

DIMENSION[®] PBX
DCTS FEATURE TEST PROCEDURES

CONTENTS

- | | |
|-------------------|-------------------------|
| 1. GENERAL | 5. PROCEDURES |
| 2. RECORDS | 6. DCTS STATION TESTS |
| 3. TEST EQUIPMENT | 7. DCTS - FEATURE TESTS |
| 4. DOCUMENTATION | 8. TROUBLESHOOTING AIDS |

1. GENERAL INFORMATION

1.1 DESCRIPTION

1.11 This section contains the following information:

- a. Methods that should be used to test the stations associated with each ETC (Electronic Telephone Controller).
- b. Methods that should be used to test features that are available to non-DCTS stations (i.e. Automatic Callback-Calling).
- c. Troubleshooting aids.

2. RECORDS

2.1 Form SD-97-1313 is required for recording the results of these tests.

3. TEST EQUIPMENT

<u>AMT</u>	<u>CODE</u>	<u>DESCRIPTION</u>
2		(EKTs) Electronic Telephone Sets (30 button)

4. DOCUMENTATION

4.1 Customer Order Document (COD)
Handbook 218 Sections 523, 533
Handbook 281 Sections 523, 533
Handbook 282 Section 250.09
SD-1E451-01 DCTS Schematic Drawing
CD-1E451-01 DCTS Circuit Description

PRIVATE

THE INFORMATION CONTAINED HEREIN SHOULD NOT BE DISCLOSED TO UNAUTHORIZED PERSONS. IT IS MEANT SOLELY FOR USE BY AUTHORIZED BELL SYSTEM EMPLOYEES.

Printed in U.S.A.

5. PROCEDURES

5.1 PRELIMINARY

5.11 DCTS testing basically consists of four parts as follows:

- a. Electronic Telephone Controller (ETC) tests - these tests are to insure that the controller is communicating with the 201 processor. They are automatically performed as a result of on-line maintenance tests; however, the controller may be tested manually via the MAAP and the appropriate procedure (see Section 523, Handbooks 218 and 281). When communications have been established (i.e. when an ETC heartbeat has been established and only red LED lamp remaining on is at the LC-59 circuit pack) it is safe to assume that one can go on to the next stage of testing.
- b. DCTS Translation Verification - this step should be performed to establish the type and quantity of stations associated with DCTS and what features are provided (see Section 533, Handbooks 218 and 281).
- c. DCTS Station Tests - these tests should be performed to verify that the DCTS, LC-02, and EKT/ECT station circuits are working properly and that the cross connect wiring has been done properly. These tests consist of making a station self test and a call from each line on the EKT sets to the attendant or another test station (as prescribed in this section).
- d. DCTS Feature Tests - these tests involve the testing of each of the assigned DCTS and common features (those that are available to regular stations as well) at least once. Section 533, Handbook 218 or 281 contains a table that should be completed to be used as a testing guide.

6. DCTS - STATION TESTS

6.1 PRELIMINARY

6.11 These tests consist of two parts: a. performing a self station test, and b. making a station-to-attendant call, or another test station.

6.12 If the station port is included as an ECT (Electronic Controlled Telephone) the station set used for test must be optioned as such. To option an EKT set as an ECT set, remove the black spade tipped wire from terminal 64 and connect it to terminal 65. The bottom housing must be removed to do this. This option removes any I-Use indication from the set.

6.13 All equipped DCTS station ports should be tested, connections should be made at the blue wall field so that access to the TT, TR, BT, BT, LT and LR can be made more easily.

6.14 When step 6.103 has been performed each of the common features and DCTS features accessible via Electronic Telephone buttons should be tested. See paragraph 7 for special status lamp indications for the common feature tests.

6.2 STATION TESTS

6.21 Connect an Electronic Telephone Set to the termination field associated with a port to be tested.

6.22 At the set under test go off hook and verify dial tone.

6.23 Dial the Station Self Test dial access code, after dial completion verify that a short burst of tone is received and that all of the status and I-Use lamps are extinguished. Note: Refer to the Trunk and Feature Dial Code Summary of the COD to determine the dial access code.

6.24 Momentarily operate each button and verify the following indications.

<u>BTN (1)</u> <u>NBR</u>	<u>RINGING (2)</u> <u># BURSTS/VOLUME/FREQ.</u>	<u>LAMPS</u>	
		<u>STATUS</u>	<u>I-USE (3)</u>
1	1/MUTED/750HZ	WINK	STEADY
2	2/MUTED/1500HZ	FLASH	STEADY
3	3/NORMAL/1500HZ	FLUTTER	STEADY
4	4/NORMAL/750HZ	WINK	STEADY
5-30	NONE	STEADY	STEADY

1. See Figure 1
2. Volume control should be set to loudest setting
3. On ECT sets the I-Use lamp will not light

6.25 After step 6.24 has been performed reoperate each of the buttons and verify that the lamps and tones are extinguished.

6.26 Momentarily operate the RECALL (R) button and verify that dial tone is received, and then dial the attendant verify:

- a. That ringback is received at the set.
- b. That when the attendant answers, ringback is extinguished and that a good transmission path is established.

6.27 Go on-hook at the station set and repeat steps 6.21 through 6.27 until all Electronic Telephone set assignments have been tested.

7. DCTS - FEATURE TESTING

7.1 PRELIMINARY

7.11 DCTS feature testing consists of testing each provided feature at least once. The Table in Section 533, Handbooks 218 and 281 should be used as a testing guide.

7.12 Some of the features that can be activated via an Electronic Telephone button are also available to non-Electronic Telephone sets via a dial access code. These features (as listed in the following paragraphs) should be tested per the appropriate section, however whenever the dialing of the feature access code is specified the button associated with the feature should be operated, instead. The following paragraphs (7.21 thru 7.29) special status lamp indications and calling operations.

7.2 COMMON FEATURE TESTS

7.21 AUTOMATIC CALLBACK - CALLING

Status lamp indications are:

Steadily Lit When feature is activated and the I-Use lamp is lit at the line used to activate the feature.

Extinguished I-Use lamp is not lit at the activating line key, or when the call has been completed, or when the feature is deactivated (reoperating the CALLBACK key).

Flutters When the called station goes on hook the status lamp flutters prior to ringing applied to the called back station.

Flashes When the ringing cycle is applied to the station.

7.22 CALL FORWARDING - ALL CALLS

Status lamp lights steady whenever feature is activated and extinguished whenever deactivated (reoperating button).

7.23 CALL FORWARDING - BUSY AND DON'T ANSWER

Status lamp lights steady whenever feature is activated and extinguished whenever deactivated (reoperating button).

7.24 CALL HOLD

Status lamp winks whenever feature is activated and extinguished whenever the station returns to the held party (reoperating the CALL HOLD button). Disconnecting from the line causes the line to ring back with the held line.

7.25 CALL PICKUP

Status will flash whenever a called line in the call pickup group does not have a ringing line appearance on the same set as the pickup key. If the station user is busy on another line, activation of the pickup key will place the previous call into Call Hold.

7.26 CALL WAITING - ORIGINATING

Status lamp will light steady when the feature is activated (button operated).

7.27 CALL WAITING - ANSWER

Status lamp will flash to indicate that a DCTS station user can answer a call via the call waiting feature. If the station user does not disconnect from the previous call the call will be placed on Call Hold. The status lamp will extinguish upon operating the Call Waiting answer button.

7.28 EXECUTIVE OVERRIDE

Status lamp will light when the feature is activated (operating the button) and extinguish when one of the original parties hangs up.

7.29 THREE-WAY CONFERENCE TRANSFER

There are no status lamps associated with the recall (R) button. Operation of the button provides a timed flash which eliminates the need for the station user to depress the switchhook for a specific timed interval.

8. TROUBLESHOOTING AIDS

8.1 ELECTRONIC TELEPHONE CONTROLLER TROUBLES

8.11 If the Electronic Telephone Controller (ETC) does not seem to be operating properly (i.e. no ETC heartbeat lamp) refer to Section 523, Handbook 218 or 281 for troubleshooting information, or verify that the data link between the LC-34 and ETC is wired properly or go to MAAP procedure 40 and verify that the ETC has not been taken out of service.

8.2 ELECTRONIC TELEPHONE SET TROUBLES

8.21 If troubles are encountered with station self test verify the wired connections, refer to the COD and SD-1E451 CAD's for information. Verify also that the set is optioned properly for either an EKT or ECT set (see paragraph 6.102 of this section). Loss of I-Use lamp indication, indicates that the set is optioned as an ECT set. Refer also to Section 250.09 for connecting information.

8.3 FEATURE TEST TROUBLES

8.31 Troubles with feature tests could possibly indicate incorrect translation. Use of the MAAP and COD should correct any possible errors.