KS-19594 DIALER
SWITCHBOARD AND MISCELLANEOUS KEY EQUIPMENT
CONNECTIONS

1. GENERAL

1.01 This section is reissued to:

- Change connection terminations of dialer telephone cord at equipment, Table A

Changes or additions in the body of tables are indicated by shaded areas.

2. CONNECTIONS

The power supply cord should not be connected to the AC power line receptacle when removing the housing or making any connections.

2.01 ***Power Supply Unit:*** Refer to dialer installation section for mounting instructions.

2.02 ***Dialer Telephone Cord:***

- Standard six conductor cord
- Secure inside the equipment under a cord clamp or by taping to set mounting cord or cable.
- Dress wires to allow proper operation of equipment

2.03 Refer to appropriate tables and figures in this section for terminations of dialer cord leads.

Test the operation of the dialer by recording and calling the telephone number usually called for job completion. For installation with speakerphones, be sure to test with speakerphones operating to insure proper connection to off normal contacts.

2.04 ***Connection Index:***

Table A—Dialer Connections To Consoles, Key Equipment, Apparatus Units, and Key Mountings

Table B—Dialer Connections To Switchboards

Fig. 1—KS-19594 Dialer, Power Supply Connections

Fig. 2—KS-19594 Dialer Connections to Switchboarc With Both Rotary and TOUCH-TONE Dia

Fig. 3—KS-19594 Dialer Connections Requiring KTU, to Switchboards With Both Rotar and TOUCH-TONE Dials

Fig. 4—KS-19594 Dialer Connections to Switchboarc With TOUCH-TONE Dials Only

Fig. 5—KS-19594 Dialer Connections Requiring KTU, to Switchboards With TOUCH-TON Only

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TABLE A

DIALER CONNECTIONS TO CONSOLES, KEY EQUIPMENT, APPARATUS UNITS, AND KEY MOUNTINGS

<table>
<tr><td colspan="2" rowspan="2">KS-19594
DIALER
TEL CORD</td><td colspan="6">CONSOLES WITH ROTARY DIALS</td></tr>
<tr><td>1A
2A</td><td>3A</td><td>4A</td><td>3C1
3C2
4B1
4B2</td><td>5A
5B
6A
6B</td><td>10A, 11A
FOR USE WITH
2A AUTOMATIC
CALL
DISTRIBUTION
SYSTEM</td></tr>
<tr><td rowspan="2">PULSING</td><td>R</td><td>Remove BL dial lead from 1 of the dial term. strip and</td><td colspan="2">Remove Y dial lead from 6 of term. strip TS1 and</td><td>Remove BL dial lead from 2 of term. strip TS2 and</td><td colspan="2">Remove BL lead from F of the network and</td></tr>
<tr><td>G</td><td colspan="6">Connect to R of dialer tel cord with D-161488 connector</td></tr>
<tr><td rowspan="2">OFF-NORMAL</td><td>W</td><td>GN* term. on the network</td><td colspan="2">1 of term. strip TS2</td><td colspan="3">GN term. on the network</td></tr>
<tr><td>BL</td><td>R* term. on the network</td><td>2 of term. strip TS2</td><td>14 of term. strip TS2</td><td colspan="3">R term. on the network</td></tr>
<tr><td rowspan="2">SPEAKERPHONE</td><td>Y</td><td colspan="6">Insulate and store in the console</td></tr>
<tr><td>BK</td><td colspan="6">Insulate and store in the console</td></tr>
</table>

* Connect to terminals 3 and 4 of dial terminal strip when console is used with 757A PBX.

TABLE A (Cont)

DIALER CONNECTIONS TO CONSOLES, KEY EQUIPMENT, APPARATUS UNITS, AND KEY MOUNTINGS

KS-19594 DIALER TEL CORD			CONSOLES WITH ROTARY DIALS (Cont)				
		10A, 11A FOR USE WITH 3A ACD SYS	10B 11B	12A1	12B1	14A1 14A3 15A1 15A3	14-TYPE
PULSING	R	Remove BL dial lead from 7 of term. board TB1 and	Remove BL dial lead from 3 of term. board TB1 and	Remove BL dial lead from 9 of term. board TB3 and	Remove BL dial lead from 2 of term. board TB2 and	Remove BL dial lead from 8 of term. board and	Remove BL dial lead from 9 of term. board TB1 and
		Connect to R of dialer tel cord with D-161488 connector					
	G	7 of term. board TB1	3 of term. board TB1	9 of term. board TB3	2 of term. board TB2	8 of term. board	9 of term. board TB1
OFF-NORMAL	W	GN term. on the network					
	BL	R term. on the network					
SPEAKERPHONE	Y	Insulate and store in console					TB1-4*
	BK	Insulate and store in console					TB1-9*

* This is not a speakerphone function.

TABLE A (Cont)

DIALER CONNECTIONS TO CONSOLES, KEY EQUIPMENT, APPARATUS UNITS, AND KEY MOUNTINGS

<table>
<tr><th colspan="2" rowspan="2">KS-19594 DIALERS TEL CORD</th><th colspan="3">APPARATUS UNITS WITH ROTARY DIALS</th><th colspan="2">KEY EQUIPMENT WITH ROTARY DIALS</th><th colspan="3">KEY MOUNTINGS WITH ROTARY DIALS</th></tr>
<tr><th>12A, 14A FOR USE WITH 2A AUTOMATIC CALL DISTRIBUTION SYSTEM</th><th>12A, 14A FOR USE WITH 3A AUTOMATIC CALL DISTRIBUTION SYSTEM</th><th>12B, 14B FOR USE WITH 2A OR 3A AUTOMATIC CALL DISTRIBUTION SYSTEM</th><th>4A USING 634(MD) SUBSCRIBER SET AND 6026 TYPE CONTROL KEY</th><th>4A USING 685 SUB-SCRIBER SET AND 6026 TYPE CONTROL KEY</th><th>400 SERIES USING 688-TYPE OR 690-TYPE SUBSCRIBER SET</th><th>700 SERIES USING 750-TYPE APPARATUS UNIT</th><th>700 SERIES USING 751-TYPE APPARATUS UNIT</th></tr>
<tr><td rowspan="2">PULSING</td><td>R</td><td>Remove BL dial lead from F of the network and</td><td>Remove BL dial lead from term. 5 of TB1 and</td><td>Remove BL dial lead from term. 3 of TB1 and</td><td>Remove G inside wire from L2-GN sub set and</td><td>Remove G inside wire from L2 in sub set and</td><td>Remove BL dial lead from F of the network and</td><td colspan="2">Remove Y lead from Y term. of the dial

and</td></tr>
<tr><td>G</td><td colspan="6">Connect to R of dialer tel cord with D-161488 connector</td></tr>
<tr><td rowspan="2">OFF-NORMAL</td><td>W</td><td colspan="3">GN term. of the network</td><td>BK term. of the sub set</td><td colspan="2">GN term. of the network</td><td>1 term. of the apparatus unit term. strip</td><td>17 term. of the handset mounting</td></tr>
<tr><td>BL</td><td colspan="6">R term. of the network</td><td>2 term. of the apparatus unit term. strip</td><td>16 term. of the handset mounting</td></tr>
<tr><td rowspan="2">SPEAKERPHONE</td><td>Y</td><td colspan="8">Insulate and store</td></tr>
<tr><td>BK</td><td colspan="8">Insulate and store</td></tr>
</table>

TABLE A (Cont)

DIALER CONNECTIONS TO CONSOLES, KEY EQUIPMENT, APPARATUS UNITS, AND KEY MOUNTINGS

KS-19594 DIALER TEL CORD		CONSOLES WITH TOUCH-TONE DIALS				
		1A 2A	1B 2B	3C3 3C4 4B3 4B4	5B 6B	10B 11B
PULSING	R	Remove G dial lead from term. 7 of the term. board and Connect to R of dialer tel cord with D-161488 connector		Remove G dial lead from 11 of term. strip TS2 and	Remove G dial lead from 11 of term. strip TS2 and	Remove G dial lead from 1 of the 151E amplifier and
	G	Term. 7 of the term. board		11 of term. strip TS2	11 of term. strip TS2	1 of 151E amplifier
OFF-NORMAL	W	GN term. on the network*		GN term. on the network	3 of term. strip TS2	GN term. on the network
	BL	R term. on the network*		R term. on the network	4 of term. strip TS2	R term. on the network
SPEAKERPHONE	Y	Insulate and store				
	BK	Insulate and store				

* Connect to terminals 9 and 10 of the TT dial terminal board when console is used with 757A PBX

TABLE A (Cont)

DIALER CONNECTIONS TO CONSOLES, KEY EQUIPMENT, APPARATUS UNITS, AND KEY MOUNTINGS

KS-19594 DIALER TEL CORD		CONSOLES WITH *TOUCH-TONE* DIALS			APPARATUS UNIT WITH *TOUCH-TONE* DIAL	KEY MOUNTING WITH *TOUCH-TONE* DIAL
		12B2	14A2 14A4 15A2 15A4	16-TYPE†	12B, 14B FOR USE WITH 2A OR 3A ACD SYS	1400 SERIES USING 1690-TYPE SUB SET
PULSING	R	Remove G dial lead from 7 of term. strip TB4 and Connect to R of dialer tel cord with D-161488 connector	Remove G dial lead from 4 of the term. board and Connect to R of dialer tel cord with D-161488 connector	10 of Term. strip TB1 and remove strap between term. strip TB1 8 and 9	Remove G dial lead from term. 1 of the 151E amplifier and Connect to R of dialer tel cord with D-161488 connector	Remove G dial lead from L1 of the network and Connect to R of dialer tel cord with D-161488 connector
	G	7 of term. strip TB4	4 of the term. board	9 of the term. strip TB1	Term. 1 of the 151E amplifier	L1 of the network
OFF-NORMAL	W	GN term. on the network				
	BL	R term. on the network				
SPEAKERPHONE	Y	Insulate and store		TB1-4*	Insulate and store	
	BK	Insulate and store		TB1-9*	Insulate and store	
61A Filter Leads	R Y BK			TB1-8 TB1-10 TB1-9		

* This is not a speakerphone function.
† Add 61A filter (ordered separately) for RF suppression.

TABLE B

DIALER CONNECTIONS TO SWITCHBOARDS

KS-19594 DIALER TEL CORD		SWITCHBOARDS		
		551A, B, D 552A, B, D, E 605A (NOTES 1, 2, 8)	555 556A 557A, B (NOTES 3, 4, 5, 8)	608A, B, D (NOTES 6, 7, 8)
PULSING	R	Term. 3 of 10-141 term. strip		Term. 3 of 10-141 term. strip
	G	Term. 5 of 10-141 term. strip	Term. 2 of 10-141 term. strip	Term. 5 of 10-141 term. strip
OFF-NORMAL	W	Term. 1 of 10-141 term. strip	Term. 8 of 10-141 term. strip	Term. 1 of 10-141 term. strip
	BL	Term. 2 of 10-141 term. strip	Term. 9 of 10-141 term. strip	Term. 2 of 10-141 term. strip
SPEAKERPHONE	Y	Insulate and store		
	BK	Insulate and store		

Note 1: Mount 10-141 terminal strip under keyshelf adjacent to wire entrance hole for dial. Rewire 6044B dial mounting as follows:

ROTARY OR ROTARY AND TOUCH-TONE DIALS (FIG. 2)				
LEAD	REMOVE FROM 6044B	CONNECT TO 10-141	CONNECT STRAPS	
			FROM 6044B	TO 10-141
R	R	1	R	1
G or BL	GN	2	GN	2
BL	B	3		
Y	Y	4	Y	4
			B	5

TOUCH-TONE DIAL ONLY (FIG. 4)*				
LEAD	REMOVE FROM 6044B	REMOVE FROM 10-141	CONNECT STRAP	
			FROM 10-141	TO 10-141
R	R	1		
G or BL	GN	2		
BL	B	5		
Y	Y	4	4	5

* 551 PBX — Place strap from 1 of B relay to 2RT of F relay.

Note 2: If dialer is disconnected, leave 10-141 terminal strip in place and strap 3 to 5.

Note 3: Mount 17B KTU in 105B apparatus box on side of switchboard and 10-141 terminal strip under keyshelf adjacent to wire entrance hole for dial. Rewire 6044B dial mounting as follows:

ROTARY OR ROTARY AND TOUCH-TONE DIALS (FIG. 3)					
LEAD	REMOVE FROM 6044B	CONNECT TO 10-141	CONNECT STRAPS		
			FROM 10-141	TO 6044B	TO 17B
R	R	1	1	R	9
G or BL	GN	3	3		7
BL	B	7	7		5
Y	Y	4	4	Y	
W	W	6	6	W	
			2	GN	
			5	B	4
			8		1

Note 4: Connect terminal 9 of 10-141 terminal strip to PBX ground and terminal 3 of 17B KTU to PBX battery. If PBX battery is —48 volts, connect 1000-ohm resistor (KS-13490L1) in battery lead to 17B KTU:

TOUCH-TONE DIALS ONLY (FIG. 5)					
LEAD	REMOVE FROM 6044B	REMOVE FROM 10-141	CONNECT STRAPS		
			FROM 10-141	TO 10-141	TO 17B
R	R	1	1		9
G or BL	GN	2			
B	B	5	5		4
Y	Y	4	4	2	
W	W	6	6	5	
			3		7
			7		5
			8		1

Note 5: If dialer is disconnected, remove 17B KTU. Leave 10-141 terminal strip and strap terminals 2 to 3 and 5 to 7.

Note 6: Mount 10-141 terminal strip under keyself adjacent to wire entrance hole for dial. Rewire 6044B dial mounting as follows using strapwire and D-161488 connectors to extend wiring from KS-16323 connector:

ROTARY OR ROTARY AND TOUCH-TONE DIALS (FIG. 2)				
LEAD FROM KS-16323 CONN PIN NUMBER	REMOVE FROM 6044B	CONNECT TO 10-141	CONNECT STRAPS	
			FROM 10-141	TO 6044B
1	B	3		
2	Y	4	4	Y
3	R	1	1	R
21	GN	2	2	GN
			5	B

TOUCH-TONE DIAL ONLY (FIG. 4)				
LEAD FROM KS-16323 CONN PIN NUMBER	REMOVE FROM 6044B	REMOVE FROM 10-141	CONNECT STRAP	
			FROM 10-141	TO 10-141
1	B	5		
2	Y	4	4	5
3	R	1		
21	GN	2		

Note 7: If dialer is disconnected, leave 10-141 terminal strip in place and strap terminals 3 and 5.

Note 8: Dialer may be connected as shown in Table B to any PBX equipped with rotary or both rotary and TOUCH-TONE dials or TOUCH-TONE dials only. See Fig. 2, 3, 4, and 5. Dialer connections to an early model PBX should be engineered locally.

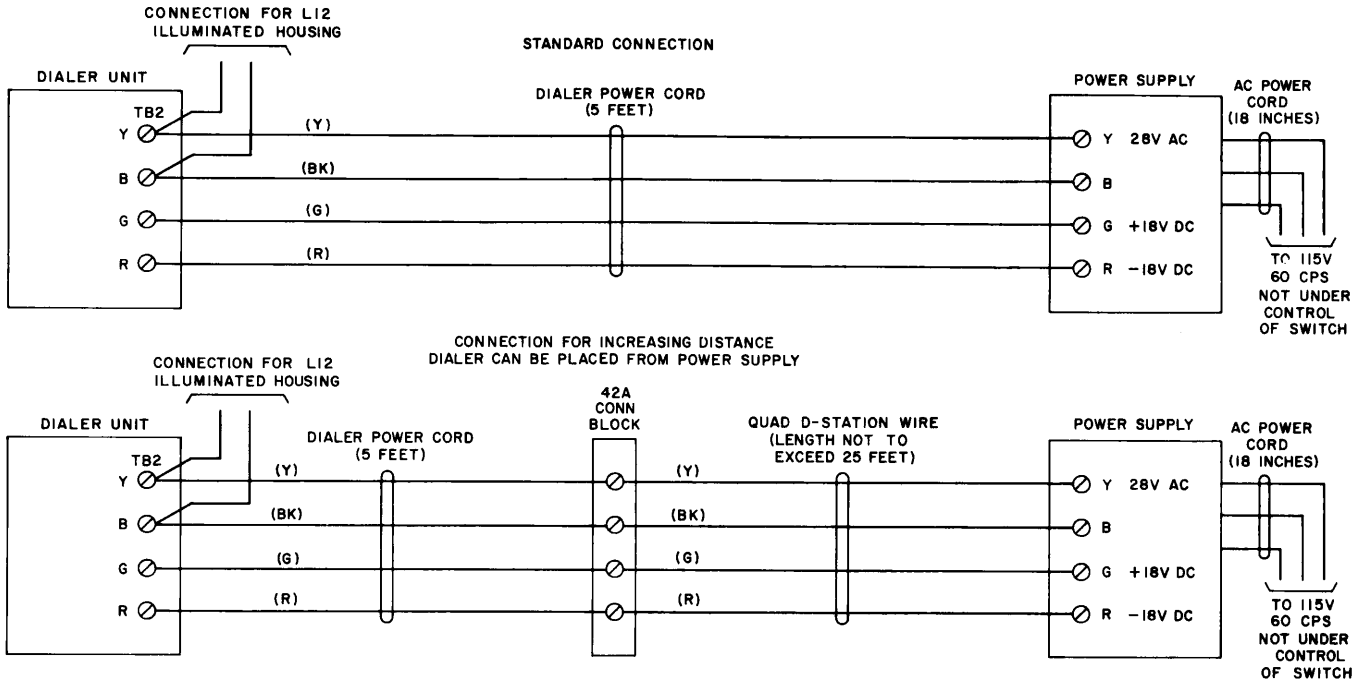

Fig. 1—KS-19594 Dialer, Power Supply Connections

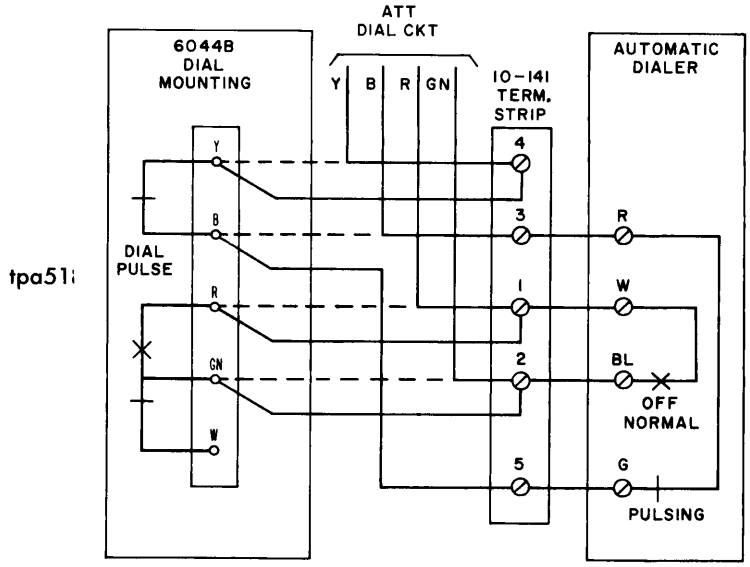

Fig. 2—KS-19594 Dialer Connections to Switchboards With Both Rotary and TOUCH-TONE Dials

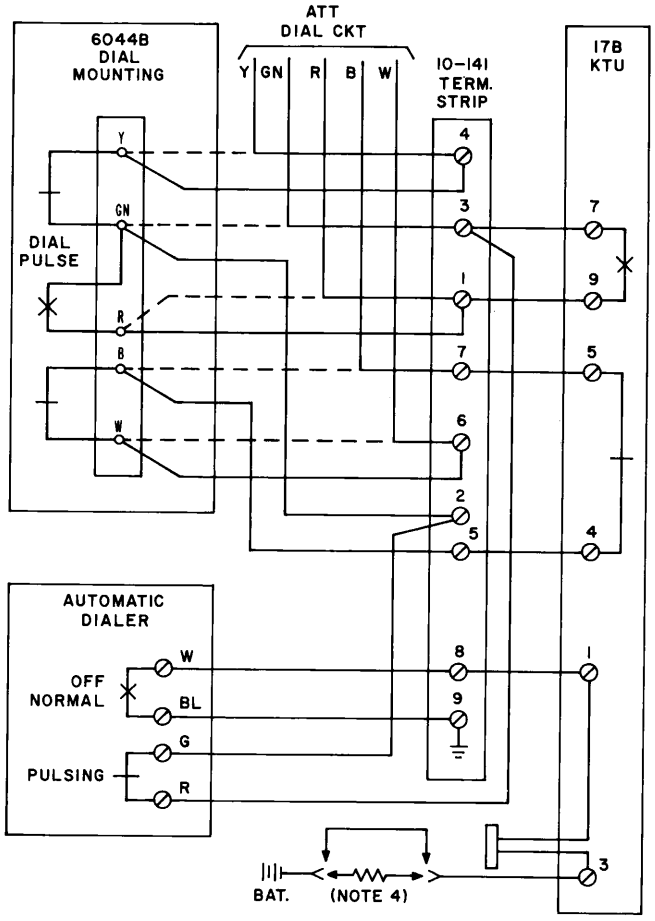

Fig. 3—KS-19594 Dialer Connections Requiring a KTU, to Switchboards With Both Rotary and TOUCH-TONE Dials

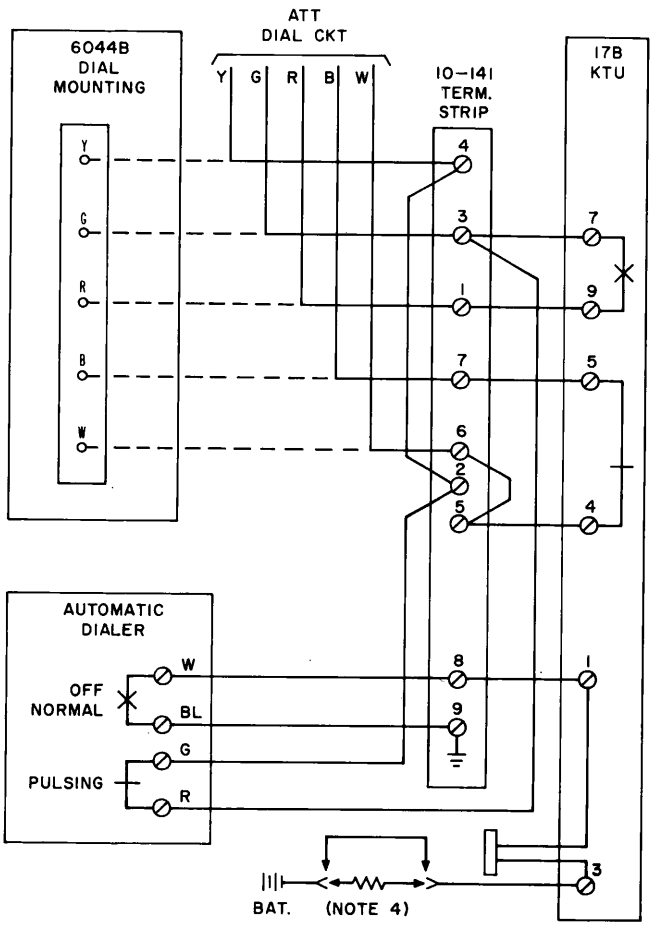

Fig. 5—KS-19594 Dialer Connections, Requiring a KTU, to Switchboards With TOUCH-TONE Dials Only

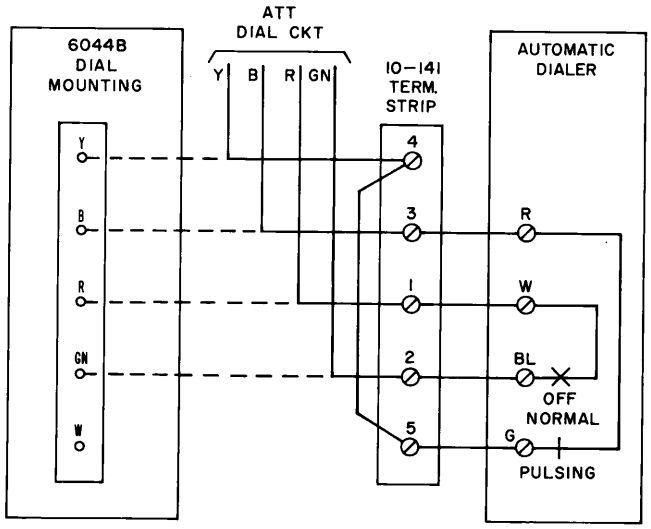

Fig. 4—KS-19594 Dialer Connections to Switchboards With TOUCH-TONE Dials Only