2301-SERIES KEY SERVICE UNITS IDENTIFICATION AND CONNECTIONS

1.00 GENERAL

- 1.01 This section covers identification and connections of 2301-series key service units.
- 1.02 The 2301-series key service units are Distributing House converted cable-tail-equipped 200F-type key telephone units. Converted units closely approximate in appearance and performance the comparable 301-series key service units.
- 1.03 Conversion consists essentially of replacing the 173B backboard and external (64A1-50) cable terminal with a die-cast aluminum (177A) backboard equipped with two 66B1-25 connecting blocks. Two metal details are added for fastening and strengthening the hinge assembly of the 31A apparatus mounting to the new backboard. The cable tail is cut and reterminated on the 66B1-25 connecting blocks. Preprinted pressure-sensitive tapes (P-16C199 for block A and P-16C200 for block B) are applied to the fanning strips and show proper lead designations. These components (177A backboard, 66B1-25 connecting blocks, pressure-sensitive tapes, and two metal details) constitute and are obtainable as a D-179862 kit assembly.
- 1.04 The code numbering assignment for the 2301-series key service units correlates the original 200F-type key telephone unit to its nearest equivalent 301-series key service unit. For instance, the 200F4C key telephone unit after conversion would be coded a 2301A2 key service unit. Table A lists the converted codes.
- 1.05 By application of the ED-69462-01 cabinet assembly and/or A75A connector cable with 2301-series key service units, combinations other than those listed in Table A could be derived locally as necessary. Table A in section entitled Key Service Units, 300, 301, 302, 310, and 311 Types, Identification and Description offers a reference guide for applying appropriate 2301 and/or 2302-series key service units.

TABLE A

200F-SERIES CODE SUPERSEDED BY 2301 SERIES

Features	200F-Series Code	2301-Series Code				
4 lines, man. intercom	200F4C	2301A2				
4 lines, man. and dial intercom	200F4DC	2301A2D				
5 lines, man. intercom	200F5C	2301A6				
6 lines, man. intercom	200F6C	2301A10				

2.00 CONNECTIONS

- 2.01 Connections for terminating running and/or key cables and external power wiring to the 66B1-25 connecting blocks are shown in Table B. Table B also shows interwiring of connections between the individual key telephone units and the connecting blocks.
- 2.02 For information on 66B1-25 connecting blocks see section entitled Connecting Blocks—66 Type.
- 2.03 For maintenance of converted key service units refer to Table B of this section and the appropriate figures in section entitled 200F-Type Key Telephone Units.



No new wiring changes are involved when converting 200F-type key telephone units to 2301-series key service units other than those concerned in the retermination of the original external cable tail on 66B1-25 connecting blocks inside the package.

TABLE B

2301-SERIES KEY SERVICE UNIT CONNECTIONS BETWEEN APPARATUS AND 66B1-25 CONNECTING BLOCKS

	Lead Desig	Cor	Block A 66B1-25 nnecting B	lock	Term. on	Term. on		Term.	Term.
Feature		Term.	Clip	Cable Color Blue Binder	232A or B KTU*	230A	230B†	202C or D KTU	207C KTU
	T R	1 2	1	W-BL BL-W			A A		
Line 1	A A1	3 4		W-O O-W		3A 4A 6A 5A			
	LG L	5 6		W-G G-W					
	T R	7 8		W-BR BR-W		1B 2B 3B 4B 6B 5B 1C 2C 3C 4C 6C 5C			
Line 2	A A1	9 10		W-S S-W					
	LG L	11 12		R-BL BL-R					
	T R	13 14	6 	R-O O-R					
Line 3	A A1	15 16		R-G G-R					
	LG L	17 18		R-BR BR-R					
	T R	19 20		R-S S-R		1D 2D			
Line 4	A A1	21 22		BK-BL BL-BK		3D 4D			
	LG L	23 24	<u> </u>	BK-O O-BK			D D		

^{*232}B KTU is arranged internally to disable time-out feature when BF relay is operated.

^{†230}B KTU is arranged for individual fusing of circuits 1-2 and 3-4 lamp input power.

TABLE B (Cont)

		Block A 66B1-25 Connecting Block				Term.	Term. on		Term.		Term.
Feature	Lead Desig	Term. Cli		Clip Cable Color Blue		232A or B KTU*	KTU		202C or D KTU		207C KTU
		25			nder K-G		230A	230B†	1		
	R	26	1	1	BK				2		
Line 5	A	27			BK-BR				3	1st	
	LG	28 29		BI	R-BK K-S				6		
	L	30			BK				5		
	T R	31 32			BL L-Y				1 2		
Line 6	A A1	33 34		Y- O-	.0				$\frac{3}{4}$	2nd	
	LG L	35 36		Y- G-	.G				6 5		
Motor Supply	$\begin{array}{c} \text{GRD} \\ 10\text{v} \pm \end{array}$	37 38		L	BR R-Y	27 26					
Spare		39 40	6	Y- S-							
Lamp	± or Bat. ± or Bat.	41‡ 42‡			BL L-V	9 10					
Supply	GRD ± or Bat.	43 44‡		V- 0-			30A 29A	6A 29A			
Audible Signal Supply	$\begin{array}{c} \text{GRD} \\ \text{Bat., } \pm \text{ , or} \\ 105\text{v}\pm \end{array}$	45 46		V- G-		29	25A	30A			
20v dc Talk or "A" Bat.	GRD Bat.	47 48			-BR R-V	25 24					
20v dc Sig or "B" Bat.	GRD Bat.	49 50		V- S-			26A 27A	26A 4A			

^{*232}B KTU is arranged internally to disable time-out feature when BF relay is operated.

 $[\]dagger$ 230B KTU is arranged for individual fusing of circuits 1-2 and 3-4 lamp input power.

[‡] With 1 to 72 lamps, strap terminals 41, 42, and 44; with 73 to 144 lamps, strap terminals 42 and 44 and run separate power lead to 41.

TABLE B (Cont)

Feature		Lead Desig	Block B 66B1-25 Connecting Block Cable Color		5 Block	Term. on 232A or B	Term. on KTU		Term. on 202C or D		Term. on 207C
			Term.	Clip	Orange Binder	KTU	230A	230B	KTU		кти
1	anual tercom	T R	1 2	1	W-BL BL-W	30 40					
Li		LG L	3 4		W-O O-W	* 28					
	Line 1	B1 or BZ1 R1 or BZ	5 6		W-G G-W		25A 10A	30A 10A			
	Line 2	B1 or BZ1 R1 or BZ	7 8		W-BR BR-W		25A 10B				
Signal	Line 3	B1 or BZ1 R1 or BZ	9 10		W-S S-W		28A 10C	30A 10C			
Audible	Line 4	B1 or BZ1 R1 or BZ	11 12		R-BL BL-R		28A 10D	25A 10D			
A	Line 5	B1 or BZ1 R1 or BZ	13 14		R-O O-R				25 10	1st	
	Line 6	B1 or BZ1 R1 or BZ	15 16	6	R-G G-R				25 10	2nd	
		T R	17 18	Ĭ	R-BR BR-R						1B 2B
		LG L	19 20		R-S S-R						32B 3B
		B(2) R(2)	21 22		BK-BL BL-BK						36B 12A
Se	Dial elective	B(3) R(3)	$\begin{array}{c} 23 \\ 24 \end{array}$		BK-O O-BK						36B 13A
	tercom Line	B(4) R(4)	25 26		BK-G G-BK						37B 14A
		B(5) R(5)	27 28		BK-BR BR-BK						37B 15A
		B(6) R(6)	29 30		BK-S S-BK						38B 16A
		B(7) R(7)	31 32		Y-BL BL-Y						38B 17A

 $^{\ ^*}$ Connect to convenient lamp ground.

TABLE B (Cont)

Feature		Lead	Block B 66B1-25 Connecting Block			Term.	Term.		Term.		Term.
		Desig	Term.	Clip	Cable Color Orange Binder	on 232A or B KTU	230A 230B		202C or D KTU		on 207C KTU
Dial		B(8) R(8)	33 34	\uparrow	Y-O O-Y						40B 18A
Selective Intercom	B(9) R(9)	35 36		Y-G G-Y						40B 19A	
	Line	B(0) R(0)	37 38		Y-BR BR-Y						31B 20A
	Line 1		39 40		Y-S S-Y		1	A A			
	Line 2		41 42	6	V-BL BL-V			B B			
PBX	Line 3		43 44		V-O O-V		7C 8C				
CO or	Line 4		45 46		V-G G-V		1	D D		· · · · · · · · · · · · · · · · · · ·	
	Line 5		47 48		V-BR BR-V				7 8	1st	
	Line 6		49 50		V-S S-V				7 8	2nd	