

BELL SYSTEM PRACTICES  
Central Office Maintenance  
Operating Methods  
Station Operations Manual  
General  
Local Test Room Operations  
Plant Operating Practices  
Plant Assignment  
Subscriber Plant Assignment

SECTION A309.493  
SECTION C16.995.1  
SECTION F26.926.1  
SECTION M25.35.1  
Issue A, 4-15-59-N  
TPT&TCo.

## COIN BOX BURGLAR ALARMS

### 1. GENERAL

1.01 This section covers the use of central office coin box alarm circuits 4G-3521 on prepay coin lines. It tells how to assign and install alarms, keep records, handle trouble reports, and take special precautions to avoid triggering false alarms.

1.02 This circuit has a continuous self-test feature, through a 15000 ohm resistor in the receiver circuit at the coin station - see Fig. 1. If the coin box upper housing is removed, or any open condition occurs on the line, audible and visual central office alarms are set off. The company can then notify the police immediately to investigate for an attempted burglary. For this purpose, the chief special agent will arrange for private line telephones, or the telephone numbers to call, so switchmen can contact the police department promptly.

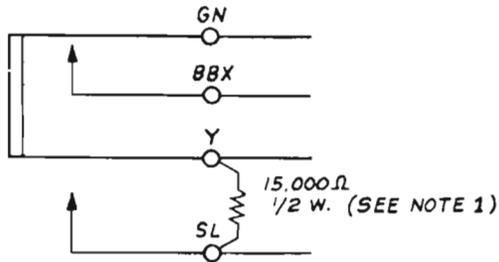
NOTE: Because of the self-test feature of the alarm circuit, coin lines on which they are used shall be given special service line (SSL) protection (See 2.02).

1.03 The chief special agent and commercial decide which offices will be equipped. The number of alarm circuits is determined by commercial, traffic, and the chief special agent. Traffic engineers determine which subscriber line circuits (coin) will be modified to include the coin alarms, and will specify them in the traffic order. These circuits will be used for coin stations at locations susceptible to repeated burglaries. They shall be assigned only on service orders that specify their use. The chief special agent will verify that a circuit is available before the order is issued.

STATION EQUIPMENT  
 PREPAY COIN COLLECTOR MODIFICATION  
 FOR USE WITH C.O. COIN BOX  
 ALARM CKT. 4G-3521

THE PACIFIC TEL. & TEL. CO. - B.F. CAL.		L-4734	
OFFICE OF CHIEF ENGINEER			
DRAWN BY	MGC	APPROVED BY	

FIG. 1



1. CONNECT A 15000Ω 1/2 WATT RADIO TYPE RESISTOR AS SHOWN IN FIG. 1.
2. USE ONLY A 223 OR EQUIVALENT COIN COLLECTOR WHICH REQUIRES A NETWORK TYPE SUBSCRIBER SET. A CUT HANDSET CORD WILL OPERATE THE ALARM ON THE 191 AND 197 TYPE SETS.

FIG. 2  
 SCHEMATIC

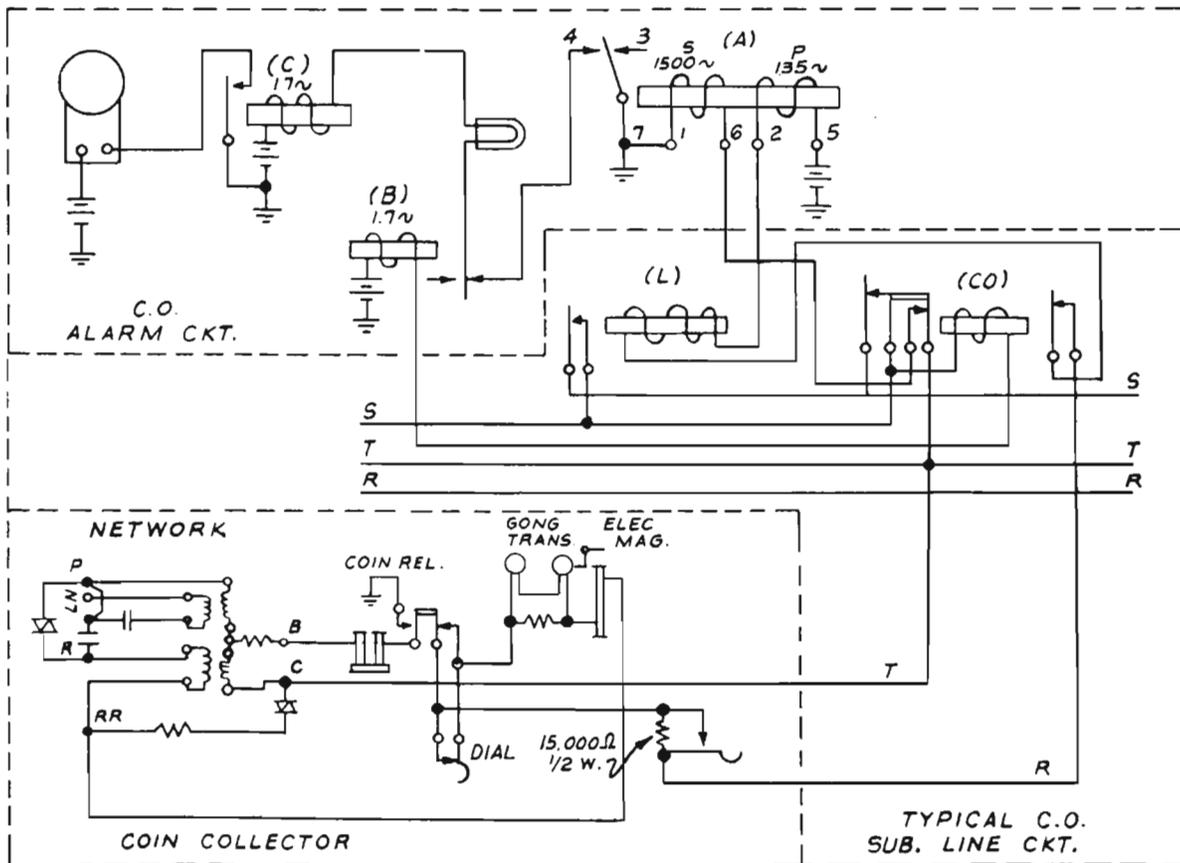


Fig. 1 - Schematic of coin station and line circuit modified for coin box alarm circuit 4G-3521.

**2. ASSIGNMENT RECORD**

2.01 The chief switchman shall notify the chief line assigner when coin line circuits are modified for coin box alarm circuits. Furnish the numbers of the alarm circuits and the associated line circuit equipment numbers. The PSC shall set up an assignment record for these circuits on Form P2026 (BSP M24.56) - Fig. 2 shows an example. However, for loading purposes, traffic will control the assignment of these line circuits, as well as assignments for changes from these circuits to those without alarms (See 3.01).

2.02 In order to assign and mark service orders properly, the following notations are needed on Form P2026 (See Fig. 2)

1. Call Traffic to Assign or Change These Line Circuits.
2. Mark Service Orders to Place (or Remove):
  - (a) SSL Protection (See BSP A, C, F and M Sections)
  - (b) A 15000 ohm Resistor per Chief Engineer's Dwg. L-4734

T.P.T.&T. CO. P2026 (4-52)

**EQUIPMENT RECORD**

TYPE OF EQUIPMENT: OFFICE MA 1 - HE 1

COIN LINE CIRCUITS MODIFIED FOR COIN BOX ALARM CKT 4G-3521

WIRING LIST \_\_\_\_\_ ISSUE \_\_\_\_\_ CIRCUIT DWG. NO. \_\_\_\_\_ ISSUE \_\_\_\_\_

EQUIPT. NO.	FIG	APP	WIRING	CIRCUIT NUMBER AND DESIGNATION	ORDER NO.	EQUIPT. NO.	FIG	APP	WIRING	CIRCUIT NUMBER AND DESIGNATION	ORDER NO.
<u>ALARM CKT</u>											
<u>LINE CKT</u>				<u>CALL TRAFFIC TO ASSIGN OR CHANGE THESE LINE CIRCUITS</u>							
				<u>MARK SERVICE ORDERS TO:</u>							
				<u>1. PLACE (OR REMOVE) SSL PROTECTION</u>							
				<u>2. PLACE (OR REMOVE) 15000 OHM RESISTOR PER CH ENGR DWG. L-4734</u>							
<u>01</u>											
<u>37-260</u>				<u>MA 1 - 9946</u>							
<u>02</u>											
<u>37-261</u>				<u>MA 1 - 9830</u>							
<u>03</u>											
<u>37-262</u>				<u>HE 1 - 9769</u>							
<u>04</u>											
<u>37-263</u>											
<u>05</u>											
<u>37-264</u>											

Fig. 2 - Assignment record of line circuits modified for coin box alarm circuit 4G-3521.

**3. ASSIGNING AND COMPLETING ORDERS**

3.01 Assign coin box alarm circuits only when they are called for on a service order. Commercial will include a RMKS entry on the order specifying that a coin box alarm should be connected. If for any reason a coin box alarm is to be disconnected from a coin station that will remain in service, commercial will issue an order to authorize it. And the PSC will call traffic for the new line circuit assignment.

3.02 In assigning these circuits, show the line equipment on the order in the regular manner. Directly below it enter "CB ALARM CKT 01" (or 02, etc.). Mark the order for the installer to place (or remove) a 15000 ohm resistor in the receiver circuit per chief engineer's drawing L-4734. Fig. 3 shows an example.

LINE	FEED-PP	BNO-C	DIST-PR	BNO-F	P-C-BILL	J-TILE	SW-VER	...
1073	14			0A	60	3-2		
* CB ALARM CKT 02								
* SSL - SEE P2201 ATTACHED								
PLACE 15000.OH RES PER CHENG DWG L-4734								

Fig. 3 - Showing coin box alarm circuit on service order.

3.03 Also mark service orders, and cable and line transfers, to show that SSL protection applies. Follow the procedures specified in other A, C, F and M sections to place or remove protection, and post PSC records. However, since SSL protection is given on these lines only because the alarm circuit requires it, we should remove it if the coin box alarm is discontinued from the station. So, tie the SSL notation to the alarm circuit by asterisks (See Fig. 3) instead of to the telephone number, as you would normally do.

3.04 After assigning an order that will use or release a coin box alarm circuit send the LI copy (SP copy for disconnect orders) to the chief special agent

(San Francisco). He will maintain a file of these services. When the order is completed (or cancelled) the PSC will notify the chief special agent by telephone. He will correct his file and notify the local police department about new and disconnected alarms.

3.05 Installers shall notify the PSC before starting work on an order or line transfer that shows a coin box alarm circuit. This includes disconnect orders. The order desk clerk, or deskman, shall ask a switchman to block the relay for the alarm circuit involved while the installer does his work. When field work is done and the deskman completes his station tests, he shall have the switchman unblock the alarm relay. Then have the installer remove and replace the upper housing so the switchman can verify that the alarm rings in.

3.06 In completing an order that calls for connecting a coin box alarm, the installer shall use the type of coin collector specified on chief engineer's drawing L-4734 and install a 15000 ohm resistor as indicated (See Fig. 1).

NOTE: Order the set on Form P2255 in the regular way (See C16.902-F14.511.1-M25.05.1). Purchase the resistor at a local radio supply store. The Western Electric Company will not stock the resistors because of the limited use and low cost.

3.07 In completing an order to discontinue a coin alarm, or to disconnect a coin box that has one, the installer shall remove the 15000 ohm resistor from the set.

3.08 The PSC shall post the subscriber line card to show the coin box alarm numbers and the resistor. Use the MISC or other available space.

NOTE: Deskmen will read the 15000<sup>W</sup> loop in testing the station with the receiver on the hook.

**4. REPORTING COIN BOX ALARMS**

4.01 The central office force shall report the alarms immediately as follows,

so the police or repairmen can be dispatched promptly to prevent or investigate attempted burglaries:

(a) From 5:00 PM to 8:00 AM report alarms to the police department. Use the private line telephone or other calling arrangement provided for this purpose. Keep the report brief, like this - "We have a burglar alarm for the coin telephone at (address, name of premises, and if necessary, the specific location and telephone number)."

(b) Report all alarms, day and night, to the PSC. See also 4.04 (b). Call the test desk during the hours it is covered, and call repair service when the test desk is not covered. Give the alarm number, address, and telephone number involved.

4.02 To avoid delays in reporting the alarms, the chief switchman shall maintain a list of the alarm circuits at the equipment bay showing the addresses and telephone numbers of the circuits in use. Keep it up-to-date from completed orders - and check it frequently with the plant assignment record. Also, post instructions at the alarm bay telling switchmen what to do about alarms.

4.03 The chief switchman shall keep a log record of alarms showing the time they are received, and the time reported to the police, or to the PSC.

4.04 When a coin box alarm comes in, take the following action:

(a) By switchman:

1. Give report to police - see 4.01 (a).
2. Retire alarm by blocking alarm relay.
3. Give report to deskman or repair service - see 4.01 (b).
4. Post the alarm log record - see 4.03.
5. Unblock the alarm relay when the deskman asks you to do so.

(b) By deskman:

1. Fill out trouble ticket and obtain line card.
2. Dispatch to the next repairman - except where information readily available to the deskman indicates authorized field work being done for which the alarm relay was not ordered blocked.
3. If alarm was caused by burglary, or attempted burglary, follow the instructions in Section C16.995-F26.926 covering Coin Box Robbery. If burglary wasn't the cause, follow normal trouble handling.
4. Notify switchman to unblock alarm relay after the station is restored to service and tests are completed. Then have repairman remove and replace the upper housing so the switchman can verify that the alarm rings in.

## 5. NOTIFYING COLLECTORS AND OTHER EMPLOYEES ABOUT ALARMS

5.01 Other employees, in addition to those working on service orders and repairs, do work that may require them to open a coin box or a coin line that has an alarm. Among these are repairmen, linemen, splicers, collectors, and booth maintenance men. These employees should be warned that:

1. Any open condition will bring in the alarm unless the alarm relay is blocked.
2. Policemen or repairmen must be dispatched to investigate the alarms that ring in.
3. Before doing any work that may cause an open, they shall call the deskman (switchman between 5:00 PM and 8:00 AM) to have the alarm relay blocked. The employee must identify himself and explain to the satisfaction of the deskman that his work requires the relay to be blocked. And he shall call again when his work is done to have the relay unblocked.

SECTION A309.493  
SECTION C16.995.1  
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SECTION M25.35.1

5.02 In order to prevent false alarms,  
PSC employees shall:

(a) Ask a switchman to block the alarm relay, when a repairman is dispatched to clear trouble on a coin line equipped with an alarm. After the trouble is cleared, have the relay unblocked. Then ask the repairman to remove and replace the upper housing while the switchman verifies that the alarm rings in.

(b) Mark cable transfers, aerial wire work orders, plant work orders, booth inspection forms, and other work

papers that affect lines with coin box alarms to show:

1. The coin box alarm number.

2. SSL treatment, with a notation to call the deskman before starting the work and after completing it. The deskman will have the alarm relay blocked, and unblocked.

(c) Give verbal notice regarding the alarm when calling for a full-box collection, or any other work not covered by work papers.