

5000A TRANSACTION III TERMINAL SET —WITH OR WITHOUT 5000A PRINTER

1. GENERAL

1.01 This section contains identification, installation, testing, and maintenance information for the Transaction III terminal set. It also contains information on the 5000A printer as used with this set. For detailed information on the terminal set, refer to CD- and SD-69945-01. For detailed information on the 5000A printer, refer to CD- and SD-69949-01.

1.02 This section is reissued to:

- Add information on the 5000A printer
- Add Personal Identification Number (PIN) option using manual entry pad
- Add information on 5000D or 5000F dials available as auxiliary manual entry pads.

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

1.03 For additional information on the Transaction Network Service (TNS) see Bell System Data Communication Technical Reference, PUB 41024, titled "Transaction Network Service" and Bell System Technical Reference, PUB 41025, titled "Transaction Network Service Polled Interface Specifications."

2. IDENTIFICATION

2.01 The 5000A Transaction III terminal set (Fig. 1) satisfies the interface requirements of the polled access circuits of the Transaction Network Service. It may be used to perform transactions such as credit authorization, check verification, inventory control, or electronic funds transfer.

2.02 *Design Features:*

- Magnetic stripe card reader (ABA Track 2)
- Click-disc type 19-button pad
- Operating instruction lamps [light emitting diodes (LED)]
- Transaction progress indicator lamps (LED)
- Four response lamps (LED)
- Frequency-shift key (FSK) modem
- A 128 character text message length
- An 8-digit numeric display with paging capabilities.

2.03 *Optional Features:*

- (a) A 5000A printer may be connected to provide a printed response from the data center.
- (b) The capability of entering a Personal Identification Number (PIN) during a transaction to positively identify an account. This may be accomplished by one of the following:
 - Activating the manual entry pad PIN option
 - Connecting an auxiliary manual entry pad consisting of a 5000B, D, or F dial (Fig. 8)

2.04 The 5000A Transaction III terminal set is available in Ivory (-50) only. These terminal sets will be shipped with a disposable protective faceplate, so it will be necessary to order the proper faceplate separately (Table A).

NOTICE

Not for use or disclosure outside the
Bell System except under written agreement

Printed in U.S.A.

Page 1

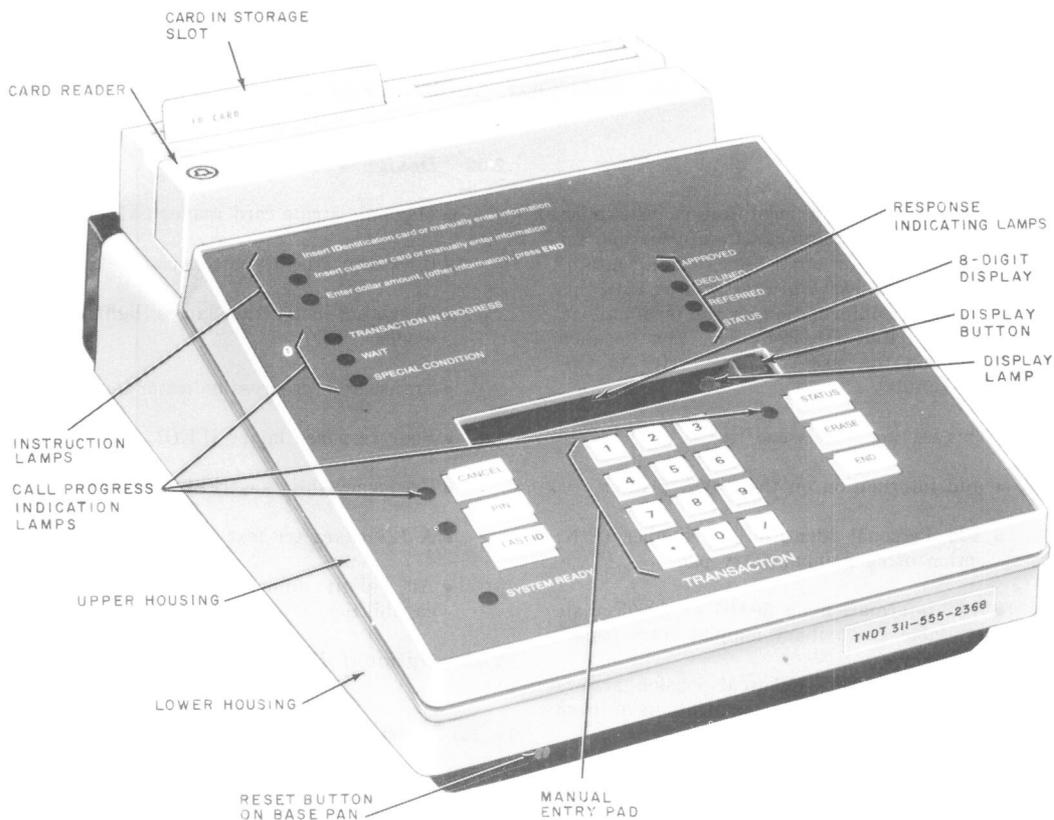


Fig. 1—5000A Transaction III Terminal Set

2.05 Ordering Guide:

(a) The 5000A Transaction III terminal set consists of all the necessary circuitry including power unit and card reader and should be ordered as:

- Set, Terminal, 5000A, Transaction III, includes the following: Cord, Mounting, D4BT-87 (7-foot provided, 14- or 25-foot cords are optional and may be ordered separately) and Test Card C.

(b) Faceplate, 139-type (Table A), ordered separately

(c) If an auxiliary manual entry pad is to be used, it will be necessary to order one of the following:

- Dial, 5000B, includes 5-foot M19A cord
- Dial, 5000D, includes 10-foot M19A cord
- Kit of Parts, D-180822, includes 5000F dial with 20-foot M19A cord and a KS-21884L3 (A52D7PC) Read Only Memory (ROM) or integrated circuit package.

TABLE A
TRANSACTION III
FACEPLATE ORDERING GUIDE

FACEPLATE CODE		COLOR GUIDE	
139A-* LETTERING	139B-* LETTERING	SUFFIX	COLOR
Standard Instruction	Blank	-100	Avocado
		-108	Teak
		-109	Walnut
		-111	Gold
		-112	Orange
		-113	Brown
		-114	Red
		-115	Blue
		-118	Black

*Add appropriate color suffix.

(d) If a 5000A printer is to be provided, it must be ordered separately and will be shipped with the following items:

- Cord, M14H, to interconnect with 5000A terminal set, (3-foot provided, 10-foot available)
- Housing Spacer, to be used when 5000A terminal set is placed on top of printer (Fig. 10)
- Test Cards D and E. (Test Card D is provided for use with the 5100BM Transaction set and will not be used with this terminal.)
- Cord, Power, KS-14532L30, 6-foot long

Note: Power cords with right angle plugs are available in other lengths as follows:

824013262 (P-40J326) 1-1/2 foot

824013270 (P-40J327) 2 foot

824013288 (P-40J328) 4 foot

824013296 (P-40J329) 6 foot

824010995 (P-40J099) 12 foot

3. INSTALLATION

3.01 Verify that a Transaction Network polled access line has been installed and terminated in a 150A Channel Service Unit (CSU) Fig. 2.

Note: The mounting cord of the 5000A terminal set must connect directly with a 150A CSU which has been tested and the attenuator switches set for the correct signal level. For installation and testing of the CSU, refer to Section 590-101-000.

3.02 Secure the **J-hook** (Fig. 2) of the D4BT mounting cord into the baseplate of the CSU and terminate as follows:

- (1) Feed end of mounting cord under printed wiring board (PWB) to opposite side of CSU.
- (2) Terminate tip (G) and ring (R) cord conductors to CT and CR screw terminals, respectively, of CSU.
- (3) Insulate and store the (Y) and (BK) mounting cord leads so they will not interfere with wiring components of the CSU.

3.03 To open the 5000A terminal set, proceed as follows:

- (1) Invert set and loosen the two captive screws holding the upper housing and chassis.
- (2) Lay the upper housing and chassis to the right, as shown by Fig. 3 without disconnecting any cables.

3.04 The Terminal Identification (TID) for the terminal being installed (number is on the service order) should now be set on the terminal identification switches (Fig. 3). The 4 digits of the TID are set by closing the appropriate rocker-switches in each digit group which have values of 1, 2, 4, and 8 counting from left to right. If front side of rocker switch is depressed, the switch will close and the horizontal mark across the bar is not visible. If rear side of rocker switch is depressed, the switch will open and the horizontal mark across the bar is visible. Only closed switches produce a 1, 2, 4, or 8 (counting left to right) or a combination thereof. See Fig. 4 for example of switches coded for TID No. 5874.

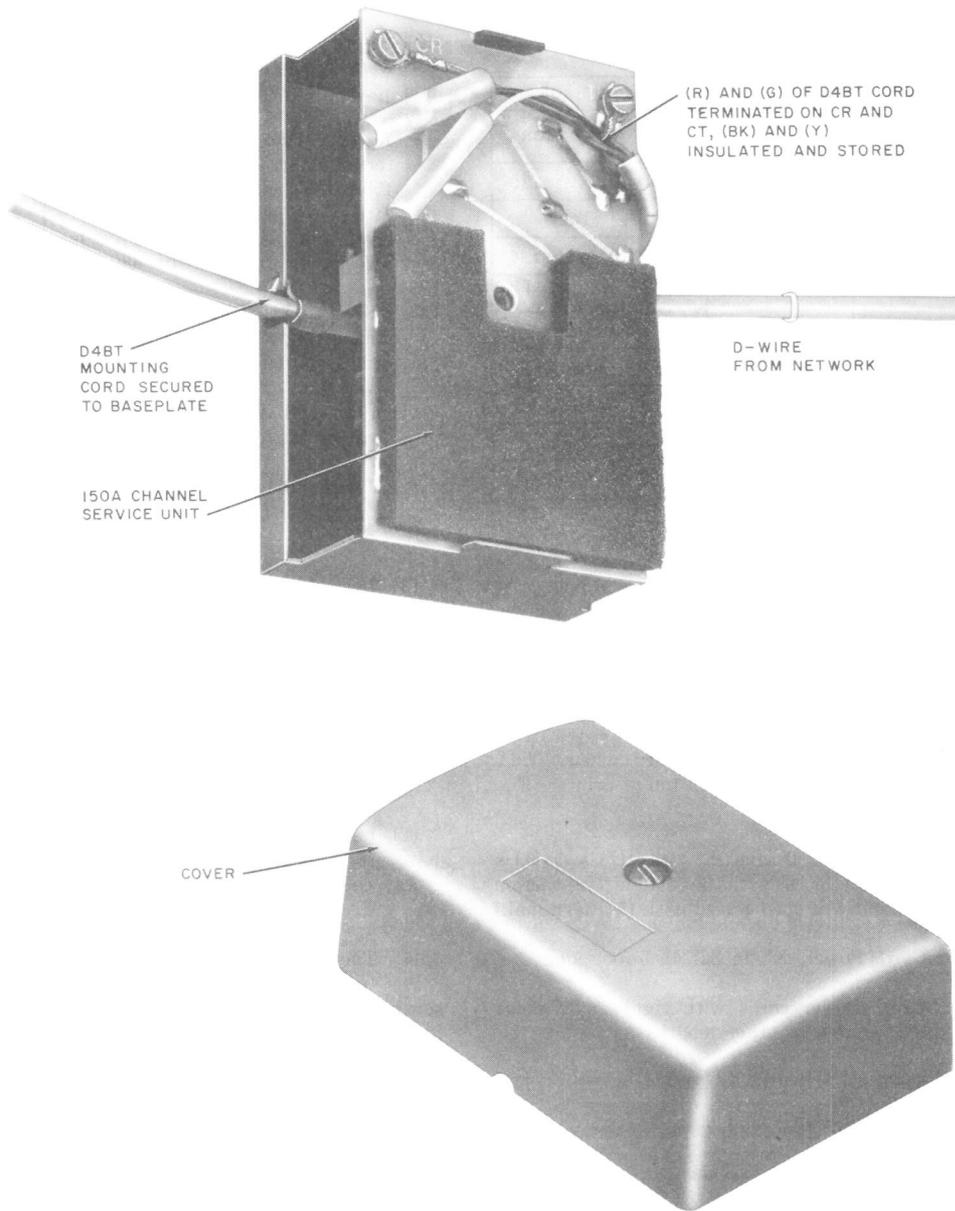


Fig. 2—150A Channel Service Unit Showing Connection of Transaction III Terminal Set

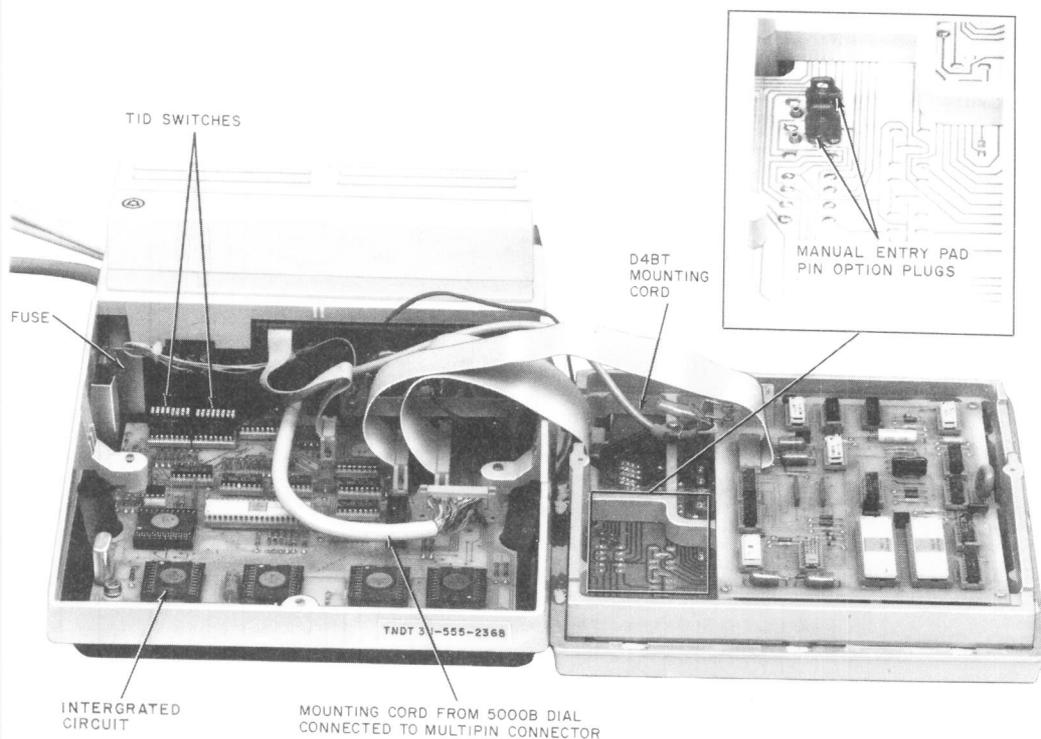


Fig. 3—5000A Transaction III Terminal Set With Upper Housing and Chassis Laid Aside — 5000B, D, or F Dial Connected

Note: The TID number should be displayed in the number card holder on the set, both for future reference and for the subscriber's use. (Early production models may only have a gummed label on front of the lower housing. Write number on label.)



Options A and B cannot be provided on the same set simultaneously.

OPTIONS

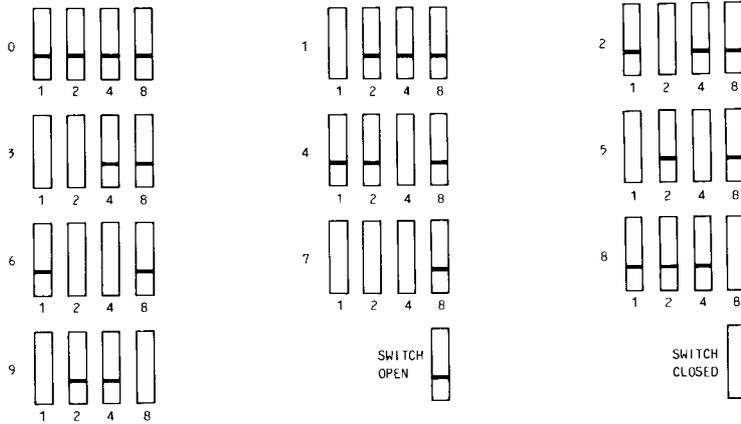
A. Personal Identification Number (PIN) Provided from Manual Entry Pad on 5000A Terminal Set (Fig. 1)

3.05 To provide this manual entry pad PIN option, move the two option plugs shown in Fig. 3 to the two left pin positions.

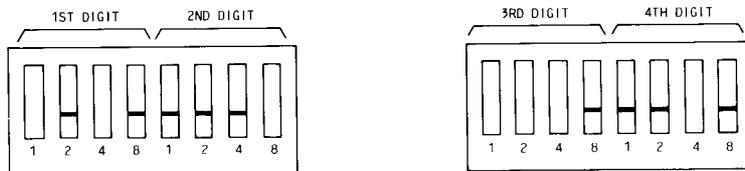
B. Personal Identification Number (PIN) (Provided by the Addition of an Auxiliary Entry Pad (Fig. 8)

3.06 To provide this option, proceed as follows:

- (1) Verify that manual entry pad PIN option plugs are in the right pin positions as shown by the insert of Fig. 3.
- (2) Hold the lower housing up on its side and feed the mounting cord of the 5000B, D, or



A. SWITCH SETTINGS FOR EACH DIGIT, 0 THRU 9



B. EXAMPLE OF TID SWITCHES SET FOR 5874

Fig. 4—Terminal Identification (TID) Switches

F dial through the cord entrance hole in the base pan.

(3) Plug multipin connector of dial mounting cord into receptacle on main printed wiring board (PWB) Fig. 3. (Cord should extend toward the front of the set when connector is correctly oriented.)

(4) If a 5000F dial is being used, the A52D7PC intergrated circuit provided with the D-180822 Kit of Parts must be installed in place of the A52D7PB circuit on the main printed wiring board, (Fig. 3). Carefully pry up the edge of the existing intergrated circuit package and lift it out. When properly oriented the new circuit package may be plugged in.

Note: Be sure that the intergrated circuit being replaced is a A52D7PB.



Options A and B cannot be provided on the same set simultaneously.

C. 5000A Printer

3.07 If a 5000A printer is to be provided, the end of the M14H printer interconnect cord not equipped with a cord stay hook should now be connected as follows:

- (1) Hold the lower housing of the 5000A terminal set on its side and feed the end of the

M14H cord through the cord entrance hole in the base pan.

(2) Plug the connector of the M14H cord into receptacle on main printed wiring board (PWB) Fig. 6. The connector is keyed and should not be forced.

3.08 Close terminal set as follows:

(1) Pull excessive slack out of adjunct cord(s) as upper housing and chassis are replaced. Invert set and tighten captive screws holding the upper and lower housing together.

(2) Place jacketed portion of cord(s) under strain relief along with terminal set mounting cord which is shown in Fig. 5.

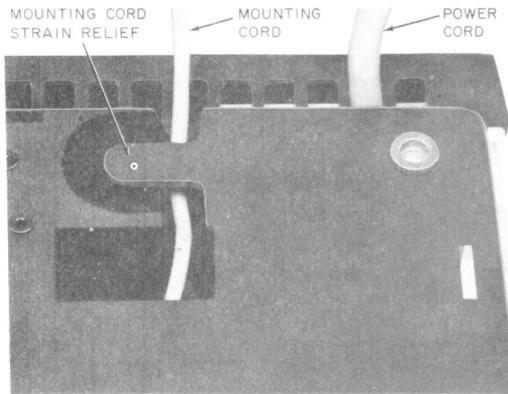


Fig. 5—Partial Bottom View of 5000A Terminal Set Showing Mounting Cord Strain Relief

3.09 Remove the disposable faceplate by lifting at the midpoints of the left and right edges. Install new faceplate by inserting bottom tab into housing and then lower faceplate onto adhesive pads.

Note: Verify that static arrester spring (Fig. 7) at upper right corner has not been distorted. It must make contact with bottom of metallic faceplate.

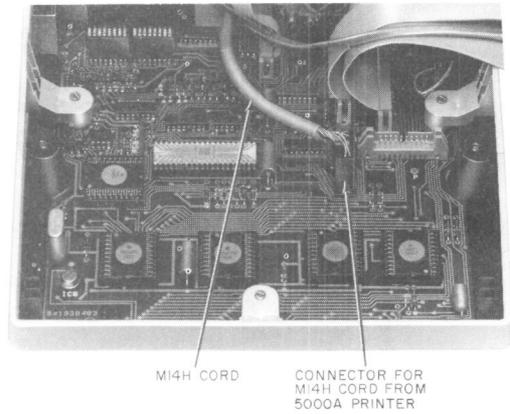


Fig. 6—5000A Terminal Set Main PWB with 5000A Printer Connected

3.10 Verify that there is an available 117-volt, 3-wire ac receptacle, not controlled by a switch, within reach of the 6-foot power cord.



A 3-wire outlet is required for safety and proper operation of the set. The third conductor must be grounded.

3.11 To install a 5000A printer with 5000A terminal set located on printer (Fig. 9), proceed as follows:

(1) Remove back cover from printer by removing the four screws holding the cover in place (Fig. 10).

(2) Turn printer onto either side. Connect the M14H cord from the 5000A terminal set by plugging the keyed connector into bottom of the printer and secure the strain relief using the screw provided (Fig. 11).

(3) Connect end of printer power cord into recessed power receptacle in the bottom of the printer (Fig. 11) and place printer upright. **Do not connect cord to ac outlet at this time.**

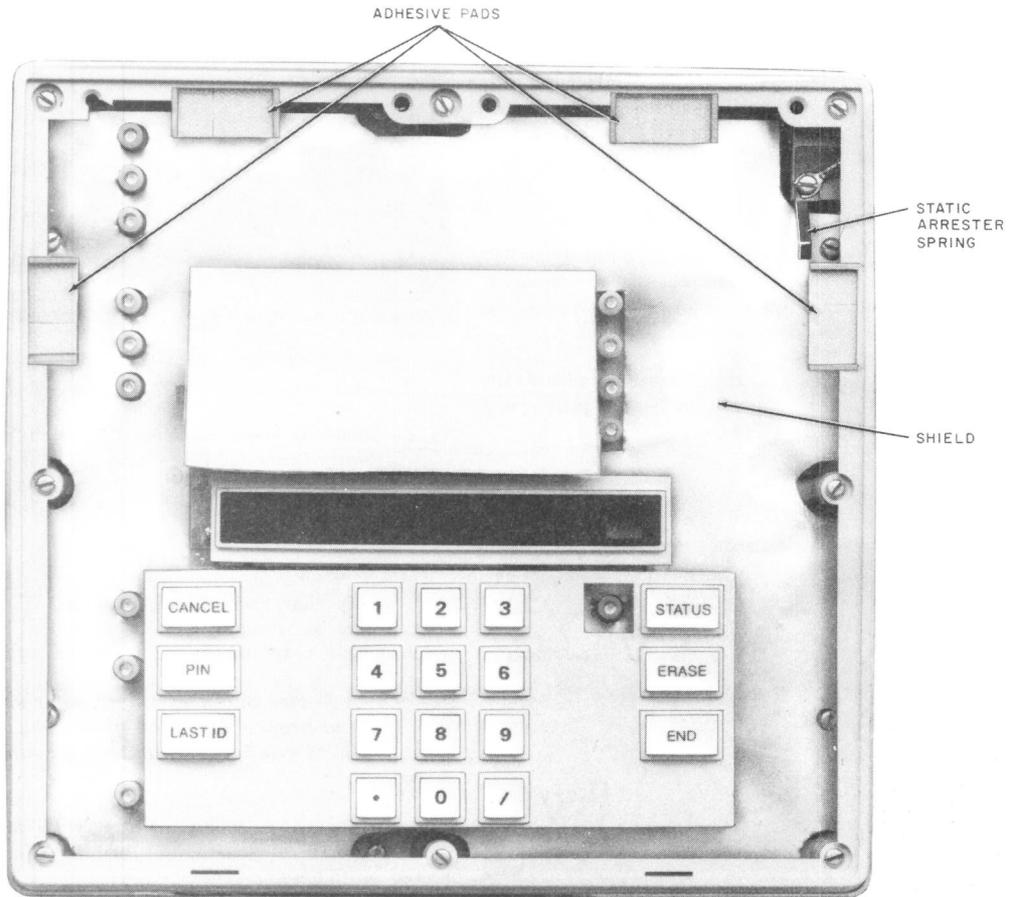


Fig. 7—5000A Transaction III Terminal Set With Faceplate Removed

(4) Place housing spacer, provided with printer, onto the printer (Fig. 10) and place the 5000A terminal set on top of the spacer.

(5) Plug 5000A terminal power cord into receptacle in rear of printer and wind the M14H and the 5000A terminal power cord around the cord storage spools at the rear of the printer (Fig. 12).

(6) Dress mounting cord(s) through the slots provided in rear of printer and replace back cover. Proceed to 3.13.

3.12 To install a 5000A printer adjacent to the 5000A terminal set, proceed as follows:

(1) Remove back cover from printer [3.11(1)] and remove cover insert from the stored location above the spools in rear of the printer. Slide the insert into the top of the back cover and replace storage screw in printer.

(2) Connect the M14H cord to the printer and connect the printer power cord to the printer [3.11 (2) and (3)].

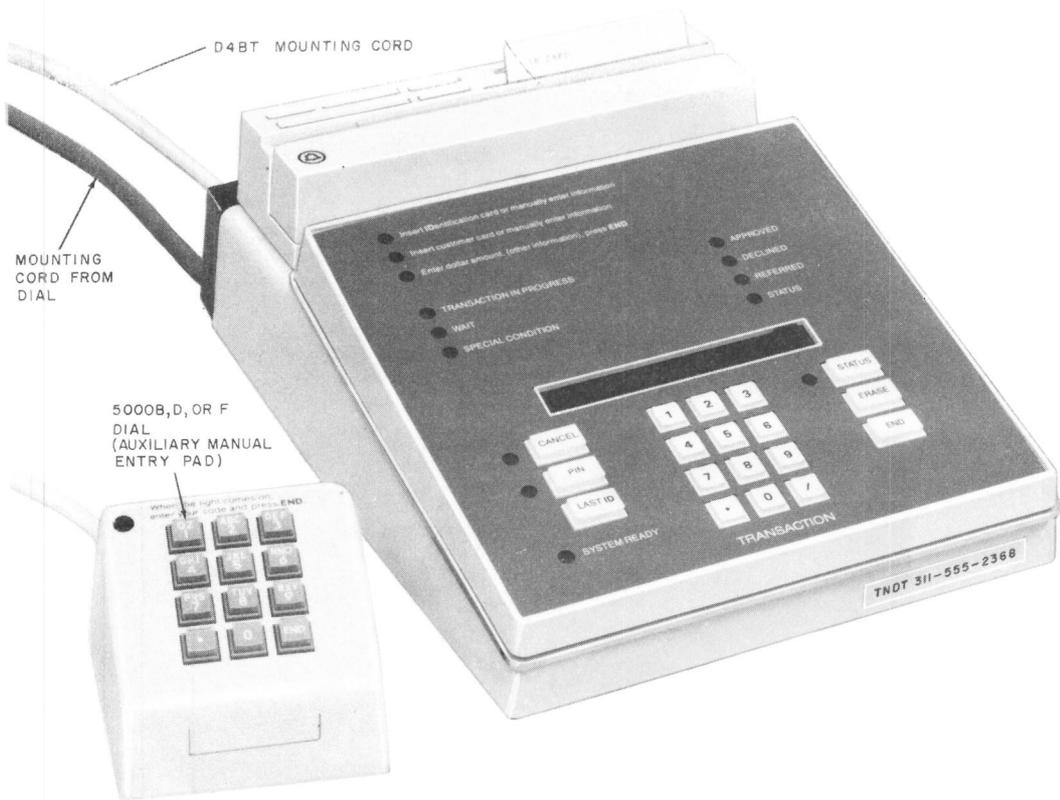


Fig. 8—5000A Transaction III Terminal Set With 5000B, D, or F Dial Installed

(3) The power cord of the 5000A terminal set may be connected to the power receptacle inside the printer or the two power cords may be run to separate ac receptacles. **Do not connect to ac power at this time.** If 5000A terminal set power cord is connected to printer receptacle, dress the cord through slot provided in rear of printer and replace back cover.

- 3.13 Connect power cord(s) to ac outlet and verify that the first instruction light is on and the

SYSTEM READY light is on. The blinking of the SYSTEM READY lamp indicates that the line is connected to the Transaction Network and that it is being polled.

Note: If no lamps light when power cord is connected, either ac receptacle is defective or fuses may be open. If fuses are suspected, refer to 5.02 and 5.03 in Part 5, Maintenance.

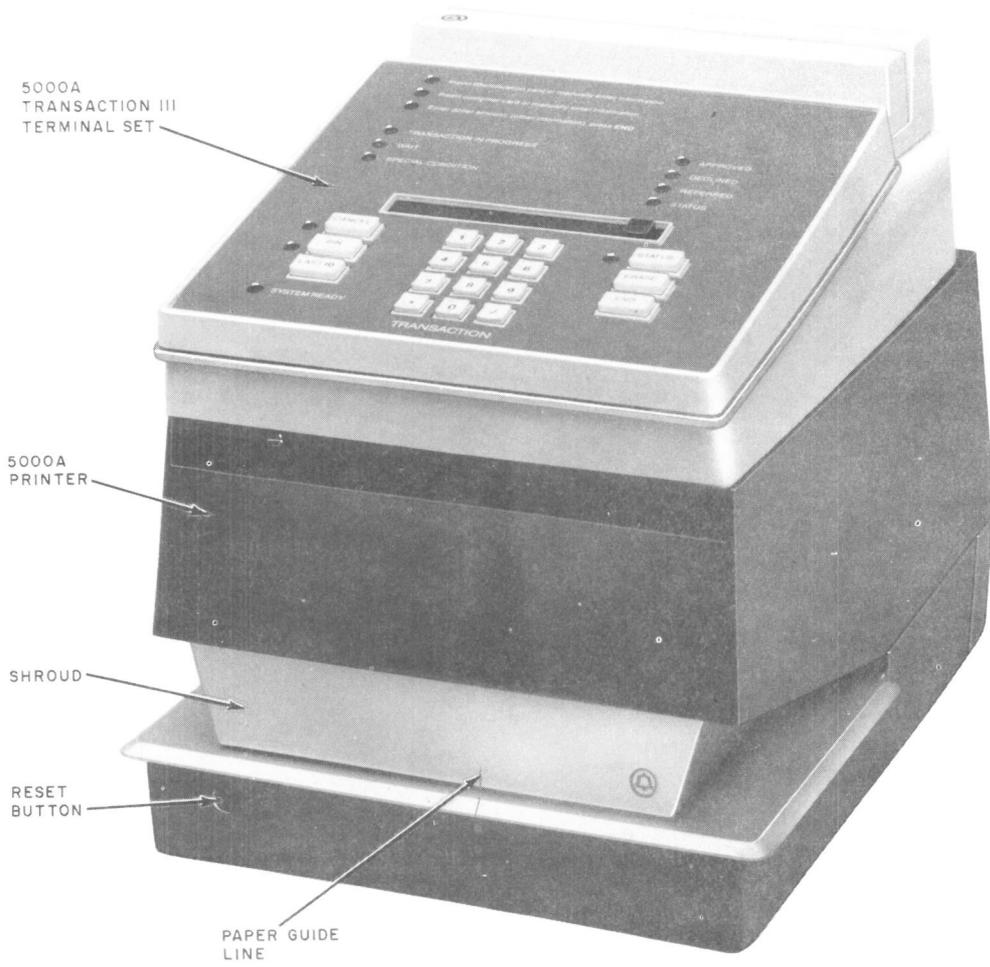


Fig. 9—5000A Transaction III Terminal Set Installed on 5000A Printer

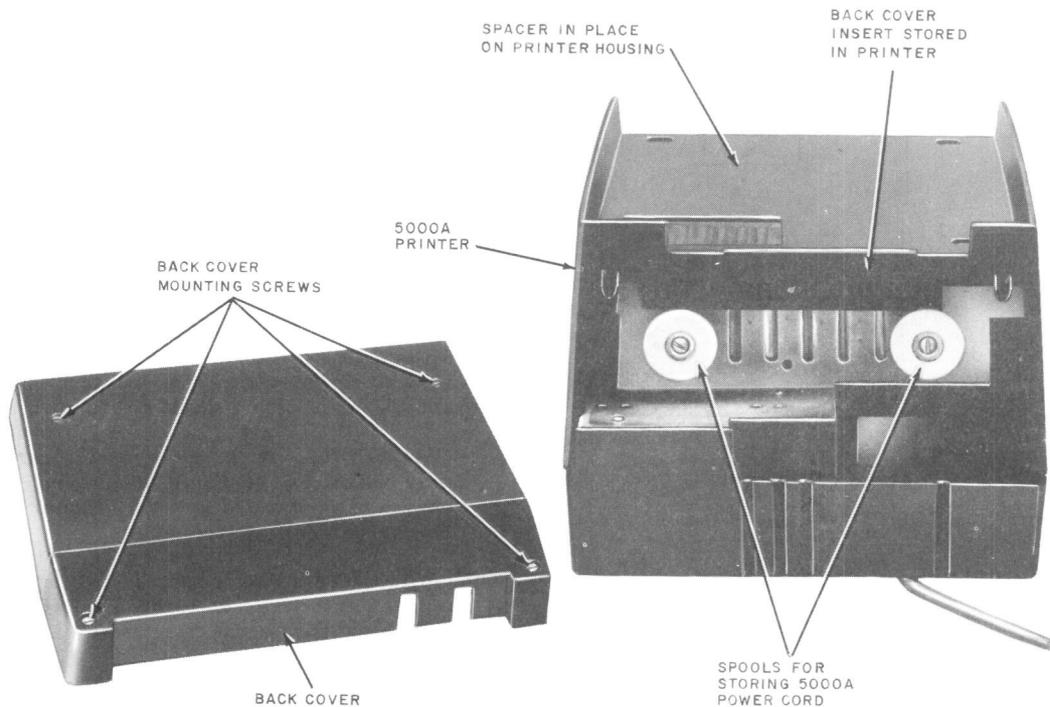


Fig. 10—5000A Printer With Back Cover Removed

4. TESTING



The following test procedures are designed to test all functions of the 5000A terminal set and associated equipment. A condensed format of the test procedures may be found at the end of this part.

Note: If a 5000A printer is being provided, have an 8-1/2 by 11 inch sheet of paper available before beginning test, but do not insert paper into printer.

4.01 The following are test sequences required to determined if the Transaction III terminal set (and printer, if provided) is operational.

Note: Any step that fails during the test means the test has failed. Repeat test before proceeding to the maintenance section.

4.02 Depress and hold RESET button momentarily. The SYSTEM READY lamp should go off and stay off as long as RESET button is held down.

4.03 Release RESET button. The first instruction lamp should be on. SYSTEM READY lamp should be on and blinking. This may be considered to be the **initial state** of the terminal. If SYSTEM READY lamp is lighted but not blinking, it could indicate any of the following:

- (a) Terminal set not connected to network.
- (b) Trouble with Transaction Network or some component.

Note: If network failure is suspected, call the Transaction Network Customer Service Bureau.

- (c) Trouble with the terminal set itself.

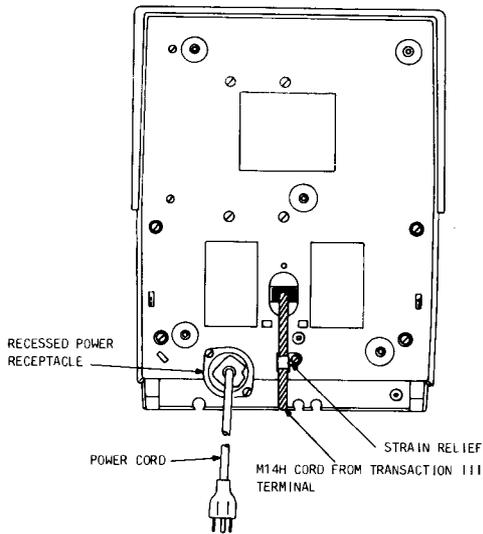


Fig. 11—Bottom View of 5000A Printer

4.04 Verify TID by simultaneously depressing the RESET and END buttons. Release RESET button while holding END. The TID should appear on visual display.

Note: If the rocker switches associated with a digit are operated improperly, so that a number greater than a nine (9) is indicated, it will appear on the display as a dash (-) or invalid number.

If incorrect TID appears on display, disconnect power cord, open terminal (3.03), reset TID (3.04), and retest. If correct TID is displayed, depress RESET button to return terminal to its initial state.

4.05 Depress the 8 button eight times and the display shall be filled with 8's. Depress the ● (decimal point) button eight times and the display shall be filled with ●'s.

TEST PROCEDURE FOR 5000A TERMINAL WITHOUT PRINTER (TEST A)

4.06 Depress RESET button and release. Pass test card C (card is packed with 5000A terminal) through the card reader from right to left. Card must be held with the magnetic stripe down and to the front and must be moved through the slot smoothly and without hesitation. First instruction lamp should go out and second instruction lamp should light. Pass the test card through the reader a second time and the instruction lamps should sequence again. Correct operation of these lamps indicates that the test card is properly coded and the card reader is good. If the card is not read correctly an instruction lamp will blink and the card reading procedure should be repeated.

WARNING: Any magnetic stripe card may have its encoding destroyed if the card is carried or stored near a magnet or magnetized object.

4.07 With third instruction lamp lighted, key in digits, *in sequence*, 1 through 9, ●, 0, and / (slash) on the manual entry pad.

4.08 Depress END button on terminal set and observe that TRANSACTION IN PROGRESS (TIP) lamp will light briefly. Observe that all response lamps including WAIT are on and the DISPLAY lamp (arrow toward right side of visual display) is blinking. The display will show ● 2-999-0.

Note: If *Error 01* appear on display, possible problems may be:

- Incorrect TID number on service order
- Connected to wrong line.

4.09 Depress DISPLAY button and display will show 1 2 3 4 5 6.

4.10 Depress DISPLAY button again and display will now show 1 2 3 4 5 6 7 8.

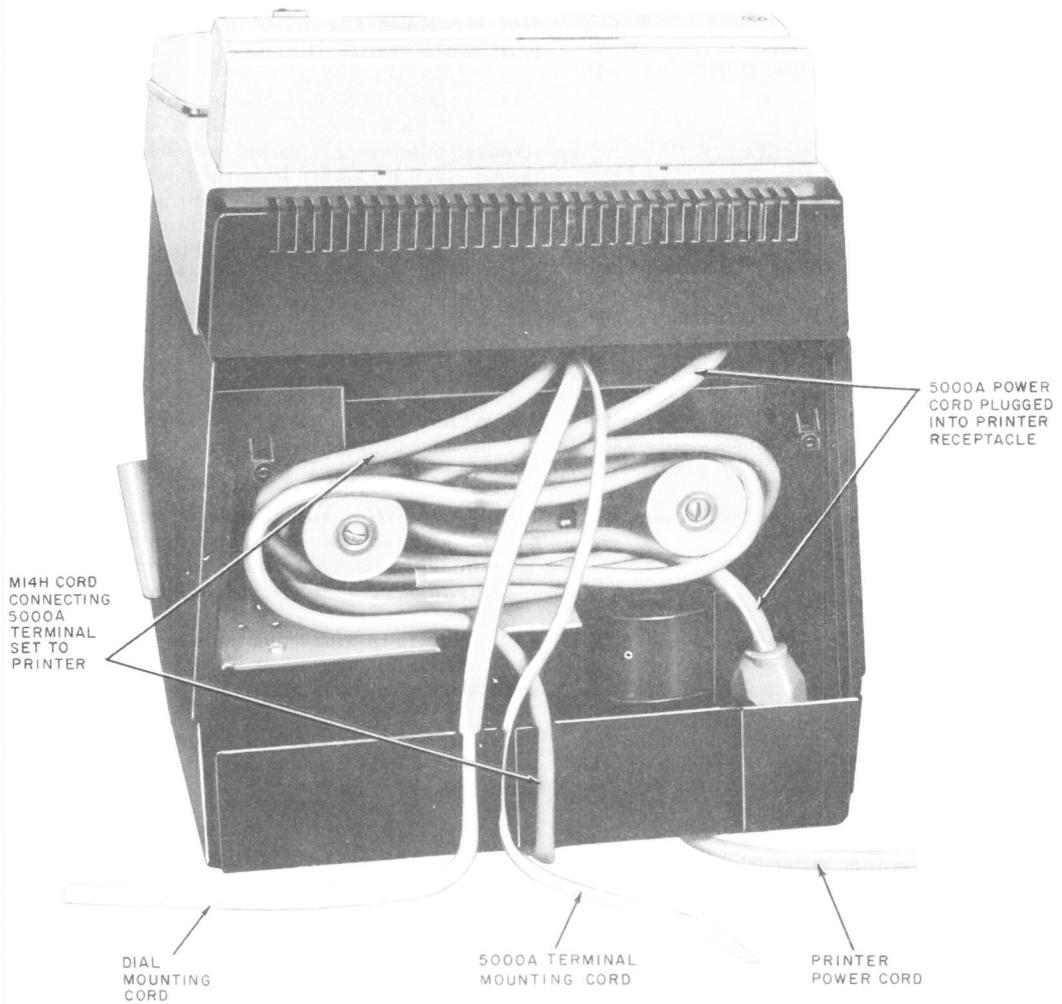


Fig. 12—5000A Terminal Shown Installed on 5000A Printer — Printer Cover Removed to Show Cord Storage

4.11 Depress DISPLAY button again. Verify that display now shows 9●0-. Display lamp (blinking arrow) will now be extinguished. If no provision has been made for a PIN pad, proceed to 4.13.

4.12 If PIN option A (3.05) or B (3.06) has been provided, test the appropriate pad as follows:

(1) Depress RESET button and run test card C through the card reader from right to left. Card must be held with the magnetic stripe down and to the front and must be moved through the slot smoothly and without hesitation. First instruction lamp should go out and second instruction lamp should light. Pass the test card through the reader a second time and the instruction lamps should sequence again.

(2) Depress PIN button and observe that PIN lamp on set and the Light Emitting Diode (LED) on the auxiliary dial (if used) are both lighted.

(3) Key in digits, in sequence, 1 through 9, ●, 0, and END on the auxiliary manual entry pad (if used), or on the manual entry pad of the set. Each entry will appear on the display as a letter "P". The PIN lamp and the LED on the auxiliary dial will now be extinguished.

(4) Depress END button on terminal set and observe that TRANSACTION IN PROGRESS (TPI) lamp will light briefly. Observe that all response lamps including WAIT are on and the DISPLAY lamp (arrow toward right side of visual display) is blinking. The display will show ● 2-999-0.

(5) Depress DISPLAY button and display will show 1 2 3 4 5 6.

(6) Depress DISPLAY button again and display will now show 1 2 3 4 5 6 7 8.

(7) Depress DISPLAY button again and verify that display shows 9 ● 0. Display lamp (blinking arrow) will now be extinguished.

4.13 Depress STATUS button and observe that all response lamps are extinguished, the visual display is now clear and that the STATUS button lamp lights.

4.14 Depress ERASE button and the STATUS lamp will be extinguished.

4.15 Depress CANCEL button. Observe that the CANCEL button lamp lights and TRANSACTION IN PROGRESS lamp will light briefly. After CANCEL lamp goes out, (● 2-999-0 will have appeared on the visual display), depress RESET button to restore terminal set to its initial state.

4.16 Depress LAST ID button and observe that SPECIAL CONDITION lamp is blinking. Display will show **Error 04**.

4.17 Depress CANCEL button and set is restored to its initial state. Proceed to 4.32.

TEST PROCEDURE FOR 5000A TERMINAL SET USED WITH 5000A PRINTER (TEST B)

4.18 Depress RESET button and release. Pass test card C (card is packed with 5000A terminal) or test card E (packed with 5000A printer) through the card reader from right to left. Card must be held with the magnetic stripe down and to the front and must be moved through the slot smoothly and without hesitation. First instruction lamp should go out and second instruction lamp should light. Pass the test card through the reader a second time and the instruction lamps should sequence again.

Note: Test card D (also packed with 5000A printer) will not be used with this terminal.

WARNING: Any magnetic stripe card may have its encoding destroyed if the card is carried or stored near a magnet or magnetized object.

4.19 With third instruction lamp lighted, key in digits, **in sequence**, 1 through 9, ●, 0, and / (slash) on the manual entry pad.

4.20 Depress END button on 5000A terminal set. The display should show PAPER. Insert paper into the printer.

Note: Paper may be inserted from the front or from the right side. Position paper so that back of paper is against the paper guide and the left side lines up with the paper guide line on the shroud (Fig. 9).

4.21 The display will show PUSH End. Depress the END button. The printer will clamp the paper at this time.

4.22 Observe that TRANSACTION IN PROGRESS (TIP) lamp will light briefly. Then observe that all response lamps, and WAIT lamp, are on and the display lamp (arrow on right side of visual display) is blinking. The display will show ●

Note: If **Error 01** appears on display, possible problems may be:

- Incorrect TID number on service order
- Connected to wrong line.

4.23 Depress DISPLAY button and display will show 1 2 3 4 5 6. Printer will be heard to operate. Do not remove paper. If no provision has been made for a PIN pad, proceed to 4.25.

4.24 If PIN option A (3.05) or B (3.06) has been provided, test the appropriate pad as follows:

(1) Depress RESET button and run test card C or E through the card reader from right to left. Card must be held with the magnetic stripe down and to the front and must be moved through the slot smoothly and without hesitation. First instruction lamp should go out and second instruction lamp should light. Pass the test card through the reader a second time and the instruction lamps should sequence again.

(2) Depress PIN button and observe that PIN lamp on set and the Light Emitting Diode (LED) on the auxiliary dial (if used) are both lighted.

(3) Key in digits, in sequence, 1 through 9, ●, 0, and END on the auxiliary manual entry pad (if used) or on the manual entry pad on the set. Each entry will appear on the display as a letter "P". The PIN lamp and the LED on the auxiliary dial will now be extinguished.

(4) Depress END button terminal set and observe that TRANSACTION IN PROGRESS (TIP) lamp will light briefly. Observe that all response lamps including WAIT are on and the DISPLAY lamp (arrow toward right side of visual display) is blinking. The display will show ● 2-999-0.

(5) Depress DISPLAY button and display will show 1 2 3 4 5 6. Printer will operate again.

4.25 Depress STATUS button and observe that all response lamps are extinguished, the visual display is now clear and that the STATUS button lamp lights.

4.26 Depress ERASE button and the STATUS lamp will be extinguished.

4.27 Depress CANCEL button. Observe that CANCEL button lamp lights and TIP lamp will light briefly. After CANCEL button lamp goes out, the response lamps will light and the display will show ● 2-999-0.

4.28 Depress DISPLAY button. Display will show 1 2 3 4 5 6 and printer will operate again.

4.29 Depress RESET button to restore terminal to its initial state. Remove paper from printer. If PIN option has been provided, printing should read:

1 2 3 4 5 6 7 8 9 < 0 =

1 2 3 4 5 6 7 8 9 < 0

1 2 3 4 5 6 7 8 9 < 0

If no PIN capability has been provided, printing should read:

1 2 3 4 5 6 7 8 9 < 0 =

1 2 3 4 5 6 7 8 9 < 0 =

4.30 Depress LAST ID button and observe that SPECIAL CONDITION lamp is blinking. Display will show **Error 04**.

4.31 Depress CANCEL button and set is restored to its initial state.

4.32 This completes the test procedures. Give test card to customer along with the How To Operate Manual. Explain to the customer the use of the test card per the How To Operate Manual.

Note: If no printer has been installed, leave test card C. If a 5000A printer has been provided, leave test card E which is provided with the printer. Both test cards have the same data on their magnetic stripes, only the testing instructions on the cards are different. If test card E is being provided, the validity of the card should be checked by the procedure given in 4.06 using test card E instead of test card C.

TEST A (SEE NOTE)

5000A TRANSACTION III TERMINAL SET

STEP	ACTION	VERIFICATION
1	Depress RESET and release, Pass test card thru reader.	1st lamp out --2nd lamp lights
2	Pass card thru reader again	2nd lamp out --3rd lamp lights
3	Key 1 thru 9, ●, 0, and / on manual entry pad, Depress END	TIP lamp lights briefly, Response lamps and WAIT are on, Display lamp blinking, Display shows ● 2-999-0
4	Depress DISPLAY button	Display shows 1 2 3 4 5 6
5	Depress DISPLAY button	Display shows 1 2 3 4 5 6 7 8
6	Depress DISPLAY button	Display shows 9●0- Display lamp extinguished
If PIN capability is not provided, proceed to Step 14.		
7	Depress RESET and pass test card thru reader 2 times.	Lamps sequence as above, 3rd lamp lighted
8	Depress PIN button	PIN lamp and LED on 5000B, D, or F dial (if provided) lighted
9	Key 1 thru 9, ●, 0, and END on auxiliary dial or manual entry pad, as provided.	Each entry appears on display as letter "P". PIN lamp and dial LED (if provide) are extinguished.
10	Depress END on 5000A terminal set.	TIP lamp lights briefly, Response lamps and WAIT are on, Display lamp blinking, Display shows ● 2-999-0.
11	Depress DISPLAY button.	Display shows 1 2 3 4 5 6.
12	Depress DISPLAY button.	Display shows 1 2 3 4 5 6 7 8.
13	Depress DISPLAY button.	Display shows 9●0, Display lamp extinguished.
14	Depress STATUS button.	STATUS button lamp lights Response lamps extinguished Display is clear.
15	Depress ERASE button.	STATUS lamp extinguished.

STEP	ACTION	VERIFICATION
16	Depress CANCEL button.	CANCEL button lamp lights, TIP lamp lights briefly, CANCEL lamp goes out, Display shows ● 2-999-0.
17	Depress RESET button.	• 1st instruction lamp on, WAIT lamp goes out, SYSTEM READY lamp blinking
18	Depress LAST ID button.	SPECIAL CONDITION lamp blinking, Display shows Error 04.
19	Depress CANCEL button.	1st instruction lamp on, SYSTEM READY lamp blinking.

Note: For more detailed information, see 4.06 through 4.17.

TEST B (SEE NOTE)

5000A TRANSACTION III TERMINAL SET WITH 5000A PRINTER

STEP	ACTION	VERIFICATION
1	Depress RESET and release, Pass test card thru reader.	1st lamp out — 2nd lamp lights.
2	Pass card thru reader again.	2nd lamp out — 3rd lamp lights.
3	Key 1 thru 9, ●, 0, and / on manual entry pad.	
4	Depress END button.	Display shows PAPER.
5	Insert paper into printer.	Display shows PUSH End.
6	Depress END.	Paper clamped by printer, TIP lamp lights briefly, Response lamps and WAIT are on, Display lamp blinking, Display shows ● 2-999-0.
7	Depress DISPLAY button.	Display shows 1 2 3 4 5 6 Printer operates.
If PIN capability is not provided, proceed to Step 13.		
8	Depress RESET and pass test card thru reader 2 times.	Lamps sequence as above, 3rd lamp lighted.
9	Depress PIN button.	PIN lamp and LED on 5000B, D, or F dial (if provided) are lighted.
10	Key 1 thru 9, ●, 0, and END on manual entry pad or auxiliary dial as provided.	Each entry appears on display as letter "P". PIN lamp and dial LED (if provided) are extinguished.
11	Depress END on 5000A terminal set.	TIP lamp lights briefly, Response lamps and WAIT are on, Display lamp blinking Display shows ● 2-999-0.
12	Depress DISPLAY button.	Display shows 1 2 3 4 5 6 Printer operates.
13	Depress STATUS button.	STATUS button lamp lights, Response lamps extinguished, Display is clear.
14	Depress ERASE button.	STATUS lamp extinguished.

STEP	ACTION	VERIFICATION
15	Depress CANCEL button.	CANCEL button lamp lights, TIP lamp lights briefly, CANCEL lamp goes out, Response lamps light Display shows ● 2-999-0.
16	Depress DISPLAY button.	Display shows 1 2 3 4 5 6 Printer operates.
17	Depress RESET button.	1st instruction lamp on WAIT lamp goes out, SYSTEM READY lamp blinking.
18	Remove paper from printer.	Printed display (With PIN capability provided) 1 2 3 4 5 6 7 8 9 < 0 = 1 2 3 4 5 6 7 8 9 < 0 1 2 3 4 5 6 7 8 9 < 0 (Without PIN capability) 1 2 3 4 5 6 7 8 9 < 0 = 1 2 3 4 5 6 7 8 9 < 0 =
19	Depress LAST ID button.	SPECIAL CONDITION lamp blinking, Display shows Error 04.
20	Depress CANCEL button.	1st instruction lamp on SYSTEM READY lamp blinking.

Note: For more detailed information, see 4.18 through 4.31.

5. MAINTENANCE

5.01 All functions of the Transaction III terminal set are rendered inoperative by the loss of ac power.

5.02 There are two fuses housed in plastic *in-line* holders located at the left rear corner of the main PWB. If a fuse failure is suspected, the fuses may be removed (access per 3.03), and checked visually.

CAUTION: *Insure that fuses do not get interchanged. The F1 fuse in the -12 volt circuitry is a 3/4 ampere fuse (connected by red leads) and the F2 fuse for +5 volt is a 3 ampere fuse (connected by black leads).*

5.03 If the F2 fuse is open, there will be no lighted lamps on the terminal set and no visual display.

WARNING: *For continued protection against fire hazard, replace fuses only with 3/4 AMP or 3 AMP (as specified) SLO-BLO (BUS MDL) or Equivalent.*

5.04 Other field maintenance of the terminal set shall consist of the following:

- (a) Check for proper connection of cord.
- (b) Replacement of D4BT-87 mounting cord.
- (c) Check for loose wires or connections on main PWB.
- (d) Replacement of auxiliary manual entry pad.
- (e) Check position of option plugs.

5.05 Field repairs on the 5000A terminal set shall not be attempted. Return defective set to Western Electric Service Center in accordance with local procedures. If set is being replaced, return disposable faceplate from new set with the used set.



If set should fail to sequence when using test card (4.06 or 4.18), try another test card before presuming the terminal set defective and replacing it.

5.06 If 5000A terminal set fails test procedure with printer connected, remove M14H cord from terminal set and retest per 4.06 through 4.17. If set passes terminal tests, replace printer.

5.07 Field repairs on the 5000A printer shall not be attempted. Return defective printer to Western Electric Service Center in accordance with local procedures.

5.08 Paper problems with the 5000A printer should be treated as follows:

- (a) If paper is jammed or can not be removed easily:
 - (1) Push RESET button.
 - (2) Try to remove paper.
 - (3) If paper can not be removed, replace printer.
- (b) If paper is *lost* in printer:
 - (1) Try to push paper out using another sheet of paper.
 - (2) Replace printer.



Do not attempt to remove paper from 5000A printer by forcing metal tools or hard objects through the paper slot as this may damage the printing mechanism.

5.09 Some printer related problems may be indicated by **Error 09** being displayed on the 5000A terminal set. These are:

- (a) Paper not registering properly causing paper sensor switch to open before printing is completed.
- (b) Defective M14H interconnect cord or improper engagement of M14H with connector in 5000A terminal or in 5000A printer.
- (c) Malfunction in printer.
- (d) Defective or faulty output from 5000A terminal.
- (e) Errors in text transmitted from data center to terminal.

5.10 Repeated occurrences of the following symptoms indicate a printer malfunction and/or a need for printer replacement:

- (a) Light printing on original (top) copy.
- (b) Missing dots in characters.
- (c) Characters printed over one another.
- (d) Line feed (paper advance) is nonuniform, skewed (successive lines not parallel), or no line feed at all.
- (e) Printer functions without paper present.
- (f) Extreme nonuniformity in character width or spacing between characters. Some nonuniformity in the first 5 characters of the printed line is normal.
- (g) Printer fails to print last character(s) on line, and stops leaving paper still clamped.
- (h) Paper jammed in printer, (see 5.08).