

CENTRAL OFFICE OR PRIVATE BRANCH EXCHANGE LINES

209A AND 202A KEY TELEPHONE UNITS

TERMINATIONS IN APPARATUS CABINET

1. GENERAL

1.01 This section covers the connections required on 209A and 202A key telephone units. It also provides information for adding 202B key telephone units to existing installations made up of 209A and 202A key telephone units. This includes strapping between key telephone units, terminating of wires from power source, terminating of lines from central office or private branch exchange, and terminating of key or running cables from key telephone stations.

1.02 The data shown in this section at the time of its issuance reflected the latest wiring connection arrangements. In some cases these arrangements are not consistent with those shown on existing drawings. It is planned to include these changes in future revisions of such drawings.

1.03 An index listing the various features, power sources, types of associated equipment, and table numbers is shown below and on pages 2 and 3 of this section.

INDEX

WIRING BETWEEN KEY TELEPHONE UNITS

TYPE OF INSTALLATION	FEATURE OR OPTION	TYPE OF K.T.U. USED	TABLE NO.	PAGE NO.
New Installations	Wink and/or Aud. Sig. Control Ckt. May or May Not Be Provided	209A and 202A (Equipment Not Mounted in Cabinet When Received by Installer)	2.01	4
	Original Factory Strapping	200A, 200B, and 200C	2.02	8
	Add Wink and/or Aud. Sig. Control Ckt.	200A, 200B, and 200C	2.24	37
	Add Lines to 200A, 200B, and 200C K.T.U. (Wink Ckt. May or May Not Be Provided)	202A	2.01	4
		202B	2.03	11
Existing Installations	Add Lines	202A	2.01	4
		202B	2.03	11
	Add Wink and/or Aud. Sig. Control Ckt.	202A	2.24	37
		202B	2.04	14

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INDEX (Continued)**CABLE CONNECTIONS TO CO OR PBX LINE UNIT (202A) ■**

LINES TO	TYPE OF CKT.		TYPE OF KEY TEL. SET USED	TABLE NO.	PAGE NO.
CO or PBX— Incoming or Running Cable	Feed		—	2.22	35
Stations— Key Cable	Line, Lamp, and Control		All 1A1 Sys. Sets Except 565A	2.20	32
			565A	2.21	33
	Common Aud. Sig.	First Ckt.	—	2.23	36
Second Ckt.					
Stations— Running Cable	Line, Lamp, and Control		All 1A1 Sys. Sets	2.20	32
			Sys. Consists of 565A Sets Only	2.21	33
	Common Aud. Sig.	First Ckt.	—	2.23	36
Second Ckt.					

POWER WIRING

POWER				TYPE OF K.T.U. USED	TABLE NO.	PAGE NO.
FURNISHED	TYPE ★	SOURCE	CONNECTED FROM			
Through Fuse and Ringing Lamp Units	Battery	101G Power Plant or Transformer	Incoming Power to Fuse and Ringing Lamp Units	Fuse Unit 201A	2.05	15
		CO, PBX, Bldg, or Local Battery			2.06	17
	Generator	CO or PBX Ringing Supply		Ringing Lamp Unit 211A or 11A	2.08	19
	Battery	—	Fuse Unit To Noise Suppression Unit	Noise Suppression Unit ✕ 211A or 23A	2.09	20
		—	Fuse Unit To CO or PBX Line Unit	CO or PBX Line Unit 202A	2.10	20
	Generator	—	Ringing Lamp Unit to CO or PBX Line Unit		2.07	18
Battery or Generator	—	Fuse Unit or Ringing Lamp Unit to Aud. Sig. Control Unit	Aud. Sig. Control Unit 211A or 16A	2.11	21	

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POWER WIRING (Continued)

POWER				TYPE OF K.T.U. USED	TABLE NO.	PAGE NO.	
FURNISHED	TYPE★	SOURCE	CONNECTED FROM				
Direct to Line or Control Units	Battery and Generator	101G Power Plant, Transformer, or Static Ringing Generator	Incoming Power To CO or PBX Line Unit	CO or PBX Line Unit 202A	2.12	22	
	Battery	CO, PBX, Bldg, or Local Battery					Noise Suppression Unit to CO or PBX Line Unit
		—	2.14	26			
	Battery and Generator	101G Power Plant, Transformer, or Static Ringing Generator ◆			Incoming Power to Aud. Sig. Control Unit	Common Aud. Sig. Control Unit	211A
	Battery	CO, PBX, Bldg, or Local Battery ◆	2.17	29			
	Battery and Generator	101G Power Plant, Transformer, or Static Ringing Generator ◆			2.18	31	
	Battery	CO, PBX, Bldg, or Local Battery ◆	2.19	31			
	Battery or Generator	All □			Aud. Sig. Control Unit to CO or PBX Line Unit	211A or 16A	

Notes: ■ Cable connections to CO or PBX line unit (202B) are shown in Section C66.205.

★ The term "Battery" as used in this column denotes low voltage ac or dc.

✕ Provide only when same source of power is used for talking circuit and for operation of audible signals.

◆ Select when the type of power or voltage used for the audible signal control unit is different from that which is used for the common ringer operated directly by the CO or PBX line unit.

□ Select when the same type of power and voltage is used for the audible signal control unit and the common ringer operated directly by the CO or PBX line unit.

TABLE 2.01

CONNECTIONS BETWEEN SYSTEM FLASHING AND TIME-OUT UNIT (209A), CENTRAL OFFICE OR PRIVATE BRANCH EXCHANGE LINE UNIT (202A), WINK UNIT (210A), AND AUDIBLE SIGNAL CONTROL UNIT (211A OR 16A) — NEW INSTALLATIONS USING 209A AND 202A K.T.U.

Select Subtable for Features Provided as Shown in the Index Immediately Below:

TYPE OF STRAPPING	FEATURES PROVIDED		TYPE OF K.T.U. USED AS AUD. SIG. CONTROL UNIT	CONNECTIONS SHOWN ON SUBTABLE
	WINK	AUD. SIG. CONTROL		
COMMON			—	α, b, and c
	√		—	α, c, and d
		√	211A	α, b, and e
			16A	α, b, and f
	√	√	211A	α, d, and e
		16A	α, d, and f	
INDIVIDUAL LINE			—	g
		√	—	g
	√		—	g and h
	√	√	—	g and h

2.01α

Run Straps as Shown Below:

LEAD DESIG.	K.T.U. USED	K.T.U. USED AS CO OR PBX LINE UNIT
TO CO HA LK	209A K.T.U. TERM. STRIP "A" TERM.	ALL 202A K.T.U. TERM. *
	4	21
	3	22
	2	23
	1	24
LAMP GRD LAMP POWER B1 COMMON RING POWER "B" BAT "B" GRD	1st 202A K.T.U. TERM.	ALL SUCCEEDING 202A K.T.U. TERM. *
	30	30
	31	31
	33	33
	36	36
	38	38
	40	40

2.01b

Run Straps on 209A and on Each 202A K.T.U. Between Terminals as Shown Below:

LEAD DESIG.	K.T.U. USED
"Z" WIRING	209A K.T.U. TERM. STRIP "A" TERM.
	14 _____ 15
"Z" WIRING	202A K.T.U. TERM.
	26 _____ 27

(Continued on Next Page)

TABLE 2.01 (Continued)

2.01c

Run Strap on Each 202A K.T.U. Between Terminals as Shown Below:

LEAD DESIG.	202A K.T.U.	
	TERM.	TERM.
"S" WIRING	39	40

2.01d

Run Straps as Shown Below:

LEAD DESIG.	209A K.T.U. TERM. STRIP "A" TERM.	210A K.T.U. TERM.
W	18	11
S	17	12
F	15	13
TO	14	14
HA	16	16

2.01e

Run Straps as Shown Below:

LEAD DESIG.	ALL 202A K.T.U. TERM.	211A K.T.U. TERM.
ST ✕	39	1
"B" GRD □	40	37

2.01f

Run Straps as Shown Below:

LEAD DESIG.	ALL 202A K.T.U. TERM.	16A K.T.U. TERM.
ST ◆	39	4
"B" GRD □	40	1

2.01g

Run Straps as Shown Below:

LINE NO. IN SYS.	LEAD DESIG.	209A K.T.U. TERM. STRIP "A" TERM.	202A K.T.U. 1st 202A K.T.U. TERM.
1	R	34	2
	T	33	1
	R1	36	4
	T1	35	3
	LF	21	25
	LB	22	26
		TERM. STRIP "B" TERM.	
	"B" BAT	18	38
	"B" GRD	20	40

(Continued on Next Page)

TABLE 2.01 (Continued)

2.01g (Continued)

Run Straps as Shown Below:

LINE NO. IN SYS.	LEAD DESIG.	209A K.T.U.	202A K.T.U.
2	R T R1 T1 LF LB	TERM. STRIP "A"	2nd 202A K.T.U.
		TERM.	TERM.
		38	2
		37	1
		40	4
		39	3
23	25		
24	26		
3	R T R1 T1 LF LB	TERM. STRIP "B"	3rd 202A K.T.U.
		TERM.	TERM.
		2	2
		1	1
		4	4
		3	3
TERM. STRIP "A"			
TERM.			
25	25		
26	26		
4	R T R1 T1 LF LB	TERM. STRIP "B"	4th 202A K.T.U.
		TERM.	TERM.
		6	2
		5	1
		8	4
		7	3
TERM. STRIP "A"			
TERM.			
27	25		
28	26		
5	R T R1 T1 LF LB	TERM. STRIP "B"	5th 202A K.T.U.
		TERM.	TERM.
		10	2
		9	1
		12	4
		11	3
TERM. STRIP "A"			
TERM.			
29	25		
30	26		
6	R T R1 T1 LF LB	TERM. STRIP "B"	6th 202A K.T.U.
		TERM.	TERM.
		14	2
		13	1
		16	4
		15	3
TERM. STRIP "A"			
TERM.			
19	25		
20	26		

(Continued on Next Page)

TABLE 2.01
(Continued)

2.01h

Run Straps as Shown Below:

LINE NO. IN SYS.	LEAD DESIG.	202A K.T.U.	210A K.T.U. TERM.
1	LW LB "B" BAT "B" GRD	1st 202A K.T.U.	
		TERM.	
		27	1
		26	2
2	LW LB	2nd 202A K.T.U.	
		TERM.	
		27	3
		26	4
3	LW LB	3rd 202A K.T.U.	
		TERM.	
		27	5
		26	6
4	LW LB	4th 202A K.T.U.	
		TERM.	
		27	7
		26	8
5	LW LB	5th 202A K.T.U.	
		TERM.	
		27	9
		26	10
6	WINK CKT. FOR 6th LINE NOT PROVIDED UNLESS a 2nd 210A K.T.U. IS USED		

Notes: ★ Loop straps between each 202A K.T.U.

✕ Loop straps between each 202A K.T.U. and from last 202A K.T.U. to the 211A K.T.U.

◆ Loop straps between each 202A K.T.U. and from last 202A K.T.U. to the 16A K.T.U.

□ Connect from 211A or 16A K.T.U. to first 202A K.T.U. only.

Reference: SD-69203-0107, Fig. 24

SD-69203-0117, Fig. 51

SD-69203-0121, Fig. 55

SD-69203-0122, Fig. 56

SD-69203-0123, Fig. 57

TABLE 2.02

**CONNECTIONS BETWEEN SYSTEM FLASHING AND TIME-OUT
UNIT (209A) AND CENTRAL OFFICE OR PRIVATE BRANCH EX-
CHANGE LINE UNIT (202A)—ORIGINAL STRAPPING FOR 200A,
200B, AND 200C KEY TELEPHONE UNITS**

Original Factory Strapping for 200A, 200B, and 200C Key Telephone Units Is Shown in Subtables α , b , and c in the Index Immediately Below:

Strapping Information for Addition of Wink Circuit and/or Audible Signal Control Circuit Is Shown on Table 2.24, Page 37.

TYPE OF K.T.U.	LINE CAPACITY	CONNECTIONS SHOWN ON SUBTABLE
200A	2	α
200B	3	α and b
200C	4	α, b, and c

2.02 α

Run Straps As Shown Below:

LINE NO. IN SYS.	LEAD DESIG.	K.T.U. USED	
		209A K.T.U. TERM. STRIP "A" TERM.	1st 202A K.T.U. TERM.
1	R T R1 T1 TO CO HA LK LF LB	34 33 36 35 4 3 2 1 21 22	2 1 4 3 21 22 23 24 25 26
	"B" BAT "B" GRD	209A K.T.U. TERM. STRIP "B" TERM. 18 20	38 40
	"Z" WIRING	209A K.T.U. TERM. STRIP "A" TERM. 14	TERM. 15
	"Z" WIRING "S" WIRING	1st 202A K.T.U. TERM. 26 39	TERM. 27 40

(Continued on Next Page)

TABLE 2.02 (Continued)

2.02a (Continued)

Run Straps as Shown Below:

LINE NO. IN SYS.	LEAD DESIG.	K.T.U. USED	
		1st 202A K.T.U. TERM.	2nd 202A K.T.U. TERM.
2	TO CO HA LK LAMP GRD LAMP POWER B1 COMMON RING POWER "B" BAT "B" GRD	21 22 23 24 30 31 33 36 38 40	21 22 23 24 30 31 33 36 38 40
	R T R1 T1 LF LB	209A K.T.U. TERM. STRIP "A" 38 37 40 39 23 24	2nd 202A K.T.U. TERM. 2 1 4 3 25 26
	"Z" WIRING "S" WIRING	2nd 202A K.T.U. TERM. 26 _____ 39 _____	TERM. 27 40

2.02b

Run Straps as Shown Below:

LINE NO. IN SYS.	LEAD DESIG.	K.T.U. USED	
		2nd 202A K.T.U. TERM.	3rd 202A K.T.U. TERM.
3	TO CO HA LK LAMP GRD LAMP POWER B1 COMMON RING POWER "B" BAT "B" GRD	21 22 23 24 30 31 33 36 38 40	21 22 23 24 30 31 33 36 38 40
	R T R1 T1	209A K.T.U. TERM. STRIP "B" 2 1 4 3	3rd 202A K.T.U. TERM. 2 1 4 3
	LF LB	209A K.T.U. TERM. STRIP "A" 25 26	25 26

(Continued on Next Page)

TABLE 2.02 (Continued)

2.02b (Continued)

Run Straps as Shown Below:

LINE NO. IN SYS.	LEAD DESIG.	K.T.U. USED	
3	"Z" WIRING "S" WIRING	3rd 202A K.T.U.	
		TERM.	TERM.
		26 _____ 27	
		39 _____ 40	

2.02c

Run Straps as Shown Below:

LINE NO. IN SYS.	LEAD DESIG.	K.T.U. USED	
4	TO CO HA LK LAMP GRD LAMP POWER BI COMMON RING POWER "B" BAT "B" GRD	3rd 202A K.T.U.	4th 202A K.T.U.
		TERM.	TERM.
		21	21
		22	22
		23	23
		24	24
		30	30
		31	31
		33	33
		36	36
38	38		
40	40		
R T R1 T1		209A K.T.U.	4th 202A K.T.U.
		TERM. STRIP "B"	TERM.
		6	2
		5	1
		8	4
		7	3
LF LB		209A K.T.U.	
		TERM. STRIP "A"	TERM.
		27	25
		28	26
"Z" WIRING "S" WIRING		4th 202A K.T.U.	
		TERM.	TERM.
		26 _____ 27	
		39 _____ 40	

Reference: SD-69203-0117, Fig. 51
SD-69203-0122, Fig. 56

TABLE 2.03

CONNECTIONS BETWEEN SYSTEM FLASHING AND TIME-OUT UNIT (209A) AND CENTRAL OFFICE OR PRIVATE BRANCH EXCHANGE LINE UNIT (202B); BETWEEN CENTRAL OFFICE OR PRIVATE BRANCH EXCHANGE LINE UNIT (202A) AND CENTRAL OFFICE OR PRIVATE BRANCH EXCHANGE LINE UNIT (202B); AND BETWEEN CENTRAL OFFICE OR PRIVATE BRANCH EXCHANGE LINE UNIT (202B) AND WINK UNIT (210A)—EXISTING INSTALLATIONS—ADDITION OF LINE USING 202B KEY TELEPHONE UNIT WHERE OTHER UNITS ARE 202A TYPE

Select Subtable for Features Provided as Shown in the Index Immediately Below:

TYPE OF STRAPPING	FEATURES PROVIDED		CONNECTIONS SHOWN ON SUBTABLE
	WINK	AUD. SIG. CONTROL	
COMMON			α, b, and c
	√		α and c
		√	α and b
	√	√	α
INDIVIDUAL LINE			d
		√	d
	√		d and e
	√	√	d and e

2.03α

Run Straps as Shown Below:

LEAD DESIG.	LAST 202A K.T.U. TERM.	202B K.T.U. TERM.
TO	21	27
CO	22	28
HA	23	37
LK	24	38
LAMP GRD	30	40
LAMP POWER	31	39
B1	33	8
COMMON RING POWER	36	19
"B" BAT	38	29
ST*	39	36
"B" GRD	40	30

2.03b

WIRING OPTION	TERM.	202B K.T.U. TERM.
"Z" WIRING	9	10

2.03c

WIRING OPTION	TERM.	202B K.T.U. TERM.
"S" WIRING	26	36

(Continued on Next Page)

TABLE 2.03 (Continued)

2.03d

LINE NO. IN SYS.	LEAD DESIG.	209A K.T.U.	202B K.T.U. TERM.
2	R T R1 T1 LF LB	TERM. STRIP "A" TERM. 38	32
		37	31
		40	34
		39	33
		23	17
		24	18
3	R T R1 T1 LF LB	TERM. STRIP "B" TERM. 2	32
		1	31
		4	34
		3	33
		TERM. STRIP "A" TERM. 25	17
		26	18
4	R T R1 T1 LF LB	TERM. STRIP "B" TERM. 6	32
		5	31
		8	34
		7	33
		TERM. STRIP "A" TERM. 27	17
		28	18
5	R T R1 T1 LF LB	TERM. STRIP "B" TERM. 10	32
		9	31
		12	34
		11	33
		TERM. STRIP "A" TERM. 29	17
		30	18
6	R T R1 T1 LF LB	TERM. STRIP "B" TERM. 14	32
		13	31
		16	34
		15	33
		TERM. STRIP "A" TERM. 19	17
		20	18

(Continued on Next Page)

TABLE 2.03
(Continued)

2.03e

LINE NO. IN SYS.	LEAD DESIG.	202B K.T.U. TERM.	210A K.T.U. TERM.
2	LW LB	10 9	3 4
3	LW LB	10 9	5 6
4	LW LB	10 9	7 8
5	LW LB	10 9	9 10
6	WINK CKT. FOR 6th LINE NOT PROVIDED UNLESS α 2nd 210A K.T.U. IS USED		

Note: ★ Run this strap only to those key telephone units where audible signal control circuit is provided.

Reference: SD-69203-0117, Fig. 51
SD-69203-0122, Fig. 56
SD-69203-0123, Fig. 57
SD-69203-01, Fig. 68

TABLE 2.04

CONNECTIONS BETWEEN CENTRAL OFFICE OR PRIVATE BRANCH EXCHANGE LINE UNIT (202B) AND WINK UNIT (210A)—EXISTING INSTALLATIONS—ADDITION OF WINK CIRCUIT AND/OR AUDIBLE SIGNAL CONTROL CIRCUITS—SYSTEM CONSISTS PRIMARILY OF 202A K.T.U. BUT HAS ONE OR MORE 202B KEY TELEPHONE UNITS

Select Subtable for Features Being Added as Shown in the Index Immediately Below:

TYPE OF STRAPPING	FEATURES BEING ADDED		CONNECTIONS SHOWN ON SUBTABLE
	WINK	AUD. SIG. CONTROL	
COMMON	√		α
		√	b
	√	√	α and b
INDIVIDUAL LINE			NONE REQUIRED
		√	NONE REQUIRED
	√		c
	√	√	c

2.04a

Remove Strap on Each 202B K.T.U. Between Terminals as Shown Below:

LEAD DESIG.	TERM.	202B K.T.U.	TERM.
"Z" WIRING	9	_____	10

2.04b

Remove Strap on Each 202B K.T.U. Between Terminals as Shown Below:

LEAD DESIG.	TERM.	202B K.T.U.	TERM.
"S" WIRING	26	_____	36

Run Strap as Shown Below:

LEAD DESIG.	LAST 202A K.T.U. TERM.	202B K.T.U. TERM.
ST	39	36

2.04c

Run Straps as Shown Below:

LINE NO. IN SYS.	LEAD DESIG.	202B K.T.U. TERM.	210A K.T.U. TERM.
2	LW	10	3
	LB	9	4
3	LW	10	5
	LB	9	6
4	LW	10	7
	LB	9	8
5	LW	10	9
	LB	9	10

Reference: SD-69203-0123, Fig. 57
 SD-69203-01, Fig. 68
 SD-69203-0117, Fig. 51

**CONNECTIONS BETWEEN 101G POWER PLANT AND/OR
TRANSFORMERS AND CIRCUIT FUSE UNIT (201A)**

TABLE 2.05

Select Only Subtables Applicable to Installation and Make Connections as Shown Below:
2.05a LOCAL WIRING OR INCOMING CABLE FROM 101G POWER PLANT *

LEAD DESIG.	101G POWER PLANT TERM.	INCOMING CABLE			CKT. FUSE 201A K.T.U. TERM.
		PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
			CONDUCTOR COLOR		
BAT	20V DC TALK BAT	7	BL-O(W)	O(R)	1, 3, and 5
		8	BL-G(W)	G(R)	
GRD	20V DC TALK GRD	7	W(BL-O)	R(O)	15, 16, and 17♦
		8	W(BL-G)	R(G)	
BAT	20V DC SIG BAT	9	BL-BR(W)	BR(R)	7
		10	BL-S(W)	S(R)	
GRD	20V DC SIG GRD	9	W(BL-BR)	R(BR)	18♦
		10	W(BL-S)	R(S)	
BAT	18V ±	15	G-W	S	9
GRD	GRD		W	BK	19♦
BAT	10V ±	11	O-W(W)	BL(BK)	11 and 13
		12	O-G(W)	O(BK)	
		13	O-BR(W)	G(BK)	
		14	O-S(W)	BR(BK)	
GRD	GRD	11	W(O-W)	BK(BL)	20♦
		12	W(O-G)	BK(O)	
		13	W(O-BR)	BK(G)	
		14	W(O-S)	BK(BR)	

2.05b RUNNING CABLE FROM 101G POWER PLANT

LEAD DESIG.	101G POWER PLANT TERM.	RUNNING CABLE			CKT. FUSE 201A K.T.U. TERM.
		PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
			CONDUCTOR COLOR		
BAT	20V DC TALK BAT	36	G-BR(R)	BL-W(BK)	1, 3, and 5
		37	G-S(R)	O-W(BK)	
GRD	20V DC TALK GRD	36	R(G-BR)	BK(BL-W)	15, 16, and 17♦
		37	R(G-S)	BK(O-W)	
BAT	20V DC SIG BAT	38	BR-W(R)	G-W(BK)	7
		39	BR-S(R)	BR-W(BK)	
GRD	20V DC SIG GRD	38	R(BR-W)	BK(G-W)	18♦
		39	R(BR-S)	BK(BR-W)	
BAT	18V ±	44	BR	BR-W	9
GRD	GRD		BK	Y	19♦
BAT	10V ±	40	S-W(R)	S-W(BK)	11 and 13
		41	BL(BK)	BL-W(Y)	
		42	O(BK)	O-W(Y)	
		43	G(BK)	G-W(Y)	
GRD	GRD	40	R(S-W)	BK(S-W)	20♦
		41	BK(BL)	Y(BL-W)	
		42	BK(O)	Y(O-W)	
		43	BK(G)	Y(G-W)	

(Continued on Next Page)

TABLE 2.05 (Continued)**2.05c LOCAL WIRING OR INCOMING CABLE FROM TRANSFORMER—BUZZER SUPPLY ✱**

LEAD DESIG.	KS-5714,L3 TRANSFORMER TERM.	INCOMING CABLE			CKT. FUSE 201A K.T.U. TERM.
		PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
			CONDUCTOR COLOR		
BAT	18V ±	15	G-W	S	9
GRD	GRD		W	BK	19♦

2.05d RUNNING CABLE FROM TRANSFORMER—BUZZER SUPPLY

LEAD DESIG.	KS-5714,L3 TRANSFORMER TERM.	RUNNING CABLE			CKT. FUSE 201A K.T.U. TERM.
		PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
			CONDUCTOR COLOR		
BAT	18V ±	44	BR	BR-W	9
GRD	GRD		BK	Y	19♦

2.05e LOCAL WIRING OR INCOMING CABLE FROM TRANSFORMER—LAMP SUPPLY ✱

LEAD DESIG.	393A TRANSFORMER TERM.	INCOMING CABLE			CKT. FUSE 201A K.T.U. TERM.
		PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
			CONDUCTOR COLOR		
BAT	B	11	O-W(W)	BL(BK)	11 and 13
		12	O-G(W)	O(BK)	
		13	O-BR(W)	G(BK)	
		14	O-S(W)	BR(BK)	
GRD	D	11	W(O-W)	BK(BL)	20♦
		12	W(O-G)	BK(O)	
		13	W(O-BR)	BK(G)	
		14	W(O-S)	BK(BR)	

2.05f RUNNING CABLE FROM TRANSFORMER—LAMP SUPPLY

LEAD DESIG.	393A TRANSFORMER TERM.	RUNNING CABLE			CKT. FUSE 201A K.T.U. TERM.
		PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
			CONDUCTOR COLOR		
BAT	B	40	S-W(R)	S-W(BK)	11 and 13
		41	BL(BK)	BL-W(Y)	
		42	O(BK)	O-W(Y)	
		43	G(BK)	G-W(Y)	
GRD	D	40	R(S-W)	BK(S-W)	20♦
		41	BK(BL)	Y(BL-W)	
		42	BK(O)	Y(O-W)	
		43	BK(G)	Y(G-W)	

Notes: ✱ When local wiring is used, connect terminals on 101G power plant to terminals on circuit fuse unit (201A) with 20-gauge copper wire.

✱ When local wiring is used, connect terminals on transformer to terminals on circuit fuse unit (201A) with 20-gauge copper wire.

♦ Strap terminals 15 through 20 together on back of terminal strip.

Reference: SD-69203-0125, Fig. 66

CONNECTIONS BETWEEN CENTRAL OFFICE, PRIVATE BRANCH EXCHANGE, BUILDING, OR LOCAL BATTERY SUPPLY AND CIRCUIT FUSE UNIT (201A)

TABLE 2.06

Select Only Subtables Applicable to Installation and Make Connections as Shown Below:
2.06a INCOMING CABLE TO FEEDER FUSE UNIT (201A)—ALL BATTERY SUPPLY EXCEPT LAMPS ✖

LEAD DESIG.	INCOMING CABLE			FEEDER FUSE 201A K.T.U. TERM.
	PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
		CONDUCTOR COLOR		
CO BAT	7	BL-O(W)	O(R)	1, 3, and 5
	8	BL-G(W)	G(R)	
CO GRD	7	W(BL-O)	R(O)	15, 16, and 17*
	8	W(BL-G)	R(G)	

2.06b RUNNING CABLE TO FEEDER FUSE UNIT (201A)—ALL BATTERY SUPPLY EXCEPT LAMPS ✖

LEAD DESIG.	RUNNING CABLE			FEEDER FUSE 201A K.T.U. TERM.
	PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
		CONDUCTOR COLOR		
CO BAT	36	G-BR(R)	BL-W(BK)	1, 3, and 5
	37	G-S(R)	O-W(BK)	
CO GRD	36	R(G-BR)	BK(BL-W)	15, 16, and 17*
	37	R(G-S)	BK(O-W)	

2.06c INCOMING CABLE TO FEEDER FUSE UNIT (201A)—LAMP SUPPLY ✖

LEAD DESIG.	INCOMING CABLE			FEEDER FUSE 201A K.T.U. TERM.
	PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
		CONDUCTOR COLOR		
CO BAT	11	O-W(W)	BL(BK)	11 and 13
	12	O-G(W)	O(BK)	
	13	O-BR(W)	G(BK)	
	14	O-S(W)	BR(BK)	
CO GRD	11	W(O-W)	BK(BL)	19 and 20*
	12	W(O-G)	BK(O)	
	13	W(O-BR)	BK(G)	
	14	W(O-S)	BK(BR)	

2.06d RUNNING CABLE TO FEEDER FUSE UNIT (201A)—LAMP SUPPLY ✖

LEAD DESIG.	RUNNING CABLE			FEEDER FUSE 201A K.T.U. TERM.
	PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
		CONDUCTOR COLOR		
CO BAT	40	S-W(R)	S-W(BK)	11 and 13
	41	BL(BK)	BL-W(Y)	
	42	O(BK)	O-W(Y)	
	43	G(BK)	G-W(Y)	
CO GRD	40	R(S-W)	BK(S-W)	19 and 20*
	41	BK(BL)	Y(BL-W)	
	42	BK(O)	Y(O-W)	
	43	BK(G)	Y(G-W)	

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TABLE 2.06
(Continued)**2.06e CONNECTIONS BETWEEN FEEDER FUSE UNIT (201A) AND CIRCUIT FUSE UNIT (201A)—ALL BATTERY SUPPLY EXCEPT BUZZER AND LAMPS**

LEAD DESIG.	FEEDER FUSE 201A K.T.U. TERM.	CKT. FUSE 201A K.T.U. TERM.
BAT	2 and 4	1, 3, 5, and 7
GRD	15 and 16	15, 16, 17, and 18*

2.06f CONNECTIONS BETWEEN FEEDER FUSE UNIT (201A) AND CIRCUIT FUSE UNIT (201A) — BUZZER SUPPLY

LEAD DESIG.	FEEDER FUSE 201A K.T.U. TERM.	CKT. FUSE 201A K.T.U. TERM.
BAT	6	9
GRD	17	19*

2.06g CONNECTIONS BETWEEN FEEDER FUSE UNIT (201A) AND CIRCUIT FUSE UNIT (201A) — LAMP SUPPLY

LEAD DESIG.	FEEDER FUSE 201A K.T.U. TERM.	CKT. FUSE 201A K.T.U. TERM.
BAT	12 and 14	11 and 13
GRD	19 and 20	20*

Notes: * Strap terminals 15 through 20 together on back of terminal strip.

✕ Select subtables 2.06e through 2.06g for connections between feeder fuse unit and circuit fuse unit.

Reference: SD-69203-0125, Fig. 66

TABLE 2.07 **CONNECTIONS BETWEEN CENTRAL OFFICE OR PRIVATE BRANCH EXCHANGE LINE UNIT (202A) AND RINGING LAMP UNIT (211A OR 11A)**

Select the One Subtable Applicable to Installation and Run Straps as Shown Below:

SUB-TABLE	LEAD DESIG.	1st 202A K.T.U. TERM.	K.T.U. USED AS RINGING LAMP UNIT
a	105V ± RING GRD	36 33	211A K.T.U. TERM. 14 16
b	105V ± RING GRD	36 33	11A K.T.U. TERM. 4 1

Reference: SD-69203-0106, Fig. 22 SD-69203-0117, Fig. 51 SD-69203-0121, Fig. 55

**CONNECTIONS BETWEEN CENTRAL OFFICE OR PRIVATE
BRANCH EXCHANGE RINGING SUPPLY AND RINGING LAMP
UNIT (211A OR 11A)**

Select Only Subtables Applicable to Installation and Make Connections as Shown Below:

2.08a INCOMING CABLE (16 PR) TO RINGING LAMP UNIT (11A)

LEAD DESIG.	INCOMING CABLE			11A K.T.U. TERM.
	PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
		CONDUCTOR COLOR		
CO GEN	16	R	R	3*
CO GRD RETURN		W	W	1, 2, 5, and 6

2.08b RUNNING CABLE TO RINGING LAMP UNIT (11A)

LEAD DESIG.	RUNNING CABLE			11A K.T.U. TERM.
	PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
		CONDUCTOR COLOR		
CO GEN	45	S	S-W	3*
CO GRD RETURN		BK	Y	1, 2, 5, and 6

2.08c INCOMING CABLE (16 PR) TO RINGING LAMP UNIT (211A)

LEAD DESIG.	INCOMING CABLE			211A K.T.U. TERM.
	PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
		CONDUCTOR COLOR		
CO GEN	16	R	R	19
CO GRD RETURN		W	W	18

2.08d RUNNING CABLE TO RINGING LAMP UNIT (211A)

LEAD DESIG.	RUNNING CABLE			211A K.T.U. TERM.
	PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
		CONDUCTOR COLOR		
CO GEN	45	S	S-W	19
CO GRD RETURN		BK	Y	18

Note: * Loop strap terminals 4, 9, 8, and 7 on 11A K.T.U.

Reference: SD-69203-0106, Fig. 22
SD-69203-0121, Fig. 55

TABLE 2.09

**CONNECTIONS BETWEEN CIRCUIT FUSE UNIT (201A) AND
NOISE SUPPRESSION UNIT (211A OR 23A)**

Select the One Subtable Applicable to Installation and Run Straps as Shown Below:

SUB-TABLE	LEAD DESIG.	CKT. FUSE 201A K.T.U. TERM.	K.T.U. USED AS NOISE SUPPRESSION UNIT
a	BAT GRD	1 15	211A K.T.U. TERM. 40 38
b	BAT GRD	1 15	23A K.T.U. TERM. 3 1

Reference: SD-69203-0106, Fig. 23
SD-69203-0121, Fig. 55
SD-69203-0125, Fig. 66

TABLE 2.10

**CONNECTIONS BETWEEN CENTRAL OFFICE OR PRIVATE
BRANCH EXCHANGE LINE UNIT (202A) AND CIRCUIT FUSE
UNIT (201A)**

Select Only Subtables Applicable to Installation and Run Straps as Shown Below:

SUB-TABLE	TYPE OF POWER AND USE	LEAD DESIG.	202A K.T.U.	CKT. FUSE 201A K.T.U. TERM.
a	LOW VOLTAGE AC or DC USED for COMMON BUZZER	SIG POWER SIG GRD	1st 202A K.T.U. TERM. 36 33	10 19
b	LOW VOLTAGE AC or DC USED for LAMPS (Not Over 36 Lamps Used in 1A1 Sys.)	LAMP POWER LAMP GRD	31 30	12 20
c	LOW VOLTAGE AC or DC USED for LAMPS (Over 36 Lamps Used in 1A1 Sys.)	LINE NO. 1, 2, 3	31 30	12 20
		LINE NO. 4, 5, 6	4th 202A K.T.U. TERM. 31 30	14 20
d	18-24V DC USED for RELAY SUPPLY	BAT GRD	1st 202A K.T.U. TERM. 38 40	4 16

Reference: SD-69203-0117, Fig. 51
SD-69203-0125, Fig. 66

**CONNECTIONS BETWEEN AUDIBLE SIGNAL CONTROL UNIT
(211A OR 16A) AND CIRCUIT FUSE UNIT (201A) OR RINGING
LAMP UNIT (211A OR 11A)**

TABLE 2.11

Select Only Subtables Applicable to Installation and Run Straps as Shown Below:

2.11a CONNECTIONS BETWEEN AUDIBLE SIGNAL CONTROL TERMINALS AND RINGING LAMP TERMINALS ON 211A K.T.U.

LEAD DESIG.	211A K.T.U.	
	TERM.	TERM.
105V ± RING GRD	12 _____ 16	
	13 _____ 15	

2.11b CONNECTIONS BETWEEN AUDIBLE SIGNAL CONTROL UNIT (211A) AND CIRCUIT FUSE UNIT (201A)

LEAD DESIG.	211A K.T.U.	CKT. FUSE
	TERM.	201A K.T.U. TERM.
POWER GRD	11	10
	10	19

2.11c CONNECTIONS BETWEEN AUDIBLE SIGNAL CONTROL UNIT (16A) AND RINGING LAMP UNIT (11A)

LEAD DESIG.	16A K.T.U.	11A K.T.U.
	TERM.	TERM.
105V ± RING GRD	7	7
	3	6

2.11d CONNECTIONS BETWEEN AUDIBLE SIGNAL CONTROL UNIT (16A) AND CIRCUIT FUSE UNIT (201A)

LEAD DESIG.	16A K.T.U.	CKT. FUSE
	TERM.	201A K.T.U. TERM.
POWER GRD	7	10
	3	19

Reference: SD-69203-0106, Fig. 22
SD-69203-0107, Fig. 24
SD-69203-0121, Fig. 55
SD-69203-0125, Fig. 66

TABLE 2.12

CONNECTIONS BETWEEN 101G POWER PLANT AND/OR TRANSFORMERS AND/OR STATIC RINGING GENERATOR AND CENTRAL OFFICE OR PRIVATE BRANCH EXCHANGE LINE UNIT (202A)

Select Only Subtables Applicable to Installation and Make Connections as Shown Below:

2.12a LOCAL WIRING OR INCOMING CABLE (16 PR) FROM 101G POWER PLANT *

SUB-TABLE NO.	TYPE OF POWER AND USE	LEAD DESIG.	101G POWER PLANT TERM.	INCOMING CABLE		1st 202A K.T.U. TERM.	
				PAIR NO.	"C" INSIDE WIRING		"D" INSIDE WIRING
					CONDUCTOR COLOR		
1	GENERATOR USED for COMMON RINGER	105V ±	105V ±	16	R	R	36
		RING GRD	RING GRD		W	W	33
2	18V AC USED for COMMON BUZZER	18V ±	18V ±	15	G-W	S	36
		GRD	GRD		W	BK	33
3	10V AC USED for LAMPS (Not Over 36 Lamps Used in 1A1 Sys.)	10V ±	10V ±	11	O-W(W)	BL(BK)	31
				12	O-G(W)	O(BK)	
				13	O-BR(W)	G(BK)	
				14	O-S(W)	BR(BK)	
		GRD	GRD	11	W(O-W)	BK(BL)	30
				12	W(O-G)	BK(O)	
				13	W(O-BR)	BK(G)	
				14	W(O-S)	BK(BR)	
4	20V DC USED for RELAY SUPPLY	BAT	20V DC TALK	7	BL-O(W)	O(R)	38
				8	BL-G(W)	G(R)	
		GRD	GRD	7	W(BL-O)	R(O)	40
				8	W(BL-G)	R(G)	

2.12b RUNNING CABLE FROM 101G POWER PLANT

SUB-TABLE NO.	TYPE OF POWER AND USE	LEAD DESIG.	101G POWER PLANT TERM.	RUNNING CABLE		1st 202A K.T.U. TERM.	
				PAIR NO.	"C" INSIDE WIRING		"D" INSIDE WIRING
					CONDUCTOR COLOR		
1	GENERATOR USED for COMMON RINGER	105V ±	105V ±	45	S	S-W	36
		RING GRD	RING GRD		BK	Y	33
2	18V AC USED for COMMON BUZZER	18V ±	18V ±	44	BR	BR-W	36
		GRD	GRD		BK	Y	33
3	10V AC USED for LAMPS (Not Over 36 Lamps Used in 1A1 Sys.)	10V ±	10V ±	40	S-W(R)	S-W(BK)	31
				41	BL(BK)	BL-W(Y)	
				42	O(BK)	O-W(Y)	
				43	G(BK)	G-W(Y)	
		GRD	GRD	40	R(S-W)	BK(S-W)	30
				41	BK(BL)	Y(BL-W)	
				42	BK(O)	Y(O-W)	
				43	BK(G)	Y(G-W)	
4	20V DC USED for RELAY SUPPLY	BAT	BAT	36	G-BR(R)	BL-W(BK)	38
				37	G-S(R)	O-W(BK)	
		GRD	GRD	36	R(G-BR)	BK(BL-W)	40
				37	R(G-S)	BK(O-W)	

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TABLE 2.12
(Continued)**2.12c LOCAL WIRING OR INCOMING CABLE FROM TRANSFORMER—LAMP SUPPLY ✕**

TYPE OF POWER AND USE	LEAD DESIG.	393A TRANSFORMER TERM.	INCOMING CABLE			1st 202A K.T.U. TERM.
			PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
				CONDUCTOR COLOR		
10V AC USED for LAMPS (Not Over 36 Lamps Used in 1A1 Sys.)	10V ±	10V ±	11	O-W(W)	BL(BK)	31
			12	O-G(W)	O(BK)	
			13	O-BR(W)	G(BK)	
			14	O-S(W)	BR(BK)	
	GRD	GRD	11	W(O-W)	BK(BL)	30
			12	W(O-G)	BK(O)	
			13	W(O-BR)	BK(G)	
			14	W(O-S)	BK(BR)	

2.12d RUNNING CABLE FROM TRANSFORMER—LAMP SUPPLY

TYPE OF POWER AND USE	LEAD DESIG.	393A TRANSFORMER TERM.	RUNNING CABLE			1st 202A K.T.U. TERM.
			PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
				CONDUCTOR COLOR		
10V AC USED for LAMPS (Not Over 36 Lamps Used in 1A1 Sys.)	10V ±	10V ±	40	S-W(R)	S-W(BK)	31
			41	BL(BK)	BL-W(Y)	
			42	O(BK)	O-W(Y)	
			43	G(BK)	G-W(Y)	
	GRD	GRD	40	R(S-W)	BK(S-W)	30
			41	BK(BL)	Y(BL-W)	
			42	BK(O)	Y(O-W)	
			43	BK(G)	Y(G-W)	

2.12e LOCAL WIRING OR INCOMING CABLE FROM TRANSFORMER—BUZZER SUPPLY ✕

TYPE OF POWER AND USE	LEAD DESIG.	KS-5714,L3 TRANSFORMER TERM.	INCOMING CABLE			1st 202A K.T.U. TERM.
			PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
				CONDUCTOR COLOR		
18V AC USED for COMMON BUZZER	18V ±	18V ±	15	G-W	S	36
	GRD	GRD		W	BK	33

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TABLE 2.12
(Continued)**2.12f RUNNING CABLE FROM TRANSFORMER—BUZZER SUPPLY**

TYPE OF POWER AND USE	LEAD DESIG.	KS-5714,L3 TRANSFORMER TERM.	RUNNING CABLE			1st 202A K.T.U. TERM.
			PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
				CONDUCTOR COLOR		
18V AC USED for COMMON BUZZER	18V ±	18V ±	44	BR	BR-W	36
	GRD	GRD		BK	Y	33

2.12g LOCAL WIRING OR INCOMING CABLE (16 PR) FROM STATIC RINGING GENERATOR ♦

TYPE OF POWER AND USE	LEAD DESIG.	STATIC RINGING GENERATOR TERM.	INCOMING CABLE			1st 202A K.T.U. TERM.
			PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
				CONDUCTOR COLOR		
GENERATOR USED for COMMON BUZZER	105V ±	105V ±	16	R	R	36
	RING GRD	RING GRD		W	W	33

2.12h RUNNING CABLE FROM STATIC RINGING GENERATOR

TYPE OF POWER AND USE	LEAD DESIG.	STATIC RINGING GENERATOR TERM.	RUNNING CABLE			1st 202A K.T.U. TERM.
			PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
				CONDUCTOR COLOR		
GENERATOR USED for COMMON BUZZER	105V ±	105V ±	45	S	S-W	36
	RING GRD	RING GRD		BK	Y	33

- Notes: ★ When local wiring is used, connect terminals on 101G power plant to terminals on CO or PBX line unit (202A) with 20-gauge copper wire.
- ✳ When local wiring is used, connect terminals on transformer to terminals on CO or PBX line unit (202A) with 20-gauge copper wire.
- ♦ When local wiring is used, connect terminals on static ringing generator to CO or PBX line unit (202A) with 20-gauge copper wire.

Reference: SD-69203-0117, Fig. 51

TABLE 2.13

CONNECTIONS BETWEEN CENTRAL OFFICE, PRIVATE BRANCH EXCHANGE, BUILDING, OR LOCAL BATTERY SUPPLY AND CENTRAL OFFICE OR PRIVATE BRANCH EXCHANGE LINE UNIT (202A)

Select Only Subtables Applicable to Installation and Make Connections as Shown Below:
2.13a INCOMING CABLE FROM CO, PBX, BLDG, OR LOCAL BATTERY

SUB-TABLE NO.	TYPE OF POWER AND USE	LEAD DESIG.	DIST. OR HOUSE CABLE TERM. PAIR	INCOMING CABLE			1st 202A K.T.U. TERM.
				PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
					CONDUCTOR COLOR		
1	14-26V DC USED for COMMON BUZZER	BAT	PAIR ASSIGNED for BATTERY	15	G-W	S	36
		GRD			W	BK	33
2	14-26V DC USED for LAMPS (Not Over 36 Lamps Used in 1A1 Sys.)	BAT	PAIR(S) ASSIGNED for LAMP BATTERY	11	O-W(W)	BL(BK)	31
				12	O-G(W)	O(BK)	
		13		O-BR(W)	G(BK)		
		14		O-S(W)	BR(BK)		
3	14-26V DC USED for RELAY SUPPLY	BAT	PAIR(S) ASSIGNED for BATTERY	7	BL-O(W)	O(R)	38
				8	BL-G(W)	G(R)	
		GRD		7	W(BL-O)	R(O)	40
				8	W(BL-G)	R(G)	

2.13b RUNNING CABLE FROM CO, PBX, BLDG, OR LOCAL BATTERY

SUB-TABLE NO.	TYPE OF POWER AND USE	LEAD DESIG.	DIST. OR HOUSE CABLE TERM. PAIR	RUNNING CABLE			1st 202A K.T.U. TERM.
				PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
					CONDUCTOR COLOR		
1	14-26V DC USED for COMMON BUZZER	BAT	PAIR ASSIGNED for BATTERY	44	BR	BR-W	36
		GRD			BK	Y	33
2	14-26V DC USED for LAMPS (Not Over 36 Lamps Used in 1A1 Sys.)	BAT	PAIR(S) ASSIGNED for LAMP BATTERY	40	S-W(R)	S-W(BK)	31
				41	BL(BK)	BL-W(Y)	
		42		O(BK)	O-W(Y)		
		43		G(BK)	G-W(Y)		
3	14-26V DC USED for RELAY SUPPLY	BAT	PAIR(S) ASSIGNED for BATTERY	36	G-BR(R)	BL-W(BK)	38
				37	G-S(R)	O-W(BK)	
		GRD		36	R(G-BR)	BK(BL-W)	40
				37	R(G-S)	BK(O-W)	

Reference: SD-69203-0117, Fig. 51

TABLE 2.14

**CONNECTIONS BETWEEN 101G POWER PLANT AND/OR
TRANSFORMER AND/OR STATIC RINGING GENERATOR AND
AUDIBLE SIGNAL CONTROL UNIT (211A)**

Select Only Subtables Applicable to Installation and Make Connections as Shown Below:

2.14a LOCAL WIRING OR INCOMING CABLE (16 PR) FROM 101G POWER PLANT *

SUB-TABLE NO.	TYPE OF POWER AND USE	LEAD DESIG.	101G POWER PLANT TERM.	INCOMING CABLE		211A K.T.U. TERM.	
				PAIR NO.	"C" INSIDE WIRING		"D" INSIDE WIRING
					CONDUCTOR COLOR		
1	GENERATOR USED for COMMON RINGER	105V ±	105V ±	16	R	R	19
		RING GRD	RING GRD		W	W	18
2	18V AC USED for COMMON BUZZER	18V ±	18V ±	15	G-W	S	11
		GRD	GRD		W	BK	10

2.14b RUNNING CABLE FROM 101G POWER PLANT

SUB-TABLE NO.	TYPE OF POWER AND USE	LEAD DESIG.	101G POWER PLANT TERM.	RUNNING CABLE		211A K.T.U. TERM.	
				PAIR NO.	"C" INSIDE WIRING		"D" INSIDE WIRING
					CONDUCTOR COLOR		
1	GENERATOR USED for COMMON RINGER	105V ±	105V ±	45	S	S-W	19
		RING GRD	RING GRD		BK	Y	18
2	18V AC USED for COMMON BUZZER	18V ±	18V ±	44	BR	BR-W	11
		GRD	GRD		BK	Y	10

2.14c LOCAL WIRING OR INCOMING CABLE (16 PR) FROM STATIC RINGING GENERATOR ✖

TYPE OF POWER AND USE	LEAD DESIG.	STATIC RINGING GENERATOR TERM.	INCOMING CABLE		211A K.T.U. TERM.	
			PAIR NO.	"C" INSIDE WIRING		"D" INSIDE WIRING
				CONDUCTOR COLOR		
GENERATOR USED for COMMON RINGER	105V ±	105V ±	16	R	R	19
	RING GRD	RING GRD		W	W	18

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TABLE 2.14
(Continued)**2.14d RUNNING CABLE FROM STATIC RINGING GENERATOR**

TYPE OF POWER AND USE	LEAD DESIG.	STATIC RINGING GENERATOR TERM.	RUNNING CABLE			211A K.T.U. TERM.
			PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
				CONDUCTOR COLOR		
GENERATOR USED for COMMON RINGER	105V ±	105V ±	45	S	S-W	19
	RING GRD	RING GRD		BK	Y	18

2.14e LOCAL WIRING OR INCOMING CABLE FROM TRANSFORMER—BUZZER SUPPLY ♦

TYPE OF POWER AND USE	LEAD DESIG.	KS-5714,L3 TRANSFORMER TERM.	INCOMING CABLE			211A K.T.U. TERM.
			PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
				CONDUCTOR COLOR		
18V AC USED for COMMON BUZZER	18V ±	18V ±	15	G-W	S	11
	GRD	GRD		W	BK	10

2.14f RUNNING CABLE FROM TRANSFORMER—BUZZER SUPPLY

TYPE OF POWER AND USE	LEAD DESIG.	KS-5714,L3 TRANSFORMER TERM.	RUNNING CABLE			211A K.T.U. TERM.
			PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
				CONDUCTOR COLOR		
18V AC USED for COMMON BUZZER	18V ±	18V ±	44	BR	BR-W	11
	GRD	GRD		BK	Y	10

- Notes:** ★ When local wiring is used, connect terminals on 101G power plant to terminals on audible signal control unit (211A) with 20-gauge copper wire.
- ✕ When local wiring is used, connect terminals on static ringing generator to terminals on audible signal control unit (211A) with 20-gauge copper wire.
- ♦ When local wiring is used, connect terminals on transformer to terminals on audible signal control unit (211A) with 20-gauge copper wire.

Reference: SD-69203-0121, Fig. 55

TABLE 2.15

**CONNECTIONS BETWEEN CENTRAL OFFICE OR PRIVATE
BRANCH EXCHANGE LINE UNIT (202A) AND NOISE SUPPRES-
SION UNIT (211A OR 23A)**

Select the One Subtable Applicable to Installation and Run Straps as Shown Below:

SUB-TABLE	LEAD DESIG.	1st 202A K.T.U. TERM.	K.T.U. USED AS NOISE SUPPRESSION UNIT
a	BAT GRD	38 40	211A K.T.U. TERM. 40 38
b	BAT GRD	38 40	23A K.T.U. TERM. 3 1

Reference: SD-69203-0106, Fig. 23
SD-69203-0117, Fig. 51
SD-69203-0121, Fig. 55

TABLE 2.16

**CONNECTIONS BETWEEN CENTRAL OFFICE, PRIVATE
BRANCH EXCHANGE, BUILDING, OR LOCAL BATTERY SUP-
PLY AND AUDIBLE SIGNAL CONTROL UNIT (211A)**

Select the One Subtable Applicable to Installation and Make Connections as Shown Below:

2.16a INCOMING CABLE

TYPE OF POWER AND USE	LEAD DESIG.	DIST. OR HOUSE CABLE TERM. PAIR	INCOMING CABLE			211A K.T.U. TERM.
			PAIR NO.	"C" INSIDE WIRING CONDUCTOR COLOR	"D" INSIDE WIRING CONDUCTOR COLOR	
14-26V DC USED for COMMON BUZZER	BAT	PAIR ASSIGNED for BATTERY	15	G-W	S	11
	GRD			W	BK	10

2.16b RUNNING CABLE

TYPE OF POWER AND USE	LEAD DESIG.	DIST. OR HOUSE CABLE TERM. PAIR	RUNNING CABLE			211A K.T.U. TERM.
			PAIR NO.	"C" INSIDE WIRING CONDUCTOR COLOR	"D" INSIDE WIRING CONDUCTOR COLOR	
14-26V DC USED for COMMON BUZZER	BAT	PAIR ASSIGNED for BATTERY	44	BR	BR-W	11
	GRD			BK	Y	10

Reference: SD-69203-0121, Fig. 55

CONNECTIONS BETWEEN 101G POWER PLANT AND/OR TRANSFORMERS AND/OR STATIC RINGING GENERATOR AND AUDIBLE SIGNAL CONTROL UNIT (16A)

TABLE 2.17

Select Only Subtables Applicable to Installation and Make Connections as Shown Below:

2.17a LOCAL WIRING OR INCOMING CABLE (16 PR) FROM 101G POWER PLANT ★

SUB-TABLE NO.	TYPE OF POWER AND USE	LEAD DESIG.	101G POWER PLANT TERM.	INCOMING CABLE			16A K.T.U. TERM.
				PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
					CONDUCTOR COLOR		
1	GENERATOR USED for COMMON RINGER	105V ±	105V ±	16	R	R	7
		RING GRD	RING GRD		W	W	3
2	18V AC USED for COMMON BUZZER	18V ±	18V ±	15	G-W	S	7
		GRD	GRD		W	BK	3

2.17b RUNNING CABLE FROM 101G POWER PLANT

SUB-TABLE NO.	TYPE OF POWER AND USE	LEAD DESIG.	101G POWER PLANT TERM.	RUNNING CABLE			16A K.T.U. TERM.
				PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
					CONDUCTOR COLOR		
1	GENERATOR USED for COMMON RINGER	105V ±	105V ±	45	S	S-W	7
		RING GRD	RING GRD		BK	Y	3
2	18V AC USED for COMMON BUZZER	18V ±	18V ±	44	BR	BR-W	7
		GRD	GRD		BK	Y	3

2.17c LOCAL WIRING OR INCOMING CABLE (16 PR) FROM STATIC RINGING GENERATOR ✖

TYPE OF POWER AND USE	LEAD DESIG.	STATIC RINGING GENERATOR TERM.	INCOMING CABLE			16A K.T.U. TERM.
			PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
				CONDUCTOR COLOR		
GENERATOR USED for COMMON RINGER	105V ±	105V ±	16	R	R	7
	RING GRD	RING GRD		W	W	3

(Continued on Next Page)

TABLE 2.17
(Continued)**2.17d RUNNING CABLE FROM STATIC RINGING GENERATOR**

TYPE OF POWER AND USE	LEAD DESIG.	STATIC RINGING GENERATOR TERM.	RUNNING CABLE			16A K.T.U. TERM.
			PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
				CONDUCTOR COLOR		
GENERATOR USED for COMMON RINGER	105V ±	105V ±	45	S	S-W	7
	RING GRD	RING GRD		BK	Y	3

2.17e LOCAL WIRING OR INCOMING CABLE FROM TRANSFORMER—BUZZER SUPPLY ♦

TYPE OF POWER AND USE	LEAD DESIG.	KS-5714, L3 TRANSFORMER TERM.	INCOMING CABLE			16A K.T.U. TERM.
			PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
				CONDUCTOR COLOR		
18V AC USED for COMMON BUZZER	18V ±	18V ±	15	G-W	S	7
	GRD	GRD		W	BK	3

2.17f RUNNING CABLE FROM RECTIFIER—BUZZER SUPPLY

TYPE OF POWER AND USE	LEAD DESIG.	KS-5714, L3 TRANSFORMER TERM.	RUNNING CABLE			16A K.T.U. TERM.
			PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
				CONDUCTOR COLOR		
18V AC USED for COMMON BUZZER	18V ±	18V ±	44	BR	BR-W	7
	GRD	GRD		BK	Y	3

Notes: ★ When local wiring is used, connect terminals on 101G power plant to terminals on audible signal control unit (16A) with 20-gauge copper wire.

✕ When local wiring is used, connect terminals on static ringing generator to terminals on audible signal control unit (16A) with 20-gauge copper wire.

♦ When local wiring is used, connect terminals on transformer to terminals on audible signal control unit (16A) with 20-gauge copper wire.

Reference: SD-69203-0107, Fig. 24

CONNECTIONS BETWEEN CENTRAL OFFICE, PRIVATE BRANCH EXCHANGE, BUILDING, OR LOCAL BATTERY SUPPLY AND AUDIBLE SIGNAL CONTROL UNIT (16A)

TABLE 2.18

Select the One Subtable Applicable to Installation and Make Connections as Shown Below:

2.18a INCOMING CABLE

TYPE OF POWER AND USE	LEAD DESIG.	DIST. OR HOUSE CABLE TERM. PAIR	INCOMING CABLE		16A K.T.U. TERM.	
			PAIR NO.	"C" INSIDE WIRING CONDUCTOR COLOR		"D" INSIDE WIRING CONDUCTOR COLOR
14-26V DC USED for COMMON BUZZER	BAT	PAIR ASSIGNED for BATTERY	15	G-W	S	7
	GRD			W	BK	3

2.18b RUNNING CABLE

TYPE OF POWER AND USE	LEAD DESIG.	DIST. OR HOUSE CABLE TERM. PAIR	RUNNING CABLE		16A K.T.U. TERM.	
			PAIR NO.	"C" INSIDE WIRING CONDUCTOR COLOR		"D" INSIDE WIRING CONDUCTOR COLOR
14-26V DC USED for COMMON BUZZER	BAT	PAIR ASSIGNED for BATTERY	44	BR	BR-W	7
	GRD			BK	Y	3

Reference: SD-69203-0107, Fig. 24

CONNECTIONS BETWEEN CENTRAL OFFICE OR PRIVATE BRANCH EXCHANGE LINE UNIT (202A) AND COMMON AUDIBLE SIGNAL CONTROL UNIT (211A OR 16A) WHEN SAME TYPE OF POWER AND VOLTAGE IS USED FOR BOTH UNITS

TABLE 2.19

Select the One Subtable Applicable to Installation and Run Straps as Shown Below:

SUB-TABLE	LEAD DESIG.	1st 202A K.T.U. TERM.	K.T.U. USED AS COMMON AUD. SIG. CONTROL UNIT
α	COM RING POWER	36	211A K.T.U. TERM. 11
	COM RING GRD	33	10
b	COM RING POWER	36	16A K.T.U. TERM. 7
	COM RING GRD	33	3

Reference: SD-69203-0107, Fig. 24

SD-69203-0117, Fig. 51

SD-69203-0121, Fig. 55

TABLE 2.20

**KEY OR RUNNING CABLE TO KEY TELEPHONE UNITS FOR
USE WITH ALL 1A1 SYSTEM KEY TELEPHONE SETS EXCEPT
565A SETS**

Connect Key or Running Cable Pairs to Key Telephone Units as Shown Below:

LINE NO. IN SYS.	LEAD DESIG.	KEY OR RUNNING CABLE			202A K.T.U. ★
		PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
			CONDUCTOR COLOR		
1	R T	1	BL W	BL W	1st 202A K.T.U. TERM. 4, 11, or 12 3, 9, or 10
	Al A	2	O W	O W	15 or 16 5, 13, or 14
	L LG	16	G-BR W	BL Y	17, 18, or 28 19, 20, or 29
2	R T	3	G W	G W	2nd 202A K.T.U. TERM. 4, 11, or 12 3, 9, or 10
	Al A	4	BR W	BR W	15 or 16 5, 13, or 14
	L LG	17	G-S W	O Y	17, 18, or 28 19, 20, or 29
3	R T	5	S W	S W	3rd 202A K.T.U. TERM. 4, 11, or 12 3, 9, or 10
	Al A	6	BL-W W	BL R	15 or 16 5, 13, or 14
	L LG	18	BR-W W	G Y	17, 18, or 28 19, 20, or 29
4	R T	7	BL-O W	O R	4th 202A K.T.U. TERM. 4, 11, or 12 3, 9, or 10
	Al A	8	BL-G W	G R	15 or 16 5, 13, or 14
	L LG	19	BR-S W	BR Y	17, 18, or 28 19, 20, or 29
5	R T	9	BL-BR W	BR R	5th 202A K.T.U. TERM. 4, 11, or 12 3, 9, or 10
	Al A	10	BL-S W	S R	15 or 16 5, 13, or 14
	L LG	20	S-W W	S Y	17, 18, or 28 19, 20, or 29

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TABLE 2.20
(Continued)

LINE NO. IN SYS.	LEAD DESIG.	KEY OR RUNNING CABLE			202A K.T.U. ★
		PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
			CONDUCTOR COLOR		
6 ✱	R T	22	O R	O V	6th 202A K.T.U. TERM. 4, 11, or 12 3, 9, or 10
	A1 A	23	G R	G V	15 or 16 5, 13, or 14
	L LG	24	BR R	BR V	17, 18, or 28 19, 20, or 29

Notes: ★ See Section C66.205 for connections to 202B K.T.U.

✱ Running cable only.

Reference: SD-69203-0117, Fig. 51

KEY OR RUNNING CABLE TO KEY TELEPHONE UNITS FOR
USE WITH 565A KEY TELEPHONE SETS ONLY

TABLE 2.21

Connect Key or Running Cable Pairs to Key Telephone Units as Shown Below:

LINE NO. IN SYS.	LEAD DESIG.	KEY OR RUNNING CABLE			202A K.T.U. ★
		PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
			CONDUCTOR COLOR		
1	R T	1	BL W	BL W	1st 202A K.T.U. TERM. 4, 11, or 12 3, 9, or 10
	A1 A	7	BL-O W	O R	15 or 16 5, 13, or 14
	L LG	16	G-BR W	BL Y	17, 18, or 28 19, 20, or 29
2	R T	2	O W	O W	2nd 202A K.T.U. TERM. 4, 11, or 12 3, 9, or 10
	A1 A	8	— BL-G (W)	— G (R)	15 or 16 5, 13, or 14
	L LG	17	G-S W	O Y	17, 18, or 28 19, 20, or 29

(Continued on Next Page)

TABLE 2.21
(Continued)

LINE NO. IN SYS.	LEAD DESIG.	KEY OR RUNNING CABLE			202A K.T.U. ★
		PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
			CONDUCTOR COLOR		
3	R T	3	G W	G W	3rd 202A K.T.U. TERM. 4, 11, or 12 3, 9, or 10
	A1 A	— 8	— W (BL-G)	— R (G)	15 or 16 5, 13, or 14
	L LG	18	BR-W W	G Y	17, 18, or 28 19, 20, or 29
4	R T	4	BR W	BR W	4th 202A K.T.U. TERM. 4, 11, or 12 3, 9, or 10
	A1 A	— 9	— BL-BR (W)	— BR (R)	15 or 16 5, 13, or 14
	L LG	19	BR-S W	BR Y	17, 18, or 28 19, 20, or 29
5	R T	5	S W	S W	5th 202A K.T.U. TERM. 4, 11, or 12 3, 9, or 10
	A1 A	— 9	— W (BL-BR)	— R (BR)	15 or 16 5, 13, or 14
	L LG	20	S-W W	S Y	17, 18, or 28 19, 20, or 29
6	R T	6	BL-W W	BL R	6th 202A K.T.U. TERM. 4, 11, or 12 3, 9, or 10
	A1 A	— 10	— BL-S (W)	— S (R)	15 or 16 5, 13, or 14
	L LG	15	G-W W	S BK	17, 18, or 28 19, 20, or 29

Note: ★ See Section C66.205 for connections to 202B K.T.U.

Reference: SD-69203-0117, Fig. 51

**INCOMING LINES FROM CENTRAL OFFICE OR PRIVATE
BRANCH EXCHANGE**

TABLE 2.22

If Lines from CO or PBX Are Brought in Through Incoming Cable, Use Columns 1, 2, and 3 Below:

If Lines from CO or PBX Are Brought in Through Running Cable, Use Columns 1, 3, and 4 Below:

Make Connections as Shown Below:

COL. 1 LEAD DESIG.	COL. 2 INCOMING CABLE			COL. 3 K.T.U. AND LINE NO. IN SYS.	COL. 4 RUNNING CABLE			
	PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING		PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
		CONDUCTOR COLOR				CONDUCTOR COLOR		
R T	1	BL W	BL W	1	1st 202A K.T.U. TERM. 2 1	46	BL-W BK	BL-W V
R T	2	O W	O W	2	2nd 202A K.T.U. TERM. 2 1	47	BL-O BK	O-W V
R T	3	G W	G W	3	3rd 202A K.T.U. TERM. 2 1	48	BL-G BK	G-W V
R T	4	BR W	BR W	4	4th 202A K.T.U. TERM. 2 1	49	BL-BR BK	BR-W V
R T	5	S W	S W	5	5th 202A K.T.U. TERM. 2 1	50	BL-S BK	S-W V
R T	6	BL-W W	BL R	6	6th 202A K.T.U. TERM. 2 1	51	O-W BK	BL-R W

Reference: SD-69203-0117, Fig. 51

KEY OR RUNNING CABLE TO KEY TELEPHONE UNITS FOR
ALL 1A1 SYSTEM KEY TELEPHONE SETS

Select Subtable for Common Audible Signal Connections as Shown in the Index Immediately Below and Make Necessary Connections:

NO. OF COMMON AUD. SIG. CKT. PROVIDED	TYPE OF CABLE	RINGER LOCATION	TYPE OF K.T.U. USED		
			SEE SUBTABLES a1,a2	16A	211A
1	KEY	IN KEY TEL. SET	CONTINUOUS RINGING a1	INTERRUPTED RINGING b1	c1
		OUTSIDE KEY TEL. SET	a2	b2	c2
	RUNNING	ALL	a1	b2	c2
2	KEY	IN KEY TEL. SET	FIRST AUD. SIG. CONTROL CKT. a1	SECOND AUD. SIG. CONTROL CKT. b1	c1
		OUTSIDE KEY TEL. SET	a2	b2	c2
	RUNNING	ALL	a1	b2	c2

2.23a CONTINUOUS RINGING AND FIRST AUDIBLE SIGNAL CONTROL CIRCUIT

SUBTABLE NO.	LEAD DESIG.	KEY OR RUNNING CABLE			1st 202A K.T.U. TERM.
		PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
			CONDUCTOR COLOR		
a1	R1 B1	12	O-G W	O BK	32* 33
a2	R1 B1	21	BL R	BL V	32* 33

2.23b INTERRUPTED RINGING AND SECOND AUDIBLE SIGNAL CONTROL CIRCUIT

SUBTABLE NO.	LEAD DESIG.	KEY OR RUNNING CABLE			16A K.T.U. TERM.
		PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
			CONDUCTOR COLOR		
b1	R1 B1	12	O-G W	O BK	9 3
b2	R1 B1	21	BL R	BL V	9 3

2.23c INTERRUPTED RINGING AND SECOND AUDIBLE SIGNAL CONTROL CIRCUIT

SUBTABLE NO.	LEAD DESIG.	KEY OR RUNNING CABLE			211A K.T.U. TERM.
		PAIR NO.	"C" INSIDE WIRING	"D" INSIDE WIRING	
			CONDUCTOR COLOR		
c1	R1 B1	12	O-G W	O BK	8 9
c2	R1 B1	21	BL R	BL V	8 9

Note: ★ Loop strap terminal 32 of all 202A K.T.U. to terminal 7 of all 202B K.T.U. associated with this feature.

CONNECTIONS BETWEEN SYSTEM FLASHING AND TIME-OUT UNIT (209A), CENTRAL OFFICE OR PRIVATE BRANCH EXCHANGE LINE UNIT (202A), WINK UNIT (210A), AND AUDIBLE SIGNAL CONTROL UNIT (211A OR 16A) — ADD WINK AND/OR AUDIBLE SIGNAL CONTROL CIRCUIT TO 200A, 200B, AND 200C KEY TELEPHONE UNITS, OR TO EXISTING INSTALLATIONS

Select Subtable for Features Being Added as Shown in the Index Immediately Below:

TYPE OF STRAPPING	FEATURES BEING ADDED		TYPE OF K.T.U. USED FOR AUD. SIG. CONTROL CKT.	CONNECTIONS SHOWN ON SUBTABLE
	WINK	AUD. SIG. CONTROL		
COMMON	✓		—	α
		✓	211A	b
		✓	16A	c
	✓	✓	211A	α and b
		16A	α and c	
INDIVIDUAL LINE			—	NONE REQUIRED
		✓	—	NONE REQUIRED
	✓		—	d
	✓	✓	—	d

2.24α

Remove Straps on 209A and Each 202A K.T.U. Between Terminals as Shown Below:

LEAD DESIG.	K.T.U. USED	
"Z" Wiring	209A K.T.U.	
	TERM. 14	TERM. 15
"Z" Wiring	202A K.T.U.	
	TERM. 26	TERM. 27

Run Straps as Shown Below:

LEAD DESIG.	209A K.T.U. TERM. STRIP "A" TERM.	210A K.T.U. TERM.
W	18	11
S	17	12
F	15	13
TO	14	14
HA	16	16

2.24b

Remove Strap on Each 202A K.T.U. Between Terminals as Shown Below:

LEAD DESIG.	202A K.T.U.	
"S" WIRING	TERM. 39	TERM. 40

Run Straps as Shown Below:

LEAD DESIG.	ALL 202A K.T.U. TERM.	211A K.T.U. TERM.
ST*	39	1
"B" GRD *	40	37

(Continued on Next Page)

TABLE 2.24 (Continued)

2.24c

Remove Strap on Each 202A K.T.U. Between Terminals as Shown Below:

LEAD DESIG.	202A K.T.U. TERM.	TERM.
"S" WIRING	39	40

Run Straps as Shown Below:

LEAD DESIG.	ALL 202A K.T.U. TERM.	16A K.T.U. TERM.
ST*	39	4
"B" GRD ✱	40	1

2.24d

Run Straps as Shown Below:

LINE NO. IN SYS.	LEAD DESIG.	202A K.T.U. TERM.	210A K.T.U. TERM.
1	LW LB "B" BAT "B" GRD	1st 202A K.T.U. TERM.	
		27	1
		26	2
		38	18
2	LW LB	40	20
		2nd 202A K.T.U. TERM.	
		27	3
		26	4
3	LW LB	3rd 202A K.T.U. TERM.	
		27	5
		26	6
		4th 202A K.T.U. TERM.	
4	LW LB	27	7
		26	8
		5th 202A K.T.U. TERM.	
		27	9
5	LW LB	26	10

Notes: ★ Where 202B K.T.U. are also provided, extend ST lead to terminal 36 on 202B K.T.U.

✱ Connect from 211A or 16A K.T.U. to first 202A K.T.U. only.

Reference: SD-69203-0107, Fig. 24
SD-69203-0117, Fig. 51SD-69203-0121, Fig. 55
SD-69203-0122, Fig. 56

SD-69203-0123, Fig. 57