

PBX AIOD-A1
 PRELIMINARY INFORMATION

CONTENTS

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|----|---------------------------|----|--|
| 1. | GENERAL INFORMATION | 5. | SIS INPUT/OUTPUT CHECKING |
| 2. | JACKS, SWITCHES AND LAMPS | 6. | PRINTER, TRAP, AND TIMED SHUTDOWN |
| 3. | NUMBER CODING | 7. | LOOP TESTS |
| 4. | SIMULATED PBX REQUESTS | 8. | ALTERNATE TREATMENT FOR CHANGED
PBX TRUNK NUMBERS |

1. GENERAL INFORMATION

- 1.1 This sub-section provides a description of the test facilities and trouble shooting facilities built into the PBX Automatic Identified Outward Dialing Type A1 (PBX AIOD-A1) frame.
- 1.2 Refer to the Section 275 for coordinating information and for the subsections containing tests and trouble shooting information.

2. JACKS, SWITCHES AND LAMPS

The following paragraphs list the jacks, switches and lamps on the SI frame with a brief description of their functional designation. A picture of the Control Panel is provided in Attachment 1.

2.1 Control Panel Switches - Non-Locking Button Type.

Switch Designation	Description
CLR	Clears the Central Register.
LD	Load - enters information into the Central Register corresponding to the setting of switches SW1 to SW44.
MR	Master Reset - Resets Error Encoder.
RESET	Clears the printer shutdown counters.
RMF	Resets the major alarm path failure circuit
RO	Read Only - Initiates a destructive readout of Memory.
RW	Read Write - Initiates a non-destructive readout of Memory.
Space	The Printer's tape is advance one space each time this key is operated.
STST	Test Circuit Self Test - Initiates a test of error monitoring features of the Test Circuit.
TRAS	Initiates a single simulated PBX Request.
TRCK	Transfer Check - Permits manual change of control from one phase generator to the other phase generator.
WO	Write Only - Initiates the writing of information into Memory.

2.2 Control Panel Switches - Toggle.

Switch Designation	Description
NT	Normal Test - In the NORMAL position the Station Identification Test Circuit performs an error monitoring function. In the TEST position the Station Identification Test Circuit is used to perform routine tests.
SWO	Premessage bit - Used for simulated PBX Requests.
SW1 to SW44	These switches control the information that is entered in the Central Register from the Test Circuit.
TDR	Transmit Digit Register - Initiates a continuous simulated PBX Request directly into the Digit Register, bypasses the Digit Register Connector.
TRAC	Transmit Continuously - Initiates repeated simulated PBX - Requests.
TRACK	Transmission Check - Introduces a known loss into the PBX transmission path.

2.3 Control Panel Lamps

Lamp Designation	Description
A, A1	Mode A - This mode is used to perform simulated PBX Requests.
B, B1	Mode B - This mode is used to perform Input/Output Checking.
L1 to L44	These lamps provide a visual indication of the contents of the Central Register.
LTA	Low Tape Alarm - This lamp indicates when the Printer's tape supply is near depletion.
MAPF	Major Alarm Path Failure.
PHA, PHB	Phase A, Phase B Generator - The lamp which is lit indicates which Generator is in control.
PSD	Printer Shutdown - This lamp lights if seven errors occurred within a 60 second period.
START	Premessage bit
TRAP	A mutilated Trunk Number was detected during a PBX - Request.

2.4 Jacks

Jack Designations	Description
DR_ _	Digit Register
DT_ _	Data Trunk
J1	Provides access to control the Test circuit to any DR_ _ jack to perform simulated PBX-Requests.
DRT	Digit Register Test - A multiple of J1 jack, is used when performing TDR Requests.
RMBO,1	Register Made Busy 0, 1 (located at the top of the AIOD frame)
S_ _	Spare Data Trunk

2.5 Miscellaneous Switches and Lamps

Designation	Apparatus	Description
ACO	Switch	Alarm Cutoff - Audible minor alarm.
CRRS	Switch	Cancel Remote RS.
RS	Switch	Release - Major and Minor circuit alarms.
TENS	Switch	TEST OFFICE INDEX - Sets the Office Index tens digit of unassigned Data Trunks.
UNITS	Switch	TEST OFFICE INDEX - Sets the Office Index units digit of unassigned Data Trunks.
ACO	Lamp	Alarm Cutoff
CRRS	Lamp	Cancel Remote RS
FA	Lamp	Fuse Alarm
MJCA	Lamp	Major Alarm
MNCA	Lamp	Minor Alarm
RMBO,1	Lamp	Register Made Busy (located at the top of the AIOD frame)
SL_ _	Lamp	Spare Data Trunk in use.

3. NUMBER CODING

3.1 Mode A

3.11 On PBX Requests and on Central Office Requests information is transmitted into and out-of the SI frame using 2/5 (2 out of 5) coded information. Table 1 lists the 2/5 coding of decimal numbers as used by the SI frame.

Table 1

Decimal Digit	2/5 Code Bit Position Value				
	0 bit	1 bit	2 bit	4 bit	7 bit
0	0	0	0	1	1
1	1	1	0	0	0
2	1	0	1	0	0
3	0	1	1	0	0
4	1	0	0	1	0
5	0	1	0	1	0
6	0	0	1	1	0
7	1	0	0	0	1
8	0	1	0	0	1
9	0	0	1	0	1

- 3.12 Table 2 illustrates 2/5 coding for sample Trunk Number or Station Number 4120 in a typical PBX message transmission, both actual and simulated. Table 2 also illustrates typical error codes.

Table 2

	THOUSANDS DIGIT	HUNDREDS DIGIT	TENS DIGIT	UNITS DIGIT
Decimal Number	4	1	2	0
2/5 Coded Number	10010	11000	10100	00011
3/5 Error (in units digit)	10010	11000	10100	11100
1/5 Error (in units digit)	10010	11000	10100	00100

3.2 Mode B

- 3.21 On SIS Input/Output Checking an abbreviated 2/5 code is used. Table 3 lists the abbreviated 2/5 coding of decimal numbers used for SIS Input/Output Checking. The abbreviated 2/5 code is the 2/5 code with the 0 bit position deleted.

Table 3

Decimal Digit	Abbreviate 2/5 Code Bit Position Value			
	1 bit	2 bit	4 bit	7 bit
0	0	0	1	1
1	1	0	0	0
2	0	1	0	0
3	1	1	0	0
4	0	0	1	0
5	1	0	1	0
6	0	1	1	0
7	0	0	0	1
8	1	0	0	1
9	0	1	0	1

NOTE: The Trunk Number thousands digit is handled in a special manner. Refer to paragraph 3.23 for an explanation of the Trunk Number thousands digit.

3.22 Table 4 illustrates abbreviated 2/5 coding for sample Trunk Number and Station Number 4120.

Table 4

	THOUSANDS DIGIT	HUNDREDS DIGIT	TENS DIGIT	UNITS DIGIT
Decimal Number	4	1	2	0
Abbreviated 2/5 coded Trunk Number	*	1000	0100	0011
Abbreviated 2/5 coded Station Number	0010	1000	0100	0011

* Refer to paragraph 3.23

3.23 Trunk Number Thousands Digit

3.231 The SI Memory, by design, can store identification data (Station Number and Data Trunk Number) associated with 1800 PBX Trunk Numbers, with these PBX Trunk Numbers used as store addresses. Because only 1800 word slots are used to store identification data, only two Trunk Number thousand digits are necessary. The Memory, therefore, is divided into two blocks (field A and field B) of 900 word slots per field. One Trunk Number thousands digit is used to address field A and the other Trunk Number thousands digit is used to address field B. The field to be addressed is derived from the two Trunk Number thousands digits and determined by the thousands bit cross-connect assignment per Table 5.

3.232 To determine the cross-connection to be made, obtain the two assigned Trunk Number thousand digits. Select a cross-connection from Table 5 such that the first Trunk Number thousands digit appears in field A and the second Trunk Number thousands digit appears in field B.

Table 5

X-Conn		Memory Field	Thousands Digit of Trunk Number	Address Register Thousands Bit
From Term	To Term			
TKTH	TK7	A	1, 2, 3, 4, 5, 6	0
		B	7, 8, 9, 0	1
	TK4	A	1, 2, 3, 7, 8, 9	0
		B	4, 5, 6, 0	1
	TK2	A	1, 4, 5, 7, 8, 0	0
		B	2, 3, 6, 9	1
	TK1	A	2, 4, 6, 7, 9, 0	0
		B	1, 3, 5, 8	1
	TK0	A	3, 5, 6; 8, 9, 0	0
		B	1, 2, 4, 7	1

NOTE: For any two given digits there are at least two possible cross-connections.

Ex. 1: If the two assigned Trunk Number thousand digits are 4 and 7 and it is desired that the digit 4 be used to address field A of the Memory and the digit 7 be used to address field B of the Memory, a cross-connection is required from TKTH to TK7.

Ex. 2: If on the other hand, the two assigned Trunk Number thousand digits are 4 and 7 and it is desired that the digit 7 be used to address field A of the Memory and the digit 4 be used to address field B of the Memory, a cross-connection is required from TKTH to TK4.

NOTE: If only one Trunk Number thousands digit is assigned, TKTH may be cross-connected to any TK- terminal.

3.233 Similar cross-connections as required to connect terminal TTH to a T- terminal and terminal TTH to a TH- terminal.

Ex. If TKTH is cross-connected to TK0, then TTH should be cross-connected to TNO and TTH should be cross-connected to T0.

3.24 Switch and Level

3.241 On a PBX Request the Data Trunk appearance is recognized by the SI frame. The SI frame generates a two digit octal number, level and switch numbers, and stores these two numbers in Memory using an octal-binary code.

3.242 On SIS Input/Output Checking these two numbers must be manually loaded using switches L4, L2, L1, S4, S2 and S1. Table 6 lists octal-binary coding.

Table 6

Octal Digit	Binary Code		
	4 bit	2 bit	1 bit
0	0	0	0
1	0	0	1
2	0	1	0
3	0	1	1
4	1	0	0
5	1	0	1
6	1	1	0
7	1	1	1

3.243 On a Central Office Request the 2 digit octal-binary coded number is readout of Memory and converted to a 3/8 Office Index (1/3 tens digit and 2/5 units digit). Table 7 illustrates 3/8 Office Index coding. The 3/8 Office Index is sent to the AIOD Trans-lator.

Table 7

	TENS DIGIT	UNITS DIGIT
Decimal Number	1	5
3/8 Code	010	01010

3.25 Parity

3.251 Odd parity must be maintained when writing into the store on SIS Input/Output Checking, the number of "1" bits in the Data Register must be odd. Switch P2, with its associated lamp, allows manual control of odd parity over the Data Register.

3.252 Switch P1, with its associated lamp, is used to maintain odd parity over bits S4, S2 and S1.

7.

3.253 When performing PBX Requests, both actual and simulated, the proper P1 and P2 bits will be generated by the AIOD frame.

4. SIMULATED PBX REQUESTS

Three types of simulated PBX Requests can be performed utilizing the SIS Control Panel. A description of their use and a step-by-step procedure for each Request is given in the following paragraphs.

4.1 TRAS Request
Single Simulated PBX Message
Transmission.

4.11 When performing a TRAS Request the SI Test Circuit duplicates the functions of the PBX-ANI equipment. This test checks the ability of the SI frame to handle incoming data and store this data in Memory.

4.12 The following steps are required to perform a TRAS Request.

STEP	OPERATION	OBSERVATION
1	Using a PC cord, 3P7B cord, patch from the J1 jack to a DR_ _ jack.	One or more errors will be generated if the PC cord is plugged into the DR_ _ jack prior to plugging it into the J1 jack.
2	Operate the NT switch to the TEST position.	Mode A or Mode B lamps light.
3	Operate switch SW0 to the 1 position.	Mode A lamps light.
4	Enter the 2/5 (2 out of 5) coded Trunk Number on the Test Panel (operate switches SW1 SW20 to give the 4 digit 2/5 coded Trunk Number, refer to Table 1 for the switch settings for each digit).	
5	Enter the 2/5 coded Station Number on the Test Panel (Switches SW21 thru SW40).	
6	Momentarily operate switch LD.	The START lamp lights. The Central Register lamps light in a 2/5 code corresponding to the switch settings SW1 thru SW40.
7	If an error was made in setting switches SW1 to SW40, momentarily operate switch CLR. Correct the switch settings and then momentarily reoperate switch LD.	The momentary operation of switch CLR extinguishes the lamps that were lighted in step 6. The momentary reoperation of switch LD gives the same observation as in step 6.
8	Momentarily operate switch TRAS. Operate switch TRAS a second PBX Request is performed.	The START lamp is extinguished. The lamp associated with switches SW1 thru SW40 are extinguished. If the transmission was successful no error codes will be printed.
9	Disconnect the PC cord. Restore switches to the "0" position. Verify that the data was stored in Memory by performing a RO or RW cycle.	

4.2 TRAC Request
Continuous Simulated PBX Message
Transmission.

4.22 The following steps are required
to perform a TRAC Request.

4.21 When performing a TRAC Request,
a simulated PBX Request (Message
Transmission) is transmitted every
.5 sec by the SI test circuit.
TRAC is used to perform load tests
and to trouble shoot the Digit
Register Connector.

STEP	OPERATION	OBSERVATION
1	Using a PC cord (3P7B cord) patch from the J1 jack to a DR__ jack.	
2	Operate the NT switch to the TEST position.	Mode A or Mode B lamps light.
3	Operate switch SW0 to the "1" position.	Mode A lamps light.
4	Enter the 2/5 coded Trunk Number on the Test Panel (switches SW1 thru SW20).	
5	Enter the 2/5 coded trunk Number on the Test Panel (switches SW21 thru SW40).	
6	Momentarily operate switch LD.	The START lamp lights. The Central Register lamps light in a 2/5 code corresponding to the switch settings.
7	If an error was made in setting switches SW1 thru SW40, momentarily operate switch CLR. Correct the switch settings and then momentarily reoperate switch LD.	The momentary operation of switch CLR extinguishes the lamps that were lighted in step 6. The momentary operation of switch LD gives the same observation as in step 6.
8	Operate switch TRAC to the ON position.	A simulated PBX Request is transmitted by the test circuit and received by the SI Circuit every .5 sec. Relays RR-, RSC-, LV-, HG-, RC-, DIS- in the DRC pulse. In the Test Circuit Relay SZR operates and Relay RC pulses. The Central Register lamps will blink in the 2/5 code for each PBX Request.
9	Restore switch TRAC to the OFF position. Disconnect the PC cord from both jacks. Restore switches SW0 and SW1 thru SW40 to the 0 position.	
10	Verify that the data was stored in the Memory by performing a RO or RI cycle.	

- 4.3 TDR Request
Continuous Simulated PBX Message transmission into the Digit Register.
- 4.31 The TDR Request bypasses the Digit Register Connector this allows verification and trouble shooting the Assembly Process without interference from the relays of the Digit Register Connector.
- 4.32 The following steps are required to perform a TDR Request.

STEP	OPERATION	OBSERVATION
1	Using the PC cord (3P7B cord) patch from jack DRT to jack RMB0 or 1.	RMB- lamp lights and RSC- relay operates.
2	Operate the NT switch to the TEST position.	Mode A or Mode B lamps light.
3	Operate switch SW0 to the 1 position.	Mode A lamps light.
4	Enter the 2/5 coded Trunk Number on the Test Panel (switches SW1 thru SW20)	
5	Enter the 2/5 coded Station Number on the Test Panel (switches SW21 thru SW40).	
6	Momentarily operate switch LD.	The START lamp lights. The Central Register lamps light in a 2/5 code corresponding to the switch settings.
7	If an error was made in setting switches SW1 thru SW40, momentarily operate switch CLR. Correct the switch settings and then momentarily reoperate switch LD.	The momentary operation of switch CLR extinguishes the lamps that were lighted in step 6. The momentary operation of switch LD gives the same observation as in step 6.
8	Operate switch TDR to the ON position.	Lamps of the Central Register maybe dimly lit. Relays SZR, RC in the Test Circuit operate. Control pulses for the Assembly Process can be checked.
9	Disconnect PC cord from both jacks. Restore switch TDR to the OFF position. Restore switches SW0 and SW1 thru SW40 to the 0 position.	If any of the Central Register lamps are lit, momentarily operate switch CLR to extinguish the lamps.
10	Verify that the data was stored in Memory by performing a RO or RW cycle.	

5. SIS INPUT/OUTPUT CHECKING

Three store operating modes can be tested utilizing the SIS Control Panel to write data into and read data out of Memory. A brief description of their use and a step-by-step procedure for each mode is given in the following paragraphs.

5.1 RO Mode

5.1.1 The RO store operating mode addresses the Memory location specified in the Address Register and then displays the contents of that location in the Data Register. This is a destructive readout of Memory, "0's" are left in the Memory location addressed.

5.1.2 The following steps are required to perform a RO cycle.

STEP	OPERATION	OBSERVATION
1	Operate switch NT to the TEST position.	Mode A or Mode B lamps light.
2	Verify that switch SW0 is in the 0 position.	Mode B lamps are lit.
3	Operate the Address Register switches in the abbreviated 2/5 code corresponding to the desired Trunk Number (operate switches SW4 thru SW16 to give the 4 digit 2/5 coded Trunk Number, refer to Table 3 for the switch settings for each digit).	
4	Momentarily operate switch LD.	Address Register lamps light in abbreviated 2/5 code corresponding to the switch settings SW4 thru SW16.
5	If an error was made in setting the switches, momentarily operate switch CLR. Correct the switch settings and then reoperate switch LD.	The momentary operation of switch CLR extinguishes the Address Register lamps. The momentary operation of switch LD gives the same observation as in step 4.
6	Momentarily operate switch RO.	The Address Register lamps light in abbreviated 2/5 code indicating the Memory location addressed. The Data Register lamps associated with switches SW21 thru SW36 light in abbreviated 2/5 code indicating the Station Number. Lamps L- and S- light in octal-binary code indicating the Data Trunk Number. Lamps P1 and P2 will light if they are required to maintain parity (refer to paragraph 3.25).
7	Momentarily operate switches CLR, LD and RO sequentially.	The Address Register lamps light in abbreviated 2/5 code indicating the Memory location addressed. No lamps light in the Data Register and 6C error code is printed.
8	Restore all SW- switches to the 0 position.	
9	Momentarily operate switch CLR.	Lamps of the Address Register and Data Register are extinguished.

5.2 RW Mode

5.21 The RW store operating mode addresses the Memory location specified in the Address Register and then displays the contents of that location in the Data Register. This is a non-destructive readout of Memory, the contents of the Memory location are left unchanged.

5.22 The following steps are required to perform a RW cycle.

STEP	OPERATION	OBSERVATION
1	Operate switch NT to the TEST position.	Mode A or Mode B lamps light.
2	Verify that switch SW0 is in the 0 position.	Mode B lamps are lit.
3	Operate the Address Register switches in the abbreviated 2/5 code corresponding to the desired Trunk Number (switches SW4 thru SW16).	
4	Momentarily operate switch LD.	Address Register lamps light in the abbreviated 2/5 code corresponding to the switch settings SW4 thru SW16.
5	If an error was made in setting the switches, momentarily operate switch CLR. Correct the switch settings and then reoperate switch LD.	The momentary operation of switch CLR extinguishes the Address Register lamps. The momentary operation of switch LD gives the same observation as in step 4.
6	Momentarily operated switch RW.	The Address Register lamps light in abbreviated 2/5 code indicating the Memory location addressed. The Data Register lamps associated with switches SW21 thru SW36 light in abbreviated 2/5 code indicating the Station Number. Lamps L- and S- light in octal-binary code indicating the Data Trunk Number. Lamps P1 and P2 will light if they are required to maintain parity.
7	Momentarily operate switches CLR, LD and RW sequentially.	Same observation as in step 6.
8	Restore all SW- switches to the 0 position.	
9	Momentarily operate switch CLR.	Lamps of the Address Register and Data Register are extinguished.

5.3 WO Mode

5.32 The following steps are required to perform a WO cycle.

5.31 The WO store operating mode is used to write the data specified in the Data Register into Memory at the location specified in the Address Register.

STEP	OPERATION	OBSERVATION
1	Operate the NT switch to the TEST position.	Mode A or Mode B lamps light.
2	Verify that switch SW0 is in the 0 position.	Mode B lamps are lit.
3	Operate the Address Register switches in the abbreviated 2/5 code corresponding to the desired Trunk Number (switches SW4 thru SW16).	
4	Operate the Data Register switches (SW21 thru SW36) in the abbreviated 2/5 code corresponding to the desired Station Number. Operate switches corresponding to lamps L- and S- in octal-binary code corresponding to the desired Data Trunk Number. Operate switch P1 if it is needed to maintain odd parity (odd number of 1 bits) over switches S4, S2, and S1. Operate switch P2 if it is needed to maintain odd parity over the Data Register.	
5	Momentarily operate switch LD.	Lamps of the Address Register and Data Register light corresponding to the switch settings of step 4.
6	If an error was made in setting the switches, momentarily operate switch CLR. Correct the switch settings and then momentarily reoperate switch LD.	The momentary operation of switch CLR extinguishes the Address Register and Data Register lamps. The momentary operation of switch LD gives the same observation as in step 5.
7	Momentarily operate switch WO.	Lamps of the Address Register and Data Register remain lit.
8	Restore all switches of the Data Register to the "0" position.	
9	Verify that the data was stored in Memory by momentarily operating switches CLR, LD and RW sequentially.	Verify that the Data Register contains the data loaded into the Data Register in step 4 (or step 6 if an error was made).
10	Restore the Address Register switches to the 0 position. Momentarily operate switch CLR.	The lamps of the Address Register and Data Register are extinguished.

6. PRINTER, TRAP AND TIMED SHUTDOWN

6.1 Printer

6.11 The printer provides a record of errors to enable trouble shooting and maintenance of the AIOD-A1 frame.

6.12 Printer Sequence 1 consists of a 2 digit error code followed by 14 status bits. Refer to TLM-1C005 for an explanation of the different formats and how to interpret the status bits.

6.13 Printer Sequence 2 consists of a two digit error code with no status bits. Refer to Section 275C for a list of the error codes and their meaning.

6.14 When a permanent error is detected by the SIT Circuit (Station Identification Test) the printer will print out seven error codes and then shutdown, lamp PSD lights. The RESET switch is provided to restore the printer to service, lamp PSD will be extinguished.

6.2 TRAP

6.21 If a request from a PBX is serviced and the Trunk Number transmitted is mutilated, the PBX Data Trunk Number will be held in the Trap Register for a minimum period of 25 seconds. The TRAP lamp will be lit during this period.

6.22 With the AIOD-A1 frame in the Trap state, Central Office Requests, requiring the trapped Data Trunk Number, will not be completed. Under this condition an alternate billing signal will be sent to the Central Office.

6.3 Timed Shutdown

6.31 If a mutilated Trunk Number is transmitted from a second PBX while the AIOD-A1 frame is in the Trap state, the AIOD-A1 frame will be go into a timed shutdown state. Lamp TSD will be lit during this period.

6.32 With the AIOD-A1 frame in the Timed Shutdown state, no Central Office Requests will be completed. An alternate billing signal will be sent to the Central Office each time a Central Office Request is attempted.

7. LOOP TESTS

7.1 Short Loop Around Test

7.11 Short Loop Around Tests are performed from the C.O. test frame used to test the ANI Outputers or the AMA Transverters.

7.12 The Short Loop Test is used to verify the switch board cabling between the C.O. ANI or AMA equipment and the AIOD Translator and between the AIOD Translator and the AIOD-A1 frame.

7.13 When performing a Short Loop Test a pulse (grd) is applied on the TST lead. With a pulse on the TST lead, the AIOD frame sends the Trunk Number back as the Station Number to the AIOD Translator. In addition, all of the OF- and OFU- Relays are operated in the AIOD Translator.

7.2 Long Loop Around Test

7.21 Like the Short Loop Test the Long Loop Test is performed from the C.O. test frame used to test the ANI Outputers or the AMA Transverters.

7.22 The Long Loop Test appears as a regular C.O. Request. i.e., The Trunk Number keyed in a. the C.O. test frame is used to interrogate the corresponding AIOD Memory location, the Station Number and switch and level are read out of Memory, and the Station Number and Office Index (refer to paragraph 3.243) are sent to the Outputer or Transverter.

7.23 To be able to read the Station Number and Switch and Level out of Memory they must first be written into Memory. This is accomplished by either performing a WO cycle or a TRAS Request using the same Trunk Number as will subsequently be used for the Long Loop Test.

8. ALTERNATE TREATMENT FOR CHANGED PBX TRUNK NUMBERS

- 8.1 The alternate treatment consists of a special sequence of operations to provide latitude for coordination between the C.O. and the PBX when Trunk Identification Numbers are changed.
- 8.2 If a PBX trunk equipment location at the C.O. is changed (e.g. from 0456 to 0789), then when billing information is required, the C.O. will request the billing information from the SI frame by addressing a new Memory location in the SI frame with the New Trunk Number (e.g. 0789). If the Trunk Identification Number at the PBX has not been changed, then PBX-ANI will continue to transmit station identification information for that trunk to the old Memory location which is addressed by the Old Trunk Number (e.g. 0456).
- 8.3 The special sequence of operations consists of writing the Old Trunk Number and a special "tag", Level 6 Switch 7, into the location addressed by the NEW Trunk Number. This is performed from the SIT Control Panel when the trunk equipment location in the C.O. is changed. When the C.O. seeks billing information by addressing the AIOD Memory with the New Trunk Number (e.g. 0789), the "tag" will alert the control circuit that the data found in the new Memory location (i.e. the Old Trunk Number, 0456) is to be used in readdressing the Memory at the Old Memory location where the Station Number has been stored.
- 8.4 After the necessary changes are made at the PBX, station identification information will be transmitted directly to the new Memory location and the "alternate treatment" instruction, which is no longer required, will be destroyed.

8.5

CAUTION:

When loading the Data Register with the Old Trunk Number and the "tag", 67, the thousands digit used for the Old Trunk Number depends on cross-connections. Refer to Table 8 for the digit to be used as the Old Trunk Number thousands digit.

Ex. If terminal TKTII is cross-connected to TK4 and the thousands digit is a 1, 2, 3, 7, 8 or a 9, the digit 4 should be loaded as the thousands digit.

TABLE 8

Cross Connection	OLD TRUNK NUMBER	
	For Thousands Digit	Use as Thousands Digit
TKTH-TK7	1, 2, 3, 4, 5, 6	4
	7, 8, 9, 0	7
TKTH-TK4	1, 2, 3, 7, 8, 9	4
	4, 5, 6, 0	7
TKTH-TK2	1, 4, 5, 7, 8, 0	4
	2, 3, 6, 9	7
TKTH-TK1	2, 4, 6, 7, 9, 0	4
	1, 3, 5, 8	7
TKTH-TK0	3, 5, 6, 8, 9, 0	4
	1, 2, 4, 7	7

8.6

If the Trunk Number is changed at the PBX-ANI prior to being changed at the C.O., the above sequence is reversed, interchange New Trunk Number, with Old Trunk Number in steps 8.1 thru 8.3.

→ Because the format was changed Arrows, normally used, are omitted.

Manager, Common Systems, Panel and Step-by-Step PECC

ATTACHMENTS
Figure 1

Reason for Reissue:
To make minor corrections, to provide additional information, and to change the format.

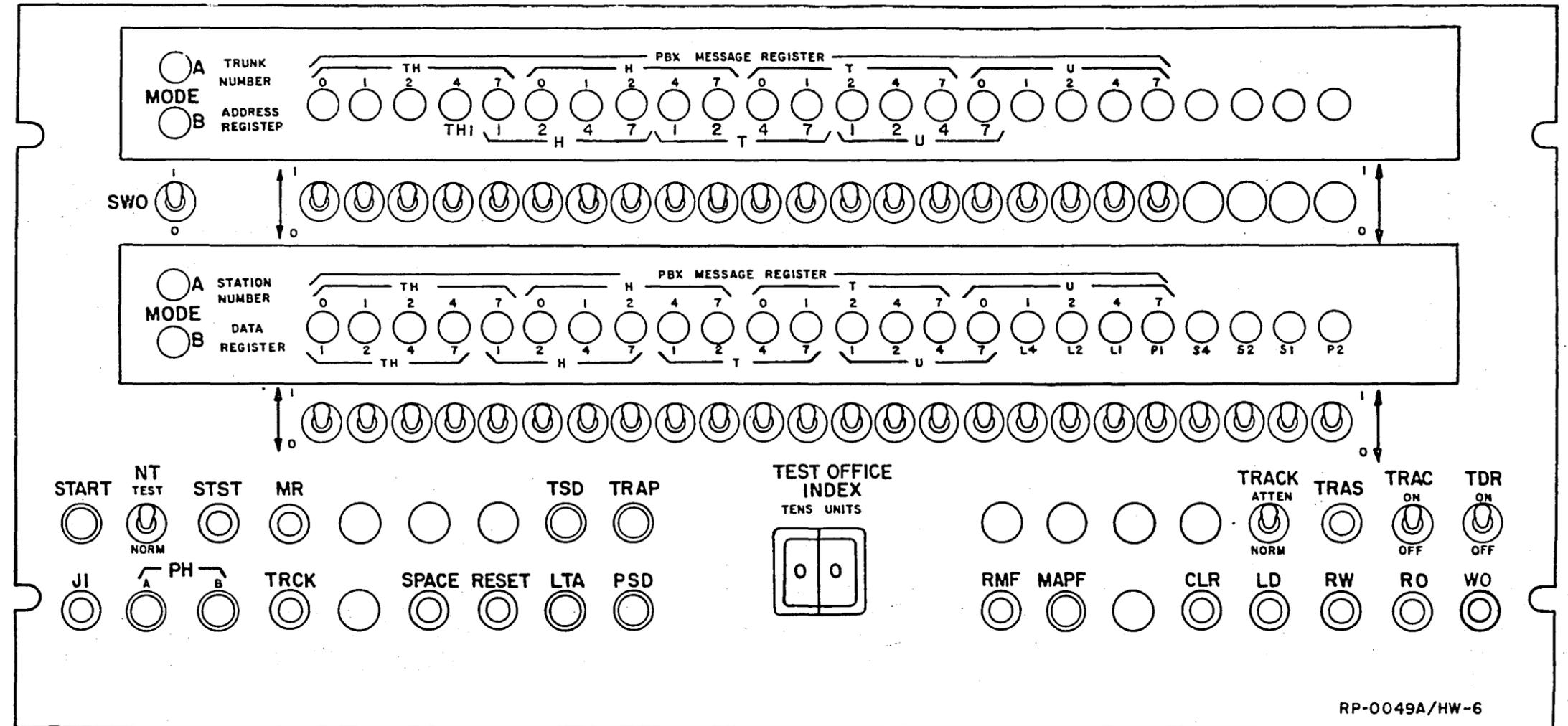


FIGURE 1: STATION IDENTIFICATION TEST CONTROL PANEL