

## TELEPHONE SETS — 306A,C, 5306C (TUBE SETS)

### COMMON BATTERY — CONNECTIONS

#### 1.00 INTRODUCTION

1.01 This section covers the combination of apparatus, circuit diagram, and connections for the 306A and C and the 5306C telephone sets.

1.02 These sets are used for the following services:

- 4-party full selective.
- 8-party semiselective.



FIG. 1—306 TYPE



FIG. 2—5306 TYPE

TABLE A  
COMBINATION OF APPARATUS

Hand Tel. Set Code	Use	Components							
		Handset	Dial	Apparatus Blank	Induction Coil	Ringer	Capacitor	Electron Tube	Filter (Optional)
306A	Manual	F1	—	82A or 94A	101A	B3A	195C	426A	—
306C	Dial		5H or 6A	—					61P
5306C		F1, F4, G1	5M or 6H						61S

2.00 CONNECTIONS

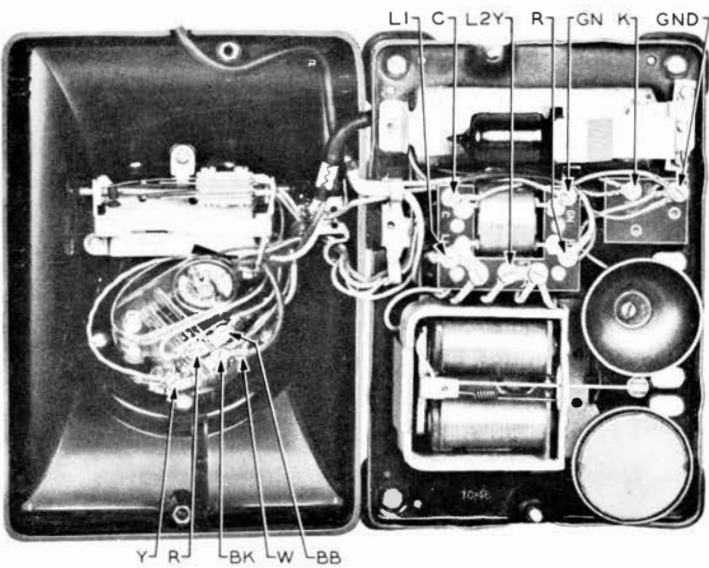


FIG. 3—306C (5306C IS SIMILAR)

TABLE B—LINE AND RINGER CONNECTIONS

Wire or Lead		Negative (—) Parties		Positive (+) Parties	
		Ring Positions 1 and 5	Tip Positions 2 and 6	Ring Positions 3 and 7	Tip Positions 4 and 8
Mounting Cord in Set	R	L2Y	L1	L2Y	L1
	GN	L1	L2Y	L1	L2Y
	Y	GND	GND	GND	GND
Ringer Lead	R	GND	GND	L2Y	L2Y
	BK	K	K	K	K
Tube Lead	R	GND	GND	L2Y	L2Y
	BK	K	K	K	K
	Y	L2Y	L2Y	GND	GND
Mounting Cord at Connecting Block	R	R	R	R	R
	GN	G	G	G	G
	Y	Y	Y	Y	Y

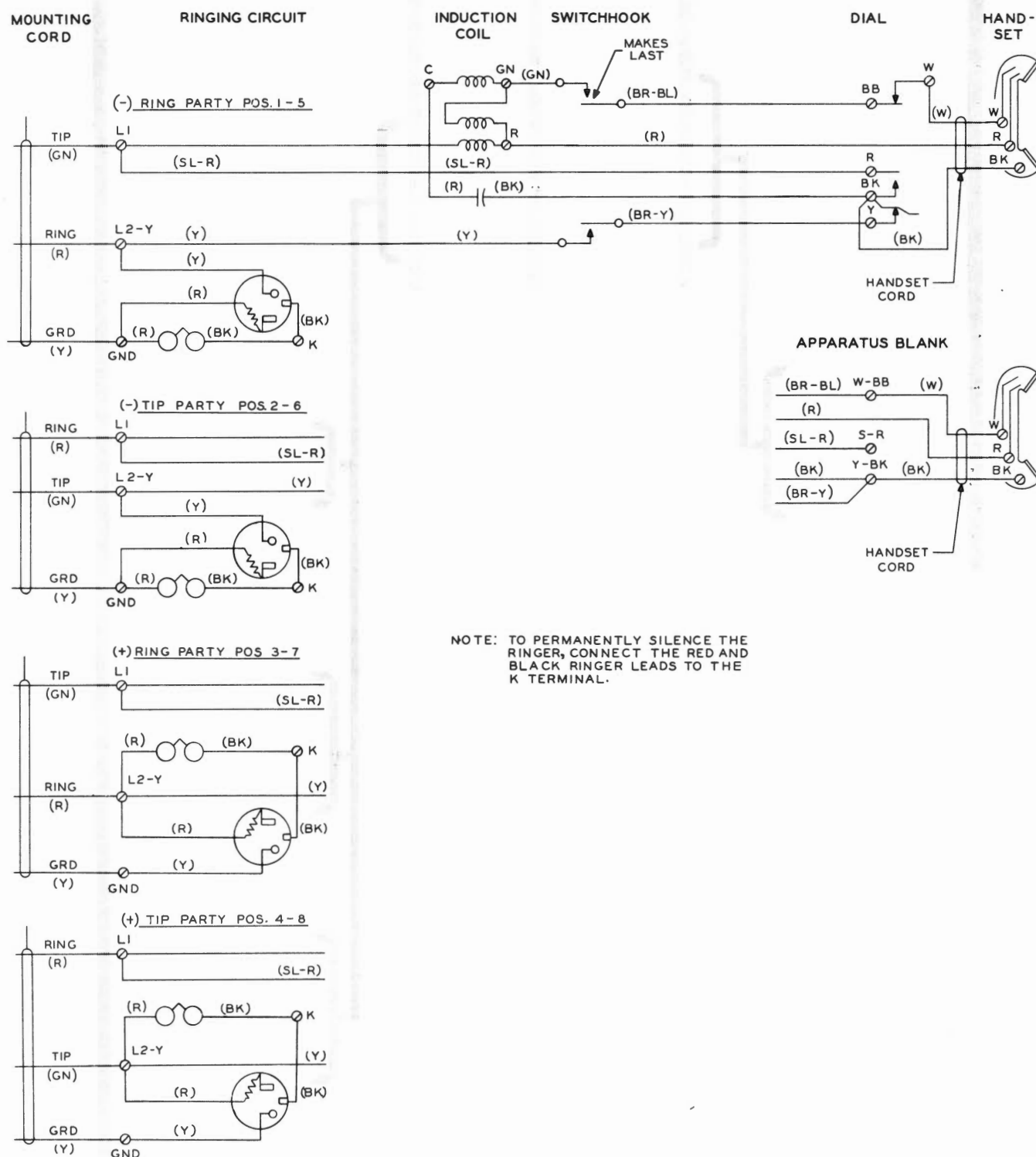


FIG. 4—306A,C AND 5306C CIRCUIT DIAGRAM

### 3.00 FILTER CONNECTIONS

When a radio-frequency suppression filter is used in the 360C or 5306C telephone set, make connections as shown in Fig. 5.

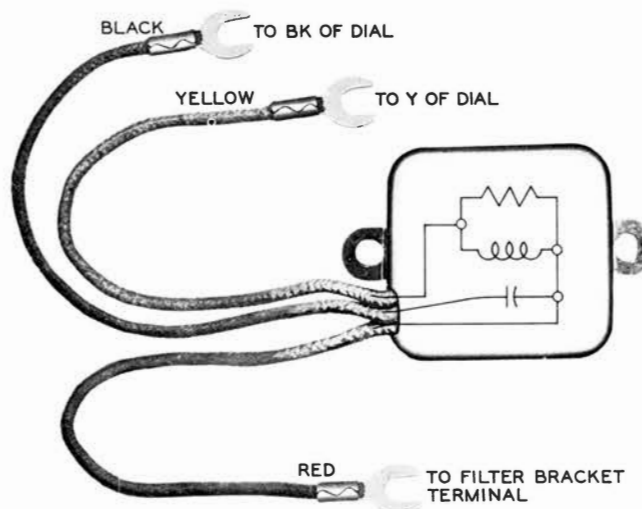
### 4.00 RINGERS

4.01 Set ringer biasing spring on B3A ringer in the notch that gives the most satisfactory ring.

4.02 The ringing bridge is an equivalent high-impedance type. For information on the number and type of ringing bridges permitted on each line, see the C Section covering ringer limitations.

### 5.00 G-TYPE HANDSET

When a G-type handset is used with the 5306C telephone set, the red and one white conductor of the handset cord should be terminated on the R terminal of the induction coil and the remaining conductors to their respective terminals.



Note: Remove brown-yellow lead from Y of the dial and terminate H on the filter bracket terminal.

FIG. 5—61P OR 61S FILTER (WITHOUT BRACKET)

### 6.00 CONNECTIONS WHEN INDUCTANCE IS ENCOUNTERED

TABLE C—INDUCTION

Leads		Average Induction				Severe Induction			
		Negative (—) Parties		Positive (+) Parties		Negative (—) Parties		Positive (+) Parties	
		Ring Positions 1 and 5	Tip Positions 2 and 6	Ring Positions 3 and 7	Tip Positions 4 and 8	Ring Positions 1 and 5	Tip Positions 2 and 6	Ring Positions 3 and 7	Tip Positions 4 and 8
Ringer Lead	R	GND	GND	K	K	K	K	K	K
	BK	K	K	GND	GND	L2Y	L2Y	GND	GND
426A Tube Lead	R	L1	L1	—	—	—	—	—	—
	BK	K	K						
	Y	L2Y	L2Y						
425A Tube Lead	R	—	—	L2Y	L2Y	L1	L1	L2Y	L2Y
	GN			L1	L1	L2Y	L2Y	L1	L1
	BK			L2Y	L2Y	GND	GND	L2Y	L2Y
	Y			K	K	K	K	K	K

Note: For additional information concerning induction, see the C Section covering inductive noise.

**7.00 CONNECTIONS FOR 2-PARTY SERVICE  
AND INDIVIDUAL LINES**

**7.01** The 306- and 5306-type sets may be used for one and 2-party service only. These sets cannot be used for tip party identification.

**7.02** When 2-party and individual lines are supplied with superimposed dc (polarized) ringing, these telephone sets may be used without modification. For line and ringer connections, see Table B in this section.

**7.03** When 2-party individual lines are supplied with ac or ac-dc (nonpolarized) ringing, the 306- and 5306-type sets are modified as follows:

- If the set employs a 333A or 372A electron tube, remove the tube and mount a KS-16023

capacitor, using the same mounting bracket, plate, and screw. The capacitor shall be connected to the L2Y and K terminals.

- If the set employs a 426A electron tube, remove the tube and mounting bracket assembly. Then mount a KS-16023 capacitor using P-10C385 bracket assembly which consists of a P-10C418 mounting bracket, a P-340593 plate, and two P-129732 screws. The capacitor shall be connected to the L2Y and K terminals.
- For line and ringer connections of a modified set, reference should be made to the C Section covering line and ringer connections for the 302E and G and the 5302G telephone sets.

**7.04** The biasing spring is normally placed in the high notch. However, place the biasing spring in the notch that gives the most satisfactory ring.