

INTERPHONE SYSTEM — 1A HOME

1752-TYPE TELEPHONE SET

CONNECTIONS AND MAINTENANCE

1. GENERAL

1.01 This section contains conversion and connection information for the 1752-type telephone set for use with 1A home interphone in conjunction with 3-type speakerphone.

1.02 A 664B transmitter must be ordered and installed separately (Fig. 1) for operation with the 1A home interphone system. The P-21F246 loudspeaker is used for both interphone and speakerphone operation. The loudspeaker and home interphone transmitter are disconnected from the home interphone when the handset is in the off-hook position.



The loudspeaker circuit is controlled by the speakerphone control unit. With speakerphone OFF the speaker is connected to the interphone circuit; with speakerphone ON the speaker is transferred to the speakerphone circuit.

2. CONNECTION INDEX

Table A — Conversion of Telephone Set for 1A Home Interphone

Table B — Pickup-Signal Key Conversion

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Table D — Disconnecting Speakerphone Feature

Table E — Ringer or Buzzer Connections

Table F — Ringer or Buzzer Cutoff by Exclusion Key

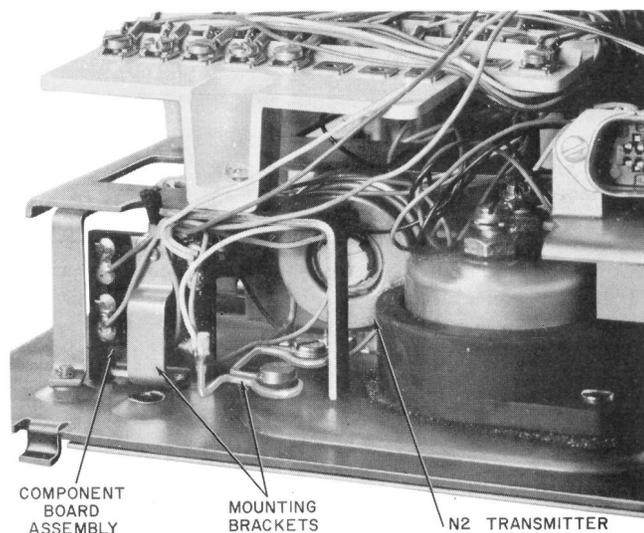


Fig. 1 — 664B Transmitter Installed

Fig. 2 — 1752-Type Telephone Set, Connections to 1A Home Interphone and 3-Type Speakerphone System

Fig. 3 — 1752-Type Telephone Set (Early Production), Wired for 1A Home Interphone

Fig. 4 — 1752-Type Telephone Set (Current Production), Wired for 1A Home Interphone

3. MAINTENANCE

3.01 Refer to Section 502-750-102 for maintenance information for the 1752-type telephone sets. Refer to Section 512-510-200 for home interphone system requirements and maintenance information.

3.02 Maintenance of the home interphone components of these sets (Fig. 1) is limited to replacement of defective units.

TABLE A
CONVERSION OF TELEPHONE SET FOR 1A
HOME INTERPHONE*

TEL SET LEADS		REMOVE FROM	CONNECT TO
Tel Set Plug	(G-BK)	5R	1
	(BK-G)	5T	2
	(BR-BK)	†	DC2
Key	(BR-BK)	X	4T
664 TRMTR (Added)	(W)	—	1
	(R)	—	2
	(S)	—	DC1

* Convert 5th pickup key to signal (for Door Answering)
 † Insulated and stored.

TABLE B
PICKUP-SIGNAL KEY CONVERSION

CONVERSION OPTIONS	635A2 KEY LEADS		
	Y-BR	BR	BR-BK
HPPP P _I S _A	M	M	4T
HPPS P _I S _A	M	SG	4T
HPSS P _I S _A	SG	SG	4T
HPP*S*P _I S _A	3H	SG	4T

P_I — Home Interphone pickup key

S_A — Door Answering signal key

* See Note 2, Fig. 3 or 4

TABLE C
CONDUCTOR ASSIGNMENTS USING 75A CONNECTING BLOCK
OR A25B CONNECTOR CABLE

TELEPHONE SET CONNECTIONS			A25B CONNECTOR CABLE OR D50AA-3 MOUNTING CORD*			75A CONNECTING BLOCK	
LEAD DESIG.	PLUG PIN NO.	TEL SET TERMINAL	PAIR NO.	CONNECTOR PIN NO.	CONDUCTOR COLOR	TERMINAL NO.	IW CABLE CONDUCTOR
T	26	1T	1	26	W-BL	1	W-BL
R	1	1R		1	1	BL-W	2
A or H	27	1H	2	27	W-O	3	W-O
A1	2	1B		2	2	O-W	4
LG1	28	LG1	3	28	W-G	5	W-G
L1	3	L1		3	3	G-W	6
T	29	2T	4	29	W-BR	7	W-BR
R	4	2R		4	4	BR-W	8
A, H, or S	30	2H	5	30	W-S	9	W-S
B	5	†		5	5	S-W	10
LG2	31	LG2	6	31	R-BL	11	R-BL
L2	6	L2		6	6	BL-R	12
T	32	3T	7	32	R-O	13	R-O
R	7	3R		7	7	O-R	14
A, H, or S	33	3H	8	33	R-G	15	R-G
B	8	†		8	8	G-R	16
LG3	34	LG3	9	34	R-BR	17	R-BR
L3	9	L3		9	9	BR-R	18
2T	35	4T	10	35	R-S	19	R-S
2R	10	4R		10	10	S-R	20
None	36	4H	11	36	BK-BL	21	BK-BL
Spare	11	†		11	11	BL-BK	22
LG4	37	LG4	12	37	BK-O	23	BK-O
L4	12	L4		12	12	O-BK	24
M2	38	2	13	38	BK-G	25	BK-G
M1	13	7		13	13	G-BR	26
SW	39	5H	14	39	BK-BR	27	BK-BR
DC	14	DC2		14	14	BR-BK	28
LG5	40	LG5	15	40	BK-S	29	BK-S
L5	15	L5		15	15	S-BK	30
S	41	S	16	41	Y-BL	31	Y-BL
F1	16	F1		16	16	BL-Y	32
M1	42	M1	17	42	Y-O	33	Y-O
P1	17	P1		17	17	O-Y	34
SP2	43	S2	18	43	Y-G	35	Y-G
SP1	18	S1		18	18	G-Y	36
BL	44	BL	19	44	Y-BR	37	Y-BR
G or SG	19	SG		19	19	BR-Y	38
B1	45	RT	20	45	Y-S	39	Y-S
R1	20	RR		20	20	S-Y	40
T	46	ET	21	46	V-BL	41	V-BL
R	21	ER		21	21	BL-V	42
A or H	47	EH	22	47	V-O	43	V-O
B	22	EB		22	22	O-V	44
T1	48	RR†	23	48	V-G	45	V-G
R1	23	R1		23	23	G-V	46
IT	49	8	24	49	V-BR	47	V-BR
IR	24	7		24	24	BR-V	48
AG	50	AG	25	50	V-S	49	V-S
M2	25	M2		25	25	S-V	50

* Terminate spade-tipped conductors of D50AA-3 mounting cord on the 75A connecting block as indicated.

† Insulated and stored.

‡ RR terminal on network.

TABLE D
DISCONNECTING SPEAKERPHONE FEATURE*

	TEL SET COMPONENT LEADS					SPEAKERPHONE COMPONENT LEADS					
	TEL SET PLUG			DIAL		SWITCH ASSEMBLY			PRINTED WIRING BOARD		
Conductor color	(V-G)	(G-V)	(V-S)	(Y)	(Y)	(Y-BL)	(BL-Y)	(O-Y)	(Y-O)	(S-Y)	(S-BK)
Disconnect from	RR†	R1	AG	7	8	S	F1	P1	M2	M2	M1

Note: Insulate and store all disconnected leads.

* Disconnect when speakerphone feature is not utilized and set is multiplied with any other set providing speakerphone operation (to avoid interference with operating circuits).

† RR terminal on network.

TABLE E
RINGER OR BUZZER CONNECTIONS (Note 6, Fig. 3 or 4)

OPTION		LEADS							
		RINGER					STRAP	BUZZER §	
		(R)	(BK)	(S-R)	(S)	(BL)	(R)		
Bridged Ringer on any Line		K	T*	†	†	†	A to R*		
Common or Private Line Ringer or Buzzer (See Note 6, Fig. 3 or 4)	With Capacitor	K	RT	†	†	†	A to RR‡		
	Without Capacitor	A	RT	†	†	†	A to RR‡	RR‡	RT
Ringer Permanently Silenced		K	K	†	†	†	A to K		

* Terminal of line involved.

† Individually insulated and stored.

‡ RR terminal on terminal board.

§ Connect buzzer in place of ringer using twisted pair station wire.

TABLE F
RINGER OR BUZZER CUTOFF BY EXCLUSION KEY

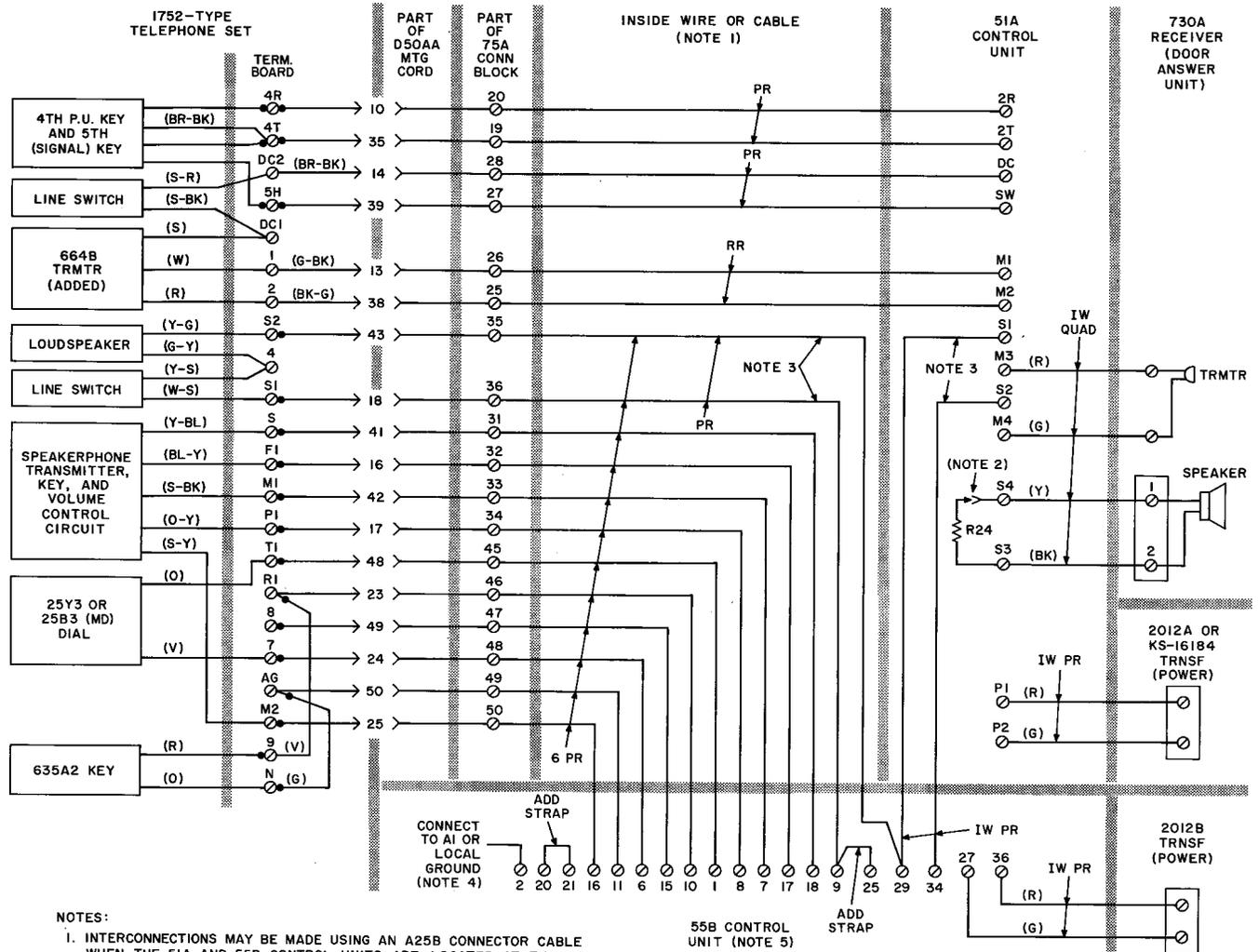
CUTOFF		LEADS											
		RINGER					STRAP	BUZZER §	EXCLUSION KEY				
		(R)	(BK)	(S-R)	(S)	(BL)	(R)			(BL-W)	(W-BL)	(O-W)	(W-O)
Bridged Ringer on any Line		K	ET	†	†	†	A to ER			R*	T*	†	†
Common or Private Line Ringer or Buzzer (Note 6, Fig. 3 or 4)	With Capacitor	K	ET	†	†	†	A to ER			RR‡	RT	†	†
	Without Capacitor	ER	ET	†	†	†	A to K	ER	ET	RR‡	RT	†	†

* Terminal of line involved.

† Individually insulated and stored.

‡ RR terminal on terminal board.

§ Connect buzzer using twisted pair station wire.



- NOTES:
1. INTERCONNECTIONS MAY BE MADE USING AN A25B CONNECTOR CABLE WHEN THE 51A AND 55B CONTROL UNITS ARE LOCATED AT THE KEY EQUIPMENT.
 2. CONNECT R24 AS SHOWN WHEN ONLY ONE 730A RECEIVER IS USED.
 3. SPEAKER LEADS MUST BE CONNECTED AS SHOWN FOR COMMON SYSTEM USE.
 4. MUST BE CONNECTED TO A1 WHEN USED WITH IA1 OR IA2 KEY TELEPHONE SYSTEM.
 5. IF SPEAKERPHONE FEATURE IS NOT PROVIDED, CONNECT SPEAKER LEADS FROM 51A CONTROL UNIT DIRECT TO 75A CONNECTING BLOCK (TERMINALS 35 AND 36); DISREGARD ALL CONNECTIONS SHOWN FOR 55B CONTROL UNIT.

Fig. 2 — 1752-Type Telephone Set, Connections to 1A Home Interphone and 3-Type Speakerphone

FROM SHEET 1

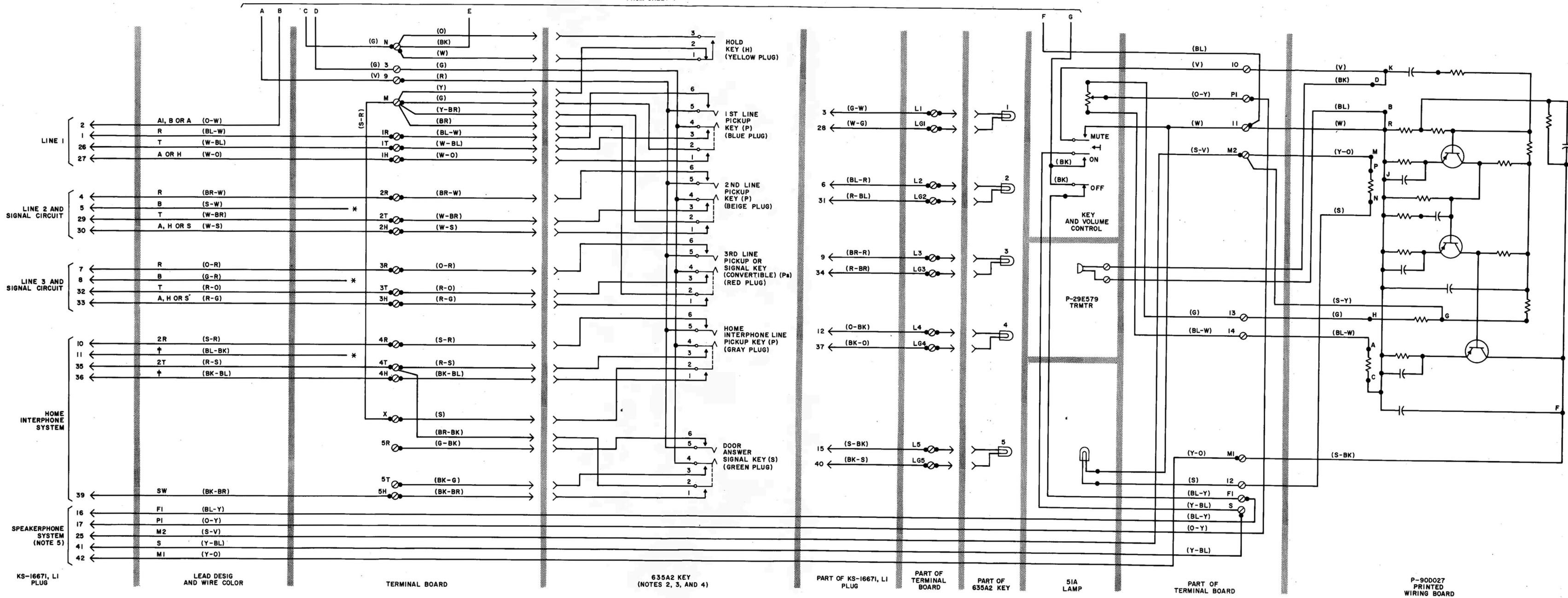
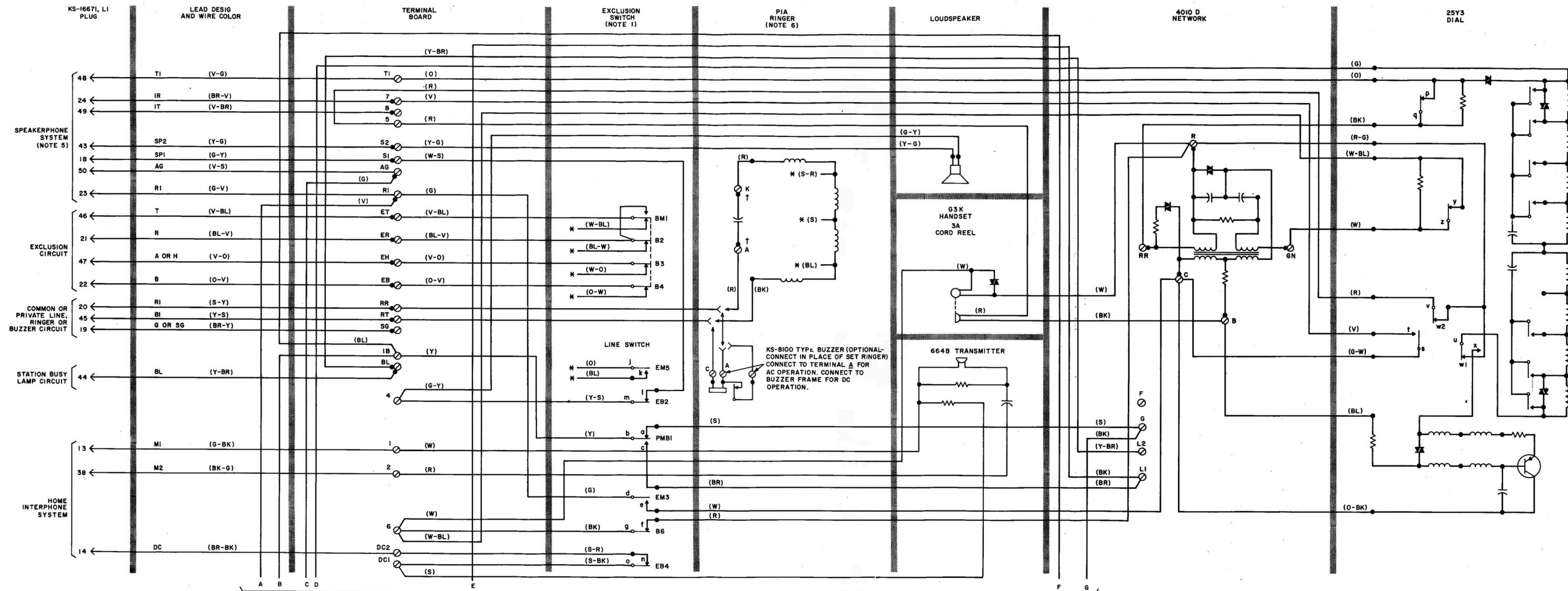


Fig. 3 - 1752-Type Telephone Set (Early Production) Wired for 1A Home Interphone (Sheet 2 of 2)



TO SHEET 2

- NOTES:
1. WITH 1A KEY TELEPHONE SYSTEM WHEN OTHER THAN LINE 1 IS EXCLUDED, REMOVE O-W CORD CONDUCTOR FROM TERMINAL IB; INSULATE AND STORE. CONNECT BALANCE LEAD CORD CONDUCTOR OF LINE INVOLVED TO TERMINAL IB.
 2. THESE PICKUP KEY OPTIONS ARE USED ON PRIVATE OR INTERCOMMUNICATING LINES WITH THE SIGNAL KEY COMMON. THE SIGNAL KEY WILL OPERATE THE SIGNAL CIRCUIT OF THE LINE WHEN THE ASSOCIATED PICKUP KEY IS DEPRESSED. USE S LEAD ON 2ND PICKUP KEY, AND G LEAD FOR COMMON SIGNAL GROUND.
 3. ALL CONVERTIBLE KEY POSITIONS ARE ARRANGED IN THE FACTORY AS PICKUP POSITIONS. TO CONVERT A KEY POSITION FROM PICKUP (LOCKING) TO SIGNAL (NONLOCKING), REMOVE THE P28E773 LOCKING PIN FROM PLUNGER AT THE KEY POSITION TO BE CONVERTED. MAKE NECESSARY CONNECTION CHANGES AS SHOWN IN TABLE B. TO CONVERT A KEY POSITION FROM NONLOCKING TO LOCKING, INSERT P28E773 LOCKING PIN.
 4. WHEN KEYS ARE CONVERTED FOR SIGNALING, THE S LEAD OF KEY INVOLVED PROVIDES THE SIGNAL CIRCUIT AND THE G LEAD PROVIDES THE COMMON SIGNAL GROUND.
 5. WHEN A 1752 TYPE SET IS MULTIPLIED WITH SETS FURNISHING SPEAKERPHONE FEATURES, CERTAIN LEADS IN THIS SET MUST BE DISCONNECTED, INSULATED AND STORED (SEE TABLE D). THIS IS NECESSARY TO AVOID INTERFERENCE WITH WORKING CIRCUITS.
 6. RINGER IS FACTORY WIRED WITH CAPACITOR IN SERIES; RED LEAD TO RR TERMINAL. BLACK LEAD TO RT TERMINAL. RINGERS MUST BE CONNECTED WITH CAPACITOR IN CIRCUIT WHEN COMMON AUDIBLE SIGNAL POWER FAILURE FEATURE IS PROVIDED. CONNECT RINGER WITHOUT CAPACITOR AS COMMON. PRIVATE OR INTERCOMMUNICATING LINE SIGNAL EXCEPT WHERE LOCAL INSTRUCTIONS DIRECT OTHERWISE.
 7. DO NOT PULL INSULATORS OFF WITH LONG-NOSE PLIERS. CUT INSULATORS OFF WITH ELECTRICIAN SCISSORS OR DIAGONAL PLIERS TO PREVENT BREAKING CONDUCTORS OR STRIPPING OFF CORD TIPS.
- * LEADS ARE INDIVIDUALLY INSULATED AND STORED.
 † TERMINALS ON NETWORK.
 ‡ NOT USED IN HOME INTERPHONE SYSTEM.

Fig. 4 - 1752-Type Telephone Set (Current Production) Wired for 1A Home Interphone (Sheet 1 of 2)

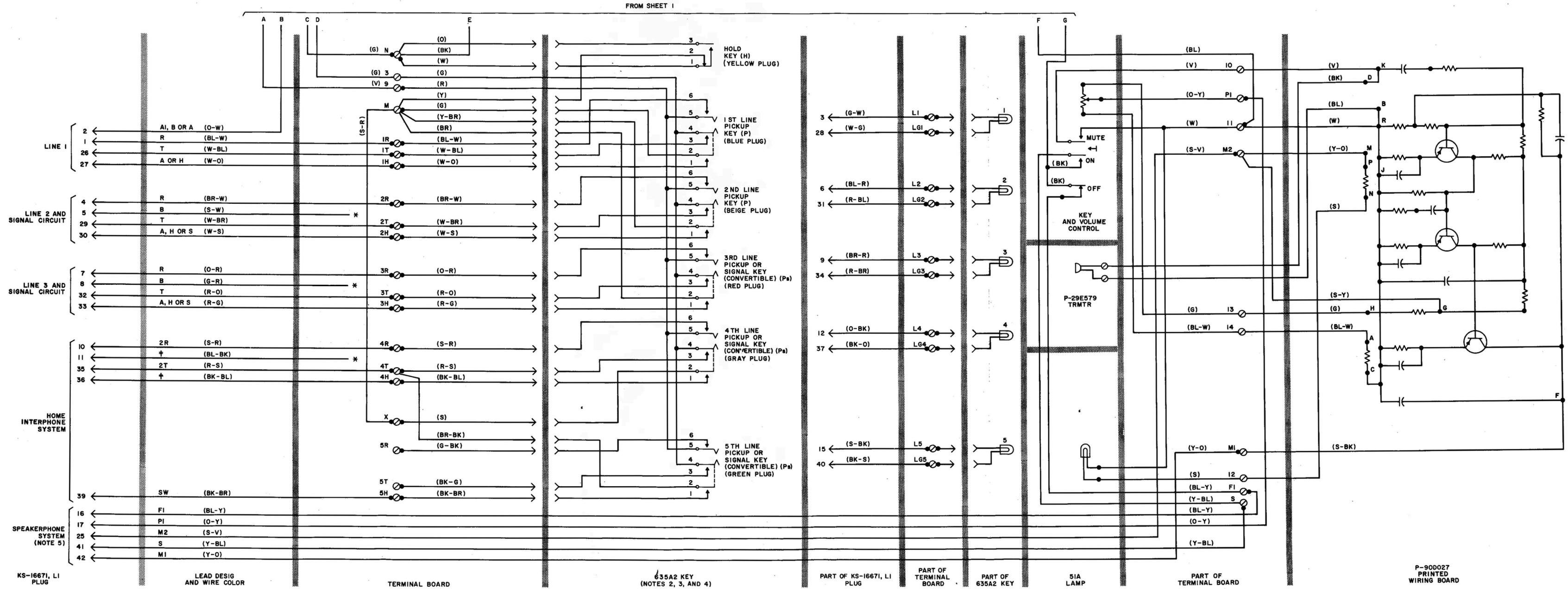


Fig. 4 - 1752-Type Telephone Set (Current Production) Wired for 1A Home Interphone (Sheet 2 of 2)