LOCAL COIN OVERTIME (LCOT) CHARGING CIRCUIT SD-35046-01 DESCRIPTION, OPERATION, AND TROUBLE LOCATING STEP-BY-STEP SYSTEMS

1. GENERAL

1.01 This section covers the description, operation, and trouble locating procedures for the Local Coin Overtime (LCOT) Charging Circuit SD-35046-01 for No. 1, 350 and 355A dial offices.

1.02 Whenever this section is reissued, the reason for reissue will be listed in this paragraph.

1.03 LCOT provides the circuitry, in conjunction with the local coin trunk, to charge the local coin customer on a conversation time basis.

2. DESCRIPTION

A. LCOT Unit

2.01 The LCOT unit is a programmed controller having the capacity to simultaneously monitor and control five coin trunks (Fig 1.)

2.02 It will function with either wire-spring or flat spring type coin trunks and can be arranged for dial-tone-first or coin-first operation.

2.03 The unit consists of an 86C apparatus mounting which can contain a maximum of seven circuit packs (Fig. 2). These circuit packs (CP) are as follows:

(a) ED-35051-( ) Controller performs the LCOT timing, monitor, and command functions. It is dedicated to a single coin trunk and interfaced through an associated dedicated port circuit.

(b) ED-35052-( ) Clock and alarm provides common interface between controller and the coin trunk. It provides outputs for system clock, interrupter, voice alarm, and the LCOT system alarm.

(c) ED-35053-( ) Power supply is a DC to DC converter. The converter is powered by -48V dc which is converted to +5.2 dc.

2.04 Initial and overtime timed periods can be varied from 1-1/2 minutes to 9 minutes in 30-second increments by strapping the appropriate terminals on ED-35051 controller. (See Table A.)

B. Associate Equipment

2.05 LCOT is arranged to utilize the 7A announcement machine or its equivalent. It will provide a loop start signal to the announcement machine for approximately 12 to 15 seconds. Thus, since the announcement is of the barge-in type, the message duration should only be 6 to 7 seconds to insure one complete announcement per request. One 7A machine will service up to 20 fully equipped LCOT Units.

2.06 The voice alarm and control circuit SD-27980-01 is used to monitor the 7A announcement machine or its equivalent audio output. If the announcement machine should fail, LCOT will be alerted and will permit free overtime conversation periods until the announcement malfunction is corrected.

3. METHOD OF OPERATION

3.01 With LCOT, the local coin customer call will proceed as follows (Fig. 3).

(a) Customer originates call.

(b) Allottment of a predetermined amount of conversation time for initial coin deposit.

(c) Thirty seconds prior to end of initial period, the customer is alerted to deposit a coin

NOTICE
Not for use or disclosure outside the
Bell System except under written agreement

for additional conversation period by the application of tone.

(d) Thirty seconds prior to end of overtime period, a request is made again to deposit additional coins.

(e) Procedures (a) through (d) continues until the customer disconnects or fails to deposit a coin.

4. TROUBLE LOCATING PROCEDURE

A. Alarms

4.01 If the LCOT unit has an internal failure, or the office interrupter fails, it will activate an alarm, disable itself, and permit calls to cycle into overtime periods without charge, until the trouble is corrected. See Fig. 4 for trouble locating procedures of troubles indicated by an alarm.

4.02 If other alarm conditions such as an announcement failure or a stuck coin condition occur, the LCOT unit will cycle into overtime period without charge until the trouble is corrected.

B. Trouble Reports

4.03 If trouble indications are reported, other than alarms, an operation test will have to be performed to determine the trouble location (See Fig. 5 for operation test.)

C. Circuit Pack Replacement

4.04 If trouble location procedures indicate that an LCOT circuit pack is defective and must be replaced perform the circuit pack replacement procedure as shown in Fig. 6.

TABLE A

INITIAL AND OVERTIME TIMED PERIOD TERMINAL STRAPPING

FOR AN INITIAL TIMED PERIOD OF	CONNECT TERMINAL			
	INITIAL TIMED PERIOD PROGRAMMING PINS			
	A1	B1	C1	D1
	OVERTIME TIMED PERIOD PROGRAMMING PINS			
	A2	B2	C2	D2
	TO			
1.5 MINUTES	+5	+5	+5	+5
2 MINUTES	GRD	+5	+5	+5
2.5 MINUTES	+5	GRD	+5	+5
3 MINUTES	GRD	GRD	+5	+5
3.5 MINUTES	+5	+5	GRD	+5
4 MINUTES	GRD	+5	GRD	+5
4.5 MINUTES	+5	GRD	GRD	+5
5 MINUTES	GRD	GRD	GRD	+5
5.5 MINUTES	+5	+5	+5	GRD
6 MINUTES	GRD	+5	+5	GRD
6.5 MINUTES	+5	GRD	+5	GRD
7 MINUTES	GRD	GRD	+5	GRD
7.5 MINUTES	+5	+5	GRD	GRD
8 MINUTES	GRD	+5	GRD	GRD
8.5 MINUTES	+5	GRD	GRD	GRD
9 MINUTES	GRD	GRD	GRD	GRD

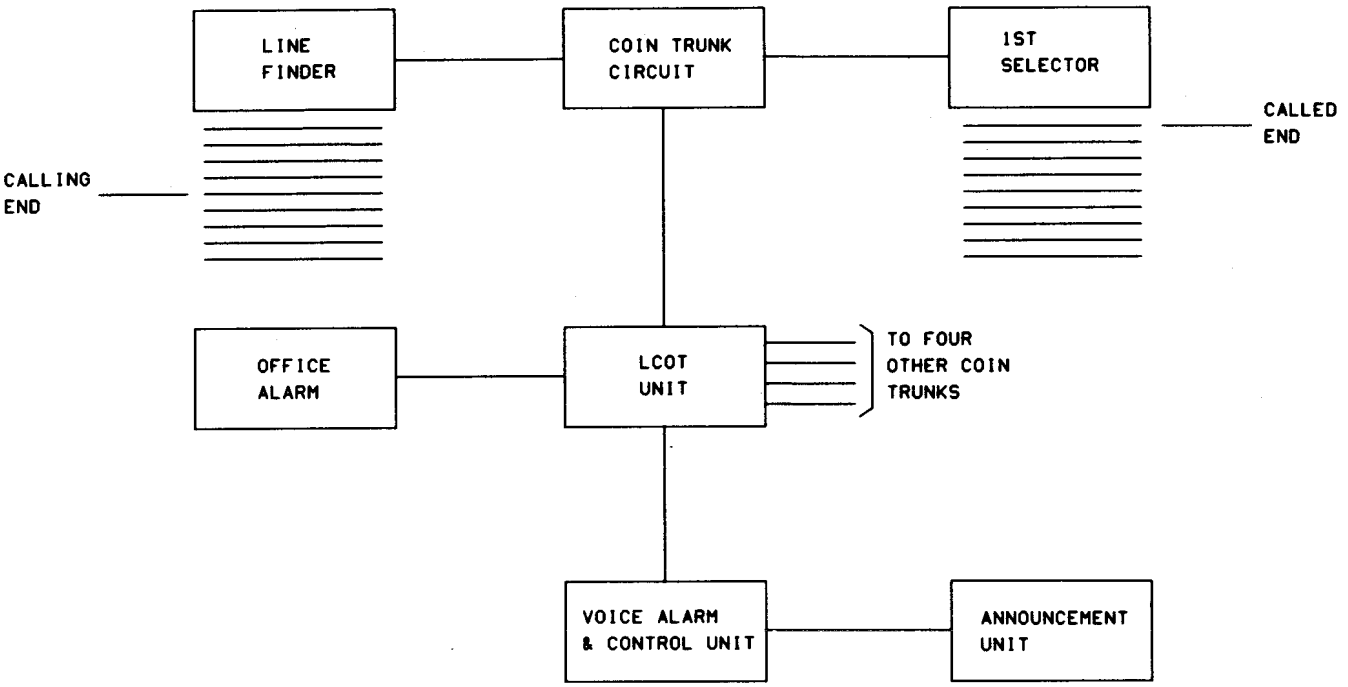


Fig. 1—Local Coin Overtime (LCOT) Interface

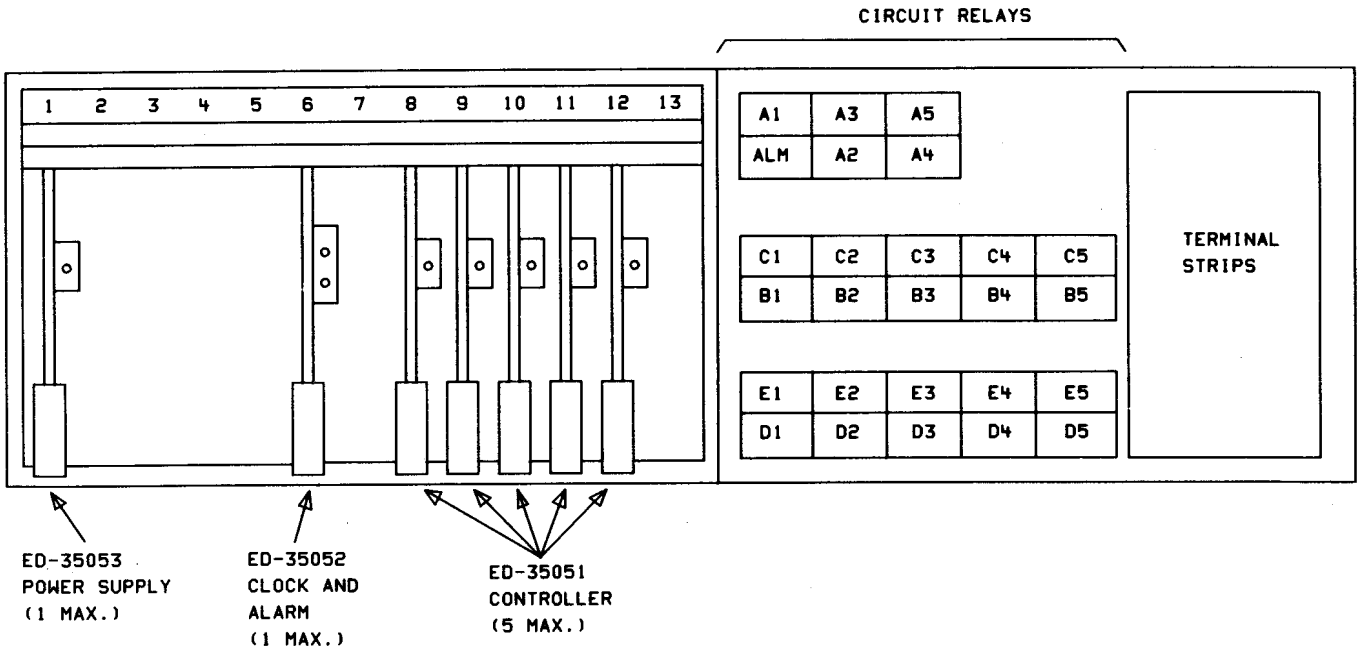


Fig. 2—Local Coin Overtime (LCOT) Unit

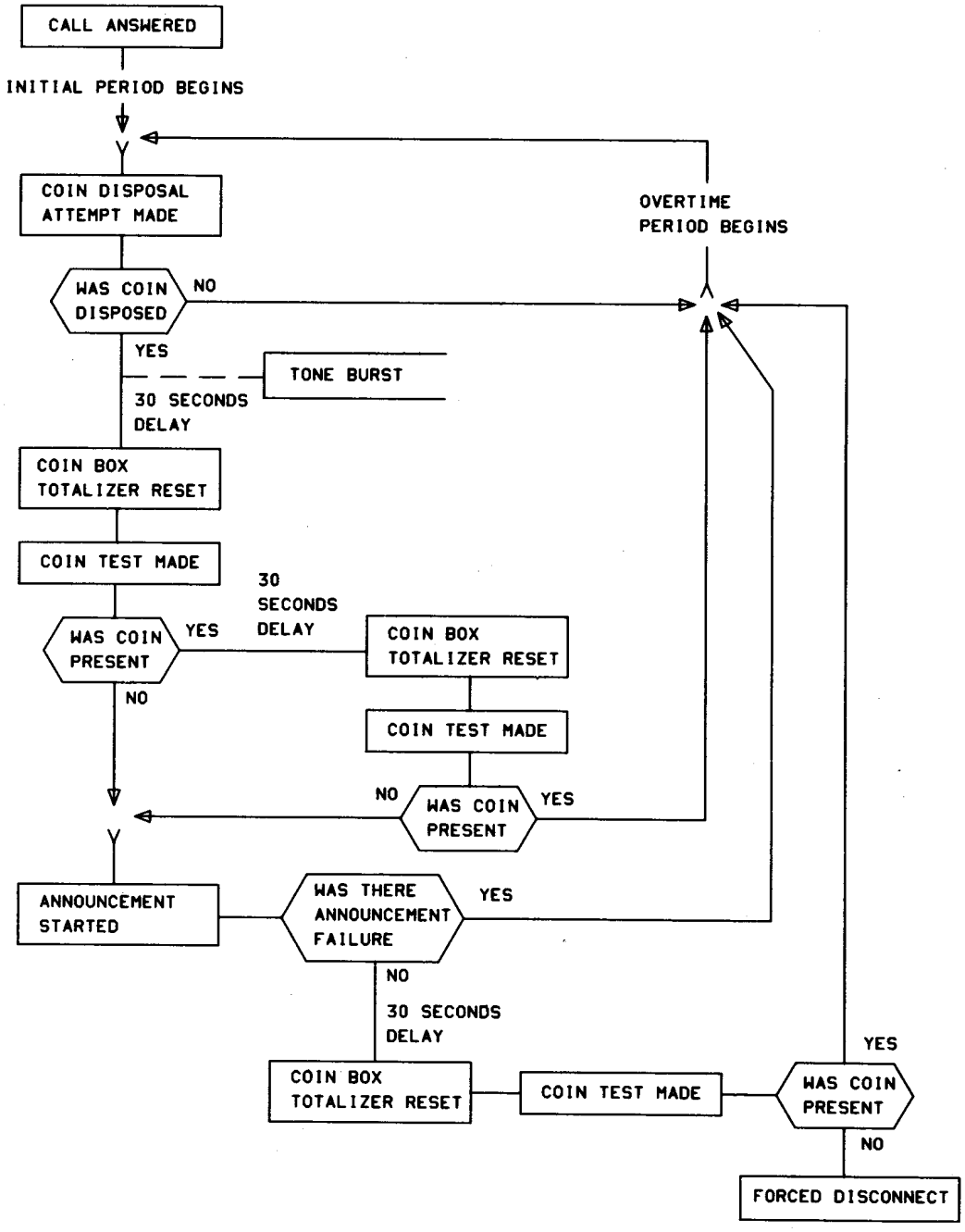


Fig. 3—Local Coin Overtime (LCOT) Charging Circuit—Method of Operation

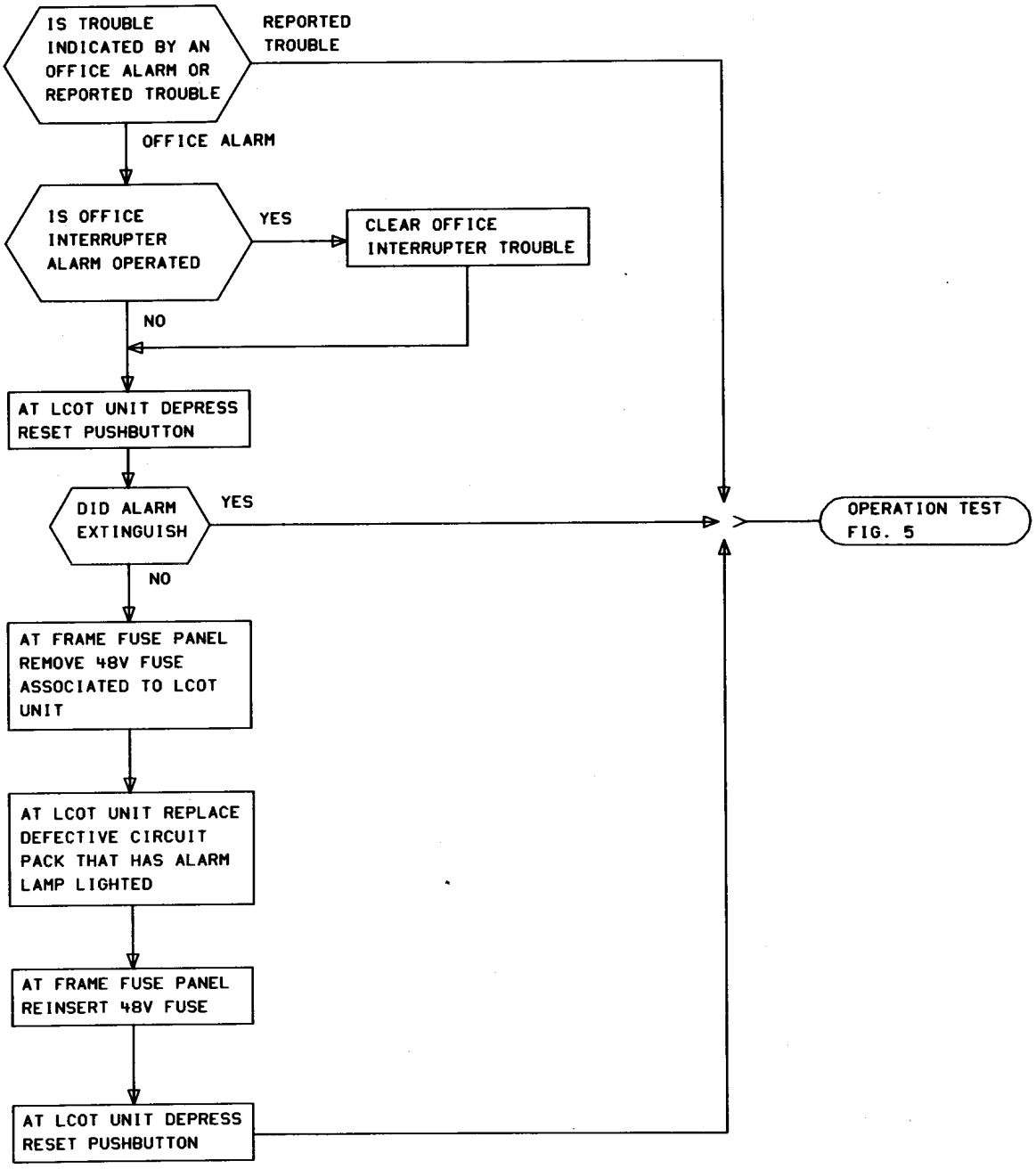


Fig. 4—Trouble Locating Procedure

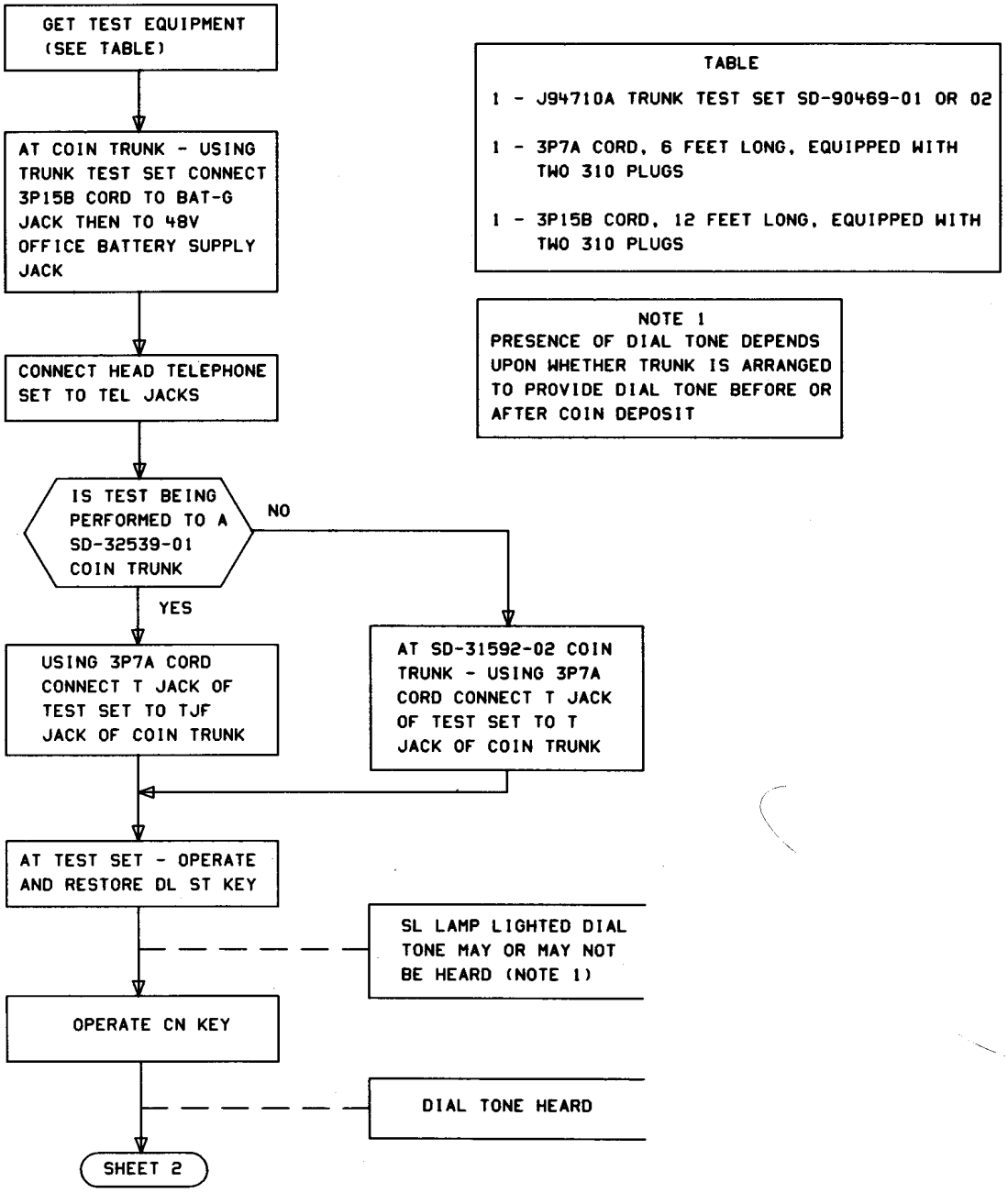
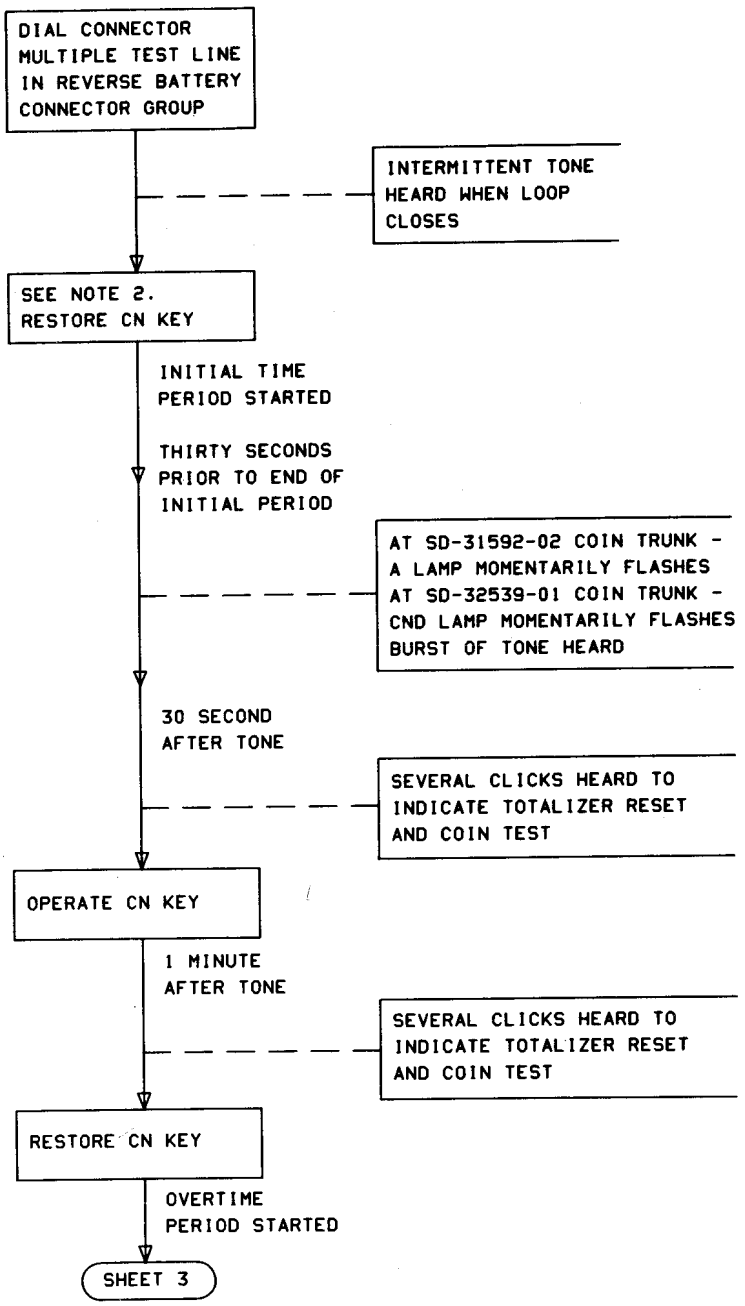


Fig. 5—Operation Test (Sheet 1 of 3)



NOTE 2

IF TEST RESPONSES WITHIN THIS OPERATION TEST ARE NOT CORRECT, THE TROUBLE MAY BE ONE OF THE FOLLOWING:

(A) IF TROUBLE IS INDICATED BY ONLY ONE OF THE FIVE COIN TRUNKS ASSOCIATED TO LCOT UNIT, THE ED35051() CONTROLLER MAY BE DEFECTIVE. REPLACE CIRCUIT PACK PER INSTRUCTIONS OF FIG. 6 AND REPEAT OPERATING TEST.

(B) IF TROUBLE IS INDICATED BY ALL FIVE COIN TRUNKS ASSOCIATED WITH LCOT UNIT, THE ED35052() CLOCK AND ALARM MAY BE DEFECTIVE, REPLACE CIRCUIT PACK PER INSTRUCTIONS OF FIG. 6 AND REPEAT OPERATIVE TEST.

Fig. 5—Operation Test (Sheet 2 of 3)

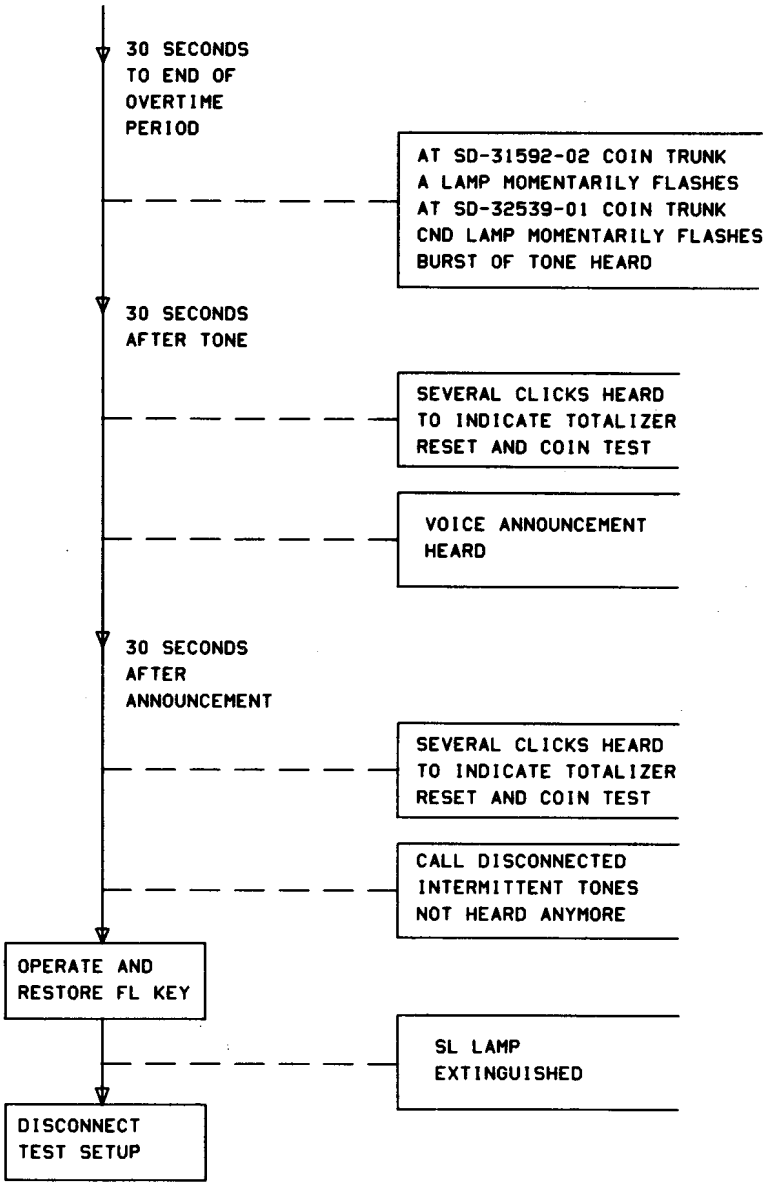


Fig. 5—Operation Test (Sheet 3 of 3)

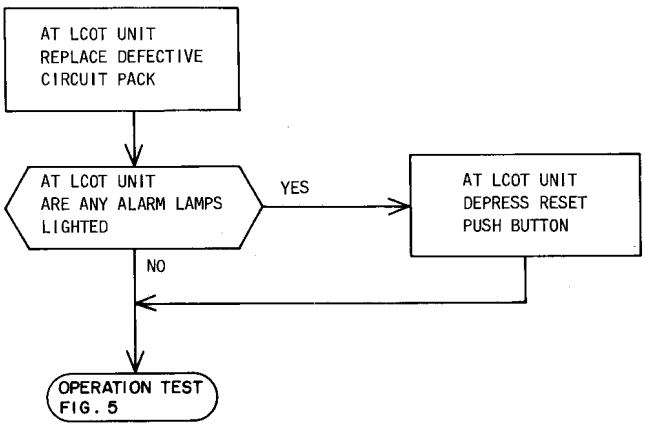


Fig. 6—Circuit Pack Replacement Procedure