### PLEASE NOTE:

FORE 1. GENERAD

#### KS-19594 DIALER



FOREMAN DAd 0630DA, 631DA, 636CA, and 637DA religible sets, Table B.

• Add 832- and 833-type telephone sets, Table A.

**Note:** Refer to appropriate sections for connections to TOUCH-TONE® dial equipped telephone sets and switchboard and miscellaneous key equipment in Division 512.

#### 2. CONNECTIONS



The power supply cord should not be connected to the AC power line receptacle when removing the housing or making any connections.

**2.01 Power Supply Unit:** Refer to dialer installation section for mounting instructions.

#### 2.02 Dialer Telephone Cord:

- Standard six conductor cord
- Secure inside the equipment under a cord clamp or by taping to set mounting cord
- Dress wires to allow proper operation of equipment

## 2.03 Dial Pulsing Contacts (red and green cord conductors):

- Place in series with ring side of line for 200-type telephone sets
- Place in series with the dial pulsing contacts on other type sets
- 2.04 Off Normal Contacts (blue and white cord conductors): Place across receiver contacts in telephone sets.
- 2.05 Off Normal Contacts (yellow and black cord conductors): Place across loudspeaker contacts in speakerphone sets.



Test the operation of the dialer by recording and calling the telephone number usually called for job completion. For installations with speakerphones, be sure to test with speakerphone operating to insure proper connection to off normal contacts.

#### 2.06 Connection Index:

- Table A—Dialer Connections To Telephone Sets Equipped With Rotary Dials
- Table B—Dialer Connections to CALL DIRECTOR®

  Telephone Sets and TRIMLINE®

  Telephone Sets Equipped With Rotary

  Dials
- Fig. 1—KS-19594 Dialer, Power Supply Connections

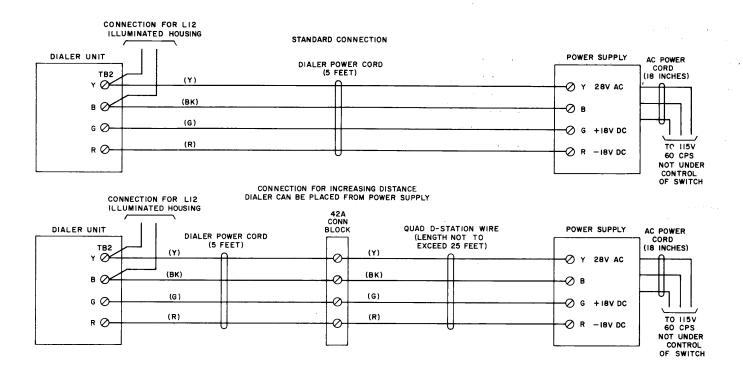


Fig. 1—KS-19594 Dialer, Power Supply Connections

TABLE A

DIALER CONNECTIONS TO TELEPHONE SETS EQUIPPED WITH ROTARY DIALS

| KS-                             | 19594             | 200   | SERIES   |  | 300 SERIES   |                                    |  |  |
|---------------------------------|-------------------|---|--|--|--|------------------------------------|--|--|
| DI.                             | ALER<br>EL<br>DRD | ALL 200 SERIES EXCEPT THOSE LISTED AT THE RIGHT AND THE TRIMLINE SETS   | 200 SERIES TEL SETS<br>USING 685A SUB-<br>SCRIBER SETS | ALL 300 SERIES<br>EXCEPT 329C,<br>332C, 334C | 329C   | 332C, 334C                         |  |  |
| P<br>U<br>L<br>S<br>I<br>N<br>G | R                 | Move R inside wire from L1 of subscriber set to GRD terminal of subscriber set and Connect R of dialer tel cord to GRD term. of sub set  Move R inside wire from L1 of subscriber set from term. L2 of subscriber set and connect R of dialer tel cord to GRD term. of sub set  Remove R inside wire from term. L2 of subscriber set and term. 4 on dial and and connect to R of dialer tel cord with D-161488 connect to R of dialer tel cord with |  |  |  | 0 <b></b>                          |  |  |
|                                 | G                 | L1 of subscriber set  | L2 of subscriber set                                   | Y terminal on dial                           |  |                                    |  |  |
| O<br>F<br>F<br>N                | w                 | Term. GN of induction coil in subscriber set  | Term. GN of network in subscriber set                  | Term. GN<br>on induction<br>coil             | Term. 2 on<br>term. strip in<br>subscriber<br>set  | E post<br>on ringer<br>term. strip |  |  |
| R<br>M<br>A<br>L                | BL                | Term. R of induction coil in subscriber set   | Term. B of network in subscriber set                   | Term. R<br>on induction<br>coil              | Term. 14 on<br>term. strip in<br>subscriber<br>set | Term. R<br>on<br>induction<br>coil |  |  |
| S<br>P<br>E<br>A<br>K           | Y                 | Insulate and store in subscriber set  | Term. 1 of term. strip in subscriber set               | Insulate and store in tel. set               |  |                                    |  |  |
| R<br>P<br>H<br>O<br>N<br>E      | ВК                | Insulate and store in subscriber set  | Term. G of network in subscriber set                   | Insulate and store<br>in tel. set            |  |                                    |  |  |

TABLE A (Cont)

DIALER CONNECTIONS TO TELEPHONE SETS EQUIPPED WITH ROTARY DIALS

|                            |                         |   | 400 SERIES  | 500 SERIES  |   |   |  |
|----------------------------|-------------------------|---|---|---|---|---|--|
| DIA<br>TI                  | 9594<br>LER<br>EL<br>RD | ALL 400 SERIES EXCEPT THOSE LISTED AT RIGHT  440 AND 460 SERIES (4- AND 6- BUTTON SETS) |   | 462AC<br>466AC  | ALL 500 SERIES<br>EXCEPT THOSE<br>LISTED BY CODE        | 500E<br>500F<br>501F                            | 500R<br>500S   |
| P<br>U<br>L                | R                       | Remove BR-Y<br>lead from<br>term. Y on<br>dial,   | Remove G lead from term. L2Y on in- duction coil, and | Remove R lead of D9D or D15B cord from L1 on term. strip, and | Remove BL<br>dial lead from<br>term. F of<br>network,   | Remove W<br>lead from<br>term. F of<br>network; | Remove<br>BL dial<br>lead from<br>term. F<br>of network<br>and |
| S<br>I<br>N<br>G           |                         | and I and I and  Connect to R of dialer tel cord with D-161488 connector                |   |   | Connect to R<br>D-161488 co                             | of dialer tel                                   | i  |
|                            | G                       | Term. Y on induction coil   |   | Term. L1<br>on term.<br>strip                                 | Term. F of network                                      |   |  |
| O<br>F<br>F                | W                       | Term. GN on induction coil Term. W on dial  |   |   | Term. GN of network                                     |   |  |
| N<br>O<br>R<br>M<br>A<br>L | BL                      | Term.   | R on induction co                                     | vil   | Term. R of network                                      |   |  |
| S<br>P<br>E<br>A<br>K<br>E | Y                       | Insula  | te and store in tels                                  | set   | Insulate and store in tel set of term. 1 of term. strip |   |  |
| R<br>P<br>H<br>O<br>N<br>E | вк                      | Insula  | te and store in tel :                                 | set   | Insulate and sto  | ore in tel set                                  | Term. 6 of term. strip   |

TABLE A (Cont)

DIALER CONNECTIONS TO TELEPHONE SETS EQUIPPED WITH ROTARY DIALS

| KS-1                       | 9594            | <del></del>   |                                  | 500 S                             | ERIES (Cont)                     |                             |                                      |  |  |  |  |
|----------------------------|-----------------|---|----------------------------------|-----------------------------------|----------------------------------|-----------------------------|--------------------------------------|--|--|--|--|
| TE                         | LER<br>EL<br>RD | 500AB<br>500AD  | 511C<br>511D<br>558D             | 558F                              | 511F<br>511H                     | 514B                        | 532A, B<br>533A, B                   |  |  |  |  |
| P<br>U<br>L<br>S           | R               | Remove BL dial lead from term. F of network<br>and<br>Connect to R of dialer tel cord with D-161488 connector |                                  |                                   |                                  |                             |                                      |  |  |  |  |
| I<br>N<br>G                | G               | Term. F of network  |                                  |                                   |                                  |                             |                                      |  |  |  |  |
| O<br>F<br>F<br>-<br>N      | W               | Term. 9 of the<br>TB1 term. strip   | Term. GN<br>of<br>network        | Term. GN<br>of<br>network         | Term. GN<br>of<br>network        | Term. 8 of the term. strip  | Term. R of<br>network                |  |  |  |  |
| O<br>R<br>M<br>A<br>L      | BL              | Term. 10 of the TB1 term. strip   | Term. R<br>of<br>network         | Term. R<br>of<br>network          | Term. R<br>of<br>network         | Term. 11 of the term. strip | Term. W of the 151B amplifier        |  |  |  |  |
| S<br>P<br>E<br>A<br>K      | Y               | Term. 14 of the TB1 term. strip   |                                  | Term. 8<br>of the<br>term. strip  | Term. 4<br>of the<br>term. strip | Insulate and store          | Term. W of the 151B amplifier        |  |  |  |  |
| R<br>P<br>H<br>O<br>N<br>E | вк              | Term. 15 of the<br>TB1 term. strip  | Term. G<br>of the<br>term. strip | Term. 12<br>of the<br>term. strip | Term. 8<br>of the<br>term. strip | Insulate and store          | Term. V of the<br>151-type amplifier |  |  |  |  |

TABLE A (Cont)

DIALER CONNECTIONS TO TELEPHONE SETS EQUIPPED WITH ROTARY DIALS

| KS-19594                   |                |   | 500 SERIES (Cont)                      |                                |  |                                   |  |  |  |  |  |  |
|----------------------------|----------------|---|--|--------------------------------|--|-----------------------------------|--|--|--|--|--|--|
| TE                         | LER<br>L<br>RD | 535A, B   | 54<br>535A, B 536A, B 564H,<br>565     |                                | 566MD                                    | 563НВ                             | 565G   |  |  |  |  |  |
| P<br>U<br>L<br>S           | R              | Remove BL dial lead from term. F of network<br>and<br>Connect to R of dialer tel cord with D-161488 connector |  |                                |  |                                   |  |  |  |  |  |  |
| I<br>N<br>G                | G              |   | Term. F of network                     |                                |  |                                   |  |  |  |  |  |  |
| O<br>F<br>F<br>-<br>N      | W              | Term. R<br>of the<br>network  | Term. GN<br>of the<br>network          | Term. GN of<br>the network     | Term. GN<br>of the<br>network            | Term. 1 of the 241-type amplifier | Term. GN of the network                                      |  |  |  |  |  |
| O<br>R<br>M<br>A<br>L      | BL             | Term. W<br>on the<br>151B<br>amplifier  | Term. R<br>of the<br>network           | Term. R of the network         | Term. R<br>of the<br>network             | Term. 8 of the term. strip        | Term. R of the network                                       |  |  |  |  |  |
| S<br>P<br>E<br>A<br>K<br>E | Y              | Term. L<br>on the<br>151B<br>amplifier  | Term. L<br>on the<br>151B<br>amplifier | Term. ON of<br>the term. strip | Term. 15<br>on the<br>key term.<br>strip | Insulate and store                | Term. ON of the term. strip                                  |  |  |  |  |  |
| R<br>P<br>H<br>O<br>N<br>E | вк             | Term. V<br>on the<br>151B<br>amplifier  | Term. V<br>on the<br>151B<br>amplifier | Term. ON1 of the term. strip   | Term. 16<br>on the<br>key term.<br>strip | Insulate and store                | Connect to O-W mtg. cord conductor with a D-161488 connector |  |  |  |  |  |

TABLE A (Cont)

DIALER CONNECTIONS TO TELEPHONE SETS EQUIPPED WITH ROTARY DIALS

| KS-1                            | 9594            |   | 500 SERIES (Cont)                                     |   |                                   |                                |  |  |  |  |  |
|---------------------------------|-----------------|---|---|---|-----------------------------------|--------------------------------|--|--|--|--|--|
| T                               | LER<br>EL<br>RD | 565GK<br>565HK<br>565LK                                     | 568HB   | 568HF   | 568HR                             | 568HT                          | 701B/D   |  |  |  |  |
| P<br>U<br>L<br>S<br>I<br>N<br>G | R               |   | L lead from te<br>and<br>L of dialer tel c<br>connect | cord with D-  | dial lead<br>from 2 on            |                                | Remove BL dial lead from term. F of the network, and Connect to R of dialer tel cord with D-161488 connector |  |  |  |  |
|                                 | G               |   | Term. F   | Term.<br>2 on<br>term. strip                          | Term. F of network                |                                |  |  |  |  |  |
| O<br>F<br>F<br>N                | W               | Term. GN of<br>the network                                  | Term. 2<br>of the<br>term. strip                      | Term. 10<br>of the<br>term. strip                     | Term. 9<br>of the<br>term. strip  | Term. 3 on term. strip         | Term. GN of the network  |  |  |  |  |
| R<br>M<br>A<br>L                | BL              | Term. R of the network                                      | Term. 4<br>of the<br>term. strip                      | Term. 12<br>of the<br>term. strip                     | Term. 10<br>of the<br>term. strip | Term. 4 on term. strip         | Term. R of the network   |  |  |  |  |
| S<br>P<br>E<br>A<br>K<br>E      | Y               | Term. 7 of the 589 or 636-type key term. strip              | Term. ON of the term. strip                           | or 636-type key term.                                 |                                   | Term. ON on . term. strip      | Term. 5 of the<br>E1 ringer  |  |  |  |  |
| R<br>P<br>H<br>O<br>N<br>E      | вк              | Term. 8<br>of the 589-<br>or 636-type<br>key term.<br>strip | Term. ON1 of the term. strip                          | Term. 8 of the 589-<br>or 636-type key term.<br>strip |                                   | Term.<br>ON1 on<br>term. strip | Term. 6 of the<br>E1 ringer  |  |  |  |  |

**♦ TABLE A (Cont) ♦**DIALER CONNECTIONS TO TELEPHONE SETS EQUIPPED WITH ROTARY DIALS

| W0.16                     | 2504     |   | 700                           | SERIES (Con                 | t)                        |  | 800 SERIES   |  |  |  |
|---------------------------|----------|---|-------------------------------|-----------------------------|---------------------------|--|--|--|--|--|
| KS-19<br>DIA<br>TE<br>COI | LER<br>L | 702В  | 702D<br>711B<br>712B*<br>713B | 750A/B†<br>751A/B<br>754A/B | 750A/B‡<br>751C/D<br>753B | 752A/B   | 830A1M, 832-TYPE<br>831A1M, 833-TYPE<br>851A1M                   |  |  |  |
| P<br>U<br>L<br>S          | R        | Remove BL dial lead from term. F on network and Connect to R of dialer tel cord with D-161488 connector |                               |                             |                           |  |  |  |  |  |
| Ĭ<br>N<br>G               | G        | Term. F on network  |                               |                             |                           |  |  |  |  |  |
| O<br>F<br>F<br>N          | w        | Term. GN  | of netwo                      | ork                         | Term. 13<br>on TB1        | Term. GN on network  |  |  |  |  |
| O<br>R<br>M<br>A<br>L     | BL       | Term. R of network  |                               |                             | Term. 14<br>on TB1        | Term. R on network   |  |  |  |  |
| S<br>P<br>E               | Y        | Term. 1 of the  | Insulate and store            |                             | e in tel set              | Term. 7 of term.   | Term. 30 of term. strip<br>830A1M, 831A1M,<br>832-type, 833-type |  |  |  |
| A<br>K<br>E               |          | 44A conn. block   |                               |                             | strip                     | Term. 15 of term. strip<br>851A1M                                |  |  |  |  |
| R<br>P<br>H<br>O<br>N     | BK       | Term. 2 of the 44A conn. block  |                               | e in tel set                | Term. 8 of term.          | Term. 24 of term. strip<br>830A1M, 831A1M,<br>832-type, 833-type |  |  |  |  |
| E<br>E                    |          |   |                               |                             | strip                     | Term. 17 of term. strip<br>851A1M                                |  |  |  |  |

st Increase depth of housing mounting cord entrance hole 1/16-inch using a 3-1/2-inch half-round file.

<sup>†</sup> Early model.

<sup>‡</sup> Current production.

♦ TABLE B ♦

DIALER CONNECTIONS TO CALL DIRECTOR TELEPHONE SETS AND TRIMLINE TELEPHONE SETS EQUIPPED WITH ROTARY DIALS

| DIA<br>T                   | 19594<br>ALER<br>EL<br>ORD | ALL 600<br>SERIES EXCEPT<br>THOSE LISTED<br>BY CODE | 608A<br>618A                                     | 608C<br>618B                               | 610A   | 623A   | 630<br>631<br>632<br>634<br>635   | 636A<br>637A                        |
|----------------------------|----------------------------|---|--|--|--|--|-----------------------------------|-------------------------------------|
| P<br>U<br>L<br>S<br>I<br>N | R                          |   | ve BL dial le<br>F on the netv<br>and<br>Connect | work                                       | Remove Y dial lead from term. 6 on term. strip TS2 and r tel cord with D-1 | Remove BL dial lead<br>from F on the network<br>and<br>61488 connector |                                   |                                     |
| G                          | G                          | Term.   | F on the net                                     | work                                       | Term. 6<br>on term.<br>strip TS2   | Т  | Term. F on the network            |                                     |
| O<br>F<br>F                | w                          | Term. GN<br>on the<br>network                       | Term. 4<br>on term.<br>strip TB3                 | Term. 5<br>on the<br>241-type<br>amplifier | Term. 1<br>on term.<br>strip TS2   | Term<br>netw   | n. GN on the<br>ork               | Term. 4<br>on term.<br>strip TB1    |
| N<br>O<br>R<br>M<br>A<br>L | BL                         | Term. R<br>on the<br>network                        | Term. 6<br>on term.<br>strip TB3                 | Term. L1<br>on the<br>network              | Term. 2<br>on term.<br>strip TS2   | Term<br>netw   | ı. R on the<br>ork                | Term. L1<br>on the<br>network       |
| S<br>P<br>E<br>A<br>K<br>E | Y                          | Term. W<br>on the<br>dial                           | Term. 7<br>on term.<br>strip TB3                 | Term. 4<br>on term.<br>strip TB1           | Insulate and store in tel set  |  | Term. 11<br>on the<br>term. block | Insulate<br>and store<br>in tel set |
| R<br>P<br>H<br>O<br>N<br>E | вк                         | Term. BB<br>on the<br>dial                          | Term. 8<br>on term.<br>strip TB3                 | Term. 5<br>on term.<br>strip TB1           | in terser i  |  | Term. 12<br>on the<br>term. block | Insulate<br>and store<br>in tel set |

▶ TABLE B (Cont) ◆

DIALER CONNECTIONS TO CALL DIRECTOR TELEPHONE SETS AND TRIMLINE TELEPHONE

WITH ROTARY DIALS

|                            |    | CALL DIRECTOR SETS   |                                   |  |                        |  |  |  |
|----------------------------|----|--|-----------------------------------|--|------------------------|--|--|--|
| KS-199                     | ER | 636B<br>637C<br>638B<br>639C                                   | 636C<br>637D<br>638C<br>639D      | 630DA<br>631DA   | 636CA<br>637DA         |  |  |  |
| P<br>U<br>L<br>S           | R  | Remove BL lead from an Connect to R of dial D-161488 connector | d<br>ler tel cord with            | Remove BL lead from F on<br>the network<br>and<br>Connect to R of dialer tel<br>cord with D-161488 connector |                        |  |  |  |
| N<br>G                     | G  | F on the network   |                                   | F on the netw  | ork                    |  |  |  |
| O<br>F<br>F<br>-<br>N      | w  | Term. 3 on term.<br>board TB1                                  | Term. 1 on the 241-type amplifier | GN on network  | L1 on network          |  |  |  |
| O<br>R<br>M<br>A<br>L      | BL | L1 on the network  |                                   | R on network   | Term. 1 on<br>241B amp |  |  |  |
| S<br>P<br>E<br>A<br>K      | Y  | Insulate and store   |                                   | Insulate and store   |                        |  |  |  |
| R<br>P<br>H<br>O<br>N<br>E | вк | Insulate and store   |                                   | Insulate and store   |                        |  |  |  |

# **♦ TABLE B (Cont) ♦**DIALER CONNECTIONS TO *CALL DIRECTOR* TELEPHONE SETS AND *TRIMLINE* TELEPHONE SETS EQUIPPED WITH ROTARY DIALS

|                            | 9594<br>LER | TRIMLINE SETS   |
|----------------------------|-------------|---|
| CO                         | _           | 220<br>HAND TEL SET   |
| P<br>U<br>L<br>S           | R           | Connect to G of inside wire (one side of CO line) at suitable connecting block. Disconnect G of D5AL mounting cord. |
| I<br>N<br>G                | G           | Connect to G of D5AL mounting cord at spare connecting block terminal, or use D-161488 connector                    |
| O<br>F<br>F<br>-<br>N      | w           | Connect to G of D5AL mounting cord and G of dialer tel cord   |
| O<br>R<br>M<br>A<br>L      | BL          | Connect to R of D5AL mounting cord and to R of inside wire at connecting block term.                                |
| S<br>P<br>E<br>A<br>K      | Y           | Insulate and store at connecting block  |
| R<br>P<br>H<br>O<br>N<br>E | вк          | Insulate and store at connecting block  |