

ORIGINATING REGISTERS SD-26040-01 AND SD-25551-01
DIAL PULSE OR "TOUCH-TONE®" CALLING

TESTS

USING AUTOMATIC MONITOR, REGISTER, AND SENDER TEST CIRCUIT SD-25680-01
NO. 5 CROSSBAR OFFICES

1. GENERAL

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1.01 This section covers the tests of originating registers using the automatic monitor, register, and sender test circuit, SD-25680-01.

1.02 The reasons for reissuing this section are listed below. Revision arrows are used to emphasize the more significant changes. This reissue affects Equipment Tests Lists.

(a) To add test BF.

1.03 The tests covered are:

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A. Regular Call—7-Digit: This test checks the ability of the originating register to receive and record dial pulses from a noncoin or coin customer, and together with the information received on the dial tone connection, select and transfer to a marker at the end of dialing, all information necessary for the satisfactory completion of call on AMA or non-AMA basis.

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B. Regular Call—10-Digit: This test checks the ability of the originating register to receive and record dial pulses from an AMA customer, and together with the information received on the dial tone connection, select and transfer to a marker at the end of dialing, all information necessary for the satisfactory completion of a DDD call on AMA basis.

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C. Prefix Digit 1 Code: This test checks the ability of the originating register to operate correctly when a prefix digit 1 is dialed.

8

D. Prefix Digits 11—Foreign Area Directing Code: This test checks the ability of the originating register to operate correctly when prefix digits 11 precedes a foreign area customer number.

8

E. 11X Service Codes: This test checks the ability of the originating register to operate correctly when a 11X service code is used.

8

F. X11 Service Codes: This test checks the ability of the originating register to operate correctly when an X11 service code is used.

8

G. Manual Call—Coin and Noncoin: This test checks the ability of the originating register to recognize a call from a manual customer and to treat the call as a call to zero operator.

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H. Zero Operator—Coin and Noncoin: The following features are checked. (1) The ability of the originating register to recognize a zero operator call. (2) If the register is arranged for a coin class that makes a coin clearance test after coin return, that the register recognizes that the coin has

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been returned. (3) The timed interval that the register will wait for additional digits when arranged for prefix digit 0+ dialing.	8
I. Prefix Digits 0+: This test checks the ability of the originating register to operate correctly when a prefix digit 0 plus additional digits are dialed.	8
I.1 Prefix Digits 01+: This test checks the ability of the originating register to operate correctly when prefix digits 01 plus additional digits are dialed.	8
I.2 Prefix Digits 011+: This test checks the ability of the originating register to operate correctly when prefix digits 011 plus additional digits are dialed. This test also checks that the originating register will recognize invalid combinations and sequences on 011+ IDDD calls and will return overflow to the calling customer.	9
J. Straightforward Call to Manual Office: This test checks the ability of the originating register, when arranged to use a 1-, 2-, or 3-digit translator for a single office code, to operate properly when handling a call on a straightforward basis to a manual office.	9
K. Preliminary Pulse: This test checks the ability of the originating register to absorb one preliminary pulse when prefix counter is not provided.	9
L. Two-Party Test: This test checks the originating register 2-party test features on a 2-party class of service that requires party test.	10
M. Abandoned Call—Coin or Noncoin: This test checks the ability of the originating register to release on an abandoned call. If the register is arranged for coin service, the test also checks that the register coin return circuit operates properly.	10

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N. Abandoned Call During Coin Test: This test checks the ability of the originating register, when it is arranged to check for the presence of a coin, (App. Fig. 9, 10, 31 provided), to recognize and to release an abandoned call during coin test.	10
O. Marker Coin Return: This test checks the ability of the originating register, when it is arranged for marker coin return, to return a coin when a coin return signal is received from the marker.	10
P. Stuck Coin: This test checks the ability of the originating register, when it is arranged to make coin clearance test, to detect a stuck coin.	10
Q. Register Supervision: The test checks that the originating register marker connector furnishes a holding ground for the originating register supervisory relay.	10
R. A- Digit Translator: This test checks the ability of the originating register to determine, from the A digit dialed, the number of digits to be expected. It also tests the ability of the originating register to determine that only one digit is registered for unused A digits.	10
S. A- and B- Digit Translators: This test checks the ability of the originating register to determine the number of digits to be received from the combination of A and B digits dialed.	10
T. Pretranslation (SD-25568-01 Provided): This test checks the ability of the originating register to receive signals from a pretranslator, which indicates to the register the number of digits to expect. It also checks that the originating register recognizes the completion of dialing when that number of digits is received.	10

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<p>T.1 Pretranslation for IDDD— (SD-27849-01) Provided: This test checks the ability of the originating register to receive signals from a pretranslator, which indicates to the register the number of digits to expect. It also checks that the originating register recognizes the completion of dialing when that number of digits is received.</p>	10
<p>U. Dial Tone and Busy or Overflow Tone: This test checks the ability of the originating register to transmit dial tone and busy or overflow tone.</p>	10
<p>V. Dial Tone Removal: This test checks that the originating register removes dial tone properly.</p>	11
<p>W. Dial Tone—Register Arranged for Manual Service: This test checks that the originating register removes dial tone when handling a call from a customer having a manual class of service.</p>	11
<p>X. Permanent Signal Timing—Coin or Noncoin: This test checks the ability of the originating register permanent signal timing circuit to time out if the first digit is not dialed in the allotted time. If the originating register is arranged for coin service, it also checks that the coin return circuit of the register operates properly.</p>	12
<p>Y. Partial Dial Timing—Coin or Noncoin: This test checks the ability of the originating register partial dial timing circuit to time out if the second digit is not dialed in the allotted time. If the originating register is arranged for coin service (with App. Fig. 9 and 10 provided), it also checks that the coin return circuit of the register operates properly. If the originating register is arranged for 011+ (IDDD), it also checks that the register will time out when an insufficient number of digits are used.</p>	12
<p>Z. B- Digit Translator: This test checks the ability of the register to determine from the B digit dialed the number of digits to be expected.</p>	14
<p>AA. Register Timeout After Marker Seizure: This test checks the ability of the originating register to time out after marker seizure within the allotted time.</p>	14
<p>AB. Timing During Pretranslation: This test checks that, from the time the originating register calls for a pretranslator until pretranslation is completed, the partial dial timing interval is not reduced.</p>	14
<p>AC. Timing During Coin Test—Dial-Tone-First: This test checks the ability of the originating register, when it is arranged for dial-tone-first, but not coin service improvement, to detect the absence of a coin, to transmit no-such-number tone, and to release after the proper time interval.</p>	15
<p>AD. Common Alarm Timing: This test checks the ability of the originating register to cause the common alarm circuit to operate properly in the allotted time.</p>	15
<p>AE. Recycle of Timing: This test checks the ability of the originating register to recycle its timing circuit when the operation which is being timed is completed in the allotted time interval.</p>	16
<p>AF. Tip-Party Manual Test: This test checks the ability of the TP1 relay in the originating register to operate over the register operate current flow test path. It also checks that, if the TP1 relay fails to operate, the originating register is held off-normal.</p>	18
<p>AG. Line Location, Class of Service, and Observed Call Information—Storing and Verification of Trouble Recorder Leads: The</p>	

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following features are checked. (1) The ability of the originating register to receive, store, and transmit line location, class of service, and observed call information to and from the marker. (2) That the trouble recorder receives the proper identifying information from the originating register when the trouble recorder is seized by the automatic monitor, register, and sender test circuit. (3) That the trouble recorder receives the proper identifying information from the originating register marker connector when the trouble recorder is seized by the marker.	19
AH. Start Dial Signal: This test checks the ability of the originating register to reverse tip and ring to centrex attendant or tie line circuit.	20
AI. Intra-PBX Call: This test checks the ability of the originating register, when arranged for centrex service, to function properly when handling intra-PBX calls.	21
AJ. 11X Special Codes—Originating Register Arranged for Centrex Service Only: This test checks the ability of the originating register, when arranged for centrex service only, to function properly when 11X code is dialed.	21
AK. Dial Zero Calls for Centrex Service: This test checks the ability of the originating register, when arranged for centrex service, to recognize an attendant call.	21
AL. 1XX Special Codes for Centrex Service: This test checks the ability of the originating register, when arranged for centrex service, to function properly when 1XX code is dialed.	21
AM. CCSA Call—Prefix Digit 8: This test checks the ability of the originating register, when arranged for CCSA feature, to function properly when handling CCSA calls.	21

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AN. CCSA Call—Digit 1 Absorption After Prefix Digit 8: This test checks the ability of the originating register, when arranged for CCSA calls, to absorb any digit 1s immediately following the prefix digit 8.	21
AO. Slow Test: This test checks that the originating register correctly receives and records the various frequency combinations. Signals are sent at a nominal level at 1 pulse per second and 11 pulses per second.	22
AP. High Level Test: This test checks that the originating register will operate correctly when the TOUCH-TONE signal level is higher than the nominal level. This test is performed at both fast and slow pulsing speeds.	22
AQ. Low Level Test: This test checks that the originating register will operate correctly when the TOUCH-TONE signal level is lower than the nominal level. This test is made at the fast pulsing speed.	22
AR. High Frequency Test: This test checks that the originating register will accept TOUCH-TONE signals composed of frequencies which are 1.5 percent higher than the nominal frequencies.	22
AS. Low Frequency Test: This test checks that the originating register will accept TOUCH-TONE signals composed of frequencies which are 1.5 percent lower than the nominal frequencies.	22
AT. Single Frequency Test: This test checks that the originating register will disregard signals composed of a single frequency.	22
AU. Special 3-Frequency Test: This test checks that the originating register will disregard signals composed of three frequencies, two of which are a	22

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valid combination of frequencies. The third is a signal of 2000 hertz at a higher level.	22	or absence of coin, (3) Coin service improvement (dial-tone-first) for presence or absence of coin.	23
AV. Long Pulse Test: This test checks that the originating register will operate correctly when pulses are approximately 0.05 second long with approximately 0.04 second between pulses.	22	BB. Wideband Service: This test checks that an originating register arranged for wideband service will (1) accept a nonwideband call from a nonwideband customer, (2) accept properly dialed wideband calls from non-PBX wideband customers, and (3) cause overflow to be returned on improperly dialed wideband calls.	23
AV. Unused Frequency Combination: This test checks that overall tone is returned by the originating register upon receipt of an unused frequency combination generated from a 12- or 16-button TOUCH-TONE telephone set.	22	BC. Wideband Access Digit to Right of 0 Key: This test checks that the register will recognize that an access digit (#) to the right of 0 key was keyed by a PBX customer to reach a central No. 5 crossbar office for a wideband call.	24
AW. Toll Diversion: This test checks the ability of the originating register to recognize a signal from the marker that a call from a PBX trunk requires toll diversion, to reverse tip and ring to the PBX trunk, and to release if the customer goes on-hook at any time after completion of dialing.	22	BD. Wideband Centrex Access to the Wideband Network: This test checks that the register will recognize an access digit (#) followed by a directing digit (9) that was keyed by a wideband centrex customer for selection of a trunk, from a trunk group handling wideband calls to the No. 5 crossbar office serving the PBX.	24
AX. Range Extension for Unigauge Cabling: This test checks the ability of the originating register to switch the voltage on the L relay to -72 volts on calls originated by lines arranged for range extension.	22	BE. Originating Register to Completing Marker Leads: This test checks the NOB, OBS, LL0, 1, 2, 4, and 7 leads between the originating registers and the completing markers.	24
AY. C-Digit Translator: This test checks the ability of the originating register to recognize that a call is either a DDD call or an NPA-411 information call when an NN0 code is dialed.	23	BF. Digit 8 Access Call to Enhanced Private Switched Communications Systems (EPSCS) No. 1 ESS: This test checks that the register will recognize that an access digit 8 was dialed to each EPSCS No. 1 ESS office.	25
AZ. Interchangeable and/or NPA-411 Information Codes: This test checks the ability of the originating register, when pretranslators are provided, to operate correctly when an interchangeable code is dialed. (Refer to 1.08.)	23	1.04 When the register is arranged for coin service improvement (dial-tone-first) operation, the coin features of Tests G, H, N, O, P, Y, and AE are not to be performed.	
BA. Coin Operation: The following coin operations are checked: (1) Coin-first ground-start operation, (2) Coin-first loop-start operation for presence			

1.05 When some registers in the same register group are arranged with different coin control apparatus figures for ground start operation, the coin feature will be tested as coin-first ground-start operation. When all registers in the same register group are not arranged for either coin-first ground-start or coin service improvement (dial-tone-first) operation, the coin feature will be tested as coin-first loop-start operation. When all of the registers in the same register group are arranged for both coin-first ground-start and coin service improvement (dial-tone-first) operation, the coin feature will be tested as coin service improvement (dial-tone-first).

1.06 Test charts are provided which show priming information required for each test. Spaces are provided on the charts for listing specific priming information depending on local conditions. These charts should be filled out from local records in accordance with the instructions provided in Part 5, Preparation of Test Chart.

1.07 During Test M, the traffic register associated with the APD lead will operate once for each abandoned call. Local instructions should be followed for recording and reporting any of these operations.

1.08 Tests AO through AV.1 are to be made only on registers arranged for TOUCH-TONE calling.

1.09 An interchangeable code is a code that represents both a working office code in the home area and a working foreign area code. In some offices where interchangeable codes are provided, timing after the 7th digit is not required on toll calls. Therefore, a prefix digit of 0 or 1 must be dialed as an indication to the originating register (OR) that 10 digits are required to complete the call. In other offices a prefix digit of 0 may indicate to the OR that 7 or 10 digits may be dialed. These offices require timing after the 7th digit. A prefix digit of 1 indicates that the call requires 10 digits for completion. In either type of office if no prefix digit is dialed, the OR can expect 7 digits or in some cases less than 7 digits. Where pretranslators are provided, the dialing of an interchangeable code will result in the pretranslator grounding the CMB lead to the originating register.

1.10 In marker groups with four, five, or six dial tone markers, markers 0 and 1 will always have full access to all line link frames,

trunk link frames and associated originating registers. In marker groups with five dial tone markers, markers other than 0 and 1 may have full or limited (graded) access to line link and trunk link frames and associated originating registers. In marker groups with six dial tone markers, markers other than 0 and 1 have only limited access to line link and trunk link frames and associated originating registers. It may be desirable to test a particular originating register with a particular marker, where limited access is provided, therefore the no-test (NT) connector should be used when selecting a line location appropriate for the required association between the particular marker and originating register group. The association of dial tone markers having limited access to certain frames shall be determined from office records.

1.11 *Lettered Steps:* A letter, a, b, c, etc, added to a step number in Parts 3 and 4 of this section indicates an action which may or may not be required depending on local conditions. The condition under which a lettered step or 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.

1.12 The manner of selecting some circuits and test conditions at the master test frame (MTF) and its associated circuits varies depending on the apparatus options furnished with these circuits. Therefore, where variable means of selection are provided, precise instructions for the selection of circuits and test conditions are not given. Precise instructions for the use of these variable means are given in Section 218-106-301.

1.13 The location statement, at MTF—, is used to refer to all apparatus located on the four basic bays of the MTF.

1.14 On Issue 76D of SD-25800-01, a group of 18 "class of test" lamps was replaced by a single "start test" lamp designated STT. Since the designation given to the lamp is not specific, the lamp will not be called out in the section, as well as the 18 discontinued lamps, such as ATNT, DT, IAO, IMS, INC, IR, ITDO, ITNP, ITP, LT, MISC, MLV, OGT, OR, ORTG, PTT, SDR, and TVT.

2. APPARATUS

All Tests

- 2.01 Master test control circuit, SD-25800-01.
- 2.02 Automatic monitor, register, and sender test circuit, SD-25680-01.

Tests W Through Y and AB Through AH, and BE

- 2.03 Blocking and insulating tools, as required. Use tools and apply, as covered in Section 069-020-801.

Tests U, X Through AD, AX

- 2.04 KS-3008 stopwatch or equivalent.

Tests X, Y, AB, AD Through AH

- 2.05 322A (make-busy) plugs as required.

Test AE

- 2.06 32A test set.

Tests AG and BE —For Nonwire-Spring-Relay Type Circuits

- 2.07 Testing cord, 893 cord, 3 feet long, equipped with two 360A tools (1W13A cord) and two 419A (test connector) tools.

Tests AG and BE —For Wire-Spring-Relay Type Circuits

- 2.08 Testing cord, 893 cord, 3 feet long, equipped with two 360A tools (1W13A cord), one 419A (test connector) tool, and one KS-6278 connecting clip.

Test AH

- 2.09 Patching cord, P3F cord, 4 feet long, equipped with one 309 plug and one 310 plug (3P12A cord).

3. PREPARATION

STEP

ACTION

VERIFICATION

Note: Refer to paragraphs 1.04 through 1.13.

All Tests Except AF

- 1 At MTF—
Restore all keys and switches.

Note: Ensure that the remotely located LFA, HFA, ADJ keys associated with the automatic monitor are in the normal positions.

- 2 Momentarily operate RL key. All lamps extinguished.
- 3a If trouble recorder card of dial tone connection is required—
Operate REC key.
- 4b If automatic repetition of test is required—
Operate REP key.
- 5 Select dial tone marker 0 or 1 (refer to 1.10).
- 6 Select OR class of test.
- 7 Select route advance 0.

SECTION 218-135-501

STEP	ACTION	VERIFICATION
8	Select originating register group.	
9	Select particular originating register to be tested.	
10	Operate GPA/GPB key as required for access to selected originating register group.	
11	Operate STT, FS, TS keys.	

4. METHOD

STEP	ACTION	VERIFICATION
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Note: Tests A, B, C, D, E, F, G, H, and I actions and verifications are the same as shown in Test I.1.

- A. Regular Call—7-Digit Tests 1 Through 20.
- B. Regular Call—10-Digit Tests 21 Through 40.
- C. Prefix Digit 1 Code Tests 41 Through 46.
- D. Prefix Digits 11—Foreign Area Directing Code Tests 47 Through 50.
- E. 11X Service Codes Tests 51 Through 54.
- F. X11 Service Codes Tests 55 Through 60.
- G. Manual Call—Coin and Noncoin Tests 61 and 62.

Note: Refer to paragraph 1.04.

- H. Zero Operator—Coin and Noncoin Tests 63 Through 68.

Note: Refer to paragraph 1.04.

- I. Prefix Digit 0—PPCS Tests 69 Through 76.

I.1 Prefix Digits 01+

12	Operate keys and set switches in accordance with Test Chart Tests 77 through 96.	
13	Momentarily operate ST key.	OK lamp lighted.
14	Momentarily operate RL key.	All lamps extinguished.
15	Restore all keys and switches not required in next test.	

STEP	ACTION	VERIFICATION
I.2 Prefix Digits 011+		
12	Operate keys and set switches in accordance with Test Chart Tests 97 through 132.	
13	Momentarily operate ST key.	OK lamp lighted. For Tests 127 through 132— Overflow tone heard.
14	Momentarily operate RL key.	All lamps extinguished.
For Tests 127 Through 132		
15	Momentarily operate ST key.	Overflow tone heard in test circuit receiver.
16	Momentarily operate RL key.	All lamps extinguished.
17	Restore all keys and switches not required in next test.	
J. Straightforward Call to Manual Office		
12	Operate keys and set switches in accordance with Test Chart Test 133.	
13	Momentarily operate ST key.	OK lamp lighted.
14	Momentarily operate RL key.	All lamps extinguished.
15	Restore all keys and switches not required in next test.	
K. Preliminary Pulse		
12	Operate keys and set switches in accordance with Test Chart Tests 134 and 135.	
13	Operate DSS key.	
14	Momentarily operate ST key.	Dial tone heard in test receiver.
15	Momentarily operate ST key.	Dial tone still heard in test receiver.
16	Momentarily operate ST key.	Dial tone still heard in test receiver.
17	Momentarily operate RL key.	Dial tone silenced.
18	Restore all keys and switches not required in next test.	

STEP	ACTION	VERIFICATION
	<i>Note:</i> Tests L, M, N, O, P, Q, R, S, and T actions and verification are the same as shown in Test T.1	
L. Two-Party Test Tests 136 Through 139.		
M. Abandoned Call—Coin or Noncoin		
	<i>Note:</i> Refer to paragraph 1.05.	
N. Abandoned Call During Coin Test		
	<i>Note:</i> Refer to paragraph 1.04.	
O. Marker Coin Return —Test 145.		
	<i>Note:</i> Refer to paragraph 1.04.	
P. Stuck Coin —Test 146.		
	<i>Note:</i> Refer to paragraph 1.04.	
Q. Register Supervision —Test 147.		
R. A- Digit Translator —Tests 148 Through 160.		
S. A- and B-Digit Translators —Tests 161 Through 171.		
T. Pretranslation (SD-25568-01 Provided) —Tests 172 Through 229.		
T.1 Pretranslation for IDDD (SD-27849-01 Provided)		
12 Operate keys and set switches in accordance with Test Chart Tests 230 through 246		
13 Momentarily operate ST key.		OK lamp lighted.
14 Momentarily operate RL key.		All lamps extinguished.
15 Restore all keys and switches not required in next test.		
U. Dial Tone and Busy or Overflow Tone		
	<i>Note:</i> Refer to paragraph 1.12.	
12 Operate keys and set switches in accordance with Test Chart Test 247.		
13 Momentarily operate ST key.		Dial tone heard in test circuit receiver.
14 Momentarily operate RL key.		Dial tone silenced.
15 Operate RBT key.		

STEP	ACTION	VERIFICATION
16	Momentarily operate ST key; <i>start timing</i> .	Dial tone momentarily heard in test circuit receiver. Busy or overflow tone heard. In 20 to 32 seconds— Tone silenced.
17	Momentarily operate RL key.	All lamps extinguished.
18	Restore all keys and switches not required in next test.	

V. Dial Tone Removal

12	Operate keys and set switches in accordance with Test Chart Tests 248 through 252.	
13	Momentarily operate ST key.	For Test 248— Dial tone <i>not</i> heard in test receiver. For tests 249, 250, 252— Dial tone may or may not be heard depending on local options. For Test 251— If register is arranged for centrex service and if dial tone is not returned after prefix digit 9— Dial tone not heard in test receiver. If register is arranged for centrex service and if dial tone is returned after prefix digit 9— Dial tone heard in test receiver.
14	Momentarily operate RL key.	Connection released.
15	Restore all keys and switches not required in next test.	

W. Dial Tone—Register Arranged for Manual Service

12	Operate keys and set switches in accordance with Test Chart Test 253.	
13	Insulate 3B of RBT relay.	
14	Momentarily operate ST key.	Dial tone not heard in test circuit receiver.
15	Momentarily operate RL key.	
16	Remove insulator from RBT relay.	
17	Restore all keys and switches not required in next test.	

STEP	ACTION	VERIFICATION
X. Permanent Signal Timing—Coin or Noncoin		
<i>Note:</i> Refer to paragraph 1.05.		
12	Operate keys and set switches in accordance with Test Chart Tests 254 and 255.	
13c	If noncoin class of service is used— Momentarily operate ST key. When ORON lamp lights, <i>start timing</i> .	ORON lamp lighted. In 20 to 32 seconds— MST1 lamp momentarily lighted. OK lamp lighted.
14d	If coin class of service is used— Momentarily operate ST key. When ORON lamp lights, <i>start timing</i> .	ORON, CR1 lamps lighted. In 20 to 32 seconds— MST1 lamp lighted. CR1 lamp extinguished. CR2 lamp momentarily lighted. OK lamp lighted.
15	Momentarily operate RL key.	All lamps extinguished.
16	At MTF— Insert make-busy plug into ORMB jack associated with register under test.	
17	At relay rack frame— Block operated RB2 relay in group-busy circuit associated with originating registers.	
18	At MTF— Momentarily operate ST key. When ORON lamp lights, <i>start timing</i> .	ORON lamp lighted. In 10 to 16 seconds— MST1 lamp lighted. OK lamp lighted.
19	Momentarily operate RL key.	All lamps extinguished.
20	At relay rack frame— Remove blocking tool from RB2 relay in group-busy circuit.	
21	At MTF— Remove make-busy plug from ORMB jack.	
22	Restore all keys and switches not required in next test.	
Y. Partial Dial Timing—Coin or Noncoin		
<i>Note:</i> Refer to paragraph 1.04 and 1.05.		
12	Operate keys and set switches in accordance with Test Chart Tests 256 through 263.	

STEP	ACTION	VERIFICATION
13c	If noncoin class of service is used— Momentarily operate ST key. When OSB lamp lights, <i>start timing</i> .	OSB lamp lighted. In 20 to 32 seconds— MST lamp lighted. OK lamp lighted.
14d	If coin class of service is used and register is arranged for coin service improvement (dial-tone-first)— Operate NCND key.	
15e	If coin class of service is used— Momentarily operate ST key. When OSB lamp lights, <i>start timing</i> .	OSB, CR1 lamps lighted. In 20 to 32 seconds— MST1 lamp lighted. OK lamp lighted.
16f	If IDDD class of service is used— Momentarily operate ST key.	OSB lamp lighted. For Tests 262 and 263— In approximately 3.5 seconds— MST lamp lighted. OK lamp lighted. For Tests 258 through 261— In 20 to 32 seconds— MST lamp lighted. OK lamp lighted.
17	Momentarily operate RL key.	All lamps extinguished.
18	Insert make-busy plug into ORMB jack associated with register under test.	
19	At relay rack frame— Block operated RB2 relay in group-busy circuit associated with originating registers.	
20	At MTF— Momentarily operate ST key. When OSB lamp lights, <i>start timing</i> .	OSB lamp lighted. In 5 to 8 seconds— MST1 lamp lighted. OK lamp lighted.
21	Momentarily operate RL key.	All lamps extinguished.
22	At relay rack frame— Remove blocking tool from RB2 relay in group-busy circuit.	
23	Remove make-busy plug from ORMB jack.	
24	Restore all keys and switches not required in next test.	

STEP	ACTION	VERIFICATION
Z. B- Digit Translator		
12	Operate keys and set switches in accordance with Test Chart Tests 264 through 277.	
13	Momentarily operate ST key.	OK lamp lighted.
14	Momentarily operate RL key.	All lamps extinguished.
15	Restore all keys and switches not required in next test.	
AA. Register Timeout After Marker Seizure		
12	Operate keys and set switches in accordance with Test Chart Test 278.	
13	Momentarily operate ST key. When MST lamp lights, <i>start timing</i> .	MST lamp momentarily lighted. In 20 to 32 seconds— OK lamp lighted.
14	Momentarily operate RL key.	
15	Restore all keys and switches not required in next test.	
AB. Timing During Pretranslation		
12	Operate keys and set switches in accordance with Test Chart Test 279 and 280.	
13	Insert make-busy plug into ORMB jack for originating register under test.	
14c	If circuit under test is nonwire-spring-relay type— At register frame— Insulate 2B, 4B of PRL relay.	
15d	If circuit under test is wire-spring-relay type— At register frame— Insulate 7B, 9B of PRL relay.	
16	At relay rack frame— Block operated RB2 relay in group-busy circuit associated with originating registers.	
17	At MTF— Repeatedly operate, release ST key until OS_D lamp lights; <i>start timing</i> .	OS_D lamp lighted. In 20 to 32 seconds— MST lamp lighted.

STEP	ACTION	VERIFICATION
	Note: Successive operation and release of the ST key must be performed in less than 5 seconds.	
18	Momentarily operate RL key.	All lamps extinguished.
19	Remove blocking tool from RB2 relay.	
20	Remove insulators from PRL relay.	
21	Remove make-busy plug from ORMB jack.	
22	Restore all keys and switches not required in next test.	
AC. Timing During Coin Test—Dial Tone First		
12	Operate keys and set switches in accordance with Test Chart Test 281.	
13	At relay rack frame— Block operated RB2 relay in group-busy circuit associated with originating registers.	
14	At MTF— Momentarily operate ST key; <i>start timing.</i>	MST1 lamp lighted. In 10 to 16 seconds— No-such-number tone heard in test circuit receiver. In 20 to 32 seconds after MST1 lamp lighted— OK lamp lighted.
15	Momentarily operate RL key.	All lamps extinguished.
16	At relay rack frame— Remove blocking tool from RB2 relay.	
17	At MTF— Restore all keys and switches not required in next test.	
AD. Common Alarm Timing		
12	Operate keys and set switches in accordance with Test Chart Test 282.	
13	Insulate 11B of DOR2 relay.	
14	Momentarily operate ST key. When TO lamp lights, <i>start timing.</i>	Dial tone heard. In 20 to 32 seconds— Dial tone silenced. After 20 to 32 second— TO lamp associated with register under test
	Note: If TOUCH-TONE calling, ST key must be momentarily operated a second time.	

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STEP	ACTION	VERIFICATION
		lighted. In 10 to 15 seconds after TO lamp lighted— R-S-TOA lamp lighted. Major alarm sounds.
15	Insert make-busy plug into ORMB jack.	R-S-TOA lamp extinguished. Major alarm silenced.
16	Momentarily operate RL key.	All lamps extinguished.
17	Remove insulator from DOR2 relay.	
18	Remove make-busy plug from ORMB jack.	
19	Restore all keys and switches not required in next test.	

AE. Recycle of Timing

Improved Procedure for Test of Recycle of Timing not Provided (Tests 283, 284)

Note: Refer to paragraph 1.04.

12	Operate keys and set switches in accordance with Test Chart Tests 283 through 285.	
13	Insert make-busy plug into ORMB jack for originating register under test.	
14	At originating register frame— Insert plug of 32A test set into RC jack.	
15	Momentarily operate white (ST) button of 32A test set. Note 1: If TOUCH-TONE calling, white (ST) button must be operated a second time.	For registers arranged for coin test before dial tone— TMA relay operated, released, reoperated to start permanent signal timing.
	Note 2: Proceed to next step within 20 seconds to prevent originating register timeout.	For registers arranged for coin test after dial tone, arranged for coin service without coin test, or not arranged for coin service— TMA relay operated to start permanent signal timing.
16	Momentarily operate white (ST) button of 32A test set to pulse A digit.	TMA relay released, reoperated to recycle timing circuit for partial dial timing. TMB relay released at start of digit, reoperated at end of digit.
	Note: Proceed to next step within 20 seconds to prevent originating register timeout.	
17	Momentarily operate white (ST) button of 32A test set to pulse B digit.	TMA relay released, reoperated. TMB relay released at start of each digit,

STEP	ACTION	VERIFICATION
	Note: Proceed to next step within 20 seconds to prevent originating register timeout.	reoperated at end of digit.
18	Momentarily operate white (ST) button of 32A test set once for each remaining C through K digit.	TMA relay operated, released for each digit. TMB relay released at start of each digit, reoperated at end of each digit except last digit.
19	Momentarily operate red (RLS) button of 32A test set.	TMA relay released.
20c	If originating register is arranged to make coin test after completion of dialing— Block nonoperated GT1 relay in originating register.	
21c	Momentarily operate white (ST) button of 32A test set.	
22c	Momentarily operate white (ST) button of 32A test set once for each digit set up on A through K keys.	TMA relay operated, released for each digit. TMB relay released at start of each digit, reoperated at end of each digit except last digit.
23c	Remove blocking tool from GT1 relay.	
24	Momentarily operate red (RLS) button of 32A test set.	TMA relay released.
25d	If register is arranged for coin service without coin test or if register is arranged for coin test before dial tone— At MTF— Restore A through K digits as required.	
26d	Restore RBT key.	
27d	Operate RPS key.	
28d	At originating register frame— Block nonoperated CR1 relay in originating register.	
29d	Momentarily operate white (ST) button of 32A test set.	
30d	At register frame— Momentarily operate TM relay manually.	TMA relay remains operated. TMB relay released.
31d	Remove blocking tool from CR1 relay.	

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STEP	ACTION	VERIFICATION
32d	Momentarily operate red (RLS) button of 32A test set.	TMA relay released.
33	Remove plug of 32A test set from RC jack.	
34	At MTF— Remove make-busy plug from ORMB jack.	
35	Restore all keys and switches not required in next test.	

Improved Procedure for Test of Recycle of Timing Provided (Test 285)

36	At MTF— Operate keys and switches in accordance with Test Chart Test 285.	
37	At group-busy circuit— Block operated RB2 relay associated with register to be tested.	
38	At MTF— Momentarily operate ST key.	OK lamp lighted.
39	Momentarily operate RL key.	All lamps extinguished.
40	At group-busy circuit— Remove blocking tool from RB2 relay.	
41	At MTF— Restore all keys and switches not required in next test.	

AF. Tip-Party Manual Test

1	At MTF— Insert make-busy plug into ORMB jack for originating register under test.	
2	At originating register frame— Block operated 2P relay.	
3	Block nonoperated TP1 relay.	
4a	If App. Fig. 13 provided— Insulate contact 7 of TP1 relay.	
5	Manually operate ON1 relay.	ON1 relay locked operated. ON, RL relays locked operated.
6	Remove blocking tool from TP1 relay.	ON1, ON, RL relays released.

STEP	ACTION	VERIFICATION
7	Manually operate ON1 relay.	TP1 relay operated while ON1 relay is operated.
8	Remove blocking tool from 2P relay.	
9a	If App. Fig. 13 provided— Remove insulation from TPT relay.	
10	At MTF— Remove make-busy plug from ORBM jack.	
AG. Line Location, Class of Service, and Observed Call Information—Storing and Verification of Trouble Recorder Leads		
12	Operate keys and set switches in accordance with Test Chart Tests 286 through 298.	
13	Insert make-busy plug into ORMB jack for originating register under test.	
14c	At AMRST frame— Insulate 5 and 6 top contacts of DOR1 relay.	
15	At MTF— Momentarily operate ST key.	Two trouble records taken. FR_, CN_, RG_, CT_, CU_, FAC or OR, FT_, FU_, VG_, HG_, VF_, CH_, and if rate treatment is provided, CRU_, CGA or CGB designations perforated on each trouble record. D designation perforated on each trouble record indicating a dial pulsed call.
16	Momentarily operate RL key.	All lamps extinguished.
17	Repeat Steps 12 through 15 using several combinations of line location, classes of service, and rate treatment.	
18c	If originating registers are equipped to receive TOUCH-TONE signals— Operate PB key.	
19c	Select a line location, class of service, and rate treatment as required for a line arranged for TOUCH-TONE calling.	
20c	At MTF— Momentarily operate ST key.	Two trouble records taken. MF, FR_, CN_, RG_, CT_, CU_, FAC or OR, FT_, FU_, VG_, HG_, VF_, CH_, and if rate treatment is provided, CRU_, CGA or CGB designations perforated on each trouble record.
21c	Momentarily operate RL key.	All lamps extinguished.

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STEP	ACTION	VERIFICATION
22c	Repeat Steps 12 through 21c using several combinations of line location, classes of service, and rate treatment, as applicable for line link frames equipped for TOUCH-TONE dialing.	
23	At AMRST frame— Remove insulation from 5 and 6 top contacts of DOR1 relay.	
24	At MTF— Restore TA key to normal.	
25	Momentarily operate ST key.	OK lamp lighted.
26	Momentarily operate QTR key.	Trouble record taken. FR_, CN_, RG_ designations perforated the same as shown on trouble record for Steps 15, or 20c as applicable.
27	Momentarily operate RL key.	All lamps extinguished.
28	Remove make-busy plug from ORMB jack.	
29	At MTF— Restore all keys and switches not required in next test.	
AH. Start Dial Signal		
12	Operate keys and set switches in accordance with Test Chart Test 299.	
13	Insert make-busy plug into ORMB jack associated with register under test.	
14c	If TM jack access is provided— Patch T1 jack of voltmeter test circuit to TM jack of trunk test circuit.	
15c	At trunk test circuit— Block ST relay operated.	
16c	At voltmeter test circuit— Block operated SL1 relay.	
17d	If TM1 and TM2 jack access is provided— Patch T1 jack of voltmeter test circuit to TM1 jack of jack, lamp, and key circuit.	
18	At MTF— Operate VMT1, T1 REV keys.	

STEP	ACTION	VERIFICATION
19	Momentarily operate ST key.	OK lamp lighted. Voltmeter readings will be 120-volts on seizure and outpulsing and 105-volts at end of pulsing.
20	Momentarily operate RL key.	All lamps extinguished.
21c	If TM jack access is provided— Remove patching cord from T1 and TM jacks.	
22c	At voltmeter test circuit— Remove blocking tool from SL1 relay.	
23c	At trunk test circuit— Remove blocking tool from ST relay.	
24d	If TM1 and TM2 jack access is provided— Remove patching cord from T1 and TM1 jacks.	
	Note: Tests AI, AJ, AK, AL, and AM actions and verifications are the same as shown in Test AN.	

- AI. Intra-PBX Call Tests 300 and 301.
- AJ. 11X Special Codes—Originating Register Arranged for Centrex Service Only Tests 302 and 303.
- AK. Dial Zero Calls for Centrex Service Tests 304 and 305.
- AL. 1XX Special Codes for Centrex Service Tests 306 Through 315.
- AM. CCSA Call—Prefix Digit 8 Tests 316 Through 323.
- AN. CCSA Call—Digit 1 Absorption After Prefix Digit 8

12	Operate keys and set switches in accordance with Test Chart Tests 300 through 325.	
13	Momentarily operate ST key.	OK lamp lighted.
14	Momentarily operate RL key.	All lamps extinguished.
15	Restore all keys and switches not required in next test.	

Note: Tests AO, AP, AQ, AR, AS, AT, AU, AV, and AW actions and verifications are the same as shown in Test AX.

STEP	ACTION	VERIFICATION
AO.	Slow Test Tests 326 Through 329.	
AP.	High Level Test Tests 330 Through 333.	
AQ.	Low Level Test Tests 334 and 335.	
AR.	High Frequency Test Tests 336 and 337.	
AS.	Low Frequency Test Tests 338 and 339.	
AT.	Single Frequency Test Tests 340 Through 347.	
AU.	Special 3-Frequency Test Tests 348 Through 351.	
AV.	Long Pulse Test Test 352.	
AV.	Unused Frequency Combinations Tests 353 and 354.	
AW.	Toll Diversion	
AX.	Range Extension for Unigauge Cabling Tests 357 Through 360	
12	Operate keys and set switches in accordance with Test Chart Tests 326 through 360.	
For all Tests Except 353, 354, 355, 356, and 358		
13	Momentarily operate ST key.	OK lamp lighted.
14	Momentarily operate RL key.	All lamps extinguished.
For Tests 353, 354		
15	Momentarily operate ST key.	Overflow tone heard in test circuit receiver.
16	Momentarily operate RL key.	Overflow tone silenced.
For Tests 355, 356		
17	Operate keys and set switches in accordance with Test Chart Tests 355 and 356.	
18	Momentarily operate the ST key.	WS lamp lighted, if reversal is present.
19	Momentarily operate RL key.	All lamps extinguished.
For Test 358		
20	Momentarily operate ST key; <i>start timing.</i>	In 40 to 60 seconds— TBL lamp lighted.
21	Momentarily operate RL key.	All lamps extinguished.
All Tests		
22	Restore all keys and switches not required in next test.	

STEP	ACTION	VERIFICATION
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AY. C- Digit Translator

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|----|--|-------------------------|
| 12 | Operate keys and set switches in accordance with Test Chart Tests 361 and 362. | |
| 13 | Momentarily operate ST key. | OK lamp lighted. |
| 14 | Momentarily operate RL key. | All lamps extinguished. |
| 15 | Restore all keys and switches not required in next test. | |

AZ. Interchangeable and/or NPA-411 Information Codes

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|----|--|--|
| 12 | Operate keys and set switches in accordance with Test Chart Tests 363 through 366. | |
| 13 | Momentarily operate ST key. | OK lamp lighted. |
| | | <i>Note:</i> On Tests 363, 364, OK lamp lighted in 3 to 4 seconds after FD lamp lighted. On Tests 365, 366, OK lamp immediately lighted after FD lamp lighted. |
| 14 | Momentarily operate RL key. | All lamps extinguished. |
| 15 | Restore all keys and switches not required in next test. | |

BA. Coin Operation

Note: Refer to paragraph 1.05.

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|----|--|-------------------------|
| 12 | Operate keys and set switches in accordance with Test Chart Tests 367 through 382. | |
| 13 | Momentarily operate ST key. | OK lamp lighted. |
| 14 | Momentarily operate RL key. | All lamps extinguished. |
| 15 | Restore all keys and switches not required in next test. | |

BB. Wideband Service

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|----|--|---|
| 12 | Operate keys and set switches in accordance with Test Chart Tests 383 through 386. | |
| 13 | Momentarily operate ST key. | For Tests 383, 384—
OK lamp lighted. |

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STEP	ACTION	VERIFICATION
		For Tests 385, 386— Overflow tone heard in test receiver.
14	Momentarily operate RL key.	All lamps extinguished. Overflow tone silenced.
15	Restore all keys and switches not required in next test.	
BC.	Wideband Access Digit to Right of 0 Key	
12	Operate keys and set switches in accordance with Test Chart Test 387.	
13	Momentarily operate ST key.	OK lamp lighted.
14	Momentarily operate RL key.	All lamps extinguished.
15	Restore all keys and switches.	
BD.	Wideband—Centrex Access to the Wideband Network	
12	Operate keys and set switches in accordance with Test Chart Test 388.	
13	Momentarily operate ST key.	OK lamp lighted.
14	Momentarily operate RL key.	All lamps extinguished.
15	Restore all keys and switches not required in next test.	
BE.	Originating Register to Completing Marker Leads Test	
12	Operate keys and set switches in accordance with Test Chart Tests 389 through 399.	
13	At MTF— Insert make-busy plug into ORMB jack for originating register under test.	
14	At MT control circuit— Apply ground to 7T of MFC1 relay.	KCH relay will operate.
15	At the AMRST— Insulate 5-6T of DOR1 relay.	
	Note: A trouble recorder card will be received on any outgoing OR test call when ST key is operated.	

STEP	ACTION	VERIFICATION
16	Momentarily operate ST key.	OK lamp lighted. Trouble recorder card made.
Note: Check trouble card punches to verify each lead between the OR and CM's.		
17	Momentarily operate RL key.	All lamps extinguished.
18	Change channel selection (CH 0-9) on each test to check all NOB, OBS, LL0, 1, 2, 4 and 7 leads from OR to CMS.	
19	Momentarily operate ST key.	OK lamp lighted. Trouble recorder card made.
20	Momentarily operate RL key.	All lamps extinguished.
21	Restore all keys and/or switches.	
BF. ▶Digit 8 Access Call to Enhanced Private Switched Communications Systems (EPSCS) No. 1 ESS		
12	Operate keys and set switches in accordance with Test Chart test 400 and 401.	
13	Momentarily operate ST key.	OK lamp lighted.
14	Momentarily operate RL key.	All lamps extinguished.
15	Restore all keys and/or switches.◀	
5. PREPARATION OF TEST CHART		
5.01 The Test Chart is used as a particular number chart and provides the priming information required for each test. Information obtained from local office records should be used to fill in the Test Chart in the following manner:		
<p>(a) Record the various classes of service. When office is provided with rate treatment, record various rate treatments. If the class of service is 2-party, record the 2P key and one of RPF, TPF, RTP, or RRP keys in the MISCELLANEOUS KEYS AND/OR SWITCHES column. Do not use a manual, coin, or CCSA class of service unless it is specified. When centrex class of service is selected, record digit 9 in the PREFIX DIGIT column. If PBX/PBX5 key is provided, record PBX key in the MISCELLANEOUS KEYS AND/OR SWITCHES column.</p>		
<p>(b) When dial pulse calling, record in the PULSING CONT column (7 MIN, 7 MAX, 15 MIN, 15 MAX, 24 MIN, 24 MAX, or SURGE) in accordance with the condition to be tested. Do not use 15 MAX, 24 MIN, or SURGE keys if the class of service used is coin and the register is arranged to function with coin-first lines which require a coin deposit before being connected to the register.</p>		
<p>(c) When TOUCH-TONE calling, record the PB key in the MISCELLANEOUS KEYS AND/OR SWITCHES column.</p>		
<p>(d) In the DIGITS—CODE(S) AND NUMBER column, record the A through F digits required for area and/or office codes. The selection of the codes should be made so that each usable numerical is employed for each dialable or TOUCH-TONE digit. When selecting</p>		

an office code on a 7-digit call, select any B-digit other than 0 or 1, or any numerical that will not be recognized as an area code or treated as an unused digit.

(e) When register is arranged to time for additional digits or repetitive timing is used, record STD key in the MISCELLANEOUS KEYS AND/OR SWITCHES column.

5.02 Test A

- (1) Apply (a), (d), and (e) of paragraph 5.01.
- (2) For Tests 9, 10, 19, and 20, use centrex class of service.

5.03 Test B

- (1) Apply (a) and (e) of paragraph 5.01.
- (2) Apply (d) of paragraph 5.01, selecting working X0X-, X1X-, NN0-type area codes. If timing after the 7th digit is not required, a prefix digit of 0 or 1 is required ahead of the area code.
- (3) When centrex class of service is used, apply (e) of paragraph 5.01.
- (4) For Tests 29, 30, 39, and 40, use CCSA class of service.

5.04 Test C

- (1) For Tests 41 and 44, apply (a) and (d) of paragraph 5.01. Do not use centrex class of service.
- (2) For Tests 42 and 45, apply (a) and (d) of paragraph 5.01, using centrex class of service.
- (3) For Tests 43 and 46 (office arranged for interchangeable and/or NPA-411 information codes) apply (a) and (d) of 5.01 except where 7-digit calls do not require a prefix digit (see paragraph 1.09.) Do not use centrex class of service.
- (4) For all tests, apply (e) of paragraph 5.01.

5.05 Test D

- (1) Where this feature is provided, 11X-type codes are not used for service codes.

(2) Apply (a), (d), and (e) of paragraph 5.01.

(3) For Tests 48 and 50, use centrex class of service.

5.06 Test E

- (1) Record the X digit of a 11X code as the A digit in the DIGITS—CODE(S) AND NUMBER column.
- (2) If a coin class of service is used with coin return where 11X codes are used for both service codes and straightforward codes, record the CR4 key in the MISCELLANEOUS KEYS AND/OR SWITCHES column.

(3) Apply (a) and (e) of paragraph 5.01.

(4) For Tests 52 and 54, use centrex class of service.

5.07 Test F

- (1) For Tests 55 and 58, record the X digit of an X11 code as the A- digit in the DIGITS—CODE(S) AND NUMBER column.
- (2) For Tests 56, 57, 59, and 60 (register arranged for NPA-411 information codes), apply (e) of paragraph 5.01.
- (3) For all tests, apply (a) of paragraph 5.01.

5.08 Test G

- (1) Apply (a) and (b) or (c) of paragraph 5.01. Use a manual class of service, noncoin and coin.

5.09 Test H

- (1) For Tests 63 and 66, do not use a coin, centrex, or CCSA class of service.
- (2) For Tests 64 and 67, use a coin class of service.
- (3) For Tests 65 and 68, use centrex class of service.

5.10 Test I

- (1) Apply (d) of paragraph 5.01.

- (2) For Tests 69 and 73, apply (a) of paragraph 5.01. Do not use centrex class of service.
- (3) For Tests 70 and 74, use centrex class of service.
- (4) For Tests 71 and 75, do not use prefix digit of 0 if OR is arranged to accept only 10 digits when a prefix of 0 is dialed. Do not use centrex class of service.
- (5) For all tests, apply (e) of paragraph 5.01.

5.11 Test I.1

- (1) Apply (a) of paragraph 5.01 using a class of service for IDDD routing.
- (2) Record country code and additional digits under DIGITS-CODE(S) AND NUMBER (CALLED NUMBER) column as follows:
 - (a) For Tests 78, 79, 80, and 86, 87, 88, select working country codes and digits through G, H, and J, respectively, when the register is arranged to time for additional digits after 7, 8, or 9 digits.
 - (b) For Tests 81 through 84 and 89 through 92 select working country codes and digits through J, K, L, and M, respectively, when the register is arranged for marker start after 9, 10, 11, and/or 12 digits.
 - (c) For Tests 93 through 96, select working country codes and digits through H, J, K, and L, respectively, when the register is arranged to (1) require an end-of-dial signal after 8, 9, 10, or 11 digits, or (2) recognize an end-of-dial signal after the register has begun timing for additional digits.

5.12 Test I.2

- (1) Apply (a) of paragraph 5.01, using a class of service for IDDD routing.
- (2) Record country code and additional digits under DIGITS-CODE(S) AND NUMBER (CALLED NUMBER) column as follows.
 - (a) For Tests 97 through 102 and 110 through 115, select working country codes that

will allow the register to record the maximum number of digits (11 or 12 digits, as provided).

- (b) For Tests 103, 104, 105, and 116, 117, 118, select working country codes and digits through G, H, and J, respectively, when the register is arranged to time for additional digits after 7, 8, or 9 digits.
- (c) For Tests 106, 107, 108 and 119 through 122, select working country codes and digits through J, K, L, and M, respectively, when the register is arranged for marker start after 9, 10, 11, and/or 12 digits.
- (d) For Tests 123 through 126, select working country codes and digits through H, J, K, and L, respectively, when the register is arranged to (1) require an end-of-dial signal after 8, 9, 10, or 11 digits, or (2) recognize an end-of-dial signal after the register has begun timing for additional digits.

5.13 Test J

- (1) Apply (a) and (b) or (c) of paragraph 5.01.
- (2) Record A; A and B; or A, B, and C digits in the DIGIT-CODE(S) AND NUMBER column for a complete code for a manual office.

5.14 Test K

- (1) Apply (a) of paragraph 5.01.

5.15 Test L

- (1) Use a 2-party class of service other than manual that requires a party test.
- (2) Apply (b) or (c) and (d) of paragraph 5.01.

5.16 Test M

- (1) In the DIGIT-CODE(S) AND NUMBER column, record an A digit other than 0, 1, 8, or 9 that will not be recognized as a code or as an unused digit to be routed to a vacant code.
- (2) For Test 140, select noncoin class of service.
- (3) For Test 141, select coin class of service.
- (4) For Test 142, select centrex class of service.

- (5) For all tests, apply (b) or (c) of paragraph 5.01.

5.17 Test N

- (1) Use coin class of service other than manual.
- (2) Apply (b) or (c) of paragraph 5.01. When (b) is applied, do not use 15 MAX, 24 MIN, or SURGE.
- (3) For Test 144 (register makes coin test after dialing is complete), apply (d) of paragraph 5.01.

5.18 Test O

- (1) Use a coin class of service other than manual.
- (2) Apply (b) or (c) and (d) of paragraph 5.01, using a code which the marker recognizes as a free call.

5.19 Test P

- (1) Use a coin class of service.
- (2) Apply (b) or (c) of paragraph 5.01.

5.20 Test Q

- (1) Apply (a), (b) or (c), and (d) of paragraph 5.01.

5.21 Test R

- (1) For Tests 148 through 153, record all unused A digits that the register will translate.
- (2) For Tests 154 through 160 and 168, record all unused A digits of 1X-type codes that the register will translate.
- (3) For Tests 161 through 167, 169, and 170, record all used A digits of 11X-type codes that the register will translate. For one test, record the A digit of a 11 foreign area directing code.
- (4) For all tests, record any additional digits required for the register to engage a marker.
- (5) For Tests 160, 167, 170, and 171, use centrex class of service.

- (6) Apply (a), (d), and (e) of paragraph 5.01.

5.22 Test S

- (1) For Tests 148 through 153, record unused A digits and/or used A digits and unused B digits that the register will translate.
- (2) For Tests 154 through 160 and 168, record used A and B digits of a 1X- or 1XX-type code that the register will translate.
- (3) For tests 161 through 167, 169, and 170, record the A and B digits of 11X- or 11XX-type codes that the register will translate. For one test, record the A digit of 11 foreign area directing code.
- (4) For all tests, record any additional digits required for the register to engage a marker.
- (5) For Tests 160, 164, 170, and 171, use centrex class of service.
- (6) Apply (a), (d), and (e) of paragraph 5.01.

5.23 Test T

Note: Refer to paragraph 1.08 and use only those lines that apply to the particular office under test.

- (1) For Tests 172 through 179, record the A and B and/or A, B, and C digits which will cause the register to engage a pretranslator.
- (2) For Test 181, record a working NPA area code.
- (3) For Tests 182 through 191, record the A, A and B digits of a 1X- or 1XX-type code which will cause the register to engage a pretranslator.
- (4) For Tests 192 through 201, record the A, A and B digits of a 11X- or 11XX-type code which will cause the register to engage a pretranslator.
- (5) For Tests 202 through 215 and 222 through 229, record the A and C, A and B, or A, B, and C digits of a working NON-, N1N, NN0-type foreign area codes and/or office codes. When register is arranged for interchangeable area

and office codes, complete Tests 202, 203, 207, 222 and 223 by recording interchangeable area and/or office codes.

(6) For Test 216, record the office code of a 11 foreign area directing code that will cause the register to engage a pretranslator.

(7) For Tests 217 through 221, use these Tests only when OR is equipped for interchangeable codes without timing (prefix digits used to differentiate between 7 and 10 digit codes).

(8) For Tests 217 and 219, record the A, B, and C digits of an area code that the pretranslator will recognize as a vacant area code.

(9) For Tests 218 and 220, record the A, B, and C digits of a working office code that is not an interchangeable code.

(10) For Test 221, record the A, B, and C digits of a working area code that is not an interchangeable code.

(11) For all Tests apply (a) and (e) of paragraph 5.01.

(12) Record any additional digits required for the register to engage a marker.

5.24 Test T.1

(1) Apply (a) of paragraph 5.01, using a class of service for IDDD routing.

(2) Apply (b) or (c) of paragraph 5.01.

(3) Record working country codes and additional digits in DIGITS-CODE(S) AND NUMBERS (CALLED NUMBER) column as follows:

(a) When selecting country codes, the selection of the codes should be made so that each usable numerical is employed for each dialable or TOUCH-TONE digit.

(b) For Tests 230 through 232, select working country codes and digits through J, K, and L, respectively, when the pretranslator indicates to the register to engage a marker after 9, 10, or 11 digits.

(c) For Tests 233 through 235, select working country codes and digits through G, H, and J, respectively, when the pretranslator indicates to the register to time for additional digits after 7, 8, or 9 digits.

(d) For Test 236, select the A, B, and C digits that the pretranslator will recognize as a vacant code.

(e) For Tests 237 through 246, select various working country codes, as required, that will check the A, B, and C digit leads to the pretranslator on a 2-out-5-basis.

(f) For Tests 237 through 246, select additional digits, as required, for the register to engage a marker.

(4) When an end-of-dial signal is required, record 10 in the digit column and record EODA in MISCELLANEOUS KEYS AND SWITCHES column.

5.25 Test U

(1) Apply (a) of paragraph 5.01.

5.26 Test V

(1) For Tests 248, 249, 250, and 252, apply (a) of 5.01. Do not use centrex class of service.

(2) For Test 251, use centrex class of service.

5.27 Test W

(1) Use a manual class of service, coin or noncoin. If coin class of service is used, record CN key in the MISCELLANEOUS KEYS AND/OR SWITCHES column.

5.28 Test X

(1) Apply (a) and (b) of paragraph 5.01, using coin class of service for Test 254 and noncoin class of service for Test 255.

5.29 Test Y

(1) For Tests 256 and 257, apply (a) and (b) or (c) of paragraph 5.01. If (c) is to be applied, use 15 MIN.

- (2) For Tests 258 through 263, use IDDD class of service.
- (3) Perform Tests 250 through 263 when register requires end-of-dialing signal on TOUCH-TONE calling.
- (4) For Tests 258 through 263, record A through L digits as required on Test Chart for IDDD routing.

5.30 Test Z

- (1) For Tests 264 and 271, record a working office code.
- (2) For Tests 265, 266, 268, 269, 270, 272, 273, 275, 276, and 277, record the A and C digits of a working foreign area code and office code or the A and C digits of an interchangeable code.
- (3) For Tests 267 and 274, apply (d) of paragraph 5.01.
- (4) For Tests 270 and 277, use centrex class of service.
- (5) For all tests, apply (a) and (e) of paragraph 5.01.

5.31 Test AA

- (1) Apply (a) and (b) or (c) of paragraph 5.01.

5.32 Test AB

- (1) Apply (a), (b), or (c) and (d) of paragraph 5.01, using a code that requires a pretranslator.
- (2) Test 279 is to be used when pretranslator SD-25568-01 is provided.
- (3) Test 280 is to be used when pretranslator SD-27849-01 is provided.

5.33 Test AC

- (1) Use coin class of service other than manual.
- (2) Apply (b) or (c), (d), and (e) of paragraph 5.01.

5.34 Test AD

- (1) Apply (a) of paragraph 5.01.

5.35 Test AE

- (1) Apply (a) of paragraph 5.01, using a coin class of service for Test 283 and a noncoin class of service for Test 284.
- (2) Apply (b) or (c), (d), and (e) of paragraph 5.01.

5.36 Test AF

- (1) Test Chart not required.

5.37 Test AG

- (1) Apply (a) of paragraph 5.01, using classes of service and rate treatment that will check all CT_, CU_, and CRU_ leads on a 2/5 basis.
- (2) Apply (b) or (c) of paragraph 5.01.
- (3) When manual class of service is used, record MAN in the MISCELLANEOUS KEYS AND/OR SWITCHES column.

5.38 Test AH

- (1) Apply (a) of paragraph 5.01, using a centrx class of service for an attendant or tie line.

5.39 Test AI

- (1) Use centrex 4-digit or 5-digit class of service.
- (2) Apply (b) or (c) of paragraph 5.01.

5.40 Test AJ

- (1) Use Test 302 when telephone company service codes are of the 11X-type.
- (2) Use Test 303 when telephone company service codes are of the X11-type.
- (3) Record the A digit of a 11X-type code and any additional digits that may be required for the register to engage a marker.
- (4) Use centrex class of service.
- (5) Apply (b) or (c) of paragraph 5.01.

5.41 Test AK

- (1) Use centrex class of service.
- (2) Use Test 304 when register is arranged for 4-digit intra-PBX calls.
- (3) Use Test 305 when register is arranged for 5-digit intra-PBX calls.

5.42 Test AL

- (1) Use centrex class of service.
- (2) For Test 306, record the A, B digits of a working 1XX special code, using a "1" for the A digit if any working special code utilizes a "1" in this position, and record additional digits required to start repetitive timing, if provided.
- (3) For Tests 307 through 310, record the A, B digits of working 1XX special codes, using a "1" for the A digit if any working special code utilizes a "1" in this position, and record additional digits required where a timing interval is not required for an additional digit.
- (4) For Tests 311 through 315, record the A, B digits of 1XX special codes, using a "1" for the A digit if any working special code utilizes a "1" in this position, and record additional digits required where a timing interval is required for an additional digit.
- (5) Apply (b), (c), or (e) of paragraph 5.01 as required.

5.43 Test AM

- (1) Use CCSA class of service.
- (2) Apply (d) of paragraph 5.01, using codes for routing to CCSA trunks.
- (3) Use Tests 318, 319, 322, and 323 when the register is arranged to recognize that an access digit 8 call was directed to the No. 5 crossbar office.

5.44 Test AN

- (1) Use CCSA class of service.

- (2) Apply (d) of paragraph 5.01, using codes for routing to CCSA trunks.

5.45 Tests AO Through AV

- (1) Apply (a) and (d) of paragraph 5.01.
- (2) For Tests 328, 329, 332, 333, 335, 337, and 339, use centrex class of service.

5.46 Test AV.1

- (1) Apply (a) of paragraph 5.01.

5.47 Test AW

- (1) Use a class of service that requires toll diversion for certain codes.
- (2) Apply (a) and (b), or (c) of paragraph 5.01.
- (3) Apply (d) of paragraph 5.01, using codes that will cause the marker to invoke toll diversion for the class of service chosen in (1).
- (4) Use Test 356 when toll diversion is screened by prefix digit 1.

5.48 Test AX

- (1) Apply (a) and (d) of paragraph 5.01.
- (2) For Tests 357 and 359, record the line location of a long-loop line arranged for range extension for unigauge cabling.
- (3) For Tests 358 and 360, record the line location of a nonlong-loop line in a horizontal group arranged for range extension for unigauge cabling.

5.49 Test AY

- (1) Apply (a) and (b) or (c) of paragraph 5.01.
- (2) Record the A and B digits of a working NNO interchangeable code.

5.50 Test AZ

- (1) Apply (a) and (b) or (c) of paragraph 5.01.
- (2) Record the A, B, and C digits of any working interchangeable code.

5.51 Test BA

- (1) For Tests 367 and 368, select a dial-pulse, coin-first, ground-start class of service.
- (2) For Tests 369 and 370, select a TOUCH-TONE, coin-first, ground-start class of service.
- (3) For Tests 371 and 372, select a dial-pulse, coin-first, loop-start class of service.
- (4) For Tests 373 and 374 select a TOUCH-TONE, coin-first, loop-start class of service.
- (5) For Tests 375 through 378, select a dial-pulse, coin service improvement (dial-tone-first) class of service.
- (6) For Tests 379 through 382, select a TOUCH-TONE, coin service improvement (dial-tone-first) class of service.

5.52 Test BB

- (1) Apply (a) and (b) of paragraph 5.01.
- (2) For Test 383, select a nonwideband class of service.
- (3) For Tests 384 through 386, select a wideband class of service.

5.53 Test BC

- (1) Apply (a) of paragraph 5.01 to select a wideband class of service that will require the register to recognize that an access digit (#) was keyed to reach a central No. 5 crossbar office.

5.54 Test BD

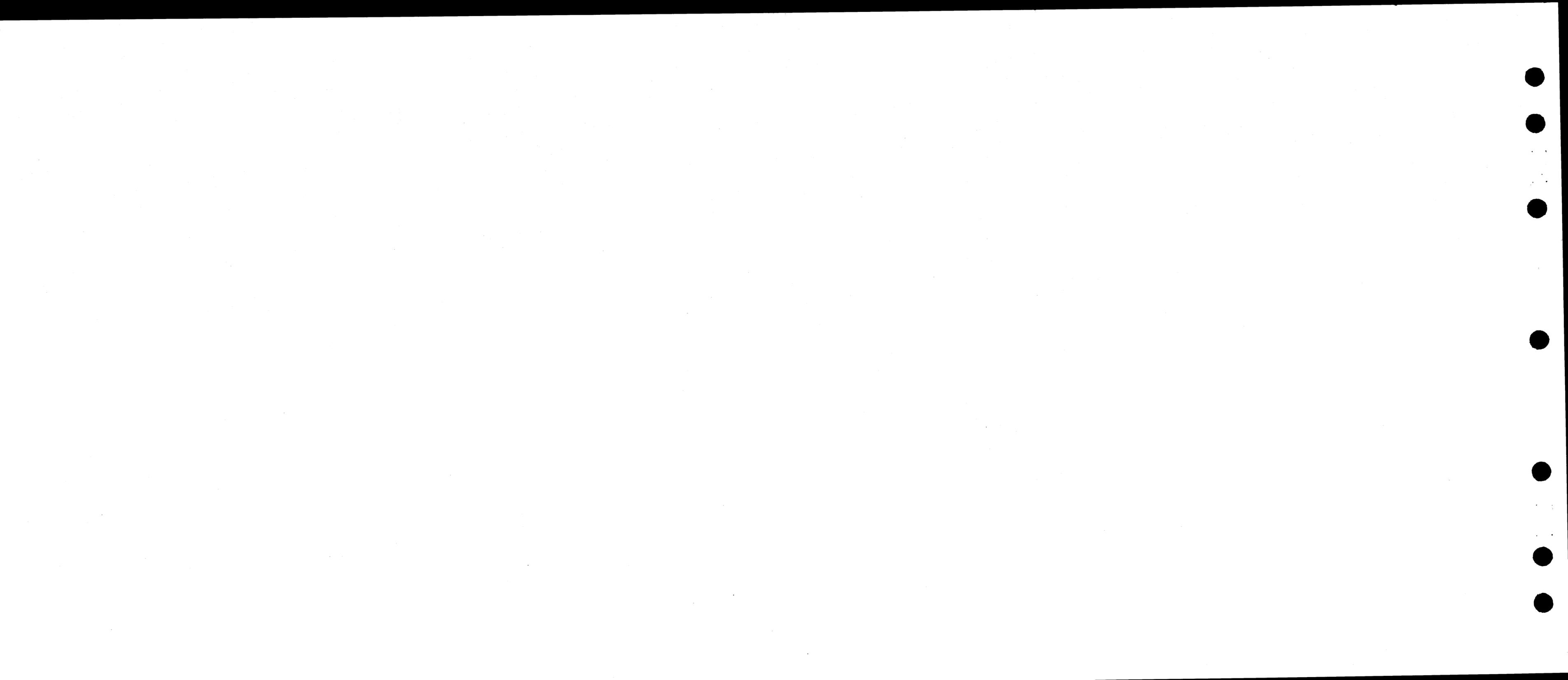
- (1) Apply (a) of paragraph 5.01 to select a wideband class of service that will require the register to recognize an access digit (#) followed by a directing digit (a) that was keyed by a wideband-centrex customer for selection of a trunk, from a trunk group handling wideband calls, to the No. 5 crossbar office serving the PBX.

5.55 Test BE

- (1) Apply (a) (d) and (e) of paragraph 5.01.

5.56 Test BF

- (1) Use class of service having access to EPSCS No. 1 ESS.
- (2) Apply (a) of paragraph 5.01.♦

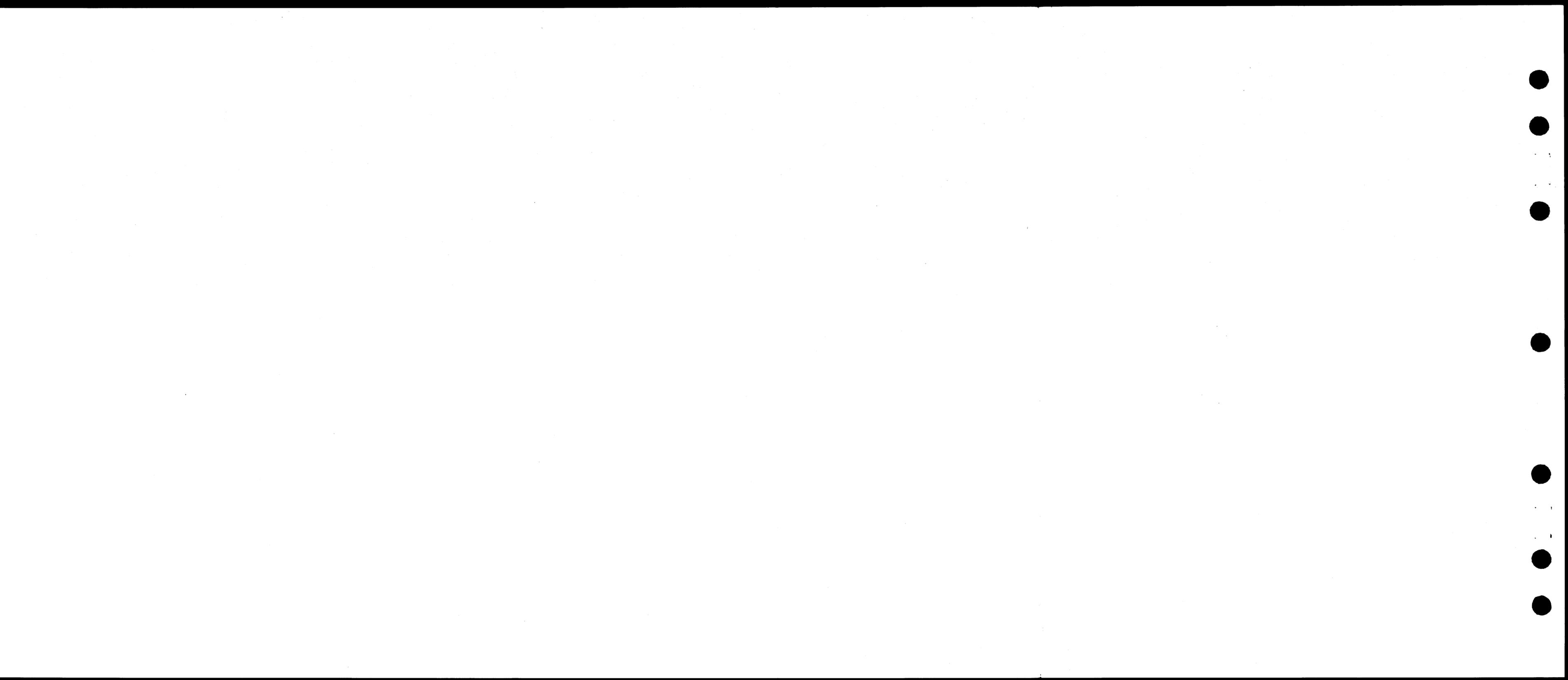




♦ TEST CHART ♦

TEST	TYPE OF TEST	TEST NO.	MASTER TEST FRAME PRIMING INFORMATION																							TEST NO.	TEST												
			LINE LOCATION				CLASS OF SERVICE				RATE TREAT.				PREFIX DIGITS		DIGITS — CODE(S) AND NUMBER (CALLED NUMBER)											CLASS OF CALL	TRANSLATOR INDICATION	FREQ CONT ("TOUCH-TONE" CALLING)	PULSING CONT (DP CALLING)	MISCELLANEOUS KEYS AND/OR SWITCHES							
			FRAME NO.	VERT GR	HOR GR	VERT FILE	TENS	UNITS	TENS	UNITS	A	B	C	D	E	F	G	H	J	K	L	M	MAN	CN	Other							Other	Other						
G	Manual Call	Noncoin	61																					OR	LT											61	G		
		Coin	62																						OR	LT											62		
H	Zero Operator	Dial Pulse	Noncoin	63																				OR	LT		24 MIN	STD**									63	H	
			Coin	64																					OR	LT		7 MIN			ZRO	CN					64		
			Centrex	65																					OR	LT		24 MIN			PBX*						65		
		TOUCH-TONE	Noncoin	66																					OR	LT					PB	STD**					66		
			Coin	67																					OR	LT					PB		ZRO	CN			67		
			Centrex	68																					OR	LT					PB	PBX*							68
I	Prefix Digits 0+	Dial Pulse		69																					FAC	LT2		24 MIN									69	I	
				70																						FAC	LT2		24 MIN			PBX*					70		
				71																						OR	LT2		24 MIN					STD†					71
				72																						OR	LT		24 MIN					STD					72
		TOUCH-TONE		73																						FAC	LT2					PB							73
				74																						FAC	LT2					PB	PBX*						74
				75																						OR	LT2					PB		STD†					75
				76																						OR	LT					PB		STD					76
I.1	Prefix Digits 01+	Dial Pulse		77																					FAC	FVD		24 MIN									77	I.1	
				78																						FAC	FVD		24 MIN					STD					78
				79																						FAC	FVD		24 MIN					STD					79
				80																						FAC	FVD		24 MIN					STD					80
				81																						FAC	FVD		24 MIN								81		
				82																						FAC	FVD		24 MIN								82		
				83																						FAC	FVD		24 MIN								83		
		TOUCH-TONE		84																						FAC	FVD		24 MIN										84
				85																						FAC	FVD					PB							85
				86																						FAC	FVD					PB		STD					86
				87																						FAC	FVD					PB		STD					87
				88																						FAC	FVD					PB		STD					88
				89																						FAC	FVD					PB					89		
				90																						FAC	FVD					PB					90		
	91																							FAC	FVD					PB					91				
	92																							FAC	FVD					PB					92				
	93																							FAC	FVD					PB	EODA					93			
	94																							FAC	FVD					PB	EODA					94			
	95																							FAC	FVD					PB	EODA					95			
	96																							FAC	FVD					PB	EODA					96			

* When provided.
 † For interchangeable codes only.
 ** When office is arranged for 0+ traffic, use this key.

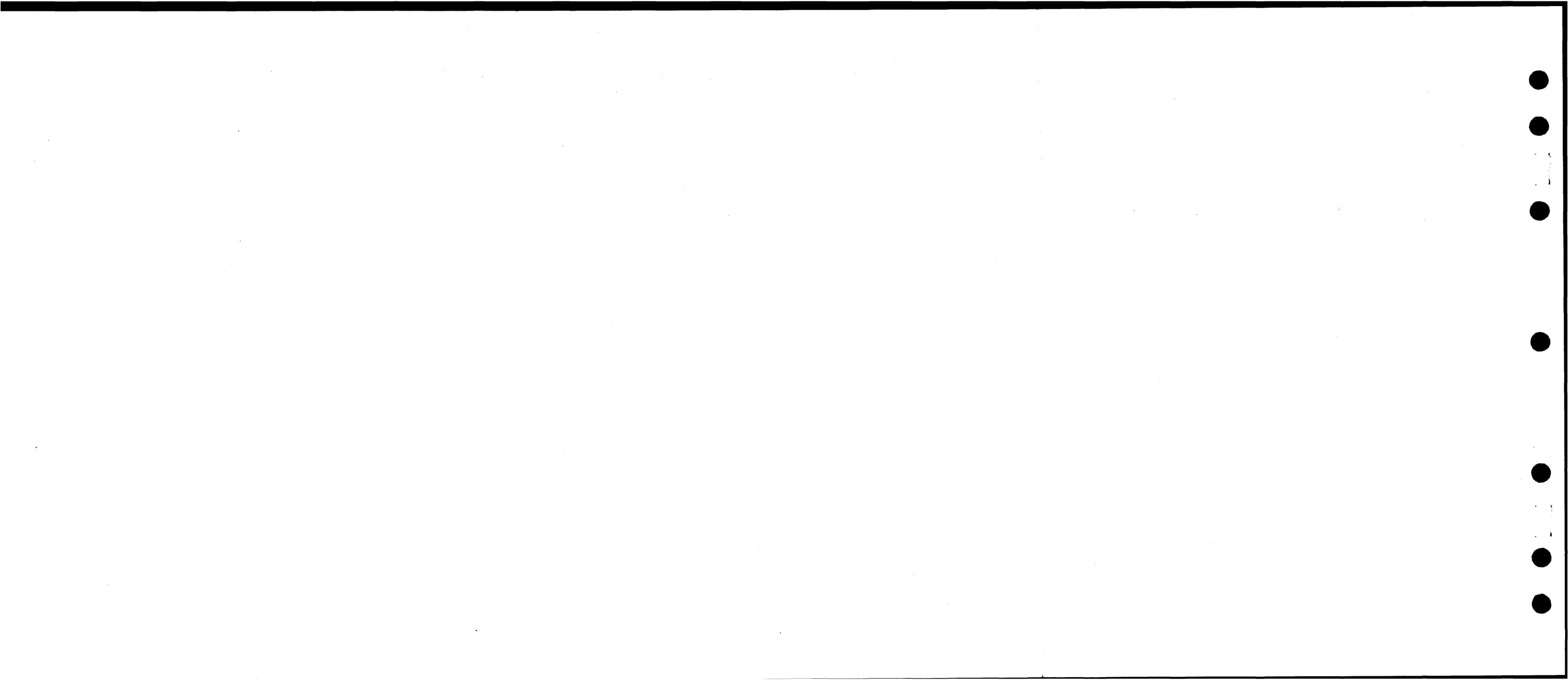


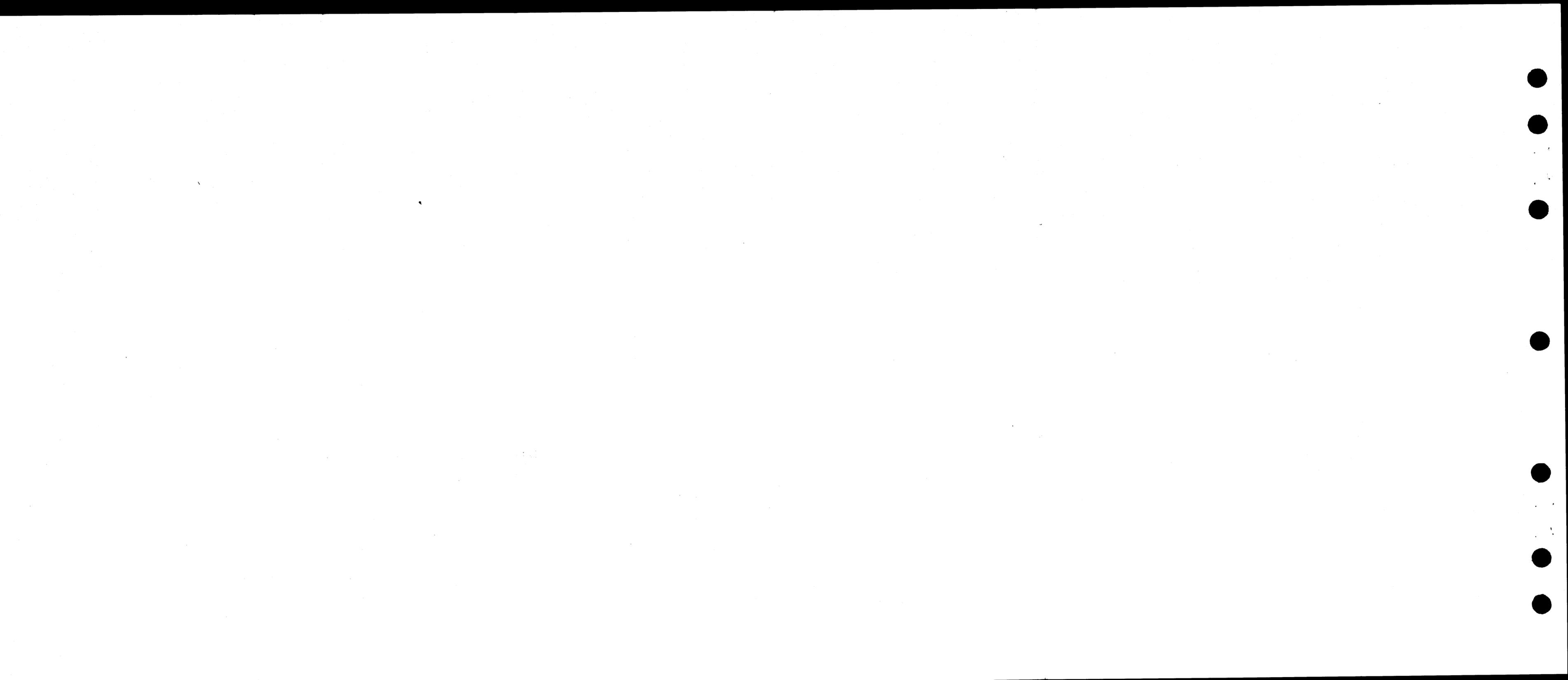
♦ TEST CHART ♦

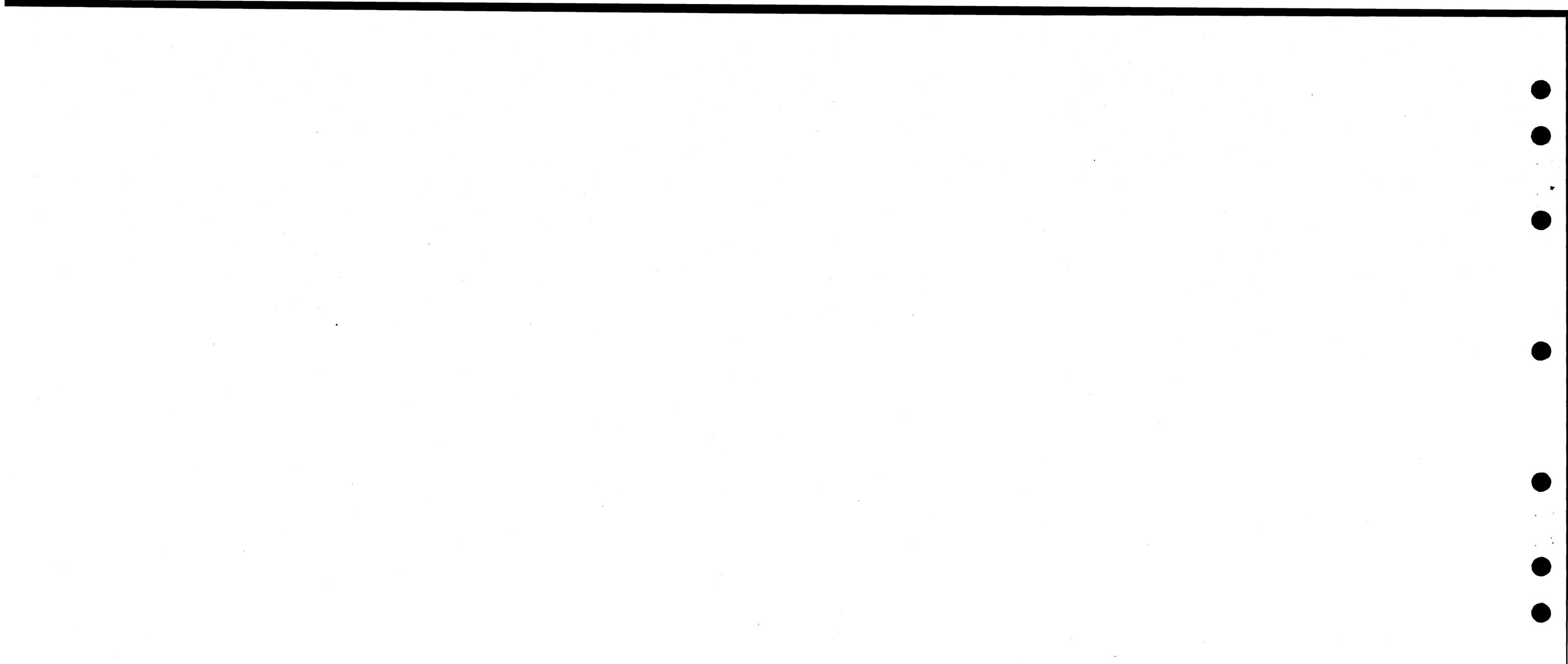
TEST	TYPE OF TEST	TEST NO.	MASTER TEST FRAME PRIMING INFORMATION																							TEST NO.	TEST												
			LINE LOCATION				CLASS OF SERVICE		RATE TREAT.		PREFIX DIGITS			DIGITS — CODE(S) AND NUMBER (CALLED NUMBER)										CLASS OF CALL	TRANSLATOR INDICATION			FREQ CONT ("TOUCH-TONE" CALLING)	PULSING CONT (DP CALLING)	MISCELLANEOUS KEYS AND/OR SWITCHES									
			FRAME NO.	VERT GR	HOR GR	VERT FILE	TENS	UNITS	TENS	UNITS	A	B	C	D	E	F	G	H	J	K	L	M																	
I.2	Prefix Digits 011+	97									0	1	1				1	3	6	0	7	1	3	6	0	FAC	11		7 MIN								97	I.2	
		98									0	1	1				3	6	0	7	1	3	6	0	7	FAC	11		7 MAX										98
		99									0	1	1				6	0	7	1	3	6	0	7	1	FAC	11		15 MIN										99
		100									0	1	1				0	7	1	3	6	0	7	1	3	FAC	11		15 MAX										100
		101									0	1	1				7	1	3	6	0	7	1	3	6	FAC	11		24 MIN										101
		102									0	1	1				1	2	3	4	1	2	3	4	1	FAC	11		24 MAX										102
		103									0	1	1													FAC	11		24 MIN	STD									103
		104									0	1	1													FAC	11		24 MIN	STD									104
		105									0	1	1													FAC	11		24 MIN	STD									105
		106									0	1	1													FAC	11		24 MIN										106
		107									0	1	1													FAC	11		24 MIN										107
		108									0	1	1													FAC	11		24 MIN										108
		109									0	1	1													FAC	11		24 MIN										109
	110									0	1	1				1	3	5	0	7	1	3	5	0	FAC	11			PB	HLV							110		
	111									0	1	1				3	5	0	7	1	3	5	0	7	FAC	11			PB	HLV	SLO						111		
	112									0	1	1				5	0	7	1	3	5	0	7	1	FAC	11			PB	LLV							112		
	113									0	1	1				0	7	1	3	5	0	7	1	3	FAC	11			PB	LLV							113		
	114									0	1	1				7	1	3	5	0	7	1	3	5	FAC	11			PB	LLV							114		
	115									0	1	1				1	2	3	4	1	2	3	4	1	FAC	11			PB	LGP							115		
	116									0	1	1													FAC	11			PB	STD							116		
	117									0	1	1													FAC	11			PB	STD							117		
	118									0	1	1													FAC	11			PB	STD							118		
	119									0	1	1													FAC	11			PB								119		
	120									0	1	1													FAC	11			PB								120		
	121									0	1	1													FAC	11			PB								121		
	122									0	1	1													FAC	11			PB								122		
123									0	1	1											10		FAC	11			PB	EODA							123			
124									0	1	1												10	FAC	11			PB	EODA							124			
125									0	1	1												10	FAC	11			PB	EODA							125			
126									0	1	1												10	FAC	11			PB	EODA							126			

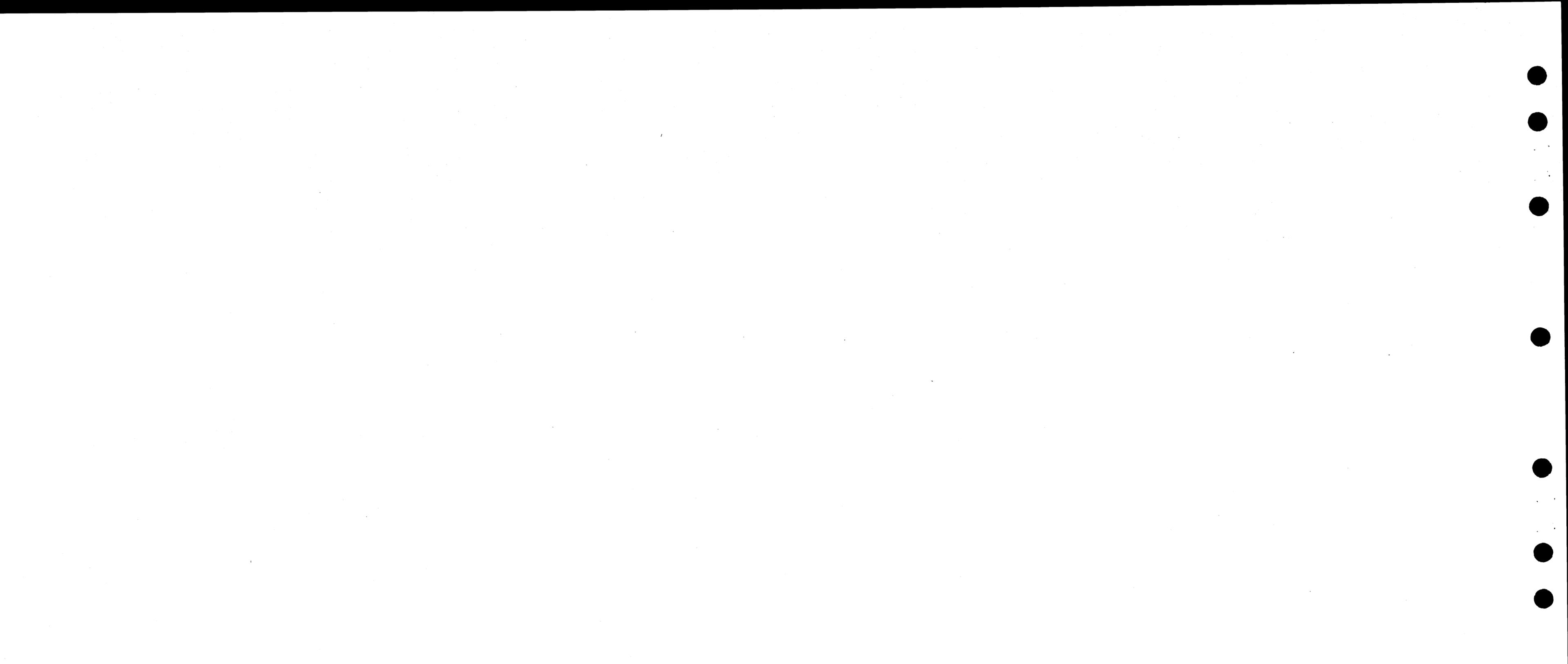
Dial Pulse

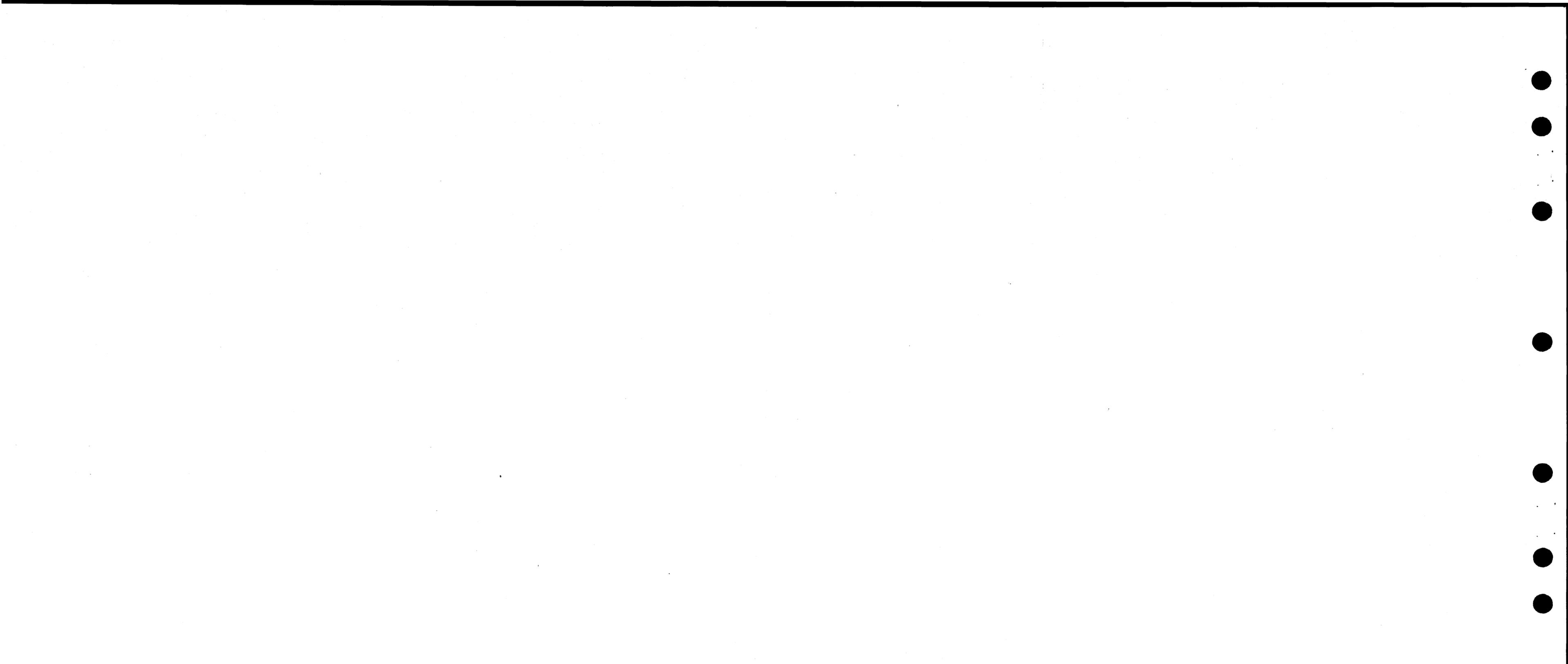
TOUCH-TONE









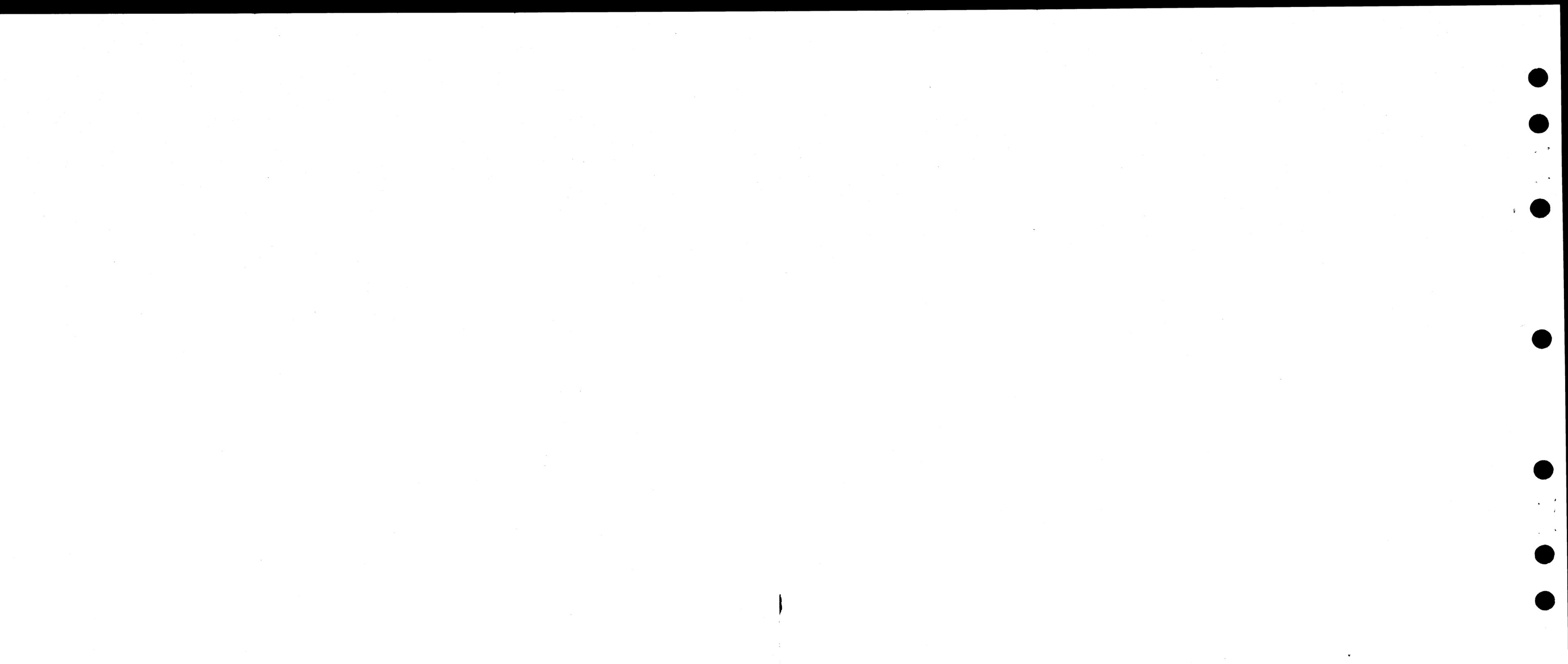


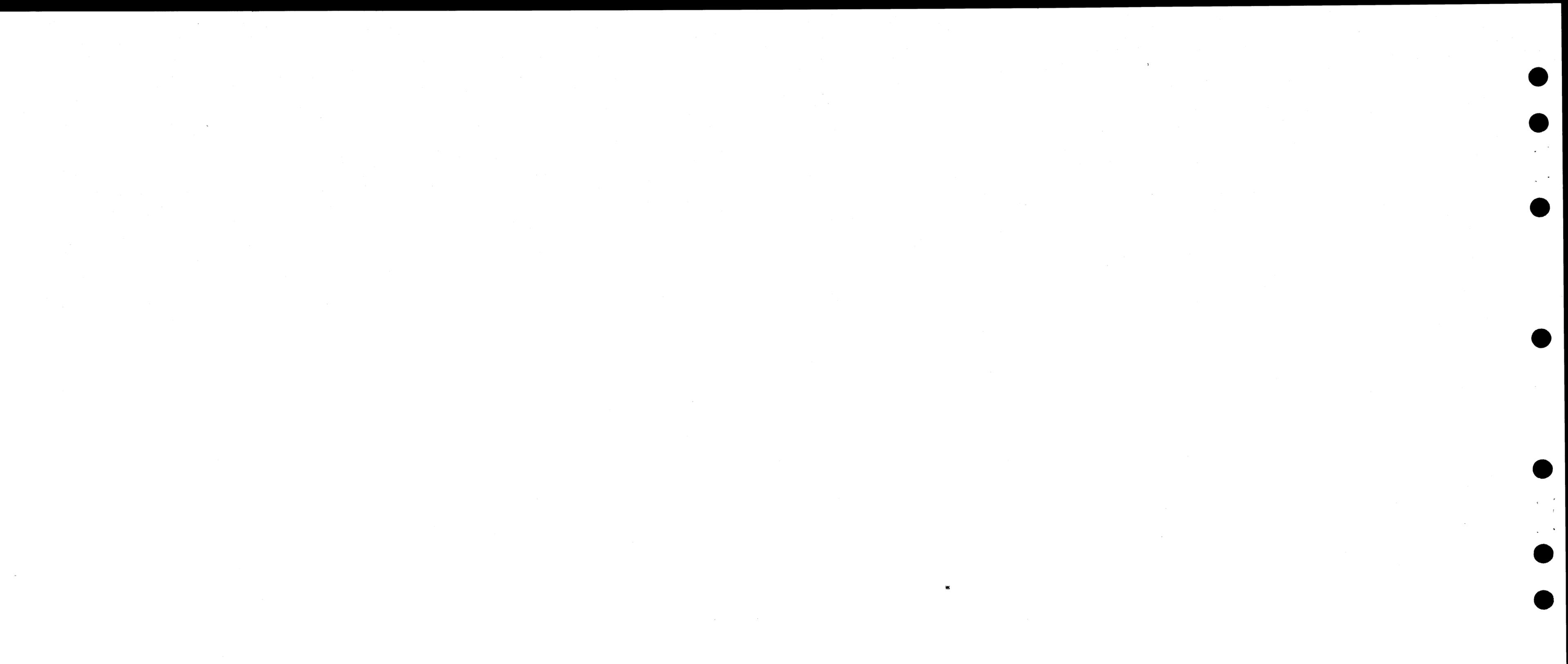
♦ TEST CHART ♦

TEST	TYPE OF TEST	TEST NO.	MASTER TEST FRAME PRIMING INFORMATION																							TEST NO.	TEST															
			LINE LOCATION				CLASS OF SERVICE		RATE TREAT.		PREFIX DIGITS			DIGITS — CODE(S) AND NUMBER (CALLED NUMBER)										CLASS OF CALL	TRANSLATOR INDICATION			FREQ CONT ("TOUCH-TONE" CALLING)	PULSING CONT (DP CALLING)	MISCELLANEOUS KEYS AND/OR SWITCHES												
			FRAME NO.	VERT GR	HOR GR	VERT FILE	TENS	UNITS	TENS	UNITS				A	B	C	D	E	F	G	H	J	K							L	M											
T.1	Pretranslation (SD-27849-01 Provided)	230										0	1												FAC	FVD											230	T.1				
		231										0	1	1											FAC	11											231					
		232										0	1	1											FAC	11											232					
		233										0	1	1							‡				FAC	11									STD		233					
		234										0	1	1									‡		FAC	11									STD		234					
		235										0	1	1										‡	FAC	11									STD		235					
		236										0	1	1											FAC	11											236					
		237										0	1	1											FAC	11											237					
		238										0	1	1											FAC	11											238					
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		245										0	1	1											FAC	11											245					
		246										0	1	1											FAC	11											246					
U	Dial Tone and Busy or Overflow Tone	247																					*	*		15 MAX							MOTL	*					247	U		
V	Dial Tone Removal	248											2														24 MIN							MOTL	TA					248	V	
		249																									24 MIN							MOTL	TA					249		
		250												1	1													24 MIN							MOTL	TA					250	
		251													9													24 MIN							MOTL	TA					251	
		252													0													24 MIN							MOTL	TA					252	

* See 1.12.
 ‡ End-of-dial signal, when required.



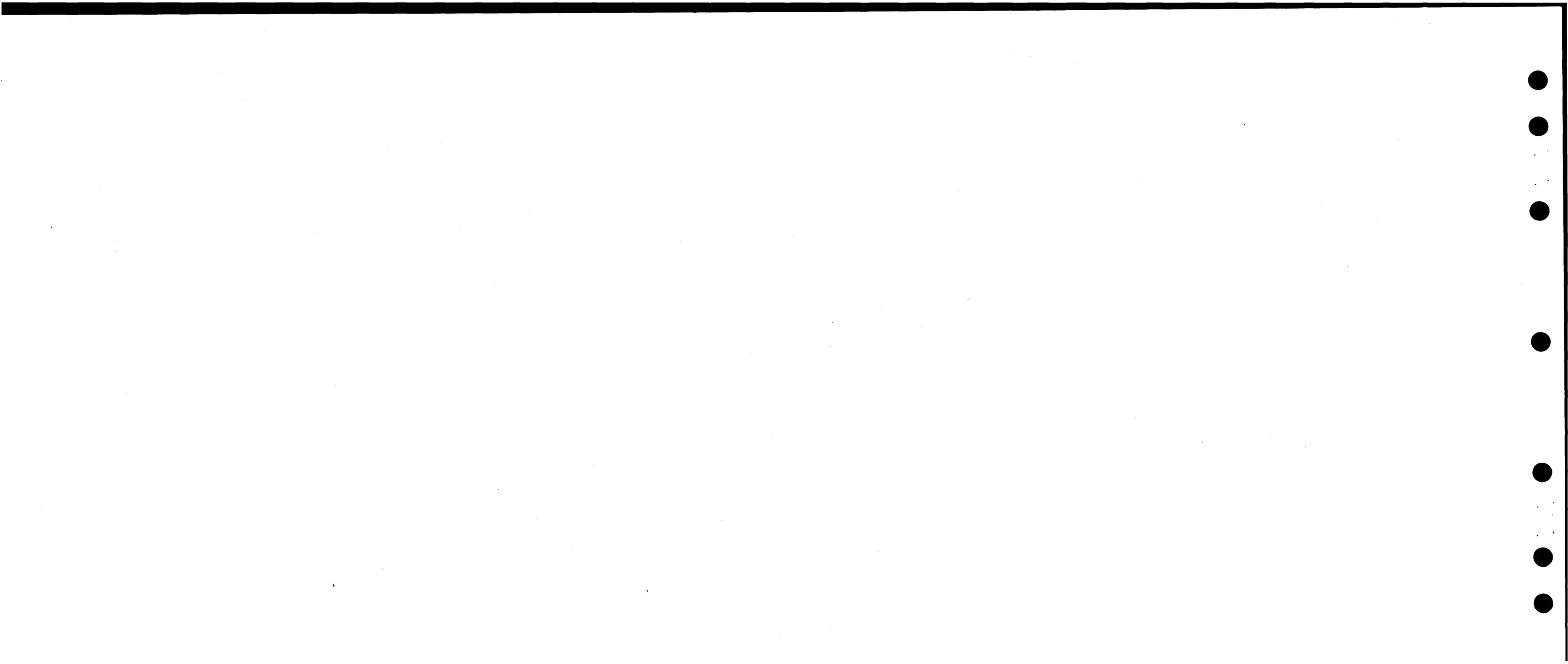




♦ TEST CHART ♦

TEST	TYPE OF TEST	TEST NO.	MASTER TEST FRAME PRIMING INFORMATION																							TEST NO.	TEST											
			LINE LOCATION				CLASS OF SERVICE		RATE TREAT.		PREFIX DIGITS		DIGITS — CODE(S) AND NUMBER (CALLED NUMBER)										CLASS OF CALL	TRANSLATOR INDICATION	FREQ CONT ("TOUCH-TONE" CALLING)			PULSING CONT (DP CALLING)	MISCELLANEOUS KEYS AND/OR SWITCHES									
			FRAME NO.	VERT GR	HOR GR	VERT FILE	TENS	UNITS	TENS	UNITS			A	B	C	D	E	F	G	H	J	K			L				M	FCA	FCB							
AL (Cont)		313											1												OR	2DT											313	AL
		314									1														OR	2DT									314	(Cont)		
		315									1														OR	2DT									315			
AM	CCSA Call — Prefix Digit 8	Dial Pulse	316									8			1	2	3	4							OR	LT3		24 MIN									316	AM
			317									8						1	2	3	4				FAC	LT3		24 MIN							317			
			318									*AC8			1	2	3	4							OR	LT3		24 MIN							318			
			319									*AC8						1	2	3	4				FAC	LT3		24 MIN							319			
		TOUCH-TONE	320									8			1	2	3	4							OR	LT3			PB	PBX*							320	
			321									8						1	2	3	4				FAC	LT3			PB	PBX*							321	
			322									*AC8			1	2	3	4							OR	LT3			PB								322	
			323									*AC8						1	2	3	4				FAC	LT3			PB								323	
AN	CCSA Call — Digit 1 Absorption After Prefix Digit 8	Dial Pulse TOUCH-TONE	324									811			1	2	3	4						OR	LT3		24 MIN									324	AN	
			325									811			1	2	3	4							OR	LT3			PB	PBX*								325
AO	Slow Test		326												1	3	5	7						OR	LT			PB						SLO		326	AO	
			327															1	3	5	7				FAC	LT			PB						SLO			327
			328									9			1	3	5	7							OR	LT			PB	PBX*					SLO			328
			329									9						1	3	5	7				FAC	LT			PB	PBX*					SLO			329
AP	High Level Test		330												1	3	5	7						OR	LT			PB							HLV	330	AP	
			331												1	3	5	7						OR	LT			PB					SLO		HLV	331		
			332									9			1	3	5	7						OR	LT			PB	PBX*						HLV	332		
			333									9			1	3	5	7						OR	LT			PB	PBX*				SLO		HLV	333		
AQ	Low Level Test		334												1	3	5	7						OR	LT			PB							LLV	334	AQ	
			335									9			1	3	5	7						OR	LT			PB	PBX*						LLV	335		
AR	High Frequency Test		336												1	3	5	7						OR	LT		MXF	PB							LLV	336	AR	
			337									9			1	3	5	7						OR	LT		MXF	PB	PBX*						LLV	337		
AS	Low Frequency Test		338												1	3	5	7						OR	LT		MNF	PB							LLV	338	AS	
			339									9			1	3	5	7						OR	LT		MNF	PB	PBX*						LLV	339		
AT	Single Frequency Test		340												1	3	5	7						OR	LT	1	SFH	PB								340	AT	
			341												1	3	5	7						OR	LT	2	SFH	PB								341		
			342												1	3	5	7						OR	LT	3	SFH	PB								342		
			343												1	3	5	7						OR	LT	4	SFH	PB								343		

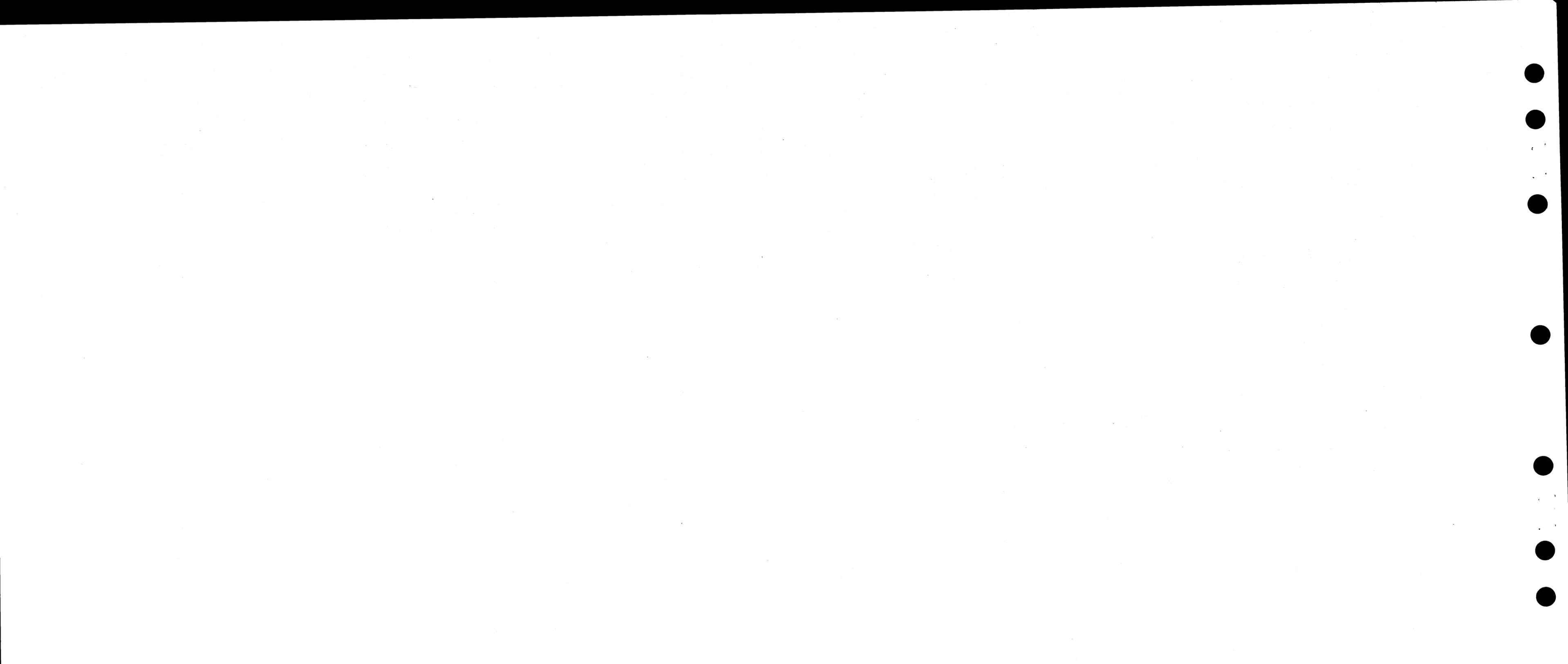
* When provided.



◆ TEST CHART ◆

TEST	TYPE OF TEST	TEST NO.	MASTER TEST FRAME PRIMING INFORMATION																								TEST NO.	TEST												
			LINE LOCATION				CLASS OF SERVICE		RATE TREAT.		PREFIX DIGITS			DIGITS — CODE(S) AND NUMBER (CALLED NUMBER)											CLASS OF CALL	TRANSLATOR INDICATION			FREQ CONT ("TOUCH-TONE" CALLING)	PULSING CONT (DP CALLING)	MISCELLANEOUS KEYS AND/OR SWITCHES									
			FRAME NO.	VERT GR	HOR GR	VERT FILE	TENS	UNITS	TENS	UNITS	A	B	C	D	E	F	G	H	J	K	L	M	SDC	SSLB							MOTL	SSRB	MOTL							
AT (Cont)		344																								OR	LT	1 SFL		PB						344	AT (Cont)			
		345																								OR	LT	2 SFL		PB						345				
		346																								OR	LT	3 SFL		PB						346				
		347																								OR	LT	4 SFL		PB						347				
AU	Special 3-Frequency Test	348																								OR	LT	1 3FS		PB						348	AU			
		349																								OR	LT	2 3FS		PB						349				
		350																								OR	LT	3 3FS		PB						350				
		351																								OR	LT	4 3FS		PB						351				
AV	Long Pulse Test	352																							OR	LT			PB	LGP						352	AV			
AV.1	Unused Frequency Combinations	353									3															OR	LT			PB	SDC	SSLB	MOTL				353	AV.1		
		354									3															OR	LT			PB	SDC	SSRB	MOTL				354			
AW	Toll Diversion	355																							OR	LT		7 Min				TDA				355	AW			
		356																								FAC	LT1		7 Min				TD				356			
AX	Range Extension for Unigauge Cabling	Dial Pulse TOUCH-TONE	357																							OR	LT		24 MIN				NTC	LOLPT				357	AX	
			358																							OR	LT		24 MIN				NTC	LOLPT				358		
			359																								OR	LT			PB			NTC	LOLPT				359	
			360																								OR	LT			PB			NTC	LOLPT				360	
AY	C-Digit Translator	361																							FAC	X11											361	AY		
		362																								FAC	LT											362		
	Interchangeable and/or NPA-411 Information Codes	363																							OR	LT**											363	AZ		
		364																							FAC	X11**											364			
		365																								FAC	LT**												365	
		366																								OR	LT**							STD					366	
BA	Coin Operation Coin First — Ground Start	Dial Pulse TOUCH-TONE	367																						OR	LT		15 MIN				CN				367	BA			
			368																						OR	LT		15 MIN				CN				368				
			369																							OR	LT			PB			CN					369		
			370																							OR	LT			PB			CN					370		
	Coin First — Loop Start	Dial Pulse TOUCH-TONE	371																							OR	LT		15 MIN				CN					371		
			372																							OR	LT		15 MIN				CN					372		
			373																							OR	LT			PB			CN					373		
			374																								OR	LT			PB			CN					374	

** Depending on prefix digit used (refer to 1.09).



TEST CHART

TEST	TEST TITLE	TEST NO.	MTF PRIMING INFORMATION																							TEST NO.	TEST									
			LINE LOCATION				CLASS OF SERVICE		RATE TREAT.		PREFIX DIGITS	DIGITS - CODES AND NUMBER (CALLED NUMBER)										CLASS OF CALL	TRANSLATOR INDICATOR	FREQ. CONT ("TOUCH-TONE" CALLING)	PULSING CONT (DP CALLING)			MISCELLANEOUS KEY AND/OR SWITCHES								
			FRAME NO.	VERT GR	HOR GR	VERT FILE	TENS	UNITS	TENS	UNITS		A	B	C	D	E	F	G	H	J	K							L	M							
BA (Cont)	Dial Pulse Coin Service Improvement (Dial-Tone-First) TOUCH-TONE	375													1	3	5	7									OR	LT		15 MIN			CN	CND	375	BA (Cont)
		376													1	3	5	7									OR	LT		15 MIN			CN	CND	376	
		377													1	3	5	7									OR	LT		15 MIN			CN	NCND	377	
		378													1	3	5	7									OR	LT		15 MIN			CN	NCND	378	
		379													1	3	6	0									OR	LT			PB		CN	CND	379	
		380													1	3	6	0									OR	LT			PB		CN	CND	380	
		381													1	3	6	0									OR	LT			PB		CN	NCND	381	
		382													1	3	6	0									OR	LT			PB		CN	NCND	382	
BB	Wideband Service	383													1	3	5	7									OR	LT			PB				383	BB
		384													1	3	5	7									OR	LT			PB	SSR	BP1		384	
		385											6														OR	LT			PB	SDC	SSRB	MOTL	385	
		386											6														OR	LT			PB	SDC	SSLB	MOTL	386	
BC	Wideband-Access Digit to Right of 0 Key	387													1	3	5	7									OR	LT			PB	PP			387	BC
BD	Wideband-Centrex Access to the Wideband Network	388								9					1	3	5	7									OR	LT			PB	PP			388	BD
BE	OR to CM Leads Test with AMRST	389								9	9	9	9	1	2	3	4									OR	LT		24 MIN			PBX†	CHO† - CH9	389	BE	
	OR to CM Leads Test w/o AMRST	390								9	9	9	9	1	2	3	4									OR	LT		24 MIN			PBX†	CHO† - CH9	390		
	OR to CM Leads Test - Obs. Call DP	391								9	9	9	9	1	2	3	4									OR	LT		24 MIN	NTC	OBS	PBX†	CHO† - CH9	391		
	OR to CM Leads Test - Non Obs. Call	392								9	9	9	9	1	2	3	4									OR	LT		24 MIN	NTC		PBX†	CHO† - CH9	392		
	OR to CM Leads Test - 10 Digit Call	393								8	9	9	9	1	2	3	1		2	3	4					FAC	LT		24 MIN			PBX†	CHO† - CH9	393		
	OR to CM Leads Test - 7 Digit Call	394								9	9	9	9	1	2	3	4									OR	LT			PB		PBX†	CHO† - CH9	394		
	OR to CM Leads Test - With AMRST	395								8	9	9	9	1	2	3	4									OR	LT			PB		PBX†	CHO† - CH9	395		
	OR to CM Leads Test - w/o AMRST TT	396								8	9	9	9	1	2	3	4									OR	LT			PB		PBX†	CHO† - CH9	396		
	OR to CM Leads Test - Obs. Call	397								8	9	9	9	1	2	3	4									OR	LT			PB	NTC	PBX†	CHO† - CH9	397		
	OR to CM Leads Test - Non Obs. Call	398								8	9	9	9	1	2	3	4									OR	LT			PB	NTC	PBX†	CHO† - CH9	398		
OR to CM Leads Test - 10 Digit Call	399								8	9	9	9	1	2	3	1		2	3	4					FAC	LT			PB		PBX†	CHO† - CH9	399			
BF	Digit 8 Access Call to Enhanced Private Switched Communications Systems (EPSCS) No. 1 ESS	400									AC8															OR	LT3		24 MIN			EPS		400	BF	
		401									AC8															OR	LT3			PB		EPS		401		

* Depending on prefix digit used (refer to paragraph 1.09)
 † When provided
 ‡ Change channel (0-9) key or sw, to test all LL0, 1, 2, 4 and 7 leads