

COIN COLLECTORS

IDENTIFICATION AND ASSEMBLY OF PARTS

1.00 INTRODUCTION

This section covers general information pertaining to the assembly of coin collector equipment and related identifying code numbers.

2.00 GENERAL

2.01 The coin collector consists of a steel lower housing mounted on a cast iron or aluminum backplate, and a steel upper housing which locks in place on the backplate and lower housing. The lower housing includes a cash compartment, equipped with a steel door and lock, and a coin-return chute.

2.02 Component parts are assembled on the backplate and lower housing and either on or in the upper housing. Circuit connections between the removable upper housing and the backplate are made by means of spur-type contacts on the upper housing, and contact springs on the backplate.

2.03 Since the introduction of the first 50-type coin collectors, they have followed the same basic design. However, they lend themselves to modification, conversion, and interchange of parts to meet changing requirements. The result is the variety of types currently in use (see Fig. 1).

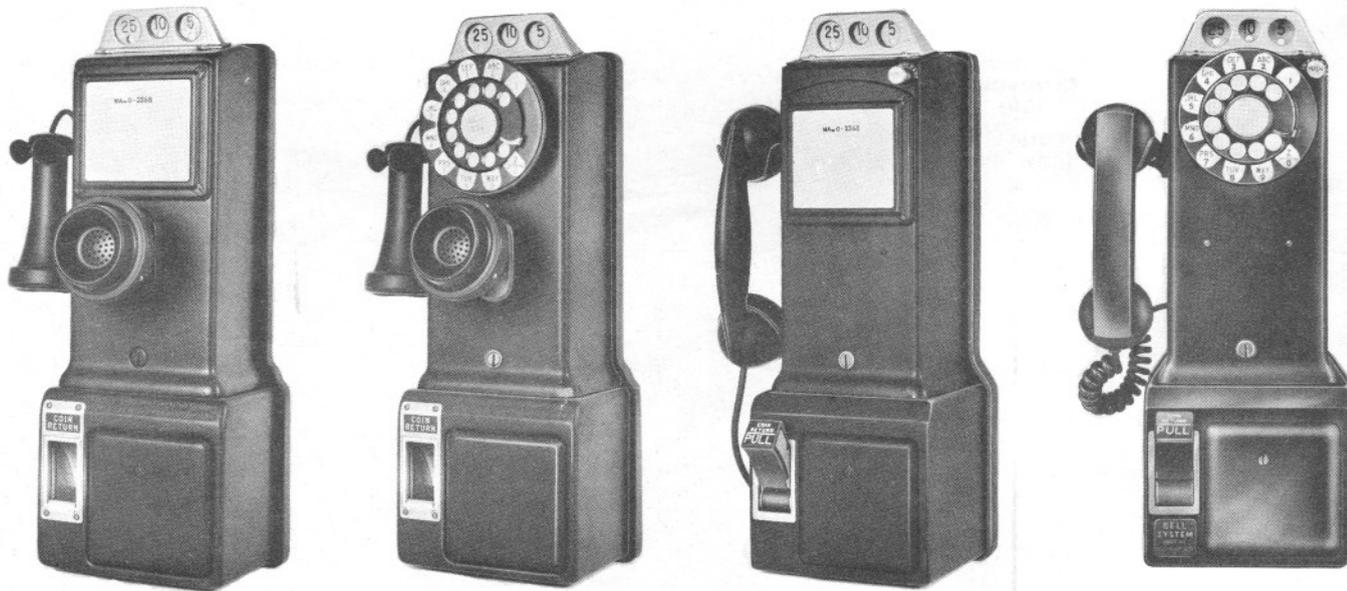


Fig. 1 — Various Types of Coin Collectors

3.00 ASSEMBLY OF PARTS — GENERAL

3.01 The components associated with each type coin collector are listed in the appropriate connection section.

Type of Wiring

3.02 Early-type coin collectors made use of a wood terminal strip for station wiring with separately mounted switchhook and transfer

spring assemblies, as shown in Fig. 2. Later designs make use of a combined switchhook and transfer spring assembly as shown in Fig. 3, 4, and 5. The antisidetone induction coil and related capacitor of the talking circuit were mounted on the backplate for 180 and 190 series coin collectors, as shown in Fig. 3 and 4. The ringing bridge is provided by a separately mounted subscriber set. All network-type and earlier induction-coil types use an externally mounted subscriber set for both talking and ringing features (see Fig. 2 and 5).

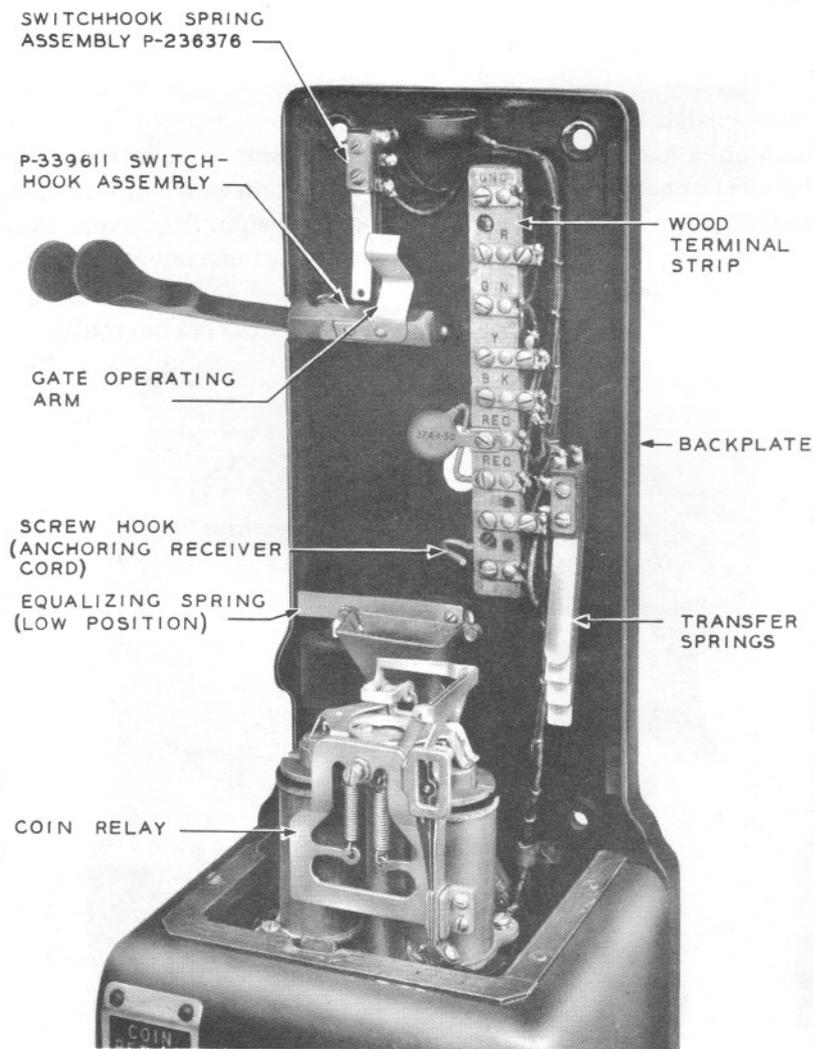


Fig. 2 — Wood Terminal Strip with External Induction Coil and Capacitor

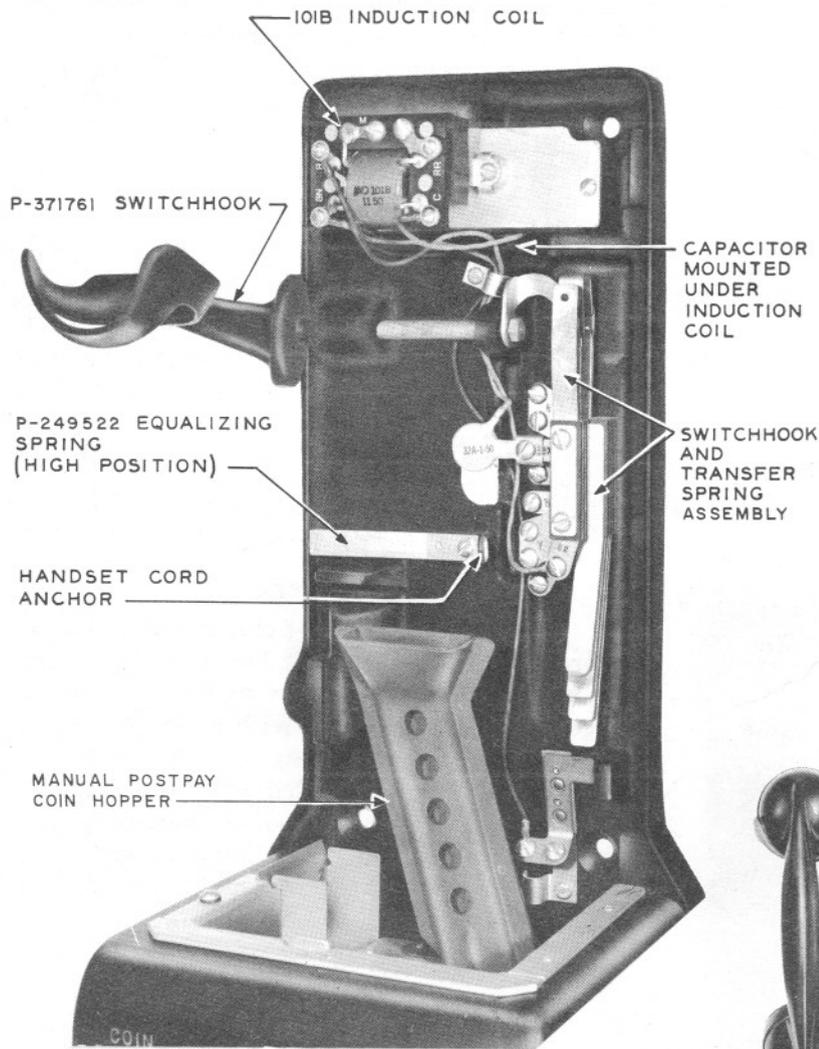


Fig. 3 — Switchhook and Transfer Spring Assembly with Internal Induction Coil and Capacitor

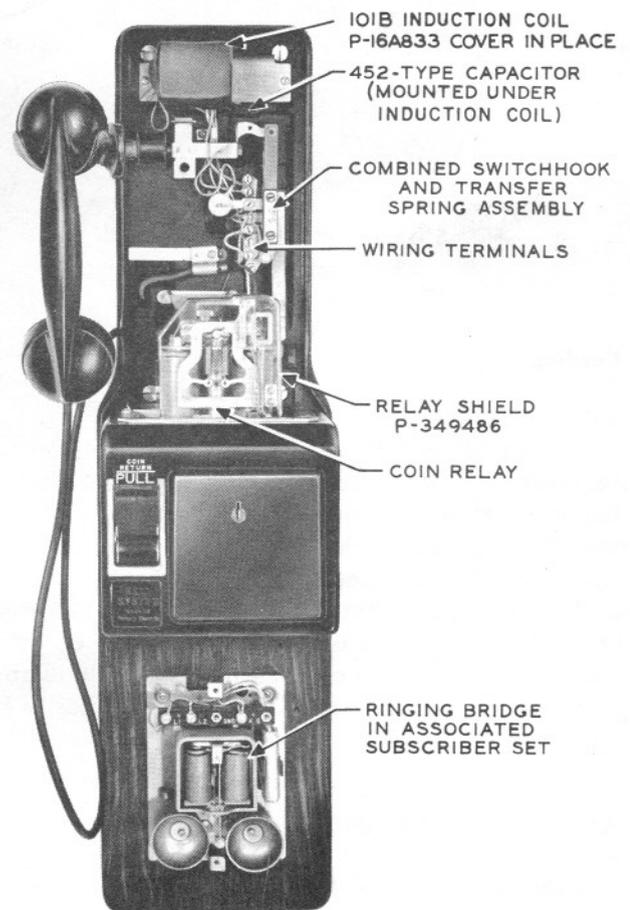


Fig. 4 — Combined Assembly with Induction Coil and Capacitor

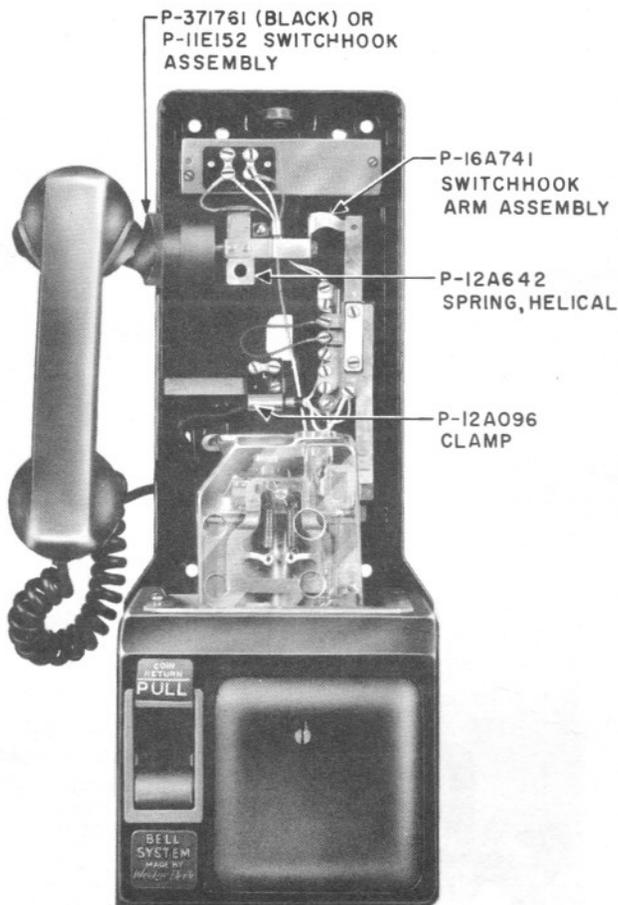


Fig. 5 - Combined Assembly with External Network

Cording

3.03 Cording shall be arranged in a manner which will eliminate the possibility of interference with gongs, coin channels, or any moving part. Spade tip or wire connections shall not touch any framework or termination point other than the one intended. Examples of cord clamps and wire guides, clamps, and holders are shown in several figures in this section. Handset cords at the present time are secured by P-12A096 clamps as shown in Fig. 4 and 5. Previously, they were anchored by stay loops, hooks, or cords.

4.00 UPPER HOUSING

Coin Gauge and Washer-reject Mechanism

4.01 The coin gauge is riveted to the upper housing and is not replaced in the field.

When provided, the washer rejector and associated coin-release push-button mechanism are also riveted or permanently attached to the upper housing and are an integral part of the assembly, as shown in Fig. 10.

Dial and Adapter

4.02 All new coin collectors are equipped with 6-type dials. Shop-reissued coin collectors are equipped with 6-type dials when so specified by the telephone company. The assembly of a 6-type dial is shown in Fig. 6. The 63A adapter incorporates a coin-deflector feature to prevent dropped coins from lodging behind dial.

4.03 The 5-type dial may be used for replacement of 5-type dials if consistent with zoning practices (see Fig. 7). The apparatus and parts associated with a 5-type dial are not interchangeable with those used with a 6-type dial. A P-14A544 coin deflector may be used with the 5-type dial and its associated 56A dial adapter. This deflector cannot be used on coin collectors equipped with washer-reject mechanisms. The 5-type dial and 56A dial adapter are mounted in the dial cup by three P-240420 screws.

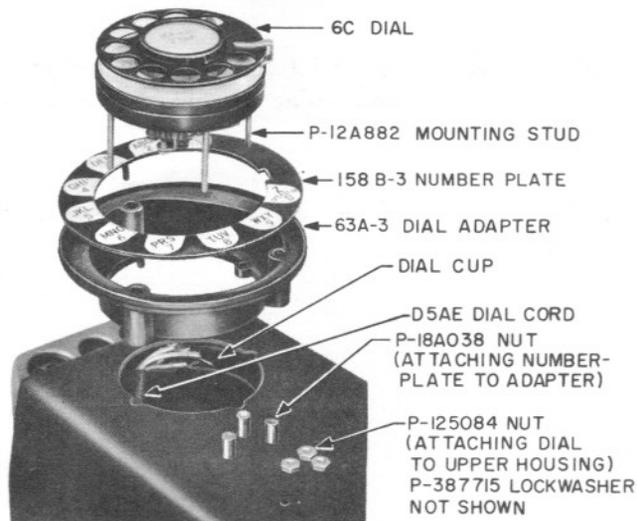


Fig. 6 - Assembly of 6-type Dial

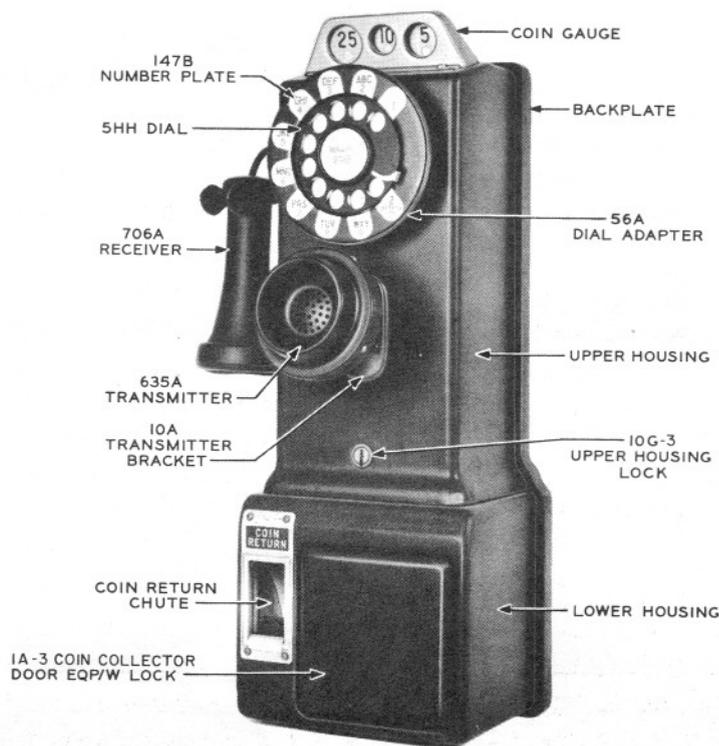


Fig. 7 — Transmitter-Receiver Type

4.04 Replacement of dials and associated equipment is covered in the C Section entitled Coin Collectors, Maintenance, General.

Apparatus Blank

4.05 The P-81C900-type apparatus blank assembly is used to cover the dial cup on coin collectors equipped for manual service. The 50C apparatus blank may be used provided the coin collector is not equipped with washer-reject and coin-release push-button mechanism (see Fig. 1). Apparatus blanks are secured from the rear by three P-242938 screws.

4.06 The P-81C900 or 50C apparatus blank may be used as instruction cardholder on dial coin collectors (see Fig. 8). Two mounting holes are provided in upper housing below dial. Apparatus blanks are mounted by two P-122977 0.112-36 by 1/4 inch RH machine screws. When not used, holes are plugged with P-243217 RH slotless machine screws, P-92383 hexagon nuts, and P-423631 external-tooth lock washers.



Fig. 8 — Handset Type

Cardholders

4.07 Coin collectors may be ordered equipped with 8B cardholders. Cardholders are mounted on top of upper housing behind coin gauge as shown in Fig. 8. The cardholder is held in place by three P-243217 RH slotless machine screws, P-92383 hexagon nuts, and P-423631 external-tooth lock washers. The 8B cardholder replaces earlier 1B and 8A cardholders.

Coin-chute Assembly

4.08 Coin chutes or coin-chute assemblies are mounted inside the upper housing. Assemblies associated with the washer-reject feature use

two P-12A680 screws, two P-12A681 restoring springs, and one P-339521 screw, as shown in Fig. 9. Coin chutes not associated with washer-reject mechanisms are mounted by three P-339521 screws.

4.09 Coin chutes and coin-chute assemblies are shown in Table A according to types of service, coin features, and equipment.

4.10 Coin collectors using coin-chute assemblies equipped with a P-349754 gong assembly have the 452-type capacitor, which is associated with the electromagnet, mounted on the upper housing underneath the coin chute with a P-347181 clip as shown in Fig. 10.

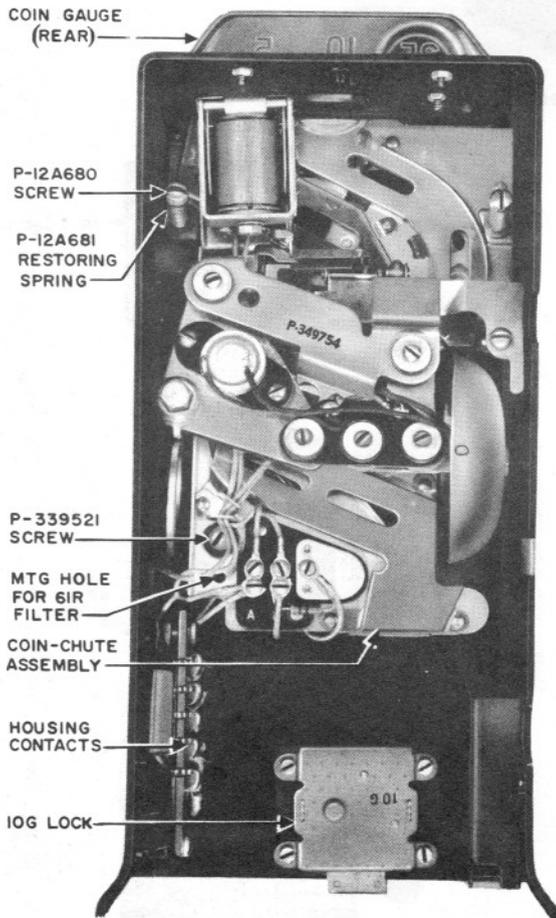


Fig. 9 - Upper Housing, Rear View

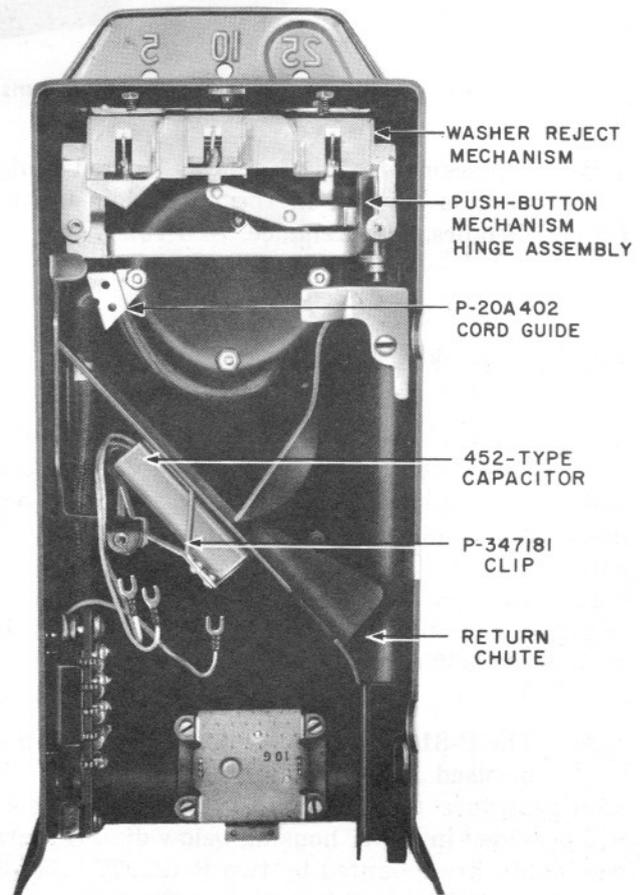


Fig. 10 - Upper Housing, Interior View

TABLE A
COIN CHUTES AND COIN-CHUTE ASSEMBLIES

| Chute Only | | | Assembly | | | Service |
|------------|-------------------|----------|----------|-------------------|----------|---------------------------------|
| U.S. | U.S. and Canadian | See Note | U.S. | U.S. and Canadian | See Note | |
| P-338883 | P-338884 | | P-338899 | P-338900 | 3 | Manual Postpay |
| P-339526 | | 1 | P-339528 | | 4 | 10¢ Prepay |
| P-339526 | P-339527 | 1 | P-340222 | P-340223 | 3 | 10¢ Prepay |
| P-340042 | | 2 | P-340044 | | 4 | 10¢ CDO Postpay |
| P-340042 | P-340043 | 2 | P-340224 | P-340225 | 3 | 10¢ CDO Postpay |
| P-20A119 | P-20A120 | 1 | P-20A125 | P-20A126 | 3 | 10¢ Prepay (Washer Reject) |
| P-20A121 | P-20A122 | 2 | P-20A127 | P-20A128 | 3 | 10¢ CDO Postpay (Washer Reject) |

Notes:

1. Equipped with a nonpolarized electromagnet.
2. Equipped with a polarized electromagnet.
3. Equipped with a P-349754 gong assembly.
4. Equipped with a 452B capacitor.

4.11 Coin-chute assemblies not equipped with a P-349754 gong assembly are used on coin collectors having the gongs mounted on the sides of the upper housing or mounted on a swing-type bracket attached to the upper housing. Coin-chute assemblies equipped with a 452B capacitor are used only in upper housings having the gongs mounted on the sides of the housing.

4.12 Manual postpay coin collectors may use a 10-cent coin chute or coin-chute assembly when the chute is equipped with a P-339098 cut-over clip to hold the electromagnet arm in its operated position (see Fig. 11).

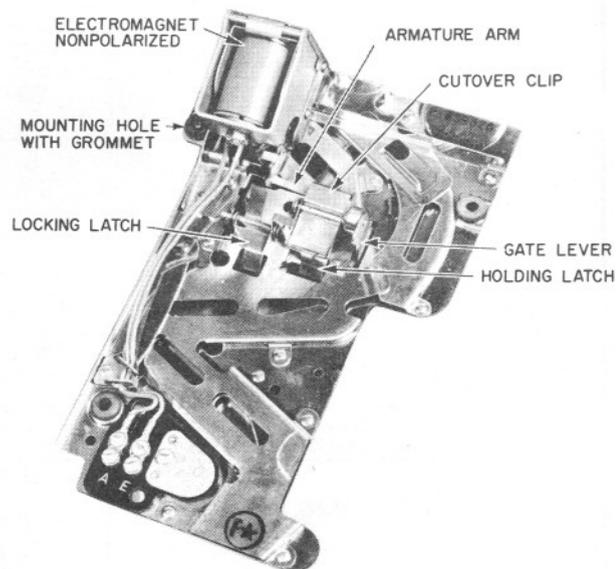


Fig. 11 — Prepay Coin Chute Equipped with Cutover Clip for 5-cent Service

TABLE B
UPPER HOUSING ASSEMBLIES FOR COIN COLLECTORS

| Service | U.S. Coins | | U.S. and Canadian Coins | |
|----------------------|--|--|--|-------------------------|
| | Coin Collectors | Equipped Upper Housings | Coin Collectors | Equipped Upper Housings |
| Manual Postpay | 150K, 162A, 162C | BA-220492C | 150L, 162B, 162D | BA-220492H |
| | 152C, 164C | BA-220493C | 152D, 164D | BA-220493D |
| | 182C, CN | BA-220494C | 182D, DN | BA-220494D |
| | 200C | P-81B803 | 200D | P-81B903 |
| 10¢ Dial Postpay CDO | 158G, 168G | BA-220496G | 158H, 168H | BA-220496H |
| | 177G, 178G | BA-220498G | 177H, 178H | BA-220498H |
| | 193G | BA-220500G | 193H | BA-220500H |
| | 193GN, 210G | P-81C403 | 193HN, 210H | P-81C503 |
| | 198G | BA-220502G or P-10E126 | 198H | BA-220502H |
| | 198GN, 212G | P-81B603 | 198HN, 212H | P-81B703 |
| 10¢ Manual Prepay | 155C, 166C | BA-220495C | 155D, 166D | BA-220495D |
| | 174C, CS, CT 176C, CS, CT | BA-220497C | 174D, DS, DT 176D, DS, DT | BA-220497D |
| | 191C, CS, CT 195C, CS, CT | BA-220499C | 191D, DS, DT 195D, DS, DT | BA-220499D |
| | 191CN, CNS, CNT 195CN, CNS, CNT 220C, CT, 230C | P-81C003 | 191DN, DNS, DNT 195DN, DNS, DNT 220D, DT, 230D | P-81C103 |
| | 196C, CS, CT 197C, CS, CT | BA-220501C | 196D, DS, DT 197D, DS, DT | BA-220501D |
| | 196CN, CNS, CNT 197CN, CNS, CNT 223C, CT, 233C | P-81B203 | 196DN, DNS, DNT 197DN, DNS, DNT 223D, DT, 233D | P-81B303 |
| 10¢ Dial Prepay | 155G, D-178457 166G, D-178875 | BA-200495G | 155H, 166H | BA-220495H |
| | 174G, GS, GT D-178940 176G, GS, GT D-178942 | BA-220497G | 174H, HS, HT 176H, HS, HT | BA-220497H |
| | 191G, GS, GT D-179432 195G, GS, GT D-179433 | BA-220499G | 191H, HS, HT 195H, HS, HT | BA-220499H |
| | 191GN, GNS, GNT 195GN, GNS, GNT 220G, GT, 230G | P-81C203 | 191HN, HNS, HNT 195HN, HNS, HNT 220H, HT, 230H | P-81C303 |
| | 196G, GS, GT D-179532 197G, GS, GT D-179533 | BA-220501G or P-13A766 | 196H, HS, HT 197H, HS, HT | BA-220501H |
| | 196GN, GNS, GNT 197GN, GNS, GNT | P-81B403 | 196HN, HNS, HNT 197HN, HNS, HNT | P-81B503 |
| | 223G, GT, 233G See Note | P-81B403 or P-81B451 or P-81B460 | 223H, HT, 233H | P-81B503 |

Note: P-81 assembly numbers are assigned from a block of numbers which indicate color significance. The last two digits of the number indicate the type of finish, ie, 03 black, 51 moss green, 60 light beige.

4.13 A radio-frequency suppression filter, although it is attached to the coin chute, is not considered a part of the chute assembly. The filter when used is mounted on the rear side of the coin chute at the lower left corner. A mounting hole is provided as shown in Fig. 9. Dial postpay coin collectors are normally equipped with 61R filters. Dial prepay coin collectors when equipped with 61R filters should be identified by a red dot located on the back of the coin gauge.

Upper Housing Assemblies

4.14 Fully equipped upper housing assemblies used on the various types of coin collectors are shown in Table B.

5.00 LOWER HOUSING

Cash Compartment

5.01 The self-locking coin receptacle and 1A coin-collector door equipped with lock for the cash compartment are controlled according to arrangements with the Commercial Department. The self-locking receptacle consists of a 1B coin receptacle equipped with a 1C coin-receptacle cover. The use of the self-locking coin receptacle requires a 1A coin-receptacle rail on the bottom of the mechanism base in the cash compartment (see Fig. 8).

Return Chute

5.02 The lower part of the coin-return chute is located in the lower housing to the left of the cash compartment. When a pull bucket is provided, it acts as a receptacle for returned coins. To remove coins, pull bucket is opened by handle marked COIN RETURN, PULL. The pull bucket in both the closed and open positions prevents access to the return chute. The assembly of the pull bucket is covered in the C Section entitled Coin Collectors, Pull Buckets, Maintenance.

Backplate Assembly

5.03 Various typical combinations of parts mounted on the backplate are illustrated in Fig. 2, 3, 4, and 5.

Mechanism-unit Assembly

5.04 The mechanism-unit assembly is mounted on top of the lower housing. Four types are provided: manual postpay, Fig. 12; dial postpay, Fig. 13; manual or dial prepay equipped with 2-coil coin relay, Fig. 14; and manual or dial prepay equipped with single-coil slow-release relay, Fig. 15.

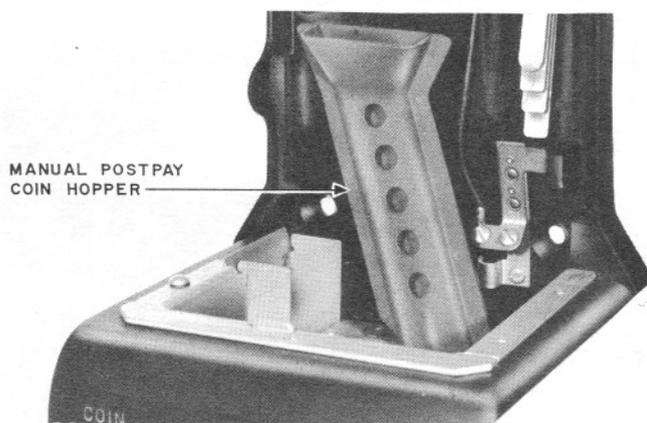


Fig. 12 — Manual Postpay

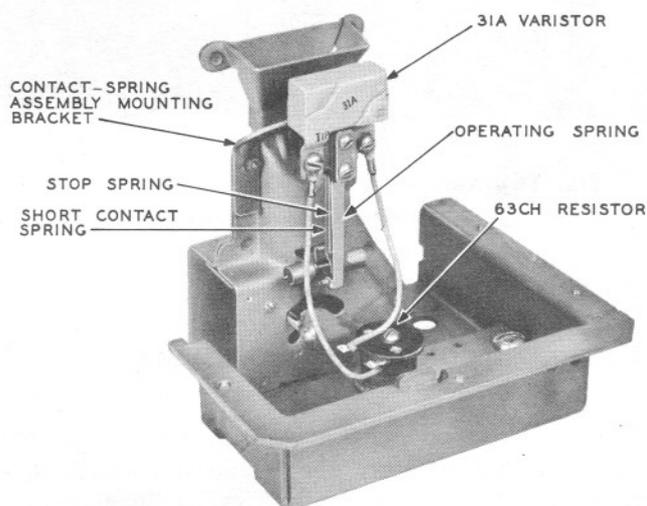


Fig. 13 — Dial Postpay (CDO)

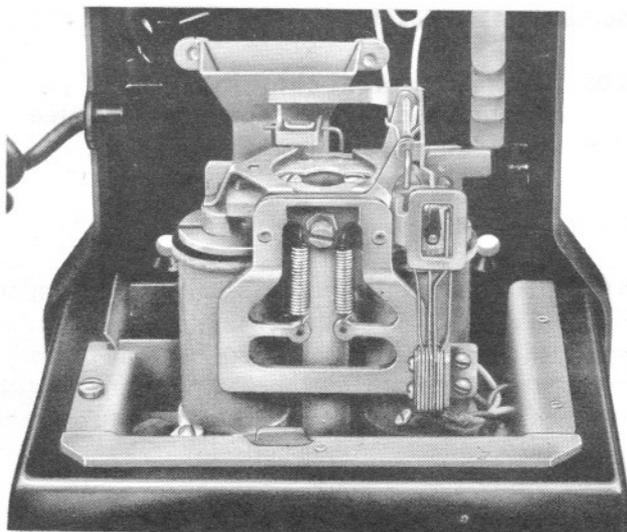


Fig. 14 — Manual or Dial Prepay, 2-coil Coin Relay

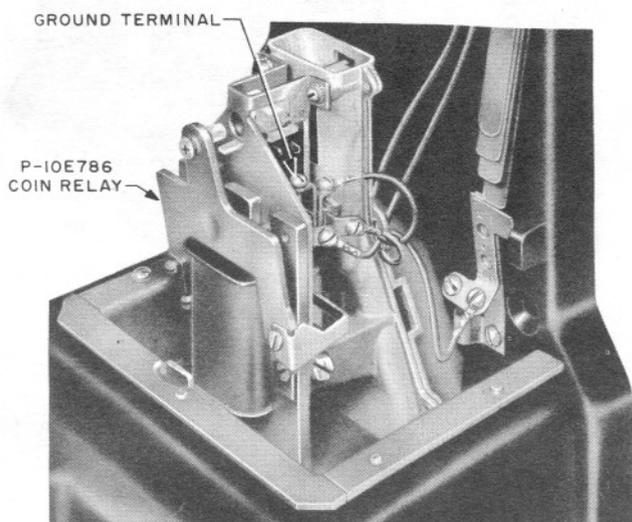


Fig. 15 — Manual or Dial Prepay, Single-coil Slow-release Coin Relay

6.00 COIN COLLECTOR CODE NUMBERS

6.01 Numerical codes in association with alphabetical suffixes are used to identify the various types of coin collectors. D specification numbers are used to identify sets made for limited usage.

Color Coin-collector Apparatus

6.02 Coin-collector apparatus for dial service, which is available in color, and its identifying code suffix are listed in Table C. All orders for coin-collector apparatus shall include the appropriate suffix.

TABLE C
COLOR APPARATUS CODES

| Apparatus | Color | | |
|---------------------|-------------|------------|-------------|
| | Black | Moss Green | Light Beige |
| | Code Suffix | | |
| 223G Coin Collector | -3 | -51 | -60 |
| 233G Coin Collector | -3 | -51 | -60 |
| 1A Door | -3 | -51 | -60 |
| 8B Cardholder | -3 | -51 | -60 |
| 14B Lock | -3 | -51 | -60 |
| 10G Lock | -3 | -51 | -60 |
| 158B Number plate | -3 | -51 | -60 |
| 63A Dial Adapter | -3 | -51 | -60 |
| G1BR Handset | -3 | | |
| G3FR Handset | | -51 | -60 |

Note: Moss green and light beige coin collectors have clear plastic finger wheels on 6M-3 dials and P-11E152 chrome-plated switchhooks. The phenol plastic pull bucket is black on all sets.

Historical Development

6.03 The historical development of prepay coin collectors and their basic features are shown in Fig. 16.

Code Number Characters

6.04 The characters in 200 series coin collector code numbers have the following significance:

First digit — telephone circuit

2 — 425B, network-type telephone circuit

Second digit — service

- 0 — Manual postpay, 5-cent coin chute
- 1 — 10-cent dial postpay (CDO)
- 2 — 10-cent prepay, 4-spring dial shorting coin relay
- 3 — 10-cent prepay, slow-release single-coil dial shorting coin relay. Coin collector has corrosion-resistant finish.

Third digit — features

- 0 — Basic collector
- 2 — Washer reject
- 3 — Pull bucket and washer reject

Letter — service and coins

- C — Manual, U.S. coins
- D — Manual, U.S. and Canadian coins
- G — Dial, U.S. coins (B-type numberplate)
- H — Dial, U.S. and Canadian coins (B-type numberplate)

All 200 series coin collectors have cast aluminum backplates. Lower numbered codes have cast iron backplates.

6.05 No one definite plan or arrangement can be applied to lower-numbered codes or the relationship between old code numbers and converted code numbers. However, 2-digit numbers indicate sidetone telephone circuits and 3-digit numbers indicate antisidetone telephone circuits.

6.06 Code numbers for 180 and 190 series coin collectors use the same general coding plan with special features available on the 191 and 193 types. Other converted coin collectors, if applicable, are also coded to this plan. The 180 series was arranged for 5-cent initial deposit; the 190 series, for 10-cent initial deposit. Both are handset types. Characters having common meaning are as follows:

Third digit — service and special features

- | | | |
|----------------------------|---|--|
| 180 or 190 Series | { | 1 — Prepay |
| | | 2 — Postpay manual |
| | | 3 — Postpay dial (CDO) |
| 190 Series Only | { | 5 — Prepay equipped with pull bucket |
| | | 6 — Prepay equipped with washer reject |
| | | 7 — Prepay equipped with pull bucket and washer reject |
| | | 8 — Postpay dial equipped with washer reject (CDO) |

First letter — service and coin features

- | | | |
|----------------------|---|--|
| | | C — Manual, U.S. coins |
| | | D — Manual, U.S. and Canadian coins |
| Not Re- issued | { | E — Dial, U.S. coins (A-type numberplate) |
| | | F — Dial, U.S. and Canadian coins (A-type numberplate) |
| | | G — Dial, U.S. coins (B-type numberplate) |
| | | H — Dial, U.S. and Canadian coins (B-type numberplate) |

Second, or second and third letters — features

- N — 425B network-type telephone circuit
- S — 4-spring dial shorting coin relay
- T — Slow-release, single-coil dial shorting coin relay
- R — Spring cord (stamped on carton only)
- L — Local battery talking, common battery signaling (obsolete)

6.07 When required, coin collectors are generally arranged for local battery talking in the field in accordance with the appropriate circuit diagram in the connection sections.

6.08 Coin collector codes with their related features are shown in Table D.

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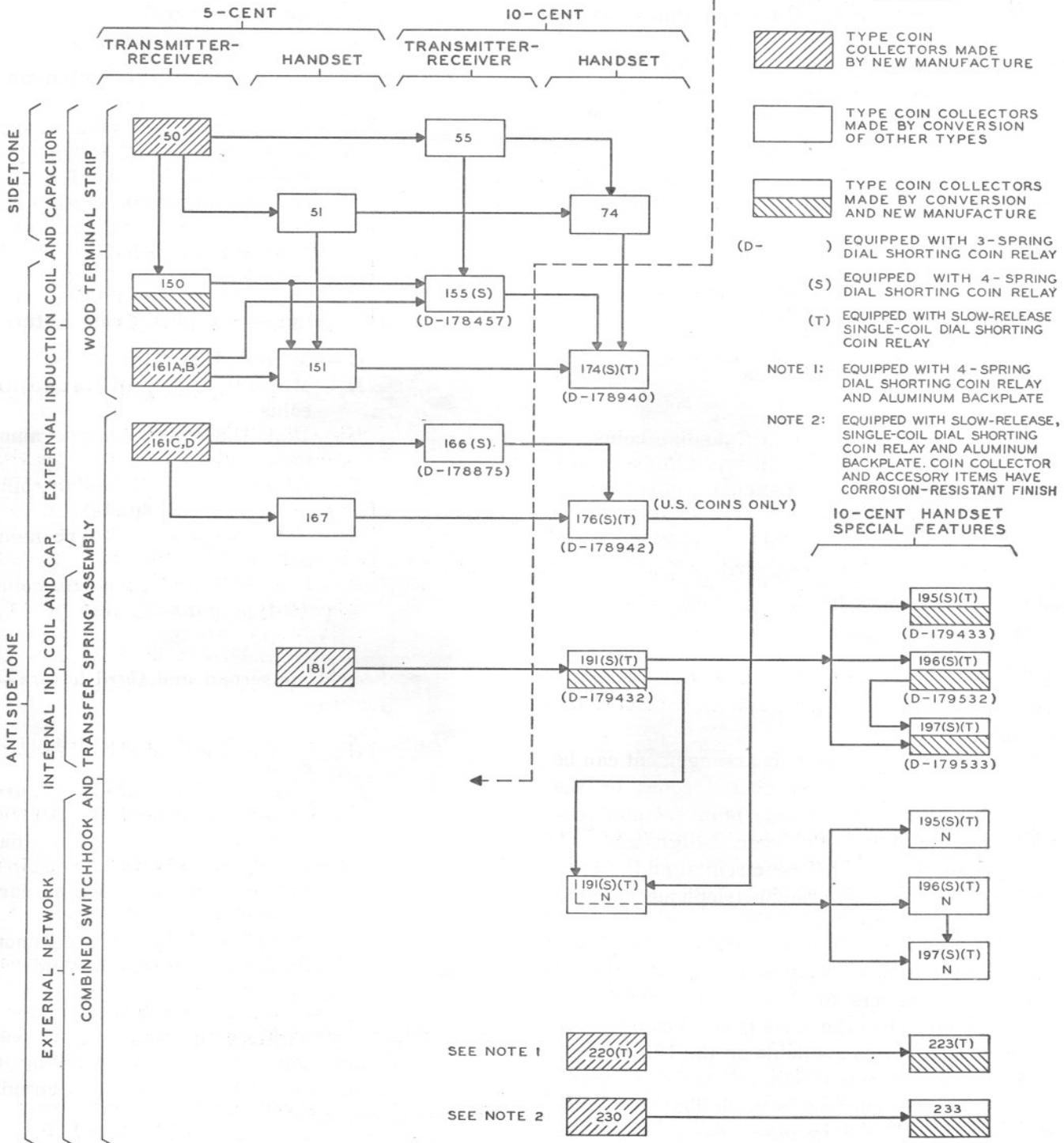


Fig. 16—Historical Development of Prepay Coin Collectors

| Transmission | | Type of Wiring | Features | | Coin Relay | | | |
|-------------------------------|---------------------------------------|---|-------------------------------|--------------|-------------------|------|-------------------|----|
| | | | Pull Bucket and Washer Reject | Code No. | P-145749 | | | |
| | | Manual | | | Dial | | | |
| | | | | Coins | | | | |
| | | | | U.S. | U.S. and Canadian | U.S. | U.S. and Canadian | |
| | | | | Code Letters | | | | |
| Handset G Type | External Network | Combined Switch-hook and Transfer Spring Assembly | None | 191 | CN | DN | GN | HN |
| | | | Pull Bucket | 195 | | | | |
| | | | Washer Reject | 196 | | | | |
| | | | Pull Bucket and Washer Reject | 197 | | | | |
| Handset F Type | Internal Induction Coil and Capacitor | | None | | C | D | G | H |
| | | | Pull Bucket | 195 | | | | |
| | | | Washer Reject | 196 | | | | |
| | | | Pull Bucket and Washer Reject | 197 | | | | |
| | External Induction Coil and Capacitor | Wood Terminal Strip | None | 176 | | | | |
| | | | | 174 | | | | |
| Separate Transmitter-Receiver | External Induction Coil and Capacitor | Wood Terminal Strip | None | 166 | | | | |
| | | | | 155 | | | | |

*.Wired and equipped for future dial shorting.

† Equipped with mechanism unit P-10E683, having increased coin-hopper capacity and P-10E786 slow-release Coin collector and accessory items have corrosion resistant finish.

‡ Washer reject only.

FILE D

FACTOR CODES

| 5-cent Prepay | | | | | 10-cent Dial Postpay (CDO) | | Manual Postpay (5-cent type coin chute) | | | | |
|---------------|----------------------------|-------------------|------------|-------------------|----------------------------|--------------|---|----------|--------------|-------------------|-------------------|
| Code No. | Coin Relay – Dial Shorting | | | | Code No. | Coins | | Code No. | Coins | | |
| | P-10C117(S) or P-10E786(T) | | | D-96590 | | U.S. | U.S. and Canadian | | Code No. | U.S. | U.S. and Canadian |
| | Manual* | | Dial | | | | | | | | |
| | Coins | | | | | Code Letters | | | Code Letters | | |
| | U.S. | U.S. and Canadian | U.S. | U.S. and Canadian | | U.S. | Code No. | | U.S. | U.S. and Canadian | |
| 191 | | | | | 193 | | | 182 | | | |
| 195 | | | | | | | | | | | |
| 196 | CNS CNT | DNS DNT | GNS GNT | HNS HNT | 198 | GN | HN | | CN | DN | |
| 197 | | | | | | | | | | | |
| 220 | C, CT | D, DT | G, GT | H, HT | 210 | | | 200 | | | |
| 230† | C | D | G | H | | G | H | | C | D | |
| 223 | C, CT | D, DT | G, GT | H, HT | 212‡ | | | | | | |
| 233† | C | D | G | H | | | | | | | |
| 191 | | | | | D-179432 | 193 | | 182 | | | |
| 195 | | | | | D-179433 | | | | | | |
| 196 | | | | | D-179532 | 198 | | | | | |
| 197 | CS CT | DS DT | GS GT | HS HT | D-179533 | G | H | | C | D | |
| 176 | | | | | D-178942 | | | 164 | | | |
| 174 | | | | | D-178940 | | | 152 | | | |
| | | | | | D-178875 | | | 162 | | | |
| | | | | | D-178457 | 158 | | 162 | A | B | |
| | | | | | | | | 150 | K | L | |

single-coil, dial shorting relay.