

KEY DISPLAY CALL INDICATOR POSITIONS

1. **Trunk signal lights on an idle trunk.** Operate the associated display key momentarily.
2. **Order properly displayed and trunk signal flashing.** Read the order and proceed with the call. If, however, calls are waiting, after you have read the order, operate the display key on the next call to be taken and then establish connection on the first call.
3. **Trunk signal does not flash after display key has been operated.**
 - a. If a number is displayed, proceed with the call. Notify your supervisor.
SUPERVISOR: Report the trouble.
 - b. If no number is displayed, notify your supervisor.
SUPERVISOR:
 - (1) **Panel or Crossbar Equipment.** Try to obtain the order from the calling party.
 - (a) If he gives a number without reporting a cut-off, tell the operator to establish connection.
 - (b) If he reports a cut-off, proceed as for a trunk disconnected in error.
 - (c) If you are not able to talk with the calling party and the trunk signal still lights when the trunk plug is disconnected from your line, report the trouble.
 - (2) **Step-by-Step Equipment.** As you will not be able to talk on the trunk, tell the operator to disregard the signal. Then watch for a repetition of the occurrence as in "4e, Sr. (2)."
4. **No display or incomplete display, trunk signal flashes after display key has been operated.** Do not operate another display key while an incomplete display remains on your call indicator.
 - a. Position Equipped with a Nonlocking Listening Key. Operate the listening key, hold it operated, and try to obtain the order.
 - (1) If you receive an order, restore the listening key and proceed with the call. On an incoming "B" trunk, however, if the call is for a jack per line party line, operate the proper ringing key before restoring the listening key.
 - (2) If you do not receive an order, restore the listening key and if the trunk signal is then lighted, operate the display key. If a correct number is not displayed, notify your supervisor.
SUPERVISOR: Cover the lamp with lamp shields. Watch the position closely to determine if the trunk signal goes out and at frequent intervals operate the display key to catch any new call which may be connected to the trunk. If the trouble does not clear in about five minutes, report the trouble.
 - b. Position Equipped with a Locking Listening Key. Operate the listening key and try to obtain the order.
 - (1) If you receive an order, proceed with the call. On an incoming "B" trunk, however, if the call is for a jack per line party line, operate the proper ringing key.
 - (2) If you do not receive an order, plug the trunk in and out of a supervisor's jack or a holding jack, as locally directed, and if the trunk signal is then lighted, operate the display key. If a correct number is not displayed, notify your supervisor.
SUPERVISOR: See "a(2), Sr."

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4. Continued

c. Position Equipped with a Listening Jack. Plug the trunk into the listening jack and obtain the order.

- (1) If the call is for an individual line, a jack per station party line, or the first station on a jack per line party line, establish connection.
- (2) If the call is for a station on a jack per line party line other than the first station, say, "There's trouble on this connection. Will you make your call again, please?" Then disconnect from the listening jack.

d. Position not Equipped for Cutting in on a Trunk. Refer the case to your supervisor.

SUPERVISOR: See "e, Sr. (1)(b) or (2)(b)."

e. If the condition occurs on a second call, notify your supervisor.

SUPERVISOR:

(1) **Panel or Crossbar Equipment.**

(a) If the position is equipped with a listening key, observe the position closely. If trouble of the same nature does not occur on other trunks, report the trunk. If trouble of the same nature occurs on other trunks, arrange for emergency operation and report the trouble.

(b) If the position is not equipped with a listening key, obtain the order from the calling party.

- [1] Incoming "B" Trunk. If the call is for an individual line or a jack per station party line, tell the operator to establish connection. If the call is for a jack per line party line, explain to the calling party that there is some trouble on his connection and ask him to make his call again.

After disposing of the call, try to locate the trouble as in "(a)."

- [2] Incoming Tandem Trunk. Tell the operator to establish connection and then try to locate the trouble as in "(a)."

(2) **Step-by-Step Equipment.**

(a) If the position is equipped with a listening jack, observe the position closely. If trouble of the same nature does not occur on other trunks, report the trunk. If trouble of the same nature occurs only on occasional calls received over other trunks, determine which recorder on the position is out of order and report it.

If trouble of the same nature occurs on all calls, report the trouble. If calls received at the position affected can not be disposed of by the operators occupying the adjacent positions, make busy all idle trunks terminating on the position. Then dispose of any calls which may be waiting on the position and which can not be handled from adjacent positions, obtaining the order on each call by means of the listening jack and establishing connection.

(b) If the position is not equipped with a listening jack, obtain the order from the calling party. If the call is for an individual line, a jack per station party line, or the first station on a jack per line party line, tell the operator to establish connection. If the call is for a station on a jack per line party line other than the first station, explain to the calling party that there is some trouble on his connection and ask him to make his call again.

After disposing of the call, try to locate the trouble as in "(a)." If it becomes necessary to make the trunks busy, dispose of any waiting calls. Operate the home display key in turn on each waiting call, connect the trunk with your line, obtain the order from the calling party, and dispose of the call as in the preceding paragraph.

5. Display does not disappear when it should.

a. "B" Position.

- (1) If you have not operated another display key, remove and reinsert the plug in the called line. If the display remains, operate the display key on a new call as soon as one appears.

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5. Continued

- (a) If the display is replaced by a new one, proceed with your work but report the occurrence to your supervisor.

SUPERVISOR: Watch the position closely. If the trouble does not recur on other trunks report the trunk. If it occurs on the next call proceed as follows.

Panel or Crossbar Equipment. Arrange for emergency operation.

Step-by-Step Equipment. Proceed as for recurring trouble in "4e, Sr. (2)."

- (b) If the display remains, notify your supervisor.

SUPERVISOR:

[1] If the display disappeared when the trunk was connected with your line, obtain the order from the calling party and tell the operator to establish connection. Report the trouble.

[2] If the display did not disappear when the trunk was connected with your line, proceed as follows.

Panel or Crossbar Equipment. Try to clear the call indicator by momentarily operating the emergency key on the position. If the display then disappears, tell the operator to establish connection. If the display still does not disappear, explain to the calling party that there is some trouble on the connection and ask him to make his call again. Arrange for emergency operation and report the trouble.

Step-by-Step Equipment. Explain to the calling party that there is some trouble on the connection and ask him to make his call again. Report the trouble, specifying any recorders on which the signals are lighted or flashing, and proceed as for a recurring trouble in "4e, Sr. (2)."

- (2) If you have operated another display key, establish connection on the call corresponding to the display.

- (a) If the display then disappears, proceed with your work but do not overlap calls until the trouble has been cleared. Report the trouble to your supervisor.

SUPERVISOR: Report the trunk. When the trouble has been cleared, tell the operator she may resume overlapping.

- (b) If the display remains, notify your supervisor.

SUPERVISOR: See "(1)(b), Sr."

- b. Tandem Position. If the display did not go out when you operated a second display key or plugged into the trunk, proceed with the call involved.

(1) If the display remains after you operate the release key, operate the release key again. If the display still remains, operate the display key on a new call as soon as one appears if you have not previously done so, and proceed as in "a(1)(a) or (b)."

(2) If the display goes out when you operate the release key, continue to handle calls as in "a(2)(a)."

6. Excessive display.

- a. **Panel or Crossbar Equipment.** If two or more digits are displayed in a block, as for example, in the hundreds block, or two or more letters are displayed in the letters block, notify your supervisor.

SUPERVISOR: If two digits are displayed in the same block, obtain the order from the calling party and tell the operator to establish connection. If two letters are displayed, explain to the calling party that there is trouble on the connection and ask him to make his call again. In either case, watch the position for a recurrence of the trouble as in "4e, Sr. (1)."

- b. **Step-by-Step Equipment.**

(1) Position Equipped with a Listening Jack.

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6. Continued

- (a) If two or more digits are displayed in a block, as for example, in the hundreds block, plug the trunk into a listening jack and obtain the order. When you obtain it, cut out, establish connection, and notify your supervisor.

SUPERVISOR: Watch for a recurrence of the trouble as in "4e, Sr. (2) (a)."

- (b) If two or more letters are displayed, plug the trunk into a listening jack and say, "There's trouble on your connection. Will you make your call again, please?" Then cut out and notify your supervisor.

SUPERVISOR: Watch for a recurrence of the trouble as in "4e, Sr. (2)(a)."

- (2) Position not Equipped with a Listening Jack. Refer the case to your supervisor.

SUPERVISOR: Obtain the order from the calling party and tell the operator to establish connection. Then watch for a recurrence of the trouble as in "4e, Sr. (2)(b)."

- 7. Four zeros displayed.** If zeros appear in the thousands, hundreds, tens, and units blocks, regardless of what else may be displayed, connect the trunk with the test jack or proceed as locally directed. If, however, the test jack is busy, connect the trunk with a busy back jack.

8. Order forgotten and you are not in on the trunk.

- a. Position Equipped with a Listening Jack. Plug the trunk into the listening jack and obtain the order.

- b. Position not Equipped with a Listening Jack. Connect the trunk with your supervisor.

SUPERVISOR: Obtain the order from the calling party and tell the operator to establish connection.

9. Signal received on an established connection.

- a. When only the disconnect signal lights, disconnect the trunk.

- b. If both the trunk and disconnect signals light, disconnect the trunk and proceed as on a new call.

- c. If only the trunk signal lights, disconnect the trunk, operate the display key, and refer the case to your supervisor.

SUPERVISOR: Explain to the calling party that there is some trouble on the connection and ask him to make his call again. Then report the trouble.

10. Trunk signal alone lights on a trunk when you disconnect it. (Panel or crossbar equipment)
Immediately operate the display key.

- a. If a number is displayed, proceed as on a new call.

- b. If a number is not displayed, proceed as for a trunk disconnected in error.

11. Disconnect signal lights on a trunk which is not up. (Step-by-step equipment)

- a. If you have operated another display key before establishing connection on the first trunk, connect the trunk with the called number.

- b. If you have disconnected the trunk in error, proceed accordingly.

- c. Under any other conditions, operate the display key and proceed as follows.

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KEY DISPLAY CALL INDICATOR POSITIONS—Continued

11. Continued

- (1) Position Equipped with a Listening Jack. Plug the trunk into the listening jack and obtain the order. When you have obtained the order establish connection. On a call for a jack per line party line, however, disconnect from the listening jack, operate the display key, then the proper master ringing key, and then establish connection.
- (2) Position not Equipped with a Listening Jack. Refer the case to your supervisor.
SUPERVISOR: Obtain the order from the calling party and tell the operator to establish the connection. On a call for a jack per line party line, tell the operator to disconnect from your line, and in sequence to operate the display key, the proper master ringing key, and then to establish connection.

12. Display key operated in error. If you have operated a team display key on your position or a home display key on an adjacent position on a waiting call, pass the trunk cord to the operator on whose call indicator you have caused the order to be displayed. This will assist her in associating the trunk with the number displayed in error on her call indicator.

13. Teamwork.

- a. When assisting an operator at an adjacent key display position, operate the team display key on a waiting call on the adjacent position and proceed as for a call on your own position.
- b. When assisting an operator at an adjacent jack listening position, plug the trunk on which a call is waiting on the jack listening position into a listening jack on your own position and test the called line with a trunk from your own position.

14. Emergency operation. (Panel or crossbar equipment)

SUPERVISOR:

- a. If an emergency call indicator is available and another emergency call indicator is not in use within the same division of eight call indicator positions, connect the emergency call indicator to the position in trouble, proceeding as follows.
Remove the apparatus blank from the emergency call indicator jack.
Adjust the emergency call indicator by inserting the large contact spring attached to the emergency call indicator into the call indicator jack and pressing the call indicator firmly into place.
Operate the emergency call indicator key.
After installing the emergency call indicator, tell the operator to resume operating. Watch the position closely and if further trouble is experienced, discontinue the use of the emergency call indicator and proceed as in "b," or if the position is grouped and appears overloaded, arrange to regroup.
- b. If no emergency call indicator is available or if an emergency call indicator is in use at another position within the same division of eight call indicator positions, make busy all idle trunks terminating on the position. Then dispose of any calls which may be waiting on the position and which can not be handled from adjacent positions, as follows.
 - (1) If the position is equipped with a listening key and the trouble is a no display or an incomplete display, have the operator obtain the order on each waiting call and establish connection, operating the proper ringing key on a call to a jack per line party line, if necessary.
 - (2) In all other cases have the operator operate the home display key in turn on each waiting call and connect the trunk with your line. Then proceed as in "4e, Sr. (1)(b).
- c. To remove an emergency call indicator, restore the emergency key while no display key on the position is being operated and while no number is displayed on the emergency call indicator.

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14. Continued

Tell the operator to use the regular call indicator. Then disconnect the emergency call indicator and replace the apparatus blank over the emergency call indicator jack.

Note: During a light traffic period of each day, place each emergency call indicator in service for one hour, rotating from day to day in regular order over the positions which it serves. If any trouble is discovered during this daily routine test period, report it.

15. Use of make busy keys.

SUPERVISOR:

- a. To divert calls from the trunks in a specific group or subgroup terminating on a certain call indicator position, operate the proper make busy key located at this call indicator position.
- b. See that calls that are waiting in the trunk group that has just been made busy receive prompt attention. If no trouble interferes with the accurate display of numbers on the position on which these calls are waiting, these calls can be disposed of at that position. If trouble interferes with the accurate display of numbers on the position, proceed in accordance with the nature of the trouble.
- c. Notify the operator when any trunks on her position have been made busy.
- d. To divert all incoming calls to the night call indicator positions, operate all make busy keys on all call indicator positions other than the night call indicator positions.
- e. After operating a make busy key and as soon as all connections have been taken down which were established in the group when the make busy key was operated or which were established after the make busy key was operated, restore the key for a few seconds and then return it to the operated position. This is necessary in order to release certain apparatus which would otherwise be held up indefinitely.
- f. To release for service call indicator trunks which have been made busy by operating a make busy key, restore the key.

16. Recorder signals. (Step-by-step equipment)

SUPERVISOR: Closely observe the recorder signals associated with each call indicator position since these signals indicate calls on which connection has not been established.

- a. If several recorder signals are lighted or flashing simultaneously on a position, supervise the work on that position to assure yourself that calls are being properly received and displayed, and also that the operating on that position and the teamwork between that position and adjacent positions is being performed in a satisfactory manner.
- b. If a recorder signal remains dimly lighted continuously during a period of more than twenty seconds, assure yourself that calls are receiving prompt attention at that position. Then if the recorder signal still remains dimly lighted, operate the key associated with this recorder signal, thus causing the trunk signal on the trunk used to light, and hold the key operated until the operator has operated the display key on the trunk. Then proceed as follows.
 - (1) If a complete number is displayed, tell the operator to establish connection with the number displayed. Immediately report the trouble. As soon as the trunk becomes free, tell the operator to operate the associated home display key at frequent intervals during the next few minutes so that subsequent calls received over that trunk may be properly disposed of before the trunk can be made busy.
 - (2) If an incomplete number is displayed or there is no display, connect the trunk with your line and obtain the order as in "4e, Sr. (2)(b)." If, however, you find no one on the line, or where trouble of the same nature has been noted on previous calls on the same trunk or on the same recorder, immediately report the trouble.

KEY DISPLAY CALL INDICATOR POSITIONS—Continued

16. Continued

If trouble is experienced on several recorders and you are unable to cause numbers to be displayed on the call indicator, consider the position as out of order and proceed as for a recurring trouble in "4e, Sr. (2)."

17. Relay interrupter circuit signal not flashing. (Step-by-step equipment)

SUPERVISOR: Operate the key associated with the signal once only. This will connect the emergency interrupter circuit and will cause the signal to flash brightly instead of dimly.

18. Caution against flashing back.

SUPERVISOR: Do not flash back on a call received over a call indicator trunk unless you know that an operator handled the call in the calling office, but give any necessary directions to the calling party on the assumption that no "A" operator is accessible on the connection.