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"TEL-TOUCH" DESK TELEPHONES: K-1500; K-2500



Figure 1. "TEL-TOUCH' Desk Telephone

#### 1. GENERAL INFORMATION

The "TEL-TOUCH' desk telephones are similar to the K-500 series of telephones except for the pushbutton dial and related parts. Early phones, (K-1500), have a 10-pushbutton dial; current phones (K-2500), have a 12-pushbutton dial. To replace the 10-pushbutton dial, order a 12-pushbutton dial, type 32; one 180147-\*\* Face plate; one 87513-1 number card, and one 87514-1 number card retainer. Refer to appropriate circuit diagram to connect dial leads.

Ordering information is shown in Table I. Replaceable parts are listed in Table II.

## 2. INSTALLATION

An appropriate circuit label is packed with each telephone. It includes all necessary instructions for telephone installation and ringer connections.

### 3. ADDITIONAL INFORMATION

The "TEL-TOUCH" dial is covered in Section 228.

#### 4. DISASSEMBLY AND ASSEMBLY

# 4.1 HOUSING GROUP

- (a) Removal of Housing (Ref to Figure 2) Loosen the two cabinet lock screws (26), and lift off the housing and face plate group, (3, 11, 12 and 13).
- (b) Installation of Housing Work the housing over the dial pushbuttons and secure with the two cabinet lock screws.

## 4.2 FACE PLATE GROUP (Refer to figure 2)

NOTE: Two styles of 10-button face plates are in use.

The early style is shown in the inset and numbered 11, 12, and 13. This face plate is molded of transparent plastic and the underside painted black with the exception of the clear window for the number card. The number card (13) is held in by a brass retainer (12).

The later style face plate (11A) is molded of colored plastic and uses a snap-in number card window (12A) which serves as number card retainer.

# (a) REMOVAL OF FACE PLATE GROUP Use the straightened end of a paper clip and insert in the slot of the Face Plate

Mounting Clip (9). Pry the clip back until the face plate is released.

### (b) INSTALLATION OF FACE PLATE GROUP Insert lower edge of Face Plate in matching slot in Housing. Press upper edge inward while holding Mounting Clip (9) in with straightened end of paper clip.

#### (c) INSTALLING NUMBER CARD

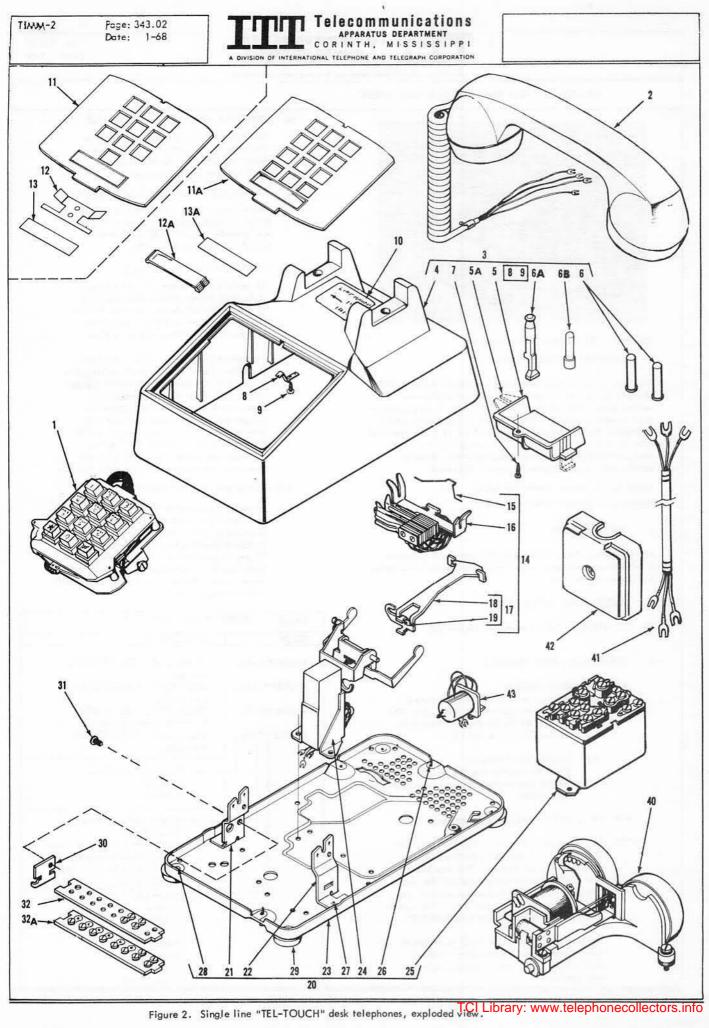
To replace the Number Card in the early style Face Plate, remove the Face Plate as directed in (a) above. Remove Retainer (12) and Number Card (13). Install the Number Card, Retainer and Face Plate.

To replace the Number Card in the later style Face Plate, remove the Retainer (12A) by inserting the straightened end of a paper clip in the slot at the right end of the Retainer and prying upward. Place the number card in the recess and snap in the Retainer as follows: Insert the left end of the Retainer in the recess, holding the Retainer near center, bend the right end down into the recess and release the Retainer.

#### 4.3 REPLACING COMPONENTS

In replacing components, refer to Table II for correct part numbers. The telephone identifying code, is stamped in ink on the bottom of the telephone base. Replace the Ringer by substitution – each Ringer is identified by a code stamped in ink on the ringer frame. Refer to the appropriate circuit label to connect leads.

#### TABLE 1. ORDERING INFORMATION DESCRIPTION CODE K-2500\*\*()30\_ TELEPHONE, "TEL-TOUCH", Standard K-2500\*\*()33\_ TELEPHONE, "TEL-TOUCH", Lift-to-talk K-2500\*\*()39\_ TELEPHONE, "TEL-TOUCH", for Hands Free Application TELEPHONE, "TEL-TOUCH", K-2502\*\*()30 Exclusion Add Dial Code as Follows: R-Regular M-Metro Insert Ringer Code As Follows: LR-Less Ringer BA-Straight Line Biased Ringer (---)-Frequency Selective Ringer (specify Exact Ringer - See Page 343.04) \*\*Substitute Color Code as Follows: 00-Black 05-Green 09-Ivory 12-Aqua Blue 13-Light Beige 15-White 16-Sea Green



Telecommunications APPARATUS DEPARTMENT

CORINTH, MISSISSIPPI

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A DIVISION OF INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION (Indented items are included in the FIGURE INDEX QUANTITY USED ON: NAME, Description part under which they are indented) NO. NO. PART NUMBER 1500 2500 2502 2500 2500 TABLE II. REPLACEABLE PARTS LIST, "TEL-TOUCH" DESK TELEPHONES (Single Line) /39 /30 /30 /30 /33 2 27(D)450 DIAL ASSEMBLY, 10-Pushbutton, Regular \* 27(G)450 DIAL ASSEMBLY, 10-Pushbutton, Metro \* 1 1 1 1 32(D)450 DIAL ASSEMBLY, 12-Pushbutton, Regular 1 32(G)450 DIAL ASSEMBLY, 12-Pushbutton, Metro 1 1 1 36(D)450 DIAL ASSEMBLY, 12-Pushbutton, Regular - (Hands - Free) 1 DIAL ASSEMBLY, 12-Pushbutton, Metro - (Hands - Free) 1 36(G)450 1 1 1 1 1 2 65\*\*(C2)410 HANDSET ASSEMBLY, (See Section 212) 3 86138-\*\* HOUSING AND PLUNGER ASSEMBLY (Standard Plungers) 1 1 1 88490-\*\* 1 1 HOUSING AND PLUNGER ASSEMBLY (One Lift Plunger) 3 86137-\*\* 1 4 HOUSING 1 1 75405-\*\* 5 RETAINER, Plunger (for Standard Plungers) 1 1 1 RETAINER, Plunger (Used with Lift Plunger) 1 79606-\*\* 1 54 PLUNGER, Cradle Switch, Standard 2 2 2 6 75406-2 1 6A 79603-2 PLUNGER, Cradle Switch, Lift Type 1 PLUNGER, Cradle Switch (Used with Lift - Type Plunger) 79101-2 1 6B 1 7 75407-2 SCREW, (Plunger Retainer) 1 1 1 1 8 86143-1 CLIP, Face Plate Mounting 1 1 1 1 1 9 95884-2 SCREW, Face Plate Clip 1 1 1 1 1 LABEL, Lift-to-Talk, Black Letters 10 86370-1 X 86370-2 X 10 LABEL, Lift-to-Talk, White Letters 11 86147-1 FACE PLATE, Old Style (Clear Plastic, Painted Black) 10-Button 1 86147-00 11A FACE PLATE, New Style (Molded of Black Plastic) - 10-Button 1 180147-\*\* FACE PLATE, for 12-Pushbutton Dial 11A 1 1 1 1 12 86144-1 RETAINER, Number Card, Old Style (Metal) 1 12A 87514-1 RETAINER, Number Card, New Style (Clear Plastic) 1 1 1 1 13 88443-1 CARD, Number (For Old Style Face Plate) 1 13A 87513-1 CARD, Number (For New Style Face Plate) 1 1 1 14 79613-1 SWITCH ASSEMBLY, Exclusion 1 14 79613-2 SWITCH ASSEMBLY, Lift-To-Talk 1 15 79624-1 RETAINER, Spring Assembly 1 1 79614-1 16 SPRING ASSEMBLY, Exclusion -1 79614-2 16 SPRING ASSEMBLY, Lift-To-Talk 1 17 7962501 BRACKET ASSEMBLY, Switch 1 1 18 79605-1 BRACKET, Switch -1 1 19 69020-3 SCREW 1 1 20 75338-13 BASE ASSEMBLY 1 1 BASE ASSEMBLY 20 75338-20 1 20 75338-16 1 BASE ASSEMBLY 1 21 86146-1 BRACKET, Dial; L.H. 1 1 1 1 1 22 86145-1 BRACKET, Dial; R.H. 1 1 1 23 NSS BASE (Not Serviced Separately) 1 1 1 1 1 24 75300-1 CRADLE SWITCH ASSEMBLY, (See Section 250) 1 1 24 75300-2 CRADLE SWITCH ASSEMBLY, (See Section 250) 1 1 24 75300-4 CRADLE SWITCH ASSEMBLY, (See Section 250) 1 (Attaching Parts) 32199-1 3 RIVET 3 3 3 3 25 75335-1 **NETWORK ASSEMBLY** 1 1 1 1 1 (Attaching Parts) 32199-1 RIVET 2 2 2 2 2 26 75486-1 SCREW, Cabinet Lock 2 2 2 2 2 27 31944-2 RIVET, (Dial Brackets) 2 2 2 2 2 28 82486-2 RIVET, (Foot) 4 4 4 4 4 29 82400-1 **FOOT** 4 4 4 30 86103-1 PLATE, Terminal Board Mounting 1 1 1 1 1 31 75392-2 SCREW, Terminal Board Mounting 1 1 1 1 1 32 79467-2 TERMINAL BOARD ASSEMBLY, (4 Terminal Screws) 1 1 79467-1 32A TERMINAL BOARD ASSEMBLY, (10 Terminal Screws) (Note: Index numbers 33 through 39 not used.) \* To replace type 27, (10-button), dial, order type 32, (12-button) dial, one 180147-\*\* Face Plate,

one 87513-1 Number Card, and one 87514-1 Number Card Retainer.

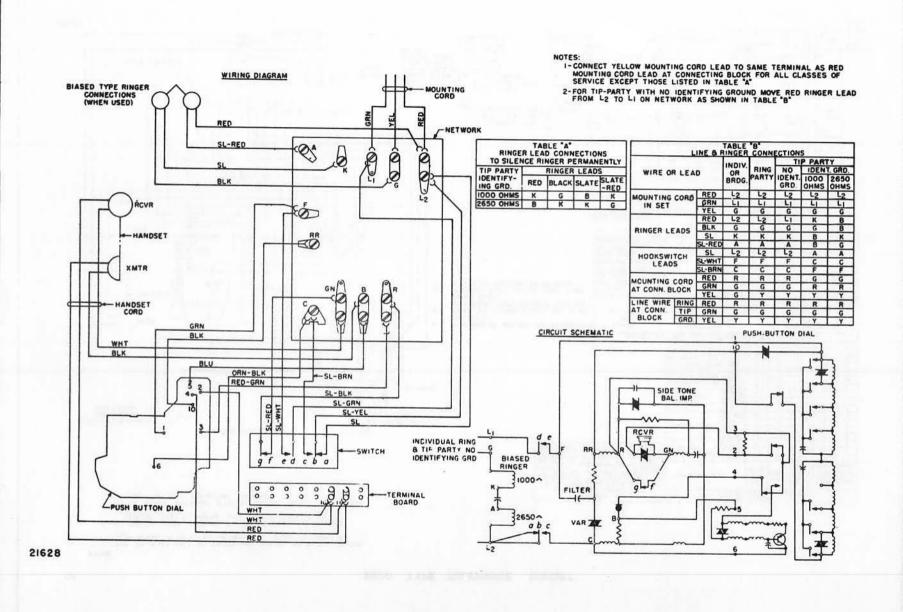
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A DIVISION OF INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION (Indented items are included in the FIGURE INDEX QUANTITY USED ON: NO. PART NUMBER NAME, Description part under which they are indented) NO. 2500 2500 1500 2500 2502 TABLE II. REPLACEABLE PARTS LIST, "TEL-TOUCH" DESK TELEPHONES (Single Line) /30 /30 /33 /39 /30 RINGERS (See Section 244) 40 130(BA)470 X X X 2 RINGER, Straight Line Biased X X 40 RINGER, Frequency Selective 156()470 -With Volume Control X X X X X 157()470 -Less Volume Control X X X X X HARMONIC (HA1) 33-1/3 cps (HA2) 50 cps (Same as HC5) (HA3) 66-2/3 cps (HA4) 16-2/3 cps (HA5) 25 cps SYNCHROMONIC (HB1) 30 cps (Same as HC3) (HB2) 42 cps (HB3) 54 cps (HB4) 66 cps (HB5) 16 cps DECIMONIC (HC1) 20 cps 60 cps (HC2) (HC3) 30 cps (Sames as HB1) 40 cps (HC4) (HC5) 50 cps (Same as HA2) 3031\*\*(06)650 41 CORD, Desk Stand, 3-conductor 1 1 41 3044\*\*(14)650 CORD, Desk Stand, 6-conductor 3052\*\*(27)650 CORD, Desk Stand, 11-conductor 1 29()783 BLOCK, Connecting, 10-terminals 1 1 32()783 42 1 BLOCK, Connecting, 4-terminals 1 43 75599-1 X X X X X TUBE, Ringer. (Used with BA Ringer for superimposed signaling.) \*\*## - COLORS ## 00 21 Black 02 22 Red 04 24 Yellow 05 25 Green 09 29 Ivory Rose Pink 11 31 12 32 Aqua Blue 13 33 Light Beige 14 34 Light Gray 15 35 White 16 36 Sea Green CIRCUIT LABELS 21628 X 180132 X 180134 X 180135 X 180139





#### 2500 TYPE TELEPHONE CIRCUIT

#### NOTES:

HANDSET

-PUSH BUTTON DIAL

RED-GRN GRN

> ORN-BLK WHT-BLU

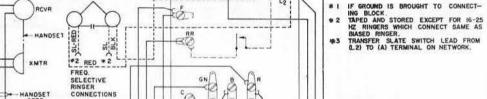
> > WHT

WHT RED RED

BLK

- 1 FOR TIP-PARTY WITH NO IDENTIFYING GROUND MOVE RED RINGER LEAD FROM L2 TO L1 ON NETWORK AS SHOWN IN TABLE \*.
- 2-(a) BROKEN LINES BETWEEN TERMINAL "RR" AND "G" INDICATE CIRCUIT FOR TELEPHONE WITH SPECIAL FEATURE 34.
  - (b) TO PROVID GROUNDING FEATURE, REMOVE BLACK RINGER LEAD FROM "G" AND REPOSITION TO "LI".

(b) TO PROVID GROU FROM "G" AND	REPOSITION TO	REMOVE BLACK RINGER "LI".	A STATE OF THE STA	BINGES	130		ECTIONS	,	k []	NE BA	RINGER	CONN	ECTION	IS	
							ERMANENTLY	1			CVXXXXXX	-	TIP PARTY		TY
				TIP PARTY			LEADS	WIRE OF	LEAD	0	OR		IDENT	IDEN	T. GRO
				IDENTIFY-	RED	BLACK	SLATE SLATE -RED				BRDG.		GRD	1000 0HMS	OHMS
				1000 OHMS	к	G	ВК	MOUNTING	CORD	RED	L2 L1 G L2 G K	L2	L2	L2	L2
				2650 OHMS	В	K	K G	IN SET		GRN	6	RING	G	G	G
	WIRING DIAG	RAM	TA CARDON						- 1111	RED	L2	L2	LI	K	В
					RINGER LE	ADS	BLK	G	G	G	G	В			
SED TYPE RINGER	0		MOUNTING					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	muna-ng	SL	K	K	K	8	K
(WHEN USED)	)							9007390	-	SL-RED		I A	L2	B	1 0
MM	,	z						HOOKSWI	TCH	SL-WHT	_	F	F	C	C
	RED	5	Z Z					LEAD		SL-BRN		C	C	F	F
		74	NETWORK					MOUNTING		acn	R	R	R	G	G
	SL-RED	Tat.						AT CONN B		GHN	G	G	G	R	R
	36.000	- KOA / /	4 74						George L.	YEL	G	Y	Y	Y	1 Y
		10 by 128	PAA					AT CONN.	TIP				G	R	R
	SL	K / //o	D   D					BLOCK	GRD		G	V	Y	V	Y
	BLK	1 ( )						0200	GNU	TEL	-	1		1	1

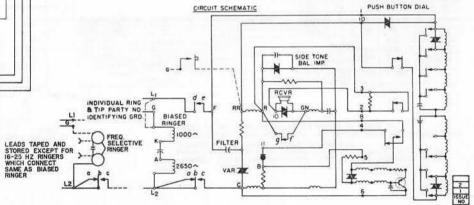


TERMINAL BOARD

SL-BLK SL-GRN SL-YEL

qfed cba

CLASS OF	CONNECTIONS AT CONNECTING BLOCK							CONNECTIONS IN SET					
SERVICE	LINE			MTG. CORD			RINGER LEADS						
	RING	TIP	GND	RED	GRN	YEL	RED	BLK	SL	SL-RED			
BRIDGED	R	G	YHI	R	G	G	LZ	G	#2	* 2			
RING PARTY	R	G	Y	R	G	Y	L2	G	+2	*2			
TIP PARTY	R	G	Y	G	R	Y	L2	G	*2	42			
TIP PARTY DIAL MESSAGE RATE *3 1000 OHM	R	G	Y	G	R	Y	A	G	В	* 2			
TIP PARTY DIAL MESSAGE RATE *3	R	G	Y	G	R	Y	G	A	₩2	В			



#### 2500 TYPE TELEPHONE CIRCUIT

- 1 FOR TIP-PARTY WITH NO IDENTIFYING GROUND MOVE RED RINGER LEAD FROM L2 TO LI ON NETWORK AS SHOWN IN TABLE \*.
- 2-(a) BROKEN LINES BETWEEN TERMINAL "RR" AND "G" INDICATE CIRCUIT FOR TELEPHONE WITH SPECIAL FEATURE 34.
  - (b) TO PROVID GROUNDING FEATURE, REMOVE BLACK RINGER LEAD FROM "G" AND REPOSITION TO "LI".
- 3- WHEN 4 CONDUCTORS ARE FURN-SHED WITH MOUNTING CORD, TERMINATE BLACK CONDUCTOR WITH YELLOW CONDUCTOR AT CONNECTING BLOCK EXCEPT WHERE USED FOR SPECIAL APPLICATIONS.

SELECTIVE

GRN

BLK

ORN-BLK

RED RED

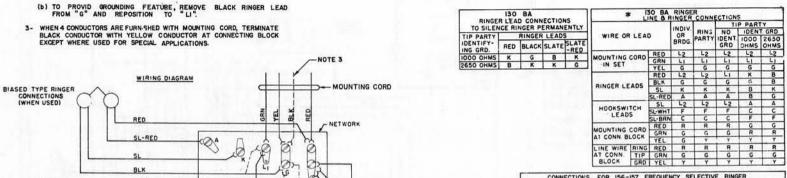
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CONNECTIONS RED-GRN

HANDSET

-PUSH BUTTON DIAL

180135





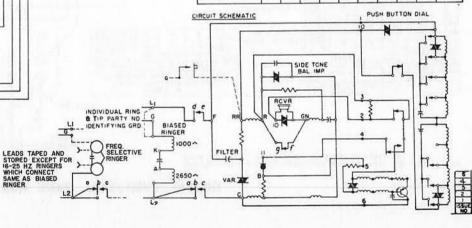
- SL-BRN

SL-GRN SL-YE

SWITCH

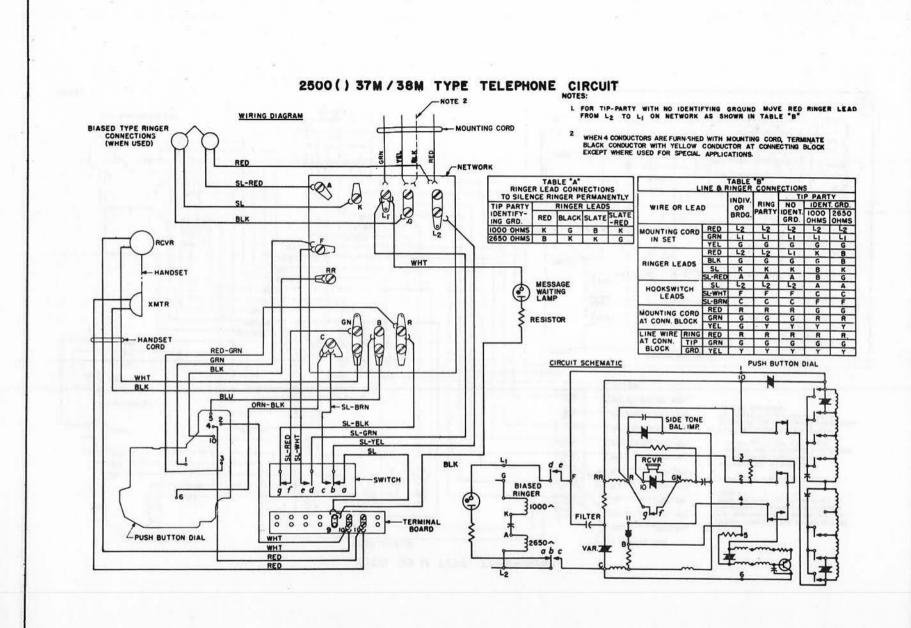
-TERMINAL

CLASS OF	CONNECTIONS AT CONNECTING BLOCK							CONNECTIONS IN					
SERVICE	LINE			MTG. CORD			RIN	IGER	LEADS				
	RING	TIP	GND	RED	GRN	YEL	RED	BLK	SL	SL-RED			
BRIDGED	R	G	YHI	R	G	3	L2	G	#2	4-2			
RING PARTY	R	G	Y	R	G	Y	L2	G	+2	# 2			
TIP PARTY	R	G	Y	G	R	Y	LZ	G	*2	* 2			
TIP PARTY DIAL MESSAGE RATE *3 1000 OHM	R	G	Y	G	R	Y	A	G	В	*2			
TIP PARTY DIAL MESSAGE RATE *3	R	G	Y	G	R	Y	G	A	₩2	В			



130 BA RINGER LEAD CONNECTIONS TO SILENCE RINGER PERMANENTLY

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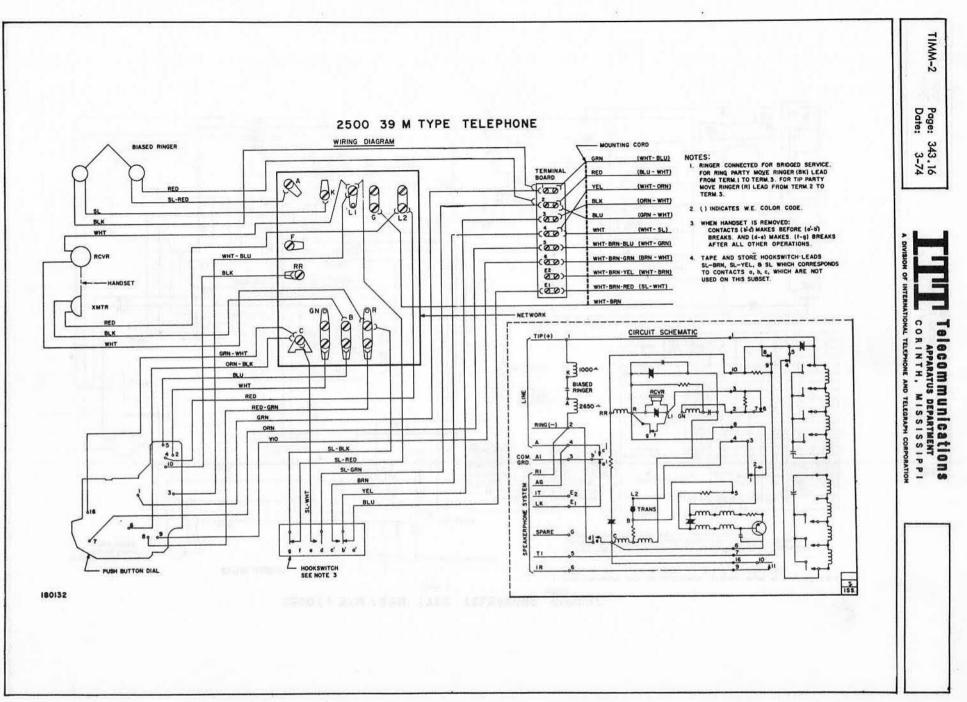
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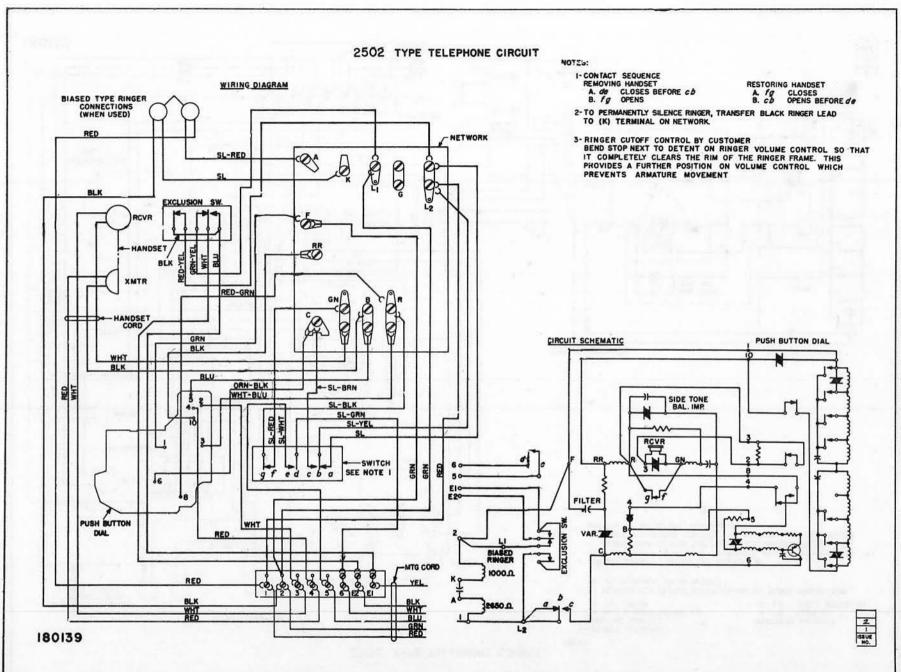
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