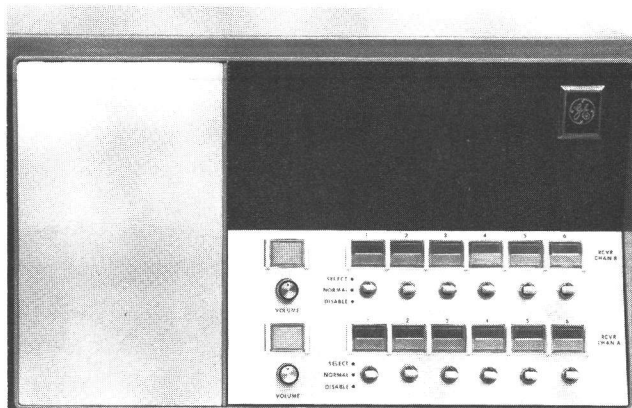


MAINTENANCE MANUAL

VOTING CONTROL PANEL MODELS 4EC76A27 & 4EC76A28
(OPTIONS 5246 thru 5255)



SPECIFICATIONS *

Used with	Receiver Voting Systems
Model Numbers	
4EC76A27	Controls up to six satellite receivers on one RF Channel
4EC76A28	Controls up to 12 satellite receivers on two RF Channels
Input Power Voting Lights	Regulated +25 Volts DC from Voting Selector
Mute Lights	+27 Volts DC from Monitor Panel
Temperature Range	-30° to +60° C (-22°F to +144°F)

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

TABLE OF CONTENTS

SPECIFICATIONS	Cover
DESCRIPTION	1
OPERATION	1
MAINTENANCE	2
Removing Control Panel	2
Indicator Lamp Replacement	2
MODIFICATIONS	3
FUNCTIONAL DIAGRAM	5
INTERCONNECTION DIAGRAMS	
Voting Control Panel to Monitor Panel	6
Control Cable	7
OUTLINE DIAGRAM	8
SCHEMATIC DIAGRAM	9
PARTS LIST	9
PRODUCTION CHANGES	9
MODIFICATION DIAGRAM	10

OPTIONS

Option #	Description	Model or PL Number
5240	50-foot Control Cable	19A129013G1
5241	100-foot Control Cable	19A129013G2
5242	300-foot Control Cable	19A129013G3
5246 thru 5251	Single-Channel Volting Control Console	4EC76A28
5252 thru 5250	Two-Channel Voting Control Console	4EC76A29

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

General Electric Voting Control Panel Models 4EC76A27 and 4EC76A28 are used in the right turret section of a Command Control Center in receiver voting systems.

Control Panel Model 4EC76A27 provides control of up to six satellite receivers on one RF channel. Control Panel Model 4EC76A28 provides control of up to 12 satellite receivers on two RF Channels, with a maximum of six receivers per channel.

The panel mounts in a 19-inch drawer-type chassis that can easily be removed from the turret for servicing. Connections from the Voting Selector are normally made through a control cable to terminal boards on the rear of the Voting Control Panel.

A functional diagram is provided to show connections between the Voting Control Panel and the Command Control Center (see Table of Contents).

OPERATION

Operating controls for each channel consist of six toggle switches, six two-section lights, a Volume control and mute switch.

TOGGLE SWITCHES

The three toggle switch positions are

marked SELECT, NORMAL and DISABLE.

Placing the toggle switches in the NORMAL position enables the Voting Selector so that the Selector "votes" on all incoming signals. Only the signal with the best audio quality is selected to be heard at the Voting Control Panel speaker.

Placing one of the switches in the SELECT position manually selects that receiver, and disables the Selector voting circuitry. One or more of the receivers can be selected at the same time.

Placing one of the switches in the DISABLE position removes that receiver from the voting process. One or more of the receivers can be rejected at a time. The receivers remain rejected until the switch is returned to the NORMAL position.

INDICATOR LIGHTS

The two-section indicator lights have a green lens in the top section, and an amber lens in the bottom section.

When one of the satellite receivers is selected, the green section of the light turns on. When any of the satellite receivers unselect, the yellow section of the light turns on. Normally, several of the yellow lights will be turned on during each call.

Placing the Local/Remote switch on the Selector Power Supply in the Remote position switches the voltage from the

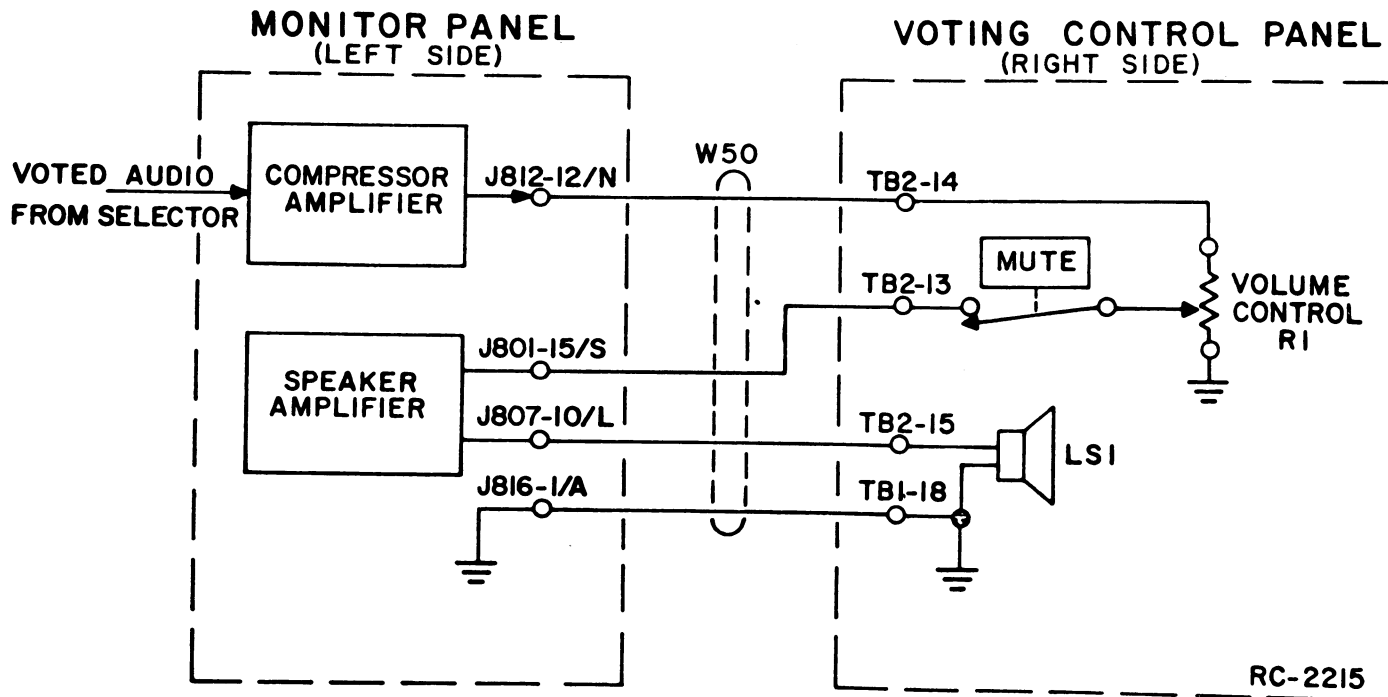


Figure 1 - Simplified Volume and Muting Circuit

Voting Selector lights to the Control Panel lights.

A regulated +25 Volts for operating the lights is supplied from the Voting Selector power supply.

VOLUME CONTROL & MUTE SWITCH

In receiver voting applications, the volume control and muting functions are transferred from the Monitor Panel to the Voting Control Panel.

Volume Control

Selected audio from the Compressor-Amplifier board is coupled through the arm of Volume control R1 and applied to the Speaker Amplifier board (see Figure 1).

The output of the Speaker-Amplifier drives loudspeaker LS1 on the Voting Control Panel.

Mute Switch

The Mute Switch permits the dispatcher to mute incoming calls during business discussions, telephone calls, etc.

Pressing the Mute Switch attenuates the audio path to the Speaker Amplifier so that low level audio is applied to the speaker. Pressing the switch also lights the Mute lamp. Operating voltage (+27 Volts) for the Mute lamps is supplied from the Monitor Panel.

FAILURE LIGHT ALARM CIRCUIT

The Failure Light Alarm Circuit consists of two separate solid-state switching circuits to turn on two sets of panel lights. These lights indicate a failure in the receiver voting for Channel A or for Channel B.

An external alarm such as a light or buzzer can be connected to the switched ground connection at TB1-16 for Channel A and TB3-16 for Channel B.

NOTE

The external alarm current should not exceed 150 mA or the switching transistors will be damaged.

When a failure occurs on Channel A of the receiver voting, a ground appears at J6. This turns off Q1 which turns on Q2 and applies a ground to J2. This completes the circuit to turn on the failure lamps DS53 and DS54 or grounds the external alarm connection TB1-16. Channel B operates in the same manner as Channel A.

A momentary ground at J5 or J6 will not cause either of the two alarm circuits to respond because of the delay circuit on the input of each alarm circuit.

MAINTENANCE

REMOVING CONTROL PANEL FROM TURRET

Remove the control panel from the console turret in the following manner:

1. Grasp the control panel frame and pull the panel forward until the stop is reached.
2. To completely remove the panel from the turret, lift the panel to clear the stop and pull forward. No electrical disconnections are required to set the panel on the desk top.

INDICATOR LAMP REPLACEMENT

Replacing DS1-DS48

To replace defective lamps DS1 through DS48, lamp tool Microswitch 15PA32 (available from SERVICE PARTS as SPK-543) is required. Replace the lamps as follows:

1. Grasp the lens and pull off to gain access to the indicator lamps.
2. Remove the defective indicator lamp by inserting the lamp tool into the socket until it is against the lamp base flange. Apply pressure and withdraw the lamp from the socket.
3. To install a lamp, grip the glass bulb portion with the lamp tool and push the lamp into the socket.
4. Replace the lens.

Replacing DS49-DS52

Replace defective indicator lamps DS49 through DS52 as follows:

1. Grasp the lens (nameplate) and pull forward to remove the indicator assembly and gain access to the indicator lamps.
2. Remove the defective indicator lamp from its socket by pressing on the bulb end, and install the new lamp.

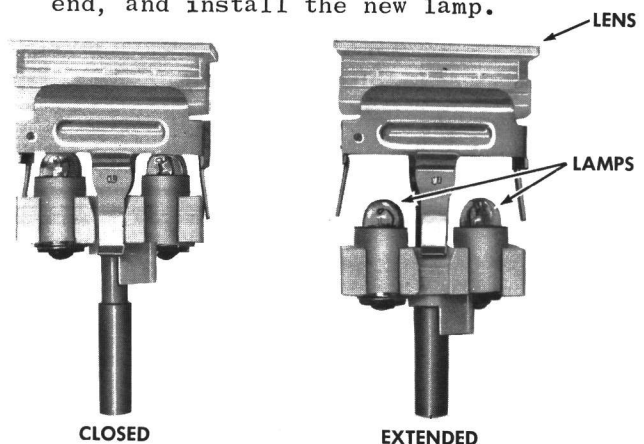


Figure 2 - Switch Indicator Assembly

3. Reinstall the indicator assembly. The assembly must be in the extended configuration shown in Figure 2 before it can be reinstalled in the panel.

MODIFICATIONS

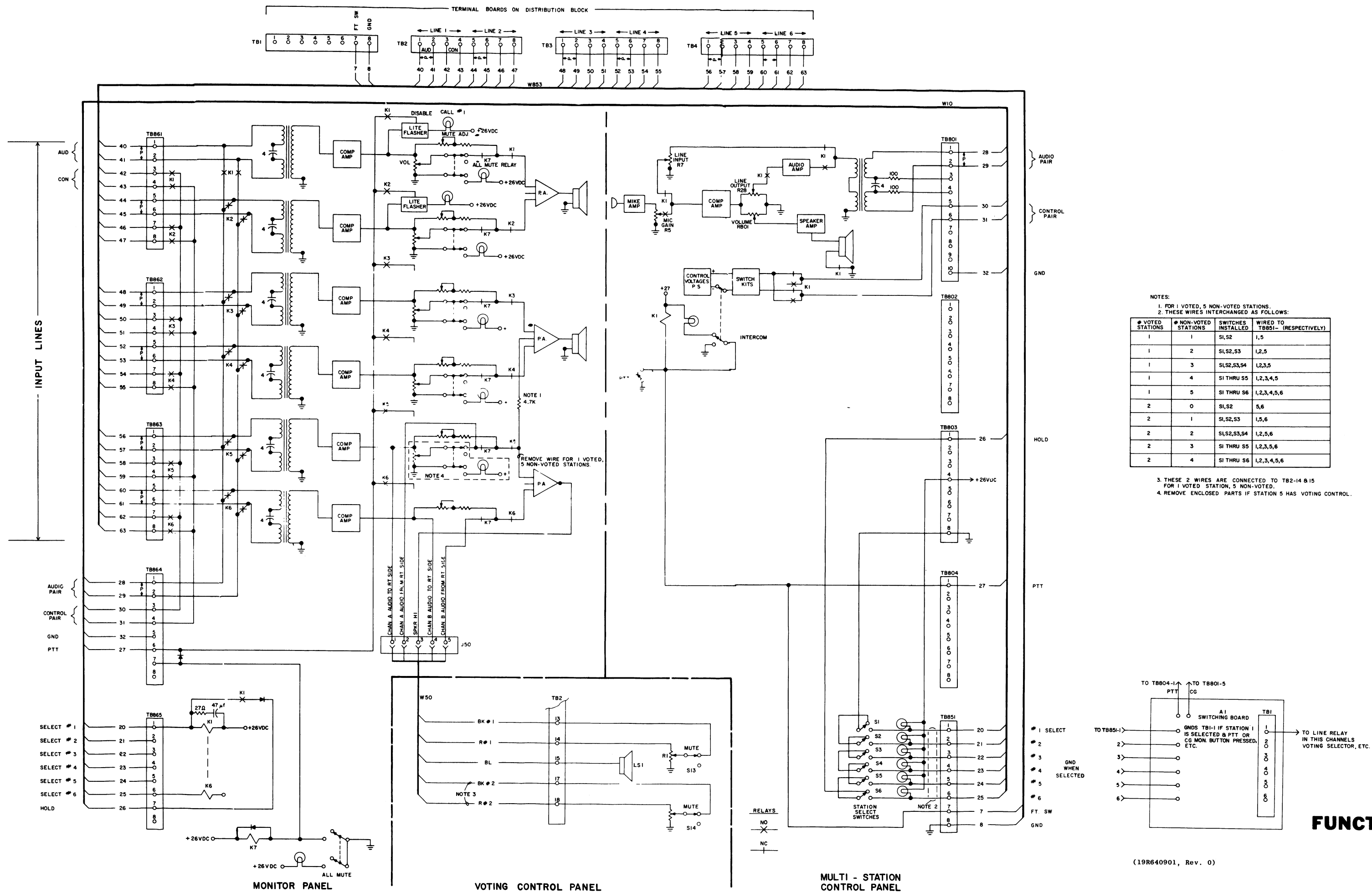
Both the Monitor Panel (left section) and the Multi-Station Control Panel (center section) must be modified for operation with the Voting Control Panel.

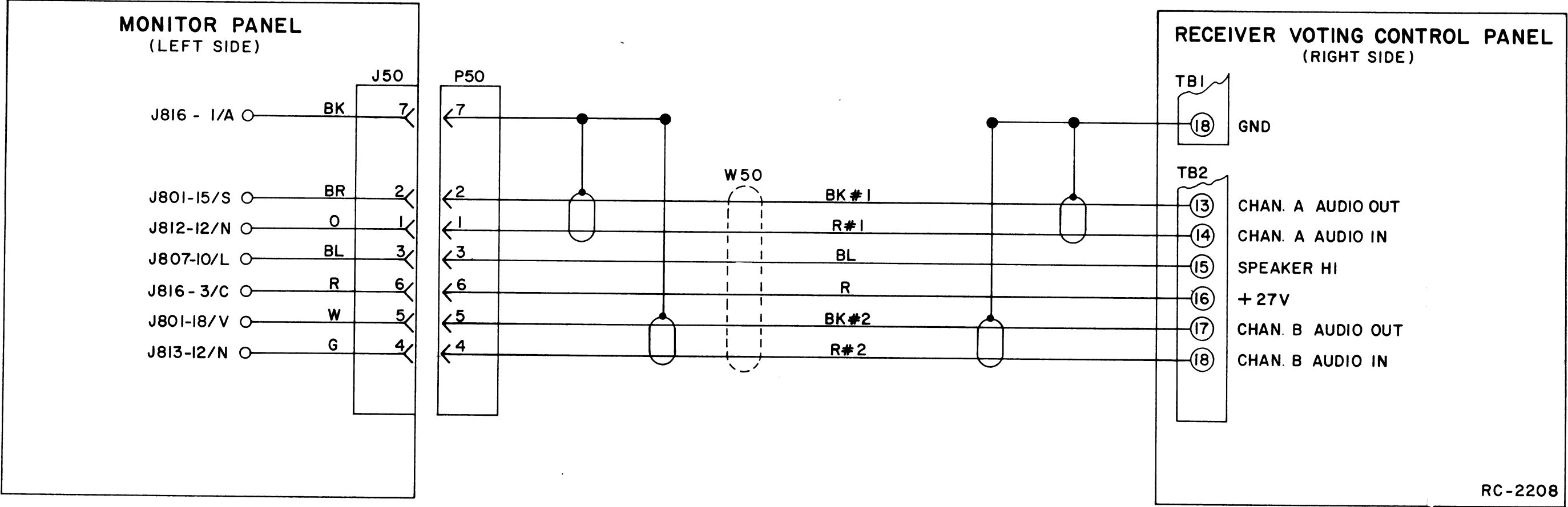
In the Monitor Panel, a socket plate assembly (J50) is installed to permit the audio and muting functions to be connected

to the Voting Control Panel through cable W50.

In the Multi-Station Control Panel, Switching Board A1 (modification kit 19A129049G1) is installed for switching the Voting Selector relay(s) from the receive to the transmit mode.

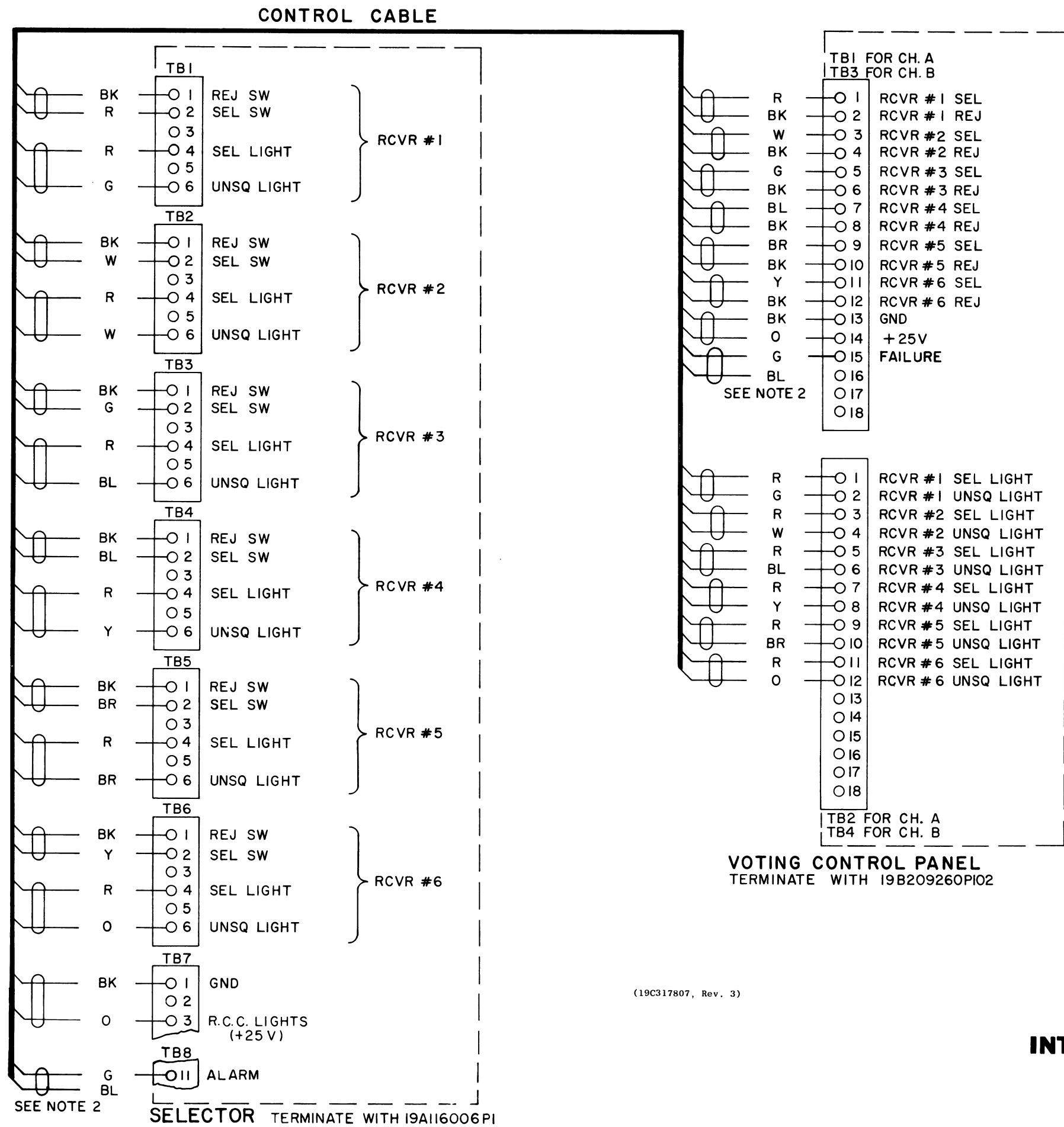
Also, wiring changes are required in both panels according to the number of stations and voting selectors in the system. Refer to the Modification Diagram as listed in the Table of Contents for the wiring changes.





INTERCONNECTION DIAGRAM

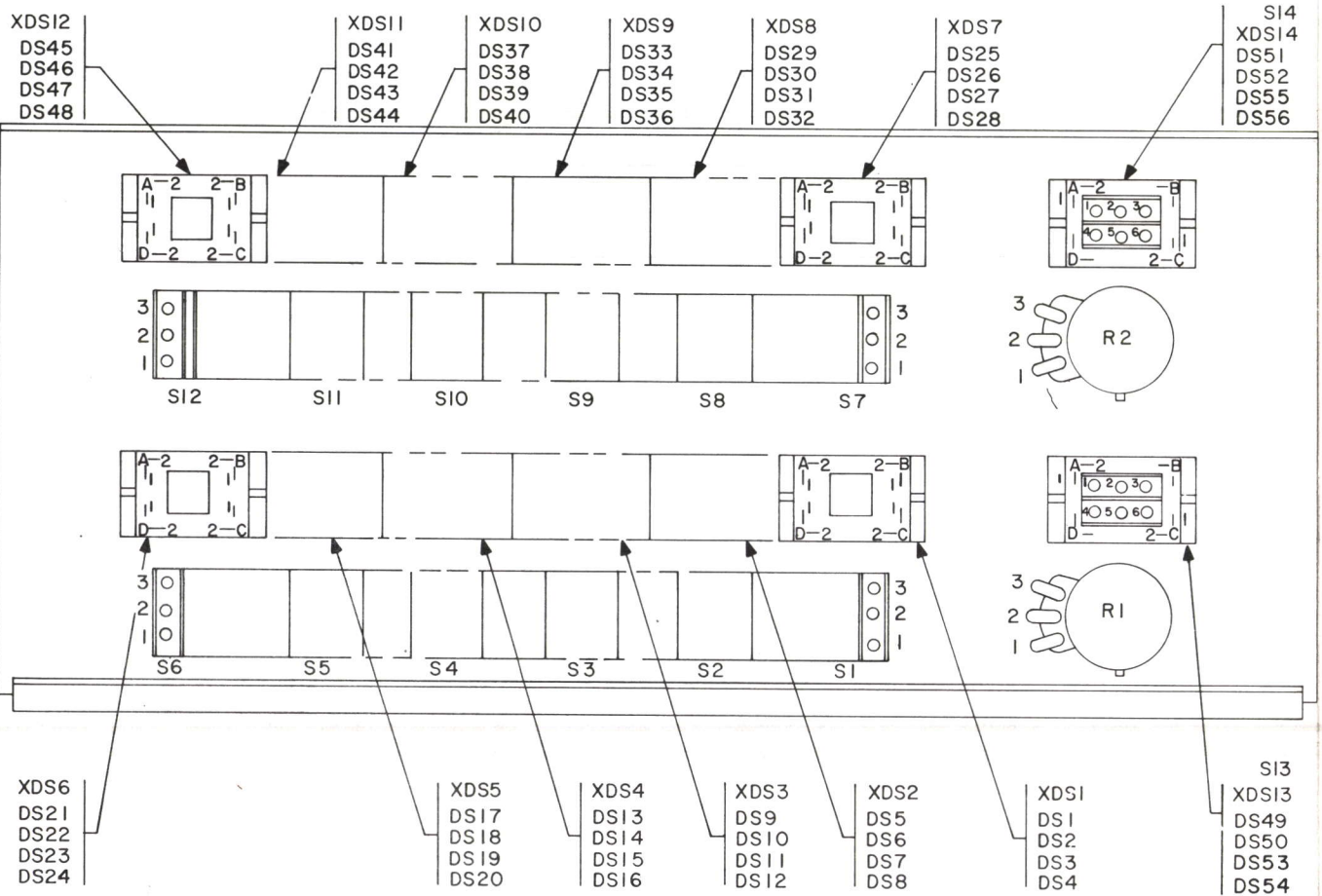
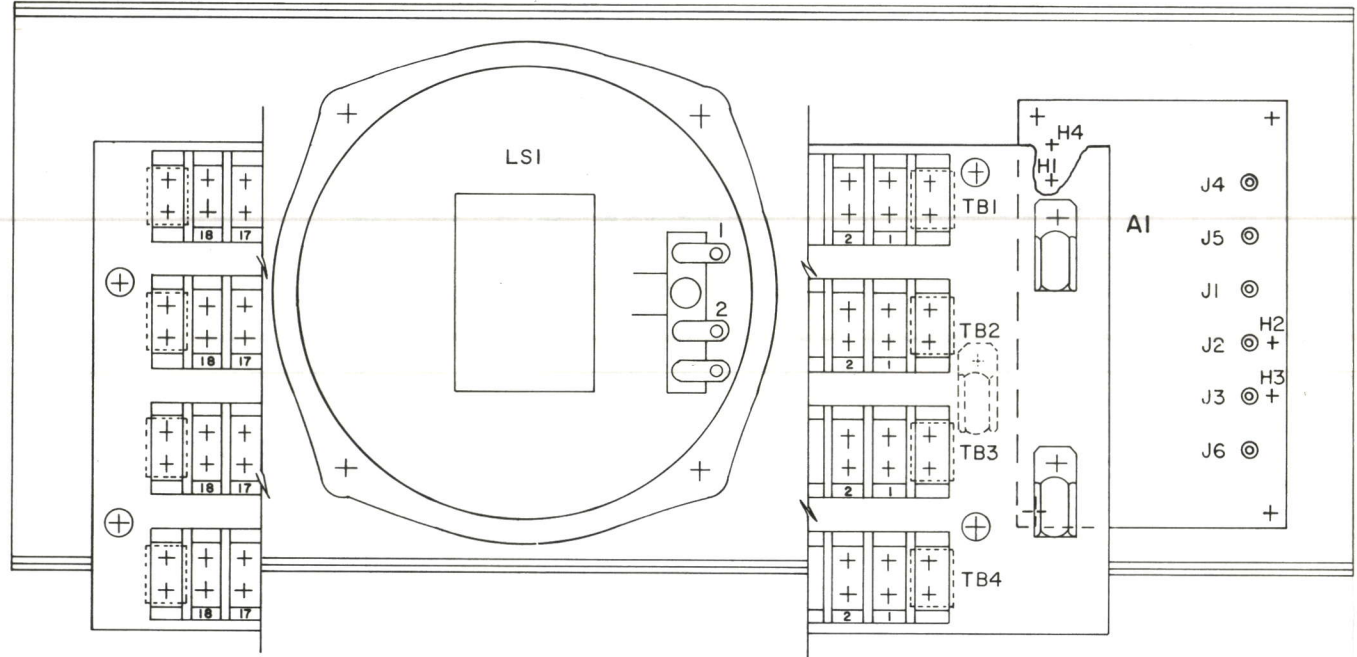
VOTING CONTROL PANEL
TO MONITOR PANEL



- NOTES:
1. LOCAL REMOTE SWITCH ON SELECTOR POWER SUPPLY MUST BE IN REMOTE POSITION.
 2. TAPE UNUSED WIRES FROM CABLE (BOTH ENDS)

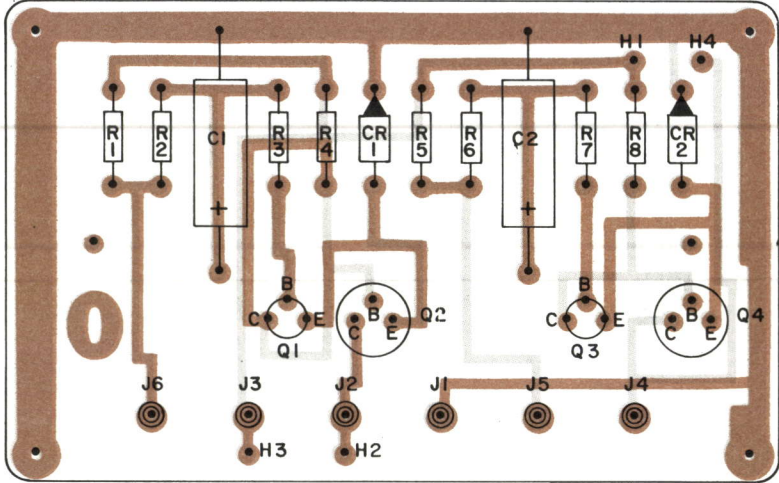
INTERCONNECTION DIAGRAM

CONTROL CABLE

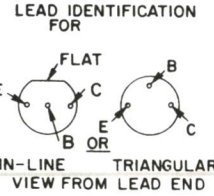


OUTLINE DIAGRAM
VOTING CONTROL PANEL AND
FAILURE LIGHT ALARM CIRCUIT

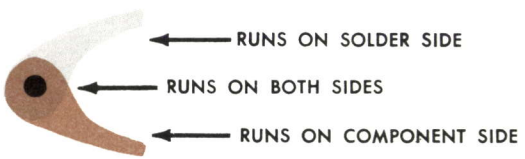
FAILURE LIGHT ALARM CIRCUIT



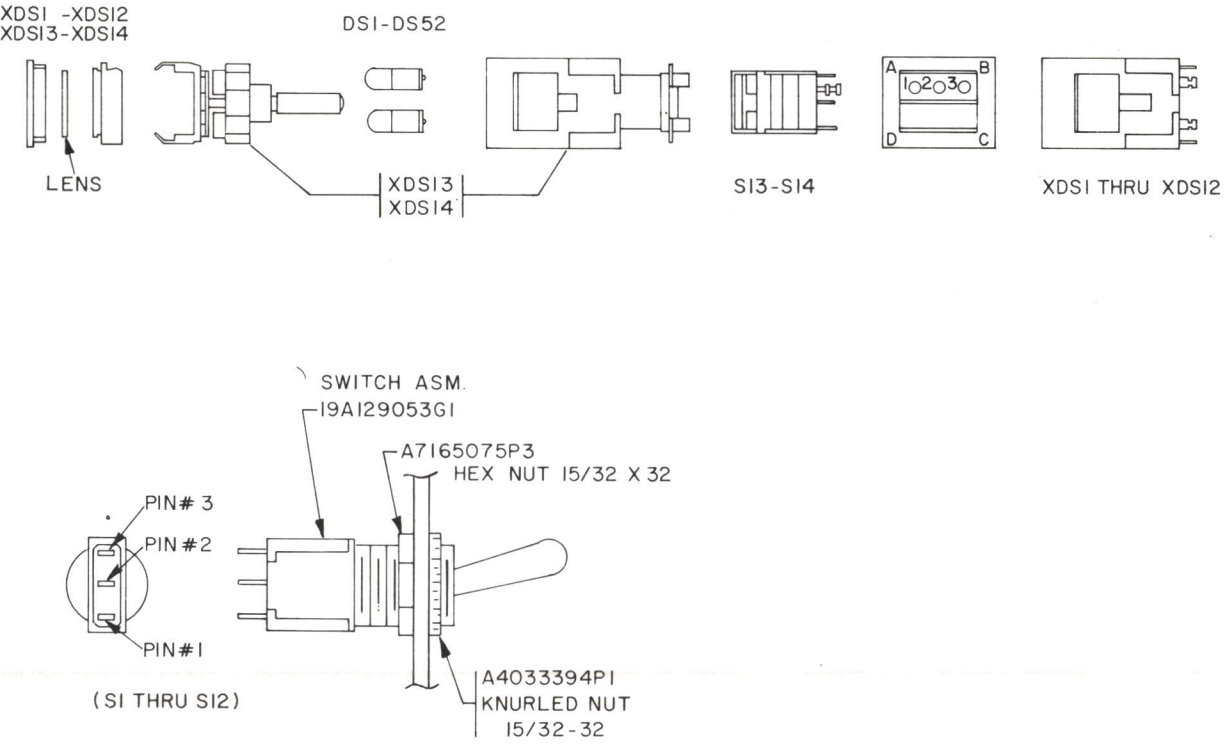
(19C321079, Rev. 0)
(19C320670, Sh. 2, Rev. 0)
(19C320670, Sh. 3, Rev. 0)



NOTE: LEAD ARRANGEMENT, AND NOT
CASE SHAPE, IS DETERMINING
FACTOR FOR LEAD IDENTIFICATION.



SWITCH ASSEMBLIES



(19D416644, Rev. 1)

PARTS LIST		
LB1-4304B		
VOTING CONTROL PANEL MODELS 4EC76A27, 28		
SYMBOL	GE PART NO.	DESCRIPTION
A1*		FAILURE LIGHT ALARM BOARD 19C320682G1 (Added by REV A)
----- CAPACITORS -----		
C1 and C2	19A115680P8	Electrolytic: 10 μ f +150% -10%, 25 VDCW; sim to Mallory Type TT.
----- DIODES AND RECTIFIERS -----		
CR1 and CR2	4037822P1	Silicon.
----- JACKS AND RECEPTACLES -----		
J1 thru J6	4033513P1	Contact, electrical: sim to Bead Chain L93-4.
----- TRANSISTORS -----		
Q1	19A116774P1	Silicon, NPN; sim to Type 2N5210.
Q2	19A115300P3	Silicon, NPN; sim to Type 2N3053.
Q3	19A116774P1	Silicon, NPN; sim to Type 2N5210.
Q4	19A115300P3	Silicon, NPN; sim to Type 2N3053.
----- RESISTORS -----		
R1 thru R3	3R152P103J	Composition: 10,000 ohms \pm 5%, 1/4 w.
R4	3R152P242J	Composition: 2400 ohms \pm 5%, 1/4 w.
R5 thru R7	3R152P103J	Composition: 10,000 ohms \pm 5%, 1/4 w.
R8	3R152P242J	Composition: 2400 ohms \pm 5%, 1/4 w.
GRILLE ASSEMBLY 19C317798G1		
----- LOUSPEAKERS -----		
LS1	5491260P7	Permanent magnet, 5-inch: 3.2 ohms \pm 10% voice coil imp, 15 w max operating, 365 Hz \pm 15% resonance, paper dust cap; sim to Jensen Model P5-VA.
----- TERMINAL BOARDS -----		
TB1 thru TB4	19C301086P11	Feed-thru, phen: 18 terminals; sim to GE CR151D.
PANEL ASSEMBLY 19D413963G1 (4EC76A27) 19D413963G2 (4EC76A28)		
----- INDICATING DEVICES -----		
DS1 thru DS52	19C307037P26	Lamp, incandescent: 28.0 v; sim to GE 387.
DS53* thru DS56*	19C307037P26	Lamp, incandescent: 28.0 v; sim to GE 387. Added by REV A.
----- RESISTORS -----		
R1 and R2	5496870P11	Variable, carbon film: 5000 ohms \pm 20%; sim to Mallory LC(5K).
----- SWITCHES -----		
S1 thru S12	19A116648P1	Toggle: SPDT, 5 amp at 28 VDC or 115 VAC, 2 amps at 250 VAC; sim to C and K Component
S13 and S14	19C307029P11	Push: lighted, 2 circuits, SPDT each, alternate action, 5 amps at 250 VAC; sim to Micro Switch 2226.

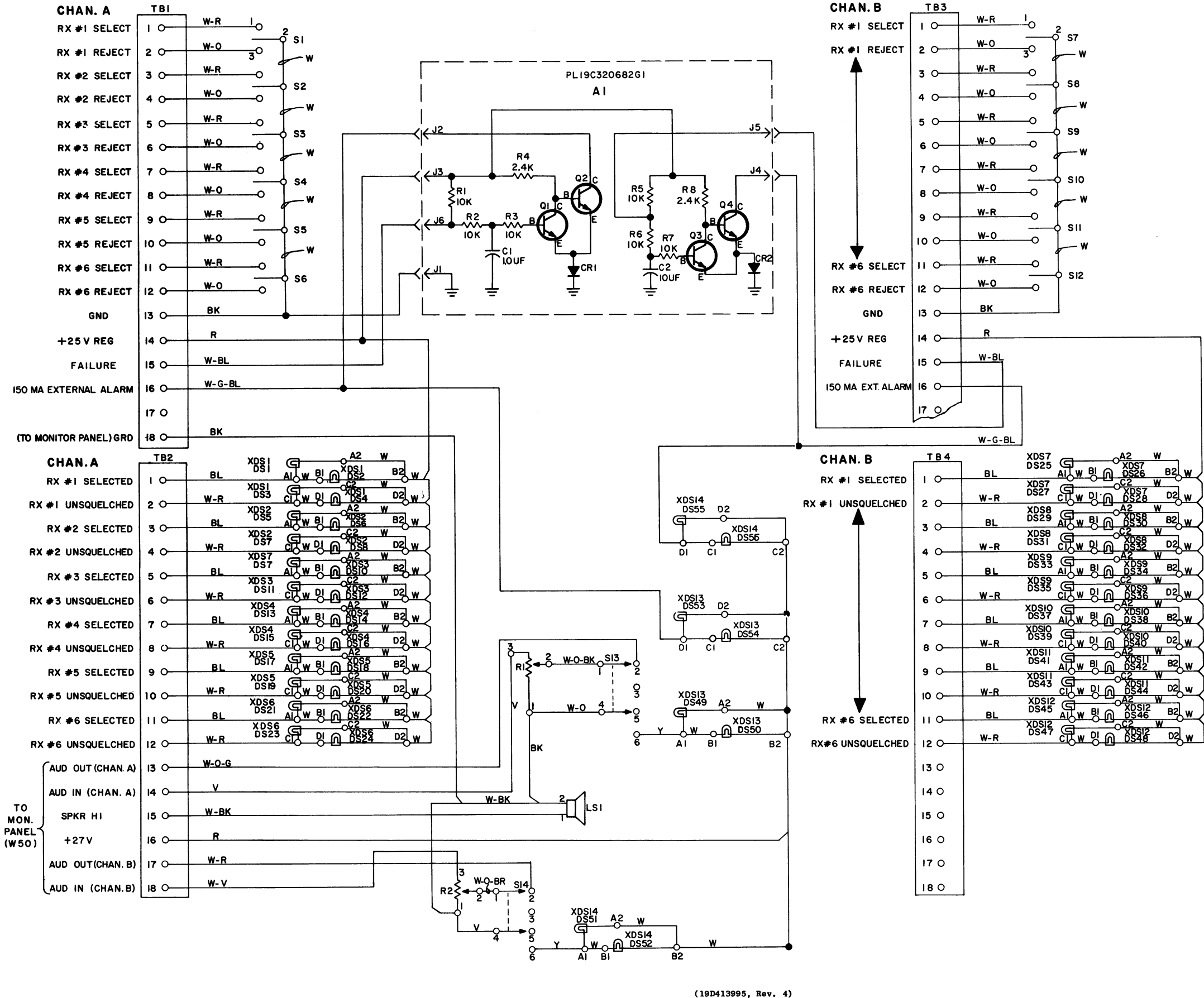
*COMPONENTS ADDED, DELETED OR CHANGED BY PRODUCTION CHANGES

SYMBOL	GE PART NO.	DESCRIPTION
----- SOCKETS -----		
XDS1 thru XDS12	19C307029P8	Push: lighted, 4 sockets, short-side type; sim to Micro Switch Barrier Mounted Indicator Unit 2F3.
XDS13* and XDS14*	19C307029P9	Push: lighted, 2 sockets, short-side type without holding coil; sim to Micro Switch 2C3. Earlier than REV A.
	19C307029P16	Push: lighted, 2 sockets, short-side type without holding coil; sim to Micro Switch 2C201.
----- MISCELLANEOUS -----		
	7142162P38	Spacer. (Located between plate and grille).
	7160508P2	Nut, sheet spring. (Used with TB1-TB4).
	19A116170P1	Knob, push on. (Used with R1 and R2).
	19C311304P1	Dummy switch.
	19C307029P3	Retainer; sim to Micro Switch Barrier for mounting 2B10. (Used with XDS1-XDS14).
	NP270463	Nameplate. (Switch Panel).
	NP249217P43	Nameplate. (MUTE). (Used with DS13 and DS14).
	NP249217P34	Nameplate. (RECNG). (Used with DS1-DS12).
	19C307029P14	Lens, Yellow-Green; sim to Micro Switch 2A56. (Used with DS1-DS12).
	19C307029P25	Lens: red/white; sim to Micro Switch 2A55. (Used with DS13 and DS14).
	4036555P1	Insulator, washer: nylon. (Used with Q2 and Q4).

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 - To add a visual failure indication to the console. The Failure Light Alarm Circuit and lights were added to the console.



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.

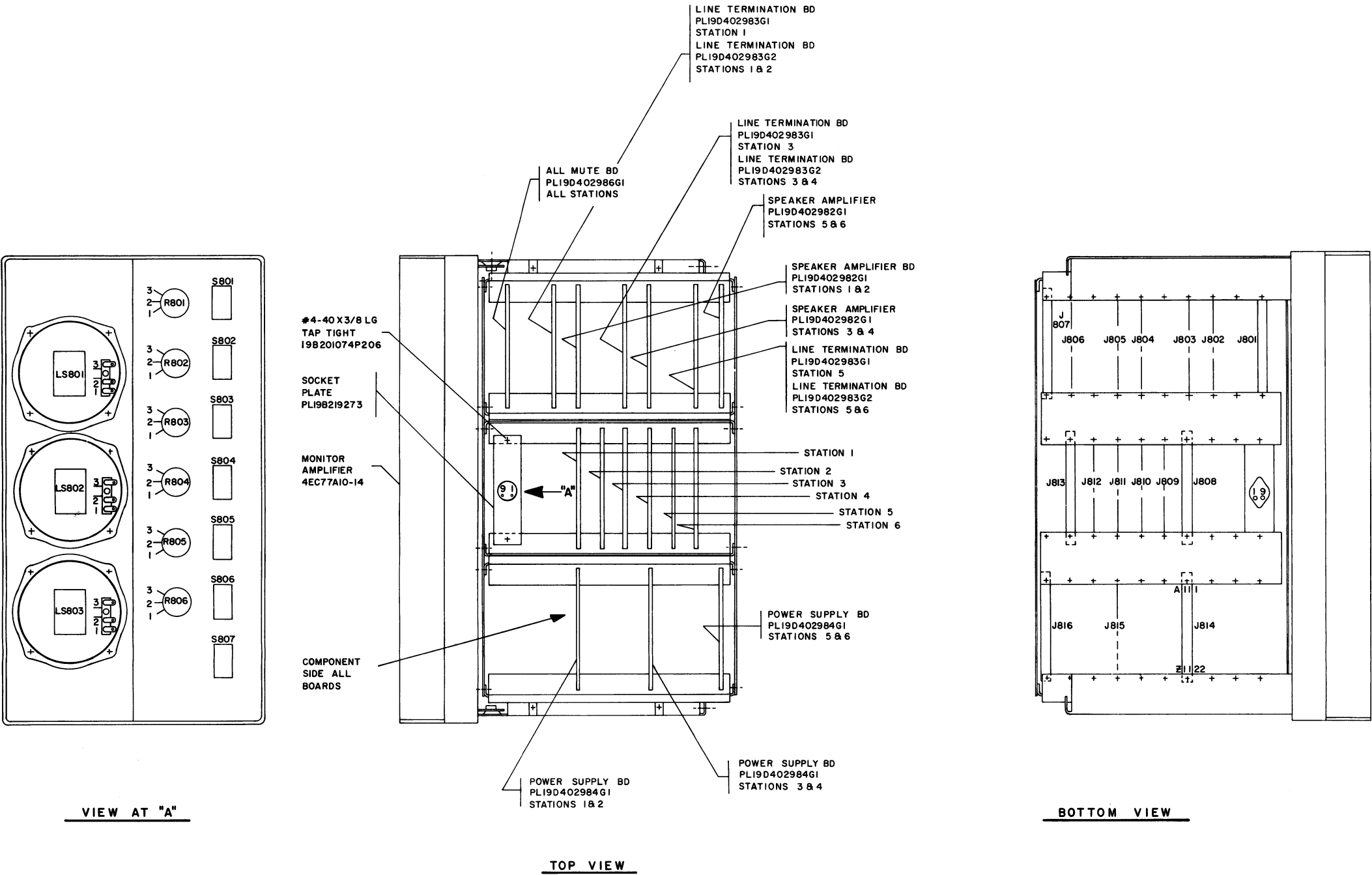
- NOTES:
1. ALL WIRES TO BE SF-24 EXCEPT PER NOTE 2.
 2. ALL WHITE WIRES TO BE SN-22.
 3. R2, S14, XDS14, S7 THRU S12 & XDS7 THRU XDS12 WILL NOT BE PRESENT ON SINGLE CHANNEL UNITS.
 4. THE 19C31561G4 HARNESS INCLUDES WIRING FOR SINGLE CHANNEL UNITS AND THE 19C31561G5 HARNESS INCLUDES WIRING FOR ONLY CHANNEL "B".

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
4EC76A27	A
4EC76A28	A

SCHEMATIC DIAGRAM

VOTING CONTROL PANEL



(19E500941, Sh. 2, Rev. 3)

MODIFICATION DIAGRAM

COMMAND CONTROL CENTER
WITH VOTING CONTROL

MONITOR PANEL

TABLE 1 (LEFT DRAWER)			
FROM	TO	WIRE COLOR	REMARKS
SOCKET PLATE	J812-12/N	N24-O	STATION "A" AUDIO TO CONTROL DRAWER ASSEMBLY(RIGHT SECTION)
J50-2	J801-15/S	N24-BR	STATION "A" AUDIO FROM CONTROL DRAWER ASSEMBLY(RIGHT SECTION)
J50-3	J807-10/L	N24-BL	SPEAKER HIGH TO CONTROL DRAWER ASSEMBLY(RIGHT SECTION)
J50-4	J813-12/N	N24-G	STATION "B" AUDIO TO CONTROL DRAWER ASSEMBLY(RIGHT SECTION)
J50-5	J801-18/V	N24-W	STATION "B" AUDIO FROM CONTROL DRAWER ASSEMBLY(RIGHT SECTION)
J50-6	J816-3/C	N24-R	B+
J50-7	J816-1/A	N24-BK	GROUND

VOTING CONTROL PANEL

TABLE 2 (RIGHT DRAWER)			
FROM	TO	WIRE COLOR	REMARKS
W50	TB2-14	22-SJ-R-#1	STATION "A" AUDIO TO CONTROL DRAWER ASSEMBLY(RIGHT SECTION)
W50	TB2-13	22-SJ-BK-#1	STATION "A" AUDIO FROM CONTROL DRAWER ASSEMBLY(RIGHT SECTION)
W50	TB2-15	N24-BL	SPEAKER HIGH TO CONTROL DRAWER ASSEMBLY(RIGHT SECTION)
W50	TB2-18	22-SJ-R-#2	STATION "B" AUDIO TO CONTROL DRAWER ASSEMBLY(RIGHT SECTION)
W50	TB2-17	22-SJ-BK-#2	STATION "B" AUDIO FROM CONTROL DRAWER ASSEMBLY(RIGHT SECTION)
W50	TB2-16	N24-R	B+
W50	TB1-18	22-SJ-SHIELD	GROUND

MONITOR PANEL

TABLE 3 (LEFT DRAWER)		
NUMBER OF VOTED STATIONS	NUMBER OF NON-VOTED STATIONS	REMOVE WIRES FROM CONTROLS
* 2	2	R802 & S802
* 1	3	R803 & S803
* 1	4	R804 & S804
* 1	5	R805 & S805
2	0	R806 & S806
* 2	1	R801 & S801
* 2	2	R802 & S802
* 2	3	R803 & S803
* 2	4	R804 & S804
* 2	5	R805 & S805
* 2	6	R806 & S806

NOTE: * FOR FACTORY MODIFICATION DO NOT INSTALL CONTROLS WHICH WOULD BE DISCONNECTED PER THIS TABLE FOR FIELD MODIFICATION REMOVE WIRING FROM CONTROLS

VOTING CONTROL PANEL

TABLE 4 (RIGHT DRAWER)		
FROM	TO	WIRE COLOR
W50	TB2-15	N24-BL
W50	TB2-14	22-SJ-R-#2
W50	TB2-13	22-SJ-BK-#2
W50	TB2-16	N24-R
W50	TB1-18	22-SJ-SHLD

NOTE: DO NOT CONNECT 2-22-SJ-R-#1 & 2-22-SJ-BK-#1 SLEEVE OR TAPE TERMINAL.

THESE INSTALLATION INSTRUCTIONS COVER MODIFICATION OF COMMAND CONTROL CENTER FOR VOTING CONTROL

1. ASSEMBLE SOCKET PLATE KIT PL19A129027G1 WITH HARDWARE SUPPLIED IN KIT INTO CENTER PORTION OF LEFT SIDE DRAWER ASSEMBLY. (SEE TOP VIEW SH. 2.)
2. WIRE SOCKET PLATE (J50) PER TABLE #1 AND SPOT TIE TO WIRING. (SEE BOTTOM VIEW SH. 2.)
3. REMOVE 10-32 SCREWS FROM SIDES OF LEFT DRAWER FRAME AND ALLOW FRONT PANEL TO LAY FLAT. REMOVE WIRING FROM STATIONS PER TABLE #3. SLEEVE OR TAPE LOOSE WIRES. (SEE VIEW A SH. 2.)
4. DISCONNECT WIRES FROM LS803 AND SLEEVE OR TAPE. (SEE VIEW A SH. 2.)
5. ASSEMBLE CABLE CLIPS AND32408P2 SUPPLIED WITH SOCKET PLATE KIT PL19A129027G1 TO CABINET AS SHOWN. (SEE SH. 1.)
6. ASSEMBLE CABLE W50 PL19B219275G1 SUPPLIED WITH SOCKET PLATE KIT PL19A129027G1 BETWEEN (J50) (SEE SH. 1) AND RIGHT SECTION PER TABLE #2.
7. ARRANGE COMPONENT BOARDS IN MONITOR DRAWER PER TABLE #5. (SEE TOP VIEW SH. 2.)
8. MODIFY CENTER DRAWER PER TABLE #6. (SEE BACKVIEW SH. 1.)
9. REASSEMBLE FRONT PLATE TO DRAWER FRAME. (LEFT SECTION) (SEE SHEET #2.)
10. THE COMBINATION NUMBER AND APPLICABLE OPTION NUMBER DETERMINE WHICH WIRE TO USE IN TABLES 3, 4 & 5. THE THIRD DIGIT OF THE COMBINATION NUMBER (EX: 03 MAY10) IS THE TOTAL NUMBER OF STATIONS. 5246, 5247, 5248, 5249, 5250, 5251 SPECIFY ONE (1) VOTED STATION. OPTIONS 5252, 5253, 5248 & 5250 SPECIFY TWO (2) VOTED STATIONS. THE NUMBER OF NON-VOTED STATIONS IS THE TOTAL MINUS THE NUMBER OF VOTED STATIONS.

FOR 2 VOTED STATION CONTROL ONLY, ADD VIOLET WIRE SUPPLIED IN SOCKET PLATE KIT PL19A129027G1 BETWEEN S801-C2 AND J816-C 3. SPOT TO WIRING. (SEE VIEW "A" AND BOTTOM VIEW SHEET #2.)

FOR 5 NON VOTED STATION AND 1 VOTED STATION CONTROL PERFORM THESE MODIFICATIONS

- A. UNSOLDER AND SLEEVE OR TAPE WIRE BETWEEN J807-7 H AND J806-16. (SEE BOTTOM VIEW SHEET #2.)
- B. SOLDER R50 (4.7 K RESISTOR) SUPPLIED WITH SOCKET PLATE KIT PL19A129027G1 BETWEEN J806-16 AND J807-6. (SEE BOTTOM VIEW SHEET #2.)
- C. WIRE CABLE W50 PL19B219275G1 SUPPLIED WITH SOCKET PLATE KIT PL19A129027G1 PER TABLE #4. (SEE BACK VIEW SHEET #1.)

TABLE 5 (LEFT DRAWER)

NUMBER OF VOTED STATIONS		NUMBER OF NON-VOTED STATIONS		COMPRESSOR CPNT. BOARD						PWR. SUP. CPNT. BD.		SPEAKER AMPL. CPNT. BD.			LINE TERMINATION CPNT. BD.			ALL MUTE CPNT. BD.	
1	2	3	4	5	6	182	384	586	182	384	586	182	384	586	182	384	586	1	2
1	2	1	1	1	1	1	1	1	1	1	1	DUAL	DUAL	DUAL	SINGLE	DUAL	DUAL	1	2
1	3	1	1	1	1	1	1	1	1	1	1	DUAL	DUAL	DUAL	SINGLE	DUAL	DUAL	1	3
1	4	1	1	1	1	1	1	1	1	1	1	DUAL	DUAL	DUAL	SINGLE	DUAL	DUAL	1	4
1	5	1	1	1	1	1	1	1	1	1	1	DUAL	DUAL	DUAL	SINGLE	DUAL	DUAL	1	5
2	0	1	1	1	1	1	1	1	1	1	1	SINGLE	DUAL	DUAL	DUAL	DUAL	DUAL	2	0
2	1	1	1	1	1	1	1	1	1	1	1	DUAL	DUAL	DUAL	SINGLE	DUAL	DUAL	2	1
2	2	1	1	1	1	1	1	1	1	1	1	DUAL	DUAL	DUAL	SINGLE	DUAL	DUAL	2	2
2	3	1	1	1	1	1	1	1	1	1	1	DUAL	DUAL	DUAL	SINGLE	DUAL	DUAL	2	3
2	4	1	1	1	1	1	1	1	1	1	1	DUAL	DUAL	DUAL	SINGLE	DUAL	DUAL	2	4

MONITOR PANEL

NUMBER OF VOTED STATIONS		NUMBER OF NON-VOTED STATIONS		DISCONNECT WIRE FROM CENTER DRAWER		RECONNECT WIRE TO CENTER		COLOR	
1	2	1	1	TB851-2	TB851-5	BL			
1	3	1	1	TB851-3	TB851-5	BL			
1	4	1	1	TB851-4	TB851-5	BL			
1	5	1	1						
2	0	1	1	TB851-1	TB851-5	BL			
2	1	1	1	TB851-2	TB851-5	BL			
2	2	1	1	TB851-3	TB851-5	BL			
2	3	1	1	TB851-4	TB851-5	BL			
2	4	1	1	TB851-5	TB851-5	BL			

TABLE 6 (CENTER DRAWER) MULTI-STATION CONTROL PANEL

NUMBER OF VOTED STATIONS	NUMBER OF NON-VOTED STATIONS	DISCONNECT WIRE FROM CENTER DRAWER	RECONNECT WIRE TO CENTER	COLOR
1	2	TB851-2	TB851-5	BL
1	3	TB851-3	TB851-5	BL
1	4	TB851-4	TB851-5	BL
1	5			
2	0	TB851-1	TB851-5	BL
2	1	TB851-2	TB851-5	BL
2	2	TB851-3	TB851-5	BL
2	3	TB851-4	TB851-5	BL
2	4	TB851-5	TB851-5	BL

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 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

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, operating 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.

MAINTENANCE MANUAL

LBI-4307

DF-4083

MOBILE RADIO DEPARTMENT
GENERAL ELECTRIC COMPANY • LYNCHBURG, VIRGINIA 24502



PRINTED IN U.S.A.