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SHEET INDEX

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FS 3 CO OR PBX LINE CKT 500D KEY TEL UNIT	B3		3	4	4	6	7	8													
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DWG ISS	CD ISS	DWG ISS	CD ISS	DWG ISS	CD ISS
1	1				

DWG ISSUE	CD ISSUE	DATE ISSUED	DWN	APPD	
2D	2D	6-8-64	EFS DHC	MHE LAH MM	HO
3D	3D	9-1-65	MPK DHC	REB LAH MM	HO
4A	3D APP-1A	9-3-65	EFS DHC	REB LAH MM	HO
5A	4A	3-11-66	HDW KB	REB LAH DLV	
6B	4A APP 1B	3-11-66	HDW KB	REB LAH DLV	HO
7D	4A APP 2D	4-22-66	— DHC	REB LAH DLV	HO
8B	4A APP 3B	4-12-68	DSC DHC	AL GES ARH	

SUPPORTING INFORMATION

CATEGORY	NO.

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.

8

SD-69513-01 IK03

STATION SYSTEMS

KEY TELEPHONE SYSTEM NO. 1A2 1A2
CO OR PBX LINE CIRCUIT 1T

(2)

AT&TCo STANDARD

SD-69513-01-A1
12 SHEETS

BELL TELEPHONE LABORATORIES INCORPORATED

DWG SIZE 3S

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SD-69513-01-A1

6-7484-1 (8-68)

HNDBK DWG

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OPTION INDEX

APP OR WRG	LOCATION
Z	1D4,2D4,3E2
Y	1E2,2E2,3F6
X	1F2,2F2,3F6
W	1G3,2G3,3A5
V	1G3,2G3,3B6
T	1G3,2G3,3B6
S	1G3,2G3,3A5
R	APP FIG. 4, 3E3,3F3
Q	APP FIG. 4, 3E3,3F3
N	APP FIG. 4, 3E2
M	APP FIG. 4, 3E2
K	APP FIG. 4
J	APP FIG. 4
G	APP FIG. 4
F	APP FIG. 4
E	APP FIG. 4
D	APP FIG. 4
B	APP FIG. 4
A	APP FIG. 4

DRAWING ISSUE		
2D	EFS DHC RDT	HO
3D	MPK DHC APM	HO
6B	HGW KB DLY	HO
8B		HO

8

CO OR PBX LINE CIRCUIT (2)

SD-69513-01-A2

BELL TELEPHONE LABORATORIES INCORPORATED

SIZE 3S

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SD-69513-01-A2 (1)

E-74564-8 (5-61)

(5)

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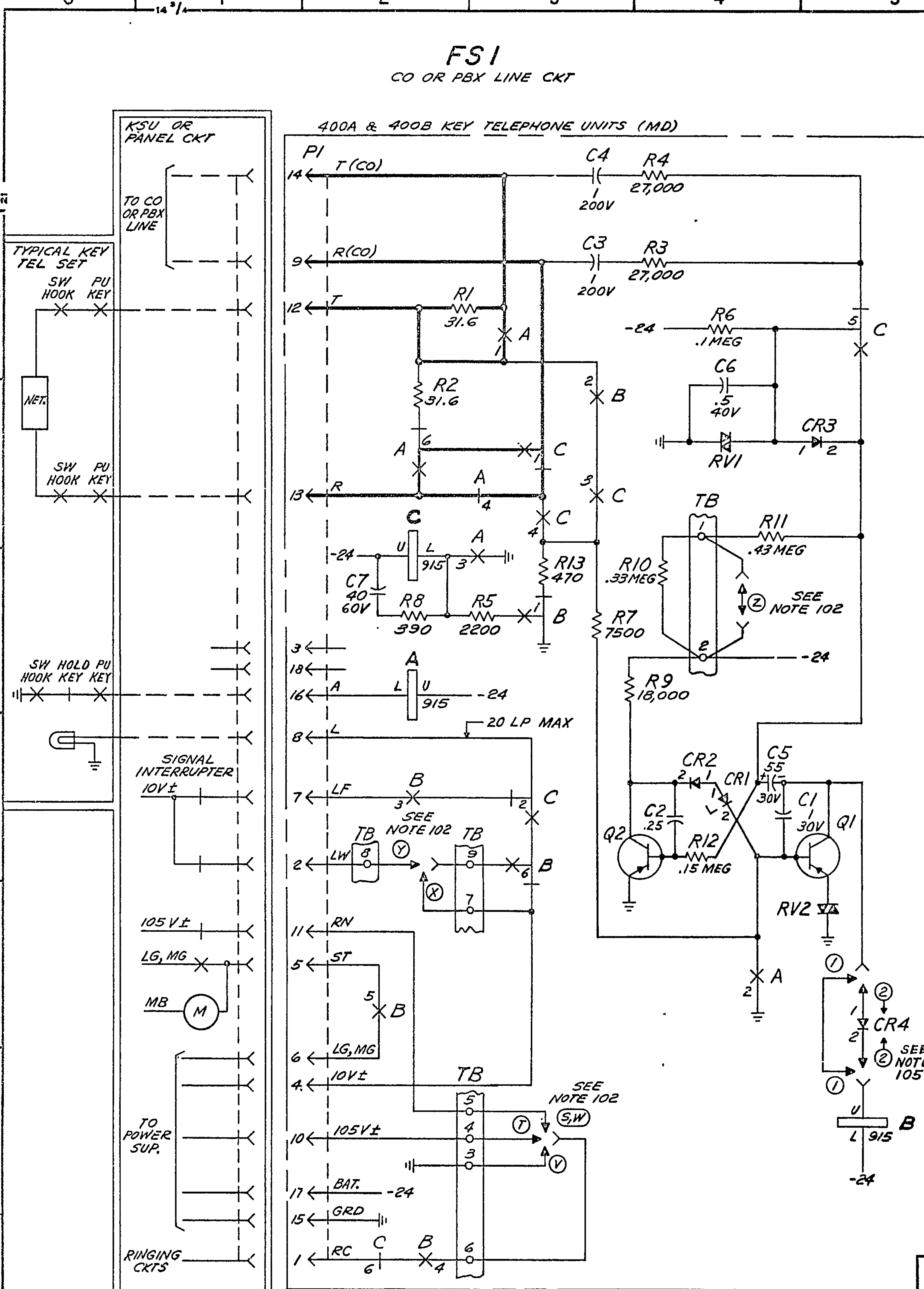
DRAWING ISSUE	
2D	DHC ARM
3D	EFS DHC ARM



STATION SYSTEMS

KEY TELEPHONE SYSTEM NO. 1A2
CO OR PBX LINE CIRCUIT ②

SD-69513-01-B1

BELL TELEPHONE LABORATORIES
INCORPORATED

DWG SIZE 3S

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SD-69513-01-B1 ⑤

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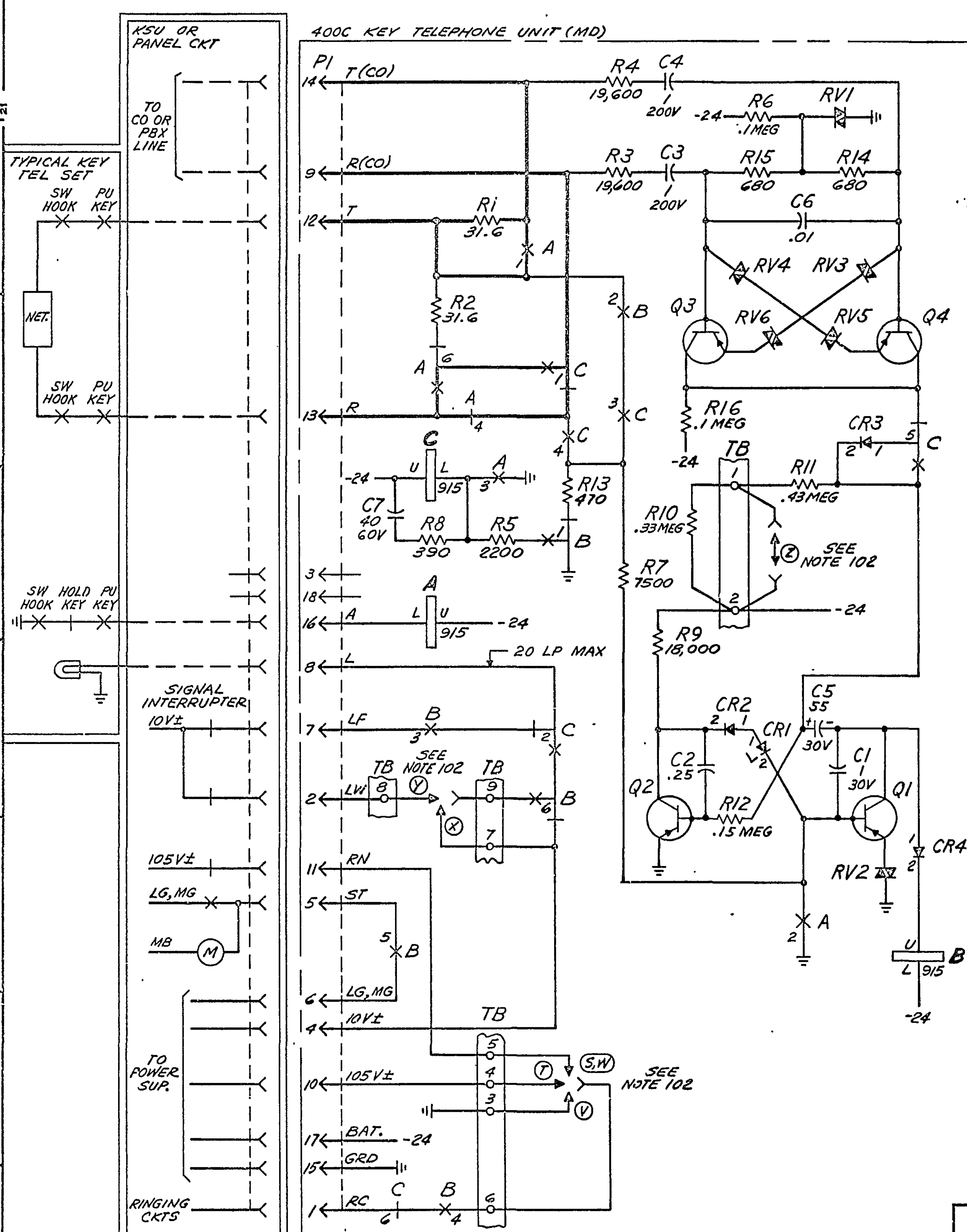
FS2
CO OR PBX LINE CKT

DRAWING ISSUE	
2D	DHC ARM
3D	EFS DHC ARM



STATION SYSTEMS

KEY TELEPHONE SYSTEM NO. 1A2
CO OR PBX LINE CIRCUIT

(2)

BELL TELEPHONE LABORATORIES
INCORPORATED

DWG SIZE 3S

SD-69513-01-B2

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3

SD-69513-01-B2

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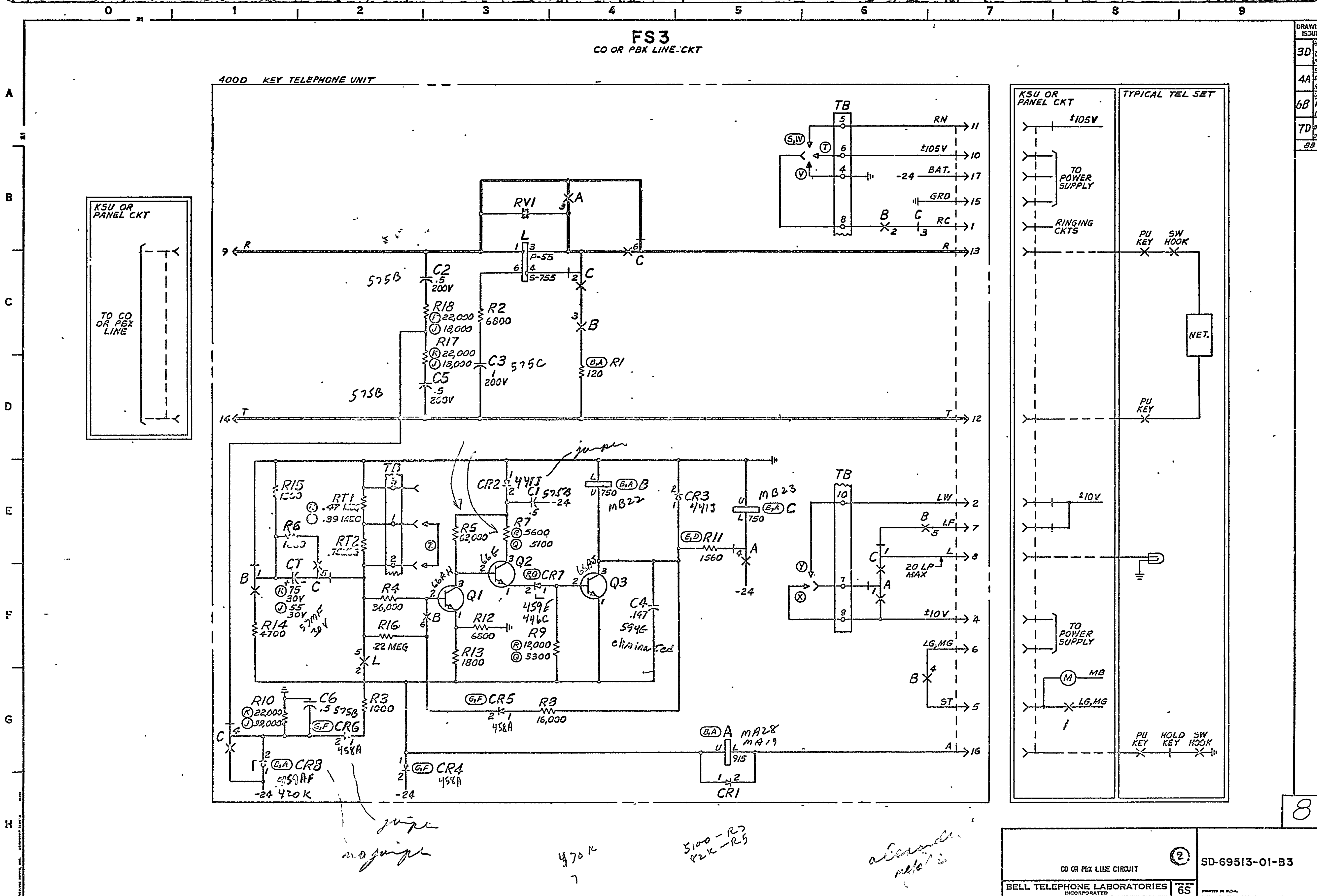

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APP FIG. 1 (MD)

400A KEY TELEPHONE UNIT

DRAWING ISSUE: 2D EFS PMC 0771 HQ

RELAY

DESIG	A		B		C					
CODE	MB6		MB2		MB3					
OPTION										
X	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC
6	EMB	1C2	EBM	1E3	B	1H2				
5			M	1F2	EBM	1B5				
4	EB	1C3	M	1H2	M	1C3				
3	M	1C3	M	1E2	M	1C3				
2	M	1F4	M	1C3	EBM	1E3				
1	EMB	1B3	EBM	1D3	EMB	1C3				
COIL		1D2		1G5		1C2				

CAPACITOR

DESIG	LOC	CODE
C1	1E4	542N
C2	1E4	542C
C3	1B3	542N
C4	1A3	
C5	1E4	KS-16390 L17
C6	1B4	542M
C7	1D2	KS-16390 L8

CONNECTOR

DESIG	LOC	CODE
P1	1A2	906C

DIODE

DESIG	LOC	CODE
CR1	1E4	420A
CR2	1E4	400J
CR3	1C5	420D

RESISTOR

DESIG	LOC	CODE
R1	1B2	KS-14603 L1A, 31.6
R2	1C2	
R3	1B4	KS-13490 L1, 27,000
R4	1A4	
R5	1D3	KS-13490 L2, 2200
R6	1B4	KS-13490 L2, .1 MEG
R7	1D3	KS-13490 L2, 7500
R8	1D2	KS-13490 L2, 390
R9	1D4	KS-13490 L1, 18,000
R10	1D4	KS-13490 L1, .33 MEG
R11	1C4	KS-13490 L1, .43 MEG
R12	1E4	KS-13490 L1, .15 MEG
R13	1D3	KS-13490 L2, 470

TERMINAL BOARD

DESIG	TB
CODE	P-15C931
OPTION	
X	LOC
9	1E3
8	1E2
7	1E3
6	1G3
5	1G3
4	1G3
3	1G3
2	1C4
1	1C4

TRANSISTOR

DESIG	LOC	CODE
Q1	1E5	12H
Q2	1E4	12G

VARISTOR

DESIG	LOC	CODE
RV1	1C4	312C
RV2	1F5	100A

2

STATION SYSTEMS

KEY TELEPHONE SYSTEM NO. 1A2
CO OR PBX LINE CIRCUIT (2)

SD-69513-01-C1

BELL TELEPHONE LABORATORIES INCORPORATED — DWG SIZE 3S — PRINTED IN U.S.A.

(4)

SD-69513-01-C1

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APP FIG. 2 (MFR DISC.)

400B KEY TELEPHONE UNIT

DRAWING ISSUE		
2D	EFS DHC ARM	
3D	EFS DHC ARM	

RELAY

DESIG	A		B		C					
CODE	MB6		MB2		MB3					
OPTION										
X	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC
6	EMB	1C2	EBM	1E3	B	1H2				
5			M	1F2	EBM	1B5				
4	EB	1C3	M	1H2	M	1C3				
3	M	1C3	M	1E2	M	1C3				
2	M	1F4	M	1C3	EBM	1E3				
1	EMB	1B3	EBM	1D3	EMB	1C3				
COIL	X	1D2	X	1G5	X	1C2	X		X	

CAPACITOR

DESIG	LOC	CODE
C1	1E4	542N
C2	1E4	542C
C3	1B3	542N
C4	1A3	
C5	1E4	KS-16390 L17
C6	1B4	542N
C7	1D2	KS-16390 L8

CONNECTOR

DESIG	LOC	CODE
P1	1A2	906C

DIODE

DESIG	LOC	CODE
CR1	1E4	420A
CR2	1E4	441J
CR3	1C5	420D
CR4	1F5	420G

RESISTOR

DESIG	LOC	CODE
R1	1B2	KS-14603 L1A, 31.6
R2	1C2	
R3	1B4	KS-13490 L1, 27,000
R4	1A4	
R5	1D3	KS-13490 L2, 2200
R6	1B4	KS-13490 L2, 0.1 MEG
R7	1D3	KS-13490 L2, 7500
R8	1D2	KS-13490 L2, 390
R9	1D4	KS-13490 L1, 18,000
R10	1D4	KS-13490 L1, 0.33 MEG
R11	1C4	KS-13490 L1, 0.43 MEG
R12	1E4	KS-13490 L1, 0.15 MEG
R13	1D3	KS-13490 L2, 470

TERMINAL BOARD

DESIG	TB
CODE	P-15C931
OPTION	
X	LOC
9	1E3
8	1E2
7	1E3
6	1G3
5	1G3
4	1G3
3	1G3
2	1C4
1	1C4

TRANSISTOR

DESIG	LOC	CODE
Q1	1E5	12H
Q2	1E4	12G

VARISTOR

DESIG	LOC	CODE
RV1	1C4	312C
RV2	1F5	100A

3

STATION SYSTEMS

KEY TELEPHONE SYSTEM NO. 1A2
CO OR PBX LINE CIRCUIT (2)

SD-69513-01-C2

BELL TELEPHONE LABORATORIES INCORPORATED

DWG SIZE 3S

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SD-69513-01-C2

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APP FIG. 3 (MFR DISC.)

400C KEY TELEPHONE UNIT

DRAWING ISSUE	
2D	EFS DHC ARM
3D	EFS DHC ARM

RELAY

DESIG	A		B		C					
CODE	MB6		MB2		MB3					
OPTION										
X	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC
6	EMB	2C2	EBM	2E3	B	2H2				
5			M	2F2	EBM	2C5				
4	EB	2C3	M	2H2	M	2C3				
3	M	2C3	M	2E2	M	2C3				
2	M	2F4	M	2C3	EBM	2E3				
1	EMB	2B3	EBM	2D3	EMB	2C3				
COIL	X	2D2	X	2F5	X	2C2	X		X	

CAPACITOR

DESIG	LOC	CODE
C1	2E5	542N
C2	2E4	542C
C3	2B4	542N
C4	2A4	
C5	2E4	KS-16390 L17
C6	2B4	570DR
C7	2D2	KS-16390 L8

CONNECTOR

DESIG	LOC	CODE
P1	2A2	906C

DIODE

DESIG	LOC	CODE
CR1	2E4	420A
CR2	2E4	441J
CR3	2C5	420D
CR4	2F5	420G

RESISTOR

DESIG	LOC	CODE
R1	2B2	KS-14603 L1A, 31.6
R2	2C2	
R3	2B3	221A, 19 600
R4	2A3	
R5	2D3	KS-13490 L2, 2200
R6	2A4	KS-13490 L2, 0.1 MEG
R7	2D3	KS-13490 L2, 7500
R8	2D2	KS-13490 L2, 390
R9	2D4	KS-13490 L1, 18,000
R10	2D4	KS-13490 L1, 0.33 MEG
R11	2D4	KS-13490 L1, 0.43 MEG
R12	2E4	KS-13490 L1, 0.15 MEG
R13	2D3	KS-13490 L2, 470
R14	2B5	KS-13490 L1, 680
R15	2B4	
R16	2C4	KS-13490 L2, 0.1 MEG

TERMINAL BOARD

DESIG	TB
CODE	P-15C931
OPTION	
X	LOC
9	2E3
8	2E2
7	2E3
6	2G3
5	2G3
4	2G3
3	2G3
2	2C4
1	2C4

TRANSISTOR

DESIG	LOC	CODE
Q1	2E5	12H
Q2	2E4	12G
Q3	2C4	12H
Q4	2C5	

VARISTOR

DESIG	LOC	CODE
RV1	2A5	317D
RV2	2F5	100A
RV3	2B5	100D
RV4	2B4	
RV5	2C5	
RV6	2C4	

3

STATION SYSTEMS

KEY TELEPHONE SYSTEM NO. 1A2
CO OR PBX LINE CIRCUIT (2)

SD-69513-01-C3

BELL TELEPHONE LABORATORIES INCORPORATED — SIZE 3S — PRINTED IN U.S.A.

SD-69513-01-C3

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APP FIG. 4

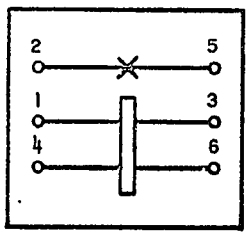
4000 KEY TELEPHONE UNIT

RELAY

DESIG	A				B				C			
CODE	MA19		MA28		MB16		MB22		MB17		[illegible]	
OPTION	B		A		B		A		B		A	
X	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC
6					H	3F3	H	3F3	J	3C4	J	3C4
5					H	3E7	H	3E7	J	3F2	J	3F2
4	[illegible]		[illegible]		H	3G6	H	3G6	J	3G1	J	3G1
3	[illegible]		H	3D4	H	3C4	H	3C4	J	3B6	J	3B3
2	[illegible]		H	[illegible]	H	3d6	H	3d6	J	3C4	J	3C4
1	[illegible]		J	3d6	H	3F1	H	3F1	J	[illegible]	J	[illegible]
COIL	[illegible]		J	3d3	[illegible]		H	3E4	[illegible]		[illegible]	

RELAY

L
327A



DRAWING ISSUE		
3D	AUX DHC ACC	
4A	EFS DHC ARM	HQ
5A	H34 KB DLY	
6B	H34 KB DLY	HQ
7D	DHC DLY	HQ
8B		HQ

CAPACITOR

DESIG	LOC	CODE
C1	3E3	575B
C2	3C3	575B
C3	3D3	575C
C4	3F4	594G
C5	3D3	575B
C6	3G2	575B
CT	3F1	(K) KS-16390 L12
		(J) KS-16390 L17

TERMINAL BOARD

DESIG	TB
CODE	P-[illegible]31
OPTION	
X	LOC
10	3C6
9	3C6
8	3A6
7	3C6
6	3A6
5	3A6
4	3A6
3	3E2
2	3C2
1	3E2

DIODE

DESIG	LOC	CODE
CR1	3H5	441J
CR2	3E3	
CR3	3E5	
CR4	3G2	(F) 458A
CR5	3G3	(G) 420G
CR6	3G2	
(R) CR7	3F3	(R) 446C
(Q) CR7	3F3	(Q) 459E
CR8	3G1	(A) 459AF
		(B) 420K

TRANSISTOR

DESIG	LOC	CODE
Q1	3F3	16G
Q2	3F3	
Q3	3F4	

RESISTOR

DESIG	LOC	CODE
R1	3D4	(A) KS-20289 L4, 120
		(B) KS-14603 L1A, 120
R2	3G3	KS-13490 L2, [illegible]000
R3	3F2	KS-13490 L2, 1000
R4	3F2	KS-13490 L1, 36,000
R5	3E3	KS-13490 L2, 62,000
R6	3E1	KS-13490 L3, 1000
R7	3E3	(Q) KS-13490 L1, 5100
		(R) KS-13490 L2, 5600
R8	3G4	KS-13490 L1, 16000
R9	3F3	(R) KS-13490 L2, 12,000
		(Q) KS-13490 L2, 3300
R10	3G1	(J) KS-13490 L2, 39,000
		(K) KS-13490 L2, 22,000
R11	3E5	(E) 223A, 1560
		(D) 221A, 1560
R12	3F3	KS-13490 L1, 6800
R13	3F3	KS-13490 L1, 1800
R14	3F1	KS-13490 L1, 4700
R15	3E1	KS-13490 L1, 1500
R16	3F2	KS-13490 L2, .22MEG
R17	3D3	(J) KS-13490 L2, 18,000
R18	3C3	(K) KS-13490 L2, 22,000
RT1	3E2	(N) KS-13490 L1, .47MEG
		(M) KS-13490 L1, .39MEG
RT2	3E2	KS-13490 L2, .75MEG.

VARISTOR

DESIG	LOC	CODE
RV1	3B3	3179

8

CO OR PBX LINE CIRCUIT

(3)

BELL TELEPHONE LABORATORIES INCORPORATED

DWG SIZE 3S

SD-69513-01-C4

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(5)

SD-69513-01-C4

E-7484-S (5-68)

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CIRCUIT NOTES:

101.

DESIG	FUSE AMP	POTENTIAL	ONE PER
		-24 SIG	FUSE PROVIDED ON ASSOC KSU OR PANEL CKT

BATTERY SYMBOL	VOLTAGE RANGE
-24	20-26V

102.

FEATURE OR OPTION				PROVIDE APP FIG.	PROVIDE APP OR WRG	PROVIDE QUANTITY
INDUCED VOLTAGE ON TIP AND RING	12V AC RMS MAX	TIME-OUT CONT	LONG TIME DELAY	2	※	1 PER LINE
			SHORT TIME DELAY		Z	
		VISUAL HOLD CKT	LAMP WINK		Y	
			LAMP STEADY		X	
		AUDIBLE SIG	INTERRUPTED RING		W	
			STEADY RING		T	
			COMMON WITH RELAY CONT		V	
			COMMON WITH DIODE MATRIX CONT		S	
	GREATER THAN 12V AC RMS SEE NOTE 302	TIME-OUT CONT	LONG TIME DELAY	3	※	1 PER LINE
			SHORT TIME DELAY		Z	
		VISUAL HOLD CKT	LAMP WINK		Y	
			LAMP STEADY		X	
		AUDIBLE SIG	INTERRUPTED RING		W	
			STEADY RING		T	
			COMMON WITH RELAY CONT		V	
			COMMON WITH DIODE MATRIX CONT		S	
TIME-OUT CONT			LONG-TIME DELAY	4	※	1 PER LINE
			SHORT-TIME DELAY		Z	
VISUAL HOLD CKT			LAMP WINK		Y	
			LAMP STEADY		X	
AUDIBLE SIG			INTERRUPTED RING		W	
			STEADY RING		T	
			COM WITH REL CONT		V	
			COM WITH DIODE MATRIX CONT		S	

※ LONG TIME DELAY IS A FUNCTION OF THE PRINTED WIRING AND IS EFFECTIVE ONLY WHEN Z OPTION STRAP IS REMOVED.

103.

NETWORK VALUES			
NETWORK NO.	NETWORK CODE	RESISTANCE IN OHMS	CAPACITANCE IN UF

CIRCUIT NOTES: (CONT)

104.

RECORD OF APPARATUS 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				FIG. 2		FIG. 1	
3D				FIG. 4		FIG. 2 & 3	
6B	R,Q	R		Q		R	
	N,M	N		M		N	
8B	A OR B	A		A		B	
	D OR E	D		D		E	
	F OR G	F		F		G	
	J OR K	J		J		K	
	Q,R OR P	P		P		Q,R	

105. (CR4) DIODE CONNECTED FOR 400B LINE CIRCUIT. SHORT CONNECTED FOR 400A.

DRAWING ISSUE		
2D	EFS DNC	H O
3D	MFK DNC	H O
6B	HCK KCB DCV	H O
8B		

8

CO OR PBX LINE CIRCUIT (2) SD-69513-01-D1

BELL TELEPHONE LABORATORIES INCORPORATED SIZE 3S PRINTED IN U.S.A.

SD-69513-01-D1

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DRAWING ISSUE		
3D	EFS DHC AFM	H.O
6B	HBW KB DLV	"
7D	DHC DLV	H.O

INFORMATION NOTES:

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

302. TRANSVERSE VOLTAGE UP TO APPROXIMATELY 24V RMS OR LONGITUDINAL VOLTAGE UP TO APPROXIMATELY 90V RMS.

303. THE TIMEOUT CAN BE REDUCED BY SHUNTING A RESISTOR OF PROPER VALUE ACROSS RT1 AT THE OPTION BLOCK. REMOVE Z OPTION STRAP CONNECTING TERMINALS 1 AND 2 ON OPTION BLOCK. RESTRAP TERMINALS 1 AND 2 WITH ONE LEAD OF SHUNTING RESISTOR R AND CONNECT OTHER LEAD TO TERMINAL 3. THE TABLE BELOW GIVES THE RESISTANCE OF R REQUIRED TO REDUCE THE TIMEOUT T_o, TO SOME LOWER VALUE DESIRED TIME.

DESIRED TIME	R MEG Ω *
3/4 T_o	1.20
2/3 T_o	.75
1/2 T_o	.39
1/3 T_o	.20
1/4 T_o	.13

*KS-13490 L1 OR EQUIVALENT

NOTE:
WHERE THE DURATION OF MACHINE RINGING IS 1 SECOND, TIMEOUT SHALL NOT BE REDUCED BELOW 50% OF ORIGINAL TIMEOUT.

304. THE 400D LINE CIRCUIT SHALL BE USED WITH THE 235A AND 236A STATION LINE CONCENTRATORS, ONLY WHEN THE CONCENTRATORS HAVE BEEN MODIFIED AS SHOWN ON THE APPLICABLE ISSUES OF SD-69387-01, SD-69498-01, AND SD-69499-01.

WORKING LIMITS

RINGING RANGES:

APP FIG.	MINIMUM RINGING VOLTAGE	MINIMUM LEAKAGE RESISTANCE	MAXIMUM NO. RINGERS 0	1	2	3
			MAXIMUM RINGING RANGE (OHMS)			
2	72V RMS	15K	4446	1788	1119	814
	80V RMS	15K	6062	2438	1526	1110
	84V RMS	15K	6871	2763	1729	1258
	84V RMS	10K	5140	2434	1594	1185
3	72V RMS	15K	4060	1722	1093	800
	80V RMS	15K	5537	2349	1490	1091
	84V RMS	15K	6275	2662	1689	1237
	84V RMS	10K	4799	2354	1560	1166
4	72V RMS	15K	2408	1334	922	705
	80V RMS	15K	3284	1819	1258	961
	84V RMS	15K	3722	2062	1426	1090
	84V RMS	10K	3148	1873	1333	1034

FOR APP FIG. 4, NO LIMITATIONS FOR LONGITUDINAL VOLTAGES EXCEPT FOR FOLLOWING CONDITION: WHEN DIALING FROM A NON "A" LEAD STATION CONNECTED ACROSS THE T AND R, LONGITUDINAL VOLTAGE UP TO 35V RMS. THE STATION CONDUCTOR LOOP RESISTANCE SHALL NOT EXCEED 50 OHMS.

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CO OR PBX LINE CIRCUIT

SD-69513-01-D2

BELL TELEPHONE LABORATORIES INCORPORATED

SIZE 3S

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E-72684-B (3-69)

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CIRCUIT REQUIREMENTS

KEY TELEPHONE SYSTEM NO. 1A2, CO OR PBX LINE CKT

DRAWING ISSUE: 1 | 2D | 3D | 6B | 7D | 8B

APPARATUS DESIG	APPARATUS CODE	APPARATUS OPT.	APPARATUS APP FIG		MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM. TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BAT.	CIRCUIT PREPARATION TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	DIRECT CURRENT FLOW REQT TEST FOR	DIRECT CURRENT FLOW REQT AFTER SOAK MA	DIRECT CURRENT FLOW REQT TEST MA	DIRECT CURRENT FLOW REQT READJ MA	REMARKS
MISC																		
400A	KTU																	
A	M05		1		204					L	GRD	3		O		18.5	17.5	
B	M02		1		201				U	L	B/G	1,2		O		19.0	18.0	
C	M03		1		202					L	GRD	1,4		O		19.0	18.0	
										L	GRD	4		H		5.3	5.0	
										L	GRD	4		NO		10.0	10.5	
400B	KTU																	
A	M05		2		204					L	GRD	3		O		18.5	17.5	
B	M02		2		201				U	L	B/G	1,2		O		19.0	18.0	
C	M03		2		202					L	GRD	1,4		O		19.0	18.0	
										L	GRD	4		H		5.3	5.0	
										L	GRD	4		NO		10.0	10.5	
400C	KTU																	
A	M06		3		204					L	GRD	3		O		18.5	17.5	
B	M02		3		201				U	L	B/G	1,2		O		19.0	18.0	
C	M03		3		202					L	GRD	1,4		O		19.0	18.0	
										L	GRD	4		H		5.3	5.0	
										L	GRD	4		NO		10.0	10.5	
400D	KTU																	
A	MA19	B	4		105					L	GRD	3		O		17.0		
														R		1.1		
	MA28	A	4		105					L	GRD	3		O		17.0		
														R		1.1		
B	MB16	B	4		201				U	L	B/G	1,2		O		20.0		
									U	L	B/G	1,2		R		1.2		
	MB22	A	4		201				U	L	B/G	1,2		O		20.0		
									U	L	B/G	1,2		R		1.2		
C	MB17	B	4		203				U	L	B/G	1,2		O		21.0		
									U	L	B/G	1,2		H		7.5		
									U	L	B/G	1		NO		11.8		
	MB23	A	4		203				U	L	B/G	1,2		O		21.0		
									U	L	B/G	1,2		H		7.5		
									U	L	B/G	1		NO		11.8		
L	327A		4						3	1	B/G	1	P	O		13.5		
									3	1	B/G	1	P	NO		7.4		
									3	1	B/G	1	P	R		1.40		
									1	6	B/G	1	P/S	O		4.7		CONNECT WIRE JUMPER BETWEEN 3(L) & 4(L)

TEST NOTES:

1. THE CURRENT FLOW INFORMATION LISTED APPLIES ONLY WHEN THE RELAY TO BE TESTED IS REMOVED FROM THE PRINTED WIRING BOARD.
2. TO TEST RELAY ON AN IN-CIRCUIT BASIS CONTROL THE LOCAL DC CIRCUIT VOLTAGE -20V AND TEST RELAY OPERATION ON BUSY AND HOLD CONDITION. PROPER RELAY PERFORMANCE UNDER THIS CONDITION INDICATES SATISFACTORY RELAY ADJUSTMENT.
3. OPEN LEAD A TO TELEPHONE SETS.
4. OPEN T AND R LEADS OF CO.

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CO OR PBX LINE CIRCUIT (2) | SD-69513-01-F1

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