

# MASTR<sup>TM</sup> *Imperial*

MOBILE CONTROL UNIT MODELS 4EC59A120 -121 & 4EC59A126 -127



## SPECIFICATIONS \*

MODEL NUMBER	4EC59A120, 121, and 4EC59A126, 127
USED WITH	MASTR Imperial Mobile Combinations
CONTROLS	VOLUME Control OFF-ON-STBY Switch SQUELCH Control Three or Four-Frequency Selector Switch Dimmer Control for Frequency Indicator Lights (Optional)
INDICATORS	Transmit light: red F1 Frequency Indicator Light: green F2 Frequency Indicator Light: yellow F3 Frequency Indicator Light: blue F4 Frequency Indicator Light: white

\*These specifications are intended primarily for the use of the serviceman. Refer to the appropriate Specification Sheet for the complete specifications.

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### WARNING

No one should be permitted to handle any portion of the equipment that is supplied with high voltage; or to connect any external apparatus to the units while the units are supplied with power. KEEP AWAY FROM LIVE CIRCUITS.

## DESCRIPTION

MASTR Imperial Control Units are compact, highly functional control units that are designed for either Trunk-Mount or Front-Mount MASTR mobile combinations.

In Trunk-Mount installations, a plate is installed on the back of the Control Unit to hold the connectors. A mounting bracket is provided for mounting the Control Unit within convenient reach of the operator. In Front-Mount installations, the Control Unit is attached to the front of the MASTR Two-Way Radio.

Cable connections are secured to the Control Unit by means of captive locking screws.

## CIRCUIT ANALYSIS

The OFF-ON-STBY (standby) switch (S701) determines whether or not the transmitter and receiver are operative. With the switch in the OFF position, all power is removed from the Two-Way Radio. Turning the switch to STBY applies power to the receiver only, and the frequency indicator lights do not light.

Turning the switch to the ON position applies filament voltage to the transmitter, activates the push-to-talk (PTT) circuit, and illuminates a frequency indicator light. The position of the Frequency Indicator switch determines which light will glow when the OFF-ON-STBY switch is turned to ON. The multi-frequency indicator light colors are: F1-GREEN, F2-YELLOW, F3-BLUE, F4-WHITE. In three-frequency control, the F4 indicator is not equipped with a lamp. After a short warm-up time, the PTT button may be pressed to key the transmitter.

Pushing the PTT button energizes the system relay, which, in turn, starts the power supply, switches the antenna and mutes the receiver. Keying the transmitter also lights the red pilot light.

## CONTROLS

All models of the Control Unit have VOLUME and SQUELCH controls, and an OFF-ON-STBY switch. Depending on the model number, some of the Control Units may have one or more of the controls described in the following paragraphs. A chart showing which controls are present on each Control Unit model is provided on the Control Unit Wiring Diagram.

Instructions for adjusting the controls are in the Operator's Manual for the Two-Way Radio.

## Three and Four-Frequency Switch (S706)

For three or four-frequency operation, a frequency selector switch selects the channel desired (F1 thru F4) for both transmitting and receiving. For three-frequency operation, the F3 and F4 channels on S706 are jumpered together. The switch connects +10 Volts to the selected receiver oscillator switching diode, and connects the transmitter oscillator switching diode to ground, so that the unit will operate on the frequency determined by each of the crystal-controlled oscillators.

## SPEAKER-OFF Switch (S702-Optional)

The SPEAKER-OFF switch is used whenever a telephone handset and hookswitch is used. The switch operates in parallel with the hookswitch and, in the SPEAKER position, overrides the speaker muting circuit in the handset hookswitch. Calls can then be heard from the speaker, regardless of whether the handset is on or off the hookswitch.

With the switch in the OFF position and the handset off the hookswitch, calls are heard only from the handset earpiece. The speaker still operates with the handset hung up.

## Dimmer Control (R705) (Optional)

The dimmer control is a rheostat in series with the frequency indicator light. Turning the control dims or brightens the light to the level desired by the operator. The dimmer control has no effect on the red TRANSMIT light.

## 12-VOLT SYSTEMS

In 12-volt vehicle systems, the Control Unit may be connected for three different modes of operation, depending on the way the three ignition switch cables are connected in the vehicle system. The black ignition switch cable provides the receiver ground connection. The yellow fused lead provides the receiver hot connections, and the red fused lead provides the hot connections for the transmitter filaments. The three types of operation are:

1. Ignition Switch Standby - For this type of operation, the red fused lead (transmitter filament voltage) is connected to the ACCESSORY or ON terminal of the ignition switch. The yellow fused lead (receiver hot) is connected to the hot side of the ignition switch, and the black lead connects to vehicle ground.

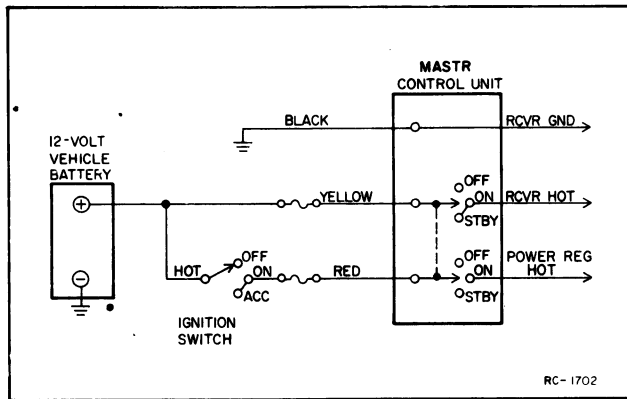
**MAINTENANCE**

Figure 1 - 12-VDC Connections for Ignition Switch Standby

With the ignition switch OFF, the receiver automatically reverts to STBY, ready to receive messages. Turning the ignition switch to the ON or ACCESSORY position turns on a frequency selector light and supplies transmitter filament voltage. Turning the OFF-ON-STBY switch to OFF removes all power to the Two-Way Radio.

2. **Ignition Switch Control** - For ignition switch control, the yellow and red fused leads are connected to the ACCESSORY or ON terminal of the ignition switch. The transmitter and receiver will operate only when the ignition switch is in the ACCESSORY or ON position. Turning the ignition switch OFF removes all power to the radio.
3. **Ignition Switch Bypass** - For ignition switch bypass, the yellow and red fused leads connect to the "hot" side of the ignition switch or the vehicle fuse block assembly. Both the transmitter and receiver operate independently of the ignition switch and can be turned on and off only by the OFF-ON-STBY switch on the MASTR Control Unit.

**DISASSEMBLY**

In Trunk-Mount installations, access to the inside of the Control Unit is obtained by removing the two Phillips-head screws in the back of the unit and pulling the back panel away from the housing.

In Front-Mount installations, remove the two Phillips-head screws holding the front casting to the frame and move the casting away from the frame. Next, remove the two screws securing the control cable plug to the inside of the front casting. Then remove the two flat-head screws holding the Control Unit to the front casting.

**PILOT LIGHT REPLACEMENT**

The pilot lights can be easily replaced without disassembling the Control Unit. First, unscrew the colored lens. Then wrap a small piece of masking tape around the bulb, to give the fingers a firm grip, and unscrew the bulb.

**REINSTALLATION**

The MASTR Imperial mobile combination operates in 12-volt, negative ground vehicle systems only! If the radio is ever moved to a different vehicle, always check the battery polarity and voltage of the new system before using the radio.

**CAUTION**

Do not install the MASTR Imperial in a vehicle system using a circuit breaker. The radio must be operated in a system protected by a 15-amp quick blow fuse (similar to GE Fuse Assembly 19B216021-G4 and fuse 1R11-P4).

If it becomes necessary to move the Two-Way Radio and Control Unit to another vehicle, the 25-pin control cable plug may need to be disassembled. Refer to Figure 2 for disassembly of the plug.

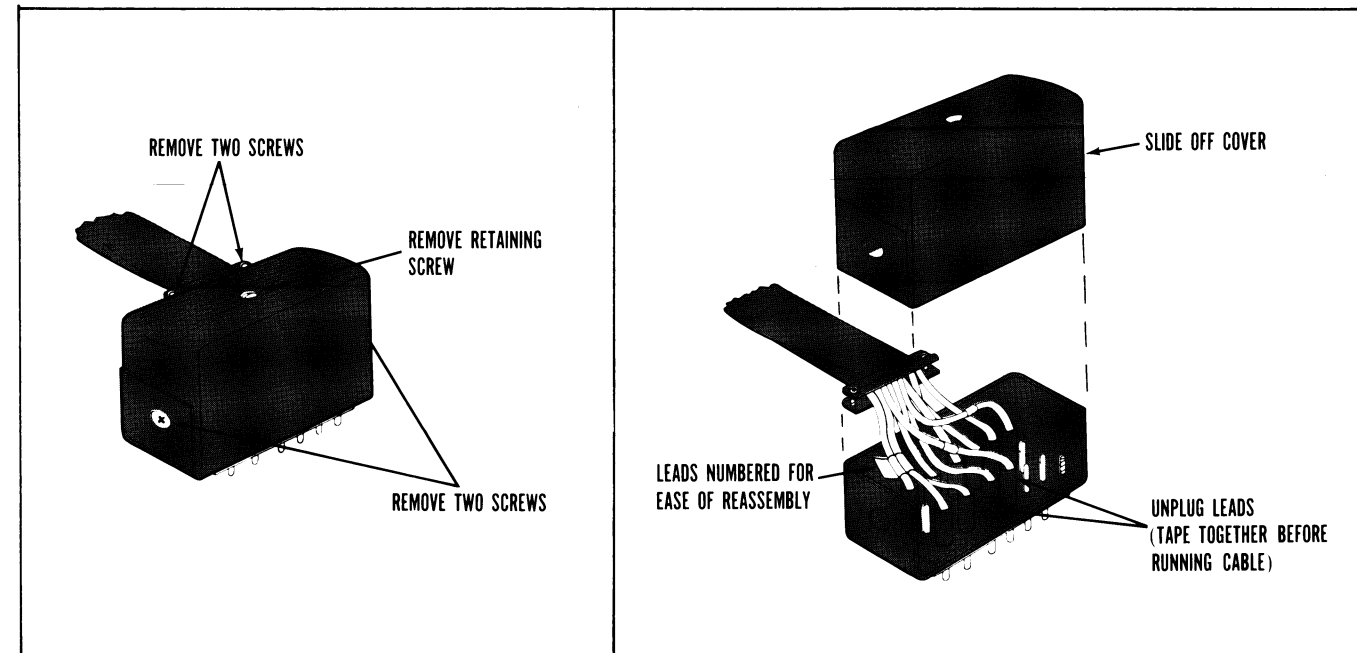
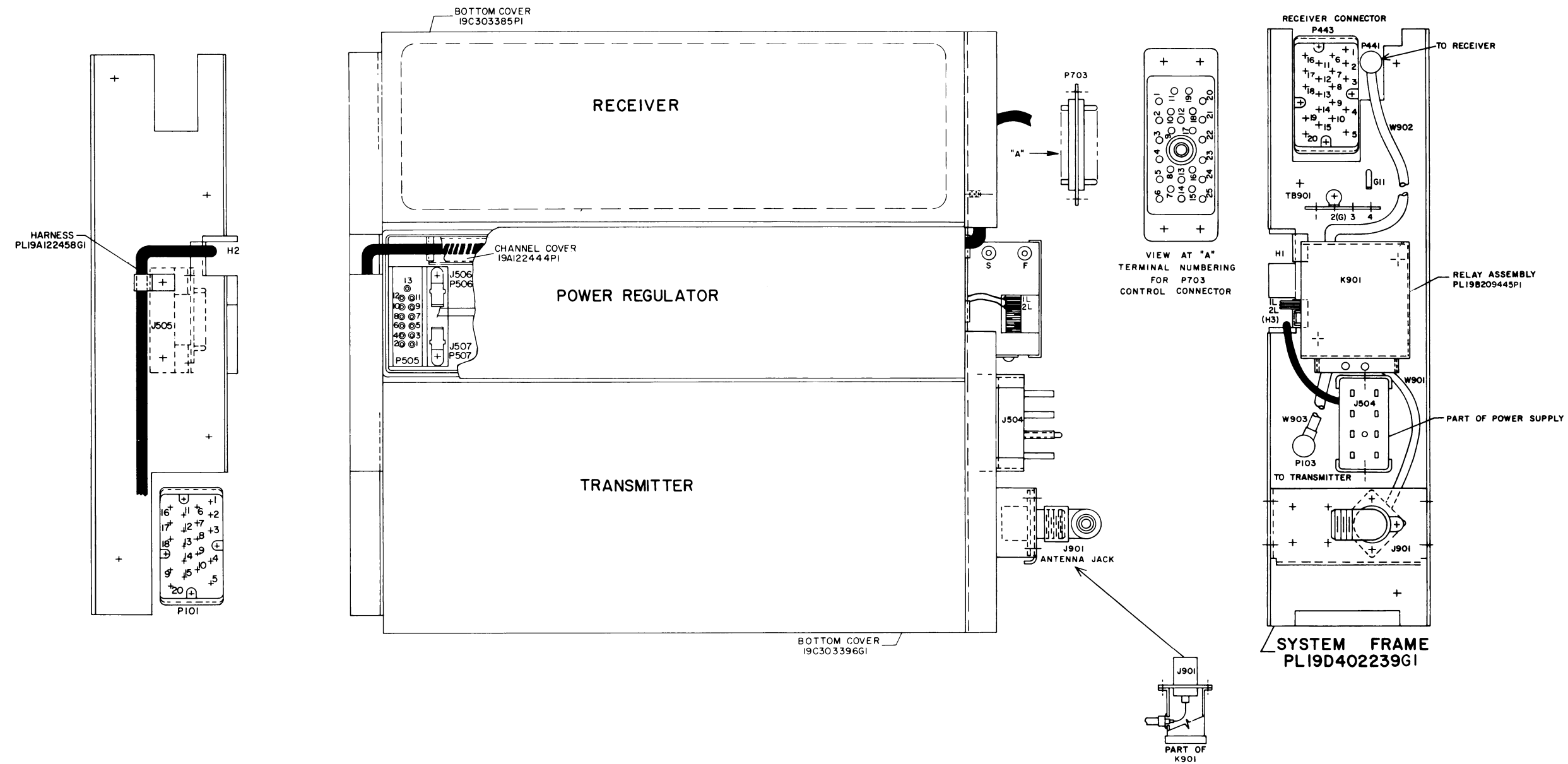


Figure 2 - Disassembly of Control Cable Plug

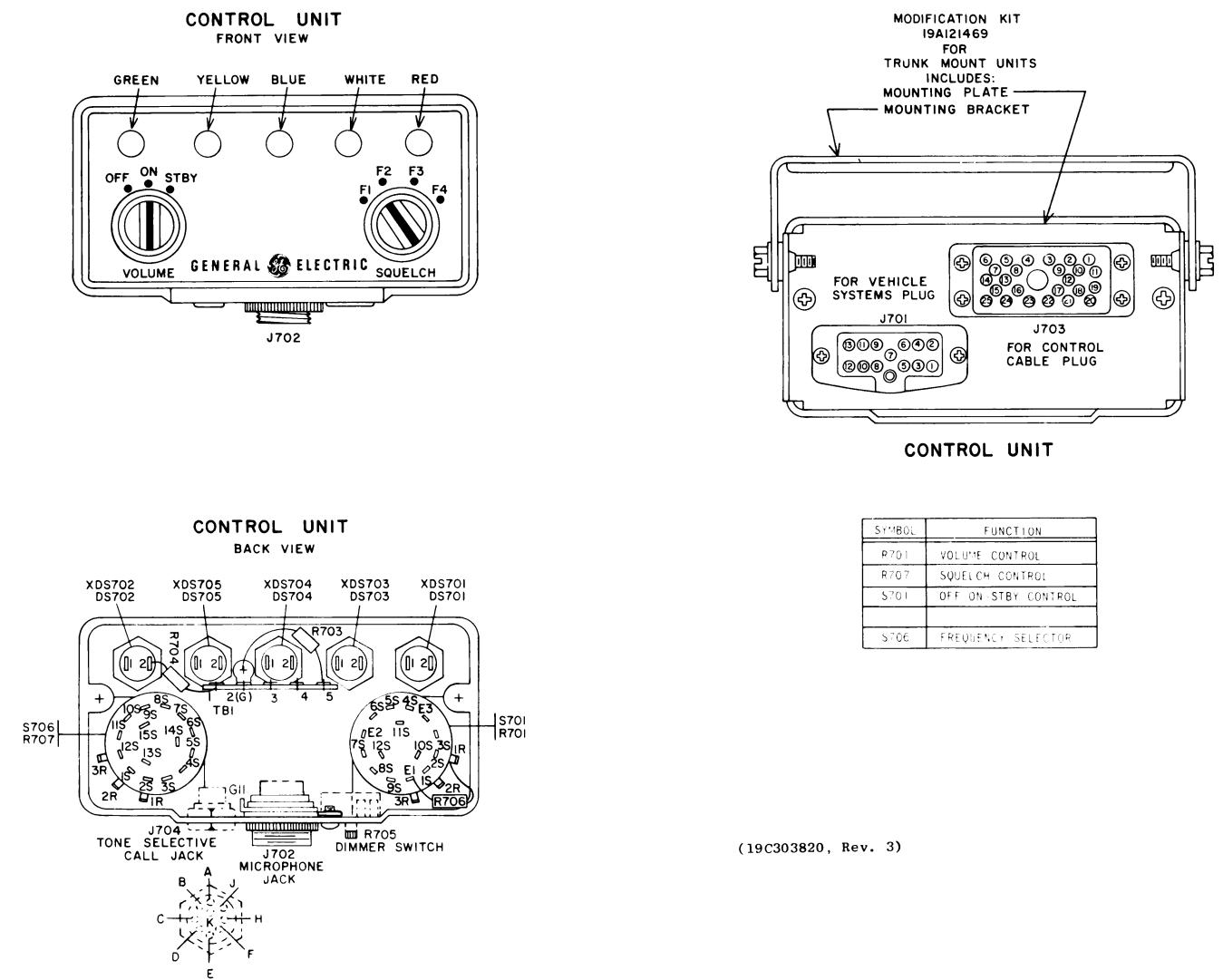
## NOTE

The plug is assembled so that the cable comes out of the top of the plug when connected to the Control Unit. To have the cable come out of the bottom of the plug, remove the remaining two screws and rotate the metal frame 180 degrees.

## SYSTEM FRAME & HARNESS



## CONTROL UNIT



SYMBOL	FUNCTION
R701	VOLUME CONTROL
R707	SQUELCH CONTROL
S701	OFF ON STBY CONTROL
S706	FREQUENCY SELECTOR

(19C303820, Rev. 3)

(19D416968, Rev. 1)

## OUTLINE DIAGRAM

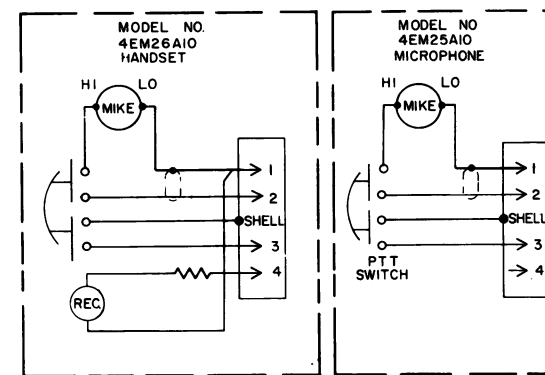
MASTR IMPERIAL CONTROL UNIT  
MODELS 4EC59A120,121 & 4EC59A126,127

MODEL NUMBER	REV. LETTER	NO. OF FREQ.	FREQ. INDICATOR LIGHTS	CHANNEL GUARD MONITOR SWITCH	TO	OPTION JACK
4EC59A74	E	4	X			
4EC59A75	E	4	X			
4EC59A76	J	4	X			
4EC59A77	J	4	X			
4EC59A98	F	3	X			
4EC59A99	F	3	X			
4EC59A80	K	3	X			X
4EC59A81	K	3	X			X
4EC59A126	A	4	X			X
4EC59A127	B	4	X			X
4EC59A120	A	3	X			X
4EC59A121	B	3	X			X

\*\* TERMINALS 4 & 11 ARE USED ON 12 VOLT SYSTEMS FOR CONTROL OF 10-WATT SPEAKER.

\*\* 6/28 V D.C. CHAN. GUARD MONITOR HOOK SW. +13.6V (ON) SYSTEM NEGATIVE CHAN. GUARD MONITOR HOOK SW. +13.6V (STANDBY)

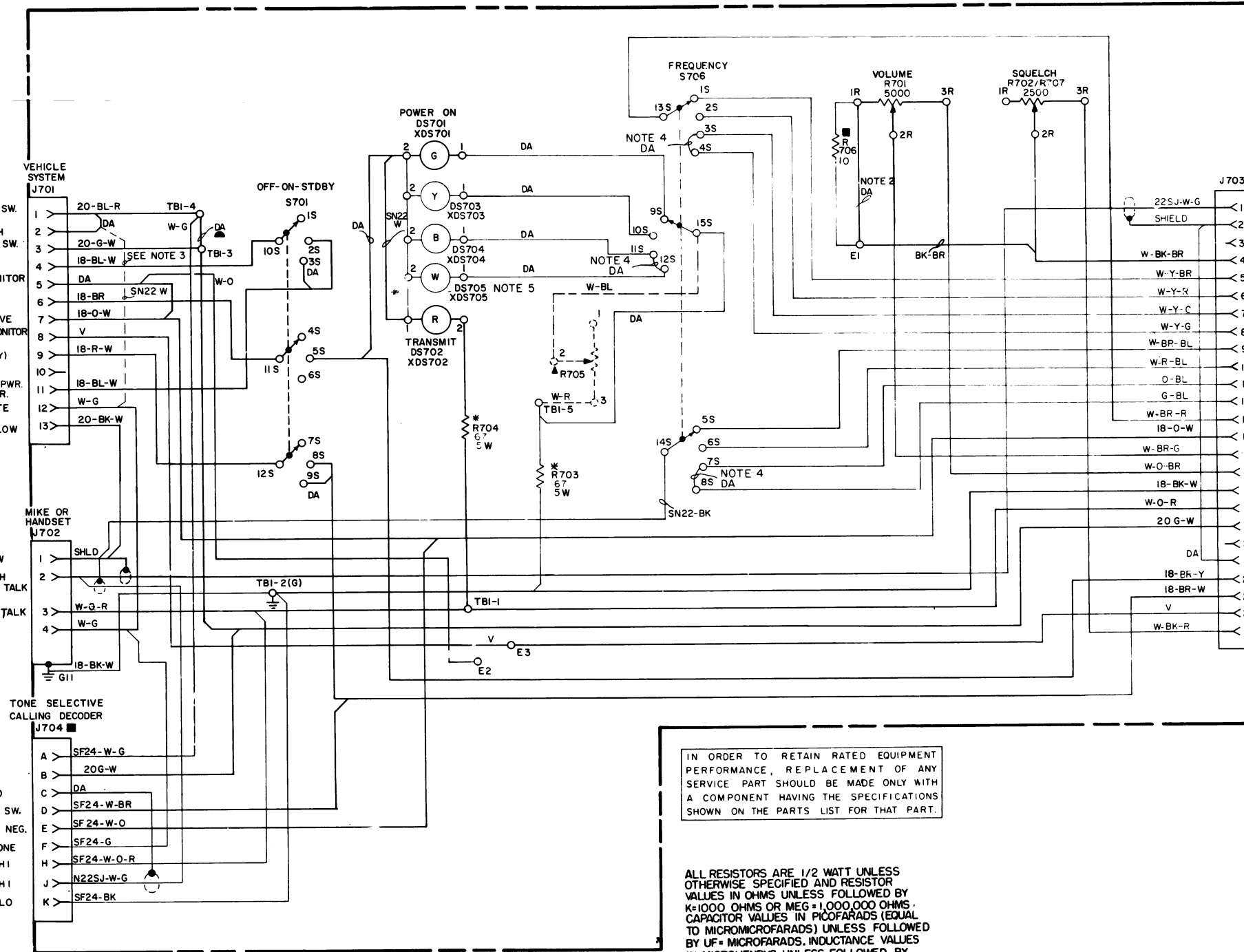
\*\* SW 6/28 V D.C. PWR. RELAY/10W. SPKR. EARPHONE MUTE VOICE COIL LOW



- ▲ DIMMER CONTROL OPTION  
ADD DOTTED CONNECTIONS & OMIT WIRE FROM TBI-9 TO S706-15S
- TONE SELECTIVE CALLING  
OMIT IN MODELS 4EC59A74, 75, 58, 59 & 126
- SPEAKER MUTE  
OMIT DA WIRE WHEN S702 AND/OR J704 IS USED.
- SPEAKER SWITCH  
OMIT IN MODELS 4EC59A74, 76, 58, 60, 126 & 127

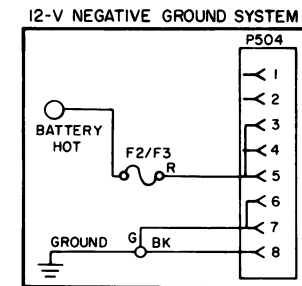
NOTES: 1. ALL WIRES N 24 UNLESS OTHERWISE SPECIFIED.  
2. OMIT DA WIRE WHEN R706 IS USED.  
3. ADD W WIRE WHEN PL19B204970G1 HOOKSWITCH IS USED.  
4. PRESENT IN THREE FREQ. MODELS ONLY.  
5. OMIT DS705 IN THREE FREQ. MODELS ONLY.

## CONTROL UNIT



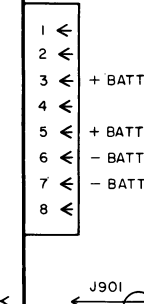
IN ORDER TO RETAIN RATED EQUIPMENT PERFORMANCE, REPLACEMENT OF ANY SERVICE PART SHOULD BE MADE ONLY WITH A COMPONENT HAVING THE SPECIFICATIONS SHOWN ON THE PARTS LIST FOR THAT PART.

ALL RESISTORS ARE 1/2 WATT UNLESS OTHERWISE SPECIFIED AND RESISTOR VALUES IN OHMS UNLESS FOLLOWED BY K=1000 OHMS OR MEG=1,000,000 OHMS. CAPACITOR VALUES IN PICOFARADS (EQUAL TO MICROMICROFARADS) UNLESS FOLLOWED BY UF= MICROFARADS. INDUCTANCE VALUES IN MICROHENRYS UNLESS FOLLOWED BY MH= MILLIHENRYS OR H=HENRYS



(RC-2361)

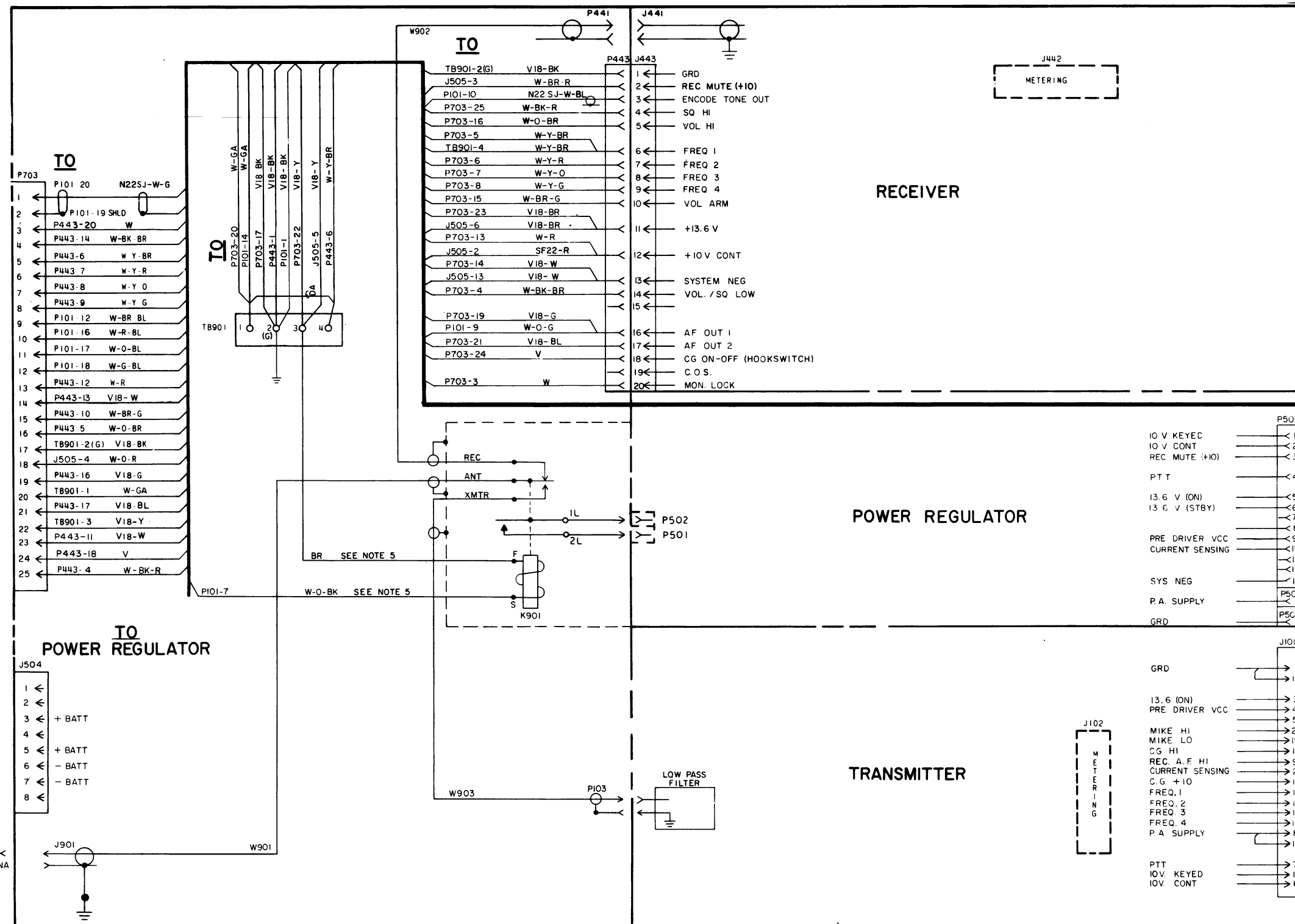
## TO POWER REGULATOR



ALL RESISTORS ARE 1/2 WATT UNLESS OTHERWISE SPECIFIED AND RESISTOR VALUES IN OHMS UNLESS FOLLOWED BY K=1000 OHMS OR MEG=1,000,000 OHMS. CAPACITOR VALUES IN PICOFARADS (EQUAL TO MICROMICROFARADS) UNLESS FOLLOWED BY UF= MICROFARADS. INDUCTANCE VALUES IN MICROHENRYS UNLESS FOLLOWED BY MH= MILLIHENRYS OR H=HENRYS

IN ORDER TO RETAIN RATED EQUIPMENT PERFORMANCE, REPLACEMENT OF ANY SERVICE PART SHOULD BE MADE ONLY WITH A COMPONENT HAVING THE SPECIFICATIONS SHOWN ON THE PARTS LIST FOR THAT PART.

## SYSTEM FRAME AND HARNESS



- NOTES:
1. ALL WIRES ARE SF24 EXCEPT AS OTHERWISE SHOWN.
  2. SEE 19D416414 FOR ORIENTATION AND LOCATION OF COMPONENTS AND ROUTING OF CABLE.
  3. N22SJ-W-G WIRE IS A7134854P4. N22SJ-W-BL WIRE IS A7134854P5. VIB-BL WIRE IS A4035028P9. VIB-Y WIRE IS A4035028P11.
  4. TERMINATE WIRES AT J506 & J507 WITH A7117265P1.
  5. PART OF HARDWARE KIT PL19A12145666.

SEE APPLICABLE PRODUCTION CHANGE SHEETS IN INSTRUCTION BOOK SECTION DEALING WITH THIS UNIT, FOR DESCRIPTION OF CHANGES UNDER EACH REVISION LETTER.

THIS ELEM DIAG APPLIES TO

PL NO REV LETTER

## SCHEMATIC & INTERCONNECTION DIAGRAM

MASTR IMPERIAL CONTROL UNIT  
MODELS 4EC59A120, 121 & 4EC59A126, 127

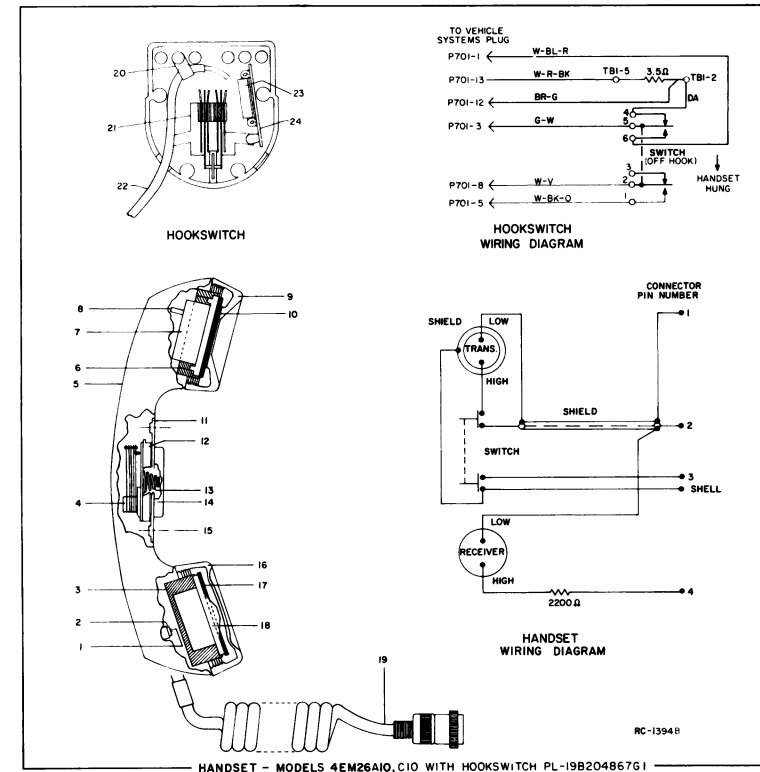
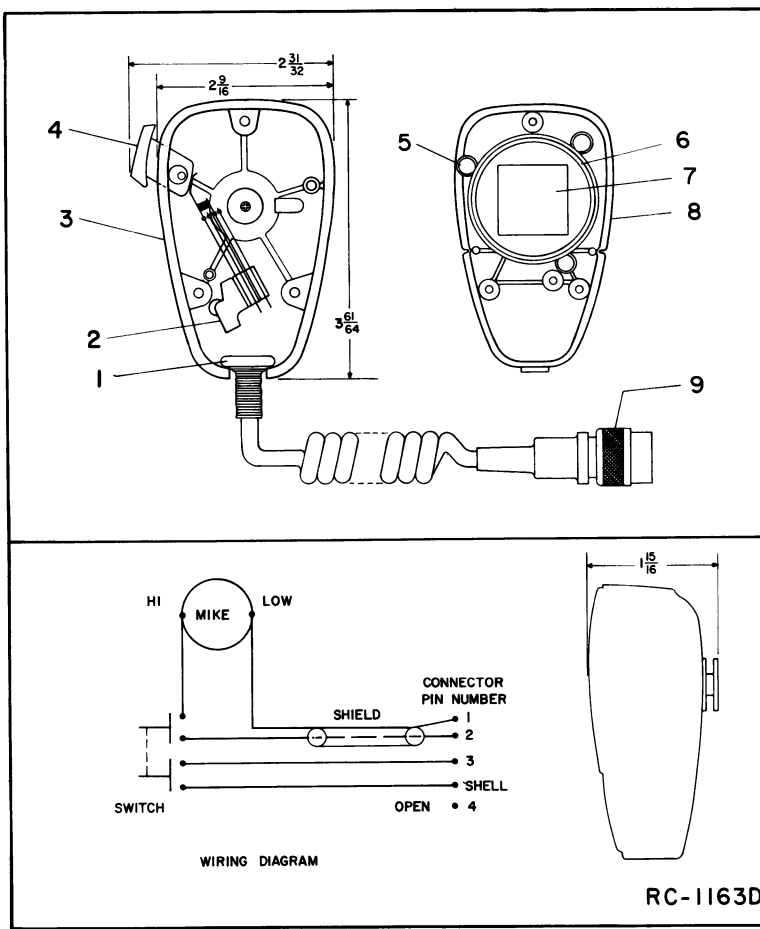
SYMBOL	GE PART NO.	DESCRIPTION
		CONTROL UNIT 19D413054G19
		- - - - - INDICATING DEVICES - - - - -
D8701 thru D8705	19B201122P1	Lamp, incandescent: 6.0 v; sim to GE Co Lamp 1768.
		- - - - - JACKS AND RECEPTACLES - - - - -
J701	19C303576P1	Socket, phen: 13 contacts rated at 5 amps max.
J702		Receptacle. Includes:
	19A116061P2	Receptacle: 4 contacts; sim to Amphenol 91-PR4N-1000.
	19A116061P4	Lockwasher, internal tooth.
	19A116061P5	Nut, knurled: No. 13/16-27N-2.
	19A116049P1	Solderless terminal.
J703	19D402408P1	Connector, phen: 25 contacts rated at 5 amps max.
J704	19B216279G1	Jack assembly: 9 female contacts rated at 5 amps at 900 VRMS; sim to Winchester M9S-LRN.
		- - - - - RESISTORS - - - - -
R701		(Part of S701).
R703 and R704	5493035P19	Wirewound: 67 ohms $\pm 5\%$ , 5 w; sim to Hamilton Hall Type HR.
R706	3R77P100K	Composition: 10 ohms $\pm 10\%$ , 1/2 w.
R707		(Part of S706).
		- - - - - SWITCHES - - - - -
S701	19C307089P19	Switch/Resistor: includes Switch, rotary, 3 poles, 3 positions, momentary shorting contacts, 250 ma at 500 VRMS; Resistor (R701), variable, 5000 ohms $\pm 20\%$ , 1/2 w max; sim to Mallory LC5K-3133.
S706	19C307089P21	Switch/Resistor: includes Switch, rotary, 3 poles, 4 positions, momentary shorting contacts, 250 ma at 500 VRMS; Resistor (R707), variable, 2500 ohms $\pm 10\%$ , 1 w max; sim to Mallory Type LC.
		- - - - - TERMINAL BOARDS - - - - -
TB1	7775500P12	Phen: 5 terminals.
		- - - - - SOCKETS - - - - -
XD8701 thru XD8705	19B201122P2	Lamp, miniature: sim to Drake Series 121.
		MECHANICAL PARTS
		CONTROL UNIT MODELS 4EC59A120, A121, A126, A127 (SEE RC-1188)
1	N529P19C13	Plug button: approx 21/32 inches dia.
2	N529P5C13	Plug button: approx 13/32 inches dia.
3	19A121521G1	Mouting bracket.
4	19B201122P3	Lens cap: green translucent nylon.
5	19B201122P6	Lens cap: yellow translucent nylon.
6	19B201122P5	Lens cap: blue translucent nylon.
7	NP276162	Nameplate.

SYMBOL	GE PART NO.	DESCRIPTION
8		(Not Used).
9	19B201122P7	Lens cap: white translucent nylon.
10	19B201122P4	Lens cap: red translucent nylon.
11	19B204443G3	Knob: brown.
12	19C303413P1	Knob: VOLUME/SQUELCH.
13	19D413010P3	Housing: brown.
14	19B204522P1	Mounting plate.
15	19A115495P1	Screw, hexhead: No. 1/4-20 x 5/8.
	19A116773P106	Tap screw, Phillips POZIDRIV®: H1 - low thread No. 7-19 x 3/8. (Secures back plate to housing).
		ASSOCIATED ASSEMBLIES
	19A121469G1	Control unit modification kit (trunk mount).
	19D402239G1	12 volt vehicle frame.
	19A122444P1	Cover, wire channel (on systems frame).
	19C303452G1	Front casting (Front mount).
	19C303452G2	Front casting (Trunk mount).
	4034260P3	Screw: 10-32 x 1-1/8 (Secures Front casting).
	5491682P2	Lock: Yale and Towne. (Part of Front casting).
	5491682P7	Cam. (Used with lock).
		DIMMER CONTROL MODIFICATION KIT 19A121293G1
		----- RESISTORS -----
R705	19B209114P1	Variable, wirewound: 75 ohms ±20%, 3 w; sim to CTS Series 117.
		POWER CABLE ASSEMBLY 19C303601G1 (12 VOLT FRONT MOUNT) 19C303601G2 (12 VOLT TRUNK MOUNT)
	19B209189P1	Connector, phen: 8 contacts rated at 15 amps at 1100 Vrms; sim to Beauchaine and Sons 5401-76 (SOCKET).
	19D402438P1	Cap, connector.
	19A121444P2	Connector retaining screw.
	19A115313P1	Cap: 3 conductor, approx 9 feet long. (Used in 19C303601G1).
	19A116884P1	Cap: 3 conductor, approx 20 feet long. (Used in 19C303601G2).
		CONTROL CABLE ASSEMBLY 19C303626G1, G2 (1-FREQ) 19C303626G3, G4 (MULTI-FREQ)
		----- PLUGS -----
P1	19C303626G5	Plug, male: includes connector 19D402408P3, cap 19C303290P2 and connector retaining screw 19A121444P2.
		----- JACKS AND RECEPTACLES -----
J1	19C303626G6	Plug, female: includes connector 19D402408P1, cap 19C303290P1 and connector retaining screw 19A121444P1.
		----- MISCELLANEOUS -----
	19D402408P1	Connector, female phen: 25 contacts rated at 5 amps max.
	19D402408P3	Connector, male phen: 25 contacts rated at 5 amps max.
	19C303290P1	Cap, connector.
	19C303290P2	Cap, connector.
	7139880P11	Cap: 23 conductors. (When ordering specify length). (Used in 19C303626G1 and G2).
	7139880P8	Cap: 13 conductors. (When ordering specify length). (Used in 19C303626G3 and G4).

SYMBOL	GE PART NO.	DESCRIPTION
		<p>VEHICLE SYSTEM CABLE KIT 19A121454G1 (12 VOLT VEHICLES)</p> <p>19A121429P1 Pin: 1/2 inch long.</p> <p>19A121441G1 Plug: 13 contacts.</p> <p>19C303574P1 Cover: approx 1-13/16 x 1 x 1/32 inches.</p> <p>FUSED LEAD ASSEMBLY 19A121314G1 (19A121454G1)</p> <p>1R16P8 Fuse, cartridge, quick blowing: 5 amps at 250 v; sim to Littelfuse 312005 or Bussmann NTH-5.</p> <p>19A115776P2 Fuseholder: sim to Bussmann Type HHJ.</p> <p>19A116850P4 Cable, wire: stranded, size No. 16 AWG.</p> <p>INTERCONNECTION HARNESS ASSEMBLY 19A122458G1</p> <p>- - - - - JACKS AND RECEPTACLES - - - - -</p> <p>J505 19A122683G1 Plug, male: 13 pin contacts.</p> <p>- - - - - PLUGS - - - - -</p> <p>P101 19C303506P1 Connector, phen: 20 contacts.</p> <p>P43 19C303506P1 Connector, phen: 20 contacts.</p> <p>P703 19D402408P2 Connector, phen: 25 contacts rated at 5 amps max.</p> <p>- - - - - TERMINAL BOARDS - - - - -</p> <p>TB901 7775500P10 Phen: 4 terminals.</p> <p>19A122444P1 Channel Cover.</p> <p>ANTENNA RELAY ASSEMBLY 19B209445P1 Includes J901, K901, P103, P441, W901-W903.</p> <p>12 VOLT FUSEHOLDER 19B216021G4 (Fuses must be ordered separately)</p> <p>- - - - - FUSES - - - - -</p> <p>1R11P4 Quick blowing: 15 amps, 250 v; sim to Bussmann NON15. (transmitters).</p> <p>132-512 MHz ANTENNA 19B209568P1</p> <p>Whip assembly. 068110-001.</p> <p>Whip nut assembly. 068047-001.</p> <p>Base nut assembly. 068048-001.</p> <p>"O" Ring (LARGE). 007059-122.</p> <p>Stud assembly. 068046-001.</p> <p>RG58/U Cable, 15 feet. 068115-001.</p> <p>25 - 50 MHz ANTENNA</p> <p>7491074P1 Antenna: includes stainless steel rod approx 96-1/2 inches long; ball tip; lockwasher; No. 10-32 hex socket set screw; sim to Antenna Specialists ASPA3B3E.</p> <p>7102930P3 Adapter, antenna: approx 2-5/16 inches long. (Used with GE Dwg 7491074P1).</p> <p>4KY9A1 Loading coil: 25-33 MHz; sim to Antenna Specialists ASPA57.</p> <p>19A121577G1 Antenna hook kit.</p> <p>7134724P1 Antenna hook.</p> <p>19C307172P1 Antenna Package: Includes base and ball assembly adapter spring assembly, cable assembly, horseshoe plate, and rubber gasket.</p>

SYMBOL	GE PART NO.	DESCRIPTION
		Base and ball assembly. Newtronics 5495. Adapter spring assembly. Newtronics 3327. Cable assembly. Newtronics 183-RAO. Horseshoe plate. Newtronics 3323-3. Rubber gasket. Newtronics 3320.
		HANDSET MODEL 4EM26A10 MODEL 4EM26C10 (SEE RC-1394)
1		Self tap screw, blind head: No. 4 x 5/16. Shure Brothers 30C640C.
2		Cable clamp. Shure Brothers 53A532.
3		Shield. Shure Brothers RP19.
4		Switch. Shure Brothers RP61.
5		Case. Shure Brothers RP49. (Used in 4EM26A10).
		Case. Shure Brothers 21RP899F. (Used in 4EM26C10).
6		Adapter. Shure Brothers 65A230.
7		Magnetic controlled cartridge. Shure Brothers RP41.
8	3R77P222K	Resistor, composition: 2200 ohms $\pm 10\%$ , 1/2 w.
9		Receiver cap. (Part of item 5).
10		Washer. Shure Brothers 34A321.
11		Escutcheon. Shure Brothers 53A536A.
12		Actuator. Shure Brothers 53A556.
13		Spring. Shure Brothers 44A140.
14		Plunger bar. Shure Brothers RP82.
15		Flat head screw, socket cap: No. 4-40 x 1/4. Shure Brothers 30C557B.
16		Transmitter cap. Shure Brothers 65A197A. (Part of item 5).
17		Washer. Shure Brothers 34A309.
18		Magnetic controlled cartridge. Shure Brothers RP13.
19		Cable and plug. Shure Brothers RP48. (Used in 4EM26A10).
		Cable and plug. Shure Brothers 21RP738F. (Used in 4EM26C10).
		HOOKSWITCH ASSEMBLY 19B204867G1 (SEE RC-1394)
20	4029851P4	Cable clamp: sim to WEC Kesser 3/16-4.
21	19A121612P1	Holder and switch: thermoplastic case, contact rating 1 amp at 125 v.
22	19A121581G1	Cable: approx 8-1/2 feet long, includes five 19A121429P1 pins.
23	5483035P10	Resistor, wirewound, ceramic: 3.5 ohms $\pm 5\%$ , 5 w sim to Hamilton Hall Type HR.
24	7775500P5	Terminal board, phen: 5 terminals.
		MILITARY MICROPHONE MODEL 4EM26M10 19B209102P6 (SEE RC-1163)
1		Cable clamp. Shure Brothers 53A532.
2		Switch. Shure Brothers RP26.
3		Case (back) and mounting button: plastic. Shure Brothers RP100.
4		Switch button: red plastic. Shure Brothers RP2
5		Spring. Shure Brothers RP16.
6		Shield. Shure Brothers RP23.

SYMBOL	GE PART NO.	DESCRIPTION
7		Magnetic controlled cartridge. Shure Brothers RP13.
8		Case (front): plastic. Shure Brothers RP100.
9		Cable and plug: approx 6 feet long. Shure Brothers RP14.
		5 WATT SPEAKER 4EZ20A12 19C32030G4
LS2	19A116910P1	Permanent magnet: 5 inch, 3.2 ohms $\pm 15\%$ imp, 5 w max operating; sim to Pioneer 002009.
W3	19A121546G1	Cable assembly: approx 48 inches long, includes (2) 19A121429P1 pins.
		MECHANICAL PARTS
	19D416396P1	Speaker housing.
	19C320016P2	Mounting support.
	19A116985P1	Screw, hex head-slotted: double lead thread, with internal tooth washer, No. 13-16 x 3/4. (Secures housing to mounting bracket).
	19B219692G1	Grille.

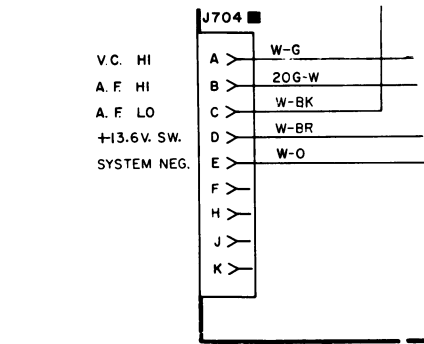


## PRODUCTION CHANGES

Changes in the equipment to improve performance or to simplify circuits are identified by a "Revision Letter", which is stamped after the model number of the unit. The revision stamped on the unit includes all previous revisions. Refer to the Parts List for descriptions of parts affected by these revisions.

REV. A - 4EC59A121, 4EC59A127  
To add MIC HI, PTT, earphone and ground to  
Tone Option Jack J704

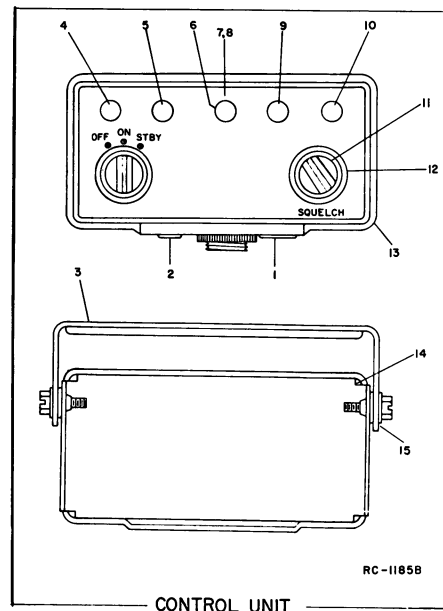
Diagram was:



REV. A - 4EC59A120, 4EC59A126

Rev. B - 4EC59A121, 4EC59A127

To incorporate new housing. Changed housing from 19B216271G3 to 19D413010P3. Changed backplate retaining screw to 19A116773P106.





## ORDERING SERVICE PARTS

Each component appearing on the schematic diagram is identified by a symbol number to simplify locating it in the parts list. Each component is listed by symbol number, followed by its description and GE Part Number.

Service parts may be obtained from Authorized GE Communication Equipment Service Stations or through any GE Radio Communication Equipment Sales Office. When ordering a part, be sure to give:

1. GE Part Number for component
2. Description of part
3. Model number of equipment
4. Revision letter stamped on unit

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These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation, operation or maintenance.

Should further information be desired, or should particular problems arise which are not covered sufficiently for the purchaser's purposes, contact the nearest Radio Communication Equipment Sales Office of the General Electric Company.

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MOBILE RADIO DEPARTMENT  
GENERAL ELECTRIC COMPANY • LYNCHBURG, VIRGINIA 24502

