

Northern Telecom Practices : 502-5151-400

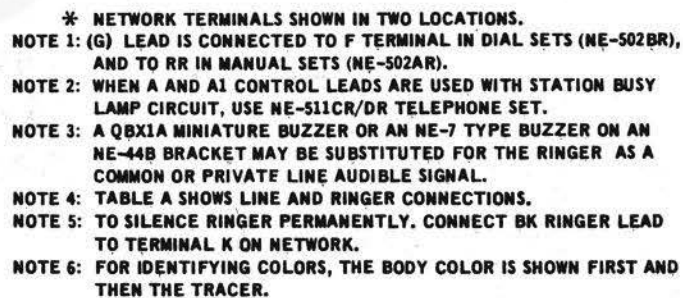
Date : Nov. 1st, 1972

**Telephone Sets : NE-502AR; BR; QA
NE-510AR; BR; ER; FR; QA
NE-511CR; DR; DQA Types**

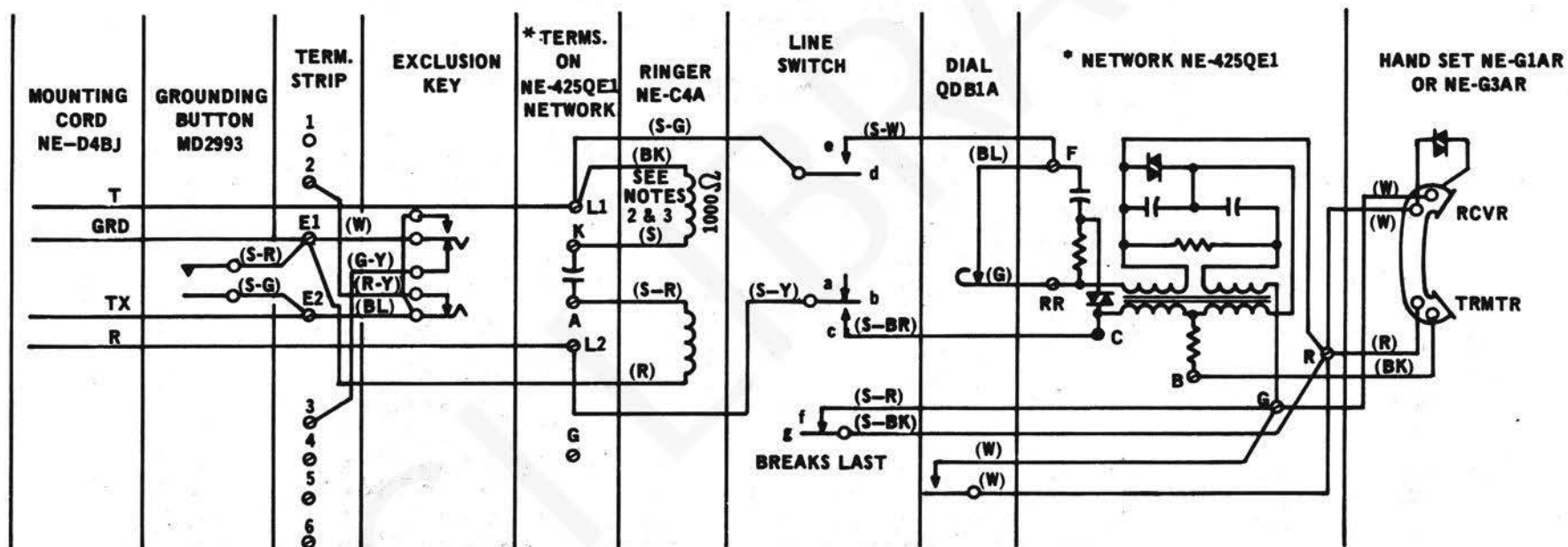
Purpose: Common Battery Connections

OCR = Yes

COMMON BATTERY – CONNECTIONS

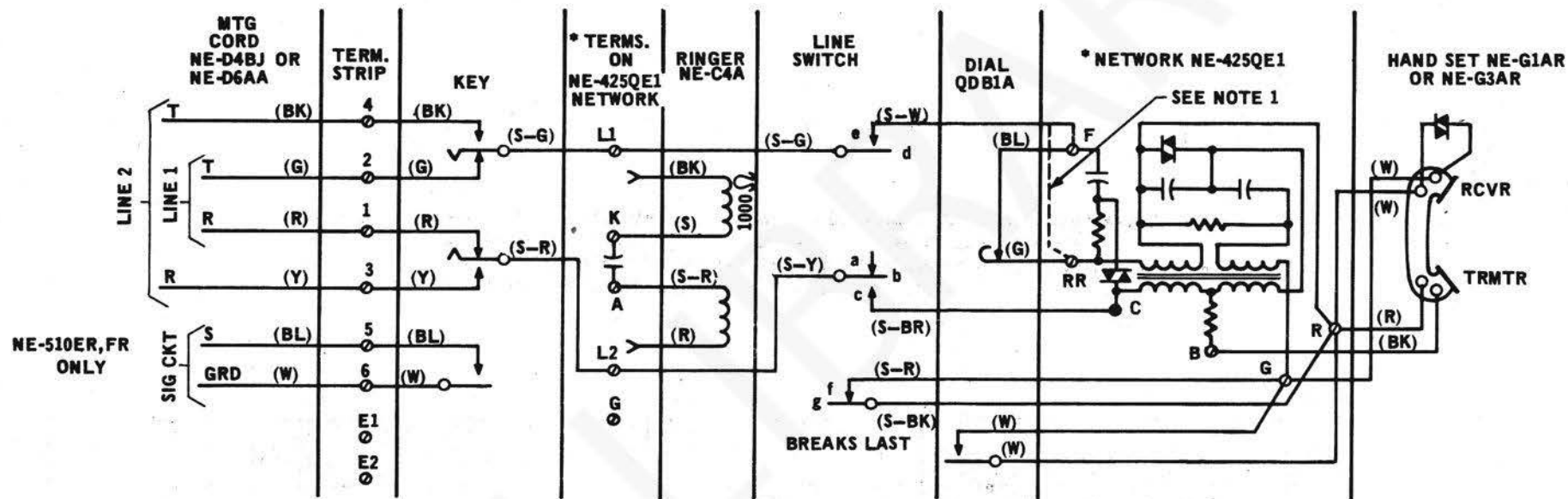


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- * NETWORK TERMINAL CONNECTIONS SHOWN IN TWO LOCATIONS.
- NOTE 1: WHEN IDENTIFYING LEAD COLORS, THE BODY COLOR IS SHOWN FIRST THEN THE TRACER.
- NOTE 2: CONNECT BK RINGER LEAD TO L1 FOR TIP PARTY OR TO L2 FOR RING PARTY.
- NOTE 3: TO SILENCE RINGER PERMANENTLY, CONNECT BK RINGER LEAD TO K TERMINAL ON NETWORK.

Fig. 2 — NE-502QA Telephone Set (Exclusion and Ground Button)



- * NETWORK TERMINALS SHOWN IN TWO LOCATIONS.
- NOTE 1: (S-W) SWITCH LEAD IS CONNECTED TO RR TERMINAL IN MANUAL SETS.
- NOTE 2: TWO-LINE PICKUP CONNECTIONS IN TABLES B AND C PROVIDE FOR RINGING ON LINE 1. FOR RINGING ON LINE 2, CONNECT R AND BK RINGER LEADS TO TERMINALS 3 AND 4, RESPECTIVELY.
- NOTE 3: A QXB1A MINIATURE BUZZER OR AN NE-7 TYPE BUZZER ON AN NE-44B BRACKET MAY BE SUBSTITUTED FOR THE RINGER AS A COMMON OR PRIVATE LINE AUDIBLE SIGNAL.
- NOTE 4: TO SILENCE RINGER PERMANENTLY, CONNECT BK RINGER LEAD TO TERMINAL K ON NETWORK.
- NOTE 5: WHEN IDENTIFYING COLORS, THE BODY COLOR IS SHOWN FIRST AND THEN THE TRACER.

CODE	DIAL	LINES	SIGNALING	CORD COND.	REMARKS
NE-510AR	—	2		4	SEE NOTE 1. AND TABLE B
NE-510BR	QDB1A	2		4	SEE TABLE B
NE-510ER	—	2	✓	6	SEE NOTE 1. AND TABLE C
NE-510FR	QDB1A	2	✓	6	SEE TABLE C

Fig. 3 — NE-510AR, BR, ER, FR Telephone Set (Two-Line Pickup and Signaling)

TABLE A
NE-502B LINE AND RINGER CONNECTIONS

OPTIONS					CONNECTIONS TO TERMINALS INSIDE SET														EXTERNAL CONNECTIONS FOR MOUNTING CORD							
NUMBER OF LINES PICKED UP	RINGER IN SET USED AS		EXCL. KEY USED TO CUT OFF		MOUNTING CORD LEADS						EXCLUSION KEY LEADS				RINGER LEADS (NOTES 3 AND 4 FIG. 1)				LINE		EXCLUSION CIRCUIT		COM OR PVT LINE RINGER CIRCUIT		KEY EQUIP OR STA BUSY LAMP CKT	
	LINE RINGER	COM OR PVT LINE RINGER	EXT STA OR EXT LINE RINGER	RINGER IN SET																						
	R	G	Y	BK	BL	W	R-Y	G-Y	BL	W	R	BK	S	S-R	RING	TIP	RING	TIP	R	B	A or BL	A1 or GRD				
1	•		•		1	2	E1	E2	5	6	L2	L1	E1	E2	1	2	K	A	R	G	Y	BK			BL	W
1		•		•	1	2	E1	E2	5	6	4	3	E2	3	E1	4	A	A	R	G			Y	BK	BL	W

TABLE B
NE-510AR, BR LINE AND RINGER CONNECTIONS
(EQUIPPED WITH 4-CONDUCTOR MOUNTING CORD)

OPTIONS (RINGER IN SET USED AS LINE RINGER)					CONNECTIONS FOR TERMINALS INSIDE SET										EXTERNAL CONNECTIONS FOR MOUNTING CORD							
NUMBER OF LINES PICKED UP	SIGNALING	TURN KEY USED TO CUT OFF			MOUNTING CORD LEADS				TURN KEY LEADS		RINGER LEADS (NOTES 2 AND 4 FIG. 3)				LINE 1		LINE 2		SIGNAL CKT		CUTOFF CKT	
		EXT STA OR EXT LINE RINGER	RINGER IN SET	AUXILIARY RECEIVER																		
1	•				L2	L1	5	6	L2	L1	L2	L1	K	A	R	G			Y	BK		
1	•		•		L2	L1	5	6	L2	L1	1	2	K	A	R	G			Y	BK		
1		•			L2	L1	3	4	L2	L1	L2	L1	K	A	R	G					Y	BK
1		•	•		L2	L1	3	4	L2	L1	1	2	K	A	R	G					Y	BK
1				•	L2	L1	3	4	GN	R	L2	L1	K	A	R	G					Y	BK
2					1	2	3	4	L2	L1	1	2	K	A	R	G	Y	BK				

TABLE C
NE-510ER, FR LINE AND RINGER CONNECTIONS
(EQUIPPED WITH 6-CONDUCTOR MOUNTING CORD)

OPTIONS							CONNECTIONS TO TERMINALS INSIDE SET										EXTERNAL CONNECTIONS FOR MOUNTING CORD											
NUMBER OF LINES PICKED UP	SIGNALING	RINGER IN SET USED AS		TURN KEY USED TO CUT OFF			MOUNTING CORD LEADS						TURN KEY LEADS		RINGER LEADS (NOTES 2, 3, AND 4 FIG. 3)				LINE 1		LINE 2		SIGNAL CIRCUIT		CUTOFF CIRCUIT		COM OR PVT LINE RINGER CIRCUIT	
		LINE RINGER	COM OR PVT LINE RINGER	EXT STA OR EXT LINE RINGER	RINGER IN SET	AUXILIARY RECEIVER																						
		R	G	Y	BK	BL	W	S-R	S-G	R	BK	S	S-R	RING	TIP	RING	TIP	S	GRD	RING	TIP	R	B					
1	•	•		•			L2	L1	3	4	5	6	L2	L1	L2	L1	K	A	R	G			BL	W	Y	BK		
1	•	•		•	•		L2	L1	3	4	5	6	L2	L1	1	2	K	A	R	G			BL	W	Y	BK		
1	•	•				•	L2	L1	3	4	5	6	G	R	L2	L1	K	A	R	G			BL	W	Y	BK		
2	•	•					1	2	3	4	5	6	L2	L1	1	2	K	A	R	G	Y	BK	BL	W				
2			•				1	2	3	4	E1	E2	L2	L1	E1	E2	A	A	R	G	Y	BK					BL	W

TABLE D
SPEAKERPHONE CONNECTIONS (NE-511 TYPE SET)

LEAD DESIG.								A1 or SIG
		R1	T1	P3	P4	LK	AG	
MOUNTING CORD	NE-D16D	O-R	O-G	O-W	O-BL	O-BK	O	W
	NE-D16QA	S-R	R-S	Y-S	S-Y	BL-BK	BK-BL	R-O

(see Note 10, Fig. 5)

TABLE E
NE-511 TYPE SET LINE, RINGER AND
MOUNTING CORD INTERNAL CONNECTIONS

OPTIONS (SIGNALING INCLUDED WITH ALL FEATURES)									MOUNTING CORD	MOUNTING CORD LEADS (SEE NOTE 9)																TURN KEY LEADS	EXCLUSION KEY LEADS (NOTE 6)				RINGER LEADS (NOTE 7)				
OPTION NUMBER	NUMBER OF LINES PICKED UP	RINGER IN SET USED AS			TURN KEY USED TO CUT OFF		EXCL KEY USED TO CUT OFF																												
		LINE RINGER	COM OR PVT LINE RINGER	EXT STA OR EXT LINE RINGER	RINGER IN SET	AUXILIARY RECEIVER	EXT STA OR EXT LINE RINGER	RINGER IN SET																											
NE-D16QA									BL -W	W- BL	BR -W	W- BR	O-R	R-O	BR-Y	Y-BR	O-V	V-O	S-R	R-S	BL- BK	S-Y	Y-S	BK- BL	S-R	S-G	R-Y	G-Y	BL	W	R	BK	S	S-R	
NE-D16D*									R	G	Y	BK	BL	W	BR-R	BR-G	BR-Y	BR-BK	O-R	O-G	O-BK	O-BL	O-W	O	S-R	S-G	R-Y	G-Y	BL	W	R	BK	S	S-R	
1	1	•		•			•			L2	L1	3	4	8	7	5	6	E1	E2	L2	RR	10	11	G	9	L2	L1	L2	L1	E1	E2	5	6	K	A
2	1	•		•	•		•			L2	L1	3	4	8	7	5	6	E1	E2	L2	RR	10	11	G	9	L2	L1	L2	L1	E1	E2	1	2	K	A
3	1	•			•		•			L2	L1	3	4	8	7	5	6	E1	E2	L2	RR	10	11	G	9	L2	L1	L2	L1	E1	E2	3	4	K	A
4	1	•				•	•			L2	L1	3	4	8	7	5	6	E1	E2	L2	RR	10	11	G	9	G	R	L2	L1	E1	E2	5	6	K	A
5	2	•					•			1	2	3	4	8	7	5	6	E1	E2	L2	RR	10	11	G	9	L2	L1	1	2	E1	E2	5	6	K	A
6	2		•				•			1	2	3	4	8	7	5	6	E1	E2	L2	RR	10	11	G	9	L2	L1	1	2	E1	E2	5	6	A	A
7	2		•					•		1	2	3	4	8	7	5	6	E1	E2	L2	RR	10	11	G	9	L2	L1	5	6	E1	E2	E1	E2	A	A

*NE-D16D Manufacture Discontinued

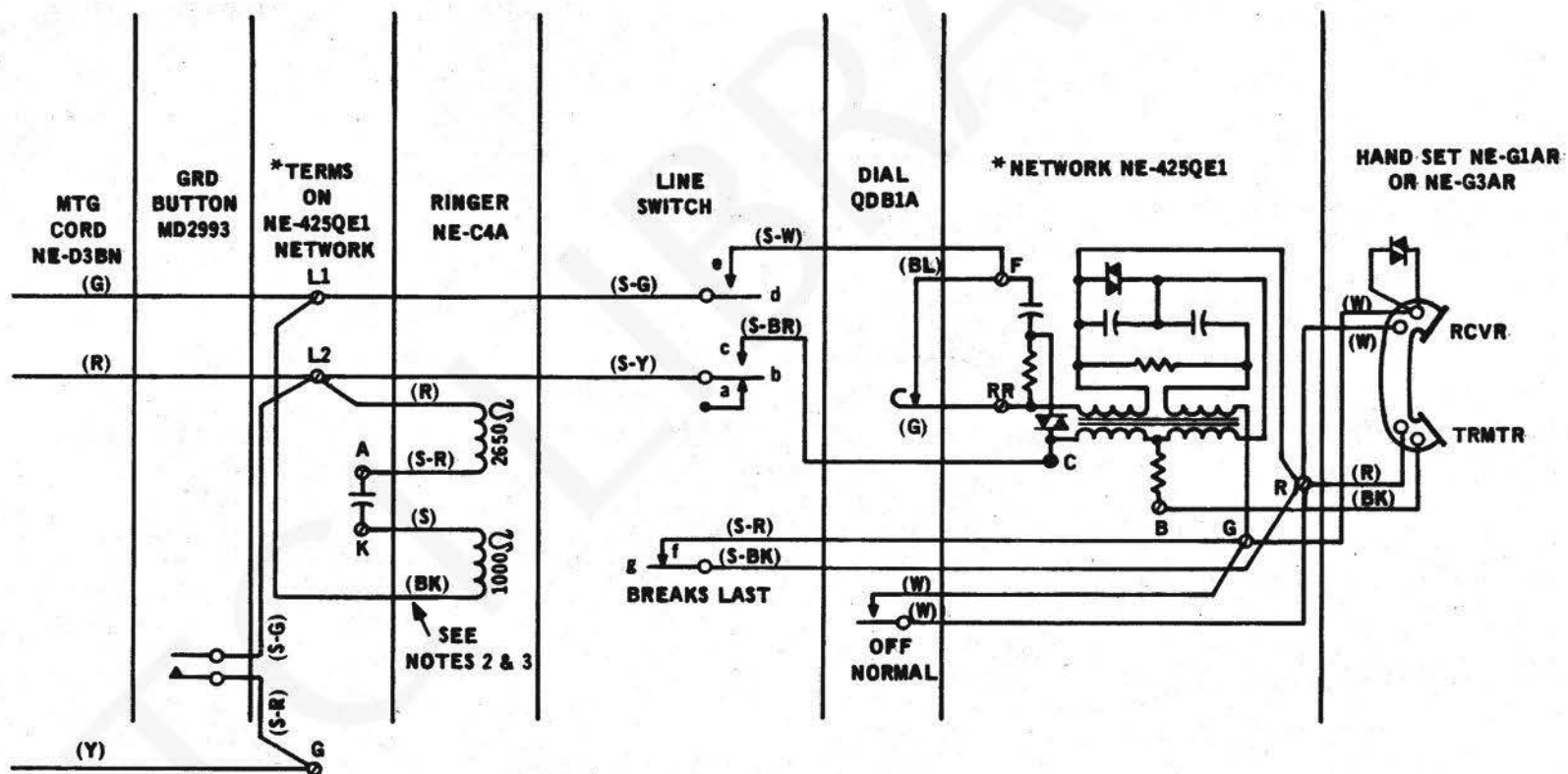
Notes associated with Fig. 5

TABLE F
NE-511 TYPE TELEPHONE SET

OPTIONS (SIGNALING INCLUDED WITH ALL FEATURES)									EXTERNAL CONNECTIONS FOR MOUNTING CORD (SEE NOTES 1, 3, AND 4)																
OPTION NUMBER	NUMBER OF LINES PICKED UP	RINGER IN SET USED AS		TURN KEY USED TO CUT OFF			EXCL KEY USED TO CUT OFF			LINE 1		LINE 2		SIGNAL CIRCUIT		EXCL CIRCUIT		CUTOFF CIRCUIT		LINE 1 OR 2 FOR LINE RINGER (NOTE 8)		COM OR PVT LINE RINGER CIRCUIT		KEY EQUIP OR STA BUSY LAMP CIRCUIT (NOTE 4)	
		LINE RINGER	COM OR PVT LINE RINGER	EXT STA OR EXT LINE RINGER	RINGER IN SET	AUXILIARY RECEIVER	EXT STA OR EXT LINE RINGER	RINGER IN SET		RING	TIP	RING	TIP	S	GRD	RING	TIP	RING	TIP	RING	TIP	R	B	A or B	A1 or GRD
1	1	•		•			•		NE-D16QA NE-D16D*	BL-W R	W-BL G			O-R BL	R-O W	O-V BR-Y	V-O BR-BK	BR-W Y	W-BR BK	BR-Y BR-R	Y-BR BR-G			BK-BL O	R-O W
2	1	•		•	•		•		NE-D16QA NE-D16D*	BL-W R	W-BL G			O-R BL	R-O W	O-V BR-Y	V-O BR-BK	BR-W Y	W-BR BK					BK-BL O	R-O W
3	1	•			•		•		NE-D16QA NE-D16D*	BL-W R	W-BL G			O-R BL	R-O W	O-V BR-Y	V-O BR-BK							BK-BL O	R-O W
4	1	•				•	•		NE-D16QA NE-D16D*	BL-W R	W-BL G			O-R BL	R-O W	O-V BR-Y	V-O BR-BK	BR-W Y	W-BR BK	BR-Y BR-R	Y-BR BR-G			BK-BL O	R-O W
5	2	•					•		NE-D16QA NE-D16D*	BL-W R	W-BL G	BR-W Y	W-BR BK	O-R BL	R-O W	O-V BR-Y	V-O BR-BK			BR-Y BR-R	Y-BR BR-G			BK-BL O	R-O W
6	2		•				•		NE-D16QA NE-D16D*	BL-W R	W-BL G	BR-W Y	W-BR BK	O-R BL	R-O W	O-V BR-Y	V-O BR-BK					BR-Y BR-R	Y-BR BR-G	BK-BL O	R-O W
7	2		•					•	NE-D16QA NE-D16D*	BL-W R	W-BL G	BR-W Y	W-BR BK	O-R BL	R-O W							BR-Y BR-R	Y-BR BR-G	BK-BL O	R-O W

*NE-D16D Manufacture Discontinued

Notes associated with Fig. 5



- * NETWORK TERMINAL CONNECTIONS SHOWN IN TWO LOCATIONS.
- NOTE 1: WHEN IDENTIFYING LEAD COLORS, THE BODY COLOR IS SHOWN FIRST AND THEN THE TRACER.
- NOTE 2: TO SILENCE RINGER PERMANENTLY, CONNECT BK RINGER LEAD TO TERMINAL K ON NETWORK.

Fig. 4 — NE-510QA Telephone Set (Single Line with Grounding Button)

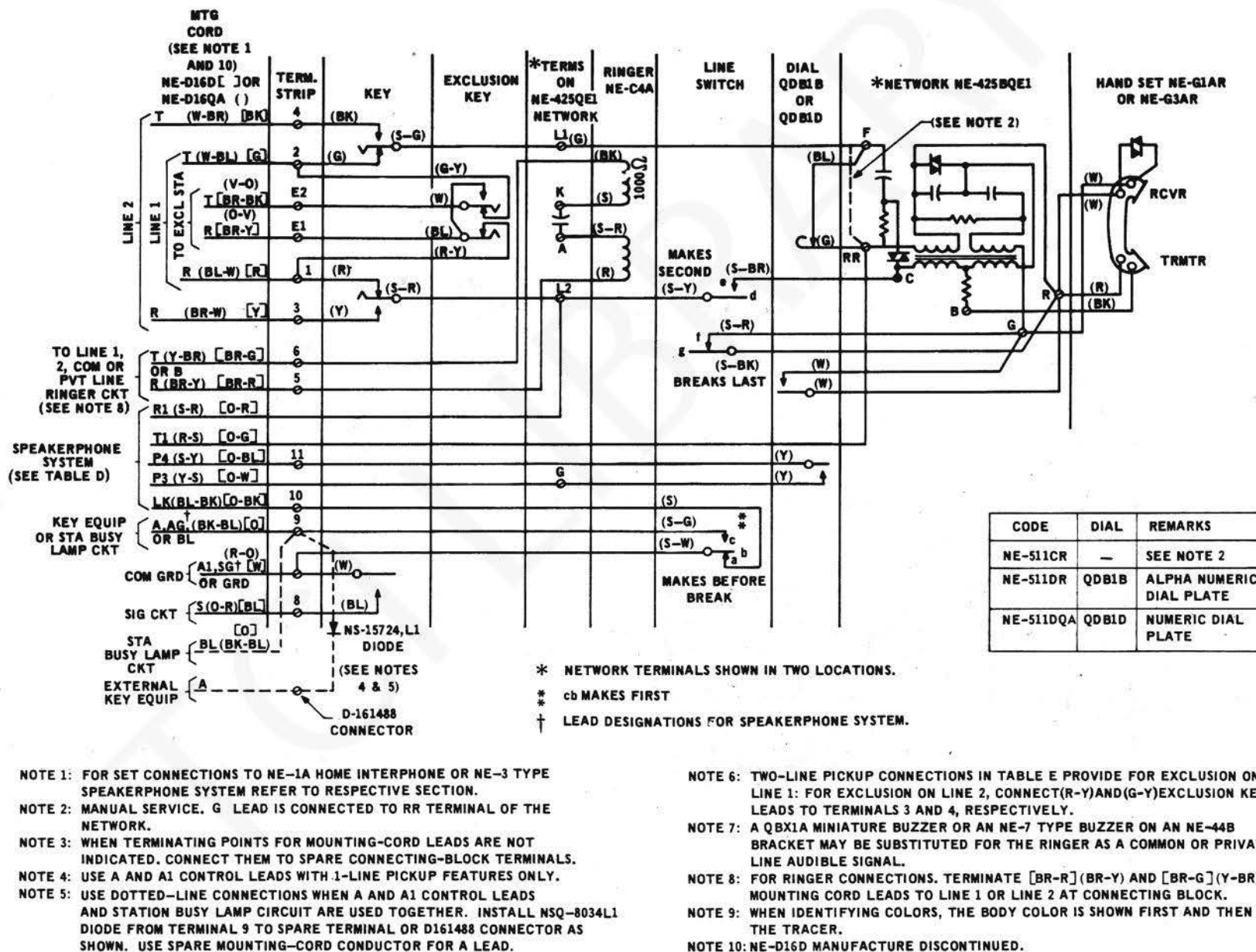


Fig. 5 — NE-511CR, DR and DQA Telephone Set (Two-Line Pickup and Exclusion)