

SHEET INDEX

CONTENTS	SHEET NO.	ISSUE NO.																			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
SHEET INDEX SUPPORTING INFORMATION OPTION INDEX	A1	1	2	3																	
FS1 CONFERENCE SET CKT	B1	1	2	3																	
APP FIG. 1	C1	1	2	3																	
	C2	1	1	3																	
	C3	1	1	3																	
APP FIG. 2	C4	1	1	3																	
CIRCUIT NOTES EQUIPMENT NOTES INFORMATION NOTES	D1	1	2	3																	
CIRCUIT REQUIREMENTS	F1	1	1	3																	
CPS 1 POWER SUPPLY	J1A	1	1	3																	
	J1B	1	2	3																	
CPS 2 PREAMPLIFIER & POWER AMPLIFIER	J2A	1	2	3																	
	J2B	1	2	3																	
CPS 3 P-12E601 CKT	J3	1	1	3																	
CPS 4 P-12E604 CKT	J4	1	1	3																	
CPS 5 P-12E607 CKT																					
CPS 6 840284 III CKT	J5	1	1	3																	

OPTION INDEX

APP OR WRG	LOCATION
Z	ID7
Y	ID7

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.

SD-69900-011X99

STATION SYSTEMS
50A CONFERENCE SET
(73A CONTROL UNIT)
CIRCUIT

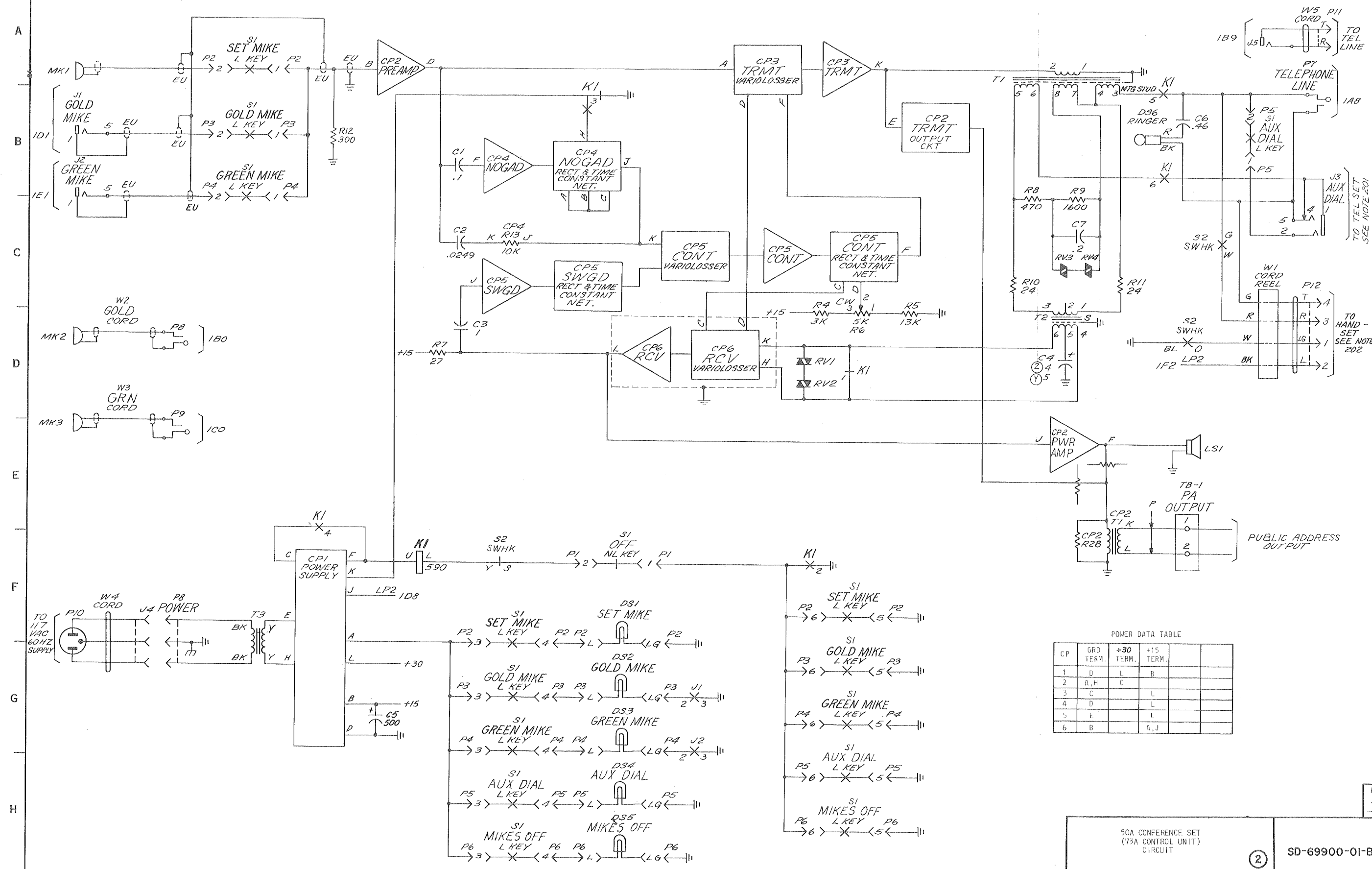
BELL TELEPHONE LABORATORIES
INCORPORATED

AT&TCO
STANDARD

SD-69900-01-A1
15 SHEETS
PRINTED IN U.S.A.

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

FS 1 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		

PART OF APP FIG.1

CIRCUIT PACK

EQPT LOC		CP1		CP2		CP3		CP4		CP5		CP6	
DESIG													
CODE		840284400		840284426		P-12E601		P-12E604		P-12E607		840284111	
OPTION													
ELEM IDENT		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										SWG	1C3		
K				T1	1E8	TRMT	1A6	R13	1C3	CONT	1C4	RCV	1D5
L			1F2	T1	1F8							RCV	1D4

RELAY

DESIG		K1	
CODE		MB7E	
OPTION			
	CONT	LOC	
6	EMB	1B8	
5	EMB	1B8	
4	EBM	1E2	
3	EBM	1B4	
2	EBM	1F5	
1	EMB	1D6	
COIL		1F2	

CAPACITOR

DESIG	LOC	CODE
C1	1B3	542L
C2	1C3	594C, .0249
C3	1D3	542D
C4	1D7	603A, 601A
C5	1G2	SPRAGUE 34D507G020FL4
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

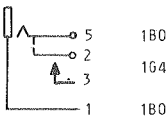
DESIG	LOC	CODE
P8	1F1	SWITCHCRAFT AC3G
P12	1D9	P/O W1 CORD REEL

CORD REEL

DESIG	LOC	CODE
W1	1C9	KS-20658, L1

JACK (SEE NOTE 1)

[2] J1, J2
SWITCHCRAFT
HI-D 113

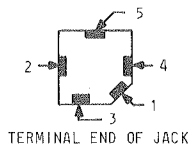


JACK (SEE NOTE 1)

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

NOTES:

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



TERMINAL END OF JACK

50A CONFERENCE SET
(73A CONTROL UNIT)
CIRCUIT

BELL TELEPHONE LABORATORIES
INCORPORATED

3S

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SD-69900-01-CI

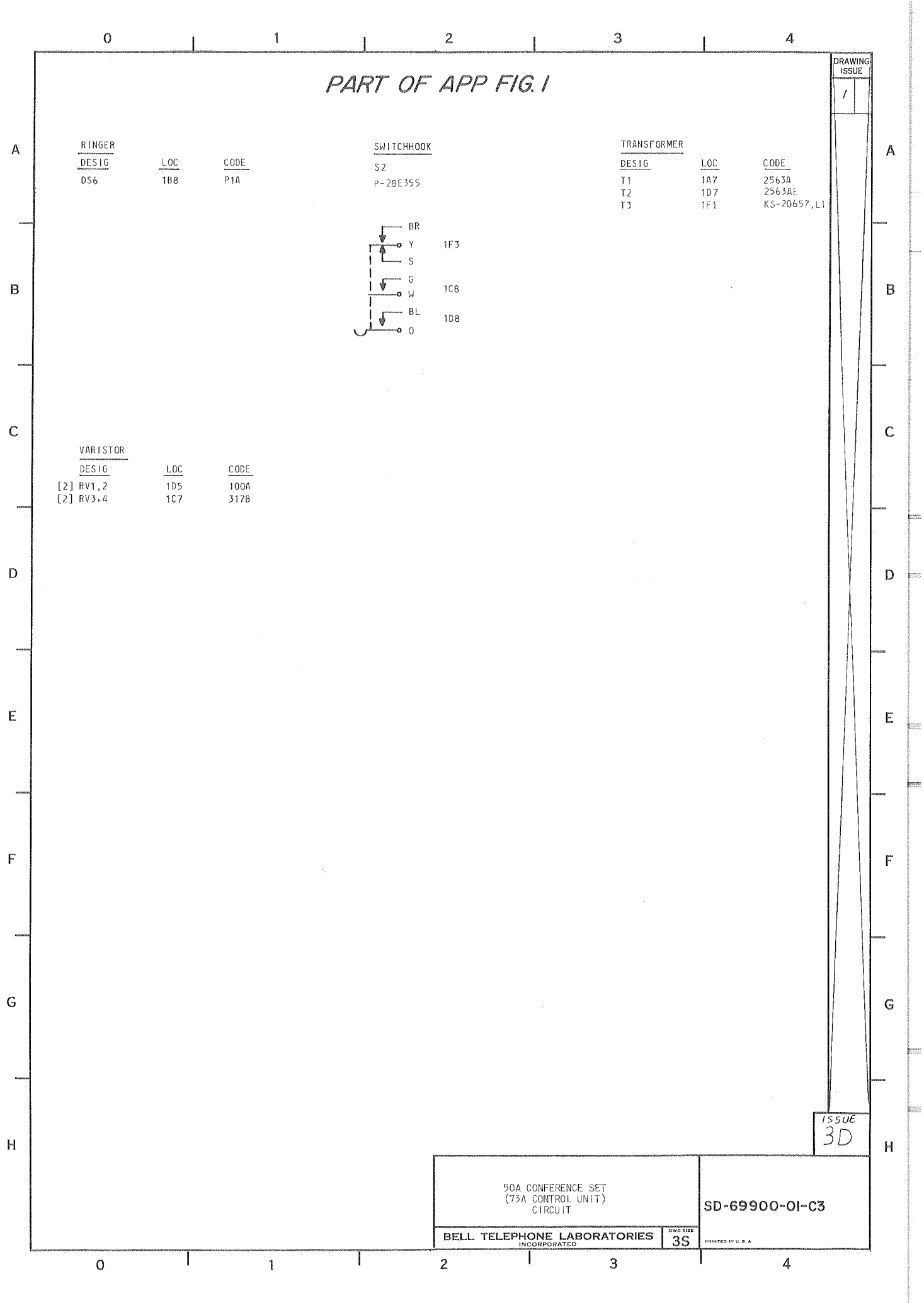
ISSUE
3D

DRAWING
ISSUE

SD-69900-01-C2

DWG SIZE
35

PRINTED IN U S A



PART OF APP FIG. 1

DRAWING
ISSUE
1

RINGER
DESIG
DS6

LOC
1B8

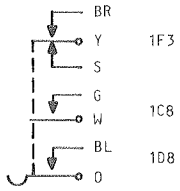
CODE
P1A

SWITCHHOOK
S2
P-28E355

TRANSFORMER
DESIG
T1
T2
T3

LOC
1A7
1D7
1F1

CODE
2563A
2563AE
KS-20657, L1



VARISTOR
DESIG

[2] RV1,2
[2] RV3,4

LOC
1D5
1C7

CODE
100A
317B

ISSUE
3D

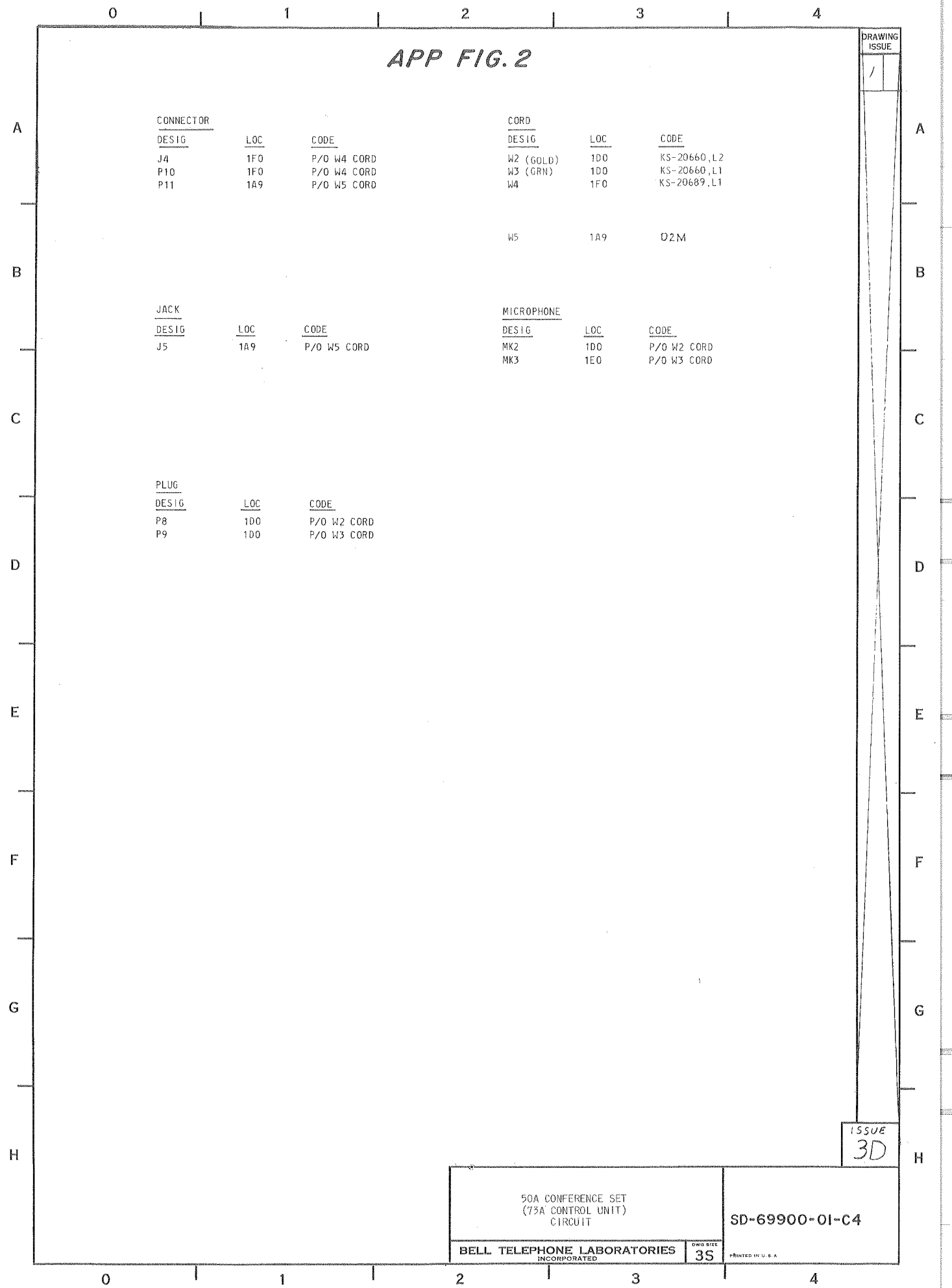
50A CONFERENCE SET
(73A CONTROL UNIT)
CIRCUIT

BELL TELEPHONE LABORATORIES
INCORPORATED

DWG SIZE
3S

PRINTED IN U.S.A.

SD-69900-01-C3



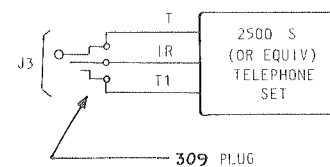
CIRCUIT NOTES:

101. FUSING INFORMATION: NONE

102.	FEATURE OR OPTION	PROVIDE	
		APP FIG.	APP OR WRG
	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.

[illegible]

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-DI

BELL TELEPHONE LABORATORIES
INCORPORATED

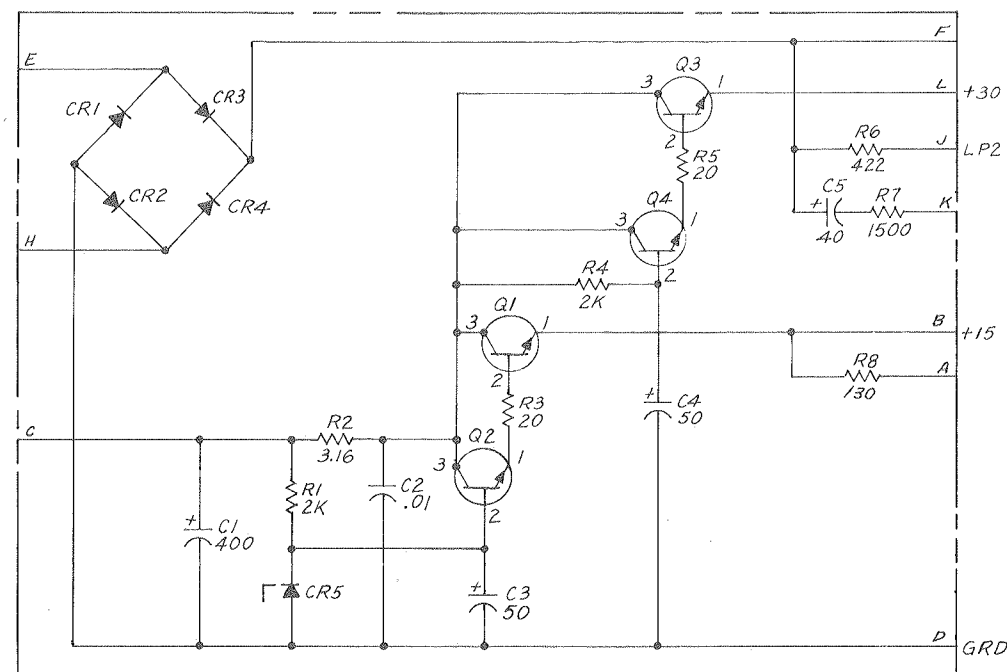
DWG SIZE
35

PRINTED IN U.S.A.

[illegible]

0 1 2 3 4

PART OF CPS I
POWER SUPPLY



COMPONENT LIST

CAPACITOR

DESIG	CODE
C1	KS-19658, L7
C2	KS-19774, L2, .01
C3	KS-19658, L19
C4	SPRAGUE 40D506F0500F4
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.

50A CONFERENCE SET
(73A CONTROL UNIT)
CIRCUIT

BELL TELEPHONE LABORATORIES
INCORPORATED

3S

SD-69900-01-JIA

ISSUE
3D

PRINTED IN U. S. A.

0 1 2 3 4

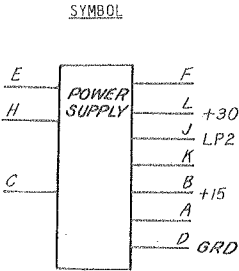
PART OF CPS I
POWER SUPPLY

INPUT/OUTPUT INFORMATION
NONE

CIRCUIT DESCRIPTION
SEE CD-69900-01

MANUFACTURING REFERENCES

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



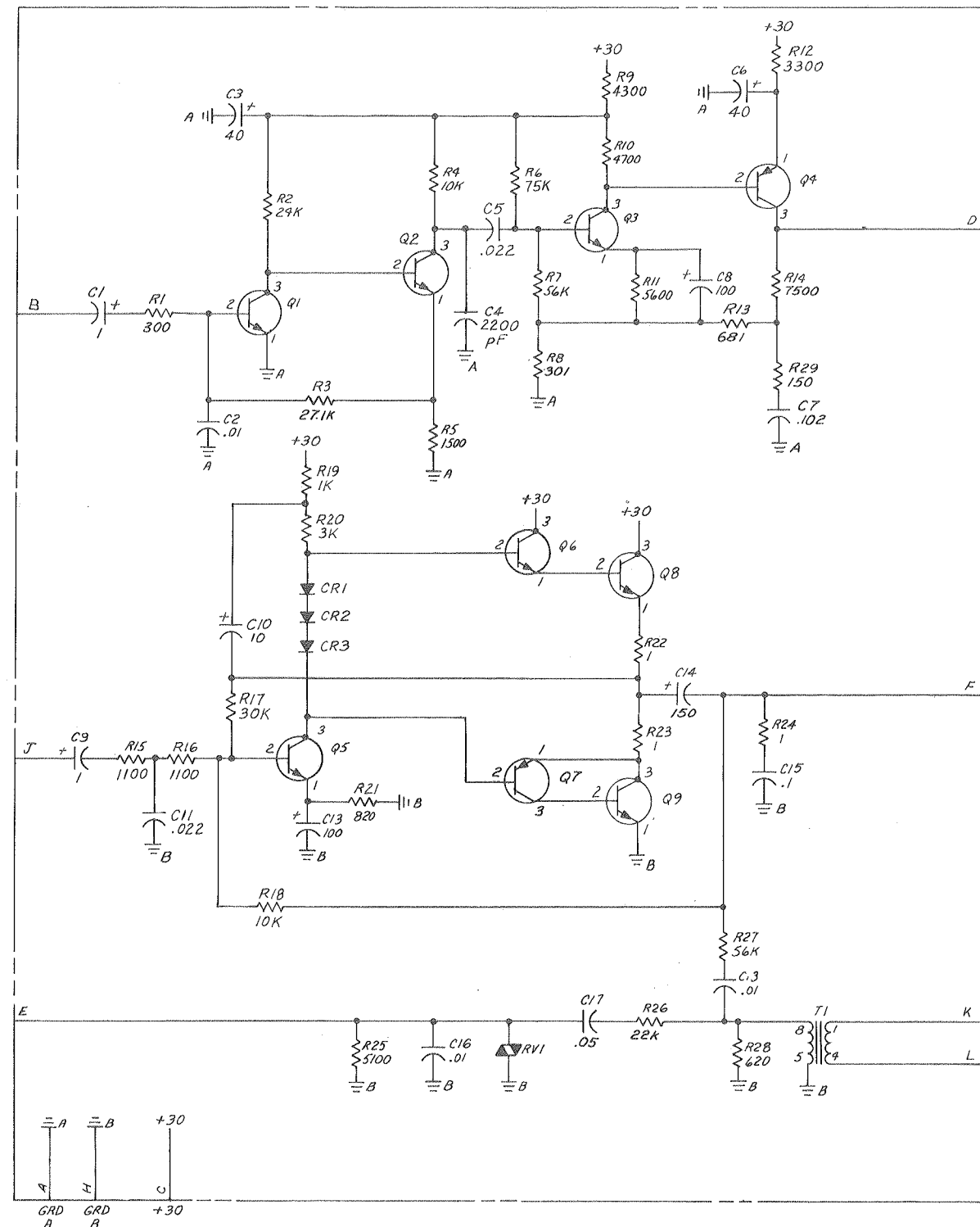
DRAWING	ISSUE
/	
A	
B	
C	
D	
E	
F	
G	
ISSUE	H
3D	

PART OF CPS 2 PREAMPLIFIER & POWER AMPLIFIER

DRAWING
ISSUE

1

ISSUE
3D



INPUT/OUTPUT INFORMATION
NONE

CIRCUIT DESCRIPTION
SEE CD-69900-01

50A CONFERENCE SET
(73A CONTROL UNIT)
CIRCUIT

SD-69900-01-J2A

BELL TELEPHONE LABORATORIES
INCORPORATED

DWG SIZE
3S

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PART OF CPS 2
PREAMPLIFIER & POWER AMPLIFIER

COMPONENT LIST

CAPACITOR

DESIG	CODE
C1	SPRAGUE 150D 105X5010A0
C2	KS-19774,L2, .01
C3	608B
C4	KS-19774,L2, 2200pF
C5	KS-19774,L6, .022
C6	608B
C7	5350Y
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

DESIG	CODE
-	KS-19276,L1

DIODE

DESIG	CODE
CR1-CR3	458A

RESISTOR

DESIG	CODE
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

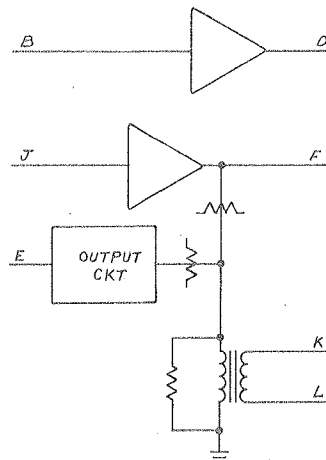
TRANSFORMER

DESIG	CODE
T1	2564G

MANUFACTURING REFERENCES

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

SYMBOL



COMPONENT LIST (CONT)

TRANSISTOR	CODE
DESIG	
Q1	16F
Q2,Q3	16G
Q4	51A
Q5,Q6	16F
Q7	51A

VARIATOR

DESIG	CODE
RV1	317D

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.
- GROUND RETURN.

ISSUE
3D

50A CONFERENCE SET
(73A CONTROL UNIT)
CIRCUIT

SD-69900-01-J2B

BELL TELEPHONE LABORATORIES
INCORPORATED

DWG SIZE
3S

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A

B

C

D

E

F

G

H

DRAWING ISSUE	
	/

3D



CIRCUIT DESCRIPTION
SEE CD-69900-01



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.

50A CONFERENCE SET (75A CONTROL UNIT) CIRCUIT		SD-69900-01-J3
BELL TELEPHONE LABORATORIES INCORPORATED	DWG SIZE 3S	PRINTED IN U.S.A.

BELL TELEPHONE LABORATORIES
INCORPORATED

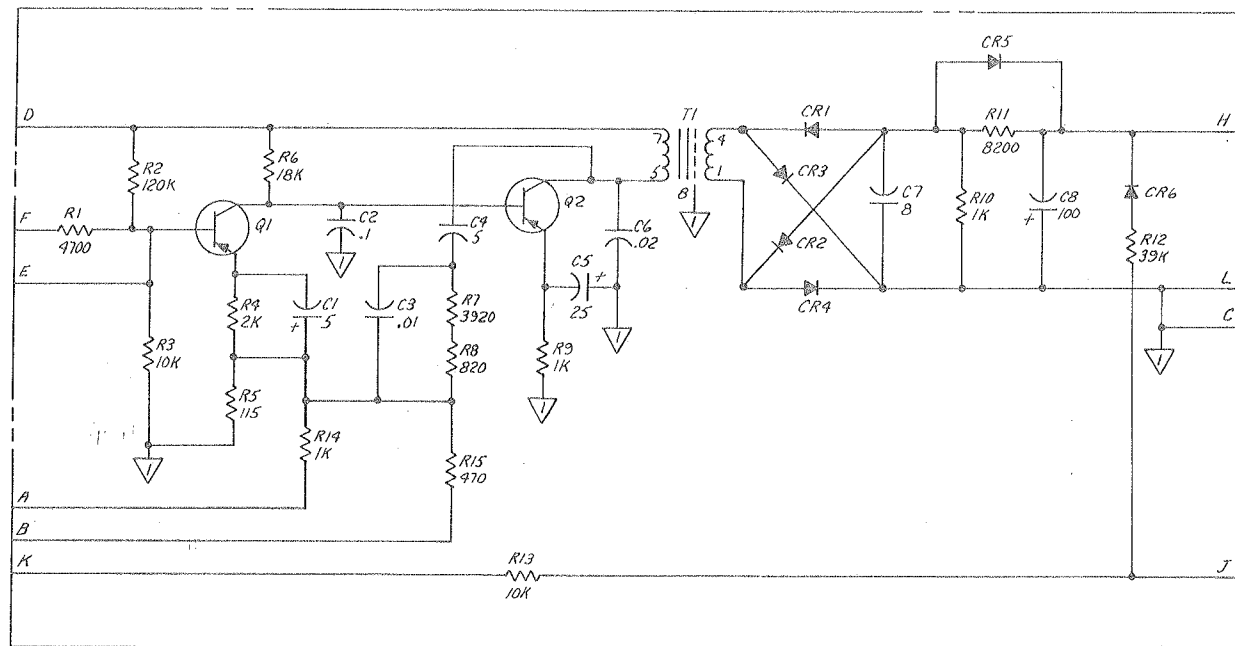
DWG SIZE
35

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CPS 4
P-12E604 CIRCUIT

MANUFACTURING REFERENCES

CATEGORY	NO.
CIRCUIT PACK CODE	P-12E604
CONNECTOR ON FRAME	KS-16182, L3



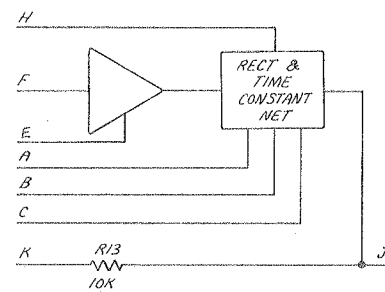
INPUT/OUTPUT INFORMATION

NONE

CIRCUIT DESCRIPTION

SEE CD-69900-01

SYMBOL



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.

ISSUE
3D

50A CONFERENCE SET
(73A CONTROL UNIT)
CIRCUIT

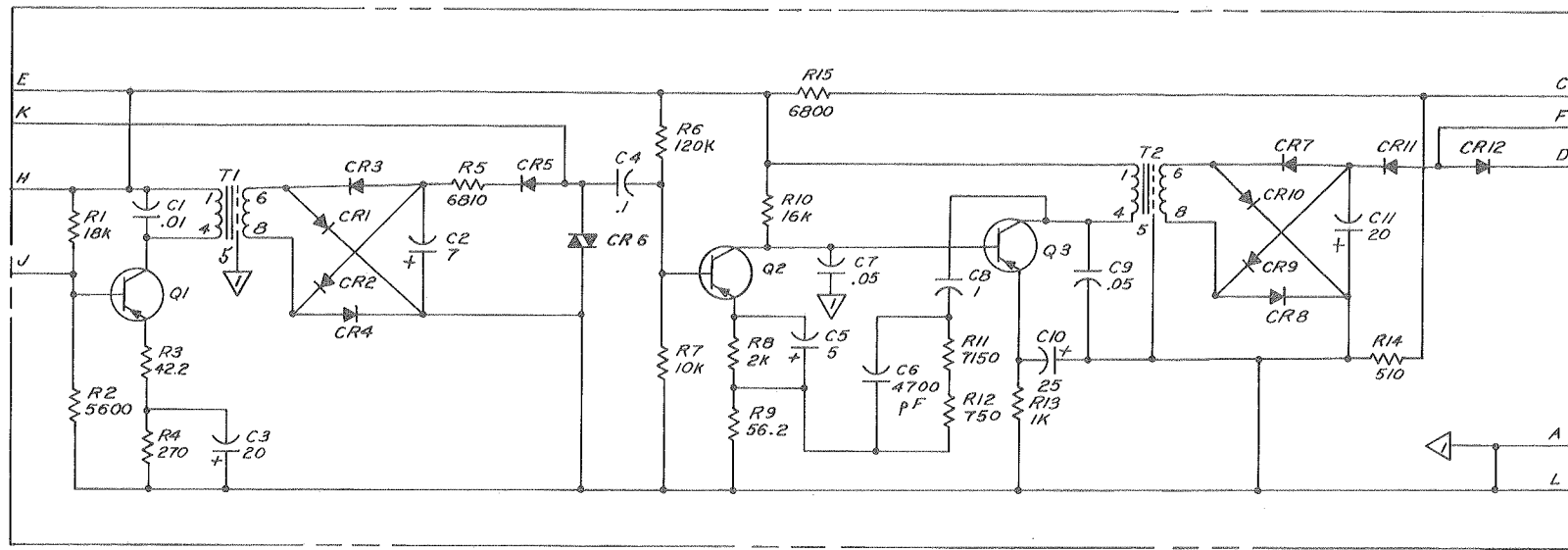
SD-69900-01-J4

BELL TELEPHONE LABORATORIES
INCORPORATED

3S

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CPS 5 P-12E607 CIRCUIT



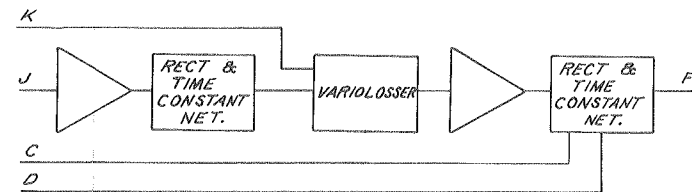
INPUT/OUTPUT INFORMATION
NONE

CIRCUIT DESCRIPTION
SEE CD-69900-01

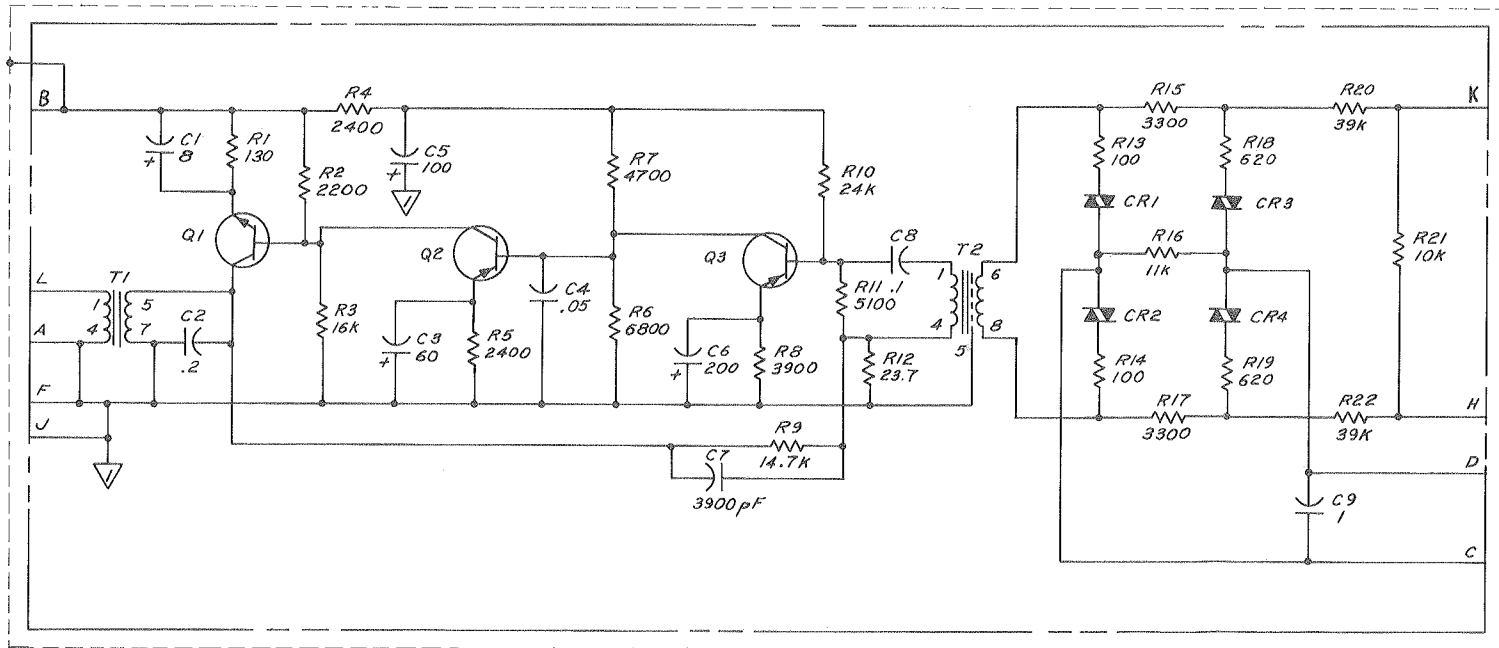
MANUFACTURING REFERENCES

CATEGORY	NO.
CIRCUIT PACK CODE	
CPS 5	P-12E607
CPS 6	840284111
CONNECTOR ON FRAME	KS-16182, L3

SYMBOL



CPS 6 840284111 CIRCUIT

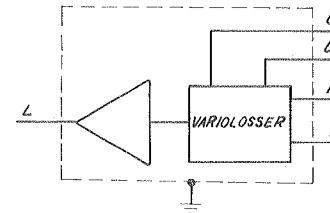


INPUT/OUTPUT INFORMATION
NONE

CIRCUIT DESCRIPTION
SEE CD-69900-01

COMPONENT LIST
CIRCUIT PACK
DESIG CODE
P-12E610

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 BY THE SYMBOL + (PLUS)
OR - (MINUS) ARE IN VOLTS.

90A CONFERENCE SET
(73A CONTROL UNIT)
CIRCUIT

2

SD-69900-01-J5

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DWG SIZE
6S

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ISSUE
3D