

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200F-SERIES CODE SUPERSEDED BY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

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

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

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

TABLE B (Cont)

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

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

† 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 | | | Term. on 232A or B KTU | Term. on KTU | | Term. on 202C or D KTU | Term. on 207C KTU | |
|---------------------------------------|------------|--|-------------|------------------------------------|---------------------------------|--------------------|------|---------------------------------|----------------------------|--|
| | | Term. | Clip | Cable Color Orange Binder | | 230A | 230B | | | |
| | | | | | | | | | | |
| Manual Intercom Line | T | 1 | ↑ 6 ↓ | W-BL | 30 | | | | | |
| | R | 2 | | BL-W | 40 | | | | | |
| | LG | 3 | | W-O | * | | | | | |
| | L | 4 | | O-W | 28 | | | | | |
| Audible Signal | Line 1 | B1 or BZ1 | | 5 | W-G | | 25A | 30A | | |
| | | R1 or BZ | | 6 | G-W | | 10A | 10A | | |
| | Line 2 | B1 or BZ1 | | 7 | W-BR | | 25A | | | |
| | | R1 or BZ | | 8 | BR-W | | 10B | | | |
| | Line 3 | B1 or BZ1 | | 9 | W-S | | 28A | 30A | | |
| | | R1 or BZ | | 10 | S-W | | 10C | 10C | | |
| Line 4 | B1 or BZ1 | 11 | | R-BL | | 28A | 25A | | | |
| | R1 or BZ | 12 | | BL-R | | 10D | 10D | | | |
| Line 5 | B1 or BZ1 | 13 | | R-O | | | | 25 | 1st | |
| | R1 or BZ | 14 | | O-R | | | | 10 | | |
| Line 6 | B1 or BZ1 | 15 | | R-G | | | | 25 | 2nd | |
| | R1 or BZ | 16 | | G-R | | | | 10 | | |
| Dial Selective Intercom Line | T | 17 | R-BR | | | | | 1B | | |
| | R | 18 | BR-R | | | | | 2B | | |
| | LG | 19 | R-S | | | | | 32B | | |
| | L | 20 | S-R | | | | | 3B | | |
| | B (2) | 21 | BK-BL | | | | | 36B | | |
| | R (2) | 22 | BL-BK | | | | | 12A | | |
| | B (3) | 23 | BK-O | | | | | 36B | | |
| | R (3) | 24 | O-BK | | | | | 13A | | |
| | B (4) | 25 | BK-G | | | | | 37B | | |
| | R (4) | 26 | G-BK | | | | | 14A | | |
| | B (5) | 27 | BK-BR | | | | | 37B | | |
| | R (5) | 28 | BR-BK | | | | | 15A | | |
| | B (6) | 29 | BK-S | | | | | 38B | | |
| | R (6) | 30 | S-BK | | | | | 16A | | |
| B (7) | 31 | Y-BL | | | | | 38B | | | |
| R (7) | 32 | BL-Y | | | | | 17A | | | |

* Connect to convenient lamp ground.

TABLE B (Cont)

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