ARMY TM 11-5805-630-34

NAVY NAVELEX 0967-438-0020

AIR FORCE TO 31W1-4-257-12

DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL

INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST

(INCLUDING DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS)

CALL DIRECTOR SYSTEM MODEL 134A

EPARTMENTS OF THE ARMY, THE NAVY, AND THE AIR FORCE

NOVEMBER 1973

TM 11-5805-630-34
NAVELEX 0967-LP-438-0022
TO 31W1-4-257-12
C 2

CHANGE
No. 2

DEPARTMENT OF THE ARMY,
THE NAVY, AND THE AIR FORCE
WASHINGTON, DC, *24 January 1977*

Direct Support and General Support Maintenance Manual

Including Repair Parts and Special Tools Lists

(Including Depot Maintenance Repair Parts and Special Tools)

CALL DIRECTOR SYSTEM

AN/GCC-21(v)1 (NSN 5805-00-140-1730)

AND MODEL 134A (NSN 5805-00-758-0575)

TM 11-5805-634-34/NAVELEX 0967-438-0020/TO 31W-4-257-12, 7 December 1973, is changed as follows:

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TM 11-5805-630-34
NAVELEX 0967-438-0021
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CHANGE

No. 1

DEPARTMENTS OF THE ARMY,
THE NAVY, AND THE AIR FORCE
WASHINGTON, DC, *11 April 1975*

Direct Support and General Support Maintenance Manual

Including Repair Parts and Special Tools List

(Including Depot Maintenance Repair Parts and Special Tools)

CALL DIRECTOR SYSTEM

MODELS 134A

AND

134B (AN/GCC-21(V)1)

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3-11 through 3-20	3-11 through 3-20.2
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FO-2	FO-2
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FO-3②	FO-3②
FO-3③	FO-3③
FO-3④	FO-3④

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TM 11-5805-630-34
NAVELEX 0967-LP-438-0022
TO 31W1-4-257-12

Technical Manual
No. 11-5805-630-34
Technical Manual
NAVELEX 0967-438-0020
Technical Order
No. 31W1-4-257-12

DEPARTMENTS OF THE ARMY,

THE NAVY, AND THE AIR FORCE

WASHINGTON, DC, *7 December 1973*

Direct Support and General Support Maintenance Manual

Including Repair Parts and Special Tools Lists

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CALL DIRECTOR SYSTEM

AN/GCC-21(V)1 (NSN 5805-00-140-1730)

AND MODEL 134A (NSN 5805-00-758-0575)

Current as of 15 October 1976

LIST OF ILLUSTRATIONS

Title

CHAPTER 1

INTRODUCTION

1-1. Scope

a. This publication contains functioning and direct support and general support maintenance for the Call Director System, Models 134A and 134B.

b. A complete listing of applicable reference publications is provided in appendix A.

c. The maintenance allocation chart appears in TM 11-5306-630-12 and the direct support and general support repair parts and special tools list appears in appendix B of this manual.

1-2. Indexes of Publications

a. DA Pam 310-4. Refer to the latest issue of DA Pam 310-4 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

b. DA Pam 310-7. Refer to the latest issue of DA Pam 310-7 to determine whether there are modification work orders (MWO's) pertaining to the equipment.

1-3. Forms and Records

a. Reports of Maintenance and Unsatisfactory Equipment. Maintenance forms, records, and reports which are to be used by maintenance personnel at all maintenance levels are listed in and prescribed by TM 38-750 (Army). Air Force personnel will use AFM 66-1 for maintenance reporting and TO-00-35D54 for unsatisfactory equipment reporting. Navy personnel will report maintenance performed utilizing the Maintenance Data Collection Subsystem (MDCS) IAW OPNAVINST 4790.2, Vol 3 and unsatisfactory material/conditions (UR, submissions) IAW OPNAVINST 4790.2, Vo12, chapter 17.

b. Report of Packaging and Handling Deficiencies. Fill out and forward DD Form 6 (Packaging Improvement Report) as prescribed in AR 700-58/NAVSUPINST 4030.29/AFR 71-13/MCO P4030.29A, and DSAR 4145.8.

c. Discrepancy in Shipment Report (DISREP) (SF 361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-38/NAVSUPINST 4610.33A/AFR 75-18/MCO P4610.19B, and DSAR 4500.15.

d. Reporting of Equipment *Publication* Improvements. The reporting of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forwarded direct to Commander US Army Electronics Command, ATTN: DRSEL-MA-Q, Fort Monmouth, NJ 07703. For Air Force, use USAFLC Form 252 (Request for TO Revision or Change). Forward direct to prime ALC/MST. For Navy, mail comments direct to: Commander, Naval Electronics Systems Command, Code 4903, Washington, DC 20360.

e. Administrative Storage. Administrative storage of equipment issued to and used by Army activities shall be in accordance with TM 740-90-1.

f. Destruction of Materiel *to Prevent Enemy* use. Refer to chapter 2, section III of TM 11-5805-630-12 which covers destruction of this equipment to prevent enemy use.

CHAPTER 2

FUNCTIONING OF EQUIPMENT

2-1. General

a. Functional circuit descriptions are provided in this chapter for the Call Director System Models 134A and 134B. Refer to TM 11-5805-630-12 for operational and circuit checkout procedures which provides related information pertaining to functioning of the equipment.

b. Primary power (fig. FO-3①) at 108 to 132 volts AC and a frequency of 60 Hz is applied via power cable W1 to POWER plug on rear of the logic box through MAIN POWER SWITCH S1. Primary power from B contact of switch. S1 then travels through protective fuse F1 to terminal 9 of terminal board TB1, while the unfused lead from contact C of switch S1 is connected directly to terminal 10 of terminal board TB1, terminals 9 and 10 then connect to input plug J14 of Power Supply (CD-134-10A). The power supply provides DC outputs of plus 12V DC and minus 12V DC at terminals 4 and 2 respectively of TB-2 and terminals 7 and 1 respectively of TB1. Lamp indicator DS1 illuminates when output voltages from the power supply are being applied to components in equipment.

NOTE

MAIN POWER SWITCH S1 located on rear panel of logic box and POWER ON switch S2 located on top of power supply CD-134-10A must both be in the ON position to apply voltage to equipment.

2-2. Call Commander-Type 860-Circuit Description

a. Hook Relay K1 (fig. 2-l). Hook relay K1 for the call commander controls three functions; minus 12 volts switched, plus 12 volts switched, and operation of the ON hook and delay relays in the KY-3 unit. The relay is controlled by a hook switch in the phone and is operated when the handset is lifted from its cradle.

(1) The hook relay operating circuit is - 12V from P7-6 to TB1-T through the hook switch to P7-31, through 57-31 throughrelay K1 to ground.

(2) The circuit for operation of the delay and ON-hook relays in the KY-3 unit receives minus 12 volts from P7-31, through diode CR2 and relay contacts R1 and R2 on intercom relay K3, through make contacts L2 and L3 on hook relay K1 ad then to the KY-3 unit through JB-31 and P8-31.

(8) The minus 12 volts supplied by the KY-3 unit is applied to TB1-2 through hook relay contacts LB and L9 to J7-26 and P7-26 to terminal E4 on the telephone preamplifier.

(4) The plus 12 volts from power supply CD-134-10A is supplied through hook relay contacts L5 and L6 to J7-5 and P7-5, terminal board TBI-R to intercom and line switches of the call commander.

b. Line Relay K2 (fig. 2-2). When energized, line relay K2 for the call commander controls four functions. It lights the LINL lamps on all extension phones and the call commander. It advances the output of the call commander preamplifier to the line mixer amplifier. It removes the 10 ohm termination resistor RI from across the receive line and connects the receive line to the phone handset. It also controls the transfer of the hold relay operating voltage. The line relay operates through the circuit of the phone line switch and a set of the hook relay contacts,

(1) The line relay operating circuit is from ground through the relay to J7-B and P7-8, through the line switch, TB1-R, P7-5 and J7-5 contacts L5 and L6 on hook relay K1 to plus 12 volts.

(2) Plus 12 volts for LINE lamps on the extension phones and call commander phone is obtained through contacts R2 and R3 on line relay K2, to J7-22 and P7-22, through the LINE lamps through TB1-I, P7-4, J7-4, and TB1-4 to ground.

(3) The transmit (talk) signal originates in the handset microphone and is applied through H1 and A1 of TB1 to the input terminal E3 of the telephone preamplifier and GRD terminal El respectively. The preamplifier OUT terminal E2 is connected to P7-1, 57-1, to contact R6 on the line relay. When contact R6 is connected to R5 and through contacts R4 and R5 on hold relay

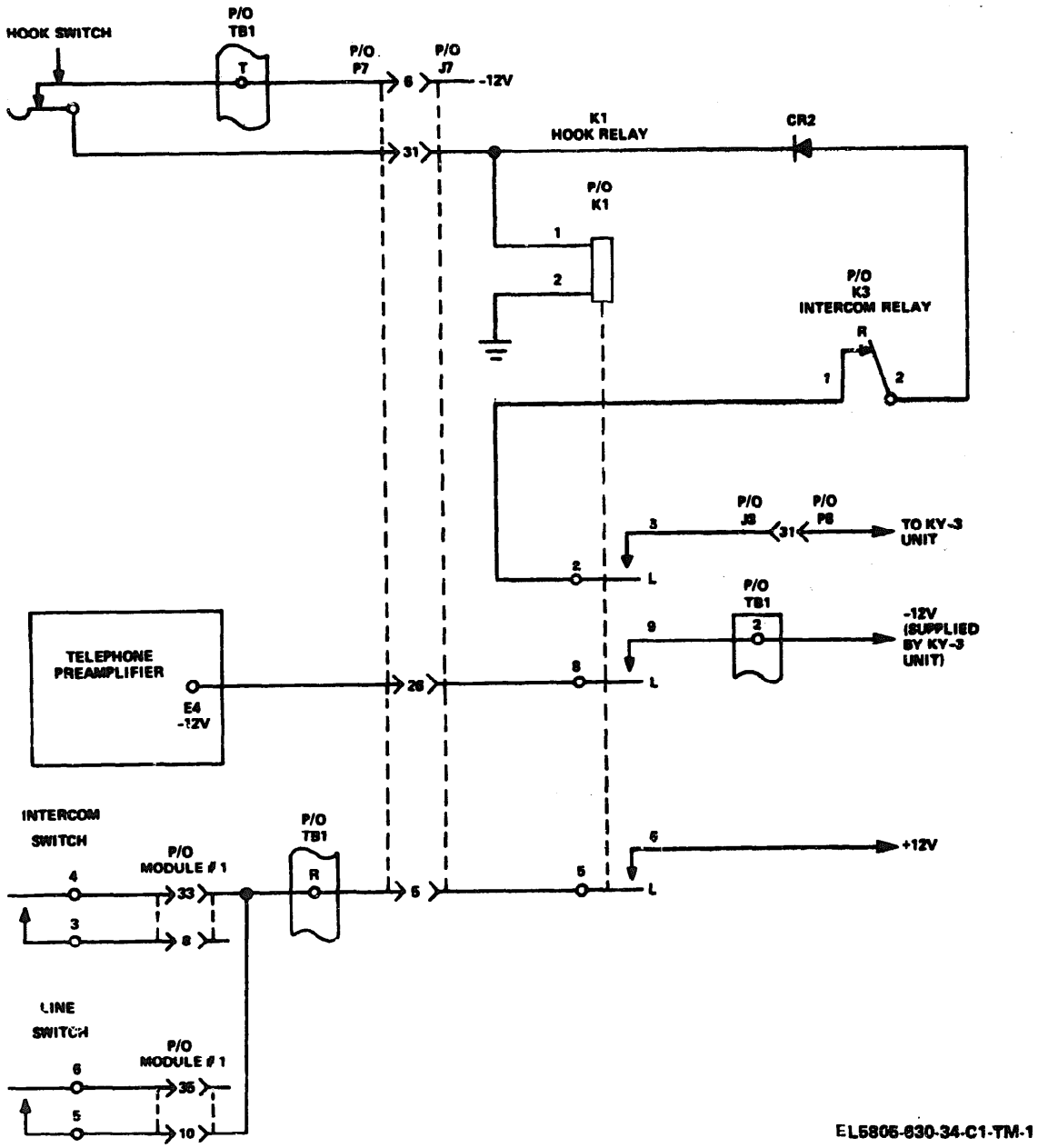


Figure 2-1. Simplified schematic diagram, call commander hook relay.

K4, to pin A of connectors J10 and P10 of the line mixer amplifier. The output of the mixer amplifier is connected through P10-L, J10-L to J8-1 and P8-1 which in turn goes through the trunk line in filter network of the KY-3 unit and then to the preamplifier of the KY-3.

(4) With line relay K2 deenergized the receive circuit path comes from the audio output transformer of the KY-3 unit to P8-27 and J8-27, hold relay contacts R10 and R11, resistor R2, line relay contacts L10 and L11, through terminating 10 ohm resistor R1, line relay contacts R10 and R11, hold relay contacts L10 and L11, and to J8-29 and P8-29 which is audio ground in the KY-3 unit. With the line relay operated, the audio receive circuit is from P8-27 and J8-27, hold relay contacts R10 and R11, resistor R2, line relay contacts L11 and L12, J7-27 and P7-27, to the handset receiver. The return circuit of the handset goes to P7-29 and J7-29, line relay contacts R11 and R12, hold relay contacts L10 and L11, then through J8-29 and P8-29 to audio ground in the KY-3 unit. The hook switch shorts across P7-27 and P7-29 when the receiver is on-hook.

c. Hold Relay K4 (fig. 2-3). Hold relay K4 of the call commander terminates the receive line, grounds the transmit line into the line mixer amplifier, feeds minus 12 volts to the KY-3 unit to simulate an off-hook condition, and provides its own hold voltage when the line relay is released.

(1) When the call commander HOLD button is depressed, plus 12 volts is fed through P7-24 and J7-24, to line relay contacts L8 and L9 and to pin 1 of hold relay K4 whereby the hold relay operates and capacitor Cl charges.

NOTE

Ground is present on pin 2 of hold relay K4 from the hold release circuit via J9-P and P9-P on the supplementary relay board. The call commander HOLD switch is self restoring and mechanically releases the LINE button when it restores. Release of the LINE button causes the line relay K2 to release, opening contacts L8 and L9, and contacts L1 and L2. Since hold relay K4 has applied plus 12 volts through L8 and L9 to line relay K2 contact L2, and with the line relay deenergized the plus 12 volts is now on pin 1 of hold relay K4. The discharging of capacitor Cl (200uf) connected across the winding of the hold relay causes the hold relay to remain energized during the open circuit condition between opening of line relay contacts L8 and L9 and closing of L1 and L2 contacts.

(2) Operation of hold relay K4 by depressing HOLD switch button terminates the incoming receive line by bridging resistor R3 across P8-27 and P8-29 through contacts R11 and R12 and L11 and L12.

(3) Input through J10-A and P10-A to the line mixer amplifier matrix is grounded by hold relay contacts R5 and R6.

(4) Hold relay contacts L2 and L3 supply minus 12 volts through J8-31 and P8-31 to the Delay and On-hook relays of the KY-3 unit to retain an off-hook condition.

(5) Hold relay contacts R2 and R3 Supply plus 12 volts to light the LINE lamp.

(6) Hold relay contacts R7 and R8 disable the dialing ground.

d. Intercom Relay K3 (fig. 2-4). The intercom relay system connects the call commander and any or all extension phones together. The call commander can setup a conference call by buzzing any or all six extensions. The call commander monitors the call until the call is completed.

(1) Intercom relay K3 circuit is from pin 2 ground terminal through the winding to terminal 1 to J7-37 and P7-37, through the INTERCOM switch, and TB1-R to plus 12 volts P7-5 and J7-5. With intercom relay K3 energized the output terminal E2 of the telephone preamplifier unit is connected to P7-1 and J7-1 through intercom relay contacts R5 and R6, to the input terminal J13-H and P13-BLU of the intercom mixer amplifier. The output of the intercom mixer amplifier is applied through P13-BLU and J13-T, through intercom relay contacts R11 and R12, P7-27 and J7-27 to the handset receiver. The audio return through P7-29 is completed to audio ground through intercom relay contacts L11 and L12.

(2) Intercom relay contacts L5 and L6 provide plus 12 volts to P7-16 for the intercom lamp. Intercom relay contacts L7 and L8 open the telephone dailing circuit.

(3) Intercom relay contacts R1 and R2 open the minus 12 volts circuit to the KY-3 unit preventing an off-hook indication to the KY-3.

(4) Intercom relay contacts L2 and L3 together with line relay contacts L4 and L5 complete a bridge circuit across the INTERCOM switch. Intercom relay contacts L1 and L2 open removing the plus 12 volts to the INCLN MON lamps.

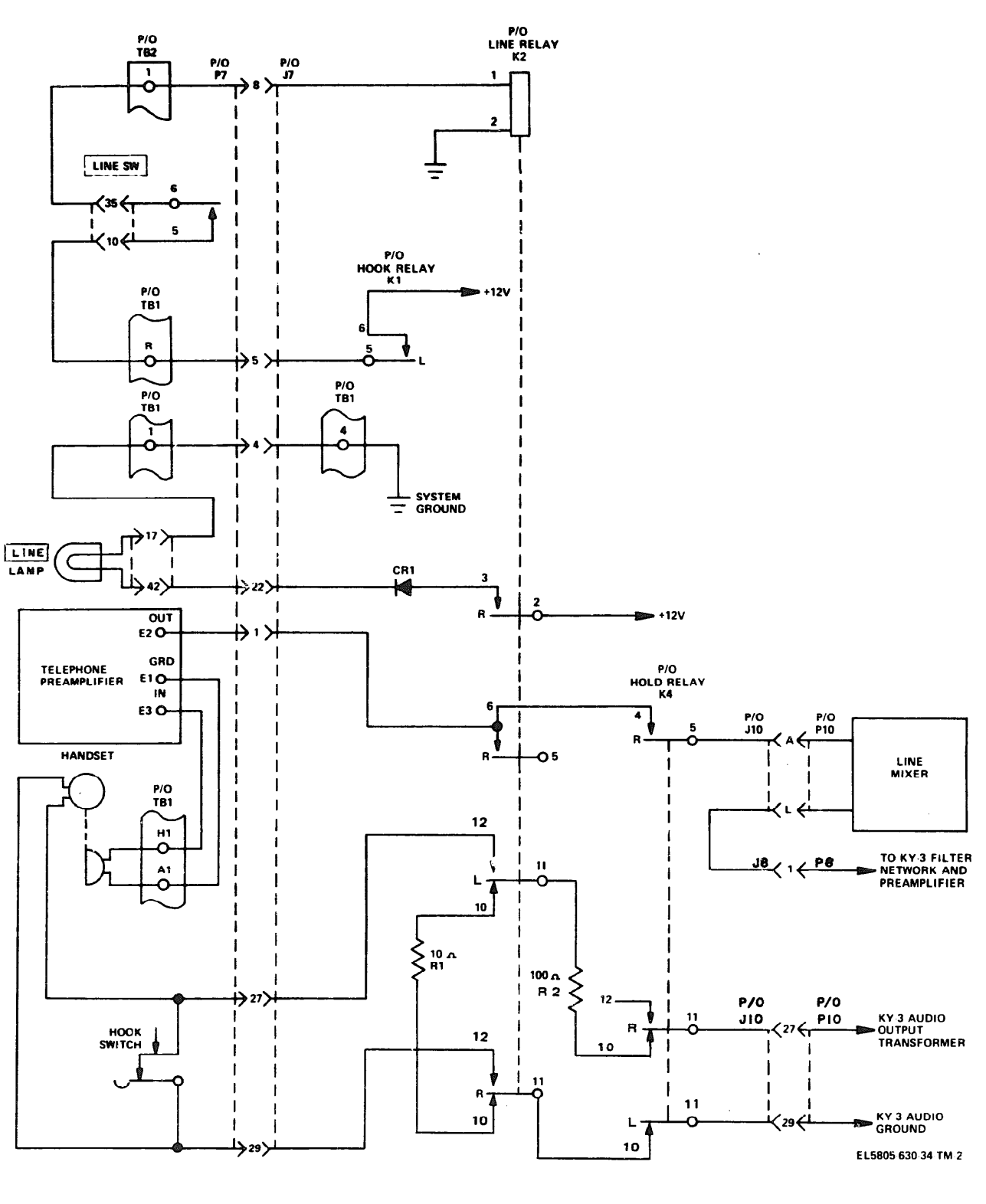


Figure 2-2. Simplified schematic diagram, call commander line relay.

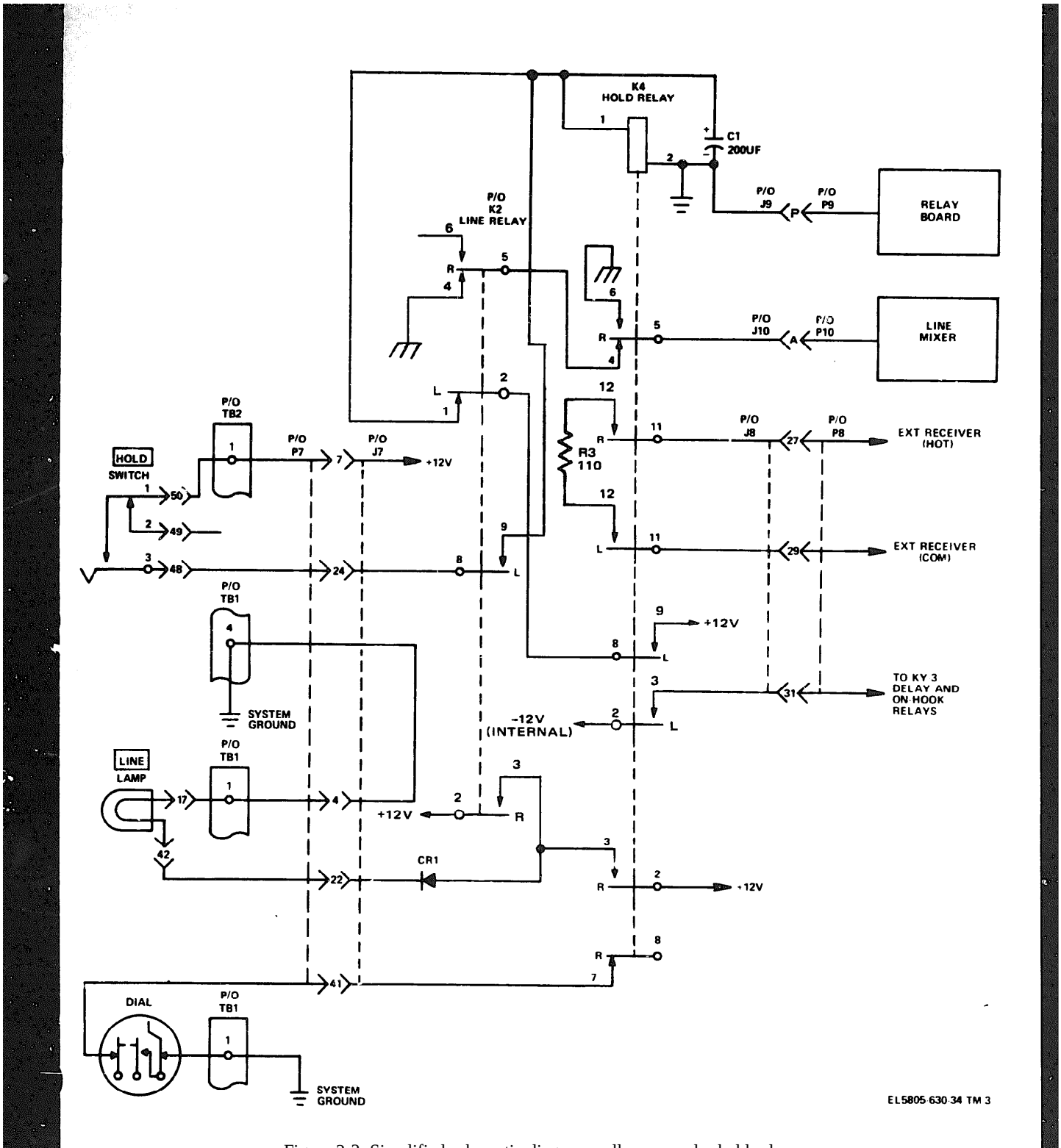


Figure 2-3. Simplified schematic diagram, call commander hold relay.

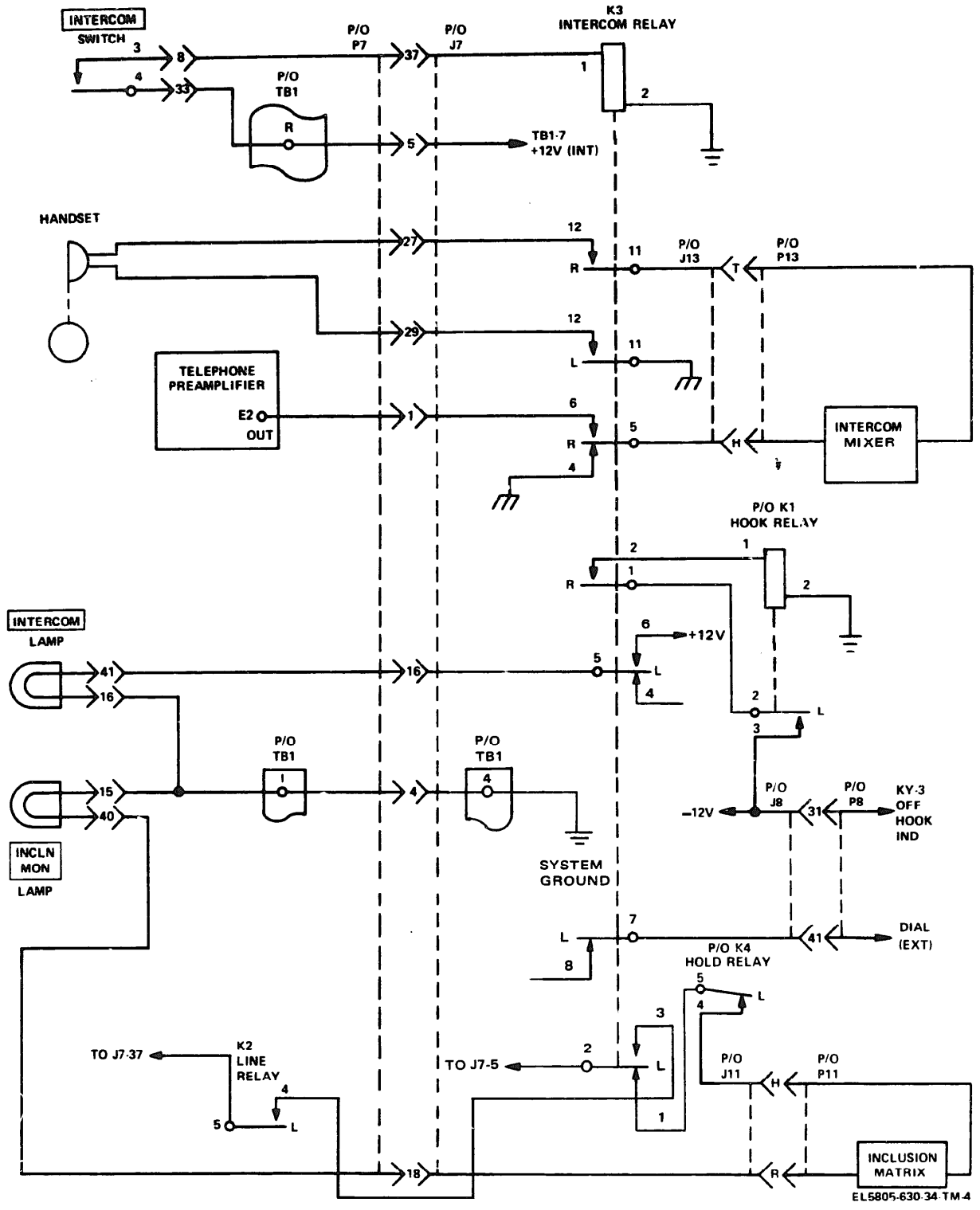


Figure 2-4. Simplified schematic diagram, call commander intercom relay.

2-3. Circuit Description-Extension Phone

NOTE

The foilowing circuit descriptions of the extension phone will be applicable to extension number 1, which has all identical circuit features of the other five extensions plus the unique executive override circuit feature.

a. Hook Relay K5 (fig. 2-5). Hook relay K5 of the extension phone controls three functions; plus 12 volts, minus 12 volts and operation of the ON-hook and Delay relays in the KY-3 unit. The relay is controlled by a hook switch in the phone and is operated when the handset is lifted from its cradle.

(1) Hook relay K5 operating circuit is from minus 12V to P1-6 through the hook switch to P1-31 and J1-31, through relay K5 winding to ground.

(2) The circuit for operation of the delay and on-hook relays in the KY-3 unit receives minus 12 volts from P1-31 and J1-31 through diode CR4 and relay contacts R1 and R2 on intercom relay K7, through contacts L2 and L3 on the hook relay and then to the KY-3 unit through J8-31 and P8-31.

(3) The plus 12 volts is fed through K5 relay contacts L5 and L6, pin J1-5 and P1-5 to terminal board TB1-M where it is applied to the LINE and INTERCOM switches.

(4) The minus 12 volts supplied by the KY-3 unit is fed to hook relay contact L9 through J1-26 and P1-26, to terminal E4 on the telephone preamplifier unit.

b. Line Relay (fig. 2-6). When energized, line relay K6 of the extension phone controls four functions. It lights the LINE lamps on the call commander and all extension phones. It advances the output of the extension phone preamplifier to the line mixer amplifier. It removes termination resistor R4 from across the receive line and connects the receive line to the telephone handset. It also controls the transfer of the hold relay operating voltage. The line relay energizes through the circuit of the phone line switch and a set of the hook relay contacts.

(1) Line relay K6 circuit is from ground through the relay winding to pin P1-49, the LINE switch, P1-5 and J1-5, through hook relay contacts L5 and L6 to plus 12 volts.

(2) The LINE lamps on extension phones and the call commander and lighted by plus 12 volts through line relay contacts R2 and R3, P1-22, through the LINE lamps to ground P1-4.

(3) The transmit talk signal originates in the handset microphone with one side going to the input terminal E3 on the telephone preamplifier and the other side to ground. The preamplifier output terminal E2 is connected to pin P1-1, to contact R6 on the line relay. In the energized position contact R6 is connected to R5 and through contacts R4 and R5 of hold relay K8 to J10-C and P10-C of the line mixer amplifier. The output of the mixer amplifier is connected to pin P8-1 which in turn goes through the trunk line in filter network of the KY-3 unit and then to the preamplifier of the KY-3.

(4) With line relay K6 deenergized, the receive circuit path comes from the audio output transformer of the KY-3 unit to P8-27, hold relay contacts R11 and R10, resister R5, line relay contacts L10 and L11, through resistor R4, line relay contacts R10 and R11, hold relay contacts L10 and L11, and to P8-29 which is audio ground in the KY-3 unit. With the line relay energized the receive audio circuit is from pin P8-27; hold relay contacts R10 and R11, resistor R5, line relay contacts L11 and L12, P1-27, to the receiver of the handset. The return circuit of the handset goes to P1-29. Audio ground P1-29 is returned to line relay contacts R11 and R12, hold relay contacts L10 and L11 and then through P8-29 to audio ground in the KY-3 unit. The hook switch contacts shorts across pin P1-27 and P1-29 when the receiver is on-hook.

c. Hold Relay K8 (fig. 2-7). Hold relay K8 of the extension phone terminates the receive line, grounds the transmit line into the line mixer amplifier, feeds a minus 12 volts to the KY-3 unit to simulate an off-hook condition and provides hold voltage to its own winding when line relay K6 is released.

(1) When the HOLD switch on the extension phone is depressed, plus 12 volts is fed through P1-24, to line relay contacts L8 and L9 and to pin 1 connection on the hold relay winding whereby the hold relay operates and capacitor C2 charges.

NOTE

Ground is present on pin 2 connection of the winding from the hold release circuit (J9-P) on the supplementary relay board. The HOLD switch on the extension phone is self-restoring and mechanically releases the LINE switch when it restores. Release of the LINE switch causes the line relay to release, opening line relay contacts L8 and L9, and closing line relay contacts L1 and L2. Since the hold relay has applied plus 12 volts

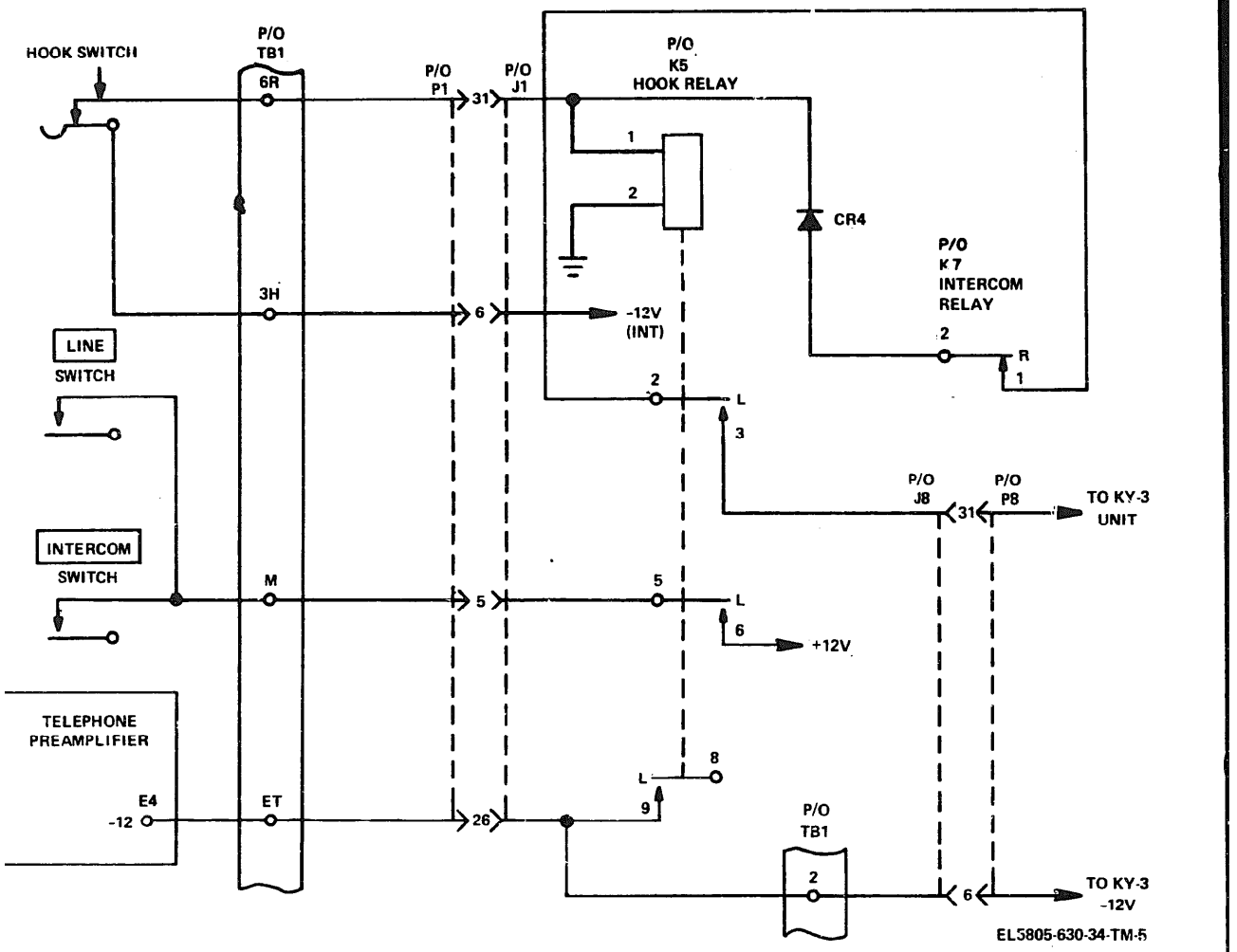


Figure 2-5. Simplified schematic diagram, extension telephone hook relay.

through its contacts L8 and L9 to line relay contact L2, and with the line relay deenergized the plus 12 volts is now on terminal pin 1 of the hold relay winding. The discharging of capacitor C2 (200uf) connected across the winding of the hold relay causes the hold relay to remain energized during the open circuit condition between opening of line relay contacts L8 and L9 and closing of contacts L1 and L2.

(2) Operation of the hold relay terminates the incoming receive line by bridging resistor R6 across P8-27 and P8-29, through contacts R11 and R12 and L11 and L12 of the hold relay.

(3) Input through J10-C to the line mixer amplifier is grounded by hold relay contacts R5 and R6.

(4) Hold relay contacts L2 and L3 supply minus 12 volts through P8-31 to the delay and on-hook relays of the KY-3 unit to retain an off-hook condition.

(5) Hold relay contacts R2 and R3 supply plus 12 volts to the LINE lamp.

(6) Hold relay contacts R7 and R8 disable the dialing ground.

d. Intercom Relay K7 (fig. 2-8). The intercom system enables connection of the call commander and any or all extension phones together. The extension phones can only buzz the call commander. When one extension wants to contact one or more other extensions the call commander must buzz the extensions. The call commander monitors each call until the call is completed.

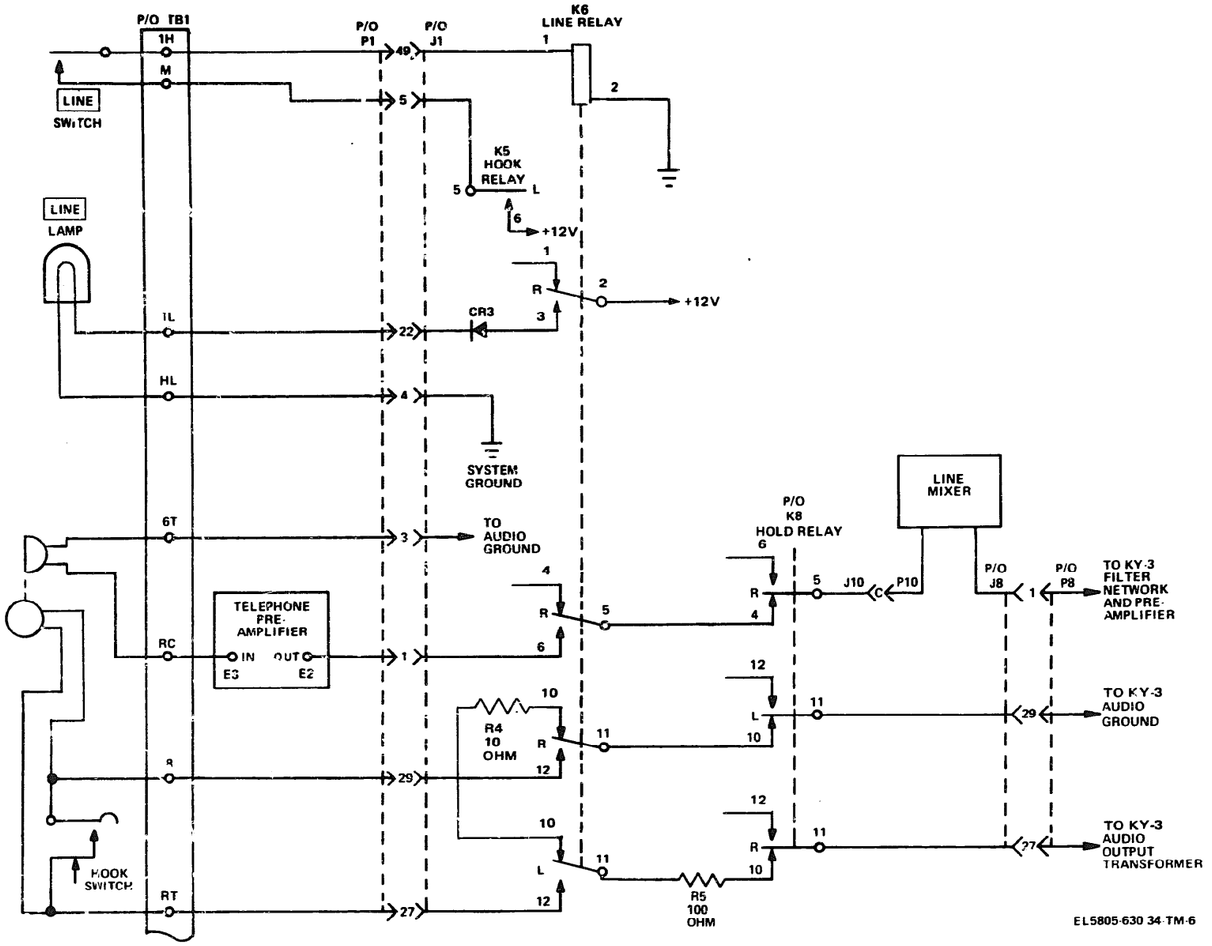


Figure 2-6. Simplified schematic diagram, extension telephone line relay.

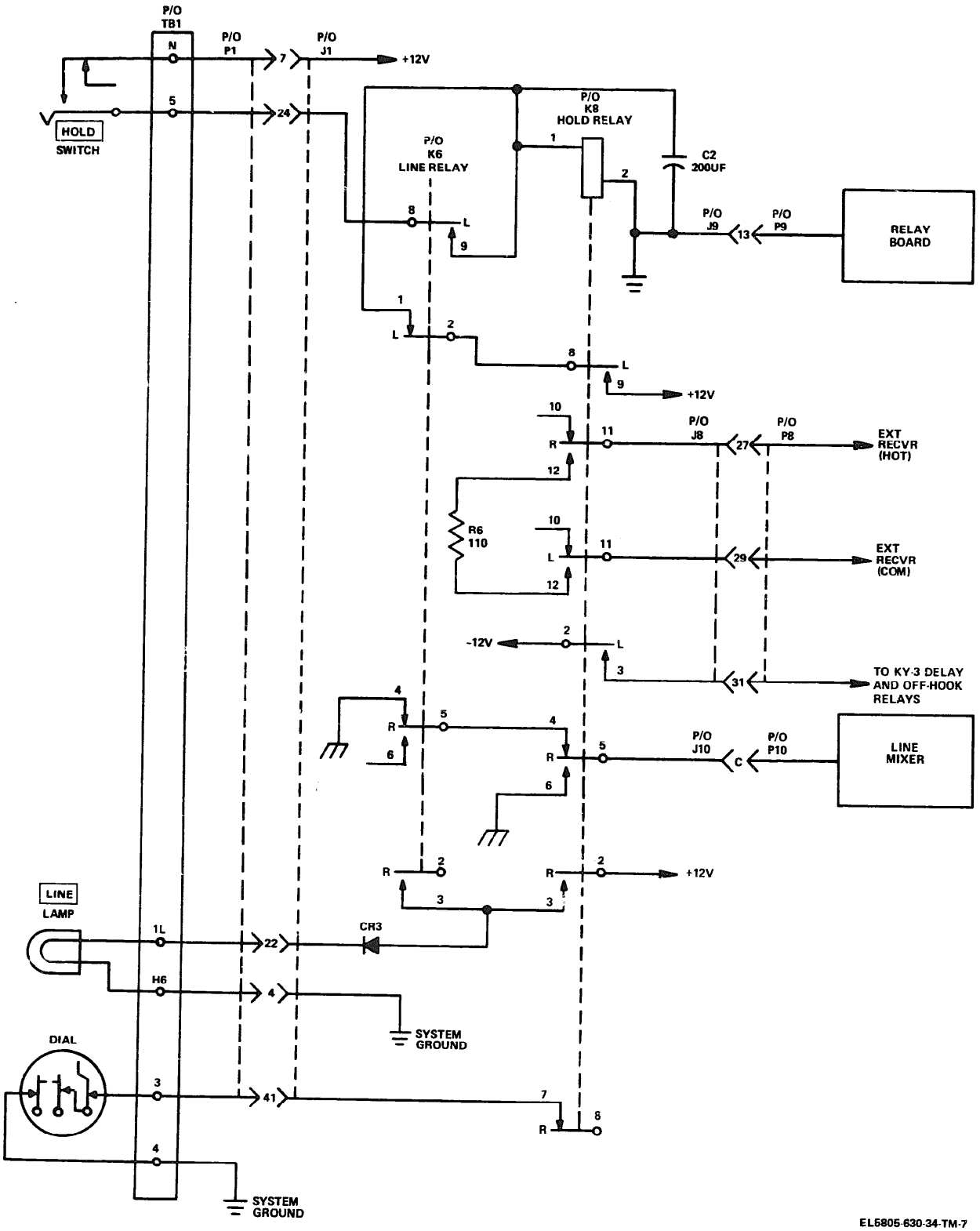


Figure 2-7. Simplified schematic diagram, extension telephone hold relay.

(1) Intercom relay K7 operates from pin 2 (ground) terminal through winding to terminal 1, to P1-13, through the INTERCOM switch, to plus 12 volts (P1-5). With the intercom relay energized, output terminal E2 of the telephone preamplifier unit is connected to P1-1 through intercom relay contacts R5 and R6 to the input terminal J13-A of intercom mixer amplifier. The extension phone receive audio output is applied to J13-L through intercom relay contacts R11 and R12, P1-27 to the handset receiver. The audio return through P1-29 is completed to audio ground through intercom relay contacts L11 and L12.

(2) Intercom relay contacts L5 and L6 provide plus 12 volts to P1-16 for the INTERCOM lamp. Intercom relay contacts L7 and L8 open the telephone dialing circuit.

(3) Intercom relay contacts R1 and R2 open the minus 12 volt circuit to the KY-3 unit preventing an off-hook indication to the KY-3.

(4) Intercom relay contacts L2 and L3 together with line relay contacts L4 and L5 complete a bridge circuit across the INTERCOM switch.

(5) Intercom relay contacts L1 and L2 open removing the plus 12 volts to the INCLN BUZZ lamp.

e. Exclusion Feature.

(1) Exclusion is a privacy feature and is activated by raising the exclusion plunger on the phone set. When the exclusion feature is invoked the five other extensions and the call commander are excluded from the call and therefore cannot speak into or hear the conversation in progress.

NOTE

The exclusion feature operates identically for extension phone numbers 2 through 6. The following description pertains to extension phone number 2.

(2) During the time a call is in progress the LINE lamp and the INCLN BUZZ lamps are lighted on all positions except the extension in use. On the extension in use only the LINE lamp is lighted. If another extension enters the line, then the INCLN BUZZ lamp on the extension in use will light indicating that another extension is on the line. If the exclusion feature is invoked at this time the extension that invaded the line will be excluded from the conversation and the INCLN BUZZ lamp at the extension on the line will go out. At the call commander, the INCLN lamps for all extensions will light.

(3) The exclusion plunger (fig. 2-9) when operated removes plus 12 volts on P2-7, from pin P2-25 by opening plunger switch black and orange contacts. The plus 12 volts is then applied to P2-8 through plunger switch black and gray contacts. P2-8 connects the plus 12 volts to the exclusion matrix which is then fed through the matrix and back to all exclusion switches via P1, P2, P3, P4, P5, and P6-37, and directly to the call commander hold relay via P12-H. The call commander is connected directly from the exclusion matrix because the call commander does not incorporate an exclusion feature. Pin 37 of all extensions then goes to the normally make contacts yellow and green on the exclusion plunger and then to pin 35 on applicable plug, which is directly connected to the hold relay windings terminal 1, causing the hold relay of extensions 1,3,4,5, and 6 to energize. Extension number 2 is not put into hold because the yellow and green contacts of its exclusion switch are opened when the switch is operated.

(4) Exclusion release is accomplished by restoring the handset to the cradle which restores the plunger to its normal position or by manually pushing the plunger in. When restored the plunger removes the plus 12 volts from P2-8 to the exclusion matrix. The hold relays do not immediately release because +12V is supplied thru holding contacts L8 and L9 of hold relays and through closed contacts L1 and L2 of the line relays to terminal 1 of their windings, latching them in the energized condition. All energized hold relays release when plus 12 volts to black contact of exclusion plunger is fed through P2-25 to pin P9-B on the relay board. A positive pulse is then coupled to the base of transistor Q2 turning it on and applying ground to the hold release relay which energizes and removes ground from terminal 2 of all the hold relay windings.

NOTE

During operation of the exclusion feature described above, it is possible for an extension phone user, if it has the executive override feature, to break-in on an excluded call by lifting the exclusion plunger.

f. Executive Override Feature (fig. 2-10). Executive override is a function of extension phone number 1 (or the other identical extension phones if connected into logic set receptacle J1). The executive override circuitry allows extension phone number 1 to exclude all other exten-

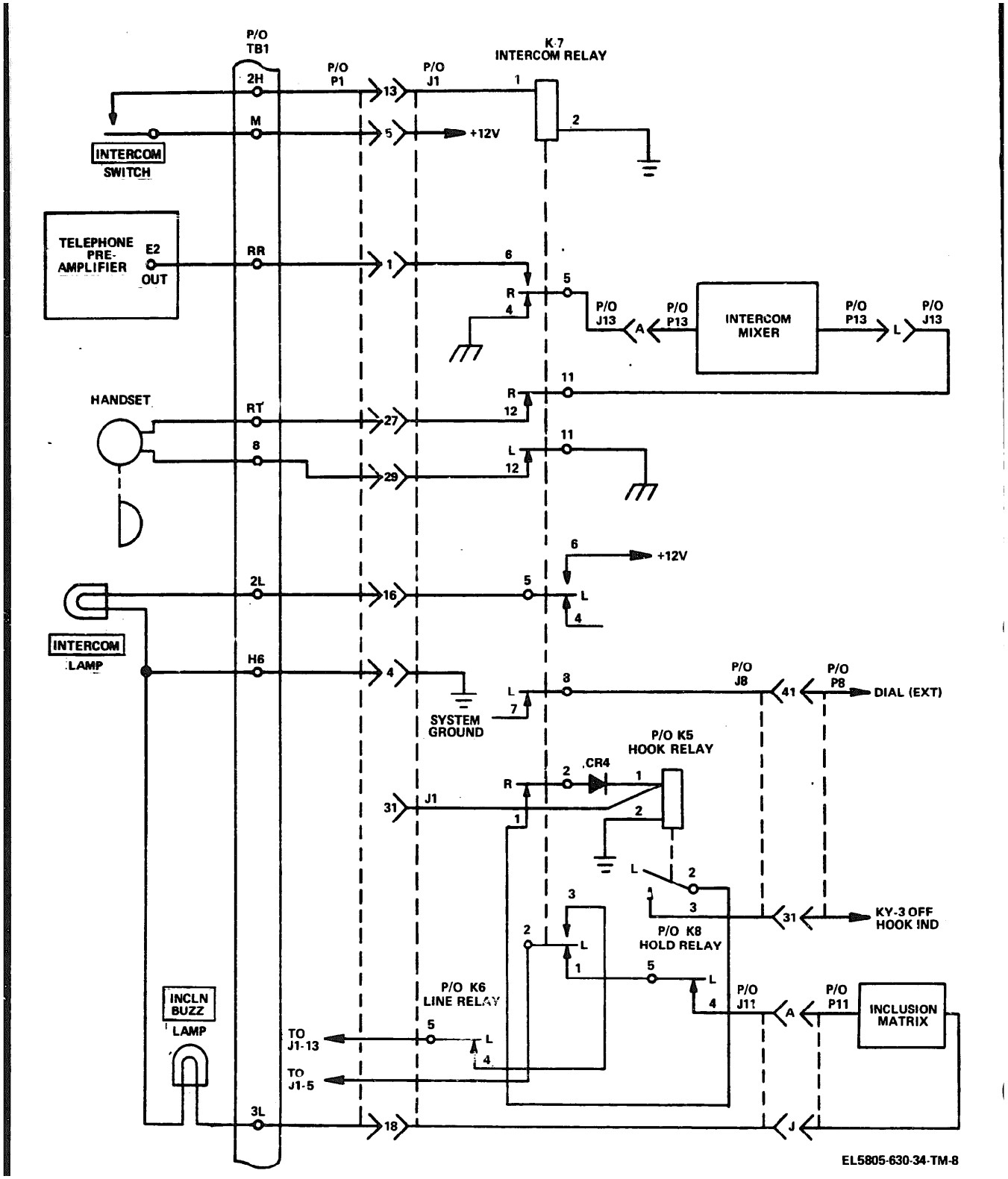


Figure 2-8. Simplified schematic diagram, extension telephone intercom relay.

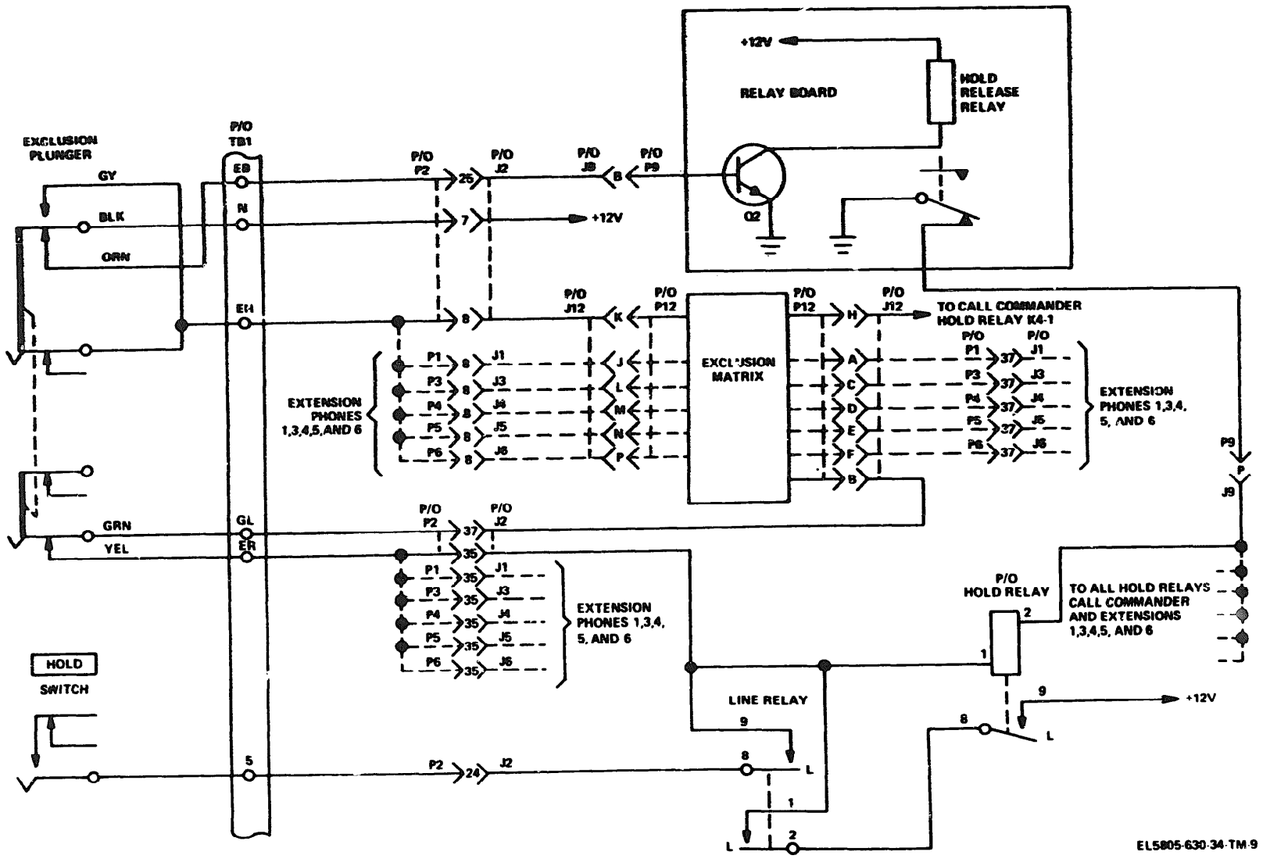


Figure 2-9. Simplified schematic diagram, extension telephone exclusion circuit.

sions and the call commander: It also enables extension phone number 1 to interrupt any exclusion introduced by another extension. Operation of circuits is as follows: A positive 12 volts is supplied from the exclusion plunger of extension number 1. This plus 12 volts operates the executive override relay K9 closing its relay contacts. The closing of the relay contacts applies plus 12 volts directly to the hold relay windings of extension telephones 2, 3, 4, 5, and 6. The call commander hold relay is operated directly from its matrix diode. The executive override relay bypasses the exclusion plungers of the extension telephones preventing any break-in on the conversation..

2-4. Extension Phone-type 186A and Call Commander—Type 860A-Circuit Description

Relay functioning as described in paragraphs 2-2 and 2-3 is the same for all models. The call commander and extension phones incorporate a PTT plain function which allows the user to converse in the clear with a manual switchboard operator. The following circuit description is the same for all extension phones and the call commander. (Refer to figures 2-11 and 2-12.)

2-5. PTT Plain Function

The plain switch receives minus 12 volts switched from the KY-3 unit and, when depressed, energizes the line mixer at J10-K. This action provides the line mixer out signal at J10-L to J8-1 to the KY-3 unit. In the off-hook position, with plain button depressed, system ground will be applied to J1-10 routed to pin J8-24 to KY-3 unit PTT Plain Gnd. The PTT Plain Gnd switches the KY-3 unit to the plain mode which applies a minus 12-volt signal to light the PLAIN lamps of all extensions and the call commander. The KY-3 unit supplies minus 12 volts to J8-11 which energizes plain indicator relay K2 at J9-25. Contact closure picks up plus 12 volts which is routed out J9-DD to contact 11 of all extensions and call commander which lights the PLAIN lamp.

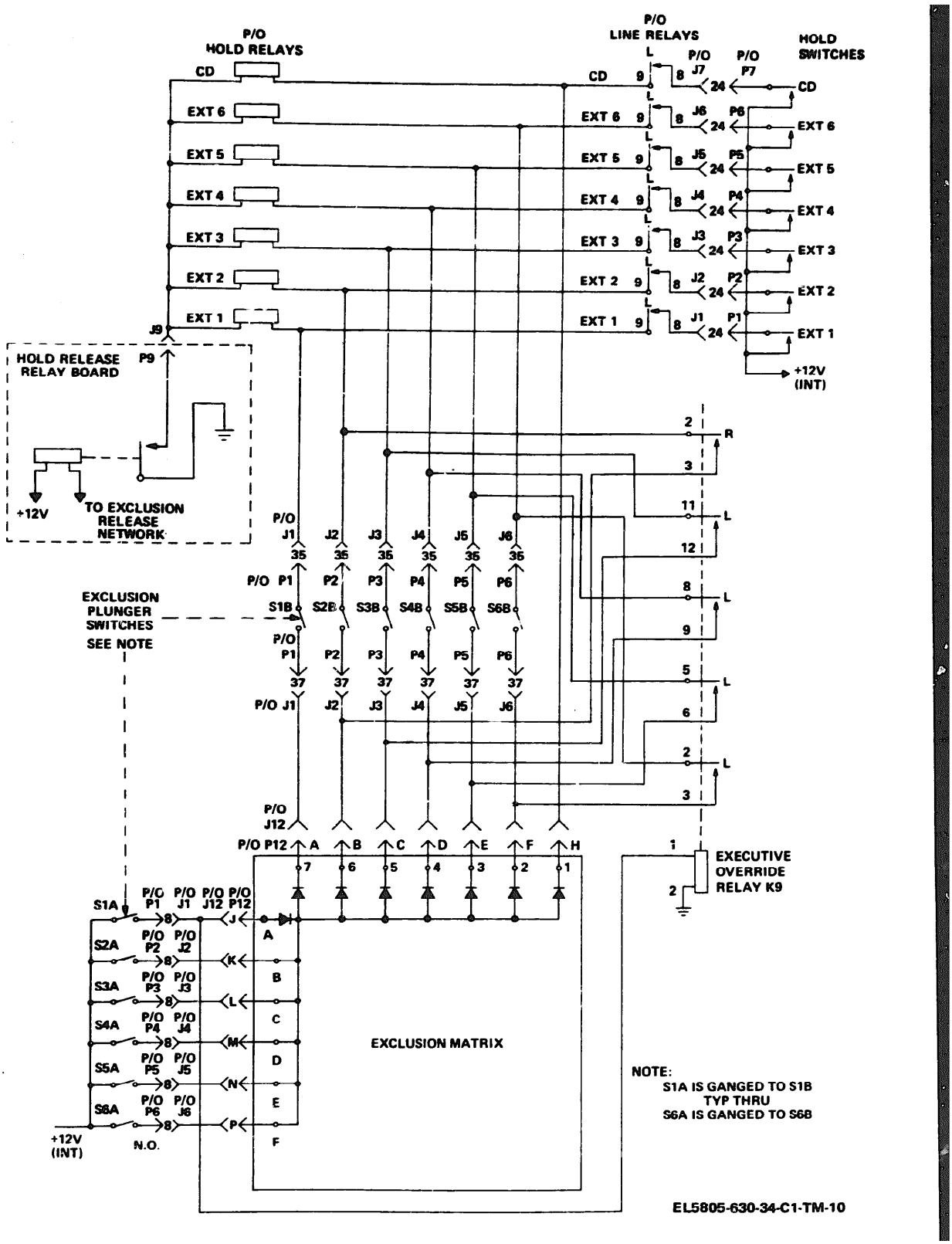


Figure 2-10. Simplified schematic diagram, extension telephone, executive override circuit.

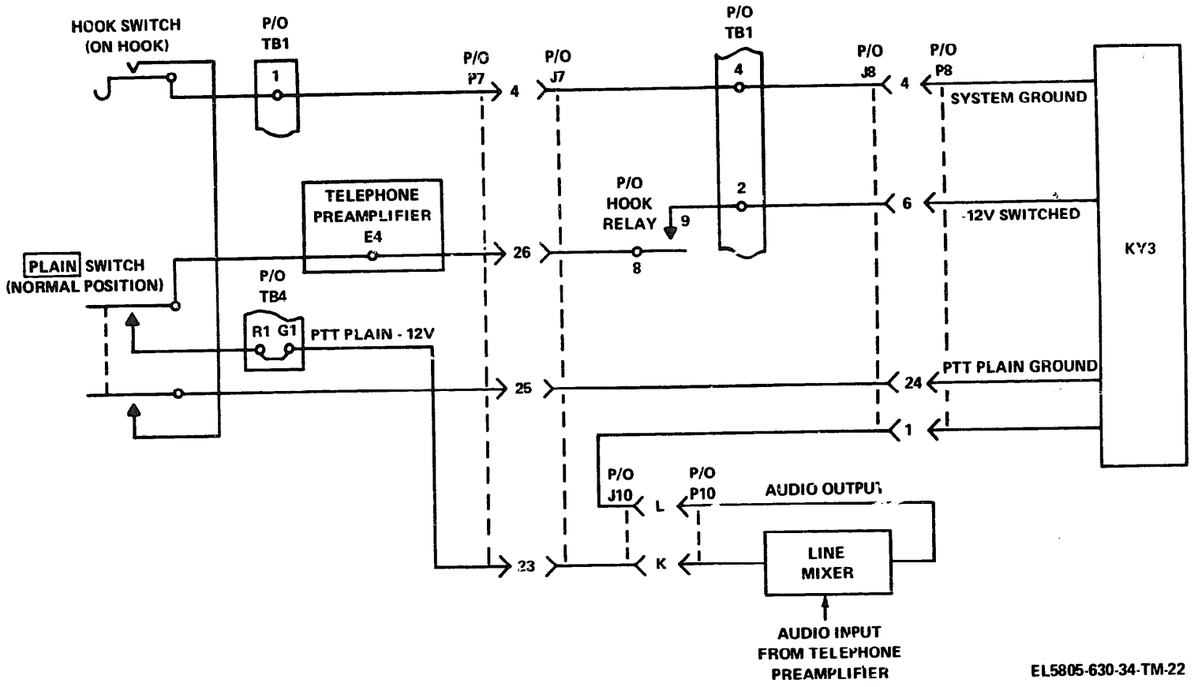


Figure 2-11. Call commander telephone, type 860A plain function.

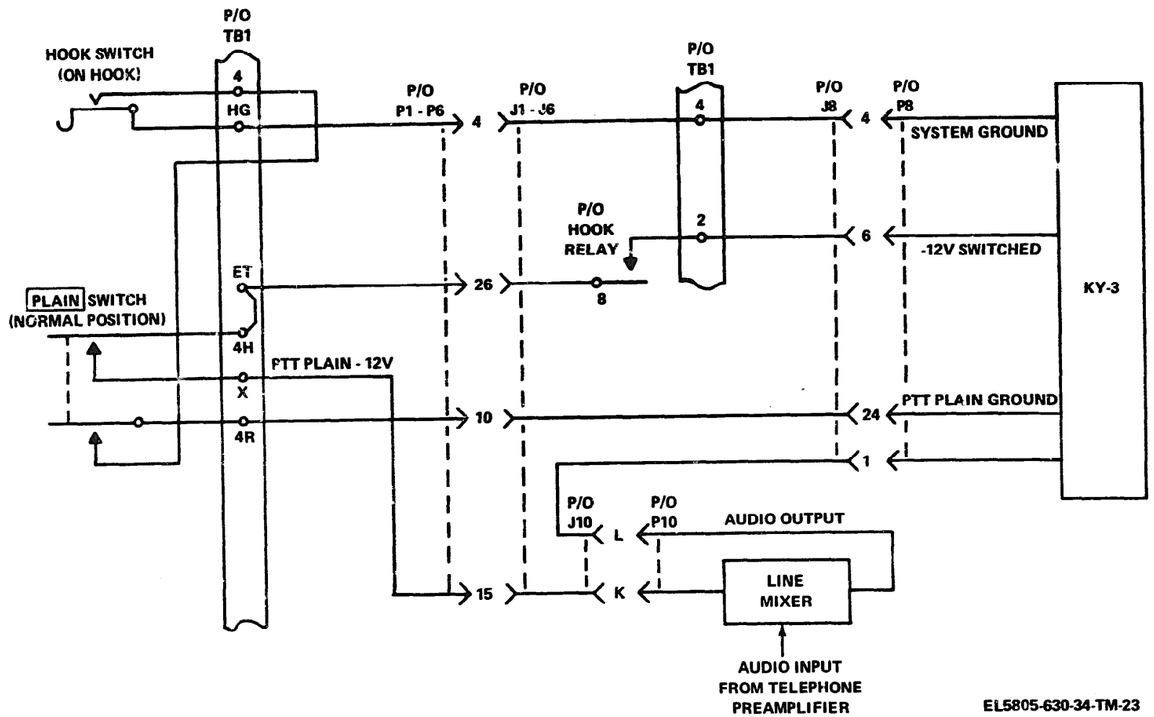


Figure 2-12. Extension telephone. type 186A plain function.

CHAPTER 3

MAINTENANCE INSTRUCTIONS

3-1. General

Direct support and general support maintenance for the call director set consists of all operator and organizational maintenance (TM 11-5805-630-12), continuity tests of the chassis wiring, bench testing and repair of the power supply (except the printed wiring boards) and repair of the call commander and extension phones. The tools and materials required to perform direct support and general support maintenance is indicated in the maintenance allocation chart (TM 11-5805-630-12).

3-2. Functional Test Power Supply CD-134-10A

a. Connect test equipment as shown in figure 3-2.

b. With power toggle switch S2 OFF (fig. 3-1), connect 120 volts AC through cable to power supply J14 input plug.

c. Set range selector knob on digital meter to 0-100 volts DC range.

d. Connect digital meter leads to corn and + 12 volt screw terminals on terminal board TB-2.

e. Place toggle switch S2 to ON.

f. Check that digital readout is between plus 10.8 and 13.2 volts DC.

g. Turn power switch S2 to OFF.

h. Connect digital meter leads to COM and -12 volt terminals.

i. Turn power switch to ON.

j. Check for digital readout between minus 10.8 and 13.2 volts DC.

3-3. Troubleshooting and Repair of Power supply CD-134-10A

Item No.	Symptom	Probable Cause	Remedy
1	No output voltage	*a.* No input voltage	*a.* Check for 120 Vac input voltage.
		b. Defective transformer T1	*b.* Replace transformer (fig. 3–1).
		c. Defective switch S2	*c.* Replace switch (fig. 3–1).
		d. Shorted capacitor C5	*d.* Replace capacitor (fig. 3–1).
		e. Shorted bridge rectifier CR2 or CR3	*e.* Replace rectifier (fig. 3–1).
2	Low positive output voltage. Normal negative output voltage.	*a.* Open bridge rectifier CR2	*a.* Replace rectifier (fig. 3–1).
		b. Defective transistor Q2	*b.* Replace transistor (fig. 3–1).
		c. Defective printed wiring board CD–134–1 (POS. SUPPLY).	*c.* Replace printed wiring board (fig. 3–1).
		d. Defective capacitor C3	*d.* Replace capacitor (fig. 3–1).
3	Low negative output voltage. Normal positive output voltage.	*a.* Open bridge rectifier CR3	*a.* Replace rectifier (fig. 3–1).
		b. Defective transistor Q3	*b.* Replace transistor (fig. 3–1).
		c. Defective printed wiring board CD–134–1 (NEG. SUPPLY).	*c.* Replace printed wiring board (fig. 3–1).
		d. Defective capacitor C4	*d.* Replace capacitor (fig. 3–1).
4	On/off indicator lamp on front of logic box does not light.	*a.* Defective indicator lamp DS1	*a.* Replace lamp (fig. 3–7(1)).
		b. Defective lamp socket XDS1	*b.* Replace socket (fig. 3–7–(1)).
		c. Defective resistor R4	*c.* Replace resistor (fig. 3–1).

3-4. Continuity Tests

a. Call Commander. Refer to figures FO-1 and FO-1.1.

b. Extension Phone. Refer to figures FO-2 and FO-2.1.

c. Logic Box. Refer to figure FO-3 (sheets 1,2, 3, and 4) and the wire run list (para 3-11).

3-5. Disassemably of Extension Phone (fig. 3-4)

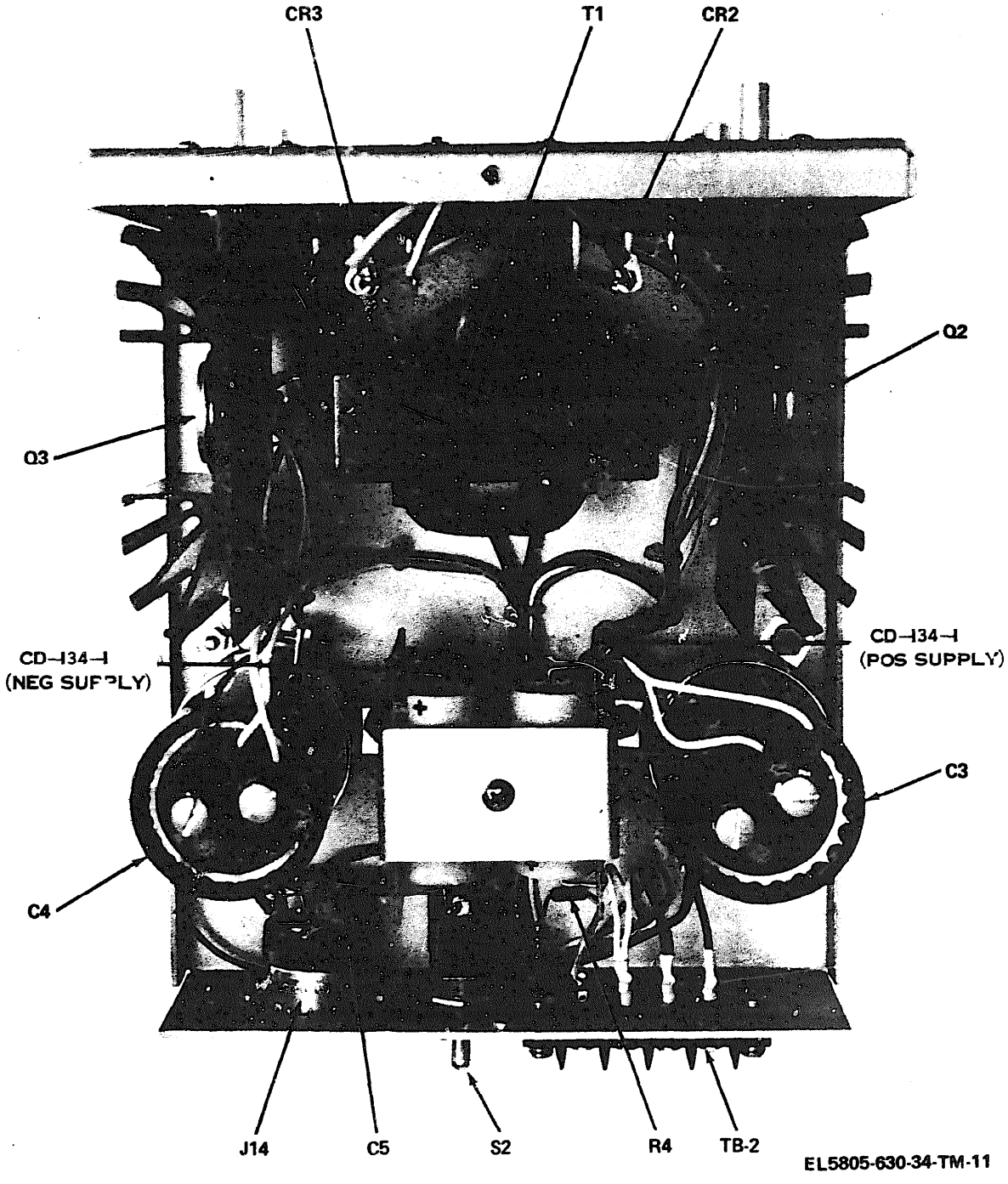


Figure 3-1. Power supply CD-134-10A, internal view, parts location.

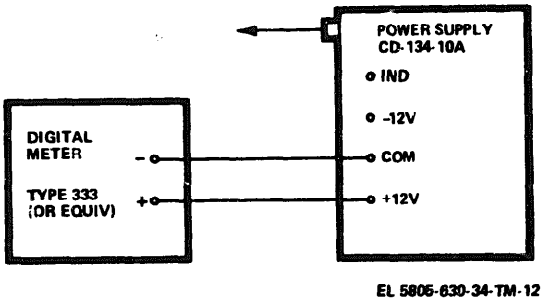


Figure 3-2. Bench teat setup, Power Supply CD-134-10A.

NOTE

Complete disassembly is not necessary for replacement of the major parts. Some parts obviously may be removed and replaced by disconnecting the leads from the terminal board and removing the mounting screws for the part. Access to most parts can be obtained by loosening cable clamp (33), screws (59), and raising one end of the chassis (60).

a. General. There are several major, components that make up the type 186, 186A extension phone. As shown in figure 3-4, they are the handset, housing, dial, key and terminal board, hookswitch, and preamplifier unit.

b. Housing Removal.

(1) Insert screwdriver between the faceplate (1, 2) and back of the housing (4).

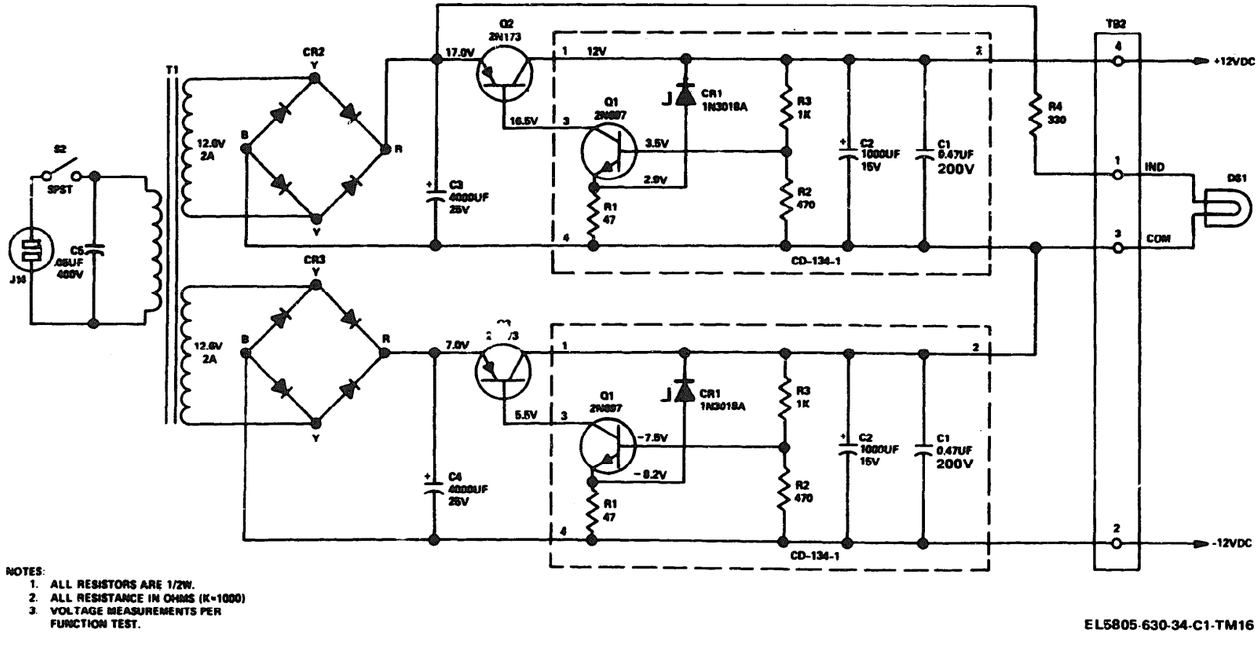
(2) Turn the screwdriver blade until the faceplate top is clear of the housing then lift the top of the faceplate and remove it.

(3) Back-off the housing/baseplate screw (3) enough to permit the housing to be lifted up.

(4) Lift the back of the housing up slightly and slide it forward enough to permit the two front housing hooks (6) to become free from the slots in the bracket on the base plate.

(5) Lift the housing straight up.

Item No.	*Item Name*
1	FACEPLATE
2	STRIP
3	SCREW
4	HOUSING
5	SCREW
6	HOOK
7	HOOK
8	CLIP
9	HANDSET AND CORD ASSEMBLY
10	CAP
11	SCREW
12	MICROPHONE ASSEMBLY
13	SCREW
14	SPRING
15	CAP
16	SCREW
17	CAPSULE
17A	GASKET
18	SPRING
19	CORD ASSEMBLY
20	HANDSET SHELL
21	SCREW
22	CLAMP
23	SCREW
24	WASHER
25	DIAL
26	SCREW
27	WASHER
28	BRACKET
29	SCREW
30	WASHER
31	BUZZER
32	WASHER
33	CLAMP
34	CONNECTOR
35	CORD
36	KEY AND TERMINAL BOARD ASSEMBLY
36	BOARD ASSEMBLY
37	SHIELD
38	LAMP
39	CAP
40	CAP
41	SCREW
42	RECEPTACLE AND BUTTON ASSEMBLY
43	PUSHBUTTON
44	PUSHBUTTON
45	BUSHING
46	LADDER ASSEMBLY
47	SCREW
48	SPRING ASSEMBLY
49	FRAME ASSEMBLY
50	RELEASE SEGMENT
51	PLUNGER
52	PLUNGER
53	SPRING
54	SPRING
55	LATCH BAR
56	PIN
57	SCREW
58	TERMINAL BOARD ASSEMBLY
59	SCREW
60	CHASSIS
61	HOOKSWITCH AND CRADLE ASSEMBLY
62	SPRING
63	PIN
64	HOOKSWITCH AND BRACKET ASSEMBLY
65	CRADLE HOOK AND BRACKET ASSEMBLY



NOTES:
1. ALL RESISTORS ARE 1/2W.
2. ALL RESISTANCE IN OHMS (K=1000)
3. VOLTAGE MEASUREMENTS PER FUNCTION TEST.

EL5805-630-34-C1-TM16

Figure 3-3. Power supply CD-134-10A schematic diagram.

Item No.	Item Name
66	EXCLUSION KEY
67	SCREW
68	WASHER
69	WASHER
70	BASEPLATE ASSEMBLY
71	PRE-AMPLIFIER AND CASE ASSEMBLY

c. Handset. To remove the handset (9), Proceed as follows:

(1) Remove the cable ties an? disconnect the handset leads from the terminal board.

(2) Open the cord clamp (22) on the key assembly enough to permit the cord to be removed.

(3) Unhook the cord strain relief hook (part of the handset cord) from the slot in the baseplate.

d. Handset Cord.

(1) Unscrew and remove the caps and capsules from the handset.

(2) Loosen the terminal screws on the cap sules and disconnect the green and red leads (fig. FO-2).

(3) Loosen the strain relief clamp screw and free the clamp.

(4) Loosen the terminal screws at the receiver end and remove the cord lead.

(5) Pull out the old cord and feed the leads of the new cord through the entrance hole in the microphone end of the handset. Feed the yellow and black leads that must be connected at the receiver end through the handset handle and into the receiver cavity.

(6) Connect the handset cord leads, fasten the strain relief clamp, and replace the springs, capsules and caps.

e. Dial. To remove the dial (25) from chassis proceed as follows:

(1) Loosen the dial mounting bracket screw (26), and washer (27), then lift the right side of the dial and slide it to the right to free it from the tab on the chassis.

(2) Disconnect the leads from the terminal board.

(3) To remove the dial from the dial mounting bracket (28), remove the three dial mounting screws (23) and washers (24).

f. Buzzer. Remove the buzzer (31) by disconnecting the two leads and remove the two mounting screws (29) and washers (30).

g. Line Cord. Remove the line cord (35) by removing the line cord clamp (33), washers (27, 32), then disconnect the leads from the terminal board.

h. Key and Terminal Board Assembly. The key and terminal board assembly (36) is removed from the set as one unit because the leads from the key assembly are soldered to the terminal boards. Proceed as follows:

(1) Disconnect the five interconnecting wires from the terminal board.

(2) Disconnect the hookswitch and exclusion key leads that terminate on the terminal board.

(3) Remove the terminal board, mounting screw (57) and loosen the two key frame assembly screws (21).

(4) Lift the key assembly so that it will come out of the slot in the chassis.

i. Pushbutton Assembly Adjustment. Pushbutton assembly spring adjustments are as follows: (see fig. 3-5, A through C).

NOTE

Unless otherwise specified, all spring follow and clearance values are gauge-by-eye requirements. If out of tolerance, adjust as necessary.

(1) All pickup armature springs shall lie in a horizontal plane with the spring pileup insulators.

(2) There shall be 0.020 inch minimum contact separation between pickup make combinations and 0.010 inch minimum between the HOLD make combination in the nonoperated position.

(3) There shall be a minimum follow of 0.050 inch in the make springs with the button fully depressed (operated position).

(4) Make combinations shall make contact within 0.010 inch of each other.

NOTE

It is preferred that the center contact of the pickup keys make first.

(5) With any pickup plunger in the operated position, the springs of another pickup pileup shall not make contact until the contacts of the first pileup have broken and the plunger has released.

(6) The pickup button shall not release until the HOLD button is fully depressed and partially released.

(7) There shall be a minimum follow of 0.010 inch in the break spring of the HOLD break combination when the tension of the armature spring is removed.

(8) The break spring of the HOLD button shall not make until after the make springs of the pickup button have broken.

j. Hookswitch Assembly.

(1) Remove the two hookswitch mounting

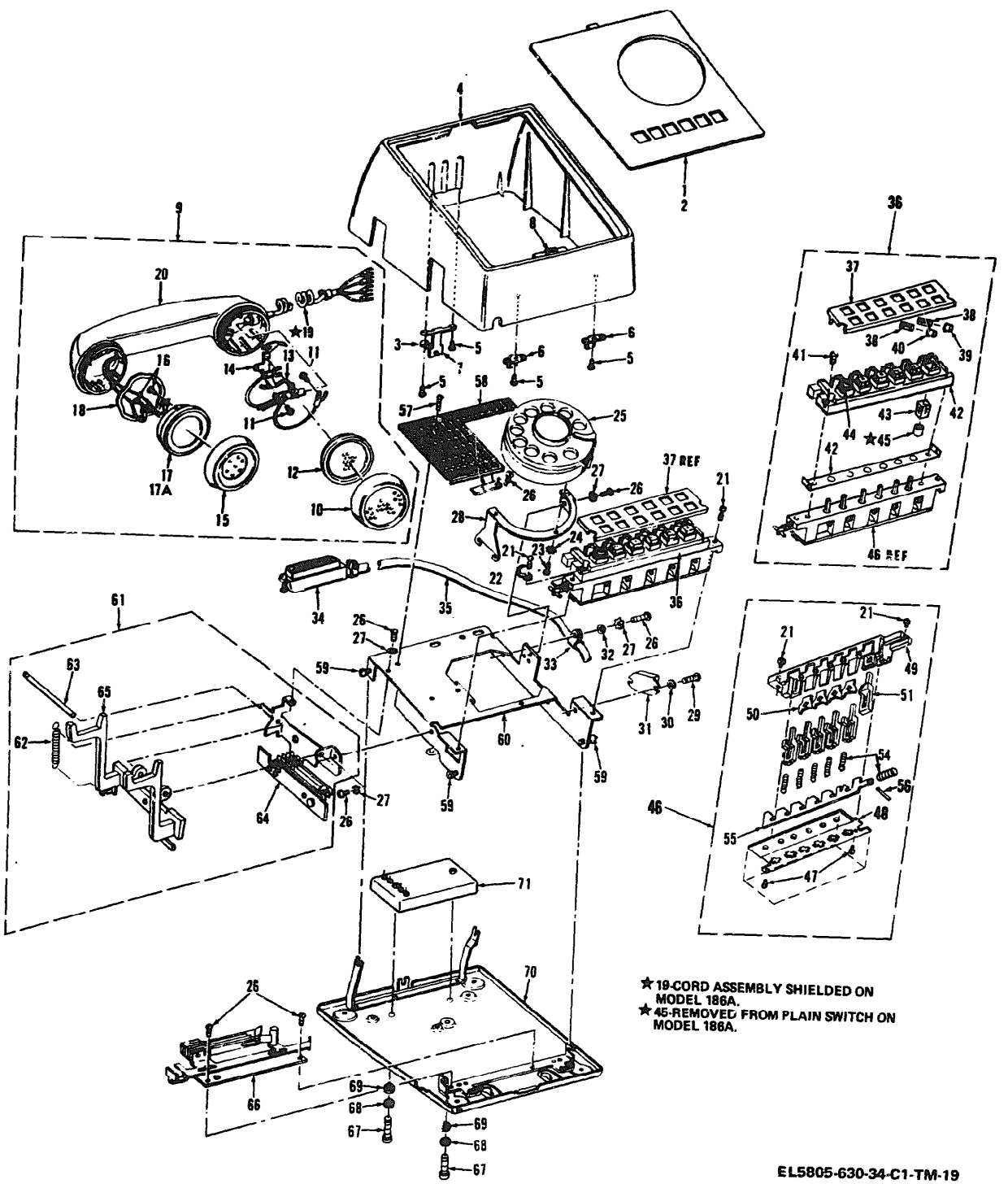


Figure 3-4. Extension telephone type 186 and 186A, exploded view.

screws (26) and washers (27).

(2) Slide the hookswitch out the side and remove it.

k. Hookswitch Lever and Springs.

(1) The hookswitch stop with the hookswitch in the on-hook position, is fixed in position and is not adjustable.

NOTE

In the following, break springs are closed with the hookswitch in the on-hook position (fig. 3-5D). Make springs are closed with the hookswitch in the off-hook position (fig. 3-5E).

(2) Break springs shall follow a minimum of 0.010 inch when the tension of its associated lever spring is removed from it. The back spring need only have perceptible follow.

(3) The lever spring of the break-make combination shall follow only perceptibly when the tension of the single make combination armature spring is removed from it.

(4) With the hookswitch in either the on-hook or off-hook position, there shall be 0.010 inch minimum clearance between the springs not designed to make contact.

(5) At the position where the make springs of the make-break combination just close, there shall be a minimum of 0.010 inch clearance between the contacts of the single make combination.

(6) With the hookswitch in the off-hook position, the single break combination shall have 0.010 inch minimum contact separation.

(7) At the position where the break contacts of the break make combination first open, there shall be a 0.010 inch minimum contact separation between the lever spring and the make spring.

(8) At the position where the single make combination first closes, there shall be a perceptible up to 0.005 inch clearance between the buffer of the single make combination and the lever spring of the single break combination.

NOTE

Hookswitch sequence of operation when the hookswitch is moved from the off-hook to the on-hook position is as follows:

(a) Single break contact closes.
(b) Single make contact opens.
(c) Make of break-make opens.
(d) Break of break-make closes.

(9) Note also that the hookswitch restoring spring must cause the spring pileup to be actuated fully when the set is off-hook but must not allow the handset to float free when the set is on-hook.

i. Exclusion Key Remove the exclusion key (66) by removing the two mounting screws (26).

m. Exclusion Key Adjustment. Exclusion key spring adjustment is as follows:

(1) The formed lever springs shall cause a minimum of 0.019 inch follow in the break springs when the key is operated. All other break springs shall have a minimum follow of 0.010 inch.

(2) There shall be a minimun follow of 0.015 inch in the make spring.

(3) There shall be a perceptible up to 0.010 inch clearance between the formed lever springs and the buffers of the outside lever springs.

NOTE

With the hookswitch and dial mounting base in place and the handset removed, the exclusion key shall operate to its maximum travel in both directions. With the exclusion key pulled out (handset off-hook), make contacts should break and break contacts should make upon restoring the hookswitch.

n. Preamplifier Unit. Remove two screws (67) and four washers (68, 69) securing the unit to the base plate.

3-6. Reassemably of Extension Telephone

a. Base Plate Assembly and Preamplifier Unit.

(1) The base plate (70) has two U-shaped brackets eyeleted to it to support the chassis. The bracket with the shorter vertical arms is at the front of the instrument.

(2) Attach the preamplifier unit (71) by aligning the unit on the base plate (70) mounting holes and securing it in place with two screws (67) and four washers (68, 69). The leads are connected as indicated in figure FO-2.

b. Exclusion Keg Assembly.

(1) Mount the exclusion key (66) to the base plate (70) with the exclusion key mounting screws (26). The leads are connected as indicated in figure FO-2.

NOTE

Check the exclusion switch pull-in to insure that the arm is not binding on the plate.

(2) Position the exclusion switch cord di-

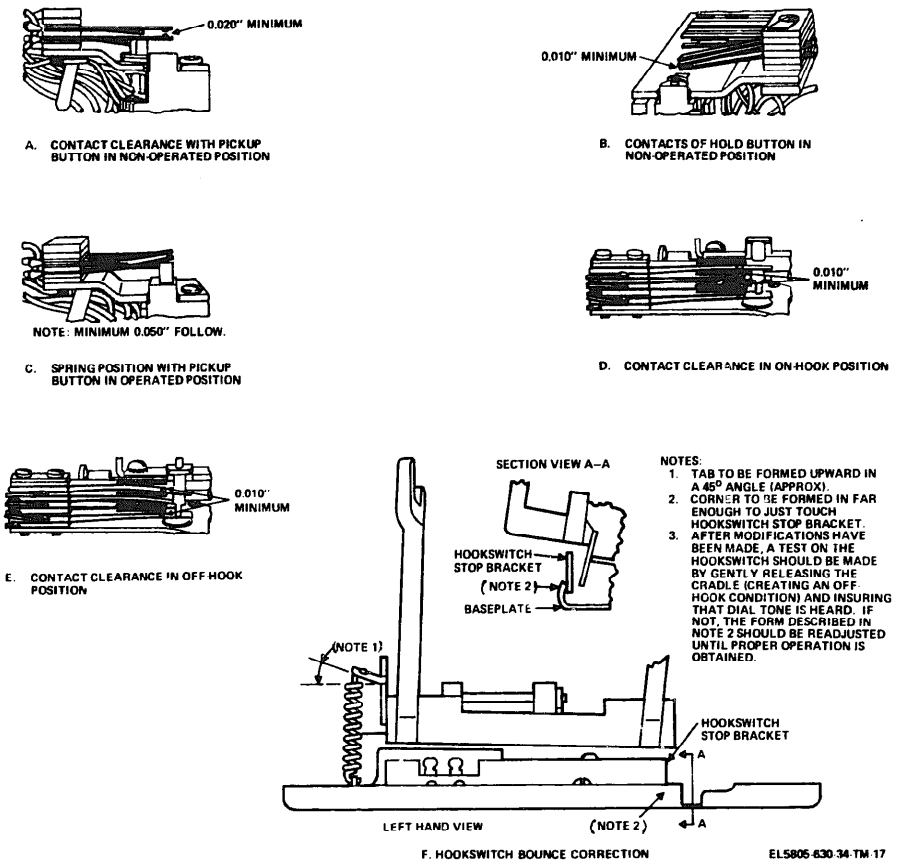


Figure 3-5. Contact clearance and hookswitch bounce correction diagram.

rectly over the switch body to clear the tabs of the hookswitch assembly.

c). Hookswitch Assembly. Position the hookswitch assembly (61-65) along the left side of the chassis and secure with the two hookswitch mounting screws (26) and washers (27). Wiring connections are made as indicated in figure FO-2.

d. Key and Terminal Board Assembly.

(1) Insert the left side of the key and terminal board assembly (36) into the chassis slot.

(2) Secure the key and terminal board assembly to the chassis with the two key frame assembly screws (21).

NOTE

Be sure all terminal board wiring is free and clear for connecting to the top of the terminal board.

(3) Secure the terminal board to the chassis with the terminal board mounting screw (51).

(4) Install the interconnecting wires between the terminal board and the assembly (fig. FO-2).

NOTE

At this time complete the wiring of the preamplifier, hookswitch, and exclusion key by terminating their leads on the terminal board.

e. Line Cord Assembly.

(1) Secure the cord to the chassis with the cord clamp (33), screw (26), and washers (27,32).

(2) Install the line cord (35) by connecting the spade terminals to the terminal board as indicated in figure FO-2.

f. Buzzer Assembly.

(1) Assemble the buzzer (31) to the side of the chassis with the two mounting screws (29) and washers (30)

(2) Wire buzzer as indicated in figure FO-2.

g. Buzzer Adjustment. To adjust buzzer tone, remove the buzzer cover and move the adjustable tone arm (screw adjusted) until the desired tone is attained.

h. Handset Assembly.

(1) Attach the handset (20) by connecting the handset leads to the terminals on the termi-

nal board as indicated in figure FO-2.

(2) Hook the cord strain relief hook (part of the handset cord) in the slot on the base plate and secure the cord under the cord clamp (33). Secure clamp with screw (26) and washers (27, 32).

(3) Add tie wraps as required.

i. Dial Assembly.

(1) Attach the dial (25) to the dial mounting bracket (28) with the three dial mounting screws (23) and washers (24).

(2) Connect the leads as indicated in figure FO-2.

(3) Position the dial and bracket on the chassis so that the left side of the bracket engages the tab on the chassis.

(4) Attach the right side of the bracket to the chassis with the bracket mounting screw (26) and washer (27).

j. Housing Assembly.

(1) Lower the housing (4) over the set.

(2) Guide the two front housing hooks (6) into the slots in the bracket on the base plate (7).

(3) Lower the housing and secure with housing/baseplate screw (3).

k. Face Plate Assembly.

(1) Insert the face plate into the tab at the edge of the housing (4).

(2) Lower the face plate over the dial until it touches the housing. Insert a screwdriver blade between the face plate and housing, twist the screwdriver and press the face plate into place. Remove the screwdriver.

3-7. Disassembly of Call Commander Telephone

(fig. 3-6)

NOTE

Complete disassembly is not necessary for replacement of the major parts. Some parts obviously can be removed and replaced by disconnecting the leads from the terminal boards and removing the mounting screws for the parts. Access to most parts can be obtained by loosening the cable clamp (70) and screw (47) and raising one end of the key frame assembly (48).

a. Housing. Carefully lift off the clear plastic face plates (1,2) and the face mat (3,4) by lifting the top part of the face mat away from the housing; move the housing forward to disengage the housing mounting hooks at the front of the unit.

b. Dial.

(1) Loosen the three dial mounting plate screws (10).

(2) Move the dial mounting assembly toward the rear of the unit and lift it clear from the unit.

(3) Disconnect all leads connected to the dial.

(4) Loosen the three dial mounting screws and remove the dial assembly from the dial mounting plate.

c. Key Frame Assembly.

(1) Loosen the right and left key frame bracket screws (47) at the rear of the telephone and cable clamp (70).

(2) Raise the rear of the key frame assembly and lift the front end out of the hinge slots, in which it rests.

d. Mounting Cord Frame.

(1) Raise the key frame assembly (48), using the frame support (49).

(2) Disconnect the four handset cord leads from the mounting cord frame (79).

(3) Remove the four screws (78) which secure the mounting cord frame (79) to the key frame assembly (48).

(4) Lift the mounting cord frame free of the telephone.

e. Key Strip Unit.

(1) Loosen the mounting screws (23) at both ends of the key strip assembly (24) in position 1.

(2) Raise the back of the key-strip assembly, slide it to the rear and lift it out of the key well in the key frame assembly (48) until the receptacle of the key strip assembly (24) is disengaged from the plug attached to the key frame assembly and the latch bar (46) is disengaged from the latch arm (43).

Item No.	*Item Name*
1	PLATE
2	PLATE
3	PLATE
4	PLATE
5	SCREW
6	HOUSING
7	SCREW
8	BRACKET
9	HOOK
10	SCREW
11	ROTARY DIAL AND BRACKET ASSEMBLY
12	SCREW
13	WASHER
14	DIAL
15	SCREW
16	BRACKET
17	PLATE
18	NUT
19	WASHER
20	WASHER
21	TERMINAL
22	CAPACITOR

Item No.	Item Name
23	SCREW
24	KEY STRIP ASSEMBLY
25	SHIELD
26	LAMP
27	CAP
28	CAP
29	SCREW
30	RECEPTACLE AND BUTTON ASSEMBLY
31	PUSHBUTTON
32	PUSHBUTTON
33	KEY SET
34	LIGHT SHIELD
35	LAMP
36	SCREW
37	RECEPTACLE AND BUTTON ASSEMBLY
38	PUSHBUTTON
39	BUSHING
40	SCREW
41	WASHER
42	LOCK
43	LATCH ARM
44	SPRING
45	SCREW
46	LATCH BAR
47	SCREW
48	KEY FRAME ASSEMBLY
49	FRAME SUPPORT
50	HANDSET AND CORD ASSEMBLY
51	CAP
52	SCREW
53	MICROPHONE ASSEMBLY
54	SCREW
55	SPRING
56	CAP
57	SCREW
58	CAPSULE
59	GASKET
60	SPRING
61	CORD ASSEMBLY
62	HANDSET SHELL
63	SCREW
64	RINGER
64A	SCREW
64A	NUT
64C	WASHER
64D	BUZZER
65	RING
66	PIN
67	SPRING
68	CRADLE HOOK ASSEMBLY
69	SCREW
70	CLAMP
71	MOUNTING CORD AND RECEPTACLE ASSEMBLY
72	PAD
73	BASEPLATE
74	SCREW
75	WASHER
76	WASHER
77	PRE-AMPLIFIER AND CASE ASSEMBLY
78	SCREW
79	MOUNTING CORD FRAME

f. Adjustments.

(1) Contacts. Normally open spring contacts should have a minimum separation of 0.006 inch. Normal closed contacts should have perceptible follow (over travel). Minimum separation between adjacent springs should be 1/64 inch.

(2) Latching mechanism. The latching mechanism should operate freely. If operation is unsatisfactory, replace the unit.

3-8. Reassembly of Call Commander Telephone

Replacement of components is similar to procedures contained in paragraph 3-6. Refer to figure FO-1 for wiring diagram of the call commander telephone.

3-9. Repair of Logic Box

Repair of the logic box is obvious, therefore steps and procedures to disassembly and reassemble parts from the set are omitted from this text. In general parts should be removed in sequence of index numbers assigned to the exploded view (fig. 3-7 parts 1 and 2). Refer to figure FO-3 part 1 schematic diagram and paragraph 3-10 for wiring information.

Item No.	Description
1	SCREW
2	CABINET
3	COVER
4	RELAY
5	SCREW
6	NUT
7	WASHER
8	WASHER
9	SOCKET
10	RESISTOR
11	RESISTOR
12	RESISTOR
13	SEMICONDUCTOR DEVICE
14	CAPACITOR
15	SCREW
16	NUT
17	WASHER
18	WASHER
19	BRACKET
20	ANCHOR
21	SCREW
22	NUT
23	BRACKET
24	BRACKET
25	SUPPORT
26	SUPPORT
27	BRACKET
28	LAMP
29	LAMPHOLDER
30	PIATE
31	SCREW
32	AMPLIFIER ASSEMBLY W/CASE
33	SCREW
34	WASHER
35	WASHER
36	INCLUSION MATRIX W/CASE

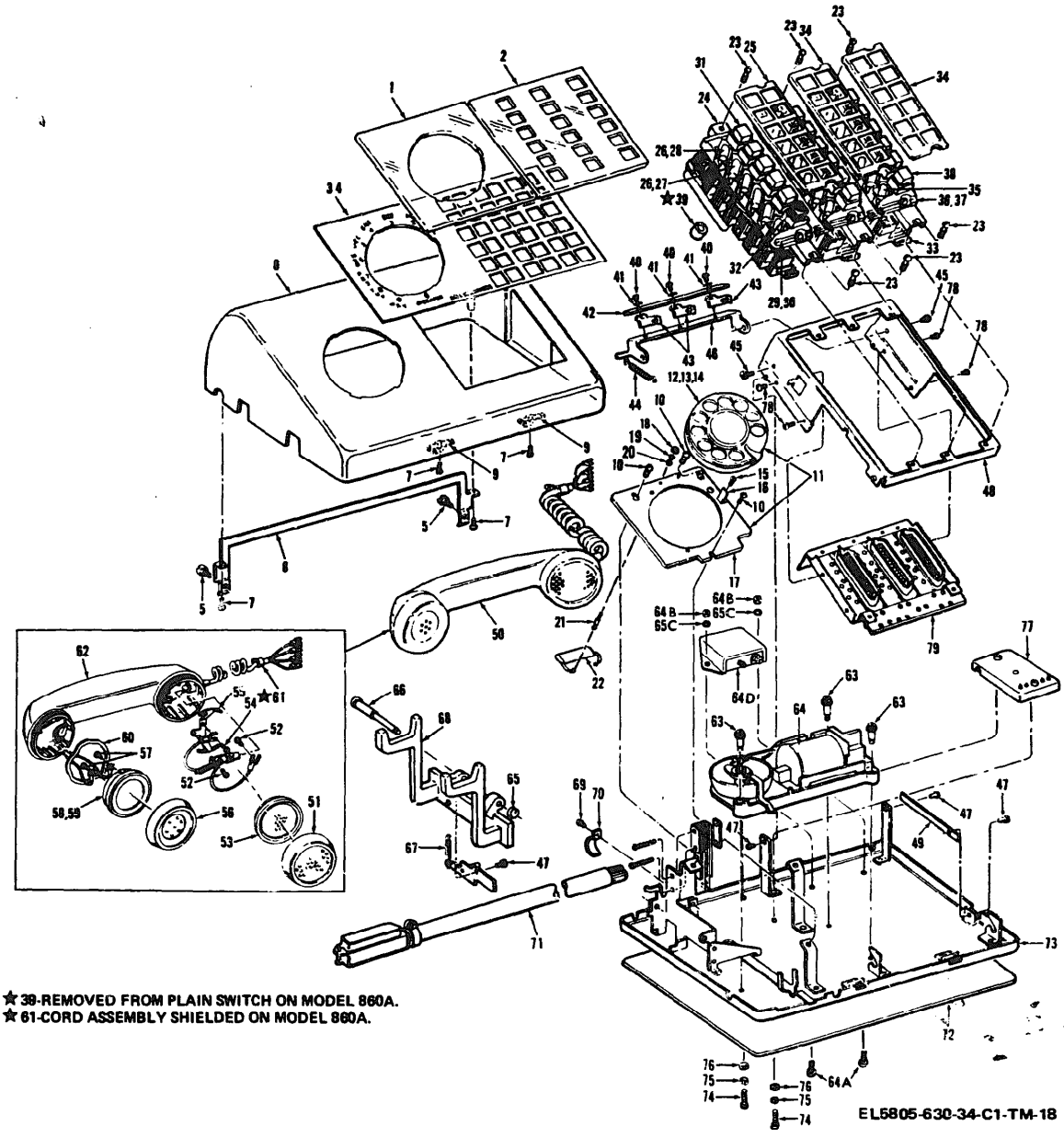


Figure 3-6. Call Commander Telephone type 860 and 860A, exploded view.

Item No.	Description
37	EXCLUSION MATRIX W/CASE
38	LINE MIXER AMPLIFIER ASSEMBLY
39	SCREW
40	POWER SUPPLY
41	SCREW
42	RELAY BOARD ASSEMBLY
43	BAR
44	SCREW
45	SUPPORT
46	SCREW
47	WASHER
48	CONNECTOR

49	CONNECTOR
50	CONNECTOR
51	FUSE
52	FUSEHOLDER
53	SWITCH
54	SCREW
55	PLATE
56	CONNECTOR
57	CONNECTOR
58	CONNECTOR
59	LEAD
60	SCREW
61	TERMINAL BOARD
62	SCREW
63	NUT
64	PLATE
65	SUPPORT
66	CONNECTOR
67	FOOT

3-10. Repair of Power Supply CD-134-10A (fig. 3-8)

Repair of the power -supply is obvious by examination of figure 3-8. Remove the parts in the sequence provided by the index numbers. Refer to figure 3-3 for a schematic diagram and to figure 3-l for a parts location diagram.

Item No.	Description
1	SCREW
2	WASHER
3	WASHER
4	COVER
5	SCREW
6	CONNECTOR
7	CAPACITOR
8	SWITCH
9	SCREW
10	WASHER
11	WASHER
12	SCREW
13	TERMINAL BOARD
14	RESISTOR
15	TERMINAL
16	CAPACITOR
17	SCREW
18	NUT
19	BRACKET
20	BRACKET
21	PRINTED CIRCUIT BOARD ASSEMBLY
22	SCREW
23	CONNECTOR
24	SPACER
25	NUT
26	TERMINAL
27	WASHER
28	WASHER
29	TRANSISTOR
30	HEATSINK
31	SCREW
32	BRACKET ASSEMBLY
33	BRACKET ASSEMBLY
34	TRANSFORMER
35	SCREW
36	TRANSISTOR
37	CHASSIS ASSEMBLY

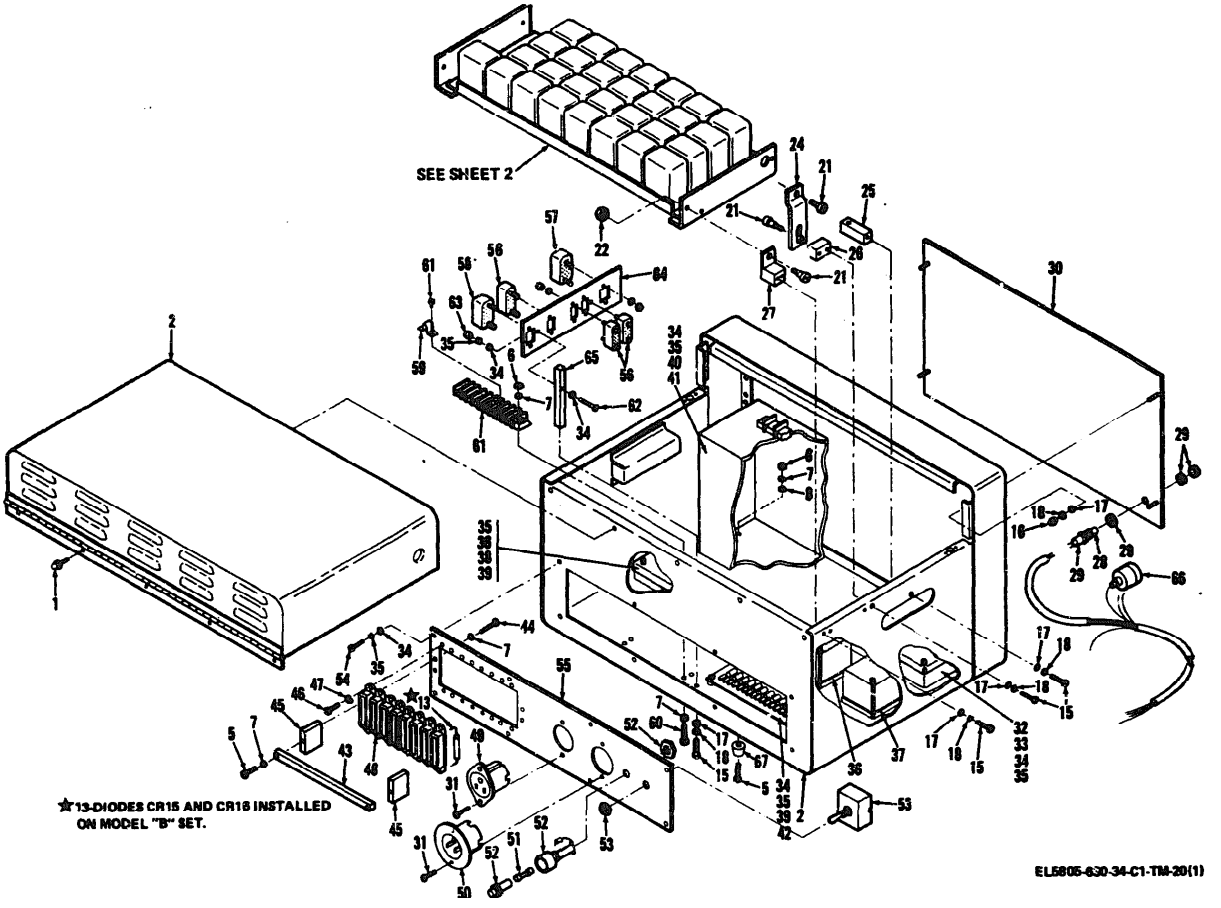


Figure 3-7. ① . ' Call director system logic set CD-134-43A and CD-134-43B, exploded view, sheet 1 of 2.

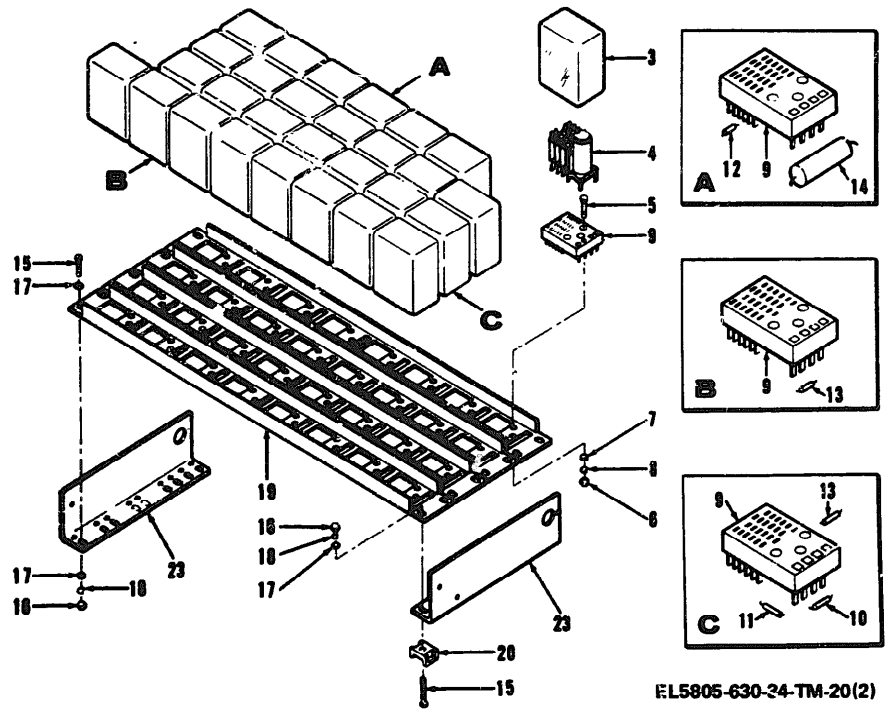


Figure 3-7.② . Call director system logic set CD-134-43A and CD-134-43B, exploded view, sheet 2 of 2.

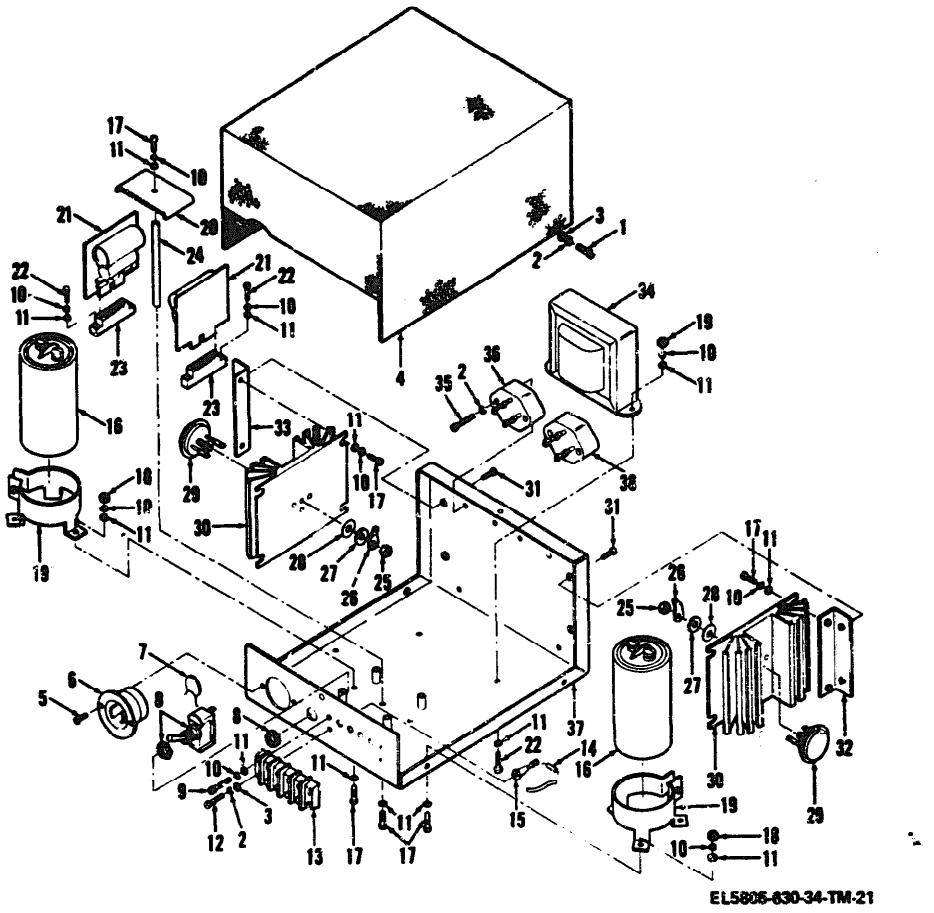


Figure 3-8. Power supply CD-134-10A, exploded view.

3-11. Wire Run List for Logic Box

COMPONENT TERM	TO DESTINATION	COLOR	AWG	SYM	NOTES
J1-1	1-K6-R6	BLACK			
J1-3	J2-3	BROWN			
J1-4	J2-4	BLACK			
J1-5	1-K5-L5	BROWN			
J1-6	J2-6	ORANGE			
J1-6	TB-1-1	ORANGE			
J1-7	TB1-7	RED			
J1-7	J2-7	RED			
J1-8	K9-1	BROWN			
J1-8	J12-J	BROWN			
J1-10 [b]	J2-10	WHITE			
J1-11	J2-11	WHITE			
J1-11	J9-DD	WHITE			
J1-13	1-K6-L5	RED			
J1-15 [b]	J2-15	ORANGE			
J1-16	J7-44	ORANGE			
J1-16	1-K7-L5	ORANGE			
J1-18	J11-J	BROWN			
J1-19	J2-19	WHITE			

See footnotes at end of table.

COMPONENT TERM	TO DESTINATION	COLOR	AWG	SYM	NOTES
J1-22	J2-22	WHITE			
J1-22	J9-U	WHITE			
J1-24	1-K6-L8	ORANGE			
J1-25	J9-A	BROWN			
J1-26	1-K5-L8	YELLOW			
J1-27	1-K6-L12	GREEN			
J1-29	1-K6-R12	BLUE			
J1-31	1-K5-1	VIOLET			
J1-35	1-K6-L9	GRAY			
J1-37	J12-A	BROWN			
J1-39	J9-S	WHITE			
J1-39	J2-39	WHITE			
J1-41	1-K8-R7	WHITE			
J1-43	1-K7-L4	RED			
J1-43	J7-12	RED			
J1-49	1-K6-1	YELLOW			
J2-1	2-K11-R6	BLACK			
J2-3	J3-3	BROWN			
J2-4	J3-4	BLACK			
J2-5	2-K10-L5	BROWN			
J2-6	J3-6	ORANGE			
J2-7	J3-7	RED			
J2-8	J12-K	RED			
J2-10 [b]	J3-10	WHITE			
J2-11	J3-11	WHITE			
J2-13	2-K11-L5	RED			
J2-15 [b]	J3-15	ORANGE			
J2-16	J7-45	ORANGE			
J2-16	2-K12-L5	ORANGE			
J2-18	J11-K	RED			
J2-19	J3-19	WHITE			
J2-22	J3-22	WHITE			
J2-24	2-K11-L8	ORANGE			
J2-25	J9-B	RED			
J2-26	2-K10-L8	YELLOW			
J2-27	2-K11-L12	GREEN			
J2-29	2-K11-R12	BLUE			
J2-31	2-K10-1	VIOLET			
J2-35	2-K11-L9	GRAY			
J2-37	K9-R3	RED			
J2-37	J12-B	RED			
J2-39	J3-39	WHITE			
J2-41	2-K13-R7	WHITE			
J2-43	2-K12-L4	RED			
J2-43	J7-17	RED			
J2-49	2-K11-1	YELLOW			
J3-1	3-K15-R6	BLACK			
J3-3	J4-3	BROWN			
J3-4	J4-4	BLACK			
J3-5	3-K14-L5	BROWN			
J3-6	J4-6	ORANGE			
J3-7	J4-7	RED			
J3-8	J12-L	ORANGE			
J3-10 [b]	J4-10	WHITE			
J3-11	J4-11	WHITE			
J3-13	3-K15-L5	RED			
J3-15 [b]	J4-15	ORANGE			
J3-16	J7-46	ORANGE			
J3-16	3-K16-L5	ORANGE			
J3-18	J11-L	ORANGE			
J3-19	J4-19	WHITE			
J3-22	J4-22	WHITE			
J3-24	3-K15-L8	ORANGE			
J3-25	J9-C	ORANGE			
J3-26	3-K14-L8	YELLOW			

See footnotes at end of table.

COMPONENT TERM	TO DESTINATION	COLOR	AWG	SYM	NOTES
J3-27	3-K15-L12	GREEN			
J3-29	3-K15-R12	BLUE			
J3-31	3-K14-1	VIOLET			
J3-35	3-K15-L9	GRAY			
J3-37	K9-L12	ORANGE			
J3-37	J12-C	ORANGE			
J3-39	J4-39	WHITE			
J3-41	3-K17-R7	WHITE			
J3-43	3-K16-L4	RED			
J3-43	J7-14	RED			
J3-49	3-K15-1	YELLOW			
J4-1	4-K19-R6	BLACK			
J4-3	J5-3	BROWN			
J4-4	J5-4	BLACK			
J4-5	4-K18-L5	BROWN			
J4-6	J5-6	ORANGE			
J4-7	J5-7	RED			
J4-8	J12-M	YELLOW			
J4-10[b]	J5-10	WHITE			
J4-11	J5-11	WHITE			
J4-13	4-K19-L5	RED			
J4-15[b]	J5-15	ORANGE			
J4-16	J7-47	ORANGE			
J4-16	4-K20-L5	ORANGE			
J4-18	J11-M	YELLOW			
J4-19	J5-19	WHITE			
J4-22	J5-22	WHITE			
J4-24	4-K19-L8	ORANGE			
J4-25	J9-D	YELLOW			
J4-26	4-K18-L8	YELLOW			
J4-27	4-K19-L12	GREEN			
J4-29	4-K19-R12	BLUE			
J4-31	4-K18-1	VIOLET			
J4-35	4-K19-L9	GRAY			
J4-37	J12-D	YELLOW			
J4-37	K9-L9	YELLOW			
J4-39	J5-39	WHITE			
J4-41	4-K21-R7	WHITE			
J4-43	4-K20-L4	RED			
J4-43	J7-20	RED			
J4-49	4-K19-1	YELLOW			
J5-1	5-K23-R6	BLACK			
J5-3	J6-3	BROWN			
J5-4	J6-4	BLACK			
J5-5	5-K22-L5	BROWN			
J5-6	J6-6	ORANGE			
J5-7	J6-7	RED			
J5-8	J12-N	GREEN			
J5-10[b]	J6-10	WHITE			
J5-11	J6-11	WHITE			
J5-13	5-K23-L5	RED			
J5-15[b]	J6-15	ORANGE			
J5-16	J7-48	ORANGE			
J5-16	5-K24-L5	ORANGE			
J5-18	J11-N	GREEN			
J5-19	J6-19	WHITE			
J5-22	J6-22	WHITE			
J5-24	5-K23-L8	ORANGE			
J5-25	J9-E	GREEN			
J5-26	5-K22-L8	YELLOW			
J5-27	5-K23-L12	GREEN			
J5-29	5-K23-R12	BLUE			
J5-31	5-K22-1	VIOLET			
J5-35	5-K23-L9	GRAY			
J5-37	K9-L6	GREEN			

See footnotes at end of table.

COMPONENT TERM	TO DESTINATION	COLOR	AWG	SYM	NOTES
J5-37	J12-E	GREEN			
J5-39	J6-39	WHITE			
J5-41	5-K25-R7	WHITE			
J5-43	5-K24-L4	RED			
J5-43	J7-15	RED			
J5-49	5-K23-1	YELLOW			
J6-1	6-K27-R6	BLACK			
J6-3	J7-3	BROWN			
J6-4	J7-4	BLACK			
J6-5	6-K26-L5	BROWN			
J6-6	J7-6	ORANGE			
J6-7	J7-7	RED			
J6-8	J12-P	BLUE			
J6-10[b]	J7-25	WHITE			
J6-11	J7-11	WHITE			
J6-13	6-K27-L5	RED			
J6-15[b]	J7-23	ORANGE			
J6-16	J7-50	ORANGE			
J6-16	6-K28-L5	ORANGE			
J6-18	J11-P	BLUE			
J6-19	J7-43	WHITE			
J6-22	J7-22	WHITE			
J6-24	6-K27-L8	ORANGE			
J6-25	J9-F	BLUE			
J6-26	6-K26-L8	YELLOW			
J6-27	6-K27-L12	GREEN			
J6-29	6-K27-R12	BLUE			
J6-31	6-K26-1	VIOLET			
J6-35	6-K27-L9	GRAY			
J6-37	K9-L3	BLUE			
J6-37	J12-F	BLUE			
J6-39	J7-39	WHITE			
J6-41	6-K29-R7	WHITE			
J6-43	6-K28-L4	RED			
J6-43	J7-21	RED			
J6-49	6-K27-1	YELLOW			
J7-1	7-K2-R6	BLACK			
J7-2	J7-4	BLACK			
J7-3	J8-3	BROWN			
J7-4	J8-4	BLACK			
J7-5	7-K1-L5	BROWN			
J7-6	J6-6	ORANGE			
J7-7	J7-10	RED			
J7-7	J6-7	RED			
J7-8	7-K2-1	YELLOW			
J7-11	J6-11	WHITE			
J7-12	J1-43	RED			
J7-13	J8-13	WHITE			
J7-14	J3-43	RED			
J7-15	J5-43	RED			
J7-16	7-K3-L5	ORANGE			
J7-17	J2-43	RED			
J7-18	J11-R	VIOLET			
J7-19	J8-19	WHITE			
J7-20	J4-43	RED			
J7-21	J6-43	RED			
J7-22	7-K2-4	WHITE			
J7-22	J6-22	WHITE			
J7-23[a]	J8-37	WHITE			
J7-23[b]	J10-K	ORANGE			
J7-24	7-K2-L8	ORANGE			
J7-25[b]	J8-24	WHITE			
J7-25[a]	J8-35	WHITE			
J7-26	7-K1-L8	YELLOW			
J7-27	7-K2-L12	GREEN			

See footnotes at end of table.

COMPONENT TERM	TO DESTINATION	COLOR	AWG	SYM	NOTES
J7-29	7-K2-R12	BLUE			
J7-31	7-K1-1	VIOLET			
J7-32	1-K6-R3	BLACK			
J7-33	2-K11-R3	BROWN			
J7-34	3-K15-R3	RED			
J7-35	4-K19-R3	ORANGE			
J7-36	5-K23-R3	YELLOW			
J7-37	7-K2-L5	RED			
J7-38	6-K27-R3	GREEN			
J7-39	J6-39	WHITE			
J7-41	7-K4-R7	WHITE			
J7-43	J6-19	WHITE			
J7-44	J1-16	ORANGE			
J7-45	J2-16	ORANGE			
J7-46	J3-16	ORANGE			
J7-47	J4-16	ORANGE			
J7-48	J5-16	ORANGE			
J7-49	J8-49	WHITE			
J7-50	J6-16	ORANGE			
J8-1	J10-L	WHITE			
J8-3	TB1-6	BROWN			
J8-3	J1-3	BROWN			
J8-4	TB1-4	BLACK			
J8-4	J1-4	BLACK			
J8-6	TB1-2	ORANGE			
J8-9	J9-Y	WHITE			
J8-10	1-K8-L2	ORANGE			
J8-10	J1-6	ORANGE			
J8-11	J9-CC	WHITE			
J8-11 *b*	CR15 (ANODE)				
J8-13	J7-13	WHITE			
J8-19	J7-19	WHITE			
J8-19	J9-V	WHITE			
J8-24 *b*	J7-25	WHITE			
J8-27	1-K8-R11	WHITE			
J8-29	1-K8-L11	WHITE			
J8-31	1-K5-L3	WHITE			
J8-33	J9-X	WHITE			
J8-35 *a*	J7-25	WHITE			
J8-37 *a*	J7-23	WHITE			
J8-39	S1-A	WHITE			
J8-39 *b*	CR16 (ANODE)				
J8-41	1-K7-L8	WHITE			
J8-43	J1-19	WHITE			
J8-49	J7-49	WHITE			
J8-49	J9-W	WHITE			
J8-50	TB1-7	RED			
J8-50	1-K5-L6	RED			
J9-A	J1-25	BROWN			
J9-B	J2-25	RED			
J9-C	J3-25	ORANGE			
J9-D	J4-25	YELLOW			
J9-E	J5-25	GREEN			
J9-F	J6-25	BLUE			
J9-H	6-K27-R9	BLUE			
J9-J	5-K23-R9	GREEN			
J9-K	4-K19-R9	YELLOW			
J9-L	3-K15-R9	ORANGE			
J9-M	2-K11-R9	RED			
J9-N	1-K6-R9	BROWN			
J9-P	K4, K8, K13, K17, K21, K25, K29-2	BLACK			

See footnotes at end of table.

COMPONENT TERM	TO DESTINATION	COLOR	AWG	SYM	NOTES
J9-R	S1-D	WHITE			
J9-S	J1-39	WHITE			
J9-T	TB1-7	RED			
J9-U	J1-22	WHITE			
J9-V	J8-19	WHITE			
J9-W	J8-49	WHITE			
J9-X	J8-33	WHITE			
J9-Y	J8-9	WHITE			
J9-Z	TB1-2	ORANGE			
J9-AA	J10-K	ORANGE			
J9-BB	TB1-4	BLACK			
J9-CC	J8-11	WHITE			
J9-DD	J1-11	WHITE			
J10-A	7-K4-R5				
J10-B	5-K25-R5				
J10-C	1-K8-R5				
J10-D	2-K13-R5				
J10-E	3-K17-R5				
J10-F	4-K21-R5				
J10-H	6-K29-R5				
J10-J	TB1-6	BROWN			
J10-K	J9-AA	ORANGE			
J10-L	J8-1				
J11-A	1-K8-L4	BROWN			
J11-B	2-K13-L4	RED			
J11-C	3-K17-L4	ORANGE			
J11-D	4-K21-L4	YELLOW			
J11-E	5-K25-L4	GREEN			
J11-F	6-K29-L4	BLUE			
J11-H	7-K4-L4	VIOLET			
J11-J	J1-18	BROWN			
J11-K	J2-18	RED			
J11-L	J3-18	ORANGE			
J11-M	J4-18	YELLOW			
J11-N	J5-18	GREEN			
J11-P	J6-18	BLUE			
J11-R	J7-18	VIOLET			
J12-A	J1-37	BROWN			
J12-B	J2-37	RED			
J12-C	J3-37	ORANGE			
J12-D	J4-37	YELLOW			
J12-E	J5-37	GREEN			
J12-F	J6-37	BLUE			
J12-J	J1-8	BROWN			
J12-H	7-K4-1	BLACK			
J12-K	J2-8	RED			
J12-L	J3-8	ORANGE			
J12-M	J4-8	YELLOW			
J12-N	J5-8	GREEN			
J12-P	J6-8	BLUE			
J13-A	1-K7-R5	BROWN			
J13-B	2-K12-R5	RED			
J13-C	3-K16-R5	ORANGE			
J13-D	4-K20-R5	YELLOW			
J13-E	5-K24-R5	GREEN			
J13-F	6-K28-R5	BLUE			
J13-H	7-K3-R5	VIOLET			
J13-L	1-K7-R11	BROWN			
J13-M	2-K12-R11	RED			
J13-N	3-K16-R11	ORANGE			
J13-P	4-K20-R11	YELLOW			
J13-R	5-K24-R11	GREEN			
J13-S	6-K28-R11	BLUE			
J13-T	7-K3-R11	VIOLET			

See footnotes at end of table.

COMPONENT TERM	TO DESTINATION	COLOR	AWG	SYM	NOTES
J13-J	TB1-1	ORANGE			
J13-K	TB1-6	BROWN			
TB1-1	J13-J	ORANGE			
TB1-1	J1-6	ORANGE			
TB1-2	1-K5-L9	ORANGE			
TB1-2	1-K1-L9	ORANGE			
TB1-2	J9-Z	ORANGE			
TB1-2	J8-6	ORANGE			
TB1-4	J9-BB	BLACK			
TB1-4	1-K5-2	BLACK			
TB1-4	J8-4	BLACK			
TB1-4	1-K1-2	BLACK			
TB1-5	J13-K	BROWN			
TB1-5	J8-3	BROWN			
TB1-6	1-K8-R6	BROWN			
TB1-6	1-K4-R6	BROWN			
TB1-6	J10-J	BROWN			
TB1-7	J9-T	RED			
TB1-7	J1-7	RED			
TB1-8	J8-5C	RED			
TB1-9	FUSE F1 (BOTTOM)	WHITE			
TB1-10	S1-C	WHITE			

[a] Used on Model 134A.
Used on Model 134B.

3-12. Jumper Wire List-Relays and Related Parts

COMPONENT TERM	TO DESTINATION	COLOR	AWG	SYM	NOTES
K1-L6	EXT 1 THROUGH 7	RED	SOLID 26		2½"
K1-L3	EXT 1 THROUGH 7	BLACK	SOLID 26		3½
K1-L9	EXT 1 THROUGH 7		26		3½
K1-2	EXT 1 THROUGH 7 & K9	BLACK	26		3½
CR1 "1" (CATH)	K1-4				
K2-R2	R8	RED	26		1¼
K2-R8	K1-L6	RED	26		2½
K2-"4"	EXT 1 THROUGH 7	RED	26		4
K2-R4	EXT 1 THROUGH 7	BLACK	26		3½
K2-2	K1-2	BLACK	26		2
EXT K2-2 L1	K9-R2	BLACK	26		17
EXT K2-3 L1	K9-L11	BLACK	26		15
EXT K2-4 L1	K9-L8	BLACK	26		13
EXT K2-5 L1	K9-L5	BLACK	26		11
EXT K2-6 L1	K9-L2	BLACK	26		8
CR1 K2-R3	"4" (CATH)		26		1¼
R1 K2-L10	K2-R10				
K3-R2	K1-4	BLACK	26		4"
K3-R6	K2-R6	BLACK	26		4
K3-R12	K2-L12	BLACK	26		2½
K3-L12	K2-R12	BLACK	26		3½
K3-L11	K3-R4	BLACK	26		2½
K3-R4	K2-R4		26		4
K3-R1	K1-L2		26		4
K3-L6	K2-R2	RED	26		4
K3-L2	K1-L5	BLACK	26		5
K3-1	K2-L5	BLACK	26		3½
K3-L8	EXT 1 THROUGH 7	BLACK	26		3½
K3-L3	K2-L4	BLACK	26		3½

COMPONENT TERM	TO DESTINATION	COLOR	AWG	SYM	NOTES
K3-2	K2-2	BLACK	26		2½
K4-R3	K2-R3	BLACK	26		5
K4-L10	K2-R11	BLACK	26		5
K4-R4	K2-R5	BLACK	26		5
K4-R8	K3-L7	BLACK	26		1¼
K4-1	K2-L-1 & K2-L9	BLACK	26		5
K4-R6		BLACK	26		2½
K4-L3	K1-L3	BLACK	26		7
K4-L8	K2-L2	BLACK	26		5"
K4-L5	K3-L1	BLACK	26		3½
K3-L2	EXT 1 THROUGH 7	ORANGE	26		5½
K4-L9	K4-R2	RED	26		2½
K4-L11	EXT 1 THROUGH 7	BROWN	26		3½
K4-R2	K3-L6	RED	26		2½
K4-R11	EXT 1 THROUGH 7	BROWN	26		3½
K4-2	EXT 1 THROUGH 7	BLACK	26		3½
R2 K4-R10	K2-L11				
R3 K4-L12	K4-R12				
C1 K4-1	K4-2				
K5-L6	EXT 1 THROUGH 7	RED	26		2½
K5-L3	EXT 1 THROUGH 7	BLACK	26		3½
K5-L9	EXT 1 THROUGH 7		26		3½
K5-2	EXT 1 THROUGH 7 & K9	BLACK	26		3½
CR4					
"1" (CATH)	K5-4				
K6-R2	R8	RED	26		1¼"
K6-R8	K5-L6	RED	26		2½
K6-"4"	EXT 1 THROUGH 7	RED	26		4
K6-R4	EXT 1 THROUGH 7	BLACK	26		3½
K6-2	K5-2	BLACK	26		2
EXT K6-2 L1	K9-R2	BLACK	26		17
EXT K6-3 L1	K9-L11	BLACK	26		15

COMPONENT-TERM	TO DESTINATION	COLOR	AWG	SYM	NOTES
			SOLID		
EXT K6-4 L1	K9-L8	BLACK	26		13
EXT K6-5 L1	K9-L5	BLACK	26		11
EXT K6-6 L1	K9-L2	BLACK	26		8
CR3 K6-R3	"4" (CATH)		26		1¼
R4 K6-L10	K6-R10				
K7-R2	K5-4	BLACK	26		4
K7-R6	K6-R6	BLACK	26		4
K7-R12	K6-L12	BLACK	26		2½
K7-L12	K6-R12	BLACK	26		3½
K7-L11	K7-R4	BLACK	26		3½
K7-R4	K6-R4		26		4
K7-R1	K5-L2		26		4
K7-L6	K6-R9	RED	26		4
K7-L2	K5-L5	BLACK	26		5"
K7-1	K6-L5	BLACK	26		3½
K7-L8	EXT 1 THROUGH 7	BLACK	26		3½
K7-L3	K6-L4	BLACK	26		3½
K7-2	K6-2	BLACK	26		2½
K8-R3	K6-R3	BLACK	26		5
K8-L10	K6-R11	BLACK	26		5
K8-R4	K6-R5	BLACK	26		5
K8-R8	K7-L7	BLACK	26		1¼
K8-1	K6-L1 & K6-L9	BLACK	26		5
K8-R6		BLACK	26		2½
K8-L3	K5-L3	BLACK	26		7
K8-L8	K6-L2	BLACK	26		5
K8-L5	K7-L1	BLACK	26		3½
K8-L2	EXT 1 THROUGH 7	ORANGE	26		5½
K8-L9	K8-R2	RED	26		2½
K8-L11	EXT 1 THROUGH 7	BROWN	26		3½
K8-R2	K7-L6	RED	26		2½
K8-R11	EXT 1 THROUGH 7	BROWN	26		3½
K8-2	EXT 1 THROUGH 7	BLACK	26		3½
R5 K8-R10	K6-L11				
R6 K8-L12	K8-R12				
C2 K8-1	K8-2				
K10-L6	EXT 1 THROUGH 7	RED	26		2½
K10-L3	EXT 1 THROUGH 7	BLACK	26		3½
K10-L9	EXT 1 THROUGH 7		26		3½
K10-2	EXT 1 THROUGH 7 & K9	BLACK	26		3½
CR6					
"1" (CATH)	K10-4				
K11-R2	R8	RED	26		1¼
K11-R8	K10-L6	RED	26		2½
K11-"4"	EXT 1 THROUGH 7	RED	26		4
K11-R4	EXT 1 THROUGH 7	BLACK	26		3½
K11-2	K10-2	BLACK	26		2
EXT K11-2 L1	K9-R2	BLACK	26		17
EXT K11-3 L1	K9-L11	BLACK	26		15
EXT K11-4 L1	K9-L8	BLACK	26		13
EXT K11-5 L1	K9-L5	BLACK	26		11
EXT K11-6 L1	K9-L2	BLACK	26		8"
CR5 K11-R3	"4" (CATH)		26		1½
R7 K11-L10	K11-R10		26		
K12-R2	K10-4	BLACK	26		4
K12-R6	K11-R6	BLACK	26		4
K12-R12	K11-L12	BLACK	26		2½
K12-L12	K11-R12	BLACK	26		3½
K12-L11	K12-R4	BLACK	26		2½
K12-R4	K11-R4				4
K12-R1	K10-L2		26		4
K12-L6	K11-R2	RED	26		4
K12-L2	K10-L5	BLACK	26		5
K12-1	K11-L5	BLACK	26		3½

COMPONENT-TERM	TO DESTINATION	COLOR	AWG	SYM	NOTES
			SOLID		
K12-L8	EXT 1 THROUGH 7	BLACK	26		3½
K12-L3	K11-L4	BLACK	26		3½
K12-2	K11-2	BLACK	26		2½
K13-R3	K11-R3	BLACK	26		5
K13-L10	K11-R11	BLACK	26		5
K13-R4	K11-R5	BLACK	26		5
K13-R8	K12-L7	BLACK	26		1¼"
K13-1	K11-L1 & K11-L9	BLACK	26		5
K13-R6		BLACK	26		2½
K13-L3	K10-L3	BLACK	26		7
K13-L8	K11-L2	BLACK	26		5
K13-L5	K12-L1	BLACK	26		3½
K13-L2	EXT 1 THROUGH 7	ORANGE	26		5½
K13-L9	K13-R2	RED	26		2½
K13-L11	EXT 1 THROUGH 7	BROWN	26		3½
K13-R2	K12-L6	RED	26		2½
K13-R11	EXT 1 THROUGH 7	BROWN	26		3½
K13-2	EXT 1 THROUGH 7	BLACK	26		3½
R8 K13-R10	K11-L11				
R9 K13-L12	K13-R12				
C3 K13-1	K13-2				
K14-L6	EXT 1 THROUGH 7	RED	26		2½
K14-L3	EXT 1 THROUGH 7	BLACK	26		3½
K14-L9	EXT 1 THROUGH 7		26		3½
K14-2	EXT 1 THROUGH 7 & K9	BLACK	26		3½
CR8					
"1" (CATH)	K14-4				
K15-R2	R8	RED	26		1¼"
K15-R8	K14-L6	RED	26		2½
K15-"4"	EXT 1 THROUGH 7	RED	26		4
K15-R4	EXT 1 THROUGH 7	BLACK	26		3½
K15-2	K14-2	BLACK	26		2
EXT K15-2 L1	K9-R2	BLACK	26		17
EXT K15-3 L1	K9-L11	BLACK	26		15
EXT K15-4 L1	K9-L8	BLACK	26		13
EXT K15-5 L1	K9-L5	BLACK	26		11
EXT K15-6 L1	K9-L2	BLACK	26		8
CR7 K15-R3	"4" (CATH)		26		1¼
R10 K15-L10	K15-R10				
K16-R2	K14-4	BLACK	26		4
K16-R6	K15-R6	BLACK	26		4
K16-R12	K15-L12	BLACK	26		2½
K16-L12	K15-R12	BLACK	26		3½
K16-L11	K16-R4	BLACK	26		2½
K16-R4	K15-R4		26		4
K16-R1	K14-L2		26		4"
K16-L6	K15-R2	RED	26		4
K16-L2	K14-L5	BLACK	26		5
K16-1	K15-L5	BLACK	26		3½
K16-L8	EXT 1 THROUGH 7	BLACK	26		3½
K16-L3	K15-L4	BLACK	26		3½
K16-2	K15-2	BLACK	26		2½
K17-R3	K15-R3	BLACK	26		5
K17-L10	K15-R11	BLACK	26		5
K17-R4	K15-R5	BLACK	26		5
K17-R8	K16-L7	BLACK	26		1¼
K17-1	K15-L1 & K15-L9	BLACK	26		5
K17-R6		BLACK	26		2½
K17-L3	K14-L3	BLACK	26		7
K17-L8	K15-L2	BLACK	26		5
K17-L5	K16-L1	BLACK	26		3½
K17-L2	EXT 1 THROUGH 7	ORANGE	26		5½
K17-L9	K17-R2	RED	26		2½

COMPONENT-TERM	TO DESTINATION	COLOR	AWG	SYM	NOTES
			SOLID		
K17-L11	EXT 1 THROUGH 7	BROWN	26		3½
K17-R2	K16-L6	RED	26		2½
K17-R11	EXT 1 THROUGH 7	BROWN	26		3½
K17-2	EXT 1 THROUGH 7	BLACK	26		3½
R11 K17-R10	K15-L11				
R12 K17-L12	K17-R12				
C4 K4-1	K17-2				
K18-L6	EXT 1 THROUGH 7	RED	26		2½
K18-L3	EXT 1 THROUGH 7	BLACK	26		3½
K18-L9	EXT 1 THROUGH 7		26		3½
K18-2	EXT 1 THROUGH 7 & K9	BLACK	26		3½
CR10					
"1" (CATH)	K18-4				
K19-R2	R8	RED	26		1¼
K19-R8	K18-L6	RED	26		2½
K19-"4"	EXT 1 THROUGH 7	RED	26		4
K19-R4	EXT 1 THRU 7	BLACK	26		3½
K19-2	K18-2	BLACK	26		2
EXT K19-2-L1	K9-R2	BLACK	26		17
EXT K19-3 L1	K9-L11	BLACK	26		15
EXT K19-4 L1	K9-L8	BLACK	26		13
EXT K19-5 L1	K9-L5	BLACK	26		11
EXT K19-6 L1	K9-L2	BLACK	26		8
CR9 K19-R3	"4" (CATH)		26		1¼
R13 K19-L10	K19-R10				
K20-R2	K18-4	BLACK	26		4
K20-R6	K19-R6	BLACK	26		4
K20-R12	K19-L12	BLACK	26		2½
K20-L12	K19-R12	BLACK	26		3½
K20-L11	K20-R4	BLACK	26		3½
K20-R4	K19-R4		26		4
K20-R1	K18-L2		26		4
K20-L6	K19-R2	RED	26		4
K20-L2	K18-L5	BLACK	26		5
K20-1	K19-L5	BLACK	26		3½
K20-L8	EXT 1 THROUGH 7	BLACK	26		3½
K20-L3	K19-L4	BLACK	26		3½
K20-2	K19-2	BLACK	26		2½
K21-R3	K19-R3	BLACK	26		5"
K21-L10	K19-R11	BLACK	26		5
K21-R4	K19-R5	BLACK	26		5
K21-R8	K20-L7	BLACK	26		1¼
K21-1	K19-L1 & K19-L9	BLACK	26		5
K21-R6		BLACK	26		2½
K21-L3	K18-L3	BLACK	26		7
K21-L8	K19-L2	BLACK	26		5
K21-L5	K20-L1	BLACK	26		3½
K21-L2	EXT 1 THROUGH 7	ORANGE	26		5½
K21-L9	K21-R2	RED	26		2½
K21-L11	EXT 1 THROUGH 7	BROWN	26		3½
K21-R2	K20-L6	RED	26		2½
K21-R11	EXT 1 THROUGH 7	BROWN	26		3½
K21-2	EXT 1 THROUGH 7	BLACK	26		3½
R14 K21-R10	K19-L11				
R15 K21-L12	K21-R12				
C5 K21-1	K21-2				
K22-L6	EXT 1 THROUGH 7	RED	26		2½"
K22-L3	EXT 1 THROUGH 7	BLACK	26		3½
K22-L9	EXT 1 THROUGH 7		26		3½
K22-2	EXT 1 THROUGH 7 & 9	BLACK	26		3½
CR12					
"1(CATH)	K22-4				
K23-R2	R8	RED	26		1¼
K23-R8	K22-L6	RED	26		2½

COMPONENT-TERM	TO DESTINATION	COLOR	AWG	SYM	NOTES
			SOLID		
K23-"4"	EXT 1 THROUGH 7	RED	26		4
K23-R4	EXT 1 THROUGH 7	BLACK	26		3½
K23-2	K22-2	BLACK	26		2
EXT K23-	K9-R2	BLACK	26		17
EXT K23-	K9-L11	BLACK	26		15
EXT K23-4 L1	K9-L8	BLACK	26		13
EXT K23-5 L1	K9-L5	BLACK	26		11
EXT K23-6 L1	K9-L2	BLACK	26		8
CR11-R3	"4" (CATH)				
R16 K2-L10	K23-R10				
K24-R2	K22-4	BLACK	26		4"
K24-R6	K23-R6	BLACK	26		4
K24-R12	K23-L12	BLACK	26		2½
K24-L12	K23-R12	BLACK	26		3½
K24-L11	K24-R4	BLACK	26		2½
K24-R4	K23-R4		26		4
K24-R1	K22-L2		26		4
K24-L6	K23-R2	RED	26		4
K24-L2	K22-L5	BLACK	26		5
K24-1	K23-L5	BLACK	26		3½
K24-L8	EXT 1 THROUGH 7	BLACK	26		3½
K24-L3	K23-L4	BLACK	26		3½
K24-2	K23-2	BLACK	26		2½
K25-R3	K23-R3	BLACK	26		5
K25-L10	K23-R11	BLACK	26		5
K25-R4	K23-R5	BLACK	26		5
K25-R8	K24-L7	BLACK	26		1¼
K25-1	K23-L1 & K23-L9	BLACK	26		5
K25-R6		BLACK	26		2½
K25-L3	K22-L3	BLACK	26		7
K25-L8	K23-L2	BLACK	26		5
K25-L5	K24-L1	BLACK	26		3½
K25-L2	EXT 1 THROUGH 7	ORANGE	26		5½
K25-L9	K25-R2	RED	26		2½
K25-L11	EXT 1 THROUGH 7	BROWN	26		3½
K25-R2	K24-L6	RED	26		2½
K25-R11	EXT 1 THROUGH 7	BROWN	26		3½
K25-2	EXT 1 THROUGH 7	BLACK	26		3½
R17 K25-R10	K23-L11				
R18 K25-L12	K25-R12				
C6 K25-1	K13-2				
K26-L6	EXT 1 THROUGH 7	RED	26		2½
K26-L3	EXT 1 THROUGH 7	BLACK	26		3½
K26-L9	EXT 1 THROUGH 7		26		3½
K26-2	EXT 1 THROUGH 7 & K9	BLACK	26		3½
CR14					
"1" (CATH)	K26-4				
K27-R2	R8	RED	26		1½"
K27-R8	K26-L6	RED	26		2½
K27-"4"	EXT 1 THROUGH 7	RED	26		4
K27-R4	EXT 1 THROUGH 7	BLACK	26		3½
K27-2	K26-2	BLACK	26		2
EXT K27-2 L1	K9-R2	BLACK	26		17
EXT K27-3 L1	K9-L11	BLACK	26		15
EXT K27-4 L1	K9-L8	BLACK	26		13
EXT K27-5 L1	K9-L5	BLACK	26		11
EXT K27-6 L1	K9-L2	BLACK	26		8
CR13 K27-R3	"4" (CATH)		26		1¼
R19 K27-L10	K27-R10				
K28-R2	K26-4	BLACK	26		4
K28-R6	K27-R6	BLACK			4
K28-R12	K27-L12	BLACK	26		2½
K28-L12	K27-R12	BLACK	26		3½
K28-L11	K28-R4	BLACK	26		2½
K28-R4	K27-R4		26		4

COMPONENT-TERM	TO DESTINATION	COLOR	AWG	SYM	NOTES
			SOLID		
K28-R1	K26-L2		26		4
K28-L6	K27-R2	RED	26		4
K28-L2	K21-L5	BLACK	26		5"
K28-1	K27-L5	BLACK	26		3½
K28-L8	EXT 1 THROUGH 7	BLACK	26		3½
K28-L3	K27-L4	BLACK	26		3½
K28-2	K27-2	BLACK	26		2½
K29-R3	K27-R3	BLACK	26		5
K29-L10	K27-R11	BLACK	26		5
K29-R4	K27-R5	BLACK	26		5
K29-R8	K28-L7	BLACK	26		1¼
K29-1	K27-L1 & K27-L9	BLACK	26		5
K29-R6		BLACK	26		2½
K29-L3	K26-L3	BLACK	26		7
K29-L8	K27-L2	BLACK	26		5
K29-L5	K28-L1	BLACK	26		3½
K29-L2	EXT 1 THROUGH 7	ORANGE	26		5½
K29-L9	K29-R2	RED	26		2½
K29-L11	EXT 1 THROUGH 7	BROWN	26		3½
K29-R2	K28-L6	RED	26		2½
K29-R11	EXT 1 THROUGH 7	BROWN	26		3½
K29-2	EXT 1 THROUGH 7	BLACK	26		3½
R20 K29-R10	K27-L11				
R21 K29-L12	K29-R12				
C7 K29-1	K29-2				
CR15 (CATH)	TB1-4				
CR16 (CATH)	TB1-4				

APPENDIX A

REFERENCES

DA Pam 310-4	Index of Technical Manuals, Technical Bulletins, Supply Manuals (Types 7,8, and 9), Supply Bulletins, and Lubrication Orders.
DA Pam 310-7	U.S. Army Equipment Index of Modification Work Orders.
SB 38-100	Preservation, Packaging and Packing Materials, Supplies, and Equipment Used by the Army.
TB 746-10	Field Instructions for Painting and Preserving Electronic Command Equipment.
TM 11-5805-630-12	Operator's and Organizational Maintenance Manual, Including Repair Parts and Special Tool Lists, Call Director System Model 134A.
TM 38-750	The Army Maintenance Management System (TAMMS).
TM 740-90-1	Administrative Storage of Equipment.

APPENDIX B

DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LISTS (INCLUDING DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS)

Section I. INTRODUCTION

B-l. Scope

This appendix lists repair parts required for performance of direct support and general support maintenance of the AN/GCC-21(V)1 and Model 134A.

B-2. General

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

a Section II. Repair Parts List. A list of repair parts authorized for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending numerical sequence, with the parts in each group listed in figure and item number sequence.

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

c. Section IV. National Stock Number and Part Number Index. A list, in ascending National item identification number (NIIN, last 9 digits) sequence, of all National stock numbers appearing in the listings, followed by a list, in alphanumeric sequence, of all part numbers appearing in the listings. National stock number and part numbers are cross-referenced to each illustration figure and item number appearance.

B-3. Explanation of Columns

The following provides an explanation of columns found in the tabular listings:

a Illustration. This column is divided as follows:

(1) Figure number. Indicates the figure number of the illustration in which the item is shown.

(2) Item number. The number used to identify each item called out in the illustration.

b. Source, Maintenance, and Recoverability Codes [SMR].

(1) Source code. Source codes are assigned to support items to indicate the manner of acquiring support items for maintenance, repair, or overhaul of end items. Source codes are entered in the first and second positions of the Uniform SMR Code format as follows:

Code	Definition
PA	Item procured and stocked for anticipated or known usage.
PD	Support item, excluding support equipment, procured for initial issue or outfitting and stocked only for subsequent or additional initial issues or outfittings. Not subject to automatic replenishment.
XA	Item is not procured or stocked because the requirements for the item will result in the replacement of the next higher assembly.
XD	A support item that is not stocked. When required, item will be procured through normal supply channels.

NOTE

Cannibalization or salvage may be used as a source of supply for any items source coded above except those coded XA, XD, and aircraft support items as restricted by AR 700-42.

(2) Maintenance code. Maintenance codes are assigned to indicate the levels of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the Uniform SMR Code format as follows:

(a) The maintenance code entered in the third position will indicate the lowest maintenance level authorized to remove, replace, and use the support item. The maintenance code entered in the third position will indicate one of the following levels of maintenance:

Code Application/Explanation

O—Support item is removed, replaced, used at the organizational level.

H—Support item is removed, replaced, used at the general support level.

D—Support items that are removed, replaced, used at depot, mobile depot, specialized repair activity only.

(*b*) The maintenance code entered in the fourth position indicates whether the item is to be repaired and identifies the lowest maintenance level with the capability to perform complete repair (i.e., all authorized maintenance functions). This position will contain one of the following maintenance codes:

Code *Application/Explanation*

H—The lowest maintenance level capable of complete repair of the support item is the general support level.

D - The lowest maintenance level capable of complete repair of the support item is the depot level.

Z-Nonreparable. No repair is authorized.

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

Recoverability codes Definition

Z-Nonreparable item. When unserviceable, condemn and dispose at the level indicated in position 3.

H- Reparable item. When uneconomically reparable, condemn and dispose at the general support level.

D - Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal not authorized below depot level.

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

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

NOTE

When a stock-numbered item is requisitioned, the repair part received may have a different part number than the part being replaced.

e. Federal Supply Code for Manufacturer (FSCM). The FSCM is a 5-digit numeric code listed in SB 708-42 which is used to identify the manufacturer, distributor, or Government agency, etc.

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

g. Unit of Measure (U/M). Indicates the standard of the basic quantity of the listed item as used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr, etc.). When the unit of measure differs from the unit of issue, the lowest unit of issue that will satisfy the required units of measure will be requisitioned.

h. Quantity Incorporated in Unit. Indicates the quantity of the item used in the breakout shown on the illustration figure, which is prepared for a functional group, subfunctional group, or an assembly.

B-4. Special Information

Usable on codes are shown in the description column Uncoded items are applicable to all models. Identification of the usable on codes used in this appendix are:

Code	Used on
DDF	Model 134A
DDG	AN/GCC-21(V)1

B-5. How to Locate Repair Parts

a When National stock number or part number is unknown:

(1) First. Using the table of contents, determine the functional group within which the repair part belongs. This is necessary since illustrations are prepared for functional groups and listings are divided into the same groups.

(2) Second. Find the illustration covering the functional group to which the repair part belongs.

(3) Third. Identify the repair part on the illustration and note the illustration figure and item number of the repair part.

(4) Fourth. Using the Repair Parts Listing, find the figure and item number noted on the illustration.

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

(1) First. Using the Index of National Stock Numbers and Part Numbers, find the pertinent National stock number or part number. This index is in ascending NIIN sequence followed by a list of part numbers in ascending alphanumeric sequence, cross-referenced to the illustration figure number and item number.

(2) Second. After finding the figure and item number, locate the figure and item number in the repair parts list.

B-6. Abbreviations

Not applicable.

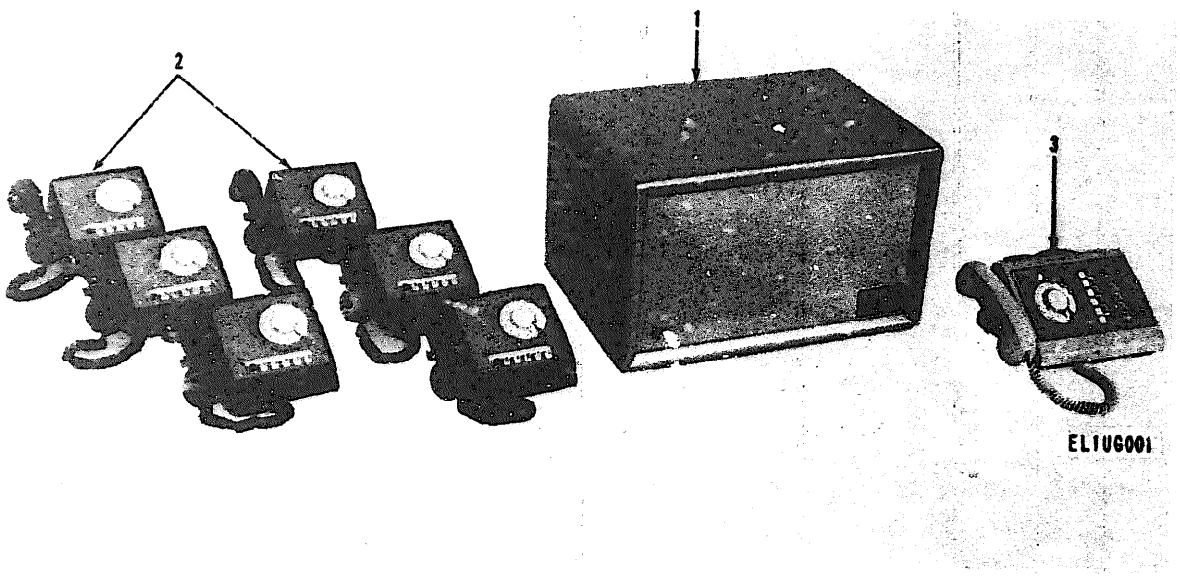


Figure B-1. Call Director System AN/CCC-21(V)1 and Model 134A.

SECTION II. REPAIR PARTS LIST

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	[redacted] NUMBER		USABLE ON CODE	OF MEAS	INC IN UNIT
				GROUP: 00 CALL DIRECTOR SYSTEM AN/GCC-21(V)1				
				AND MODEL 134A				
B-1	1	XDCDD		CD134-43A	02002	LOGIC BOX ASSEMBLY	DDF	EA	1
B-1	1	PDODD	5805-00-138-7403	CD134-43B	02002	LOGIC BOX ASSEMBLY	DDG	EA	1
B-1	2	PAOHH	5805-00-164-3780	CD134-26A	02002	TELEPHONE, EXTENSION	DDF	EA	6
B-1	2	PAOHH	5805-00-138-7398	CD134-26B	02002	TELEPHONE, EXTENSION	DDG	EA	6
B-1	3	PDOHH		CD134-25A	02002	TELEPHONE, SECRETARIAL SET	DDF	EA	1
B-1	3	PDOHH	5805-00-138-7373	CD134-25B	02002	TELEPHONE, SECRETARIAL SET	DDG	EA	1

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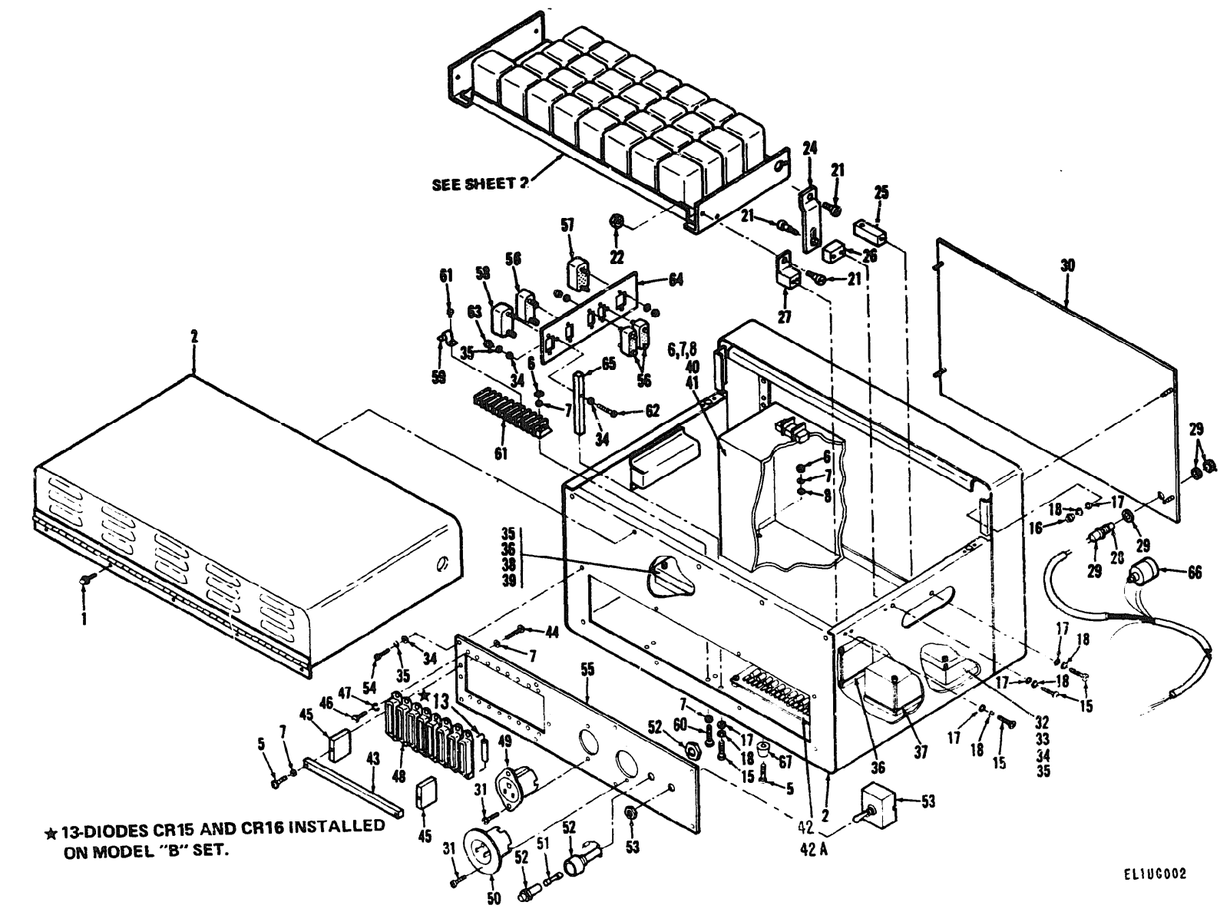

Figure B-2 ① · Logic box, chassis mounted parts (Sheet 1 of 2).

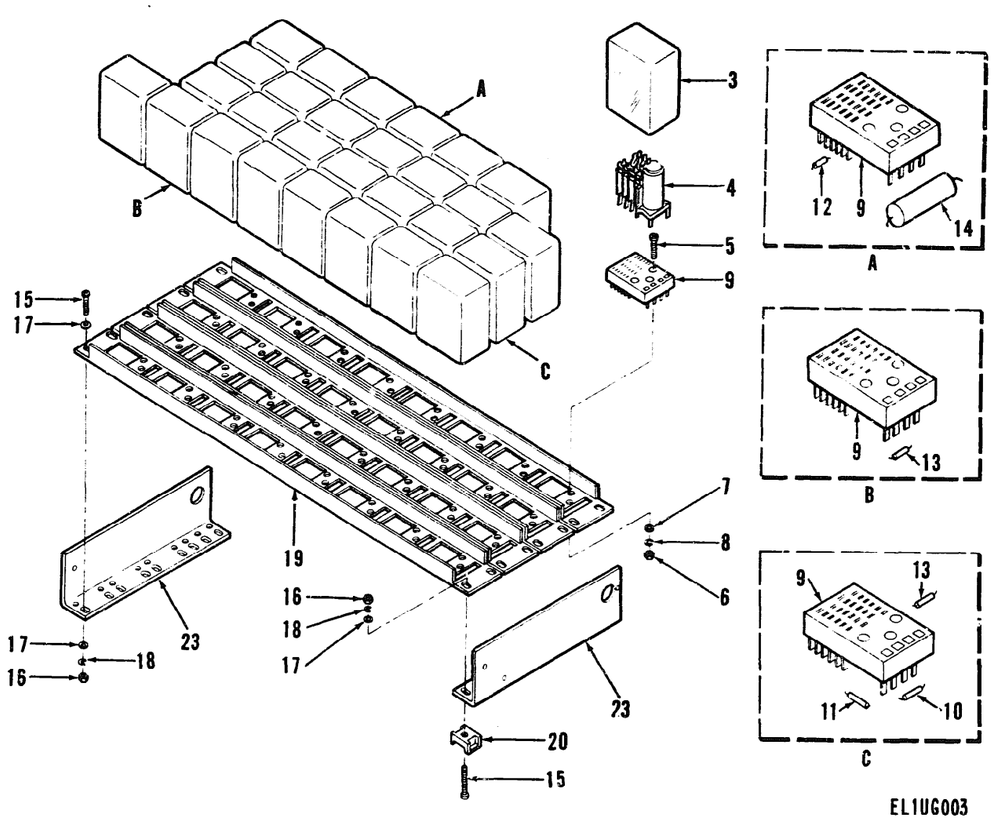

Figure B-2. Logic Box, chassis mounted parts (Sheet 2 of 2).

SECTION II. REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(B) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION	USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
						GROUP: 01 LOGIC BOX ASSEMBLY			
						GROUP: 0101 CHASSIS MOUNTED PARTS			
B-2	1	XDOZZ		6X3-8SLTDINDT	73734	SCREW, SELF-TAPPING, NO. 6X 3/8 SLOTTED INDENTED HH, TYPE A		EA	5
B-2	2	XDHZZ		CD134-50A	02002	CABINET ASSEMBLY		EA	1
B-2	3	PAHZZ	5945-00-963-1190	RV50	04773	COVER, RELAY		EA	29
B-2	4	XDHZZ		PE1635D17	04773	RELAY, ARMATURE		EA	29
B-2	5	PAHZZ	5305-00-054-663	MS51957-29	96906	SCREW, MACHINE, NO. 6-32 PH X 1/2 SS, CROSS-RECESSED		EA	64
B-2	6	PAHZZ	5310-00-964-9761	MS35649-264	96906	NUT, PLAIN, HEXAGON, NO. 6-32 SS		EA	66
B-2	7	PAHZZ	5310-00-722-5998	MS15795-805	96906	WASHER, FLAT, NO. 6 SS		EA	70
B-2	8	PAHZZ	5310-00-929-6395	MS35338-136	96906	WASHER, LOCK, SPLIT NO. 6 SS		EA	74
B-2	9	PAHZZ	5935-00-891-2601	RS20	04773	SOCKET, RELAY		EA	29
B-2	10	PAHZZ	5905-00-141-1183	RCR07G101JS	81349	RESISTOR, FIXED, COMPOSITION, 100 OHMS, 1/4W, 5%		EA	7
B-2	11	PAHZZ	5905-00-107-0656	RCR07G100JS	81349	RESISTOR, FIXED, COMPOSITION, 10 OHMS, 1/4W, 5%		EA	7
B-2	12	PAHZZ	5905-00-169-6931	RCR07G111JS	81349	RESISTOR, FIXED, COMPOSITION, 110 OHMS, 1/4W, 5%		EA	7
B-2	13	PAHZZ	5961-00-840-5466	JAN1N485B	81349	SEMICONDUCTOR DEVICE, DIODE	DDF	EA	16
B-2	13	PAHZZ	5961-00-840-5466	JAN1N485B	81349	SEMICONDUCTOR DEVICE, DIODE	DDG	EA	16
B-2	14	PAHZZ	5910-00-823-1436	TE1164	56289	CAPACITOR, FIXED, ELECTROLYTIC, 15 WVDC, 200 UF		EA	1
B-2	15	PAHZZ	5905-00-054-6670	MS51957-45	96906	SCREW, MACHINE, NO. 8-32 PH X 1/2 SS, CROSS-RECESSED		EA	26
B-2	16	PAHZZ	5310-00-934-9759	MS35649-284	96906	NUT, PLAIN, HEXAGON, NO. 8-32 SS		EA	24
B-2	17	PAHZZ	5910-00-880-5978	MS15795-807	96906	WASHER, FLAT, NO. 8 SS		EA	32
B-2	18	PAHZZ	5310-00-933-8110	MS35338-137	96906	WASHER, LOCK, NO. 8 SS		EA	32
B-2	19	XDHZZ		CD134-12	02002	BRACKET, DOUBLE ANGLE		EA	4
B-2	20	PAHZZ	5340-00-66-0834	TM1	06383	ANCHOR, WIRE TIE		EA	4
B-2	21	XDHZZ	5305-00-512-5486	4327	00141	SCREW, SHOULDER		EA	4
B-2	22	PAOZZ	5310-00-063-5360	511-061500-00	78189	NUT, ASSEMBLED WASHER		EA	4
B-2	23	XDHZZ		CD134-14	02002	BRACKET, ANGLE		EA	2
B-2	24	XDHZZ		CD134-15	02002	BRACKET, HINGE		EA	1
B-2	25	XDHZZ		CD134-16	02002	BRACKET, SUPPORT		EA	2
B-2	26	XDHZZ		CD134-17	02002	BRACKET, SUPPORT		EA	2
B-2	27	XDHZZ		CD134-13	02002	BRACKET, ANGLE		EA	[illegible]
B-2	28	PAOZZ	6240-00-763-9555	CF03RCS2107	03797	LAMP, INCANDESCENT, [illegible]		EA	1
B-2	29	PAHZZ	5250-00-690-1569	50c-7538-504	72619	LAMPHOLDER		EA	1
B-2	30	PAHZZ		CD134-23	02002	PLATE, MOUNTING, FRONT		EA	1
B-2	31	PAHZZ	5305-00-054-6650	MS51957-26	96906	SCREW, MACHINE, NO. 6-32 PH X 1/4 SS, CROSS-RECESSED		EA	10
B-2	32	XDOOD		CD134-44A	02002	AMPLIFIER ASSEMBLY, [illegible] (SEE GROUP 0102 FOR PARTS BREAKDOWN)		EA	1
B-2	33	PAOZZ	5305-00-054-5647	MS51957-13	96906	SCREW, MACHINE, NO. 4-40 PH X [illegible] SS, CROSS-RECESSED		EA	4
B-2	34	PAOZZ	5310-00-595-*6211	MS15795-803	96906	WASHER, FLAT, NO. 4 SS		EA	4
B-2	35	PAOZZ	5310-00-933-8118	MS35338-135	96906	WASHER, LOCK, SPLIT NO. 4 SS		EA	4

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SECTION II. REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-2	36	XDODD		CD134-47A	02002	EXCLUSION MATRIX, W/CASE ASSEMBLY (SEE GROUP 0107 FOR PARTS BREAKDOWN)	EA	1
B-2	37	XDODD		CD134-52A	02002	INCLUSION MATRIX, W/CASE ASSEMBLY (SEE GROUP 0106 FOR PARTS BREAKDOWN)	EA	1
B-2	38	XDOLD		CD134-42A	02002	AMPLIFIER ASSEMBLY, LINE MIXER (SEE GROUP 0104 FOR PARTS BREAKDOWN)	EA	1
B-2	39	PAOZZ	5305-00-054-6651	MS51957-27	96906	SCREW, MACHINE, NO. 6-32 X 5/16 SS, CROSS-RECESSED	EA	4
B-2	40	PAODD	5805-00-155-8526	CD134-10A	02002	POWER SUPPLY (SEE GROUP 0105 FOR PARTS BREAKDOWN)	EA	1
B-2	41	PAOZZ	5305-00-054-6652	MS51957-28	96906	SCREW, MACHINE, NO. 6-32 PH X 3/8 SS, CROSS-RECESSED	EA	7
B-2	42	PAOLD	5805-00-155-8531	CD134-7	02002	RELAY BOARD ASSEMBLY (SEE GROUP 0103 FOR PARTS BREAKDOWN)	EA	1
B-2	42A	PAOZZ	5305-00-054-6651	MS51957-27	96906	SCREW, MACHINE, NO. 6-32 X 5/16 SS, CROSS-RECESSED	EA	4
B-2	43	XDHZZ		CD134-20	02002	BAR, JACK PROTECTOR	EA	1
B-2	44	PAHZZ	5305-00-054-6652	MS51957-28	96906	SCREW, MACHINE, NO. 6-32 PH X 3/8 SS, CROSS-RECESSED	EA	6
B-2	45	XDHZZ		CD134-21	02002	SUPPORT, BAR	EA	2
B-2	46	PAHZZ	5305-00-054-5638	MS51957-4	96906	SCREW, MACHINE, NO. 2-56 PH X 5/16 SS, CROSS-RECESSED	EA	16
B-2	47	PAHZZ	5310-00-928-2690	MS35338-134	96906	WASHER, LOCK, SPLIT NO. 2 SS	EA	16
B-2	48	PAHZZ	5935-00-865-9237	57-20500	02660	CONNECTOR, RECEPTACLE, ELECTRICAL	EA	8
B-2	49	PAHZZ	5935-00-660-7008	5256	74545	CONNECTOR, RECEPTACLE, ELECTRICAL	EA	1
B-2	50	PAHZZ	5935-00-660-5207	5278	74545	CONNECTOR, RECEPTACLE, ELECTRICAL	EA	1
B-2	51	PAOZZ	5920-00-199-3960	1402-120	75915	FUSE, CARTRIDGE, 8/10A, 250V	EA	1
B-2	52	PAHZZ	5920-00-089-4130	FHL17G1	81349	FUSEHOLDER	EA	1
B-2	53	PAHZZ	5930-00-259-9410	7611K2	15605	SWITCH, TOGGLE, SPST	EA	1
B-2	54	PAHZZ	5305-00-054-5648	MS51957-14	96906	SCREW, MACHINE, NO. 4-40 PH X 5/16 SS, CROSS-RECESSED	EA	8
B-2	55	XDHZZ		CD134-22	02002	PLATE, MOUNTING REAR	EA	1
B-2	56	PAHZZ	5935-00-500-8409	MSE14S	81312	CONNECTOR, RECEPTACLE, ELECTRICAL	EA	3
B-2	57	PAHZZ	5935-00-807-3688	MS24011-1	96906	CONNECTOR, RECEPTACLE, ELECTRICAL	EA	1
B-2	58	PAHZZ	5935-00-735-1344	MSE26S	81312	CONNECTOR, RECEPTACLE, ELECTRICAL	EA	1
B-2	60	PAHZZ	5305-00-054-6656	MS51957-32	96906	SCREW, MACHINE, NO. 6-32 PH X 5/3 SS, CROSS-RECESSED	EA	4
B-2	61	PAHZZ	5940-00-983-6051	37TB10	81349	TERMINAL BOARD	EA	1
B-2	62	PAHZZ	5305-00-054-5651	MS51957-17	96906	SCREW, MACHINE, NO. 4-40 PH X 5/8 SS, CROSS-RECESSED	EA	2
B-2	63	PAHZZ	5310-00-934-9748	MS35649-244	96906	NUT, PLAIN, HEXAGON, NO. 4-40	EA	2
B-2	64	XDHZZ		CD134-19	02002	PLATE, JACK MOUNTING	EA	1
B-2	65	XDHZZ		CD134-18	02002	SUPPORT, PLATE	EA	2
B-2	66	PAHZZ	5935-00-149-3628	7464	74545	CONNECTOR, RECEPTACLE, ELECTRICAL	EA	1
B-2	67	XDHZZ		F6G	31827	FOOT, RUBBER	EA	4

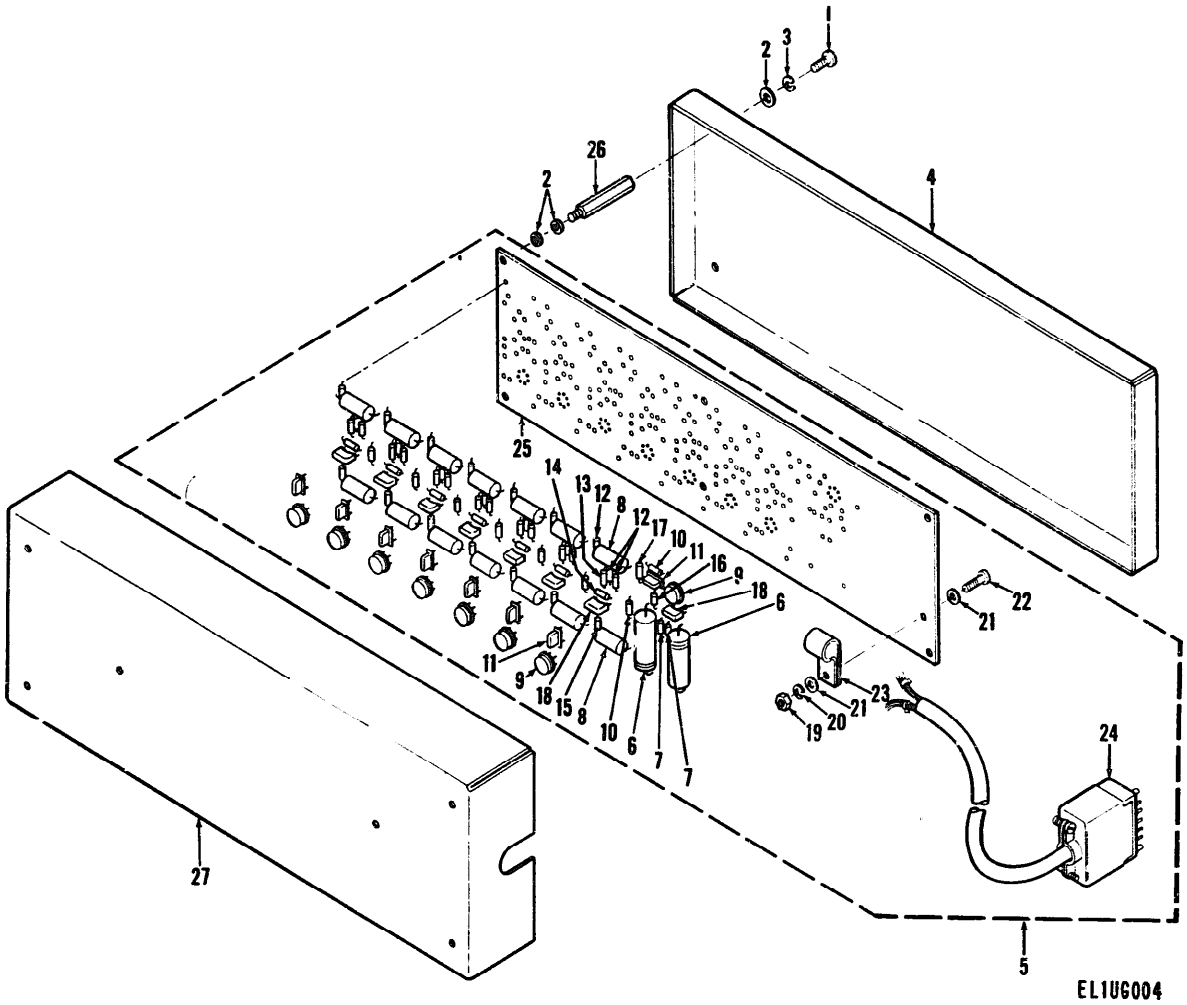

Figure B-3. Amplifier assembly. w/case.

SECTION II. REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
						GROUP: 0102 AMPLIFIER ASSEMBLY W/CASE CD134-44A		
B-3	1	PAOZZ	5305-00-054-6652	MS51957-28	96906	SCREW, MACHINE, NO. 6-32 PH X 3/8 SS, CROSS-RECESSED	EA	4
B-3	2	PAOZZ	5310-00-722-5998	MS15795-805	96906	WASHER, FLAT, NO. 6 SS	EA	12
B-3	3	PAOZZ	5310-00-929-6395	MS35338-136	96906	WASHER, LOCK, NO. 6 SS	EA	4
B-3	4	XDDZZ		CD134-27	02002	COVER	EA	1
B-3	5	PAODD	5805-00-151-3928	CD134-6A	02002	CIRCUIT CARD ASSEMBLY	EA	1
B-3	6	PADZZ	5910-00-986-7470	TE1162	56289	CAPACITOR, FIXED, ELECTROLYTIC, 15 WVDC, 150 UF	EA	2
B-3	7	PADZZ	5305-00-110-7620	RCR07G102JS	81349	RESISTOR, FIXED, COMPOSITION, 1K OHMS, 1/4W, 5%	EA	[illegible]
B-3	8	PADZZ	5910-00-884-4900	TE1[illegible]	56289	CAPACITOR, FIXED, ELECTROLYTIC, 15 WVDC, 10 UF	EA	4
B-3	9	PADZZ	5962-00-472-9785	740005	09206	AMPLIFIER, OPERATIONAL, INTERGRATED CIRCUIT	EA	6
B-3	10	PADZZ	5905-00-104-8366	RCR07G5R1JS	81349	RESISTOR, FIXED, COMPOSITION, 5.1 OHMS, 1/4W, 5%	EA	8
B-3	11	PADZZ	5910-00-249-4922	225P10491WD3	56289	CAPACITOR, FIXED, FILM, 0.1 UF, 10%	EA	6
B-3	12	PADZZ	5905-00-106-3666	RCR07G103JS	81349	RESISTOR, FIXED, COMPOSITION, 10K OHMS, 1/4W, 5%	EA	21
B-3	13	PADZZ	5905-00-125-6683	RCR07G332JS	81349	RESISTOR, FIXED, COMPOSITION, 3.3K OHMS, 1/4W, 5%	EA	7
B-3	14	PADZZ	5905-00-111-1679	RCR07G512JS	81349	RESISTOR, FIXED, COMPOSITION, 5.1K OHMS, 1/4W, 5%	EA	7
B-3	15	PADZZ	5905-00-136-3891	RCR07G621JS	81349	RESISTOR, FIXED, COMPOSITION, 620 OHMS, 1/4W, 5%	EA	7
B-3	16	PADZZ	5905-00-131-1255	RCR07G122JS	81349	RESISTOR, FIXED, COMPOSITION, 1.2K OHMS, 1/4W, 5%	EA	1
B-3	17	PADZZ	5905-00-106-1278	RCR07G123JS	81349	RESISTOR, FIXED, COMPOSITION, 12K OHMS, 1/4W, 5%	EA	1
B-3	18	PADZZ	5910-00-764-2758	CM04CD050D03	81349	CAPACITOR, FIXED, FILM, 5 PF	EA	6
B-3	19	PADZZ	5310-00-934-9748	MS35649-244	96906	NUT, PLAIN, HEXAGON, NO. 4-40 SS	EA	1
B-3	20	PADZZ	5310-00-933-8118	MS35338-135	96906	WASHER, LOCK, SPLIT, NO. 4 SS	EA	1
B-3	21	PADZZ	5310-00-595-6211	MS15795-803	96906	WASHER, FLAT, NO. 4 SS	EA	2
B-3	22	PADZZ	5305-00-054-5649	MS51957-15	96906	SCREW, MACHINE, NO. 4-40 PH X 3/8 SS, CROSS-RECESSED	EA	1
B-3	23	PADZZ	5340-00-291-5294	833	83330	CLAMP, LOOP	EA	1
B-3	24	PADZZ	5935-00-296-8575	MRE18PGH	81312	CONNECTOR, PLUG, ELECTRICAL	EA	1
B-3	25	XADZZ		CD134-49	02002	PRINTED CIRCUIT BOARD	EA	1
B-3	26	XDDZZ		11415-1-1-[illegible]	73734	POST, ELECTRICAL-MECHANICAL EQUIPMENT	EA	4
B-3	27	XDDZZ		CD134-28A	02002	CASE ASSEMBLY	EA	1

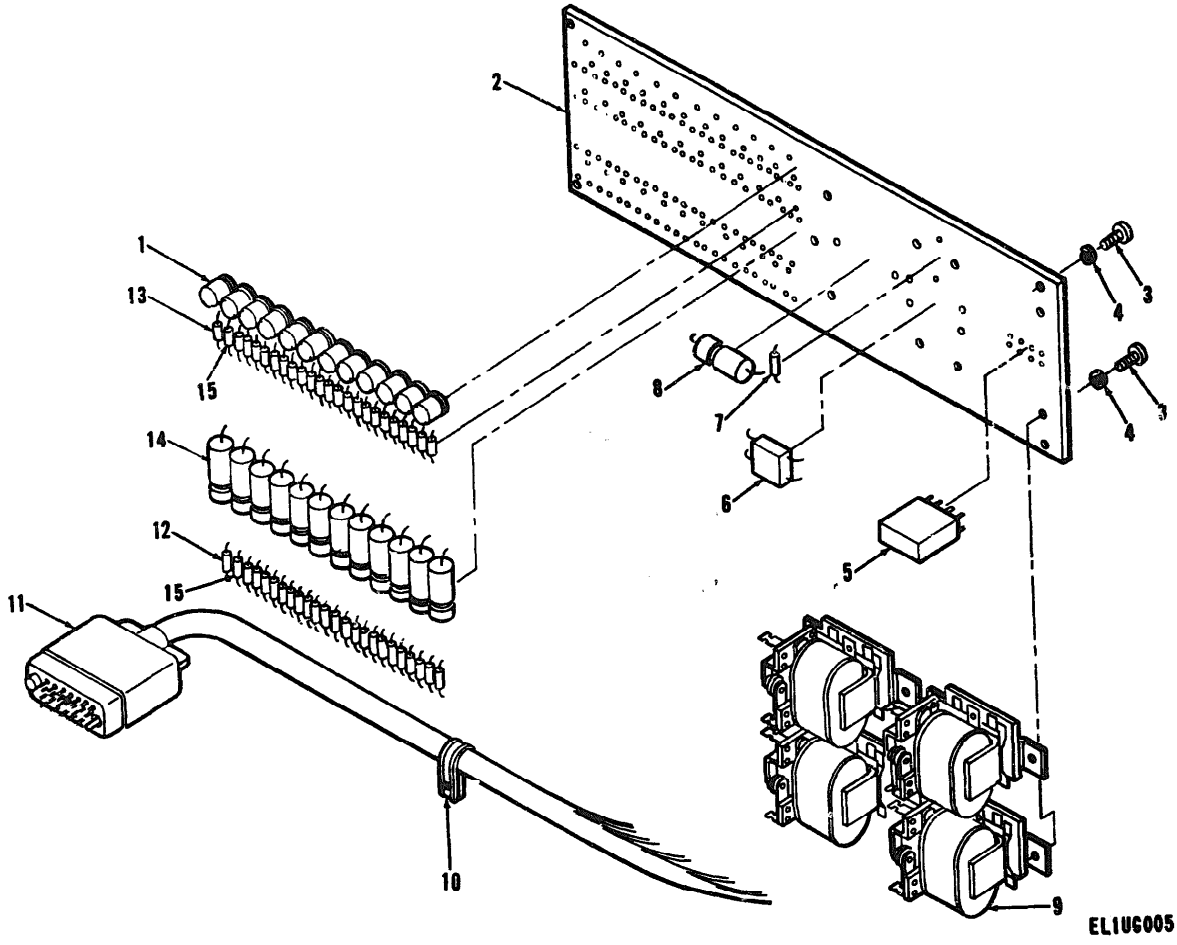

Figure B-4. Relay board assembly.

SECTION II. REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
						GROUP: 0103 RELAY BOARD ASSEMBLY CD134-7		
B-4	1	PADZZ	5961-00-837-7262	JAN2N697	81349	TRANSISTOR	EA	12
B-4	2	XADZZ		CD134-46	02002	PRINTED CIRCUIT BOARD	EA	1
B-4	3	PADZZ	5305-00-054-6650	MS51957-26	96906	SCREW, MACHINE, NO. 6-32 PH X 1/4 SS, CROSS-RECESSED	EA	8
B-4	4	PADZZ	5310-00-929-6395	MS35338-136	96906	WASHER, LOCK, SPLIT NO. 6 SS	EA	8
B-4	5	PADZZ	5945-00-724-7649	2B1710	02289	RELAY, ARMATURE	EA	1
B-4	6	PADZZ	5961-00-841-1263	MDA942-3	04713	RECTIFIER, SEMICONDUCTOR DEVICE	EA	1
B-4	7	PADZZ	5905-00-111-1679	RCR07G512JS	81349	RESISTOR, FIXED, COMPOSITION, 5.1K OHMS, 1/4W, 5%	EA	1
B-4	8	PADZZ	5910-00-879-0123	TE1307	80183	CAPACITOR, FIXED, ELECTROLYTIC, 50 WVDC, 50 UF	EA	1
B-4	9	PADZZ	5945-00-944-4119	41F1000SSIL	78277	RELAY, ARMATURE, 2A, 28 VDC/120 VAC, 60 OHMS	EA	4
B-4	10	PADZZ	5340-00-291-5294	833	83330	CLAMP, LOOP	EA	1
B-4	11	PADZZ	5935-00-146-3936	M28748-5E00G1A	81349	CONNECTOR, PLUG, ELECTRICAL	EA	1
B-4	12	PADZZ	5905-00-106-1356	RCR07G152JS	81349	RESISTOR, FIXED, COMPOSITION, 1.5K OHMS, 1/4W, 5%	EA	12
B-4	13	PADZZ	5905-00-126-6683	RCR07G332JS	81349	RESISTOR, FIXED, COMPOSITION, 3.3K OHMS, 1/4W, 5%	EA	24
B-4	14	PADZZ	5910-00-879-6892	TE1162	80183	CAPACITOR, FIXED, ELECTROLYITC, 15 WVDC, 100 UF	EA	12
B-4	15	PADZZ	5905-00-116-8556	RCR07G223JS	81349	RESISTOR, FIXED, COMPOSITION, 22K OHMS, 1/4W, 5%	EA	12

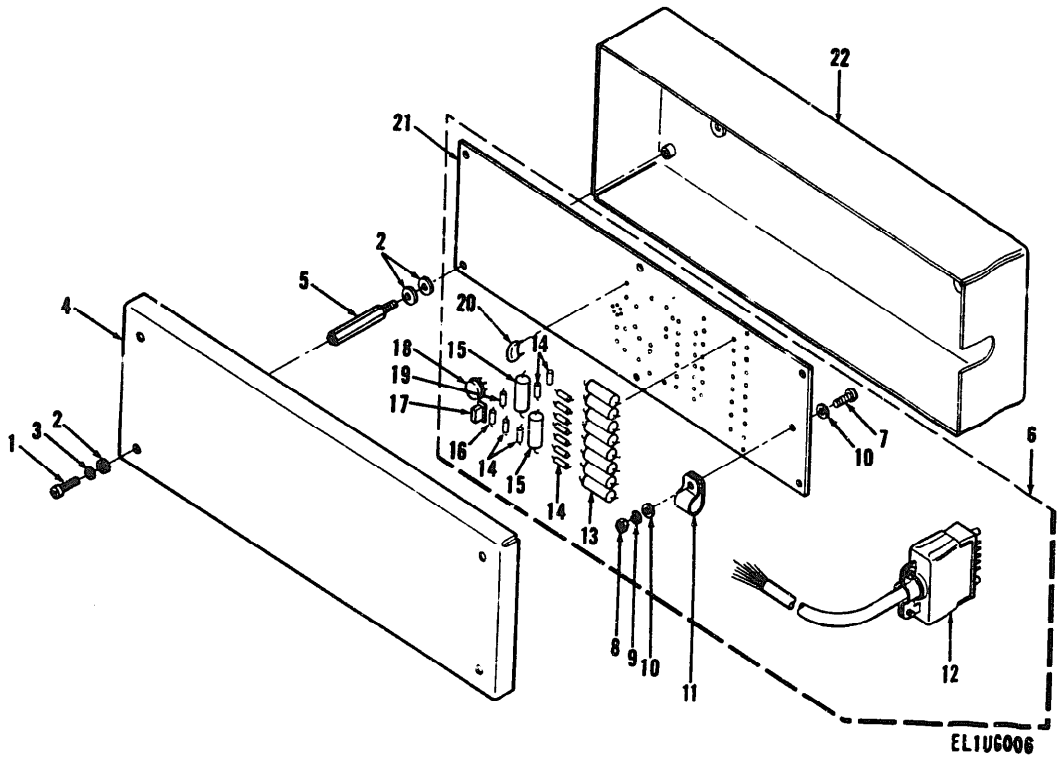

Figure B-5. Line mixer amplifier assembly.

SECTION II. REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION / USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
						GROUP: 0104 LINE MIXER AMPLIFIER ASSEMBLY CD134-42A		
B-5	1	PAOZZ	5305-00-054-6650	MS51957-26	96906	SCREW, MACHINE, NO. 6-32 PH X 1/4 SS, CROSS-RECESSED	EA	4
B-5	2	PAOZZ	5310-00-722-5998	MS15795-805	96906	WASHER, FLAT, NO. 6 SS	EA	12
B-5	3	PAOZZ	5310-00-929-6395	MS35338-136	96906	WASHER, LOCK, SPLIT NO. 6 SS	EA	4
B-5	4	XDDZZ		CD134-29	02002	COVER	EA	1
B-5	5	XDDZZ		11415-1-1-4SS	73734	POST, ELECTRICAL-MECHANICAL EQUIPMENT	EA	4
B-5	6	PAODD	5805-00-155-8557	CD134-5A	02002	AMPLIFIER, PRINTED CIRCUIT BOARD ASSEMBLY	EA	1
B-5	7	PADZZ	5305-00-054-5649	MS51957-15	96906	SCREW, MACHINE, NO. 4-40 PH X 3/8 SS, CROSS-RECESSED	EA	1
B-5	8	PADZZ	5310-00-934-9748	MS35649-244	96906	NUT, PLAIN, HEXAGON, NO. 4-40	EA	1
B-5	9	PADZZ	5310-00-933-8118	MS35338-135	96906	WASHER, LOCK, SPLIT NO. 4 SS	EA	1
B-5	10	PADZZ	5310-00-595-6211	MS15795-803	96906	WASHER, FLAT, NO. 4 SS	EA	2
B-5	11	PADZZ	5340-00-291-5294	833	83330	CLAMP, LOOP	EA	1
B-5	12	PADZZ	5935-00-687-0856	MS24010-3	96906	CONNECTOR, PLUG, ELECTRICAL	EA	1
B-5	13	PADZZ	5910-00-834-4900	TE1155	56289	CAPACITOR, FIXED, ELECTROLYTIC, 15 WVDC, 10 UF	EA	8
B-5	14	PADZZ	5905-00-106-3666	RCR07G103JS	81349	RESISTOR, FIXED, COMPOSITION, 10K OHMS, 1/4W, 5%	EA	11
B-5	15	PADZZ	5910-00-760-0937	30D357G016DH4	56289	CAPACITOR, FIXED, ELECTROLYTIC, 15 WVDC, 50 UF	EA	2
B-5	16	PADZZ	5905-00-104-8366	RCR07G5R1JS	81349	RESISTOR, FIXED, COMPOSITION, 5.1 OHMS, 1/4W, 5%	EA	1
B-5	17	PADZZ	5910-00-249-4922	225P10491WD3	56289	CAPACITOR, FIXED, FILM, 0.1 UF, 10%	EA	1
B-5	18	PADZZ	5962-00-472-9785	740005	09206	INTEGRATED CIRCUIT, OPERATIONAL AMPLIFIER	EA	1
B-5	19	PADZZ	5905-00-111-1679	RCR07G512JS	81349	RESISTOR, FIXED, COMPOSITION, 5.1K OHMS, 1/4W, 5%	EA	1
B-5	20	PADZZ	5910-00-764-2758	CM04CD050D03	81349	CAPACITOR, FIXED, FILM, 5 PF	EA	1
B-5	21	XADZZ		CD134-42	02002	PRINTED CIRCUIT BOARD	EA	1
B-5	22	XDDZZ		CD134-30A	02002	CASE ASSEMBLY	EA	1

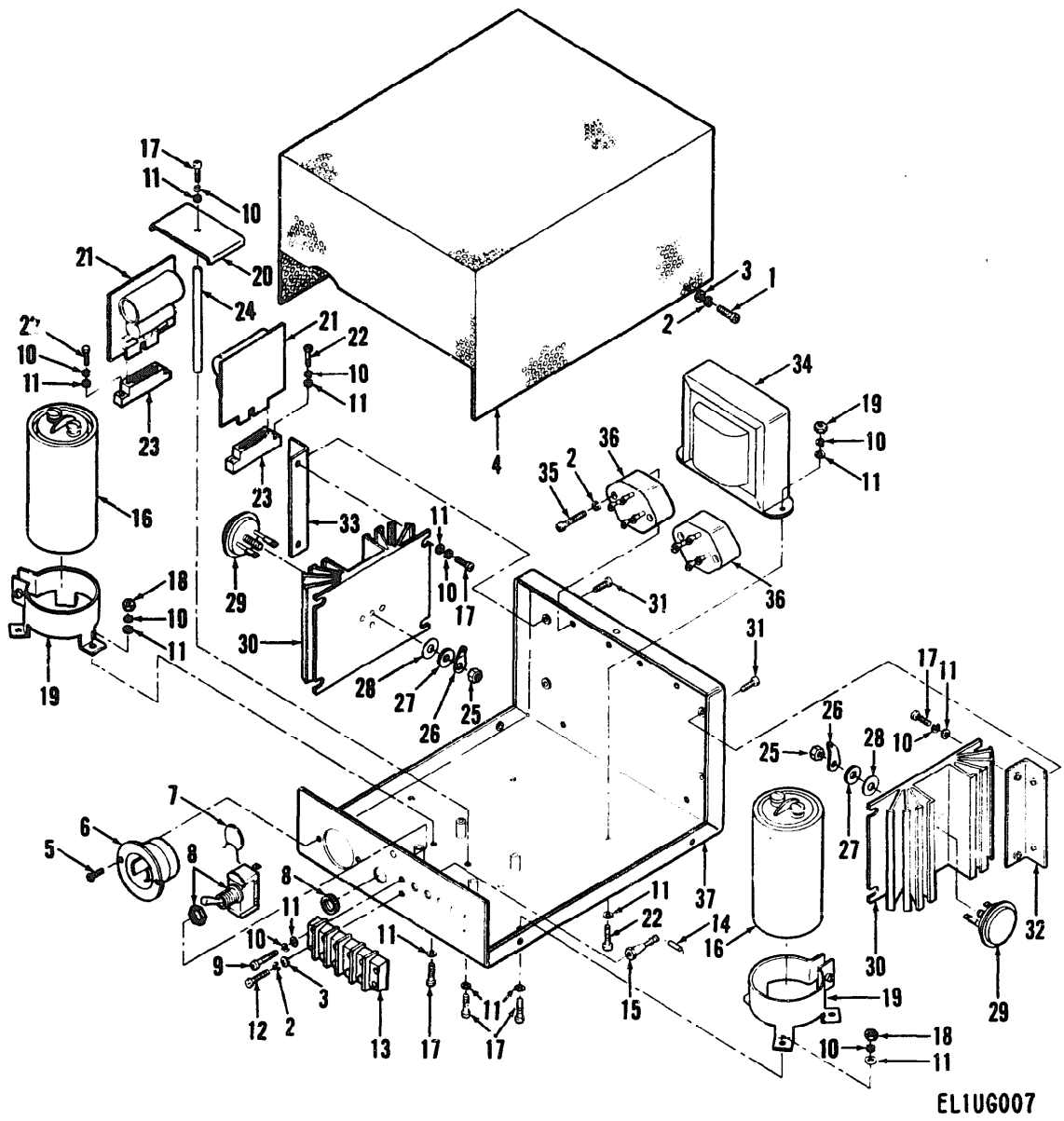

Figure B-6. Power supply.

SECTION II. REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION / USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
						GROUP: 0105 POWER SUPPLY CD134-10A		
B-6	1	PADZZ	5305-00-054-5648	MS51957-14	96906	SCREW, MACHINE, NO. 4-40 PH X 5/16 SS, CROSS-RECESSED	EA	6
B-6	2	PADZZ	5310-00-933-8118	MS35338-135	96906	WASHER, LOCK, SPLIT NO. 4 SS	EA	11
B-6	3	PADZZ	5310-00-595-6211	MS15795-803	96906	WASHER, FLAT, NO. 4 SS	EA	7
B-6	4	XDDZZ		CD134-33	02002	COVER	EA	1
B-6	5	PADZZ	5305-00-958-5453	MS35190-236	96906	SCREW, MACHINE, NO. 6-32 FH X 3/8 SS, CROSS-RECESSED	EA	2
B-6	6	PADZZ	5935-00-161-9653	7466	74545	CONNECTOR, PLUG, ELECTRICAL	EA	1
B-6	7	PADZZ	5910-00-797-4909	5GA550	52689	CAPACITOR, FIXED, CERAMIC, 400 VDC, 0.05 UF	EA	1
B-6	8	PADZZ	5930-00-655-1514	MS35058-22	96906	SWITCH, TOGGLE	EA	1
B-6	9	PADZZ	5305-00-054-6655	MS51957-31	96906	SCREW, MACHINE, NO. 6-32 PH X [illegible] SS, CROSS-RECESSED	EA	3
B-6	10	PADZZ	5310-00-929-6395	MS35338-136	96906	WASHER, LOCK, SPLIT NO. 6 SS	EA	20
B-6	11	PADZZ	5310-00-722-5998	MS15795-805	96906	WASHER, FLAT, NO. 6 SS	EA	34
B-6	12	PADZZ	5305-00-054-5651	MS51957-17	96906	SCREW, MACHINE, NO. 4-40 PH X 1/2 SS, CROSS-RECESSED	EA	1
B-6	13	XDDZZ		354-18-04-001	71785	TERMINAL BOARD	EA	1
B-6	14	PADZZ	5905-00-104-8334	RCR20G331JS	81349	RESISTOR, FIXED, COMPOSITION, 330 OHMS, 1/2W, 5%	EA	1
B-6	15	XDDZZ		52-1505-106	83330	TERMINAL, STANDOFF, INSULATED	EA	1
B-6	16	PADZZ	5910-00-080-5469	HC2540A	37942	CAPACITOR, FIXED, ELECTROLYTIC, 25 WVDC, 4000 UF	EA	2
B-6	17	PADZZ	5305-00-054-6652	MS51957-28	96906	SCREW, MACHINE, NO. 6-32 PH X 3/8 SS, CROSS-RECESSED	EA	11
B-6	18	PADZZ	5310-00-934-9761	MS35649-264	96906	NUT, PLAIN, HEXAGON, NO. 6-32 SS	EA	8
B-6	19	XDDZZ		VR6	90201	BRACKET, CAPACITOR	EA	2
B-6	20	XDDZZ		CD134-34	02002	BRACKET, DOUBLE ANGLE	EA	1
B-6	21	PADDD	5805-00-198-2852	CD134-1	02002	PRINTED CIRCUIT BOARD ASSEMBLY (SEE FIGURE B-7 FOR PARTS BREAKDOWN)	EA	2
B-6	22	PADZZ	5305-00-034-6653	MS51957-29	96906	SCREW, MACHINE, NO. 6-32 PH X 1/2 SS, CROSS-RECESSED	EA	6
B-6	23	PADZZ	5935-00-484-5183	250-06-30-170	71785	CONNECTOR, RECEPTACLE, ELECTRICAL	EA	2
B-6	24	XDDZZ		8354	83330	SPACER	EA	1
B-6	25	PADZZ	5310-00-934-9760	MS35649-204	96906	NUT, PLAIN, HEXAGON, NO. 10-32	EA	2
B-6	26	PADZZ	5940-00-681-8184	MS35431-8	96906	TERMINAL, LUG	EA	2
B-6	27	PADZZ	5310-00-550-5054	MS15795-809	96906	WASHER, FLAT, NO. 10 SS	EA	2
B-6	28	PADZZ	5310-00-619-1148	MS15795-808	96906	WASHER, FLAT, NO. 10 SS	EA	2
B-6	29	PADZZ	5961-00-044-5749	JAN2N2079A	81349	TRANSISTOR	EA	2
B-6	30	XDDZZ		NC641B	05820	HEATSINK, ELECTRICAL-ELECTRONIC COMPONENTS	EA	2
B-6	31	PADZZ	5305-00-054-5645	MS51957-15	96906	SCREW, MACHINE, NO. 4-40 PH X 3/8 SS, CROSS-RECESSED	EA	4
B-6	32	XDDZZ		CD134-37-1	02002	BRACKET ASSEMBLY	EA	1
B-6	33	XDDZZ		CD134-37-2	02002	BRACKET ASSEMBLY	EA	1
B-6	34	PADZZ	5950-00-280-4539	FT10	80223	TRANSFORMER, POWER STEP-DOWN	EA	1
B-6	35	PADZZ	5305-00-054-565	MS51957-20	96906	SCREW, MACHINE, NO. 4-40 PH X 7/8 SS, CROSS-RECESSED	EA	4
B-6	36	PADZZ	5961-00-933-4989	MDA952-2	04713	RECTIFIER, SEMICONDUCTOR DEVICE	EA	2
B-6	37	XDDZZ		CD134-38A	02002	CHASSIS ASSEMBLY	EA	1

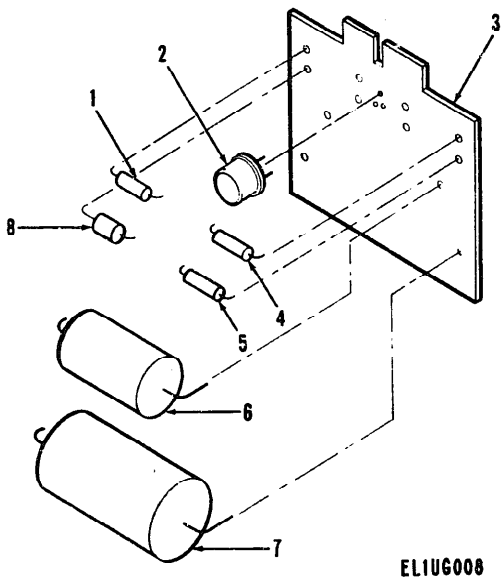

Figure B-7. Printed circuit board assembly.

SECTION II. REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-7	1	PALZZ	5905-00-110-0196	RCR20G102JS	81349	RESISTOR, FIXED, COMPOSITION, 1K OHMS, 1/2W, 5%	EA	1
B-7	2	PADZZ	5961-00-241-3594	2N697	04713	TRANSISTOR	EA	1
B-7	3	XADZZ		CD134-35	02002	PRINTED CIRCUIT BOARD	EA	1
B-7	4	PADZZ	5905-00-111-4858	RCR20G471JS	81349	RESISTOR, FIXED, COMPOSITION, 470 OHMS, 1/2W, 5%	EA	1
B-7	5	PADZZ	5905-00-111-4734	RCR20G470JS	81349	RESISTOR, FIXED, COMPOSITION, 47 OHMS, 1/2W, 5%	EA	1
B-7	6	PADZZ	5910-00-905-0677	WMF2P47	14655	CAPACITOR, FIXED, ELECTROLYTIC, 200 WVDC, 0.47 MFD	EA	1
B-7	7	PADZZ	5910-00-713-1948	TVA1163	56289	CAPACITOR, FIXED, ELECTROLYTIC, 15 WVDC, 1000 MFD	EA	1
B-7	8	PADZZ	5961-00-842-6181	JAN1N3018B	81349	DIODE, ZENER	EA	1

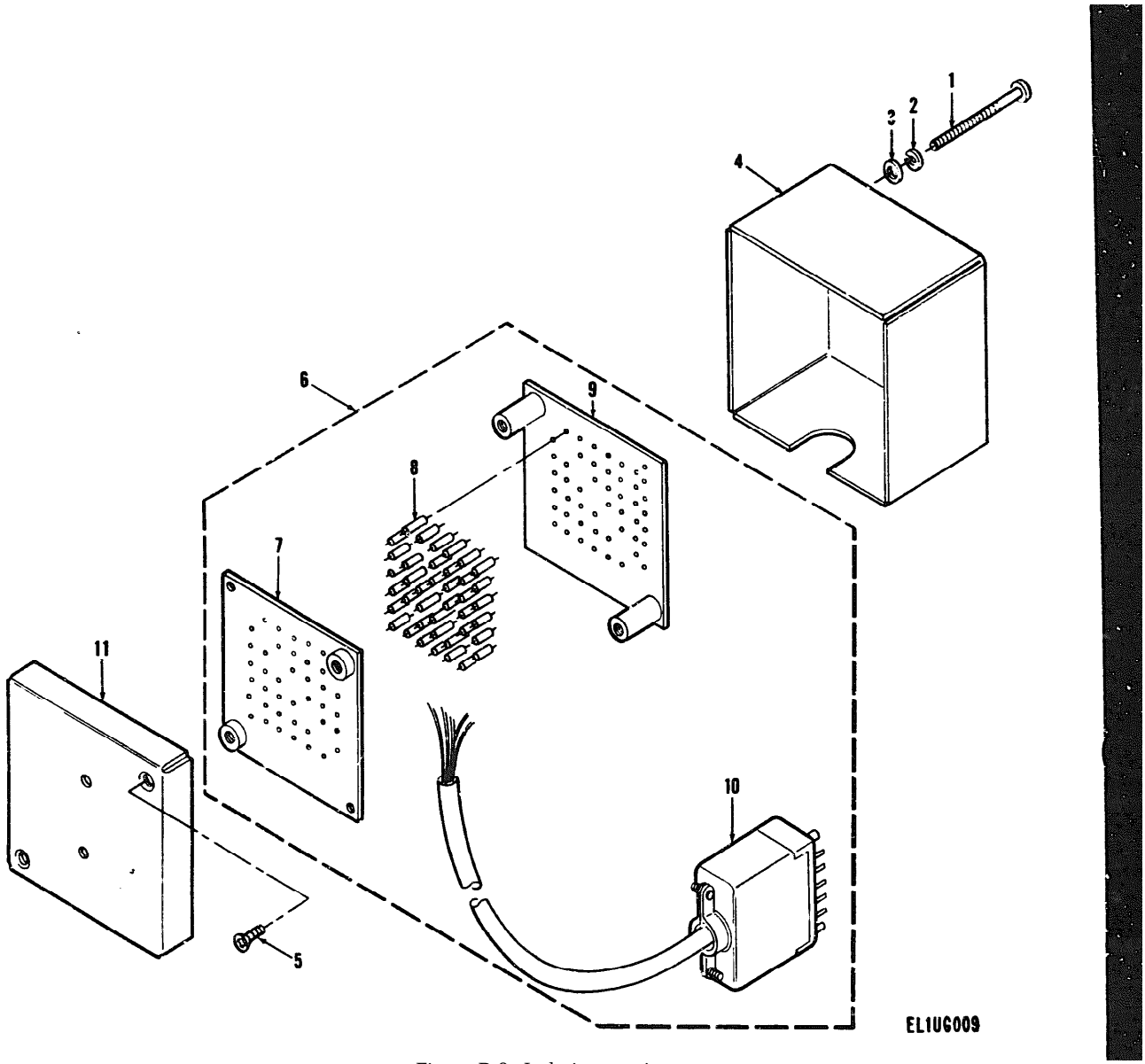

Figure B-8. Inclusion matrix.

SECTION II. REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
						GROUP: 0106 INCLUSION MATRIX, W/CASE ASSEMBLY CD134-52A		
B-8	1	XDOZZ		4-40PHX1-1-4SSCR	73734	SCREW, MACHINE, NO. 4-40 PH X 1-1/4 SS, CROSS-RECESSED	EA	2
B-8	2	PAOZZ	5310-00-933-8118	MS35338-135	96906	WASHER, LOCK, SPLIT NO. 4 SS	EA	2
B-8	3	PAOZZ	5310-00-595-6211	MS15795-803	96906	WASHER, FLAT, NO. 4 SS	EA	2
B-8	4	XAOZZ		CD13[illegible]-32	02002	CASE	EA	1
B-8	5	PAOZZ	5305-00-958-5483	MS35190-221	96906	SCREW, MACHINE, NO. 4-40 FH X 1/4 SS, CROSS-RECESSED	EA	2
B-8	6	PAODL	805-00-155-8525	CD134-2	02002	INCLUSION MATRIX ASSEMBLY, CIRCUIT CARD ASSEMBLY	EA	1
B-8	7	XADZZ		CD100-3	02002	PRINTED CIRCUIT BOARD	EA	1
B-8	8	PADZZ	5961-00-840-5466	JAN1N485B	81349	SEMICONDUCTOR DEVICE, DIODE	EA	42
B-8	9	XADZZ		CD100-2	02002	PRINTED CIRCUIT BOARD	EA	1
B-8	10	PADZZ	5935-00-687-0856	MS24010-3	96906	CONNECTOR, PLUG, ELECTRICAL	EA	1
B-8	11	XDDZZ		CD134-31A	02002	COVER ASSEMBLY	EA	1

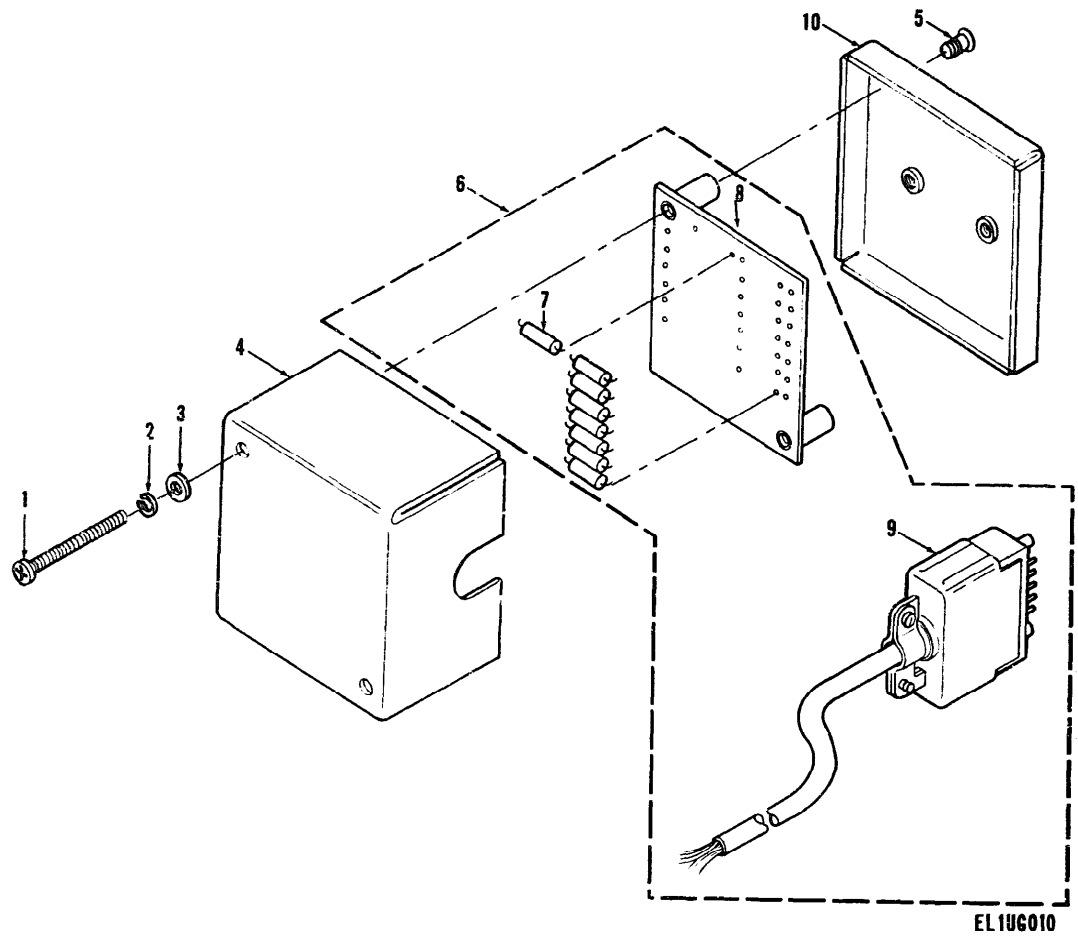

Figure B-9. Exclusion matrix.

SECTION II. REPAIR PARTS List (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION / USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
						GROUP: 0107 EXCLUSION MATRIX, W/CASEE ASSEMBLY CD134-47A		
B-9	1	XDOZZ		4-40PHX1-1-4SSCR	73734	SCREW, MACHINE, NO. 4-40 PH X 1-1/4 SS, CROSS-RECESSED	EA	2
B-9	2	PAOZZ	5310-00-933-8118	MS35338-135	96906	WASHER, LOCK, SPLIT NO. 4 SS	EA	2
B-9	3	PAOZZ	5310-00-595-6211	MS15795-803	96906	WASHER, FLAT, NO. 4 SS	EA	2
B-9	4	XDOZZ		CD134-31A	02002	COVER ASSEMBLY	EA	1
B-9	5	PAOZZ	5305-W-958-5483	MS35190-221	96906	SCREW, MACHINE, NO. 4-40 FH X 1/4 SS, CROSS-RECESSED	EA	2
B-9	6	XDODD		CD134-4	02002	EXCLUSION MATRIX ASSEMBLY	EA	1
B-9	7	PADZZ	5961-00-840-5466	JAN1N485B	81349	SEMICONDUCTOR DEVICE, DIODE	EA	8
B-9	8	XADZZ		CD134-51	02002	PRINTED CIRCUIT BOARD	EA	1
B-9	9	PADZZ	5935-00-687-0856	MS24010-3	96906	CONNECTOR, PLUG, ELECTRICAL	EA	1
B-9	10	XDDZZ		CD134-32	02002	CASE	EA	1

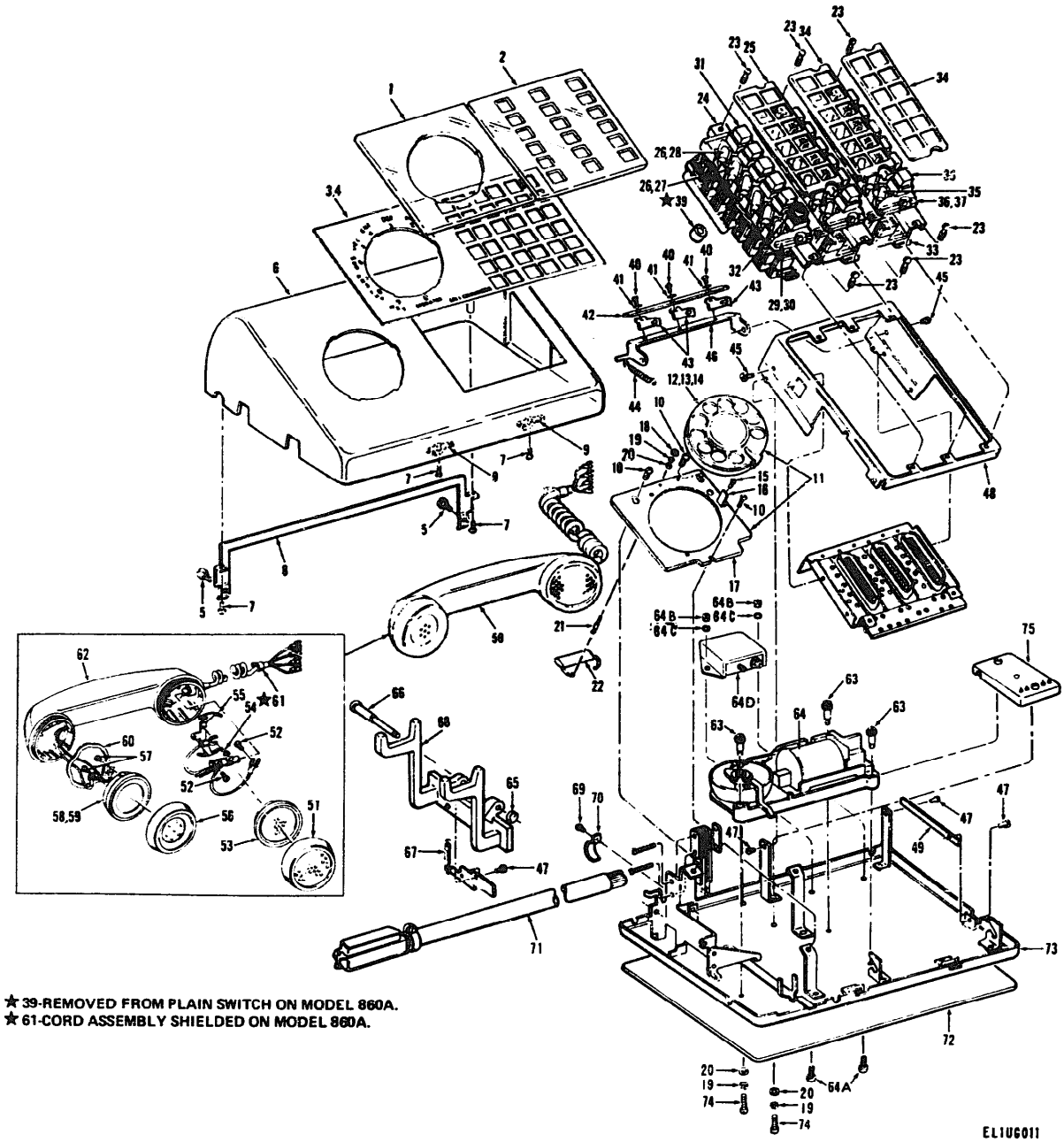

Figure B-10. Telephone, secretarial.

SECTION II. REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
						GROUP: 02 TELEPHONE, SECRETARIAL SET		
B-10	1	XDHZZ		D780809A	04773	PLATE, DIAL FACE	EA	1
B-10	2	XDHZZ		D780810A	04773	PLATE, KEYS FACE	EA	1
B-10	3	XDHZZ		D539303A	04773	PLATE, IDENTIFICATION	EA	1
B-10	4	XDHZZ		D781063A	04773	PLATE, MOUNTING	EA	1
B-10	5	PAHZZ	5305-00-852-6562	D760865A	04773	SCREW, SPECIAL	EA	2
B-10	6	XDHZZ		D490209B	04773	HOUSING	EA	1
B-10	7	XDHZZ		D760900A	04773	SCREW, SPECIAL	EA	4
B-10	8	XDHZZ		D732757A	04773	BRACKET	EA	1
B-10	9	XDHZZ		D60142A	04773	HOOK, HOUSING, FRONT	EA	2
B-10	10	XDHZZ		5-40PHX1-4SS	73734	SCREW, MACHINE, NO. 5-40 PH X 1/4 SS	EA	3
B-10	11	XDHHH		CD134-56A	02002	ROTARY DIAL AND BRACKET ASSEMBLY	EA	1
B-10	12	XDHZZ		5-40RHX1-4BRONZE	73734	SCREW, MACHINE, NO. 5-40 RH X 1/4 BRONZE	EA	3
B-10	13	PAHZZ	5310-00-282-9060	1805-00	78189	WASHER, LOCK, NO. 5, EXTERNAL TOOTH, BRONZE	EA	3
B-10	14	PAHZZ	5805-00-151-3998	D549758	04773	DIAL	EA	1
B-10	15	PAHZZ	5305-00-494-5406	15220	73734	SCREW, MACHINE, NO. 4-40 PH X 1/8 BRASS	EA	1
B-10	16	XDHZZ		CD134-57	02002	BRACKET, ANGLE	EA	1
B-10	17	XDHZZ		CD134-58	02002	PLATE, DIAL MOUNTING	EA	1
B-10	18	PAHZZ	5310-00-275-9301	MS35649-43	96906	NUT, PLAIN, HEXAGON, NO. 4-40	EA	3
B-10	19	PAHZZ	5310-00-933-8118	MS35338-135	96906	WASHER, LOCK, SPLIT NO. 4 SS	EA	5
B-10	20	PAHZZ	5310-00-595-6211	MS15795-803	96906	WASHER, FLAT, NO. 4 SS	EA	5
B-10	21	PAHZZ	59[illegible]-00-150-[illegible]	52-1500-101	83330	TERMINAL, STANDOFF, INSULATED	EA	3
B-10	22	XDHZZ		AU18-0-47MFL	84411	CAPACITOR, FIXED, ELECTROLYTIC, 0.047 MFD, 250V	EA	1
B-10	23	PAHZZ	5305-00-[illegible]-5360	D760862A	04773	SCREW, SPECIAL	EA	6
B-10	24	XDAHH		D59306A	04773	KEY ASSEMBLY, W/HOLD	EA	1
B-10	25	XDHZZ		D16199A	04773	SHIELD, LIGHT	EA	1
B-10	26	PAHZZ	6240-00-647-1429	10ESB	04655	LAMP, INDICATOR, 10V, 0.40W, 0.040A, 28 OHMS	EA	6
B-10	27	PAHZZ	6210-00-126-2546	36003-[illegible]	58854	CAP, LENS, YELLOW	EA	1
B-10	28	PAHZZ	6210-00-96[illegible]-8641	38001	58854	CAP, LENS, RED	EA	1
B-10	29	PAHZZ	5305-00-[illegible]94-4633	[illegible]024	73734	SCREW, MACHINE, NO. 4-40 BH X 3/8 STEEL CADMIUM PLATED	EA	2
B-10	30	PAHZZ	5805-00-291-6850	D59160A	04773	RECEPTACLE AND BUTTON ASSEMBLY	EA	1
B-10	31	PAHZZ	5805-00-835-6227	D59308A	09657	PUSHBUTTON, CLEAR	EA	[illegible]
B-10	32	PAHZZ	5805-00-885-5115	D59308B	04773	PUSHBUTTON, RED	EA	[illegible]
B-10	33	XDHHH		D59307A	04773	KEY SET	EA	[illegible]
B-10	34	XDHZZ		D16199A	04773	LIGHT SHIELD	EA	1
B-10	35	PAHZZ	6240-00-647-1429	10ESB	04655	LAMP, INDICATOR, 10V, 0.40W, 0.040A, 28 OHMS	EA	6
B-10	36	PAHZZ	5305-00-[illegible]94-4633	[illegible]024	73734	SCREW, MACHINE, NO. 4-40 BH X 3/8 STEEL CADMIUM PLATED	EA	2
B-10	37	PAHZZ	5805-00-291-6850	D59160A	04773	RECEPTACLE AND BUTTON ASSEMBLY	EA	1
B-10	38	PAHZZ	5805-00-885-6227	D59308A	09657	PUSHBUTTON, CLEAR	EA	6
B-10	39	PAHZZ	[illegible]	[illegible]	04773	BUSHING, BUSHING, RING	EA	[illegible]
B-10	40	PAHZZ	5305-00-[illegible]	[illegible]	04773	SCREW, MACHINE	EA	[illegible]
B-10	41	PAHZZ	5310-00-17[illegible]	[illegible]	[illegible]	WASHER, LOCK	EA	3

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SECTION II. REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO.	(2) SMP CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-10	42	XDHZZ		D580804	04773	LOCK, LATCH	EA	1
B-10	43	XDHZZ		D58079A	04773	LATCH ASSEMBLY	EA	3
B-10	44	XDHZZ		D109885A	04773	SPRING, HELICAL COMPRESSION	EA	1
B-10	45	PAHZZ	5305-00-001-5082	D760864A	04773	SCREW, MACHINE	EA	3
B-10	46	XDHZZ		D67639A	04773	LATCH, YOKE	EA	1
B-10	47	XDHZZ		6-40RHX3-16BRASS	73734	SCREW, MACHINE, NO. 6-40 RH X 3/16 BRASS	EA	7
B-10	48	XDHZZ		D30227A	04773	KEY FRAME ASSEMBLY	EA	1
B-10	49	XDHZZ		D62141A	04773	HOOK, MAINTENANCE	EA	1
B-10	50	XDHHH		CD134-59A	02002	HANDSET AND CORD ASSEMBLY	EA	1
B-10	51	XDHZZ		D67442A	04773	CAP, TRANSMITTER	EA	1
B-10	52	PAHZZ	5305-00-054-5646	MS51957-12	96906	SCREW, MACHINE, NO. 4-40 PH X 3/16 SS	EA	2
B-10	53	PAHZZ	5965-00-937-6482	60150	82872	MICROPHONE ASSEMBLY	EA	1
B-10	54	XDHZZ		5-40PHX3-16SS	73734	SCREW, MACHINE, NO. 5-40 PH X 3/16 SS	EA	2
B-10	55	XDHZZ		D109756A	04773	SPRING, TRANSMITTER	EA	1
B-10	56	PAHZZ	5999-00-850-1237	D67708A	04773	CAP, RECEIVER	EA	1
B-10	57	PAHZZ	5305-00-494-5388	15222	73734	SCREW, MACHINE, NO. 4-40 PH X 1/4 BRASS	EA	2
B-10	58	PAHZZ	5965-00-958-7455	D51030A	04773	CAPSULE, RECEIVER	EA	1
B-10	59	XDHZZ		D67646A	04773	GASKET, CORK	EA	1
B-10	60	PAHZZ	5965-00-013-9859	D109918A	04773	SPRING, RECEIVER CUSHION	EA	1
B-10	61	XDHZZ		D543069BT	04773	CORD ASSEMBLY DDF	EA	1
B-10	61	XDHZZ		CD134-999-1BEIGE	02002	CORD ASSEMBLY DDG	EA	1
B-10	62	XAHZZ		D52146A	04773	HANDSET SHELL	EA	1
B-10	63	XDHZZ		D760866A	04773	SCREW, SHOULDER	EA	3
B-10	64	PAHZZ	5805-00-864-7798	D56580A	04773	RINGER	EA	1
B-10	64A	PAHZZ	5305-00-001-9815	102224	73734	SCREW, MACHINE	EA	2
B-10	64B	PAHZZ	5310-00-460-0807	105201	73734	WASHER, NONMETAL	EA	2
B-10	64C	PAHZZ	5310-00-929-6395	MS35338-136	96906	WASHER, LOCK	EA	2
B-10	64D	PAHZZ	6350-00-262-1461	15-1-6VAC	19557	BUZZER	EA	1
B-10	65	PAHZZ	5365-00-181-0128	D65511C	04773	RING,RETAINING	EA	1
B-10	66	XDHZZ		D37692A	04773	PIN, BEARING	EA	1
B-10	67	PAHZZ	5360-00-171-2658	D109895	04773	SPRING, HELICAL, COMPRESSION	EA	1
B-10	68	XDHZZ		D62144A	04773	CRADLE HOOK ASSEMBLY	EA	1
B-10	69	PAHZZ	5305-00-494-4881	3012	73734	SCREW, MACHINE, NO. 4-40 RH X 1/4 BRASS	EA	1
B-10	70	PAHZZ	5340-00-180-8175	D73144K	04773	CLAMP, LOOP	EA	1
B-10	71	PAHZZ	5995-00-158-6395	D543636B	04773	LINE CORD ASSEMBLY	EA	1
B-10	72	XDHZZ		D67722A	04773	PAD, CORK	EA	1
B-10	73	XDHZZ		D781066A	04773	BASEPLATE ASSEMBLY	EA	1
B-10	74	PAHZZ	5305-00-054-5647	MS51957-	96906	SCREW, MACHINE, NO. 4-40 PH X 1/4 SS, CROSS-RECESSED	EA	1
B-10	75	XDHZZ		CD134-39A	02002	PREAMPLIFIER AND CASE ASSEMBLY	EA	1

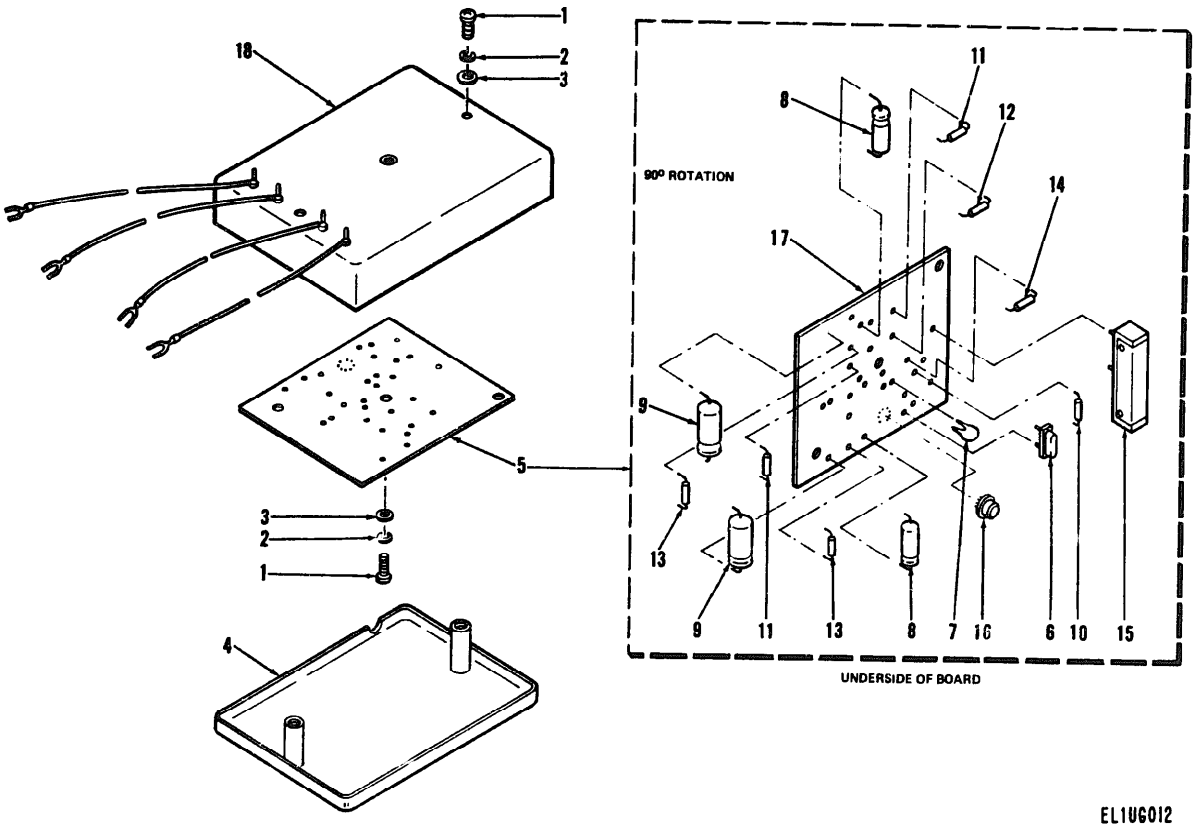

Figure B-11. Preamplifier and case assembly.

SECTION II. REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-11	1	PADZZ	5305-00-054-5647	MS51957-13	96906	SCREW, MACHINE, NO. 4-40 PH X 1/4 SS, CROSS-RECESSED	EA	3
B-11	2	PAHZZ	5310-00-933-8118	MS35338-135	96906	WASHER, LOCK, SPLIT NO. 4 SS	EA	3
B-11	3	PAHZZ	5310-00-595-6211	MS15795-803	96906	WASHER, FLAT, NO. 4 SS	EA	3
B-11	4	XDHZZ		CD134-40	02002	COVER	EA	1
B-11	5	PAHDD	5805-00-164-3779	CD134-8A	02002	PREAMPLIFIER ASSEMBLY	EA	1
B-11	6	PAHZZ	5910-00-249-4922	225P10491WD3	56289	CAPACITOR, FIXED, FILM, 0.1 UF, 10%	EA	1
B-11	7	PAHZZ	5910-00-764-2758	CM04CD050D03	81349	CAPACITOR, FIXED, FILM, 5 PF	EA	1
B-11	8	PAHZZ	5910-00-834-4900	TE1155	56289	CAPACITOR, FIXED, ELECTROLYTIC, 15 WVDC, 10 UF	EA	2
B-11	9	PAHZZ	5910-00-806-1075	TE1160	56289	CAPACITOR,FIXED, ELECTROLYTIC, 15 WVDC, 50 UF	EA	2
B-11	10	PAHZZ	5905-00-104-8366	RCR07G5R1JS	81349	RESISTOR, FIXED, COMPOSITION, 5.1 OHMS, 1/4W, 5%	EA	1
B-11	11	PAHZZ	5905-00-110-7620	RCR07G102JS	81349	RESISTOR, FIXED, COMPOSITION, 1K OHMS, 1/4W, 5%	EA	2
B-11	12	PAHZZ	5905-00-114-0708	RCR07G202JS	81349	RESISTOR, FIXED, COMPOSITION, 2K OHMS, 1/4W, 5%	EA	1
B-11	13	PAHZZ	5905-00-106-3666	RCR07G103JS	81349	RESISTOR, FIXED, COMPOSITION, 10K OHMS, 1/4W, 5%	EA	2
B-11	14	PADZZ	5905-00-119-3505	RCR07G683JS	81349	RESISTOR, FIXED, COMPOSITION, 68K OHMS, 1/4W, 5%	EA	1
B-11	15	PADZZ	5905-00-431-4915	RT12C2Y102	81349	RESISTOR, VARIABLE	EA	1
B-11	16	PADZZ	5962-00-472-9785	740005	09206	INTEGRATED CIRCUIT	EA	1
B-11	17	XADZZ		CD134-43	02002	PRINTED CIRCUIT BOARD	EA	1
B-11	18	XDDZZ		CD134-41A	02002	CASE ASSEMBLY	EA	1

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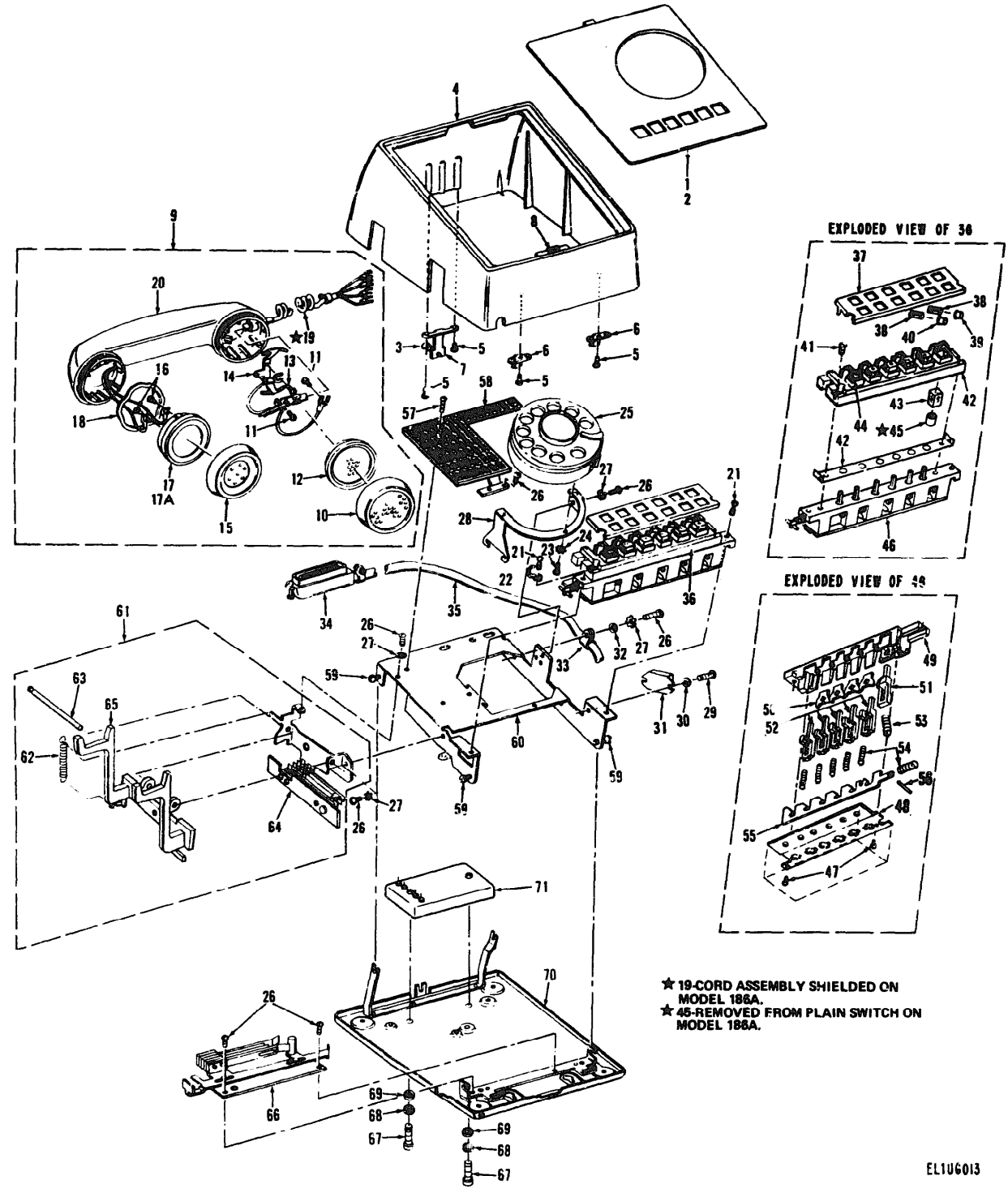

Figure B-12. Telephone, extension.

SECTION II. REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION / USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
				GROUP: 03 TELEPHONE, EXTENSION				
B-12	1	XDHZZ		D781004D	04773	FACEPLATE, DIAL	EA	1
B-12	2	XDHZZ		D530304A	04773	STRIP, DESIGNATION, SET OF SIX	EA	1
B-12	3	PAHZZ	5305-00-852-6362	D760865A	04773	SCREW, SPECIAL	EA	1
B-12	4	XDHZZ		D490178-00	04773	HOUSING	EA	1
B-12	5	XDHZZ		D760900A	04773	SCREW, SPECIAL	EA	4
B-12	6	XDHZZ		D62142A	04773	HOOK, HOUSING, FRONT	EA	2
B-12	7	XDHZZ		D732113A	04773	HOOK, HOUSING, REAR	EA	1
B-12	8	XDHZZ		D732120A	04773	CLIP, HOUSING	EA	1
B-12	9	XDHHH		CD134-55A	02002	HANDSET AND CORD ASSEMBLY	EA	1
B-12	10	XDHZZ		D67442A	04773	CAP, TRANSMITTER	EA	1
B-12	11	PAHZZ	5305-00-054-5646	MS51957-12	96906	SCREW, MACHINE, NO. 4-40 PH X 3/16 SS	EA	2
B-12	12	PAHZZ	5965-00-937-6482	60150	82872	MICROPHONE ASSEMBLY	EA	1
B-12	13	XDHZZ		5-40PHX3-16SS	73734	SCREW, MACHINE, NO. 5-40 PH X 3/16 SS	EA	2
B-12	14	XDHZZ		D109756A	04773	SPRING, TRANSMITTER	EA	1
B-12	15	PAHZZ	5999-00-850-1237	D67708A	04773	CAP, RECEIVER	EA	1
B-12	16	PAHZZ	5305-00-494-5388	15222	73734	SCREW, MACHINE, NO. 4-40, PH X 1/4 BRASS	EA	2
B-12	17	PAHZZ	5965-00-958-7455	D51030A	04773	CAPSULE, RECEIVER	EA	1
B-12	17A	XDHZZ		D67646A	04773	GASKET, CORK	EA	1
B-12	18	PAHZZ	5965-00-013-9851	D109918A	04773	SPRING, RECEIVER CUSHION	EA	1
B-12	19	PAHZZ	5995-00-179-7982	D53534A	04773	CORD ASSEMBLY DDF	EA	1
B-12	19	PAHZZ	5995-00-342-9573	CD134-999-1BLACK	02002	CORD ASSEMBLY DDG	EA	1
B-12	20	XAHZZ		D52146	04773	HANDSET SHELL	EA	1
B-12	21	PAHZZ	5305-00-501-5080	D760862A	04773	SCREW, SPECIAL	EA	2
B-12	22	PAHZZ	5340-00-180-7970	D73261C	04773	CLAMP, LINE CORD	EA	1
B-12	23	PAHZZ	5305-00-494-5389	15222	73734	SCREW, MACHINE, NO. 4-40 PH X 1/4 BRASS	EA	3
B-12	24	PAHZZ	5310-00-939-1063	MS35335-85	96906	WASHER, LOCK, NO. 4, EXTERNAL TOOTH, BRONZE	EA	1
B-12	25	PAHZZ	5805-00-151-3998	D84975B	04773	DIAL	EA	1
B-12	26	PAHZZ	5305-00-494-5183	15242	73734	SCREW, MACHINE, NO. 6-32 PH X 1/4 BRASS	EA	8
B-12	27	PAHZZ	5310-00-939-0903	MS35335-86	96906	WASHER, LOCK, NO. 6, EXTERNAL TOOTH, BRONZE	EA	4
B-12	28	XDHZZ		D732124A	04773	BRACKET, DIAL MOUNTING	EA	1
B-12	29	PAHZZ	5305-00-001-9815	107224	73734	SCREW, MACHINE, NO. 6-32 BH X 3/8 NYLON	EA	2
B-12	30	PAHZZ	5310-00-460-0807	105201	73734	WASHER, NONMETALLIC, NO. 6, FLAT, NYLON	EA	2
B-12	31	PAHZZ		15-1-6VAC	19557	BUZZER	EA	1
B-12	32	PAHZZ	5310-00-595-6927	A11257	07647	WASHER, FLAT, NO. 6, BRASS	EA	1
B-12	33	XDHZZ		D731449A	04773	CLAMP, LOOP	EA	1
B-12	34	XDHZZ		57-10500-25	03665	CONNECTOR, PLUG, ELECTRICAL	EA	1
B-12	35	PAHZZ	5995-00-158-6392	D543569A	04773	CORD, LINE	EA	1
B-12	36	XDHZZ		D59359A	04773	KEY AND TERMINAL BOARD ASSEMBLY	EA	1
B-12	37	XDHZZ		D18199A	04773	SHIELD, LIGHT	EA	1
B-12	38	PAOZZ	6240-00-647-1429	10ESB	04655	LAMP, INDICATOR, 10V, 0.40W, 0.040A, 25 CHNT	EA	6
B-12	39	PAOZZ	6210-00-94-8841	88001	58854	CAP, LENS, RED	EA	1

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SECTION II. REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
B-12	40	PAOZZ	6210-00-126-2546	38003-0	88204	CAP, LENS, YELLOW	EA	1
B-12	41	PAHZZ	5305-00-494-4633	4024	73734	SCREW, MACHINE, NO. 4-40 BH X 3/8 STEEL, CADIMUM PLATED	EA	2
B-12	42	PAHZZ	5805-00-201-8850	D94160A	04773	RECEPTACLE AND BUTTON ASSEMBLY	EA	1
B-12	43	PAHZZ	5805-00-885-8227	D59308A	09657	PUSHBUTTON, CLEAR	EA	5
B-12	44	PAHZZ	5805-00-885-5115	D59308B	04773	PUSHBUTTON, RED	EA	1
B-12	45	PAHZZ	3120-00-405-9105	D750008A	04773	BUSHING, BLOCKING RING DDF	EA	2
B-12	45	PAHZZ	3120-00-405-9105	D750008B	04773	BUSHING, BLOCKING RING DDG	EA	1
B-12	46	PAHZZ	5805-00-151-3914	D16403A	04773	LADDER ASSEMBLY	EA	1
B-12	47	PAHZZ	5305-00-494-4643	4122	73734	SCREW, MACHINE, NO. 4-40 BH X 1/4 BRASS	EA	2
B-12	48	XDHZZ		D735550A	04773	SPRING ASSEMBLY	EA	1
B-12	49	XDHZZ		D30362A	04773	FRAME ASSEMBLY	EA	1
B-12	50	XDHZZ		D58077A	04773	RELEASE SEGMENT	EA	4
B-12	51	XDHZZ		D67703A	04773	PLUNGER, HOLD BUTTON	EA	1
B-12	52	XDHZZ		D67704A	04773	PLUNGER, PICKUP BUTTONS	EA	5
B-12	53	XDHZZ		D109883A	04773	SPRING, HELICAL COMPRESSION, HOLD BUTTON	EA	1
B-12	54	PAHZZ	5360-00-171-2656	D109882A	04773	SPRING, HELICAL COMPRESSION, PICKUP BUTTONS AND LATCH BAR	EA	6
B-12	55	XDHZZ		D58090A	04773	LATCH BAR	EA	1
B-12	56	PAHZZ	5315-00-169-8384	D37735A	04773	PIN, LATCH BAR	EA	1
B-12	57	XDHZZ		D762048J	04773	SCREW, SPECIAL	EA	1
B-12	58	XDHZZ		D150355A	04773	TERMINAL BOARD ASSEMBLY	EA	1
B-12	59	PAHZZ	5305-00-001-5084	D761074A	04773	SCREW, SPECIAL	EA	4
B-12	60	XDHZZ		D732121A	04773	CHASSIS	EA	1
B-12	61	PAHZZ	5805-00-155-8524	D735544A	04773	HOOKSWITCH AND CRADLE ASSEMBLY	EA	1
B-12	62	PAHZZ	5360-00-171-2657	D109780A	04773	SPRING, HELICAL COMPRESSION	EA	1
B-12	63	XDHZZ		D37744A	04773	PIN, STRAIGHT	EA	1
B-12	64	XDHZZ		D735541A	04773	HOOKSWITCH AND BRACKET ASSEMBLY	EA	1
B-12	65	XDHZZ		D62155A	04773	CRADLE HOOK AND BRACKET ASSEMBLY	EA	1
B-12	66	PAHZZ	5805-00-155-8523	D735556A	04773	EXCLUSION KEY	EA	1
B-12	67	PAHZZ	5305-00-054-5647	MS51957-13	96906	SCREW, MACHINE, NO. 4-40 PH X 1/4 SS, CROSS-RECESSED	EA	2
B-12	68	PAHZZ	5310-00-933-8118	MS35338-135	96906	WASHER, LOCK, SPLIT NO. 4 SS	EA	2
B-12	69	PAHZZ	5310-00-595-6211	MS15795-803	96906	WASHER, FLAT, NO. 4 SS	EA	2
B-12	70	XDHZZ		D781002A	04773	BASEPLATE ASSEMBLY	EA	1
B-12	71	XDHDD		CD134-39A	02002	PREAMPLIFIER AND CASE ASSEMBLY (SEE FIGURE B-11 FOR PARTS BREAKDOWN)	EA	1

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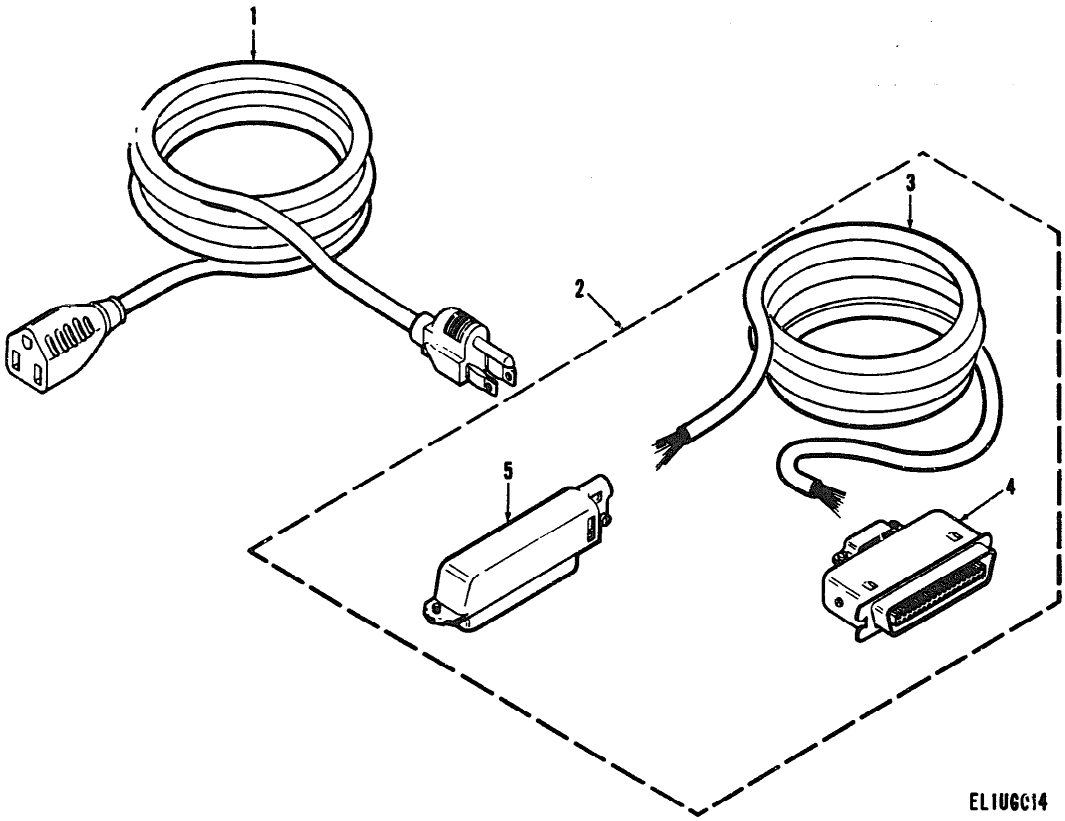

Figure B-13. Cables.

SECTION II. REPAIR PARTS LIST (CONTINUED)

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) UNIT OF MEAS	(8) QTY INC IN UNIT
						GROUP: 04 CABLES		
B-13	1	PAOZZ	6150-00-842-0721	174608	70903	CABLES, POWER, ELECTRICAL	EA	1
B-13	2	XDHHH		CD134-11A	02002	CABLE ASSEMBLY	EA	1
B-13	3	XDHZZ		205216-32	77229	CABLE, TELEPHONE, ELECTRICAL	EA	1
B-13	4	PAHZZ	5935-00-660-5791	57-30500	02660	CONNECTOR, PLUG, ELECTRICAL	EA	1
B-13	5	PAHZZ	5935-00-917-0405	57-10500-7	02660	CONNECTOR, PLUG, ELECTRICAL	EA	1

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SECTION IV. NATIONAL STOCK NUMBER AND PART NUMBER INDEX

NOTE : LATEST NATIONAL STOCK NUMBER ASSIGNMENT IS INCLUDED AT END OF INDEX

STOCK NUMBER	FIG. NO.	ITEM NO.
5305-00-001-5080	B-12	21
5305-00-001-5080	B-10	23
5305-00-001-5081	B-10	40
5305-00-001-5082	B-10	45
5305-00-001-5084	B-12	59
5305-00-001-9815	B-10	64A
5305-00-001-9815	B-12	29
5965-00-013-9859	B-10	60
5965-00-013-9859	B-12	18
5305-00-034-6653	B-6	22
5961-00-044-5749	B-6	29
5305-00-054-5638	B-2	46
5305-00-054-5646	B-10	52
5305-00-054-5646	B-12	11
5305-00-054-5647	B-2	33
5305-00-054-5647	B-10	74
5305-00-054-5647	B-11	1
5305-00-054-5647	B-12	67
5305-00-054-5648	B-2	54
5305-00-054-5648	B-6	1
5305-00-054-5649	B-3	22
5305-00-054-5649	B-5	7
5305-00-054-5649	B-6	31
5305-00-054-5651	B-2	62
5305-00-054-5651	B-6	12
5305-00-054-5654	B-6	35
5305-00-054-6650	B-2	31
5305-00-054-6650	B-4	3
5305-00-054-6650	B-5	1
5305-00-054-6651	B-2	39
5305-00-054-6651	B-2	42A
5305-00-054-6652	B-2	41
5305-00-054-6652	B-2	44
5305-00-054-6652	B-3	1
5305-00-054-6652	B-6	17
5305-00-054-6653	B-2	5
5305-00-354-6655	B-6	9
5305-00-054-6656	B-2	60
5305-00-054-6670	B-2	15
5310-00-063-7360	B-2	22
5910-00-080-5469	B-6	16
5920-00-089-4130	B-2	52
5905-00-104-8334	B-6	14
5905-00-104-8366	B-3	10
5905-00-104-8366	B-5	16
5905-00-104-8366	B-11	10
5305-00-106-1278	B-3	17
5905-00-106-1356	B-4	12
5905-00-106-3666	B-3	12
5905-00-106-3666	B-5	14
5905-00-106-3666	B-11	13
5905-00-107-0656	B-2	11
5905-00-110-0196	B-7	1
5905-00-110-7620	B-3	7
5905-00-110-7620	B-11	11
5905-00-111-1679	B-3	14
5905-00-111-1679	B-4	7
5905-00-111-1679	B-5	19
5905-00-111-4734	B-7	5
5905-00-111-4858	B-7	4
5905-00-114-0708	B-11	12
5905-00-116-8556	B-4	15
5905-00-119-3505	B-11	14
6210-00-126-2546	B-10	27
6210-00-126-2546	B-12	40
5905-00-126-6683	B-3	13
5905-00-126-6683	B-4	13
5905-00-131-1255	B-3	16
5905-00-136-3891	B-3	15
5805-00-138-7373	B-1	3
5805-00-138-7398	B-1	2
5805-00-138-7403	B-1	1
5905-00-141-1183	B-2	10
5935-00-146-3936	B-4	11
5935-00-149-3628	B-2	66
5940-00-150-4245	B-10	21
5805-00-151-3914	B-12	46
5805-00-151-3928	B-3	5
5805-00-151-3998	B-10	14
5805-00-151-3998	B-12	25
5805-00-155-8523	B-12	66
5805-00-155-8524	B-12	61
5805-00-155-8525	B-8	6
5805-00-155-8526	B-2	40
5805-00-155-8531	B-2	42
5805-00-155-8557	B-5	6
5995-00-158-6392	B-12	35
5995-00-158-6395	B-10	71
5935-00-161-9653	B-6	6
5805-00-164-3779	B-11	5
5805-00-164-3780	B-1	2
5315-00-169-8384	B-12	56
5360-00-171-2656	B-12	54
5360-00-171-2657	B-12	62
5360-00-171-2658	B-10	67
5310-00-172-6400	B-10	41
5995-00-179-7982	B-12	19
5340-00-180-7970	B-12	22
5340-00-180-8175	B-10	70
5365-00-181-0128	B-10	65
5805-00-198-2852	B-6	21
5920-00-199-3960	B-2	51

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SECTION IV. NATIONAL STOCK NUMBER AND PART NUMBER INDEX (CONTINUED)

STOCK NUMBER	FIG. NO.	ITEM NO.
5805-00-201-8850	B-10	30
5805-00-201-8850	B-10	37
5805-00-201-8850	B-12	42
5961-00-241-3594	B-7	2
5910-00-249-4922	B-3	11
5910-00-249-4922	B-5	17
5910-00-249-4922	B-11	6
5930-00-259-9410	B-2	53
6350-00-262-1461	B-10	64D
6350-00-262-1461	B-12	31
5950-00-280-4539	B-6	34
5310-00-282-9060	B-10	13
5340-00-291-5294	B-3	23
5340-00-291-5294	B-4	10
5340-00-291-5294	B-5	11
5935-00-296-8575	B-3	24
5995-00-342-9573	B-12	19
5905-00-369-6931	B-2	12
3120-00-405-9105	B-10	39
3120-00-405-9105	B-12	45
5905-00-431-4915	B-11	15
5310-00-460-0807	B-10	64B
5310-00-460-0807	B-12	30
5962-00-472-9785	B-3	9
5962-00-472-9785	B-5	18
5962-00-472-9785	B-11	16
5935-00-484-5183	B-6	23
5305-00-494-4633	B-10	29
5305-00-494-4633	B-10	36
5305-00-494-4633	B-12	41
5305-00-494-4643	B-12	47
5305-00-494-4881	B-10	69
5305-00-494-5183	B-12	26
5305-00-494-5388	B-10	57
5305-00-494-5388	B-12	16
5305-00-494-5388	B-12	23
5305-00-494-5406	B-10	15
5935-00-500-8409	B-2	56
5310-00-550-5054	B-6	27
5310-00-595-6211	B-2	34
5310-00-595-6211	B-3	21
5310-00-595-6211	B-5	10
5310-00-595-6211	B-6	3
5310-00-595-6211	B-8	3
5310-00-595-6211	B-9	3
5310-00-595-6211	B-10	20
5310-00-595-6211	B-11	3
5310-00-595-6211	B-12	69
5310-00-595-6927	B-12	32
5310-00-619-1148	B-6	28
6240-00-647-1429	B-10	26
6240-00-647-1429	B-10	35
6240-00-647-1429	B-12	38
5930-00-655-1514	B-6	8
5935-00-660-5207	B-2	50
5935-00-660-5791	B-13	4
5935-00-660-7008	B-2	49
5940-00-681-8184	B-6	26
5935-00-687-0856	B-5	12
5935-00-687-0856	B-8	10
5935-00-687-0856	B-9	9
6250-00-690-1569	B-2	29
5910-00-713-1948	B-7	7
5310-00-722-5998	B-2	7
5310-00-722-5998	B-3	2
5310-00-722-5998	B-5	2
5310-00-722-5998	B-6	11
5945-00-724-7649	B-4	5
5935-00-735-1344	B-2	58
5910-00-760-0937	B-5	15
6240-00-763-9555	B-2	28
5910-00-764-2758	B-3	18
5910-00-764-2758	B-5	20
5910-00-764-2758	B-11	7
5910-00-797-4909	B-6	7
5910-00-806-1075	B-11	9
5935-00-837-3688	B-2	57
5305-00-813-5486	B-2	21
5910-00-823-1436	B-2	14
5910-00-834-4900	B-3	8
5910-00-834-4900	B-5	13
5910-00-834-4900	B-11	8
5961-00-837-7262	B-4	1
5961-00-840-5466	B-2	13
5961-00-840-5466	B-8	8
5961-00-840-5466	B-9	7
5961-00-841-1263	B-4	6
6150-00-842-0721	B-13	1
5961-00-842-6181	B-7	8
5999-00-850-1237	B-10	56
5999-00-850-1237	B-12	15
5305-00-852-6362	B-10	5
5305-00-852-6362	B-12	3
5805-00-864-7798	B-10	64
5935-00-865-9237	B-2	48
5340-00-868-0834	B-2	20
5910-00-879-0123	B-4	8
5910-00-879-6892	B-4	14
5310-00-880-5978	B-2	17
5805-00-885-5115	B-10	32
5805-00-885-5115	B-12	44
5805-00-885-8227	B-10	31

SECTION IV. NATIONAL STOCK NUMBER AND PART NUMBER INDEX (CONTINUED!

STOCK NUMBER	FIG. NO.	ITEM NO.	STOCK NUMBER	FIG. NO.	ITEM NO.
5805-00-885-8227	B-10	38			
5805-00-885-8227	B-12	43			
5935-00-891-2601	B-2	9			
5910-00-905-0677	B-7	6			
5935-00-917-0405	B-13	5			
5935-00-917-9079	B-2	59			
5310-00-928-2690	B-2	47			
5310-00-929-6395	B-2	8			
5310-00-929-6395	B-3	3			
5310-00-929-6395	B-4	4			
5310-00-929-6395	B-5				
5310-00-929-6395	B-6	10			
5310-00-929-6395	B-10	64C			
5961-00-933-4989	B-6	36			
5310-00-933-8119	B-2	18			
5310-00-933-8118	B-2	35			
5310-00-933-8118	B-3	20			
510-00-933-8118	B-5	9			
5310-00-933-8118	B-6	2			
5310-00-933-8118	B-8	2			
5310-00-933-8118	B-9	2			
5310-00-933-8118	B-10	19			
5310-00-933-8118	B-11	2			
5310-00-933-8118	B-12	68			
5310-00-934-9748	B-2	63			
5310-00-934-9748	B-3	19			
5310-00-934-9748	B-5	8			
5310-00-934-9759	B-2	16			
5310-00-934-9760	B-6	25			
5310-00-934-9761	B-2	6			
5310-00-934-9761	b-6	18			
5965-00-934-6482	B-10	53			
5965-00-937-6482	B-12	12			
5310-00-939-0903	B-12	27			
5310-00-939-1063	B-12	24			
5945-00-944-4119	B-4	9			
530500-958-5453	B-6	5			
5305-00-958-5483	B-8	5			
5305-00-958-5483	B-9	5			
5965-00-958-7455	B-10	58			
5965-00-958-7455	B-12	17			
5945-00-963-1190	B-2	3			
6210-00-964-8841	B-10	28			
610-00-964-8841	B-12	39			
5940-00-983-6051	B-2	61			
5910-00-986-7470	B-3	6			

SECTION IV. NATIONAL STOCK NUMBER AND PART NUMBER INDEX (CONTINUED)

PART NUMBER	FSCM	FIG. NO.	ITEM NO.
AU18-0-47MFD	84411	B-10	22
A11257	07647	B-12	32
B8001	58854	B-10	28
B8001	58854	B-12	39
CD100-2	02002	B-8	9
CD100-3	02002	B-8	7
CD134-1	02002	B-6	21
CD134-10A	02002	B-2	40
CD134-11A	02002	B-13	2
CD134-12	02002	B-2	19
CD134-13	02002	B-2	27
CD134-14	02002	B-2	23
CD134-15	02002	B-2	24
CD134-16	02002	B-2	25
CD134-17	02002	B-2	26
CD134-18	02002	B-2	65
CD134-19	02002	B-2	64
CD134-2	02002	B-8	6
CD134-20	02002	B-2	43
C1D34-21	02002	B-2	45
CD134-22	02002	B-2	55
CD134-23	02002	B-2	30
CD134-25A	02002	B-1	3
CD134-25B	02002	B-1	3
CD134-26A	02002	B-1	2
CD134-26B	02002	B-1	2
CD134-27	02002	B-3	4
CD134-28A	02002	B-3	27
CD134-29	02002	B-5	4
CD134-30A	02002	B-5	22
CD134-31A	02002	B-8	11
CD134-31A	02002	B-9	4
CD134-32	02002	B-8	4
CD134-32	02002	B-9	10
CD134-33	02002	B-6	4
CD134-34	02002	B-6	20
CD134-35	02002	B-7	3
CD134-37-1	02002	B-6	32
CD134-37-2	02002	B-6	33
CD134-38A	02002	B-6	37
CD134-39A	02002	B-10	75
CD134-4	02002	B-9	6
CD134-40A	02002	B-11	4
CD134-41	02002	B-11	18
CD134-42	02002	B-5	21
CD134-42A	02002	B-2	38
CD134-43	02002	B-11	17
CD134-43A	02002	B-1	1
CD134-43B	02002	B-1	1
CD134-44A	02002	B-2	32
CD134-46	02002	B-4	2
CD134-47A	02002	B-2	37
CD134-49	02002	B-3	25
CD134-5A	02002	B-5	6
CD134-50A	02002	B-2	1
CD134-51	02002	B-9	8
CD134-52A	02002	B-2	36

PART NUMBER	FSCM	FIG. NO.	ITEM NO.
CD134-55A	02002	B-12	9
CD134-56A	02002	B-10	11
CD134-57	02002	B-10	16
CD134-58	02002	B-10	17
CD134-59A	02002	B-10	50
CD134-6A	02002	B-3	5
CD134-7	02002	B-2	42
CD134-8A	02002	B-11	5
CD134-999-1BEIGE	02002	B-10	61
CD134-999-1BLACK	02002	B-12	19
CF03RCS2107	03797	B-2	28
CM04CD050D03	81349	B-5	20
CM04CD050D03	81349	B-11	7
CM04CD050D03	81349	B-3	18
D109756A	04773	B-10	55
D109756A	04773	B-12	14
D109780A	04773	B-12	62
D109882A	04773	B-12	54
D109883A	04773	B-12	53
D109885A	04773	B-10	44
D109895	04773	B-10	67
D109918A	04773	B-10	60
D109918A	04773	B-12	18
D150355A	04773	B-12	58
D16403A	04773	B-12	46
D17389A	04773	B-10	41
D18199A	04773	B-10	25
D18199A	04773	B-12	37
D18199Z	04773	B-10	34
D30227A	04773	B-10	48
D30362A	04773	B-12	49
D37692A	04773	B-10	66
D37735A	04773	B-12	56
D37744A	04773	B-12	63
D490178-00	04773	B-12	4
D490209B	04773	B-10	6
D51030A	04773	B-10	58
D51030A	04773	B-12	17
D52146	04773	B-12	20
D52146A	04773	B-10	62
D53030A	04773	B-10	3
D530304A	04773	B-12	2
D543069BT	04773	B-10	61
D543534A	04773	B-12	19
D543569A	04773	B-12	35
D543636B	04773	B-10	71
D56580A	04773	B-10	64
D58077A	04773	B-12	50
D58079A	04773	B-10	43
D580504	04773	B-10	42
D58090A	04773	B-12	55
D59306A	04773	B-10	1
D59307A	04773	B-10	33
D59308A	09657	B-10	31
D59308A	09657	B-10	38
D59308A	09657	B-12	43
59308B	04773	B-10	32

SECTION IV. NATIONAL STOCK NUMBER AND PART NUMBER INDEX (CONTINUED)

PART NUMBER	FSCM	FIG. NO.	ITEM NO.
D59308B	04773	B-12	44
D59359A	04773	B-12	36
D62141A	04773	B-10	49
D62142A	04773	B-10	9
D62142A	04773	B-12	6
D62144A	04773	B-10	68
D62155A	04773	B-12	65
D65511C	04773	B-10	65
D67442A	04773	B-10	51
567442A	04773	B-12	10
D567639A	04773	B-10	46
D67646A	04773	B-10	59
D67646A	04773	B-12	17A
D67703A	04773	B-12	51
D67704A	04773	B-12	52
D67708A	04773	B-10	56
D67708A	04773	B-12	15
D67722A	04773	B-10	72
D73144K	04773	B-10	70
D731449A	04773	B-12	33
D732113A	04773	B-12	7
D732120A	04773	B-12	8
D732121A	04773	B-12	60
D732124A	04773	B-12	28
D73261C	04773	B-12	22
D732757A	04773	B-10	8
D735541A	04773	B-12	64
D735544A	04773	B-12	61
D735550A	04773	B-12	48
D735556A	04773	B-12	66
D750008A	04773	B-10	39
D750008A	04773	B-12	45
D750008B	04773	B-12	45
D760862A	04773	B-10	23
D760862A	04773	B-12	21
D760863A	04773	B-10	40
D760864A	04773	B-10	45
D760865A	04773	B-10	5
D760865A	04773	B-12	3
D760866A	04773	B-10	63
D760900A	04773	B-10	7
D760900A	04773	B-12	5
D761074D	04773	B-12	59
D762048J	04773	B-12	57
D780809A	04773	B-10	1
D780810A	04773	B-10	2
D781002A	04773	B-12	70
D781004D	04773	B-12	1
D781066A	04773	B-10	73
D84975B	04773	B-10	14
D84975B	04773	B-12	25
D94160A	04773	B-10	30
D94160A	04773	B-10	57
D941260A	04773	B-12	42
FHL17G1	81349	B-2	52
FT10	80223	B-6	34
F6G	31827	B-2	67

PART NUMBER	FSCM	FIG. NO.	ITEM NO.
HC2540A	37942	B-6	16
JAN1N485B	81349	B-2	13
JAN1N485B	81349	B-8	8
JAN1N485B	81349	B-9	7
JAN2N2079A	81349	B-6	29
JAN2N697	81349	B-4	1
JAN1N3018B	81349	B-7	8
MDA942-6	04713	B-4	6
MDA952-2	04713	B-6	36
MRE14S	81312	B-2	56
MRE18PGH	81312	B-3	24
MRE26S	81312	B-2	58
MS15795-803	96906	B-2	34
MS15795-803	96906	B-3	21
MS15795-803	96906	B-5	10
MS15795-803	96906	B-6	3
MS15795-803	96906	B-8	3
MS15795-803	96906	B-9	3
MS15795-803	96906	B-10	20
MS15795-803	96906	B-11	3
MS15795-803	96906	B-12	69
MS15795-805	96906	B-2	7
MS15795-805	96906	B-3	2
MS15795-805	96906	B-5	2
MS15795-805	96906	B-6	11
MS15795-807	96906	B-2	17
MS15795-808	96906	B-6	28
MS15795-809	96906	B-6	27
MS24010-3	96906	B-5	12
MS24010-3	96906	B-8	10
MS24010-3	96906	B-9	9
MS24011-1	96906	B-2	57
MS35058-22	96906	B-6	8
MS35190-221	96906	B-8	5
MS35190-221	96906	B-9	5
MS35190-236	96906	B-6	5
MS35335-85	96906	B-12	24
MS35335-86	96906	B-12	27
MS35338-134	96906	B-2	47
MS35338-135	96906	B-2	35
MS35338-135	96906	B-3	20
MS35338-135	96906	B-5	9
MS35338-135	96906	B-6	2
MS3538-135	96906	B-8	2
MS35338-135	96906	B-9	2
MS35338-135	96906	B-10	19
MS35338-135	96906	B-11	2
MS35338-135	96906	B-12	68
MS35338-136	96906	B-2	8
MS35338-136	96906	B-3	3
MS35338-136	96906	B-4	4
MS35338-136	96906	B-5	3
MS35338-136	96906	B-6	10
MS35338-136	96906	B-10	6
MS35338-137	96906	B-2	18
MS35431-8	96906	B-6	26

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PART NUMBER	FSCM	FIG. NO.	ITEM NO.
MS35649-204	96906	B-6	25
MS35649-244	96906	B-2	63
MS359649-244	96906	B-3	19
MS35649-244	96906	B-5	8
MS35649-264	96906	B-2	6
MS35649-264	96906	B-6	18
MS35649-284	96906	B-2	16
MS35649-43	96906	B-10	18
MS51957-12	96906	B-10	52
MS51957-12	96906	B-12	11
MS51957-13	96906	B-2	33
MS51957-13	96906	B-10	74
MS51957-13	96906	B-11	1
MS51957-13	96906	B-12	57
MS51957-14	96906	B-2	54
MS51957-14	96906	B-6	1
MS51957-15	96906	B-3	22
MS51957-15	96906	B-5	7
MS51957-15	96906	B-6	31
MS51957-17	96906	B-2	62
MS51957-17	96906	B-6	12
MS51957-20	96906	B-6	35
MS51957-26	96906	B-2	31
MS51957-26	96906	B-4	3
MS51957-26	96906	B-5	1
MS51957-27	96906	B-2	39
MS51957-27	96906	B-2	42A
MS51957-28	96906	B-2	41
MS51957-28	96906	B-2	44
MS51957-28	96906	B-3	1
MS51957-28	96906	B-6	17
MS51957-29	96906	B-2	5
MS51957-29	96906	B-6	22
MS51957-31	96906	B-6	9
MS51957-32	96906	B-2	60
MS51957-4	96906	B-2	46
MS51957-45	96906	B-2	15
MS8748-5E00G1A	81349	B-4	11
NC641B	05820	B-6	30
PE1685D17	04773	B-2	4
RCR07G100JS	81349	B-2	11
RCR07G101JS	81349	B-2	10
RCR07G102JS	81349	B-3	7
RCR07G102JS	81349	B-11	11
RCR07G103JS	81349	B-3	12
RCR07G103JS	81349	B-5	14
RCR07G103JS	81349	B-11	13
RCR07G111JS	81349	B-2	12
RCR07G122JS	81349	B-3	16
RCR07G123JS	81349	B-3	17
RCR07G152JS	81349	B-4	12
RCR07G202JS	81349	B-11	12
RCR07G332JS	81349	B-3	13
RCR07G332JS	81349	B-4	13
RCR07G5R1JS	81349	B-3	10
RCR07G5R1JS	81349	B-5	16
RCR07G5R1JS	81349	B-11	10
RCR07G512JS	81349	B-3	14
RCR07G512JS	81349	B-4	7
RCR07G512JS	81349	B-5	19
RCR07G621JS	81349	B-3	15
RCR07G223JS	81349	B-4	15
RCR07G683JS	81349	B-11	14
RCR20G102JS	81349	B-7	1
RCR20G331JS	81349	B-6	14
RCR20G470JS	81349	B-7	5
RCR20G471JS	81349	B-7	4
RS20	04773	B-2	9
RT12C2Y102	81349	B-11	15
RV50	04773	B-2	3
TE1155	56289	B-3	8
TE1155	56289	B-5	13
TE1155	56289	B-11	8
TE1160	56289	B-11	9
TE1162	80183	B-4	14
TE1163	56289	B-3	6
TE1164	56289	B-2	14
TE1307	80183	B-4	8
TM1	06383	B-2	20
TVA1163	56289	B-7	7
VR6	90201	B-6	19
WMF2P47	14655	B-7	6
0781063A	04773	B-10	4
10ESB	04655	B-10	26
10ESB	04655	B-10	35
10ESB	04655	B-12	38
102224	73734	B-10	64A
102224	73734	B-12	29
105201	73734	B-10	64B
105201	73734	B-12	30
11415-1-1-4SS	73734	B-3	26
11415-1-1-4SS	73734	B-5	5
1402-120	75915	B-2	51
17460S	70903	B-13	1
15-1-6VAC	19557	B-12	31
15-1-6VAC	19557	B-10	64D
15220	73734	B-10	15
15222	73734	B-10	57
15222	73734	B-12	16
15222	73734	B-12	23
15242	73734	B-12	26
1805-00	78189	B-10	13
2B1710	02289	B-4	5
2N697	04713	B-7	2
205216-32	77229	B-13	3
225P10491WD3	56289	B-3	11
225P10491WD3	56289	B-5	17
225P10491WD3	56289	B-11	6
250-06-30-170	71780	B-6	23
30D357G016DH4	56289	B-5	15
3012	73734	B-10	69
354-18-04-001	71785	B-6	13
37TB10	81349	B-2	61
38003-0	88204	B-10	27
38003-0	88204	B-12	40
4024	73734	B-10	29

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SECTION IV. NATIONAL STOCK NUMBER AND PART NUMBER INDEX (CONTINUED)

PART NUMBER	FSCM	FIG. NO.	ITEM NO.
4024	73734	B-10	36
4024	73734	B-12	41
41F1000SSIL	78277	B-4	9
4122	73734	B-12	47
422-13-11-013	71785	B-2	59
4327	00141	B-2	21
4-40PHX1-1-4SSCR	73734	B-8	1
4-40PHX1-1-4SSCR	73734	B-9	1
5GA550	52689	B-6	7
50-7538-504	72619	B-2	29
511-061800-00	78189	B-2	22
52-1500-101	83330	B-10	21
52-1505-106	83330	B-6	15
5256	74545	B-2	49
5278	74545	B-2	50
5-40PHX1-4SS	73734	B-10	10
5-40PHX3-16SS	73734	B-10	54
5-40PHX3-16SS	73734	B-12	13
5-40RHX1-4BRONZE	73734	B-10	12
57-10500-7	02660	B-13	5
57-10500-25	02660	B-12	34
57-20500	02660	B-2	48
57-30500	02660	B-13	4
60150	82872	B-10	53
60150	82872	B-12	12
6-40RHX3-16BRASS	73734	B-10	47
740005	09206	B-3	9
740005	09206	B-5	18
740005	09206	B-11	16
7464	74545	B-2	66
7466	74545	B-6	6
7611K2	15605	B-2	53
833	83330	B-3	23
833	83330	B-4	10
833	83330	B-5	11
8354	83330	B-6	24

PART NUMBER	FSCM	FIG. NO.	ITEM NO.

LATEST NATIONAL STOCK NUMBER ASSIGNMENT

STOCK NUMBER	FIG. NO.	ITEM NO.
5310-00-275-2302	B-10	18

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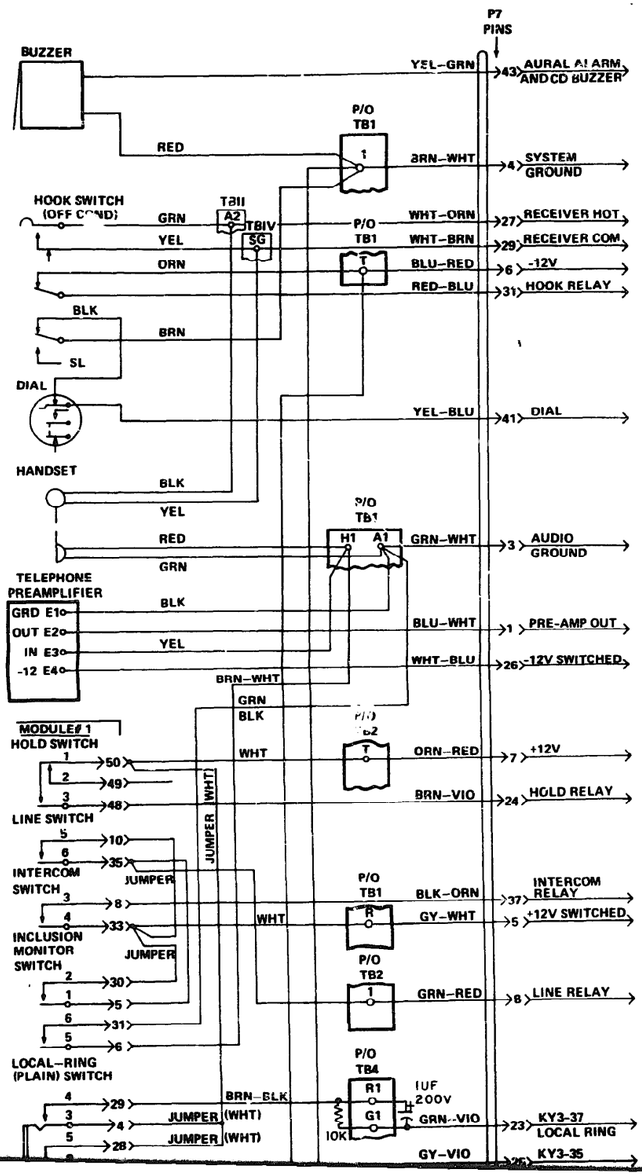

P7
PINS
BUZZER
YEL-GRN
43
AURAL ALARM
AND CD BUZZER
P/O
TB1
RED
1
BRN-WHT
4
SYSTEM
GROUND
HOOK SWITCH
(OFF GND)
GRN
YEL
ORN
TB11
A2
TB1V
SG
P/O
TB1
WHT-ORN
27
RECEIVER HOT
WHT-BRN
29
RECEIVER COM
BLU-RED
6
-12V
RED-BLU
31
HOOK RELAY
BLK
BRN
SL
DIAL
YEL-BLU
41
DIAL
HANDSET
BLK
YEL
RED
GRN
P/O
TB1
H1
A1
GRN-WHT
3
AUDIO
GROUND
TELEPHONE
PREAMPLIFIER
GRD E1
OUT E2
IN E3
-12 E4
BLK
YEL
BLU-WHT
1
PRE-AMP OUT
WHT-BLU
26
-12V SWITCHED
BRN-WHT
GRN
BLK
MODULE# 1
HOLD SWITCH
1
2
3
50
49
48
WHT
P/O
TB2
T
ORN-RED
7
+12V
BRN-VIO
24
HOLD RELAY
LINE SWITCH
5
6
10
35
JUMPER
JUMPER (WHT)
INTERCOM
SWITCH
3
4
8
33
JUMPER
WHT
P/O
TB1
R
BLK-ORN
37
INTERCOM
RELAY
GY-WHT
5
+12V SWITCHED
INCLUSION
MONITOR
SWITCH
2
1
6
5
30
5
31
6
P/O
TB2
1
GRN-RED
8
LINE RELAY
LOCAL-RING
(PLAIN) SWITCH
P/O
TB4
R1
G1
1UF
200V
10K
4
3
5
29
4
28
BRN-BLK
JUMPER (WHT)
JUMPER (WHT)
GRN-VIO
23
KY3-37
LOCAL RING
GY-VIO
KY3-35

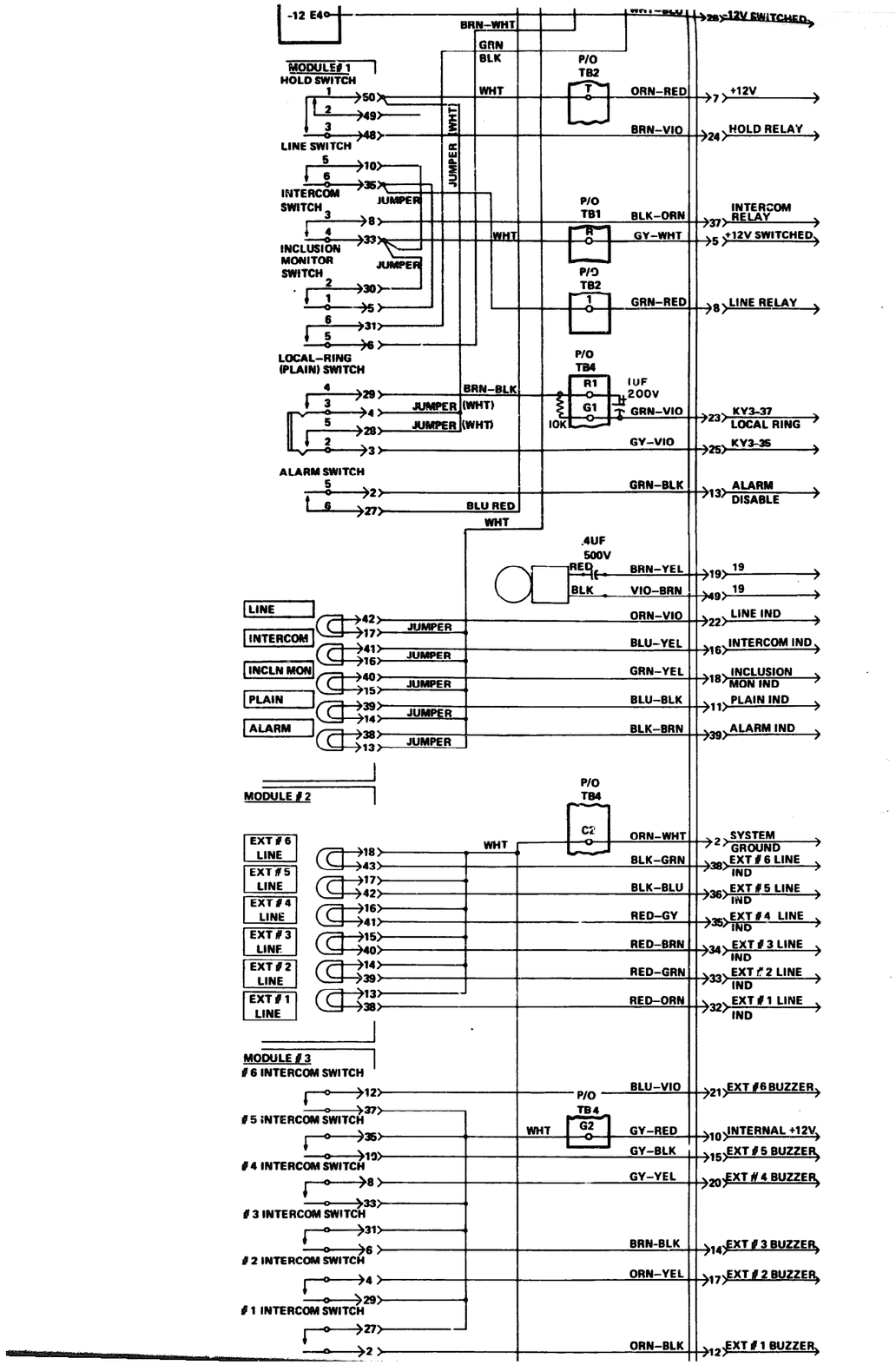


Figure FO-1. Call commander telephone type 860 schematic

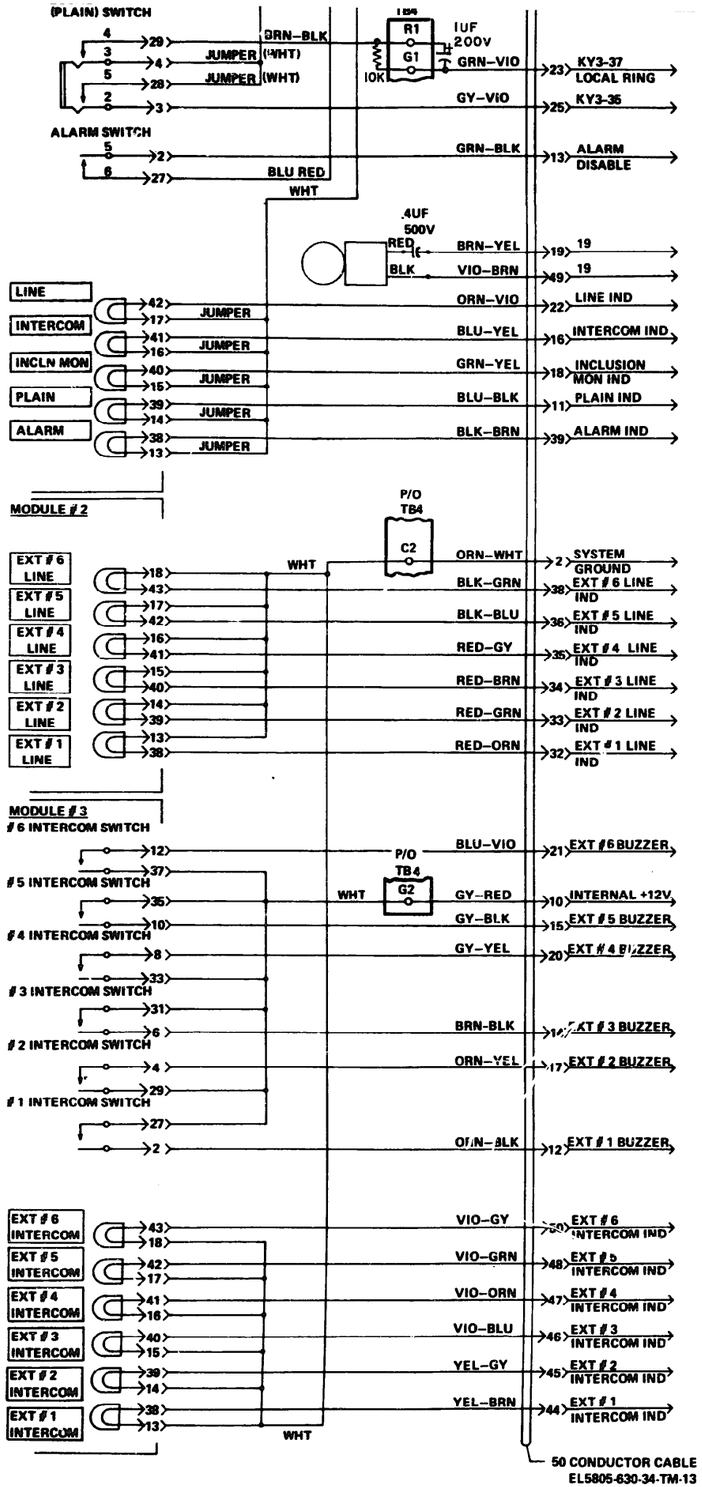
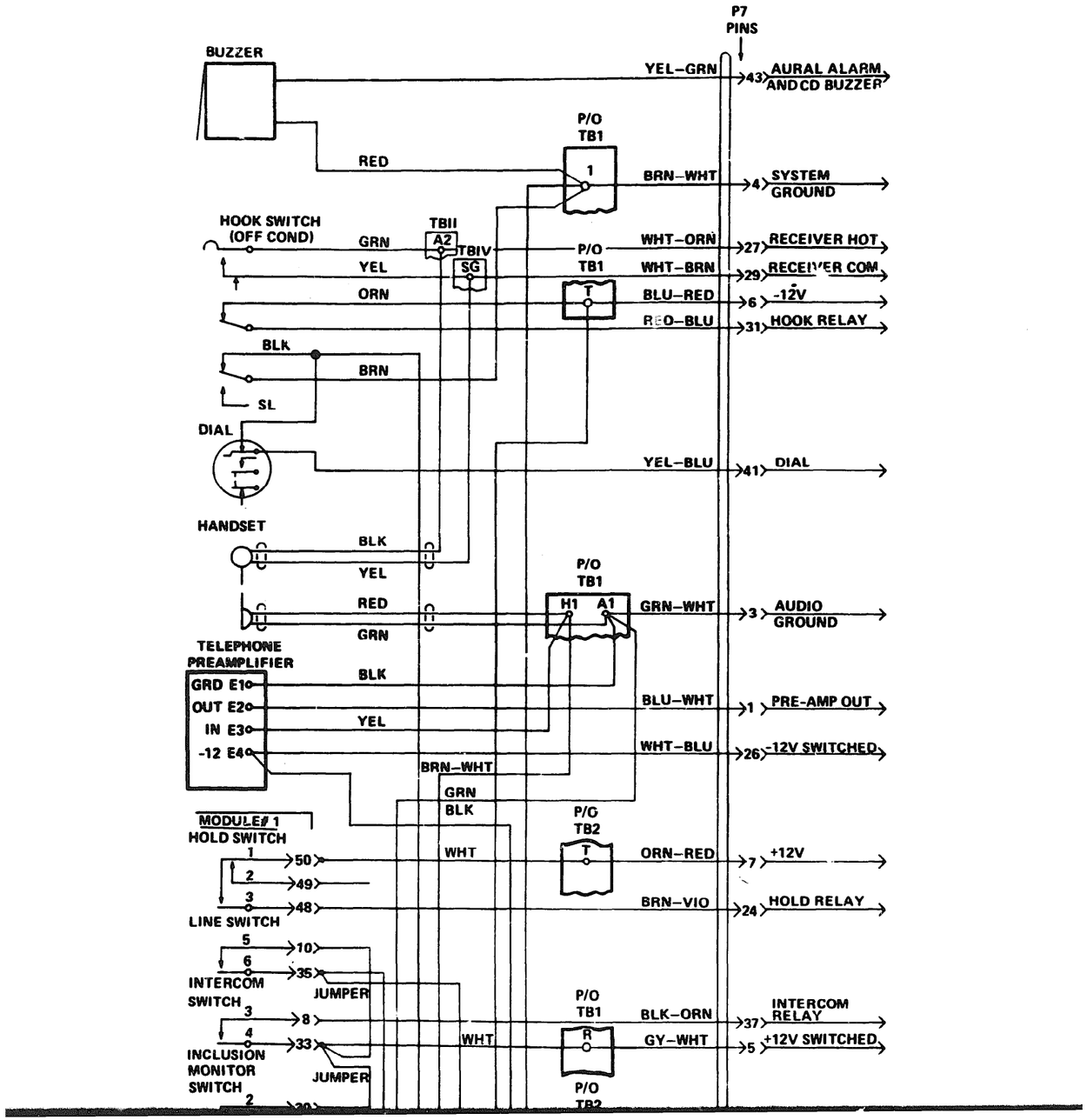
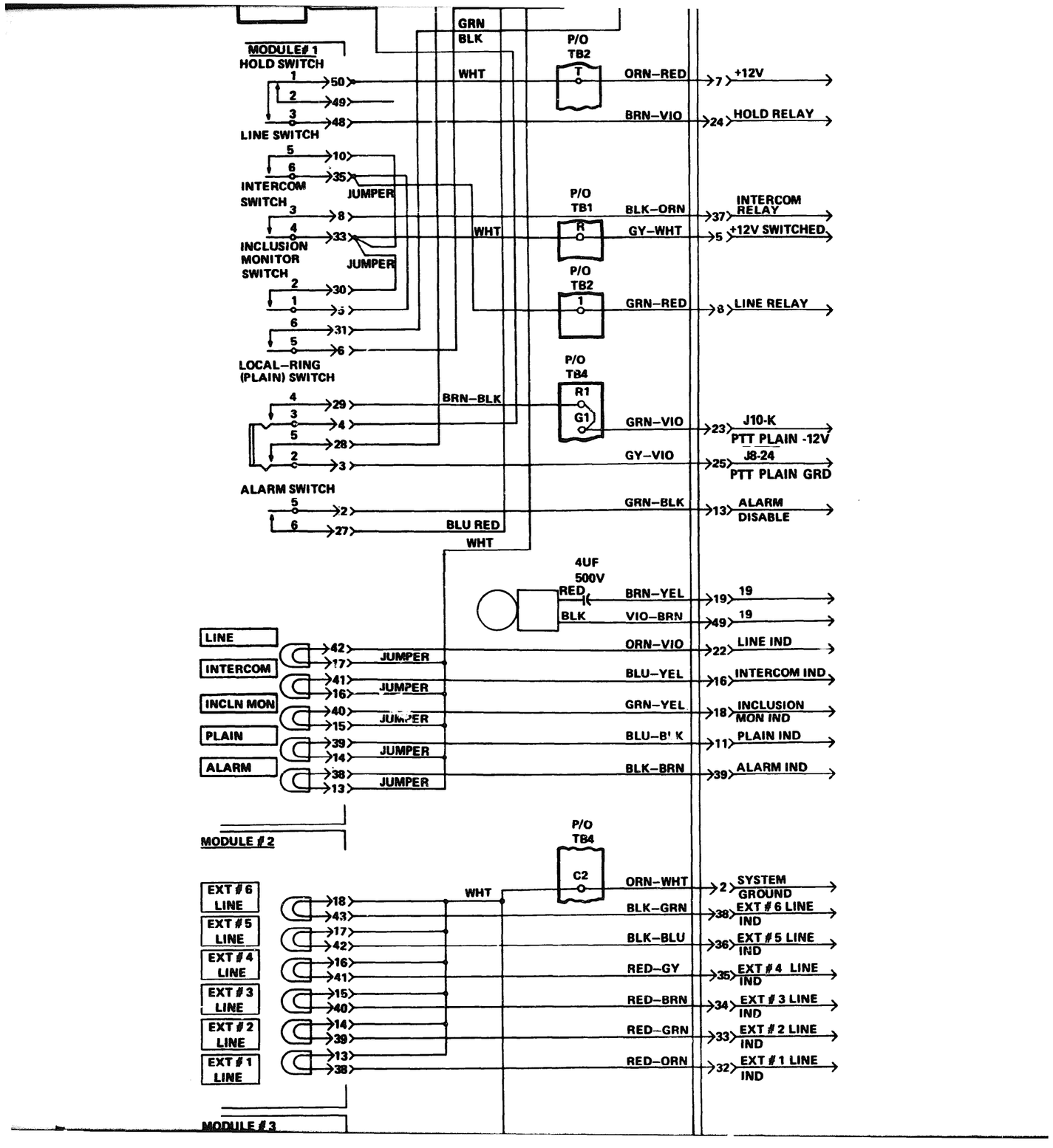


Figure FO-1. Call commander telephone type 860 schematic diagram.


P7
PINS
BUZZER
YEL–GRN
43
AURAL ALARM
AND CD BUZZER
P/O
TB1
RED
1
BRN–WHT
4
SYSTEM
GROUND
HOOK SWITCH
(OFF COND)
TBII
A2
GRN
TBIV
SG
P/O
TB1
WHT–ORN
27
RECEIVER HOT
YEL
WHT–BRN
29
RECEIVER COM
ORN
T
BLU–RED
6
-12V
RED–BLU
31
HOOK RELAY
BLK
BRN
SL
DIAL
YEL–BLU
41
DIAL
HANDSET
BLK
YEL
P/O
TB1
RED
H1
A1
GRN–WHT
3
AUDIO
GROUND
GRN
TELEPHONE
PREAMPLIFIER
GRD E1
BLK
OUT E2
BLU–WHT
1
PRE-AMP OUT
IN E3
YEL
-12 E4
WHT–BLU
26
-12V SWITCHED
BRN–WHT
GRN
BLK
MODULE# 1
HOLD SWITCH
P/O
TB2
1
50
WHT
T
ORN–RED
7
+12V
2
49
3
48
BRN–VIO
24
HOLD RELAY
LINE SWITCH
5
10
6
35
INTERCOM
SWITCH
JUMPER
P/O
TB1
3
8
BLK–ORN
37
INTERCOM
RELAY
4
33
WHT
R
GY–WHT
5
+12V SWITCHED
INCLUSION
MONITOR
SWITCH
JUMPER
2
P/O
TB2


GRN
BLK
MODULE# 1
HOLD SWITCH
WHT
P/O
TB2
T
ORN–RED
7
+12V
BRN–VIO
24
HOLD RELAY
LINE SWITCH
INTERCOM
SWITCH
JUMPER
P/O
TB1
R
BLK–ORN
37
INTERCOM
RELAY
WHT
GY–WHT
5
+12V SWITCHED
INCLUSION
MONITOR
SWITCH
JUMPER
P/O
TB2
1
GRN–RED
8
LINE RELAY
LOCAL–RING
(PLAIN) SWITCH
P/O
TB4
R1
G1
BRN–BLK
GRN–VIO
23
J10-K
PTT PLAIN -12V
GY–VIO
25
J8-24
PTT PLAIN GRD
ALARM SWITCH
GRN–BLK
13
ALARM
DISABLE
BLU RED
WHT
4UF
500V
RED
BLK
BRN–YEL
19
19
VIO–BRN
49
19
LINE
INTERCOM
INCLN MON
PLAIN
ALARM
JUMPER
ORN–VIO
22
LINE IND
BLU–YEL
16
INTERCOM IND
GRN–YEL
18
INCLUSION
MON IND
BLU–BLK
11
PLAIN IND
BLK–BRN
39
ALARM IND
MODULE # 2
P/O
TB4
C2
WHT
ORN–WHT
2
SYSTEM
GROUND
EXT # 6
LINE
EXT # 5
LINE
EXT # 4
LINE
EXT # 3
LINE
EXT # 2
LINE
EXT # 1
LINE
BLK–GRN
38
EXT # 6 LINE
IND
BLK–BLU
36
EXT # 5 LINE
IND
RED–GY
35
EXT # 4 LINE
IND
RED–BRN
34
EXT # 3 LINE
IND
RED–GRN
33
EXT # 2 LINE
IND
RED–ORN
32
EXT # 1 LINE
IND
MODULE # 3

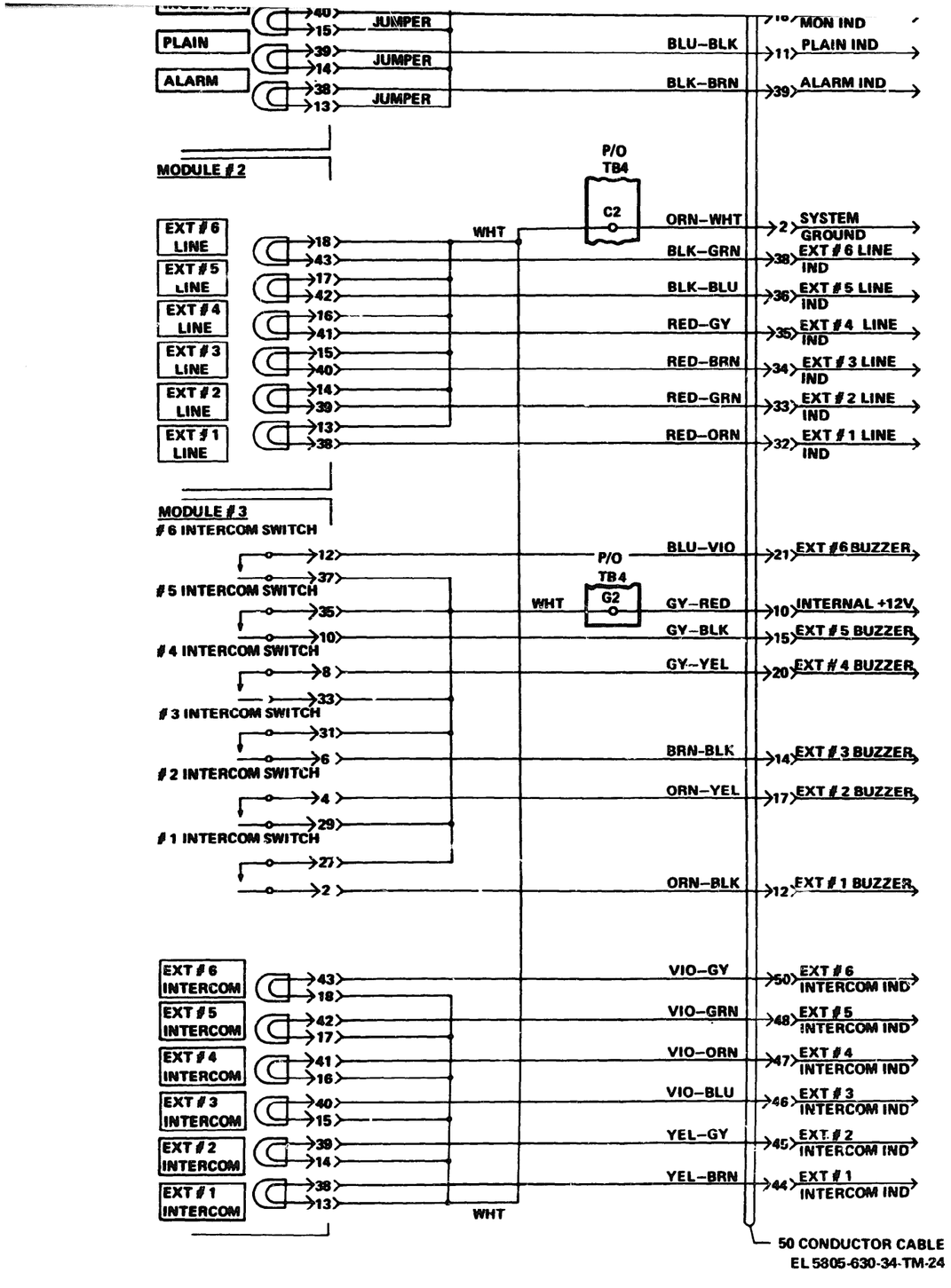


Figure FO-1.1. Call commander telephone type 860A, schematic diagram

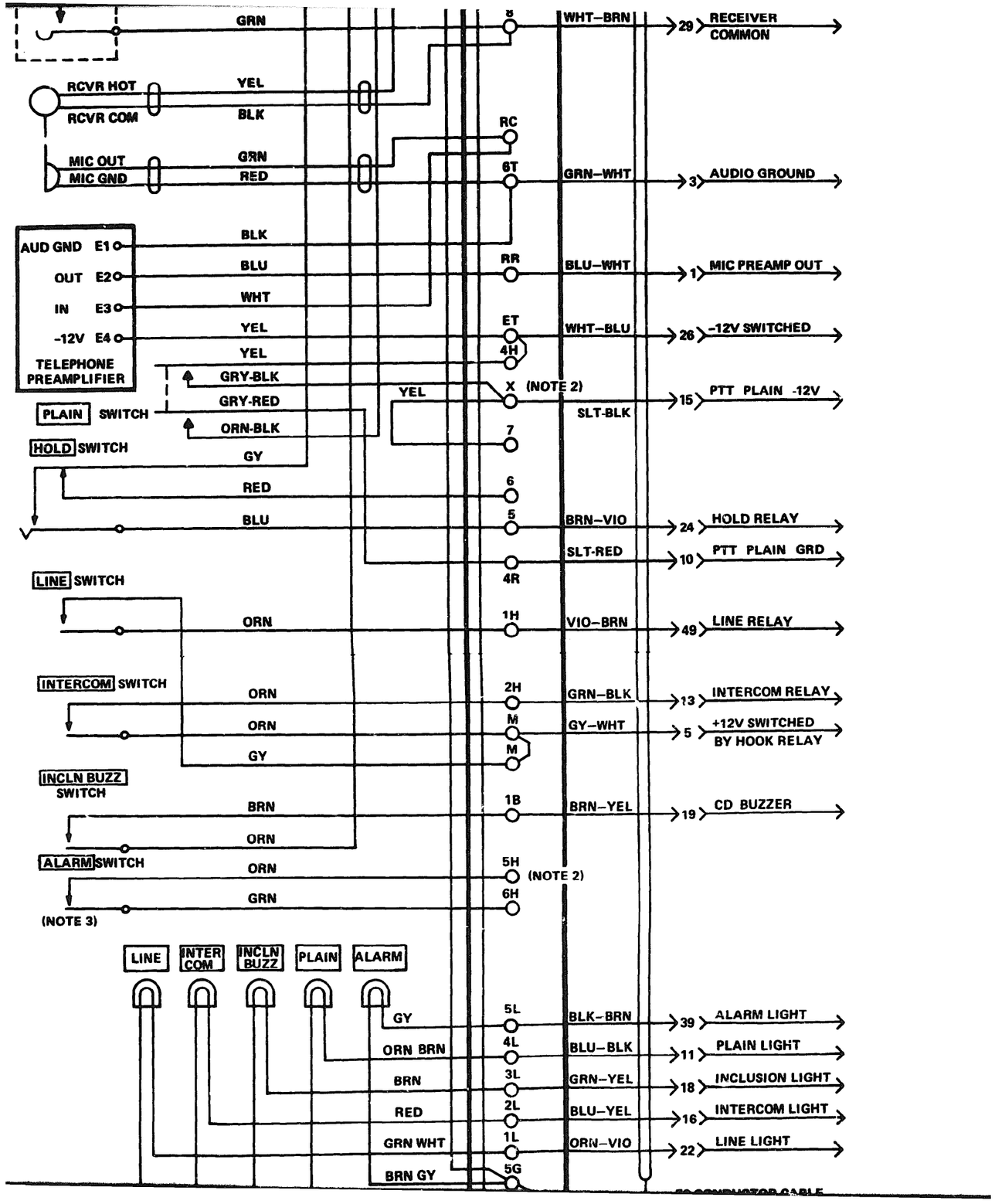


Figure FO-2.1. Extension telephone type 186A

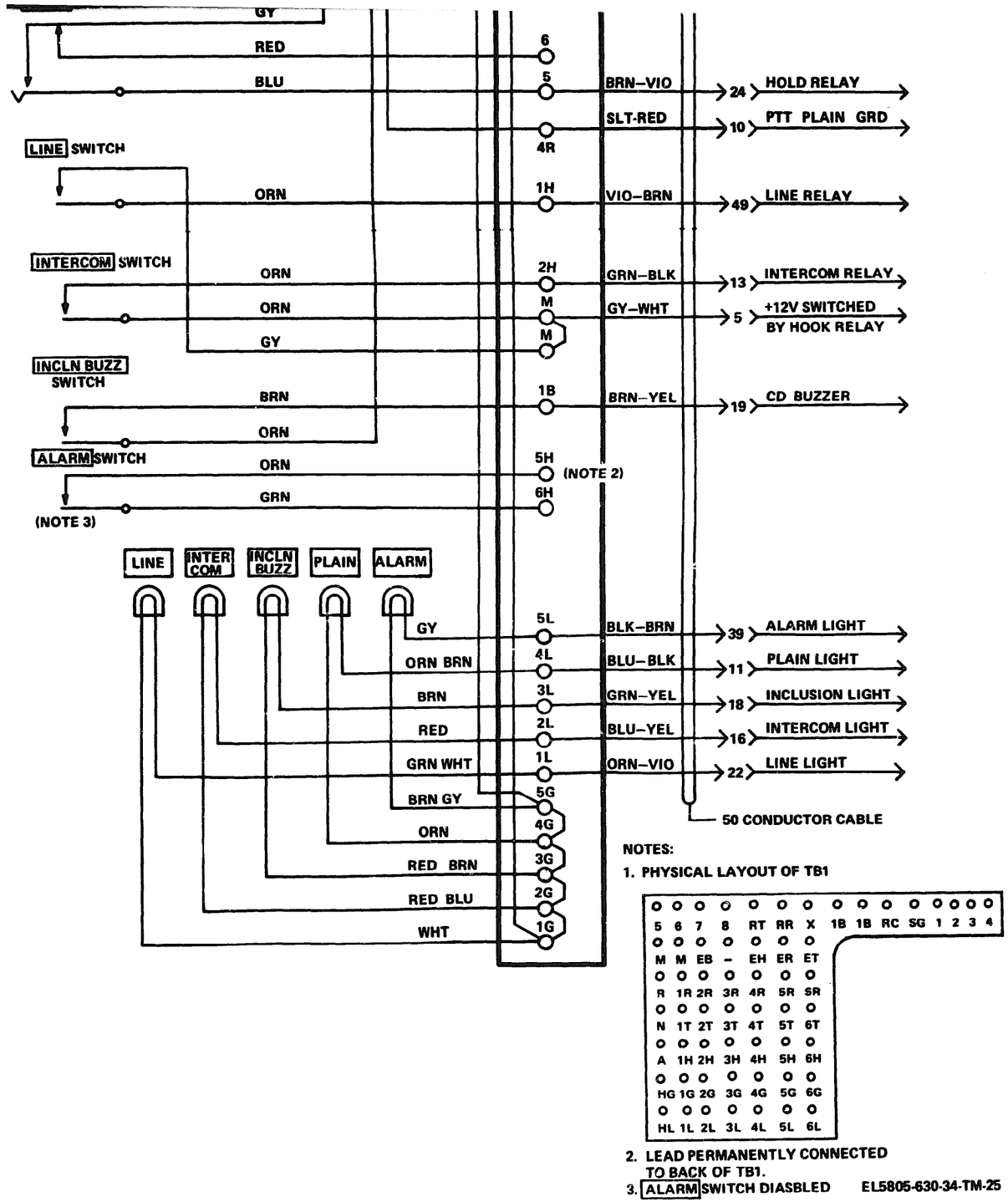
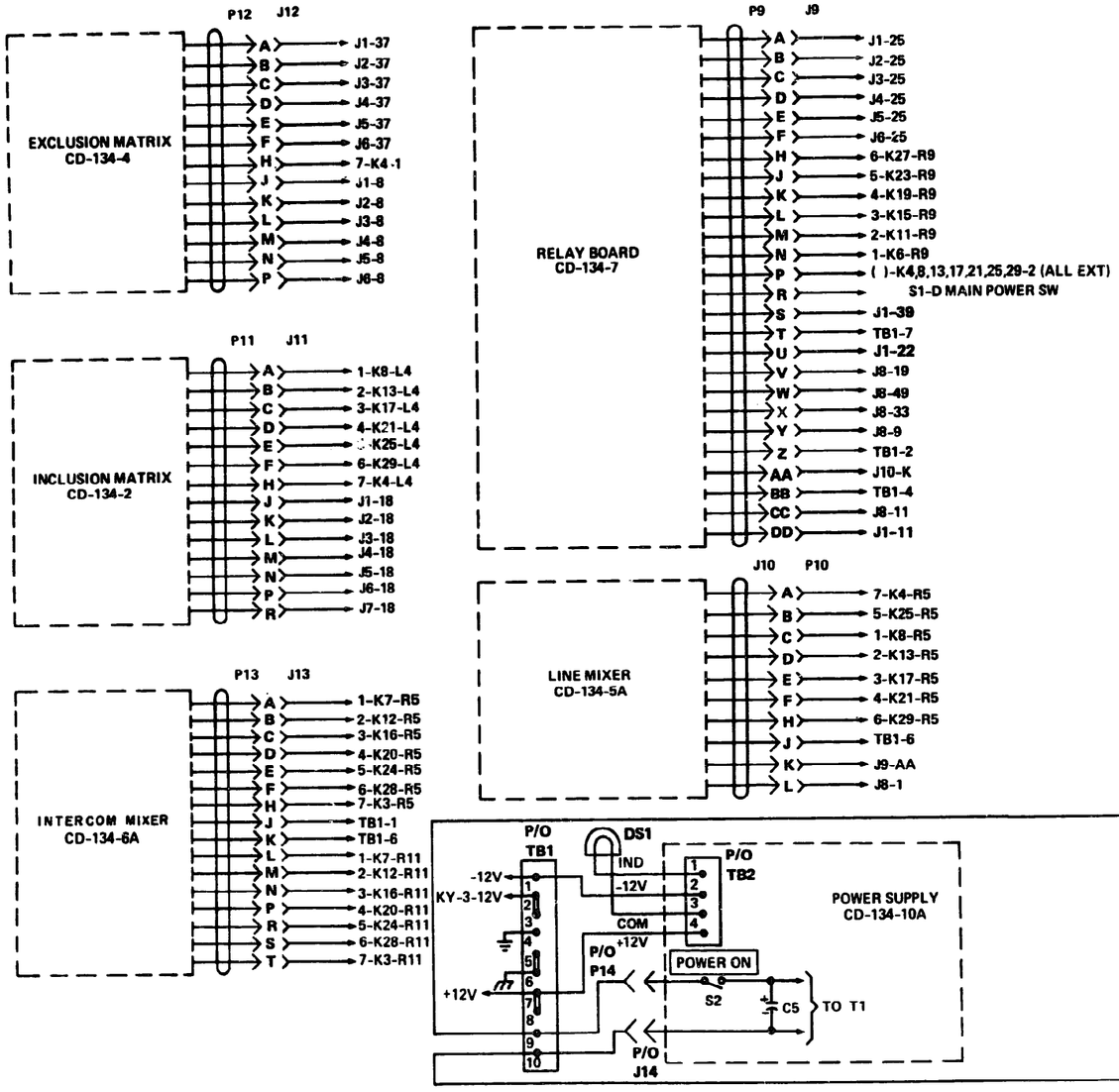


Figure FO-2.1. Extension telephone type 186A, schematic diagram.


P12 J12
EXCLUSION MATRIX CD-134-4
A J1-37
B J2-37
C J3-37
D J4-37
E J5-37
F J6-37
H 7-K4-1
J J1-8
K J2-8
L J3-8
M J4-8
N J5-8
P J6-8
P11 J11
INCLUSION MATRIX CD-134-2
A 1-K8-L4
B 2-K13-L4
C 3-K17-L4
D 4-K21-L4
E 5-K25-L4
F 6-K29-L4
H 7-K4-L4
J J1-18
K J2-18
L J3-18
M J4-18
N J5-18
P J6-18
R J7-18
P13 J13
INTERCOM MIXER CD-134-6A
A 1-K7-R5
B 2-K12-R5
C 3-K16-R5
D 4-K20-R5
E 5-K24-R5
F 6-K28-R5
H 7-K3-R5
J TB1-1
K TB1-6
L 1-K7-R11
M 2-K12-R11
N 3-K16-R11
P 4-K20-R11
R 5-K24-R11
S 6-K28-R11
T 7-K3-R11
P9 J9
RELAY BOARD CD-134-7
A J1-25
B J2-25
C J3-25
D J4-25
E J5-25
F J6-25
H 6-K27-R9
J 5-K23-R9
K 4-K19-R9
L 3-K15-R9
M 2-K11-R9
N 1-K6-R9
P ( )-K4,8,13,17,21,25,29-2 (ALL EXT)
R S1-D MAIN POWER SW
S J1-39
T TB1-7
U J1-22
V J8-19
W J8-49
X J8-33
Y J8-9
Z TB1-2
AA J10-K
BB TB1-4
CC J8-11
DD J1-11
J10 P10
LINE MIXER CD-134-5A
A 7-K4-R5
B 5-K25-R5
C 1-K8-R5
D 2-K13-R5
E 3-K17-R5
F 4-K21-R5
H 6-K29-R5
J TB1-6
K J9-AA
L J8-1
P/O TB1
DS1
IND
-12V
KY-3-12V
+12V
COM
P/O TB2
P/O P14
POWER ON
S2
C5
TO T1
P/O J14
POWER SUPPLY CD-134-10A
J9-R
F1
.8A
ON
OFF
S1
MAIN POWER
POWER
AUX. AC
J8-39
108-132 VAC. 60 Hz
W1
J1
J2
J3
1 1-K6-R6PA OUT
AUDIO GRD
SYSTEM GRD
5 1-K5-L5, +12V SW
TB1-1
TB1-7
K9-1
8 J12-J
PTT PLAIN GRD
PLAIN LIGHT
J9-DD
1-K6-L5
PTT PLAIN -12V
J7-44
1-K7-L5
INT LIGHT
J11-J
CD BUZZER
J9-U
LINE LIGHT
1-K6-L8
J9-A
1-K5-L8
1-K6-L12
1-K6-R12
1-K5-1
1-K6-L9
J12-A
J9-S
ALARM LIGHT
1-K7-L4
1-K8-R7
J7-12
1-K6-1
2-K11-R6
2-K10-L5
2-K11-L5
2-K12-L5
J7-45
J11-K
2-K11-L8
J9-B
2-K10-L8
2-K11-L12
2-K11-R12
2-K10-1
K9-R2
2-K11-L9
K9-R3
J12-B
2-K13-R7
2-K12-L4
J7-17
2-K11-1
3-K15-R6
3-K14-L5
J12-L
3-K15-L5
3-K16-L5
J7-46
J11-L
3-K15-L8
J9-C
3-K14-L8
3-K15-L12
3-K15-R12
3-K14-1
K9-L11
3-K15-L9
K9-L12
J12-C
3-K17-R7
3-K16-L4
J7-14
3-K15-1
RELAY
NOMENCLATURE
CONTACT
DESIGNATION
RELAY CONTACT
RELAY DESIGNATION
EXTENSION NO.
EXAMPLE: 1-K1-9 = EXTENSION NO. 1, RELAY NO. K1, CONTACT POSITION 9

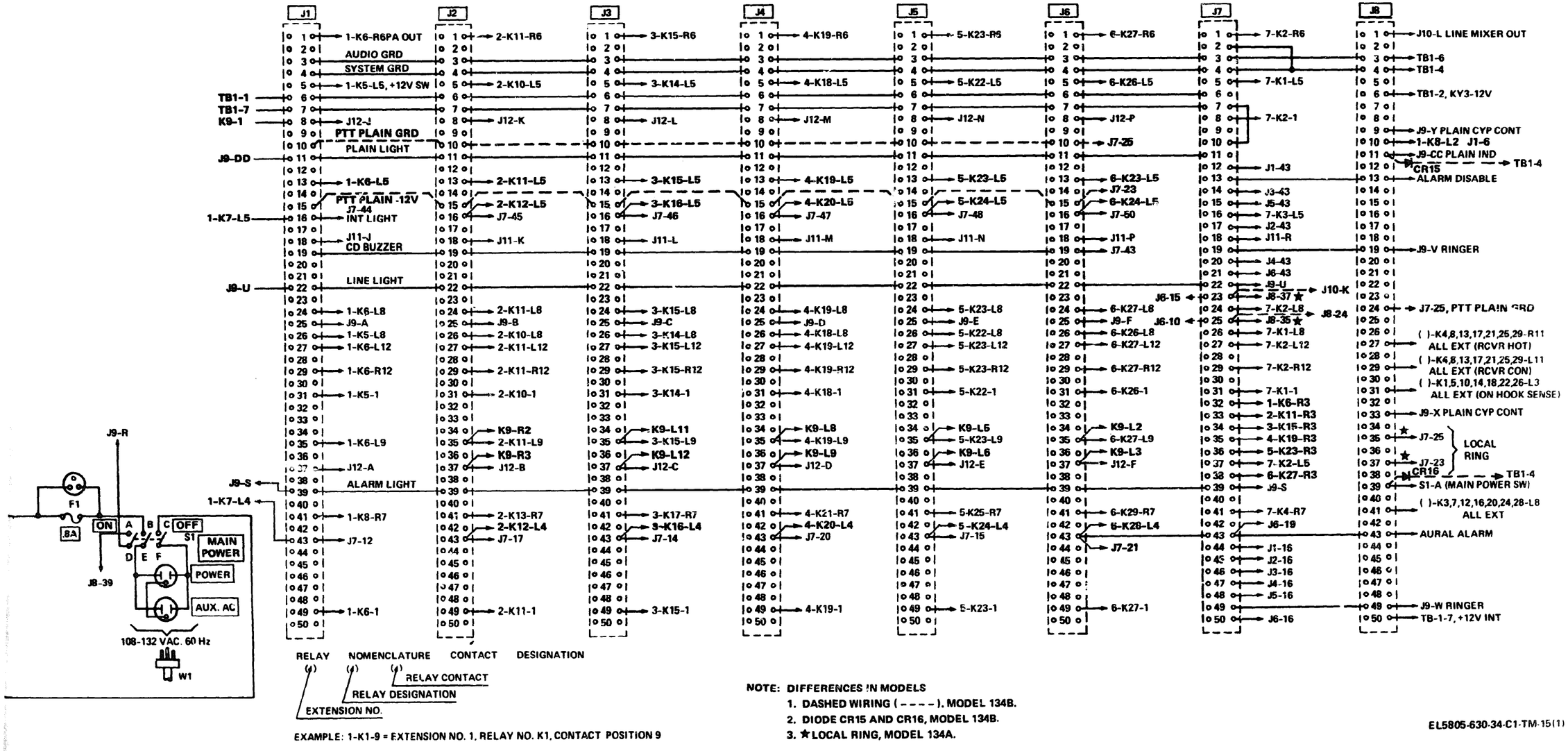
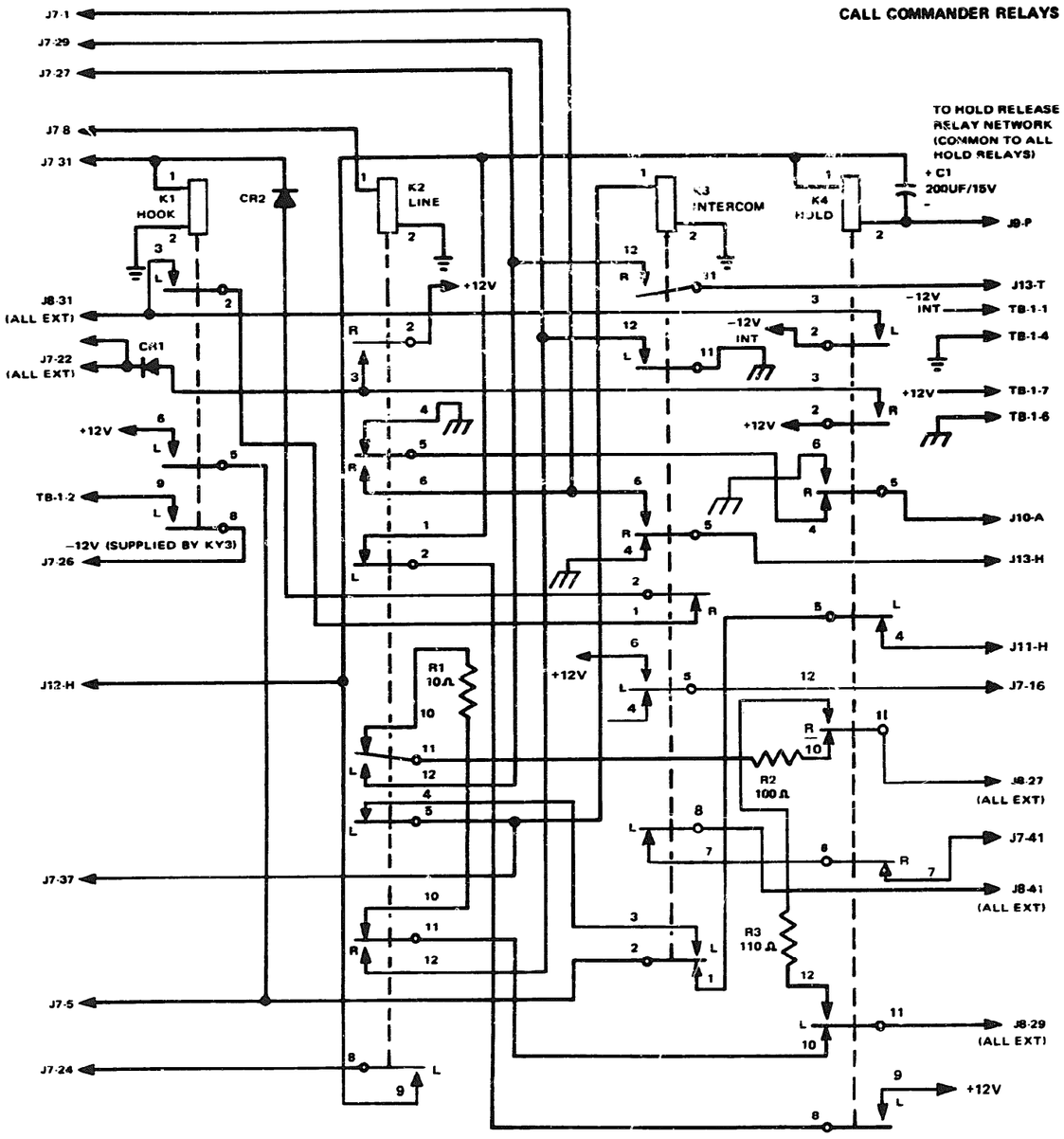


Figure FO-3 ① . Call director system inferconnecting schematic diagram. sheet 1 of 4

CALL COMMANDER RELAYS



EXTENSION NO. 1 RELAYS

J1-1

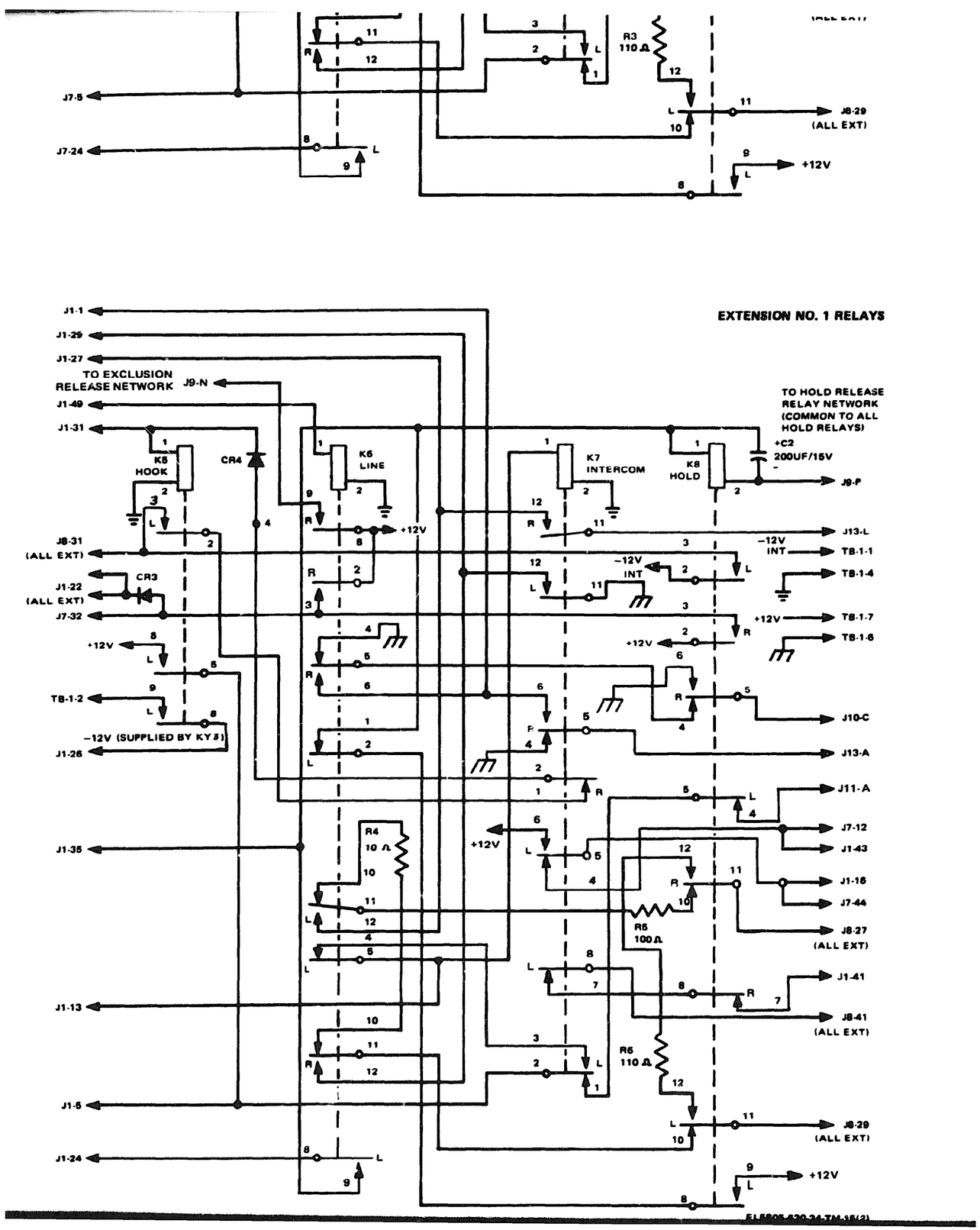


Figure FO-3. Call director system interconnecting schematic diagram sheet 2 of 4

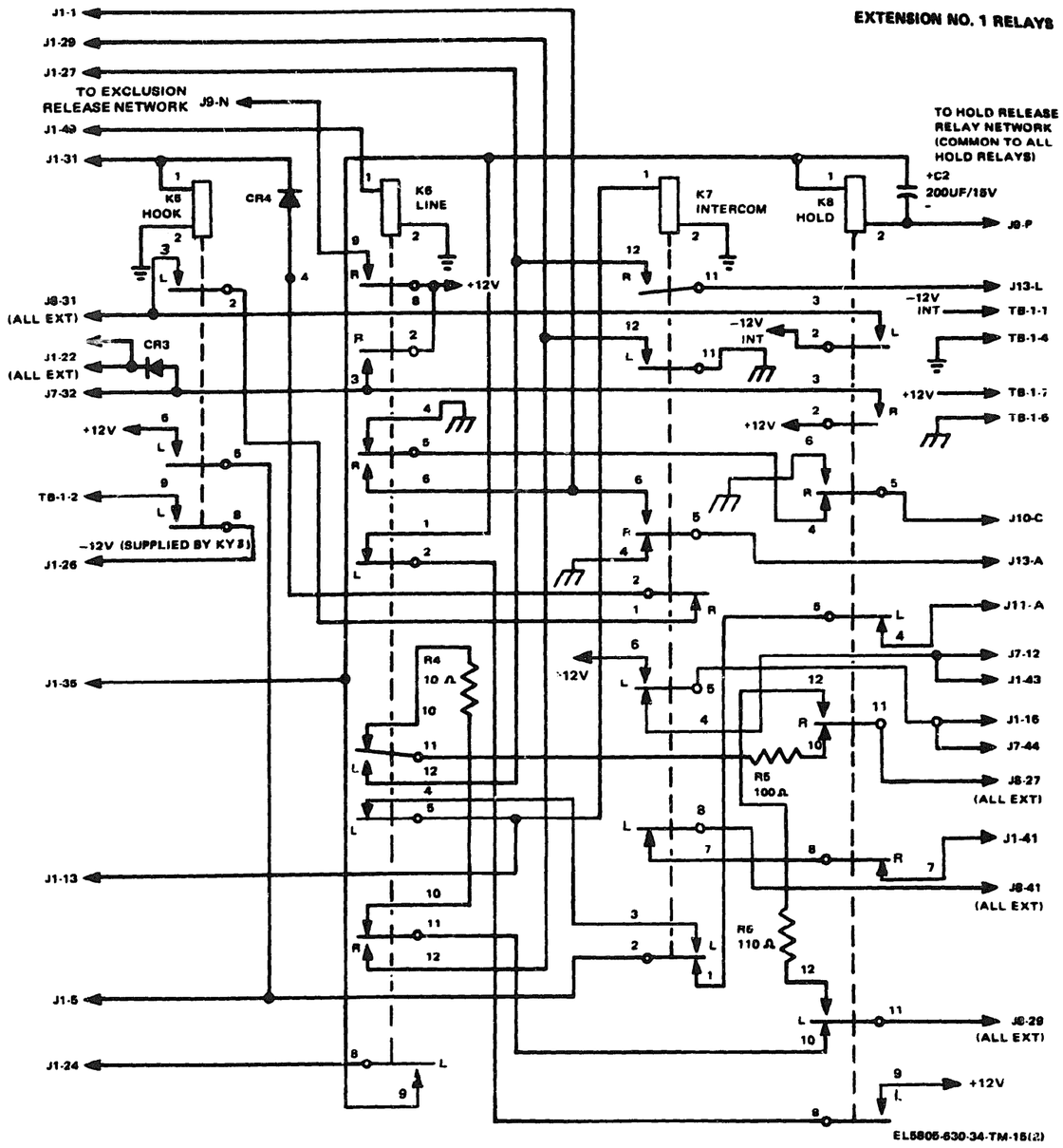
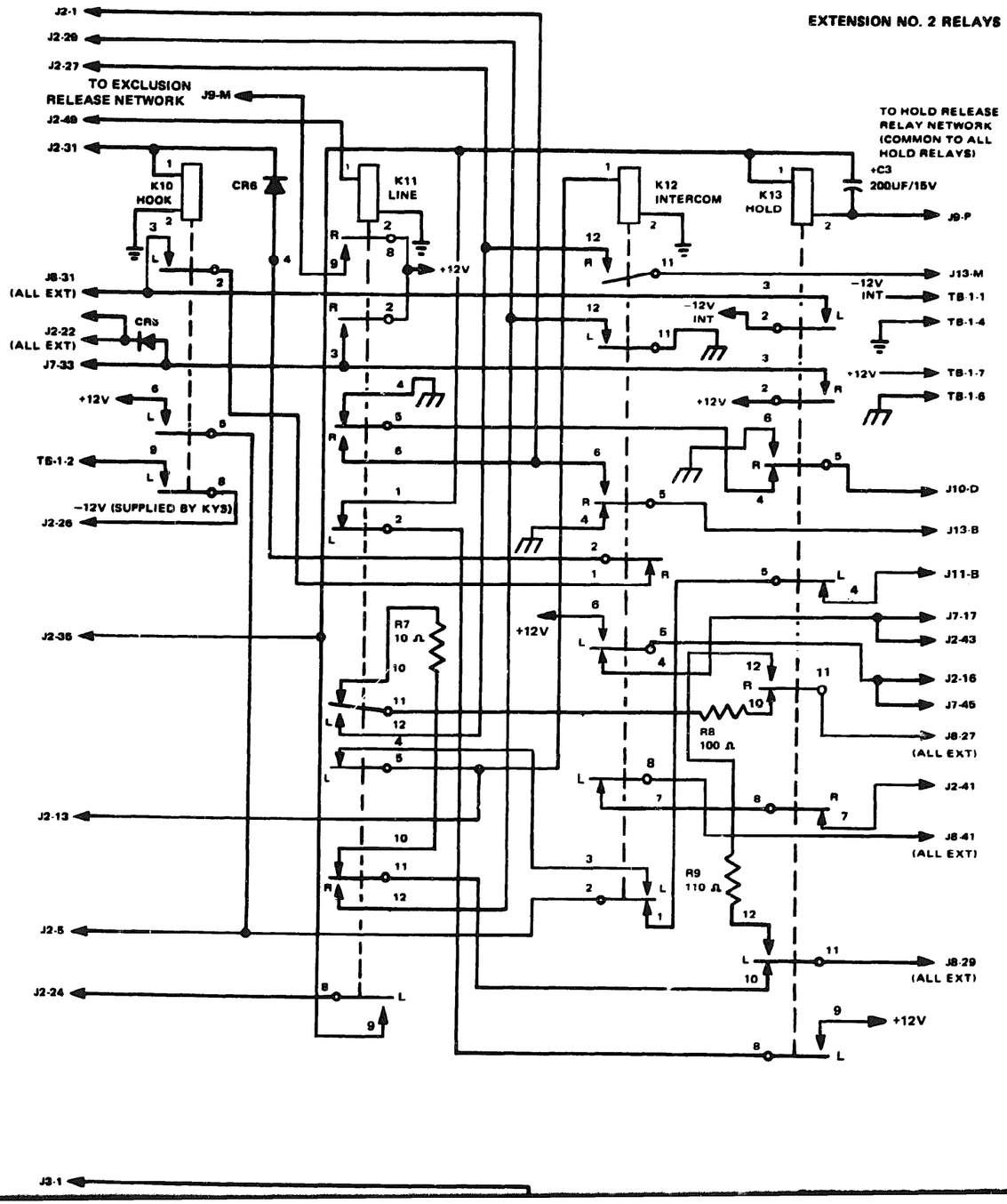


Figure FO-3. Call director system interconnecting schematic diagram sheet 2 of 4

EXTENSION NO. 2 RELAYS



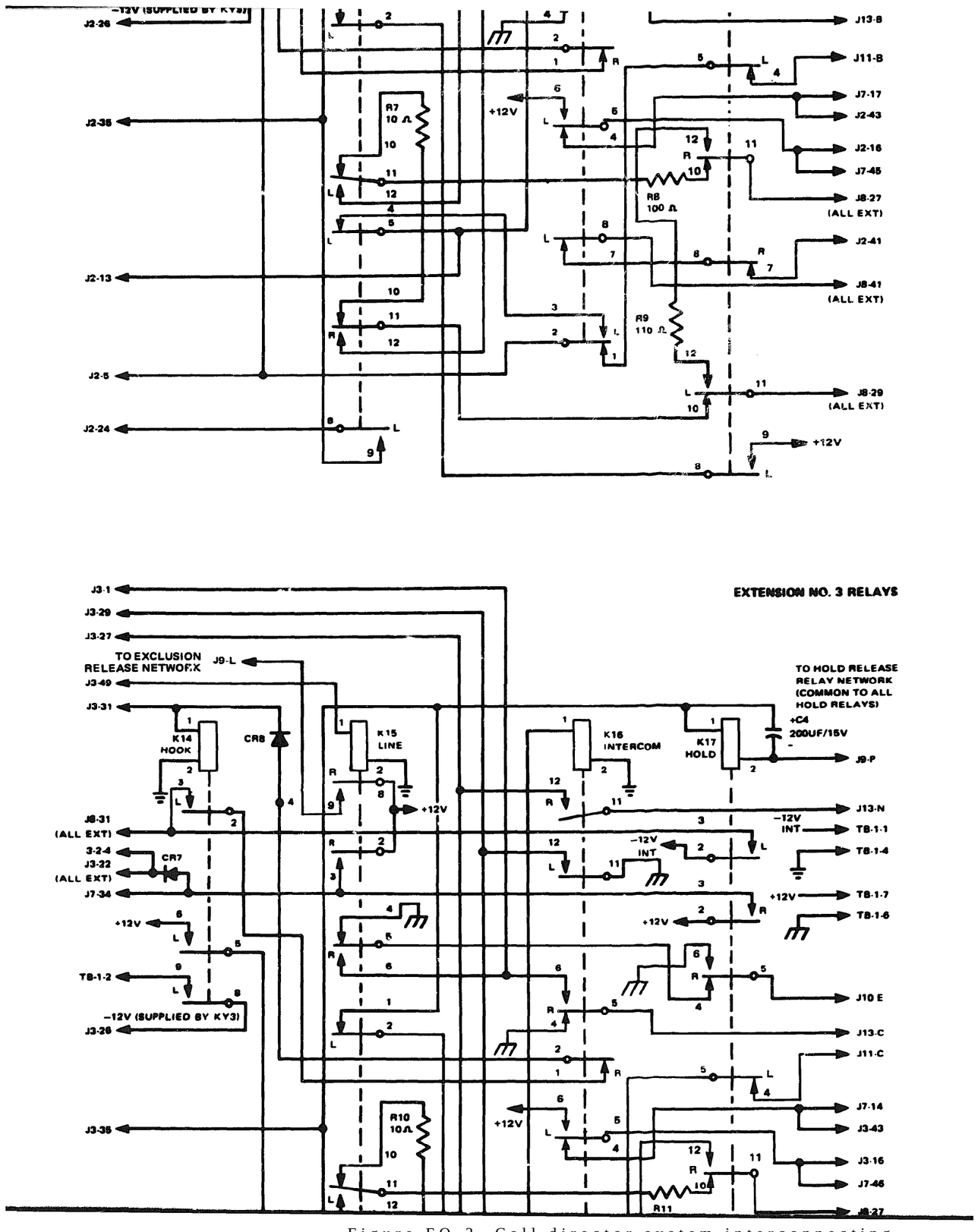


Figure FO-3. Call director system interconnecting

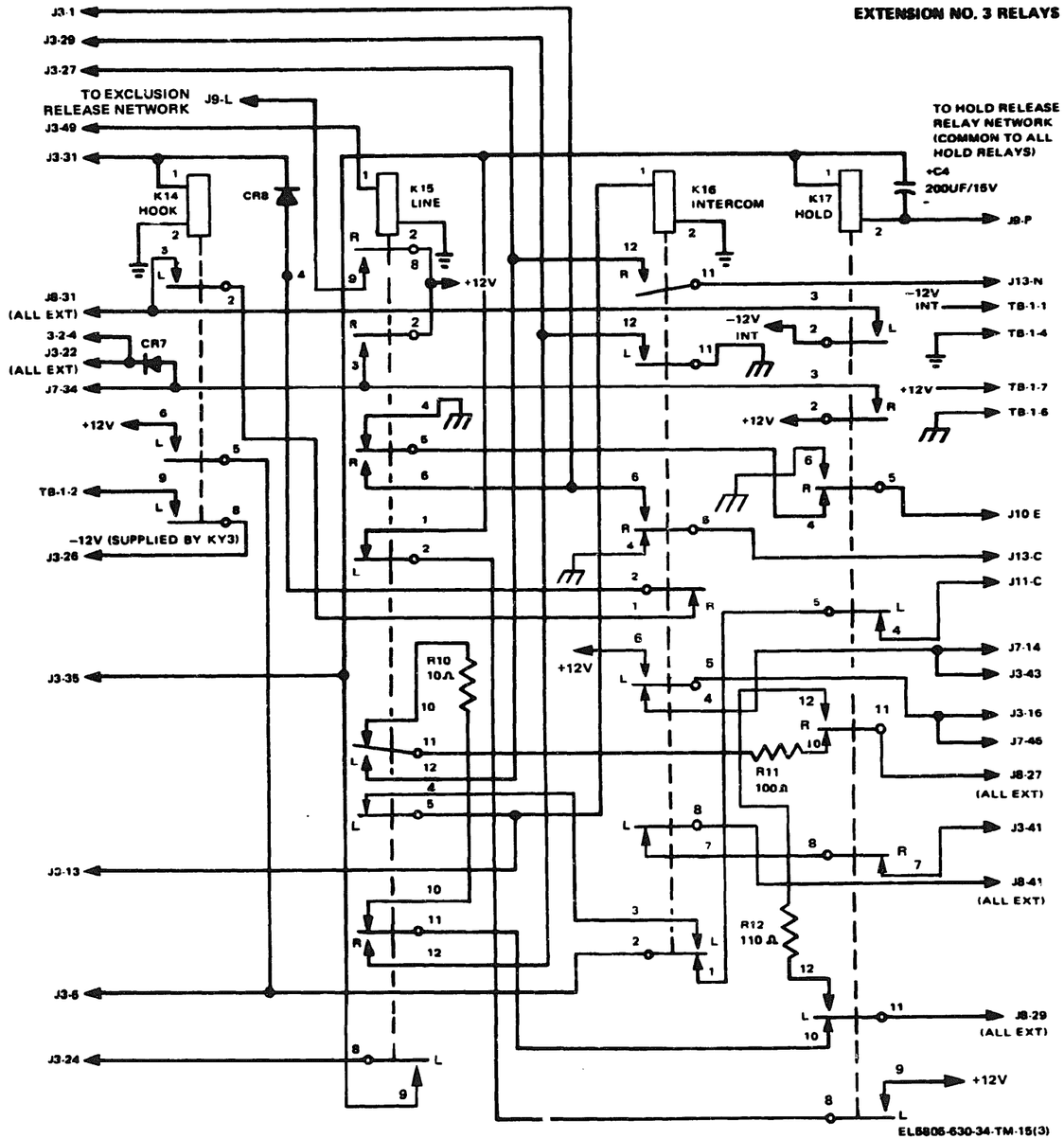
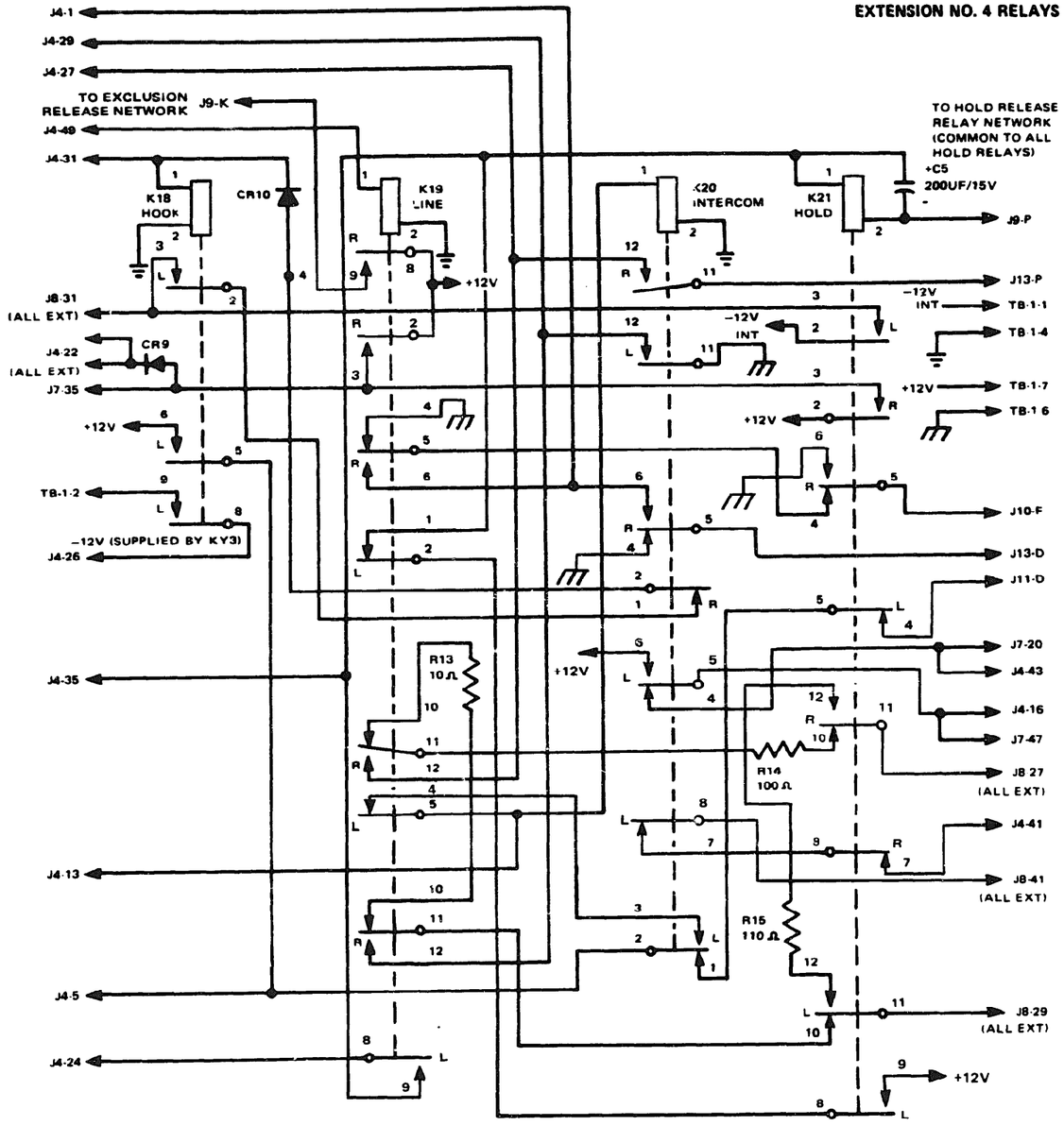
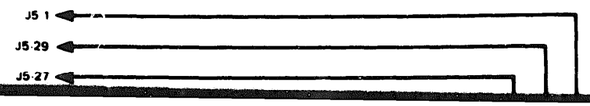


Figure FO-3. Call director system interconnecting schematic diagram sheet 3 of 4

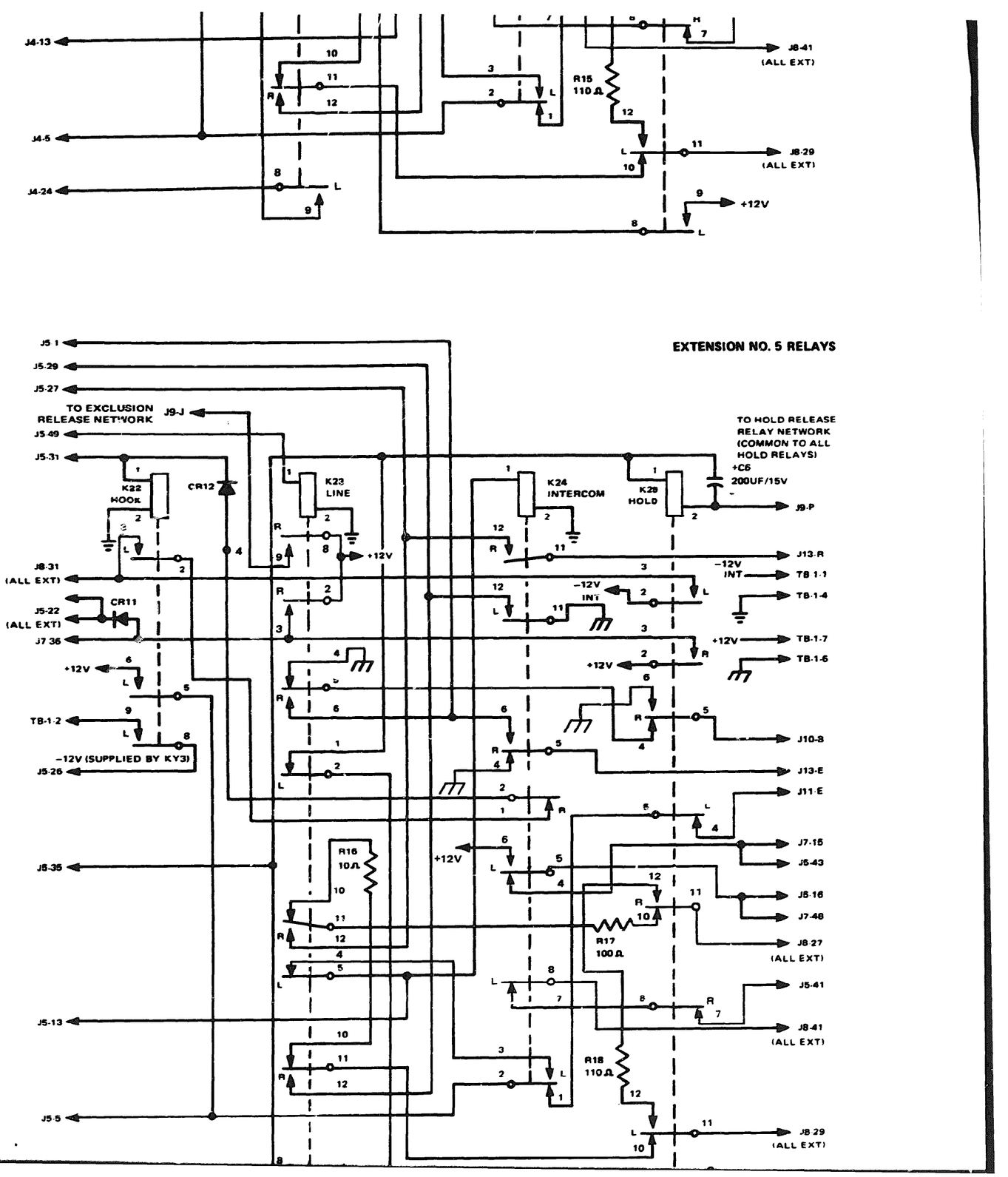
EXTENSION NO. 4 RELAYS



EXTENSION NO. 5 RELAYS



EXTENSION NO. 5 RELAYS



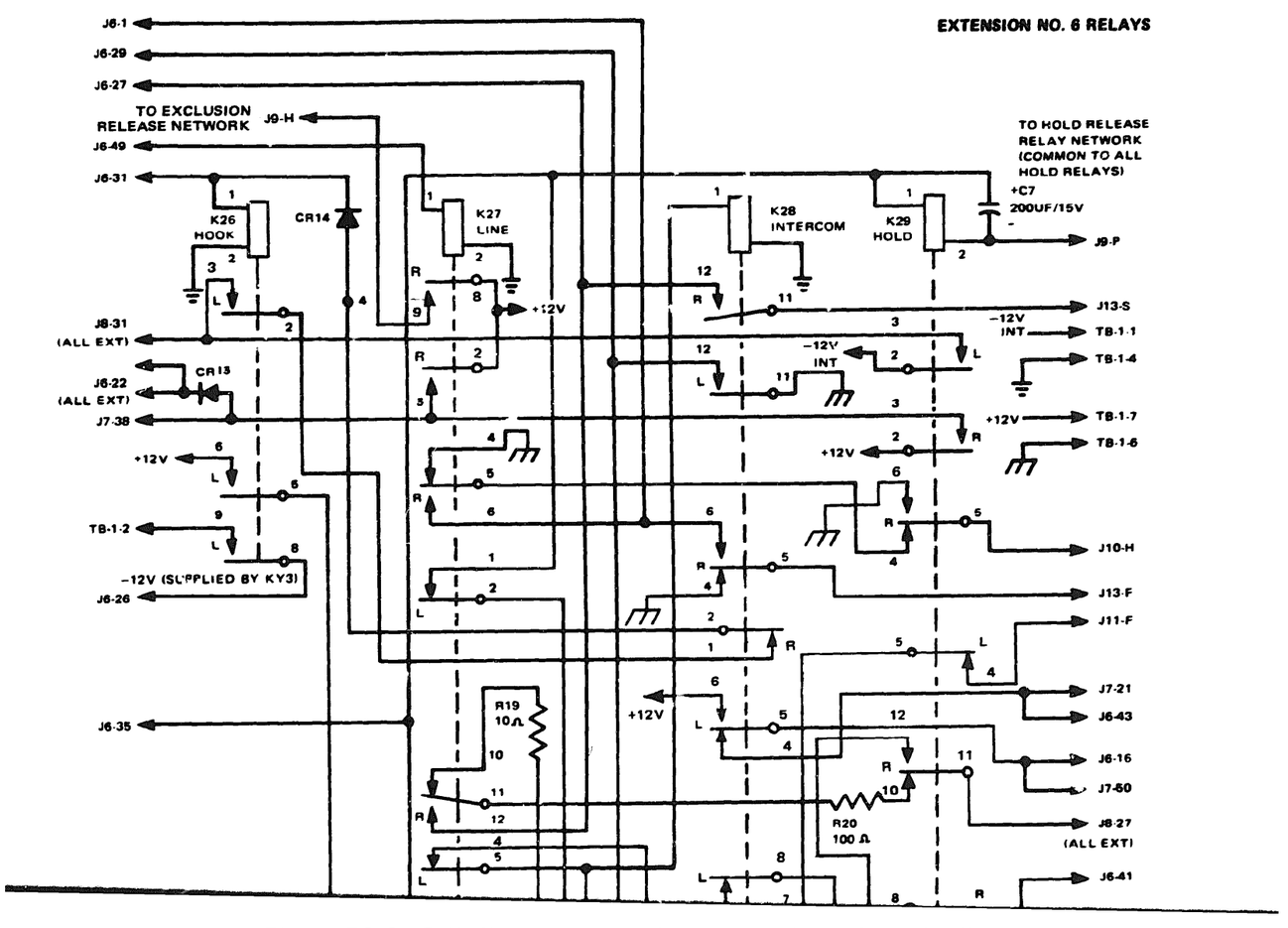


Figure FO-3. Call director system interconnecting schematic diagram

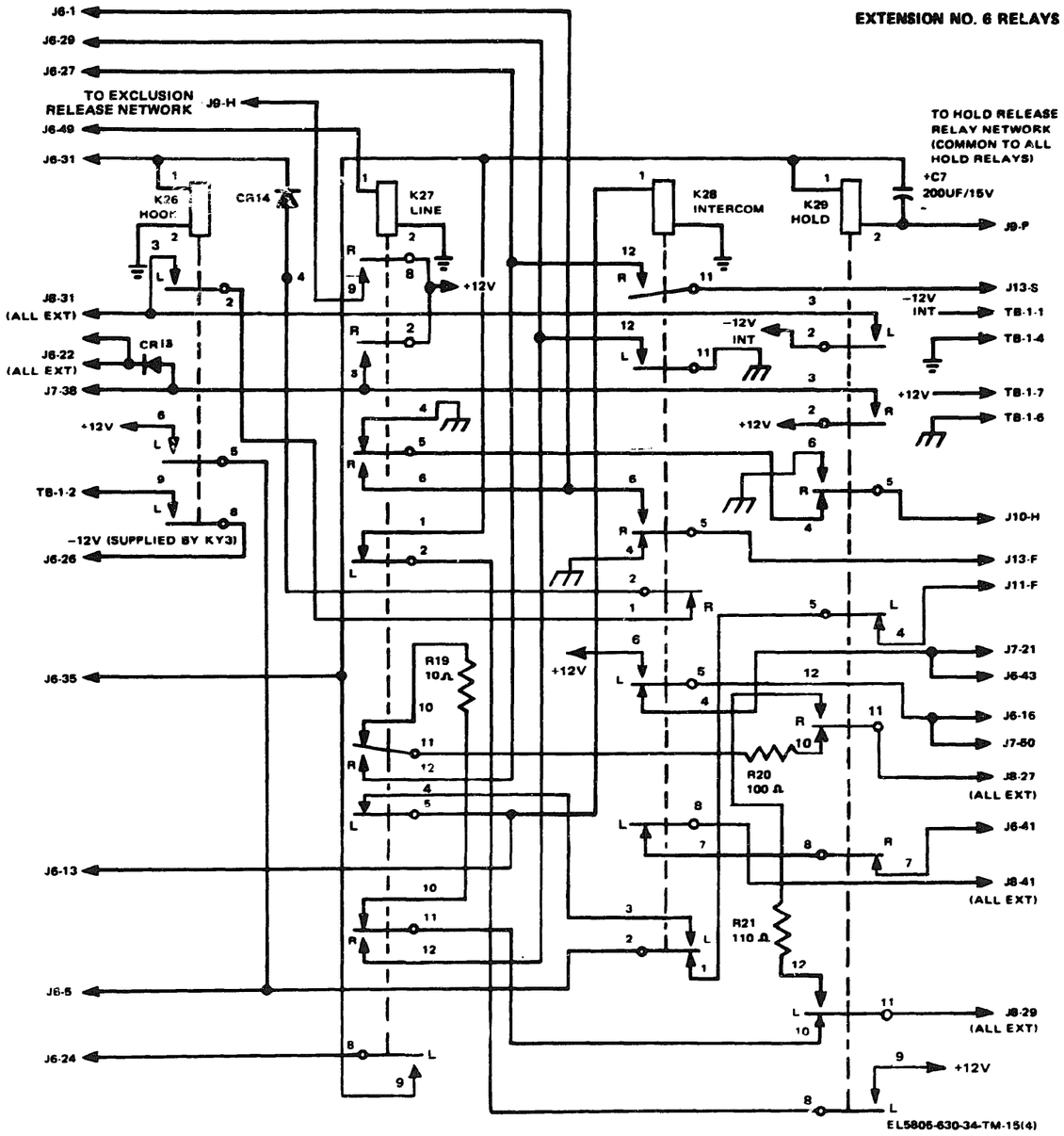


Figure FO-3. Call director system interconnecting schematic diagram sheet 4 of 4

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OS Maj Comd (3)
Armies (2)
corps (2)
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Ft Carson ( )
TOAD (15)
SAAD (30)
LBAD (5)
Pirmasens (10)
Sig FLDMS (1)
Units org under fol TOE: - 1 ea.
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29-134
29-136

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For explanation of abbreviations used. see AR 310-50.

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Sig Dep (2)
HISA (Ft Monmouth) (30)
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USASG (UK) (1)
Sig FLDMS (1)
Fort Gordon (5)
Fort Huachuca (5)
Fort Carson (3)
Units org under for TOE
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11-357
29-119
29-134
29-136

NG: None.

USAR: None.

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USASTRATCOM-SIG GP-Taiv\ an (3)
OS Maj Cqmd (3)
Armies (2)
corps (2)
USREDCOM (2)
FORSCOM (2)
USA Dep (2)
Sig Sec USA Dep (5)
Sig Dep (5)
NG: None
USAR: None
For explanation of abbreviations used, see AR 310-50.

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LBAD (7)
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USACSA (6)
USASG (Aus) (1)
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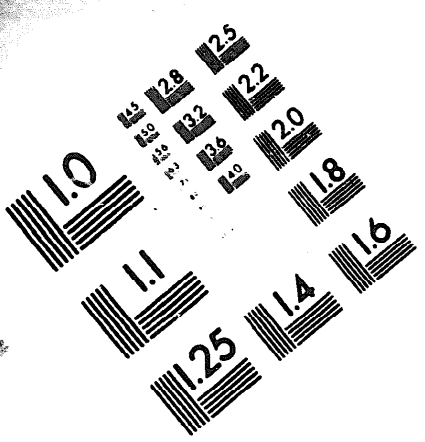
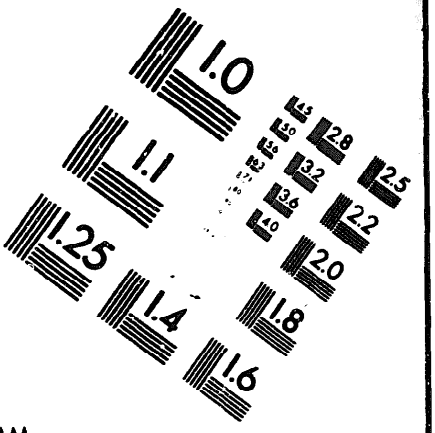
MICROFORM
TEST TARGET





150 MM

1.5 mm (e= 1.09 mm)

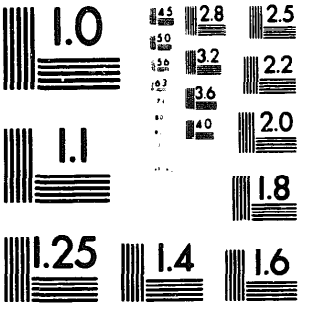
ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567890
abcdefghijklmnopqrstuvwxyz$¢£/%#½¼¾—=+×&@*

2.0 mm (e= 1.37 mm)

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890$¢£/%#½¼¾—=+×&@*

2.5 mm (e= 1.77 mm)

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890$¢£/%#½¼¾—=+×&@*



1.5 mm (e= 1.09 mm)

ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567890
abcdefghijklmnopqrstuvwxyz$¢£/%#½¼¾—=+×&@*

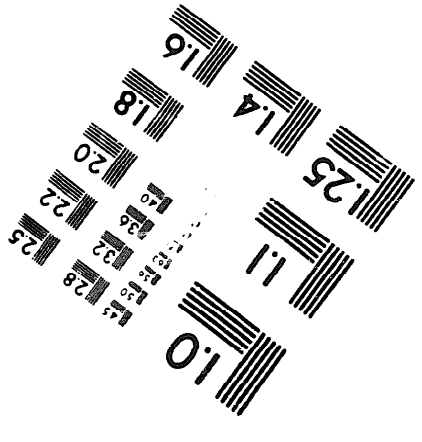
2.0 mm (e= 1.37 mm)

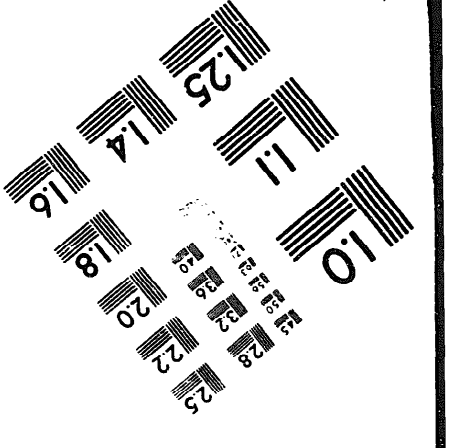
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890$¢£/%#½¼¾—=+×&@*

2.5 mm (e= 1.77 mm)

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890$¢£/%#½¼¾—=+×&@*

200 MM





250 MM