# PREPAYMENT COIN COLLECTORS 191-TYPE

## TESTS AND ADJUSTMENTS

### 1. GENERAL

1.01 This section provides maintenance procedures for 191-type coin collectors equipped with stainless steel coin chutes which are equipped with cut-over clips P-339881 (latest style 3/8" wide).

1.02 It is intended to be used in conjunction with Section C64.223 and Section C42.129.

1.03 The procedures and requirements in this section replace Paragraphs 3.04, 3.05 and 3.06 and supplement Paragraph 7.01 of Section C42.129 for 191-type coin collectors.

### 2. TESTS

2.01 With the upper housing locked in placed on the coin collector and with hand set on switchhook, deposit a nickel. The coin should drop into the "Coin Return". Repeat test five times and nickel shall be returned each time.

2.02 With upper housing locked in place on the coin collector and with hand set off switchhook, deposit nickel. Dial tone should be heard in receiver at dial stations or operator should answer at manual stations.

2.03 At dial stations, if dial tone **is heard,** hang up hand set. Coin should drop into "Coin Return" on hang-up. At manual stations, if operator answers, request that coin be refunded.

2.04 With upper housing locked in place on the coin collector and with hand set on switchhook, deposit quarter. Quarter should stop in chute (stopped by open gate) and no gong tone should be heard. Lift hand set off switchhook, quarter should be released and should strike the gong. Dial tone should be heard in receiver or operator should answer.

2.05 With upper housing locked in place on the coin collector and with hand set off switchhook, deposit dime. Bell should be struck twice. If dime is deposited before the quarter or separately, dial tone should be heard in receiver or operator should answer.

2.06 At dial stations if dial tone is heard, hang up hand set. Coins should drop into "Coin Return" on hang-up. At manual stations if operator answers, request that coins be returned.

## 3. CLEARING TROUBLES

3.01 If the **nickel is not returned,** when deposited with hand set on switchhook in accordance with 2.01, remove upper housing and look for coin.

(a) If nickel is stuck in the return path in the upper housing remove the coin and repeat the tests in 2.01. If the nickel sticks in the return path in the upper housing on the repeat tests **replace the upper housing** and repeat all tests.

(b) If the nickel is stuck in the return path in the lower housing, clear obstruction in accordance with Section C42.129 and repeat the tests in 2.01.

(c) If the nickel is on the trap, around the relay or stuck on quarter runway return or remove coin. Then manually hold in the gate lever roller on chute as far as it will go, with upper housing vertical, and deposit nickel. Make test five times. If the nickel is **not ejected from the chute through the open gate each time, or sticks in the chute anytime, replace the coin chute.** If the nickel is ejected through gate and does not stick in chute, adjust the gate operating arm on the switchhook downward approximately 1/16" with the aid of long nose pliers. Check that bracket P-347660 is in place as shown on Fig. 1. Lock upper housing in place on coin collector and observe that switchhook comes to a full stop downward due to weight of hand set when placed on switchhook. Repeat the tests in 2.01. If it fails repeat the above adjustment and tests.

If the gate operating arm has become badly distorted so that it cannot be adjusted to meet requirements, replace the switchhook arm assembly (P-347208). (See Fig. 2.) Check operation of switchhook contact springs in accordance with Paragraph 2.01 of Section C42.129. If switchhook does not come to a positive stop, upward or downward, the gate operating arm, or contact spring operating end of switchhook arm, or both, will require adjustment in accordance with Part 7 of this section.

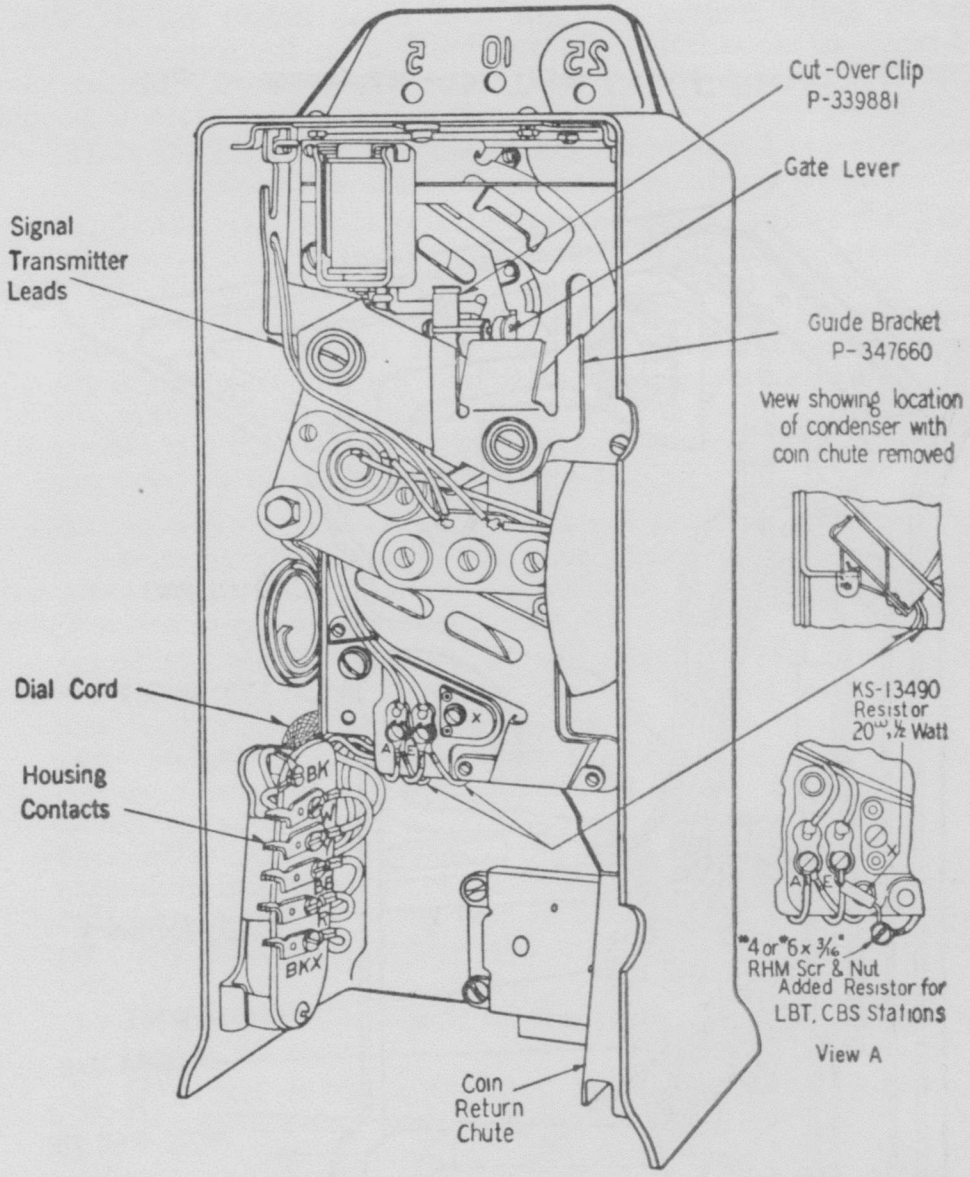


**Fig. 1—Upper Housing—191-Type Coin Collector**

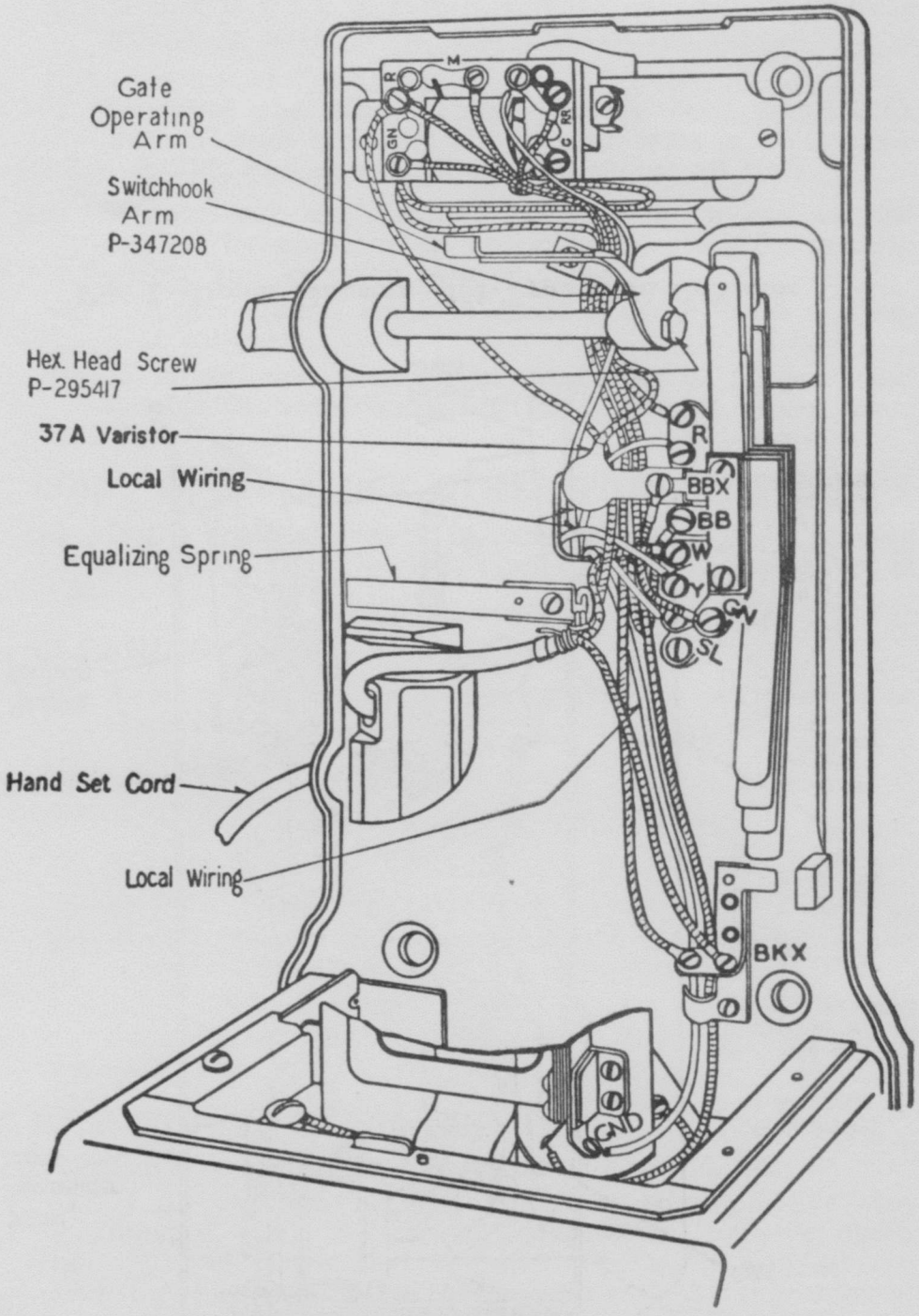


**Fig. 2—Backplate—191-Type Coin Collector**

3.02 If the nickel drops into the coin return, when nickel is deposited with hand set off switchhook in accordance with 2.02, remove the upper housing, hold it vertical and deposit a nickel.

(a) If the chute rejects the nickel through the reject opening **replace the coin chute** and repeat all tests.

(b) If the coin is not rejected by the chute, adjust the gate operating arm on the switchhook upward approximately 1/16". Lock upper housing in place on coin collector and repeat the nickel test in 2.02. Arm shall not be adjusted upward, such that it hits the induction coil when hand set is off hook or such that it fails to eject the nickel into the return chute with hand set on the hook. Conductors should not interfere with the operation of the gate operating arm, or operation of switchhook.

3.03 At dial stations if dial tone **is not heard,** and at manual stations if operator does not answer, when nickel is deposited and hand set is off switchhook in accordance with 2.02, remove upper housing and look for coin.

(a) If the nickel is stuck in the chute at the first gate, check that the cut-over clip is present and is not distorted. The cut-over clip should be of the type 3/8 inch wide, should be located against the left-hand gate bearing lug as shown in Fig. 1, and should firmly hold the arm which extends from electromagnet armature toward the back of the coin chute, with the bent-over tab on the arm extending into the coin chute. If necessary adjust or replace cut-over clip and repeat test in 2.02. If this does not correct the sticking, replace the coin chute and repeat all tests.

(b) If the nickel is stuck in the chute, **replace chute** and repeat all tests.

(c) If nickel is on coin trap, refund coin by manually operating relay and look for cause at station such as open line, open ground, etc., in accordance with Section C42.129. If station appears satisfactory have test desk arrange to cover central office for possible trouble condition. Repeat test in 2.02.

3.04 When coin is not refunded on hang-up in accordance with 2.03, remove upper housing and look for coin.

(a) If coin remains on trap, refund coins by manually operating relay and make station tests for relay failure, open ground, etc., in accordance with C42.129. If station appears satisfactory refer to test desk for possible trouble conditions at central office. Repeat test in 2.03.

(b) If coin is stuck in return, remove obstruction or clear trouble in accordance with C42.129 and repeat test in 2.03.

3.05 If either the dime or the quarter drop into "Coin Return" with hand set off hook on tests in accordance with 2.04 or 2.05, **replace coin chute** and repeat all tests.

3.06 If coins are not returned on hang-up or are not refunded by operator in accordance with 2.06, remove upper housing and look for coin or coins.

(a) If either coin is stuck in chute, **replace chute** and repeat all tests.

(b) If either coin is stuck in return or in hopper clear trouble in accordance with C42.129 and repeat tests in 2.06.

## 4. COINS FOUND STUCK OTHER THAN IN CHUTE

4.01 If the coins are stuck in locations other than covered in Part 3, clear by following the procedures given in C42.129.

## 5. CLEANING

5.01 Replace coin chutes that are dirty. **Do not attempt to clean coin chutes.**

## 6. CHUTE REPLACEMENT

6.01 To replace stainless steel coin chute proceed as follows:

(a) Disconnect leads to the A and E terminals.

(b) If filter is present, remove filter mounting screw.

(c) Remove coin chute and install new chute P-339526 (or P-339527). Reassemble filter, if present.

(d) Reconnect coin chute in accordance with connection diagram in Section C64.236 and dress cording as in Fig. 1 of this section.

## 7. SWITCHHOOK OPERATION

7.01 With reference to Paragraph 7.01 of C42.129:

(a) If the switchhook does not come to a positive stop upward when the receiver is removed, remove upper housing and check that the gate operating arm on the switchhook does not touch induction coil. Arrangement of conductors should be such as not to interfere with operation of gate operating arm, switchhook shaft, or switchhook arm as shown on Fig. 2. Adjust either or both arms as required.

(b) If the switchhook does not come to a positive stop downward due to weight of the hand set when placed on switchhook, remove upper housing and repeat the test. If it still does not come to a positive stop downward with upper housing removed, first try adjusting contact spring operating end of switchhook arm by bending. If this does not correct trouble then readjust switchhook contact springs in accordance with Paragraph 7.01 of C42.129. When bending arm avoid distorting the mounting surface.

(c) If the switchhook comes to a positive stop downward with upper housing removed and does not when coin collector is assembled, remove upper housing and check operation of gate by operating gate lever, manually. If gate has a tendency of sticking, **replace coin chute.** If gate operates freely, further adjustment is required on spring operating end of switchhook arm, on gate operating arm of switchhook or switchhook contact springs.

Note: The above adjustments require coordination in order to meet all requirements. First check that contact springs meet their adjustment requirements. This should facilitate adjustment of the gate operating arm. The gate operating arm should not rest against the roller on gate lever when switchhook is in up position. Although this cannot be observed visually it can be felt when the switchhook is operated by hand. Then if switchhook operation fails, only a slight adjustment of the contact spring operating end of switchhook arm may be required.