



# TRAVERSE 2-HIGH HCDU UPGRADE/INSTALLATION

TDN 07103-08209 May 11, 20012



**CORPORATE HEADQUARTERS:**

21405 B STREET  
LONG BEACH, MS. 39560  
PHONE: (800) 259-6672  
FAX: (228) 868-9445

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**PURPOSE**

This guide covers the steps for replacing current Traverse ATM single unit cash dispensers with a dual-decked, high-speed dispenser capable of holding more than twice the number of bills used in a single cassette. This document includes a list of all tools and hardware necessary for the removal of the old unit and replacement of the new power supply, dispenser and cassettes.

**SCOPE**

This procedure applies to all service personnel involved in the process of maintaining, converting, or upgrading hardware and software on Triton ATMs nationwide and abroad.

**APPLICATION**

This upgrade covers all Traverse LRL 331X ATM units currently utilizing standard dispenser units. Upgrading to the 2-High HCDU dispenser will increase bill capacity, help lower travel costs and save time spent at unit.

**REQUIRED PARTS AND TOOLS**

<b>TOOLS REQUIRED</b>	Number two (2) Phillips screwdriver
<b>KIT #06200-08209</b>	Traverse 2-High HCDU Upgrade Kit

Items in kit	Description	Qty
<b>41017-11087</b>	CDU, ASSY, 2 High HCDU, Front Load W/O CST W/Triton firmware	1
<b>41017-00018</b>	PSU-3000, 36V Power Supply	1
<b>41017-00019</b>	Cable, HCDU, PSU-3000 36V DC out	1
<b>41017-00020</b>	Side Frame L/R	2
<b>41017-00021</b>	US CASSETTE, HCDU TYPE, 1ST CST	1
<b>41017-00022</b>	US CASSETTE, HCDU TYPE, 2ND CST	1
<b>41017-00023</b>	M4 w/ spring washer: 12.5mm: M4 L10 SEMS SCREW	8
<b>07103-00208-00</b>	Kit, Installation Manuals & Software Upgrades Instruction Sheet	1
<b>07100-00126</b>	Vivid Neon Labels (Kit Documentation Part # Label)	1
<b>07103-08209</b>	Traverse SCDU to 2 High HCDU Upgrade Instructions	1

# POWER SUPPLY REPLACEMENT

**WARNING:** Abnormal shutdowns can cause internal file system corruption if the power switch is turned off while the system is performing a write operation. Follow instructions below to properly shut down unit before beginning upgrade.

Before proceeding, follow these steps to remove power from the ATM: Enter **Management Functions > System Parameters > Shut Down the Terminal**. When prompted, unlock/ open the ATM control panel and turn power **OFF** (0) red switch on the ATMs power supply.

1. Once power is removed from unit, open fascia of unit and slide compartment forward to determine if current power supply will require replacement. This HCDU upgrade requires the PSU 3000, a 36-volt power module designed to replace 24-volt modules in use on some units. The PSU 3000 module is identical in size and appearance to some models in other units, (see figures 2, 3, 4). Check labeling to determine voltage and whether module must be replaced, (see figure 1).

2. If replacement is needed, disconnect all wiring from current power supply. Remove two Phillips screws at rear of power supply unit. Lift from rear and remove power module.

3. Place new power supply in position by inserting flange at front of unit into slot on mounting deck. Replace two Phillips screws at rear of unit. Check voltage switch on rear of module to make sure setting conforms to geographic area of use. The switch is not auto-sensing, but default is set at 115.

4. Once installed, reconnect all cables that route to and from power supply. Cable extension supplied in kit, (see figure 5) will connect in a later step. This cable is necessary to connect 36-volt module to control board on dispenser unit. **Do not return power to unit until all steps have been completed.** Make sure cables are snug and power module is firmly seated. Begin SCDU removal.



**Figure 2**  
PSU 1700/24-Volt Module



**Figure 3**  
PSU 1000/24-Volt Module

INPUT -	VOLTAGE	CURRENT	FREQ.
	100-120Vac	4.0A	50-60Hz
	200-240Vac	2.0A	50-60Hz
OUTPUT -	VOLTAGE	CURRENT	
	+36Vdc	5.0A / +24Vdc	5.0A
	+12Vdc	1.5A	
	+5Vdc	3.5A	

WARNING!

**Figure 1**



**Figure 4**

2-High HCDU upgrade requires 36-volt power module

PSU 3000/36-volt module used for upgrade

**SCDU REMOVAL**

**WARNING:** Before opening cabinet and removing SCDU, make sure unit is secured firmly to flooring or braced in a way that will prevent tipping. The HCDU upgrade will weigh slightly more and may cause an imbalance when dispenser drawer is fully extended.

This section contains information necessary for the removal of current single-tier cash dispensers and related hardware. Later sections will cover the installation of the two-tier dispenser unit for Traverse ATMs. The procedure will require removal of the original deck and slides, the installation of new side frames, and re-installation of original deck and slides. Installing the upgraded dispenser will require a possible power module replacement, (see page 3), and a main board software update to incorporate the dual dispenser. Find information about software changes in the software instructions. Directions to software link are included in kit.

1. Unlock and open front panels of cabinet and remove single cash cassette drawer from dispenser, (see figure 5).
2. Disconnect all wiring leading to SCDU including DB-9 communications connection, main power connection just below, and ground wire at right rear of sliding deck.
3. Slide SCDU out of compartment by grasping deck just beneath green strip. Using a Phillips screwdriver, remove four (4) screws that attach base of unit to sliding deck, (see figure 5). Retain screws for later use. Loosen wing nut on stop bracket at left front of base of unit. Remove two screws holding stop bracket in place.
4. Lift SCDU from sliding deck and set aside. Prepare to relocate slide rails and install left and right side frames to accommodate HCDU.

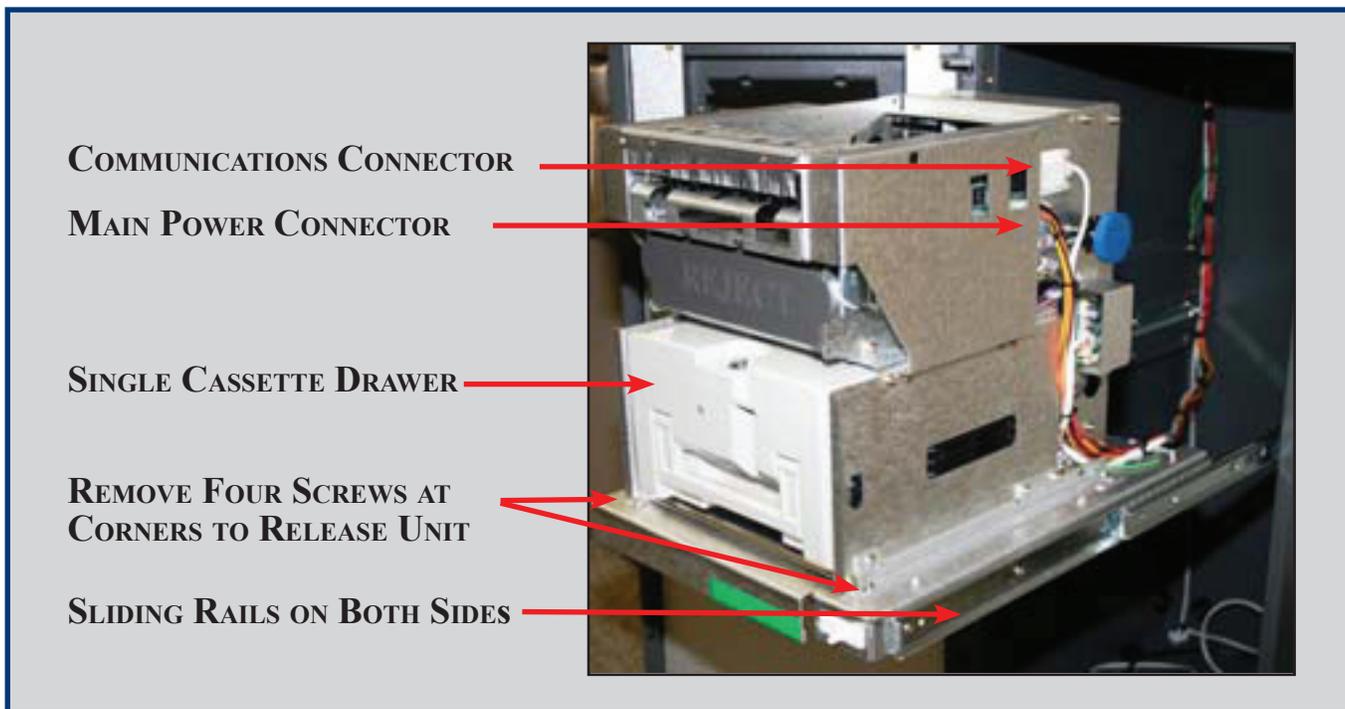


Figure 5

*SCDU with a 1,000-bill capacity can dispense three bills per second. Upgrade kit drops dual dispenser down into ATM cabinet and provides a capacity of 1,700-bills per cassette. Unit will dispense at four bills per second.*

## RELOCATING BRACKETS

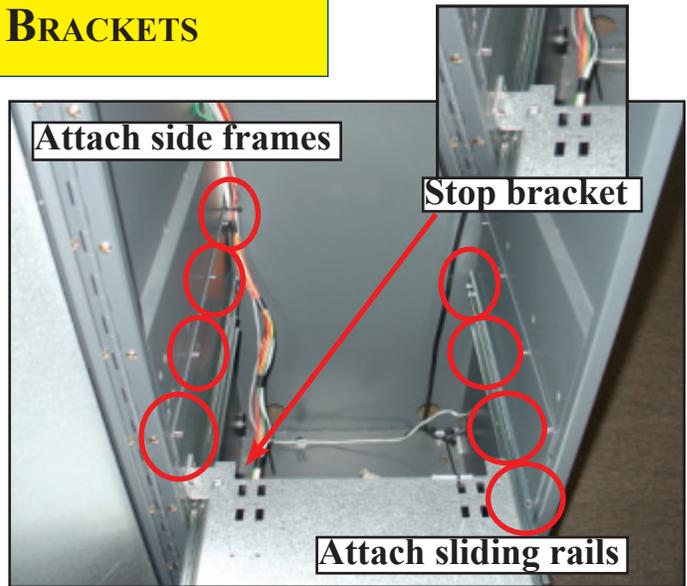
**If necessary, use assistant to remove rails and tray to avoid warping rails or causing other damage.**

1. Slide rails slowly back toward inside of unit to align oblong openings in rail to match screws holding rail to original frame. Through openings in rail, remove two (2) forward screws on both sides, (see figure 7).

2. Slide deck forward and out of unit as far as possible. Locate and remove two (2) Phillips screws at rear of left and right sliding rails along inside of compartment walls. Retain tray and slides for later re-installation.

3. Locate left and right interchangeable side frames from kit. Place outer sides of sliding rails along lower edge on inside of frame. Attach rails to frame using four (4) Phillips screws from previous step on each side. Use same process as removal, aligning holes in sliding rails to match screw openings.

4. Once both sliding rails are attached to side frames, align four (4) holes on upper portion of frame with lowest holes along inside of cabinet, (see figure 6) and attach deck frame to cabinet using eight (8) screws supplied in kit. Use assistance if possible. Note: Frame fits in place with notches and tabs on either side.



**Figure 6**

*Upper holes, (left), on both side frames attach to inside of cabinet. Sliding rails attach to frames on both sides, (right)..*



**Figure 7**

*Align holes in rails to remove and replace screws.*

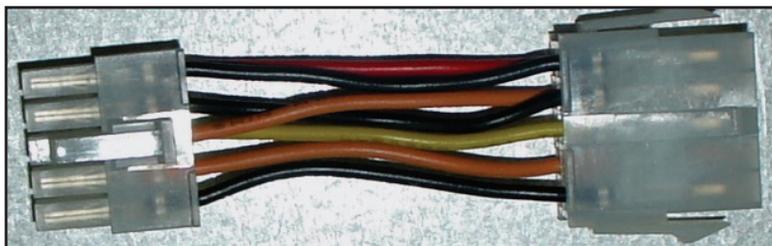
5. Reattach stop bracket to lower position on left side just above sliding rail, (see figure 6)

## INSTALLING HCDU BODY

1. Lower HCDU onto sliding deck and align four holes in deck with slots at base of HCDU. Tighten four (4) Phillips screws securing HCDU to deck. Slide deck into unit until it reaches stop bracket. Tighten wing nut on stop bracket.

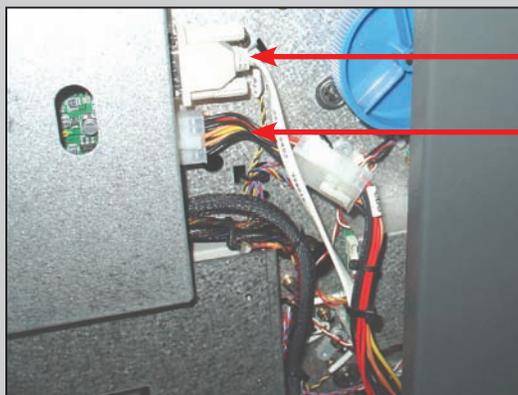
2. Connect extension piece supplied in kit, (see figure 8) to end of wiring harness and plug into dispenser control board, (see figure 9). If necessary, shorten cables with TY wrap.

3. Be sure fittings clip together and fit snugly. Connect DB-9 communications cable into HCDU control board just above power connection, (see figure 9).



**Figure 8**

*Connector to attach HCDU to power source conforms to PSU-3000, 36-volt power supply. Part is included in upgrade kit. Wire colors do not match main cable, but connections are compatible.*



**Figure 9**

## DB-9 COMMUNICATION CABLE CONNECTOR CONNECTOR FROM POWER SUPPLY HARNESS TO HCDU CONTROL BOARD

*Wiring from power supply and communication systems attach to control board on right side of HCDU. At left, DB-9 connector; (top), links communications to control board. Below is the power supply connector running from power module, (also see figure 8). Make certain connections are secure before operation.*

## REPLACING DUAL CASSETTES

The HCDU cassettes are identical except for the rail position along the sides. The rail of the upper cassette is in a higher position and the rail of the lower cassette is in a lower location.

1. When HCDU is secured inside cabinet and all wiring attached, locate two bill holder cassettes.
2. Slide cassettes into HCDU until they lock into position. Cassettes are labeled for upper and lower use in HCDU.
3. Once cassettes are in place, close and lock doors and return power to unit.
4. After power is restored to unit, test functionality.

**NOTE:** Cassettes come with a red label for #1, or high position, and a blue label for #2, or low position, (see figure 11). Ensure a label on the front properly identifies the cassette for ease of use.



**Figure 10**

*Cassette sides slide along rails inside dispenser compartment. Be sure to differentiate between upper and lower cassettes.*



**Figure 11**

*The 2-High HCDU with cassettes provides greater capacity and a higher dispense speed. Each cassette can hold 1,700 bills.*