

RECORDED TELEPHONE DICTATION TRUNKS

SD-65728-01 AND SD-65788-01

OPERATION TESTS

701A, 701B, 711A, 711B, 740A, 740AX, 740B, 740C, 740E, 755A OR 756A PBX

1. GENERAL

1.01 This section describes a method of testing a recorded telephone dictation trunk circuit with dial control per SD-65728-01 and with dial or voice control per SD-65788-01.

1.02 This section has been reissued for the following reasons:

- (a) To revise the title of the section to include the 701B, 711B, and 756A PBX and to include the circuit SD-65788-01 which may be used with dial controlled or voice controlled dictation machines.
- (b) To add to Test A the trunk seizure for the 755A and 756A PBX.
- (c) To revise Test B to limit the over-all operation test to trunk per SD-65728-01.
- (d) To reletter former Test C to Test E.
- (e) To add a new Test C to provide an over-all operation test for trunk per SD-65788-01.
- (f) To add a new Test D to include the test of the two-way sleeve repeater per SD-65788-01.
- (g) To add steps to Test E (formerly Test C) to provide for those dictation machines which provide a ground signal indicating playback in progress, and which are arranged to cancel the remainder of playback on receipt of a dialed digit 1.
- (h) To change the subtitle of steps in Test E (formerly Test C) from "Check of Make-busy Feature" to "Check of Idle Condition."

Since this reissue covers a general revision, arrows ordinarily used to indicate changes have been omitted.

1.03 The tests covered are:

A. *Trunk Seizure*: The following features are checked: (1) The trunk may be seized from a selector or selector-connector on a step-by-step PBX. (2) The trunk may be seized from a station line or trunk on a 755A PBX. (3) The trunk may be seized from a universal line circuit arranged as a trunk on a 756A PBX.

B. *Over-all Operation SD-65728-01*: This checks the operation of the trunk per SD-65728-01 in combination with a dial controlled dictation machine.

C. *Over-all Operation SD-65788-01*: This checks the operation of the trunk per SD-65788-01 in combination with a dial or voice controlled dictation machine.

D. *Two-way Sleeve Repeater*: This checks the operation of the two-way sleeve repeater.

E. *Trunk Operation from Connecting Block*: This facilitates the locating of a trouble condition that has been disclosed by Test A, B or C or a trouble report. This test also verifies the reliability of Bell System equipment and wiring independent of the customer-owned dictating equipment and wiring.

1.04 The procedures in Test E assume that all leads are cabled to a connecting block at the location of the dictation machine. In some installations it may not be expedient to extend all of the leads. To perform certain tests which require access to specific leads, connections may be made at the trunk equipment or a cross-connecting point.

1.05 The digits dialed by the dictator and the functions performed are shown in Table A.

TABLE A

DIGIT DIALED	SD-65728-01	SD-65788-01	
	DIAL CONTROL	DIAL CONTROL	VOICE CONTROL
1	Start-Stop	Start-Stop	Cancel remainder of playback
	Stop ringing of attendant when attendant does not answer	Stop ringing of attendant when attendant does not answer End or cancel of playback	Stop ringing of attendant when attendant does not answer
2	Correction	Correction	Correction
		Reduce playback	Reduce playback
3	Playback	Playback	Playback
4	End of dictation	End of dictation	End of dictation
0	Assistance	Assistance	Assistance

1.06 Before any tests are performed, it should be determined what type of dictation machine is used and the features provided by the dictation machine.

1.07 *Lettered Steps:* A letter a, b, c, etc, added to a step number in Part 3 of this section, indicates an action which may or may not be required depending on local conditions. The condition under which a letter step or a series of lettered steps should be made is given in the ACTION column, and all steps governed by the same condition are designated by the same letter within a test. Where a condition does not apply, all steps designated by that letter should be omitted.

2. APPARATUS

Test A (Step-by-Step PBX Only)

2.01 No. 1011G dial hand test set equipped with a No. 2W39A cord consisting of W2CL cord, No. 240A plug, and No. 471A jack.

Test A (756A PBX Only) and Test E

2.02 No. 1011G dial hand test set equipped with a No. 2W37A cord consisting of W2DB cord, No. 471A jack, and two KS-6780 connecting clips with two No. 108 cord tips.

Tests B and C

2.03 No. 1011G dial hand test set equipped with No. 2W38A cord, consisting of W2CK cord, No. 471A jack and No. 310 plug.

Test B

2.04 No. 394A (dummy) plug.

Tests B and E

2.05 Two testing cords, a black cord, 1 foot 8 inches long, equipped with one clip per AT6928 and one KS-6780 connecting clip with one No. 108 cord tip (No. W1U cord).

Test D

2.06 No. 258C (dummy) plug.

Test E

2.07 No. 81A test set equipped with a W2BA cord and two KS-6780 connecting clips with two No. 108 cord tips.

2.08 Patching cord, No. P2B cord, 6 feet long, equipped with two No. 310 plugs (No. 2P4C cord).

3. METHOD

STEP	ACTION	VERIFICATION
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A. Trunk Seizure

- 1 At dictation machine —
Have attendant prepare for operation the dictation machine associated with trunk under test. This should include the provision of a new record.

Step-by-Step PBX

- 2 At trunk equipment —
Connect dial hand test set to test jack of an idle selector or selector-connector.

- 3 Remove switch cover.

- 4 Operate dial hand test set switch to TALK position.

Dial tone heard.

- 5 Dial switch to level of trunk to be tested.
Note: Switch will automatically rotate to bank terminals of first idle trunk. If this is not trunk to be tested, rotate the selector to the next contact by momentarily operating the vertical off-normal lever. Repeat this operation until reaching desired trunk.

If dictation machine is dial controlled —
Continuous audible ringing or dial tone heard.

If dictation machine is voice controlled —
Spurt of tone heard.

- 6 Remove all test equipment.

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- 7a If dictation trunk is terminated as a station line circuit —
At PBX station, depress LOCAL pickup key and remove receiver from set.

PBX dial tone heard.

- 8a Dial line associated with dictation trunk.

If dictation machine is dial controlled —
Continuous audible ringing or dial tone heard.

If dictation machine is voice controlled —
Spurt of tone heard.

- 9b If dictation trunk is terminated as a trunk circuit —
At PBX station, depress trunk pickup key associated with dictation trunk and remove receiver from set.

If dictation machine is dial controlled —
Continuous audible ringing or dial tone heard.

If dictation machine is voice controlled —
Spurt of tone heard.

- 10 Place receiver back on set.

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- 11 At PBX equipment, slide 2 —
Connect dial hand test set to test line terminals.

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STEP	ACTION	VERIFICATION
12	Operate dial hand test set switch to TALK position.	PBX dial tone heard.
13	Dial trunk associated with dictation trunk.	If dictation machine is dial controlled — Continuous audible ringing or dial tone heard. If dictation machine is voice controlled — Spurt of tone heard.
14	Disconnect dial hand test set from test line terminals.	

B. Over-all Operation SD-65728-01

1	At dictation machine — Have attendant prepare for operation the dictation machine associated with trunk under test. This should include the provision of a new record.	
2	At trunk equipment — Check that trunk is idle.	S relay operated. B relay released.
3	Insert plug of dial hand test set into trunk jack A.	
4	Operate switch of dial hand test set to TALK position.	Continuous audible ringing or dial tone heard.
5a	If cord-type switchboard is provided — Connect 1T of relay S to sleeve of jack A with W1U cord.	
6a	Insert 394A dummy plug into jack T.	
7	Dial digit 1.	Continuous audible ringing or dial tone removed.
8	Speaking plainly into transmitter, count from 1 to 10 at the rate of about one number per second.	
9	Dial digit 3.	Recorded numbers from about 6 to 10 should be heard, depending upon adjustment of customer's machine.
10	Dial digit 1.	
11	Repeat Steps 8, 9, and 10.	
12	Dial digit 2. Wait approximately 30 seconds.	
13	Dial digit 4.	Tone heard (dial tone of low level).
14	Dial digit 0. When attendant position answered, request next ringing signal not be answered.	Dial tone stops. Audible ringing tone heard until attendant position answered. Conversation satisfactory with attendant position.

STEP	ACTION	VERIFICATION
15	At attendant position — Replace handset on switchhook.	
16	At trunk equipment — Dial digit 0.	Audible ringing tone heard.
17	Dial digit 1.	Audible ringing tone stops.
18a	If cord-type PBX is provided — Connect sleeve of jack A to 3T of S relay with W1U cord.	SV relay releases.
19	Remove all test equipment.	At dictation machine — Correction and end-of-message indications (where applicable) marked by dictation machine.

C. Over-all Operation SD-65788-01

1	At dictation machine — Have attendant prepare for operation the dic- tation machine associated with trunk under test. This should include the provision of a new record.	
2	At trunk equipment — Check that trunk is idle.	S relay operated.
3	Insert plug of dial hand test set into trunk jack T.	
4	Operate switch of dial hand test set to TALK position.	If machine is voice controlled — Spurt of tone heard. If machine is dial controlled — Continuous audible ringing or dial tone heard.
5b	If machine is dial controlled — Dial digit 1.	Continuous audible ringing or dial tone removed.
6	Speaking plainly into transmitter, count from 1 to 10 at the rate of about one number per second.	
7	Dial digit 3.	Recorded numbers from about 6 to 10 should be heard, depending upon adjustment of customer's machine.
8c	If dictation machine does not provide ground signal indicating playback is in progress (option T) — Dial digit 1.	
9d	If dictation machine provides ground signal indicating playback in progress and by dial- ing digit 1 cancels remainder of playback (option S) — Dial digit 1.	

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STEP	ACTION	VERIFICATION
10	Repeat Steps 6 and 7 and 8c or 9d if applicable.	
11	Dial digit 2.	
12	Dial digit 4.	If machine is dial controlled — Tone heard (dial tone of low level).
13	Dial digit 0. When attendant answers, request next ringing signal not be answered.	Audible ringing tone heard until attendant position answered. Conversation satisfactory with attendant position.
14e	If PB key is provided — At attendant position, operate PB key.	Recorded message made in Step 6 heard at trunk equipment and at attendant position.
15	Replace handset on mounting.	
16	At trunk equipment — Dial digit 0.	Audible ringing tone heard.
17	Dial digit 1.	Audible ringing tone stops.
18	Operate switch of dial hand test set to MON position. Wait approximately 30 seconds.	Relays A and B released.
19	Operate MB-TA key to MB position.	
20	Operate switch of dial hand test set to TALK position.	Relays A and B operate.
21	Operate TB key.	SV relay operates.
22	Momentarily operate MB-TA key to TA position.	
23	Remove all test equipment, restore all keys to normal.	At dictation machine — Correction and end-of-message indications (where applicable) marked by dictation machine.

D. Two-way Sleeve Repeater

1	At two-way sleeve repeater equipment — Connect one connecting clip of dial hand test set to punching 10 of terminal strip on repeater unit.	
2	Operate test set switch to TALK position.	
3	Momentarily touch other connecting clip of test set to punching 1 of terminal strip.	No click heard.
4	Insert 258C dummy plug into SV jack of repeater unit.	

STEP	ACTION	VERIFICATION
5	Momentarily touch other connecting clip of test set to punching 1 of terminal strip.	Click heard.
6	Remove dummy plug and test clips from equipment.	

E. Trunk Operation from Connecting Block

Steps Common to All Checks

- 1a If testing trunk per SD-65728-01 —
At trunk equipment, patch between jack A and jack TT of trunk equipment using P2B cord.
- 2b If testing on trunk per SD-65788-01 —
At trunk equipment, operate TB key.
- 3 At dictation machine —
Disconnect dictation machine from ac power source.
- 4 Place connecting clips of dial hand test set on terminals CT and CR of connecting block, and operate switch to TALK position.
- 5 Operate switch of 81A test set to C position.

Check of Seizure

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|----|---|------------------|
| 6 | Remove S1 and S2 leads from connecting block terminals. | |
| 7 | Connect 81A test set to leads S1 and S2. | Buzzer sounds. |
| 8 | Remove 81A test set from S1 and S2 leads and replace leads on connecting block terminals. | Buzzer silenced. |
| 9 | Remove TT and TR leads from connecting block terminals. | |
| 10 | At trunk equipment —
Using W1U cord, short out "J" resistance. | |
| 11 | At connecting block —
Connect 81A test set to TT and TR leads. | Buzzer sounds. |
| 12 | Remove 81A test set from TT and TR leads and replace leads on connecting block terminals. | Buzzer silenced. |
| 13 | At trunk equipment —
Remove W1U cord from "J" resistor. | |

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STEP	ACTION	VERIFICATION
Check of Start-Stop Feature Dial Controlled Machines		
14	Remove SS1 and SS2 leads from connecting block terminals.	
15	Connect 81A test set to SS1 and SS2 leads.	
16	Dial digit 1.	Buzzer sounds.
17	Dial digit 1.	Buzzer silenced.
18	Remove 81A test set from SS1 and SS2 leads and replace leads on connecting block terminals.	
Check of Correction Feature		
19	Remove C1, C2, C3, and C4 leads from connecting block terminals.	
20	Connect 81A test set to C1 and C2 leads.	
21	Dial digit 2.	Buzzer sounds momentarily.
22	Remove 81A test set from C1 and C2 leads and replace leads on connecting block terminals.	
23	Connect 81A test set to C3 and C4 leads.	
24	Dial digit 2.	Buzzer sounds momentarily.
25	Remove 81A test set from C3 and C4 leads and replace leads on connecting block terminals.	
Check of End-of-Dictation Feature		
26	Remove E1, E2, E3, and E4 leads from connecting block terminals.	
27	Connect 81A test set to E1 and E2 leads.	
28	Dial digit 4.	Buzzer sounds momentarily.
29	Remove 81A test set from E1 and E2 leads and replace leads on connecting block terminals.	
30	Connect 81A test set to E3 and E4 leads.	Buzzer sounds.
31	Dial digit 4.	Buzzer silenced momentarily.
32	Remove 81A test set from E3 and E4 leads and replace leads on connecting block terminals.	Buzzer silenced.

STEP	ACTION	VERIFICATION
Check of Playback Feature		
33c	If customer provides connection to both C and PB5 leads — Remove C and PB5 leads from connecting block terminals.	
34c	Connect C and PB5 leads together using W1U cord.	
35c	Dial digit 3.	At trunk equipment — If testing trunk per SD-65728-01 — PB1 relay operates and locks. If testing trunk per SD-65788-01 — PW relay operates and locks.
36c	At connecting block — Remove W1U cord from C and PB5 leads and replace leads on connecting block terminals.	At trunk equipment — If testing trunk per SD-65728-01 — PB1 relay releases. If testing trunk per SD-65788-01 — PW relay releases.
37	At connecting block — Remove C and G leads from connecting block terminals.	
38	Connect C and G leads together using W1U cord.	
39	Remove PB1 and PB2 leads from connecting block terminals.	
40	Connect 81A test set to PB1 and PB2 leads.	
41	Dial digit 3.	Buzzer sounds momentarily.
42	Remove 81A test set from PB1 and PB2 leads and replace leads on connecting block terminals.	
43d	If customer has provided connection to C lead — Momentarily open test connection between leads C and G.	
44e	If customer has not provided connection to C lead — Dial digit 1.	
45	Remove SS1 and SS2 leads from connecting block terminals.	
46	Connect 81A test set to SS1 and SS2 leads.	Buzzer sounds.
47	Dial digit 3.	Buzzer silenced.
48	Remove 81A test set from SS1 and SS2 leads and replace leads on connecting block terminals.	

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STEP	ACTION	VERIFICATION
49	Repeat Step 43d or 44e.	
50	Remove PB1 and PB3 leads from connecting block terminals.	
51	Connect 81A test set to PB1 and PB3 leads.	
52	Dial digit 3.	Buzzer sounds.
53	Remove 81A test set from PB1 and PB3 leads and replace leads on connecting block terminals.	Buzzer silenced.
54	Repeat Step 43d or 44e.	
55	Remove SS1 and PB4 leads from connecting block terminals.	
56	Connect 81A test set to SS1 and PB4 leads.	
57	Dial digit 3.	Buzzer sounds.
58e	If customer has not provided connection to C lead — Dial digit 1, two times.	
59	Remove 81A test set from SS1 and PB4 leads and replace on connecting block terminals.	Buzzer silenced.
60	Remove W1U cord from C and G leads and replace on connecting block terminals.	

Check of Idle Condition

61	Remove G and B leads from connecting block terminals.	
62	Connect G and B leads together using W1U cord.	At trunk equipment — S relay operates.
63	Remove W1U cord from G and B leads and replace leads on connecting block terminals.	

Restoration to Normal for All Checks

64	Remove dial hand test set from leads CT and CR on connecting block.	
65a	At trunk equipment — If testing on trunk per SD-65728-01 — Remove P2B cord from jacks A and TT.	
66b	If testing on trunk per SD-65788-01 — At trunk equipment, restore TB key.	
67	At dictation machine — Connect dictation machine to ac power source.	