lead, and solder together, using a minimum of solder. Use the black lead for ground connection as shown in figure 5. Cordage CO-213 (item 8), entering vehicle terminal box, shall be prepared in the same manner as cordage entering interphone amplifier except that the shielded pair of red and green wires are taped; the white and yellow, and black and brown leads are paralleled so that lugs (obtained from terminal box) can be soldered to each pair, as shown in figure 5.
- Control Box BC-739-A (co-driver)
(item 2, fig. 6).
- Remove disc sweated over holes that are to be used for entrance of cordage. Two connectors No. 61007 and Bondnuts BL-50 and two rubber washers are supplied with each control box for securing Cordage CO-213. Place a rubber washer over threaded stem of each connector, insert stem through hole in control box, and secure it with bondnut. Insert Cordage CO-213 (items 5 and 7) into control box through connectors and bondnuts. Solder ends of wires to numbered terminals on terminal block on inside control box as shown in figure 5. With screws and lockwashers provided secure Mounting FT-507 (furnished with Control Box BC-739-A) on mounting plate located on hull ceiling, center. Secure Control Box BC-739-A on Mounting FT-507 by means of studs and hex. nuts on sides of control boxes.
- Interphone Control Box BC-606-H
(driver) (item 3, fig. 6).
- Prepare Interphone Control Box BC-606-H in same manner prescribed above for entrance of Cordage CO-213 (items 4 and 6). Solder ends of wires to numbered terminals on terminal block, as shown in figure 5, detail A, for Interphone Control Box BC-606-H. Secure Mounting FT-507 to interphone bracket located on hull ceiling, center, with screws and lockwashers provided. Secure Interphone Control Box BC-606-H to Mounting FT-507.
- Control Box BC-739-A (commander)
(item 2, fig. 6).
- Prepare Control Box BC-739-A in same manner described above, but for entrance of Cordage CO-213 (item 5). With screws and lockwashers provided, secure Mounting FT-507 to mounting plate located on right side of vehicle, directly below horizontal support bar for gun ring. Secure Control Box BC-739-A on Mounting FT-507. Route patch cords of commander's Control Box BC-739-A to Radio Set SCR-608-A as shown in figure 2, and to Radio Set SCR-610-() as

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Part and location

Method and materials

shown in figure 8. Remove patch cords from other control boxes when not required for connection to a radio set.

Control Box BC-739-A (radio operator) (item 2, fig. 6).

With provided screws and lockwashers, secure Mounting FT-507 to mounting plate located on left side of vehicle directly below horizontal support bar for gun ring. Prepare Control Box BC-739-A for an entrance of Cordage CO-213 (item 4), in same manner prescribed for co-driver's Control Box BC-739-A. Secure control box to Mounting FT-507 by means of studs and hex. nuts provided. Route patch cords of radio operator's Control Box BC-739-A to Radio Set SCR-506-() as shown in figure 3.

Control Box BC-739 and Interphone Control Box BC-606-().

If Control Box BC-739 and Interphone Control Box BC-606-() are supplied, secure each control box directly to interphone brackets. Apply suitable waterproofing. Cordage is secured by means of clamps provided.

Interphone Amplifier BC-667, with Tubes VT-107, connectors No. 61007, and Bondnuts BL-50.

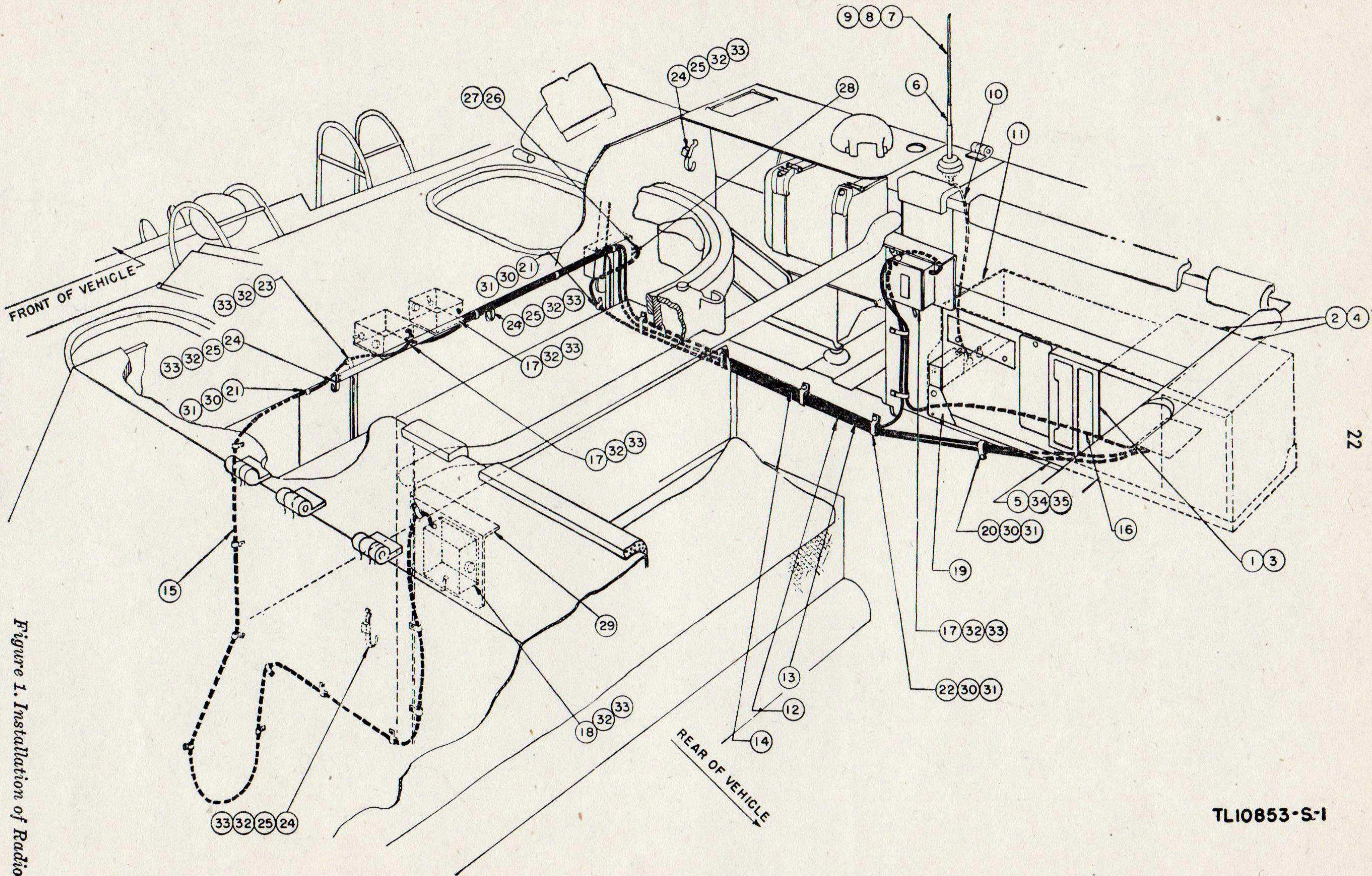
See figure 5 for wiring of cordage to interphone Amplifier BC-667. Remove screws around edge of panel of Interphone Amplifier BC-667. Remove amplifier chassis from case. Remove necessary knock-outs from case and install connectors and bondnuts in the holes. Connect prepared tips of Cordage CO-213 (items 6, 7, and 8) to terminal strip inside amplifier case, as shown in figure 5. Mount amplifier case on bracket located on hull ceiling, forward from hatchway, with $\frac{1}{4}$ -20 x $1\frac{1}{4}$ -inch screws and $\frac{1}{4}$ -inch lockwashers supplied. Insert two Tubes VT-107 into tube sockets on amplifier chassis and plug spare tube into spare socket inside case. Place amplifier chassis in case and secure by replacing screws around edge of panel. Connect power cord, Cordage CO-213 (item 8, fig. 6), as shown in figure 5.

Microphone and headset hooks (item 13, fig. 6).

Mount hooks on spacers provided with screws and lockwashers.

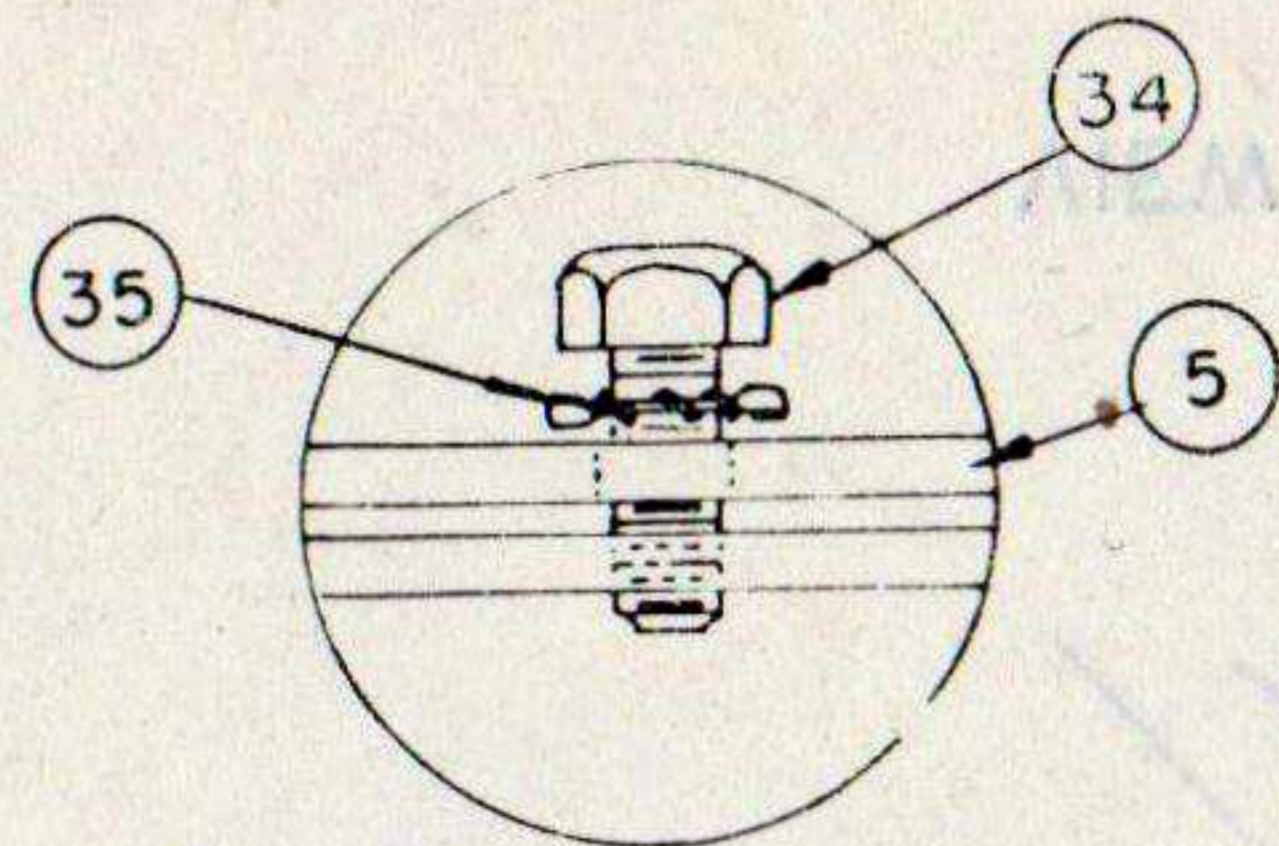
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Figure 1. Installation of Radio



DETAIL A
APPLICATION OF
SHAKEPROOF WASHER

NOTE:

1. FOR ADDITIONAL COMPONENTS AND SPARE PARTS, SEE COMPONENT PARTS LIST.
2. (28) , (29) , (30) AND (31) ARE FURNISHED WITH THE VEHICLE BY THE MANUFACTURER.
3. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.
4. (35) SHALL BE CAT #4018-24 AS FURNISHED BY SHAKEPROOF INC., OR EQUAL.
5. FIGURE REFERENCES:
 INSTALLATION OF SCR-506-() IN T41E1. FIG 3.
 INSTALLATION OF SCR-608-A IN T41E1. FIG 2.
 INSTALLATION OF SCR-610-() IN T41E1. FIG. 7
 INSTALLATION OF SCR-610-() IN M39 (T41). FIG 8.
 INSTALLATION OF INTERPHONE EQUIPMENT RC-99
 IN M39 (T41) AND T41E1. FIG 6.
 WIRING DIAGRAM OF INTERPHONE EQUIPMENT RC-99
 IN M39 (T41) AND T41E1. FIG 5.
 WIRING DIAGRAM OF INTERPHONE EQUIPMENT FOR
 SCR-608-B IN T41E1. FIG 4.
6. REMOVE PATCH CORDS FROM CONTROL BOX BC-739-A (18) , WHEN NOT REQUIRED FOR CONNECTION TO RADIO SET ON LEFT SIDE OF VEHICLE.
7. IF (6) , (7) , (8) , AND (9) ARE NOT AVAILABLE USE MAST SECTIONS MS-51, MS-52, MS-53; MAST BASE MP-48-A OR MP-48; CLAMPS MC-423, AND MC-424, COVER BG-108.
8. CUT (10) TO PROPER LENGTH, TIN ENDS FOR ANTENNA CONNECTIONS.
9. WHEN USING ANTENNA A-83, PHANTOM, FOR ALIGNING TRANSMITTER DISCONNECT (10) FROM MOUNTING FT-237-() AND CONNECT BONDING BRAID FROM ANTENNA A-83, PHANTOM, TO TRANSMITTER ANTENNA POST ON FT-237-() .

ITEM NO	NAME OF ITEM	QUANTITY REQUIRED
1	RADIO TRANSMITTER BC-684-BM	1
2	RADIO RECEIVER BC-683-BM	2
3	DYNAMOTOR DM-37-()	1
4	DYNAMOTOR DM-36-()	2
5	MOUNTING FT-237-()	1
6	MAST BASE AB-15/GR	1
7	MAST SECTION MS-116	1
8	MAST SECTION MS-117	1
9	MAST SECTION MS-118	1
10	WIRE W-128 24-IN. LONG SEE NOTE 8 AND 9	1
11	COVER BG-96	1
12	CORD CO-278 (PART OF ITEM 5)	1
13	CORDAGE CO-213 11-FT LONG	1
14	CORDAGE CO-213 9-FT LONG	1
15	CORDAGE CO-213 10-FT 7-IN LONG	1
16	CORDAGE CO-213 6-FT LONG	1
17	INTERPHONE CONTROL BOX BC-606-H	3
18	CONTROL BOX BC-739-A	1
19	ANTENNA A-83, PHANTOM SEE NOTE 9	1
20	CLAMP NO. 9 PER FIGURE 9	6
21	CLAMP NO. 6 PER FIGURE 9	14
22	CLAMP NO. 11 PER FIGURE 9	4
23	CLAMP NO. 4 PER FIGURE 9	1
24	HOOK	4
25	CLIP	4
26	CONNECTOR NO. 61007	1
27	BONDNUT BL-50	1
28	TERMINAL BOX	1
29	MOUNTING PLATE FOR CONTROL BOX	2
30	HEX. HD. CAP SCREW 5/16 - 24 x 1/2 LONG	24
31	LOCKWASHER STD FOR 5/16 SCREW	24
32	RD. HD. MACH SCREW #8-32 x 3/8 LONG	21
33	LOCKWASHER SAE REG FOR #8 SCREW	21
34	HEX. HD. CAP SCREW 5/16 - 24 x 9/16	8
35	LOCKWASHER I.E.T. 5/16 SEE NOTE 4	8

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Set SCR-608-B and associated interphone equipment in Vehicle, Utility, Armored, T41E1.

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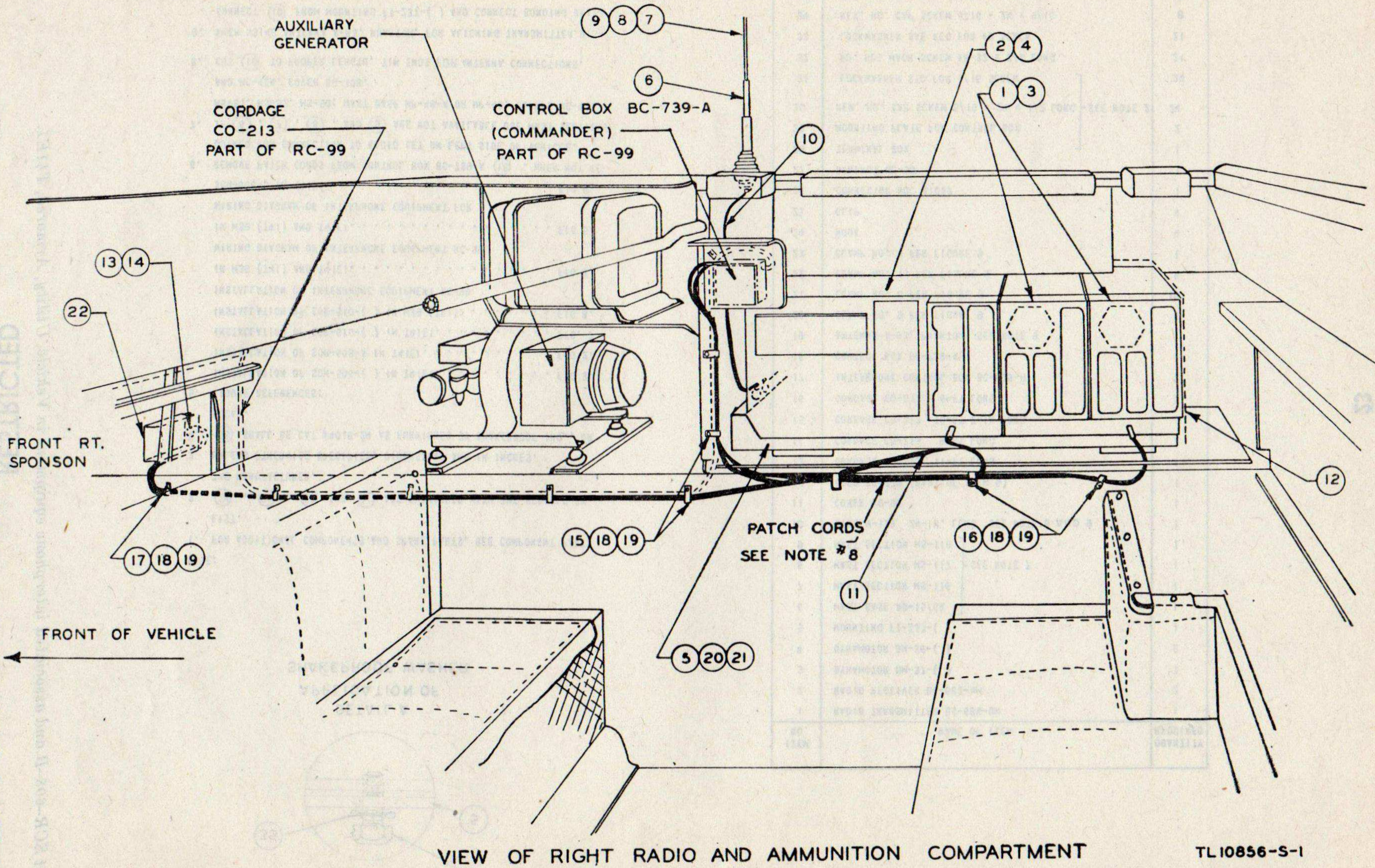
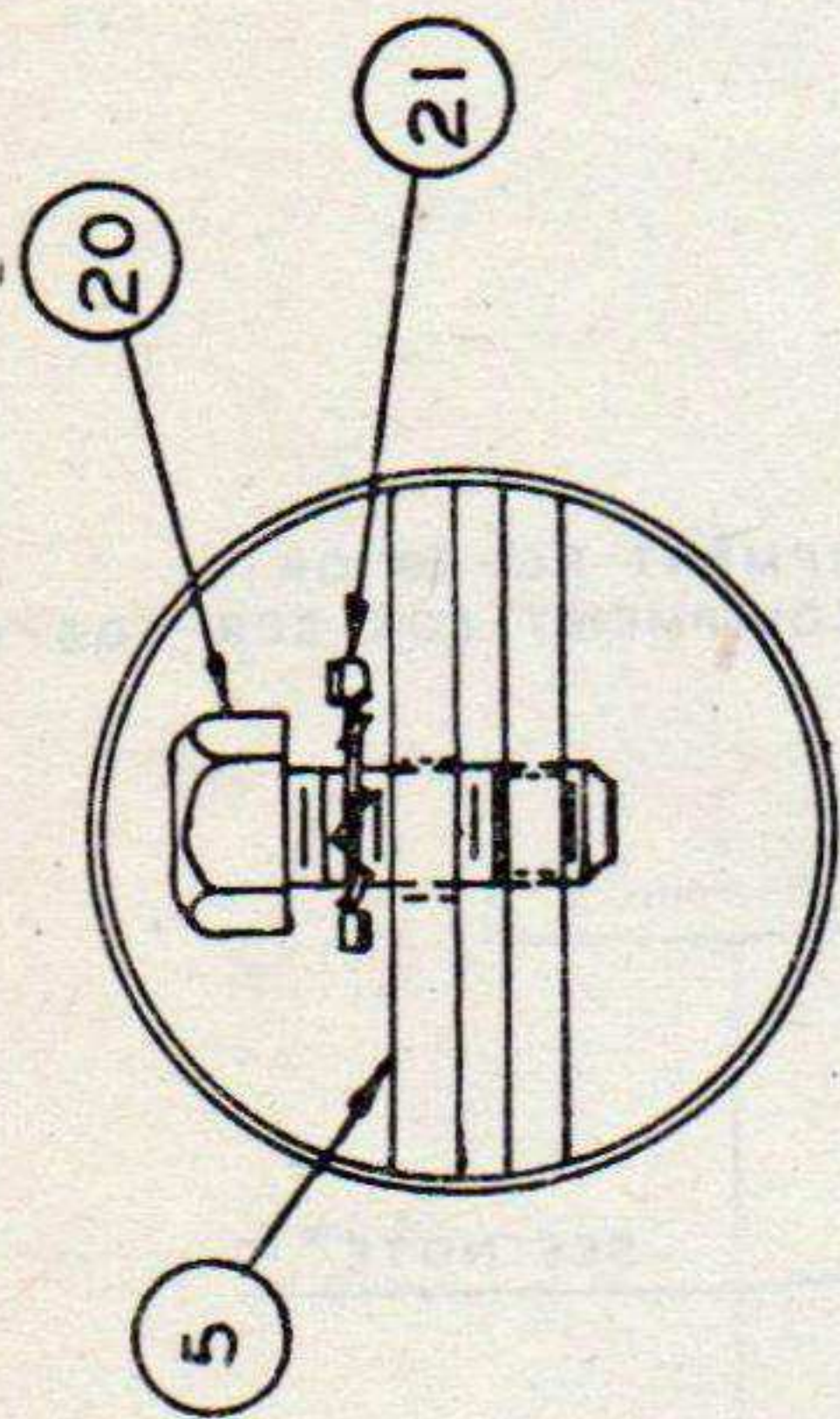


Figure 2. Installation of Radio Set SCR-608-A



DETAIL A
APPLICATION OF SHAKEPROOF
WASHER

ITEM NO.	NAME OF ITEM	QUANTITY REQUIRED
1	RADIO RECEIVER BC-683-A	2
2	RADIO TRANSMITTER BC-684-A	1
3	DYNAMOTOR DM-36-()	2
4	DYNAMOTOR DM-37-()	1
5	MOUNTING FT-237-()	1
6	MAST BASE AB-15/GR	1
7	MAST SECTION MS-116	1
8	MAST SECTION MS-117	1
9	MAST SECTION MS-118	1
10	WIRE W-128 24-IN LONG SEE NOTE 4	1
11	CORD CO-278 PART OF (5) SEE NOTE 3	1
12	COVER BG-96	1
13	CONNECTOR NO. 61007	1
14	BONDNUT BL-50	1
15	CLAMP NO. 9 PER FIGURE 9	7
16	CLAMP NO. 3 PER FIGURE 9	2
17	CLAMP NO. 6 PER FIGURE 9	1
18	HEX HD CAP SCREW 5/16 - 24 X 1/2 LONG	10
19	LOCKWASHER SAE REG FOR 5/16 SCREW	10
20	HEX HD CAP SCREW 5/16 - 24 X 9/16	8
21	LOCKWASHER I.E.T. 5/16 SEE NOTE 5	8
22	TERMINAL BOX SEE NOTE 2	1

NOTE:

- FOR ADDITIONAL COMPONENTS AND SPARE PARTS SEE COMPONENT PARTS LIST.
- (22) (18) AND (19) ARE FURNISHED IN VEHICLE BY MANUFACTURER.
- IF (6) (7) (8) AND (9) ARE NOT AVAILABLE USE MAST SECTIONS MS-51, MS-52, MS-53; MAST BASE MP-48-A, OR MP-48; CLAMPS MC-423, AND MC-424; COVER BG-108.
- CUT (10) TO PROPER LENGTH, TIN ENDS FOR ANTENNA CONNECTIONS.
- (21) SHALL BE CAT NO. 4018-24 AS MADE BY SHAKEPROOF, INC., OR EQUAL.
- FIGURE REFERENCES:
 INSTALLATION OF SCR-506-()..... FIG. 3
 INSTALLATION OF SCR-610-()..... FIG. 7
 INSTALLATION OF INTERPHONE EQUIPMENT RC-99..... FIG. 6
 WIRING DIAGRAM OF INTERPHONE EQUIPMENT RC-99..... FIG. 5
 WIRING DIAGRAM OF INTERPHONE EQUIPMENT FOR SCR-608-B..... FIG. 4
 INSTALLATION OF SCR-608-B..... FIG. 1
- UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
- PLUG PATCH CORDS OF NEAREST CONTROL BOX BC-739-A INTO RADIO SET, REMOVE PATCH CORDS NOT REQUIRED FROM OTHER CONTROL BOXES.

TL10856-S-2

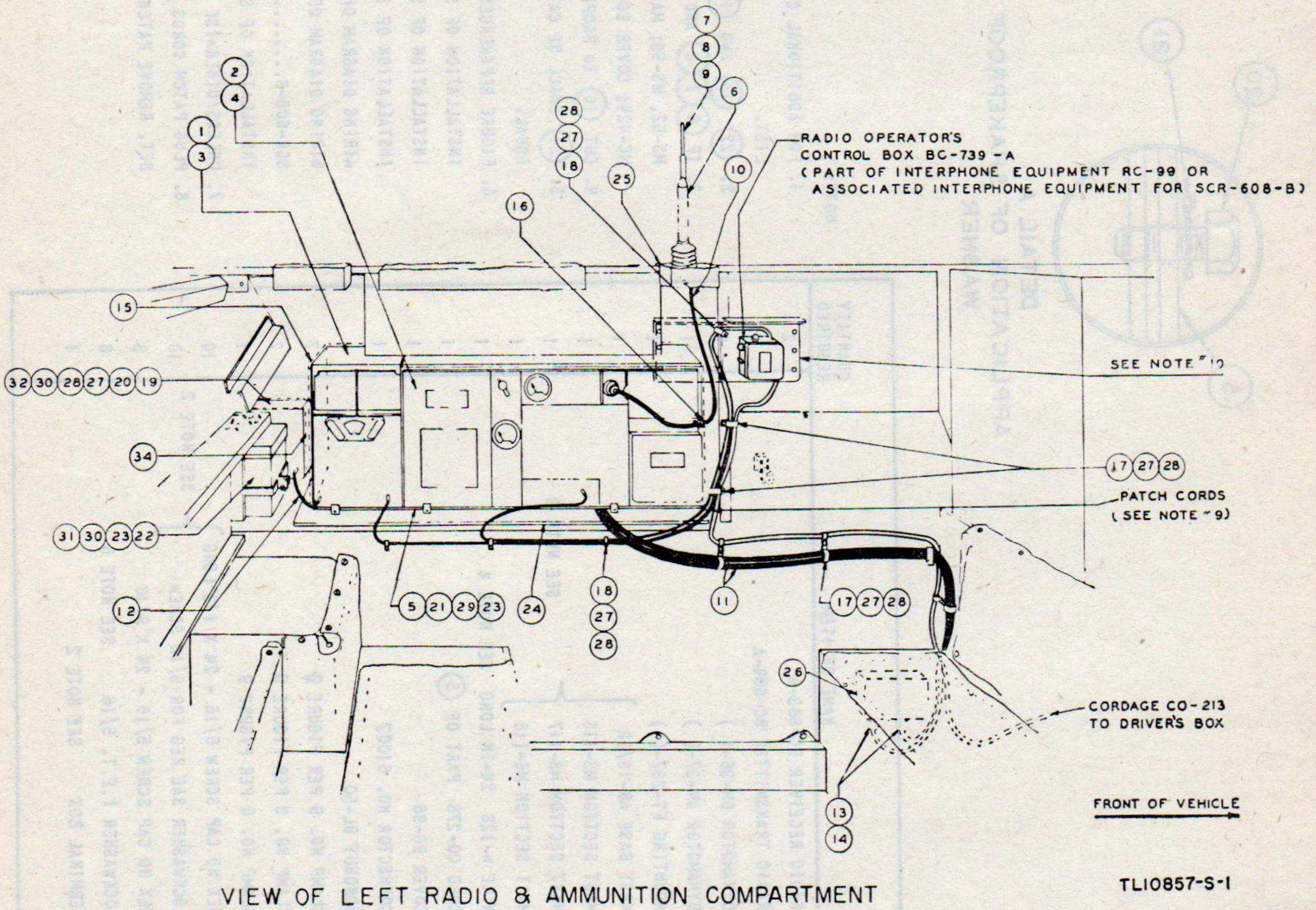
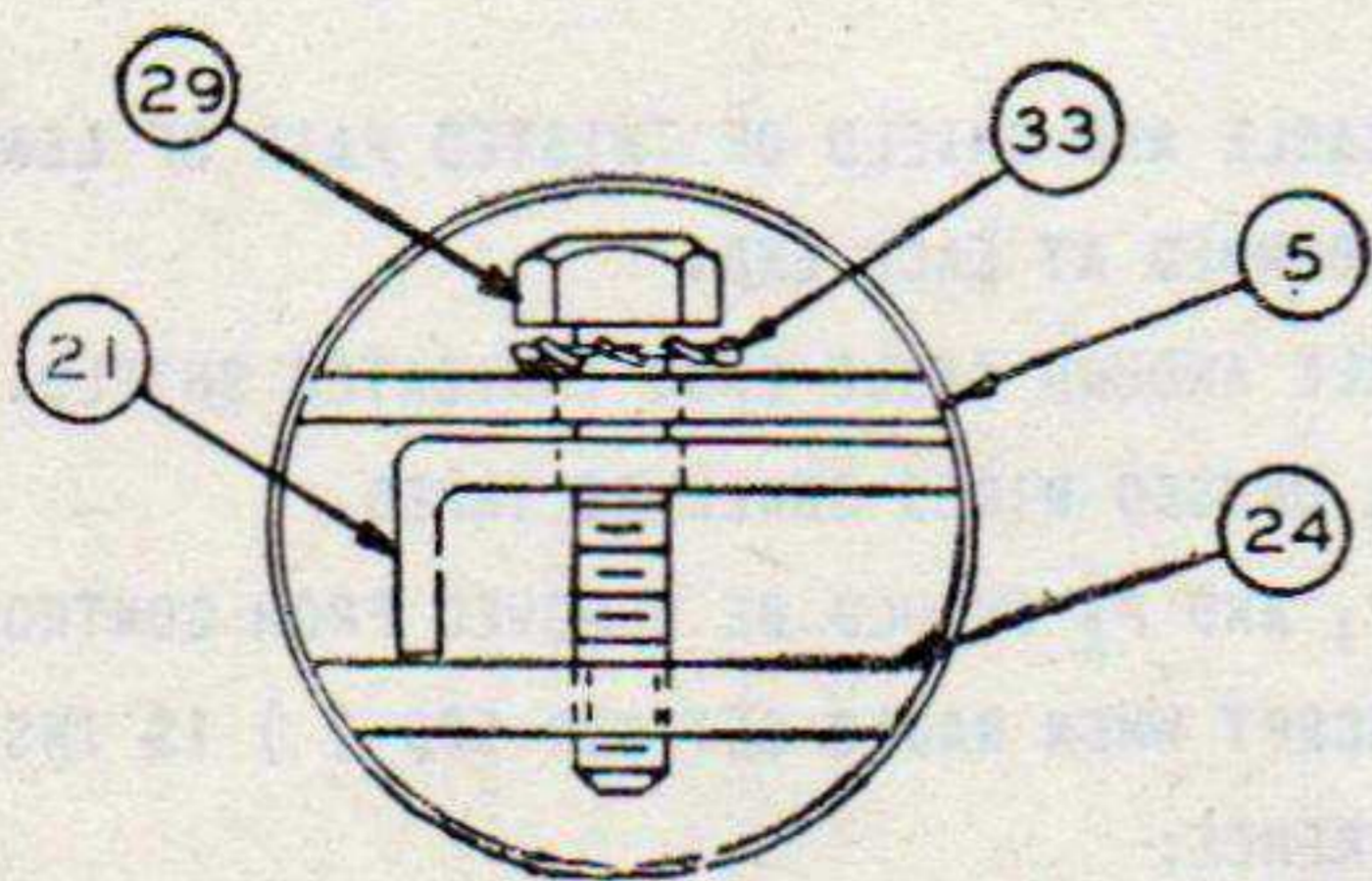


Figure 3. Installation of Radio Set SCR-506-()

NOTE:

1. FOR ADDITIONAL COMPONENTS AND SPARE PARTS, SEE COMPONENT PARTS LIST.
2. (24) TO (28) INCLUSIVE ARE FURNISHED IN THE VEHICLE BY THE MANUFACTURER.
3. (11) AND (21) ARE FURNISHED WITH (5).
4. IF (6) (7) (8) AND (9) ARE NOT AVAILABLE, USE MAST BASE MP-57 OR MP-37; MAST SECTIONS MS-49 TO MS-53 INCLUSIVE; CLAMPS MC-421 TO MC-424 INCLUSIVE AND COVER BG-67.
5. FIGURE REFERENCES:
 INSTALLATION OF SCR-608-A IN T41E1..... FIG. 2
 INSTALLATION OF SCR-610-() IN T41E1..... FIG. 7
 INSTALLATION OF INTERPHONE EQUIPMENT RC-99 IN M39 (T41) AND T41E1..... FIG. 6
 WIRING DIAGRAM OF INTERPHONE EQUIPMENT RC-99 IN M39 (T41) AND T41E1..... FIG. 5
 INSTALLATION OF SCR-610-() IN (T41) M39..... FIG. 8
 INSTALLATION OF SCR-608-B IN T41E1..... FIG. 1
 WIRING DIAGRAM OF SCR-608-B AND ASSOCIATED INTERPHONE EQUIPMENT IN T41E1..... FIG. 4
6. (33) SHALL BE CAT NO. 4014-22, AS MADE BY SHAKEPROOF, INC., OR EQUAL.
7. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.
8. CUT (10) TO PROPER LENGTH, TIN ENDS FOR ANTENNA CONNECTIONS.
9. PLUG PATCH CORDS OF RADIO OPERATOR'S CONTROL BOX BC-739-A INTO RADIO SET. REMOVE PATCH CORDS NOT REQUIRED FOR OTHER CONTROL BOXES.
10. RELOCATE BRACKET SHOWN BY DOTTED LINES TO POSITION SHOWN BY SOLID LINES TO PERMIT MOUNTING OF (22) ON (2).

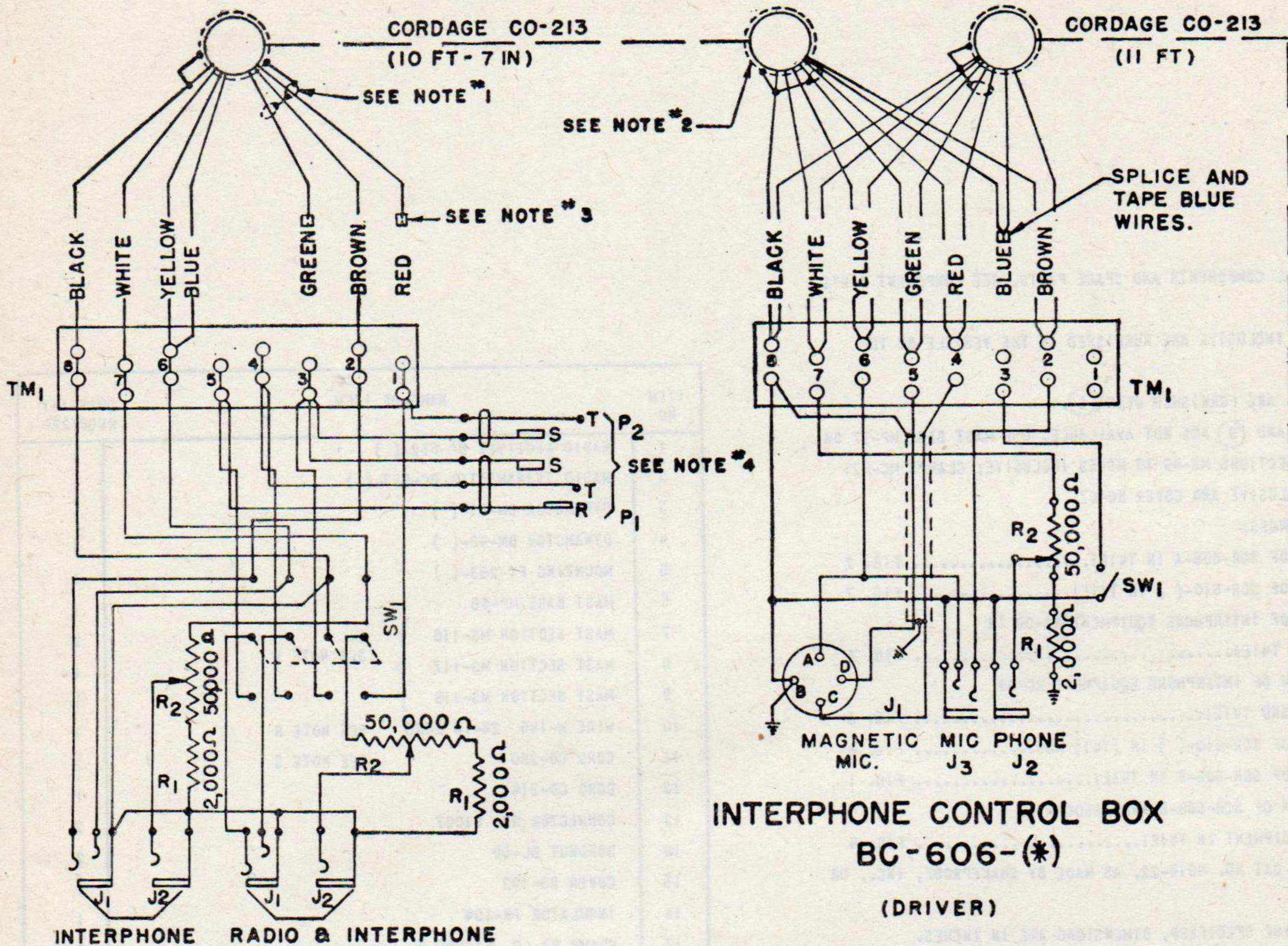


DETAIL "A"

in Vehicle, Utility, Armored, T41E1.

ITEM NO	NAME OF ITEM	QUANTITY REQUIRED
1	RADIO RECEIVER BC-652-()	1
2	RADIO TRANSMITTER BC-653-()	1
3	DYNAMOTOR DM-41-()	1
4	DYNAMOTOR DM-43-()	1
5	MOUNTING FT-253-()	1
6	MAST BASE MP-65	1
7	MAST SECTION MS-116	3
8	MAST SECTION MS-117	1
9	MAST SECTION MS-118	1
10	WIRE W-146 24-IN LONG	1
11	CORD CO-280	2
12	CORD CD-314	1
13	CONNECTOR NO. 61007	2
14	BONDNUT BL-50	2
15	COVER BG-103	1
16	INSULATOR IM-104	1
17	CLAMP NO. 9 FIGURE 9	7
18	CLAMP NO. 3 FIGURE 9	3
19	LOUDSPEAKER LS-3	1
20	BRACKET FOR LS-3 SEE FIG. 10	1
21	SPACER PLATE SEE NOTE 3	6
22	ANTENNA A-27, PHANTOM	1
23	BRACKET (FOR ANTENNA A-27, PHANTOM) SEE FIG. 11	1
24	MOUNTING PLATE	1
25	ANTENNA MOUNT	1
26	TERMINAL BOX	1
27	HEX HD CAP SCREW 5/16 - 24 X 1/2 LONG	16
28	LOCKWASHER SAE STD FOR 5/16 SCREW	16
29	HEX HD CAP SCREW 1/4-20 X 1-1/2 LONG	12
30	LOCKWASHER SAE STD FOR 1/4 SCREW	7
31	HEX HD CAP SCREW 1/4 - 20 X 3/4 LONG	3
32	HEX HD CAP SCREW 1/4 - 20 X 5/8 LONG	4
33	LOCKWASHER I.E.T. 1/4	12
34	COVER CW-41/U	1

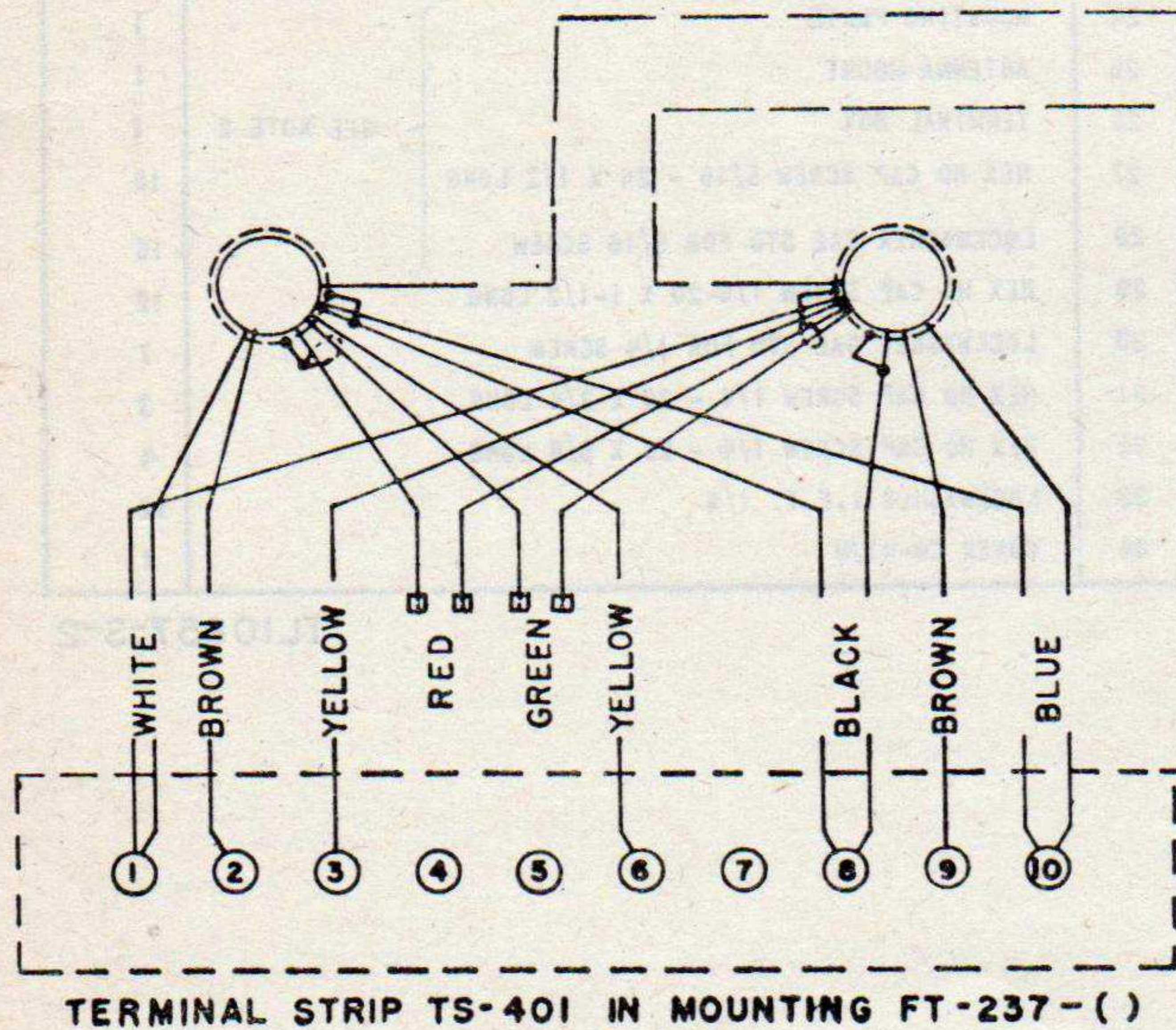
TL10857-S-2



**CONTROL BOX
BC-739-A
(CREW MEMBER)**

**INTERPHONE CONTROL BOX
BC-606-*(*)
(DRIVER)**

* INDICATES BC-606-A THROUGH -G



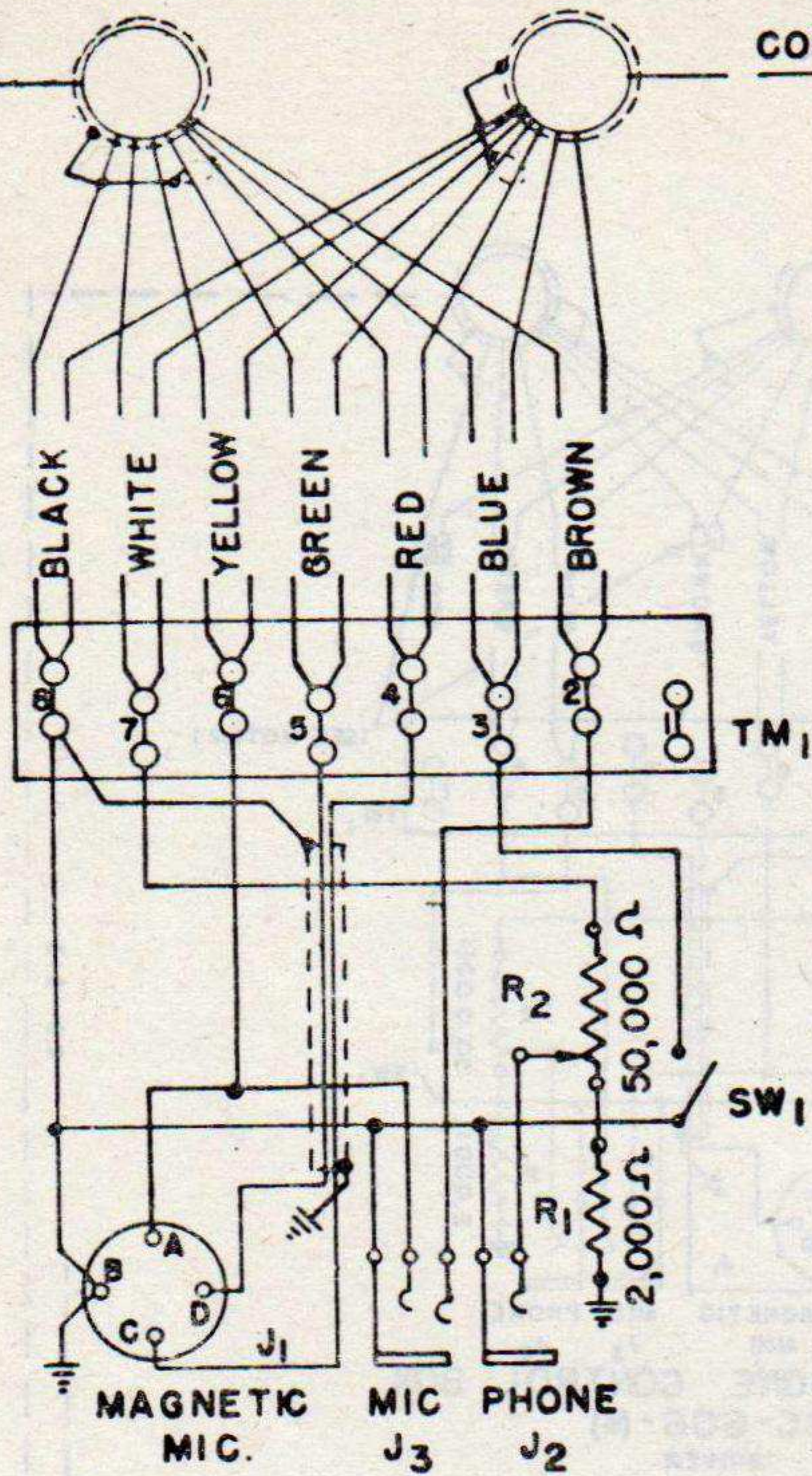
NOTE:

1. SHIELD OF CABLE AND SHIELD OF TWISTED PAIR OF LEADS SHALL BE SECURELY GROUNDED AT EACH END.
2. DOTTED CIRCLE AROUND CABLE ENDS INDICATES SHIELD.
3. ENDS OF ALL UNUSED WIRES SHALL BE TAPED.
4. THE CORDS P₁ AND P₂ SHOULD BE REMOVED FROM CONTROL BOX BC-739-A EXCEPT WHEN RADIO SET SCR-506-() IS INSTALLED.
5. FIGURE REFERENCE:
INSTALLATION OF RADIO SET SCR-608-B AND ASSOCIATED INTERPHONE EQUIPMENT IN ARMORED UTILITY VEHICLE T41E1. . . . FIGURE 1

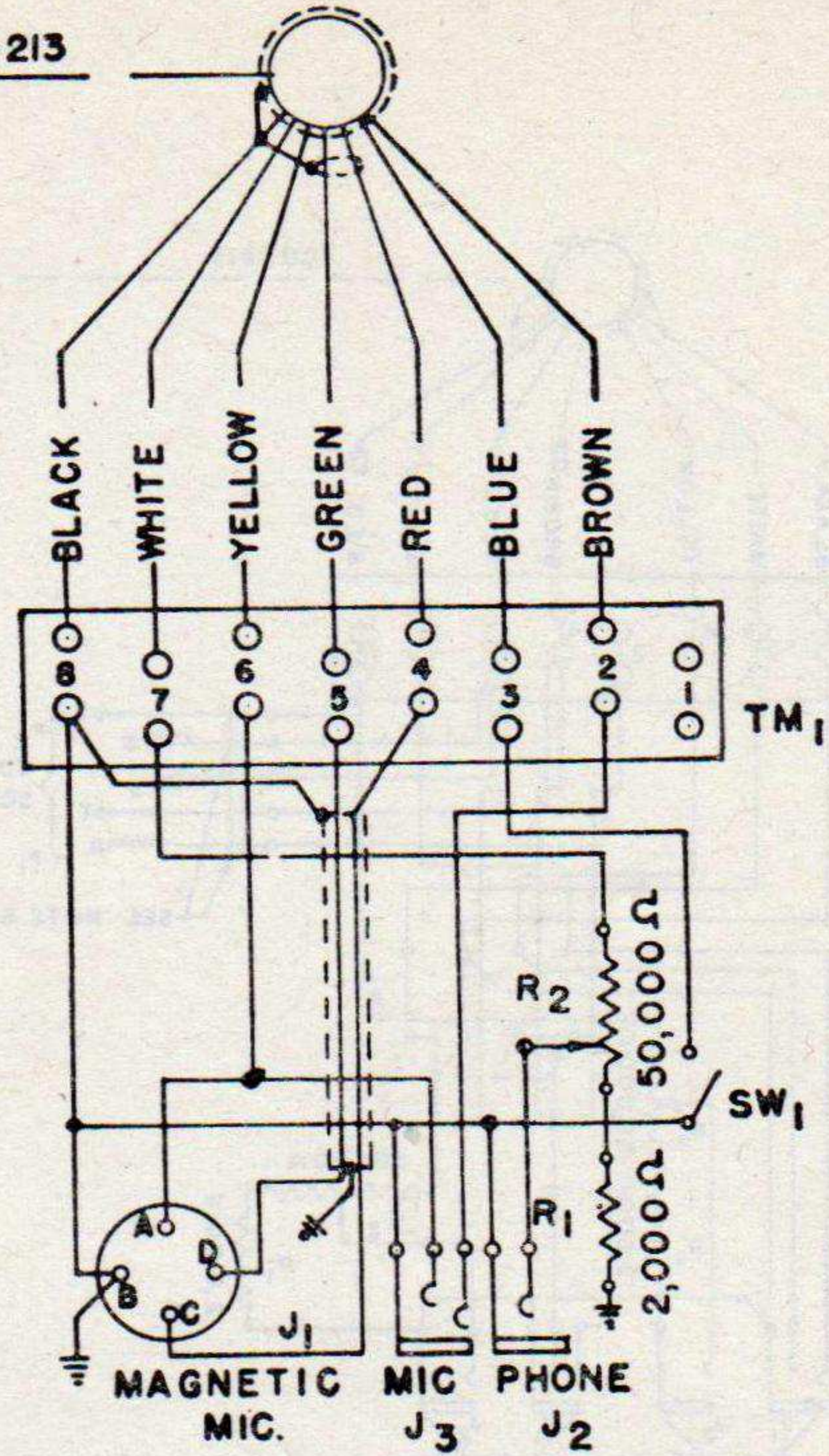
TL10858-S-1

CORDAGE CO-213
(6 FT)

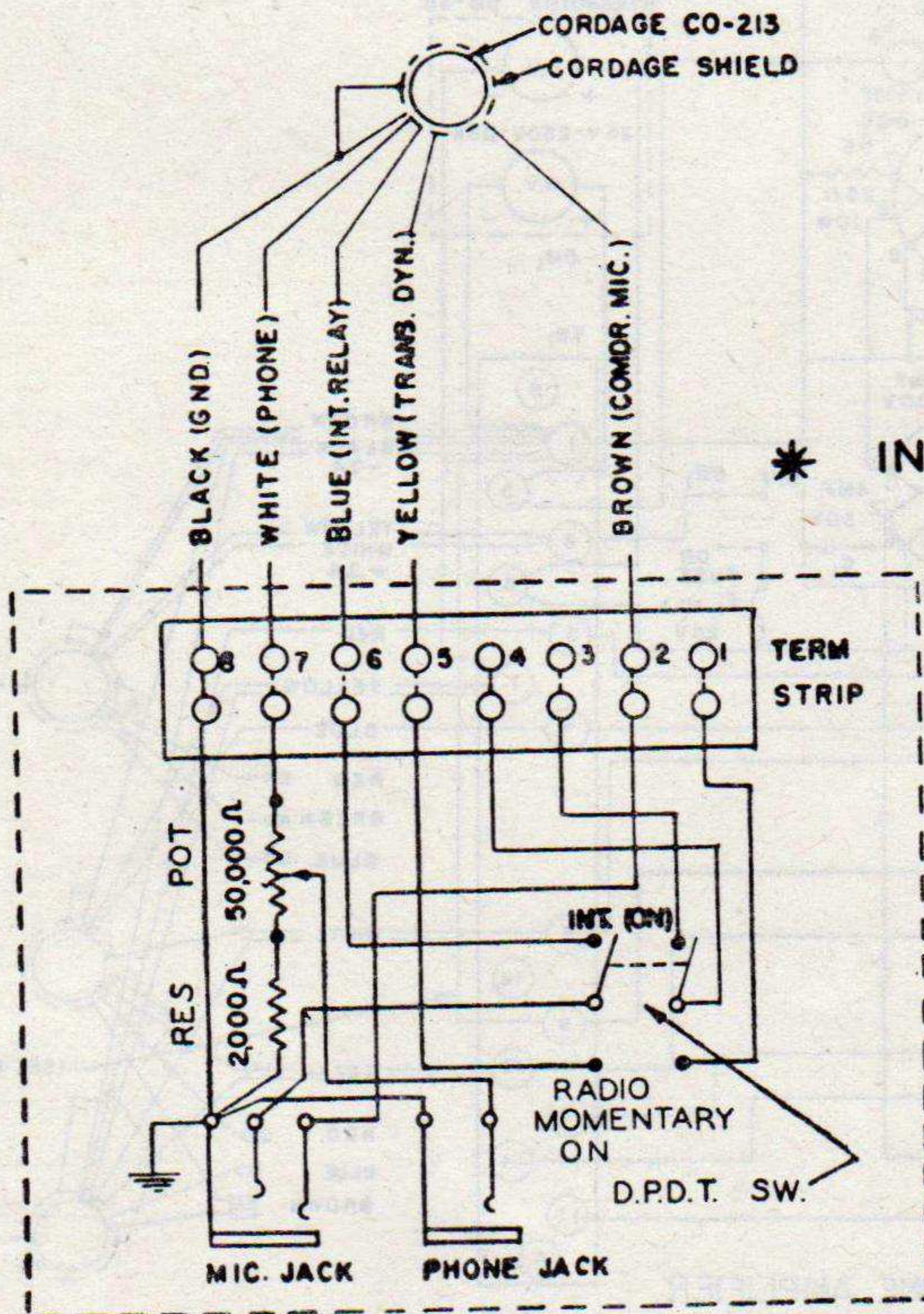
CORDAGE CO-213
(9 FT)



INTERPHONE CONTROL BOX
BC-606-(*)
(COMMANDER)



INTERPHONE CONTROL BOX
BC-606-(*)
(CO-DRIVER)



* INDICATES BC-606-A THROUGH-G

VIEW A

INTERPHONE CONTROL BOX
BC-606-H

Radio Set SCR-608-B in Vehicle, Utility, Armored, T41E1.

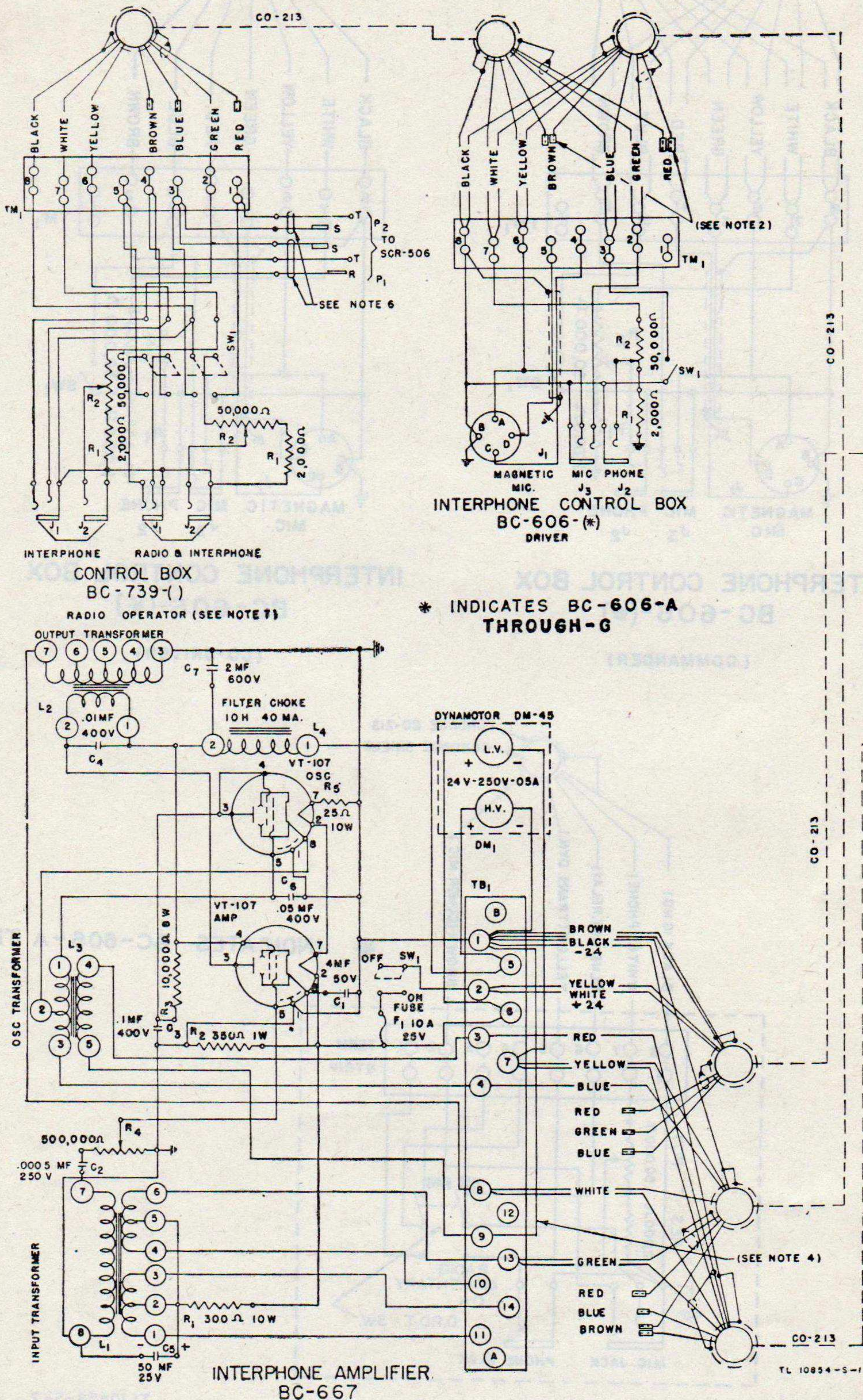
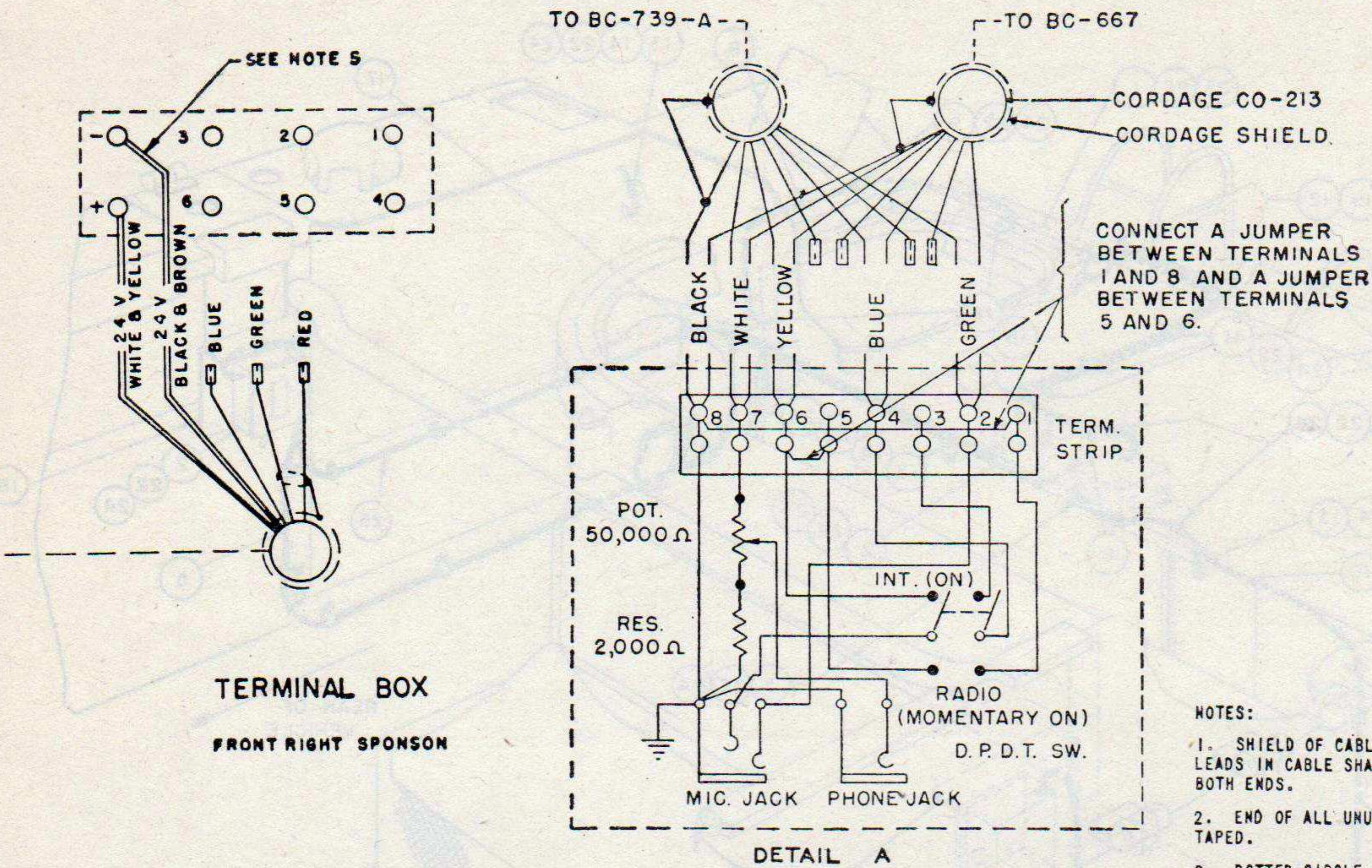
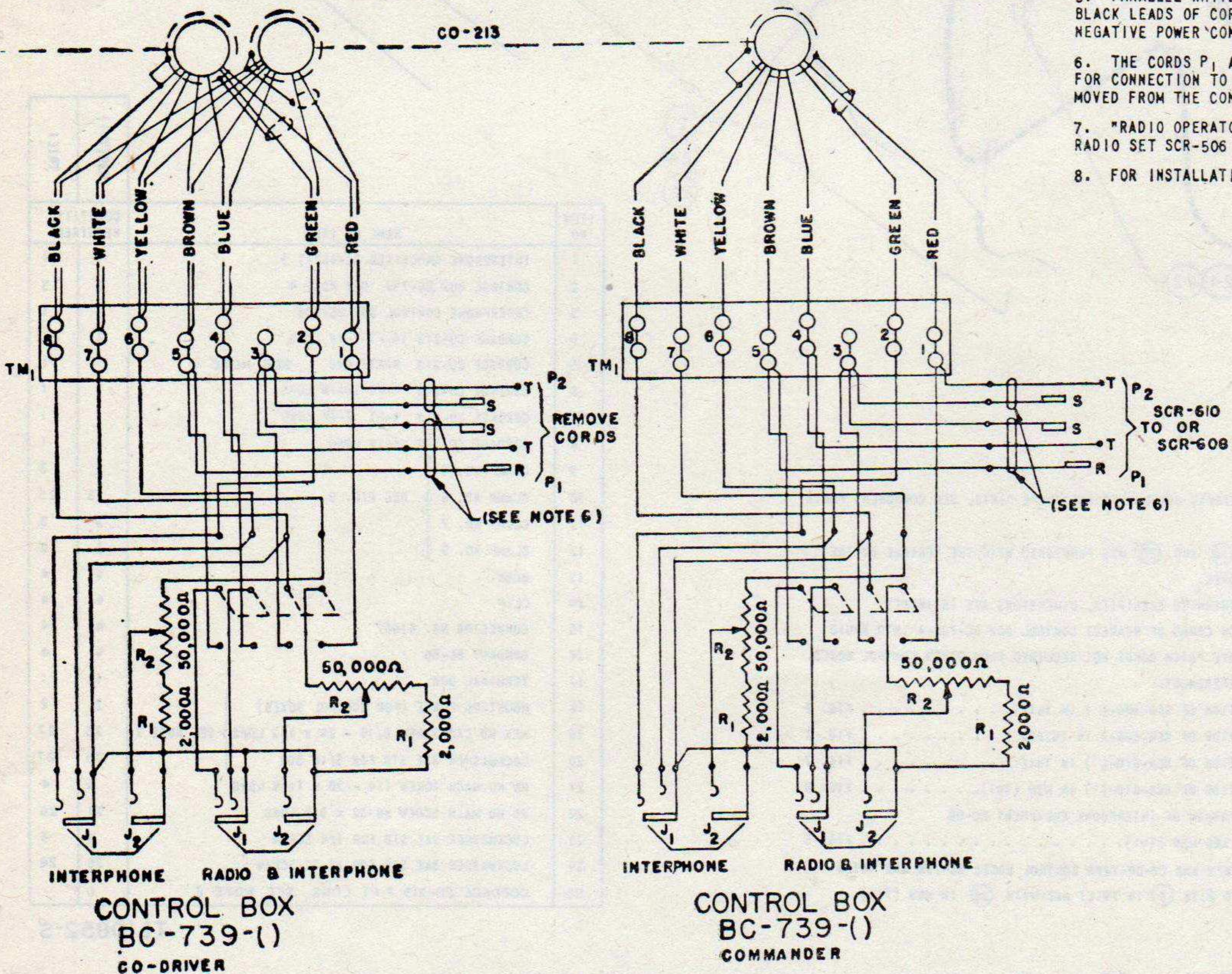


Figure 5. Wiring diagram of Interphone Equipment RC-99



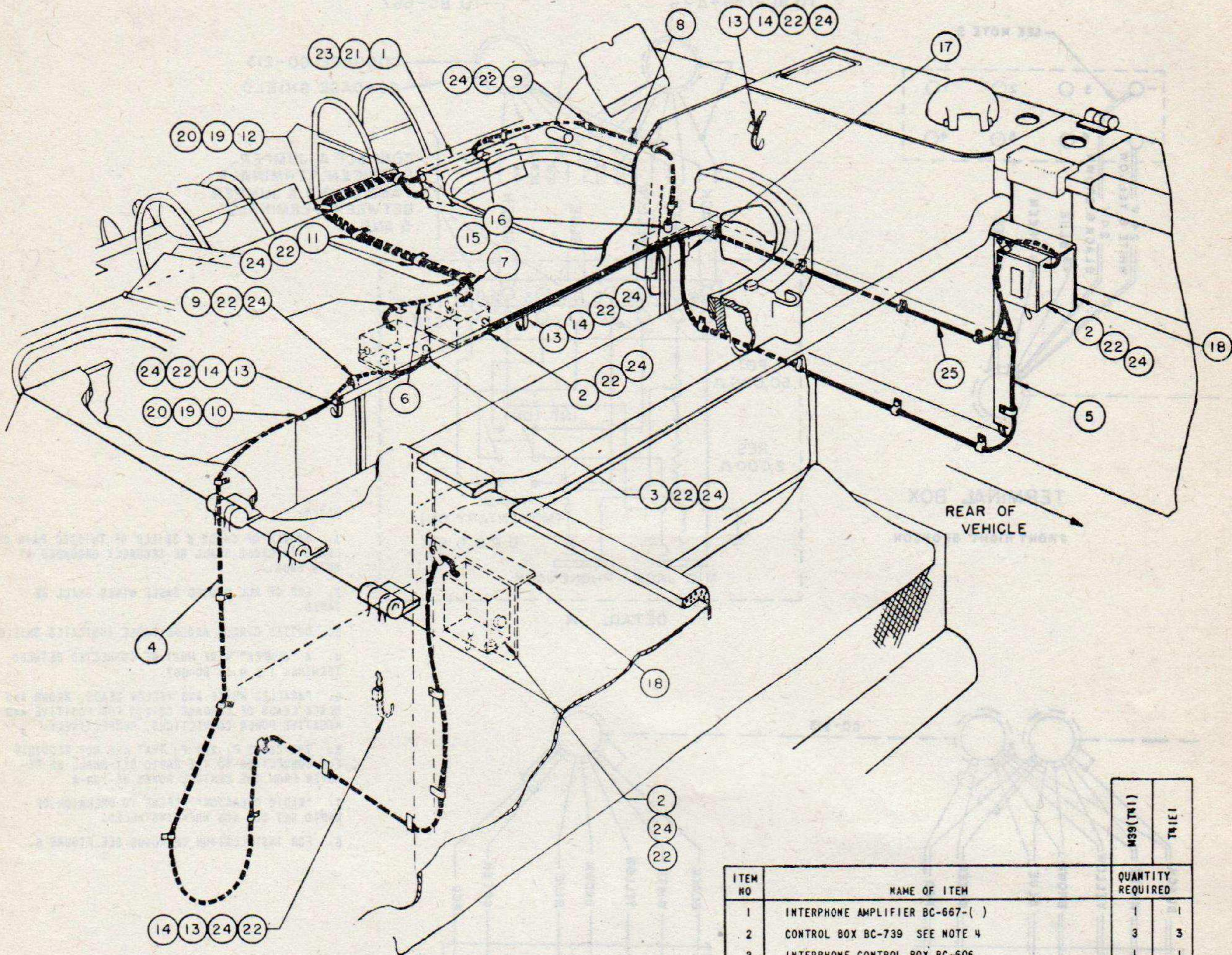
NOTES:

1. SHIELD OF CABLE & SHIELD OF TWISTED PAIR OF LEADS IN CABLE SHALL BE SECURELY GROUNDED AT BOTH ENDS.
2. END OF ALL UNUSED CABLE WIRES SHALL BE TAPED.
3. DOTTED CIRCLE AROUND CABLE INDICATES SHIELD
4. A "JUMPER" WIRE MUST BE CONNECTED BETWEEN TERMINAL 1 & 9 IN BC-667
5. PARALLEL WHITE AND YELLOW LEADS, BROWN AND BLACK LEADS OF CORDAGE CO-213 FOR POSITIVE AND NEGATIVE POWER CONNECTIONS, RESPECTIVELY.
6. THE CORDS P₁ AND P₂ THAT ARE NOT REQUIRED FOR CONNECTION TO THE RADIO SET SHALL BE REMOVED FROM THE CONTROL BOXES BC-739-A.
7. "RADIO OPERATOR" REFERS TO OPERATOR OF RADIO SET SCR-506 WHEN INSTALLED.
8. FOR INSTALLATION OF RC-99 SEE FIGURE 6.



TL10854-S -2

in Vehicle, Utility, Armored, M39 (T41) or T41E1.



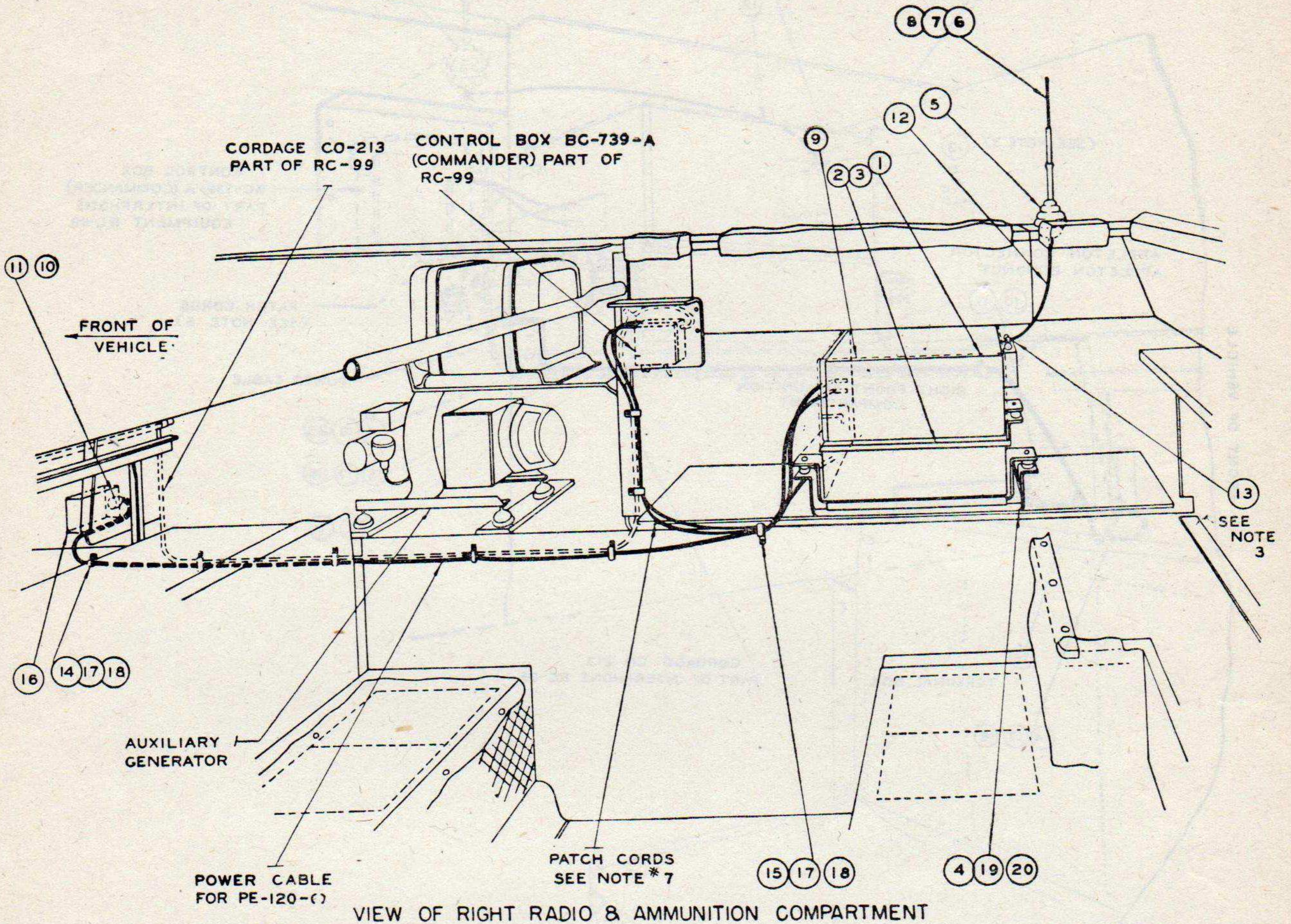
NOTE:

1. FOR ADDITIONAL COMPONENTS AND SPARE PARTS, SEE COMPONENT PARTS LIST.
2. (17) (18) (19) AND (20) ARE FURNISHED WITH THE VEHICLE BY THE MANUFACTURER.
3. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.
4. PLUG PATCH CORDS OF NEAREST CONTROL BOX BC-739-A INTO RADIO SET. REMOVE PATCH CORDS NOT REQUIRED FROM OTHER CONTROL BOXES.
5. FIGURE REFERENCES:
 INSTALLATION OF SCR-506-() IN T41E1. FIG. 3
 INSTALLATION OF SCR-608-A IN T41E1. FIG. 2
 INSTALLATION OF SCR-610-() IN T41E1. FIG. 7
 INSTALLATION OF SCR-610-() IN M39 (T41). FIG. 8
 WIRING DIAGRAM OF INTERPHONE EQUIPMENT RC-99
 IN T41E1 AND M39 (T41). FIG. 5
6. COMMANDER'S AND CO-DRIVERS CONTROL BOXES BC-739 ARE INTER-CONNECTED WITH (5) IN T41E1 AND WITH (25) IN M39 (T41).

ITEM NO	NAME OF ITEM	QUANTITY REQUIRED	
		M39(T41)	T41E1
1	INTERPHONE AMPLIFIER BC-667-()	1	1
2	CONTROL BOX BC-739 SEE NOTE 4	3	3
3	INTERPHONE CONTROL BOX BC-606	1	1
4	CORDAGE CO-213 10-FT 7-IN LONG	1	1
5	CORDAGE CO-213 9-FT LONG SEE NOTE 6	1	1
6	CORDAGE CO-213 4-FT 10-IN LONG	1	1
7	CORDAGE CO-213 4-FT 7-IN LONG	1	1
8	CORDAGE CO-213 46-IN LONG	1	1
9	CLAMP NO. 4	3	3
10	CLAMP NO. 6	23	25
11	CLAMP NO. 7	3	3
12	CLAMP NO. 9	2	2
13	HOOK	4	4
14	CLIP	4	4
15	CONNECTOR NO. 61007	4	4
16	BONDNUT BL-50	4	4
17	TERMINAL BOX	1	1
18	MOUNTING PLATE (FOR CONTROL BOXES)	2	2
19	HEX HD CAP SCREW 5/16 - 24 x 1/2 LONG	25	27
20	LOCKWASHER SAE STD FOR 5/16 SCR	25	27
21	RD HD MACH SCREW 1/4 - 20 x 11/4 LONG	4	4
22	RD HD MACH SCREW #8-32 x 3/8 LONG	26	26
23	LOCKWASHER SAE STD FOR 1/4 SCREW	4	4
24	LOCKWASHER SAE STD FOR #8-32 SCREW	26	26
25	CORDAGE CO-213 7 FT LONG SEE NOTE 6	1	

TL10852-S

Figure 6. Installation of Interphone Equipment RC-99 in Vehicle, Utility, Armored, M39 (T41) or T41E1.



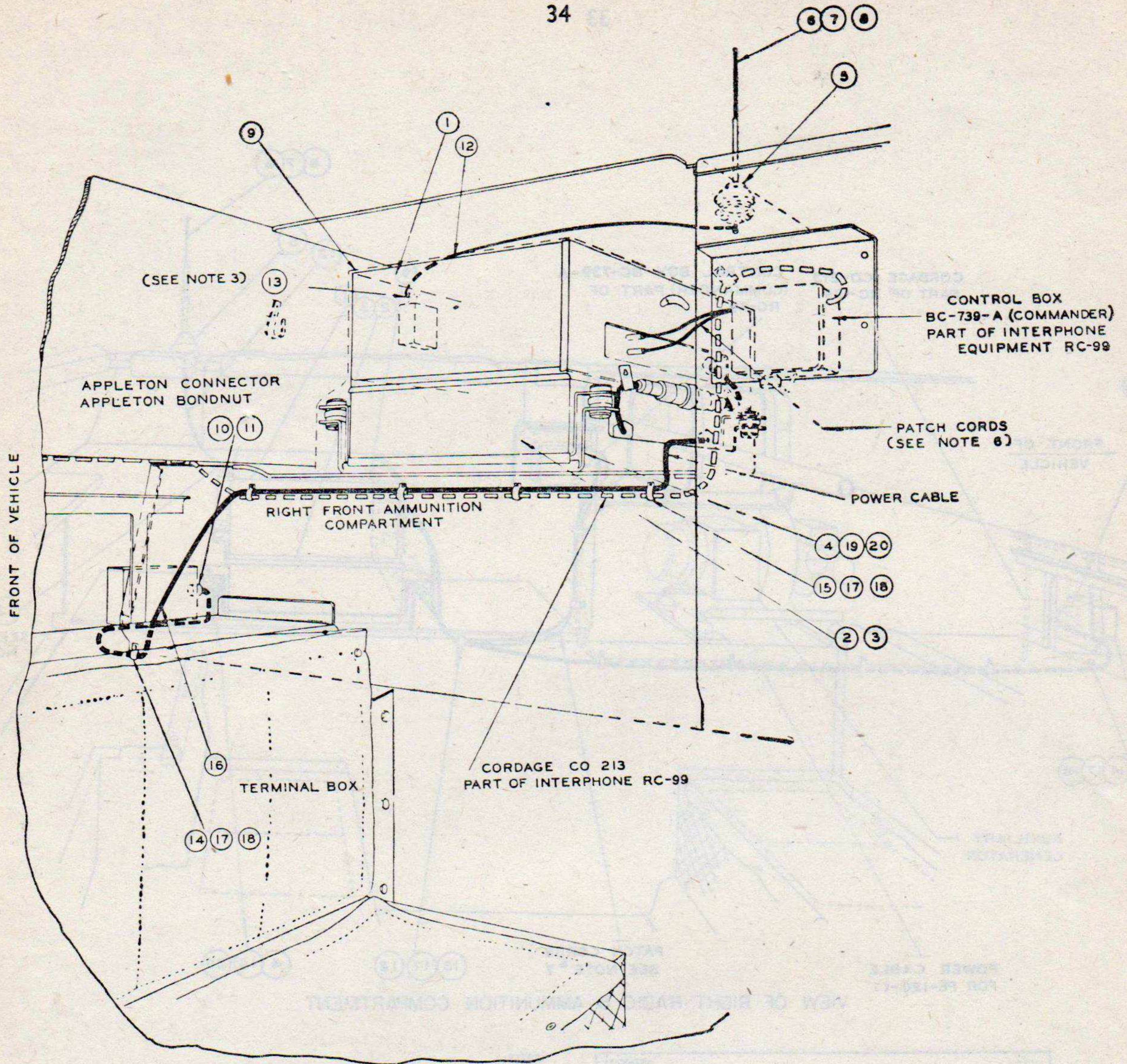
ITEM NO.	NAME OF ITEM	QUANTITY REQUIRED
1	RADIO RECEIVER AND TRANSMITTER BC-659-()	1
2	POWER SUPPLY UNIT PE-120-()	1
3	VIBRATOR VB-11	1
4	MOUNTING FT-250-()	1
5	MAST BASE AB-15/GR	1
6	MAST SECTION MS-116	1
7	MAST SECTION MS-117	1
8	MAST SECTION MS-118	1
9	COVER BG-153	1
10	CONNECTOR NO. 61007	1
11	BONDNUT BL-50	1
12	WIRE W-128 36 IN LONG SEE NOTE 3	1
13	TERMINAL SEE NOTE 3	1
14	CLAMP NO. 6 PER FIG. 9	1
15	CLAMP NO. 9 PER FIG. 9	7
16	TERMINAL BOX SEE NOTE 2	1
17	HEX HEAD CAP SCREW 5/16-24 X 1/2 IN LONG	8
18	LOCKWASHER S.A.E. STD FOR 5/16 SCREW	8
19	HEX HEAD CAP SCREW 1/4-20 X 1/2 IN LONG	4
20	LOCKWASHER S.A.E. STD FOR 1/4 SCREW	4

NOTES:

- FOR ADDITIONAL COMPONENTS AND SPARE PARTS, SEE COMPONENT PARTS LIST.
- (16) (17) AND (18) ARE FURNISHED IN THE VEHICLE BY THE MANUFACTURER.
- CUT (12) TO PROPER LENGTH, TIN ENDS FOR ANTENNA CONNECTIONS, AND SOLDER (13) TO ONE END. IF (1) IS EQUIPPED WITH TERMINAL BOX TM-218 HAVING SLOTTED TYPE BINDING POST, (13) IS NOT USED.
- IF (5) (6) (7) AND (8) ARE NOT AVAILABLE, USE MAST BASE MP-48 OR MP-48-A; MAST SECTIONS MS-51, MS-52, MS-53; CLAMPS MC-424; COVER BG-108.
- DRAWING REFERENCES:
 INSTALLATION OF SCR-506..... FIG. 3
 INSTALLATION OF SCR-608-A..... FIG. 2
 INSTALLATION OF INTERPHONE EQUIPMENT RC-99..... FIG. 6
 WIRING DIAGRAM OF INTERPHONE EQUIPMENT RC-99..... FIG. 5
- UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.
- PLUG PATCH CORDS FROM COMMANDER'S CONTROL BOX BC-739-A INTO RADIO SET. REMOVE PATCH CORDS THAT ARE NOT REQUIRED FROM OTHER CONTROL BOXES BC-739-A.
- M39 (T41) IS A GUN SERVICE VEHICLE. T41E1 IS A COMMAND RECONNAISSANCE VEHICLE. FOR INSTALLATION OF SCR-610 IN T41 SEE FIG. 8.

TL10855-S

Figure 7. Installation of Radio Set SCR-610-() in Vehicle, Utility, Armored, T41E1.



NOTE:

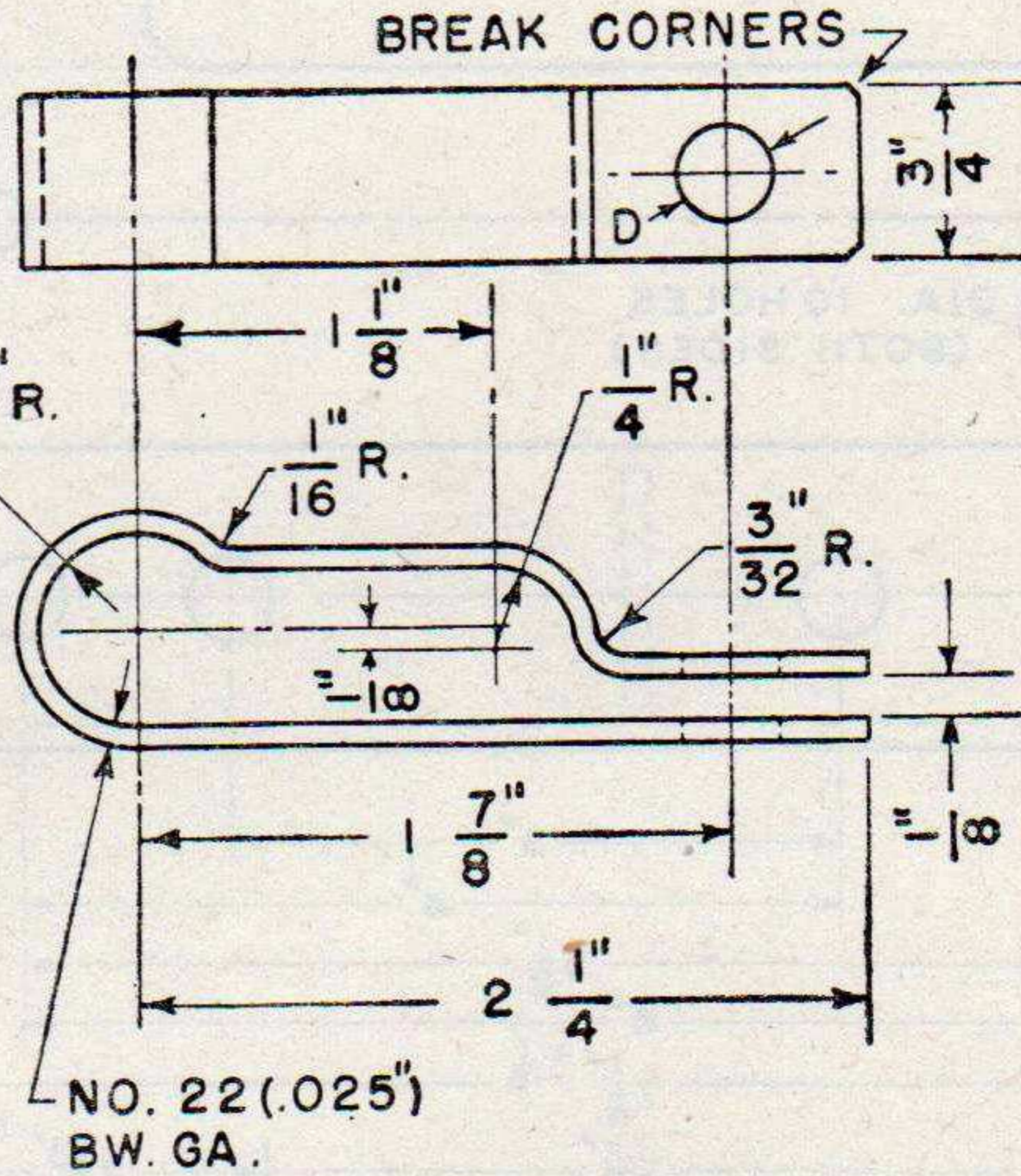
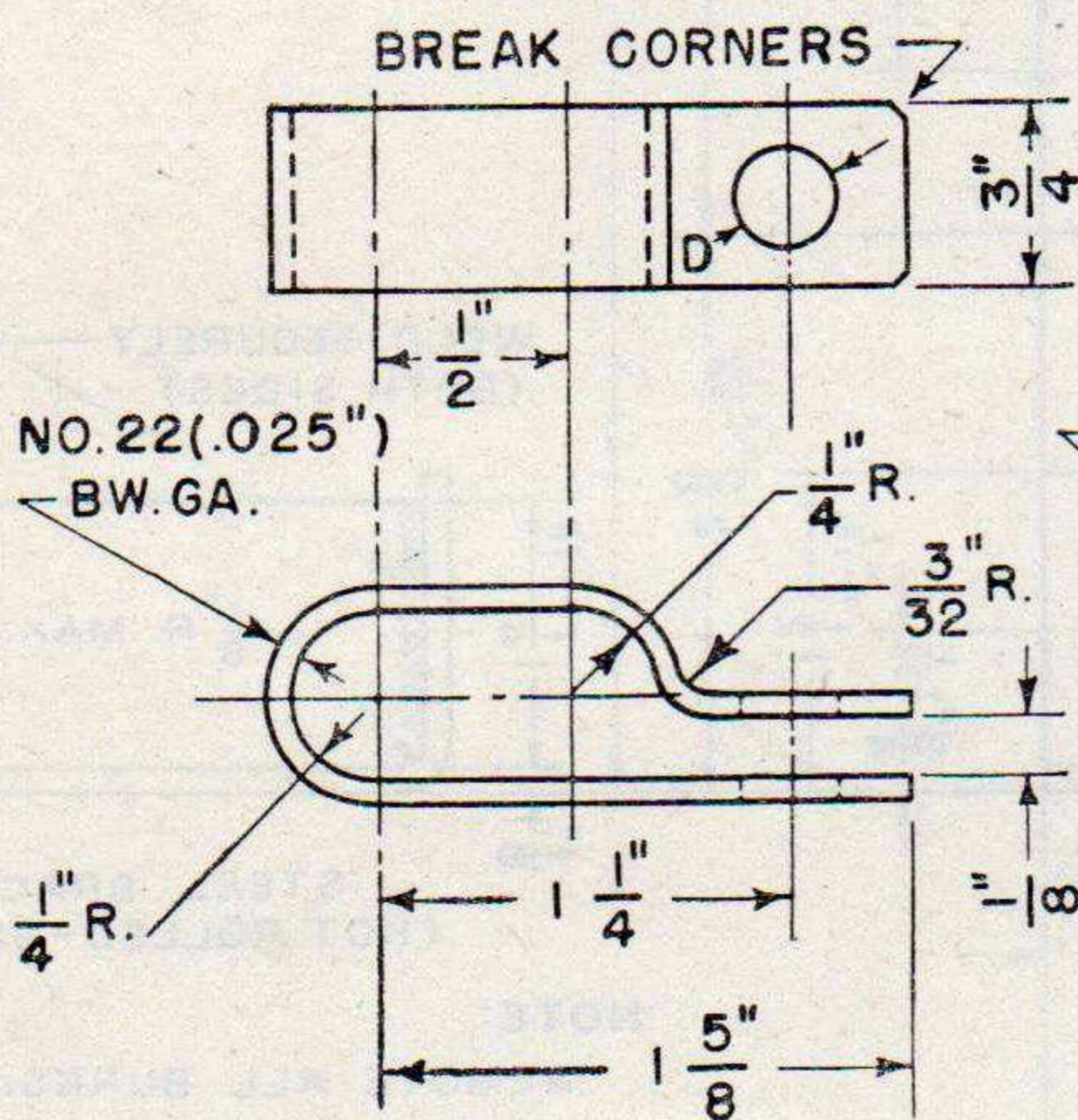
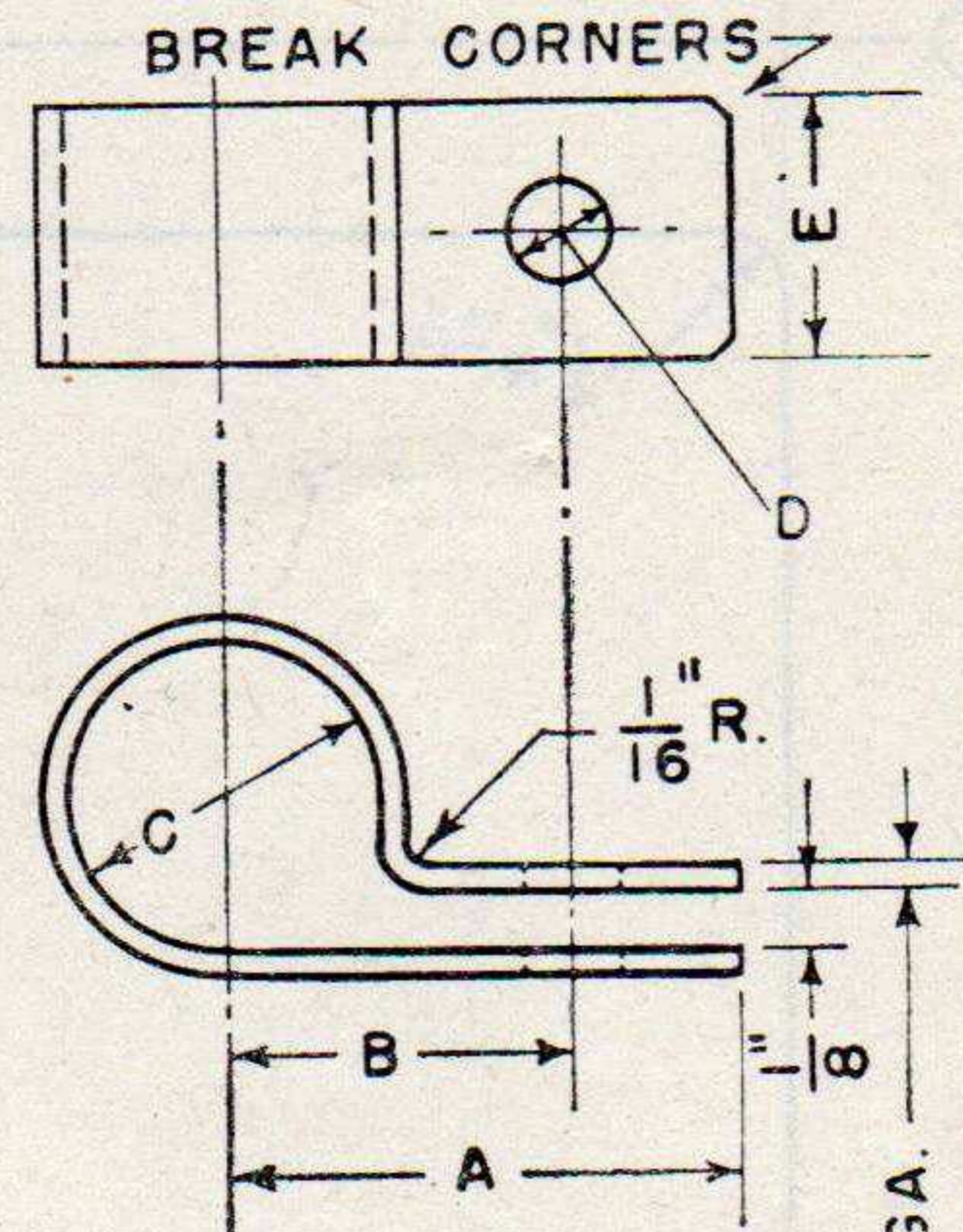
1. FOR ADDITIONAL COMPONENTS AND SPARE PARTS, SEE COMPONENT PARTS LIST.
2. (16), (17), AND (18) ARE FURNISHED IN VEHICLE BY MANUFACTURER.
3. CUT (12) TO PROPER LENGTH. TIN ENDS FOR ANTENNA CONNECTION AND SOLDER (13) TO ONE END. IF (1) IS EQUIPPED WITH TERMINAL BOX TM-218 HAVING SLOTTED TYPE BINDING POST (13) IS NOT REQUIRED.
4. IF (5), (6), (7), AND (8) ARE NOT AVAILABLE USE MAST BASE MP-48-A OR MP-48, MAST SECTIONS MS-51, MS-52, MS-53, CLAMPS MC-423 AND MC-424; COVER BG-108.
5. UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
6. PLUG PATCH CORDS FROM COMMANDER'S CONTROL BOX BC-739-A INTO RADIO SET. REMOVE PATCH CORDS THAT ARE NOT REQUIRED FROM OTHER CONTROL BOXES BC-739-A.
7. FIGURE REFERENCES:
 INSTALLATION OF INTERPHONE EQUIPMENT RC-99 IN T41E1 AND M39. FIGURE 6
 WIRING DIAGRAM OF INTERPHONE EQUIPMENT RC-99 IN T41E1 AND M39. FIGURE 5
 INSTALLATION OF RADIO SET SCR-506-() IN T41E1 FIGURE 3
 INSTALLATION OF RADIO SET SCR-610-() IN T41E1 FIGURE 7
 INSTALLATION OF RADIO SET SCR-608-A IN T41E1 FIGURE 2

ITEM NO	NAME OF ITEM	QUANTITY REQUIRED
1	RADIO RECEIVER AND TRANSMITTER BC-659-()	1
2	POWER UNIT PE-120-()	1
3	VIBRATOR VB-11	1
4	MOUNTING FT-250-()	1
5	MAST BASE AB-15/GR	1
6	MAST SECTION MS-116	1
7	MAST SECTION MS-117	1
8	MAST SECTION MS-118	1
9	COVER BG-153	1
10	CONNECTOR NO. 61007	1
11	BONDNUT BL-50	1
12	WIRE W-128 36-IN. LONG	1
13	TERMINAL	1
14	CLAMP NO. 6 (FIG. 9)	1
15	CLAMP NO. 9 (FIG. 9)	6
16	TERMINAL BOX	1
17	HEX. HD. CAP. SCREW 5/16-24 X 1/2	7
18	LOCKWASHER SAE ST'D FOR 5/16 SCREW	7
19	HEX. HD. CAP. SCREW 1/4-20 X 1/2	4
20	LOCKWASHER SAE ST'D FOR 1/4 SCREW	4

TL10851-S

Figure 8. Installation of Radio Set SCR-610-() in Vehicle, Utility, Armored, M39 (T41).

CLAMP	A	B	C	D	E	STOCK NO.
1	1-1/8"	3/4"	7/16"	3/16"	1/2"	222637-1
2	1-1/8"	3/4"	7/16"	9/32"	3/4"	222637-2
3	1-1/8"	3/4"	7/16"	13/32"	3/4"	222637-3
4	1-1/8"	3/4"	17/32"	3/16"	1/2"	222637-4
5	1-1/8"	3/4"	17/32"	9/32"	3/4"	222637-5
6	1-1/8"	3/4"	17/32"	13/32"	3/4"	222637-6



NO. 22 (.025) BW. GA.

CLAMP	D	STOCK NO.
7	3/16"	222637-7
8	9/32"	222637-8
9	13/32"	222637-9

CLAMP	D	STOCK NO.
10	9/32"	222637-10
11	13/32"	222637-11

TL-13319

NOTE:
TOLERANCES $\pm 1/32$ "

Figure 9. Clamps for radio cordage.

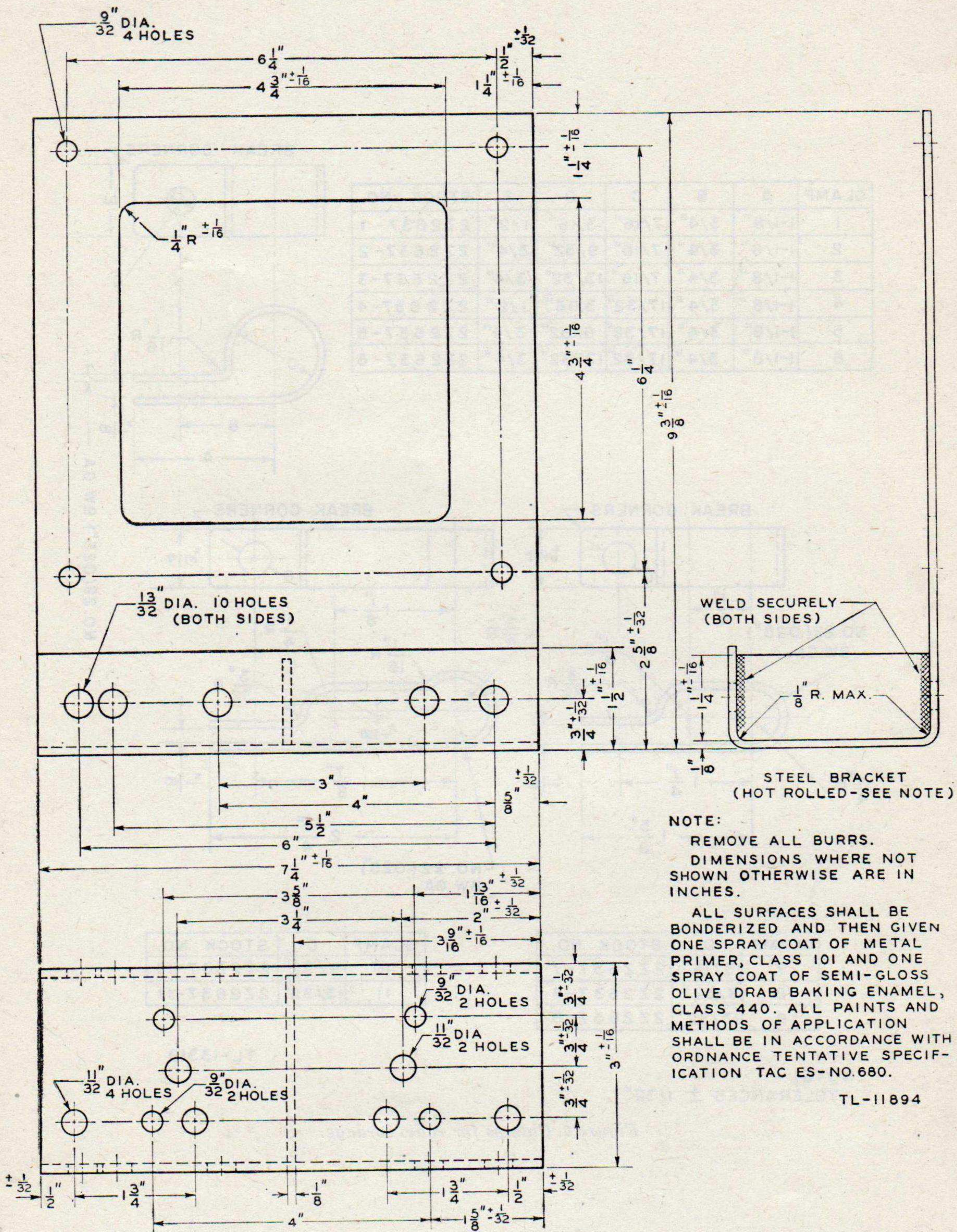
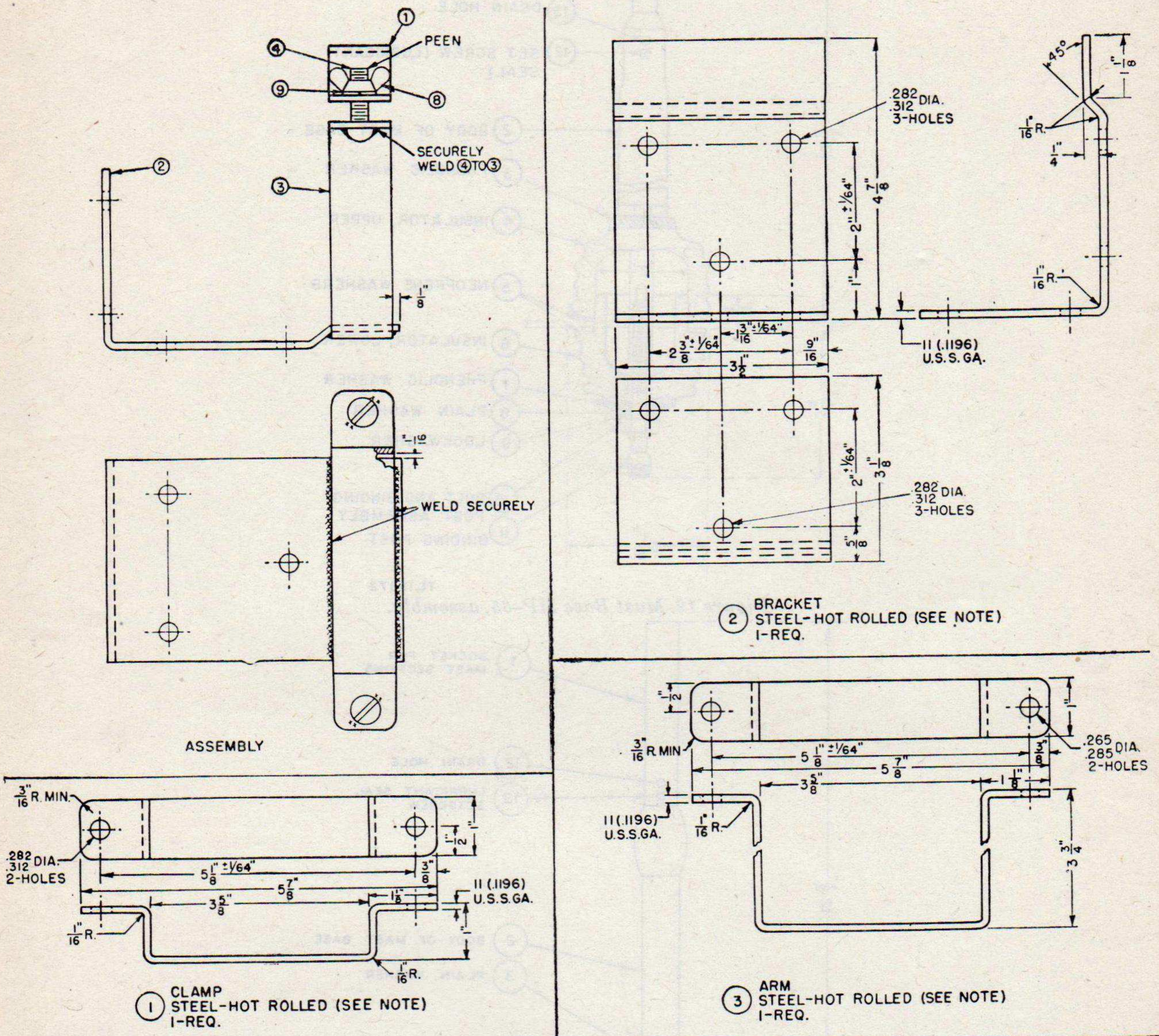


Figure 10. Bracket for Loudspeaker LS-3.



ITEMS REQUIRED

QUAN. REQ.	NAME OF ITEM	MATERIAL	TYPE NO.	ITEM NO.	REMARKS
6	LOCKWASHER	STEEL ELECTRO- GALVANIZED	SEE NOTE	9	S.A.E. REG. FOR 1/4 SCREW
2	WING NUT		SEE NOTE	8	1/4 - 20
4	HEX. NUT		SEE NOTE	7	1/4 - 20 STD.
4	HEX. HD. CAP SCREW		SEE NOTE	6	1/4 - 20 X 3/4 LONG
4	HEX. HD. CAP SCREW		SEE NOTE	5	1/4 - 20 X 1 1/2 LONG
2	RD. HD. MACH. SCREW		SEE NOTE	4	1/4 - 20 X 1 LONG
1	ARM	STEEL		3	
1	BRACKET	STEEL		2	
1	CLAMP	STEEL		1	

NOTE:

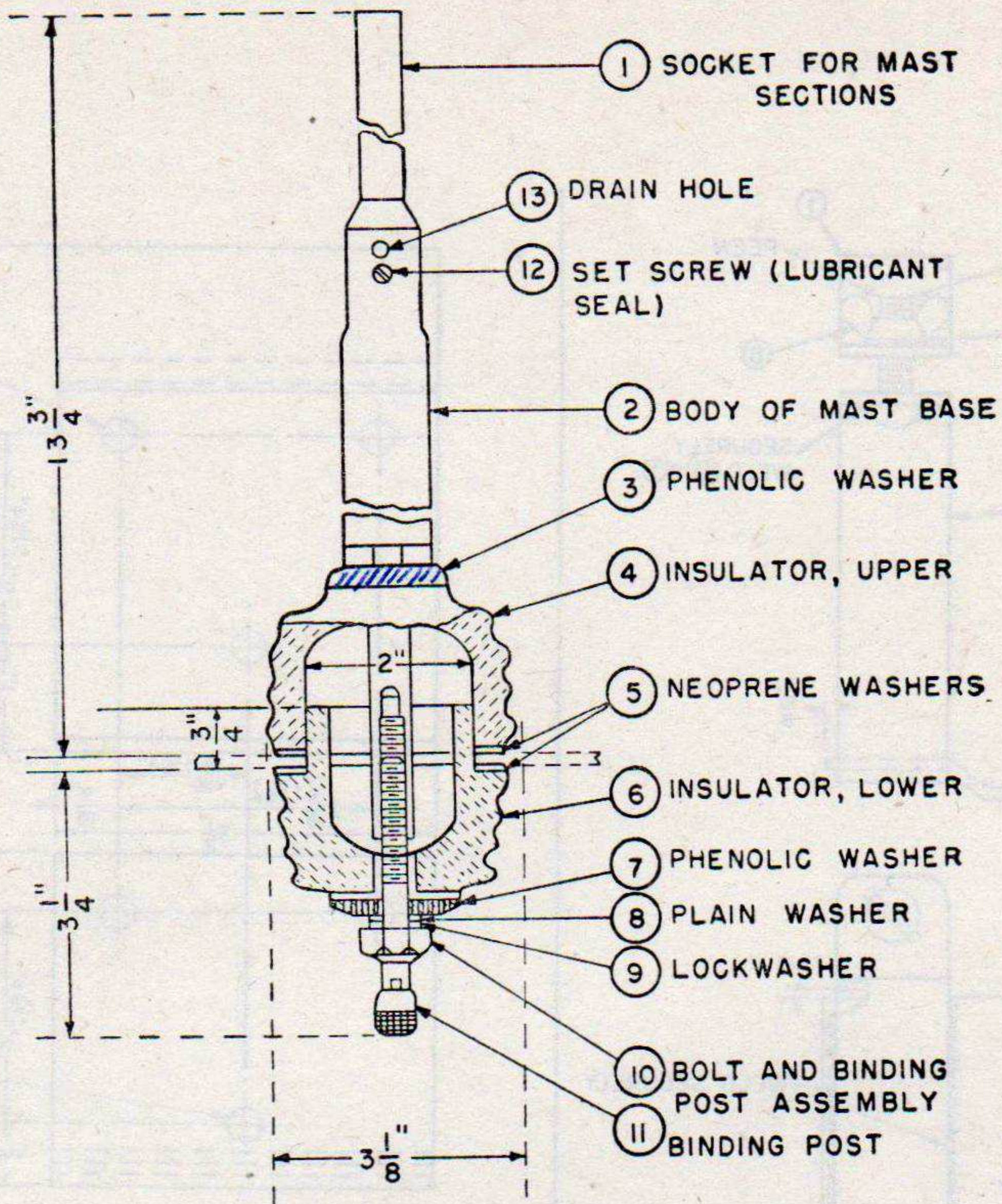
REMOVE ALL BURRS.
AFTER WELDING ② & ④ TO ③, ①, ② & ③ SHALL BE BONDERIZED AND THEN GIVEN ONE SPRAY COAT OF METAL PRIMER, CLASS 101, AND ONE SPRAY COAT OF SEMI-GLOSS OLIVE DRAB BAKING ENAMEL, CLASS 440. TOUCH UP HEADS OF ④ TO MATCH SURROUNDING SURFACE. ALL PAINTS AND METHODS OF APPLICATION SHALL BE IN ACCORDANCE WITH ORDNANCE TENTATIVE SPECIFICATION TAC ES-NO. 680.
⑤, ⑥, ⑦ & ④ OF ⑨ ARE USED FOR INSTALLATION AND SHALL BE PLACED IN A HEAVY CLOTH BAG PLAINLY AND PERMANENTLY MARKED "THIS BAG CONTAINS SCREWS NUTS AND LOCKWASHERS FOR INSTALLATION. SPARES ARE INCLUDED IN QUANTITIES." THIS BAG SHALL BE TIED TO THE BRACKET.

TL 15087

Figure 11. Bracket for Antenna A-27, phantom.

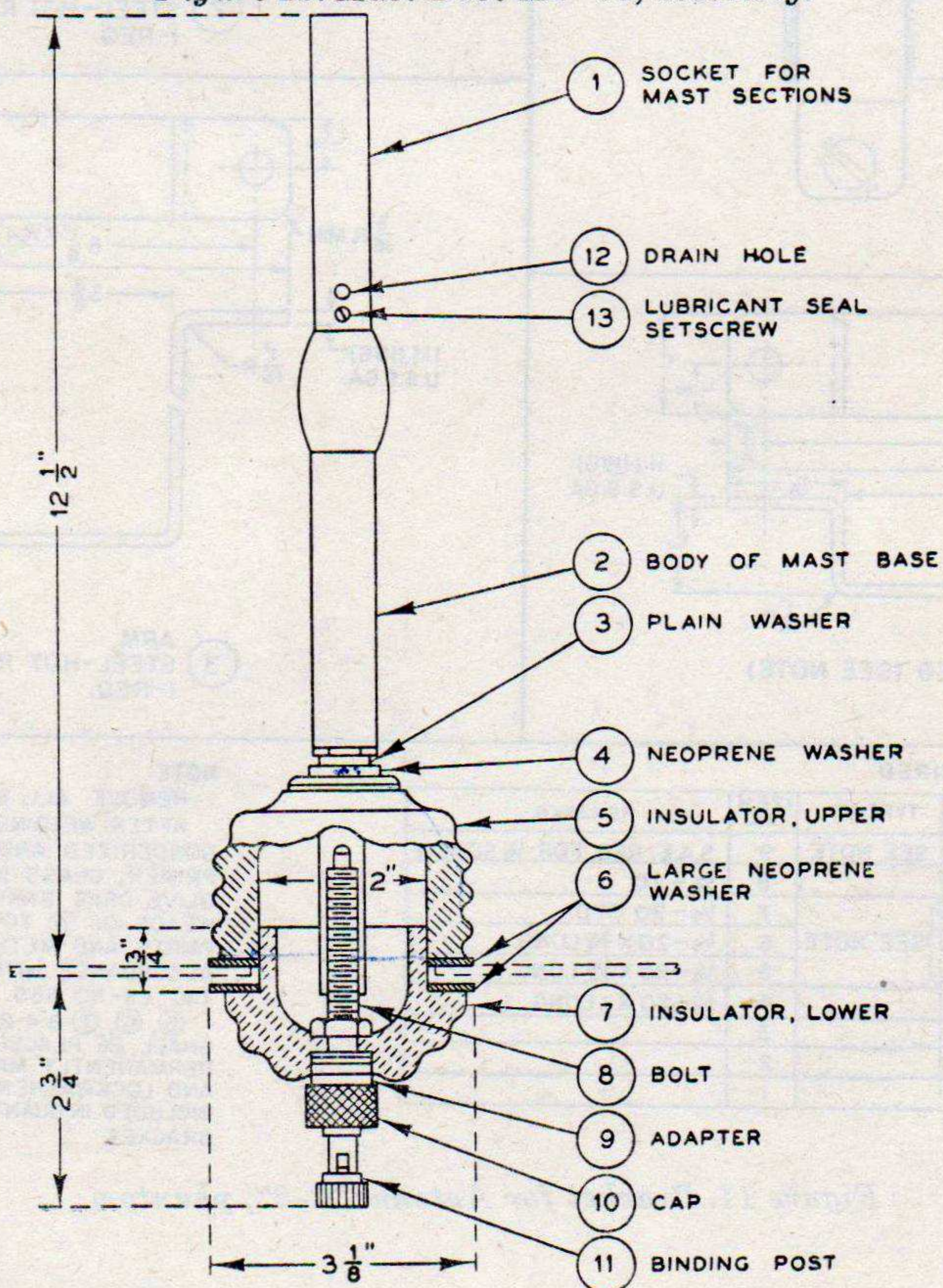
RESTRICTED

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TL13372

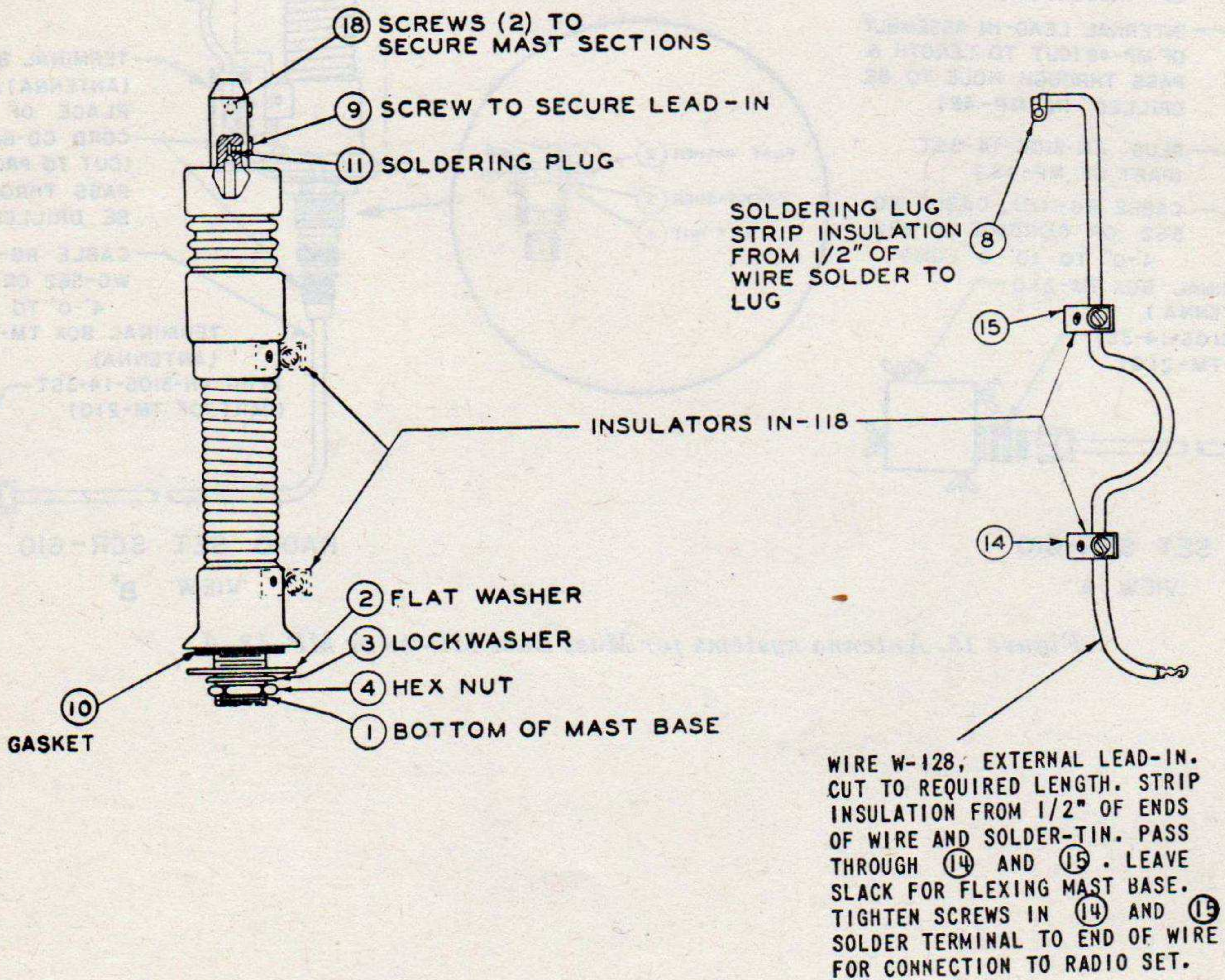
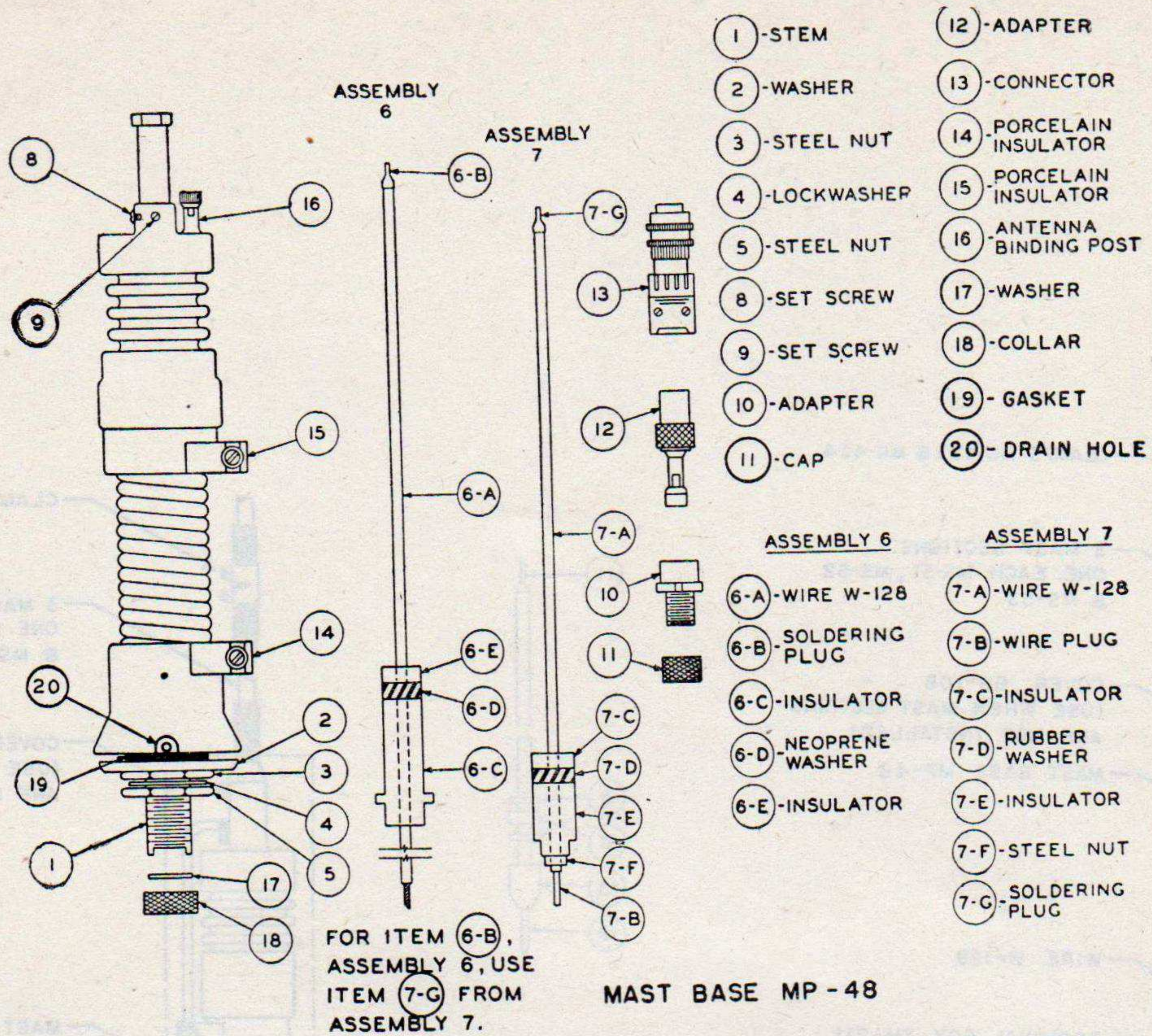
Figure 12. Mast Base MP-65, assembly.



TL 13371

Figure 13. Mast Base AB-15/GR, assembled for Wire W-128 lead-in.

RESTRICTED



MAST BASE MP-48-A

TL 15999-E

Figure 14. Mast Base MP-48 or MP-48-A, assembly.

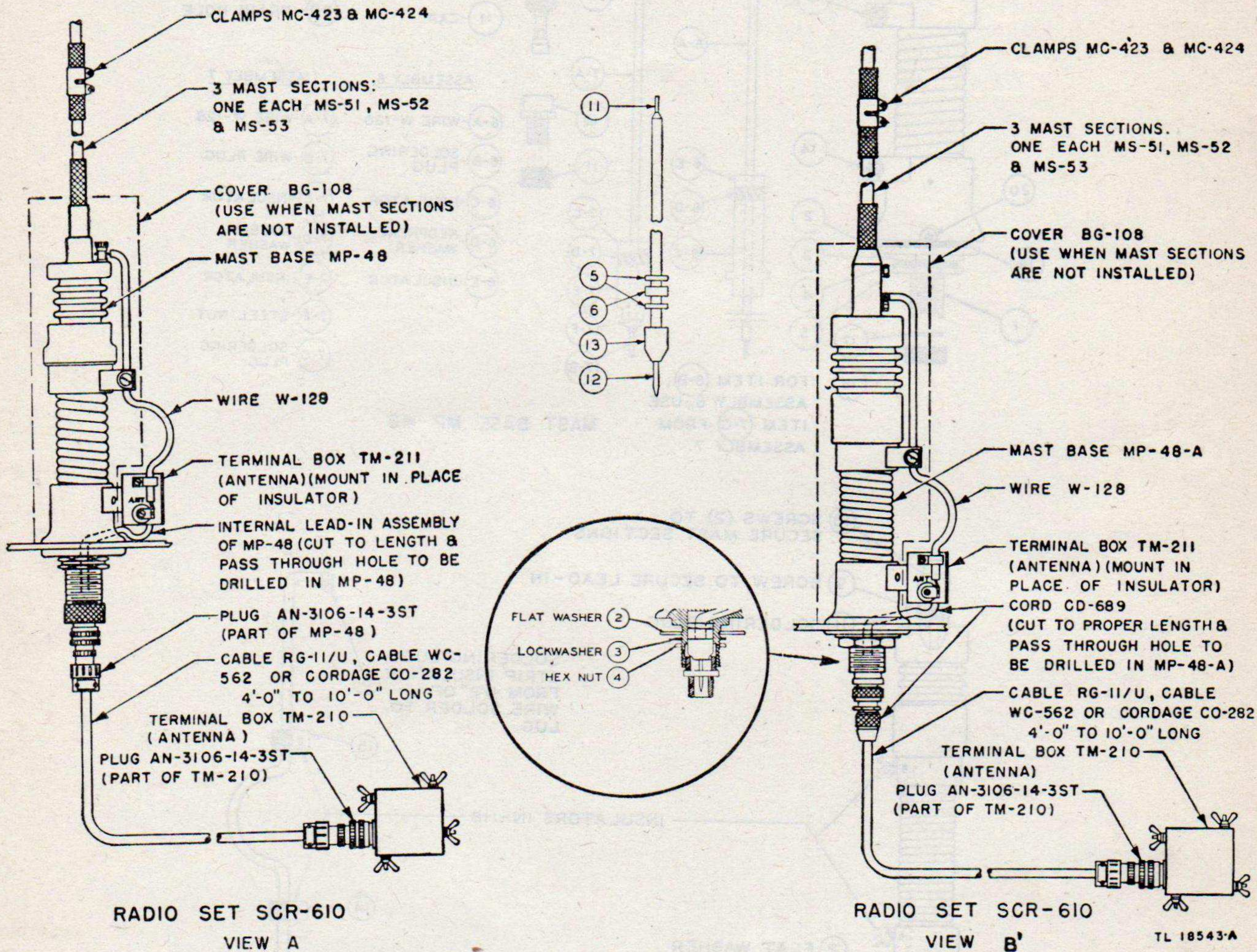
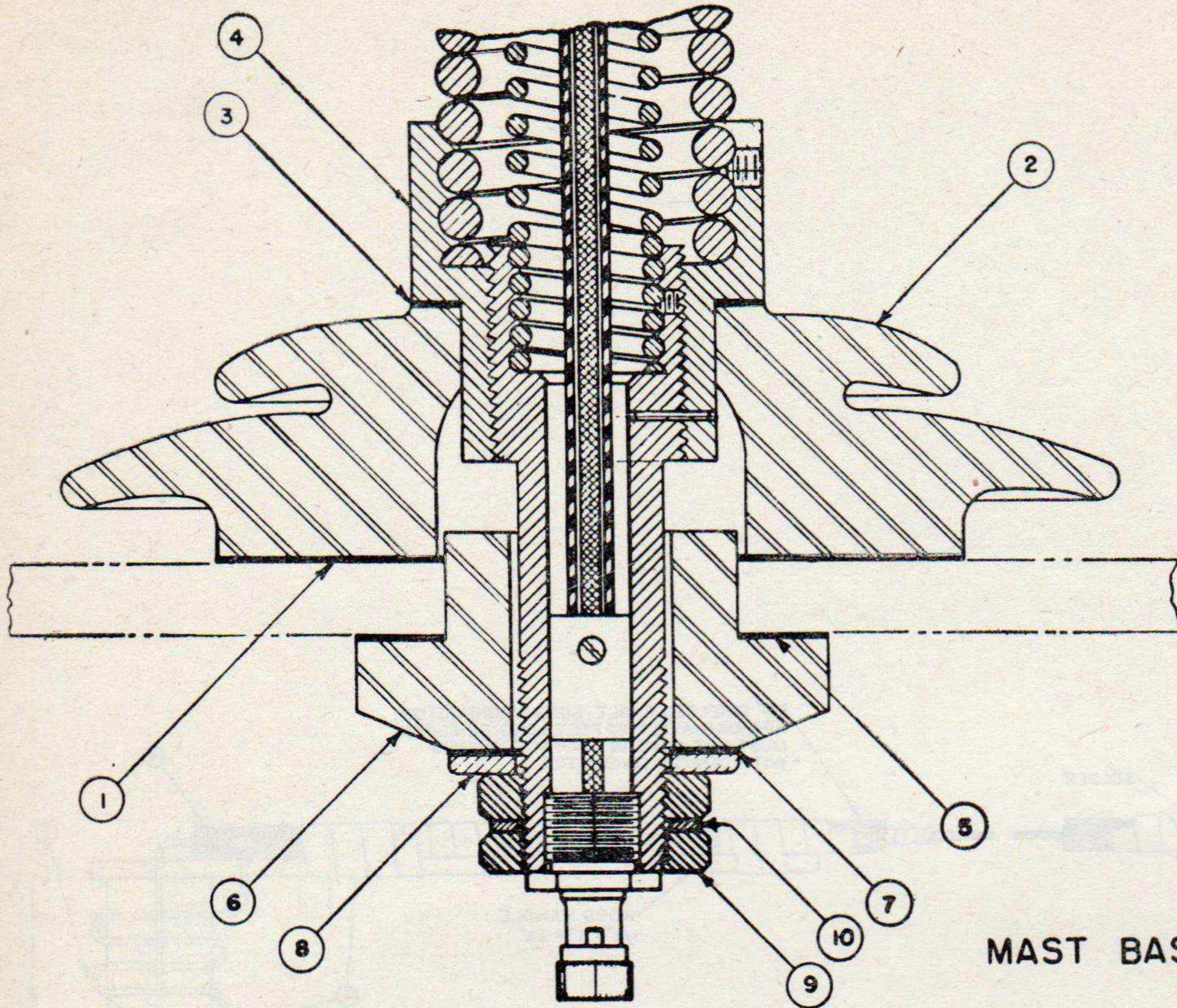


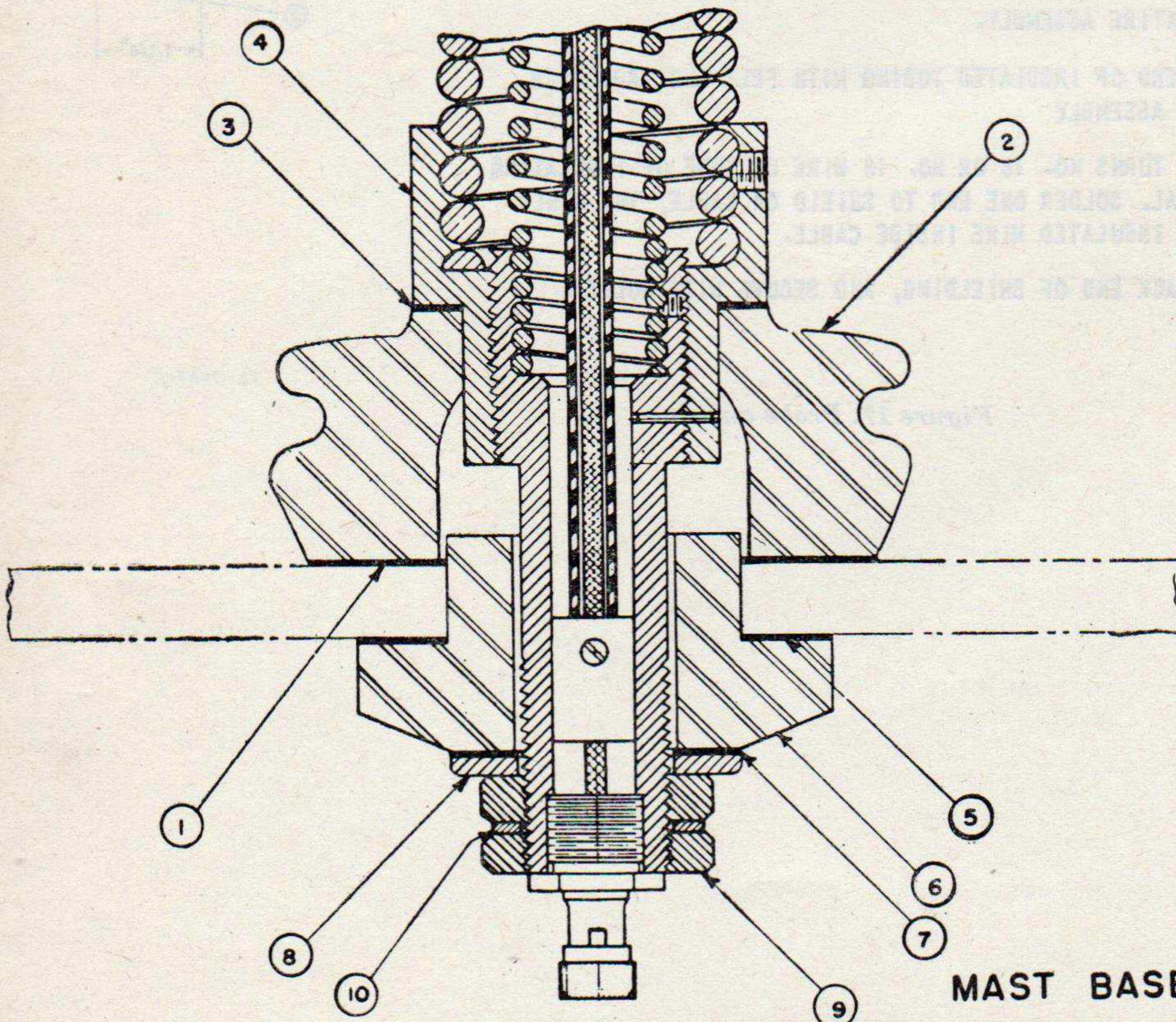
Figure 15. Antenna systems for Mast Base MP-48 or MP-48-A.

RESTRICTED

41



MAST BASE MP - 37



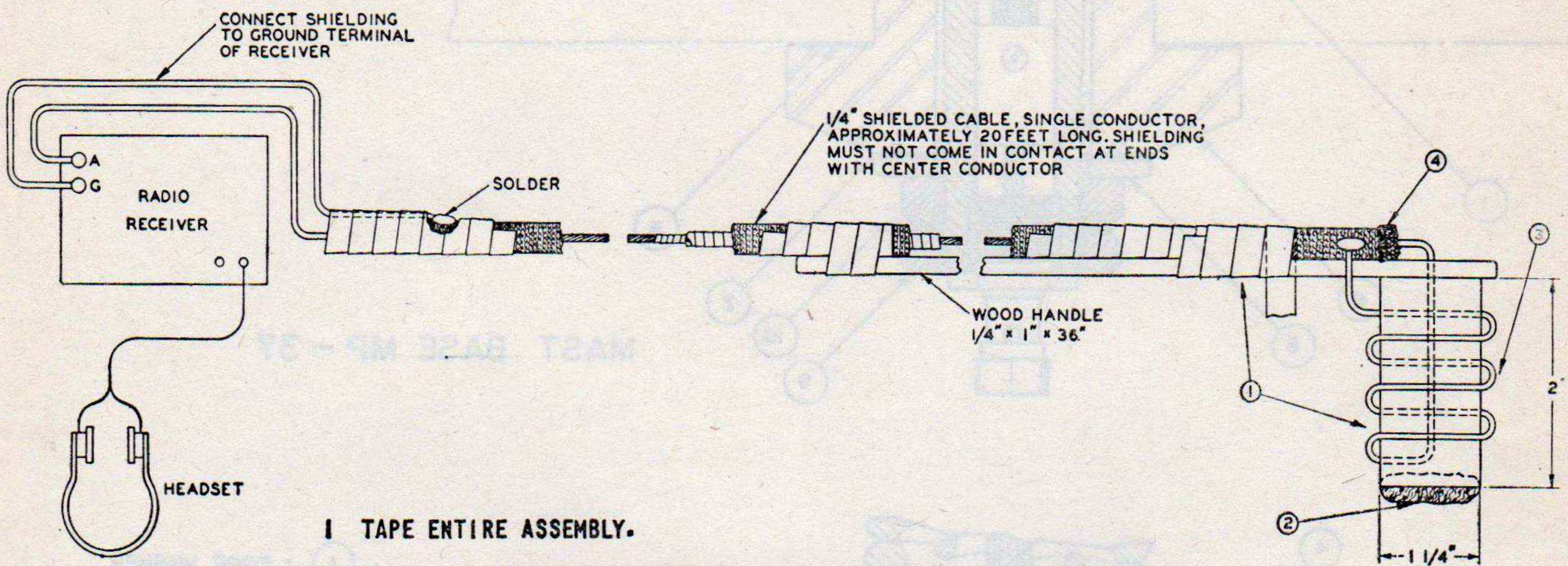
- ① - FIBER WASHER
- ② - PORCELAIN INSULATOR
- ③ - FABRIC WASHER
- ④ - SPRING RETAINER
- ⑤ - FIBER WASHER
- ⑥ - PORCELAIN INSULATOR
- ⑦ - FABRIC WASHER
- ⑧ - STEEL WASHER
- ⑨ - STEEL NUT
- ⑩ - LOCKWASHER

MAST BASE MP - 57

TL 15998-A

Figure 16. Mast Base MP-37 or MP-57, assembly.

RESTRICTED



- 1 TAPE ENTIRE ASSEMBLY.
- 2 STUFF END OF INSULATED TUBING WITH FELT AND TAPE OVER ENTIRE ASSEMBLY
- 3 WIND 3 TURNS NO. 16 OR NO. 18 WIRE ON TUBE OF INSULATING MATERIAL. SOLDER ONE END TO SHIELD ON CABLE, THE OTHER END ON INSULATED WIRE INSIDE CABLE.
- 4 ROLL BACK END OF SHIELDING, AND SECURE WITH SOLDER.

TL-7547-A

Figure 17. Probe antenna.

THE END!