

BELL SYSTEM PRACTICES
Station Installation and Maintenance

SECTION C42.106
Issue 3, October, 1953
AT&T Co Standard
Preliminary No. 2

COIN COLLECTORS

MULTISLOT TYPES

FOR 10¢ INITIAL CHARGE BASIS

CORDING

1 GENERAL

1.01 This section covers the cording for 55, 74, 155, 158, 166, 168, 174, 176, 177, 178, 191, 193, 195, 196, and 197-type coin collectors. It also applies to D-178457, D-178875, D-178940, D-178942, D-179432, and D-179433 coin collectors (dial shorting types). It is reissued for the following reasons:

- (a) To add 195, 196, and 197-type and D-179432 and D-179433 coin collectors.
- (b) To bring it up to date.

Revised and added information is of such a nature and magnitude that the use of arrows to indicate changes is not practical.

1.02 Figures given herein are intended to show only the mechanical arrangements of cords and conductors within the coin collector to obtain correct anchorage, avoid interference with other parts, etc. Except for 193-type, figures given herein for the lower housing and backplate assembly show only the more common prepayment-type coin collectors with coin relays. The same general principles shall be followed in cording similar types not specifically shown. For connections, refer to Subdivision C64. For cording of receivers, refer to Section C35.260.

1.03 Some upper housings may be used interchangeably on backplates of coin collectors for a particular type of service. Because of this, the upper housing shall be compared with the appropriate figure to determine the proper cording. The backplate shall be corded in accordance with code number given in title of figure.

1.04 Conductors and cords shall be dressed as closely as practicable to walls of housing or backplate and so as not to come into contact with gongs, interfere with relay, relay

C42.106

Page 1

COIN COLLECTORS
MULTISLOT TYPES
FOR 10¢ INITIAL CHARGE BASIS
CORDING

cover, or coin chute, or obstruct passage of coins when coin collector is assembled.

Caution: Whenever removing or reassembling upper housing from or to backplate, remove receiver or handset from switchhook.

Never replace upper housing without P-349486 or KS-7994 shield over relay since shield protects relay coils from damage which may result if hit by housing.

Never replace upper housing without neoprene cover in place over induction coil.

On 193-type coin collectors, when assembling upper housing, take extra care to prevent striking electromagnet against induction coil. Also, when raising or lowering swing-type gong signal assembly, avoid dislocating wire-type cover holder on electromagnet.

2. UPPER HOUSING

General

- 2.01 Upper housing assembly figures show cording of dial and dial cord.
- 2.02 Cord tips at "BK" housing terminal shall be arranged so as to clear coin chute.

Filters

2.03 Except for coin collectors used in community dial office service, a radio interference suppression filter is not used unless required by local instructions. Where used, locate a 61R filter and dress lead-wires as indicated in Section C55.803. Place dial cord under filter terminal plate to avoid interference with 25¢ gong.

2.04 When filter is added on 176 or 178-type or D-178942 coin collector, if black lead-wire of filter is too short to reach the "5" housing terminal, add strap wire P-294521 (3-1/2 in. long) by fastening one of its cord tips to cord tip of black filter lead-wire with No. 4 by 3/16 in. R.H.B.M. screw and nut. Exposed metal of this connection shall be taped with "Scotch" electrical tape, or equivalent. The spliced connection shall be stowed under the terminal plate.

Dial Cord

2.05 When dial is replaced, dial cords shall be dressed and assembled in upper housing as shown in Figs. 1 to 7. In the assembled views, back of dial cup has been cut away to show internal arrangement after assembly. In order to pre-

vent interference when assembling the lower dial mounting screw, twist cord at free conductors while assembling dial to housing to assure proper dressing as shown in Figs. 1, 2, and 4.

2.06 Dial cord shall be dressed as shown in Figs. 8 and 9.

It is permissible to use cord clamp P-339764, or equivalent (modified P-297767). Cord shall be dressed against dial cup and as close to front of housing as practicable with all slack taken upward. If cord is short and cannot be clamped as shown in Figs. 8 and 9, it is permissible to place P-339764 clamp under lower dial mounting screw.

2.07 When outer serving of dial cord becomes unraveled and free conductors extend outside of dial cup more than 1/2 in., the unraveled portion and the free conductors outside of cup shall be bound with "Scotch" electrical tape. The taped portion shall be capable of being drawn through hole in dial cup.

2.08 That portion of dial cord below coin return chute shall be dressed into corner of housing with free conductors against side wall of housing behind terminals of spring pile-up-type housing contacts as shown in Fig. 10 or behind terminal plate-type housing contacts as shown in Fig. 16.

Transmitter Cords

2.09 Transmitter cords shall be dressed as shown in Fig. 8. In early-type housings having a cast shelf (not shown in figures), no cord clamp is required.

2.10 The T1C transmitter cord having a textile outer cover and rubber insulation shall be used when replacement is required.

2.11 On housings of type shown in Fig. 14, transmitter cords shall pass through opening formed by top of housing contact mounting bracket.

Transmitter Unit

2.12 When it is necessary to remount or replace the transmitter unit on front of upper housing, cord tips of transmitter cords shall be dressed so that they do not come into contact with transmitter bridge or bell.

Signal Transmitter Lead-Wires

2.13 On 191, 193, 195, 196, or 197-type coin collectors, signal transmitter lead-wires shall be arranged and anchored as shown in Figs. 20, 21, and 24.

(a) On collectors equipped with swing-type signal assembly, these lead-wires shall pass through hole in swing bracket and be dressed close to side of housing and shall then follow dial cord to lower end of housing. There shall be sufficient slack in lead-wires to permit placing swing bracket in raised position without damage to wires.

(b) On swing-type signal assembly having one signal transmitter, these lead-wires shall be anchored by cord clip P-338910 as shown in order to prevent interference with operation of coin chute.

(c) On collectors equipped with chute-mounted signal assembly having a coin chute with closed-type cord holder, these leads shall be anchored as shown in Fig. 14.

2.14 On 74, 174, 176, 177, or 178-type, D-178940 or D-178942 collectors having coin chute with closed-type cord holder, the signal transmitter lead-wires may be anchored as shown in Fig. 14 or 18. Where open-type cord holder is provided, place lead-wires in cord holder adjacent to electromagnet lead-wires and condenser lead-wires when present.

Condensers

2.15 When either the 452A or B condenser located under coin return shelf is replaced for any reason, it shall be positioned with lead-wires upward as shown in Figs. 20 and 21.

2.16 When the 452B condenser located on coin chute is replaced for any reason, it shall be positioned as follows:

(a) If bracket assembly with wire guide hole is used, the condenser and lead-wires shall be mounted and arranged as shown in Figs. 16 and 18.

(b) If bracket assembly without guide or with guide but without wire guide hole is used, secure lead-wires with tape and mount condenser and arrange lead-wires through wire guide as shown in Figs. 16 and 18.

2.17 When the 452A condenser located on coin chute is replaced for any reason, it shall be positioned as follows:

(a) If bracket assembly without guide or with guide but without wire guide hole is used and condenser has short lead-wires, secure lead-wires with tape and mount condenser and arrange lead-wires as shown in Figs. 10 and 14 or as shown by dot-dash lines in Figs. 16 and 18.

(b) If bracket assembly without guide is used and condenser has long lead-wires, secure lead-wires with tape and mount condenser as shown in Figs. 10 and 14 and

arrange lead-wires through wire guide as shown in Figs. 16 and 18.

(c) If bracket assembly with wire guide hole is used and condenser has short lead-wires, mount condenser and arrange lead-wires as shown in Figs. 16 and 18 except that lead-wires shall not be run through wire guide.

(d) If bracket assembly with wire guide hole is used and condenser has long lead-wires, mount condenser and arrange lead-wires as shown in Figs. 16 and 18.

Local Battery Stations

2.18 When a coin collector is converted to local battery talking-common battery signaling service in the field, resistor added at coin chute terminals shall be arranged and dressed as shown in View A of Figs. 10, 14, 16, 18, 20, 21, and 23.

Electromagnet Short-circuiting Clip

2.19 View B of Fig. 10, 16, 20, or 21 shows the location of strap clip P-338903 which may be used to short-circuit the electromagnet and the 452A or B condenser before cut-over to 10¢ operation.

3. LOWER HOUSING AND BACKPLATE ASSEMBLY

Caution: Receiver or handset cord or any conductors shall not lie between the equalizing spring or any of the contact springs and the backplate except as covered in 3.01.

Transfer Spring

3.01 The 55-type, D-179432, and D-179433 coin collectors which are equipped with transfer spring shall have receiver or handset cord dressed as shown in Fig. 11 (equalizing spring-low position) and Fig. 23 (equalizing spring-high position).

L1 Terminal

3.02 When an "L1" terminal or an induction coil is provided in the coin collector, line wires shall terminate in coin collector and shall be arranged and dressed as shown in figures of backplate unless otherwise specified by the Telephone Company.

Receiver or Handset Cord

3.03 When equalizing spring is in high position and cord is removed for any reason, cord clamp P-12A096 shall be added to hold cord from interfering with coin hopper or coin chute. When "L1" terminal plate is present, place clamp under

terminal plate and use longer screw as shown in Figs. 17 and 19. Remove anchor hook on wood block as shown in Fig. 13. Place cord with metal band adjacent to clamp. Metal stay hook on receiver cord need not be removed and may hang loose. Excess length of tie cords shall be disposed of under the clamp.

3.04 In order to facilitate replacement of cords, tie a piece of strong string to old cord before removing it. Use string to pull new cord through cord entry port. Due to S hook and large metal band at coin collector end of rubber-jacketed receiver cords, they cannot pass through cord entry port and, therefore, should be inserted by tying string to receiver end of these cords. Dress cords close to backplate so as not to interfere with coin chute when coin collector is assembled. Stow any excess of tie cord so as to prevent dropping into hopper (see 3.03).

Wiring to Induction Coil and Condenser

3.05 The 191, 193, 195, 196, and 197-type coin collectors shall be dressed as shown in Figs. 22 and 25. The conductors shall not interfere with the operation of switchhook arm, switchhook shaft, and coin chute.

Induction Coil

3.06 Cord tips on induction coil shall be dressed parallel to sides of coil to facilitate assembly of neoprene cover and eliminate interference in assembly. When cover is not provided, special precautions shall be taken to arrange cord tips to prevent grounding on electromagnet or upper housing.

Varistor

3.07 The 37A varistor shall be located and lead-wires dressed as shown in Figs. 11, 12, 13, 15, 17, 19, 22, 23, and 25. Terminal connections are given in Subdivision C64.

Alarm Switch

3.08 Alarm switch connections, when required, shall be made through hole in backplate in coin receptacle compartment. When this hole is not present, alarm switch wire shall enter coin collector through opening for local wiring. Wiring shall be placed under cable clamp at lower part of backplate adjacent to wires to coin relay, and secured so as not to interfere with operation of coin collector parts. (Wires not shown in figures.)

3.09 Terminal plate and conductors of alarm switch, if installed in lower housing, shall be arranged so as not to interfere with insertion or removal of coin receptacle. (Not shown in figures.)

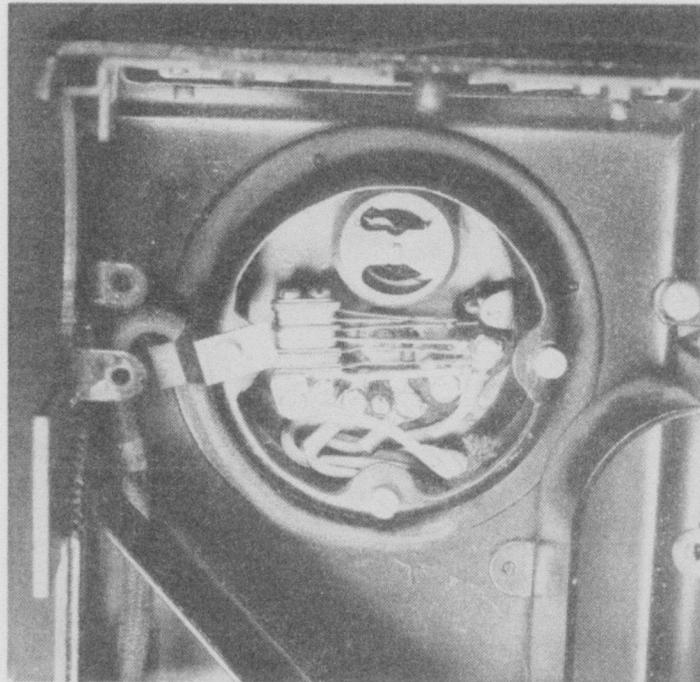
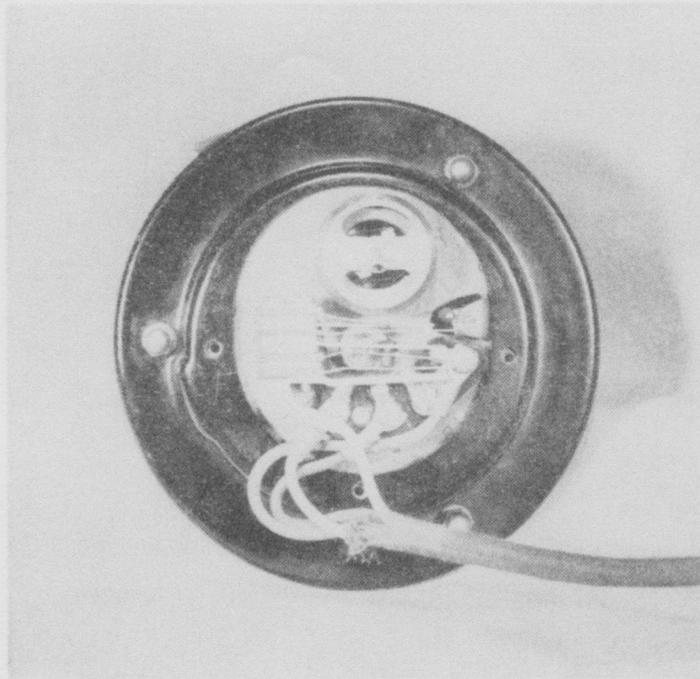


Fig. 1—5HH Dial with D4Y Cord

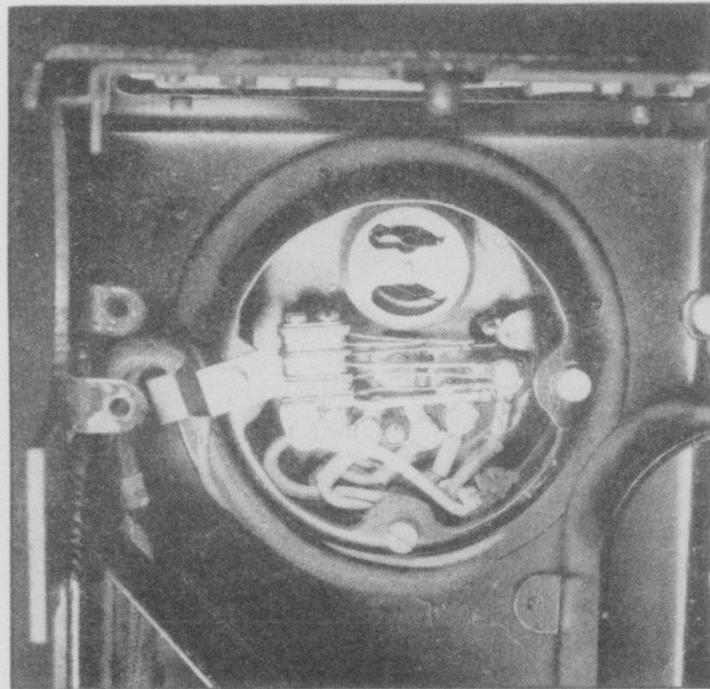
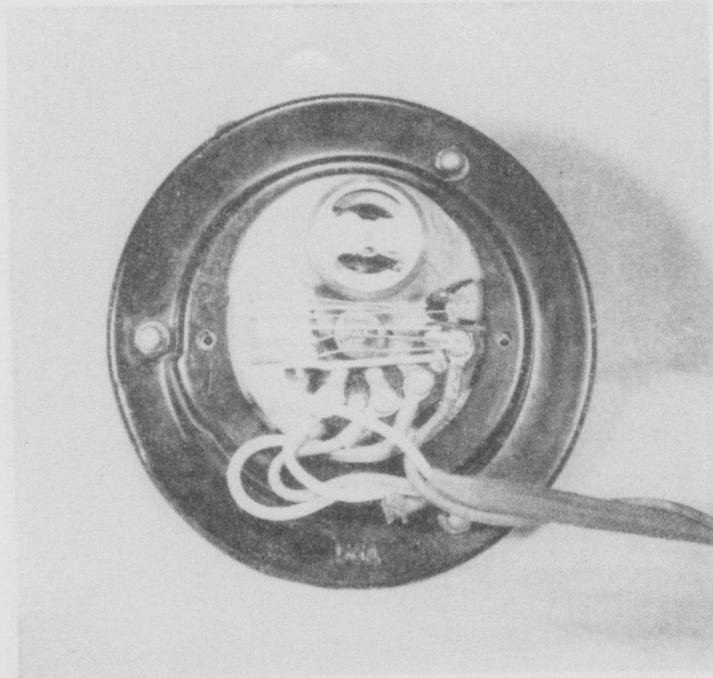


Fig. 2—5HH Dial with D4Y and M1W Cords

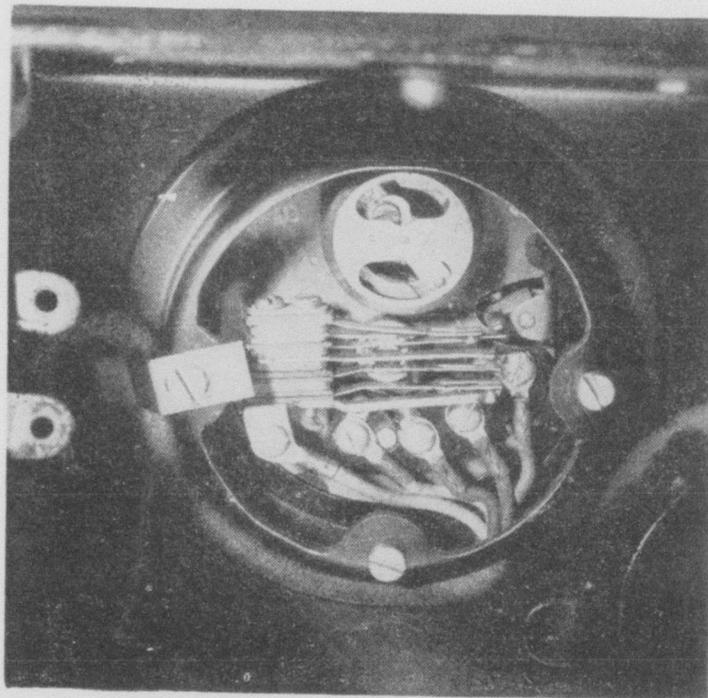
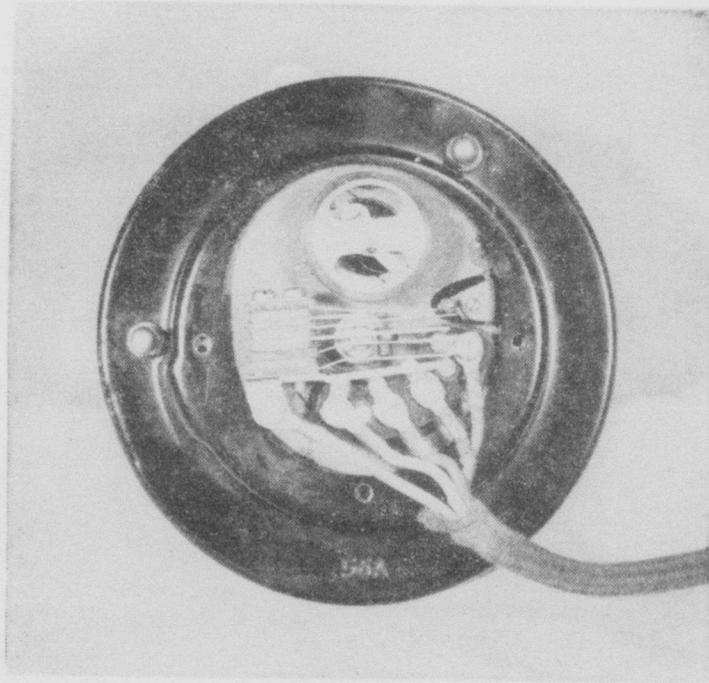


Fig. 3—5HH Dial with D5AB Cord

C42.106

Page 9

COIN COLLECTORS
MULTISLOT TYPES
FOR 10¢ INITIAL CHARGE BASIS
CORDING

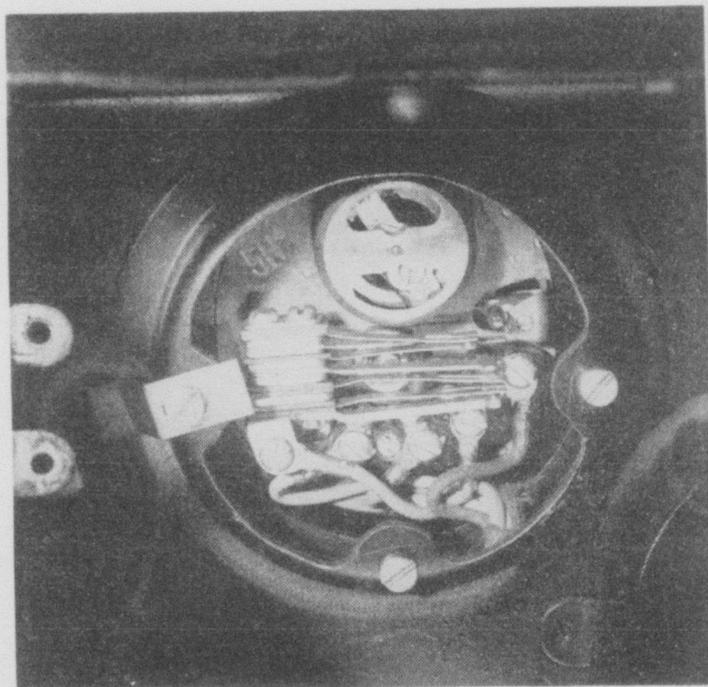
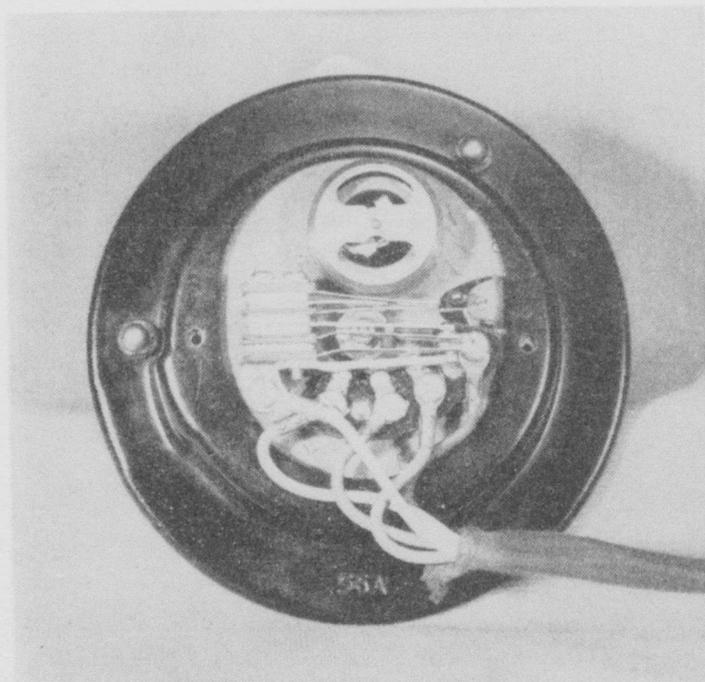


Fig. 4—5HH Dial with D5AE Cord

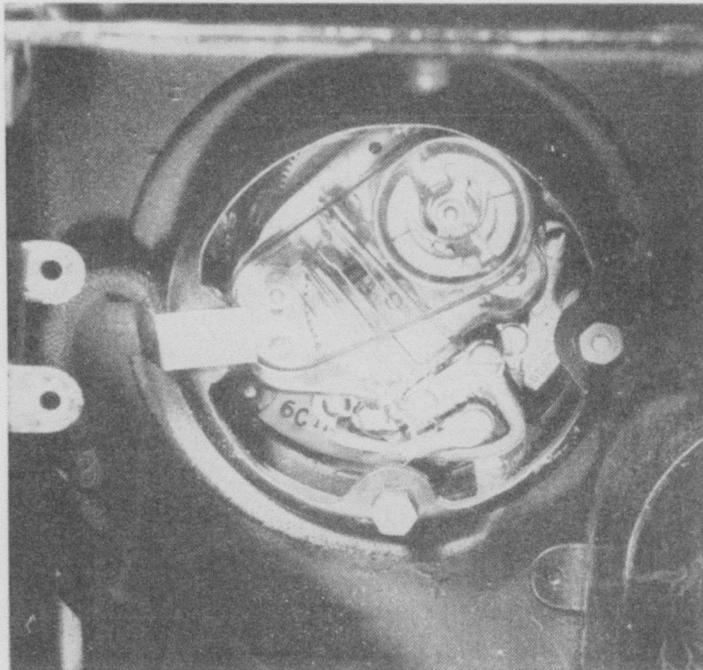
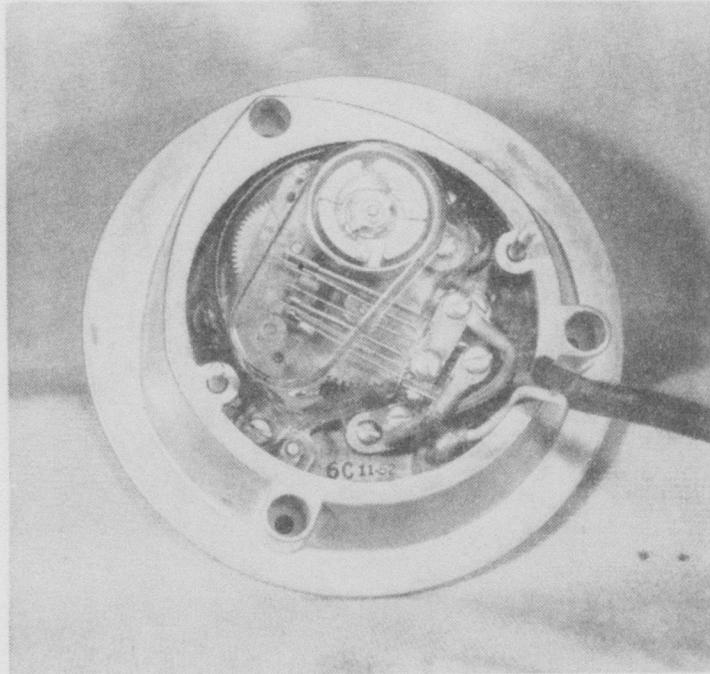


Fig. 5—6C Dial with D4Y Cord

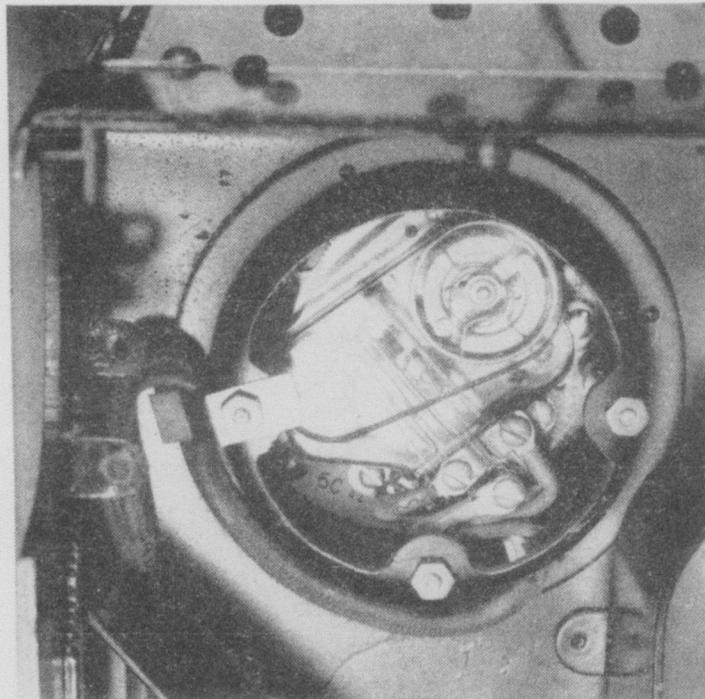
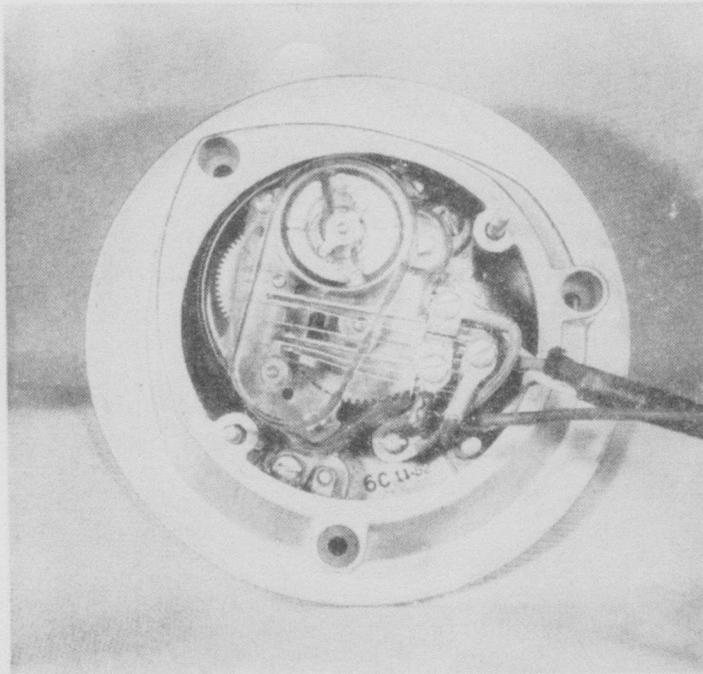


Fig. 6—6C Dial with D4Y and M1W Cords

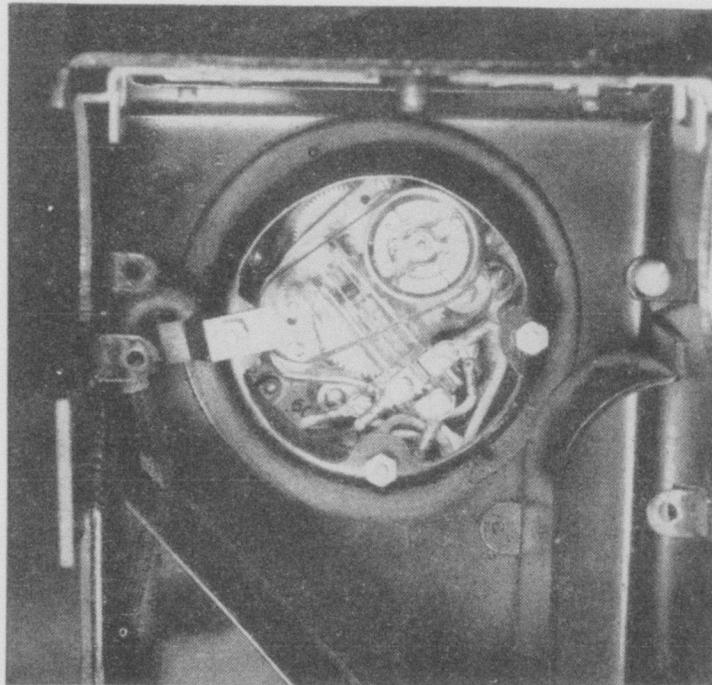
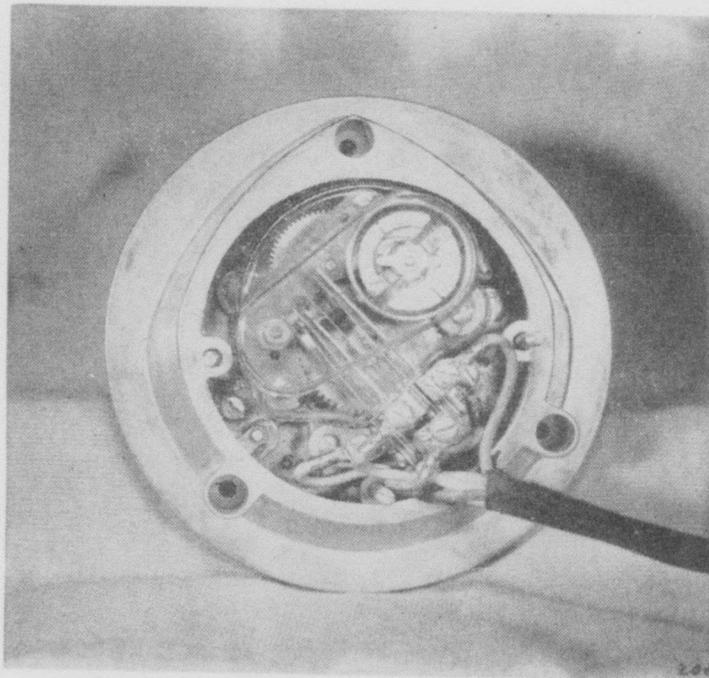
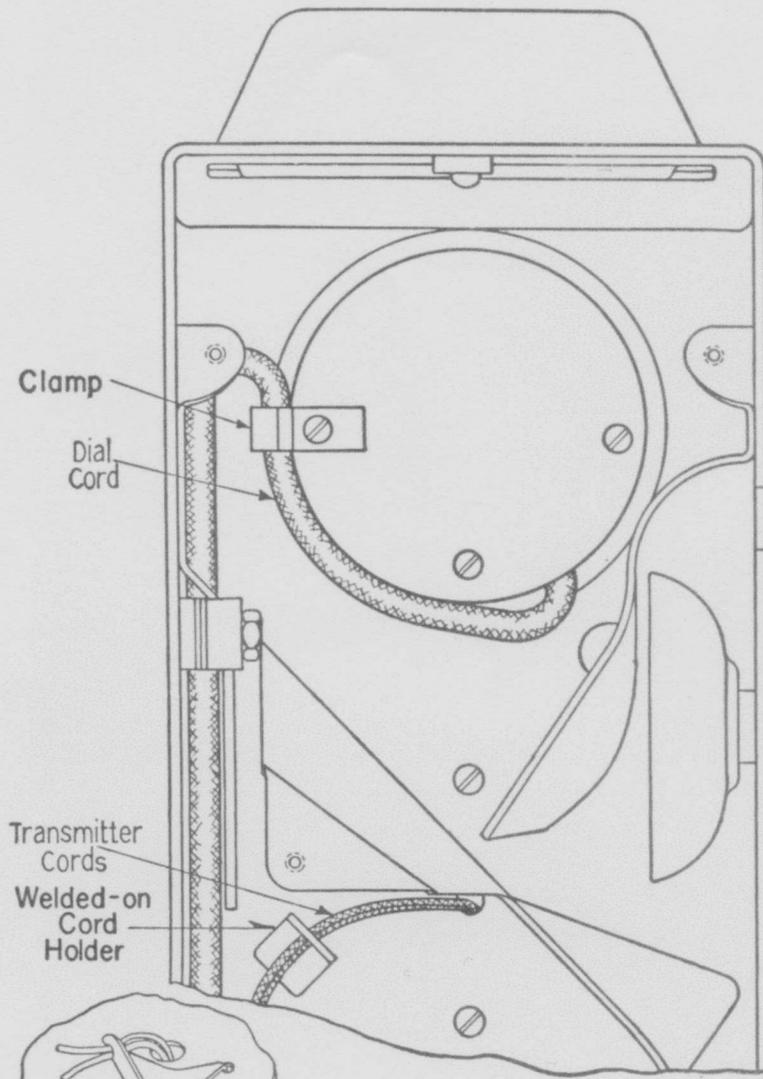


Fig. 7—6C Dial with D5AE Cord



Edge of Clamp bent over at approximately 45°

Trans. Cord Clamp

Fig. 8—Dial and Transmitter Cord Arrangements—55, 155, 158, 166 or 168-type, D-178457, or D-178875 Coin Collector

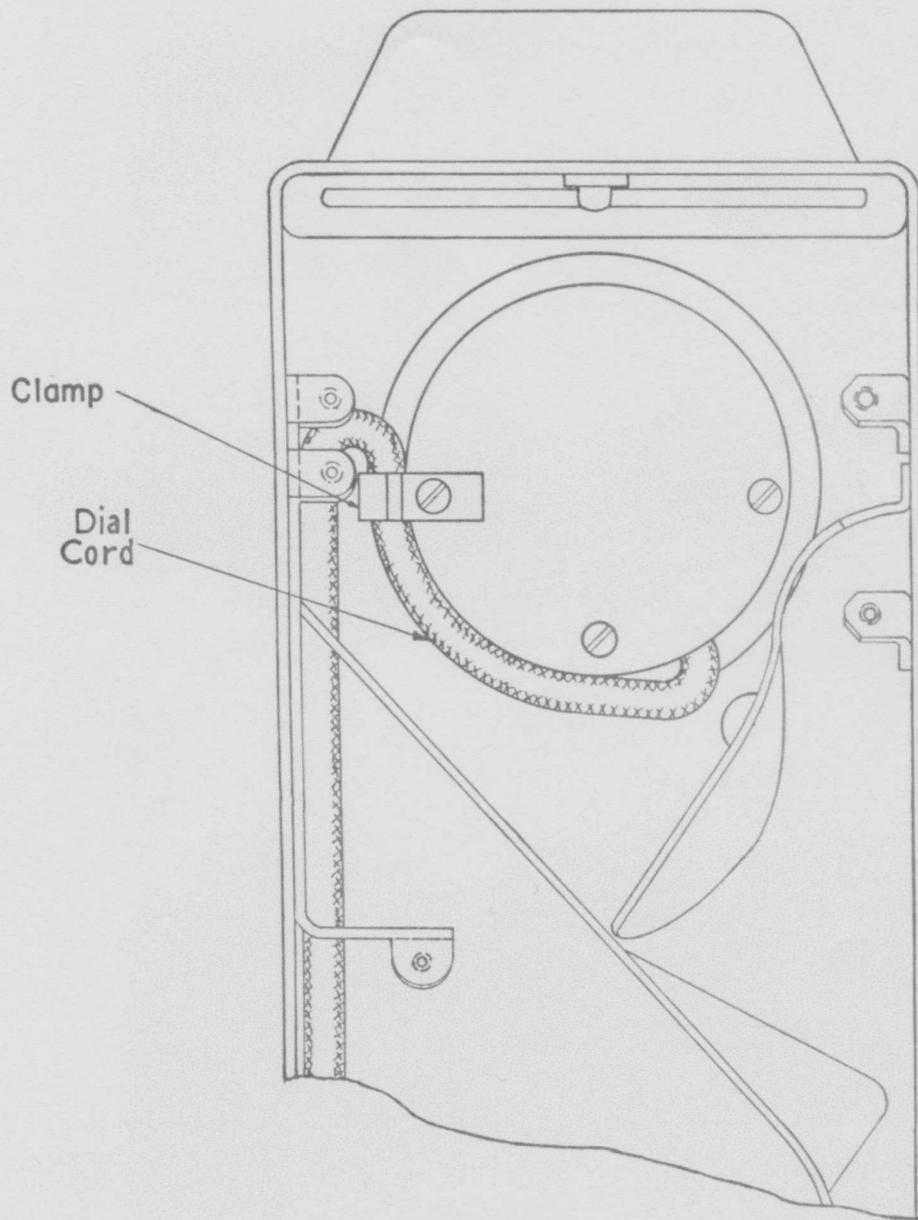


Fig. 9—Dial Cord Arrangement—74, 174, 176, 177, 178, 191, 193, 195, 196, or 197-type, D-178940, D-178942, D-179432, or D-179433 Coin Collector

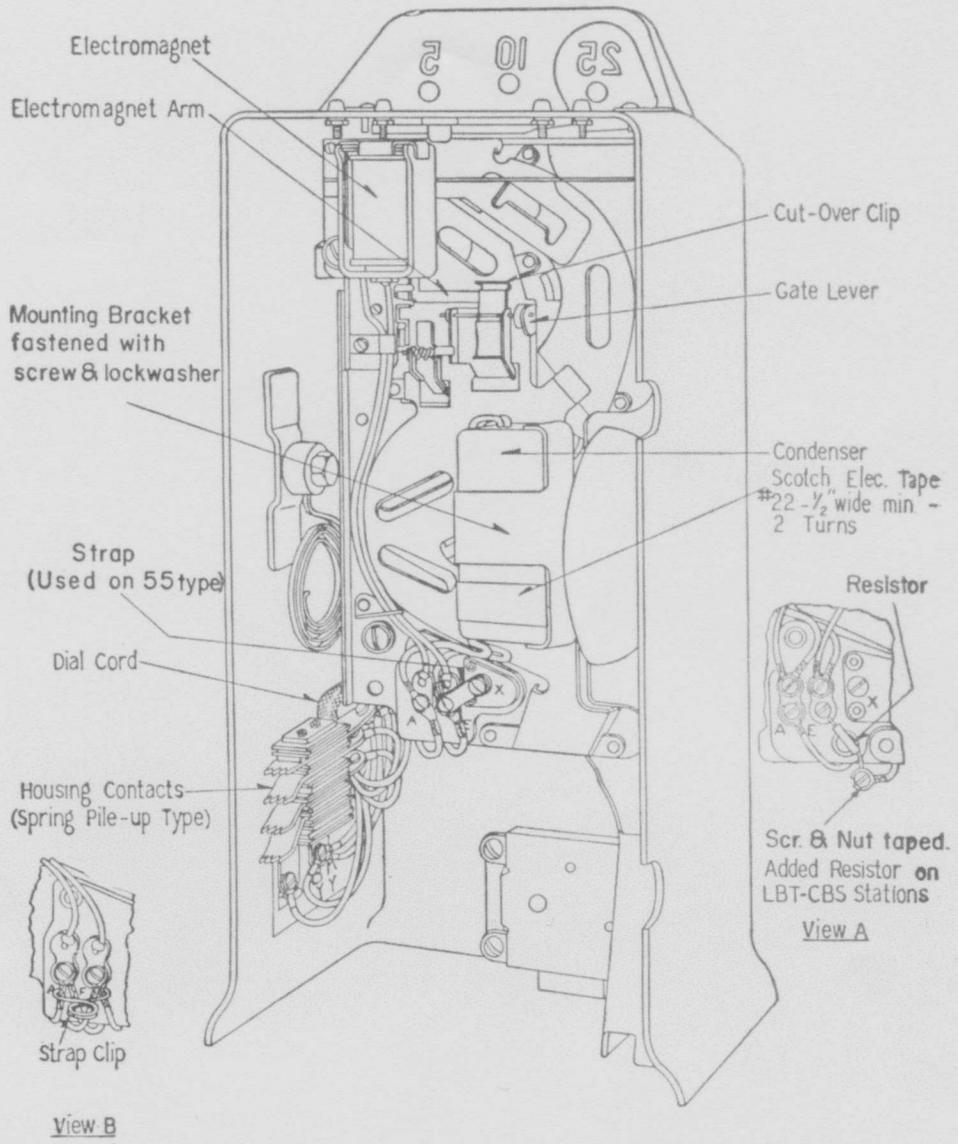


Fig. 10—Upper Housing—55, 155, or 158-type, or D-178457 Coin Collector.

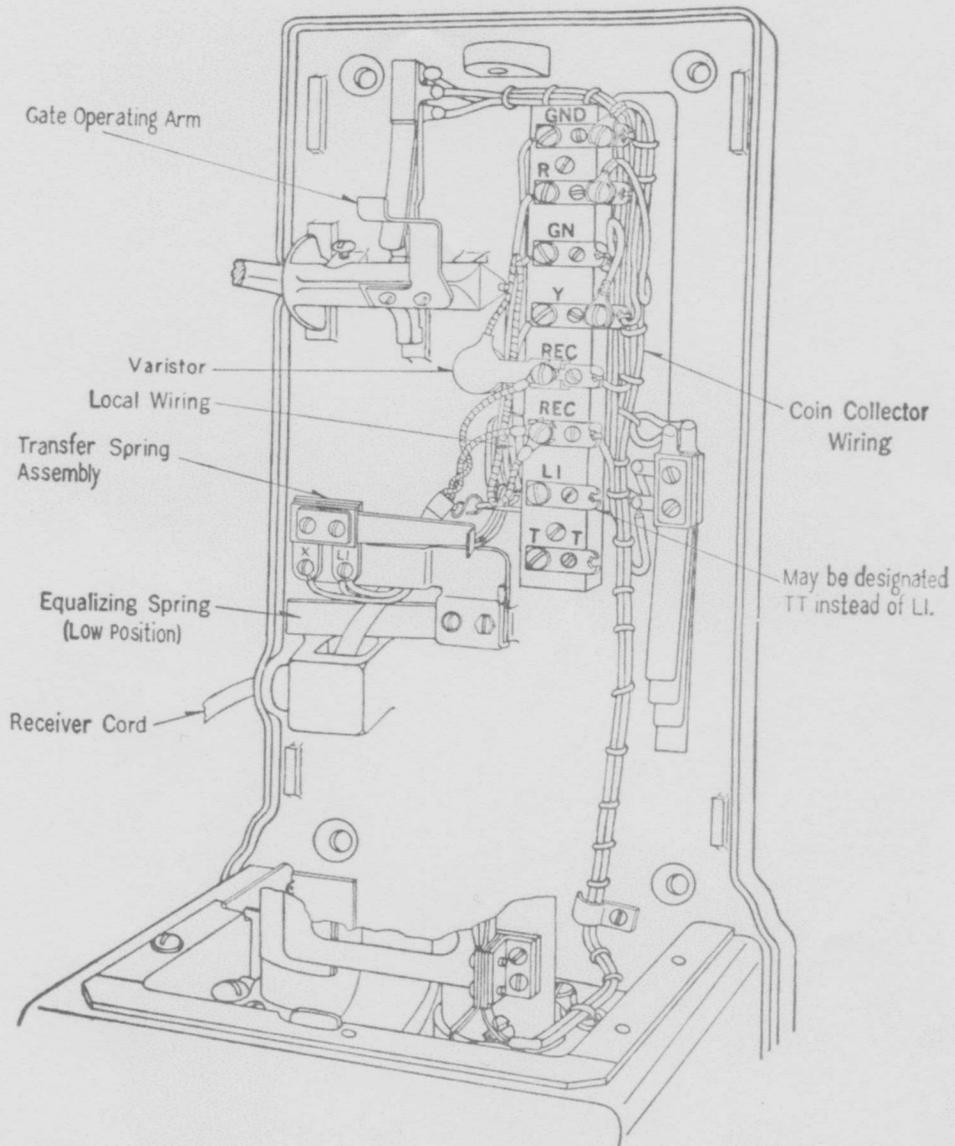


Fig. 11—55-type Coin Collector—Lower Housing and Backplate Assembly

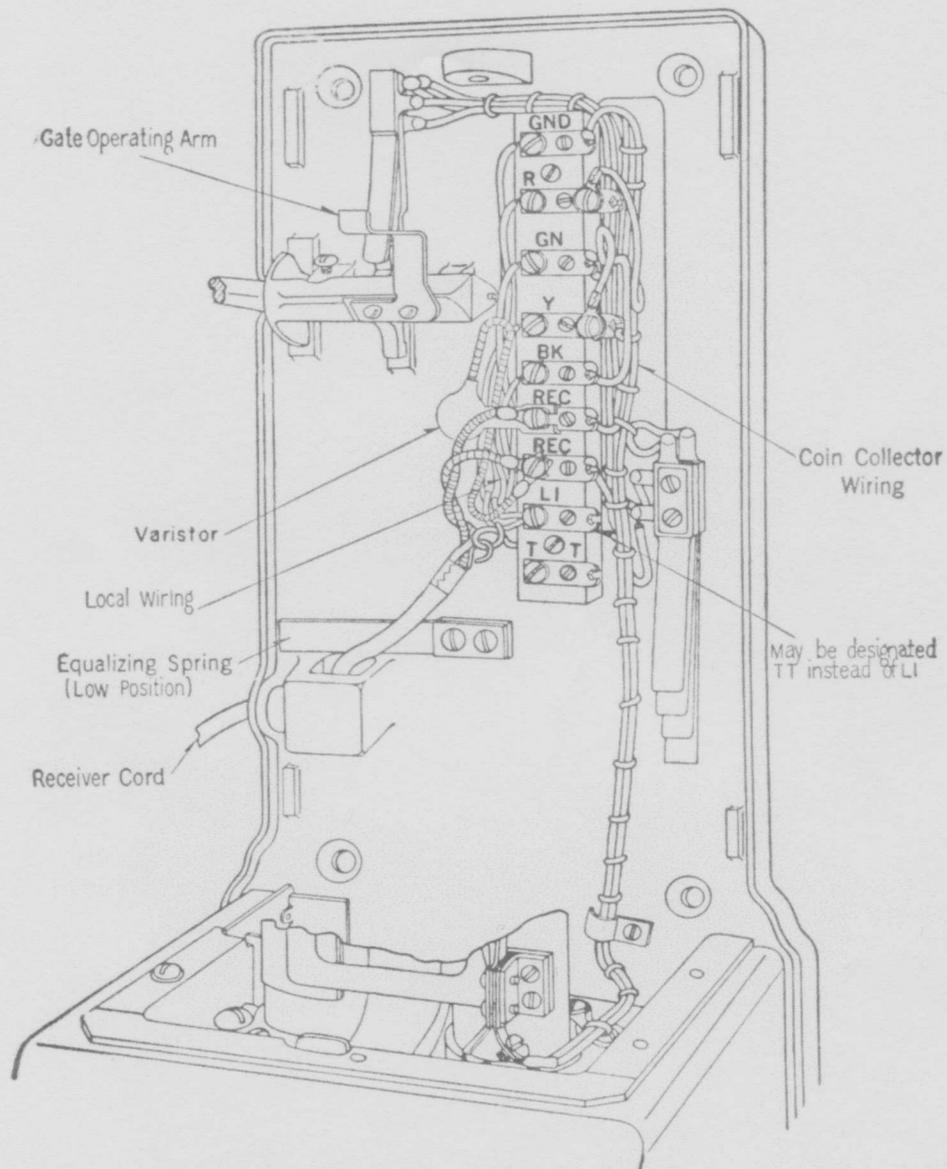


Fig. 12—155-type Coin Collector with Equalizing Spring in Low Position—Lower Housing and Backplate Assembly

Notes

- A. D-178457 collector is similar except see Fig. 11 (equalizing spring-low position) for transfer spring and receiver cord.
- B. 158-type collector is similar except wires to lower housing go to the hopper contacts (see Fig. 25) instead of to coin relay.

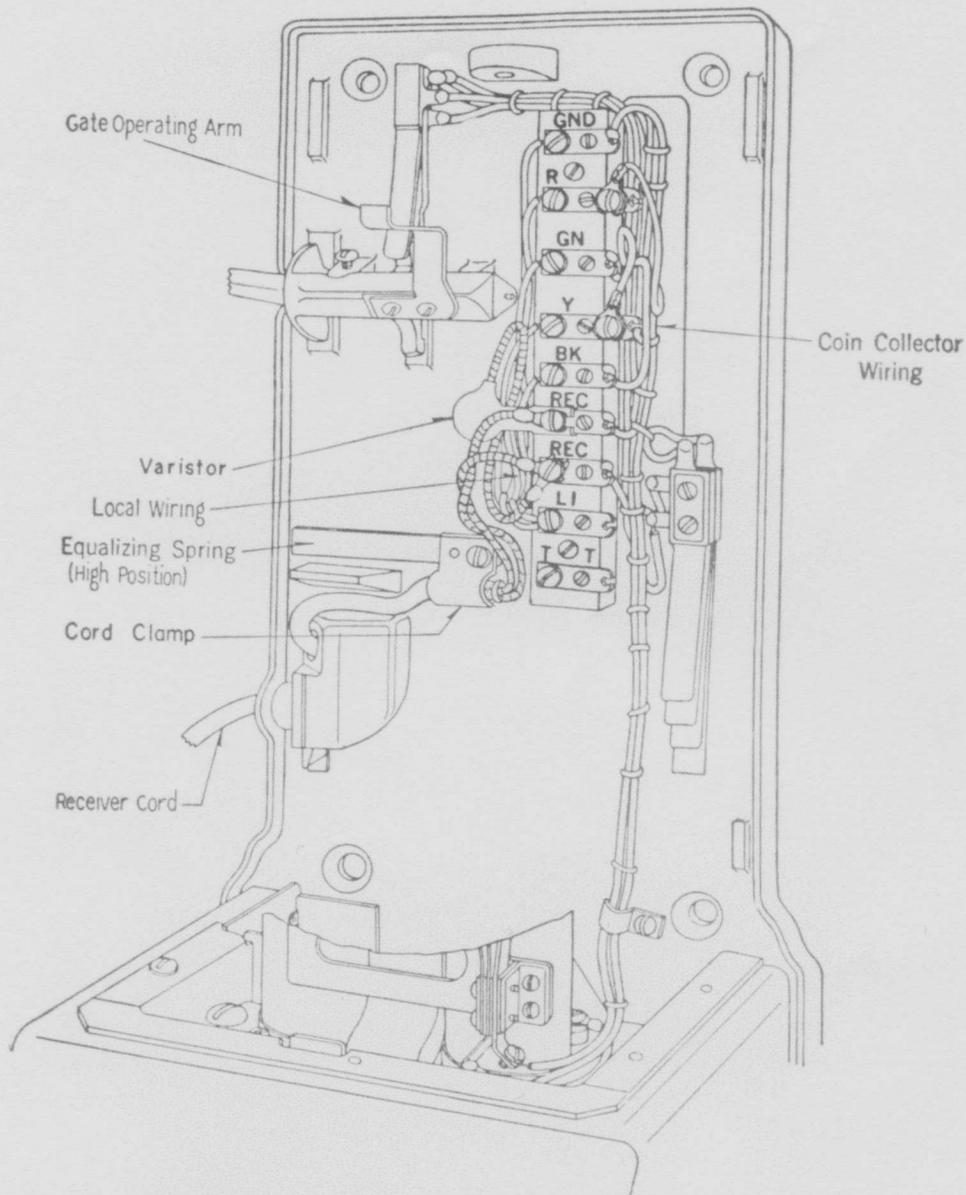


Fig. 13—155-type Coin Collector with Equalizing Spring in High Position—Lower Housing and Backplate Assembly

Notes

- A. D-178457 collector is similar except see Fig. 23 (equalizing spring-high position) for transfer spring and receiver cord.
- B. 158-type collector is similar except wires to lower housing go to hopper contacts (see Fig. 25) instead of to coin relay.

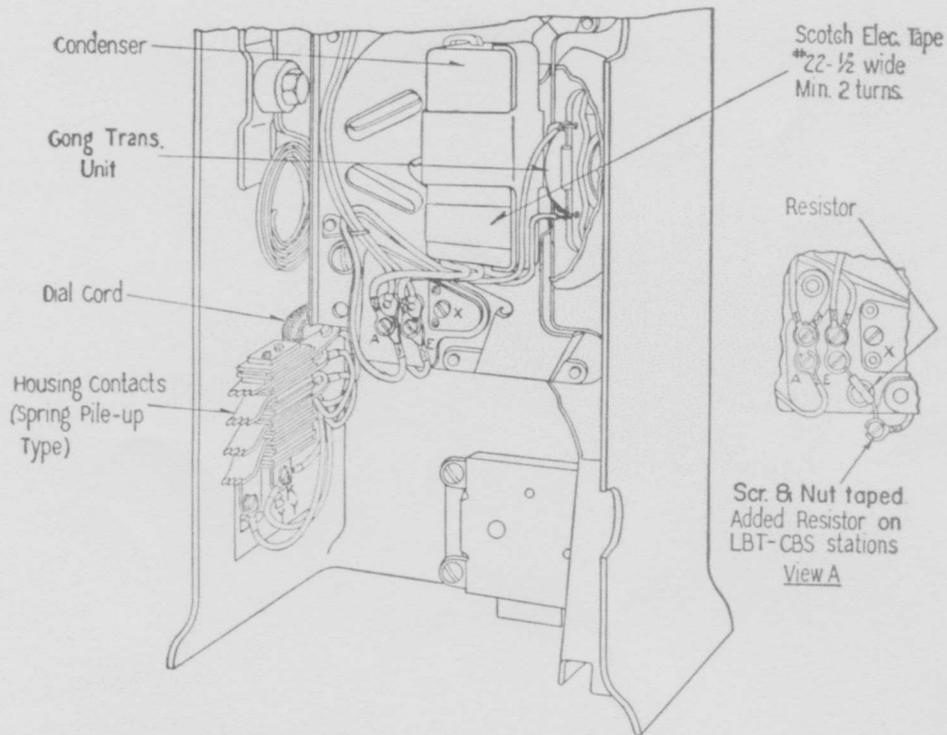


Fig. 14—74, 174, or 177-type, or D-178940 Coin Collector Upper Housing

Note: Wires to electromagnet same as in Fig. 10.

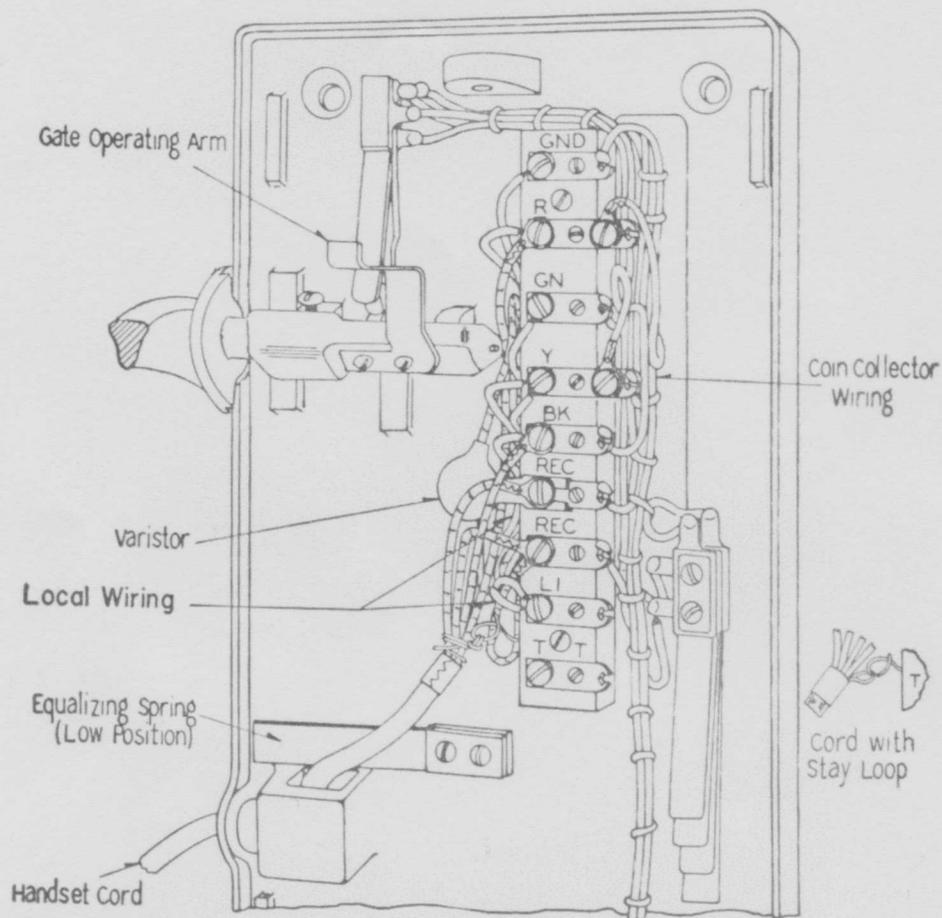


Fig. 15—74, 174, or 177-type Coin Collector—Backplate Assembly

Notes

- A. D-178940 collector is similar except see Fig. 11 (equalizing spring-low position) and Fig. 23 (equalizing spring-high position) for transfer spring and receiver cord.
- B. Wires to coin relay or hopper contacts same as in Fig. 12 or 25.

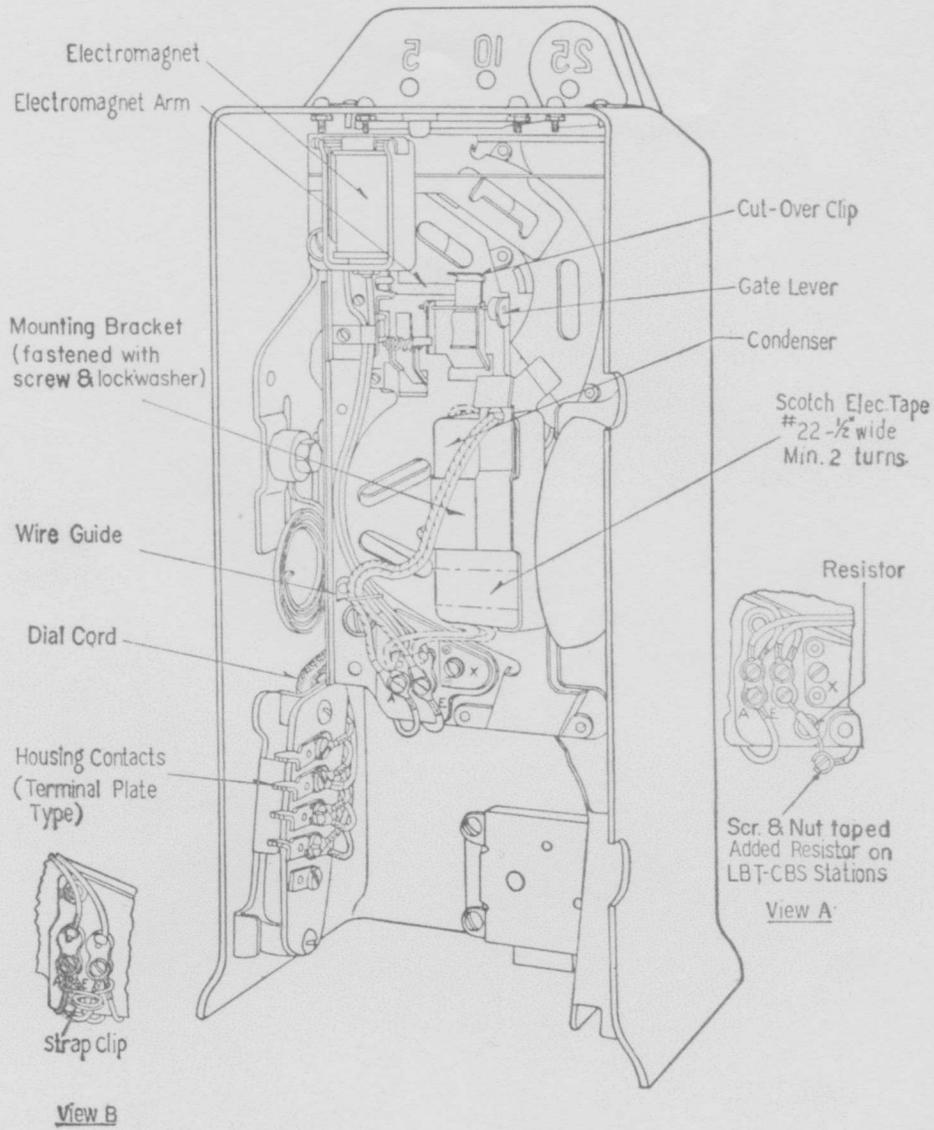


Fig. 16—166 or 168-type, or D-178875 Coin Collector—Upper Housing

Note: When condenser mounting bracket is not provided with wire guide hole, condenser lead-wires shall be arranged and taped to condenser as shown with dot-dash lines.

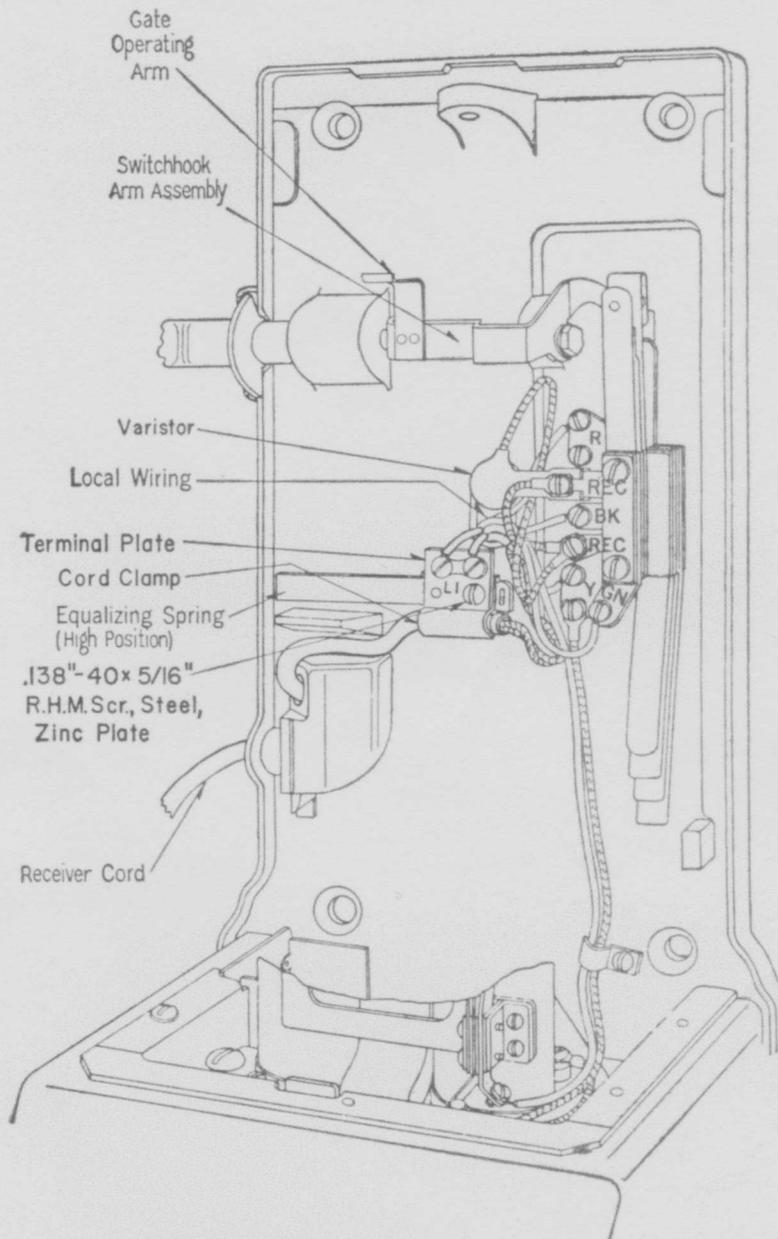


Fig. 17—166-type Coin Collector—Lower Housing and Backplate Assembly

Notes

- A. D-178875 collector is similar except see Fig. 23 (equalizing spring-high position) for transfer spring and receiver cord.
- B. 168-type collector is similar except wires to lower housing go to hopper contacts (see Fig. 25) instead of coin relay.

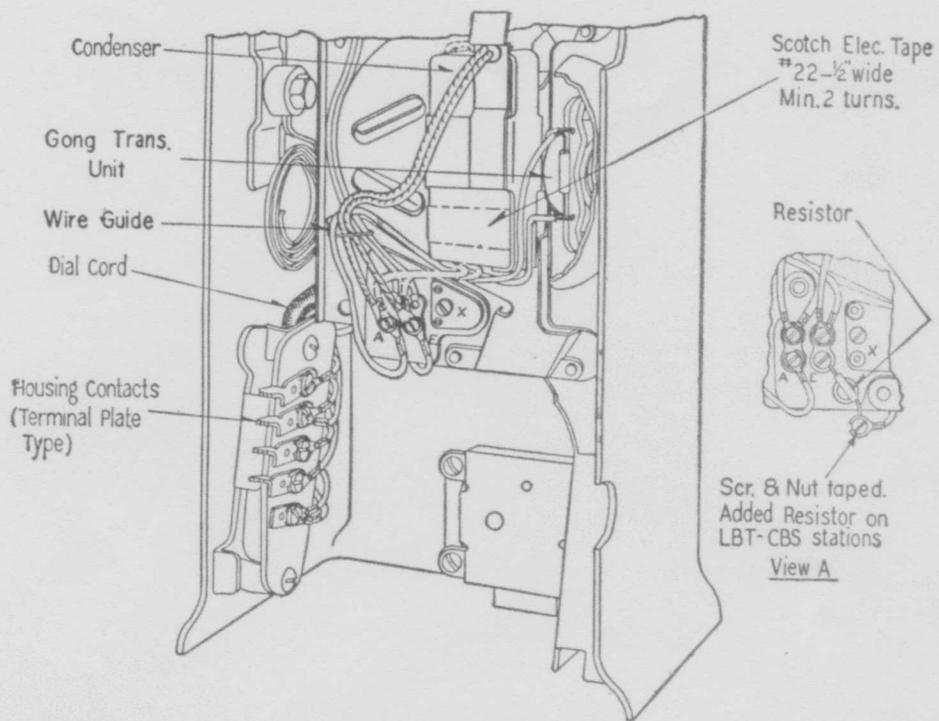


Fig. 18—176 or 178-type, or D-178942 Coin Collector—Upper Housing

Notes

- A. Wires to electromagnet same as in Fig. 16.
- B. When condenser mounting bracket is not provided with wire guide hole, the condenser lead-wires shall be arranged and taped to the condenser as shown with dot-dash lines.

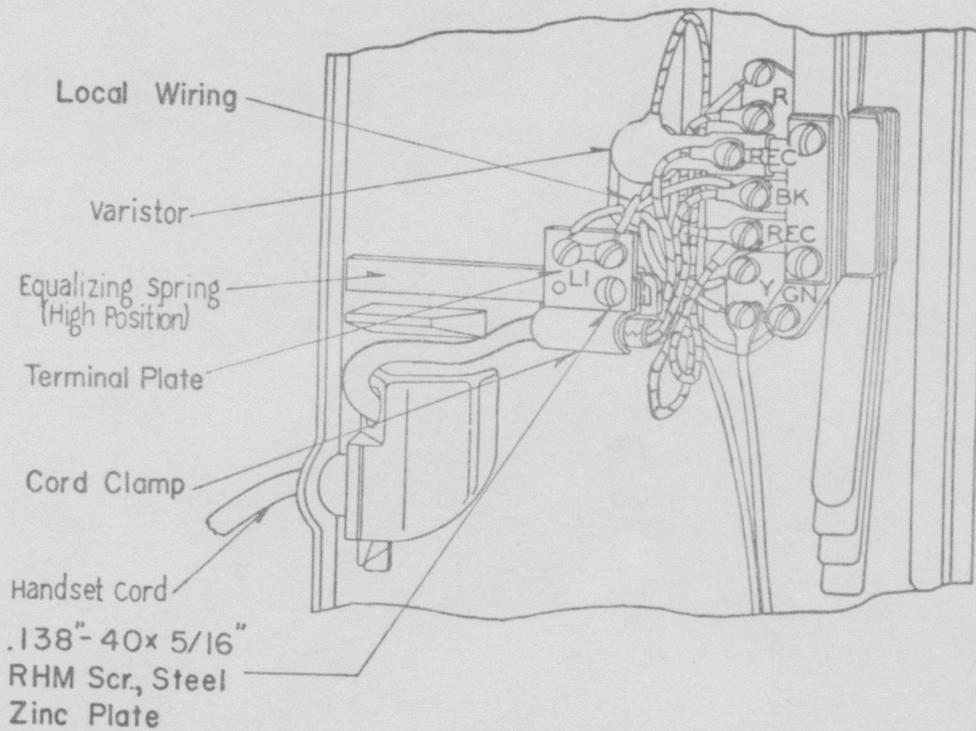


Fig. 19—176 or 178-type Coin Collector—Backplate Assembly

Notes

- A. D-178942 collector is similar except see Fig. 23 (equalizing spring-high position) for transfer spring and receiver cord.
- B. Wires to coin relay or hopper contacts same as in Fig. 17 or 25.

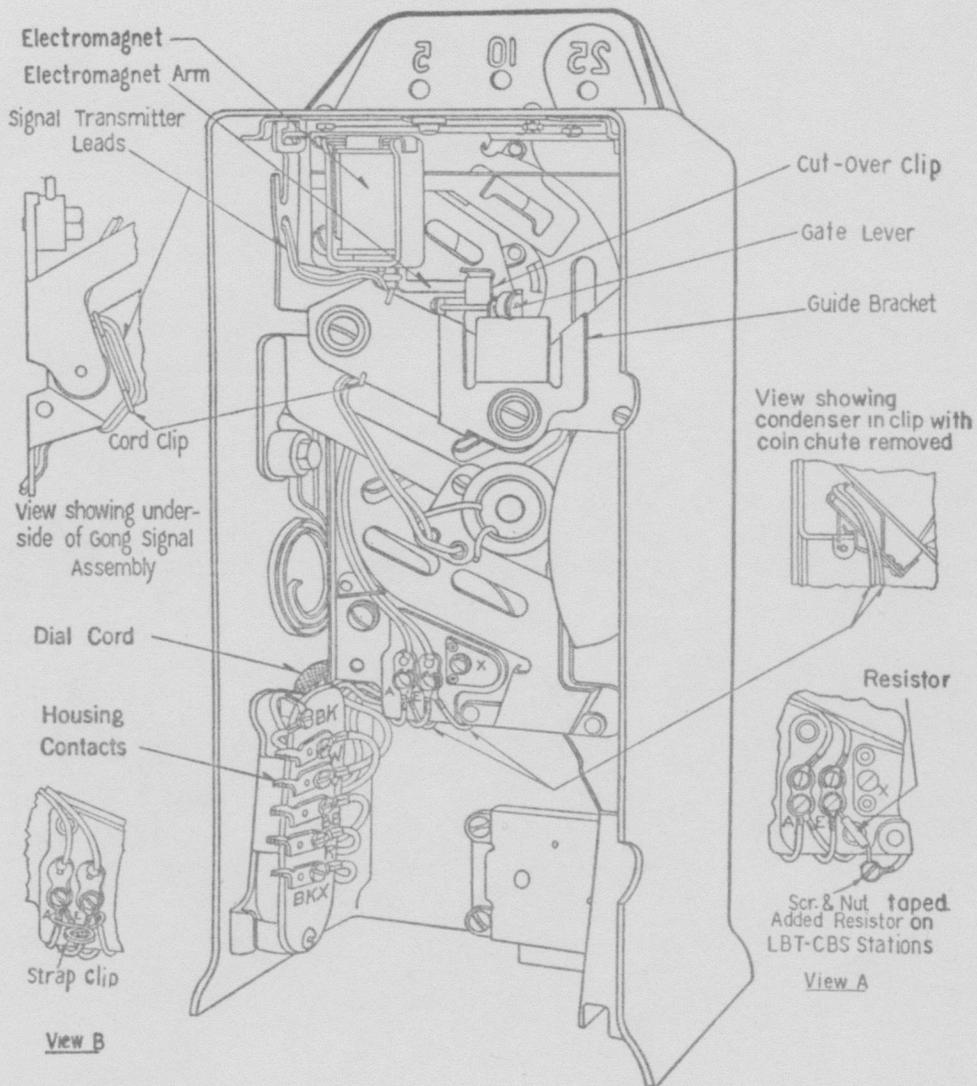


Fig. 20—191, 195, 196, or 197-type, D-179432 or D-179433 Coin Collector—Upper Housing Having Swing-type Signal Assembly with One Signal Transmitter

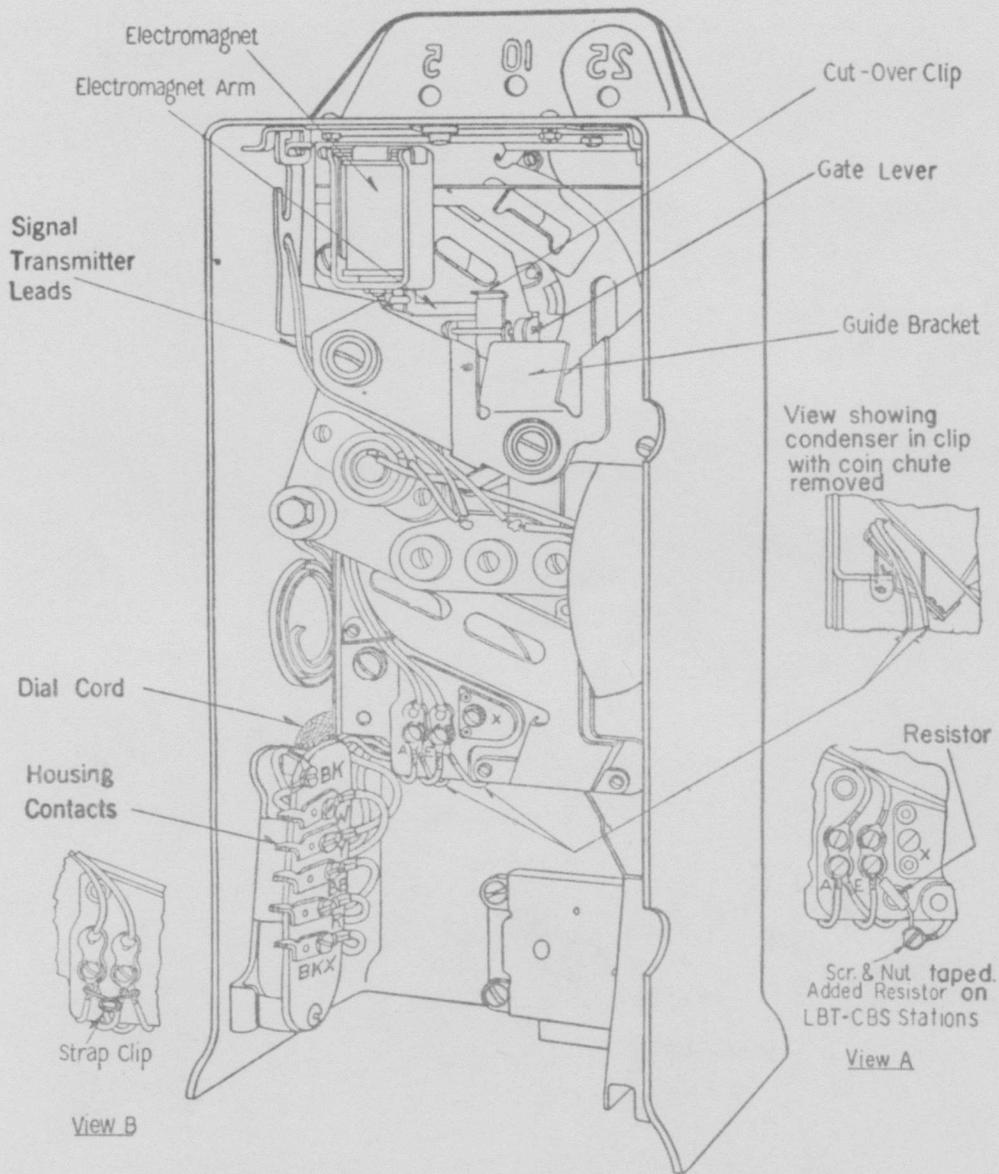


Fig. 21—191, 195, 196, or 197-type, D-179432 or D-179433 Coin Collector—Upper Housing Having Swing-type Signal Assembly with Two Signal Transmitters

Note: The later types of these collectors may have a chute-mounted signal assembly as shown in Fig. 24.

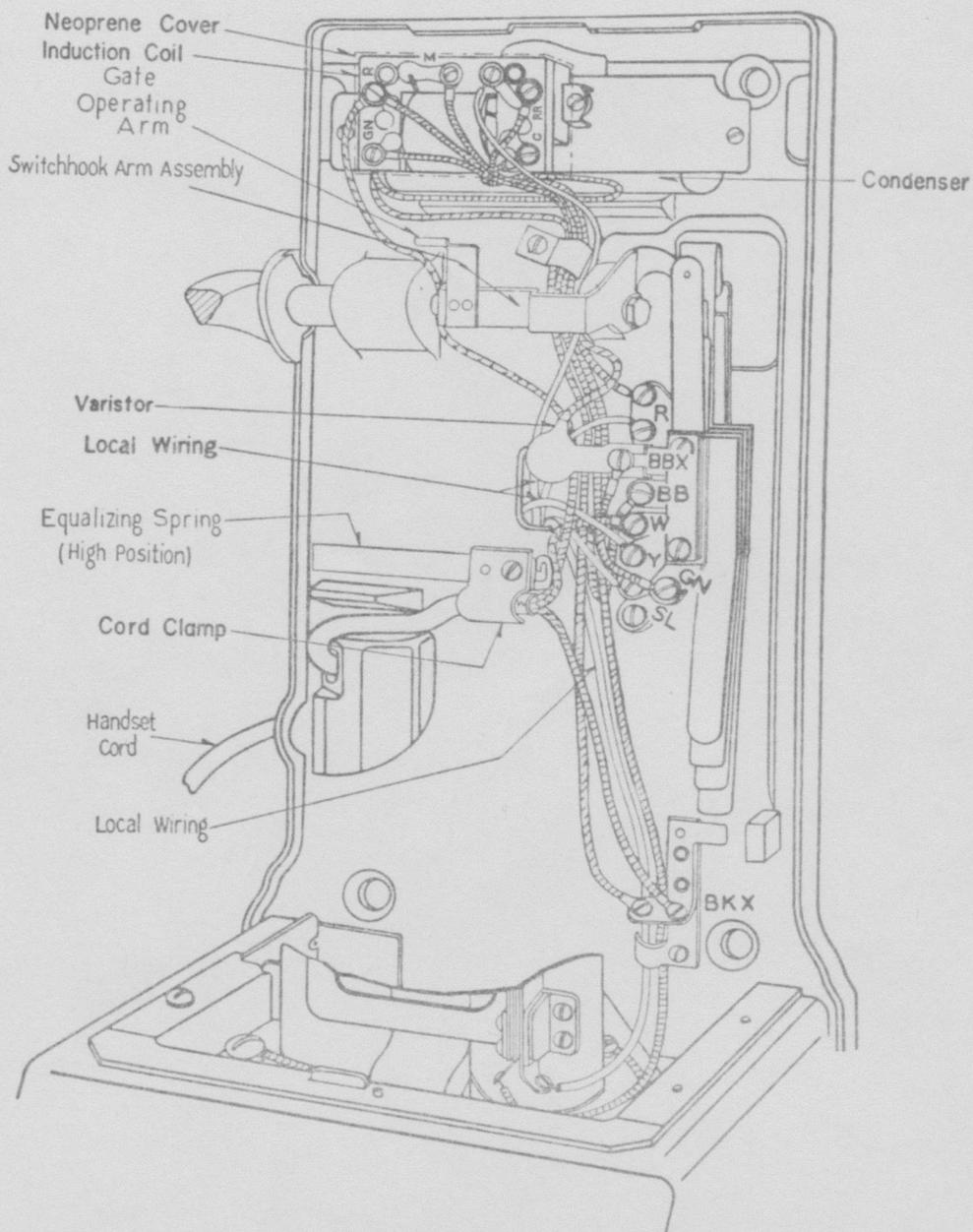


Fig. 22—191, 195, 196, or 197-type Coin Collector—Lower Housing and Backplate Assembly

Notes

- A. D-179432 or D-179433 collector is similar except see Fig. 23 (equalizing spring-high position) for transfer spring and receiver cord.
- B. The later types of these collectors may have induction coil inverted as shown in Fig. 25.

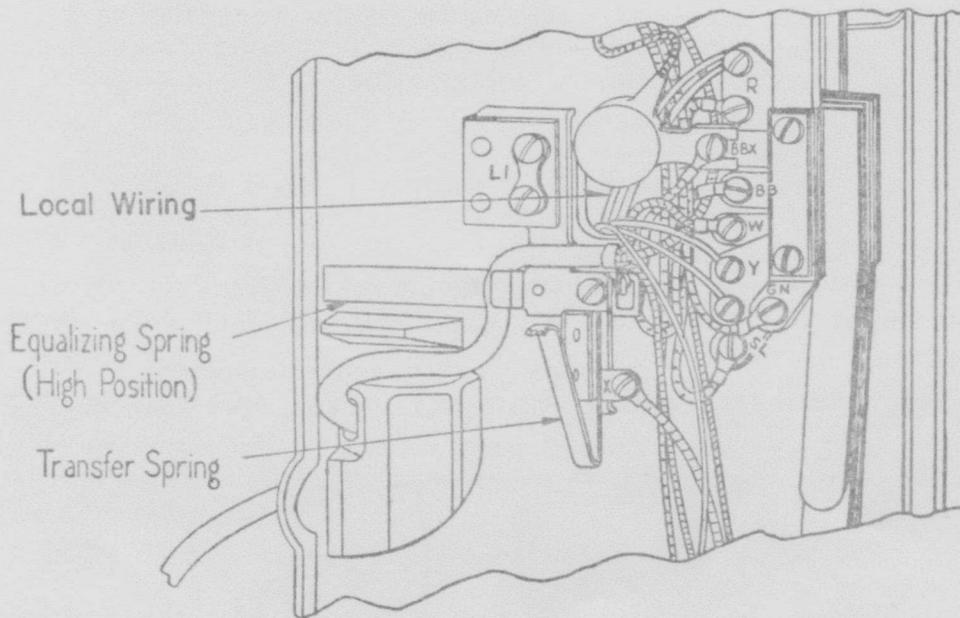


Fig. 23—D-179432 or D-179433 Coin Collector—Backplate Assembly

Note: Wires to coin relay or hopper contacts same as in Fig. 22 or 25.

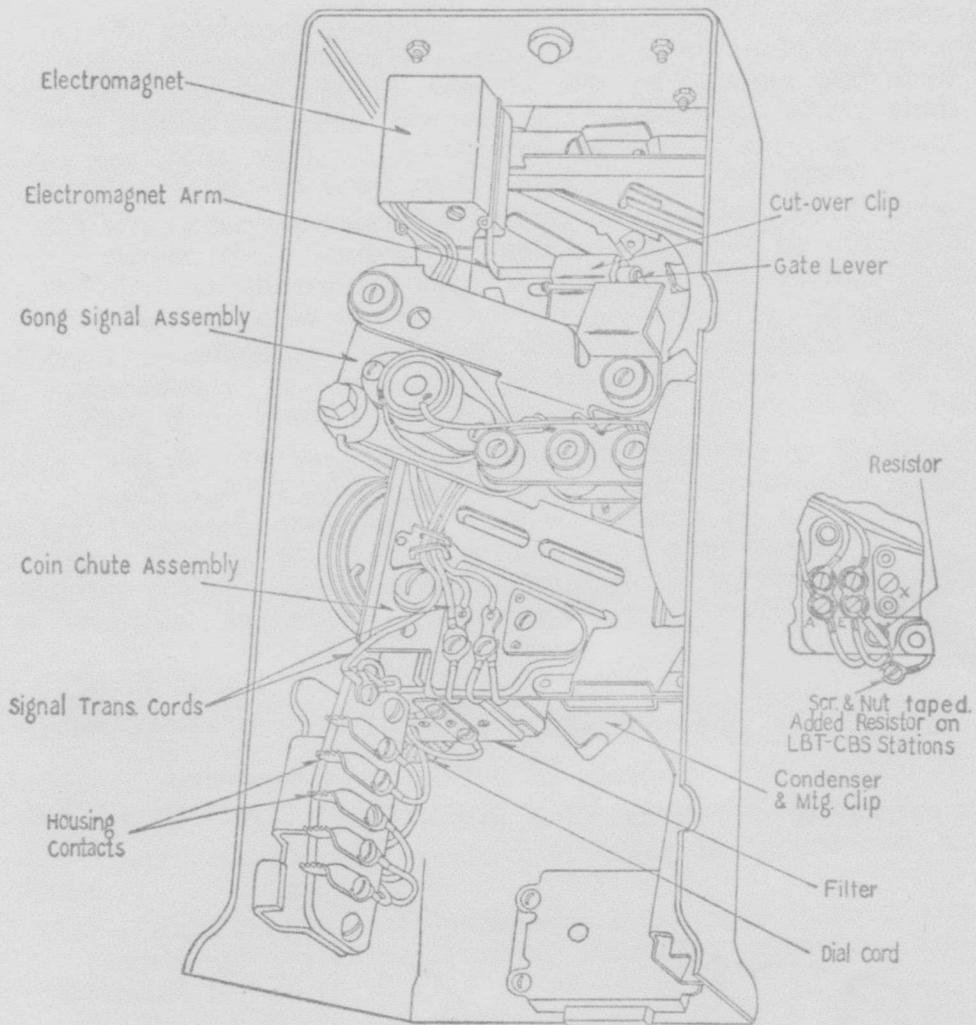


Fig. 24—193-type Coin Collector—Upper Housing Having Chute-mounted Signal Assembly

Note: Converted 193-type collector may have the swing-type signal assembly as shown in Figs. 20 and 21.

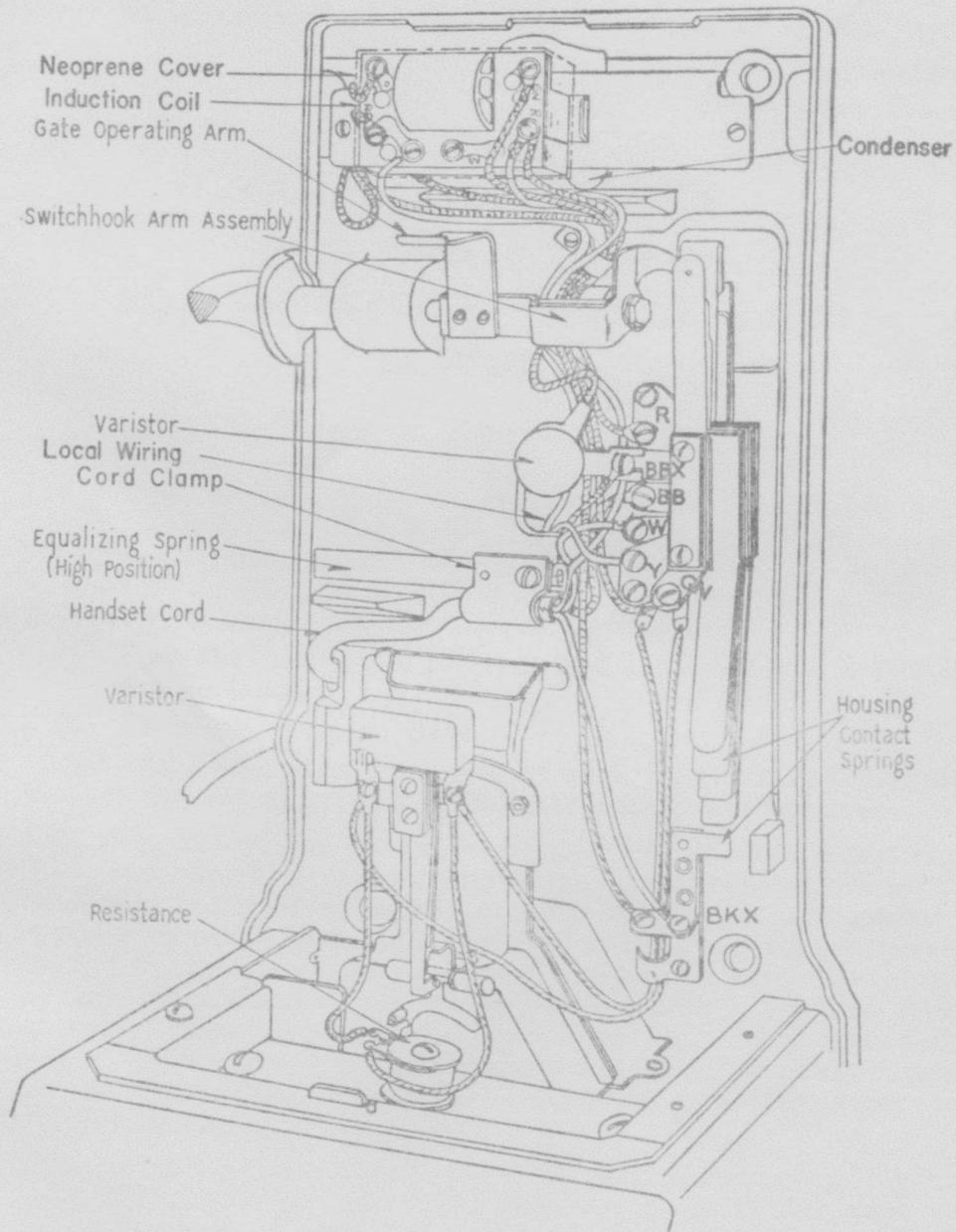


Fig. 25—193-type Coin Collector—Lower Housing and Backplate

C42.106

Page 31
31 Pages

COIN COLLECTORS
MULTISLOT TYPES
FOR 10¢ INITIAL CHARGE BASIS
CORDING