

SHEET INDEX

| FIG. | CONTENTS | SHEET NO. | ISSUE NO. | | | | | | | | | | | | | | | | OLD SHEET NO. | |
|--|---|-----------|-----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---------------|-----------------------|
| | | | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | | 43 |
| | SHEET INDEX SUPPORTING INFORMATION | A1 | 27 | | | | | | | | | | | | | | | | | 011 |
| | SHEET INDEX | A2 | 27 | | | | | | | | | | | | | | | | | |
| | CKT NOTES OPTIONS USED BAT. VARIATION WORKING LIMITS KEY TOP | B1 | 27 | | | | | | | | | | | | | | | | | 011-012 012 011 |
| 1 4 | TWO-STA KEY BOX SINGLE-STA KEY BOX | C1 | 27 | | | | | | | | | | | | | | | | | 011 |
| 2 2A 2B 3 A B | LINE CKT CUTOFF KEY TIMING CKT COM TO 10 LINE CKT AC BUZ INDIVIDUAL TO LINE AC BUZ COM TO ALL LINES IN GROUP DC BUZ COM TO ALL LINES IN GROUP | C2 | 27 | | | | | | | | | | | | | | | | | 011 |
| 5 6 7 8 9 10 11 12 13 | AC BUZ SUP DC BUZ SUP AC BUZ COM TO ALL LINES IN GROUP DC BUZ COM TO ALL LINES IN GROUP AC BUZ INDIVIDUAL TO LINE INTERCOM LINE CKT INTERCOM KEY CKT INTERCOM SIG KEY CKT BUZ CKT | C3 | 27 | | | | | | | | | | | | | | | | | 012 |
| | CKT REQ | D1 | 27 | | | | | | | | | | | | | | | | | 013 |
| K 1K & 4K 2K 2L AK, BK, 2BK | EQUIP. NOTES A&M ONLY MFR DISC. MFR DISC. A&M ONLY | E1 | 27 | | | | | | | | | | | | | | | | | 013 |

| DWG ISS | CD ISS | DWG ISS | CD ISS | DWG ISS | CD ISS |
|---------|--------|---------|--------|---------|--------|
| 1 | 1 | 2A | 2A | 3D | 3D |
| 4A | 4A | 5D | 5D | 6D | 6D |
| 7D | 7D | 8D | 8D | 9D | 9D |
| 10D | 10D | 11D | 11D | 12D | 12D |
| 13D | 13D | 14B | 14B | 15D | 15D |
| 16D | 16D | 17D | 17D | 18D | 18D |
| 19D | 19D | 20D | 20D | 21D | 21D |
| 22D | 22D | 23D | 23D | 24D | 24D |
| 25D | 25D | 26D | 26D | | |

| DWG ISS | EE OR CD ISSUE | DATE ISSUE | DRAWN | APP |
|---------|----------------|------------|-------|----------|
| 27D | 26 D APP ID | 4-22-59 | 57/18 | 7/10 FNR |

SHEET INDEX NOTES

1. WHEN CHANGES ARE MADE IN THIS DRAWING, ONLY THOSE SHEETS AFFECTED WILL BE REISSUED.
2. 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.
3. THE ISSUE NUMBER ASSIGNED TO A CHANGED OR NEW SHEET WILL BE THE SAME ISSUE NUMBER AS THAT OF THE SHEET INDEX.
4. SHEETS THAT ARE NOT CHANGED WILL RETAIN THEIR EXISTING ISSUE NUMBER.
5. THE LAST ISSUE NUMBER OF THE SHEET INDEX IS RECOGNIZED AS THE LATEST ISSUE NUMBER OF THE DRAWING AS A WHOLE.
6. "OLD SHEET NO." REFERS TO SHEET NO. PRIOR TO ISSUE: 27D

SUPPORTING INFORMATION

| CATEGORY | NO. |
|-----------------|--|
| EQUIPMENT INFO. | ED-69003-01 ED-69018-01 ED-69016-01 ED-69019-01 ED-69006-01 ED-69065-01 |

| | |
|---|---|
| SD-69000-01 Station Systems NO. 100 KEY EQUIPMENT MULTIPLE LINE LINE AND AUXILIARY SIGNAL CIRCUIT For Use With Central Office or PBX With or Without Arrangement to Retire Line Signal When Line is Released at Central Office or PBX Arranged for Intercommunicating Service (CO OR PBX L) | AT&TCO STANDARD |
| SD-69000-01-A1 9 SHEETS | |
| BELL TELEPHONE LABORATORIES <small>INCORPORATED</small> | DWG. REC. 35 <small>PRINTED IN U.S.A.</small> |

SHEET INDEX (CONT)

DRAWING
ISSUE
270 -

| FIG. | CONTENTS | SHEET NO. | ISSUE NO. | | | | | | | | | | | | | | | | OLD SHEET NO. | |
|--|-----------|-----------|-----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---------------|-------------------|
| | | | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | | 43 |
| 2M 2N BL & 2BL BM & 2BM | MFR DISC. | E2 | 27 | | | | | | | | | | | | | | | | | 012 013 012 |
| | | | | | | | | | | | | | | | | | | | | |

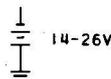
(2 PAGES) PAGE 2

| | | |
|---|----|----------------|
| NO. 100 KEY EQUIPMENT MULTIPLE LINE LINE AND AUXILIARY SIGNAL CIRCUIT | | SD-69000-01-A2 |
| BELL TELEPHONE LABORATORIES <small>INCORPORATED</small> | 35 | |

CIRCUIT NOTES:

101. (A) PROVIDE ONE 2 AMP FUSE FOR EACH FIG. 2.
(B) PROVIDE ONE 2 AMP FUSE FOR EACH FIG. 2B.
(C) PROVIDE ONE 2 AMP FUSE FOR FIG. B OR 6.
(D) PROVIDE ONE 2 AMP FUSE FOR FIGS. 10 & 13.
102. PROVIDE ONE 8B OR 12B LAMP FOR 7 BUZZERS.
103. PROVIDE ONE FIG. B OR 6 ONLY WHEN BUZZER COMMON TO ALL LINES IN A GROUP IS SPECIFIED AND CONT RINGING SUPPLY IS NOT AVAILABLE.
104. PROVIDE X WIRING AND APPARATUS WHEN (BUZZER) KEY IS SPECIFIED, OTHERWISE PROVIDE Y WIRING.
105. LEADS DESIGNATED C SHALL BE RUN IN A SEPARATE CABLE.
106. NOT MORE THAN 12 LAMPS SHALL BE CONNECTED TO THE L LEAD OR THE B LEAD. PRIOR TO ISSUE 11D THE LAMPS WERE LIMITED TO 6.
107. THE HI LEAD SHALL BE DEAD ENDED AT POSITION OF KEY. (MFR DISC.)
108. THE MANUFACTURE OF THE 6002B KEY FOR USE ON THIS CIRCUIT HAS BEEN DISCONTINUED. THE 6002B KEY IS SUPERSEDED BY THE 6017B KEY ON ISSUE 8D OF THIS CIRCUIT. PRIOR TO ISSUE 8D THE 6017B KEY WAS NOT SHOWN.
109. THE HI AND T LEADS SHALL BE CONNECTED TOGETHER AT EACH KEY BOX. PRIOR TO ISSUE 12D NOTE 107 WAS NOT RATED "MFR DISC." THE HI AND T LEADS WERE NOT CONNECTED TOGETHER AT THE KEY BOXES IN FIGS. 1 AND 4, AND THE (H) CONDENSER AND ASSOCIATED WIRING IN FIG. 2 WAS NOT SHOWN.
110. S WIRING AND APPARATUS SHALL BE USED ONLY WHEN IT IS NECESSARY TO SUPPRESS THE RADIO FREQUENCY INDUCTION ARISING FROM THE (S) REL CONTACTS. THE YELLOW AND BLACK CORDS OF THE (A) FILTER SHALL BE CONNECTED DIRECTLY TO THE (S) REL CONTACT TERMINALS WITHOUT SPLICING. IF NECESSARY ADDITIONAL WIRE MAY BE SPLICED TO THE RED CORD ON THE (A) FILTER TO CONNECT IT TO THE WDG OF THE (TA) REL. PRIOR TO ISSUE 13D, S WIRING AND APPARATUS WERE NOT SHOWN AND R WIRING WAS NOT DESIGNATED AND WAS PART OF FIG. 2.
111. THE (TA) 149AT REL IS RATED "A&M ONLY" FOR USE IN THIS CKT AND IS SUPERSEDED BY THE 149CP REL ON ISSUE 14B. PRIOR TO ISSUE 14B, REL 149CP WAS NOT SHOWN.
112. SEPARATE LEADS SHALL BE PROVIDED BETWEEN THE EQUIPMENT UNIT AND THE KEY BOX FOR THE "A" AND "B" GRD. PRIOR TO ISSUE 17D, THE "A" AND "B" GRD WERE NOT DESIGNATED.

| FIGURES AND OPTIONS ON THIS DWG | | |
|---------------------------------|---|---------------|
| CKT FIG. | A | APP OR WIRING |
| 1 | A | |
| 2 | B | Y |
| 2A | | X |
| 2B | | W |
| 3 | | V |
| 4 | | E |
| 5 | | D |
| 6 | | S |
| 7 | | R |
| 8 | | |
| 9 | | |
| 10 | | |
| 11 | | |
| 12 | | |
| 13 | | |



113. 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 | M. D. |
| 22-D | FIG. 5,6,7, 8, OR 9 | FIG. A B, OR | | 5,6,7, 8,9 | | A, B, 3 |
| 22-D | | | | | | C |
| 22-D | 12B LAMP | 8B LAMP | | 12B | | 8B |
| 24-D | | | | FIG. 10 TO 13 | | |
| 25-D | D OR E | D | | D,E | | |
| 26-D | V OR W | W | | V | | W |

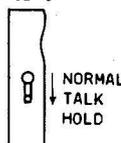
WORKING LIMITS

| | SUPV | SIG |
|--|---------|---------|
| MAXIMUM CONDUCTOR LOOP RESISTANCE | | |
| TO MANUAL CENTRAL OFFICE | 1645Ω | 1700Ω |
| TO STEP BY STEP CENTRAL OFFICE | 3100Ω | 1700Ω |
| TO PANEL CENTRAL OFFICE | 1715Ω | 1700Ω |
| TO 740C PBX | 1200Ω | 1700Ω |
| TO 550C, 550SC, 551A OR 551B PBX | 110Ω | 1700Ω |
| TO 605A, 701A OR 711A PBX | 465Ω | 1700Ω |
| TO 700C OR 710C PBX | 255Ω | 1700Ω |
| TO 740A OR 740B PBX | 100Ω | 1700Ω |
| TO 600C PBX | 110Ω | 1700Ω |
| MINIMUM INSULATION RESISTANCE | | |
| MANUAL OR PANEL AREAS | 20,000Ω | 20,000Ω |
| STEP BY STEP AREAS | 30,000Ω | 30,000Ω |
| MAXIMUM RESISTANCE OF EACH L & B LEAD | | 15Ω * |
| MAXIMUM RESISTANCE OF EACH A & B GRD LEAD FOR 3 LINE KEY BOXES | | 15Ω * |
| FOR 6 LINE KEY BOXES | | 7.5Ω * |

* SEE NOTE 117

114. WHEN THE 4C BUZZER IS USED THE STRAP WIRE BETWEEN THE FRAME AND THE WINDING TERMINAL OF THE BUZZER COIL SHALL BE DISCONNECTED.
115. WHEN A BELL IS REQUIRED IN PLACE OF A BUZZER, PROVIDE THE 7A BELL.
116. TO OBTAIN SOMEWHAT LONGER LIFE IN INSTALLATIONS WITH HIGH AVERAGE VOLTAGE THE TEL CO MAY REPLACE ALL A3 LAMPS BY A1 LAMPS, PROVIDING THE ILLUMINATION FROM THE A1 LAMPS IS SATISFACTORY.
117. WHEN LINES ARE MULTIPLIED AT KEY BOXES LOCATED NEAR EACH OTHER, ONE L LEAD AND ONE B LEAD PER LINE MAY BE USED PROVIDED THE TOTAL RESISTANCE OF THE L LEAD OR THE B LEAD DOES NOT EXCEED 15 OHMS DIVIDED BY THE NUMBER OF BOXES WHERE THE CORRESPONDING LAMPS APPEAR. IN SUCH A CASE ONE A GROUND LEAD AND ONE B GROUND LEAD SHOULD ALSO BE PROVIDED AND THE RESISTANCE OF EACH GROUND LEAD SHOULD NOT EXCEED FOR 3 LINE KEY BOXES 15 OHMS DIVIDED BY THE NUMBER OF BOXES, AND FOR THE 6 LINE KEY BOXES 75 OHMS DIVIDED BY THE NUMBER OF BOXES.

532B-6



| | | |
|---|----|---------------------|
| NO. 100 KEY EQUIPMENT MULTIPLE LINE LINE AND AUXILIARY SIGNAL CIRCUIT | | SD-69000-01-B1 |
| BELL TELEPHONE LABORATORIES INCORPORATED | 3S | PRINTED IN U. S. A. |

FIG. 1
TWO STATION
KEY BOX
SEE TEST NOTE 8

TO FIG. II,
TO SUB SET, TO TEL AND
DIAL CKT OR TO PRECEDING
KEY BOX AS SPEC

TO FIG. II,
TO SUB SET, TO TEL AND
DIAL CKT OR TO PRECEDING
KEY BOX AS SPEC

FIG. 4
SINGLE STATION
KEY BOX
SEE TEST NOTE 8

TO FIG. II,
TO SUB SET, TO TEL AND
DIAL CKT OR TO PRECEDING
KEY BOX AS SPEC

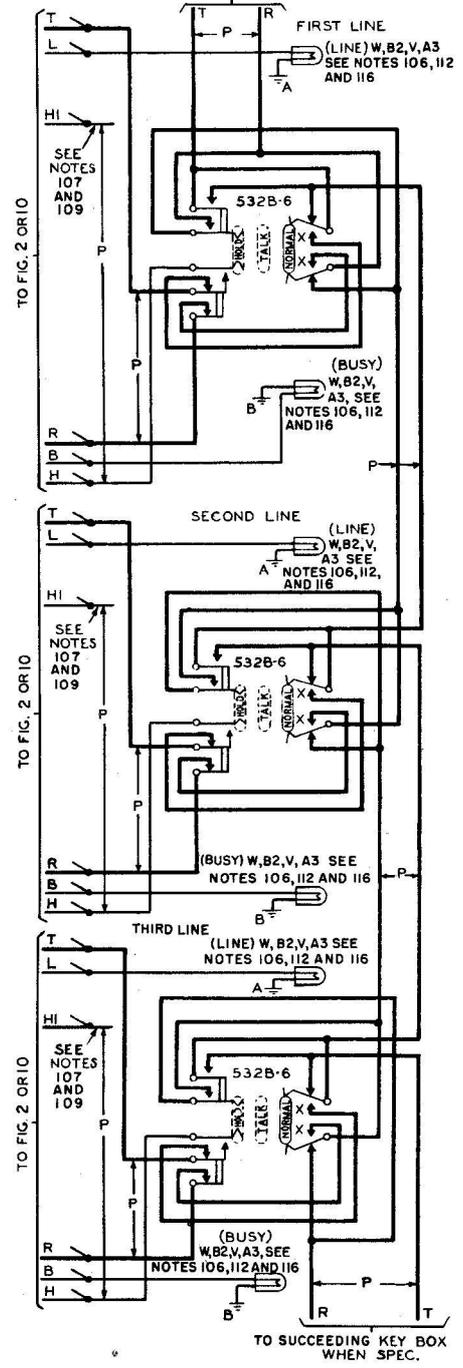
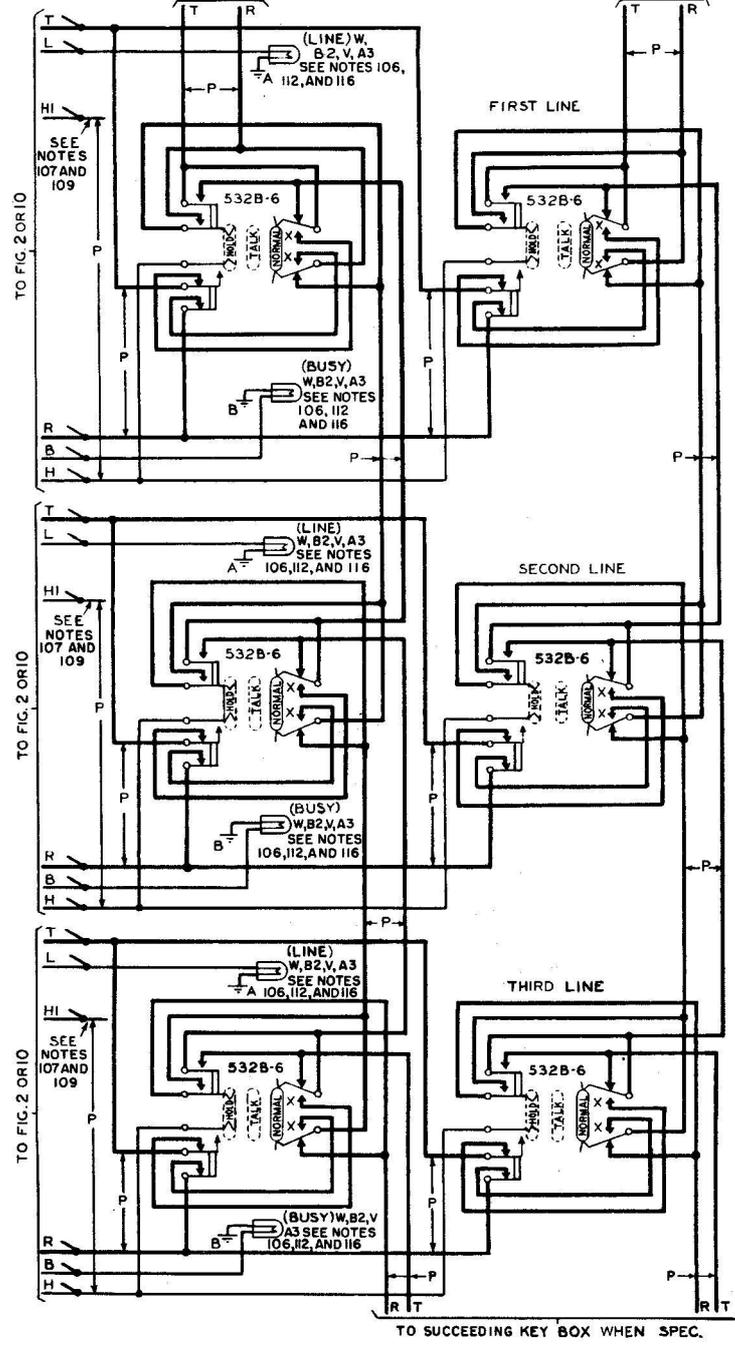


FIG. 2
LINE CIRCUIT

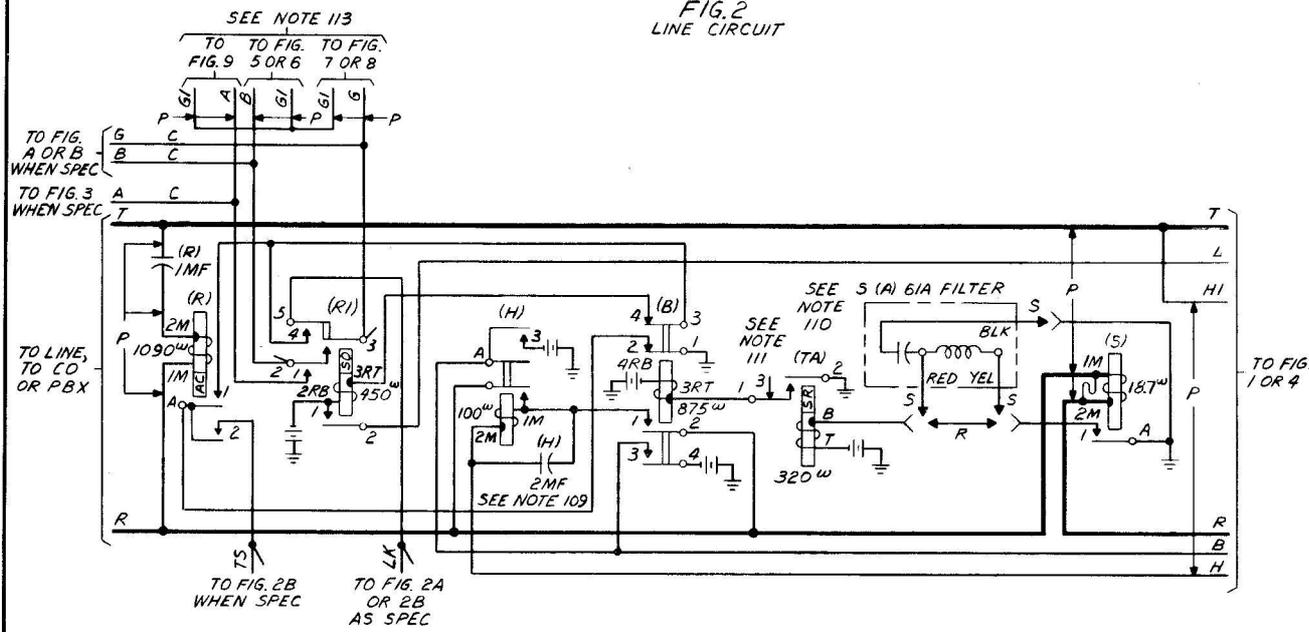


FIG. 2B
TIMING CIRCUIT
COMMON TO 10 LINE CIRCUITS
TO FIG. 2

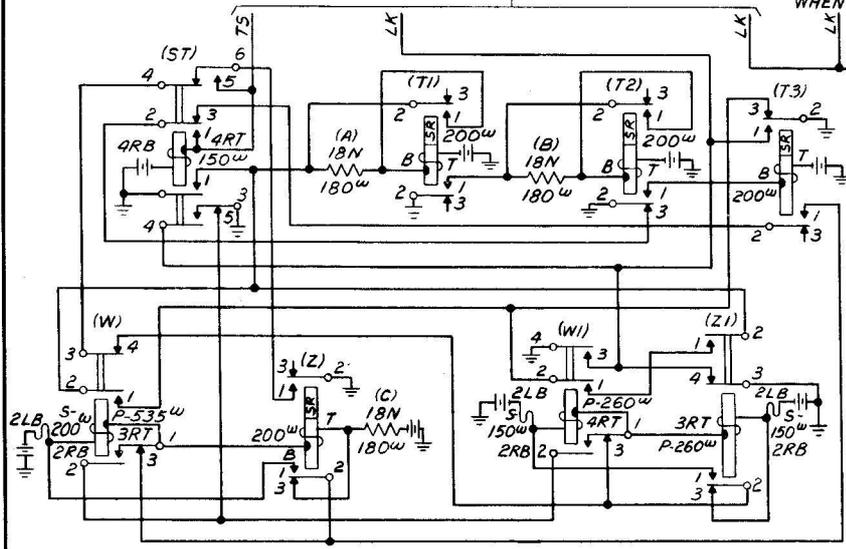


FIG. A
AC BUZZER COMMON TO
ALL LINES IN A GROUP

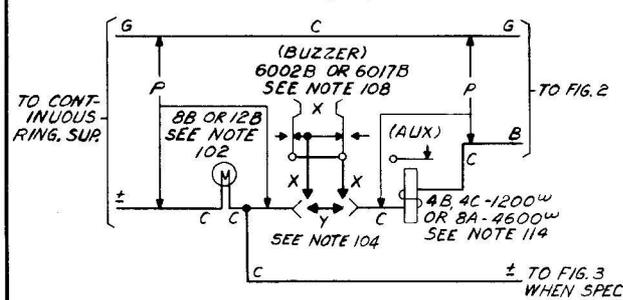


FIG. 2A
CUTOFF KEY
TO FIG. 2
IN OTHER CABINETS
WHEN SPEC

5 AMP INDICATING
TOGGLE SWITCH
AS SPEC

FIG. 3
AC BUZZER
INDIVIDUAL TO LINE

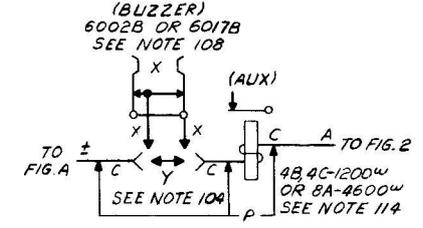


FIG. B
DC BUZZER COMMON TO
ALL LINES IN A GROUP
SEE NOTE 103

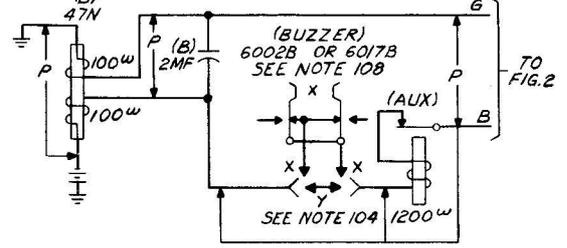


FIG. 5
A-C BUZZER SUPPLY

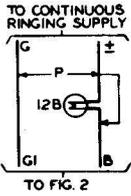


FIG. 6
D-C BUZZER SUPPLY

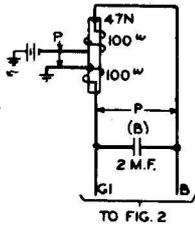


FIG. 7
A-C BUZZER COMMON TO ALL LINES IN A GROUP (AUX)
SEE NOTE 114

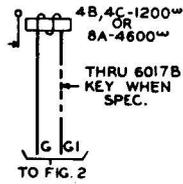


FIG. 8
D-C BUZZER COMMON TO ALL LINES IN A GROUP (AUX)

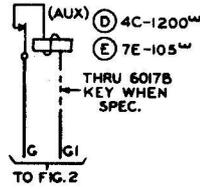


FIG. 9
A-C BUZZER INDIVIDUAL TO LINE (AUX)
SEE NOTE 114

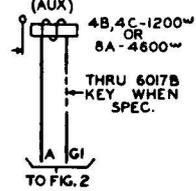


FIG. 10
INTERCOMMUNICATING LINE CIRCUIT

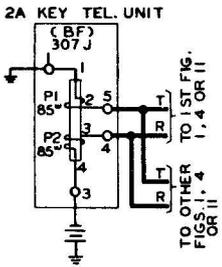


FIG. 11
INTERCOMMUNICATING KEY CIRCUIT
TO SUB. SET, TO TEL. AND DIAL CKT., OR TO PRECEDING KEY BOX AS SPECIFIED

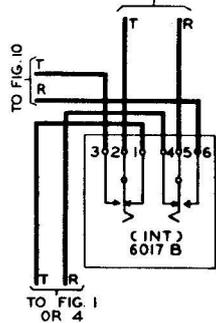


FIG. 12
INTERCOMMUNICATING SIGNALING KEY CIRCUIT
551A OR EQUIVALENT OR PART OF 549A KEY

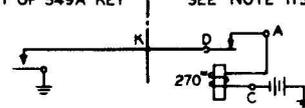


FIG. 13
BUZZER CIRCUIT
(B)
7A BUZZER
SEE NOTE 115

NO. 100 KEY EQUIPMENT
MULTIPLE LINE
LINE AND AUXILIARY SIGNAL CIRCUIT

SD-69000-01-C3

| APPARATUS | | | | MECH REQ | | | CIRCUIT PREPARATION | | | | TEST SET PREP | SEE TEST NOTE | DIRECT CURRENT FLOW REQ | | | | | REMARKS |
|----------------|--------|--------|---------|----------|------------|-----------|---------------------|----------------|----------|-----|---------------|---------------|-------------------------|----------|-------------------------------|----------|-----------|---------|
| DESIG | CODE | OPTION | FIG. | BSP FIG. | CONT PRESS | ARM. TRVL | BLOCK OR INSULATE | TEST CLIP DATA | | | | | TEST WDG | TEST FOR | AFTER SOAK MA. | TEST MA. | READJ MA. | |
| | | | | | | | | CONN BAT. | CONN GRD | | | | | | | | | |
| MAGNETS | | | | | | | | | | | | | | | | | | |
| AUX | 4B OR | | A, J, | | | | | | | | | | | | | | | |
| | 8A BUZ | | 7, 9 | | | | | | | | | | | | | | | |
| AUX | 4C BUZ | | A, B, | | | | | | | | | | | | | | | |
| | | | 3, 7, 9 | | | | | | | | | | | | | | | |
| AUX | 4C BUZ | | 8 | | | | | | | | | | | | D OPTION | | | |
| AUX | 7E BUZ | | 8 | | | | | | | | | | | | E OPTION | | | |
| RELAYS | | | | | | | | | | | | | | | | | | |
| B | R1600 | | 2 | 15/11 | H | .015 | | | RT(B) | GRD | | | 0 | .0142 | .0135 | | | |
| H | B1083 | | 2 | 7 | | .035 | | 1M(H) | 2M(H) | B/G | | | 0 | .005 | .0047 | | | |
| | | | | | | | | 1M(H) | 2M(H) | B/G | | | R | .0017 | .0018 | | | |
| | | | | | | | | | | | | | | | OPEN RING OF LINE | | | |
| R | J44 | | 2 | 9 | | .030 | | 1M(R) | 2M(R) | B/G | 2 | | 0 | .0075 | .0071 | | | |
| | | | | | | | | 1M(R) | 2M(R) | B/G | 2 | | NO | .0057 | .006 | | | |
| | | | | | | | | | | | 3 | | 0 | AC | OPEN RING OF LINE | | | |
| RI | R1598 | | 2 | 22/1 | H | .030 | (B)0 | | RT(RI) | GRD | | | 0 | .028 | .0265 | | | |
| | | | | | | | (B)0 | | RT(RI) | GRD | | | NO | .0122 | .0129 | | | |
| S | B1082 | | 2 | 13 | | .030 | | 1M(S) | 2M(S) | B/G | P/S | 0 | | .0087 | .0082 | | | |
| | | | | | | | | 1M(S) | 2M(S) | B/G | P/S | R | | .0017 | .0018 | | | |
| | | | | | | | | | | | | | | | OPEN RING OF LINE | | | |
| ST | R1646 | | 2B | 24/9 | L | .035 | (T2)0, | | RT(ST) | GRD | | | 0 | .0475 | .045 | | | |
| | | | | | | | 3T(W) | | | | | | | | | | | |
| T1, T2, | 178CN | | 2B | E/E | | | 3T(ST) | | B(T1) | GRD | 4 | | 0 | .070 | .0375 | | | |
| T3 | | | | | | | 3T(ST) | | B(T1) | GRD | 4 | | NO | .070 | .025 | | | |
| | | | | | | | | | | | | | | | .0265 | | | |
| TA* | I49AT | | 2 | C | | | | | 1(S) | GRD | 5, 6 | | 0 | .025 | .0235 | | | |
| | | | | | | | | | 1(S) | GRD | | | R | OC | OC | | | |
| | | | | | | | | | | | | | | | MAX ARM. TRVL .025 IN. | | | |
| TA* | I49CP | | 2 | C | | | | | 1(S) | GRD | 5, 6, 7 | | 0 | .055 | .0235 | | | |
| | | | | | | | | | 1(S) | GRD | | | R | .055 | OC | | | |
| | | | | | | | | | | | | | | | OC | | | |
| | | | | | | | | | | | | | | | MAX ARM. TRVL .025 IN. | | | |
| W | R1642 | | 2B | 10/14 | L | .035 | | | | | | | P | 0 | .016 | | | |
| | | | | | | | (Z)NO | | RT(W) | GRD | | | P | 0 | .050 | | | |
| | | | | | | | | | | | | | | | .015 | | | |
| | | | | | | | | | | | | | | | FOR REL WDG ALONE | | | |
| | | | | | | | | | | | | | | | FOR CKT COMB. OF (W) & (Z) | | | |
| | | | | | | | | | | | | | | | RELS INSULATE 5B(ST), 3T(T3) | | | |
| | | | | | | | | | | | | | | | & 3B(Z) | | | |
| WI | R1645 | | 2B | 11/14 | H | .035 | | | | | | | P | 0 | .028 | | | |
| | | | | | | | (Z1)NO | | RT(WI) | GRD | | | P | 0 | .060 | | | |
| | | | | | | | | | | | | | | | .051 | | | |
| | | | | | | | | | | | | | | | FOR REL WDG ALONE | | | |
| | | | | | | | | | | | | | | | FOR CKT COMB. OF (WI) & (Z1) | | | |
| | | | | | | | | | | | | | | | RELS INSULATE 5B(ST) & 3B(Z1) | | | |
| Z | 178CN | | 2B | E/E | | | | | | | | | 0 | .055 | .027 | | | |
| | | | | | | | (W1)NO | | | | | | NO | .055 | .0175 | | | |
| | | | | | | | (W1)NO | | RT(W) | GRD | | | 0 | .085 | .0425 | | | |
| | | | | | | | | | RT(W) | GRD | | | NO | .085 | .0265 | | | |
| | | | | | | | | | | | | | | | .027 | | | |
| | | | | | | | | | | | | | | | FOR REL WDG ALONE | | | |
| | | | | | | | | | | | | | | | FOR REL WDG ALONE | | | |
| | | | | | | | | | | | | | | | FOR CKT COMB. OF (Z) & (W) | | | |
| | | | | | | | | | | | | | | | RELS INSULATE 5B(ST), 3T(T3) | | | |
| | | | | | | | | | | | | | | | & 3B(W) | | | |
| ZI | R1641 | | 2B | 10/3 | H | .020 | | | | | | | P | 0 | .028 | | | |
| | | | | | | | | | RT(ZI) | GRD | | | P | 0 | .060 | | | |
| | | | | | | | | | | | | | | | .047 | | | |
| | | | | | | | | | | | | | | | FOR REL WDG ALONE | | | |
| | | | | | | | | | | | | | | | FOR CKT COMB. OF (ZI) & (WI) | | | |
| | | | | | | | | | | | | | | | RELS INSULATE 5B(ST), 3T(T3) | | | |
| | | | | | | | | | | | | | | | & 3B(WI) | | | |
| MISC | | | | | | | | | | | | | | | | | | |
| | 532B-6 | | 1, 4 | | | | | | | | | | | | 8 | | | |
| | KEY | | | | | | | | | | | | | | | | | |

TEST NOTES:

- THE BUZZER SHALL BE TESTED AND READJUSTED TO OPERATE SATISFACTORILY WHEN REL (R1) IS BLOCKED OPERATED.
- ON ISSUE 100 ADDED DC TEST VALUES.
- TEST AND READJUST THE (R) REL FOR AC OPERATION BY RING, ON THE LINE FROM THE CENT. OFF. OR PBX OR BY CONNECTING 95-111V, 1100-1200 RPM RING. CURRENT THRU A 13C OR EQUIVALENT RES LAMP AND A 12,000Ω NONINDUCTIVE RES TO THE RING OF THE LINE AND RING. GRD TO THE TIP OF THE LINE. SATISFACTORY OPERATION OF THE (R) REL IN EACH CASE AND ALSO IN THE SECOND CASE WITH THE 12,000Ω SHORT CIRCUITED SHALL BE DETERMINED BY THE OPERATION AND LOCKING OF THE (RI) REL.
- PRIOR TO ISSUE 100 ADJ WAS TEST READJ
0- 0295 028
NO- 0195 021
- * INDICATES THAT THERE IS MORE THAN ONE REL WITH THE SAME DESIGNATION.

- MIN 10 GRAMS ON NO. 2 SPRING. PRIOR TO ISSUE 170 THIS REQ FOR THE NO. 2 SPRING WAS NOT SPECIFIED.
- MAX 35 GRAMS ON NO. 1 SPRING. PRIOR TO ISSUE 180 THIS REQ FOR THE NO. 1 SPRING WAS NOT SPECIFIED.
- THE X CONTACTS SHALL NOT BREAK WHEN THE KEY IS RESTORED UNRESTRAINED FROM THE HOLD POSITION TO THE TALK POSITION. PRIOR TO ISSUE 200 THIS ADJUSTMENT WAS NOT SPECIFIED.

NO. 100 KEY EQUIPMENT - MULTIPLE LINE
LINE AND AUXILIARY SIGNAL CIRCUIT

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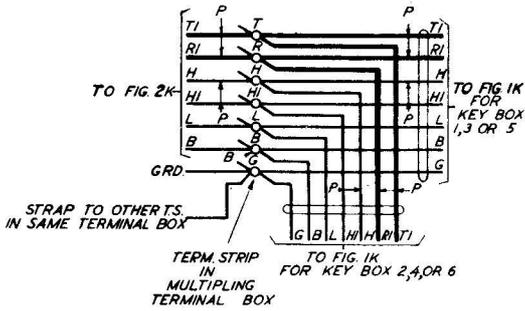
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EQUIPMENT NOTES:
 201. PRIOR TO ISSUE 13-D THE "HI" LEAD IN FIG. 1K WAS SHOWN
 SPLICED INSTEAD OF CONNECTED TO THE "T" TERMINAL.

202. FIGS. 2K, 2L, 4L AND 2BL WERE RATED "MFR. DISC." ON ISSUE 22-D

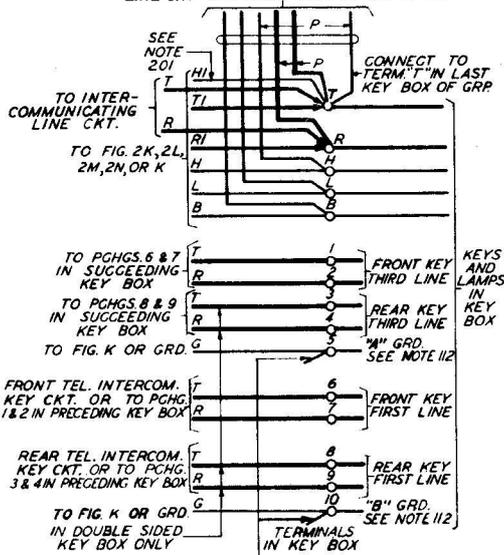
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 27D 4748

FIG. K (A & M ONLY)
 MULTIPLYING TERMINAL BOX



FIGS. 1K & 4K

MULTIPLE TO OTHER KEY BOXES IN SAME LINE CKT GRP WHEN FIG. K IS NOT SPEC.



LOOP TO OTHER KEY BOXES WHEN LINES ARE MULTIPLIED FROM KEY BOX TO KEY BOX

FIG. 2K (MFR. DISC.)
 SEE NOTE 202

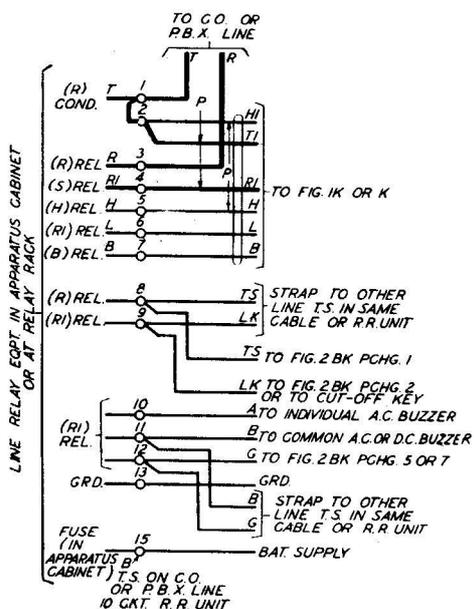
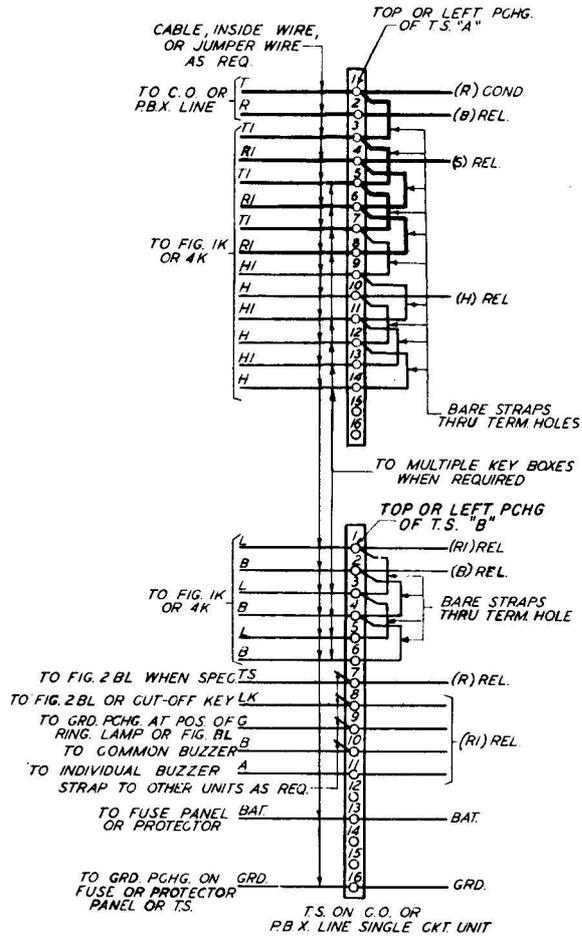
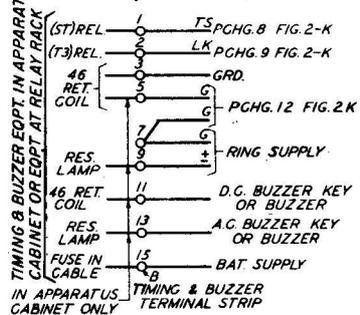


FIG. 2L (MFR. DISC.)
 SEE NOTE 202



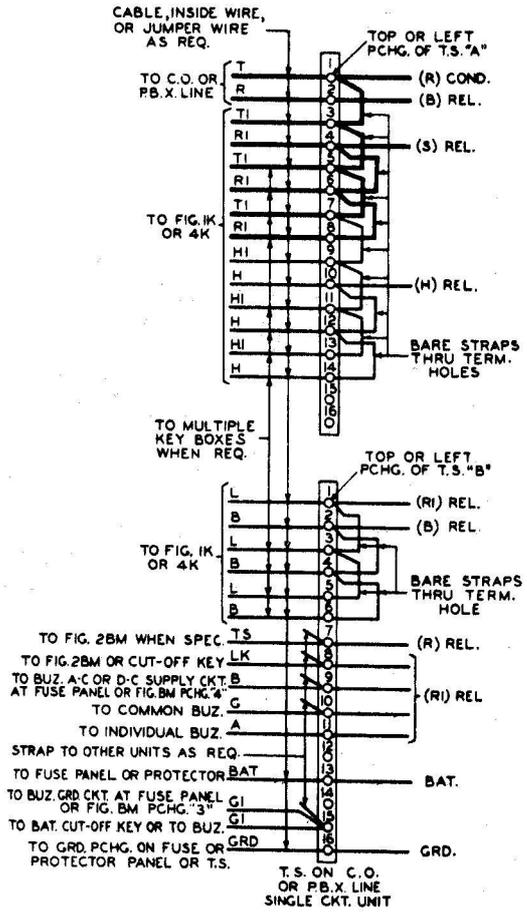
FIGS. 4K, BK & 2BK (A & M ONLY)



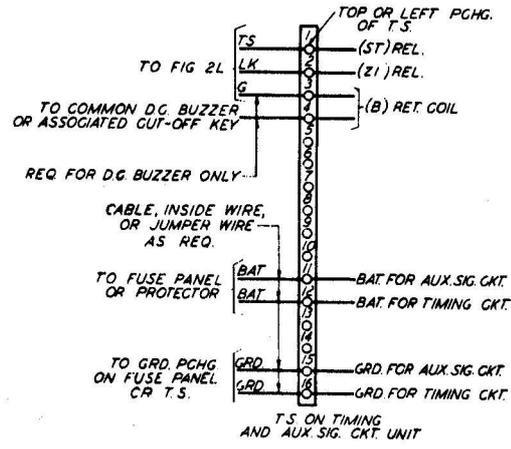
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FIG. 2M



FIGS. 2L & 2BL
(MFR. DISC.)
SEE NOTE 202



FIGS. 2M & 2BM

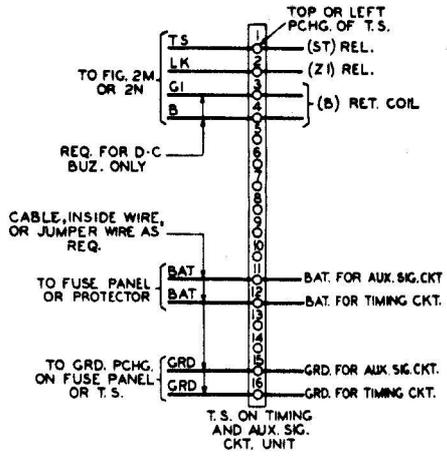


FIG. 2N

