

METHODS OF DENYING AND RESTORING SERVICE ON CUSTOMER LINES
NO. 5 CROSSBAR OFFICES

1. GENERAL

1.01 This section describes the methods for denying and restoring service on subscriber lines (individual and party) in No. 5 crossbar offices.

1.02 It is reissued to add a method of denying service to an individual subscriber line associated with AML or UI subscriber carrier.

1.03 These methods may be used:

- (a) To deny service for nonpayment (temporary disconnect), or
- (b) For customer request for vacation rate or emergency reasons.

1.04 Temporary disconnect means temporary discontinuance without termination of the service. It involves either partial or complete service denial by the company for nonpayment of bills. It usually provides the following features for:

- (a) Toll terminals, individual lines (except coin), and PBX trunk lines, outward service is denied, inward service allowed.
- (b) Party lines, inward service is denied, and outward service allowed. (See 2.02.)

1.05 Vacation rate means temporary discontinuance of incoming service to the station. All outgoing service is allowed. Incoming calls are routed to intercept.

1.06 The following apparatus will be needed:

- (a) Handset: Dial hand test set equipped with connecting clips.
- (b) Test receiver: 716C receiver attached to a W2AB cord equipped with two 360A tools (2W21A cord), one KS-6278 connecting clip, and one 411A (test pick) tool.

(c) Testing cord: 893 cord, 3 feet long, equipped with two 360A tools (1W13A cord) and two 624B (terminal connector) tools (used for interconnecting a contact of a reed-type relay and a terminal on a 251-type terminal strip on a No. 1A concentrator).

(d) No. 8 red, impregnated, varnished sleeving per KS-7851 or equivalent, cut into required lengths.

(e) 550B tool.

(f) 136B tool.

1.07 For intercepting connection requirements, refer to Section 002-591-930PT.

2. DENYING SERVICE

2.01 For individual lines, methods for both one-way and 2-way denial are outlined. One-way denials may be made for either outgoing or incoming service as follows:

- (a) Cut off outgoing calls from the subscriber station but allow incoming calls to the station.
- (b) Cut off incoming calls to the station, routing them to intercepting, but allow outgoing calls.

NOTE 1. 2-way denial cuts off the incoming and outgoing service and provides for intercepting incoming calls except for individual lines in terminal hunting groups, which are made busy.

NOTE 2. For individual lines served by a 1A line concentrator, one-way denials are not made for outgoing service. This type of denial would cause trouble in the concentrator.

2.02 For party lines, one-way denial can only be made for incoming service. To deny out-

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going service, a 2-way denial must be made by disconnecting the station loop.

NOTE: If a party line is working alone, denials may be made the same as for an individual line.

2.03 When incoming service only is denied, outgoing service shall continue to be given from the same line link appearance as normally used. The same message register shall continue to be used on message rate service.

2.04 When denying service abide by the following general rules:

- (a) When relay covers must be removed to block or unblock relays, replace them without unnecessary delay.
- (b) Before working on lines, verify equipment assignments to ensure that other customers are not denied service.

(c) Run in and prepare any required new jumpers for connection before disconnecting any of the regular jumpers.

(d) Before opening line connections, monitor to see that the line is not in use.

(e) Jumpers should be disconnected at one end only. The end at which disconnection should be made is specifically designated in the various methods. Clip the bare wire ends even with the insulation, and slip sleeving over the ends of the wires far enough to protect them.

(f) Loop or tie disconnected jumpers through the holes of the terminal strip so they will not interfere with working circuits or regular maintenance operations.

2.05 Determine the type of denial required and proceed as directed in Table A.

TABLE A

TYPE OF LINE	METHODS FOR DENIAL OF SERVICE			
	Outgoing	Incoming	Outgoing and Incoming	1A Concentrator Outgoing and Incoming
Individual lines — flat rate, message rate, manual and coin	A	B	A and B	B and F
Party lines — 2, 4 and multi-party	None	B	B and C	C and B
Terminal Hunting Groups Entire Group — Apply method to all lines in the group	A	B	A and B	B and F
Individual lines in the group	A	D	A and D	D and F
Individual lines associated with AML or U1 Subscriber Carrier	Physical	E	B and E	—
	Derived	A	A and B	—

2.06 Upon completion of any outgoing service denial, use a handset and verify that dial tone is not received on the T and R leads at the VMDF.

2.07 On incoming and 2-way denials, make a line verification test. (See Sections 218-102-501, 218-102-502, 218-400-501, and 218-401-501.)

2.08 When the service has been denied and the proper tests made, report the completion of the work to the Plant service center (PSC).

2.09 The following methods may be used for denying service:

(a) **Method A:** Insert a No. 550B tool between the No. 1- and 2- or 1T- and 2T-contacts of the line link switch hold magnet off-normal springs.

(b) **Method B:** Use one of the following methods to remove the jumpers on the number group frame. Choose on the basis of marker options and cross-connection arrangements used for the desired type of intercept (machine or operator).

(1) Remove the jumpers which connect the F, G, and L punchings to the RF, VHG, and LL punchings.

(2) Remove the jumpers which connect the F and L punchings to the RF and LL punchings.

(3) Remove the jumpers which connect the F and G punchings to the RF and VHG punchings.

(c) **Method C:** Disconnect the station loop from the bridging point nearest the station in accordance with local instructions.

(d) **Method D:** Make the individual lines to be denied incoming service busy by disconnecting the associated S-leads on the number group block at the MDF. Place a piece of red sleeving over each disconnected wire so the bare wire is covered and approximately one-half inch from the end of the sleeving. Press the sleeve down between the terminals.

(e) **Method E:** Block the line relay non-operated with a 136B tool.

(f) **Method F:** If the line to be denied is served through a No. 1A concentrator, first use Method B. Then:

(1) At the concentrator control unit, using an 893 cord, connect terminal A69 on the unit terminal strip to contact 3 on the CO-relay associated with the line to be denied. Insulate break contact of DIS-relay, shown in Table B, associated with the line. Operate and hold operated the T0 or T1 key (T0 for lines 0 to 49, T1 for lines 50 to 99). When the COK lamp lights, restore the T0 or T1 key which will extinguish the COK lamp. Remove test connection from unit terminal strip and insulator from DIS-relay.

(2) If the COK lamp does not light when the T0 or T1 key is operated, the line to be denied though idle may be cut through the concentrator with hold magnets magnetically latched. In this case, it is necessary to establish a "disconnect request" to release the line. This may be done by blocking operated the DPO or DP1 relay (DPO for lines 00 to 49, DP1 for lines 50 to 99). This will release all idle lines in the same group cut through the concentrator. Remove blocking tool from DPO or DP1 relay. Repeat the procedure outlined above.

TABLE B

LINE	DIS-RELAY	CONTACT
00-11	00	1-12
12-23	01	1-12
24-35	02	1-12
36-47	03	1-12
48-49	04	7, 8
50-61	10	1-12
62-73	11	1-12
74-85	12	1-12
86-97	13	1-12
98-99	14	7, 8

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3. METHODS OF RESTORING SERVICE

Temporary Restorals

3.01 Temporary restorals of disconnected lines may be requested for:

- (a) Emergency reasons, or
- (b) A long distance operator attempting to call back a temporarily disconnected or vacation rate station to complete a delayed toll call.

NOTE: During regular working hours all requests for restorals are controlled by the plant service center (PSC).

3.02 If a chief operator or Traffic supervisor requests the temporary restoration of service for the completion of delayed toll calls or for emergency reasons at other than normal working hours, the Plant employee on duty for the office involved shall:

- (a) Complete the restoration.
- (b) Notify the chief operator or supervisor when the work is completed.

NOTE: Proper notification and follow-up shall be made during regular working hours to determine the length of such an emergency.

3.03 Plant may occasionally receive requests from customers who want their service restored because of some emergency such as serious illness, etc. During business hours, refer these requests to the business office. If the business office is closed, refer them to the Plant supervisor on duty.

3.04 Upon receipt of a request to restore outgoing service on a temporary disconnected line for emergency or other reasons:

- (a) Remove temporary jumpers or straps.

NOTE: Lay them back so they can be tied down again when restoral period is over.

- (b) Reconnect original jumpers or straps.

(c) Remove blocking tools where used. Make line verification test (Sections 218-102-501, 218-102-502, 218-400-501, and 218-401-501). Use a handset to verify that dial tone is received on the tip and ring leads at the VMDF. Dial a "no charge" test call.

NOTE: For lines associated with 1A line concentrators see 3.08.

3.05 The PSC shall be notified when the work is completed. The time shall be noted periodically, and if two or more hours have elapsed since the restoration was made, call it to the attention of the PSC. In cases occurring near the end of the working day, the interval shall be shortened to one hour. Every possible effort shall be made to avoid leaving a temporarily disconnected or vacation rate line fully restored over night.

3.06 When the temporary restored period is over, work the denial per Table A. When the work is complete, notify the PSC.

Permanent Restorals

3.07 When restoring service permanently:

- (a) Remove any temporary connections and reconnect all original connections.
- (b) Remove any blocking tools.
- (c) Make line verification test (Sections 218-102-501, 218-102-502, 218-400-501, and 218-401-501). Use a handset to verify that dial tone is received on the tip and ring leads at the VMDF. Dial a "no charge" test call.

3.08 When restoring a line that has been denied 2-way service on a No. 1A concentrator, terminate a call to the customers' line. This is necessary to restore the concentrating equipment associated with the customer's line and allow the customer to receive dial tone. It is not necessary for the customer to answer.

3.09 When the service has been restored, and the proper tests made, report the completion of the work to the PSC.