

SHEET INDEX (INITIATED ON ISSUE 16D)

FIG.	CONTENTS	SHEET NO.	ISSUE NO.																																SHEET NO.														
			16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47		48	49	50	51	52	53	54	55	56	57	58	59	60	61
	SHEET INDEX SUPPORTING INFORMATION	-A	16	17	18	19	20	21	22																													-A											
	CIRCUIT NOTES EQUIPMENT NOTES INFORMATION NOTES FIGURES AND OPTION TABLES WORKING LIMITS	-011	16	17	18	19	20	21	22																													-011											
1	INCPY TRK FOR CONN TERM. OR TOLL TRANS AND TOLL INT SEL LEV	-012	16	16	18	19	20	21	22																													-012											
2	INCPY TRK FOR LOCAL OR TOLL PREC SEL LEV OR TRK FOR																																																
3	INCPY TRK FOR INTERTOLL SEL LEV																																																
4	INCPY TRK FOR TOLL TRANS OR TOLL INT SEL LEV IN 36CA OFF. ONLY																																																
5	ANN. EQUIP	-013	16	17	18	19	20	21	21																													-013											
6	INCPY TRK FOR TERM. PER LINE CONN TERM.																																																
7	INCPY TRK FOR CONN TO CONN THRU SHELF JK OR AUX TRK CKT																																																
8	CONN CKT																																																
9	CONN CKT																																																
10	CONN CKT																																																
11	CONN CKT																																																
	CIRCUIT REQUIREMENT TABLES	-014	16	17	17	17	17	17	17																													-014											
CAD.1	FOR FIG. 1 & A	-015	16	16	18	19	20	21	22																													-015											
CAD.2	FOR FIG. 2																																																
CAD.3	FOR FIG. 3																																																
CAD.4	FOR FIG. 1 OR 6																																																
CAD.5	FOR FIG. 1,2,3 OR 4 & A OR B																																																
CAD.6	FOR FIG. 5																																																
CAD.7	FOR FIG. 4	-016	16	17	18	19	20	20	20																													-016											
CAD.8	FOR FIG. 1 & B																																																
CAD.9	FOR FIG. 6																																																
CAD.10	FOR FIG. 1 OR 6																																																
CAD.11	FOR FIG. 7																																																
CAD.12																																																	
CAD.13																																																	
CAD.14	FOR FIG. 1 & A	-017	16	16	18	19	20	20	20																													-017											
CAD.15	FOR FIG. 6 & A																																																
CAD.16	FOR FIG. 8																																																
CAD.17	FOR FIG. 7																																																
CAD.18	FOR FIG. 1 & A																																																
CAD.19	FOR FIG. 6																																																
CAD.20	FOR FIG. 9																																																
CAD.21	FOR FIG. 7																																																
CAD.22	FOR FIG. 10																																																
CAD.23	FOR FIG. 11																																																

SUPPORTING INFORMATION

CATEGORY	NO.
EQUIPMENT DRAWINGS	SD-35014-1 J3301640-1 H400-107
KEYSHEET INFO	SXS-NO 1 SD-31359-01 SXS-350A SD-31364-01 SXS-355A SD-31780-01 SXS-356A SD-32149-01 SXS-35E97 SD-32325-01

FIG.	CO. ISSUE	DATE	BY	CO. ISSUE	DATE	BY
1	1	20	20	10	10	
68	APP 11	5A	5A	88	APP 11	
70	50	50	APP 12	90	60	
100	APP 10	110	APP 12	120	APP 10	
130	APP 10	140	APP 12	150	APP 10	
155	CO. ISSUE	DATE <td>ISSUED</td> <td>BY</td> <td>DATE <td>ISSUED</td> </td>	ISSUED	BY	DATE <td>ISSUED</td>	ISSUED
160	70	3-9-62		FJD	MKD	
170	70	APP ID 5-13-63		JPD	NPS	
180	70	APP 2D	6-8-71	ROZ	OGK	
190	70	APP 306-23-72		PJS	LCB	
200	70	APP 4B	5-3-78	GK	CFB	
210	70	APP 8B	12-20-78	CFH	RWH	
220	88	APP ID	5/6/81	JAP	RWH	

SHEET INDEX NOTES

- WHEN CHANGES ARE MADE IN THIS DRAWING, ONLY THOSE SHEETS AFFECTED WILL BE REISSUED.
- 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.
- THE ISSUE NUMBER ASSIGNED TO A CHANGED OR NEW SHEET WILL BE THE SAME ISSUE NUMBER AS THAT OF THE SHEET INDEX.
- SHEETS THAT ARE NOT CHANGED WILL RETAIN THEIR EXISTING ISSUE NUMBER.
- THE LAST ISSUE NUMBER OF THE SHEET INDEX IS RECOGNIZED AS THE LATEST ISSUE NUMBER OF THE DRAWING AS A WHOLE.

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

ISSUE
22

STEP BY STEP SYSTEMS 1099
NO. 1, 35CA, 355A, 356A, 360A, 35-E-97
AND NORTH ELECTRIC CO. CX OFFICES
INTERCEPTING TRUNK CIRCUIT

FOR INTERCEPTING CALLS FROM
CONNECTOR TERMINALS
AND FROM SELECTOR LEVELS
FOR USE WITH AN ANNOUNCEMENT MACHINE

(M INCPY TPL CONN) (M INCPY CONN & T SEL)
(M INCPY T SEL) (M INCPY SEL) (M INCPY IT SEL)

BELL TELEPHONE LABORATORIES INCORPORATED 6S

AT&TC STANDARD
A 2 M ONLY FOR 350A, 356A
360A AND 35-E-97

SD-32202-01-A
3 SHEETS

1-32202-01-A

CIRCUIT NOTES:

DESIG	FUSE AMP	POTENTIAL	ONE PER
A	1-1/3	-48V SIG	MAX. 20 FIG. 1,A
A	1-1/3	-48V SIG	MAX. 10 FIG. 1,B
B	1-1/3	-48V TALK	MAX. 8 FIG. 2
C	1-1/3	-48V TALK	MAX. 8 FIG. 3
D	1-1/3	-48V SIG	MAX. 9 FIG. 4
E	1-1/3	-48V SIG	MAX. 6 FIG. 6
F	1-1/3	-48V SIG	OFFICE FIG. 7

BATTERY SYMBOL	VOLTAGE RANGE
-48	45-52V

FEATURE OR OPTION		FIG.	APP OR WRG	QUANTITY
INCPTRK FROM	NORTH ELEC CO TYPE CX OR CONN TERM. OTHER THAN FROM TPL CONN AND AUTO. DISC. ON CALLING PARTY HOLDS IS	1,A	S, T, Z	ONE PER TRK
	TOLL TRANS OR TOLL INT SEL LEV		T	
	REQUIRED			
INCPTRK FROM LOCAL OR PRECEDING SEL LEVELS OR TRK FINDERS IN NO. 1 AMA OFFICE CONN TO CG AMA TRUNKS OR TO RCC/PBX AUX TRK CKT	2		ONE PER TRK	
INCPTRK FROM IN-TERTOLL SEL LEVELS	3	W, V	ONE PER TRK	
INCPTRK FOR TPL CONN CONN TO BANK MULTIPLE OR INCPTRK CKT FROM MULTI-PARTY TPL CONN MULTIPLE AND AUTO. DISC. ON CALLING PARTY HOLDS IS	6	REQUIRED	M	ONE PER TRK
		NOT REQUIRED		
WHERE TRAFFIC REGISTER IS REQD		N	ONE PER TRK	
INCPTRK FROM 200 PT CONN SHELF JACKS OR AUX TRK CKT	7		ONE PER ANN CKT	
CONN CKT	VOICE ALARM & CONTROL CKT (WITH 7A ANN MACHINE)	NOT REQD	9	ONE PER ANN CKT
		REQD	10	
	INTERFACE AND ALARM CKT FOR 13A ANN SYS	NOT REQD	11	ONE PER TRK
		REQD	K	
AUTOMATED LOOP TESTING IS EQUIPPED IN OFFICE (TPS CONNECTOR TERMINAL ONLY)		G		

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

CIRCUIT NOTES: (CONT)

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	MD
1				T	X	U
1						FIG. 4
7D	FIG. A OR B	FIG. A				FIG. B
7D						FIG. 6
10D						FIG. 5
16D	S	NONE	102	S		
16D	M & N OR Y	Y	102	M, N		Y
18D				221A		145A
18D						FIG. 8
18D						FIG. 9
20B			102			FIG. 11
21B	G	NONE	102	G		

105. (A&M ONLY)

FEATURE OR OPTION		FIG.	APP OR WRG	QUANTITY
INCPTRK FROM	LOCAL & TOLL PRECEDING SEL LEVELS IN 35-E-97 OFFICES	2	X	ONE PER TRK
	TOLL TRANS OR TOLL INT SEL LEVELS IN 360A OFFICES			ONE PER TRK
	TOLL TRANS OR TOLL INT SEL LEVELS IN 35-E-97 OFFICES		1, B	ONE PER TRK
	200 PT CONN SHELF JACKS OR AUX TRK CKT IN 35E97 OFFICES	7		ONE PER ANN CKT

WORKING LIMITS

MAX EXT CKT LOOP 1500 OHMS, FIG. 2
 MIN INSULATION RES 15,000 OHMS

EQUIPMENT NOTES:

201. THE KS-678C CONNECTING CLIPS FOR FIG. 5 SHALL BE INSULATED BY COVERING EACH WITH A SUITABLE LENGTH OF NO. 0 BLACK NON RIGID POLYVINYL TUBING PER ASTM DESIG D922. THEY MAY BE ATTACHED TO THE CORD TIPS OF THE RECORDING TEL SET CORD WITHOUT ALTERING THE POSITION OF THE TUBING.
202. THE POWER CORD OF THE 2A TELEPHONE ANSWERING SET SHALL BE PLUGGED INTO A POWER OUTLET SEPARATELY FUSED TO 115V 60 CYCLE AC SUPPLY AT THE POWER SERVICE CABINET, AND WHICH IS NOT UNDER CONTROL OF A MAINTENANCE CUT-OFF SWITCH.
203. Y INSTALLER WIRING IS ADDED TO CAD. 1 ON ISSUE 7D, AS ALSO ARE CADS. 8, 9 AND 10. Y INSTALLER WIRING IN CADS 1 AND 9 TO CAD. 10 SHALL BE FURNISHED FOR ALL UNITS IN ORDER TO PROVIDE FOR PEG COUNT REGISTRATION ON ANY TRUNK AS REQUIRED.
204. WHEN THIS UNIT IS CONNECTED TO INTERCEPTING TRUNK CIRCUIT (SD-31995-01) IT SHALL BE WIRED DIRECTLY TO THE UNIT TERMINAL STRIP FOR FIGURES 3, 6 AND 8.
205. THE TERMINAL STRIP ON ANNOUNCEMENT SET EQUIPMENT ASSEMBLY IN CADS. 16 AND 17, ADDED ON ISSUE 15D, REFLECT A REVISION IN THE INITIAL PRODUCTION OF EQUIPMENT PER ED-95034-() WHICH PROVIDES A SHOP WIRED UNIT WITH THE UNIT TERMINAL STRIP FOR THE WIRING FOR FIG. 8. THE UNIT TERMINAL STRIP IS ALSO UTILIZED FOR WIRING LEADS TO THE (SL) RELAY OF FIG. 7 MOUNTED ON THIS UNIT, EXCEPT THAT THIS RELAY IS FURNISHED AS A LOOSE PART PER J33016AD AND MOUNTED AND WIRED TO THE UNIT TERMINAL STRIP BY THE INSTALLER. OTHER CONNECTIONS AND INFORMATION AS SPECIFIED ON THE ANNOUNCEMENT SET EQUIPMENT ASSEMBLY DRAWING ARE ALSO SHOWN TO PROVIDE THE NECESSARY COMPLETE PICTURE OF CONNECTIONS. CAD. 11 FOR FIG. 7 IS DATED MFR DISC.
206. ON ISSUE 16D CAD. 1 AND 9 ARE REVISED TO INCLUDE CONNECTIONS TO THE SW TBL ALM CKT AND MISC. ALM CKT. ALSO CADS. 2 AND 16 ARE REVISED TO INCLUDE CONNECTIONS TO THE TRK FOR CKT AND OGT TRK CKTS, RESPECTIVELY. CADS. 18 AND 19 WERE ADDED.
207. ON ISSUE 16D "N" INSTALLER WIRING WAS ADDED TO CADS 1 & 9. "N" INSTALLER WIRING IN CADS 1 AND 9 TO CAD 10 SHALL BE FURNISHED FOR ALL UNITS IN ORDER TO PROVIDE FOR PEG COUNT REGISTRATION ON ANY TRUNK AS REQUIRED.
208. ON ISSUE 18D CADS 20 & 21 WERE ADDED. THESE CADS REFLECT A REVISION IN THE INITIAL PRODUCTION OF THE ANNOUNCEMENT SET & AMPLIFIER EQUIPMENT NOW SHOWN ON DRAWING H400-107 REPLACING ED 95034-() THE NEW UNIT PER H400-107 IS A SHOP WIRED UNIT WITH KS-14160 CONNECTOR THAT WILL ACCEPT CONNECTIONS FOR SD-32202-01. THE (SL) RELAY PER SD-32202-01, FIG. 7 IS FURNISHED AND SHIPPED LOOSE AS A PART OF J33016AD MOUNTED ON A SEPARATE MOUNTING PLATE NEAR THE ANNOUNCEMENT SET.
209. WHEN CONNECTION TO RCC/PBX AUX TRK CKT IS REQUIRED CROSS CONNECT T&R LEADS ONLY.

INFORMATION NOTES:

301. UNLESS OTHERWISE SPECIFIED: RESISTANCE VALUES ARE IN OHMS. CAPACITANCE VALUES ARE IN MICROFARADS. VALUE PRECEDED BY THE SYMBOL + (PLUS) OR - (MINUS) ARE IN VOLTS.
302. CONNECT A 145C 68.1 OHM RESISTOR ACROSS OUTPUT TERMINALS OF ANNOUNCEMENT MACHINE.
303. REMOVE EXISTING STRAPS FROM TS 4 OF TEL ANN. SET.
304. TRANSFER LEAD TO (C4) CAPACITOR FROM PCHG "TAS" TO PCHG "COO" ON 152L AMPLIFIER.
305. STRAPPING SHOULD BE ADDED ON A 2A ANN. SET AS SHOWN IN FIG. 5. ON 2A SETS WHERE A BLUE LEAD IS BROUGHT THROUGH TO TOP OF TS 4 AND CONNECTED TO PCHG 12. THE BLUE LEAD SHOULD BE TRANSFERRED TO PCHG 13.
306. ALTHOUGH Z OPTION IS NECESSARY ONLY ON TRUNKS FROM CONN MULT OR FROM NORTH ELECTRIC CO. TYPE CX, IT MAY ALSO BE USED ON TRUNKS FROM TOLL SELECTORS WITHOUT AFFECTING OPERATION.
307. CONNECT A KS-13490, L1 200 OHM RESISTOR BETWEEN TERMINAL 7R OF WAFER J AND TERMINAL 2 OF WAFER F ON (S1) SWITCH OF 2A ANN. SET.
308. IN NORTH ELECTRIC CO TYPE CX OFFICES CONNECTION TO THE S SHALL BE MADE ON JOB BASIS.
309. WHEN A KS-16765, L2 ANNOUNCEMENT SET IS EMPLOYED AS THE ANNOUNCEMENT SOURCE IN CONJUNCTION WITH FIG. 8 OR FIG. 9 AN AUX AMPLIFIER PER KS-16754, L1 (MFR. DISC.) OR L4 IS REQD AND THE T & R LEADS TO THE TRUNKS SHALL BE CONNECTED TO THE T2 & R2 LEADS RESPECTIVELY OF THE AMPLIFIER CKT SD-95231-01.

FIGURES AND OPTIONS ON THIS DWG			
CKT FIG.	LOC	APP OR WIRING	LOC
1	2A2		2A1.
2	2E2	Z	2B1
3	2A7		2D1.
4	2D7	Y	2D2.
5	3A2		3G3
6	3D2	X	2G1
7	3A7	W	2B7
8	3A8	V	2B7
9	3D5		2D1.
10	3D8	U	2E7
11	3E6	T	2D1.
		S	2D1
A	2C1	N	2D1.
B	2C2	R	3F3
		K	3F6
		J	3F6
G	2A0		

DRAWING	160
ISSUE	170
	180

ISSUE 220

INTERCEPTING TRUNK CIRCUIT

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SD-32202-0:1

65

SD-32202-0:1

FIG 1
 INCPT TRK FOR CONN TERM
 OR TOLL TRANS AND TOLL
 INT SEL LEV
 (SEE NOTE 308)

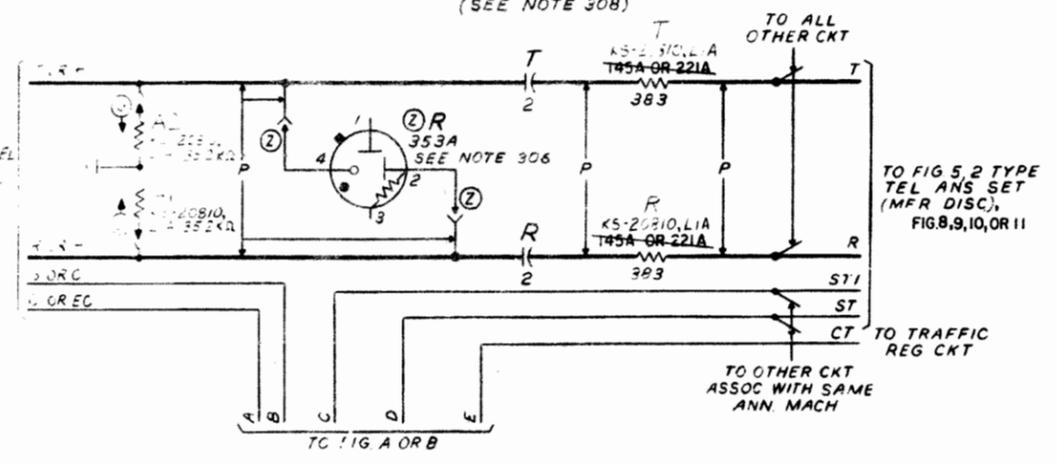


FIG A
 TO FIG 1

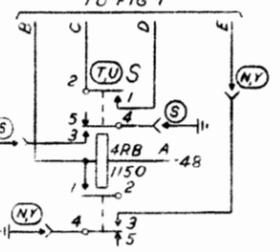
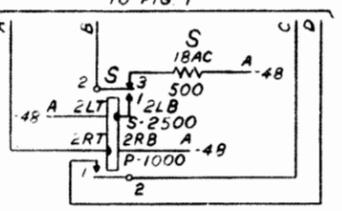
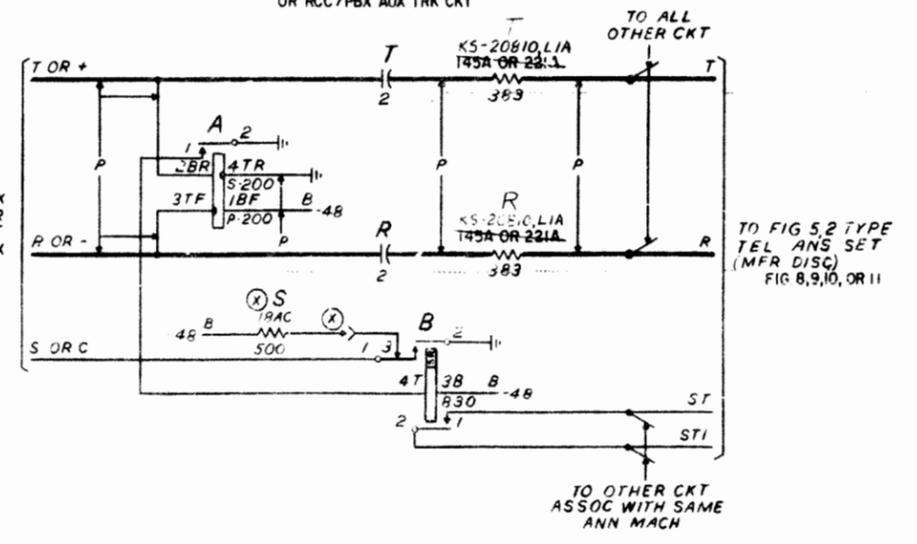


FIG B (A & M ONLY)
 TO FIG 1



TO SW TBL ALM CKT
 OR MISC ALM CKT
 TO ALL OTHER INCPT
 TRK AND TRK ARR TO
 TRP RING WITHOUT
 CHG SERVING SAME
 CONN GR

FIG 2
 INCPT TRK FOR LOCAL OR
 TOLL PREC SEL LEV OR
 TRK FOR
 OR RCC/PBX AUX TRK CKT



TO SEL BANK
 MULT CKT OR
 TRK FOR CKT
 OR RCC/PBX AUX
 TRK CKT

FIG 3
 INCPT TRK FOR
 INTERTOLL SEL LEV

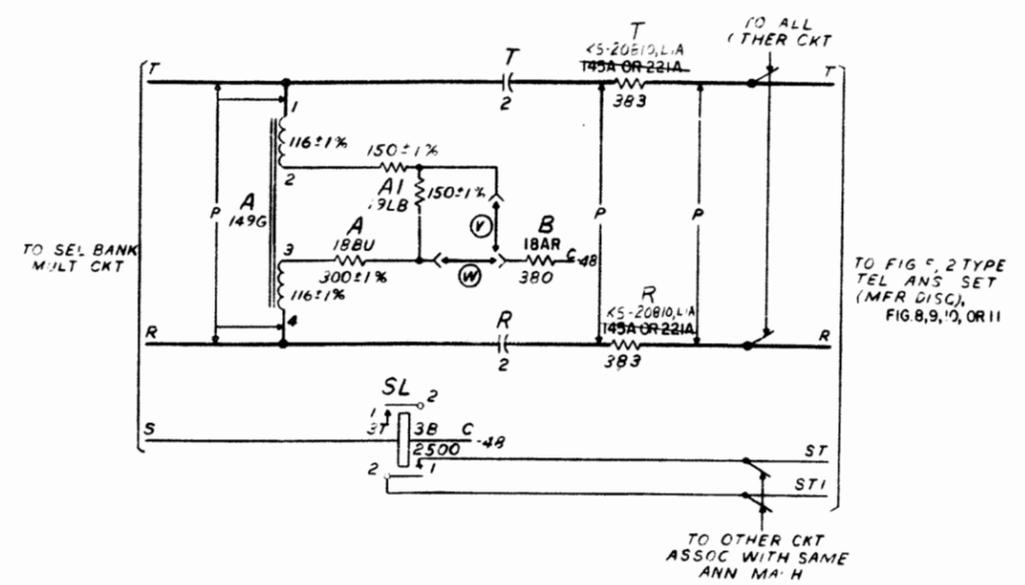
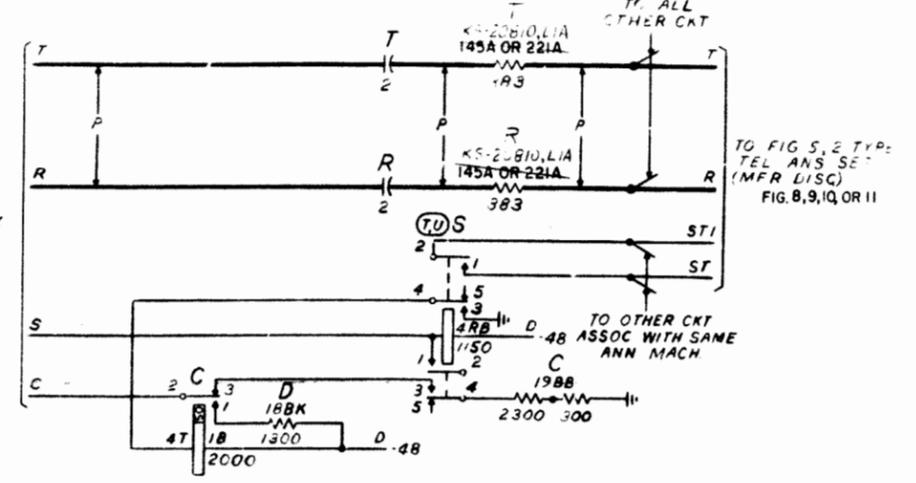


FIG 4 (A & M ONLY)
 INCPT TRK FOR TOLL TRANS
 OR TOLL INT SEL LEV
 IN 360A OFF ONLY



TO SEL BANK

SD-32202-012

ISSUE
 22D

INTERCEPTING TRUNK CIRCUIT (2) SD-32202-012
 BELL TELEPHONE LABORATORIES INCORPORATED 65

FIG. 5 (MFR DISC.)
ANN. EQUIP.

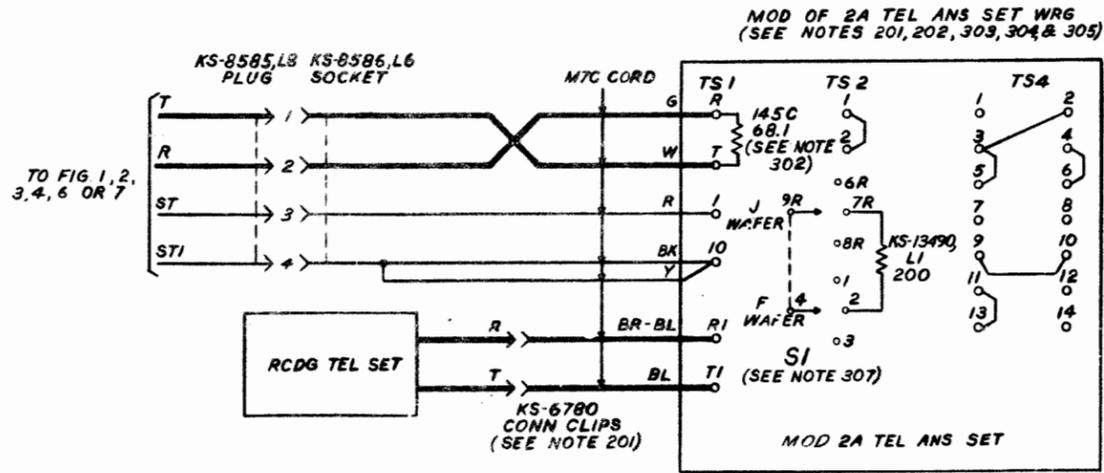


FIG. 7
INCPT TRK FOR CONN
TO CONN THRU SHELF JK
OR AUX TRK CKT

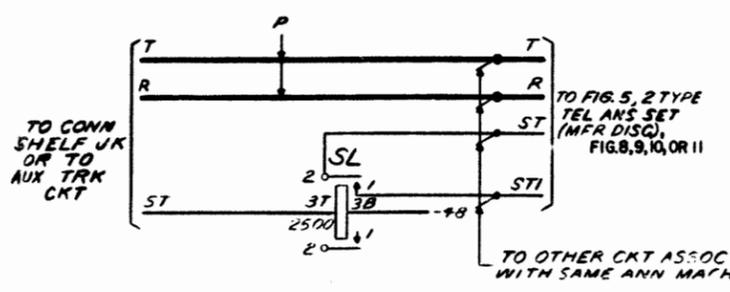


FIG. 8 (A & M ONLY)
CONN CKT
(SEE NOTE 309)

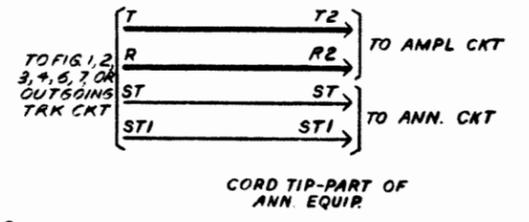


FIG. 6
INCPT TRK FOR TERM.
PER LINE CONN TERM.

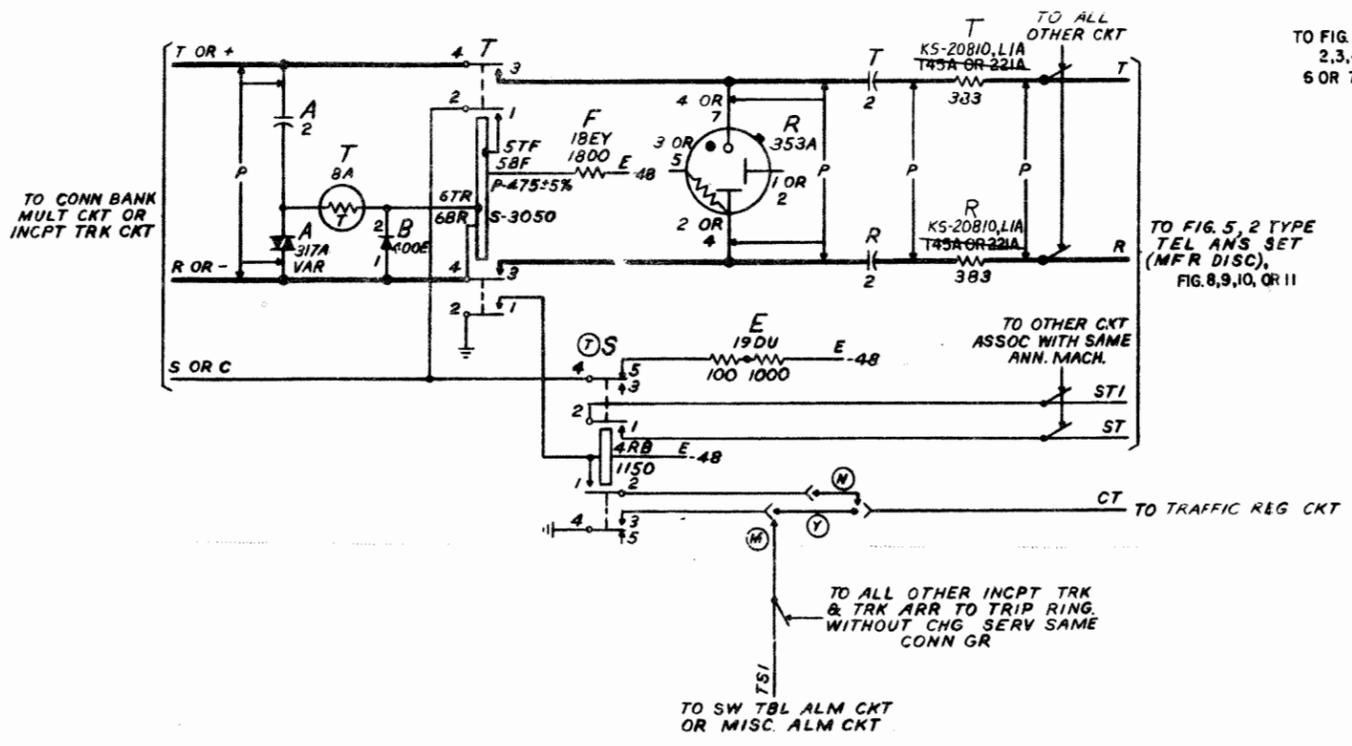


FIG. 9
CONN CKT
SEE NOTE 309

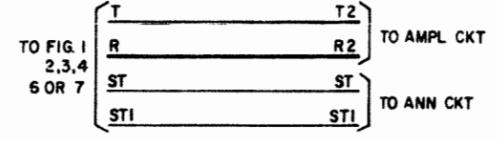


FIG. 10
CONN CKT

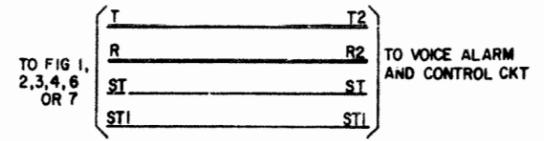
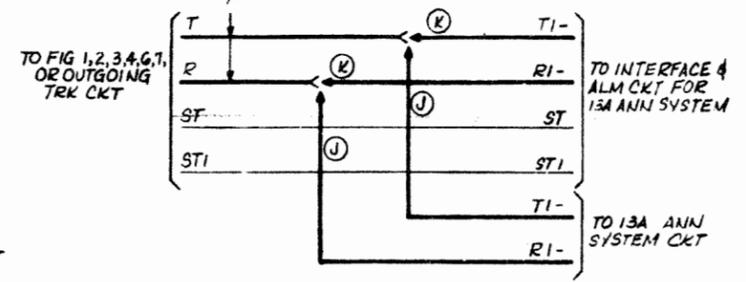


FIG. 11
CONN CKT



SD-32202-013

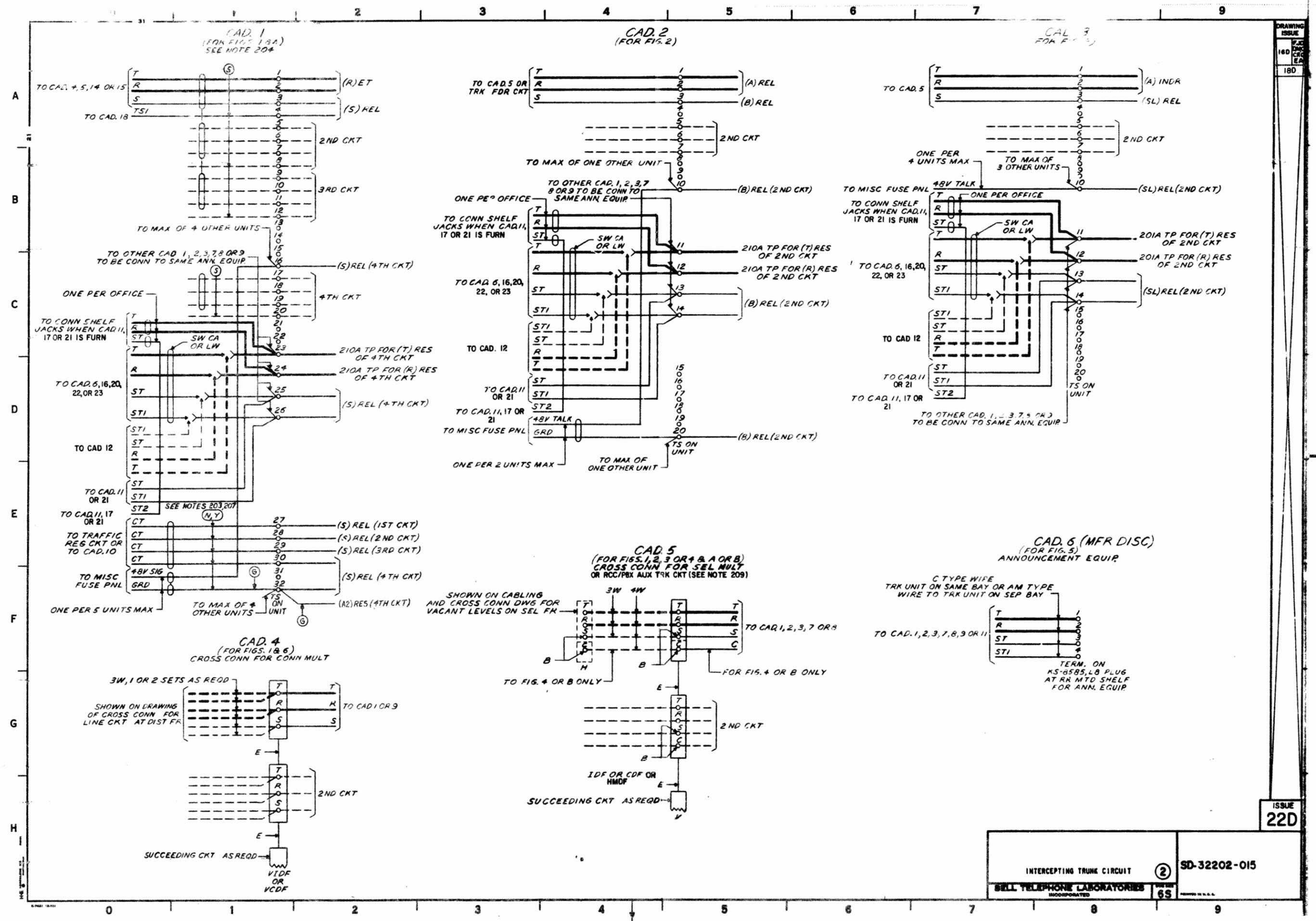
ISSUE
21B

INTERCEPTING TRUNK CIRCUIT

BELL TELEPHONE LABORATORIES INCORPORATED

SD-32202-013

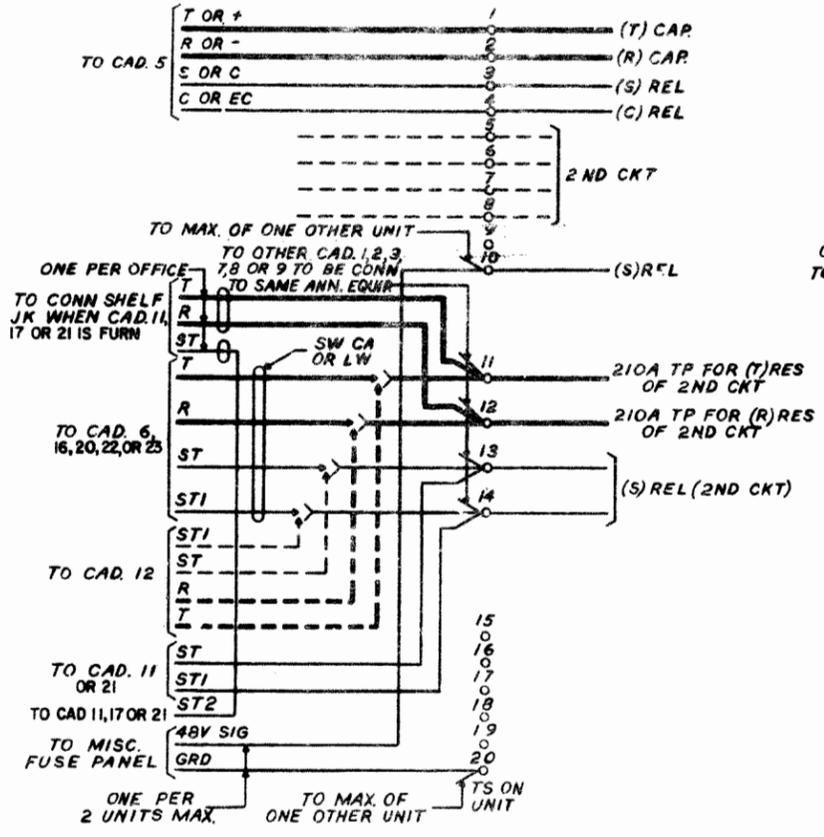
65



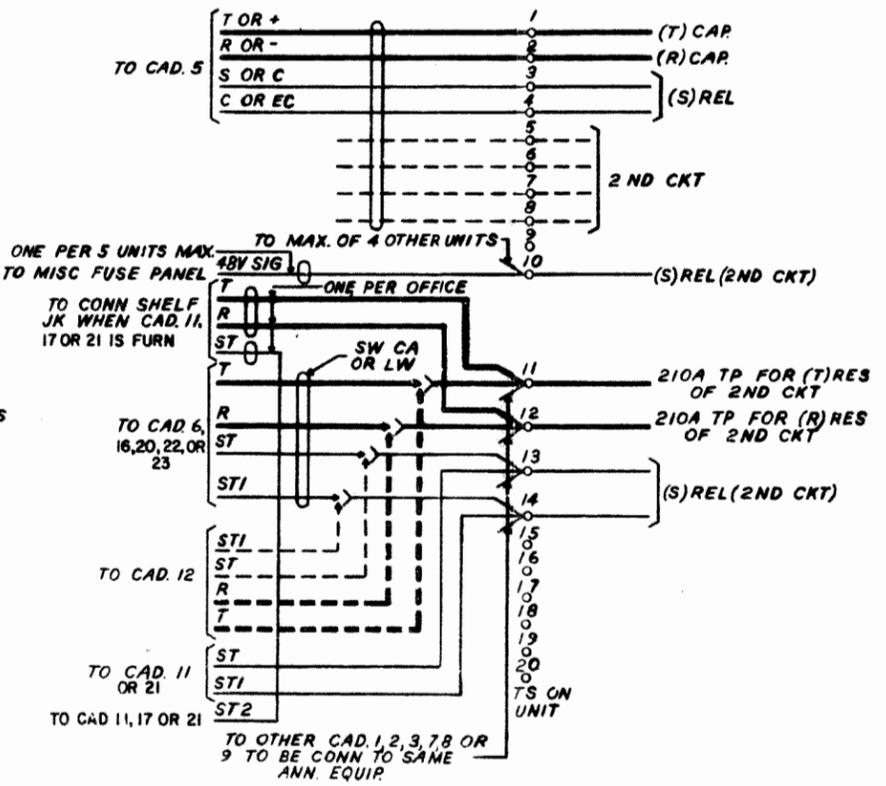
SD-32202-015

INTERCEPTING TRUNK CIRCUIT	②	SD-32202-015
BELL TELEPHONE LABORATORIES INCORPORATED	6S	MADE IN U.S.A.

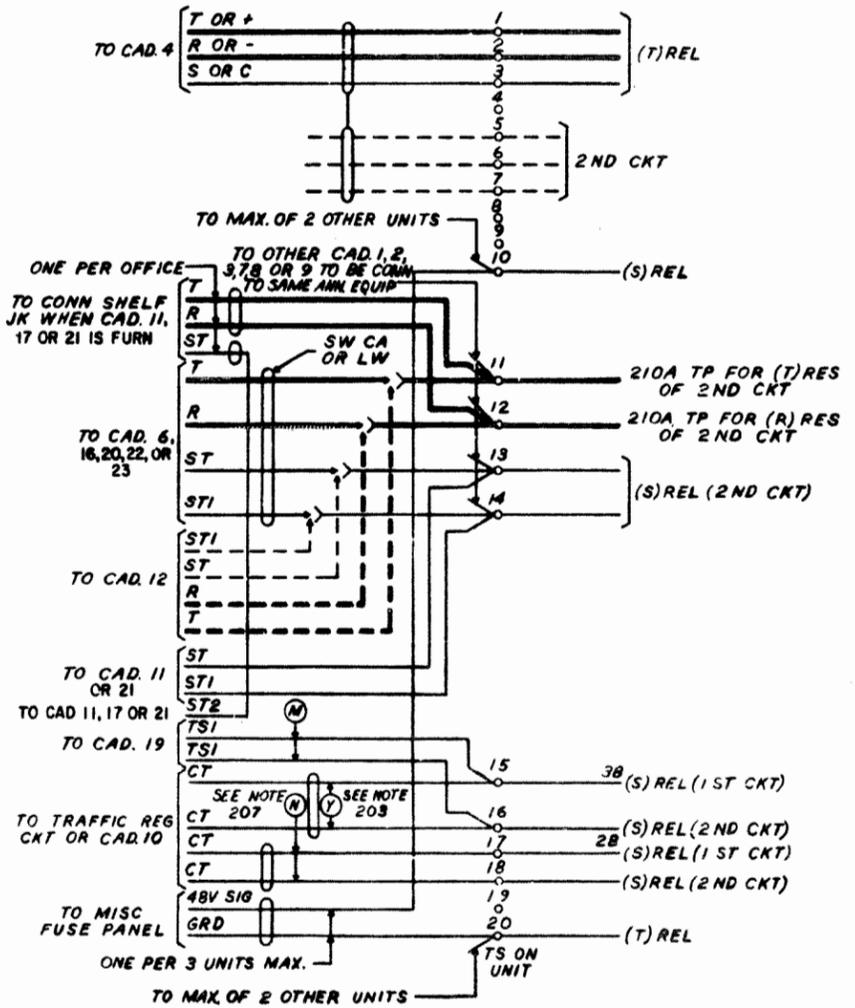
CAD.7 (A & M ONLY)
 (FOR FIG. 4)



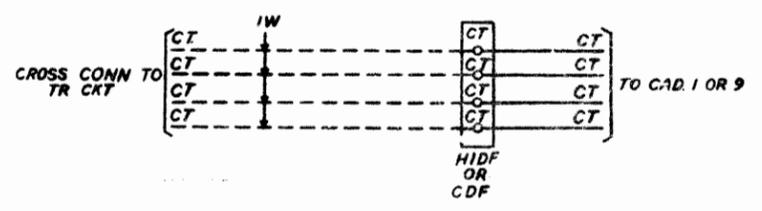
CAD.8 (A & M ONLY)
 (FOR FIG. 1 & 8)



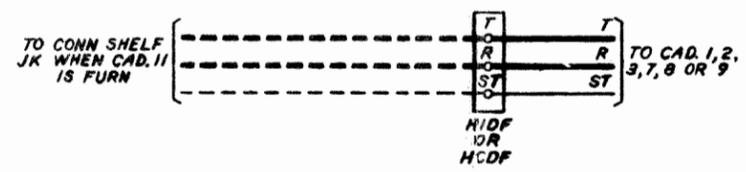
CAD.9
 (FOR FIG. 6)



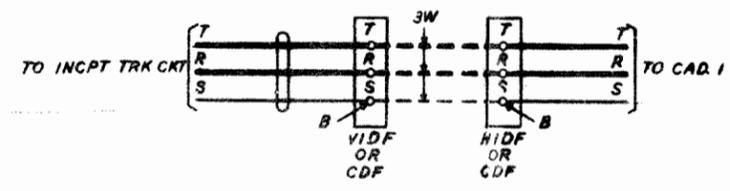
CAD.10
 (FOR FIG. 1 OR 6)
 NO. 1 & 350A



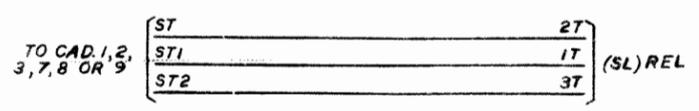
CAD.13 (MFR DISC)



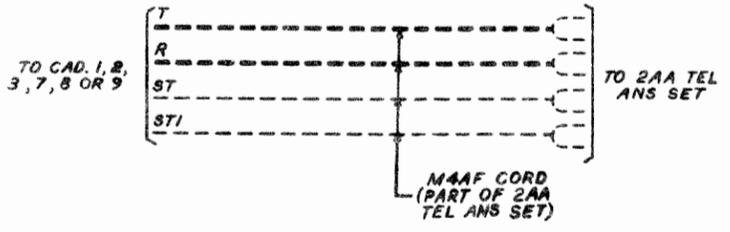
CAD.14 (MFR DISC)
 (FOR FIG. 1 & A)
 SEE NOTE 204



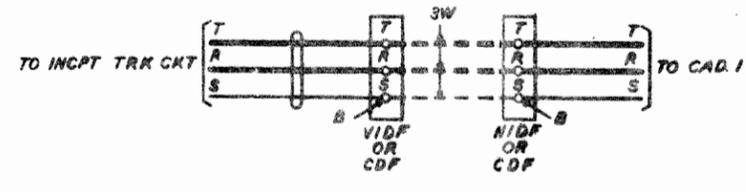
CAD.11 (MFR DISC)
 (FOR FIG. 7)



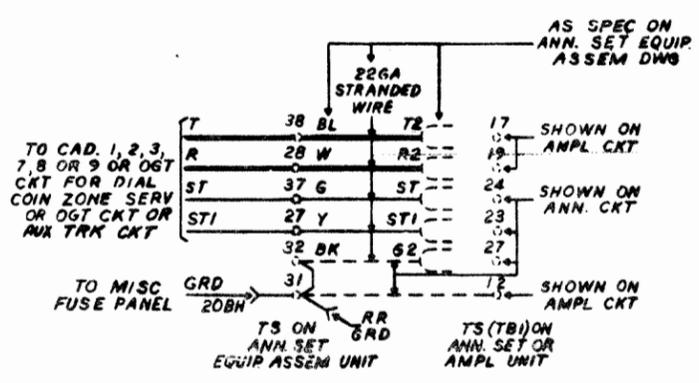
CAD.12 (MFR DISC)



CAD.15
 (FOR FIG. 6 & A)
 SEE NOTE 204



CAD.16 (A & M ONLY)
 (FOR FIG. 8)
 SEE NOTE 205



SD-32202-016

