LED SIGN

INSTALLATION GUIDE

Version 3.0

TDN 07103-00055 9/99

FCC COMPLIANCE WARNING:

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CONTENTS

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SECTION 1

INTRODUCTION

SECTION 1 – INTRODUCTION

WHAT'S IN THIS ADDENDUM

This Addendum will cover installation and setup of the scrolling LED Sign, a new option designed to enhance the value of your Triton Systems, Inc. *mini***ATM**™ terminal.

LED SIGN OPTIONS

The LED Sign is available in two models: the Low Topper Sign, and the High Topper Sign, both of which replace the standard light panel on your 9600-series terminal.

EPROM REQUIREMENT

An upgrade to a component of the terminal software is required to support the LED Sign option. This upgrade is available as EPROM Version SD01.04 (or later). Instructions for installing this EPROM are contained in Section 2 of this manual.

INSTALLATION OF THE LED SIGN

Installation procedures for both versions of the LED Sign are included in this manual. For Low Topper installation procedures, refer to Section 3. Refer to Section 4 for High Topper installation procedures.

OPERATION OF THE LED SIGN

The LED Sign will normally be controlled using Triton Connect for Windows 95, version 1.9.2 or later. Refer to the Triton Connect User Manual for operating procedures.

As an alternative to Triton Connect, an optional hand-held remote control device can be used to control the LED Sign. Procedures for operating the remote control are contained in the LED Sign Remote Control Operation Manual.

SECTION 2

EPROM INSTALLATION

LED SIGN INSTALLATION GUIDE

SECTION 2 – EPROM INSTALLATION

TOOLS AND EQUIPMENT NEEDED

1. EPROM, Version SD01.04 (or later)
2. Integrated Circuit (I.C.) Chip Puller (recommended) or small standard screwdriver
3. Electro-Static Discharge (ESD) safety mat and wrist strap (recommended)

INSTALLATION PROCEDURE

1. Turn off power to the terminal.

2. Unlock and open the front face of the terminal hood.

3. Remove the SS-2 card (Memory Module) from its slot in the card cage.

4. Place the memory card on a flat surface (preferably an ESD mat) and position the card so that the front of it card is facing you (See Figure 2-1).
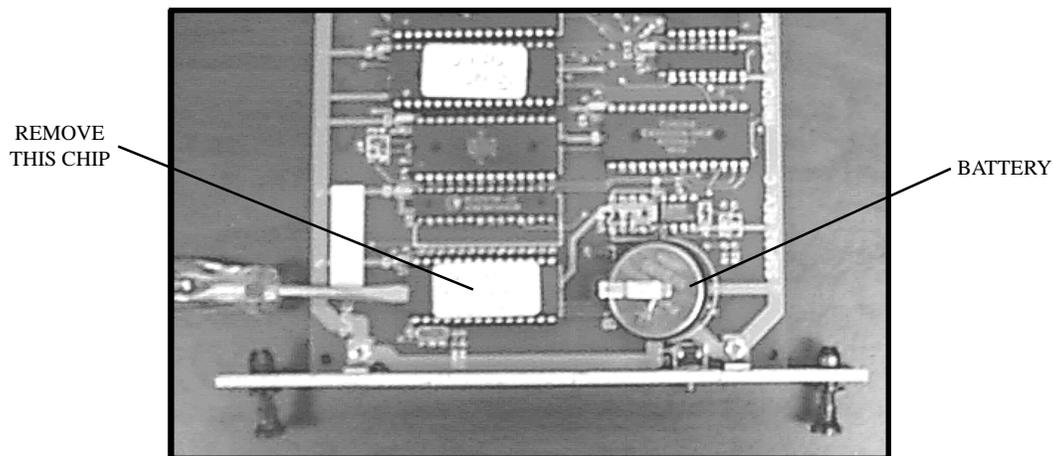
REMOVE THIS CHIP

BATTERY

FIGURE 2-1

5. Remove the I.C. chip that is immediately to the left of the circular battery (See Figure 2-1). The use of a chip puller to perform this step is recommended; however, a small flat-blade screwdriver can be used. Place the tip of the screwdriver between the chip and its socket, and twist the tip slightly to begin lifting the chip from the socket. Move the tip of the screwdriver to the opposite end of the chip and repeat. By alternating sides and lifting the chip a small amount each time, you will eventually release the chip from its socket. At this point, carefully remove the chip from the memory card.

SECTION 2 – EPROM INSTALLATION

6. Take the new EPROM (Version SD01.04) and place it lightly on the chip socket, ensuring that the half-circle notch on the chip is positioned to the left (See Figure 2-2). Align the pins of the chip with the insertion holes of the socket.
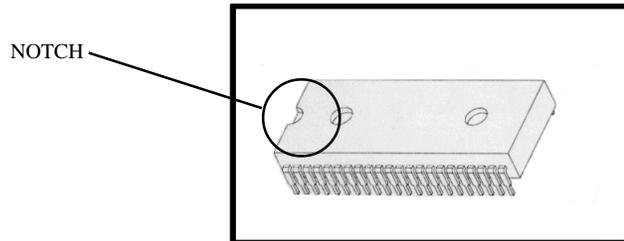

FIGURE 2-2

7. It may be necessary to bend the pins on one or both edges of the chip inward very slightly to achieve this alignment. To do this, grasp the left and right-hand edges of the chip and orient the chip so that the pins are facing you (See Figure 2-3). Place the pins on one side of the chip on a flat surface and apply mild pressure to bend the pins by angling the top edge of the chip toward you. Check the alignment of the pins with the socket as before. If necessary, bend the pins on the opposite edge of the chip.
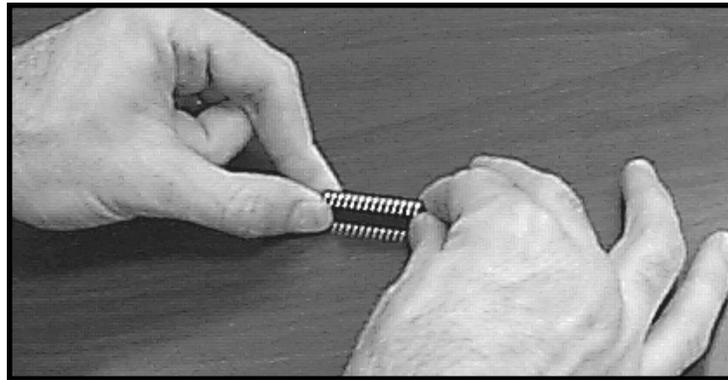

FIGURE 2-3

8. Once the pins of the chip line up with the socket holes, insert the chip into the socket by applying an even pressure to the chip to seat it firmly in the socket. Make sure the chip is oriented properly (notch to the left). Make sure the pins are inserted correctly and that none are bent.

9. Re-install the memory card into the card cage slot. The procedure is complete.

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SECTION 3

LOW TOPPER
INSTALLATION

SECTION 3 – LOW TOPPER INSTALLATION

TOOLS AND EQUIPMENT NEEDED

1. #2 Phillips Magnetic Screwdriver, 6" long (not included)
2. Quad-Port Module Board (Triton Part Number 9600-2030)
3. 9600 Scrolling LED Assembly Kit, which includes:
   - 9600 Scrolling LED Assembly (1)
   - Hardware bag including #8-32 Pan Head Screws (2)
   - LED Sign Serial Cable (9600-0033) and LED Sign Power Cable (9600-0029)
   - LED Sign Remote Control with batteries and operating instructions (optional)

INSTALLATION PROCEDURE

1. Turn off power to the terminal.

2. Unplug the power cable from the wall outlet.

3. Unlock and open the front face of the terminal hood.

4. Remove the two Phillips head screws that affix the sign housing to the hood of the terminal. (See Figure 3-1.)

FIGURE 3-1

5. Lift up on the bottom of the sign housing and pivot the sign housing upward to remove it from the unit. (See Figure 3-2.)
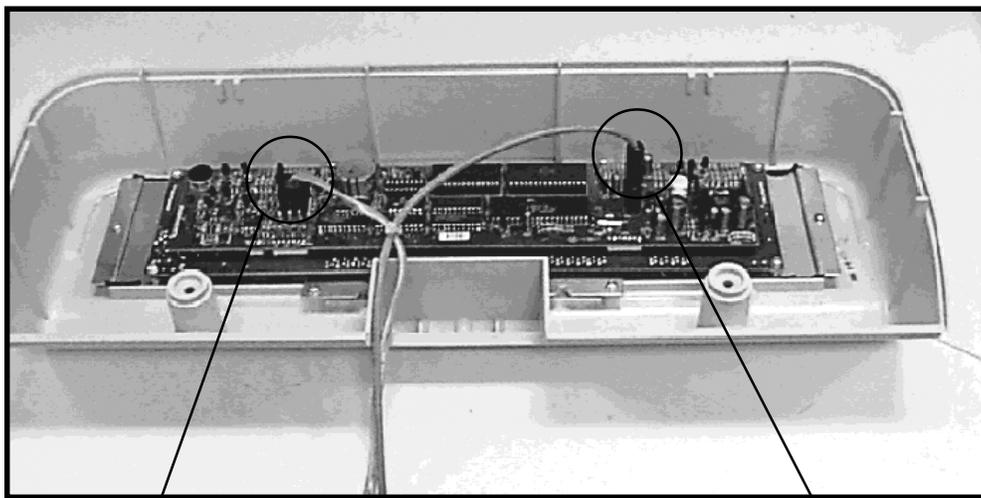
SECTION 3 – LOW TOPPER INSTALLATION

FIGURE 3-2

6. If there is a light kit installed, remove the ballast and bulb socket from their mountings, as they will interfere with the new sign.

7. Remove the Scrolling LED Assembly Kit from its packaging.

8. Looking at the sign assembly from the rear, attach the 6-position plug of the Serial Cable to the modular connector on the left, and attach the LED Power Cable to its connection on the right. (See Figure 3-3.)

FIGURE 3-3

SERIAL CABLE   LED POWER CABLE

SECTION 3 – LOW TOPPER INSTALLATION

9. Place the scrolling sign assembly onto the terminal hood by using the reverse of step 4. Ensure the cables are positioned to the side of the locking bracket. Secure the housing to the hood with the two #8-32 Pan Head Screws. (See Figure 3-4.)
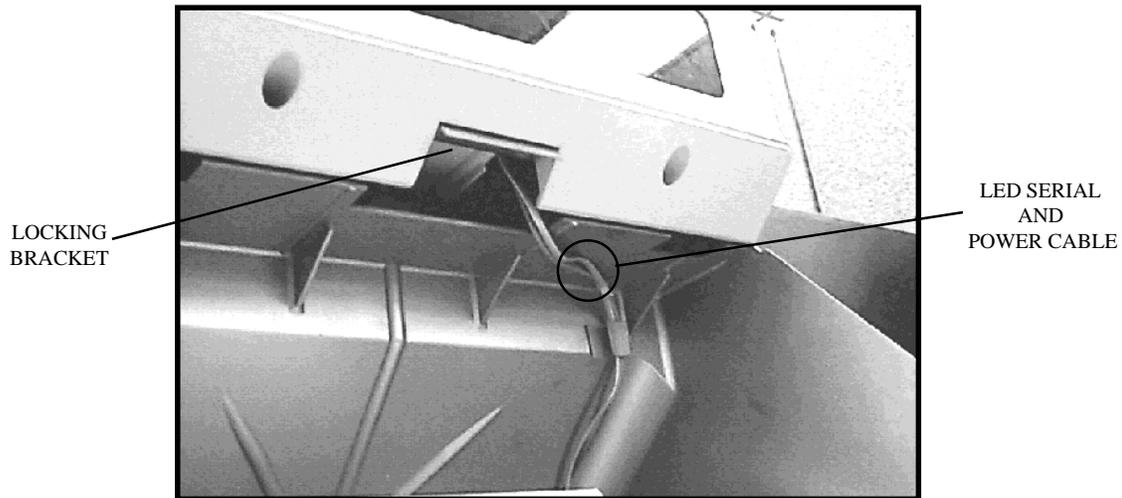

FIGURE 3-4

10. Guide the tie-wrapped cables down the rear of the hood in the cable clips and through the oval slot for the power cables. In some cases the cables may fit more snugly if they are placed in the clips first. In these cases, temporarily remove the power cord, run the cables through the clips, then replace the power cord. (See Figure 3-5.)
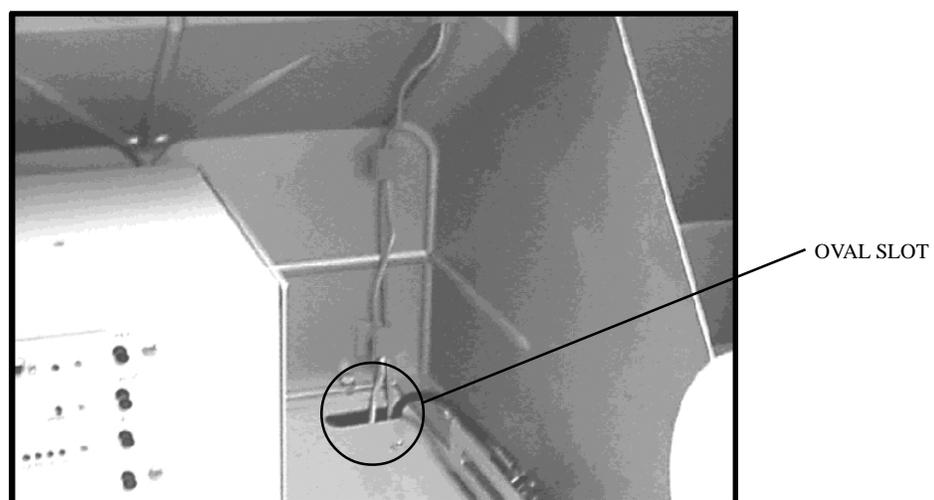

FIGURE 3-5

SECTION 3 – LOW TOPPER INSTALLATION

11. Disconnect the power cords from the side of the cage side. Open the right side panel of the card cage by removing the two top corner screws. (See Figure 3-6.)
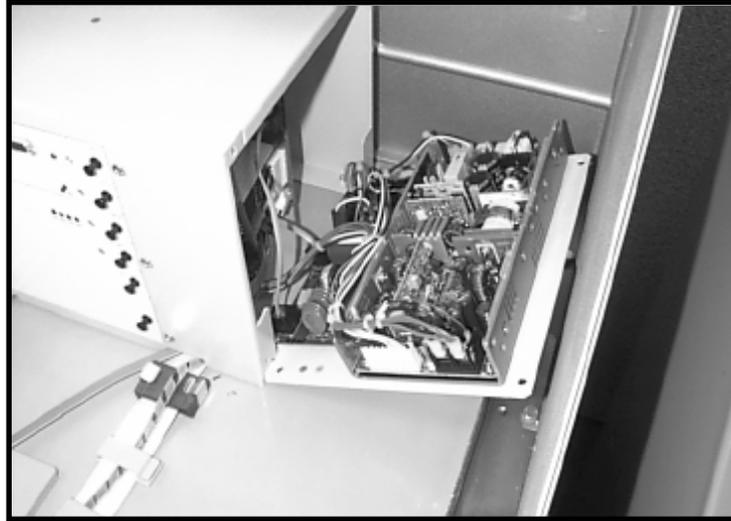

FIGURE 3-6

12. Open the security cabinet door to gain access to the lower compartment of the terminal. Slide the cash dispensing mechanism out and if necessary remove it from the cabinet to provide clear access to the rear wall and ceiling of the lower compartment.

13. Route the cables through the two cable clips that are attached to the top of the cabinet, near the rear wall. (See Figure 3-7.)
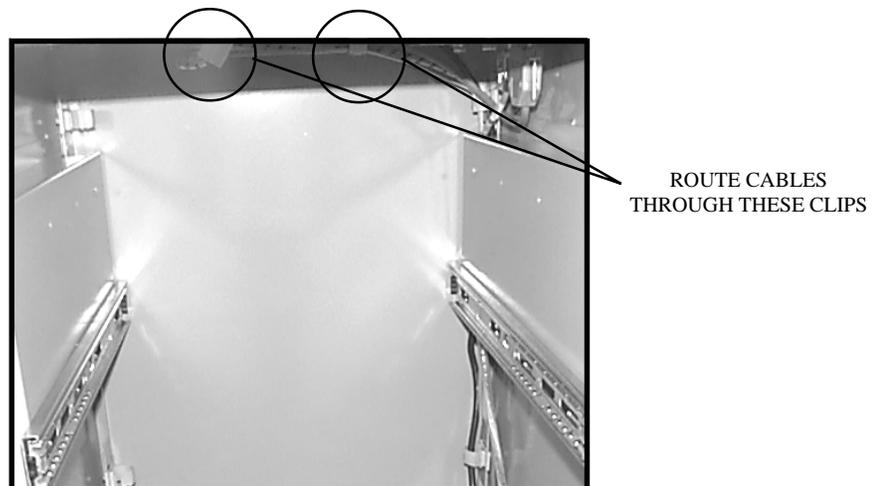

ROUTE CABLES
THROUGH THESE CLIPS

FIGURE 3-7

SECTION 3 – LOW TOPPER INSTALLATION

14. From the bottom compartment of the terminal, lead the cables up through the oval slot under the card cage. Then guide the cables out through the opening in the bottom front of the card cage. (See Figure 3-8.)
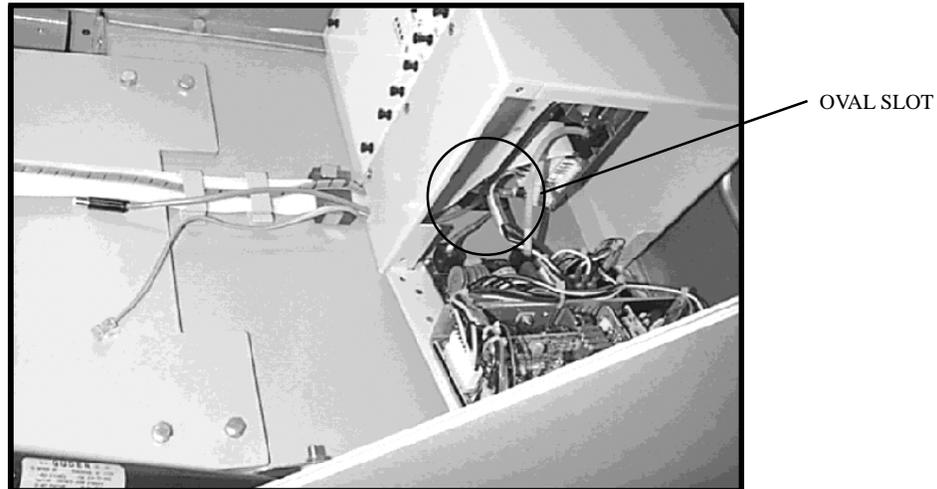

OVAL SLOT

FIGURE 3-8

15. Replace the fourth card slot from the top of the card cage with the Quad-Port Module.

16. Connect the 8-position plug of the Serial Cable to the far-right (SERIAL 4) modular connector of the Quad-Port Module. (See Figure 3-9.)

FIGURE 3-9

SECTION 3 – LOW TOPPER INSTALLATION

17. Connect the LED Power Cable to the proper connection on the right of the Quad-Port Module. (See Figure 3-9.)

18. Reassemble the side of the card cage and replace any disconnected plugs.

19. Examine the inside of the hood and remove any loose hardware.

20. Secure the terminal and reapply power. The procedure is complete.

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SECTION 4

HIGH TOPPER
INSTALLATION

SECTION 4 – HIGH TOPPER INSTALLATION

TOOLS AND EQUIPMENT NEEDED

1. #2 Phillips Magnetic Screwdriver, 6" Long (1) (not supplied)
2. Wire cutters (not supplied)
3. Quad-Port Module Board (Triton Part Number 9600-2030)
4. Hightopper LED Sign Kit, includes:
   - Front Sign Housing Assembly (1)
   - Back Sign Housing Assembly (1)
   - Fluorescent Bulb (1)
   - RJ11 LED Sign Serial Cable (1) and LED Sign Power Cable (1), adjoined
   - #8-32 x 3/8" Pan Head Phillips Screws (6)
   - LED Sign Remote Control with batteries and operating instructions (optional)
   - #4-40 x 1/2" Pan Head Phillips Screws (14)
   - Sign Bracket, Long (5)
   - Sign Bracket, Short (4)

INSTALLATION PROCEDURE

1. Disconnect power to the terminal and open the hood. If the terminal is already equipped with a light panel sign, unplug the power cord for the sign from the side of the card cage.

2. Remove the two screws that attach the small sign housing to the hood and set aside. Remove the small sign housing from the unit. (See Figure 4-1.)

FIGURE 4-1

3. If a fluorescent bulb wiring harness assembly is installed in the unit, remove the light assembly by removing the four screws that attach the ballast and the light socket to the terminal hood.

SECTION 4 – HIGH TOPPER INSTALLATION

4. Remove the LED Hightopper Sign kit from the shipping box. Remove the foam cradles from the edges of the Hightopper sign. Set the Hightopper sign face down. Remove the four screws that attach the Back Sign Housing Assembly to the Front Sign Housing Assembly and set them aside. (See Figure 4-2.) Lift off the Back Sign Housing Assembly, flip it over and set it aside. (See Figure 4-3.)
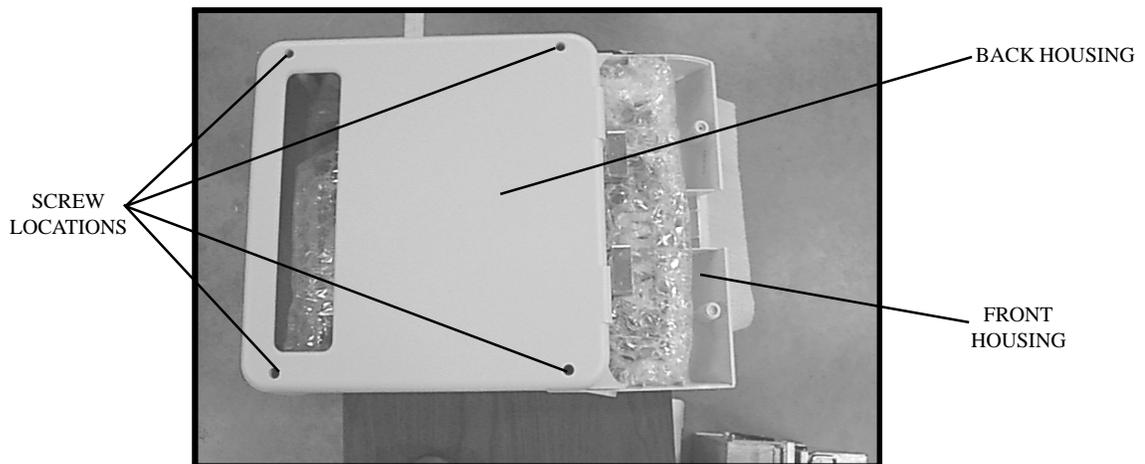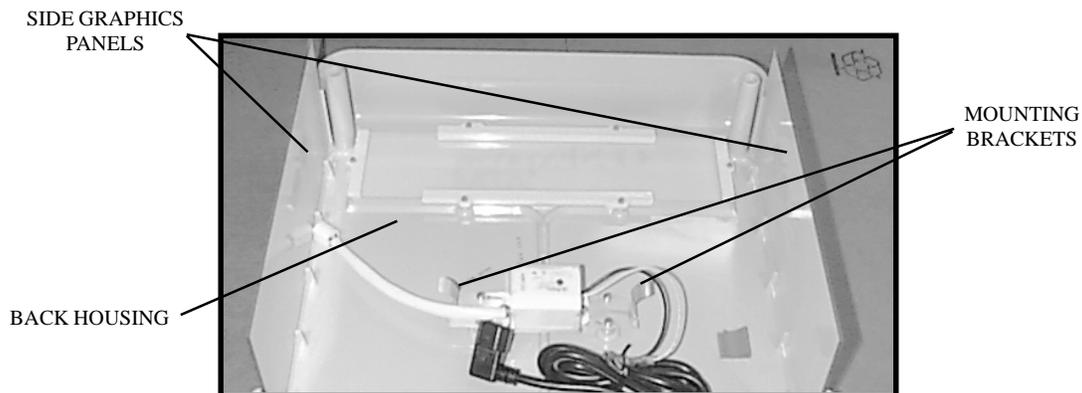

FIGURE 4-2

FIGURE 4-3

5. Peel back the bubble wrap and remove the packed contents from the Front Sign Housing Assembly.

6. Remove the plastic bag with mounting screws from the Back Housing Assembly and set aside.

SECTION 4 – HIGH TOPPER INSTALLATION

7. On the Back Housing Assembly, insert the Rear Graphics Sign so it is readable from the outside. Place two of the Long Sign Brackets and two of the Short Sign Brackets on the inside of the Back Housing, as shown in Figure 4-4. The "toe" of each bracket should face down toward the Rear Graphics Sign. Insert the included #4-40 screws through the holes in the brackkets and into the inserts in the Back Housing. Tighten down until the brackets are secure.

8. Remove the four screws that connect the two sign Mounting Brackets to the Back Sign Housing and remove the brackets. (See Figure 4-4.) Place and align the Back Sign Housing Assembly on top of the ATM. Place the two sign mounting brackets back onto the Back Sign Housing. Align the holes in the brackets with the mounting bosses on the Back Sign Housing and the ATM. Attach the Back Sign Housing Assembly to the top of the hood with four #8-32 x 3/8" screws. (See Figure 4-4.)
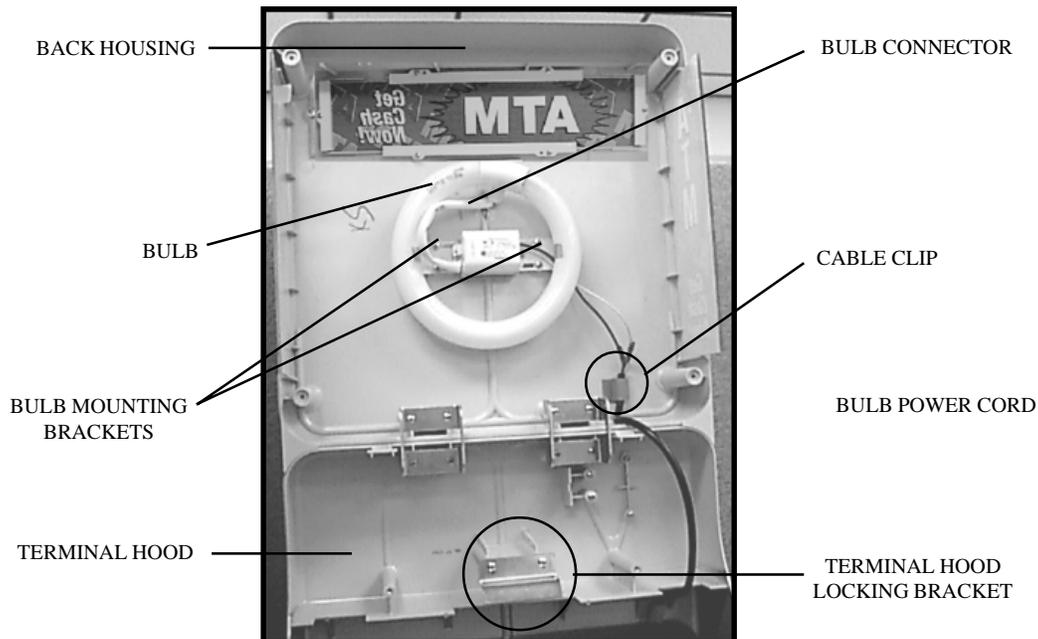

FIGURE 4-4

10. Remove the fluorescent bulb from the shipping box and plug the bulb into the connector located on the ballast on the Back Sign Housing Assembly. (See Figure 4-4.) **NOTE: the connector is keyed and will only plug into the bulb when properly aligned**.

11. Place the bulb into the two bulb mounting brackets located in the center of the Back Sign Housing Assembly. (See Figure 4-4.)

SECTION 4 – HIGH TOPPER INSTALLATION

12. Remove the Tie-wrap from the fluorescent bulb power cord and route the power cord down the right-hand side of the unit. Use the cable clips already installed in the unit and on the Back Sign Housing Assembly to hold the power cord in place. Plug the end of the power cord into the output connector on the card cage side plate. (See Figure 4-5.)
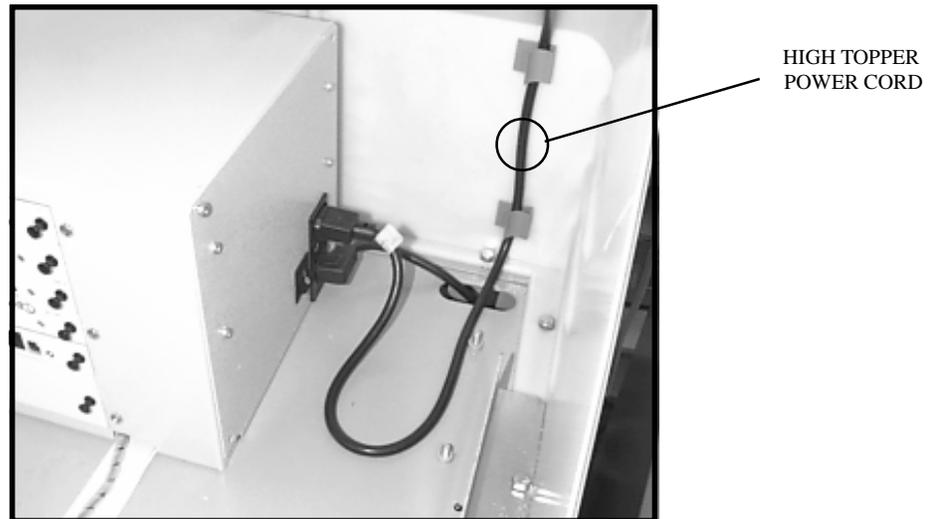

HIGH TOPPER
POWER CORD

FIGURE 4-5

13. Turn on the unit and check to see that the fluorescent bulb lights. If the bulb does not light, turn off power to the unit and check for proper connections on the fluorescent bulb wiring assembly.

14. Place the Front Housing Assembly face down.

15. Insert the Front Graphics Sign into the Front Housing Assembly so that it is visible from the outside. Place three of the Long Sign Brackets and two of the Short Sign Brackets on the inside of the Front Housing, as shown in Figure 4-6. The "toe" of each bracket should face down toward the Graphics Sign.

16. Take the 14" piece of black plastic molding and place it on the bottom of the Front Graphics Sign. Take the red Plexiglas and insert it into the other side of the molding. The three pieces should fit properly into the Front Housing. (See Figure 4-6.)

SECTION 4 – HIGH TOPPER INSTALLATION

LARGE GRAPHICS SIGN

lONG GRAPHICS SIGN BRACKETS
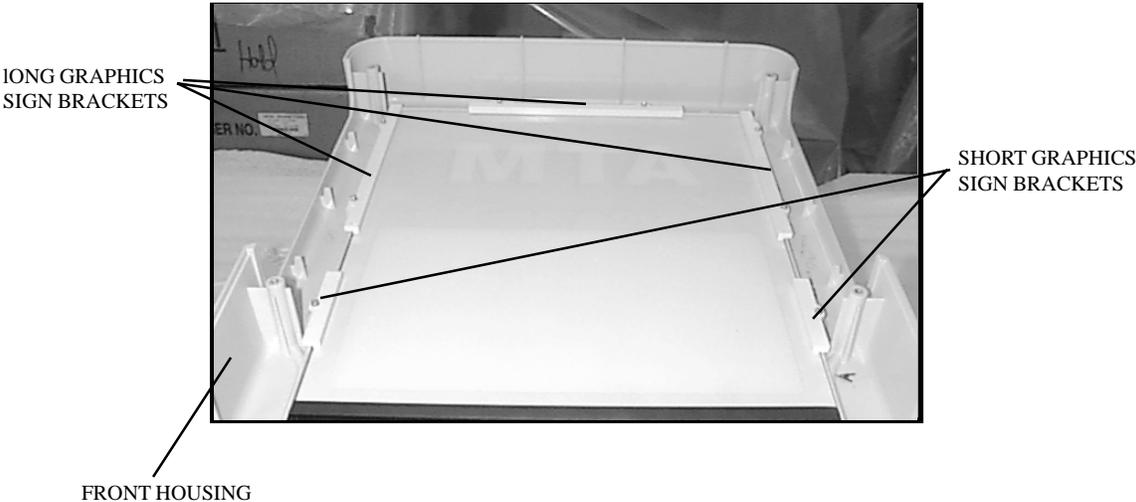
SHORT GRAPHICS SIGN BRACKETS

FRONT HOUSING

FIGURE 4-6

17. Locate the square hole in the front of the LED Sign bracket. Position the LED Sign so that this hole is on the left-hand side as viewed from the rear of the Front Housing and place the sign face down over the red Plexiglas. (See Figure 4-7.)
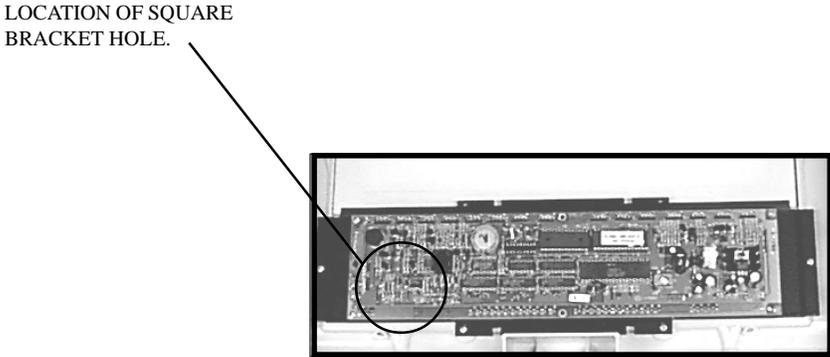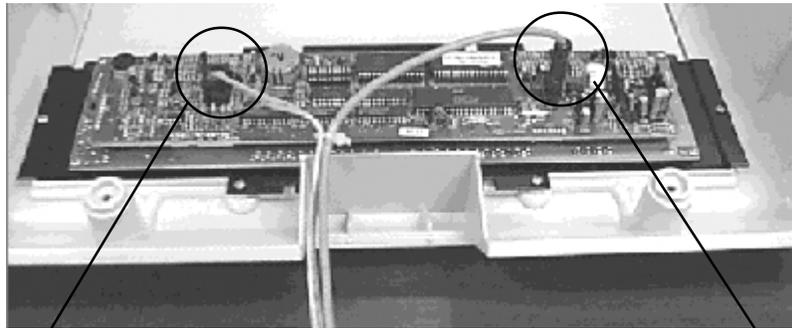
LOCATION OF SQUARE BRACKET HOLE.

FIGURE 4-7

SECTION 4 – HIGH TOPPER INSTALLATION

18. Secure the bracket to the Front Housing using the four #4 Phillips screws from the plastic bag.

19. Take the included #4-40 screws and insert them through the holes in the sign brackets and into the inserts in the front housing. Tighten down until the brackkets are secure.

20. Plug the six-position plug of the modular serial cable into the modular connector on the back of the LED sign. Plug the end of the LED Power Cable into the back of the LED sign. (See Figure 4-8.)

SERIAL CABLE   FIGURE 4-8   LED POWER CABLE

21. Place the Front Sign Housing Assembly on top of the unit and attach it to the Back Sign Housing Assembly using the four #8-32 x 3/8" Pan Head Phillips screws removed earlier. When aligning the Front to the Back, guide the Side Graphics Signs into the slots on the interior of the Front Housing.

22. Make sure the sides fit properly once the two halves are mated together, and ensure the dangling cables are positioned to the side of the locking bracket. (See Figure 4-9.)

SECTION 4 – HIGH TOPPER INSTALLATION

FIGURE 4-9

23. Attach the lower part of the Front Sign Housing Assembly to the hood through the two lower mounting bosses, using the two #8-32 x 3/8" Pan Head Phillips Screws removed from the old sign. (See Figure 4-9.)

24. Guide the tie-wrapped cables down the rear of the hood in the cable clips and through the oval slot for the power cables. In some cases the cables may fit more snugly if they are placed in the clips first. In these cases, temporarily remove the power cord, run the cables through the clips, then replace the power cord. (See Figure 4-10.)

FIGURE 4-10

SECTION 4 – HIGH TOPPER INSTALLATION

25. Disconnect the power cords from the side of the card cage. Open the right side of the card cage by removing the two top corner screws (See Figure 4-11.)
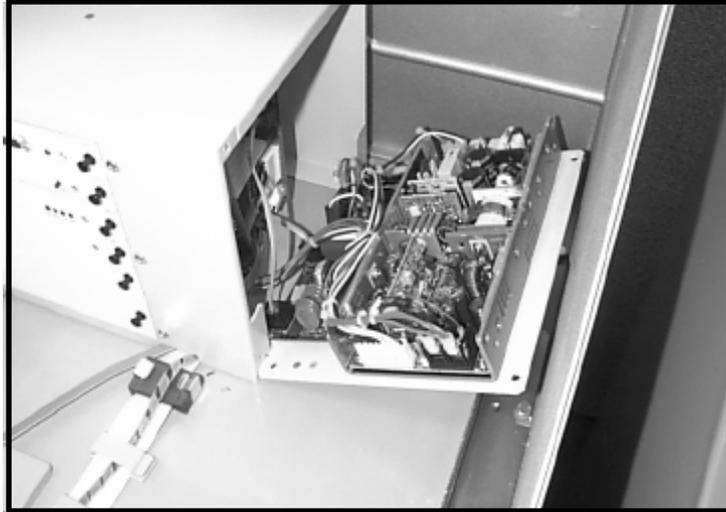

FIGURE 4-11

26. Open the security cabinet door to gain access to the lower compartment of the terminal. Slide the cash dispensing mechanism out (multi-cassette dispensing mechanisms may need to be completely removed from the cabinet) to provide clear access to the rear wall and ceiling of the compartment.

27. Route the cables through the two cable clips that are attached to the top of the cabinet, near the rear wall. (See Figure 4-12.)
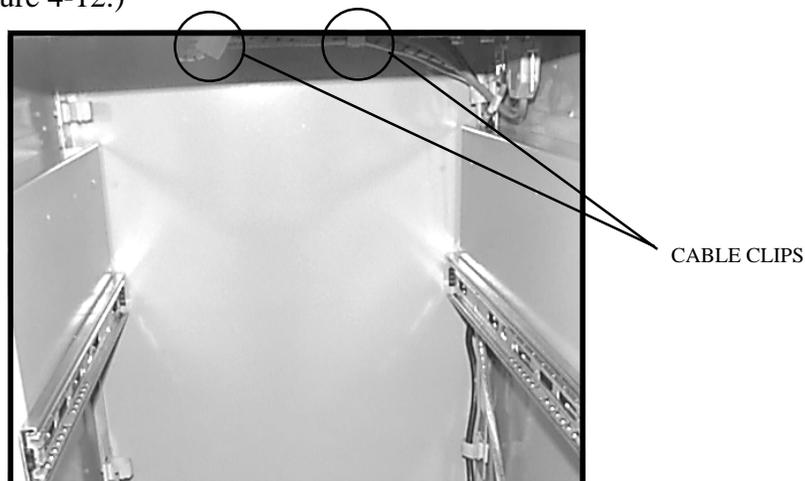

CABLE CLIPS

FIGURE 4-12

SECTION 4 – HIGH TOPPER INSTALLATION

28. From the bottom compartment of the terminal, lead the cables up through the oval slot under the card cage. Then guide the cables out through the opening in the bottom front of the card cage. (See Figure 4-13.)
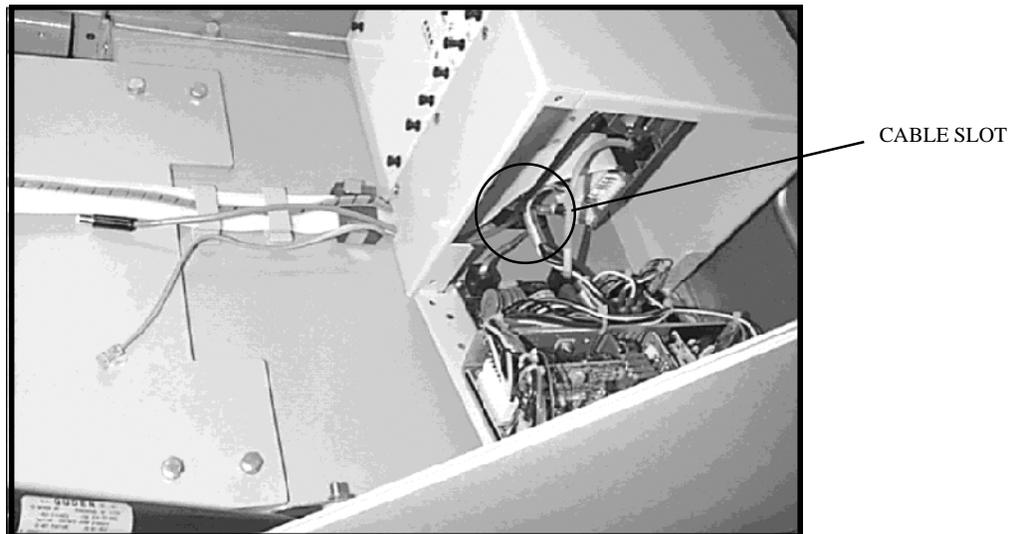

CABLE SLOT

FIGURE 4-13

29. Replace the fourth card slot from the top of the card cage with the Quad-Port Module.

30. Connect the eight-position plug of the Serial Cable to the far-right (SERIAL 4) modular connector slot of the Quad-Port Module. (See Figure 4-14.)

POWER
CABLE

SERIAL
CABLE

FIGURE 4-14

SECTION 4 – HIGH TOPPER INSTALLATION

31. Connect the LED Power Cable to the proper connection on the right of the Quad-Port Module. (See Figure 4-14.)

32. Reassemble the side of the card cage and replace any disconnected plugs.

33. Examine the inside of the hood and remove any loose hardware.

34. Secure the terminal and reapply power. The procedure is complete.