

Customer_____

G. E. Req. No. _____

Customer Order No. _____

INSTRUCTIONS

for

SELECTIVE CALL SELECTOR MODEL 4EC41A1

OPTIONS 4081-4088

LBI-10179C
DF-5016

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4362



COMMUNICATION PRODUCTS DEPARTMENT
LYNCHBURG, VIRGINIA

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EQUIPMENT INDEX

<u>Option Number</u>	<u>Equipment</u>	<u>G-E Part No.</u>
4081-4088	Selector Assembly	19C300250-G1
4081-4088	Tone Detector (Reed)	5495846-*
4081-4088	Call Indicator Head	5491895-G2
4081-4088	TPL Tone Modification Kit	4033533-G1
4083-4084 4087-4088	Horn Modification Kit	4036391-G1
4081-4088	Interconnection Cable	5496847-G1
4085-4088	Split Mount Extension Cable	19B200486-G1

* Group Number determined by frequency specified (must be coordinated with Dispatcher).

INSTRUCTIONS FOR
SELECTIVE CALL SELECTOR MODEL 4EC41A1
OPTIONS 4081-4088

The Model 4EC41A1 Selector is designed for operation with General Electric Transistorized Progress Line mobile units in selective call applications. The selector, in conjunction with the TPL equipment, functions as part of a system consisting of a base station equipped with a General Electric Selective Call Dispatcher and a number of mobiles operating on the same radio frequency. The dispatcher at the base station generates two audio tones that modulate the station transmitter. The mobile unit with a selector tuned to the tone frequencies transmitted responds either to two sequential or two simultaneous tones by unmuting the mobile speaker and turning on an indicating device (or operating an external lamp or horn if provided). The base station operator can then talk with the mobile selected.

SPECIFICATIONS

Signal Input Level	50 to 200 millivolts
Input Power	12 volt battery (13.2 volts $\pm 20\%$)
Standby Current	20 ma max.
Operate Current	180 ma max.
Ambient Temperature	-30°C to +60°C

INSTALLATION

The 4EC41A1 Selector is mounted in the 5498341-P1 Option Case which is sandwiched between the front and rear units of the TPL assembly. A Call Indicator (PL-5491895-G1) is mounted under the front panel of the TPL control unit or to the underside of the Model 4EC45A10 Control Unit in rear mount installations (Options 4085-4088). The call indicator contains a call lamp and a function control switch to permit selecting an external lamp or horn if provided.

An Interconnection Cable (PL-5496847-G1) connects to the printed board of the selector by means of slip-on connectors fitting over "bead-chain" pins on the board. The cable has two plugs on the opposite end for connection to the TPL unit and the call indicator. A special extension cable (PL-19B200486-G1) is required for split-mount applications.

Installation Diagram RC-736 provides instructions for field installation of the selector and its associated equipment. Instructions are also provided on RC-736 for installing the TPL Modification Kit A-4033533-G1. RC-737 shows the application of the selector

and call indicator to TPL Split-Mount installations.

No adjustments are required on the selector unit. The input signal from the TPL receiver is too strong when the selector is used in wide band applications; therefore, a resistor (R1714) is provided in the input circuit to limit the signal. A jumper is connected across the resistor in narrow band applications.

OPERATION

1. The base station operator initiates a radio frequency signal modulated by two audio tones. When simultaneous signaling is used, the two tones are transmitted for one second; when signaling is used, each tone is transmitted for one second for a total signaling period of two seconds.
2. The mobile unit with its selector tuned to these tones responds by unmuting the mobile speaker and turning on the call indicator lamp. If the call indicator switch is in the HORN position, and the external horn option is used, the horn is energized for approximately 4 seconds. If the external lamp option is used, the external lamp will be turned on when the switch is in the LAMP position. The call indicator lamp (an external lamp, if used) will remain on until the mobile operator removes the microphone from the hang-up bracket and presses the push-to-talk button.
3. Upon completion of the call, the mobile operator replaces the microphone on the hang-up bracket, muting the speaker and preparing the mobile unit for the next call.

CIRCUIT DESCRIPTION

Audio from the mobile receiver discriminator is passed through J1701 to the audio amplifier circuit in the selector. This circuit consists of Q1701, Q1702 and Q1703. The amplifier audio is then applied across the four electromechanical (reed) detectors: FL1701, FL1702, FL1703 and FL1704. The two reeds that are resonant to the two tone signals present in the audio signal will respond and close their contacts. Two of the reeds (FL1701 and FL1702) may be used for individual call and the other two (FL1703 and FL1704) for group call. The contacts of FL1701 and FL1702 are tied together and thus select the associated integrating circuit. A DC voltage is accumulated across this circuit which triggers the DC amplifier (Q1704 and Q1705). The collector of Q1705 is connected to the keyed-battery voltage in the TPL transmitter through J1707. This keyed voltage is also connected across relay K1701 which locks up when Q1701 conducts due to the DC voltage from the integrator circuit.

In the event group call tones are received, reeds FL1704 and FL1703 respond and select the associated integrating circuit. The resulting DC voltage is amplified and operates K1701 in the same manner as the individual call tones.

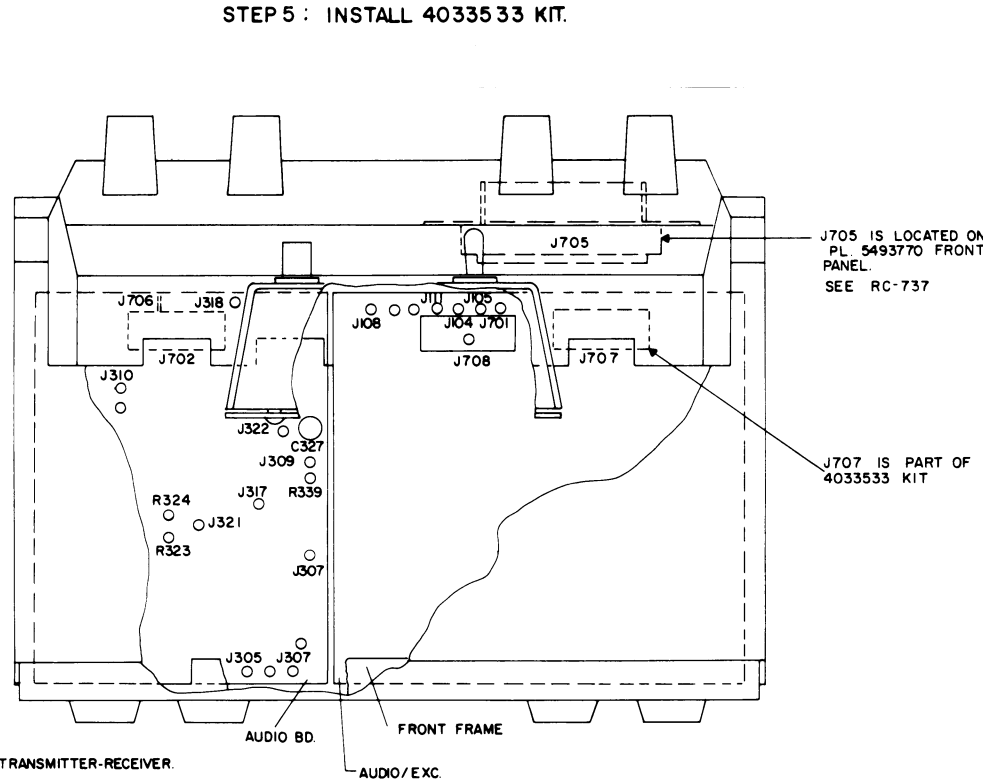
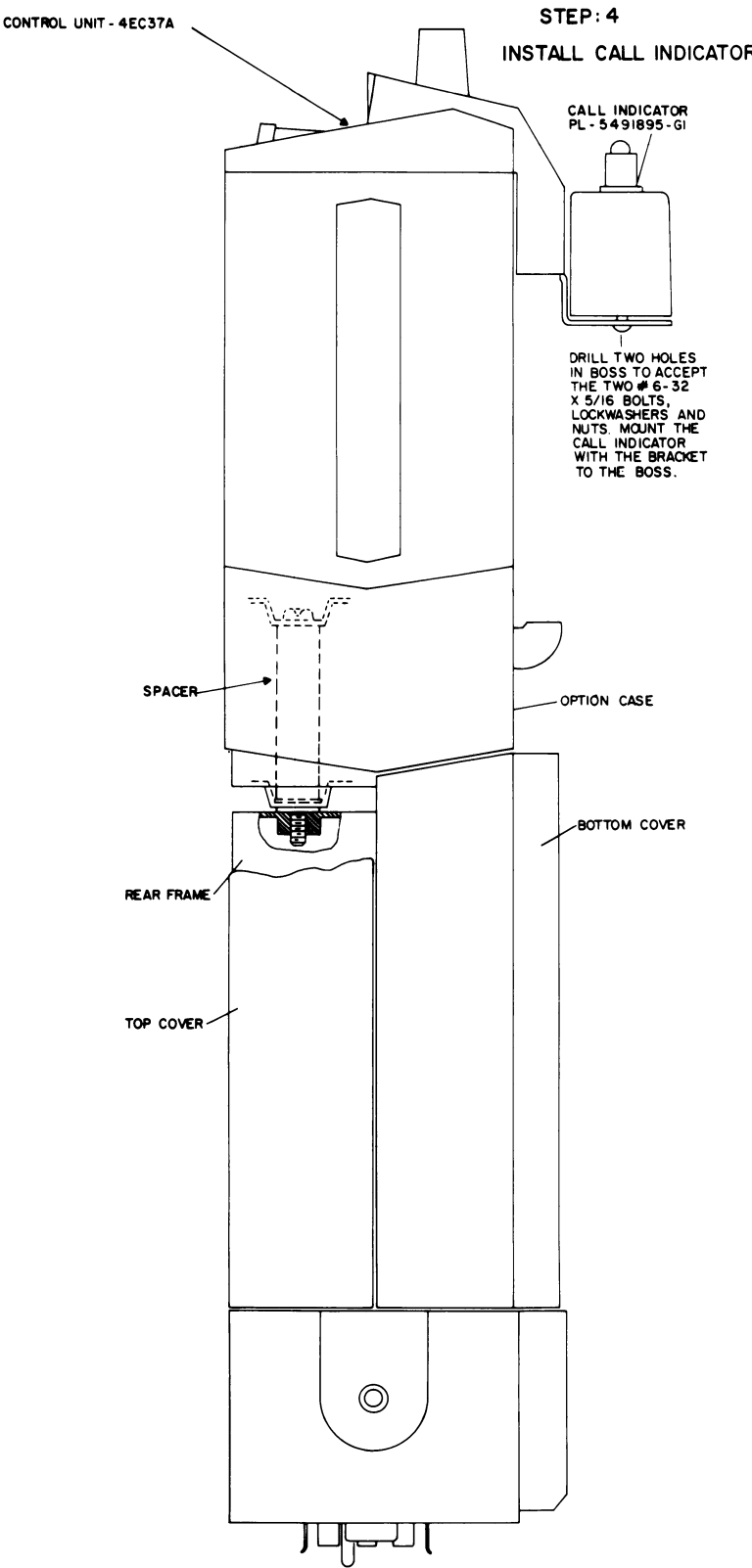
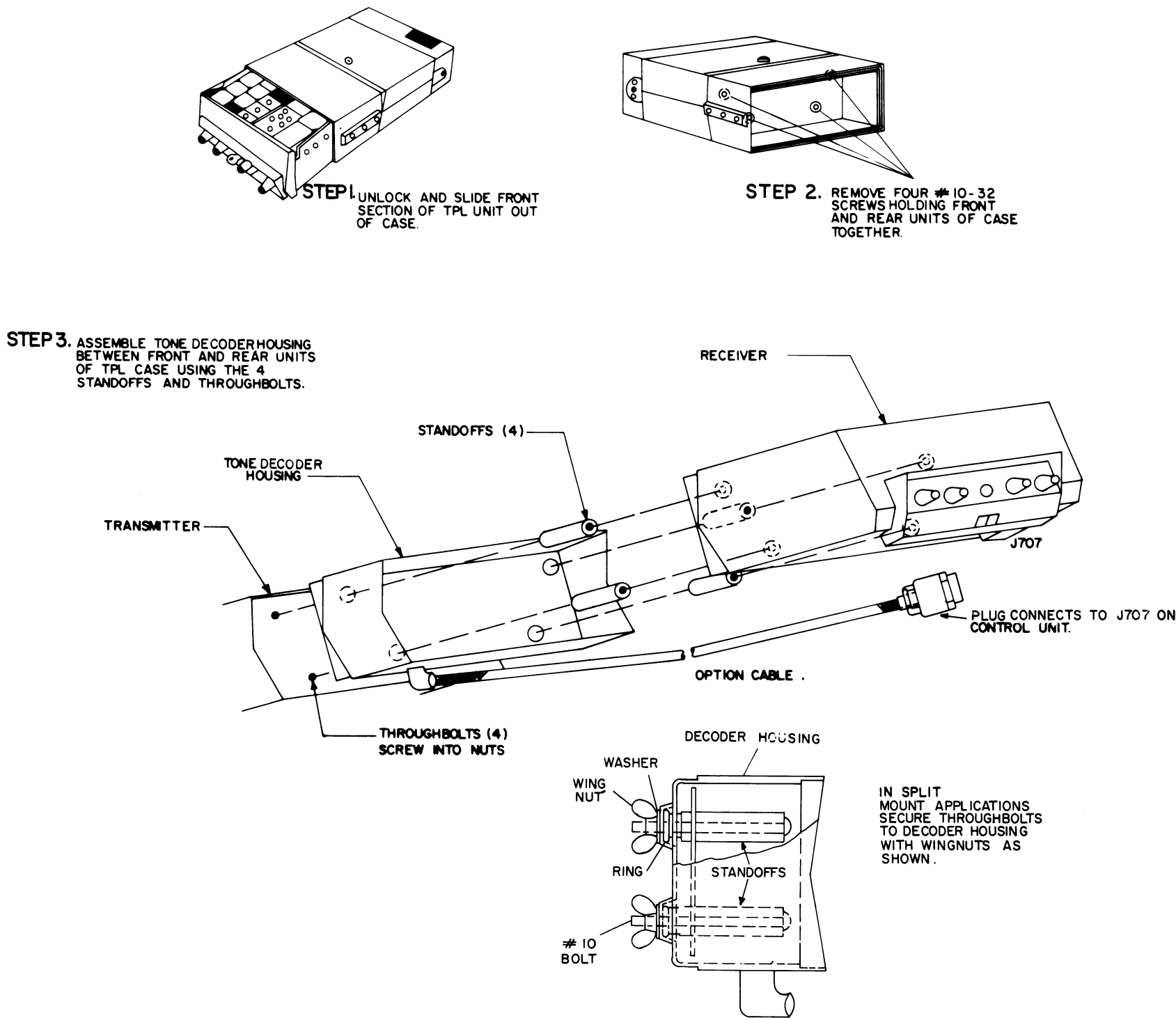
If the horn option is used, relay K1702 initially picks up through C1709 which is normally discharged by R1722. When K1702 picks up, C1710 (which has been charged to the battery voltage through K1702-5 and 6) is discharged through relay K1702 and, after 4 seconds, the relay drops out. The residual current through R1722 is insufficient to hold the relay closed. Contacts 9 and 10 of K1702 close the external circuit which energizes the horn.

All other functions remain locked in until the microphone is lifted off the hang-up bracket and the push-to-talk switch is operated. This unlocks K1701. All circuits return to normal. However, the speaker remains unmuted since the microphone is off hook, and mutes only when the microphone is returned to the hang-up bracket.

The normal arrangement described above permits individual call and group call assignments only. Provision is made for easily altering the circuit to provide individual call, group call and all call. However, this arrangement limits the number of group call assignments to 9, and individual call assignments to 9 per group. This circuit alteration is accomplished by moving P1701 from J1713 to J1714.

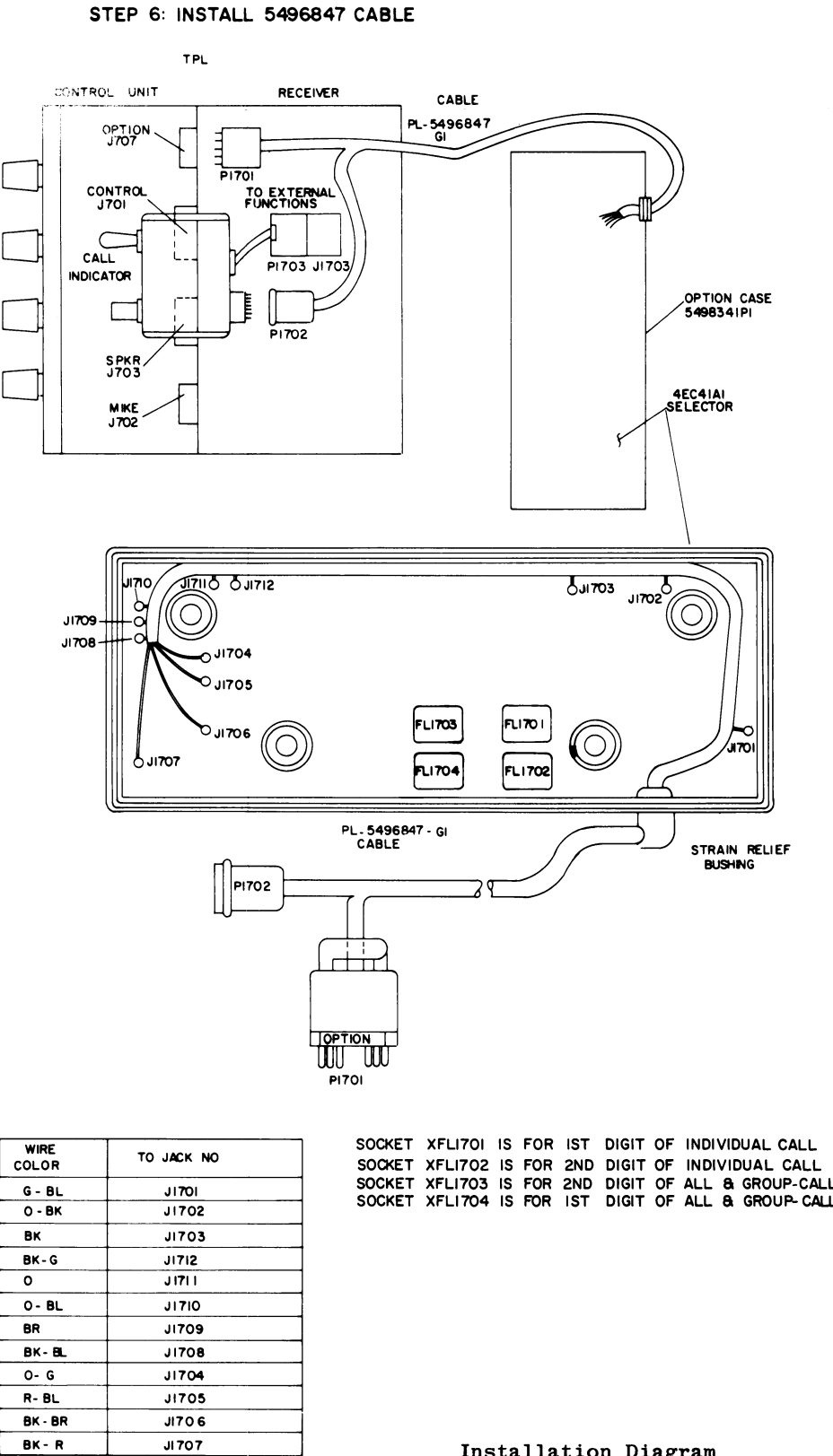
When using the arrangement outlined above, FL1701 responds first on individual calls and then triggers FL1702. When group calls are received, FL1704 responds first, then FL1703. During all call, FL1704 responds and then FL1702.

INSTALLATION OF TONE DECODER HOUSING IN TPL COMBINATION



1. INSTALL A-4033533 KIT AS OUTLINED IN TABLE.
2. IF R339 IS PRESENT ON 4EA10A10 CHANGE TO 1000 OHM RESISTOR PROVIDED IN KIT.
3. REMOVE WIRE BETWEEN J702-6 AND J703-6 IN CONTROL IF PRESENT.

INSTALLATION OF A-4033533 MODIFICATION KIT				
OPERATION	WIRED FROM	WIRE DESIGN	PLUG OR JACK	ON UNIT
CONNECT P714	J707-1	F24 O-R	TO J706	CONTROL
CONNECT P715	J707-2	F24 BK-BL	TO J318	
CONNECT P725		F24 O-G	TO J322	AUDIO BD
CONNECT P726		F24 O-BL	TO J321	
CONNECT P717 P718	J707-4	F24 BR-G	TO J104 & J108	AUDIO/EXC
DISCONNECT P707		F24 BL	FROM J305	
CONNECT P719	J707-5	F24 BR-BL	TO J305	AUDIO BD
CONNECT P720	J707-6	F24 R-G	TO P707	CONTROL
DISCONNECT P705		F24 O-BK	FROM J307	
CONNECT P721	J707-7	F24 O-BK	TO J307	AUDIO BD
CONNECT P705		F24 O-BK	TO P721	CONTROL
CONNECT P722	J707-8	F24 O	TO J708	CONTROL
DISCONNECT P702		RG 174/U	FROM J105	
CONNECT P723	J707-9	F24 BK	TO J105	AUDIO EXC
CONNECT P702		RG 174/U	TO P723	CONTROL
DISCONNECT P704		BK-BR	FROM J310	CONTROL
CONNECT P724	J707-10	BK-BR	TO J310	AUDIO BOARD
CONNECT P704		BK-BR	TO P724	AUDIO BOARD

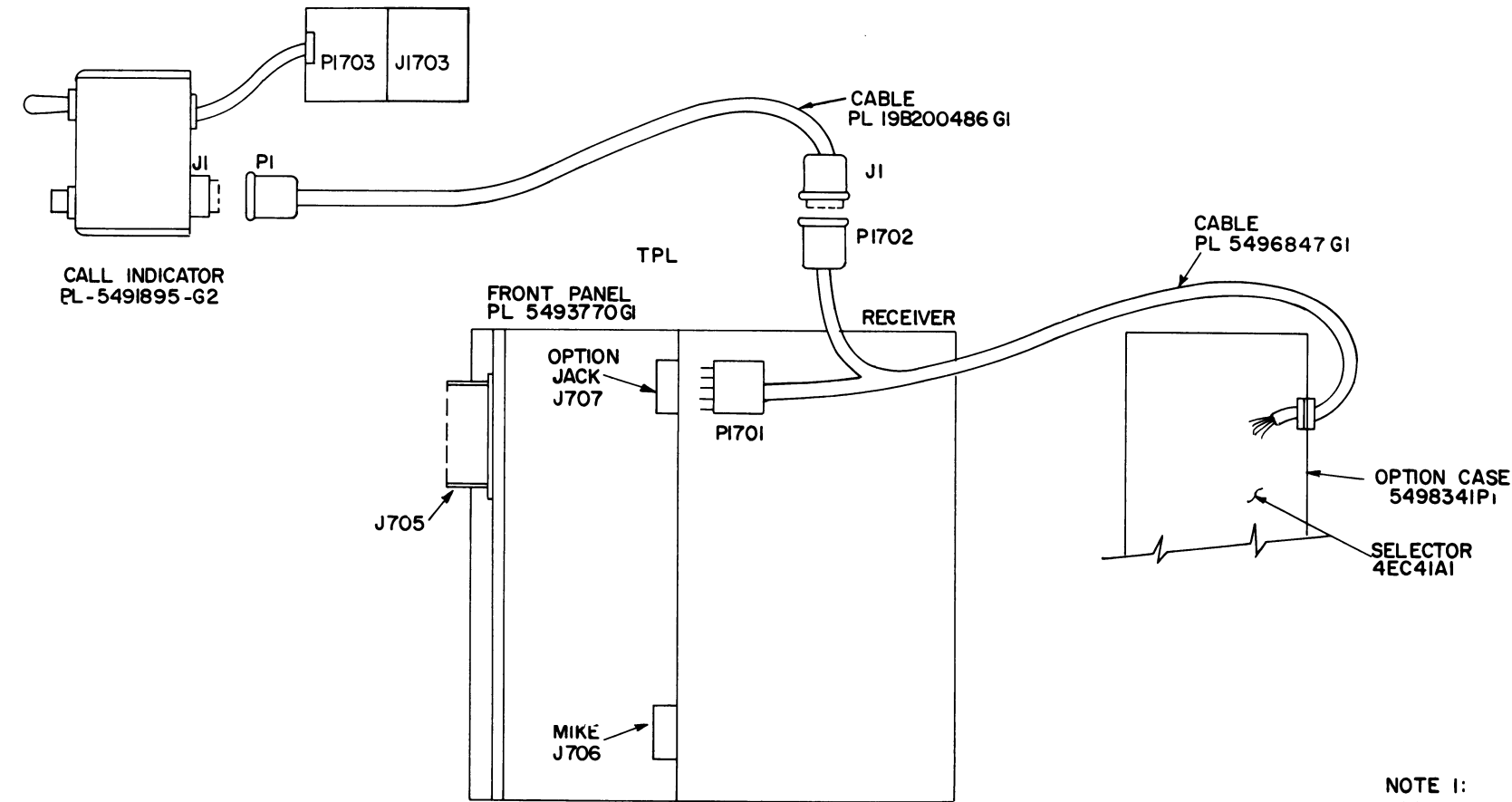


Installation Diagram

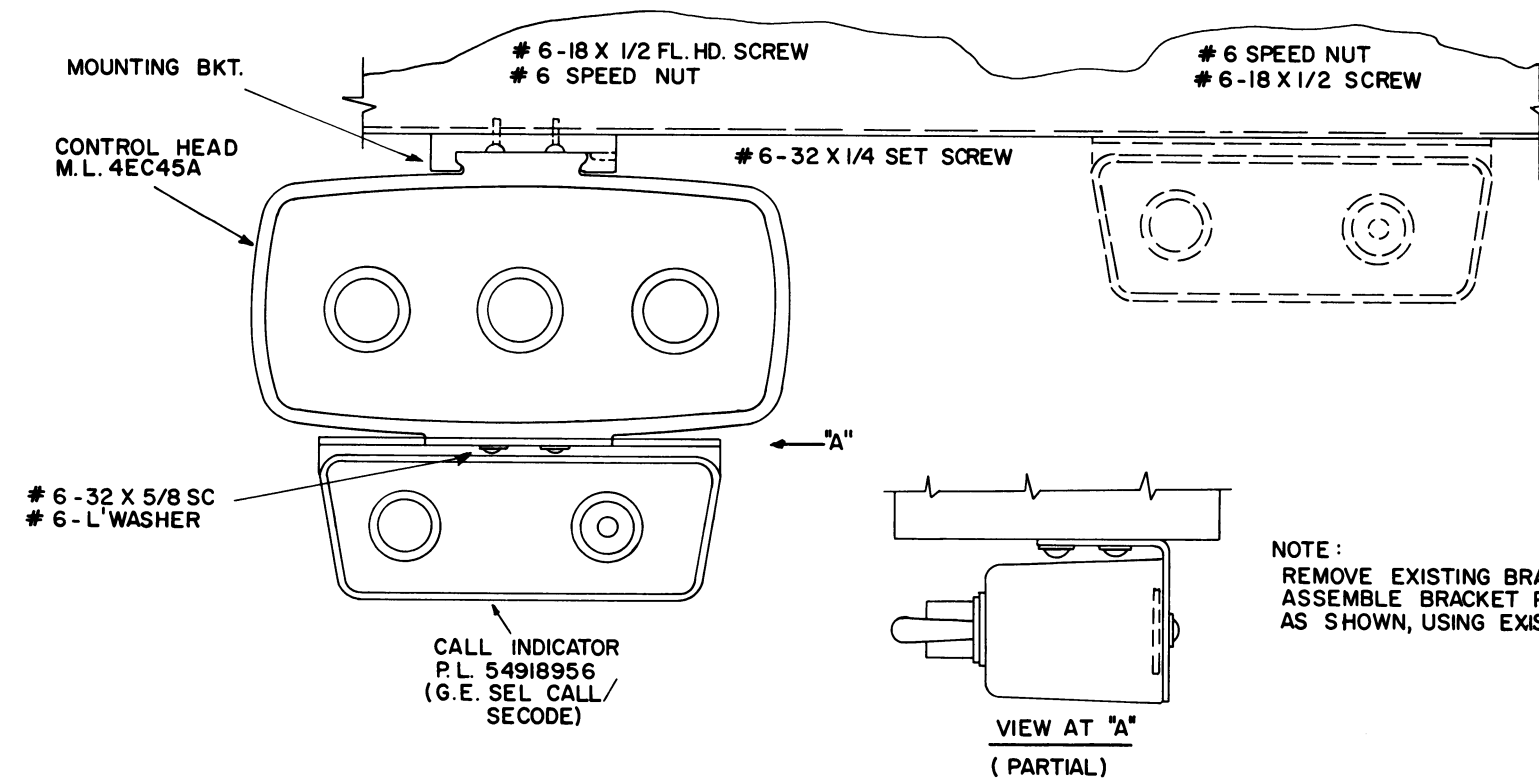
MODEL 4EC41A1 SELECTOR IN TPL FRONT MOUNT INSTALLATIONS

OPTIONS 4081 - 4084

(RC-736D)



NOTE 1:
HARDWARE AND BRACKET FOR MOUNTING
CALL INDICATOR (PL-5491895) IS FURNISHED
WITH KIT. INDICATOR MAY BE MOUNTED
TO 4EC45A CONTROL UNIT OR TO CAR
AS SHOWN.



NOTE:
REMOVE EXISTING BRACKET FROM CALL INDICATOR
ASSEMBLY. BRACKET PACKAGE WITH CALL INDICATOR
AS SHOWN, USING EXISTING HARDWARE.

Installation Diagram

MODEL 4EC41A1 SELECTOR IN
TPL SPLIT MOUNT INSTALLATIONS
OPTIONS 4085 - 4088

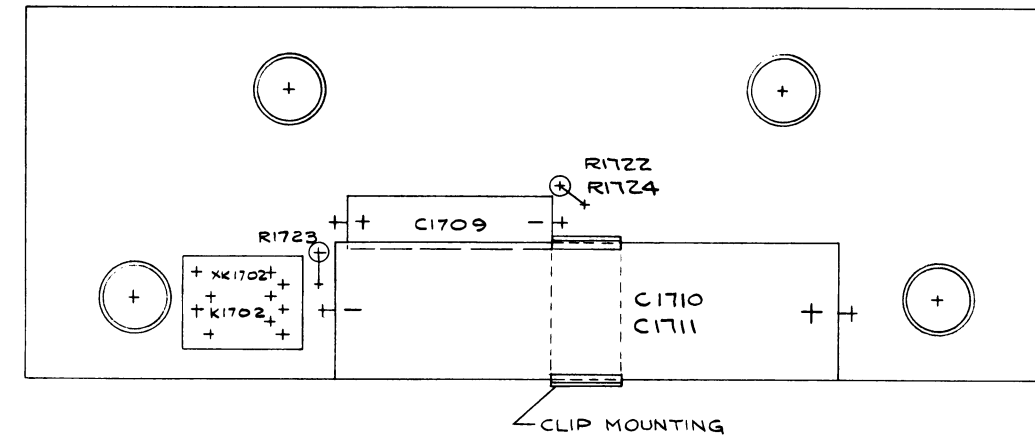
(RC-737C)

PARTS LIST

CABLE ASSEMBLY
PL-19B200486-G1

SYMBOL	G-E PART NO.	DESCRIPTION
J1	7768887-P16	----- JACKS AND RECEPTACLES ----- 7 pin min, mica-filled phenolic, without mtg saddle; sim to Elco 241 PH-3702.
P1	5491563-P1	----- PLUGS ----- 7 pin: Phenolic; sim to Methode Mfg M850.
	7160478-P6	----- MISCELLANEOUS ----- Cable: 23 ft of 7-conductor; sim to Birnbach 798.

*COMPONENTS ADDED, DELETED OR CHANGED BY PRODUCTION CHANGES.



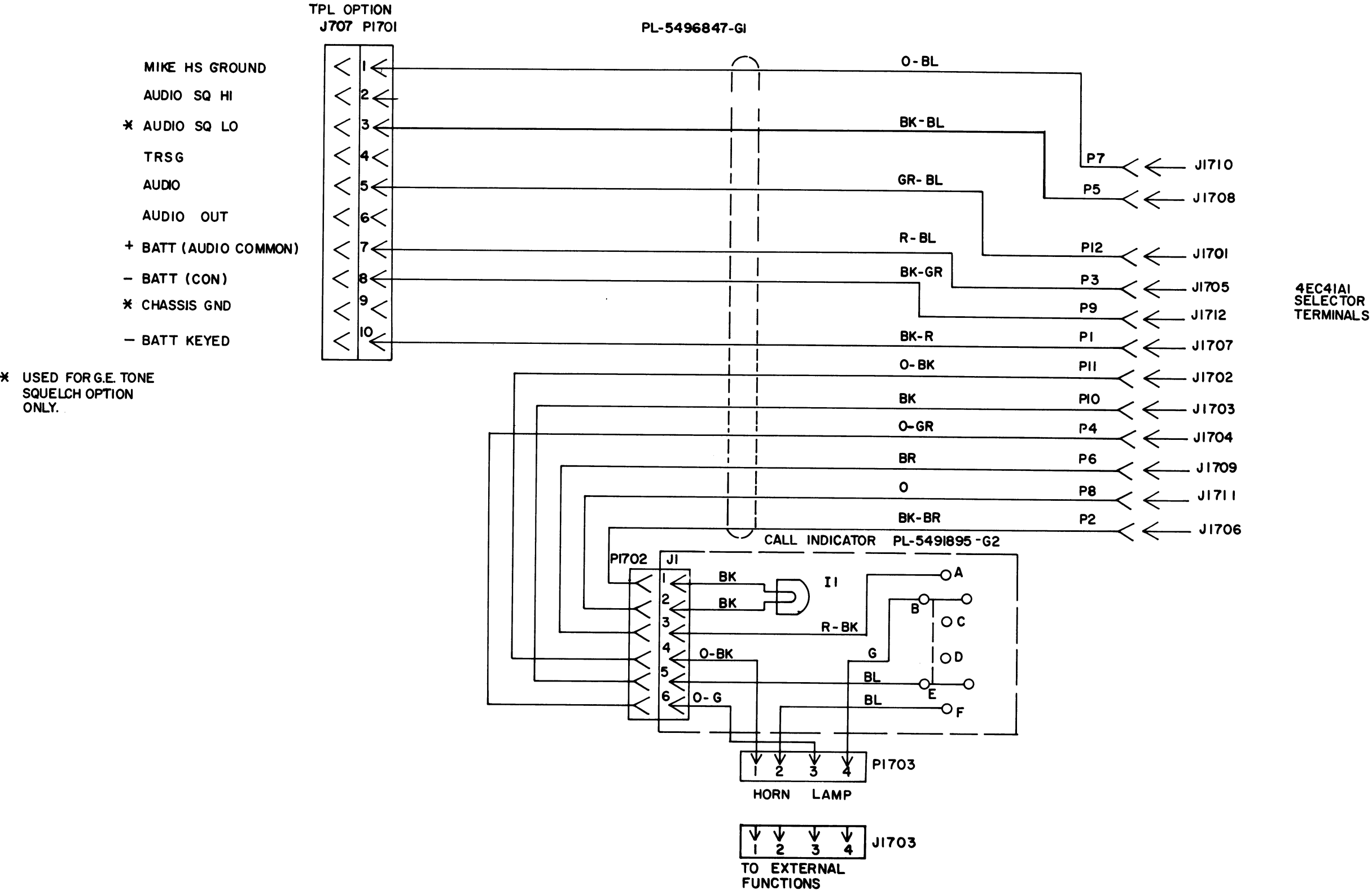
1. MOUNT CLIP IN BOARD IN POSITION AS SHOWN.
2. INSERT R1722, R1723, C1709 & C1710 FROM HORN MODIFICATION KIT PL A 4036391 G1 INTO BOARD AS SHOWN.
3. SOLDER ALL ELECTRICAL CONNECTIONS.
4. INSERT RELAY K1702 FROM KIT INTO SOCKET XK1702. FASTEN IN PLACE WITH RETAINING SPRING PT1 OF MODIFICATION KIT A4036391

PARTS LIST

HORN MODIFICATION KIT
PL-4036391-G1

SYMBOL	G-E PART NO.	DESCRIPTION
		CAPACITORS
C1709	7489483-P20	Electrolytic tubular: 200 uf +100% -10%, 15 VDCW; Sim to Sprague 30D174A1.
C1710	5493132-P2	Electrolytic tubular:2000 uf +60% -0%, 15 VDCW.
C1711	5493132-P1	Electrolytic tubular: 1000 uf +250% -15%, 35 VDCW Sim to G-E 43F2066AA1.
		RELAYS
K1702	5491595-P12	1.5 w at 26°C, 520 ohms ±15% at 25°C, 2 form C contacts; Sim to Allied Control T154-C-C.
		RESISTORS
R1722	3R77-P513K	Fixed composition: 51,000 ohms ±10%, 1/2 w.
R1723 and R1724	3R77-P271K	Fixed composition: 270 ohms ±10%, 1/2 w.

*COMPONENTS ADDED, DELETED OR CHANGED BY PRODUCTION CHANGES.



Interconnection Diagram
MODEL 4EC41A1
SELECTOR TO TPL
(RC-764C)

PARTS LIST

CALL INDICATOR HEAD
PL-5491895-G1 and-G2

SYMBOL	G-E PART NO.	DESCRIPTION
I1	5491892-P1	----- INDICATING DEVICES ----- Indicator, incandescent: 24 v, red lens, 2 wire leads; sim to Industrial Devices Series 1000.
J1		----- JACKS AND RECEPTACLES ----- (Used in PL-4034030-G1 and G2 only).
J1703		(Used in PL-19B201254-G1 only).
P1703		----- PLUGS ----- (Used in PL-19B201254-G1 only).
S1	5491875-P1	----- SWITCHES ----- Toggle: DPDT, 3 pos center off, 10 amps at 250 vac and 15 amps at 125 vac or 3/4 hp at 115 to 230 vac; sim to Cutler Hammer 7563K5.
		----- SUBASSEMBLIES ----- BRACKET ASSEMBLY PL-4034030-G1 and G2
J1	5491563-P1	----- JACKS AND RECEPTACLES ----- 7 pin, phenolic; sim to Methode Mfg M850. (Pin numbers molded counter-clockwise).
	5491891-P1	----- MISCELLANEOUS ----- Bracket: Steel. (Used in G1 only).
	5491891-P2	Bracket: Steel. (Used in G2 only).
		CABLE ASSEMBLY PL-19B201254-G1
J1703	5492497-P24	----- JACKS AND RECEPTACLES ----- Connector: 4 way; sim to Amp 480134-1.
P1703	5492497-P14	----- PLUGS ----- Connector: 4 way; sim to Amp 480135-1.
	5492497-P1	----- MISCELLANEOUS ----- Contact: Brass; sim to Amp 42485-1.

*COMPONENTS ADDED, DELETED OR CHANGED BY PRODUCTION CHANGES.

TYPICAL VOLTAGE AND RESISTANCE READINGS

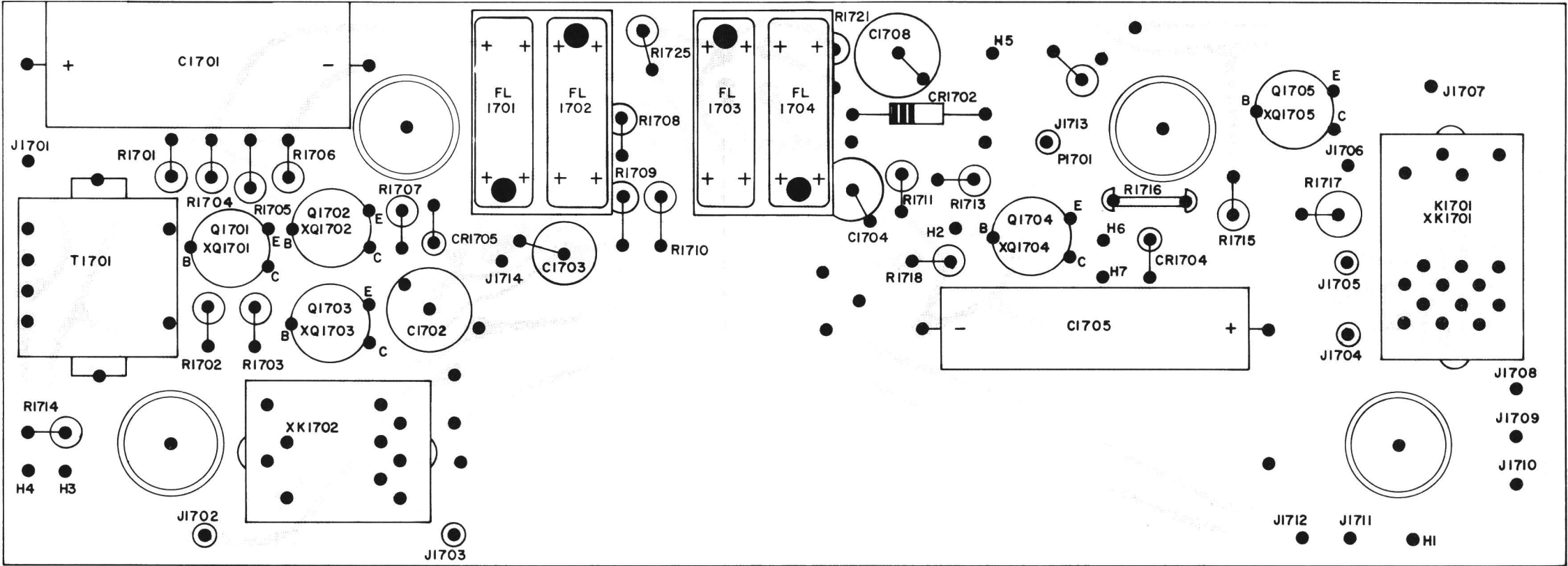
TABLE 1: VOLTAGE

CONDITIONS OF MEASUREMENTS: No Tone; No Carrier; FM Noise at Decoder Input.	Carrier with Pulsed Tone; Reset Relay Each Time it Locks In.
Q1701-E: 0.75 volts B: 0.75 volts C: 4.4 volts	These readings vary slightly when tone is received.
Q1702-E: 0.77 volts B: 0.75 volts C: 4.4 volts	These readings vary slightly when tone is received.
Q1703-E: 6.1 volts B: 4.4 volts C: 9.4 volts	4.9 volts, increases to 6.4 v. with tone. 4.6 volts, decreases to 4.5 v. with tone. 9.4 volts, decreases slightly with tone.
Q1704-E: 8.8 volts B: 8.6 volts C: 0 volts	8.8 volts, decreases to 8.0 v. with tone. 8.6 volts, decreases to 7.7 v. with tone. 0 volts, increases to 8.0 v. with tone.
Q1705-E: 0 volts B: 0 volts C: 13.6 volts	0 volts, increases to 8.0 v. with tone; locks in at 6.0 volts. 0 volts, increases to 8.3 v. with tone; drops back to 0 volts. 13.6 volts, drops to 12.2 volts when re- lay locks in.

TABLE 2: RESISTANCE

CONDITIONS OF MEASUREMENTS: Resistance Readings Taken with Transistors Removed and with Unit Disconnected From TPL. All Readings Taken with 20,000 Ohms-Per-Volt Meter. All Readings Taken from COMMON (+).		
Q1701-E: 11.2K ohms B: 3300 ohms C: 20K ohms	Q1703-E: 1800 ohms B: 20K ohms C: 5200 ohms	Q1705-E: 90 ohms B: 1500 ohms C: Infinite.
Q1702-E: 2K ohms B: 11.2K ohms C: 20K ohms	Q1704-E: * B: 36K ohms C: 1500 ohms	

* This Reading Varies Depending On
Ohmmeter Battery Condition.



(19C300872, Rev. 2)
(19C300233, Rev. 2)

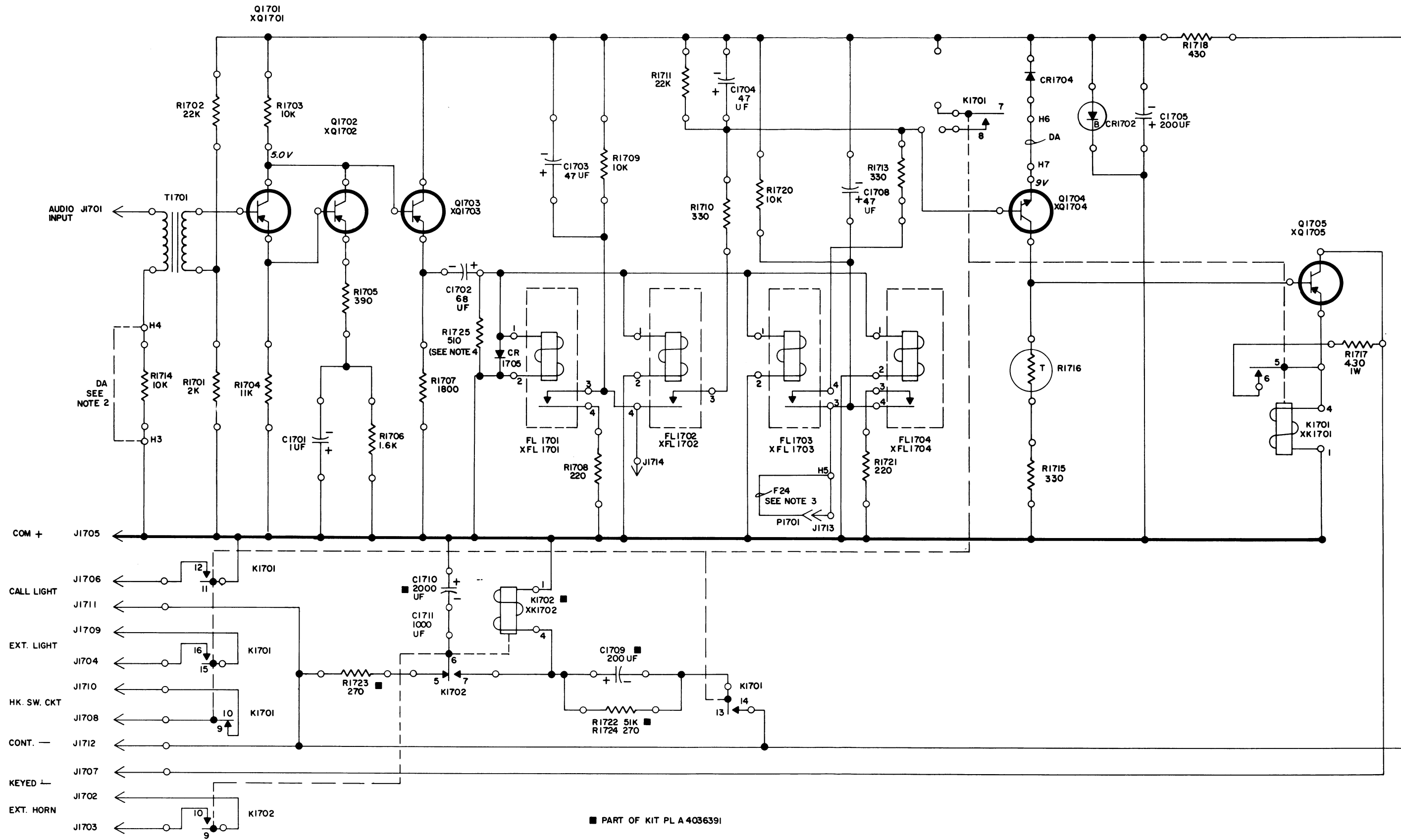
Denotes Solder Side

SEE WIRING DIAGRAM FOR THE FOLLOWING CONNECTIONS	
FROM	TO
H6	H7
H3	H4
H5	LET HANG

Service Outline

TONE SELECTOR
MODEL 4EC41A1

(RC-765B)



NOTES:

1. ALL CIRCUIT PRINTED WIRING EXCEPT AS SHOWN.
2. OMIT THIS JUMPER FOR WIDE BAND APPLICATIONS.
3. FOR BOTH ALL CALL & GROUP CALL MOVE P1701 FROM J1713 TO J1714.
4. CLIP OUT R1725 IF ALL FOUR DETECTORS ARE USED.

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 PICO FARADS (EQUAL TO MICROMICROFARADS) UNLESS FOLLOWED BY UF= MICROFARADS. INDUCTANCE VALUES IN MICROHENRYS UNLESS FOLLOWED BY MH= MILLIHENRYS OR H=HENRYS.

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	
MODEL NO	REV LETTER
4EC41A1	E

Wiring Diagram

TONE SELECTOR
MODEL 4EC41A1; REV. E

(D-5499589, Rev. 9)

PARTS LIST		
SELECTIVE CALL SELECTOR MODEL 4EC41A1 PL-19C300250-G2 REV. E		
SYMBOL	G-E PART NO.	DESCRIPTION
P1701 and P1702		----- PLUGS ----- (Used in PL-5496847-G1 only). SELECTOR PL-19C300232-G1
C1701	7491930-P13	Mylar®, tubular: 1 µf ±20%, 100 VDCW; sim to Good-A11 663-UW.
C1702*	5496267-P11	Fixed tantalum: Dry solid, 68 µf ±20%, 15 VDCW; sim to Sprague 150D68X0015R2. In Models of Rev A or earlier: Electrolytic tubular: Vertical mount, 100 µf +100% -10%, 15 VDCW; sim to Sprague 30D172A1.
C1703*	5496267-P15	Fixed tantalum: Dry solid, 47 µf ±20%, 20 VDCW; sim to Sprague 150D476X0020R2. In Models of Rev A or earlier: Electrolytic tubular: 10 µf +100% -10%, 15 VDCW; sim to Sprague 30D165A1.
C1704	5496267-P15	Fixed tantalum: Dry solid, 47 µf ±20%, 20 VDCW; sim to Sprague 150D476X0020R2.
C1705*	7489483-P20	Electrolytic tubular: 200 µf +100% -10%, 15 VDCW; sim to Sprague 30D174A1. (Added by Rev A).
C1706* and C1707*	5495670-P10	Electrolytic tubular: Vertical mount, 100 µf +100% -10%, 15 VDCW; sim to Sprague 30D172A1. (Deleted by Rev A).
C1708*	5496267-P15	Fixed tantalum: Dry solid, 47 µf ±20%, 20 VDCW; sim to Sprague 150D476X0020R2. In Models of Rev A or earlier: Electrolytic tubular: Vertical mount, 10 µf +100% -10%, 15 VDCW; sim to Sprague 30D165A1. In Models earlier than Rev A: Electrolytic tubular: 10 µf +100% -10%, 15 VDCW; sim to Sprague 30D165A1.
C1709 thru C1711	7489483-P5	(Used in PL-4036391-G1 only).
CRI1701*	5491705-P2	----- RECTIFIERS ----- Silicon. (Deleted by Rev A).
CRI1702	4036392-P2	Silicon, Zener.
CRI1703*	5491705-P2	Silicon. (Deleted by Rev A).
CRI1704	5491705-P2	Silicon.
CRI1705*	5491705-P2	Silicon. (Added by Rev A).
FL1701 thru FL1704		----- REEDS ----- TONE DETECTOR PL-19C300580 Electromechanical resonant subassembly. Group No. determined by multiplying the frequency marked on the can x 10. Example: 517.5 x 10 equals Group No. 5175. (Must be coordinated with Dispatcher). 517.5 cps PL-19C300580-G5175 532.5 cps PL-19C300580-G5325 547.5 cps PL-19C300580-G5475 562.5 cps PL-19C300580-G5625 577.5 cps PL-19C300580-G5775 592.5 cps PL-19C300580-G5925 607.5 cps PL-19C300580-G6075 622.5 cps PL-19C300580-G6225 637.5 cps PL-19C300580-G6375 652.5 cps PL-19C300580-G6525 667.5 cps PL-19C300580-G6675 682.5 cps PL-19C300580-G6825 697.5 cps PL-19C300580-G6975 712.5 cps PL-19C300580-G7125 727.5 cps PL-19C300580-G7275 742.5 cps PL-19C300580-G7425 757.5 cps PL-19C300580-G7575 772.5 cps PL-19C300580-G7725 787.5 cps PL-19C300580-G7875

*COMPONENTS ADDED, DELETED OR CHANGED BY PRODUCTION CHANGES.

SYMBOL	G-E PART NO	DESCRIPTION
		----- REEDS(Cont'd) ----- 802.5 cps PL-19C300580-G8025 817.5 cps PL-19C300580-G8175 832.5 cps PL-19C300580-G8325 847.5 cps PL-19C300580-G8475 862.5 cps PL-19C300580-G8625 877.5 cps PL-19C300580-G8775 892.5 cps PL-19C300580-G8925 907.5 cps PL-19C300580-G9075 922.5 cps PL-19C300580-G9225 937.5 cps PL-19C300580-G9375 952.5 cps PL-19C300580-G9525 967.5 cps PL-19C300580-G9675
J1701 thru J1712	4033513-P4	----- JACKS AND RECEPTACLES ----- Pin, contact: Brass, cad. plated; sim to Bead Chain L93-3.
J1713* and J1714*	4033513-P4	Pin, contact: Brass, cad. plated; sim to Bead Chain L93-3. (Added by Rev A).
K1701	5491595-P18	----- RELAYS ----- 1.5 w at 26°C, 90 ohms ±15% at 25°C, 5 form A and 1 form B contacts; sim to Allied Control T154-AAA-AAA. (Used in PL-4036391-G1 only).
K1702		----- PLUGS -----
P1701*	4029840-P1	Terminal: Taper pin connector; sim to Amp 41854 or Kent 123946. (Added by Rev A).
Q1701 thru Q1703	19B200061-P4	----- TRANSISTORS ----- Germanium, PNP.
Q1704	5492639-P2	Germanium, NPN.
Q1705	4037145-P2	Germanium, PNP.
R1701	3R77-P202J	----- RESISTORS ----- Fixed composition: 2000 ohms ±5%, 1/2 w.
R1702	3R77-P223J	Fixed composition: 22,000 ohms ±5%, 1/2 w.
R1703	3R77-P103J	Fixed composition: 10,000 ohms ±5%, 1/2 w.
R1704	3R77-P113J	Fixed composition: 11,000 ohms ±5%, 1/2 w.
R1705	3R77-P391J	Fixed composition: 390 ohms ±5%, 1/2 w.
R1706	3R77-P162J	Fixed composition: 1600 ohms ±5%, 1/2 w.
R1707*	3R77-P182J	Fixed composition: 1800 ohms ±5%, 1/2 w. In Models earlier than Rev A: Fixed composition: 1000 ohms ±5%, 1/2 w.
R1708*	3R77-P102J	Fixed composition: 220 ohms ±10%, 1/2 w. In Models earlier than Rev A: Fixed composition: 430 ohms ±10%, 1/2 w.
R1709	3R77-P103K	Fixed composition: 10,000 ohms ±10%, 1/2 w.
R1710*	3R77-P331J	Fixed composition: 330 ohms ±5%, 1/2 w. In Models earlier than Rev A: Fixed composition: 1000 ohms ±5%, 1/2 w.
R1711	3R77-P223J	Fixed composition: 22,000 ohms ±5%, 1/2 w.
R1712*	3R77-P221K	Fixed composition: 220 ohms ±10%, 1/2 w. (Deleted by Rev A).
R1713*	3R77-P331J	Fixed composition: 330 ohms ±5%, 1/2 w. In Models earlier than Rev A: Fixed composition: 33,000 ohms ±5%, 1/2 w.
R1714	3R77-P103K	Fixed composition: 10,000 ohms ±10%, 1/2 w.
R1715*	3R77-P331J	Fixed composition: 330 ohms ±5%, 1/2 w. In Models earlier than Rev A: Fixed composition: 2000 ohms ±5%, 1/2 w.
R1716	5490828-P21	Thermistor, rod: 1250 ohms ±10% at 25°C, temp coef 3000 ±5%; sim to Globar 492H-11.
R1717*	3R78-P431J	Fixed composition: 430 ohms ±5%, 1 w. In Rev. C or earlier: Fixed composition: 91 ohms ±10%, 1 w.
R1718	3R77-P431J	Fixed composition: 430 ohms ±5%, 1/2 w.
R1720*	3R77-P103J	Fixed composition: 10,000 ohms ±5%, 1/2 w. In Models earlier than Rev A: Fixed composition: 7500 ohms ±5%, 1/2 w.
R1721*	3R77-P221J	Fixed composition: 220 ohms ±5%, 1/2 w. In Models earlier than Rev A: Fixed composition: 430 ohms ±5%, 1/2 w.

SYMBOL	G-E PART NO	DESCRIPTION
R1722 thru R1724		----- RESISTORS(Cont'd) ----- (Used in PL-4036391-G1 only).
R1725*	3R77-P511J	Fixed composition: 510 ohms ±5%, 1/2 w. (Added by Rev A).
T1701	5490525-P2	----- TRANSFORMERS ----- Audio: Pri: 35,000 ohms ±10% Sec 1: 2000 ohms ±3% Sec 2: 2000 ohms ±3%.
XFL1701* thru XFL1704*	4035441-G1	----- SOCKETS ----- Reed socket asm. Includes 4 contacts, sub-mini. Deleted by Rev. E.
XK1701	5491595-P7	Relay: Nylon, 10 contacts, for printed wiring board; sim to Allied Control 30054-4.
XK1702	5491595-P6	Relay: Nylon, 10 contacts, for printed wiring board; sim to Allied Control 30054-3.
XQ1701 thru XQ1705	5490277-P2	Transistor: 4-contacts, low-loss mica-filled phenolic; sim to Elco 3305.
		----- SUBASSEMBLIES ----- CABLE ASSEMBLY PL-5496847-G1
P1701	5495345-P11	----- PLUGS ----- 10 male contacts, phenolic; sim to Component Mfg 6601-M10.
P1702	7768887-P17	7 pin min, mica-filled phenolic, without mtg saddle and center shield; sim to Elco 241 PH-3702.
	4029840-P1	----- MISCELLANEOUS ----- Terminal: Taper pin connector; sim to Amp 41854 or Kent 123946.

PRODUCTION CHANGES

(Refer to Parts List for description of parts affected by these revisions)

REV. A To make units compatible with revised coding system and to make circuit suitable for allowing greater tolerance in reed characteristics.
Removed C1706, C1707, CRI1701, R1712, CRI1703.
Changed value of R1720, R1713, R1707, R1708, R1710, R1715, R1721, C1708.
Removed connection between contact of FL1703 and R1721.
Added connection between FL1703 and R1713.
Added connection between H5 and P1701.
Added J1713, J1714, P1701, H5, R1725, CRI1705.
Note 3 added to Wiring Diagram: For both A11-Call and Group-Call, move P1701 from J1713 to J1714.
Note 4 added to Wiring Diagram: Clip out R1725 if all four detectors are used.

REV. B To allow Selector to respond to either simultaneous or sequential tones.
Changed value of C1702, C1703, C1708.

REV. C To apply muting voltage to proper point on receive audio assembly. Changed termination of black-blue wire on Option Plug P1701 from pin 2 to pin 3.

REV. D To provide consistent resetability when used in a system including Microphone Model 4EM18D10.
Changed Value of R1717.

REV. E To incorporate improved reed. 19C300016 vertical reeds replaced by 19C300580. Reed sockets XFL1701-1704 were replaced by two printed wiring adapter boards. The sketch below shows the changes made to the selector board. R1725 must be present if two reeds are used. Clip out R1725 if all four reeds are used.