

REPLACING PAGE ADDENDUM

Filing Instructions:

1. REMOVE FROM THE SECTION THE PAGES NUMBERED THE SAME AS THOSE ATTACHED TO THIS PINK SHEET.
2. INSERT THE ATTACHED PAGES INTO THE SECTION IN THEIR PLACE.
3. PLACE THIS PINK SHEET AHEAD OF PAGE 1 OF THE SECTION.

GFELLER LINE CONCENTRATORS

49-9-2, 49-11+1-2, 49-12-2

INITIAL PREPARATION, LINE-UP, AND CUTOVER

1. GENERAL

1.001 This addendum supplements Section 067-201-201, Issue 2. The attached pages must be inserted in the section in place of the correspondingly numbered pages.

1.002 This addendum is issued to revise Test C, Step 12d covering tests of resistors. Test D is revised to add new Steps 17 and 18 showing the release of relays C and AB1, and to re-number existing Steps 17 through 21.

4. METHOD

The following changes apply to Part 4 of the section:

- (a) Test C, Step 12d — revised
- (b) Test D, Steps 17 and 18 — added

Attached:

Page 7 dated October 1962, revised.

Page 8 dated October 1962, reissued.

Page 9 dated October 1962, reissued.

Page 10 dated October, 1962, revised.

STEP	ACTION	VERIFICATION
14	Remove ohmmeter from resistor RI.	
15	Repeat Steps 13 and 14, substituting resistors RII and RIII in turn.	
16	Replace 70- or 80-volt ac supply fuse.	
17	Remove plug from test jacks MC1.	Relays RA and RD release in both units.
18	Replace plug.	Relays RA and RD operate in both units.
19	Remove plug from test jacks MC2.	Relays RB and RE release in both units.
20	Replace plug.	Relays RB and RE operate in both units.
21	Repeat Steps 19 and 20, substituting test jacks MC3.	Same as Steps 19 and 20 except that relays RC and RF release and operate.
22	Check the operate and release requirements of relays RA through RF as specified in the circuit requirement table of Section 067-201-701, using the test arrangement given in the same section.	
23	At remote unit — Repeat Step 22.	

C. Test of Resistors R1, R2, R5, R11, R12, R13, R14, and R18

11	At central office unit — Remove all fuses.	
→ 12d	If units are powered for 48-volt dc operation — With straps wired between the rear and slide terminals of resistors R2, R5, R11, R13 and R18, if provided — Connect an ohmmeter, in turn, to the front and rear terminals of resistors R2, R5, R11, R13 and R18, if provided.	
13d	Adjust slide terminal for each resistor as required.	Ohmmeter should read as follows: R2 — 50 ohms ± 2 ohms R5 — 6 ohms ± .5 ohm R11 — 350 ohms ± 10 ohms R13 — 225 ohms ± 10 ohms R18 — 450 ohms ± 15 ohms

SECTION 067-201-201

STEP	ACTION	VERIFICATION
→ 14e	<p>If units are powered for 72-volt dc operation — With strap removed between the rear and slide terminals of resistor R11 — Connect an ohmmeter, in turn, to resistors R2, R5, R11, R13, and R18, if provided, between the front and rear terminals.</p>	<p>Ohmmeter should read as follows: R2 — 50 ohms \pm 2 ohms R5 — 6 ohms \pm .5 ohm R11 — 700 ohms \pm 20 ohms R13 — 225 ohms \pm 10 ohms R18 — 450 ohms \pm 15 ohms</p>
15d	<p>At the remote unit — If unit is powered for 48-volt dc operation — With strap wired between the rear and slide terminals of resistor R1 — Connect an ohmmeter to the front and rear terminals of resistor R1.</p>	
16d	<p>Adjust slide terminal as required —</p>	<p>Ohmmeter should read 6 ohms \pm .5 ohm.</p>
17e	<p>If unit is powered for 72-volt dc operation — With strap removed between the rear and slide terminals of resistor R1 — Connect an ohmmeter to the front and rear terminals.</p>	<p>Ohmmeter should read 20 ohms \pm 1 ohm.</p>
→ 18	<p>At the central office unit — Manually load all vertical bars (trunks) on bar 50.</p>	
19	<p>Replace all fuses.</p>	<p>Circuit functions to cause vertical bar 1 to be selected and held operated.</p>
20	<p>Remove plug from test jacks MC4.</p>	
21	<p>Connect dc milliammeter to test jacks MC4.</p>	
22	<p>Block operated relays C and AB1.</p>	
→ 23	<p>At the remote unit — Block operated any TN- relay.</p>	
24	<p>At central office unit — Adjust slide of resistor R12 to obtain reading in accordance with Table A.</p>	
25	<p>Momentarily release and then block operated relay C.</p>	<p>Circuit advances to select and hold operated next higher numbered vertical bar. Milliammeter should read in accordance with reading obtained in Step 24 \pm 2 ma.</p>

STEP	ACTION	VERIFICATION
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TABLE A

OUTSIDE TEMPERATURE DEGREES FAHRENHEIT	CURRENT FLOW	
	R-12	R-14
105-114	67 ma	53 ma
95-104	68 ma	54 ma
85-94	69 ma	55 ma
75-84	71 ma	56 ma
65-74	72 ma	57 ma
55-64	74 ma	58 ma
45-54	76 ma	60 ma
35-44	78 ma	61 ma
25-34	80 ma	62 ma
15-24	82 ma	64 ma

26	Repeat Step 25 until all vertical bars have been tested.	Same as Step 25.
27	Remove blocking tools and meter and replace plug in test jacks MC4.	
28	Remove plug from test jacks MC5.	
29	Connect dc milliammeter to test jacks MC5.	
30	Adjust slide of resistor R14 to obtain a reading in accordance with Table A.	
31	Momentarily operate relay F1.	Circuit functions to select and operate next higher numbered vertical bar. Milliammeter should read in accordance with reading obtained in Step 30 \pm 2 ma.
32	Repeat Step 31 until all vertical bars have been tested.	Same as Step 31.
33	Remove meter and replace plug in jacks of MC5.	
34	Remove block from relays C and AB1.	

D. F- and G- Relay Test

11	At the central office unit — Remove plug from test jacks MC4.
12	Connect dc milliammeter to test jacks MC4.
13	Block operated relays C and AB1.

SECTION 067-201-201

STEP	ACTION	VERIFICATION
14	At remote unit.— Hold operated relay TN1.	Milliammeter reads in accordance with R-12, Table A ± 2 ma. At remote unit — Relays F- and G- are operated in accordance with Table B.
15	Release relay TN1.	
16	Repeat Steps 14 and 15, substituting relays TN2 through 49.	Same as Step 14.
→ 17	At central office unit — Remove blocking tools from relays C and AB1.	U and U1 relays release.
→ 18	Block operated relays C and AB1.	
19	Hold operated relay TN1.	Milliammeter reads 70 to 75 ma. Relays F- and G- are operated in accordance with Table B.
20	Release relay TN1.	
21	Repeat Steps 19 and 20, substituting relays TN2 through 49.	Same as Step 19.
22	Remove blocking tools from relays C and AB1.	
23	Remove meter from test jacks MC4 and replace plug.	

TABLE B

TN-	G-	F-	TN-	G-	F-
1	5	1	26	6	4
2	6	1	27	7	4
3	7	1	28	8	5
4	8	2	29	1	5
5	1	2	30	2	5
6	2	2	31	3	5
7	3	2	32	4	5
8	4	2	33	5	5
9	5	2	34	6	5
10	6	2	35	7	5
11	7	2	36	8	6
12	8	3	37	1	6
13	1	3	38	2	6
14	2	3	39	3	6
15	3	3	40	4	6
16	4	3	41	5	6
17	5	3	42	6	6
18	6	3	43	7	6
19	7	3	44	8	7
20	8	4	45	1	7
21	1	4	46	2	7
22	2	4	47	3	7
23	3	4	48	4	7
24	4	4	49	5	7
25	5	4	AK	6	7