

**SUBSCRIBER SETS—634YD**  
**LOCAL BATTERY**  
**USED WITH HAND TELEPHONE SETS**  
**CONNECTIONS**

**1.00 INTRODUCTION**

This section covers the combination of apparatus, circuit diagram, and connections for the 634YD subscriber set when associated with hand telephone sets for local battery talking — common battery signaling service.

**2.00 GENERAL**

**2.01** These sets come equipped with either a 104A or 113D induction coil, but the coils are not interchangeable in the field. The corresponding terminals of the two coils are given below:

104A — L1    RBK    C    A    BL    SL

113D — S    S1    S2    S3    P    P

**2.02** Means are provided in the sets whereby any one of four different network connections, A to D, may be made in the induction coil balancing circuit to obtain a satisfactory sidetone balance when sets are used on the different types of subscriber loops employed in the plant.

**2.03** Unless otherwise specified, sets are furnished with A network as shown in the circuit diagrams herein. Necessary changes in the set to obtain the other networks are shown as follows:

**Sets Equipped with 104A Induction Coils**

**Network B:** Connect a KS-8058, 400-ohm, or KS-13490, List 2, 390-ohm resistor between A on induction coil and BK. Connect black lead from capacitor to wood screw (see Note 1).

**Network C:** Connect yellow lead from capacitor to C on induction coil, and connect one end of black strap on C to wood screw.

**Network D:** Connect black lead from capacitor to wood screw, and connect one end of black strap on C to BK.

**Sets Equipped with 113D Induction Coils**

**Network B:** Connect 63FD, KS-8058, 280-ohm, or KS-13490, List 2, 300-ohm resistor between S3 on induction coil and BK (Notes 1, 2).

**Network C:** Connect white lead from S3 on induction coil to wood screw and connect black lead from capacitor to BK.

**Network D:** Connect black strap from S2 on induction coil to BK.

*Note 1:* The 63FD, KS-8058, 280-ohm, or KS-13490, List 2, 300-ohm resistor is not furnished as part of the set and must be obtained separately.

*Note 2:* To make this connection, the white lead from S3 on induction coil should be connected to any unused terminal on the set, and the resistor should be connected between that terminal and BK. If there is no unused terminal, an extra terminal should be added to the set.

**2.04** When dry cells are employed for transmitter battery supply, they shall be connected in series with the battery terminals of the subscriber set, using the number of cells specified in the section which covers transmission zoning.

**2.05** Where stations receive transmitter battery supply from a common source, a filter is necessary in each transmitter circuit. This filter and its connections are covered in the section which deals with battery supply filters.

**3.00 CONNECTIONS**

**3.01** To connect the subscriber set to its associated hand telephone set, the appropriate circuit diagram herein should be matched with the circuit diagram on the foldout page in the section covering the connections for the hand telephone set. It should be noted that changes in the wiring of the subscriber set are required in some cases; therefore, circuit diagrams should be followed closely.

**3.02** Connections in table form are also given for each type of subscriber set connection. Tables C and E cover the connections of the subscriber set when used with hand telephone sets.

**TABLE A  
COMBINATION OF APPARATUS**

Sub. Set Code	Components		
	Induction Coil	Capacitor	Ringer
634YD	104A and 101A or 113D and 46B	2 — 149B, 1149B, 449B, or 449H and 1 — 147A, 147AB, or 447A or	6J, 6JA, 8J, 8JA, 68J, 68JA, or B1AL
		1 — 149B, 1149B, 449B, or 449H and 1 — 149D or 449D and 1 — 147A, 147AB, or 447A or	
		1 — 387A	

**TABLE B  
ASSOCIATED APPARATUS**

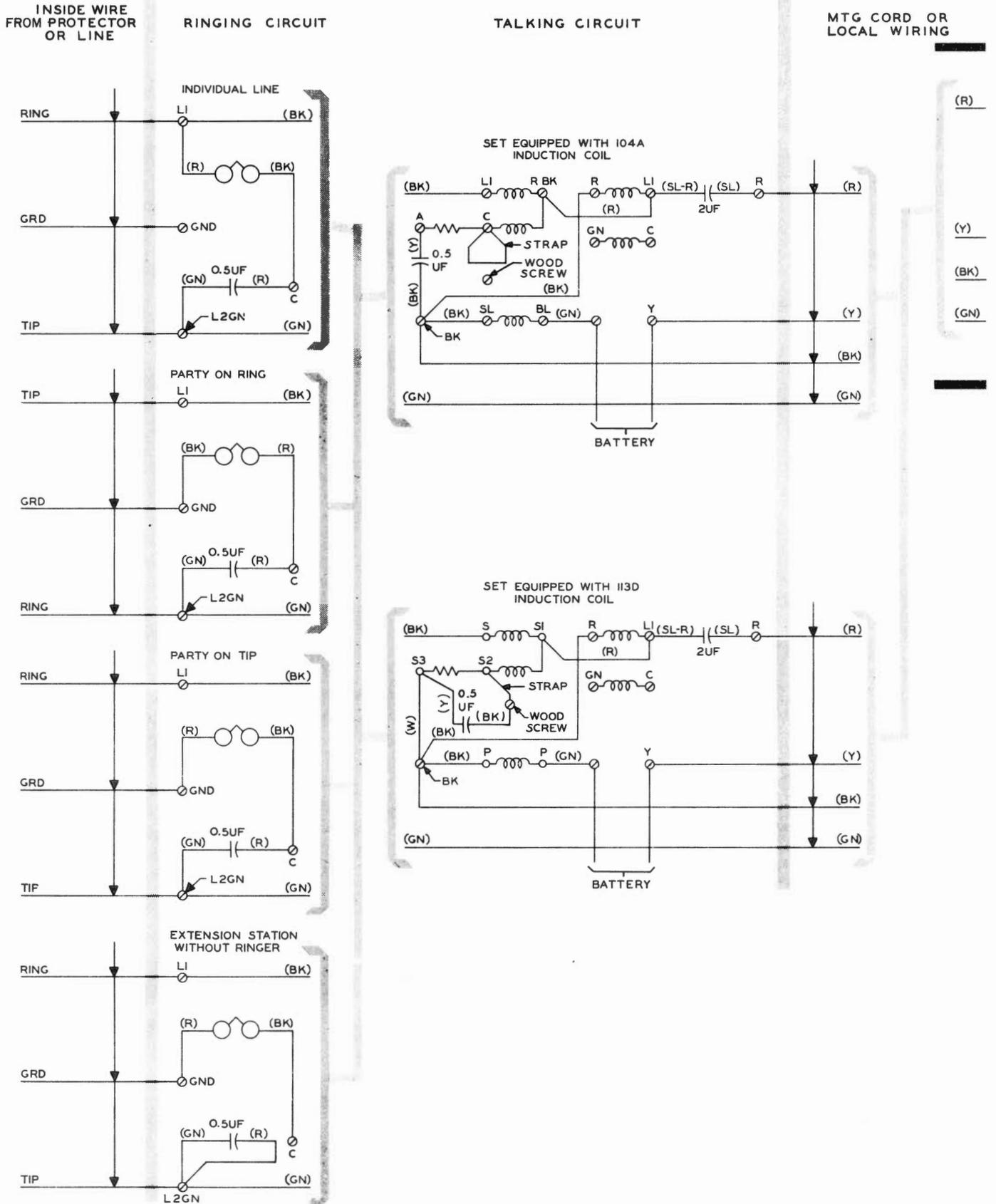
Class of Service	Hand Telephone Set	
	Desk Type	Hangup Type
Individual Lines PBX Stations 2-Party Flat Rate 2-Party Message Rate (Manual and Ring Party Dial) 4-Party Semiselective Multiparty Divided Code Multiparty Nonselective	202E, F, G, or H 215A, B, C, or D	201A, B, C, or D 211E, F, G, or H 213A, B, C, or E

**TABLE C  
CONNECTIONS**

Wire or Lead		Terminals		
		Individual or Bridged	Ring Party	Tip Party
Inside Wire from Protector or Line	Ring	L1	L2GN	L1
	Tip	L2GN	L1	L2GN
	GND	GND	GND	GND
Ringer Lead	R	L1	C	GND
	BK	C	GND	C
Ringing Capacitor Lead	R	C	C	C
	GN	L2GN	L2GN	L2GN
Mounting Cord or Local Wiring	R	R	R	R
	Y	Y	Y	Y
	BK	BK	BK	BK
	GN	L2GN	L2GN	L2GN

*Note:* Extension stations without ringer shall be connected in the same way as the associated main station except that both leads from the ringing capacitor shall be connected to terminal L2GN.

3.03 Circuit diagram of 634YD subscriber set when used with hand telephone set and when an individual source of transmission battery supply is employed:



**TABLE D**  
**ASSOCIATED APPARATUS**

Class of Service	Hand Telephone Set	
	Desk Type	Hangup Type
Individual Lines PBX Stations 2-Party Flat Rate 2-Party Message Rate (Manual and Ring Party Dial) 4-Party Semiselective Multiparty Divided Code Multiparty Nonselective	207A, B, C, or D	211E, F, G, or H (Modified)

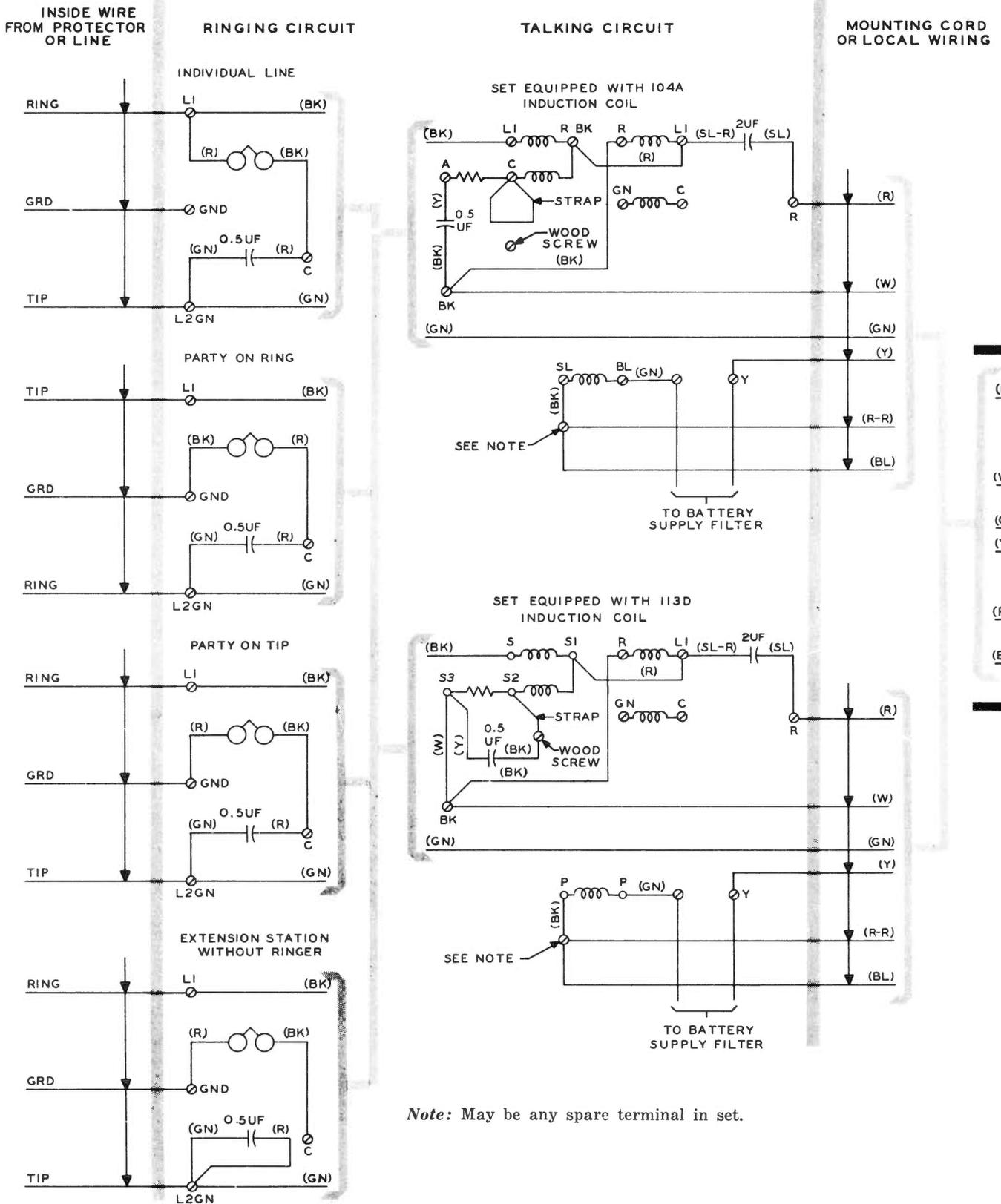
**TABLE E**  
**CONNECTIONS**

Wire or Lead		Terminals		
		Individual or Bridged	Ring Party	Tip Party
Inside Wire from Protector or Line	Ring	L1	L2GN	L1
	Tip	L2GN	L1	L2GN
	GND	GND	GND	GND
Ringer Lead	R	L1	C	GND
	BK	C	GND	C
Ringer Capacitor Lead	R	C	C	C
	GN	L2GN	L2GN	L2GN
Mounting Cord or Local Wiring	R	R	R	R
	W	BK	BK	BK
	Y	Y	Y	Y
	BL	*	*	*
	GN	L2GN	L2GN	L2GN
	RR	*	*	*

*Note:* Extension stations without ringer shall be connected in the same way as the associated main station except that both leads from the ringing capacitor shall be connected to terminal L2GN.

\* Use any spare terminal in set to which cords or wires and the lead from SL or P on induction coil may be connected together. If there is no unused terminal available, an extra terminal should be added to the set.

3.04 Circuit diagram of 634YD subscriber set when used with hand telephone set and when common source of transmitter battery supply is employed:



Note: May be any spare terminal in set.