LOGIC 1* KEY TELEPHONE SETS

QSK201AB, QSK201BB AND QSK2201AB, QSK2201BB

INSTALLATION MANUAL

Fig. 1 — QSK201AB Telephone Set

1. GENERAL

1.01 The QSK201-type and QSK2201-type LOGIC 1 telephone sets are single-line sets designed for desk-top or wall-mounted installation.

1.02 The QSK201-type and QSK2201-type telephone sets are identical except that the QSK201-type telephone set is equipped with a QDB1N Rotary Dial while the QSK2201-type Telephone Set is equipped with an NE-35Q3L1 DIGITONE* multifrequency pushbutton dial.

1.03 The QSK201AB and QSK2201AB telephone sets are identical to the QSK201BB and QSK2201BB sets except that the QSK201BB and QSK2201BB sets provide a message-waiting feature and appropriately designated faceplate.

1.04 For a wall-mounted installation of a LOGIC 1 telephone set, a wall bracket assembly (P0515934) must be ordered separately.

1.05 The QSK201-type and QSK2201-type telephone sets are factory wired for use with NE-1A1, NE-1A2 or NE-6A Key Telephone Systems (KTS) or for residential use with bridged ringer connection. Table A gives the connections for all classes of residential service. The sets cannot be used with the NE-1A KTS.

1.06 The telephone sets are available in various colors. Their corresponding color codes are given in 500-1201-100.

2. OPTIONS

2.01 The following features are subscriber option. Refer to the schematic diagrams (Fig. 3 and 4) and Tables B through E when converting the telephone set for a paticular option as specified below.

2.02 *Buzzer.* A QBX1A buzzer may be mounted on the left-hand dial mounting bracket. The buzzer should be connected to any two spare leads. The QBX1A buzzer operates on 10 V ac only.

2.03 *Station Busy Monitor.* This feature may be installed to provide station busy lamp indication at a remote location. Connection information for this feature is given in Table B.

2.04 *Ringer Cutoff.* This feature may be provided on telephone sets equipped with an NE-C4A ringer, by bending the stop next to the detent on the ringer volume control until it completely clears the rim of the ringer frame. This provides a further position on the volume control which prevents ringer armature movement.

2.05 *Handsfree Telephone Operation.* The QUS1C LOGIC handsfree unit is designed for use with the LOGIC 1 telephone sets. The QUS1C is physically compatible with the LOGIC 1 sets and is equipped with a 15-pin plug for plug-in attachment. The QUS1C plug fits into a matching interconnecting jack which is normally stored within the LOGIC 1 set. (See 3.05 and 3.06).

2.06 *Exclusion.* This feature maybe obtained by using a NE-10A KTU or a NE-229B KTU (see Fig. 5). The feature provides automatic cutoff or excluded stations whenever the master station picks up the line or NE-229B KTU.

2.07 *Voice Station Coupler.* A QCT1A voice station coupler may be installed to provide an automatic answering facility. Connection information for this feature is given in Table C.

2.08 *LOGIC Dialer.* A variety of automatic dialers is compatible with the LOGIC 1 sets. Connection information for automatic dialers is given in Table D. For LOGIC dialer connection information see 512-1301-200. The LOGIC dialer plugs into the left-hand side of the LOGIC set and the LOGIC handsfree unit may be plugged into the left-hand side of the LOGIC dialer.

2.09 *Auxiliary Dial.* A NE-1035B3QA station dial may be used with the QSK201AB telephone set if computer input of DIGITONE signals is required. Connection information is given in Table E.

3. INSTALLATION

3.01 The LOGIC 1 telephone sets can be mounted either on a horizontal surface (e.g., desk top, etc.) or on a vertical surface (e.g., wall).

3.02 For desk top installation, the sets should be placed in a convenient location on the desk and connected to the appropriate connector cable or connecting block.

3.03 For vertical surface installation, it is necessary to use the wall bracket assembly (P0515934) which must be ordered separately. The installation should be perfomed according to Chart 1.

3.04 When making the conversions as specified in Tables B through E, the following guidelines should be observed.

(a) If more connection positions are required than are available, use a QCM15B connector (Fig. 2) to obtain the additional positions.

(b) If no terminal is available for the connection of two spade-tipped leads, use a QCM12A or QCM15B connector (Fig. 2).
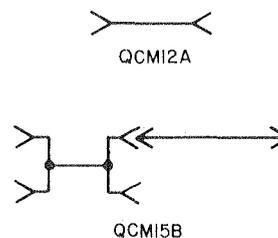

QCM12A

QCM15B

Fig. 2 — QCM-Type Connectors

3.05 If the LOGIC handsfree unit is required, the filler plate in the left-hand side of the set housing base must be removed and the prewired interconnect socket, which is stored inside the set must be installed in its place. A NE-2012B transformer (or equivalent power supply) is required for each LOGIC 1 telephone set to be equipped wtih a LOGIC handsfree unit and should be connected per 3.06. Refer to LOGIC handsfree unit installation manual or 512-6251-400 for detailed connection information.

Caution: The power supply output must not be grounded.

3.06 The power supply for the QUS1C handsfree unit is connected through the LOGIC telephone set in one of the following ways.

(a) Run the two-conductor cord or mounting cord from the NE-2012B transformer (or equivalent power supply) through the telephone set housing beside the telephone set mounting cord and insert its spade tips in terminals 18-19 and 28-29 of the terminal block in the LOGIC 1 telephone set. Remove the (BL) and (W) mounting cord leads from terminals 18-19 and 28-29. Insulate and store these leads.

(b) Connect the NE-2012B transformer (or equivalent power supply) to the LOGIC 1 set through the mounting cord. For an NE-D6QC mounting cord, connect the transformer to the (BL) and (W) leads.

(c) Connect the NE-2012B transformer (or equivalent power supply) to the telephone set through the connector cable.

Note: The maximum allowable lengths of 22, 24, and 26 AWG cable for connecting the NE-2012B transformer to the handsfree unit are 400, 250, and 150 feet respectively.

CHART 1
WALL MOUNTING THE QSK201AB, BB AND QSK2201AB, BB TELEPHONE SETS

STEP	PROCEDURE
1	Attach the wall bracket (P0515934) to the mounting surface using two No. 8 screws or similar mounting hardware (not supplied).
2	Place the telephone set on the wall bracket so that the shoulder rivets enter the corresponding keyhole slots in the base of the set (Fig. 6).
3	Move the telephone set to the left as far as possible so that the lower front mounting hole is in line with the corresponding threaded hole in the telephone set base.
4	Lock the set in place by inserting the knurled thumb screw through the wall bracket into the threaded hole in the base of the telephone set and tighten.

Note: When mounting the telephone set on a vertical suface, the mounting cord is directed downward from the cord exit hole in the base of the set so that it can be fastened to the mounting surface where required.

CHART 2
REMOVAL OF THE FACEPLATE AND COVER

STEP	PROCEDURE
1	Release the faceplate catch (Fig. 7) by inserting the NS-16750, L3 releaser hole located on the lower front edge of the housing cover.
2	Lift upward and forward on the faceplate until the locating tabs at the rear of the faceplate are disengaged from the housing cover.
3	Loosen the two captive retaining screws until they are disengaged from the threaded posts on the housing base. The cover can then be removed.
4	Replace the cover and faceplate.

Caution: Do not exert undue force when tightening the captive remaining screws.

CHART 3
LOGIC HANDSFREE TO LOGIC 1 TELEPHONE SET
FOR DESK TOP INSTALLATION

STEP	PROCEDURE
1	Hold the telephone set in the right hand with the dial forward.
2	Hold the handsfree unit in the left hand with the controls forward.
3	Tilt the upper edge of the handsfree unit towards the upper edge of telephone set, and bring the set and unit together so that the plug is firmly in the socket.

CHART 4
LOGIC HANDSFREE TO LOGIC 1 TELEPHONE
SET FOR WALL-MOUNTED INSTALLATION

STEP	PROCEDURE
1	Mount a QBP7A mounting bracket securely on the wall. (The mounting bracket must be ordered separately.)
2	Place the telephone set in position on the mounting bracket. Slide the set to the right and secure it with the thumb screw.
3	Tilt the upper edge of the handsfree unit towards the upper edge of the telephone set, and bring the unit together with the set so that the plug is firmly in the jack and the unit is secured on the locking pin.

TABLE A
RESIDENTIAL LINE AND RINGER CONNECTIONS

WIRE OR LEAD			BRIDGED	RING PARTY	TIP PARTY	TIP AUTOMATIC # IDENT.	TIP DIAL MESSAGE RATE
Line Wire at Connecting Block	Ring	(R)	R	R	R	R	R
	Tip	(G)	G	G	G	G	G
	Ground	(Y)	Y	Y	Y	Y	Y
Mounting Cord* at Connecting Block		(R)	R	R	G	G	G
		(G)	G	G	R	R	R
		(Y)	Y	Y	Y	Y	Y
Mounting Cord in Set		(R) (G) (Y)			As connected at factory		
Line Switch	e	(S-W)	47-49				
	d	(S-G)	C**				
	a	(S)	46	46	46	A**	A**
	b	(S-Y)	00-5	00-5	00-5	7-9	7-9
	c	(S-BR)	30-32	30-32	30-32	10-12	10-12
	j	(G)	10-12	10-12	10-12	46	46
	k	(S-BL)	7-9	7-9	7-9	25	25
	f	(S-R)	R**				
	g	(S-BK)	GN**				
Ringer		(S-R)	A**	A**	A**	00-5	B**
		(R)	47-49	47-49	47-49	B**	K**
		(BK)	7-9	00-5	00-5	B**	00-5
		(S)	K**	K**	K**	K**	B**

* Insulate and store the (BK), (BL), and (W) leads of the mounting cord when not in use.

** Terminals on network.

TABLE B
STATION BUSY MONITOR CONNECTION INFORMATION

LEAD	CONVERSION
(BK) Mounting Cord Lead	Remove from 30-32 and connect to any spare terminal.
Spare Mounting Cord Lead (to be used as BL lead)*	Connect to 30-32
Diode Assembly P0522718	30-32 Same Terminal as (BK) mounting cord lead.

* One of the power leads may be used and the power brought into the
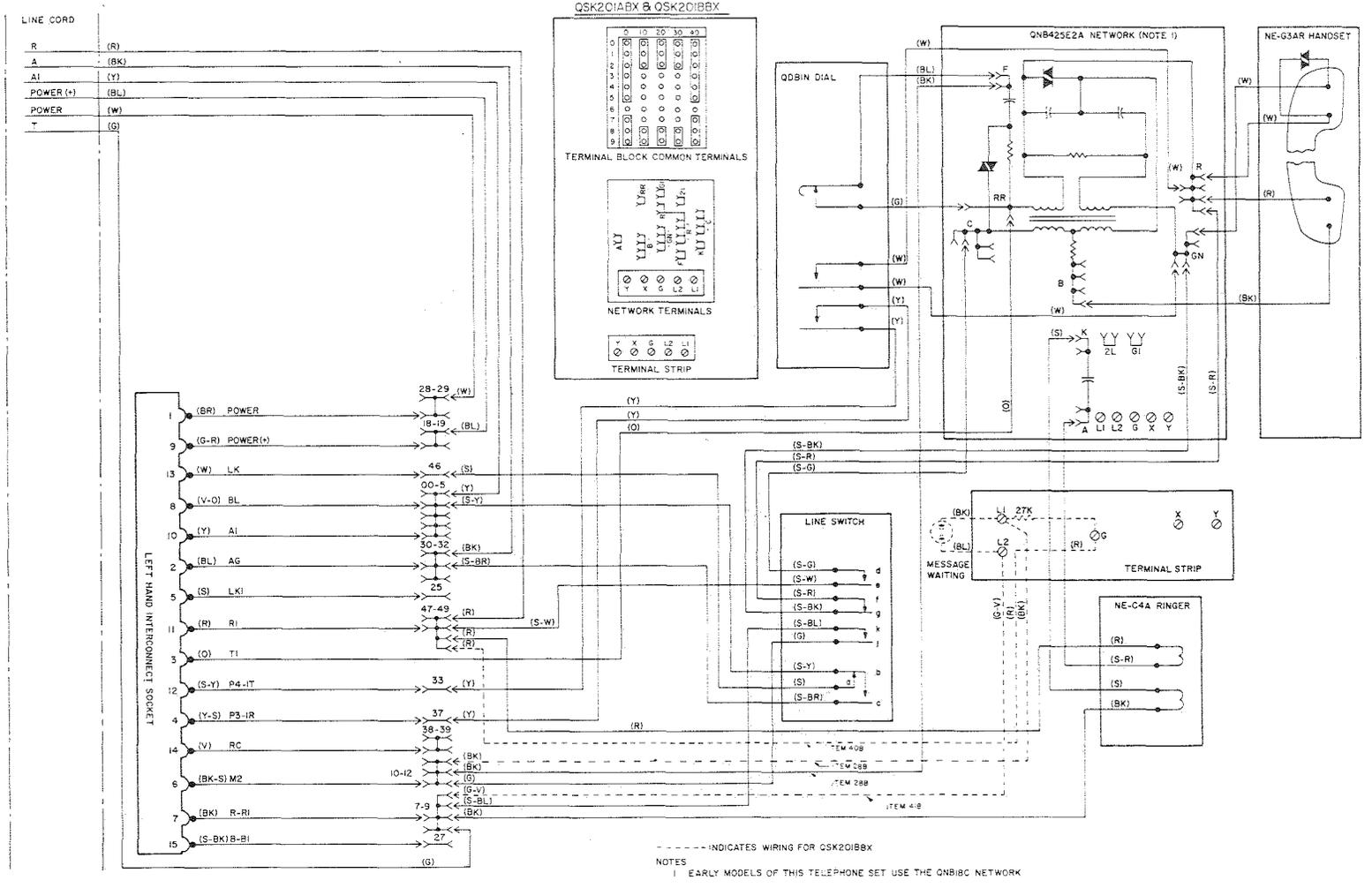telephone set by a separate mounting cord.

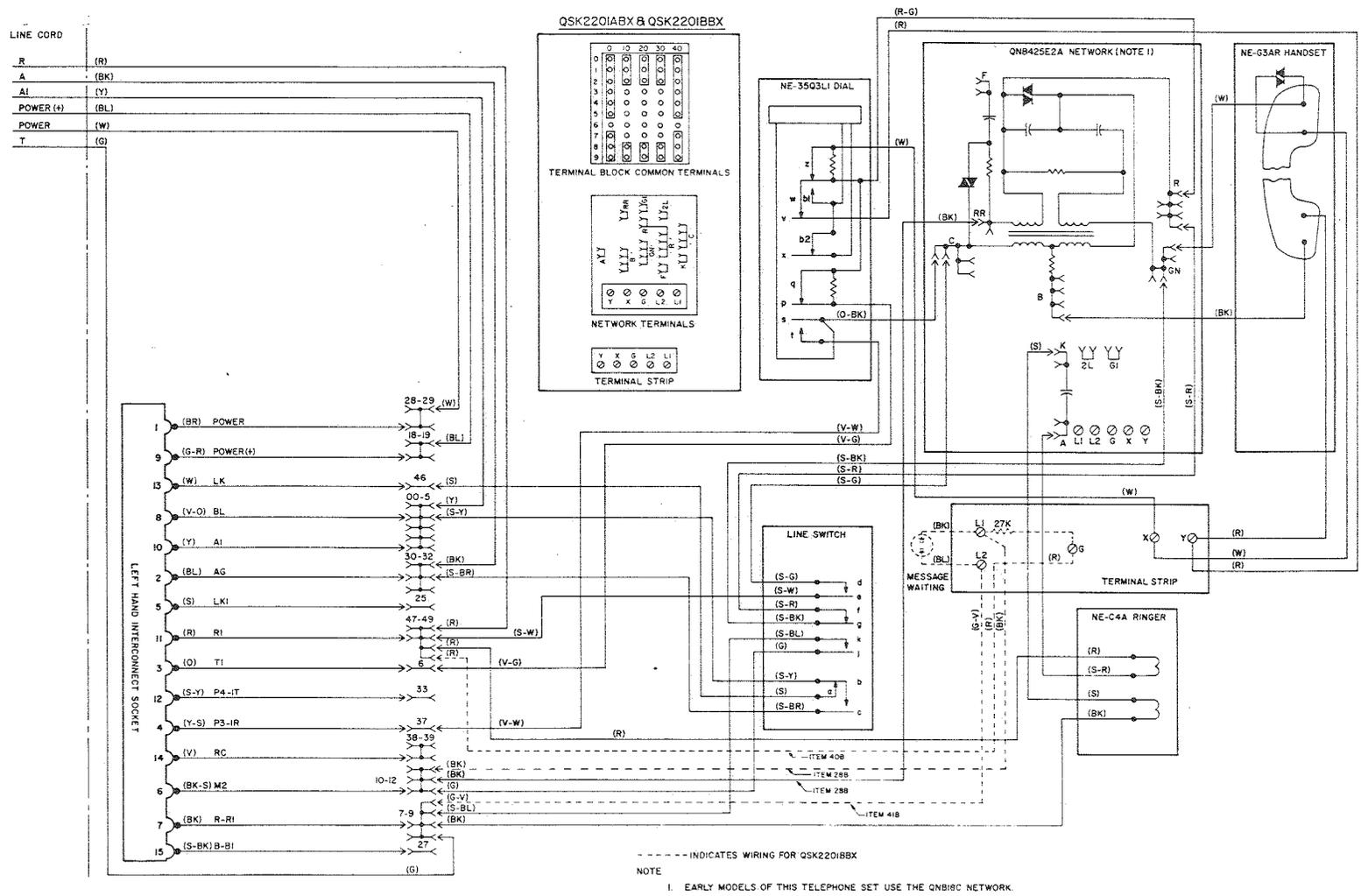Fig. 3 — Schematic Diagram of QSK201AB and QSK201BB-Type Telephone Sets

Fig. 4 — Schematic Diagram of QSK2201AB and QSK2201BB-Type Telephone Sets

TABLE C
QCT1A VOICE STATION COUPLER CONNECTION INFORMATION

Coupler Terminals	R	R1	T	T1	A	A1
Set Term		47-49		7-9	30-32	00-5
(G) Mounting Cord from Term 7-9			Spare Term			
(R) Mounting Cord from Term 47-49	Spare Term					
Note: Use a suitable spade-tip-ended cord, e.g., NE-6AA-* cord.						

TABLE D
AUTOMATIC DIALER CONNECTION INFORMATION

Dialer Leads	TELERAPID 350*			W	Y			BL
	TELERAPID 125*			Y-W	G-W			W
	MAGICALL*	BL	W	G	R	BK	Y	
	RAPIDIAL*	W	W	G	BL	Y	Y	
QSK201AA and BB	Set Terminals	GN	R	F		37	33	C
	(BK) Lead from Term. F				Spare Term			
QSK2201AA and BB	Set Terminals	GN	R	RR		37	33	C
	(BK) Lead from Term. RR				Spare Term			

* Registered Trademark

TABLE E
NE-1035B3QA AUXILIARY DIAL CONNECTION INFORMATION

DIAL LEADS	BR-W	S-R	W-BL	O-R	R-O	V-O	O-V	Y-S	S-Y
Set term	R		B		C		47-49		F
(R) Handset lead from Term R		Y							
(W) Handset lead from Term R				X					
(BK) Lead from Term F								Spare Term	
(SW) Line Switch lead from Term 47-49						Spare Term			

Note: Insulate and store unused leads: (BL-BK), (BK-BL), (BR-Y), (W-BR), (R-S), (BL-W).
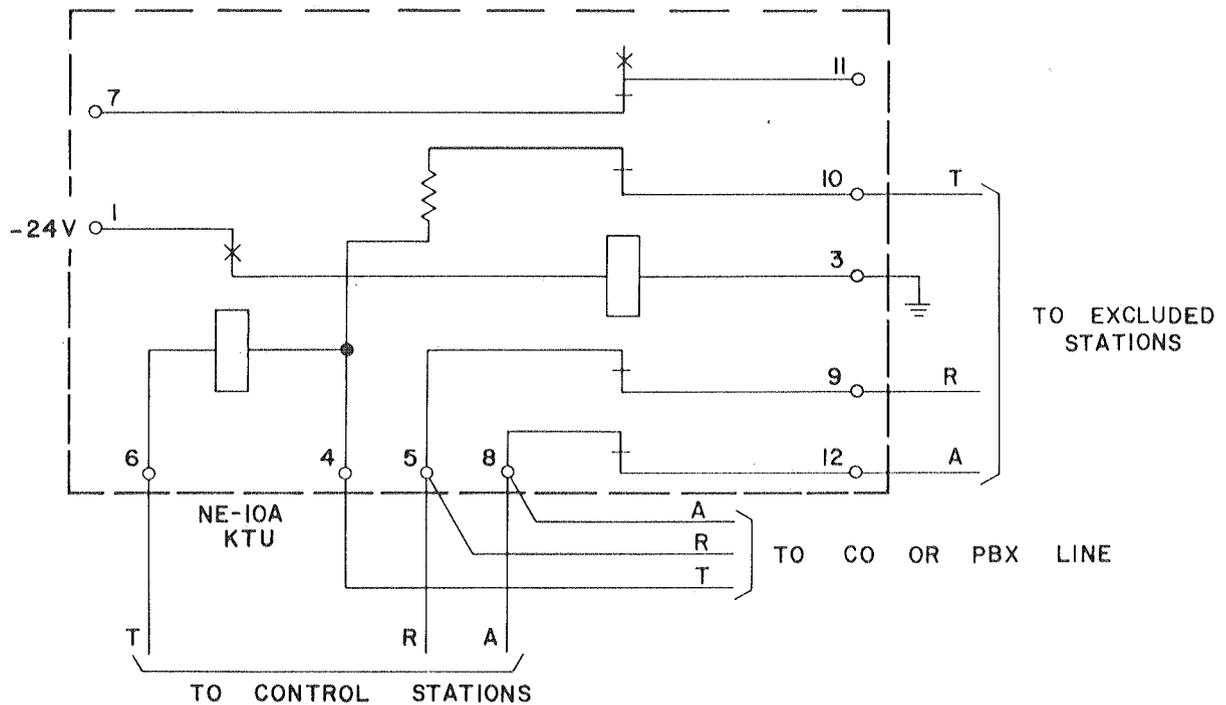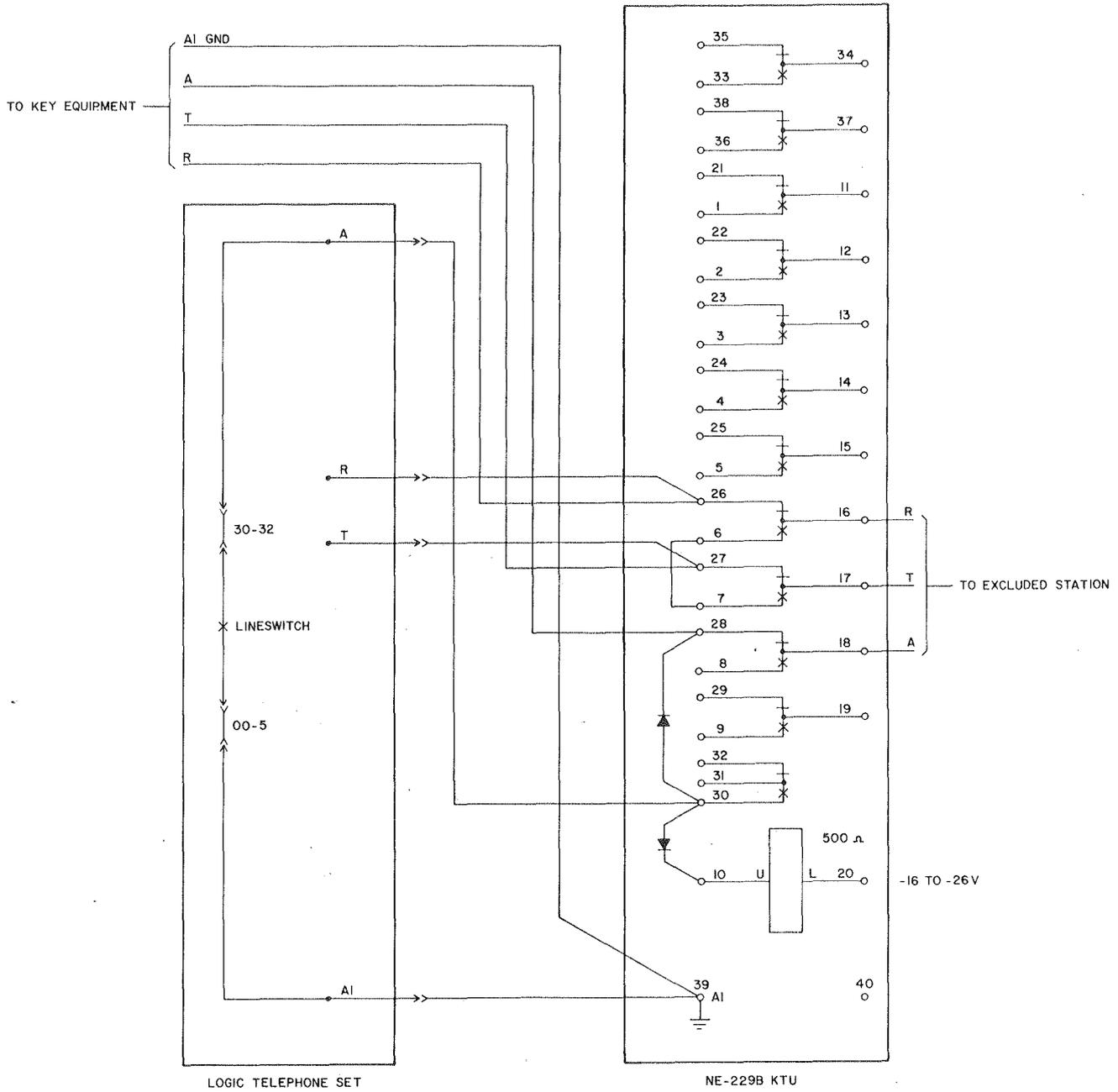

Fig. 5(a) — Exclusion Using NE-10A KTU

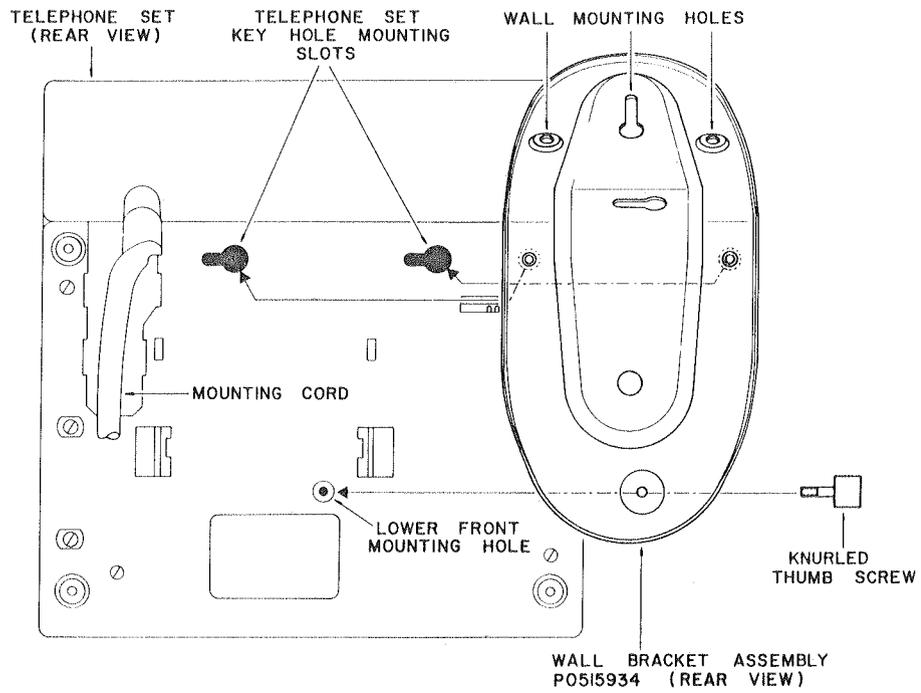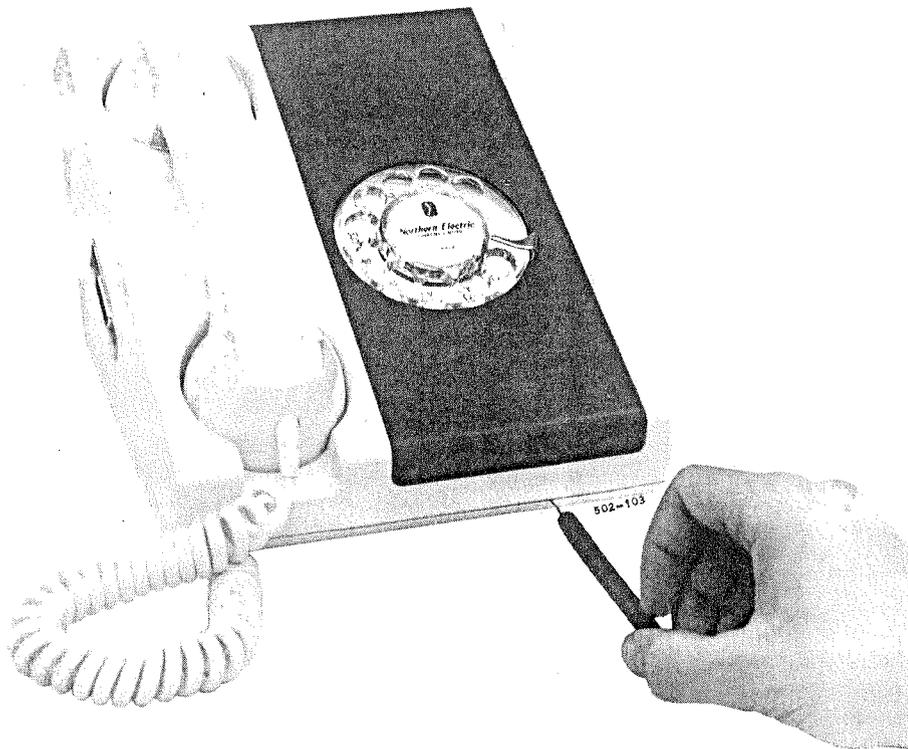Fig. 5(b) — Exclusion Using NE-229B KTU

Fig. 6 — Method of Mounting LOGIC 1 Telephone Set to Wall

Fig. 7 — Faceplate Removal