

SHEET INDEX

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4	CIRCUIT REQUIREMENTS TABLE CAD 1

CIRCUIT NOTES (CON'T)

102.

FEATURE OR OPTION	PROVIDE	
	APP FIG.	QUANTITY

103.

NETWORK VALUES		
NETWORK NO.	RESISTANCE IN OHMS	CAPACITANCE IN UF
1	470	0.11

RECORD OF 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	ND

EQUIPMENT NOTES:

201. THE LEADS BETWEEN THE T RESISTOR AND TERMINAL 2M OF RELAY LO CAN BE OPENED FOR TESTING PURPOSES AT T3(A). (SEE CAD 1)

SUPPORTING INFORMATION

CATEGORY	NO.
EQUIPMENT LAYOUT	J99244BU
EQUIPMENT DESIGN REQUIREMENTS	809-703-i51

OPTION INDEX

APP OR WIRING	LOCATION
2	APP FIG. 2
3	APP FIG. 3
Z	3A2,3C2
Y	3B4
X	APP FIG. 1
W	APP FIG. 1
V	APP FIG. 1
T	3B3
R	3B2
Q	3B2

CIRCUIT NOTES

101.

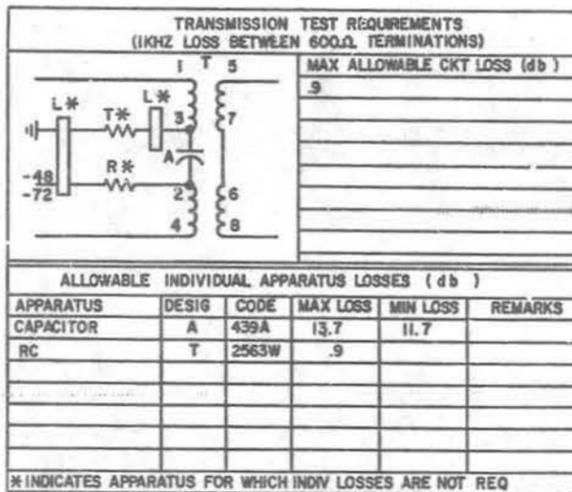
DESIG	FUSE AMP	POTENTIAL	ONE PER
1-1/3	-48		10 APP FIG. 1
1/2 HV	+105		MAX 14 APP FIG. 3
1-1/3	-72		10 APP FIG. 1

BATTERY SYMBOL	VOLTAGE RANGE
-48	42.75 - 52.5
-72	66.75 - 74.5

102.

WHEN USED WITH	STATION LINE CKT AND	SELECTIVE ROUTING IS USED WITH	RERING	PROVIDE		
				APP FIG.	QUANTITY	
			RERING	1,2	X, Y	1 PER CKT
			NO RERING	3		1 PER MAX4 APP FIG. 2
			RERING	1,2	X	1 PER CKT
			NO RERING	3		1 PER MAX4 APP FIG. 2
			REQUIRED	1	Z, W	1 PER CKT
			NOT REQUIRED		Z, ...	
						R
						T, R
						T, Q



WORKING LIMITS

	STATION	TOWARD LINE CKT
MAX EXT CONDUCTOR LOOP RESISTANCE OPTION (R)	1600Ω	1800Ω
MAX EXT CONDUCTOR LOOP RESISTANCE OPTION (Q)	2500Ω	1800Ω
MIN INSULATION RES	60,000Ω	30,000Ω
EMERGENCY TEL STA BRIDGE RES FOR CONT LOOP TEST OPTION (R) - 7320 ± 5%		
EMERGENCY TEL STA BRIDGE RES FOR CONT LOOP TEST OPTION (Q) - 11,000 ± 2%		

DWG ISSUE	RECORD ISSUE	DATE ISSUED	BY	APPV
1	1	9-10-70	GPT	CEM
2A	1	APP 3-22-79	DL	JS
3D	1	APP 3-22-79	DL	JS

NOTICE  
NOT FOR USE OR DISCLOSURE OUTSIDE THE BELL SYSTEM EXCEPT UNDER WRITTEN AGREEMENT

REPLACES SD-5E059-01

SD-99545-01 1N03

COMMON SYSTEMS  
EMERGENCY REPORTING SYSTEM  
LONG LINE CIRCUIT  
FOR USE WITH  
PBX NO. 520 TYPE

AT & T CO STANDARD

(EMER REPT SYS LL) ②

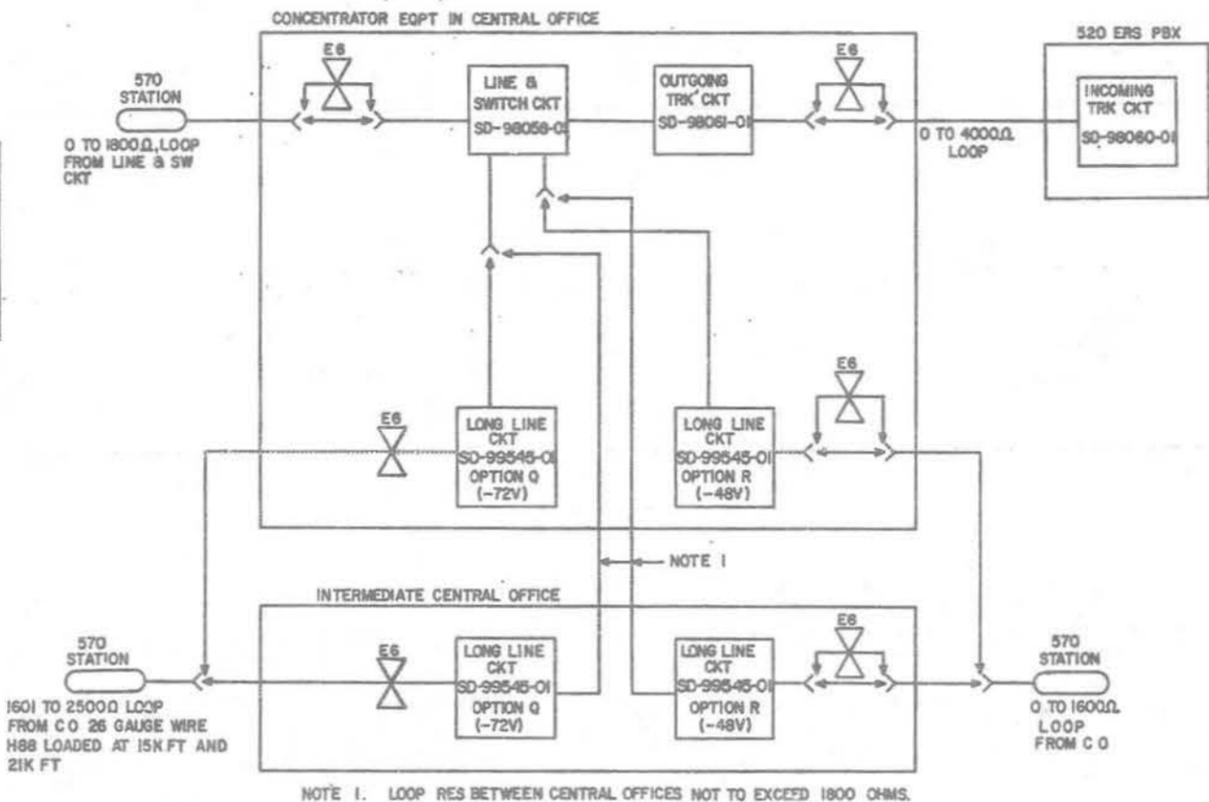
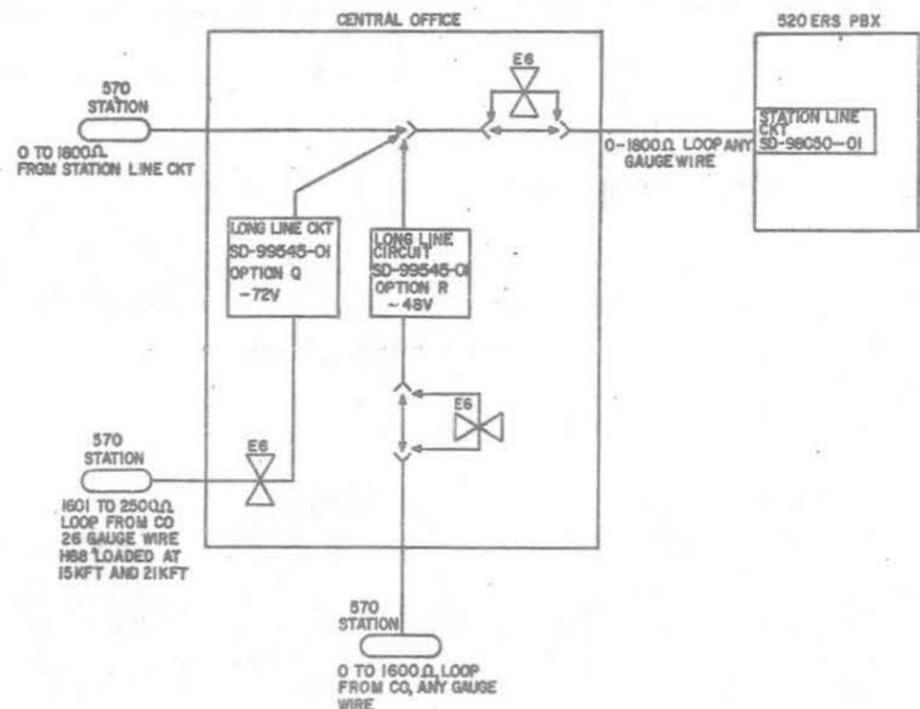
SD-99545-01-1  
4 SHEETS

BELL TELEPHONE LABORATORIES INCORPORATED 65

303. TYPICAL OUTSIDE PLANT LAYOUT FOR 520C CONCENTRATOR SYSTEM

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. TYPICAL OUTSIDE PLANT LAYOUT FOR 520 DIRECT LINE SYSTEM



NOTE 1. LOOP RES BETWEEN CENTRAL OFFICES NOT TO EXCEED 1800 OHMS.

LOOP RES BETWEEN STATION LINE CKT AT PBX AND STATION SET	LONG LINE CKT		OPTION ON LONG LINE CKT	
	LESS THAN 1800 OHMS	NOT REQD	LESS THAN 1600 OHMS	R
GREATER THAN 1800 OHMS	REQD	BETWEEN CENTRAL OFFICE AND STATION SET	GREATER THAN 1600 OHMS	Q

THE LOOP LOSS BETWEEN THE STATION LINE CKT AT THE PBX AND THE STATION SET SHOULD BE NOT GREATER THAN 12 dB (WITH OR WITHOUT REPEATERS)

WHEN GAIN DEVICES ARE USED IN ANY OF THE FOLLOWING SECTIONS, THE REPEATER IN THAT SECTION SHOULD BE ADJUSTED FOR A LOOP LOSS OF AT LEAST 3 dB.

- A. STATION LINE CKT & STATION SET
- B. STATION LINE CKT & LONG LINE CKT
- C. LONG LINE CKT & STATION SET

LOOP RES BETWEEN LINE & SW CKT IN CO AND STATION SET	LONG LINE CKT		OPTION ON LONG LINE CKT	
	LESS THAN 1800 OHMS	NOT REQD	LESS THAN 1600 OHMS	R
GREATER THAN 1800 OHMS	REQD	LOOP RES BETWEEN CENTRAL OFFICE AND STATION SET	GREATER THAN 1600 OHMS	Q

THE LOOP LOSS BETWEEN THE INCOMING TRUNK CIRCUIT AT THE PBX AND THE STATION SET SHOULD BE NOT GREATER THAN 12dB (WITH OR WITHOUT REPEATERS)

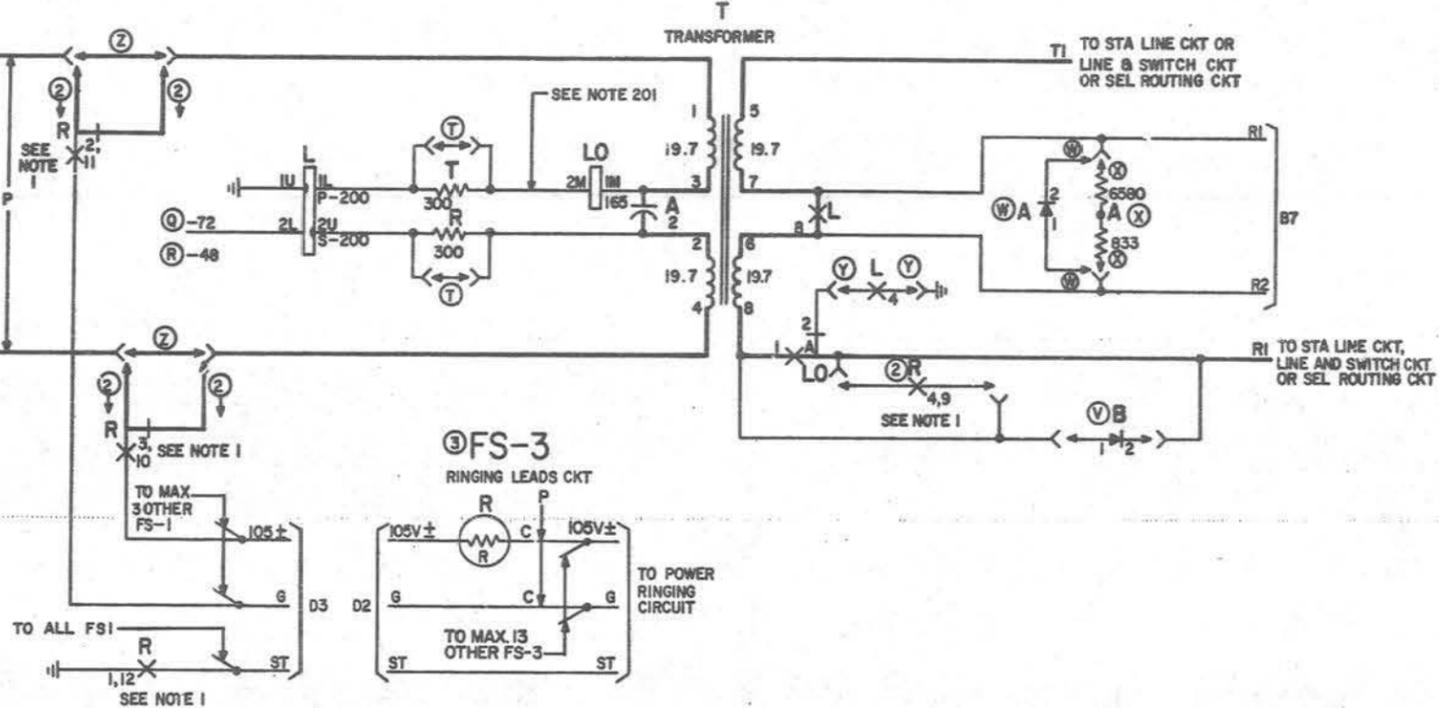
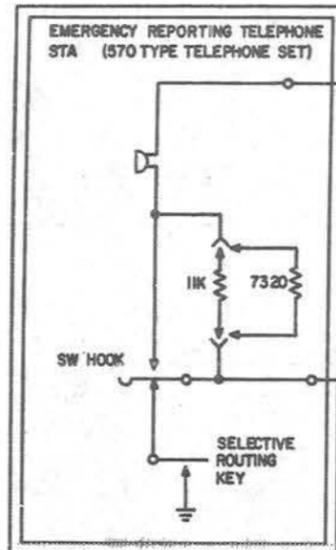
WHEN GAIN DEVICES ARE USED IN ANY OF THE FOLLOWING SECTIONS, THE REPEATER IN THAT SECTION SHOULD BE ADJUSTED FOR A LOOP LOSS OF AT LEAST 3 dB.

- A. INCOMING TRK CKT & OUTGOING TRK CKT
- B. LONG LINE CKT & STATION SET
- C. LINE & SWITCH CKT & STATION SET

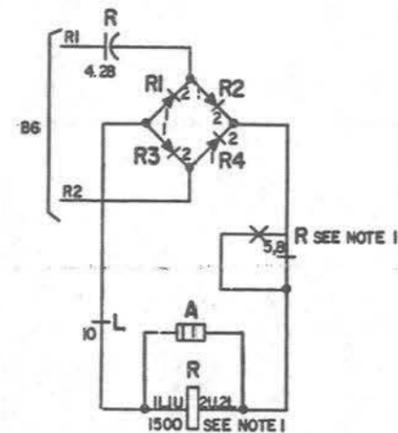
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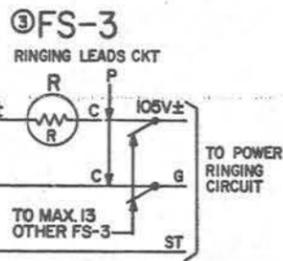
EMERGENCY REPORTING SYSTEM  
LONG LINE CIRCUIT (2)  
SD-99545-01-2  
BELL TELEPHONE LABORATORIES



②FS-2 RINGING RELAY CIRCUIT



NOTES:  
 1. CONTACTS 1 THRU 5 WITH COIL 1L AND 2L APPLY TO FIRST CIRCUIT ON PLATE.  
 CONTACTS 8 THRU 12 WITH COIL 1U AND 2U APPLY TO SECOND CIRCUIT ON PLATE.



APP FIG. 1

DESIG	L				
CODE	AJ26				
OPTION					
12					
11					
10	B	3C7			
9					
8	M	3B4			
7					
6	BM				
5					
4	M	3B5			
3					
2					
1					
COIL		3B2			

DESIG	LOC	CODE
⊗ A	3B5	19WG
R	3B3	18BU
T	3B3	18BU

DESIG	LOC	CODE
A	3B4	439A

DESIG	LOC	CODE
T	3A4	2563W

DESIG	LOC	CODE
Ⓜ A	3B5	446A
Ⓥ B	3C6	400E

APP FIG. 2

DESIG	R	R
CODE	AK47	
OPTION		
12		
11		
10		
9		
8		
7		
6		
5	EMB	3B8
4	EMB	3C5
3	EMB	3C2
2	EMB	3B2
1	M	3D2
COIL		3C8

DESIG	LOC	CODE
R	3A7	437A

APP FIG. 3

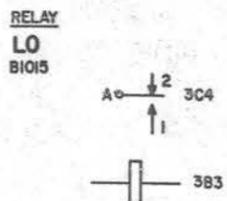
DESIG	LOC	CODE
R1	3B8	446F
R2	3B8	446F
R3	3B8	446F
R4	3B8	446F

DESIG	LOC	CODE
A	3C8	185A

DESIG	LOC	CODE
R	3C3	13C (RES)



SD-99545-01-3

