

THE COIN STATION TOTALIZER— A TROUBLE INDICATOR

1. GENERAL

1.01 The single slot coin first station is critical to sequential testing. Tests performed out of sequence can leave the coin station in an off normal condition and the next customer will experience an out of service condition.

1.02 The totalizer, described in detail in Chapter 1-1, is a primary component in the coin telephone set for indicating troubles from the test desk.

1.03 The “A” series coin station is polar and operation of the RCCI and T keys should **home** the totalizer. A reversal of tip and ring on the line to the coin station will result in a failure to **home** the totalizer. The totalizer on “C” series coin station will restore to the **home** position when applying -48 volts to either tip or ring side of the line when initial rate or greater has been deposited.

1.04 Refer to Fig. 1 for “homing” the totalizer.

1.05 The conditions caused by a totalizer left **off-normal** in a coin first station may result in a trouble report. (No dial tone, can't break dial tone, or can't be called.) The first attempt to originate a call after the totalizer is left off-normal may result in not receiving dial tone (“C” series station) or not being able to break dial tone (“A” series station). A customer will not be aware that even though the attempt to originate a call was unsuccessful, the action taken cleared the trouble condition. This could result in a trouble report which will test clear.

Note: The state of the totalizer can be determined in most cases from the test desk with no one at the station by following standard test sequence.

1.06 Observing the state of the totalizer can afford valuable trouble locating information. It can generally isolate the trouble to the CO equipment, station or loop plant. It can be used to great advantage by the CO switchperson to detect the exact piece of CO equipment causing a trouble condition and also indicate to the switchperson what the cause is.

1.07 Observations can be made by the repairperson as follows.

(a) Totalizer off normal-in fraud:

(1) Observation:

- Totalizer off normal
- Rate latch down
- Fraud latch set.

(2) Cause:

- This condition is generally caused by the failure of the CO equipment to apply a 48-volt battery on the loop prior to applying coin control (100- to 130-volt) battery, or customers depositing coins during any coin action.

(3) Verification test from RSB:

- Tester will observe a short circuit.
- Operate T and RCCI keys and monitor the oscillator tones of totalizer
- Tones stop indicating totalizer has reached **home** position
- Test for short circuit. Short circuit is removed. If short circuit is not removed,

operate REV key and listen for coin tone.
Recheck for short circuit.

- Release test circuit
- Station now back in service.

(b) Totalizer off normal—not in fraud:

(1) Observation:

- Totalizer off normal beyond 10 degrees
- Rate latch up
- Fraud latch normal.

(2) Cause:

- Long loop
- This condition is generally caused by an open both sides or ring side open. A reversal will also cause this condition with an “A” series coin station.

(3) Verification test from RSB:

- Tester will observe ground on both sides
- Operate T and RCCI keys and monitor the oscillator tones of totalizer
- Tone stops
- Tester will now observe ground tip side
- Operate CC key and release
- Tester will now observe O.K. circuit
- Release test circuit
- Station now back in service.

Note: On an “A” series coin telephone set, if totalizer fails to home when operating RCCI and T key, operate the REV key as well. If oscillator tone is heard and stops, it is an indication that the station loop is reversed.

Fig. 1
TOTALIZER HOMING

