

SHEET INDEX	
CONTENTS	SHEET NO.
SHEET INDEX	1
SUPPORTING INFORMATION	
OPTION INDEX	
TRANSMISSION TEST REQ	
FIG. 1 COIN TRUNK CRT	
FIG. 2 CLASS OF SERVICE TONE INDICATION	
FIG. 3 CUT OFF KEY FOR "A", "I" & "P" LEADS	
FIG. 4 TRANSFER RELAY FOR "A" OR "I" & "P" LEADS	
FIG. A, TEST JACK	
FIG. B, RELAYS FOR DELAY INTERVAL	
FIG. C	
FIG. D	
FIG. E-TEST JACK OVERTIME CHARGING	
FIG. F-RELAYS FOR DELAY INTERVAL OVERTIME CHARGING	
FIG. G-LOCAL COIN OVERTIME	
CIRCUIT REQ. TABLES	2
FIG. 51-61	3
EQUIPMENT NOTES	
INFORMATION NOTES	
CIRCUIT NOTES	4
BATTERY VARIATIONS	
WORKING LIMITS	

OPTIONS USED	
FIGS.	APP. OR WIRING
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101. CIRCUIT NOTES:

DESIG	AMP	POTENTIAL FUSED	ONE PER
	1 1/3	48V TALK	CKT SEE NOTE 108
	1/2	CC+	CKT
	1/2	CC-	CKT

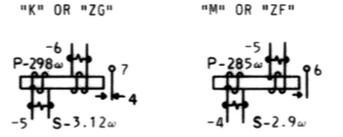
102.

FEATURE OR OPTION		FIGS	APP OR MFR	QUANTITY
WHEN DIAL TONE IS REQ. BEFORE COIN DEPOSIT AND NO AUX COIN TRK IS PROVIDED			Z	
WHEN COIN BOX TRK. RELEASE CKT. IS FURN.			Y,ZA	
WHEN COIN BOX TRK. RELEASE CKT. IS NOT FURN.			X,A	
WHEN NO LONG LINE CKTS. ARE PROVIDED IN THE ASSOCIATED LINE FINDER UNIT OR ROTARY LINE SWITCH			S	
PREPAY COIN TRK.		1		1 PER CKT
DELAYED CHARGING	REQUIRED	NO. 1 OR 350A	B	J
	NOT REQUIRED	NO. 355A	A	H
10 CENT INITIAL CHARGE			E	
NO DELAY			A	
DELAYED CHARGING	REQUIRED	NO. 1 OR 350A	B	J
	NOT REQUIRED	355A, 360A, 35-E97	A	H
CUT OFF KEY FOR "A" "L" & "P" LEADS	TIMED RLS. CKT. PROVIDED & MORE THAN 10 TRKS. IN BAY		ZK	1 PER 20 CKT. MAX IN SAME BAY
	TIMED RLS. CKT. NOT PROVIDED OR LESS THAN 10 TRKS. IN BAY		ZL	
FOR USE WITH COIN LINES TO BE RESTRICTED FROM CAMA TRUNKS		2	ZH	1 PER CKT
WHEN CLASS OF SERVICE TONE INDICATION FROM COIN TRK IS REQ FOR ANI	OFFICES WHERE COIN LINES ARE INDICATED BY 35E97 OFFICES (SEE NOTE 301)	DIRECT GRD 3000Ω GRD	ZH	1 PER CKT
	TYPE B REQD	REQD	ZH, ZI	
TYPE C REQD (SEE NOTE 301)		NOT REQD	ZH, ZI	
NOT REQD			ZH, ZI	
WHEN THIS CKT IS ASSOCIATED WITH A SUBSCRIBERS ROTARY LINE SWITCH EQUIPPED WITH DIAL LONG LINE CKT. SEE NOTE III		AND AN AUX COIN TRK IS PROVIDED	ZW, ZY	
AUX COIN TRK PRECEDING THIS CIRCUIT SEE NOTE III		AND AN AUX COIN TRK IS NOT PROVIDED	T, ZX	1 PER CKT
WHEN ANY OF THE LINES IN THE ASSOCIATED LINE FINDERS UNIT ARE EQUIPPED WITH LONG LINE CKT. SEE NOTE III		AND AN AUX COIN TRK IS PROVIDED	ZW, ZY	
AND AN AUX COIN TRK IS NOT PROVIDED			T, ZX	
LCOT (LOCAL COIN OVERTIME) CHARGING, SEE NOTES 103 & 115		REQUIRED	G YD	1 PER FIG. I
BT RELAY		NOT REQUIRED	YE	
REQUIRED FOR LCOT		TSPS ± 110V	YD	
COIN BAT ± 130V OR ± 120V			YL	
NOT REQUIRED FOR LCOT			YZ	

103.

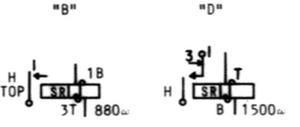
RECORD OF FIGURES, WIRING AND APPARATUS CHANGES						
CHANGED ON ISS	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN	SEE NOTE	USE IN CIRCUIT		
				STD	A&M	MD
8D	V OR W	W		V		W
9D	U, Q, P OR N	U & Q		P, N		U, Q
10D	FIG. A OR B	FIG. A	102	FIG. A, B		
10D			104	K		M
10D			102	H, J		
10D	R OR G	R		G	R	
12B	F	R OR G	105	F		G, R
13D	FIG. C OR D	FIG. C		FIG. D		FIG. C
13D	E	NONE	102	E		
13D	B OR D	D	106	B		D
13D	A OR ZA	A	102	A, ZA		
15D	ZC	ZB	107	ZC		ZB
15D	RELAYS			E888		E626
				B36		B500
				149AR		149CG
				E1446		E589
15D	FIG. E OR F	FIG. A OR B	102	E, F		
15D			104	ZG		ZF
16D			102	FIG. 2		
16D			102	FIG. 3		
16D	ZH OR ZI	NONE		ZH, ZI		
19D	ZM OR ZN	ZM	102	ZM, ZN		
21D			102	FIG. 4		
22D	ZO OR ZP	ZO		ZP		ZO
25D	ZQ OR ZR	ZR	102	ZQ, ZR		
27D						FIG. E, F
27D						ZD, ZE, ZG
30D	ZV OR ZW	ZV	110	ZV, ZW		
31D	ZX OR ZY	ZX	111	ZX, ZY		
32B	ZZ OR YC	YC	112	ZZ		YC
	YA OR YB	YA	113	YB		YA
	YD OR YE	YE	102	YD, YE		YB
33B	YF & YH	ZN OR NONE	102B16	YH		YF
	YG & YJ	ZQ OR NONE	102B16	YJ		YG
35B	YK	NONE	117, 118	YK		
38A	YL OR YM	YE		YL, YM		

104. THE DIFFERENCE BETWEEN THE (P2) RELAYS IS AS FOLLOWS:

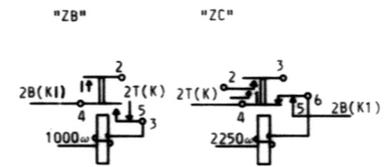


105. WHERE EXISTING CKTS. WITH "R" OR "G" OPTION ARE MODIFIED FOR 10 CENT INITIAL CHARGE COIN SERVICE "R" OR "G" OPTION MUST BE REPLACED BY "F" OPTION.

106. THE DIFFERENCE IN THE "H" OR "N" RELAYS IS AS FOLLOWS:



107. THE DIFFERENCE BETWEEN THE (C) RELAYS IS AS FOLLOWS:



108. FUSE FIG. 3 WITH FIG. 1 OF UNIT ON WHICH FIG. 3 IS LOCATED. WHEN FIG. 3 IS ON SEPARATE EQPT UNIT (FOR MOD. OF EXISTING EQPT.) FUSE FIG. 3 WITH COIN TRUNK NEXT BELOW OR IF NONE IS BELOW, WITH THAT NEXT ABOVE.

109. WHERE "ZT" OPTION IS RETAINED, THE (B) DIODE DOES NOT AFFECT NORMAL CIRCUIT OPERATION. IF THE (B) DIODE BECOMES DEFECTIVE "ZT" OPTION SHOULD BE REPLACED BY "ZU" OPTION.

110. WHEN AN AUXILIARY TRUNK IS PROVIDED FOR COIN SERVICE IMPROVEMENTS OMIT "ZV" AND ADD "ZW" OPTION.

111. REMOVE OPTION ZX AND ADD OPTION ZY FOR USE WHEN 911 EMERGENCY SERVICE AND DIAL TONE FIRST ARRANGEMENTS ARE USED TOGETHER. PRIOR TO ISSUE 31D, OPTIONS ZX AND ZY WERE NOT SHOWN.

112. OPTION ZZ IS PROVIDED FOR FIELD MODIFICATION PURPOSES WHEN OPTION YA & YC WERE ORIGINALLY PROVIDED. OPTION ZZ DISABLES THE FUNCTION OF THE BT RELAY WHICH BLOCKS OPERATION OF THE COIN TRUNK IN CASE OF AN IRREGULAR CONDITION ON THE LINE. THIS OPTION ELIMINATES THE POSSIBILITY OF A FALSE GROUND LOCK-UP. SEE NOTE 113 & 114.

113. MFR DISC PRIOR TO ISSUE 32B, OPTIONS YA & YC WERE ALWAYS REQD. OPTION YB IS PROVIDED TO REMOVE THE BT RELAY ON FUTURE ORDERS OF THIS CIRCUIT. THE BT RELAY BLOCKS OPERATION OF THE COIN TRUNK IN CASE OF AN IRREGULAR CONDITION ON THE LINE. OPTION YB ELIMINATES THE POSSIBILITY OF A LOCK-UP FROM A FALSE GROUND. SEE NOTE 112.

114. PRIOR TO ISSUE 32B, OPTION YC WAS ALWAYS REQUIRED. OPTION ZZ IS PROVIDED FOR FIELD MODIFICATION PURPOSES. (SEE NOTE 112.) THIS MODIFICATION CAN BE APPLIED BY REMOVING THE LEAD FROM TERMINAL 2 OF THE BT RELAY AND CONNECTING THIS LEAD TO TERMINAL 3 OF THE BT RELAY.

- 115. PRIOR TO ISSUE 33B, THE BT RELAY COULD BE USED PER OPTIONS YA OR YC AS A GROUND FRAUD TEST. THIS FUNCTION WAS ELIMINATED BY OPTION ZZ (FIELD MODIFICATION) OR BY OPTION YB (NEW MANUFACTURE). AS OF THIS ISSUE OPTION YB IS RERATED MFR DISC. THE BT COIL IS ALWAYS SPECIFIED, EITHER BY OPTION YA OR YD.
- 116. PRIOR TO ISSUE 33B, YF OPTION WAS PART OF ZN OPTION AND YG OPTION WAS PART OF ZQ OPTION.
- 117. WHEN OPTION YK IS APPLIED, OPTION ZZ OR THE REMOVAL OF THE BT RELAY FUNCTION MUST BE APPLIED. SEE NOTE 112.
- 118. WHEN THE TRUNK IS USED WITH THE SUBSCRIBER LOOP MULTIPLEXER OR SUBSCRIBER CARRIER SYSTEMS, OPTION YK MUST BE APPLIED.



WORKING LIMITS	
PULSING SUPV. AND COIN CONTROL	
MAX. EXT. CKT. LOOP	SEE RANGE CHART
MAX. INS. RES.	20,000Ω
EARTH POTENTIAL LIMITS:	
NEGATIVE LIMITS:	REL(P) MAX. 10V
POSITIVE LIMITS:	
MIN. CONDUCT. LOOP	MAX. E.P.
0Ω	9.5V
105Ω	10.0V
220Ω	10.5V
320Ω	11.0V
420Ω	11.5V
530Ω	12.0V