COIN COLLECTOR TELECART

Identification, Installation and Maintenance

1. IDENTIFICATION

1.01 The Coin Collector Telecart consists of a coin collector and a telephone set built into a portable cabinet, for use by convalescent and bedridden patients in military hospitals and convalescent homes.

1.02 The telecart is provided with a fifty-foot cord which can be plugged into standard telephone jacks, and is equipped with special mercury switches to prevent unauthorized return of coins.

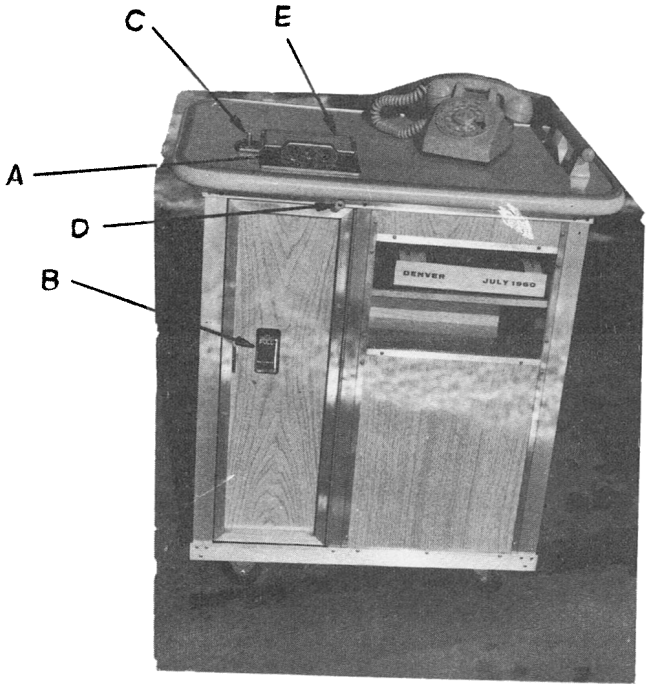

FIGURE 1
Coin Collector Telecart
Front View

1.03 The cabinet, illustrated in Figure 1, has a frame of extruded aluminum, and side and top panels of gray laminated plastic. The wheels are equipped with heavy-duty ball bearings for easy rolling.

1.04 The Coin Collector is concealed in a front compartment of the cabinet. The coin slots (A) project above the top and the coin return pull bucket (B) projects through a hole in the door of the compartment. Operation of button (C) depresses the switch-hook to release a nickel held by the holding latch. A coin release button (D) in the front panel is used to release coins wedged in the coin slots. A frame (E) for an instruction card is provided on top near the coin slots.

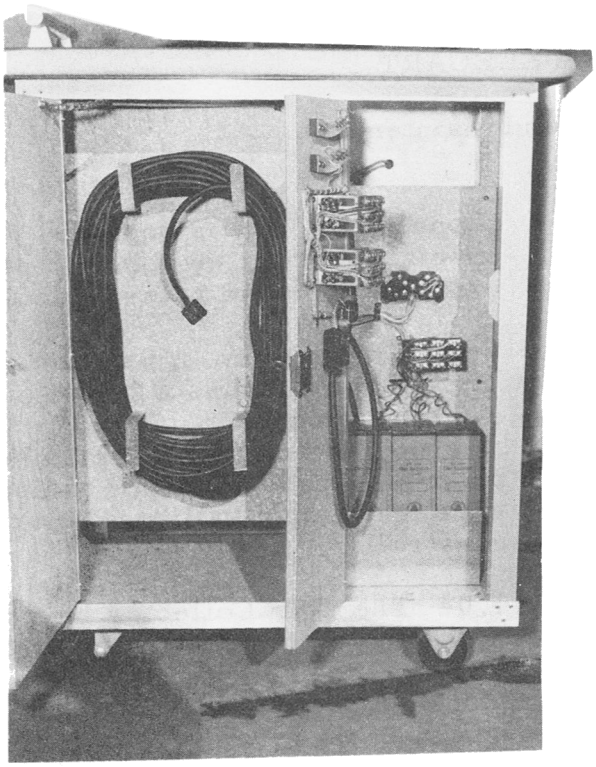

FIGURE 2
Coin Collector Telecart
Equipment Compartment

1.05 The reverse side of the cabinet contains two compartments: one to store the extension cord, the other to mount the control equipment illustrated in Figures 2 and 3. Equipment is mounted on the inside of the door, the left side panel and the rear panel of this compartment. The door is equipped with a regular upper housing lock from a coin collector.

1.06 The parts list is shown in Table I.

TABLE I
TELECART, COLLECTOR, COIN
PARTS LIST

QUAN.	NAME
4	Switch, Mercury, G.E. 2-52 KRO, or equivalent
2	8C K.T.U. (Key Telephone Unit)
1	8A K.T.U.
2	U3 Covers
1	Relay, U1245
1	Relay, Y107
1	Relay, Amperite, 26C2
1	Socket, Tube, Amphenol 77MIP-8, or equivalent
1	42A CONN BLK
1	44A CONN BLK
3	Batteries, KS-7889
1	Resistor, KS-18491, L1, 4700 ohms, 5% 1 watt or equivalent (Figure 7)
1	Lock, Coin Collector, 10H. (Figure 2)
1	Collector, Coin, 233GR-3 (Figure 6)
1	Set, Telephone, 500DR-61 (Figure 4)
1	Cord, D6AA-61, 9Ft. (Figure 4)
50 ft.	Cord, 18Ga., 4 Cond., Type SO (600V), Whitney-Blake 5722, or equivalent (Figure 7)
1	Plug, 283B-9 (Figure 7)
1	Telecart, Model 203C.
1	Frame, Card, P-14E388

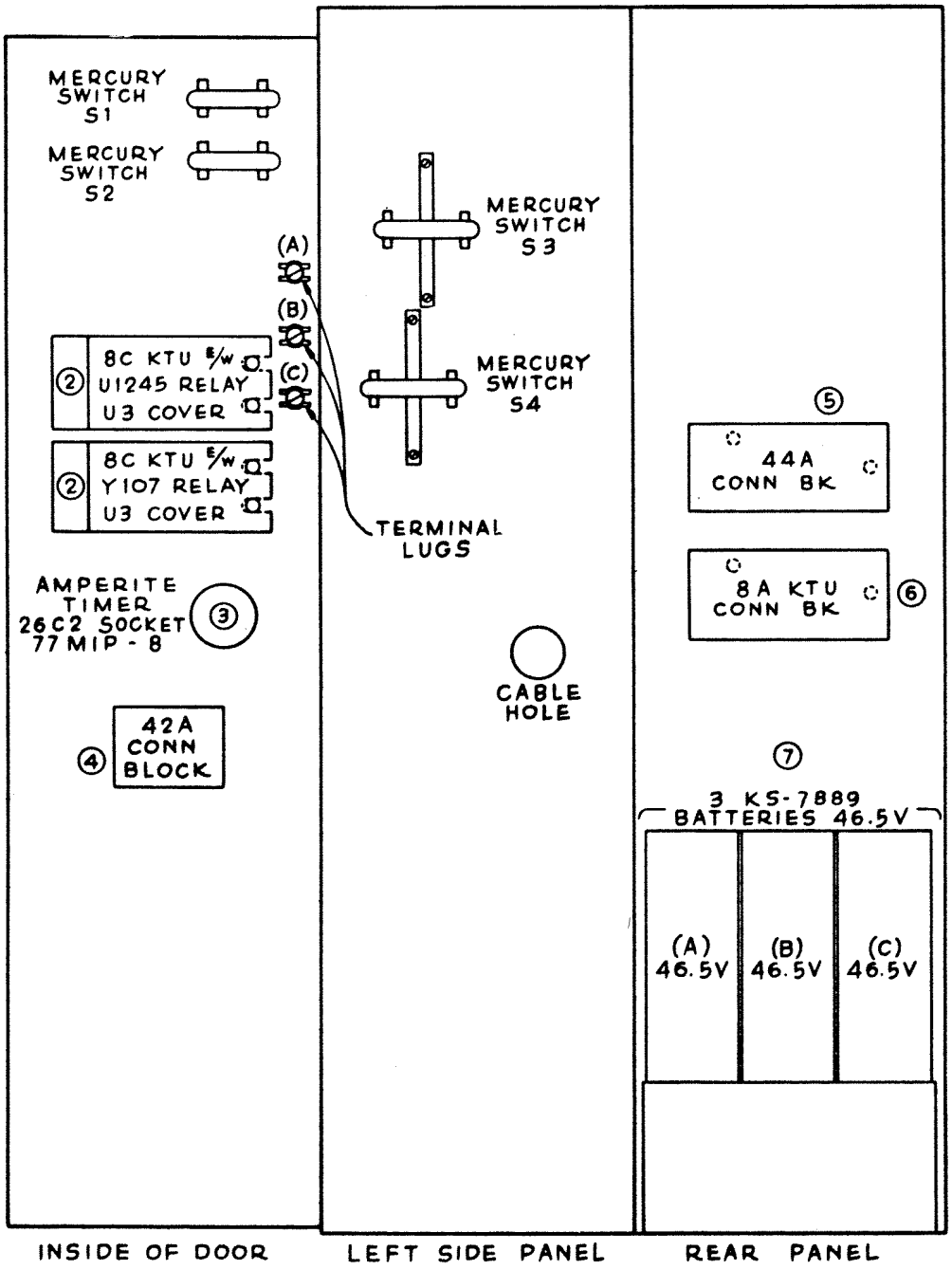

FIGURE 3
Equipment Compartment

2. INSTALLATION

2.01 The telecart is shipped ready for service except for the following minor operations:

(a) Install instruction card in frame provided in top of cabinet.

(b) Connect battery by attaching wire to terminal 1 of the 44A connecting block. This wire is left detached to avoid draining the battery in case of accidental operation of the mercury switches during shipping. There is normally no drain on the battery except intermittently when the telephone is in use.

(c) Plug cord into standard telephone jack.

3. CIRCUIT DESCRIPTIONS, TESTS AND MAINTENANCE

3.01 Refer to appropriate sections of BSP's for instructions on maintenance of the coin collector and telephone set.

3.02 The 500 type telephone used with the Telecart is modified as follows:

a. Rewired as illustrated in Figure 4.

b. Cord replaced with D-6AA-61 cord, 9' long.

The ringer is connected in the regular manner.

3.03 The Telecart is equipped with a 233GR coin collector modified as follows:

a. Dial and handset and associated wiring removed.

b. Upper housing rewired as shown in Figure 6.

c. Coin relay modified as shown in Figure 5 below.

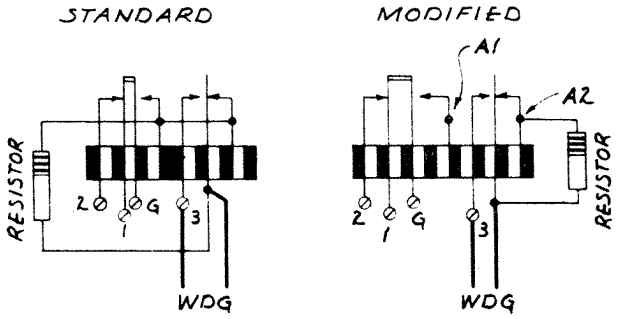

FIGURE 5
Modification of
Coin Relay Spring Assembly

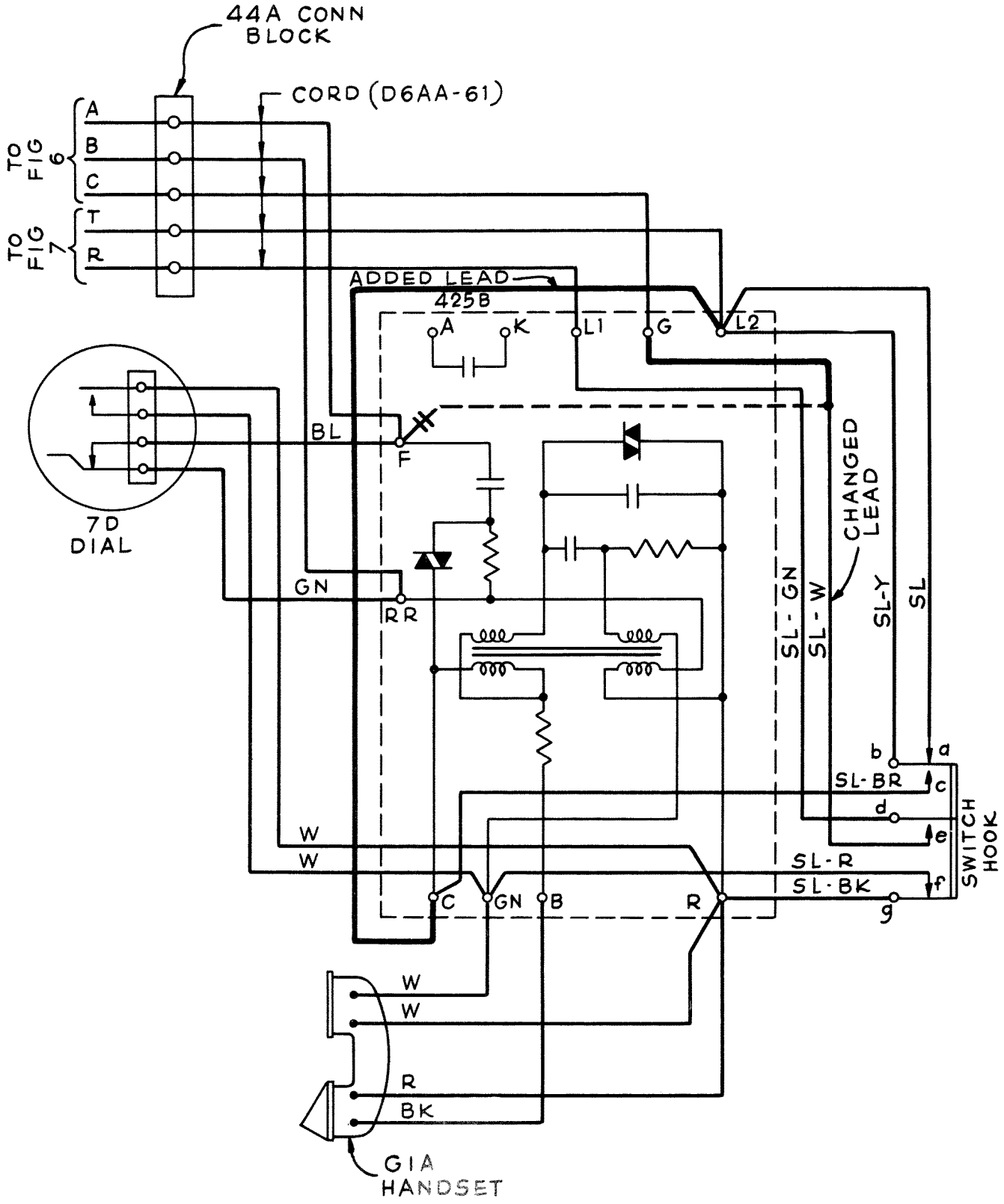

FIGURE 4

500D TYPE TELEPHONE MODIFIED FOR USE WITH TELECART

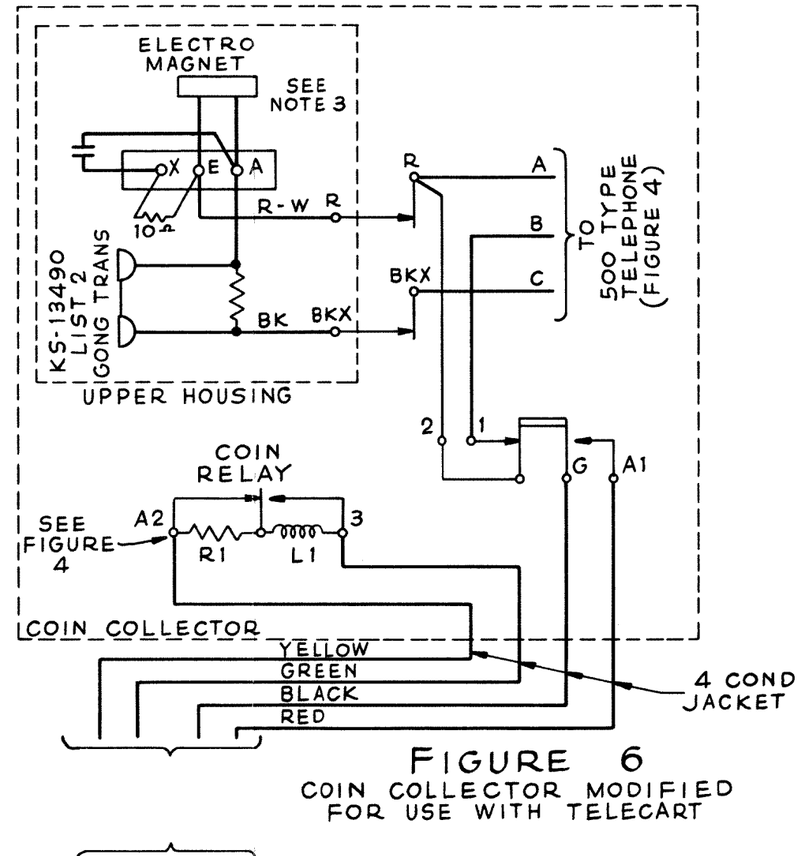

FIGURE 6
COIN COLLECTOR MODIFIED FOR USE WITH TELECART

NOTES:

1. BEWARE OF HIGH VOLTAGE OF A, B & C BATTERIES.
2. THE MERCURY SWITCHES S2 AND S4 (NORMALLY CLOSED) SHOULD FULLY OPEN BEFORE SWITCHES S1 AND S3 (NORMALLY OPEN) CLOSE.
3. THE ELECTRO-MAGNET WILL FOLLOW DIAL PULSES; DO NOT TRY TO RE-ADJUST.

FIGURE 7
TELECART CONTROL CIRCUIT

3.04 The Telecart Control Circuit shown in Figure 7 prevents fraudulent or accidental return of coins which, without this circuit, will occur either when the cart is tilted or when the plug is removed from the jack before the coins are collected. Circuit requirements are shown in Table 2.

TABLE 2

CIRCUIT REQUIREMENTS

APPARATUS			DIRECT CURRENT FLOW REQ				
DESIG	CODE	CKT FIG	TEST WDG	TEST FOR	AFTER SOAK MA	TEST MA	READJ MA
A	U1245	2	P	O		17.5	16.5
			S	O		10.3	9.3
B	Y105	2	P	O	18	14.3	13.6
				H		1.7	1.6
				R		.7	.9

3.05 The circuit consists mainly of two relays and two pairs of mercury switches which control the operation of the telecart under various conditions.

Condition A

Normal Operation (Receiver off-hook and coin deposited.) (See Figure 6 and Figure 7)

1. Battery "A" operates relay (A) through the bottom contacts 2 & 3 of relay (B), mercury switches S2 and S4 and the coin relay contact.

The operation of relay (A) connects the coin relay winding to line through top contacts 3 & 4 of relay (A). The coin collector operates normally from this point.

2. Relay (A) releases when coin contact opens through return or collection of coins.

Condition B

Plug Removed from Jack before Coin is Collected

1. Relay (A) releases when lead G is opened.

2. Relay (B) operates, energized by "A" battery. Operation of relay (B) removes the coin relay winding from the line and connects it through the Amperite Timer to A, B & C batteries in series, thus collecting coins.

3. Amperite Timer operates after 1/2 second, releasing the coin relay, which in

turn releases relay (B).

Condition C

Cart Tilted to Cause Premature Release of Coins

The circuit operates normally with mercury switches S2 and S4 closed and S1 and S3 open.

Tilting the cart in one direction causes switch S2 to open and switch S1 to close; tilting in the other direction causes switch S4 to open and switch S3 to close.

1. Cart tilted before coin is deposited.

When coin is deposited, relay (B) operates, causing the coin to be collected as in B2 above. With the line open, gong transmitter cannot transmit "coin release" signal.

2. Cart tilted after coin is deposited.

With coin relay operated, tilting cart causes relay (A) to release, relay (B) to operate, and coins to be collected as in B1 and B2 above.

The slow release of relay (B) through operation of the Amperite Timer ensures collection of the coins even though the cart is levelled quickly.