# TELEPHONE SETS — 357A
## MAGNETO — CONNECTIONS

### 1.00 INTRODUCTION

This section covers the combination of apparatus, circuit diagram, and connections for the 357A telephone set when used with a magneto subscriber set.

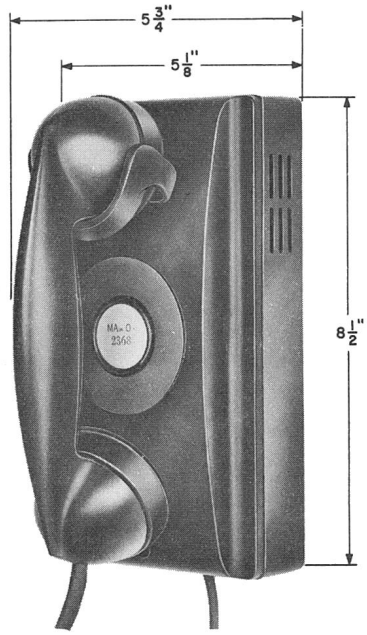


FIG. 1—357 TYPE

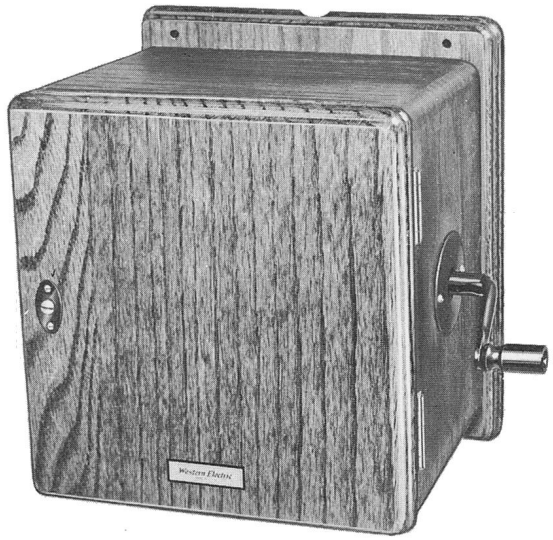

FIG. 2—299F OR D-176680 TYPE

TABLE A—COMBINATION OF APPARATUS

| Tel. Set Code | Use | Components | | | | | |
|---|---|---|---|---|---|---|---|
| | | Handset | Apparatus Blank | Induction Coil | Ringer | Capacitor | Inductor |
| 357A | Magneto | F1 | 94A | 104A | B1AL | 387A | 266A |
| 299F | | 5-Bar Generator (48A) | | | | | |
| D-176680 | | 3-Bar Generator (D-176681) | | | | | |

### 2.00 RINGERS

The ringing bridge in this set is of the high-impedance type. For information on the number and type of ringing bridges permitted on each line, reference should be made to the section covering ringer limitations.

## TABLE B—LINE AND RINGER CONNECTIONS

| Wire or Lead | | Individual or Bridged Station | Ring Party Station | Tip Party Station |
|---|---|---|---|---|
| | | | Positions 1, 3, 5, 7 and 9 | Positions 2, 4, 6, 8 and 10 |
| Line Wire in Tel. Set | R | L1 | L2Y | L1 |
| | GN | L2Y | L1 | L2Y |
| | Y | GND | GND | GND |
| Ringer Lead | R | LI | K | GND |
| | BK | K | GND | K |
| Local Battery Wires in Tel. Set | | BK | BK | BK |
| | | BL | BL | BL |
| Magneto Wires in Tel. Set | | L1 | L1 | L1 |
| | | L2Y | L2Y | L2Y |

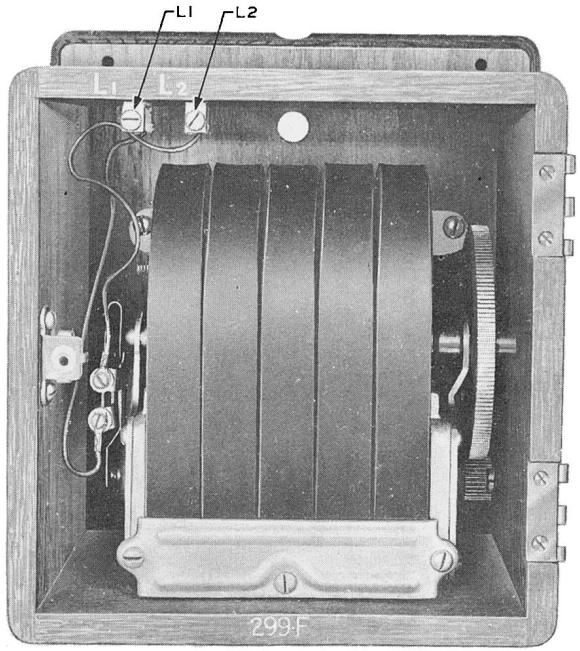


FIG. 3—299F (D-176680 HAS A 3-BAR GENERATOR)

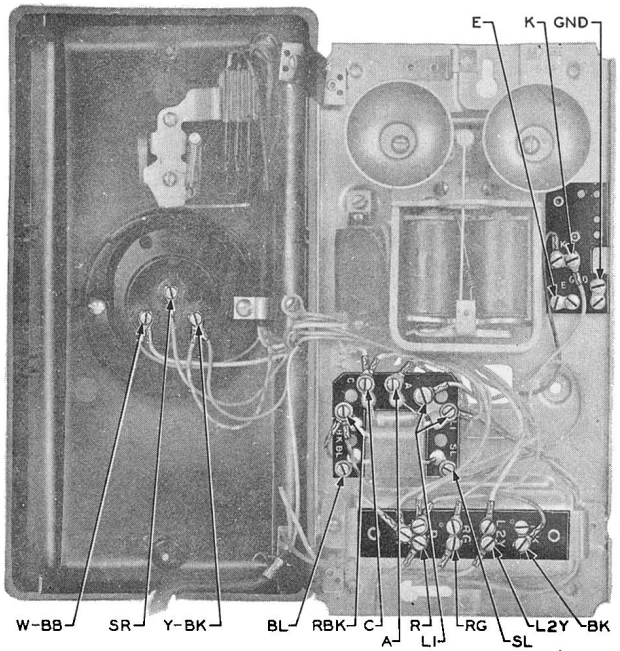


FIG. 4—357A

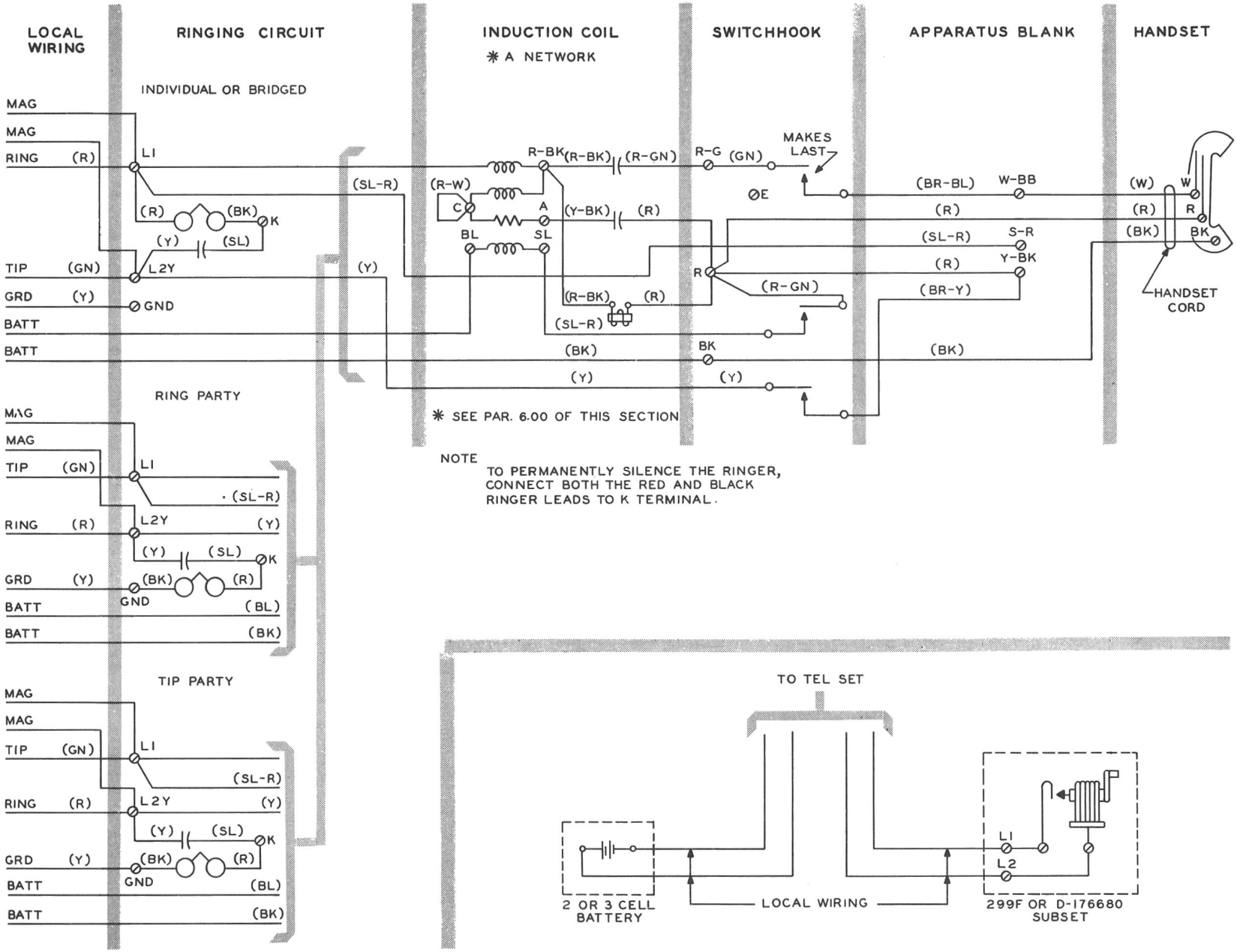


FIG. 5—357A CIRCUIT DIAGRAM

## 4.00 INDUCTIVE NOISE

When inductive noise is encountered at tip party stations, connect the red lead from the 266A inductor to RBK and the red-black lead to R.

## 5.00 COMMON SOURCE OF BATTERY

**5.01** Where the transmitter battery for more than one station is obtained from a common source of supply, such as battery feed from the central office, the following changes in Fig. 5 must be made:

- Replace an F1 handset with an F2 handset.
- Connect the green conductor of the F2 handset to terminal SL. Connect the slate-red and red-green leads from the switchhook to terminals BL and E.
- Connect the battery leads to BK and E.
- Connect the red, black, and white conductors of the F2 handset the same as shown for the F1 handset in Fig. 5.

**5.02** When a common source of battery supply is used, a battery feed filter must be used. For further information, see the section covering battery feed filters.

## 6.00 BALANCING NETWORKS

**6.01** Means are provided in this set whereby various networks may be connected in the induction coil balancing circuit to obtain satifactory sidetone balance when the set is used on the different types of subscriber loops employed in the plant.

**6.02** This set is normally furnished with the type A network as indicated in Fig. 5. Necessary changes in the set to obtain other networks are as follows:

**Network B:** Connect a KS-8058 400-ohm, or KS-13490, List 2, 390-ohm resistor from A on induction coil to R on terminal strip. Connect red from capacitor to A on induction coil.

**Network C:** Connect yellow-black from capacitor to C on induction coil.

**Network D:** Connect yellow-black from capacitor to R on terminal strip. Connect red-white strap from C on induction coil to R on terminal strip.