

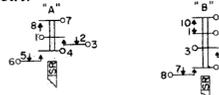
242A PLUG, 344 JACK
CIRCUIT NOTES:

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

102. SEE NOTES 112, 113, 305 AND 308

| 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 | Q, V, ZI | 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 | 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 | Q, V, ZI | Q |
| WHEN CONNECTED TO ROT OUT TRK SWITCH ARRANGED FOR PRESELECTION OR TO MAKE BUSY CIRCUIT | | T | T |
| RESERVED NO. OR VACANT LEVEL INTERCEPT AND/OR MEASURED RATE SERVICE REQUIRED | YES | ZY | |
| | NO | ZX | |

103. THE DIFFERENCE BETWEEN THE (C) RELAYS IN FIG. 1 IS AS FOLLOWS:



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

105. 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. | ADM. | M.D. | SPL. | | |
| 4 B | X | OR Y | Y | | |
| 7 D | T | NONE | 107 | | |
| 8 D | W | NONE | | W | |
| 9 D | R | OR S | S | | |
| 9 D | N | OR Q | Q | | |
| 10 D | M | N | OR Q | M | |
| 13 B | J | NONE | | J | |
| 13 B | H | NONE | 113 | H | |
| 13 B | K | OR G | G | K | |
| 13 B | K | OR G | G | K | |
| 17 D | ZA, ZD | F | 102 | ZA, ZD | |
| 17 D | ZB | K | OR G | 110 | ZB |
| 17 D | ZC | Q, N, M, OR Y | | 110 | ZC |
| 18 D | ZF | OR ZG | ZE | 302 | ZG, ZF, ZE |
| 18 D | ZJ | ZK | ZH | 111 | ZJ, ZH |
| 18 D | FIG. 1 OR 3 | FIG. 1 | | 3 | I |
| 18 D | ZI | NONE | | ZI | |
| 18 D | ZB | OR G | ZB | G | ZB |
| 18 D | | | | B | ZD, ZA |
| 19 D | ZK | ZF | OR ZB | | ZK |
| 20 B | ZL, ZM | ZL, ZM | OR ZN | 112 | ZM, ZN |
| 20 B | ZO | ZP | OR ZQ | ZP | ZO |
| 22 D | | | | M | |
| 24 D | ZR | ZO | OR ZP | ZR | ZO, ZP |
| 24 D | ZS | OR ZT | ZS | 114 | ZS |
| 24 D | ZU | OR ZV | ZU | ZV | ZU |
| 26 B | RESISTORS | NONE | | KS20289, L6C | 44B |
| | | | | 476F | 446F |
| 28 B | ZX | OR ZY | ZX | 102 | ZX |
| | | | | 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 (B) 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 17-0 "ZC" WAS PART OF "Q" AND "ZB" WAS PART OF "K" OPTION.

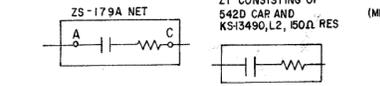
111. PRIOR TO ISSUE 18 D "ZM" WAS PART OF "Q".

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

| FEATURE OR OPTION | FIGS. | APP. OR WIR. | QUANTITY |
|---|--------------------------|--------------|--------------------------|
| REPEATER FOR TRUNK TO CALL INDICATOR OFFICE | CONDC. LOOP 600Ω OR OVER | 1, 2 | S, E, J, Q, V, Z, ZC, ZH |
| IF REPEATER IS CONNECTED TO ROT. OUT TRK SW ARRANGED FOR PRE SELECTION | CONDC. LOOP UNDER 600Ω | 1, 2 | V, Z, ZC, ZH |
| TO OPEN BOTH T & R OF TRUNK WHEN REPEATER IS IDLE SEE NOTE 302 | | | ZM |
| IF DIFFICULTY IS ENCOUNTERED IN APPLYING PERCENTAGE BREAK REQ. TO (A) REL. IN EXISTING CKTS. ARRANGED FOR LOOP PULSING SEE NOTE 303 | | | ZN |
| | | | ZJ, G, Q |

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. 18 D, DUE TO INDUCTIVE INTERFERENCE ON THE TRUNK AND THIS CIRCUIT IS NOT TO BE CONNECTED TO ROT. OUT TRK SW. ARR. FOR PRE SELECTION, USE "7N" OPTION IF THIS CIRCUIT IS CONNECTED TO A ROT. OUT TRK SW. ARR. OR PRE SELECTION USE "2M" OPTION.

303. WHERE DIFFICULTY IS ENCOUNTERED IN APPLYING PERCENT BREAK ADJUSTMENTS TO THE (A) RELAY IN CKTS. MFR. PRIOR TO ISS. 18 D, AND ARRANGED FOR LOOP PULSING THEY SHOULD BE CONVERTED TO BATTERY-GROUND PULSING USING OPTIONS "ZJ", "Q" AND "G" AND OMITTING "V", "X", "ZB" AND "ZA".

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

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

305. WHEN CONNECTING TO CARRIER SYSTEMS SEE 50-99421-01.

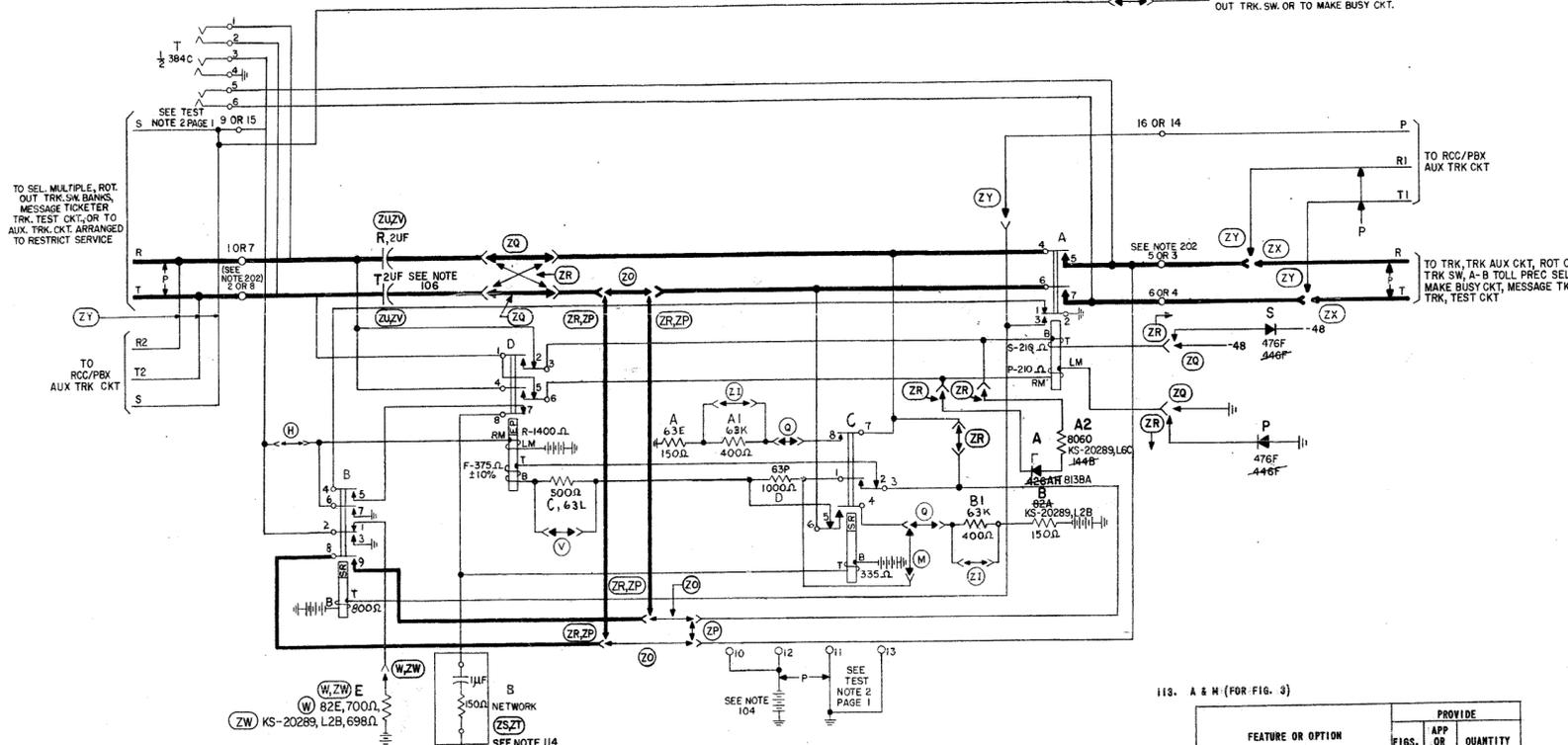
306. PROVIDE MODIFICATION DRAWING ES-32506-01 WHERE POWER INDUCTANCE IS PRESENT.

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 | OUTGOING (B) RELAY |
| MAX. EXT. CKT. LOOP | 2340Ω | 2560Ω |
| MIN. INS. RES. | 30,000Ω | 30,000Ω |

FIG. 3 REPEATER



115. 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 | CONDC. LOOP 500Ω OR OVER | | ZI, V, Q |
| | CONDC. LOOP UNDER 500Ω | | Q |
| TRUNK TO NO. 1 CROSSBAR IF CONNECTED TO A D. P. TER. SENDER | CONDC. LOOP 500Ω OR OVER | | M, V |
| | CONDC. LOOP UNDER 500Ω | | M |
| TRUNK TO CROSSBAR TANDEM | CONDC. LOOP 500Ω OR OVER | | M, Y |
| | CONDC. LOOP UNDER 500Ω | | M |
| WHEN CONNECTED TO A-B TOLL PRECEDING SEL. (SPECIAL) | | | T, ZI |
| WHEN THIS CKT. IS USED IN A 35-E-97 DIAL OFFICE | | | M, ZW |

(MFR. DISC.)

| OPTIONS USED | FIGS. | APP. OR WIRING |
|--------------|--------|----------------|
| 1 | Z, ZE | |
| 2 | Y, ZF | |
| 3 | X, ZG | |
| | W, ZH | |
| | V, ZI | |
| | T, ZJ | |
| | S, ZK | |
| | R, ZL | |
| | Q, ZM | |
| | P, ZN | |
| | O, ZO | |
| | N, ZP | |
| | K, ZR | |
| | J, ZS | |
| | H, ZT | |
| | G, ZU | |
| | F, ZV | |
| | E, ZW | |
| | D, ZX | |
| | C, ZY | |
| | B, ZA | |
| | A, ZB | |
| | ZC, ZD | |

| TRANSMISSION TEST REQUIREMENTS (1000 CYCLE LOSS BETWEEN 600Ω LINES) | | | | |
|---|-------|-----------------------|---------|------------|
| APPARATUS (DESIG.) | CODE | MAX. LOSS (MIN. LOSS) | REMARKS | |
| CAPACITOR (A OR B) | 2UF | 20.9 | 17.3 | "H" OPTION |
| CAPACITOR (C OR D) | 4.2UF | 18.6 | 14.2 | "X" OPTION |
| CAPACITOR (E) | 2UF | 14.0 | 11.5 | |
| RELAY (A) | 84FAF | 0.3 | | |
| RELAY (B) | 84FAF | 0.3 | | |

NOTES:
INDICATES APPARATUS FOR WHICH IND. LOSSES ARE NOT REQ. WHERE THE (T) AND (R) CAPACITORS ARE PART OF A MULTI-UNIT CAPACITOR. THE IND. LOSSES FOR THE (T) AND (R) CAPACITOR SHALL BE WITHIN 0.5 DB OF EACH OTHER.

OUTGOING REPEATER CIRCUIT

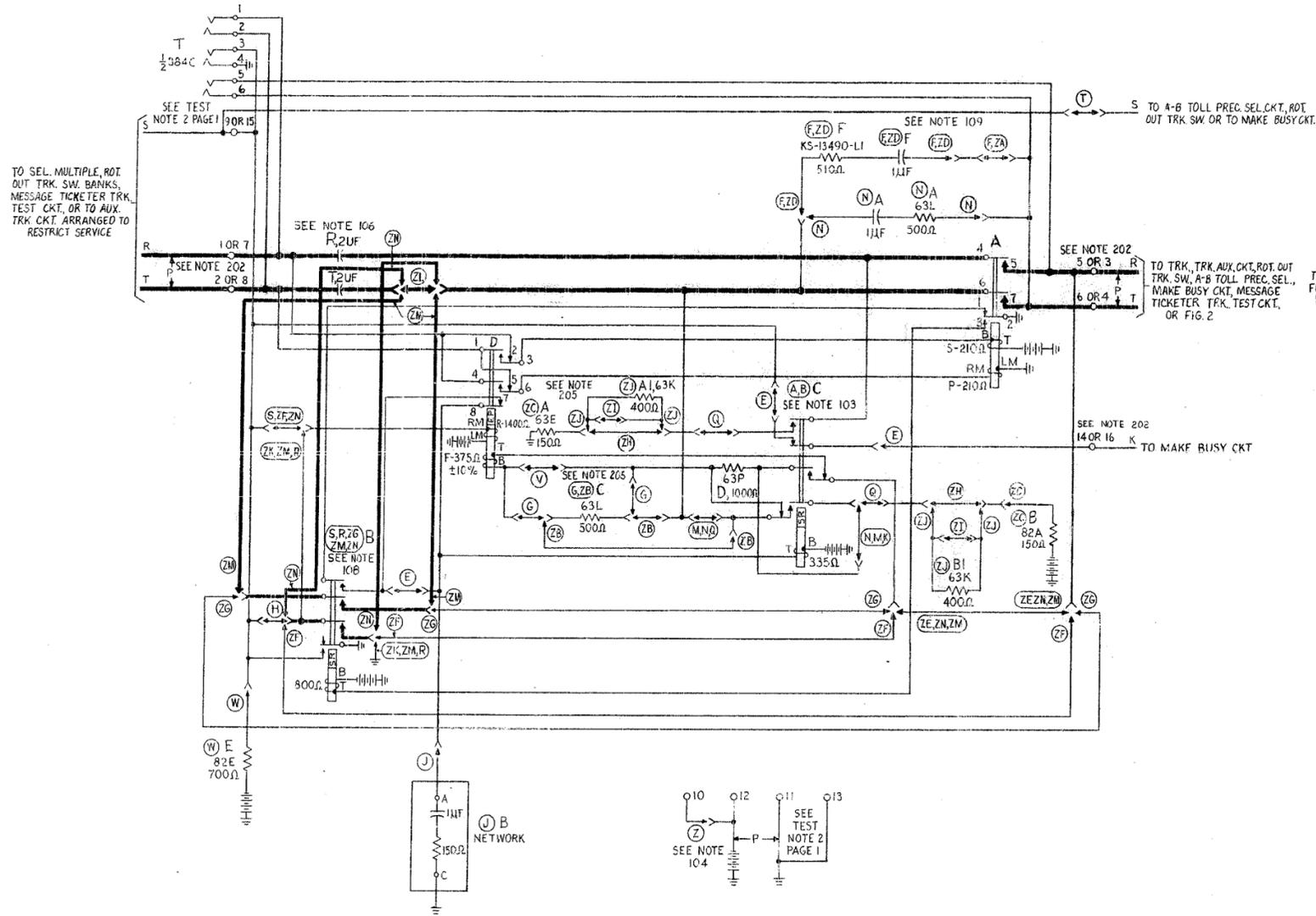
BELL TELEPHONE LABORATORIES INCORPORATED

SD-31779-01-1

ISSUE 28B

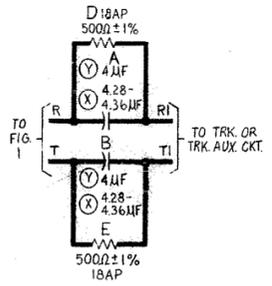
1-10-2112-02

FIG. 1 (A & M ONLY)
 REPEATER
 SEE NOTES 301, 302, 303 AND 304



TO SEL. MULTIPLE, ROT. OUT TRK. SW. BANKS, MESSAGE TICKETER TRK. TEST CKT, OR TO AUX. TRK. CKT. ARRANGED TO RESTRICT SERVICE

FIG. 2 (A & M ONLY)
 SHORT LOOP COMPENSATOR
 SEE NOTES 112 & 304



TO TRK, TRK. AUX. CKT, ROT. OUT TRK. SW., A-B TOLL. PREC. SEL., MAKE BUSY CKT, MESSAGE TICKETER TRK. TEST CKT, OR FIG. 2

TO MAKE BUSY CKT

2D-31779-01

CIRCUIT REQUIREMENTS

| APPARATUS | | | | MECH REQ | | | CIRCUIT PREPARATION | | | | DIRECT CURRENT FLOW REQ | | | | TIME REQ | | REMARKS | | | |
|-----------|-------|--------|-----|----------|---------|-----------|--|--|----------------|-------------|-------------------------|---------------|----------|----------|----------|-------|---------|------------|------------|----------|
| DESG | CODE | OPT | FIG | RESID | BSP FIG | CONT PRES | ARM TRVL | BLOCK OR INSULATE | TEST CLIP DATA | | TEST SET NO | SEE TEST NOTE | TEST WDG | TEST FOR | P/ST | MA | | TEST READJ | TEST READJ | |
| | | | | | | | | | CONN DAT | CONN GRD | | | | | | | | | | TEST WDG |
| RELAYS | | | | | | | | | | | | | | | | | | | | |
| A | 22FAC | | 1,3 | 4-8 | 3G6 | | 8 | (D) NO | TST-JK-2 | TST-JK-1 | M | 1,4,5 | P/S | O | FS | 14.1 | 13.4 | | | |
| | | | | | | | | | (D) NO | TST-JK-2 | TST-JK-1 | M | 7 | P/S | NO | FS | 11.7 | 12.4 | | |
| | | | | | | | | | (D) NO | TST-JK-2 | TST-JK-1 | M | 1,4,6,8 | P/S | O | FS | 16 | | | |
| | | | | | | | | | (D) NO | TST-JK-2 | TST-JK-1 | M | 6,8 | P/S | NO | FS | 11.5 | | | |
| | | | | | | | | | (D) NO | TST-JK-2 | TST-JK-1 | M | | | | | | | | |
| B | 24BF | 2G, 2M | 1,3 | 15-4 | 5I6 | | 27 | | 3(A) | GRD | 9 | O | FS | 10.5 | 10 | | | | | |
| | | | | | | | | | 3(A) | GRD | 9 | NO | FS | 8.5 | 9 | | | | | |
| | | | | | | | | | TST-JK-2 | TST-JK-1 | V-BR | 3,7 | H | | | | | | | |
| | | | | | | | | | TST-JK-2 | TST-JK-1 | V-BR | 3 | R | | | | | | | |
| | | | | | | | | | TST-JK-2 | TST-JK-1 | GRD | 3 | NO | FS | 8.5 | 9 | | | | |
| B | 24BJ | S | I | 15-4 | 522 | | 29 | | 3(A) | GRD | 9 | O | FS | 10.5 | 10 | | | | | |
| | | | | | | | | | 3(A) | GRD | 9 | NO | FS | 8.5 | 9 | | | | | |
| | | | | | | | | | TST-JK-2 | TST-JK-1 | V-BR | 3,7 | H | | | | | | | |
| | | | | | | | | | TST-JK-2 | TST-JK-1 | V-BR | 3 | R | | | | | | | |
| | | | | | | | | | TST-JK-2 | TST-JK-1 | GRD | 3 | NO | FS | 8.5 | 9 | | | | |
| B | 24BD | R, ZN | I | 15-4 | 504 | | 28 | | 3(A) | GRD | 9 | O | FS | 10.5 | 10 | | | | | |
| | | | | | | | | | 3(A) | GRD | 9 | NO | FS | 8.5 | 9 | | | | | |
| | | | | | | | | | TST-JK-2 | TST-JK-1 | V-BR | 3,7 | H | | | | | | | |
| | | | | | | | | | TST-JK-2 | TST-JK-1 | V-BR | 3 | R | | | | | | | |
| | | | | | | | | | TST-JK-2 | TST-JK-1 | GRD | 3 | NO | FS | 8.5 | 9 | | | | |
| C | 247H | B | I | 15-4 | 519 | | 48 | | 8(D) | GRD | 9,16 | O | FS | 26 | 24.5 | | | | | |
| | | | | | | | | | 8(D) | GRD | 9,16 | NO | FS | 16 | 17 | | | | | |
| | | | | | | | | | TST-JK-2 | TST-JK-1 | V-M | 3,17 | H | | | | | | | |
| | | | | | | | | | TST-JK-2 | TST-JK-1 | V-M | 3 | R | | | | | | | |
| | | | | | | | | | TST-JK-2 | TST-JK-1 | GRD | 3,16 | NO | FS | 16 | 17 | | | | |
| C | 247J | A | I,3 | 15-4 | 521 | | 49 | | 8(D) | GRD | 9,10 | O | FS | 21 | 20 | | | | | |
| | | | | | | | | | 8(D) | GRD | 9,10 | NO | FS | 13.3 | 14 | | | | | |
| | | | | | | | | | TST-JK-2 | TST-JK-1 | V-M | 5,17 | H | | | | | | | |
| | | | | | | | | | TST-JK-2 | TST-JK-1 | V-M | 3 | R | | | | | | | |
| | | | | | | | | | TST-JK-2 | TST-JK-1 | GRD | 3,10 | NO | FS | 13.3 | 14 | | | | |
| D | 252A | 3 | | 367 | | 18 | 2(C), 5(C), 1(A), 1(A)NO, 1(B)O | 5(C) | 2(C) | B/G | 11,15,15 | F | O | | 14 | 13.3 | | | | |
| | | | | | | | | 5(C) | 2(C) | B/G | 11,15 | F | H | | -9.5 | -10 | | | | |
| | | | | | | | | 5(C) | 2(C) | B/G | 11,15 | F | R | | -14 | -15.3 | | | | |
| | | | | | | | | 5(C) | 2(C) | B/G | 11,15 | F | NO | | 3.7 | 10.3 | | | | |
| | | | | | | | | 5(C) | 2(C) | B/G | 11,15,18 | F | NO | | -64 | -67.9 | | | | |
| D | 252A | I | | 367 | | 18 | 5(C) WITH (A) OPTION OR 7(C) WITH (B) OPTION | 2(C) WITH (A) OPTION OR 5(C) WITH (B) OPTION | B/G | 11,15,15,19 | F | O | | 14 | 13.3 | | | | | |
| | | | | | | | | B/G | 11,14,15,19 | F | H | | -9.5 | -10 | | | | | | |
| | | | | | | | | B/G | 11,15,19 | F | R | | -14 | -15.3 | | | | | | |
| | | | | | | | | B/G | 11,15,19 | F | NO | | 3.7 | 10.3 | | | | | | |
| | | | | | | | | B/G | 11,15,18,19 | F | NO | | -64 | -67.9 | | | | | | |

- TEST NOTES:
1. ARM NEED NOT TOUCH CORE ON OPERATE.
 2. JK5 9 & 11 AND 13 & 15 SHALL MAKE WHEN REP IS REMOVED.
 3. FOR USE WHEN TIMING REQUIREMENTS ARE APPLIED.
 4. TEST CONT SEPARATION MIN 3 CONT FOLLOW 2-3, 4-5 & 6-7 MIN & TEST AND READJ CONTS 2-3 AND 4-5 SHALL MAKE BEFORE CONT 6-7.
 5. FOR USE IN OFFICES WHERE PULSE REP REQUIREMENTS ARE NOT APPLIED.
 6. FOR USE IN OFFICES WHERE PULSE REP REQUIREMENTS ARE APPLIED, DO NOT APPLY PULSE REP REQUIREMENTS WHEN THIS CKT PULSES ON A LOOP BASIS INTO A CBR NO 1 OR 5 OFFICE OR A CBR TDM OFFICE.
 7. TST HOLD-USE MOOD LOOP IN PULSE TST SET.
 8. APPLY PULSE REQ (A) 48-78% BK FOR BAT GRD PULSING OR 46-78% BK FOR LOOP PULSING CONNECT TST SET TO (T) JK SPRINGS 1, 2 & 3 FOR INPUT AND 5-6 FOR OUTPUT.
 9. FOR USE WHERE TIMING REQUIREMENTS ARE NOT APPLIED.
 10. TEST-CONTACTS 2-3 SHALL BREAK BEFORE CONT 4-6 OR 7-8 MAKE. CONT PRES SPRINGS 2-3 & 5-6 MIN 15 GRAMS.
 11. APPLY CURRENT WITH THE BAT AT 48.5-50V.
 12. CONTACTS 1-3 & 4-6 MAY MAKE BEFORE CONTACT 7-8 BREAKS.
 13. CONT PRES TEST-SPRINGS 2-3 & 5-6 MIN 35 GRAMS. SPRINGS 7-8 MIN 15 GRAMS. READJ SPRINGS 7-8 MIN 20 GRAMS.
 14. PRIOR TO ISSUE 4-B, THE HOLD VALUE WAS NOT SHOWN.
 15. APPLY CURRENT FLOW REQUIREMENTS IN ORDER SHOWN. RLS KEY OF TEST SET SHALL NOT BE CLOSED WHEN APPLYING HOLD OPR & NON-OPR CURRENT.
 16. TEST-CONTACTS 4-3 SHALL BREAK BEFORE 6-8 & 9-10 MAKE, CONT PRES SPRINGS 4-5 & 7-8, MIN 15 GRAMS.
 17. TST HOLD-USE LEAK (A) IN PULSE TST SET.
 18. IF SUFFICIENT CURRENT CANNOT BE OBTAINED, SHORT CIRCUIT RESISTANCE (C).
 19. BLOCK (A) NO & (B) O; INSULATE 1(A), 2(C) & 5(C) WITH (A) OPTION OR 1(A), 4(C) & 7(C) WITH (B) OPTION.

FIG 69
(FOR 4 FIG 2)

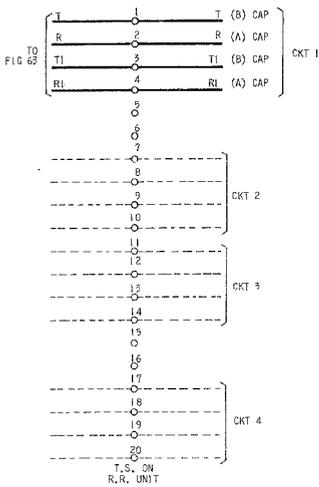


FIG 70
(FOR FIG 3)

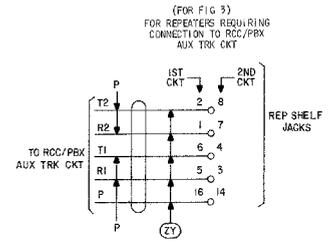


FIG. K (MFR. DISC.) FOR OFFICES USING T.D.F. OR I.D.F.

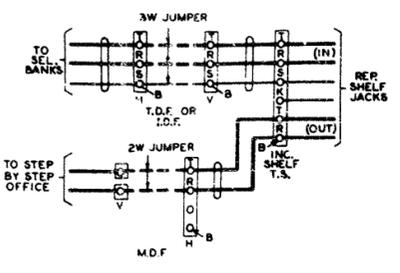


FIG. R (MFR. DISC.) FOR 350A DIAL OFFICES

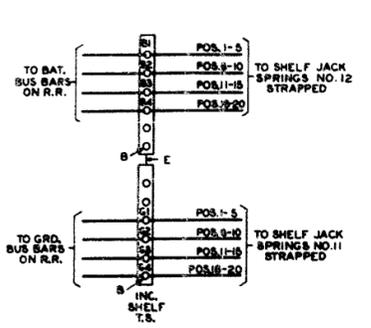


FIG. L (MFR. DISC.) FOR OFFICES USING T.D.F. OR I.D.F. AND ROT. OUT. TRK. SWITCHES

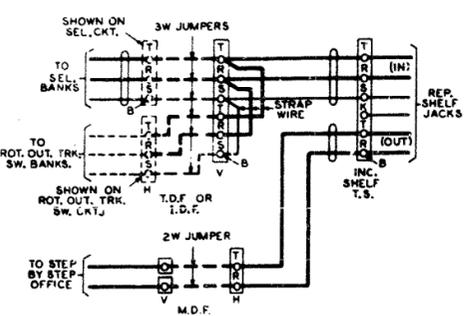


FIG. S (MFR. DISC.) FOR C.I. OFFICES USING T.D.F. OR I.D.F. AND ROTARY OUT. TRK. SW.

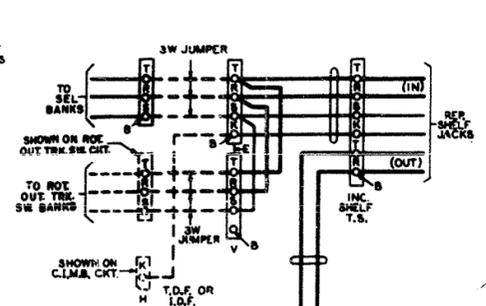


FIG. 51 FOR OFFICES USING T.D.F. OR I.D.F.

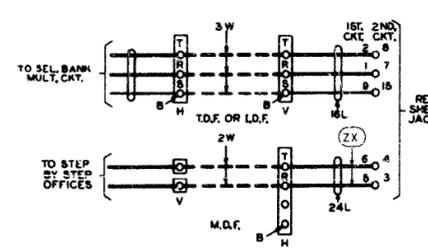


FIG. 52 FOR OFFICES USING T.D.F. OR I.D.F. AND ROT. OUT. TRK. SWITCHES

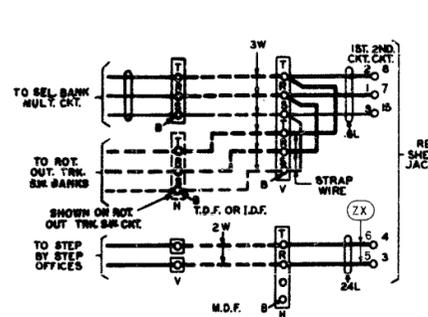


FIG. 57 FOR UNITS MOUNTED ON SW. FR. FOR CENTRAL OFFICES 2 REPEATERS PER PLATE

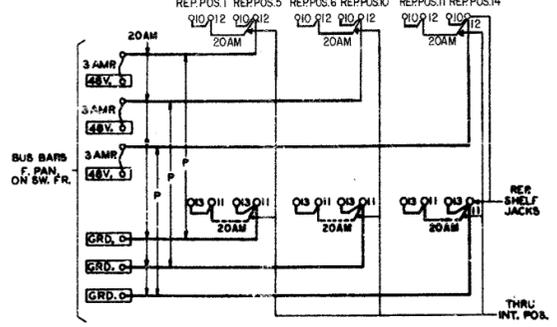


FIG. 61 FOR C.I. OFFICES USING T.D.F. OR I.D.F. AND ROT. OUT. TRK. SW.

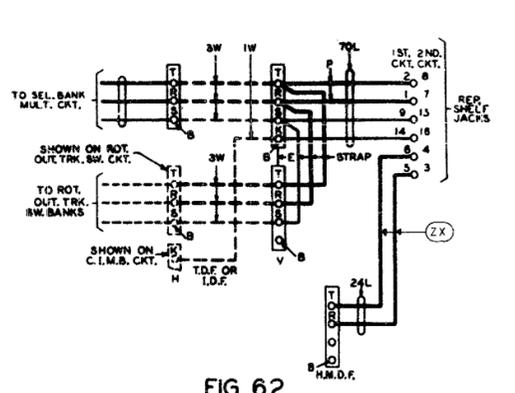


FIG. 58 FOR UNITS MOUNTED ON R.R. 350A, 355A AND 350A OFFICES

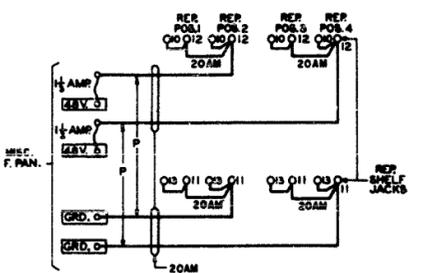


FIG. 62 FOR C.I. OFFICES CONDUCTOR LOOP OVER 600'

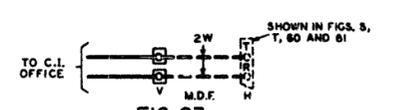


FIG. 63 FOR C.I. OFFICES CONDUCTOR LOOP UNDER 600'

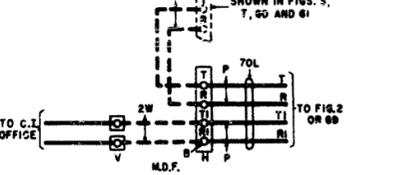


FIG. 53 FOR OFFICES USING C.D.F. FOR INCOMING AND OUTGOING CABLES

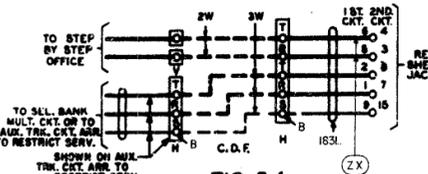


FIG. 59 FOR UNITS MOUNTED ON SW. FR. 350A OR 355A OFFICE 2 REPEATERS PER PLATE

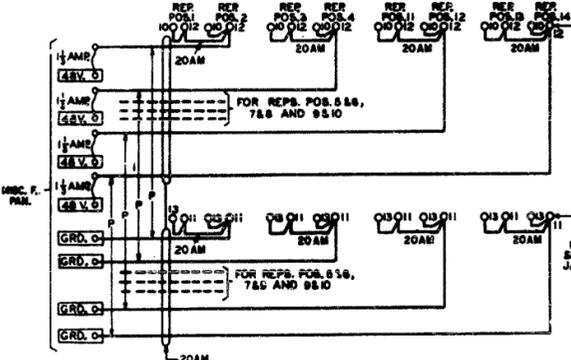


FIG. 67 FOR OFFICES USING C.D.F. AND ROT. OUT. TRK. SWITCHES

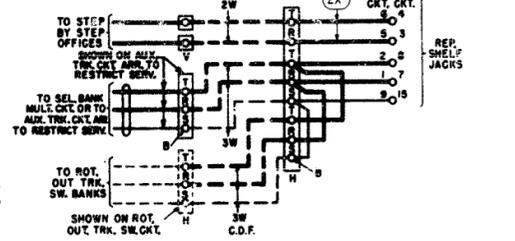


FIG. M (MFR. DISC.) FOR 350A DIAL OFFICE USING C.D.F.

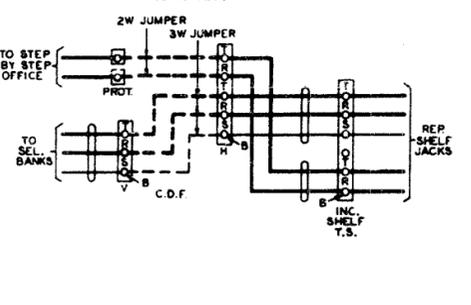


FIG. T (MFR. DISC.) FOR C.I. OFFICES USING T.D.F. OR I.D.F.

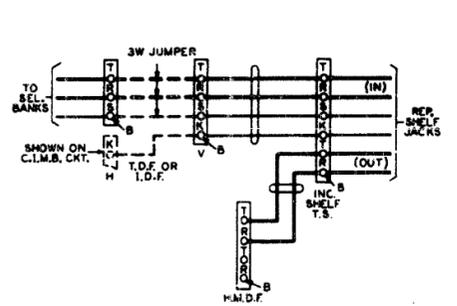


FIG. 54 FOR 350A OR 355A DIAL OFFICE USING C.D.F. FOR OUTGOING CABLES

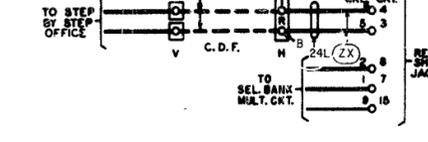


FIG. 55 (A&M ONLY) FOR 350A DIAL OFFICE

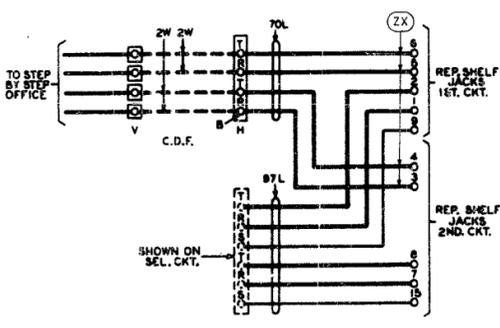


FIG. 60 FOR C.I. OFFICES USING T.D.F. OR I.D.F.

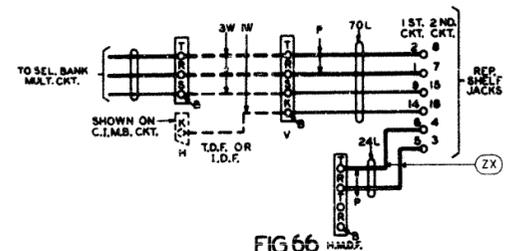


FIG. 64 (A&M ONLY) FOR UNITS MOUNTED ON REP. FR. 20 REP. POS. PER SHELF FOR CENTRAL OFFICES 2 REPS. PER PLATE

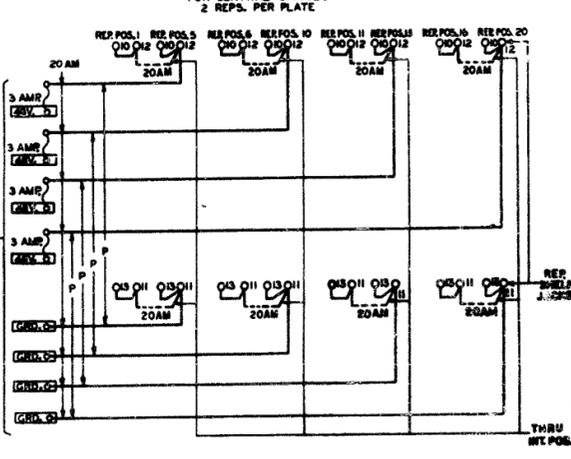


FIG. 65 (A&M ONLY) FOR UNITS MOUNTED ON REP. FR. 20 REP. POS. PER SHELF 350A OR 355A OFFICE 2 REPS. PER PLATE

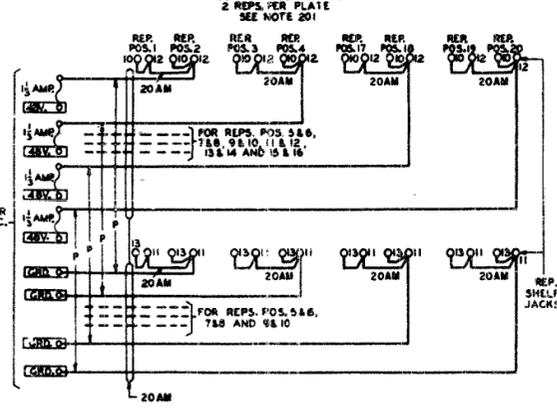


FIG. 56 FOR UNITS MOUNTED ON R.R. 2 REPEATERS PER PLATE CENTRAL OFFICES

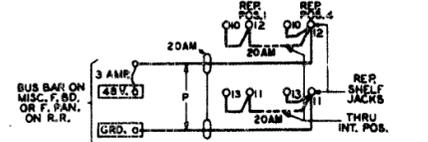


FIG. 66 FOR REPEATER CRTS. REQUIRING CONNECTION OF SUCC. SELECTORS, ROT. OUT. TRK. SW. OR MAKE BUSY CRT. IN SAME OFFICE

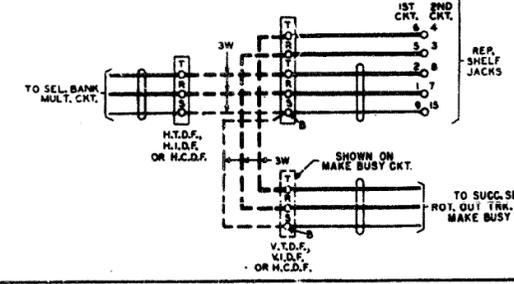
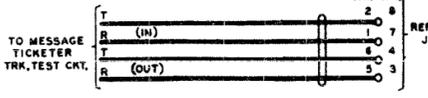


FIG. 68 FOR REPEATERS REQUIRING CONNECTION TO MESSAGE TICKETER TRK. TEST CRT.



EQUIPMENT NOTES: (CONT.)
204. PRIOR TO ISSUE 9-D, THE BAT. AND GRD. LOOP LEADS IN FIGS. 57, 58, 59, 64, 65 AND 66 BETWEEN REP. POSITIONS ON THE SAME SHELF WERE TAKEN FROM TERMS 12 AND 11 RESPECTIVELY OF THE PRECEDING POSITION TO TERMS 10 AND 13 RESPECTIVELY OF THE SUCCEEDING POSITION. THE ARRANGEMENT NOW SHOWN PERMITS UNIVERSAL WIRING FOR 2 PER BASE OR 1 PER BASE REPS. IN FIG. 53 THE SEL. BANKS WERE TERMINATED ON THE V.C.D.F. IN ERROR, AND FIG. 57 WAS NOT SHOWN. THE 'TR' AND 'TR' LEADS IN FIG. 53 WERE REVERSED, CONNECTION TO ROT. OUT. TRK. SW. WAS NOT SHOWN IN FIG. 58 AND THIS FIG. WAS RATED 'SPECIAL'.
205. REPEATERS (OTHER THAN CALL INDICATOR) MANUFACTURED PER ISSUE 170 OF THIS DRAWING SHALL BE EQUIPPED WITH '2B', '2C' AND '2D' APPARATUS OPTIONS IN ALL CASES AND WIRING SO THAT ANY ONE OF 'W', 'M', 'O' OR '2A' CIRCUIT OPTIONS MAY BE OBTAINED BY WIRING CHANGES AT THE (A), (B), (C) AND (D) RESISTANCES AND (F) CONDENSER.

EQUIPMENT NOTES:
201. INTERMEDIATE POS. 5-16 WIRING SAME AS SHOWN FOR ADJACENT POS.
202. THE LEFT HAND NUMBER AT EACH PLUG TERMINAL IS FOR CRT. 1, AND THE RIGHT HAND NUMBER IS FOR CRT. 2.
203. ON ISSUE 9-D, FIGS. 64 AND 65 WERE ADDED. POS. 15 TO 20 ARE RATED 'A&M ONLY'.