REFERENCE

750-TYPE TELEPHONE SETS



Fig. 1—750-Type Telephone Set

I. GENERAL

- 1.01 This section contains identification, installation, maintenance, and connection information for the 750-type telephone sets.
- 1.02 This section is reissued to:
 - Revise Tables B and D through L
 - Show current panel assembly, Fig. 2
 - Revise all connection diagrams
 - Make reference to Section 502-700-102 for common installation and maintenance information.

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

2. IDENTIFICATION

Ordering Guide

2.01 Set, Telephone, 750A-58 or 750B-60

Note: -58 includes white handset, aluminum mat, and light gray plastic frame. -60 includes light beige handset, copper mat, and light beige plastic frame.

- 2.02 Replaceable Set Components are listed in Tables A and B.
- 2.03 Associated Apparatus or Equipment (ordered separately):
 - Apparatus Box, 113-type or 114A (recessed mounting)
 - D-180071 or D-180072 Kit of Parts (surface mounting)
 - Connecting Block, 71B



with 3B cord reel. Either the 3A or 3B cord reel may be used when the telephone set is not subjected to temperatures below 40 degrees F. Below 40 degrees F only the 3A cord reel should be used.

2.04 Loose Parts Furnished With Set:

- P-90D232 Cord and Plug Assembly or Cord, Mounting, D4BN-3 equipped with 423A plug
- Subscriber Instruction Booklet, SIB-2408
- ●P-160828 Mounting Screws (4)
- ●P-25E803 Card Retainer

American Telephone and Telegraph Company, 1971
 Printed in U.S.A.

TABLE A
COMPONENT ORDERING GUIDE (COLOR SIGNIFICANT)

TELEPHONE	MAT	FRAME (MAT)	SWITCH ASSEMBLY	HANDSET
750A-58	P-26E934	P-84A261* P-89C261†	P-85A161	G3K-58
750B-60	P-26E935	P-84A260* P-89C260†	P-85A160	G3K-60

* Furnished with telephone set.

† Furnished with kit of parts used for surface mounting.

TABLE I

COMPONENT ORDERING GUIDE

TELEPHONE SET	DIAL	RINGER	CORD REEL‡	CORD AND PLUG ASSY	GROMMET‡ (HANDSET CORD)
750	8A	D1E	3A or 3B	P-90D232*	P-44E501† (Upper Half P-44E502† (Lower Half

* Replaces D4BN-3 cord and 423A plug in early and later production models.

† These components replace the P-14E894 (MD) grommet assembly used in early production.

‡ Current cord reels are equipped with a solid one-piece grommet.

2.05 In current 750-type telephone sets the terminal board (TB1) is omitted from the panel assembly and the mounting block is relocated (Fig. 2).◆

Design Features

- 2.06 The 750-type telephone set may be recess mounted or adapted for surface mounting using a D-180071 or D-180072 Kit of Parts.
- 2.07 Component parts of these sets are mounted on a steel panel. An aluminum mat retained

by a plastic frame covers the panel and gives the installation a finished appearance.

Application

- 2.08 Can be wired for bridged, two-party flat rate, two-party message rate, or four-party full selective on CO or PBX lines.
- 2.09 Can be modified for use with 1A1 or 1A2 KTS. Refer to Table C.

3. INSTALLATION AND MAINTENANCE

3.01 ♦Refer to Section 502-700-102 for installation and maintenance information. ♦

Page 2

TABLE C

MODIFICATIONS FOR USE WITH 1A1 OR 1A2 KTS

WI O LEA	R	REMOVE FROM	CONNECT
	Tip	1 1	3 3
Incoming Line at	Ring	2 2	1 1
71B Conn Block	GRD-A1	2 3	2 2
	A	and histor	4 4
37	(R)	L1)†R*	GN ‡ Y *
Ringer	(BK)	L2†	C†
Line Switch	(BR) [S-SR]	C† C†	L2)† BK *
	(BK)	§	L2)†
Strap	(Y)	(L2)† §	C† C†

- Terminal on 283B plug.
- Terminal on network.
- 1 Terminal on P-14E055 mounting block assembly.
- Insulated and stored.
- Early and later production models. oueis.
- () Current color code.
- [] MD color code.

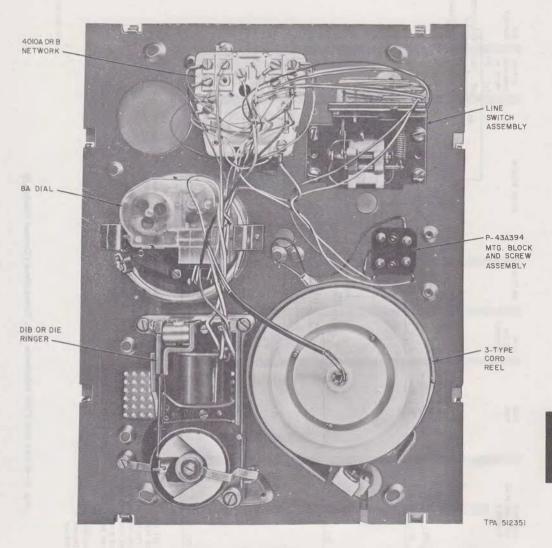
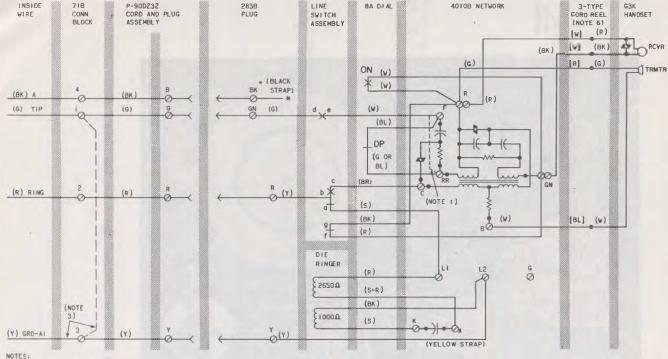


Fig. 2—Current 750-Type Telephone Set, Rear View4

ISS 2, SECTION 502-705-100



- I. FOR MANUAL SERVICE MOVE (W) LINE SWITCH LEAD FROM NETWORK TERM. F TO
- RR AND (W) DIAL LEAD FROM TERM. R TO GN. DIAL REMAINS IN SET. 2. CONNECT A LEAD AS SHOWN FOR USE WITH IAI OR IA2 KEY TELEPHONE SYSTEMS;
- SEE TABLE C FOR SET WIRING MODIFICATIONS.
 3. GROUND MAY BE OMITTED AND TERMINALS STRAPPED AS SHOWN (MIW CORD)
- FOR INDIVIDUAL OR BRIDGED RINGER CONNECTION.
 4. SET FACTORY-WIRED FOR RING PARTY. SEE TABLE D.E.AND F FOR CLASSES OF
- SET FACTORY-WIRED FOR RING PARTY. SEE TABLE D,E,AND F FOR CLASSES OF SERVICE NOT SHOWN.
- 5. LINE SWITCH OFF-HOOK SEQUENCE.
 (1) bc MAKES (3) db BREAKS
 (2) de MAKES (4) fg BREAKS

- 6.[] DENOTES LEAD COLOR FOR 3A CORD REEL.
- () DENOTES LEAD COLOR FOR 3B CORD REEL.
- * INSULATE OR STORE ON SPARE TERMINAL.
- ON DIAL OFF-NORMAL CONTACT DP DIAL PULSE CONTACT

TPA 542698

Fig. 3—4750A and 750B Telephone Sets, Connections (Current Models)4

TABLE D

750A AND 750B TELEPHONE SETS (CURRENT MODELS) LINE AND RINGER CONNECTIONS

										TIP PARTY	WITH IDE	NTIFICATIO	N GROUN	D	
1	-		BRID		RII PAI	NG RTY	TIP PARTY		NORMAL CO	ONNECTION	S	RIN	IGER REVE	SAL (NOTI	E 1)
WIRE OR LE	AD	COLOR	(FACTORY	WIKING)				1000	OHMS	2650	OHMS	1000	онмѕ	2650	онмѕ
			71B CON	N BLOCK	71B CON	N BLOCK	71B CONN BLOCK	71B CO	NN BLOCK	71B CON	N BLOCK	71B CON	IN BLOCK	71B CON	N BLOCK
CO Line	Ring	R		2	2	2	1		1	1			1		1
at Term.	Tip	G	-	1	1	1	2		2	2	2		2		2
Strip	GRD	Y	Strap	3 to 1†	3	3	3		3	3			3		3
				NET.		NET.	NET.	- 7	NET.	- 10	NET.		NET.	12.	NET.
Ringer		R		L1		L1	L1		В	1-5	В		K		L2
Leads (Note 3)		BK		L2		L2	L2		В		В		L2		K
		S		K		K	K		L2		K		В		В
		S-R		A		A	A		K		L2		В		В
Line Swit	ch	S		L1		L1	L1		A		A		A		A

^{*}Insulate and store.

Notes:

- 1. Use normal connections for tip party identification ground station. If bell taps on station connected to long-line equipment, reverse ringer leads as shown in this column to retain proper tip party identification. Grounded ringing arrangements on 96-volt long line circuits require a ringer isolator. Refer to sections on Ringing Bridge Limitations and Inductive Noise.
- 2. To permanently silence ringer for all classes of service except identifying ground, connect (Y) strap to R terminal on 283B plug.

 (a) For 1000Ω identifying ground insulate, store, or place (R) ringer lead on unused terminal.
 - (b) For 2650Ω identifying ground insulate, store, or place (BK) ringer lead on unused terminal.
- 3. Connections to network terminals A and K may be interchanged.

[†]Use M1W cord.

TABLE E

750A AND 750B TELEPHONE SETS (CURRENT MODELS) LINE, RINGER, AND 426A TUBE CONNECTIONS
FOR SELECTIVE RINGING SERVICE

		- 100			NEGATIVE	(—) PARTIES				in second	POSITIVE (+) PARTIES		
WIRE OR LE	AD	COLOR	R	ING STATIO	N	Characters.	TIP STATION 2 AND 6	циторії	R	ING STATIO 3 AND 7	N	of estimate	TIP STATION	
			71B CONN BLOCK	283B PLUG	NET.†	71B CONN BLOCK	283B PLUG	NET†	71B CONN BLOCK	283B PLUG	NET.†	71B CONN BLOCK	283B PLUG	NET.
CO Line	Ring	R	2			1			2			1		
at Term.	Tip	G	1			2			1			2		
Strip	GRD	Y	3			3			3			3		
		R			L2			L2	I		L2	- 1 W		L
Ringer		BK		W II	L2		30	L2			L2			L
Leads		S		II.W	A		EW	A			A			A
		S-R			K		U	K			K			K
Q.		Y		Y <	→ L2		Y ←	> L2		Y <	→ Li		Y <	> L
Straps		вк		BK←	> K		BK<	> K		ВК≪	→ K	118	BK ←	> K
	le nir	BK	4			4		1	4			4		
426A Tub (3-Elemen		R	1			1			2			2		
(o-Liemen	(0)	Y	2			2	H a		3			3		
Line Swit	ch	S			*			*			L2			L

^{*}Insulate and store.

[†]Connections to network terminals A and K may be interchanged.

TABLE F

750A AND 750B TELEPHONE SETS (CURRENT MODELS) LINE, RINGER, AND 425A TUBE CONNECTIONS
FOR SELECTIVE RINGING SERVICE AND NOISE REDUCTION

					NEGATIVE (—) PARTIES	A TOTAL				POSITIVE (+) PARTIES		
WIRE OR LE	AD	COLOR	R	ING STATIO	N	1	IP STATION 2 AND 6		RI	NG STATION 3 AND 7			TIP STATION 4 AND 8	
			71B CONN BLOCK	283B PLUG	NET†	71B CONN BLOCK	283B PLUG	NET†	71B CONN BLOCK	283B PLUG	NET†	71B CONN BLOCK	283B PLUG	NET.
CO Line	Ring	R	2			1	- 4		2			1		
at Term.	Tip	G	1			2			1			2		
	GRD	Y	3			3			3			3		
		R			K			K			K			K
Ringer	Ringer	BK			A			A			A			A
Leads		S			L2			L2			L2			L2
		S-R			L2			L2			L2			L2
		Y		Y <	→ L1		Y <	→ L1		Y <	→ L2		Y <	> L2
Straps		вк		ВК←	→ K		BK ←	→ K		BK←	→ K		BK ←	→ K
		R	1			1			2			2		
425A Tu	425A Tube (4-Element)	G	2			2			1			1		
		BK	3.			3			2			2		
		Y	4			4			4	31.1		4		
Line Swit	teh	S			L2			L2			*			*

^{*}Insulate and store.

[†]Connections to network terminals A and K may be interchanged.

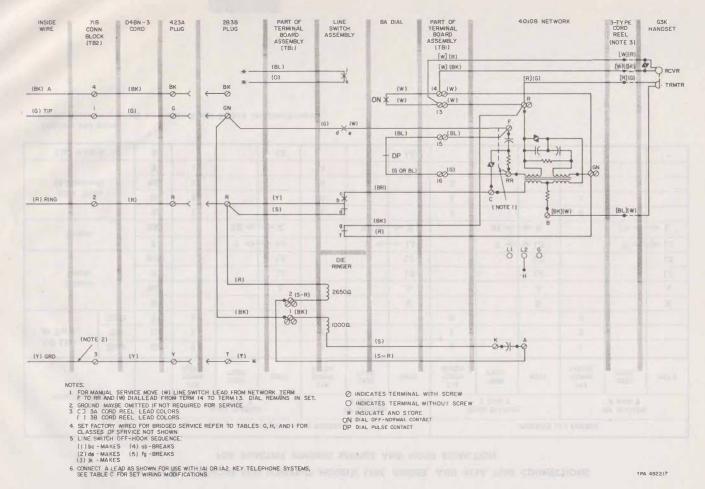


Fig. 4—\$750A and 750B Telephone Sets, Connection (Later Models)\$

TABLE G

750A AND 750B TELEPHONE SETS (LATER MODELS) LINE AND RINGER CONNECTIONS

			IND	IVIDIIA.	00										TIP PA	RTY WI	TH IDE	NTIFICA	ATION C	ROUNI	D		
			E	BRIDGE)		RING		Т	IP PAR	ſΥ		NOR	MAL C	ONNEC	CTIONS			RINGE	R REVE	RSAL (NOTE 1)
WIRE OR LE	AD	COLOR	(FACT	ORY WI	KING)							1	000 OH	MS	2	650 OH	MS	1	000 ОН	MS	2	550 OH	MS
			TB2	283B PLUG	NET.	TB2	283B PLUG	NET.	TB2	283B PLUG	NET.	TB2	283B PLUG	NET.	TB2	283B PLUG	NET.	TB2	283B PLUG	NET.	TB2	283B PLUG	NET
CO Line	Ring	R	2		179747	2	-		1			1			1			1			1		
At Term	Tip	G	1		1	1			2			2			2			2		7	2		
Strip	GRD	Y	3*	-		3		-1-	3			3			3			3	1	-	3		
			TB1	283B PLUG	NET†	TB1	283B PLUG	NET†	TB1	283B PLUG	NET†	TB1	2838 PLUG	NET†	T81	2838 PLUG	NET†	тві	283B PLUG	NET†	TB1	283B PLUG	NET-
D.		R		R			R			R		2	119		2			1			19.	Y	
Ringer Leads		BK	1			1			1			2			2		10		Y		1	W	
		S			K			K			K		Y		1			2			2	-	
		S-R	2			2			2			1				Y		2			2		
TB1 Stra	aps	BK		GN			Y			Y				K			K			K			K
(Note 2	(:)	S-R			A			A			A			В			В			В			В
Line Swit	tch	S		R			R			R				A			A			A			A

^{*}Ground may be omitted if not required for service.

- Note 1: Use normal connections for tip party identification ground station. If bell taps on station connected to long line equipment, reverse ringer leads as shown in this column to retain proper tip party identification. Grounded ringing arrangements on 96-volt long line circuits require ringer isolator. Refer to sections on Ringing Bridge Limitations and Inductive Noise.
 - 2: One end of straps permanently soldered to TB1, other end equipped with spade tip terminal.
 - 3: To permanently silence ringer for all classes of service identifying ground, remove (S) ringer lead from terminal K and store on terminal G of network.
 - (a) For 1000 Ω identifying ground insulate, store, or place (R) ringer lead on unused terminal.
 - (b) For 2650 Ω identifying ground insulate, store, or place (BK) ringer lead on unused terminal.



[†]Connections to network terminals A and K may be interchanged.

TABLE H

750A AND 750B TELEPHONE SETS (LATER MODELS) LINE, RINGER, AND 426A TUBE CONNECTIONS
FOR SELECTIVE RINGING SERVICE

					NE	GATIVE () PAR	TIES					PC	SITIVE (+) PART	IES		
WIRE OR LEA		COLOR			TATION ND 5				ND 6				STATION IND 7				ND 8	
			TB2	TB1	2838 PLUG	NET*	TB2	TB1	2838 PLUG	NET*	TB2	тві	2838 PLUG	NET*	T82	T81	283B PLUG	NET*
CO Line	Ring	R	2				1				2				1			
at Term.	Tip	G	1				2				1				2			
Strip	GRD	Y	3				3				3		1		3			11
1-1-1		R		1				1				1				1		
Ringer		BK		1				1				1				1		
Leads		S				A				A				A				A
		S-R		2				2				2				2		
TB1 Strap	os	BK			Y				Y				R				R	
(Note)		S-R				K				K				K				K
ADC A TILL		BK			The same	K	Jun Z		10	K	ung I			K		us Is	1111	K
	426A Tube (3-element)	R			GN				GN				R				R	
(= 310111011	,	Y			R				R				Y				Y	

*Connections to network terminals A and K may be interchanged.

TABLE I

750A AND 750B TELEPHONE SETS (LATER MODELS) LINE, RINGER, AND 425A TUBE CONNECTIONS
FOR SELECTIVE RINGING SERVICE AND NOISE REDUCTION

					NEC	SATIVE (-	-) PARTI	ES	0.7				PO	SITIVE (-	+) PARTI	ES		
WIRE OR LEA	D	COLOR			TATION ND 5			TIP ST.					TATION ND 7				ATION ND 8	
			ТВ2	тві	283B PLUG	NET*	тв2	TB1	283B PLUG	NET*	TB2	тві	283B PLUG	NET*	тв2	тві	283B PLUG	NET
CO Line	Ring	R	2	Tele		(my	1				2				1			
At Terminal	Tip	G	1				2				1				2			
Strip	GRD	Y	3				3				3				3			
		R		1				1						K				K
Ringer		BK		1				1				2				2		
Leads		S				K				K			Y				Y	
		S-R		2			1 18.	2					Y				Y	
TB1 Strap	s	BK		1		L1				L1			R	l m		1-10	R	
(Note)		S-R				A	711			A			la .	A				A
		R			GN				GN			1		11		1		
425A Tube	425A Tube (4-element)	G			R				R	7 -1			GN				GN	
(4-element		BK			Y			10	Y			1				1		
		Y				L1				L1				K				K
M1W					R<	>A	100		R <	>A	25		9-1					

^{*}Connections to network terminals A and K may be interchanged.

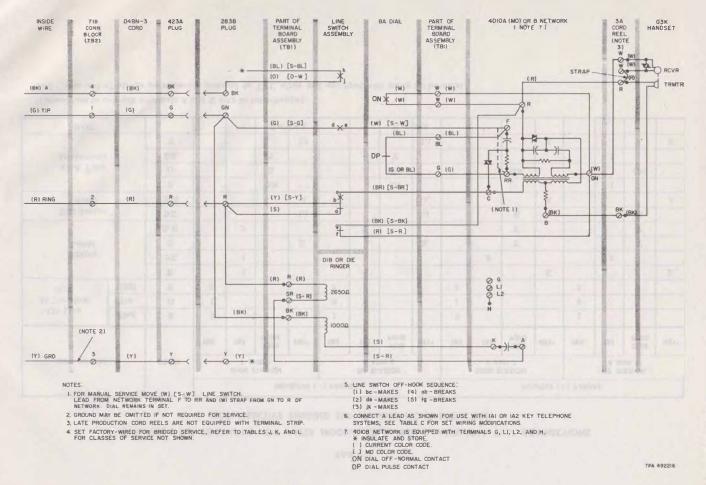


Fig. 5—\$750A and 750B Telephone Sets, Connection (Early Models)

TABLE J
750A AND 750B TELEPHONE SETS (EARLY MODELS) LINE AND RINGER CONNECTIONS

														T	IP PAR	RTY WIT	H IDEN	TIFICA	TION G	ROUNI			
			100	IVIDUAI BRIDGEI)		RING			TIP			NOR	MAL CO	NNEC	TIONS			RINGER	REVE	RSAL (P	NOTE 1)	
WIRE OR LI		COLOR	(FACT	ORY WI	RING)							1	000 OH	MS	20	650 OH	MS	1	000 OH	MS	26	50 OH	MS
			TB2	2B3B PLUG	NET.	TB2	2B3B PLUG	NET.	TB2	2B3B PLUG	NET.	TB2	2B3B PLUG	NET.	TB2	2B3B PLUG	NET.	TB2	2B3B PLUG	NET.	TB2	2B3B PLUG	NET
CO Line	Ring	R	2			2			1			1			1			1			1	-	
at Term.	Tip	G	1			1			2		1	2			2			2			2		
Strip	GRD	Y	3*			3			3			3			3			3			3		1
		7	TB1	2B3B PLUG	NET.†	TB1	2B3B PLUG	NET.†	TB1	2B3B PLUG	NET.†	тві	283B PLUG	NET.†	TB1	2B3B PLUG	NET.†	TB1	2B3B PLUG	NET.	TB1	2B3B PLUG	NE
Diversi		R	R			R			R			SR			SR			BK				Y	
Ringer Leads		BK	BK			BK			BK	1		SR		-	SR				Y		BK		
		S			K	-10	F	K		1 90	K		Y		BK			SR	-		SR	-	
		S-R	SR			SR		-	SR			BK				Y		SR			SR		
		R		R			R			R			R			R			R	EE	HE	R	
TB1 Stra (Note 2		BK	-	GN			Y			Y	-			K	-		K			K			K
(Note 2	,	S-R			A			A			A			В			В	-		В	-		В
Line Swi	tch	S		R			R			R				A			A		1.25	A	H		A

^{*}Ground may be omitted, if not required for service.

†Connections to network terminals A and K may be interchanged.

- Note 1: Use normal connections for tip party identification ground station. If bell taps on station connected to long ling equipment, reverse ringer leads as shown in this column to retain proper tip party identification. Grounded ringing arrangements on 96-volt long line circuits require a ringer isolator. Refer to sections on Ringing Bridge Limitations and Inductive Noise.
 - 2: One end of straps permanently soldered to TB1, other end equipped with space tip terminal.
 - 3: To permanently silence ringer for all classes of service except identifying ground, remove (S) ringer lead from terminal K and store on terminal G of network.
 - (a) For 1000 Ω identifying ground insulate, store, or place (R) ringer lead on unused terminal.
 - (b) For 2650 Ω identifying ground insulate, store, or place (BK) ringer lead on unused terminal.

TABLE K

750A AND 750B TELEPHONE SETS (EARLY MODELS) LINE, RINGER, AND 426A TUBE CONNECTIONS
FOR SELECTIVE RINGING SERVICE

					NE	GATIVE (—) PAR	TIES					PC	SITIVE (-	+) PART	IES		
WIRE OR LEA	D	COLOR			TATION ND 5				ATION ND 6				TATION ND 7				ATION ND 8	
			TB2	TB1	283B PLUG	NET.*	TB2	TB1	2838 PLUG	NET.*	TB2	тві	283B PLUG	NET.*	TB2	ТВ1	283B PLUG	NET.
CO Line	Ring	R	2			-	1				2				1			
at Term.	Tip	G	1				2				1	- 19			2			11.7
Strip	GRD	Y	3				3				3				3			
100 7 110		R		BK				BK				R				R		
Ringer		BK		BK				BK				BK				BK		
Leads		S				K				K				K				K
		S-R		SR		10		SR				SR				SR		
301544		R			R				R				R				R	
TB1 Strap (Note)	S	BK			Y				Y			R		1		R		
(Note)		S-R		The sale		A		Skiy P	10	A	3012	1115	1 1 T	A	1934	ar ji	11 1	A
		BK				A				A				A				A
426A Tub (3-element		R			GN				GN	1			R				R	
(o-element	,	Y		R				R		1-2		7	Y			-	Y	

^{*}Connections to network terminals A and K may be interchanged.

TABLE L

750A AND 750B TELEPHONE SETS (EARLY MODELS) LINE, RINGER, AND 425A TUBE CONNECTIONS
FOR SELECTIVE RINGING SERVICE AND NOISE REDUCTION

	15.0				NE	GATIVE (—) PARI	TIES	- 33 (PO	SITIVE (-	-) PART	ES		
WIRE OR LEA	D	COLOR		RING S			15	TIP ST	ATION ND 6			RING S		B			ND 8	
			TB2	ТВ1	283B PLUG	NET.*	TB2	тві	283B PLUG	NET.*	TB2	ТВ1	283B PLUG	NET.*	ТВ2	TB1	283B PLUG	NET.*
CO Line	Ring	R	2	E		A FI	1	W.	1		2	7.4			1		1	
at Term.	Tip	G	1			575.0	2			HTD-1	1				2		The Control	
Strip	GRD	Y	3				3			- 22	3	FE			3		5	
		R		BK			1	BK	JE.	12		R				R	1	
Ringer		BK		BK				BK				BK				BK	100	Į.
Ringer Leads	S				K	100			K		SR				SR	14	J.	
		S-R		SR			180	SR	7 [SR		10.5		SR	10	
	11.0	R			R		100		R					K				K
TB1 Strap (Note)	S	BK				L1				L1				A				A
(Note)		S-R				A				A			Y	1 8			Y	
		R			GN			3	GN				R		i i		R	
425A Tube	G			R				R				GN				GN		
(4-element	425A Tube (4-element)	BK			Y		1		Y				R		L.		R	
		Y				L1				L1		R		7		R		
M1W				R<		> A		R<		→ A								

^{*}Connections to network terminals A and K may be interchanged.