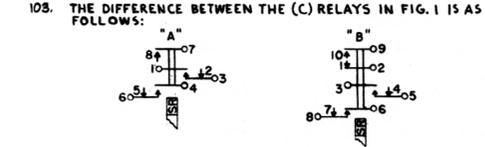


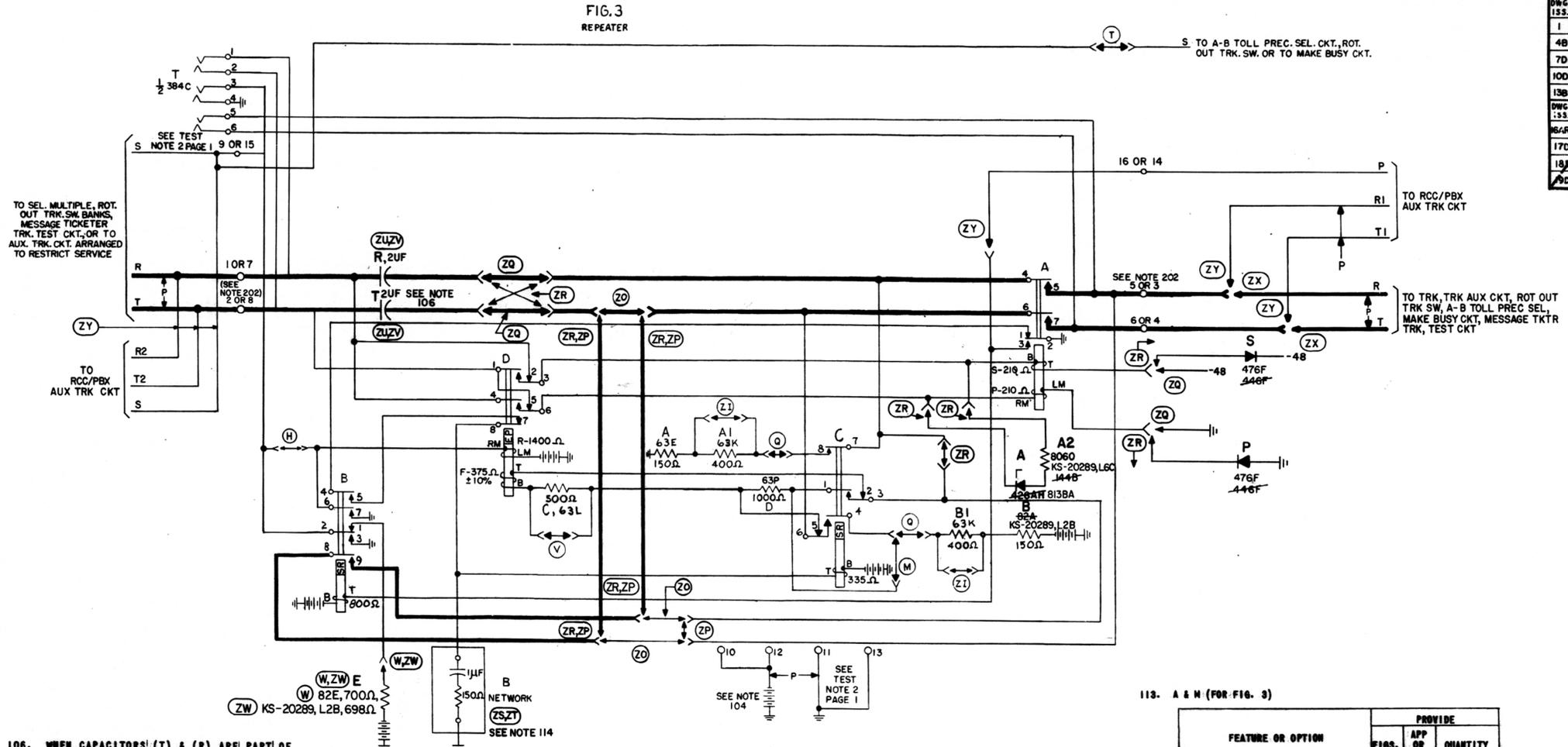
242A PLUG, 344 JACK
 CIRCUIT NOTES:
 101. WHEN USED IN 350A, 355A, 360A, OR 35-E-97 OFFICE PROVIDE ONE 1/3 AMP. FUSE FROM 48V. TALK. BAT. FOR EACH 5 OR LESS REPEATERS. OTHERWISE PROVIDE ONE 3 AMP. FUSE FROM 48V. TALK. BAT. FOR EACH 10 OR LESS REPEATERS

FEATURE OR OPTION	FIGS.	APP. OR WIR.	QUANTITY
TRUNK TO ESS NO. 1, STEP BY STEP OR CROSS BAR TANDEM (EAS) AND THE CONDUCTOR LOOP IS	500Ω TO 2000Ω LESS THAN 500Ω	Q, V, Z1	Q
TRUNK TO NO. 5 CROSSBAR WITH AJ15 OR AJ29 PULSING RELAY AT THE NO. 5 CSBR AND THE TRUNK CONDUCTOR LOOP IS	500Ω TO 1500Ω LESS THAN 500Ω	Q, V	Q
TRUNK TO NO. 5 CSBR WITH AJ36 OR AJ34 PULSING RELAY AT THE NO. 5 CSBR AND THE TRUNK CONDUCTOR LOOP IS	500Ω TO 2000Ω LESS THAN 500Ω	Q, V, Z1	Q
WHEN CONNECTED TO ROT OUT TRK SW. ARRANGED FOR PRESELECTION OR TO MAKE BUSY CIRCUIT			T
RESERVED NO. OR VACANT LEVEL INTERCEPT AND/OR MEASURED RATE SERVICE REQUIRED	YES NO	ZY ZX	



104. BATTERY AND GROUND FOR CKT. 1 SHALL BE OBTAINED FROM PLUG 12 AND 11, AND FOR CKT. 2 FROM PLUG 10 AND 13.

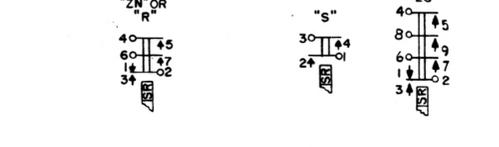
CHANGED ON ISS.	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN.	SEE NOTE	USE IN CIRCUIT
STD.	AGM	M.D.	SPL.	
4 B	Z	NONE	104	Z
5 D	X OR Y	Y		X
7 D	T	NONE	107	T
8 D	W	NONE		W
9 D	R OR S	S		R
9 D	H OR Q	Q	102	H, Q
9 D			102	T
10 D	M	H OR Q	113	M
13 B	J	NONE		J
13 B	H	NONE	113	H
13 B	K OR G	Q, N OR H WITH G		K, G
17 D	ZA, ZD	F	102	ZA, ZD
17 D	ZB	K OR G	110	ZB
17 D	ZC	Q, N, M, OR K	E10	ZC
18 D	ZF OR ZG	ZE	302	ZG, ZF, ZE
18 D	ZJ	ZH	111	ZJ, ZH
18 D	FIG. 1 OR 3	FIG. 1		3
18 D			FIG. 2	
18 D	ZI	NONE		ZI
18 D	ZB OR G	ZB		G, ZB
18 D				B, ZD, ZA
19 D	ZK	ZF OR ZG OR ZE OR R		ZK, R
20 B	ZL, ZM OR ZN	ZL, ZG OR ZH OR ZI OR ZJ OR ZK OR ZF OR ZG OR ZH	112	ZM, ZN, ZL, ZK, ZG, ZF
20 B	ZO OR ZP	ZO		ZP, ZO
22 D				M
24 D	ZR	ZO & ZP OR ZP		ZR, ZO, ZP
24 D	ZS OR ZT	ZS	114	ZT, ZS
24 D	ZU OR ZV	ZU		ZV, ZU
24 D	ZW OR W	NONE	113	ZW, W
26 B	RESISTORS		KS20289 L6C	448
26 B	DIODES		476F	446F
28 B	ZX OR ZY	ZX	102	ZX, ZY
28 B	DIODES		8138A	426AH



106. WHEN CAPACITORS (T) & (R) ARE PART OF A MULTI-UNIT CAPACITOR THEY SHALL BE BALANCED WITHIN 0.11UF.

107. WHEN AN A-B TOLL PREC. SEL. CKT. IS CONNECTED BETWEEN THE OUTGOING END OF THIS CKT. AND THE TRK., ALL THE TRK. CONDUCTORS CONNECTED TO THE BANK LEVELS OF THE SEL. SHALL HAVE THE SAME RES. AND APPROX. THE SAME MAKE UP OF OPEN WIRE AND CABLE.

108. THE DIFFERENCE BETWEEN THE (D) RELAYS IN FIG. 1 IS AS FOLLOWS:



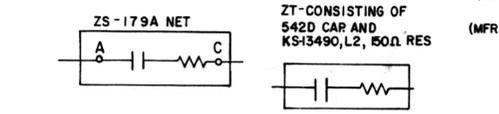
109. "F" OPTION SHOULD ONLY BE APPLIED ON TRUNKS TO STEP BY STEP OFFICES WHERE THE COND. LOOP IS UNDER 500Ω AND "K" OPTION IS PROVIDED.

110. PRIOR TO ISSUE 17-D "ZC" WAS PART OF "Q" AND "ZB" WAS PART OF "K" OPTION.

111. PRIOR TO ISSUE 18-D "ZH" WAS PART OF "Q".

FEATURE OR OPTION	FIGS.	APP. OR WIR.	QUANTITY
REPEATER FOR TRUNK TO CALL INDICATOR OFFICE. SEE NOTE 301.	1, 2	B, E, J, Q, V, Z, ZC, ZH	ONE PER CKT.
REPEATER FOR TRUNK TO NO. 1 CROSSBAR IF CONNECTED TO A SUBSCRIBER SENDER OR TRUNK TO PANEL STEP BY STEP OR NO. 5 CROSSBAR		Q	
TRUNK TO NO. 1 CROSSBAR IF CONNECTED TO A D.P. TER. SENDER OR TRUNK TO CROSSBAR TANDEM		M	
WHEN CONNECTING TO A-B TOLL PRECEDING SEL. (SPECIAL)		T, Q	

112. A & M (FOR FIG. 1).



113. (SEE TABLE AT RIGHT)
 114. THE DIFFERENCE BETWEEN OPTIONS ZS AND ZT IS AS FOLLOWS:

INFORMATION NOTES:
 301. "B" OPTION MAY BE REUSED IN PLACE OF "A" OPTION WHEN CALL INDICATOR OFFICE IS REPLACED.
 302. IF DIFFICULTY IS ENCOUNTERED WITH CIRCUITS MFR. PRIOR TO ISS. 18D, DUE TO INDUCTIVE INTERFERENCE ON THE TRUNK AND THE CIRCUIT IS NOT TO BE CONNECTED TO ROT. OUT. TRK. SW. ARR. FOR PRE SELECTION, USE "ZM" OPTION. IF THIS CIRCUIT IS CONNECTED TO A ROT. OUT TRK. SW. ARR. FOR PRE SELECTION USE "ZM" OPTION.
 303. WHERE DIFFICULTY IS ENCOUNTERED IN APPLYING PERCENT BREAK ADJUSTMENTS TO THE (A) RELAY IN CKTS. MFR. PRIOR TO ISS. 18D AND ARRANGED FOR LOOP PULSING THEY SHOULD BE CONVERTED TO BATTERY-GROUND PULSING USING OPTIONS "ZJ", "Q" AND "G" AND OMITTING "V", "K", "ZB" AND "ZA".

304. THIS TABLE IS SHOWN TO RECORD STANDARD OPTIONS PRIOR TO ISSUE 18D.

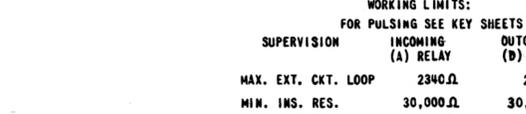
FEATURE OR OPTION	FIGS.	APP. OR WIR.	QUANTITY
REPEATER OTHER THAN CALL INDICATOR SEE NOTE 301.	1	A, J, V, Z, ZB, ZC, ZD	ONE PER CKT.
REPEATER FOR TRUNK TO CALL INDICATOR OFFICE. SEE NOTE 301.	1, 2	B, E, J, Q, V, Z, ZC, ZH	ONE PER CKT.
TRUNK TO NO. 1 CROSSBAR IF CONNECTED TO A SUBSCRIBER SENDER OR TRUNK TO PANEL STEP BY STEP OR NO. 5 CROSSBAR		Q	
TRUNK TO NO. 1 CROSSBAR IF CONNECTED TO A D.P. TER. SENDER OR TRUNK TO CROSSBAR TANDEM		M	
WHEN CONNECTING TO A-B TOLL PRECEDING SEL. (SPECIAL)		T, Q	

305. WHEN CONNECTING TO CARRIER SYSTEMS SEE SD-99421-01.

(MFR DISC) 306. PROVIDE MODIFICATION DRAWING ES-32506-01 WHERE POWER INDUCTION IS PRESENT.

(MFR DISC) 307. ES-32506-01 ADDED TO THIS CIRCUIT BY OPTION ZR.

308. OPTION ZR FIG. 3 IS PROVIDED TO CORRECT PROBLEMS OF SPLIT PULSING AND PULSING FAILURES CAUSED BY INDUCED AC.



WORKING LIMITS:
 FOR PULSING SEE KEY SHEETS
 SUPERVISION INCOMING (A) RELAY 2340Ω
 MAX. EXT. CKT. LOOP 2340Ω
 MIN. INS. RES. 30,000Ω
 OUTGOING (B) RELAY 2560Ω
 30,000Ω

DWG. C.D.	ISSUE	DATE	ISSUED	APPROVED
1	1	2A	2A	30
4B	2A	5B	2A	30
7D	2A	8D	2A	30
10D	2A	11B	2A	30
13B	2A	14D	2A	30
16A	2A	17E	2A	30
17D	2A	18D	2A	30
18D	2A	19D	2A	30
20D	2A	21D	2A	30

DWG. C.D.	ISSUE	DATE	ISSUED	APPROVED
16A	2A	17E	2A	30
17D	2A	18D	2A	30
18D	2A	19D	2A	30
20D	2A	21D	2A	30

113. A & M (FOR FIG. 3)

FEATURE OR OPTION	FIGS.	APP. OR WIR.	QUANTITY
TRUNK TO NO. 1 CROSSBAR IF CONNECTED TO A SUBSCRIBER SENDER OR TRUNK TO PANEL		Z1, V, Q	
TRUNK TO NO. 1 CROSSBAR IF CONNECTED TO A D.P. TER. SENDER		M, V	
TRUNK TO CROSSBAR TANDEM		M, V	
WHEN CONNECTED TO A-B TOLL PRECEDING SEL. (SPECIAL)		T, Q, Z1	
WHEN THIS CKT. IS USED IN A 35-E-97 DIAL OFFICE		W, ZW	

(MFR. DISC.)

FIGS.	APP. OR WIRING
1	Z, ZE
2	X, ZF
3	X, ZG
	W, ZH
	V, ZI
	Y, ZJ
	S, ZK
	R, ZL
	Q, ZM
	ZO
	N, ZP
	M, ZQ
	K, ZR
	J, ZS
	H, ZT
	G, ZU
	F, ZV
	E, ZW
	B, ZY
	A, ZZ
	Z1
	Z2
	Z3
	Z4
	Z5
	Z6
	Z7
	Z8
	Z9
	Z0

TRANSMISSION TEST REQUIREMENTS (1000 CYCLE LOSS BETWEEN 600 Ω LINES)			
(A)	(B)	(C)	MAX. ALLOWABLE CKT. LOSS (db)
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