

BELL SYSTEM PRACTICES
Station Installation and Maintenance

SECTION C63.223
Issue 1, Nov., 1955
AT&TCo Standard

SUBSCRIBER SETS

CONNECTIONS

COMMON BATTERY

1. GENERAL

1.01 This section covers line and ringer connections and wiring diagrams for all subsets using common battery.

1.02 **Table A** shows connections for individual or bridged flat- or message-rate service, 2-party flat rate, message rate, automatic-message accounting, automatic ticketing, zone registration, 4-party semiselective, and multiparty divided-code ringing service.

1.03 **Table B** shows connections for 4-party selective and 8-party semiselective service. This table also shows connections for subsets equipped with tubes or relays to lines having average to severe induction.

2. WIRING DIAGRAMS

2.01 Figs. 1 through 16 show wiring diagrams for all types of common battery subsets, including ringers, loud ringing bells, and sets equipped with tubes and relays.

TABLE A
Common Battery Subscriber Set Connections—No Induction

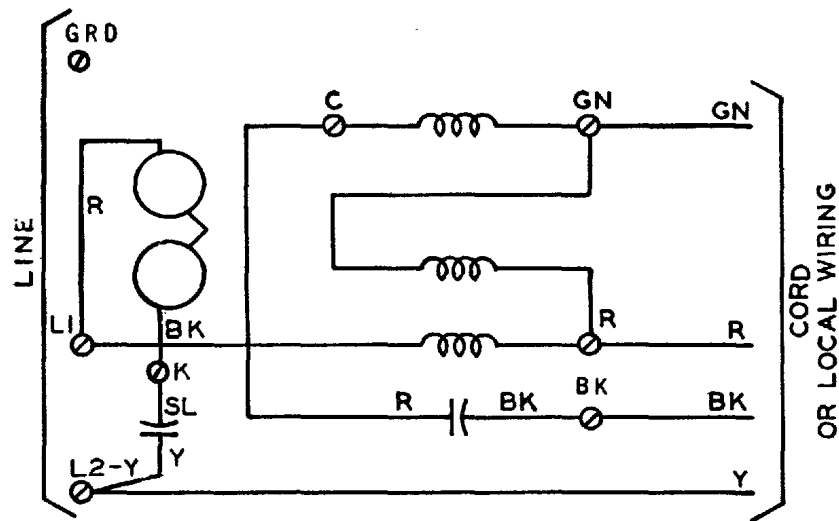
Wiring Diagram Fig.	Subset	TYPE OF SERVICE																						Local Wiring to Main, Ext, Ext Bell and/or Aux Sig Ckt		
		Individual or Bridged Flat or Message Rate Incl PBX 750A and 755A Keyless						Flat Rate																		
								2-party Selective, 4-party Semiselective, and Multiparty Divided Code		2-party Selective Step-by-step AMA and AT Modified Crossbar AMA				2-party Selective Panel ZR Standard Crossbar AMA		2-party Selective Message Rate										
		Line Wire		Ringer Leads				Party Position		Line Wire		Ringer Leads														R
R	GN	BK	R	S	SR			R	GN	Y	BK	R	S	SR	BK	R	S	SR	BK	R	S	SR	R	GN		
1	434A, BA, 495BP, 634A, BA, C, 434R, 684A, BA, C	L1	L2Y	K	L1			R	1-J 3-R	L2Y	L1	GND	GND	K			GND	K			GND	K				
								T	2-M 4-W	L1	L2Y	GND	K	GND												
2A	534DE, DF, 584DE, DF	R	L2	B	R			R	1-J 3-R	L2		R	R	B			R	B			R	B				
								T	2-M 4-W		L2	R	B	R			B	R			B	R				
2B	531A, 392L, 592A	L1	L2	K	L1			R	1-J 3-R	L2		GND	GND	K			GND	K			GND	K				
								T	2-M 4-W		L2	GND	K	GND			K	GND			K	GND				
3	534A, BA, C 584A, BA, C	L1	L2Y	C	L1			R	1-J 3-R	L2Y	L1	GND	GND	C												
								T	2-M 4-W	L1	L2Y	GND	GND	C												
4	634BC, 684BC	L1	L2Y	RR	L1			R	1-J 3-R	L2Y	L1	GND	GND	RR			GND	RR			GND	RR				
								T	2-M 4-W	L1	L2Y	GND	RR	GND						YY	GND					
5	634CE	*L1	L2Y	K	L1	SR	SR	R	1-J 3-R	L2Y	*L1	GND	GND	K	SR	SR	GND	K	SR	SR	GND	K	SR	SR		
								T	2-M 4-W	L1	L2Y	GND	*K	GND	SR	SR	†SR	M	K	GND	GND	K	M	†SR		
6	634CF	L1	L2Y																						GND	E
7	634BK	L1	L2Y	K	L1			R	1-J 3-R	L2Y	L1	GND	GND	K			GND	K			GND	K			S1	S2
								T	2-M 4-W	L1	L2Y	GND	K	GND											S1	S2
8	685A	L1	L2	L1	L2	K	1	R	1-J 3-R	L2	L1	G	G	L2	K	1	G	L2	K	1	G	L2	K	1		
								T	2-M 4-W	L1	L2	G	G	L2	K	1	‡B	B	K	G	‡G	K	B	B		
9A	687A	L1	L2	K	L1	2	2	R	1-J 3-R	L2		G	K	G	2	2										
								T	2-M 4-W		L2	G	K	G	2	2										
9B	310B, 684BT	L1	L2					R	1-J 3-R	L2		L1													S1	S2
								T	2-M 4-W	L1		L2													S1	S2

* Strap RR to L1. † Strap RR to SR. ‡ Transfer S-BR lead from L2 to 2 on terminal block.

TABLE B
Common Battery Connections—Subscriber Sets with Electron Tubes and/or Relays

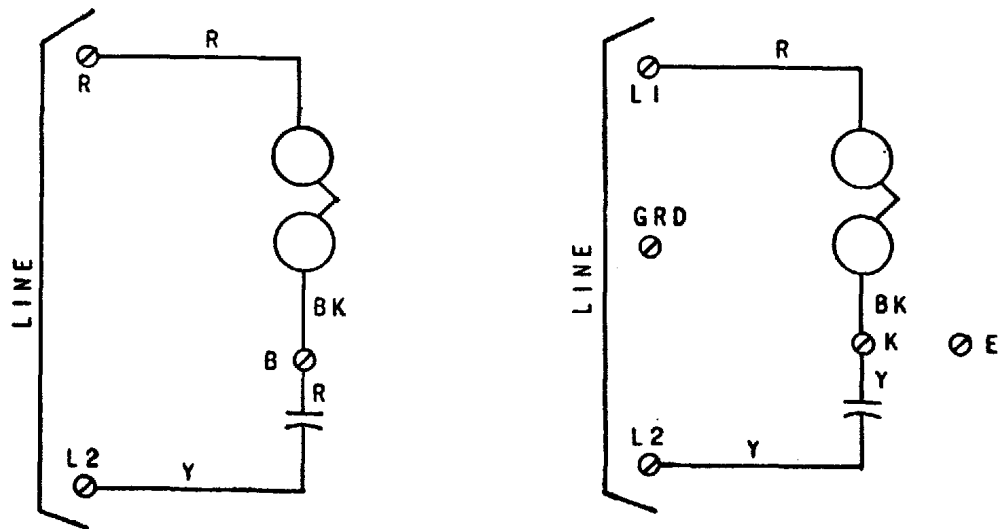
Wiring Diagram Fig.	Subset	4-party Selective and 8-party Semiselective, also, Average to Severe Induction																	Local Wiring to Ext, Ext Bell, Aux Signal Ckt		
		Party Position		Line			Ringer				Tube			Relay							
				R	G	Y	BK	R	SL	SL-R	BK	Y	R	W	BK	BR-Y	BR-BL	R	SL	R	GN
10	434AT, 495AT, 634AT	−R −T +R +T	1-5 2-6 3-7 4-8	L2Y L1 L2Y L1	L1 L2Y L1 L2Y	GND GND GND GND	K K K K	GND GND L2Y L2Y			K K K K	L2Y L2Y GND GND	GND GND L2Y L2Y								
11A	592C	−R −T +R +T	1-5 2-6 3-7 4-8	Y R	Y R	R R Y Y	K K K K	R R R R			K K K K	Y Y Y Y	E E E E								
11B	531C, 687B	−R −T +R +T	1-5 2-6 3-7 4-8	L2Y L1 GND L1	L1 L2Y L1 GND	GND GND L2Y L2Y					K K K K	L2Y L2Y L2Y L2Y	GND GND GND GND	*K *K *K *K	GND GND GND GND	2 2 2 2	GND GND L2Y L2Y		L2Y L1 GND L1	L1 L2Y L1 GND	2 2 2 2
12	686A	−R −T +R +T	1-5 2-6 3-7 4-8	L2 L1 L2 L1	L1 L2 L1 L2	G G G G	G G L2 L2	G G L2 L2	A A A A	K K K K	K K K K	L2 L2 G G	G G L2 L2								
13 14	634AR-Regular Ckt 634FR-Regular Ckt	−R −T +R +T	1-5 2-6 3-7 4-8	L2Y L1 L2Y L1	L1 L2Y L1 L2Y	GND GND GND GND	L2Y L2Y K K	K L2Y L2Y						W W W W	L1 L1 L1 L1			GND GND GND GND	K K K K		
13 14	634AR-Inverted Ckt 634FR-Inverted Ckt	−R −T +R +T	1-5 2-6 3-7 4-8	L2Y L1 L2Y L1	L1 L2Y L1 L2Y	GND GND GND GND	L2Y L2Y K K	K L2Y L2Y						W W W W	GND GND GND GND			L1 L1 L1 L1	K K K K		
15	634CG, †CH														E	§L2Y		RR	M		
16	†685B														2	§L2		L1	K		

*BK lead
†Used with coin collectors only
‡From coin relay
§Y lead



NOTE
A RINGER AND RINGING CAPACITOR NOT
INCLUDED IN 634C, 684C, OR 434R

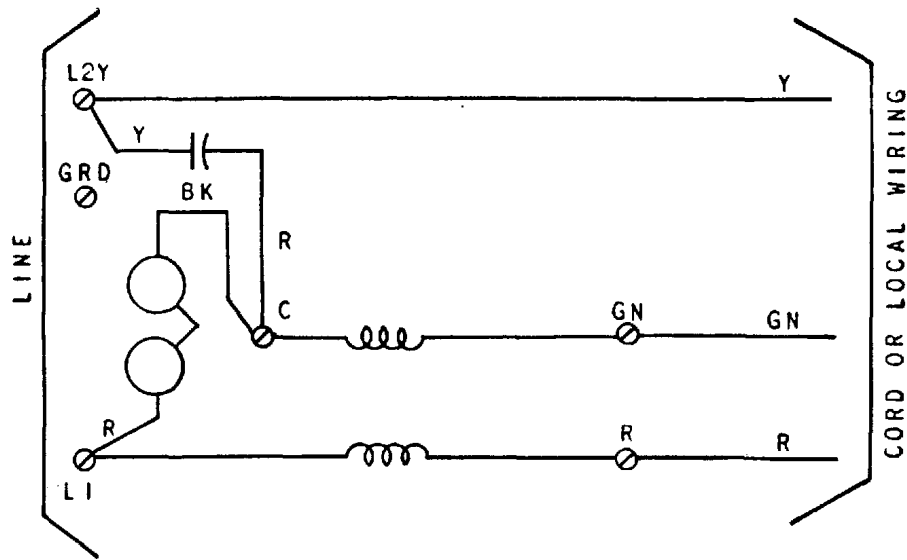
**Fig. 1—434A, BA, 495BP, 634A, BA, C, 434R, 684A,
BA, C Subset Connections**



A—534DE, DF, 584DE, DF

B—531A, 392L, 592A

Fig. 2—Subset Connections



NOTE: RINGER NOT INCLUDED
IN 534C OR 584C.

Fig. 3—534A, BA, C, 584A, BA, C Subset Connections

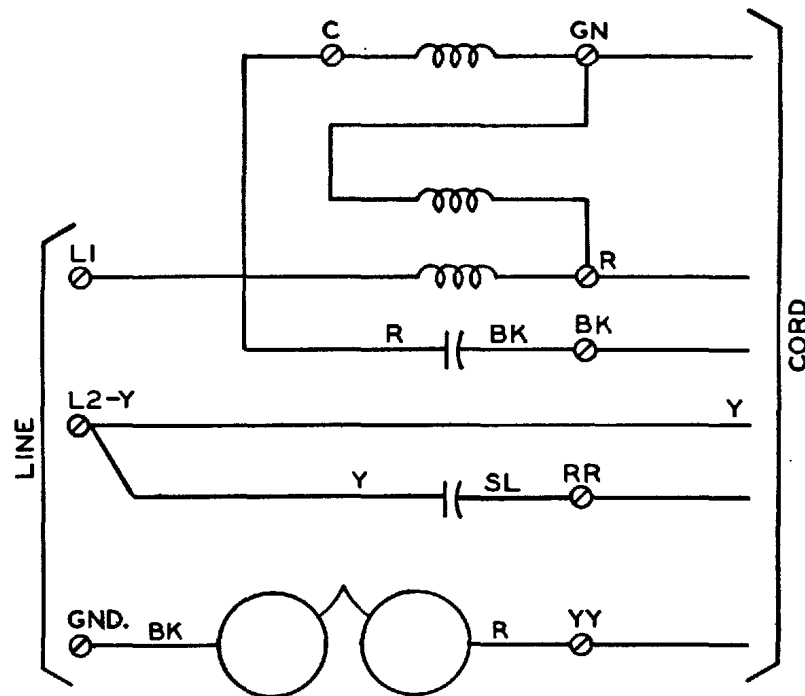


Fig. 4—634BC, 684BC Subset Connections

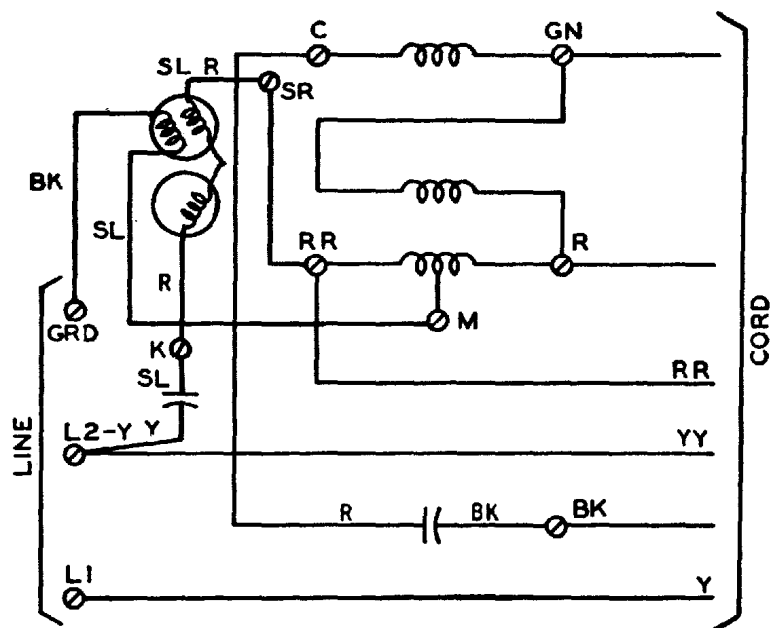


Fig. 5—634CE Subset Connections

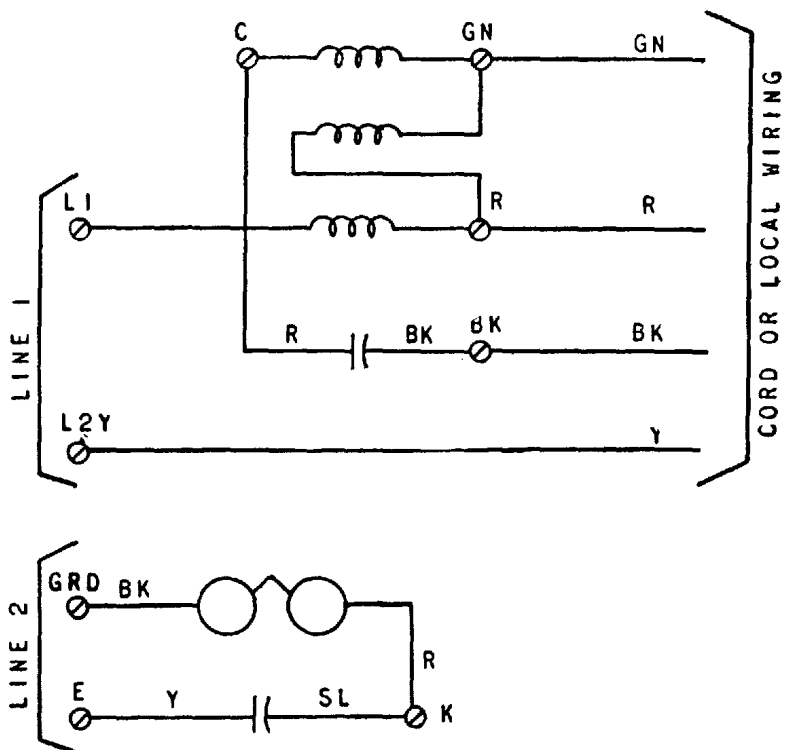


Fig. 6—634CF Subset Connections

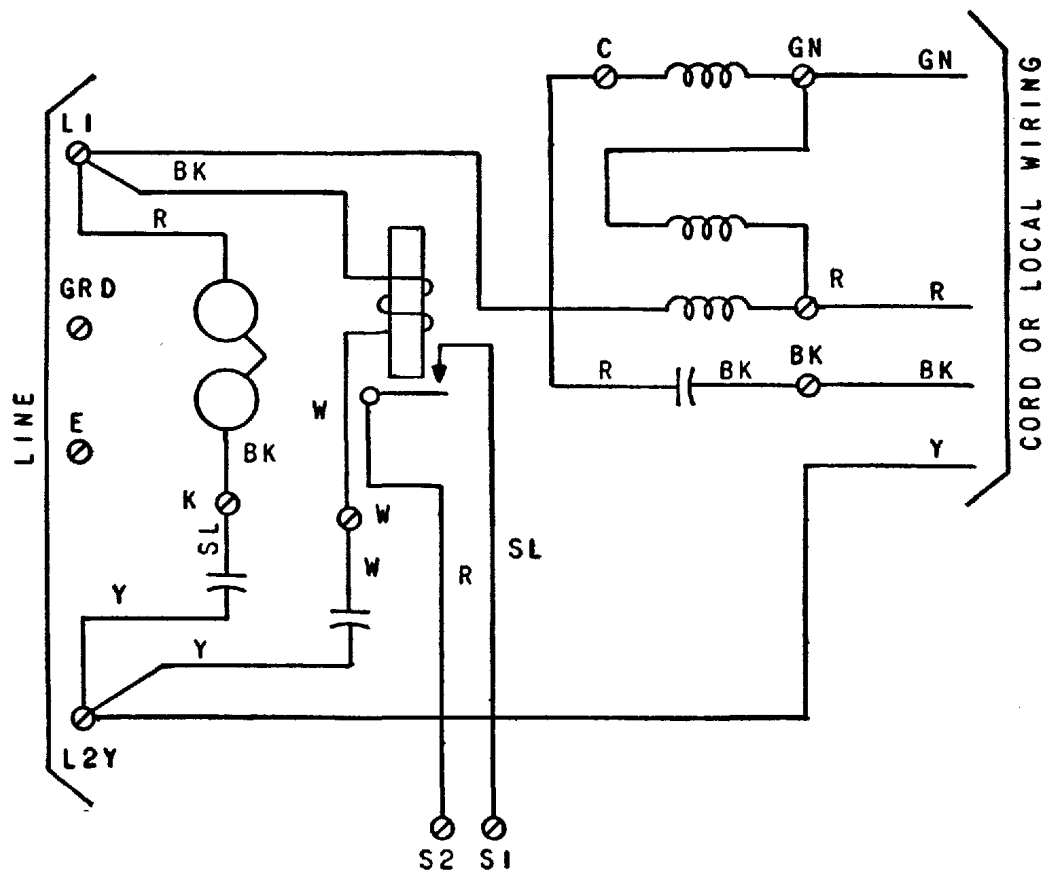


Fig. 7—634BK Subset Connections

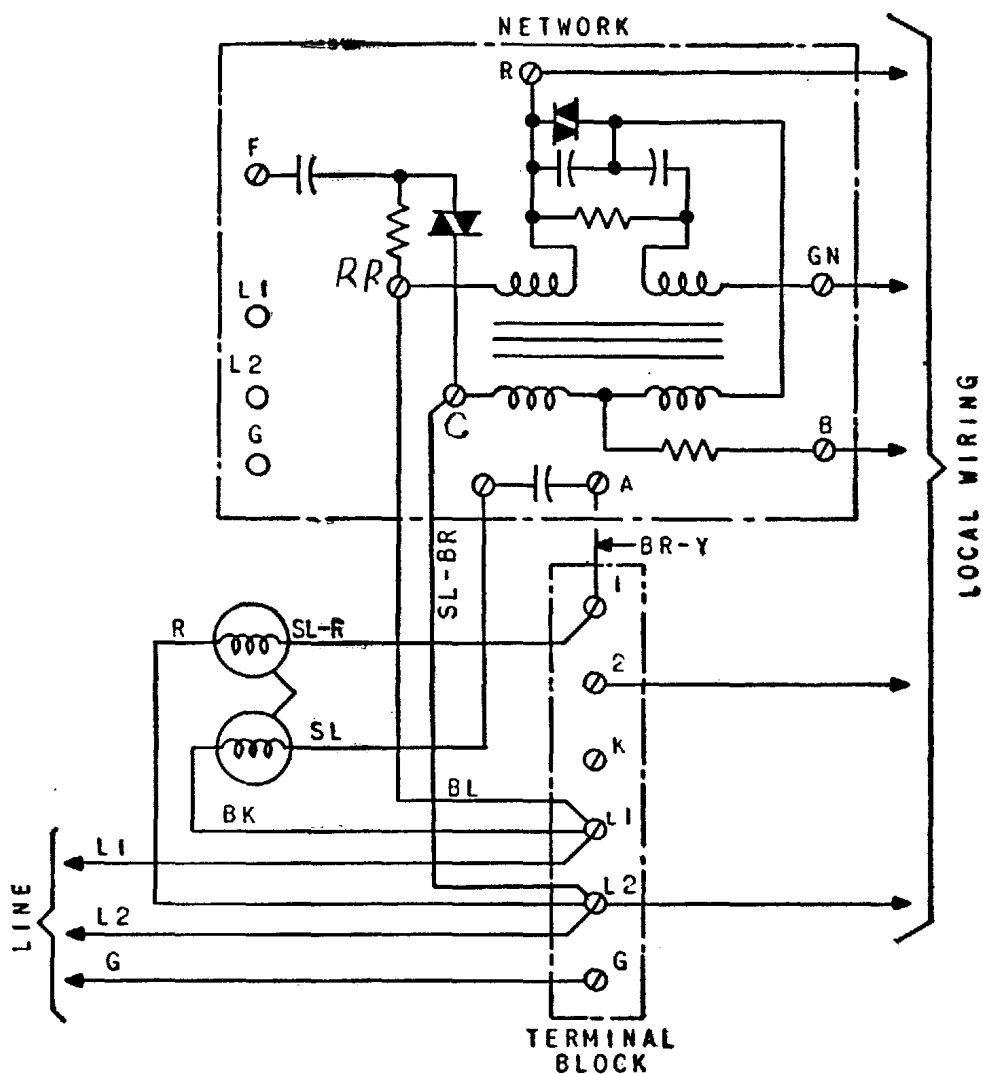
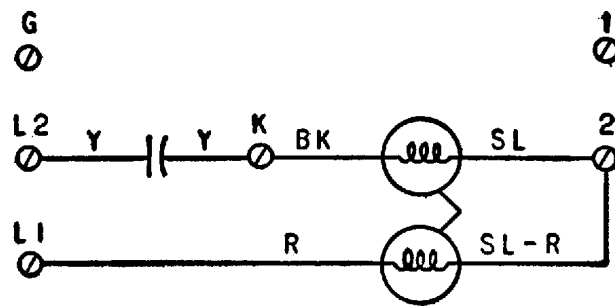
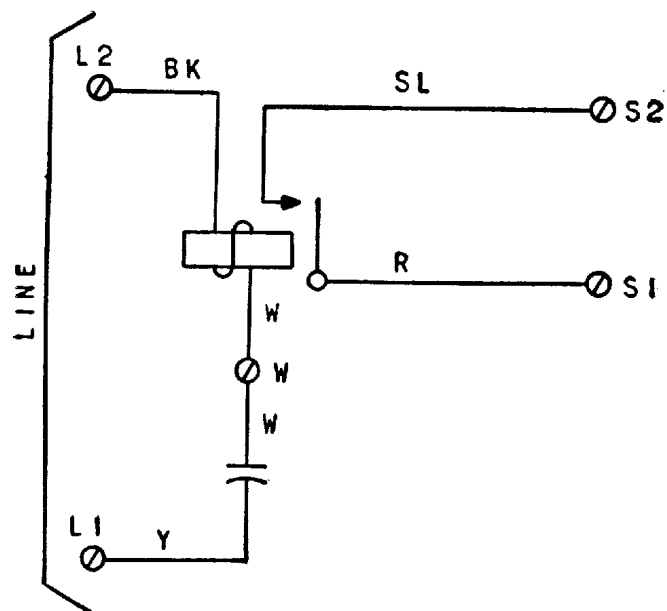


Fig. 8—685A Subset Connections



A-687A



B-310B, 684BT

Fig. 9—Subset Connections

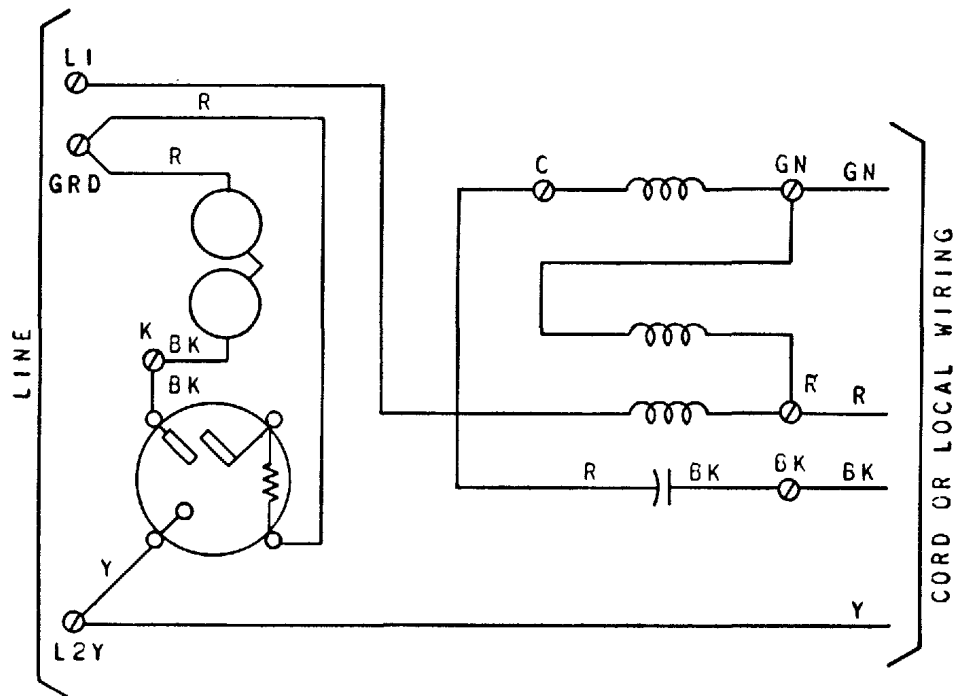
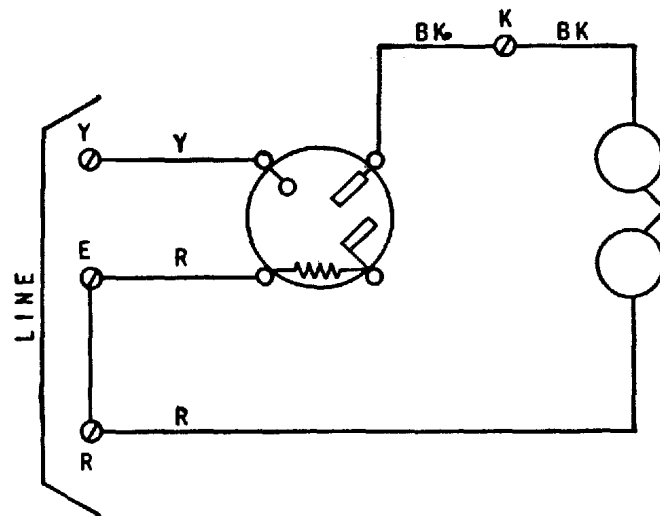
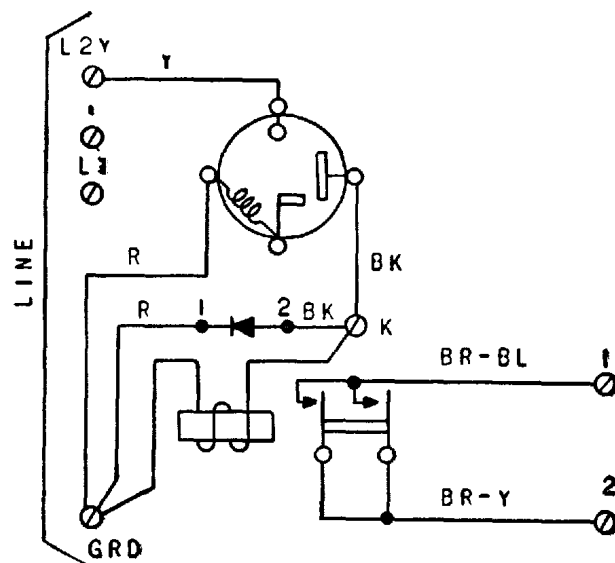


Fig. 10—434AT, 495AT, 634AT Subset Connections



A—592C



B—531C, 687B

Fig. 11—Subset Connections

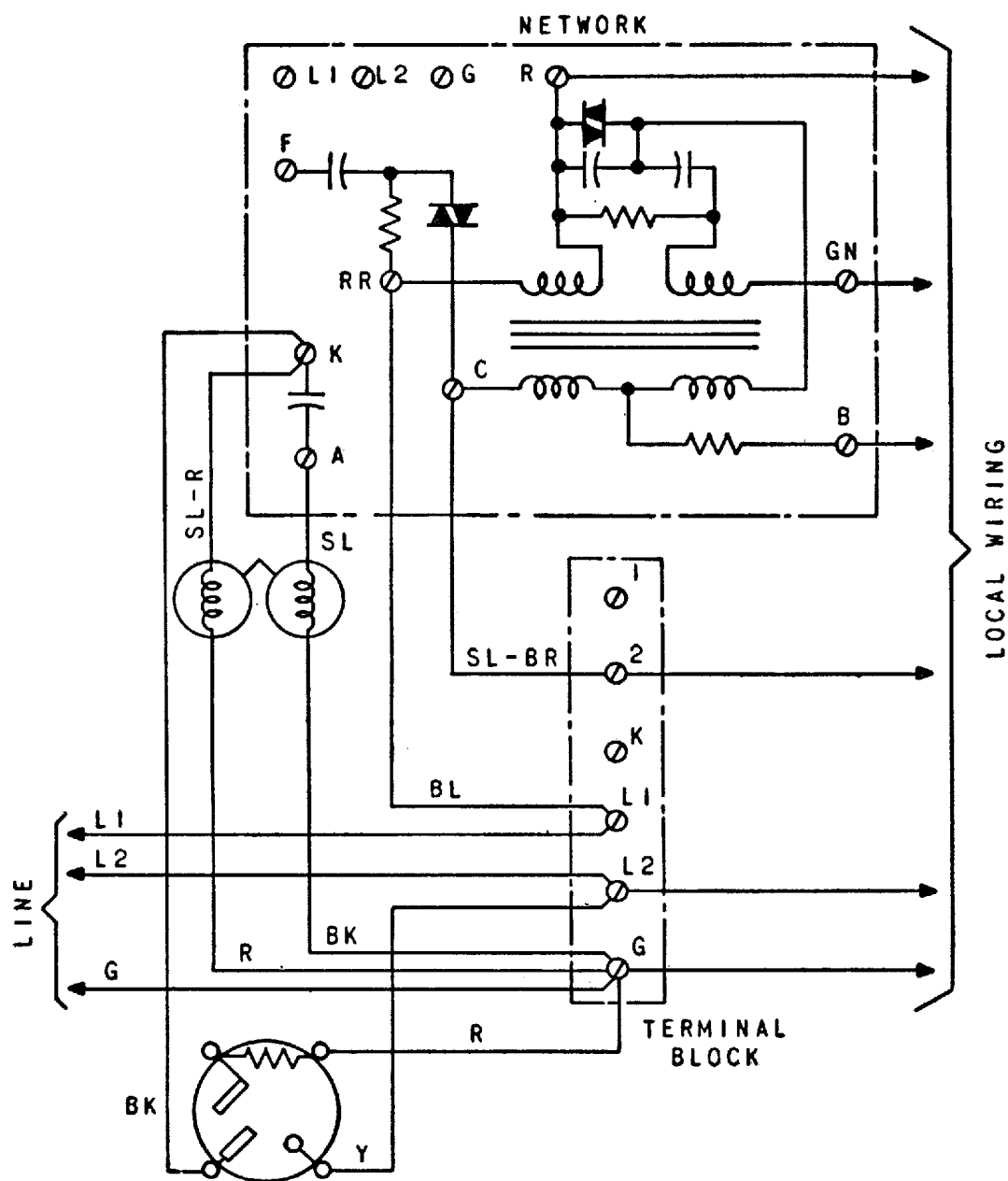


Fig. 12—686A Subset Connections

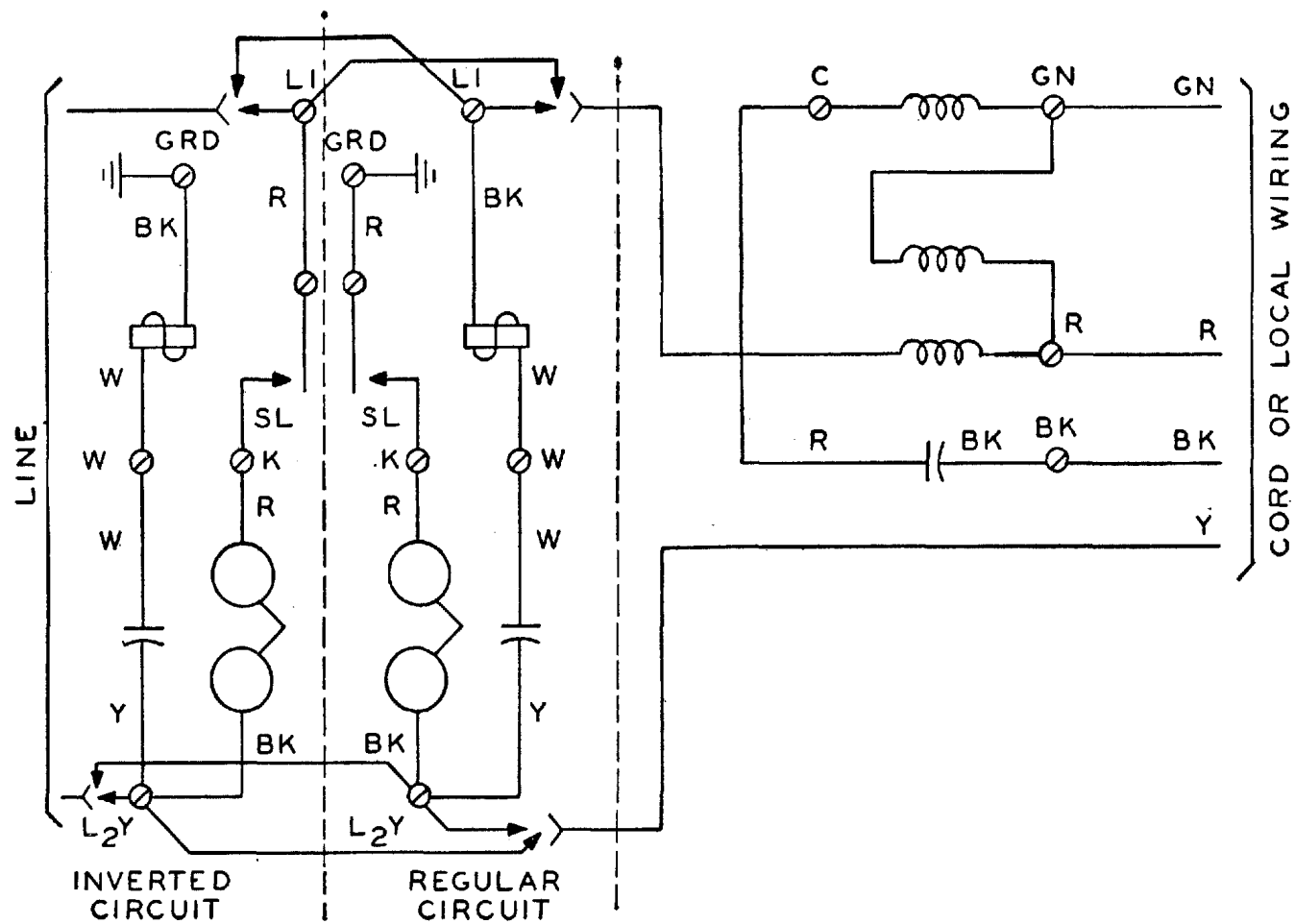


Fig. 13—634AR Subset Connections

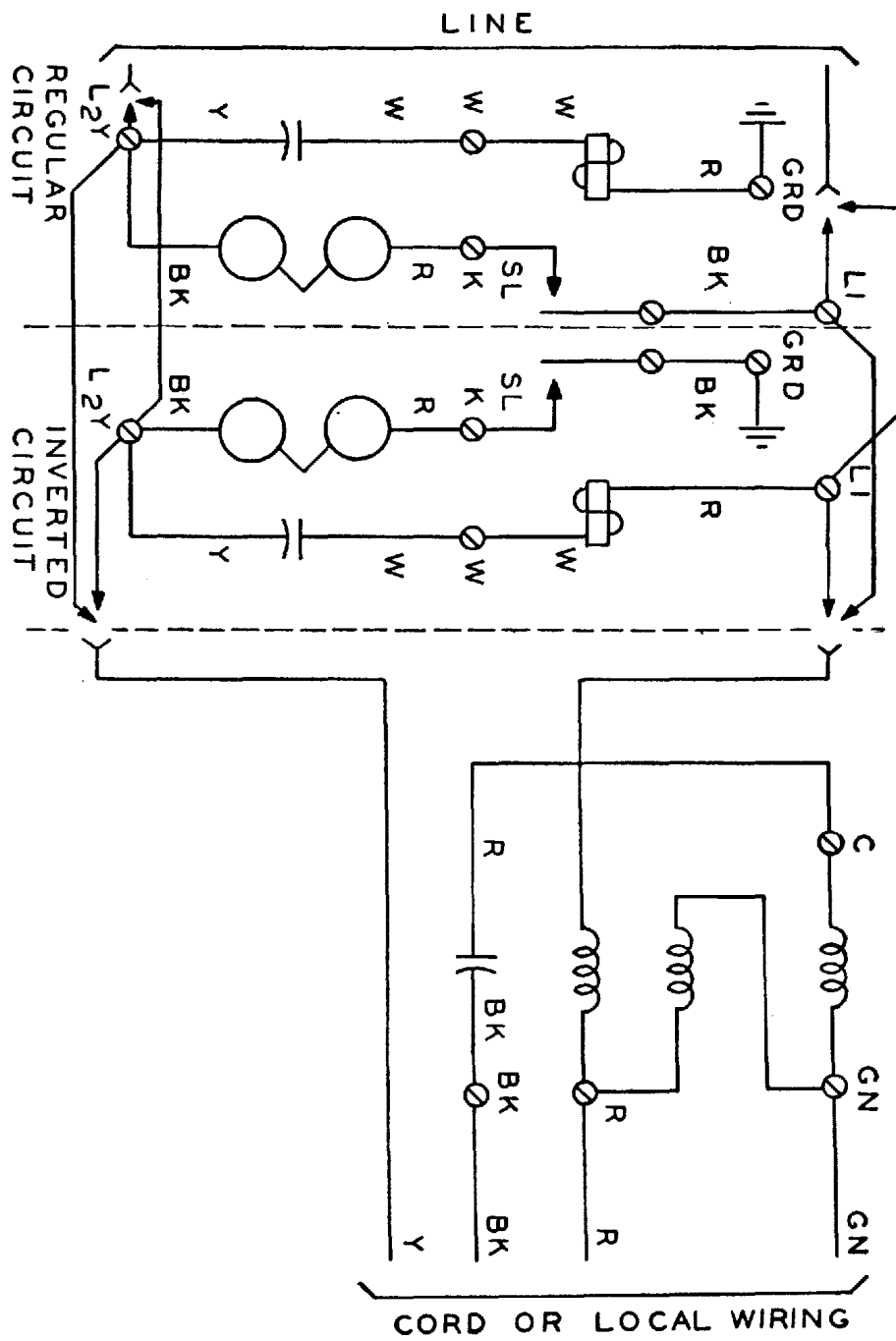


Fig. 14—634FR Subset Connections

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BATTERY

C63.223

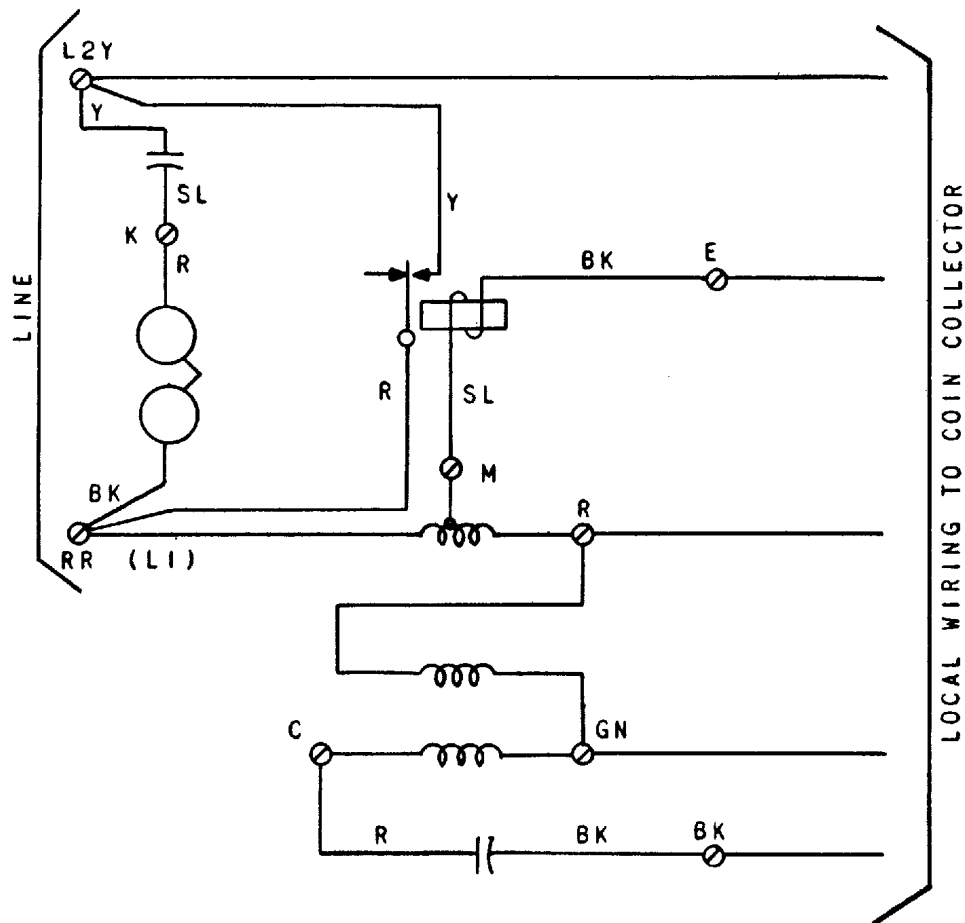


Fig. 15—634CG, CH Subset Connections

Fig. 16—685B Subset Connections

