

BELL SYSTEM PRACTICES
Station Installation and Maintenance

SECTION C64.258
Issue 1, October, 1953
AT&T Co Provisional

COIN COLLECTORS

MULTISLOT TYPES

TESTS ON ROUTINE MAINTENANCE VISITS

1. GENERAL

1.01 This section covers procedures for routine maintenance visits. Scheduling of such visits are covered by local instructions based largely on trouble experience. Steps for the testing procedures are numbered and shall be followed in numerical sequence.

1.02 This section replaces, in part, Sections C64.223, C64.224, C64.225, C64.226, and C64.227.

1.03 For detailed information on "Maintenance" refer to Section C42.144, paragraph numbers of which are shown in parentheses in this section.

2. GENERAL TESTS

2.01 Remove loose dust, upper housing in place (3.01 to 3.03).

2.02 **Dial Speed:** Test before removing chute (4.11, 4.12). Make adjustments or replace defective dials after chute is removed.

2.03 **Upper Housing:** Brush out, chute removed (4.03).

2.04 **Coin Gauge:** Clean with petroleum spirits on pipe cleaner (3.04).

2.05 **Lower Housing and Backplate:** Brush out, relay cover on.

2.06 **Relay:** Remove magnetic particles (5.14b).

2.07 **Coin Return:** Nylon brush and petroleum spirits (3.07, 3.08).

2.08 **Clean instruments and exterior,** moist Dextilose paper (3.03).

- 2.09 **Varistor:** 37A varistor present. Finish around lead-out terminal intact. If not, replace varistor (5.16).
- 2.10 **Cording:** Terminals, cord tips.
- 2.11 **Level Coins** (5.01): Report for collection as required.
- 2.12 **Trap and Vane Release** (5.02, 5.03): 147A gauge and tongue depressor (657A tool). Both sides of relay. If mechanism does not restore, clear:
 - (a) Vane binding on bearings or on hopper wall.
 - (b) Trap catching on vane or roller.
 - (c) Fork binding on vane stem. Replace trap, relay, or coin collector as required.
- 2.13 **Bias Margin** (5.04, 5.05): 146A gauge. Both sides of relay. Trip trigger, operate electrically, trigger shall restore. If no relay operation or trigger restoral:
 - (a) Remove magnetic particles (5.14b).
 - (b) Replace relay or coin collector if required.
- 2.14 **Ground Spring Contact Pressure** (5.06, 5.07): 147A gauge, 5-gram slot, contacts closed. Minimum 5 grams.
 - (a) Burnish contacts or replace relay.
- 2.15 **Ground Spring Contact Continuity** (5.08, 5.09): Replace relay if clicks are heard on operate stroke.
- 2.16 **Coin Chute:** Replace (4.05).
 - (a) Turn down mounting screws to seat.
 - (b) Check alignment (4.06). Replace chute or coin collector.
 - (c) Condenser leads upward. Replace if leaking (4.05).
- 2.17 **Signal Gongs** (4.07, 4.08, 4.09)
 - (a) Replace quarter gong with chamfered hub type if jamming is suspected or if locally instructed.
 - (b) Check signals. Reset gongs or replace housing.
- 2.18 **Switchhook Operation** (5.18 to 5.21)
 - (a) Move freely on bearings.
 - (b) Comes to positive stops, up and down.
 - (c) No interference with upper housing.
- 2.19 **Switchhook Contact Springs** (5.17)
 - (a) Make, break, sequence. Burnish open contacts.
 - (b) Pile-up tightness, alignment.
 - (c) Follow, separation. Springs clear, not contacting parts.

2.20 Gate Operation (5.22 to 5.24)

- (a) Minimum 1/16 in. downward travel of switchhook before arm touches roller.
- (b) Minimum 3/16 in. downward travel after coin is released from latch.
- (c) Minimum 1/4 in. downward travel after arm touches roller. Adjust arm, replace switchhook (wood connecting block type only), or replace coin collector.

2.21 Housing Crossed with Station Wiring (Ungrounded Coin Collector) (6.03, 6.04): Temporary wire through coin return to ground, replace upper housing, switchhook down and switchhook up. If clicks are heard in hand test set:

- (a) Correct defects in station wiring.
- (b) Replace coin collector.

2.22 Ground or Power on Booth Lining (Underground Booths) (6.05, 6.06): Upper housing off. Clip onto battery side of line. Touch lining.

- (a) If click is heard, booth is grounded. BX or local wiring may be touching lining.
- (b) If loud 60-cycle hum is heard, booth is crossed with power. Defective BX or light switch.

2.23 Station Visit Inspection: C61.701

2.24 Other Station Tests (6.08, 6.09)

- (a) Noise or cutouts, move upper housing and transmitter (receiver-transmitter type).
- (b) Clean or adjust housing contact springs and equalizing spring.
- (c) Replace noisy cords.

2.25 Coin Chute Operation and Refund (6.01, 6.02): Upper housing in place.

- (a) Coin channels clear.
- (b) Operation of latches (10¢).
- (c) Operation of relay and hopper.

2.26 Coin Signals (6.07): If operator does not identify signals correctly, replace upper housing or coin collector.

3. ADDITIONAL TESTS

3.01 Dial Shorting (7.02 to 7.05)

- (a) Ground spring contact separation minimum 0.010 in., force minimum 3 grams.

- (b) Dial shorting contact shall shunt dial. If not, replace relay.
- 3.02 **Long Loop** (8.02).
 - (a) Check S36 relay operation.
 - (b) Adjust relay or replace subscriber set.
- 3.03 **Dial Postpayment (CDO)** (11.02 to 11.10)
 - (a) **Mechanical:** Shall have 31A varistor, trap to be of proper type. Trap shall operate freely. If not, replace coin collector.
 - (b) **Operation:** Shall complete circuit when trap is operated manually. If not, burnish contacts or replace coin collector. Check varistor, resistance, line reversal, or line and central office circuits.
 - (c) **Varistor:** Shall reduce clicks due to trap operation on calls to operator. If not, replace varistor.
 - (d) **Cross with Wiring:** Omit unless station ground is available or cross is suspected.
 - (e) **Coin Chute Operation and Refund:** Use 529A tool.
 - (1) Coin channels clear.
 - (2) Operation of latches (10¢).
 - (3) Electromagnet arm shall move into channel on operator calls (10¢).
 - (f) **Coin Signals:** Use 529A tool.
- 3.04 **Manual Postpayment (5¢)** (12.02 to 12.04)
 - (a) Replace coin collector if coin sticks in hopper without clear-out holes.
 - (b) **Cross with Wiring:** Standard test.
 - (c) **Coin Signals:** Use 529A tool.