

TIME OF DAY CIRCUIT TESTS NO. 5 CROSSBAR OFFICES

1. GENERAL

1.01 This section describes a method of testing the time of day circuit in No. 5 crossbar offices not arranged for AMA. It also covers the purpose of each test.

1.02 The tests covered are:

- (A) Visual Check of the Time Setting
- (B) Verification Test of Time Indicating Lamps and Time Indication Leads To The Trouble Recorder and Operation Test
- (C) Setting the Time of Day Circuit
- (D) Alarm Features

1.03 The time of day circuit is provided for No. 5 crossbar offices not arranged for AMA. This circuit provides day, hour and minute information for the trouble recorder for perforation on the trouble record card. The time of day circuit is located on the trouble recorder bay of the master test frame. It consists primarily of selectors, which are operated in sequence from a clock circuit or impulse clock circuit. Indicating lamps are furnished on the time of day panel of the master test frame, for a visual indication of the month, day of the month, hour and minute.

1.04 For the purpose of these tests the selectors are stepped to various positions by means of the keys provided. The normal operation of the selectors, by means of relays and the clock circuit, is also checked. The time indication leads to the trouble recorder are checked by causing trouble record cards to be perforated and comparing the time indications with the setting of the time of day circuit.

1.05 The master test frame is used to produce the trouble record cards. These cards are produced by setting up a line class of test to the busy test line and a record taken of the connections set up by the marker.

1.06 When making tests (B), (C) and (D) the time as indicated by the time of day circuit will not be the correct time. Where required, trouble record

cards that are produced by service calls during these tests should be marked with the correct time in accordance with local instructions.

1.07 The terminals referred to in this section are bank terminals of the associated selector. The number of the terminal is indicated by the pointer and index wheel of the selector.

1.08 The time of day circuit indicates the hours on a 24 hour basis instead of an A.M. and P.M. basis of a standard clock. For example 0000 on the hour and minute lamps indicates midnight and 0100 indicates 1 A.M. Also 1200 indicates midday and 1300 indicates 1 P.M.

2. APPARATUS

- 2.01 Master test control circuit J23255 (SD-25800-01) (test (B)).
- 2.02 KS-3008 stop watch or equivalent, (all tests).
- 2.03 No. 893 cord, 6 feet long, equipped with two No. 360A tools (1W13B cord) and one KS-6278 tool and one No. 419A tool (test (B)).

3. PREPARATION

Test (B)

- 3.01 At the master test frame restore to normal all keys that may be operated on the master test control panel, trunk test panel and the voltmeter test panel.
- 3.02 At the master test frame, on the master test control panel, momentarily operate the RL key. No lamps should be lighted when the master test control circuit is normal.
- 3.03 On the master test control panel operate the following keys.

Key

Purpose

- | | |
|-----------------------------|--|
| A(0-9)
through
D(0-9) | <u>Numerical Digits:</u> Operate one key unit (0-9) of each key to select the busy test line to be used in the test. |
|-----------------------------|--|

<u>Key</u>	<u>Purpose</u>
IC(OA) (OB) (OAT) (OBT)	<u>Incoming Class:</u> Operate one key unit (OA), (OB), (OAT) or (OBT) to set up the office class of an incoming call. The designation on the individual key units indicate the following: <u>Office A:</u> To select a trunk located in office A. <u>Office B:</u> To select a trunk located in office B. <u>Office AT:</u> To select a trunk located in office A theoretical. <u>Office BT:</u> To select a trunk located in office B theoretical.
LT	<u>Line Test:</u> To make a subscriber line class of test.
MTO-1	<u>Marker Transverter:</u> Operate one key (0-1) to select a special marker required for the test.
REC	<u>Record:</u> To obtain a record of the connection set up by the marker.

3.04 On the master test control panel operate the following keys as specified in Part 4.

<u>Key</u>	<u>Purpose</u>
RL	<u>Release:</u> Momentary operation at any stage of the test causes the master test control circuit and connecting circuits to start to release. Momentary operation at the completion of a test releases all locked up relays and thus causes all lighted lamps to be extinguished.
ST	<u>Start:</u> Momentary operation controls the start of a test call.

All Tests

3.05 On the time of day panel operate the following keys as specified in Part 4.

<u>Key</u>	<u>Purpose</u>
P*	<u>Pulses:</u> Momentary operation causes the pulse selector to step one terminal.
DT*	<u>Days Tens:</u> Momentary operation causes the days tens selector to step one terminal.

<u>Key</u>	<u>Purpose</u>
DU*	<u>Days Units:</u> Momentary operation causes the days units selector to step one terminal.
HT*	<u>Hours Tens:</u> Momentary operation causes the hours tens selector to step one terminal.
HU*	<u>Hours Units:</u> Momentary operation causes the hours units selector to step one terminal.
MO*	<u>Month:</u> Momentary operation causes the month selector to step one terminal.
MT*	<u>Minutes Tens:</u> Momentary operation causes the minutes tens selector to step one terminal.
MU*	<u>Minutes Units:</u> Momentary operation causes the minutes units selector to step one terminal.

*These keys are effective only when the VK key is operated.

3.06 On the trouble recorder panel operate the following keys as specified on Part 4.

<u>Key</u>	<u>Purpose</u>
VK	<u>Visual Check:</u> To make effective the MO, DT, DU, HT, HU, MT, MU and P keys and to supply ground for lighting the time indicating lamps on the time of day panel.
TDAR	<u>Time of Day Alarm Release:</u> Momentary operation causes the release of the time of day circuit alarm.

4. METHOD

(A) Visual Check of the Time Setting

4.01 This test checks that the setting of the time of day circuit can be visually checked.

4.02 Operate the VK key and observe that one each of the MO1-12, DTO-3, DUO-9, HTO-2, HUO-9, MTO-5 and MUO-9 lamps light.

4.03 Check that the lighted MO1-12, DTO-3 and DUO-9 lamps agree with the correct month and day of the month.

4.04 Check that the lighted HTO-2, HUO-9, MTO-5 and MUO-9 lamps agree with the correct time.

Note: To establish the correct time, start the stop watch precisely at the beginning of any minute as

observed on the building master clock. Make a note of the time in hours and minutes indicated by this clock. The correct time is obtained by adding the time as noted, to the elapsed time from this point as determined from the stop watch. At the time of day equipment, observe that the time in hours tens, hours units, minutes tens and minutes units as indicated by the lighted lamps agrees within ± 0.5 minute of the correct time.

4.05 Restore the VK key to normal and observe that the time indicating lamps are extinguished.

4.06 Momentarily operate the MO, DT, DU, HT, HU, MT, MU and P keys in succession and observe that the associated selectors do not step due to the operation of the keys.

(B) Verification Test of Time Indicating Lamps and Time Indication Leads to the Trouble Recorder and Operation Test

4.07 This test verifies the time indicating lamps and the time indication leads to the trouble recorder. It also checks the operation of the time of day circuit.

4.08 Insulate the 1T contact of the AL relay to prevent the time of day alarm.

Verification Test of Time Indicating Lamps and Time Indication Leads to the Trouble Recorder

4.09 Operate the VK key and observe that one each of the MO1-12, DTO-3, DUO-9, HTO-2, HUU-9, MTO-5 and MUO-9 lamps light.

4.10 Block non-operated the MO, DT, DU, HT, HU, HUU, MT, MU and P relays.

4.11 Table A lists terminals to which the selectors, MO, DT, DU, HT, HU, MT and MU, are stepped as indicated by the SELECTOR TERMINAL column. The LAMP DESIGNATION column indicates the lamps lighted when the selectors are stepped to the indicated terminal. The TROUBLE RECORD DESIGNATIONS column indicates the trouble record card perforations that are perforated on trouble record cards which are produced during this test.

4.12 Momentarily operate the MO key the required number of times to step the MO selector to terminal 1. Step the DT, DU, HT, HU, MT and MU selectors to terminal 1 in the order named, using the associated selector keys. Observe that the lamps lighted are those indicated in Table A for terminal 1.

4.13 Except for additional key operations or changes in key settings specified in this test, operate the keys as specified in 3.03 to set up a test call to the busy test line.

4.14 Momentarily operate the ST key and observe that a trouble record card is produced.

4.15 Momentarily operate the RL key and observe that the time indications perforated on the trouble record card agree with those indicated in Table A for terminal 1.

4.16 Proceed to step the selectors to the terminals indicated in Table A, by the momentary operation of the associated selector key. When the selectors are on the terminal indicated, check that the lamps lighted are those indicated in Table A for the particular selector terminal. Obtain a trouble record card by momentarily operating the ST key. Release the test circuit by the momentary operation of the RL key. Check that the time perforations on the trouble record card are those indicated in Table A for the particular selector terminal. Repeat until all test operations as covered by Table A have been covered.

4.17 Momentarily operate the HU key the required number of times to step the HU selector to terminal 5.

4.18 Momentarily operate the HT key the required number of times to step the HT selector to terminal 3 and observe that the HUU relay is operated.

4.19 Momentarily operate the HU key the required number of times to step the HU selector to terminal 10. Observe that after each operation of the HU key, the HUU relay is operated.

4.20 Momentarily operate the HT key the required number of times to step the HT selector to terminal 22. Observe that after each operation of the HT key, the HUU relay is operated.

4.21 Remove the blocking tools from the MO, DT, DU, HT, HU, MT and MU relays in the order named and observe that the MO selector steps to terminal 1, the DT selector steps to terminal 1, the DU selector steps to terminal 2, the HT selector steps to terminal 1, the MT selector steps to terminal 1 and the MU selector steps to terminal 1. Momentarily operate the HU key and observe that the HU selector steps to terminal 1.

Operation Test

4.22 Momentarily operate the P key the required number of times to step the P selector to terminal 10.

TABLE A

OPERATIONS	SELECTOR TERMINAL	LAMP DESIGNATIONS						TROUBLE RECCRD DESIGNATIONS						SEE NOTE	
		MO	DT	DU	HT	HU	MT	MU	DT	DU	HT	HU	MT		MU
		LAMP LIGHTED						TROUBLE RECORD PERFORATIONS							
1	1	1	0	0	0	0	0	0	4,7	4,7	4,7	4,7	4,7	4,7	
2	2	2	1	1	1	1	1	1	0,1	0,1	0,1	0,1	0,1	0,1	
3	3	3	2	2	2	2	2	2	0,2	0,2	0,2	0,2	0,2	0,2	
4	4	4	3	3	X	3	3	3	1,2	1,2	4,7	1,2	1,2	1,2	
5	5	5	X	4	X	4	4	4	4,7	0,4	4,7	0,4	0,4	0,4	1
6	5	5	X	4	X	4	4	4	4,7	0,4	4,7	4,7	0,4	0,4	2
7	6	6	X	5	X	5	5	5	4,7	1,4	4,7	1,4	1,4	1,4	2
8	7	7	X	6	X	6	0	6	4,7	2,4	4,7	2,4	4,7	2,4	
9	8	8	X	7	X	7	1	7	4,7	0,7	4,7	0,7	0,1	0,7	2
10	9	9	X	8	X	8	2	8	4,7	1,7	4,7	1,7	0,2	1,7	2
11	10	10	X	9	X	9	3	9	4,7	2,7	4,7	2,7	1,2	2,7	2
12	11	11	X	0	X	X	4	0	4,7	4,7	4,7	4,7	0,4	4,7	1
13	12	12	X	1	X	X	5	1	4,7	0,1	4,7	4,7	1,4	0,1	1
14	13	X	X	X	X	X	0	2	4,7	0,1	4,7	4,7	4,7	0,2	1
15	14	X	X	X	X	X	1	3	4,7	0,1	4,7	4,7	0,1	1,2	1
16	15	X	X	X	X	X	2	4	4,7	0,1	4,7	4,7	0,2	0,4	1
17	16	X	X	X	X	X	3	5	4,7	0,1	4,7	4,7	1,2	1,4	1
18	17	X	X	X	X	X	4	6	4,7	0,1	4,7	4,7	0,4	2,4	1
19	18	X	X	X	X	X	5	7	4,7	0,1	4,7	4,7	1,4	0,7	1
20	19	X	X	X	X	X	X	8	4,7	0,1	4,7	4,7	4,7	1,7	1
21	20	X	X	X	X	X	X	9	4,7	0,1	4,7	4,7	4,7	2,7	1
22	21	X	X	X	X	X	X	X	4,7	0,1	4,7	4,7	4,7	4,7	1
23	22	X	X	X	X	X	X	X	4,7	0,1	4,7	4,7	4,7	4,7	1

X = No lamp lighted

Note 1 - For this operation remove the blocking tool from the HUO relay.

Note 2 - For this operation block the HUO relay non-operated.

4.23 Remove the blocking tool from the P relay. The P relay operates and releases within six seconds. After the P relay releases, block it non-operated.

4.24 Observe that the MU selector has stepped to terminal 2 (MU1 lamp lighted) and that the P selector has stepped to terminal 11.

4.25 Momentarily operate the P key nine times to step the P selector to terminal 20.

4.26 Remove the blocking tool from the P relay. The P relay operates and releases within six seconds. After the P relay releases, block it non-operated.

4.27 Observe that the MU selector has stepped to terminal 3 (MU2 lamp lighted) and that the P selector has stepped to terminal 1.

4.28 Momentarily operate the P key nine times to step the P selector to terminal 10. Insulate the 1B contact of the P relay.

4.29 Momentarily operate the MU key seven times to step the MU selector to terminal 10 (MU9 lamp lighted).

4.30 Remove the blocking tool from the P relay. The P relay operates and releases within six seconds. After the P relay releases, block it non-operated.

- 4.31 Observe that the MT selector has stepped to terminal 2 (MT1 lamp lighted) and that the MU selector has stepped to terminal 11 (MUO lamp lighted).
- 4.32 Momentarily operate the MT key four times to step the MT selector to terminal 6 (MT5 lamp lighted).
- 4.33 Momentarily operate the MU key nine times to step the MU selector to terminal 20 (MU9 lamp lighted).
- 4.34 Remove the blocking tool from the P relay. The P relay operates and releases within six seconds. After the P relay releases, block it non-operated.
- 4.35 Observe that the HU selector has stepped to terminal 2 (HU1 lamp lighted), that the MT selector has stepped to terminal 7 (MTO lamp lighted) and that the MU selector has stepped to terminal 1 (MUO lamp lighted).
- 4.36 Momentarily operate the MU key nine times to step the MU selector to terminal 10 (MU9 lamp lighted). Insulate the 1B contact of the MU relay.
- 4.37 Momentarily operate the MT key five times to step the MT selector to terminal 12 (MT5 lamp lighted).
- 4.38 Momentarily operate the HU key eight times to step the HU selector to terminal 10 (HU9 lamp lighted).
- 4.39 Remove the blocking tool from the P relay. The P relay operates and releases within six seconds. After the P relay releases, block it non-operated.
- 4.40 Observe that the HT selector has stepped to terminal 2 (HT1 lamp lighted), that the HU selector has stepped to terminal 1 (HUO lamp lighted) and that the MT selector has stepped to terminal 13 (MTO lamp lighted).
- 4.41 Momentarily operate the MT key five times to step the MT selector to terminal 18 (MT5 lamp lighted).
- 4.42 Momentarily operate the HU key three times to step the HU selector to terminal 4 (HU3 lamp lighted).
- 4.43 Momentarily operate the HT key to step the HT selector to terminal 3 (HT2 lamp lighted).
- 4.44 Remove the blocking tool from the P relay. The P relay operates and releases within six seconds. After the P relay releases, block it non-operated.
- 4.45 Observe that the DU selector has stepped to terminal 3 (DU2 lamp lighted), that the HT selector has stepped to terminal 1 (HTO lamp lighted), that the HU selector has stepped to terminal 1 (HUC lamp lighted) and that the MT selector has stepped to terminal 1 (MTO lamp lighted).
- 4.46 Momentarily operate the MT key five times to step the MT selector to terminal 6 (MT5 lamp lighted). Insulate the 1B contact of the MT relay.
- 4.47 Momentarily operate the HU key three times to step the HU selector to terminal 4 (HU3 lamp lighted). Insulate the 1T contact of the HU relay.
- 4.48 Momentarily operate the HT key two times to step the HT selector to terminal 3 (HT2 lamp lighted). Insulate the 1B contact of the HT relay.
- 4.49 Momentarily operate the DU key seven times to step the DU selector to terminal 10 (DU9 lamp lighted).
- 4.50 Remove the blocking tool from the P relay. The P relay operates and releases within six seconds. After the P relay releases, block it non-operated.
- 4.51 Observe that the DT selector has stepped to terminal 2 (DT1 lamp lighted) and that the DU selector has stepped to terminal 1 (DUO lamp lighted).
- 4.52 Momentarily operate the DU key nine times to step the DU selector to terminal 10 (DU9 lamp lighted).
- 4.53 Momentarily operate the DT key to step the DT selector to terminal 3 (DT2 lamp lighted).
- 4.54 Remove the blocking tool from the P relay. The P relay operates and releases within six seconds. After the P relay releases, block it non-operated.
- 4.55 Observe that the DT selector has stepped to terminal 4 (DT3 lamp lighted) and that the DU selector has stepped to terminal 11 (DUO lamp lighted).
- 4.56 Momentarily operate the DU key to step the DU selector to terminal 12 (DU1 lamp lighted).
- 4.57 Remove the blocking tool from the P relay. The P relay operates and releases within six seconds. After the P relay releases, block it non-operated.
- 4.58 Observe that the MO selector has stepped to terminal 2 (MO2 lamp lighted), that the DT selector has stepped to terminal 1 (DTO lamp lighted) and that the DU selector has stepped to terminal 2 (DU1 lamp lighted).
- 4.59 Momentarily operate the DU key seven times to step the DU selector to terminal 9 (DU8 lamp lighted).

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- 4.60 If it is a leap year momentarily operate the DU key to step the DU selector to terminal 10 (DU9 lamp lighted).
- 4.61 Momentarily operate the DT key two times to step the DT selector to terminal 3 (DT2 lamp lighted).
- 4.62 Remove the blocking tool from the P relay. The P relay operates and releases within six seconds. After the P relay releases, block it non-operated.
- 4.63 Observe that the MO selector has stepped to terminal 3 (MO3 lamp lighted), that the DT selector has stepped to terminal 1 (DT0 lamp lighted) and that the DU selector has stepped to terminal 2 (DU1 lamp lighted).
- 4.64 Momentarily operate the DT key three times to step the DT selector to terminal 4 (DT3 lamp lighted). Insulate the 1B contact of the DT relay.
- 4.65 Momentarily operate the DU key ten times to step the DU selector to terminal 12 (DU1 lamp lighted).
- 4.66 Remove the blocking tool from the P relay. The P relay operates and releases within six seconds. After the P relay releases, block it non-operated.
- 4.67 Observe that the MO selector has stepped to terminal 4 (MO4 lamp lighted) and that the DU selector has stepped to terminal 1 (DU0 lamp lighted).
- 4.68 Momentarily operate the DU key ten times to step the DU selector to terminal 11 (DU0 lamp lighted).
- 4.69 Remove the blocking tool from the P relay. The P relay operates and releases within six seconds. After the P relay releases, block it non-operated.
- 4.70 Observe that the MO selector has stepped to terminal 5 (MO5 lamp lighted) and that the DU selector has stepped to terminal 1 (DU0 lamp lighted).
- 4.71 Proceed in a manner similar to that outlined in 4.68 to 4.70 inclusive, until the MO selector has been stepped to terminal 12 (MO12 lamp lighted).
- Note: Where repeating 4.68, if the MO 6, 9 or 11 lamp is lighted, advance the DT selector to terminal 11. Otherwise advance the DT selector to terminal 12.
- 4.72 Momentarily operate the DU key eleven times to step the DU selector to terminal 12 (DU1 lamp lighted).
- 4.73 Remove the blocking tool from the P relay. The P relay operates and releases within six seconds. After the P relay releases, block it non-operated.
- 4.74 Observe that the MO selector has stepped to terminal 1 (MO1 lamp lighted) and that the DU selector has stepped to terminal 1 (DU0 lamp lighted).
- 4.75 Remove the insulator from the DT relay. Momentarily operate the DT key two times and observe that the DT selector steps to terminal 1 (DT0 lamp lighted) and that the DU selector steps to terminal 2 (DU1 lamp lighted).
- 4.76 Remove the insulators from the HT, HU, and MT, MU relays.
- 4.77 Using a cord equipped with a No.419A tool connect ground to the 9B spring of the STR relay of the trouble recorder control circuit.
- 4.78 Momentarily operate the P key the required number of times to step the P selector to terminal 1.
- 4.79 Remove the blocking tool from the P relay. The P relay operates within six seconds. Observe that the P relay remains operated.
- 4.80 Momentarily operate the P key enough times to step the P selector to terminal 20. After each operation of the P key, observe that the P relay remains operated.
- 4.81 Remove the cord from the STR relay, and observe that the P relay releases. Remove the insulator from the P relay.
- 4.82 Remove the insulator from the AL relay.
- 4.83 Set the time of day circuit to the correct time as described in 4.85 to 4.96 inclusive.

(C) Setting the Time of Day Circuit

4.84 This test outlines the method of setting the time of day circuit to the correct time.

4.85 Establish the correct time.

Note: To establish the correct time, start the stop watch precisely at the beginning of any minute as observed on the building master clock. Make a note of the time in hours and minutes indicated by this clock. The correct time is obtained by adding the time as noted, to the elapsed time from this point as determined from the stop watch.

- 4.86 Operate the VK key and observe that the MO-, DT-, DU-, HT-, HU-, MT- and MU- lamps light.
- 4.87 Momentarily operate the P key the required number of times to step the P selector to terminal 9 or 19. Operate the P key and release it as the second hand of the stop watch passes the 60 second mark.
- 4.88 Momentarily operate the MU key the required number of times to step the MU selector until the lighted MUO-9 lamp corresponds to the minutes units of the correct time.
- 4.89 Momentarily operate the MT key the required number of times to step the MT selector until the lighted MTO-5 lamp corresponds to the minutes tens of the correct time.
- 4.90 Momentarily operate the HU key the required number of times to step the HU selector until the lighted HUU-9 lamp corresponds to the hours units of the correct time.
- 4.91 Momentarily operate the HT key the required number of times to step the HT selector until the lighted HTO-2 lamp corresponds to the hours tens of the correct time.
- 4.92 Momentarily operate the DT key the required number of times to step the DT selector until the lighted DTO-3 lamp corresponds to the days tens of the day of the month.
- 4.93 Momentarily operate the DU key the required number of times to step the DU selector until the lighted DUO-9 lamp corresponds to the days units of the day of the month.

Note: When setting the DU selector for the 30th or 31st day of the month, set the DU selector on the 11th or 12th terminal respectively.

- 4.94 Momentarily operate the MO key the required number of times to step the MO selector until the lighted MO1-12 lamp corresponds to the correct month.
- 4.95 Observe the lamps on the time of day panel for five minutes and check that the proper lamps are lighted as the circuit functions and that the time indicated is within ± 0.5 minute of the correct time.
- 4.96 Restore the VK key to normal.

(D) Alarm Features

- 4.97 This test checks that the minor alarm sounds within 8 to 25 seconds if the P relay fails to operate or release.

- 4.98 Block the P relay operated.
- 4.99 Using the stop watch, check that in 8 to 25 seconds, after the P relay is blocked operated, the minor alarm sounds, the white aisle pilot lamp lights and the TDA lamp lights, on the trouble recorder panel.
- 4.100 Remove the blocking tool from the P relay.
- 4.101 Momentarily operate the TDAR key, to restore the alarm circuit to normal, extinguish the TDA lamp and silence the minor alarm.
- 4.102 Block the P relay non-operated and using the stop watch, check that in 8 to 25 seconds the minor alarm sounds, the white aisle pilot lamp lights and the TDA lamp lights.
- 4.103 Remove the blocking tool from the P relay.
- 4.104 Momentarily operate the TDAR key to restore the alarm circuit to normal extinguish the TDA lamp and silence the minor alarm.
- 4.105 Set the time of day circuit to the correct time as outlined in 4.85 to 4.96 inclusive.

5. INTERPRETATION OF LAMP SIGNALS

- 5.01 The lamps associated with the tests in this section are located on the time of day panel, except the TDA lamp, which is located on the trouble recorder panel. The lamps are as follows:

<u>Lamp</u>	<u>Indication</u>
DTO-9*	<u>Days Tens:</u> The lighted lamp indicates the tens digit of the day of the month.
DUO-9*	<u>Days Units:</u> The lighted lamp indicates the units digit of the day of the month.
HTO-2*	<u>Hours Tens:</u> The lighted lamp indicates the tens digit of the hour of the day.
HUU-9*	<u>Hours Units:</u> The lighted lamp indicates the units digit of the hour of the day.
MO1-12*	<u>Month:</u> The lighted lamp indicates the month of the year.
MTO-5*	<u>Minutes Tens:</u> The lighted lamp indicates the tens digit of the minutes past the hour.
MUO-9*	<u>Minutes Units:</u> The lighted lamp indicates the units digit of the minutes past the hour.

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Lamp

Indication

*These lamps are lighted when the VK key is operated.

TDA

Time of Day Alarm: The lighted lamp indicates that the alarm relay of the time of day circuit has operated.

6. REPORTS

6.01 The required record of these tests should be entered on the proper form.