

**SHEET INDEX**

CONTENTS	SHEET NO.	ISSUE NO.																			
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	C2	1	1	3																	
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	J2B	1	2	3																	
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CPS 4 P-12E604 CKT	J4	1	1	3																	
CPS 5 P-12E607 CKT	J5	1	1	3																	
CPS 6 840284 III CKT		1	1	3																	

DWG ISSUE	CD ISSUE	DATE ISSUED	DRAWN	APPD
1	1	2-5-70	CDI	RFK
			CRA	RWW
2D	1 APP 1D	6-28-72	JHS	WDE
			JHS	FEF
3D	1 APP 2D	2-26-73	JHS	JAD
			JHS	FEF
				R100

*OPTION INDEX*

APP OR WRG	LOCATION
Z	1D7
Y	1D7

**SHEET INDEX NOTES**

1. WHEN CHANGES ARE MADE IN THIS DRAWING, ONLY THOSE SHEETS AFFECTED WILL BE REISSUED.
2. THIS SHEET INDEX WILL BE REISSUED AND BROUGHT UP TO DATE EACH TIME ANY SHEET OF THE DRAWING IS REISSUED, OR A NEW SHEET IS ADDED.
3. THE ISSUE NUMBER ASSIGNED TO A CHANGED OR NEW SHEET WILL BE THE SAME ISSUE NUMBER AS THAT OF THE SHEET INDEX.
4. SHEETS THAT ARE NOT CHANGED WILL RETAIN THEIR EXISTING ISSUE NUMBER.
5. THE LAST ISSUE NUMBER OF THE SHEET INDEX IS RECOGNIZED AS THE LATEST ISSUE NUMBER OF THE DRAWING AS A WHOLE.

**SUPPORTING INFORMATION**

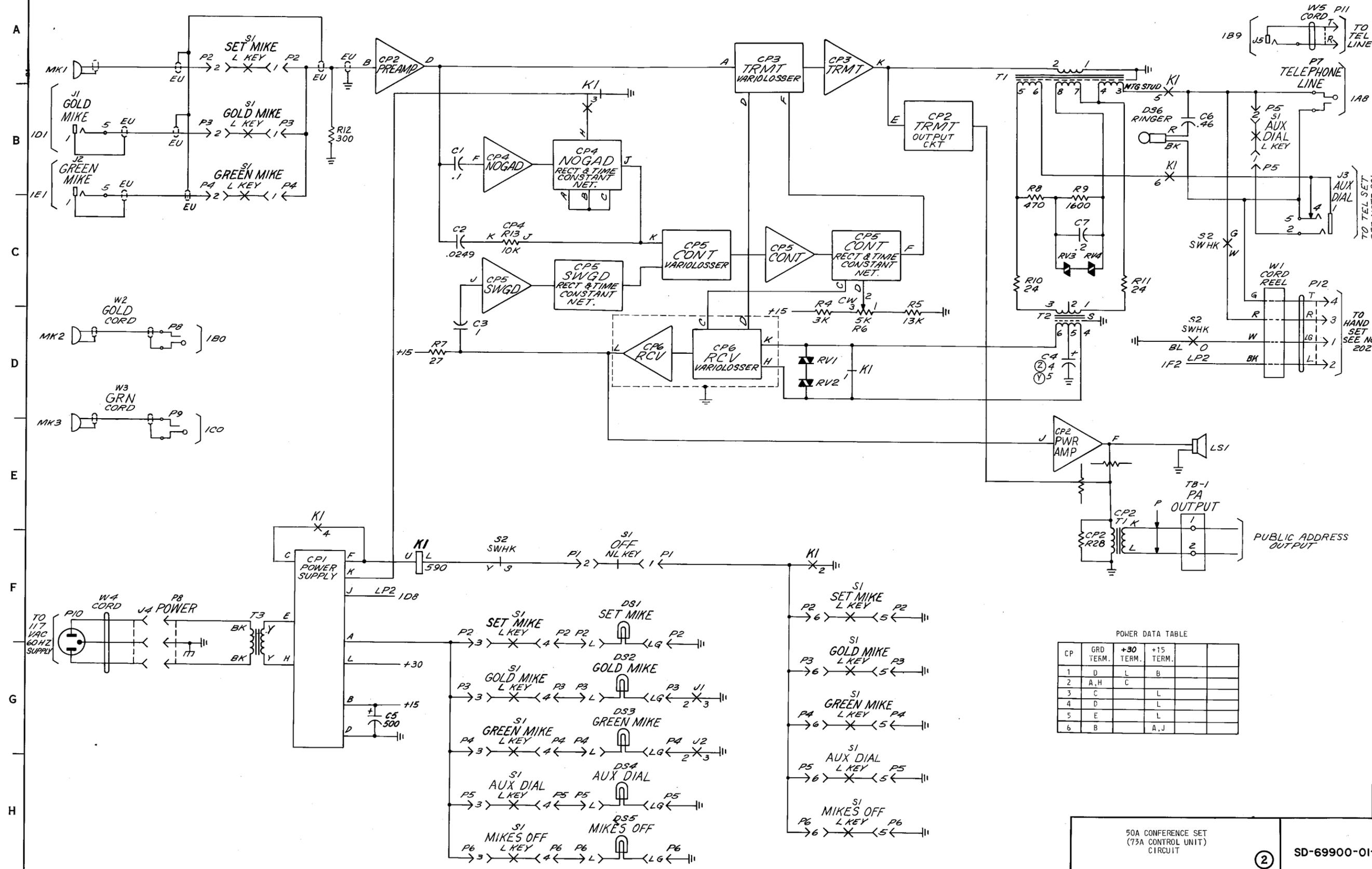
CATEGORY	NO.

ISSUE  
**3D**

SD-69900-01	1.K99	AT&TCO STANDARD
STATION SYSTEMS 50A CONFERENCE SET (73A CONTROL UNIT) CIRCUIT		SD-69900-01-A1  15 SHEETS PRINTED IN U.S.A.
BELL TELEPHONE LABORATORIES INCORPORATED		

DWS SIZE  
**35**

# FS I CONFERENCE SET CIRCUIT



POWER DATA TABLE

CP	GRD TERM.	+30 TERM.	+15 TERM.		
1	D	L	B		
2	A, H	C			
3	C		L		
4	D		L		
5	E		L		
6	B		A, J		

50A CONFERENCE SET  
(73A CONTROL UNIT)  
CIRCUIT

ISSUE 3D

SD-69900-01-B1

BELL TELEPHONE LABORATORIES  
INCORPORATED

DWG NO. 6S

DRAWING ISSUE 1

TO TEL SET SEE NOTE 201

TO TEL SET SEE NOTE 202

PUBLIC ADDRESS OUTPUT

# PART OF APP FIG. 1

DRAWING  
ISSUE

**CIRCUIT PACK**

EQPT LOC		CP1		CP2		CP3		CP4		CP5		CP6	
DESIG	LOC												
CODE		840284400		840284426		P-12E601		P-12E604		P-12E607		840284111	
OPTION													
ELEM IDENT	TERM.	TERM.		TERM.		TERM.		TERM.		TERM.		TERM.	
TERM.		DESIG	FS LOC	DESIG	FS LOC	DESIG	FS LOC	DESIG	FS LOC	DESIG	FS LOC	DESIG	FS LOC
A													
B													
C													
D				PREAMP	1A2								
E				TRMT	1B6								
F				LSPK	1E7	TRMT	1A5	NOGAD	1B3	CONT	1C6		
H								NOGAD	1B4				
J										SWGD	1C3		
K				T1	1E8	TRMT	1A6	R13	1C3	CONT	1C4	RCV	1D5
L				1F2	T1	1F8						RCV	1D4

**RELAY**

DESIG	K1	
CODE	MB7E	
OPTION		
<input checked="" type="checkbox"/>	CONT ARR	LOC
6	EMB	1B8
5	EMB	1B8
4	EBM	1E2
3	EBM	1B4
2	EBM	1F5
1	EMB	1D6
COIL	<input checked="" type="checkbox"/>	1F2

**CAPACITOR**

DESIG	LOC	CODE
C1	1B3	542L
C2	1C3	594C, .0249
C3	1D3	542D
C4	1D7	<b>Z</b> 603A, <b>Y</b> 601A
C5	1G2	SPRAGUE 34D5076020FL4
C6	1B8	575E
C7	1C7	542B

**CONNECTOR**

DESIG	P1	P2	P3	P4	P5	P6
CODE	508A	508B	508C	508D	508E	508L
OPTION						
TERM.	LOC	LOC	LOC	LOC	LOC	LOC
1	1F4	1A1	1B1	1B1	1B9	1C1
2	1F4	1A1	1B1	1B1	1B9	1C1
3		1F3	1G3	1G3	1H3	1H3
4		1F3	1G3	1G3	1H3	1H3
5		1F6	1G6	1G6	1H6	1H6
6		1F5	1G5	1G5	1H5	1H5
L		1F4	1G4	1G4	1H4	1H4
LG		1F4	1G4	1G4	1H4	1H4

**CONNECTOR**

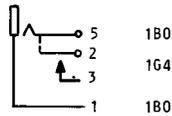
DESIG	LOC	CODE
P8	1F1	SWITCHCRAFT AC3G
P12	1D9	P/O W1 CORD REEL

**CORD REEL**

DESIG	LOC	CODE
W1	1C9	KS-20658, L1

**JACK (SEE NOTE 1)**

[2] J1, J2  
SWITCHCRAFT  
HI-D 113

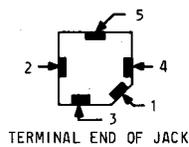


**JACK (SEE NOTE 1)**

DESIG	LOC	CODE
J3	1C9	SWITCHCRAFT HI-D NS-113B

**NOTES:**

1. TERMINAL NUMBERING FOR JACKS (J1) TO (J3) IS AS FOLLOWS:



ISSUE  
3D

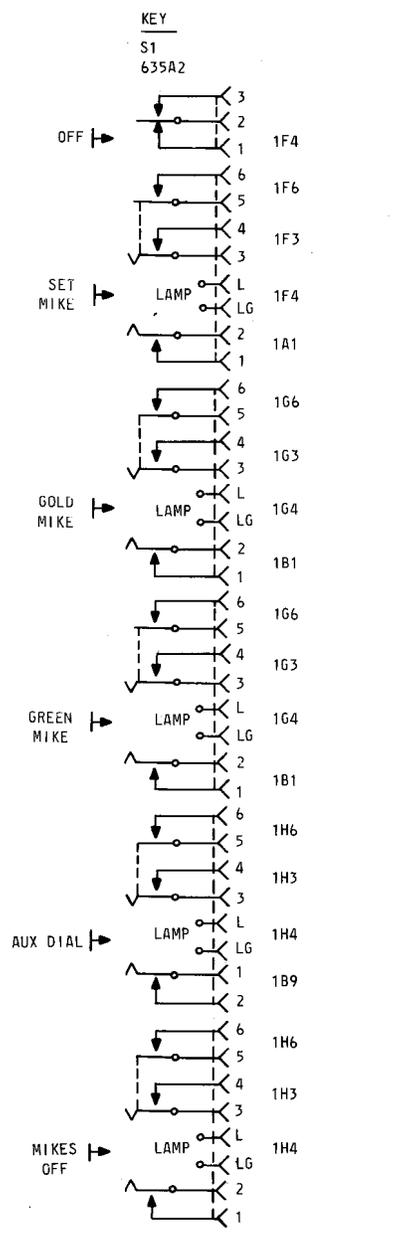
50A CONFERENCE SET (73A CONTROL UNIT) CIRCUIT	<b>SD-69900-01-C1</b>
<b>BELL TELEPHONE LABORATORIES</b> <small>INCORPORATED</small>	DWG SIZE <b>35</b> <small>PRINTED IN U.S.A.</small>

# PART OF APP FIG. 1

DRAWING  
ISSUE

/

A  
B  
C  
D  
E  
F  
G  
H



LAMP		CODE
DESIG	LOC	
DS1 (SET MIKE)	1F4	} 51A (USED IN S1 KEY) (GOLD) (GRN)
DS2 (GOLD MIKE)	1G4	
DS3 (GREEN MIKE)	1G4	
DS4 (AUX DIAL)	1H4	
DS5 (MIKES OFF)	1H4	

LOUDSPEAKER		
DESIG	LOC	CODE
LS1	1E8	KS-20661, L1

MICROPHONE		
DESIG	LOC	CODE
MK1	1A0	KS-20659, L1

PLUG		
DESIG	LOC	CODE
P7	1A9	SWITCHCRAFT 250

POTENTIOMETER		
DESIG	LOC	CODE
R6	1D6	ALLEN-BRADLEY TYPE J, U TAPER, 5K BUSHING LENGTH 1/4 IN., SHAFT LENGTH 3/4 IN., WITH STANDARD FLAT ON SHAFT.

RESISTOR		
DESIG	LOC	CODE
R4	1C5	KS-16645 L1, 3K
R5	1C6	KS-16645 L1, 13K
R7	1D2	KS-13490 L1, 27
R8	1B7	KS-13490 L1, 470
R9	1B7	KS-13490 L1, 1600
R10	1C7	KS-13491 L1, 24
R11	1C8	KS-13491 L1, 24
R12	1B2	KS-16645 L1, 300

ISSUE  
3D

50A CONFERENCE SET (73A CONTROL UNIT) CIRCUIT	<b>SD-69900-01-C2</b>
BELL TELEPHONE LABORATORIES INCORPORATED	DWG SIZE <b>3S</b> PRINTED IN U.S.A.

PART OF APP FIG. 1

DRAWING  
ISSUE

1

A

RINGER

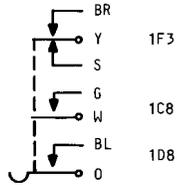
<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
DS6	1B8	P1A

<u>LOC</u>	<u>CODE</u>
1B8	P1A

<u>CODE</u>
P1A

SWITCHHOOK

S2  
P-28E355



TRANSFORMER

<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
T1	1A7	2563A
T2	1D7	2563AE
T3	1F1	KS-20657, L1

<u>LOC</u>	<u>CODE</u>
1A7	2563A
1D7	2563AE
1F1	KS-20657, L1

<u>CODE</u>
2563A
2563AE
KS-20657, L1

B

C

VARISTOR

<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
[2] RV1.2	1D5	100A
[2] RV3.4	1C7	317B

<u>LOC</u>	<u>CODE</u>
1D5	100A
1C7	317B

<u>CODE</u>
100A
317B

D

E

F

G

H

A

B

C

D

E

F

G

H

ISSUE  
3D

50A CONFERENCE SET  
(73A CONTROL UNIT)  
CIRCUIT

SD-69900-01-C3

BELL TELEPHONE LABORATORIES  
INCORPORATED

DWG SIZE  
3S

PRINTED IN U.S.A.

0

1

2

3

4

# APP FIG. 2

DRAWING  
ISSUE  
/

A  
B  
C  
D  
E  
F  
G  
H

CONNECTOR

<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
J4	1F0	P/O W4 CORD
P10	1F0	P/O W4 CORD
P11	1A9	P/O W5 CORD

CORD

<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
W2 (GOLD)	1D0	KS-20660, L2
W3 (GRN)	1D0	KS-20660, L1
W4	1F0	KS-20689, L1
W5	1A9	D2M

JACK

<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
J5	1A9	P/O W5 CORD

MICROPHONE

<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
MK2	1D0	P/O W2 CORD
MK3	1E0	P/O W3 CORD

PLUG

<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
P8	1D0	P/O W2 CORD
P9	1D0	P/O W3 CORD

ISSUE  
3D

50A CONFERENCE SET (73A CONTROL UNIT) CIRCUIT		SD-69900-01-C4
BELL TELEPHONE LABORATORIES INCORPORATED	DWG SIZE 3S PRINTED IN U.S.A.	

0 1 2 3 4

0 1 2 3 4

CIRCUIT NOTES:

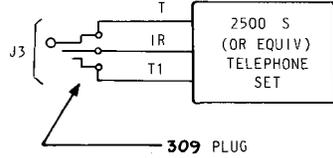
101. FUSING INFORMATION: NONE

102.

FEATURE OR OPTION	PROVIDE		
	APP FIG.	APP OR WRG	QUANTITY
CONFERENCE SET	1		1 PER CKT
MICROPHONES & CORDS	2		1 PER CKT

EQUIPMENT NOTES:

201. A 2500S (OR EQUIV) TELEPHONE SET WITH POLARITY GUARD CAN BE CONNECTED AS SHOWN TO PROVIDE "TOUCH-TONE" SIGNALING.



202. REPLACE THE 53B LAMP BY A 53A LAMP TO PROVIDE ILLUMINATION OF THE DIAL IN THE 220A OR 2220B HANDSET.

103.

RECORD OF APP FIGURES, WIRING AND APPARATUS CHANGES						
CHANGED ON ISS	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN	SEE NOTE	USE IN CIRCUIT		
				STD	A&M	MD
2D	Z O R Y	Z		Y		Z

INFORMATION NOTES:

301. UNLESS OTHERWISE SPECIFIED:  
RESISTANCE VALUES ARE IN OHMS,  
RESISTANCE VALUES SUFFIXED BY THE LETTER K ARE IN KILOHMS,  
CAPACITANCE VALUES ARE IN MICROFARADS  
VALUES PRECEDED BY THE SYMBOL + (PLUS) OR - (MINUS) ARE IN VOLTS.

ISSUE  
3D

50A CONFERENCE SET (73A CONTROL UNIT) CIRCUIT	SD-69900-01-D1
BELL TELEPHONE LABORATORIES INCORPORATED	DWG SIZE 3S PRINTED IN U. S. A.

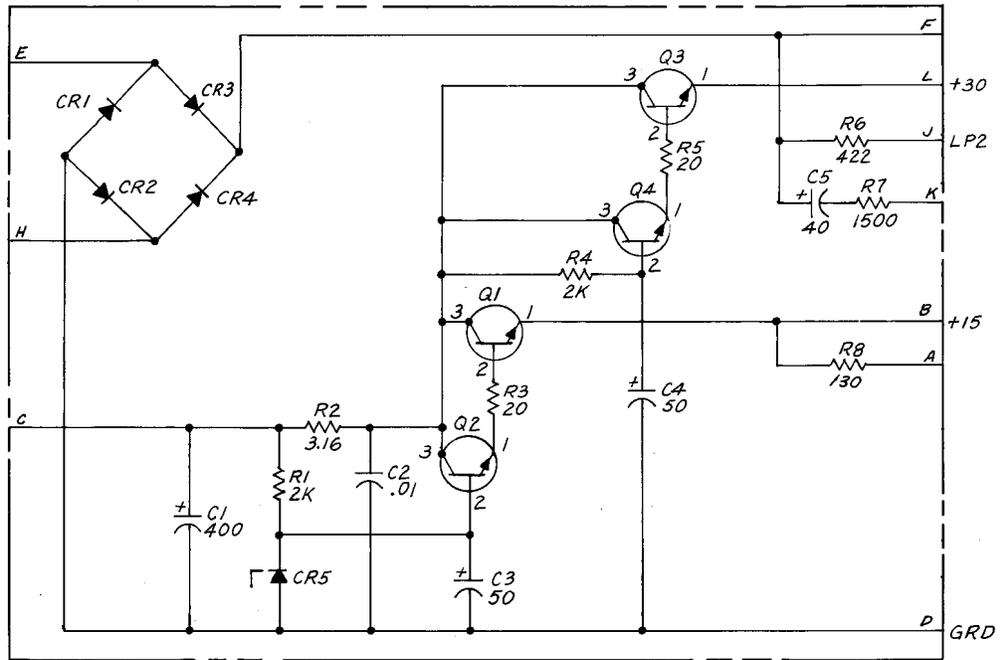


# PART OF CPS I

## POWER SUPPLY

DRAWING  
ISSUE

1



**COMPONENT LIST**

**CAPACITOR**

DESIG	CODE
C1	KS-19658, L7
C2	KS-19774, L2, .01
C3	KS-19658, L19
C4	SPRAGUE 40D506F050DF4
C5	KS-16390, L8

**CONNECTOR**

DESIG	CODE
-	KS-19276, L1

**DIODE**

DESIG	CODE
CR1-CR4	446F
CR5	459AC

**RESISTOR**

DESIG	CODE
R1	KS-13490, L1, 2K
R2	KS-14603, L3A, 3.16
R3	KS-13490, L1, 20
R4	KS-13490, L1, 2K
R5	KS-13490, L1, 20
R6	KS-14603, L3A, 422
R7	KS-13490, L1, 1500
R8	KS-13490, L1, 130

**TRANSISTOR**

DESIG	CODE
Q1	20J
Q2	16F
Q3	20J
Q4	16F

**NOTES:**

- UNLESS OTHERWISE SPECIFIED:  
RESISTANCE VALUES ARE IN OHMS,  
RESISTANCE VALUES SUFFIXED WITH  
THE LETTER K ARE IN KILOHMS,  
CAPACITANCE VALUES ARE IN MICROFARADS,  
VALUES PRECEDED WITH THE SYMBOL + (PLUS)  
OR - (MINUS) ARE IN VOLTS.

ISSUE  
**3D**

50A CONFERENCE SET (73A CONTROL UNIT) CIRCUIT	<b>SD-69900-01-JIA</b>
<b>BELL TELEPHONE LABORATORIES</b> <small>INCORPORATED</small>	<small>PRINTED IN U.S.A.</small>

DWG SIZE  
**3S**

**PART OF CPS I**  
POWER SUPPLY

DRAWING  
ISSUE

1

INPUT/OUTPUT INFORMATION

NONE

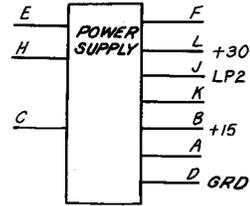
MANUFACTURING REFERENCES

CATEGORY	NO.
CIRCUIT PACK CODE & ASSEMBLY DWG	840284400
CONNECTOR ON FRAME	KS-16182,L3

CIRCUIT DESCRIPTION

SEE CD-69900-01

SYMBOL



ISSUE  
3D

50A CONFERENCE SET  
(73A CONTROL UNIT)  
CIRCUIT

SD-69900-01-JIB

BELL TELEPHONE LABORATORIES  
INCORPORATED

DWG SIZE  
3S

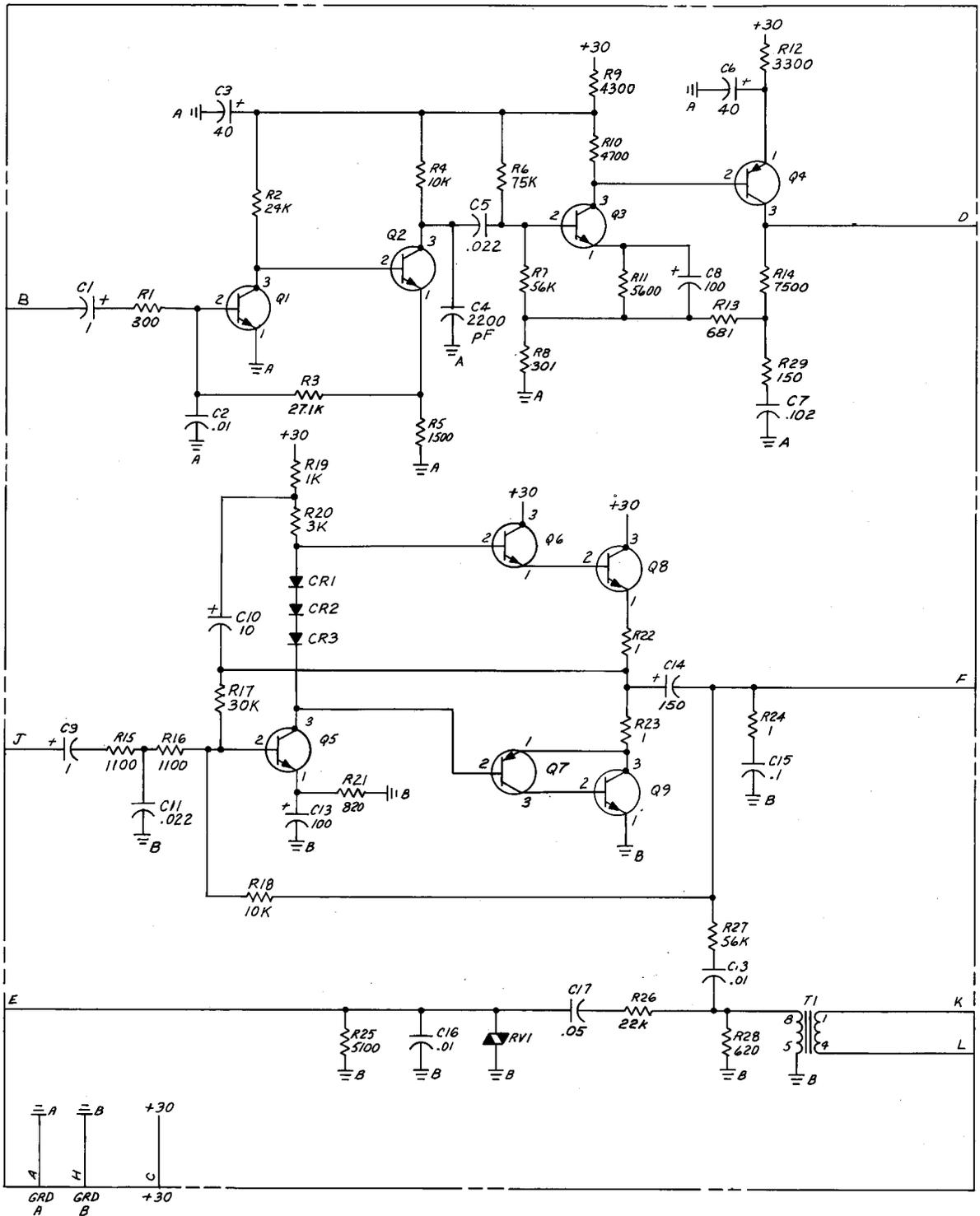
PRINTED IN U.S.A.

**PART OF CPS 2**  
PREAMPLIFIER & POWER AMPLIFIER

DRAWING

ISSUE

3D



INPUT/OUTPUT INFORMATION

NONE

CIRCUIT DESCRIPTION

SEE CD-69900-01

ISSUE  
3D

50A CONFERENCE SET  
(73A CONTROL UNIT)  
CIRCUIT

SD-69900-01-J2A

BELL TELEPHONE LABORATORIES  
INCORPORATED

DWG SIZE  
3S

PRINTED IN U.S.A.

# PART OF CPS 2

## PREAMPLIFIER & POWER AMPLIFIER

DRAWING  
ISSUE

/	
---	--

ISSUE  
**3D**

**COMPONENT LIST**

CAPACITOR

<u>DESIG</u>	<u>CODE</u>
C1	SPRAGUE 150D 105X5010A0
C2	KS-19774,L2, .01
C3	608B
C4	KS-19774,L2, 2200pF
C5	KS-19774,L6, .022
C6	608B
C7	535DY
C8	602B
C9	600A
C10	604A
C11	KS-19774,L6, .022

C13	602B
C14	SPRAGUE 109D157X0030T2
C15	KS-19774,L6, .1
C16	KS-13814,L2

C17	KS-13814,L14
C18	594G, .01

CONNECTOR

<u>DESIG</u>	<u>CODE</u>
-	KS-19276,L1

DIODE

<u>DESIG</u>	<u>CODE</u>
CR1-CR3	458A

RESISTOR

<u>DESIG</u>	<u>CODE</u>
R1	KS-16645,L1, 300
R2	KS-16645,L1, 24K
R3	237A, 27.1K
R4	KS-16645,L1, 10K
R5	1500
R6	75K
R7	KS-16645,L1, 56K
R8	237A, 301
R9	KS-16645,L1, 4300
R10	4700
R11	5600
R12	KS-16645,L1, 3300
R13	237A, 681
R14	237A, 7500
R15	KS-16645,L1, 1100
R16	1100
R17	30K
R18	10K
R19	1K
R20	3K

R21	KS-16645,L1, 820
R22,R23	237A, 1
R24	237A, 1
R25	KS-16645,L1 5100

R26	22K
R27	56K
R28	620
R29	KS-16645,L1, 150

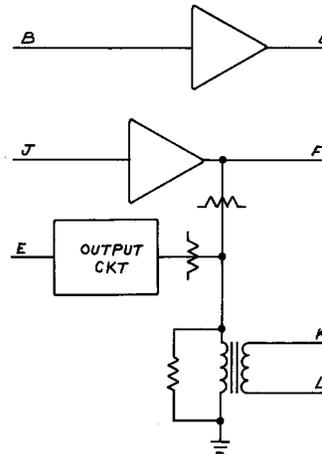
TRANSFORMER

<u>DESIG</u>	<u>CODE</u>
T1	2564G

MANUFACTURING REFERENCES

CATEGORY	NO.
CIRCUIT PACK CODE & ASSEMBLY DWG	840284426
CONNECTOR ON FRAME	KS-16182,L3

SYMBOL



COMPONENT LIST (CONT)

<u>TRANSISTOR</u>	
<u>DESIG</u>	<u>CODE</u>
Q1	16F
Q2,Q3	16G
Q4	51A
Q5,Q6	16F
Q7	51A
Q8,Q9	20J

VARISTOR

<u>DESIG</u>	<u>CODE</u>
RV1	317D

NOTES:

1. UNLESS OTHERWISE SPECIFIED:  
RESISTANCE VALUES ARE IN OHMS,  
RESISTANCE VALUES SUFFIXED WITH THE  
LETTER K ARE IN KILOHMS,  
CAPACITANCE VALUES ARE IN MICROFARADS,  
VALUES PRECEDED WITH THE SYMBOL + (PLUS),  
OR - (MINUS) ARE IN VOLTS.
2. ⚬ GROUND RETURN.

50A CONFERENCE SET  
(73A CONTROL UNIT)  
CIRCUIT

**SD-69900-01-J2B**

BELL TELEPHONE LABORATORIES  
INCORPORATED

DWG SIZE  
**3S**

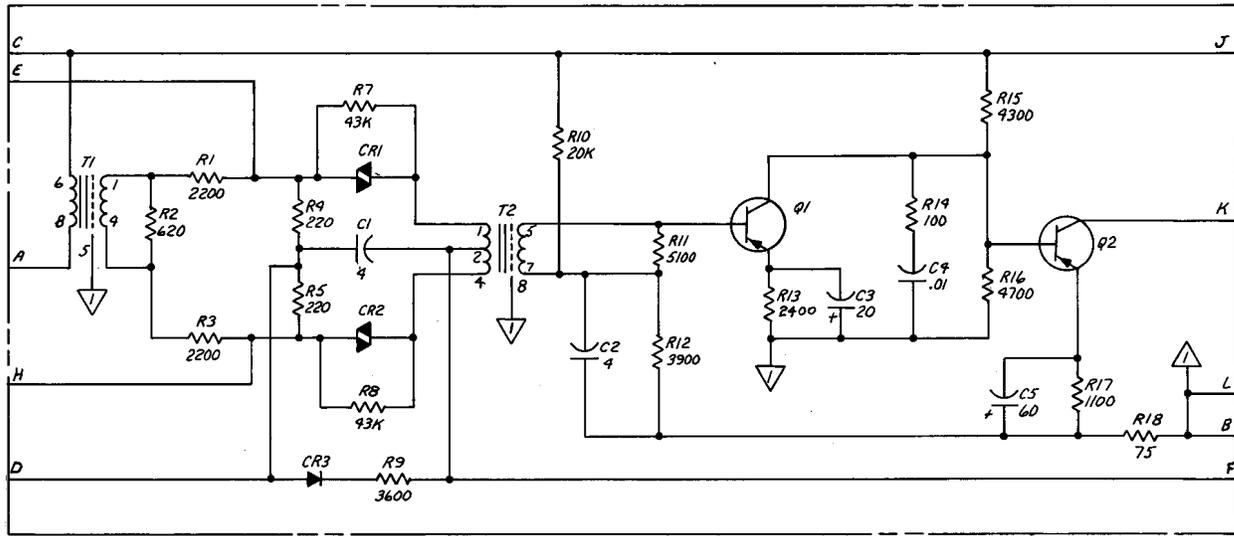
PRINTED IN U. S. A.

**CPS 3**  
P-12E601 CIRCUIT

MANUFACTURING REFERENCES

CATEGORY	NO.
CIRCUIT PACK CODE	P-12E601
CONNECTOR ON FRAME	KS-161B2,L3

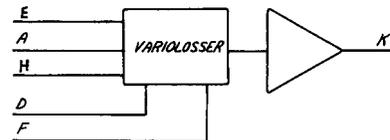
DRAWING  
ISSUE



INPUT/OUTPUT INFORMATION  
NONE

CIRCUIT DESCRIPTION  
SEE CD-69900-01

SYMBOL



NOTES:

- UNLESS OTHERWISE SPECIFIED:  
RESISTANCE VALUES ARE IN OHMS,  
RESISTANCE VALUES SUFFIXED WITH THE  
LETTER K ARE IN KILOHMS,  
CAPACITANCE VALUES ARE IN MICROFARADS,  
VALUES PRECEDED WITH THE SYMBOL + (PLUS)  
OR - (MINUS) ARE IN VOLTS.

ISSUE  
3D

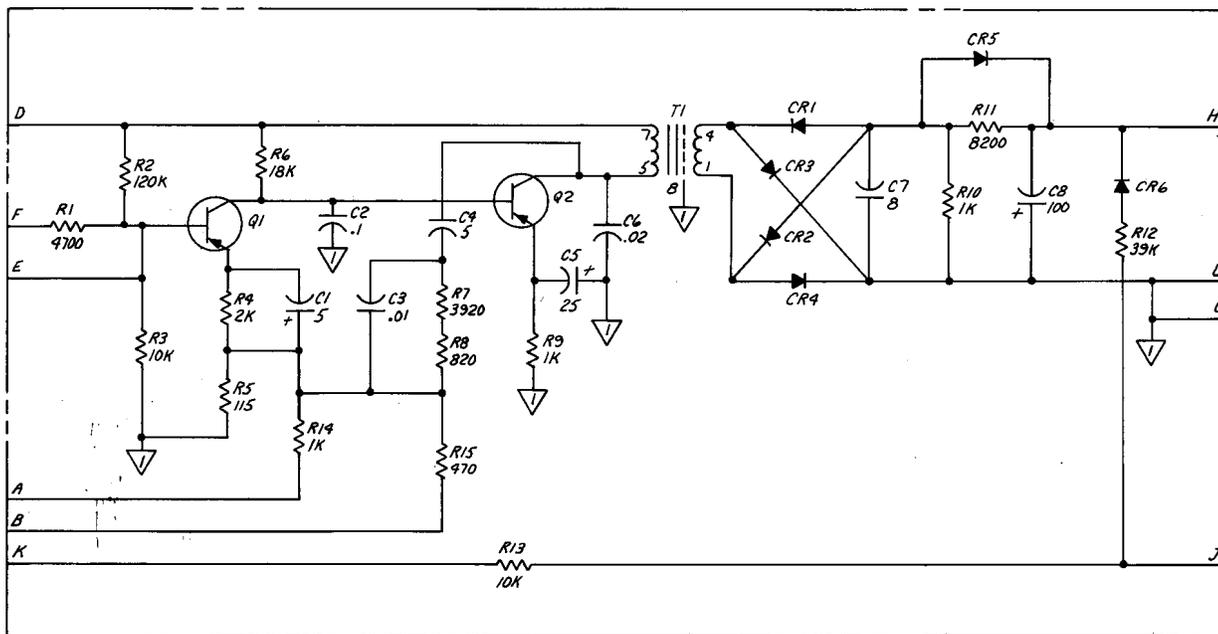
50A CONFERENCE SET (73A CONTROL UNIT) CIRCUIT	SD-69900-01-J3
BELL TELEPHONE LABORATORIES INCORPORATED	DWG SIZE 3S PRINTED IN U.S.A.

**CPS 4**  
P-12E604 CIRCUIT

MANUFACTURING REFERENCES

CATEGORY	NO.
CIRCUIT PACK CODE	P-12E604
CONNECTOR ON FRAME	KS-161B2,L3

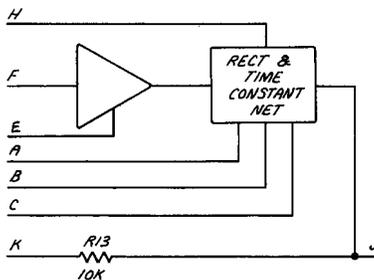
DRAWING  
ISSUE



INPUT/OUTPUT INFORMATION  
NONE

CIRCUIT DESCRIPTION  
SEE CD-69900-01

SYMBOL



NOTES:

- UNLESS OTHERWISE SPECIFIED:  
RESISTANCE VALUES ARE IN OHMS,  
RESISTANCE VALUES SUFFIXED WITH THE  
LETTER K ARE IN KILOHMS,  
CAPACITANCE VALUES ARE IN MICROFARADS,  
VALUES PRECEDED WITH THE SYMBOL + (PLUS)  
OR - (MINUS) ARE IN VOLTS.

ISSUE  
3D

50A CONFERENCE SET  
(73A CONTROL UNIT)  
CIRCUIT

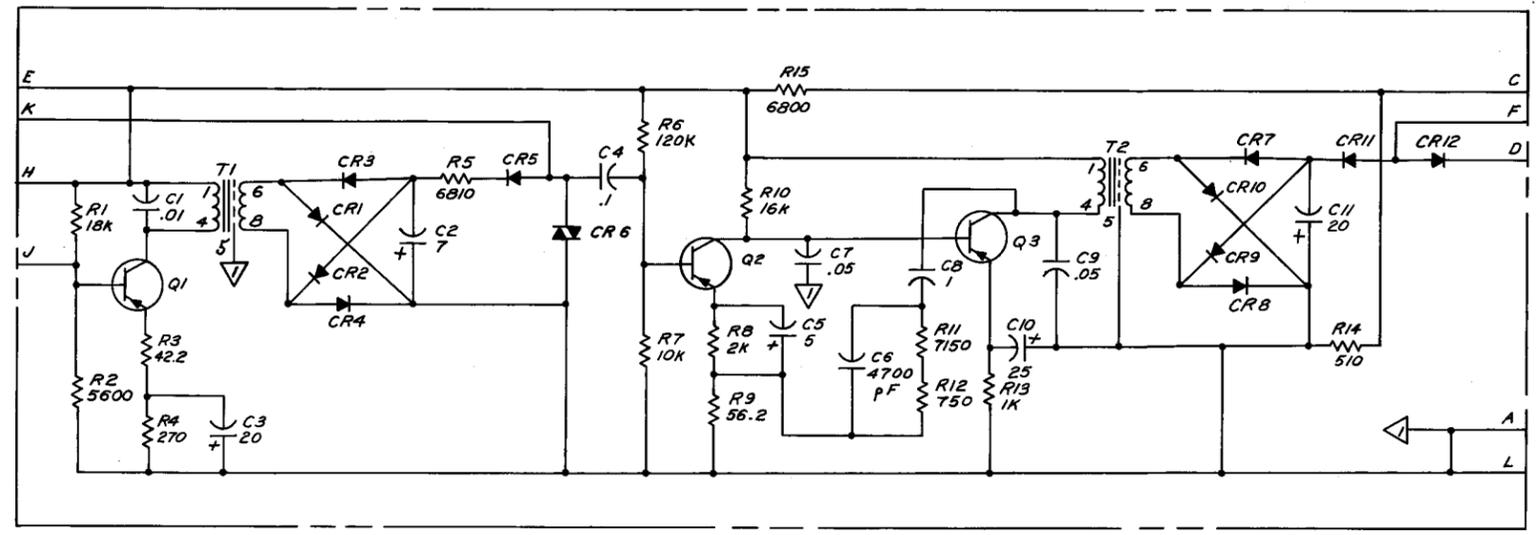
SD-69900-01-J4

BELL TELEPHONE LABORATORIES  
INCORPORATED

DWG SIZE  
35

PRINTED IN U.S.A.

**CPS 5**  
P-12E607 CIRCUIT

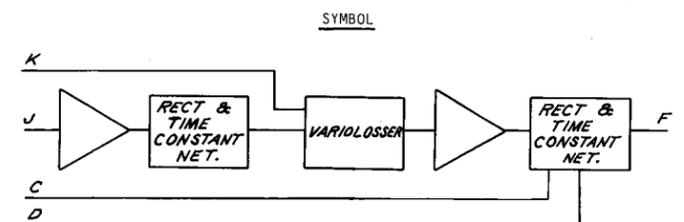


INPUT/OUTPUT INFORMATION  
NONE

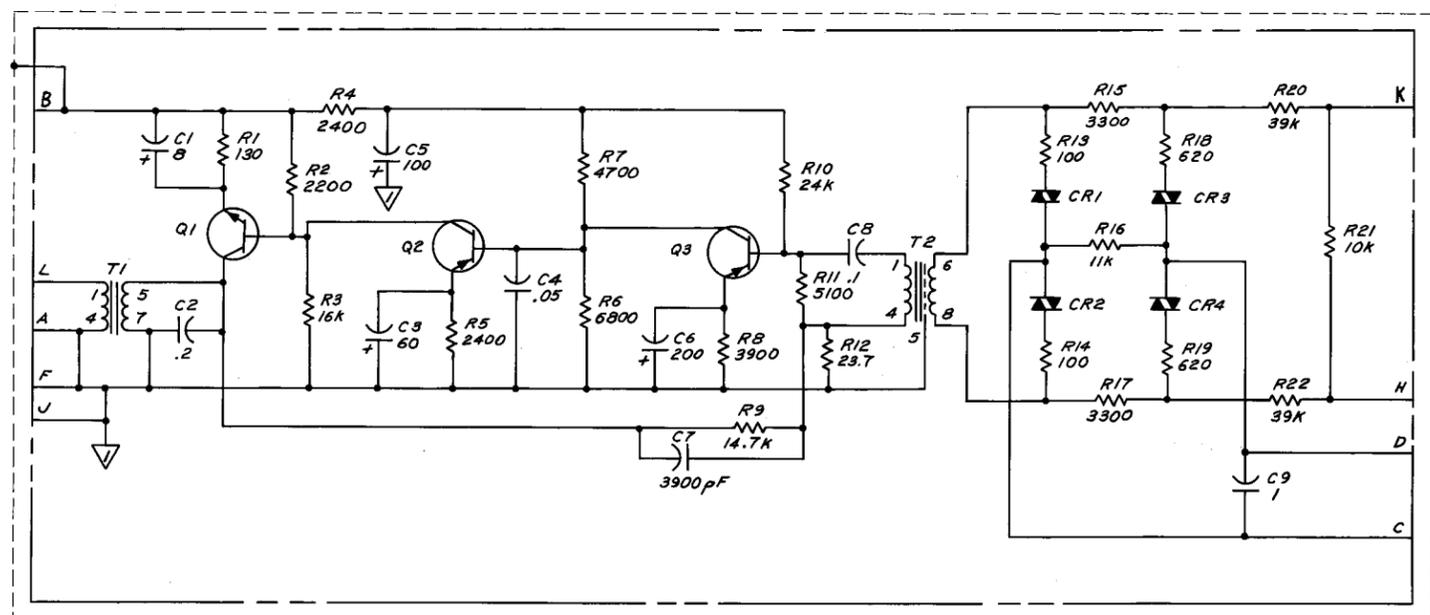
CIRCUIT DESCRIPTION  
SEE CD-69900-01

MANUFACTURING REFERENCES

CATEGORY	NO.
CIRCUIT PACK CODE	P-12E607
CPS 5	040204111
CPS 6	040204111
CONNECTOR ON FRAME	KS-16182.L3



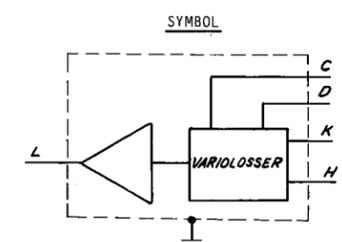
**CPS 6**  
040204111 CIRCUIT



INPUT/OUTPUT INFORMATION  
NONE

CIRCUIT DESCRIPTION  
SEE CD-69900-01

COMPONENT LIST  
CIRCUIT PACK CODE  
DESIGN CODE  
P-12E610



- NOTES:
- UNLESS OTHERWISE SPECIFIED:  
RESISTANCE VALUES ARE IN OHMS,  
RESISTANCE VALUES SUFFIXED WITH THE  
LETTER K ARE IN KILOHMS,  
CAPACITANCE VALUES ARE IN MICROFARADS,  
VALUES PRECEDED BY THE SYMBOL + (PLUS)  
OR - (MINUS) ARE IN VOLTS.

50A CONFERENCE SET  
(73A CONTROL UNIT)  
CIRCUIT

BELL TELEPHONE LABORATORIES  
INCORPORATED

ISSUE 3D

6S

2 SD-69900-01-J5

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