

**COMBINED AND COMPLETING MARKER CIRCUITS-PART 22**  
**TESTS USING MASTER TEST FRAME**  
**NO. 5 CROSSBAR OFFICES**

**1. GENERAL**

**1.001** This addendum supplements Section 218-122-522, Issue 3. Place this pink sheet ahead of Page 1 of the section.

**1.002** The reasons for issuing this addendum are listed below. This addendum does not affect the Equipment Test List(s).

- (a) To add to the verification in Steps 15 and 18 of Test CH.
- (b) To add a note in Test CI referencing offices equipped with the call data transmitter (CDT).

**2. CHANGES TO SECTION**

**2.001** On Page 15, Steps 15 and 18, add the following under verification:

If ETS provided—  
RA2 lamp lighted.

**2.002** On Page 16, under Test CI heading, add Note 2 as follows: If office is equipped with call data transmitter (CDT) and traffic sampling feature associated with CDT is being tested, use the procedure given in Test DS, Section 218-122-534.

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MEMORANDUM FOR THE RECORD

DATE: 10/10/44

TO: SAC, NEW YORK

FROM: SAC, NEW YORK

RE: [Illegible]

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[Illegible text block]

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## COMBINED AND COMPLETING MARKER CIRCUITS—PART 22

### TESTS USING MASTER TEST FRAME

#### NO. 5 CROSSBAR OFFICES

#### 1. GENERAL

PAGE

1.01 This section is Part 22 in a series of sections for testing combined and completing markers.

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 Test Lists.

- (a) To revise test procedures to include offices arranged with Electronic Translation System (ETS).
- (b) To include under Test CG "Line Link Pulsing Features," a procedure for testing hundreds block translator used for thousands block containing POTS and LLP numbers.
- (c) To make minor changes as required.

1.03 The tests covered are:

PAGE

#### **CG. Line Link Pulsing Features:**

The following features are checked:

- (1) Intraoffice flat rate and AMA.
- (2) Line route relay selection in non ETS offices and line route selection if ETS is provided.
- (3) Restricted station.
- (4) Line busy.
- (5) All line circuits busy.
- (6) Trouble intercept.

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#### **CH. Paired Line Link Frames**

**Feature:** This test checks that the marker will complete a call using mate line link frame junctors. It also checks that the marker recognizes a busy mate line link frame or both frames simultaneously busy.

14

#### **CI. Traffic Sampling Feature by Selected Customer Group—**

**ETS Not Provided:** This test checks that the marker functions properly when arranged to sample calls.

16

1.04 **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 lettered 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.

1.05 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.

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

1.07 When the office is arranged for LAMA-C or ETS, the distributors and scanners associated with the marker and trunk used in the test call must be in service or in a **maintenance busy** condition—not in an **out-of-service** condition. To change a scanner or distributor from an **out-of-service** to a **maintenance-busy** condition, use the procedure given in the following sections for the office arrangement.

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**SECTION 218-122-522**

218-798-308—Taking LAMA-C Equipment Out-of-Service.

218-799-701—Taking ETS Equipment Out-of-Service.

**1.08** Additional test procedures are available for verification of leads between the completing marker and the distributor and scanner (DAS). Refer to Section 218-122-531 for DAS application to LAMA-C or Section 218-799-321 for DAS application to ETS.

**1.09** When making tests in No. 5 crossbar offices arranged with Electronic Translation System and test verification requires a completing marker trace output (teletype printout or data dump) to determine the data used to process a call, operate the TCPO key at the master test frame (MTF). The data dump received at the maintenance

teletypewriters (TTY) may be in a raw form (binary or hexadecimal numbering system), formatted into decimal and written text, or a combination of both. For additional information on data dumps and formats used, refer to Section 218-799-102.♦

**2. APPARATUS**

**All Tests**

**2.01** Master test control circuit, SD-25800-01.

**Test CG**

**2.02** 322A (make-busy) plugs as required.

**Test CI**

**2.03** Trunk test circuit, SD-25918-01.

**3. METHOD**

**STEP**

**ACTION**

**VERIFICATION**

*Note:* Refer to paragraphs 1.04 through 1.09.

**CG. Line Link Pulsing Features**

**Intraoffice—Flat Rate**

- |    |  |                         |
|----|--|-------------------------|
| 1  | At MTF—<br>Restore all keys and switches.  |                         |
| 2  | Momentarily operate RL key.  | All lamps extinguished. |
| 3  | Select ORIG class of test.   |                         |
| 4  | Operate A_ through G_ digits as required to select an intraoffice route to a PBX station reached by an LLP line circuit. |                         |
| 5  | Select OR class of call with translator indication as required for access to selected route.                             |                         |
| 6  | Select line location for access to selected route.   |                         |
| 7  | Select class of service and rate treatment as required for access to selected route.                                     |                         |
| 8a | ♦If ETS provided—<br>Operate PCS key.♦   |                         |

STEP	ACTION	VERIFICATION
9	Select marker under test.	
10	Operate REC key.	
11b	♦If ETS provided and CM dump is required— Operate TCPO key.  <b>Note:</b> See paragraph 1.09.♦	
12	Momentarily operate ST key.	MRL lamp lighted. Two trouble records taken. FS_, TS_, TB_, TG_, LC_, LV_, FAK/FBK designations perforated indicating line location of B appearance of intraoffice trunk (first trouble card), A appearance (second trouble card). ♦If ETS provided— TG_ designation not perforated.♦ FTT_, FUT_, VGT_, HGT_, VFT_ designations perforated indicating line location of line circuit. RS_(0/1), RS_(2-8) silent level, LRA, TBS_, FK, OSG_, CL_, DL_, CP_ designations perforated as required (first trouble card). ♦If ETS provided— TBS_, DL_, CP_ designations not perforated.♦
13	Momentarily operate RL key.	All lamps extinguished.
14c	If office is equipped for 10-digit local completion— Operate A_ through K_ digits as required to select an intraoffice route to a PBX station reached by an LLP line circuit.	
15c	Repeat Steps 12 and 13.	
16	Restore all keys and switches.	
<b>Intraoffice—AMA</b>		
17	Perform Steps 1 through 11b.	
18	Momentarily operate ST key.	<b>LAMA-C ♦and ETS♦ not provided</b> MRL lamp lighted. Trouble record taken. FS_, TS_, TG_, TB_, LC_, LV_, FAK/FBK designations perforated indicating location of outgoing end of outgoing-incoming trunk. LRA, GS_, CP_, MB_, RN_, DL_, CL_, AR_, BR_, CR_, OSG_, AMA designations perforated as required.

STEP	ACTION	VERIFICATION
		<p><b>LAMA-C provided</b>  MRL lamp lighted.  Two trouble records taken.  FS_, TS_, TB_, TG_, LC_, LV_, FAK/FBK designations perforated indicating line location of B appearance of intraoffice trunk (first trouble card), A appearance (second trouble card).  FTT_, FUT_, VGT_, HGT_, VFT_ designations perforated indicating line location of line circuit.  RS_(0/1), RS_(2-8) silent level, LRA, TBS_, FK, OSG_, CL_, DL_, CP_ designations perforated as required (first trouble card).</p> <p>♦<b>ETS provided</b>  MRL lamp lighted.  Two trouble records taken.  FS_, TS_, TB_, LC_, LV_, FAK/FBK designations perforated indicating line location of B appearance of intraoffice trunk (first trouble card), A appearance (second trouble card).  FTT_, FUT_, VGT_, HGT_, VFT_ designations perforated indicating line location of line circuit.  RS_(0/1), RS_(2-8) silent level, LRA, FK, OSG_, CL_, designations perforated as required (first trouble card).♦</p>
19	Momentarily operate RL key.	All lamps extinguished.
20c	If office is equipped for 10-digit local completion— Operate A_ through K_ digits as required to select an intraoffice route to a PBX station reached by an LLP line circuit.	
21c	Repeat Steps 18 and 19.	
22	Restore all keys and switches.	
<b>Treatment by Office Code—Operation of LR_ Relay From Code Point—♦ETS Not Provided♦</b>		
23	At MTF— Restore all keys and switches.	
24	Momentarily operate RL key.	All lamps extinguished.
25	Select INC class of test.	

STEP	ACTION	VERIFICATION
26	Select A_ through G_ digits as required to direct call to an unrestricted LLP station with translation determined by office code.	
27	Select INC class of call with translator indication as required for completion to called line.	
28	Select incoming trunk class as required for completion to called line.	
29	Select any trunk link frame.	
30	Select marker under test.	
31	Operate $\blacktriangleleft$ CCT, $\blacktriangleright$ REC keys.	
32	Momentarily operate ST key.	MRL lamp lighted. Trouble record taken. FTT_, FUT_, VGT_, HGT_, VFT_ designations perforated indicating line location of line link pulsing circuit used in test. RS_(0/1), RS_(2-8) silent level, LRA, TBS_, FK, OSG_, CL_, DL_, CP_ designations perforated.
33	Momentarily operate RL key.	All lamps extinguished.
34	Restore all keys and switches.	
<b>Treatment by Thousands Block—All Numbers in Thousands Block Associated With Same LR_ Relay—<math>\blacktriangleleft</math>ETS Not Provided<math>\blacktriangleright</math></b>		
35	At MTF— Restore all keys and switches.	
36	Momentarily operate RL key.	All lamps extinguished.
37	Select INC class of test.	
38	Select A_ through G_ digits as required to direct call to unrestricted LLP station associated with a thousands block containing only LLP numbers associated with same LR_ relay.	
39	Select INC class of call with translator indication as required for completion to called line.	
40	Select incoming trunk class as required for completion to called line.	
41	Select any trunk link frame.	

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STEP	ACTION	VERIFICATION
42	Select marker under test.	
43	Operate <b>◆CCT,◆</b> REC keys.	
44	Momentarily operate ST key.	MRL lamp lighted. Trouble record taken. FTT_, FUT_, VGT_, HGT_, VFT_ designations perforated indicating line location of line link pulsing circuit used in test. RS_(0/1), RS_(2-8) silent level, LRA, TBS_, FK, OSG_, CL_, DL_, CP_ designations perforated.
45	Momentarily operate RL key.	All lamps extinguished.
46	Restore all keys and switches.	
<b>Thousands Block Contains Only LLP Numbers—Number Group Determined by Hundreds Digit—All Numbers in Hundreds Block Associated With Same LR_ Relay—<b>◆ETS Not Provided◆</b></b>		
47	At MTF— Restore all keys and switches.	
48	Momentarily operate RL key.	All lamps extinguished.
49	Select INC class of test.	
50	Select A_ through G_ digits as required to direct call to unrestricted LLP station associated with a number group selected depending on hundreds digit.	
51	Select INC class of call with translator indication as required for completion to called line.	
52	Select incoming trunk class as required for completion to called line.	
53	Select any trunk link frame.	
54	Select marker under test.	
55	Operate <b>◆CCT,◆</b> REC keys.	
56	Momentarily operate ST key.	MRL lamp lighted. Trouble record taken. FTT_, FUT_, VGT_, HGT_, VFT_ designations perforated indicating line location of line link pulsing circuit used in test. RS_(0/1), RS_(2-8) silent level, LRA, TBS_

STEP	ACTION	VERIFICATION
		FK, OSG_, CL_, DL_, CP_ designations perforated.
57	Momentarily operate RL key.	All lamps extinguished.
58	Restore all keys and switches.	
<b>Thousands Block Contains Only LLP Numbers—Number Group Determined by Hundreds Digit and all Hundreds Blocks Require Individual Treatment—ETS Not Provided</b>		
59	At MTF— Restore all keys and switches.	
60	Momentarily operate RL key.	All lamps extinguished.
61	Select INC class of test.	
62	Select A_ through G_ digits as required to direct call to unrestricted LLP station associated with a number group selected depending on hundreds digit and more than one LR_ relay associated with hundreds block.	
63	Select INC class of call with translator indication as required for completion to called line.	
64	Select incoming trunk class as required for completion to called line.	
65	Select any trunk link frame.	
66	Select marker under test.	
67	Operate CCT, REC keys.	
68	Momentarily operate ST key.	MRL lamp lighted. Trouble record taken. FTT_, FUT_, VGT_, HGT_, VFT_ designations perforated indicating line location of line link pulsing circuit used in test. RS_(0/1), RS_(2-8) silent level, LRA, TBS_, FK, OSG_, CL_, DL_, CP_ designations perforated.
69	Momentarily operate RL key.	All lamps extinguished.
70	Restore all keys and switches.	

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STEP	ACTION	VERIFICATION
<b>Number Group Determined by Hundreds Digit and Using Thousands Digit of an Unequipped Number Group (AST Relay Operated)—ETS Not Provided</b>		
71	At MTF— Restore all keys and switches.	
72	Momentarily operate RL key.	All lamps extinguished.
73	Select INC class of test.	
74	Select A_ through G_ digits as required to direct call to unrestricted LLP station associated with a number group selected depending upon the hundreds digit and using a thousands digit of an unequipped number group.	
75	Select INC class of call with translator indication as required for completion to called line.	
76	Select incoming trunk class as required for completion to called line.	
77	Select any trunk link frame.	
78	Select marker under test.	
79	Operate CCT, REC keys.	
80	Momentarily operate ST key.	MRL lamp lighted. Trouble record taken. FTT_, FUT_, VGT_, HGT_, VFT_ designations perforated indicating line location of line link pulsing circuit used in test. RS_(0/1), RS_(2-8) silent level, LRA, TBS_, FK, OSG_, CL_, DL_, CP_ designations perforated.
81	Momentarily operate RL key.	All lamps extinguished.
82	Restore all keys and switches.	

**Hundreds Block Translator Used for Thousands Block Containing POTS and LLP Numbers—Number Group Determined by Hundreds Digit—ETS not Provided**

83	At MTF— Restore all keys and switches.	
84	Momentarily operate RL key.	All lamps extinguished.
85	Select INC class of test.	

STEP	ACTION	VERIFICATION
86	Select A_ through G_ digits as required to direct call to unrestricted LLP station associated with a number group depending on hundreds digit selected.	
87	Select INC class of call with translator indication as required for completion to called line.	
88	Select incoming trunk class as required for completion to called line.	
89	Select any trunk link frame.	
90	Select marker under test.	
91	Operate <b>▶CCT,◀ REC</b> keys.	
92	Momentarily operate ST key.	MRL lamp lighted. Trouble record taken. FTT_, FUT_, VGT_, HGT_, VFT_ designations perforated indicating line location of line link pulsing circuit used in test. RS_(0/1), RS_(2-8) silent level, LRA, TBS_, FK, OSG_, CL_, CP_ designations perforated.
93	Momentarily operate RL key.	All lamps extinguished.
94	Select A_ through G_ digits as required to direct call to POTS station associated with a number group depending on hundreds digit selected.	
95	Momentarily operate ST key.	MRL lamp lighted. Trouble record taken. FTT_, FUT_, VGT_, HGT_, VFT_ designations perforated indicating line location of POTS station selected in Step 94.
96	Momentarily operate RL key.	All lamps extinguished.
97	Restore all keys and switches.	
<b>Call to an Unrestricted LLP Station—ETS Provided</b>		
98	At MTF— Restore all keys and switches.	
99	Momentarily operate RL key.	All lamps extinguished.
100	Select INC class of test.	

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STEP	ACTION	VERIFICATION
101	Select A_ through G_ digits as required to direct call to unrestricted LLP station.	
102	Select INC class of call with translator indication as required for completion to called line.	
103	Select incoming trunk class as required for completion to called line.	
104	Select any trunk link frame.	
105	Select marker under test.	
106	Operate <b>◆CCT,◆</b> REC keys.	
107d	If CM dump is required— Operate TCPO key.	
108	Momentarily operate ST key.	MRL lamp lighted. Trouble record taken. FTT_, FUT_, VGT_, HGT_, VFT_ designations perforated indicating line location of line link pulsing circuit used in test. RS_(0/1), RS_(2-8) silent level, LRA, FK, OSG_, CL_ designations perforated.
109	Momentarily operate RL key.	All lamps extinguished.
110	Restore all keys and switches.◆	

**Call to Restricted Station**

111	At MTF— Restore all keys and switches.	
112	Momentarily operate RL key.	All lamps extinguished.
113	Select INC class of test.	
114	Select A_ through G_ digits as required to direct call to restricted station reached by a line link pulsing line circuit.	
115	Select INC class of call with translator indication as required for completion to called line.	
116	Select incoming trunk class as required for completion to called line.	
117	Select any trunk link frame.	
118	Select marker under test.	

STEP	ACTION	VERIFICATION
119	Operate $\blacklozenge$ CCT, $\blacklozenge$ REC keys.	
120b	$\blacklozenge$ If ETS provided and CM dump is required— Operate TCPO key. $\blacklozenge$	
121	Momentarily operate ST key.	MRL lamp lighted. Trouble record taken. FTT_, FUT_, VGT_, HGT_, VFT_ designations perforated indicating line location of announcement, intercept, or attendant trunk. TER, BN, PAN, RIP or ATT designations perforated. $\blacklozenge$ If ETS provided— PAN or RIP designation not perforated. $\blacklozenge$
122	Momentarily operate RL key.	All lamps extinguished.
123	Restore all keys and switches.	
<b>Call to Busy Line</b>		
124	At MTF— Restore all keys and switches.	
125	Momentarily operate RL key.	All lamps extinguished.
126	Select INC class of test.	
127	Select A_ through G_ digits as required to direct call to station reached by a line link pulsing line circuit.	
128	Select INC class of call with translator indication as required for completion to called line.	
129	Select incoming trunk class as required for completion to called line.	
130	Select any trunk link frame.	
131	Select marker under test.	
132	Operate LB, $\blacklozenge$ CCT, $\blacklozenge$ REC keys.	
133b	$\blacklozenge$ If ETS provided and CM dump is required— Operate TCPO key. $\blacklozenge$	
134	Momentarily operate ST key.	BY, MRL lamps lighted. Trouble record taken. FTT_, FUT_, VGT_, HGT_, VFT_ designations perforated indicating line location of tone trunk.

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STEP	ACTION	VERIFICATION
135	Momentarily operate RL key.	All lamps extinguished.
136	Restore all keys and switches.	
<b>All Line Circuits Busy—♦ETS Not Provided♦</b>		
137	At MTF— Restore all keys and switches.	
138	Momentarily operate RL key.	All lamps extinguished.
139	Select INC class of test.	
140	Select A_ through G_ digits as required to select route using an LLP line circuit.	
141	Select INC class of call with translator indication as required for completion to called line.	
142	Select incoming trunk class as required for completion to called line.	
143	Select any trunk link frame.	
144	Set TBT_, TBU_ switches to select LLP line circuit within a tens block.	
145	Select marker under test.	
146	Operate EBH, ♦CCT,♦ REC keys.	
147	Momentarily operate ST key.	MRL lamp lighted. Trouble record taken. If office is arranged to return overflow for all line circuits busy— OV designation perforated. If office is not arranged to return overflow for all line circuits busy— LB, BY designations perforated.
148	Momentarily operate RL key.	All lamps extinguished.
149	Restore all keys and switches.	
150	Select ORIG class of test.	
151	Select A_ through G_ digits as required to select an LLP line circuit within a tens block.	
152	Select OR class of call with translator indication as required for access to selected route.	

STEP	ACTION	VERIFICATION
153	Select line location as required having access to selected route.	
154	Select class of service and rate treatment as required for access to selected route.	
155	Set TBT_, TBU switches to select LLP line circuit within a tens block.	
156	Select marker under test.	
157	Operate EBH, REC keys.	
158	Momentarily operate ST key.	MRL lamp lighted. Trouble record taken. If office is arranged to return overflow for all line circuits busy— OV designation perforated. If office is not arranged to return overflow for all line circuits busy— LB, BY designations perforated.
159	Momentarily operate RL key.	All lamps extinguished.
160	Restore all keys and switches.	
<b>Trouble Intercept—ETS Not Provided</b>		
161	Determine from office records an LLP customer group number and associated LN (00-119) ST marker cross-connection. (If possible, select a customer group routed to trouble intercept.)	
162	At MTF— Restore all keys and switches.	
163	Momentarily operate RL key.	All lamps extinguished.
164	Select ORIG class of test.	
165	Select A_ through G_ digits as required to direct an intraoffice call to LLP customer group number selected in Step 161.	
166e	If a customer group which is routed to trouble intercept is not available— Insert make-busy plug into MMB_ jack of marker being tested.	
167e	At marker frame— Disconnect LN (00-119) ST cross-connection associated with LLP customer group number	

STEP	ACTION	VERIFICATION
	to be used in test and temporarily cross-connect to BNTH.	
168	At MTF— Select line location as required having access to number selected.	
169	Select class of service and rate treatment as required having access to number selected.	
170	Select OR class of call with translator indication as required for access to number selected.	
171	Select marker under test.	
172	Operate REC key.	
173	Momentarily operate ST key.	MRL lamp lighted. Two trouble records taken. First trouble record— BN or RI designation perforated.
174	Momentarily operate RL key.	All lamps extinguished.
175e	If a customer group which is routed to trouble intercept is not available— At marker frame— Remove temporary cross-connection placed between LN (00-119) ST to BNTH and replace cross-connection which was removed in Step 167e.  <b>Caution: Verify that cross-connection has been replaced and that LLP customer group is working properly before proceeding to next step.</b>	
176e	At MTF— Remove make-busy plug from MMB_ jack of marker tested.	
177	Restore all keys and switches.	

**CH. Paired Line Link Frames Feature**

1	At MTF— Restore all keys and switches.	
2	Momentarily operate RL key.	All lamps extinguished.
3	Select ORIG class of test.	

STEP	ACTION	VERIFICATION
4	Select A_ through K_ digits as required to direct call to outgoing route.	
5	Select an originating line location on paired line link frame.	
6	Select class of service and rate treatment as required for access to selected route.	
7a	<del>If ETS provided— Operate PCS key.</del>	
8	Select originating class of call with translator indication as required for access to selected route.	
9	Select marker under test.	
10	Operate STP2, REC keys.	
11b	<del>If ETS provided and CM dump is required— Operate TOTO key.</del>  <u>Note: See paragraph 1.09.</u>	
12	Momentarily operate ST key.	MRL lamp lighted. Trouble record taken. STP2, JG1 designations perforated. STP lamp lighted if provided.
13	Momentarily operate RL key.	All lamps extinguished.
✓14	Operate MFEB key.	
15	Momentarily operate ST key.	RBT1, RA1, BT-OF lamps lighted. Trouble record taken. STP2, JG1 designations perforated.
16	Momentarily operate RL key.	All lamps extinguished.
17	Restore MFEB key; operate MFSB key.	
18	Momentarily operate ST key.	RBT1, RA1, BT-OF lamps lighted. Trouble record taken. STP2, JG1 designations perforated. STP lamp lighted if provided.
19	Momentarily operate RL key.	All lamps extinguished.
20	Restore all keys and switches.	

STEP	ACTION	VERIFICATION
CI.	<b>Traffic Sampling Feature by Selected Customer Group—ETS Not Provided</b>	
	<i>Note:</i> When LAMA-C features are being tested; the distributors and scanners (part of SD-28083-01) associated with the marker and trunk used in the test calls must be in service or a special procedure must be followed to obtain a valid test. The special procedure is in the BSP on taking LAMA-C equipment out of service under the title, Changing Distributors or Scanners From Out of Service to Maintenance Busy.	
	<b>Intraoffice Routes</b>	
1	At MTF— Restore all keys and switches.	
2	Momentarily operate RL key.	All lamps extinguished.
3	Select IAO class of test.	
4	Select class of service and rate treatment as required associated with traffic sampling.	
5	Select OR class of call with LT translator indication.	
6	Operate GPA/GPB key as required for selected group when trunk is in an allotted subgroup.	
7	Select marker under test.	
8	Operate TLK, TTL, RC1, SMPL, REC keys.	
9a	If AMA intraoffice routes are provided— Operate A_ through C_ digits as required for intraoffice code associated with AMA route.	
10a	Select route advance as required for access to AMA intraoffice route.	
11a	Momentarily operate ST key.	AS lamp lighted. If LAMA-C is provided— S1 lamp lighted. If LAMA-C is <b>not</b> provided— IE, T_ U_ RN_ lamps lighted. Two trouble records taken. FS_ TS_ TG_ TB_ LC_ LV_ FAK/FBK designations perforated indicating location of B appearance of intraoffice trunk (first trouble

STEP	ACTION	VERIFICATION
		record), A appearance (second trouble record). Second trouble record— If LAMA-C is <i>not</i> provided— NSI, ND1, CP_, MB_, RN_, OSG_, AMA designations perforated.
12a	Momentarily operate RL key.	All lamps extinguished.
13b	If non-AMA intraoffice routes are provided and marker is arranged to route advance to AMA route on sample request— Repeat Steps 9a through 11a for a non-AMA route arranged to route advance marker to AMA route on sample request.	AS, TS lamps lighted. If LAMA-C is provided— S1 lamp lighted. If LAMA-C is <i>not</i> provided— IE, T, U, RN, RA1 lamps lighted. Two trouble records taken. FS, TS, TG, TB, LC, LV, FAK/FBK designations perforated indicating location of B appearance of intraoffice trunk (first trouble record), A appearance (second trouble record). Second trouble record— If LAMA-C is <i>not</i> provided— NSI, ND1, CP, MB, RN, OSG, AMA designations perforated.
14b	Momentarily operate RL key.	All lamps extinguished.
15c	If non-AMA intraoffice routes are provided and marker is arranged to cancel sampling on sample request— Repeat Steps 9a through 11a for a non-AMA route arranged to cancel sampling on sample request.	AS, TS lamps lighted. Two trouble records taken. FS, TS, TG, TB, LC, LV, FAK/FBK designations perforated indicating location of B appearance of intraoffice trunk (first trouble record), A appearance (second trouble record). Second trouble record— NSI designation perforated.
16c	Momentarily operate RL key.	All lamps extinguished.
17	Restore all keys and switches.	
<b>Outgoing Routes</b>		
18	At MTF— Restore all keys and switches.	
19	Momentarily operate RL key.	All lamps extinguished.
20	Select OGT class of test.	
21	Select class of service and rate treatment as required associated with traffic sampling.	

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STEP	ACTION	VERIFICATION
22	Select originating class of call with translator indication as required for access to selected route.	
23	Operate GPA/GPB key as required for selected group when trunk is in an allotted subgroup.	
24	Select marker under test.	
25	Operate KY, TLK, SMPL, REC keys.	
26d	If 4-wire route is selected— Operate 4W key.	
27e	If AMA outgoing route not requiring AMA record but requiring traffic sampling is provided— Select A_ through K_ digits as required to direct call to AMA route not requiring AMA record but requiring traffic sampling.	
28e	Momentarily operate ST key.	If LAMA-C is <b>not</b> provided— AS, IE, RN_, T_, U_ lamps lighted. If LAMA-C is provided— AS, S1 lamps lighted. Trouble record taken. FS_, TS_, TG_, TB_, LC_, LV_, FAK/FBK designations perforated indicating location of outgoing trunk for route selected. If LAMA-C is not provided— CP_, MB_, RN_, OSG_, AMA designations perforated.
29e	Momentarily operate RL key.	All lamps extinguished.
30f	If non-AMA outgoing routes are provided and marker is arranged to route advance to AMA route on sample request— Select A_ through K_ digits as required for a non-AMA route arranged to route advance marker to AMA route on sample request.	
31f	Momentarily operate ST key.	If LAMA-C is <b>not</b> provided— AS, IE, RN_, T_, U_, RA1 lamps lighted. If LAMA-C is provided— AS, RA1, S1 lamps lighted. Trouble record taken. FS_, TS_, TG_, TB_, LC_, LV_, FAK/FBK designations perforated indicating location of outgoing trunk for route selected. If LAMA-C is <b>not</b> provided—

STEP	ACTION	VERIFICATION
		CP_, MB_, RN_, OSG_, AMA designations perforated.
32f	Momentarily operate RL key.	All lamps extinguished.
33g	If non-AMA outgoing route for which marker is arranged to cancel sampling on sample request is provided— Repeat Step 27e for a non-AMA route arranged to cancel sampling on sample request.	
34g	Momentarily operate ST key.	AS lamp lighted. Trouble record taken. FS_, TS_, TG_, TB_, LC_, LV_, FAK/FBK designations perforated indicating location of outgoing trunk for route selected. CP_, OSG_ designations perforated.
35g	Momentarily operate RL key.	All lamps extinguished.
36	Restore all keys and switches.	
<b>Tandem Routes</b>		
37	Restore all keys and switches.	
38	Momentarily operate RL key.	All lamps extinguished.
39	Select OGT class of test.	
40	Select incoming class of call and translator indication as required associated with traffic sampling.	
41	Select any trunk link frame.	
42	Select trunk number as required having access to selected route.	
43	Operate GPA/GPB key as required for selected group when trunk is in an allotted subgroup.	
44	Select route advance as required for outgoing route.	
45	Select marker under test.	
46	Operate KY, REC, SMPL, TLK keys.	
47d	If 4-wire route is selected— Operate 4W key.	

STEP	ACTION	VERIFICATION
48h	<p>If AMA tandem route not requiring AMA record but requiring traffic sampling is provided—            Select A_ through K_ digits as required to direct call to AMA route not requiring AMA record but requiring traffic sampling.</p>	
49h	Momentarily operate ST key.	<p>If LAMA-C is <i>not</i> provided—            AS, IE, RN_, T_, U_ lamps lighted.            If LAMA-C is provided—            AS, S1 lamps lighted.            Trouble record taken.            FS_, TS_, TG_, TB_, LC_, LV_, FAK/FBK designations perforated indicating location of outgoing trunk for route selected.            VG_, HG_, VF_ designations perforated corresponding to trunk number selected.            If LAMA-C is <i>not</i> provided—            CP_, MB_, RN_, OSG_, AMA designations perforated.</p>
50h	Momentarily operate RL key.	All lamps extinguished.
51i	<p>If non-AMA tandem routes are provided and marker is arranged to route advance to AMA route on sample request—            Select A_ through K_ digits as required to direct call to non-AMA route arranged to route advance marker to AMA route on sample request.</p>	
52i	Momentarily operate ST key.	<p>If LAMA-C is <i>not</i> provided—            AS, IE, RN_, T_, U_ lamps lighted.            If LAMA-C is provided—            AS, S1 lamps lighted.            Trouble record taken.            FS_, TS_, TG_, TB_, LC_, LV_, FAK/FBK designations perforated indicating location of outgoing trunk for route selected.            VG_, HG_, VF_ designations perforated corresponding to trunk number selected.</p> <p><i>Note:</i> If office is arranged to send 00X number to AMA equipment instead of trunk number VG0, HG0, VF_ designations will be perforated.</p> <p>If LAMA-C is <i>not</i> provided—            CP_, MB_, RN_, OSG_, AMA designations perforated.</p>

STEP	ACTION	VERIFICATION
53i	Momentarily operate RL key.	All lamps extinguished.
54	Restore all keys and switches.	