

# CVS System 7 Installation Manual

(Version 4.2)  
(3-22-21)



## VERSION

4.8 – Updated coupon testing with new parameters.

4.9 - Corrected Caitlyn's phone number. Removed Paul Berringer from check in process.

4.10 Updated unpacking instructions, tool requirements, coupon box hex key instructions, updated cash module grounding documentation.

4.11 Updated single lane social distance guidance, Instructions for twist loc pigtail adapter for drink cooler, moved UPS installation instructions, and added update for EC for cashless lane center shelf installation.

4.12 Added in "Customer Service Call Button" to inventory and close out.

## PURPOSE

The purpose of this document is to provide an abridged overview of the CVS Self Checkout installation process. This should be used as a quick reference guide to ensure all required installation steps are followed to ensure the customer is provided a quality installation.

## ESCALATIONS/ASSISTANCE

The Toshiba PMO will be the primary contact for all issues. They will then direct you to the appropriate customer or Toshiba technical support contact.

**NOTE: Please contact the designated PMO contact for your assigned store prior to reaching out to the ROC or STS.**

## CONTACTS

Toshiba PMO

Charles Mitchell (479-973-3049)

Caitlyn Bailey (479-721-7917)

Leo Richard (919-523-0612)

Robert Mitchell (919-559-1429)

Carter Calloway – (919-949-0791)

**CVS Support Contact (STS)** - 401-770-7666, Option 2, Option 1  
**Rollout Operation Center (ROC)** - 1-888-401-4601, Option 9, Option 2

## TOOL LIST

Cordless Drill (12V minimum)

Basic socket set (SAE and Metric)

22MM open end wrench (2)

DVM (digital voltmeter)

**Weight for load cell calibration \*\*\***

Philips and slotted screw drivers (various sizes)

Hammer

3/8" Allen wrench for orientation change if required

Torx key kit – full kit but T10 is required

Torpedo level or multidirectional level

Hex key kit (SAE and Metric) – Full kit but 3MM is required)

USB keyboard

Installation Report

Spring clamp to hold open cash module latch

Small ratchet drive for pin pad security screw

**Key tools to have are 10MM and 5/16" sockets/wrench, 2.5MM & 3MM allen wrench/hex key, T10 Torx key/bit, 8MM socket or wrench, 4MM hex key and bit for screw gun, various Phillips head and flat head screw drivers, and a spring clamp to hold open cash door latch**

**\*\*\* Must be a weight of approximately 10 lbs. in which the exact weight is known. A 10 lbs. dumbbell or plate weight from a sporting goods store will work. You must weigh it on an accurate scale (supermarket produce scale) to get the exact weight. Once the exact weight is known, use a permanent marker to record the exact weight for future reference when performing the load cell calibration. Naturally, certified weight kits can be used for this as well.**

## CHECK IN

Two-part check in...

- 1) Notify the PMO teams that you are on site by sending an email to the following email addresses:  
[PMO\\_Team\\_Projects@toshibagcs.com](mailto:PMO_Team_Projects@toshibagcs.com).
- 2) Contact the ROC or STS as directed by the PMO team to notify them you are on site.

# INVENTORY

There will typically be a combination of one or two cash lanes and one cashless lane. The lanes will come shipped one lane per pallet and will be wrapped in packing paper and shrink wrapped with all components included on the individual pallet. There will also be a ramp with the cashless lane to assist in removing the cash module (cash handling components) off the pallet.

## Inventory

- Lanes on pallets
- Wooden ramp for cash module removal
- Flatbed scanner USB cables (Not currently used – please hand over to store POC))
- One box of Shopper assist (SA) cards (Please hand over to store POC)
- Power connector (pig tail cables)
- Ethernet cables
- Lane keys
- BNR keys
- BCR keys
- Document set with CD
- Customer Service Call Button (Two per lane)

Each lane will have a set of unpacking instructions taped to the outside of the lane



Figure 1 – Cash lane



Figure 2 – Cashless lane with ramp



Follow the instructions below on unwrapping/unpacking the lanes



Figure 1



Figure 2

To prevent damage to the SCO Lanes, DO NOT REMOVE protective shrink wrap till lanes are in their final location.



Figure 3

**Figure 3** calls attention to the “Do Not Grab” label as well as the unpacking instructions right below the display.



Figure 4

**Figure 4** illustrates safe places to handle via “Grab Here Only” labels.



Figure 5



Figure 6

**Figure 5 & 6** carefully remove the stretch wrap and polybag. Once lanes are in final location.

Once you have the lanes unwrapped, inventory the components to make sure all expected components are included. If you find that equipment is missing, please contact the PMO team noted in *Contacts* information section.

Dispose of all packing material as directed by the customer POC. Always keep the work area clean and organized.

After inventorying all equipment, count and record the number of keys received and retain in a safe location until the installation is complete at which point you will turn over to the store POC. Have the POC sign the Installation Report validating key count and receipt at that time.

**NOTE: On the cash lane, the cash module is not yet physically attached to the core the module so be careful when moving the lane as the cash module could roll off the pallet.**



## SITE PREPARATION - VALIDATION

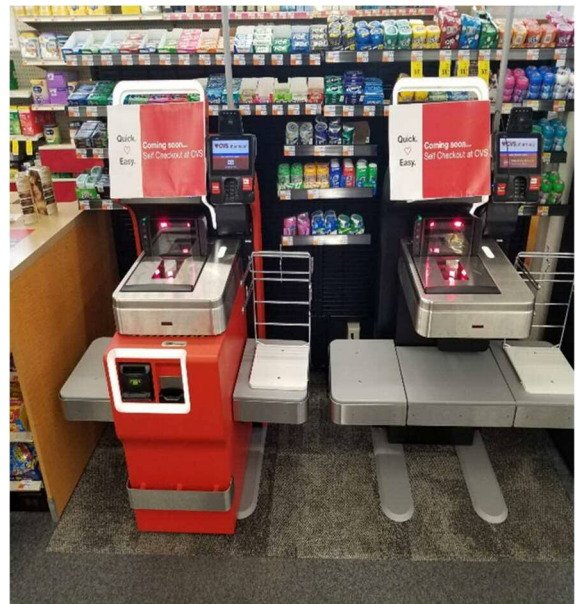
Verify the front end is set for lane placement. Verify power and data have been completed and are correct. There should be one data jack and one twist lock receptacle for each lane. Escalate to the PMO team if the site preparation is not completed.

CVS utilizes a NEMA L5-15 twist lock power plug. Make sure the receptacles are twist lock as shown below. Verify power is ~120V using a standard DVM measuring between the GRND and HOT terminals. Record the voltage on your Installation report for each lane.



Below is a typical CVS front end set up for two SCO lanes.

NOTE: There may be candy racks against the wall that the lanes will slide in between (right picture)

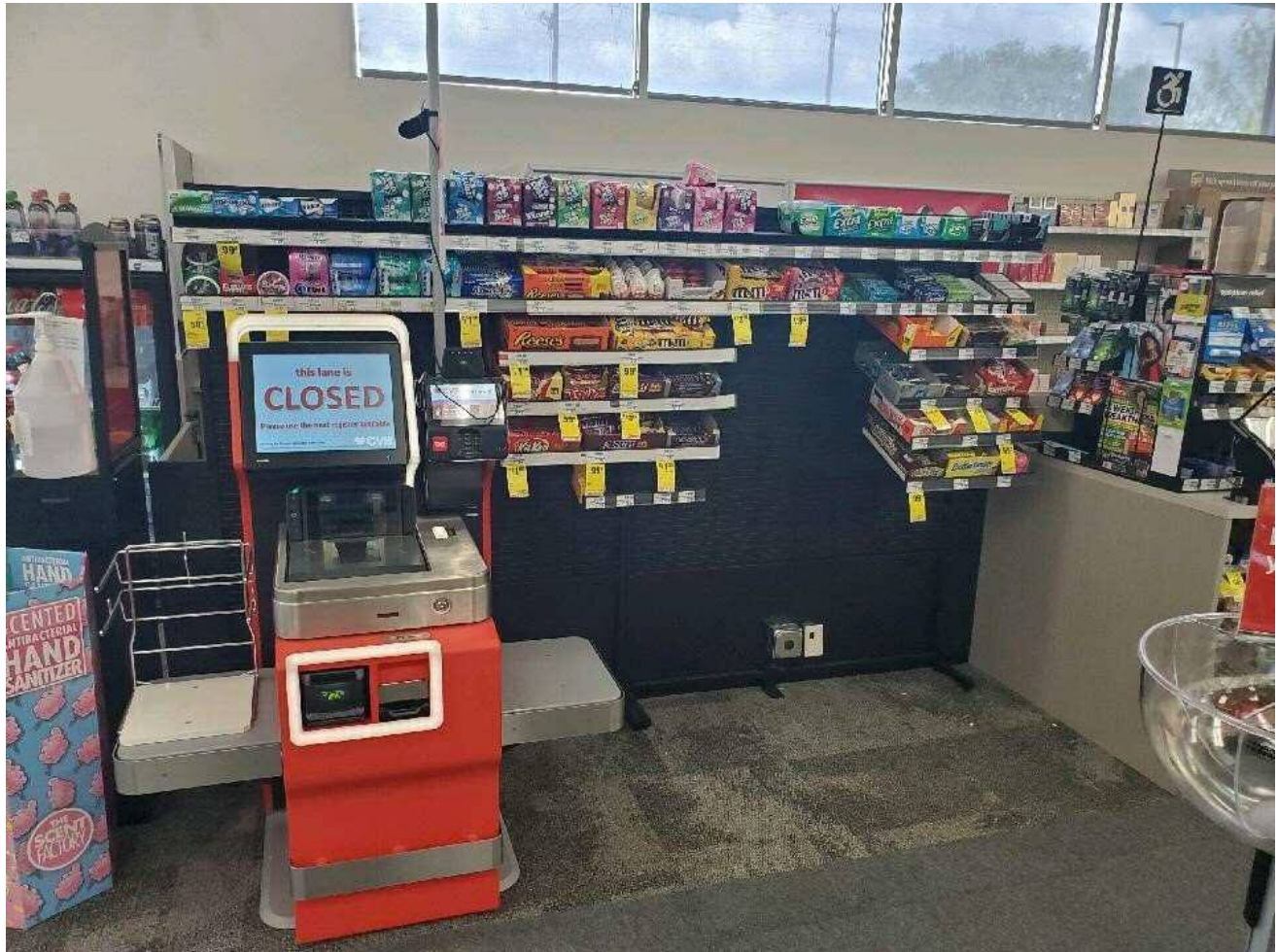


### Adapter Cables (new)

Give Twist Loc adapter pigtail to the managers for 1 lane sites for the drink coolers, as they will need an adapter to plug into our twist lock outlets.

## LANE PLACEMENT

Lanes will go closest to the door regardless of cash or cashless orientation. Please leave an open space closest to the manned POS cash wrap. CVS may have installed a drink cooler in the normal cash machine location to help support the distancing measures. Please provide a picture of your single lane in the correct position closest to the front door. If there are any questions or requests by store management to change, please contact the PMO office for direction. Note: **Check power and data for both outlets to support future installations.**





## LANE PLACEMENT

Once the site preparation has been verified, the lanes can now be placed in the appropriate locations on the front end. **Always start with installation of the cash lane first as this will need to be completed first to allow store training. Make sure adjacent lanes are not touching each other or the walls. There should be a minimum of 1" clearance.**

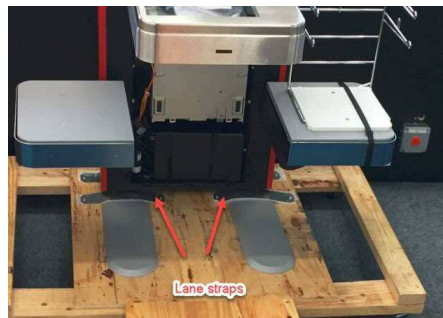
**NOTE:** Cash lane should be placed closest to POS counter when there is a POS counter nearby. If there is not a POS counter, place the cash lane according to lane orientation as noted below:

- a) Left hand lane (stand in front of lane, if bag rack is on the left, it is a left-hand lane) - place the CASH lane in the first position on the RIGHT
- b) Right hand lane (stand in front of lane, if bag rack is on the right, it is a right-hand lane) – place the CASH lane in the first position on the LEFT.

**NOTE:** Lanes that are adjacent to each other should have the same orientation. The bagging section should be closest to the exit of the store so customer traffic flows towards the door after checking out. If you receive lanes that do not match this set up, please escalate to the PMO immediately.

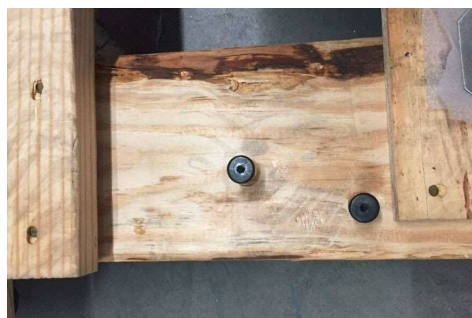
The pallets are designed to either be used with a pallet jack or they can be rolled on the attached wheels. If the store is carpeted, you cannot use a pallet jack to bring the lanes out to the front of the store.

**NOTE:** Do not remove the straps securing the lane to the pallet until the lane has been transported to the front of the store.



If the floor is **not** carpeted, slide the pallet jack fully under the pallet to engage both side of the pallet on the pallet jack forks. Using the pallet jack carefully roll the lanes out to the appropriate location on the front end.

If the floor is carpeted, remove the two screws from the blocks on each corner using a 4MM allen wrench or bit for your cordless drill. This allen wrench should be taped to the lane. Using a hammer, you can then tap the blocks from under the pallet to allow the pallet to sit on the wheels. After the blocks have been removed, carefully roll the pallet to the front of the store.



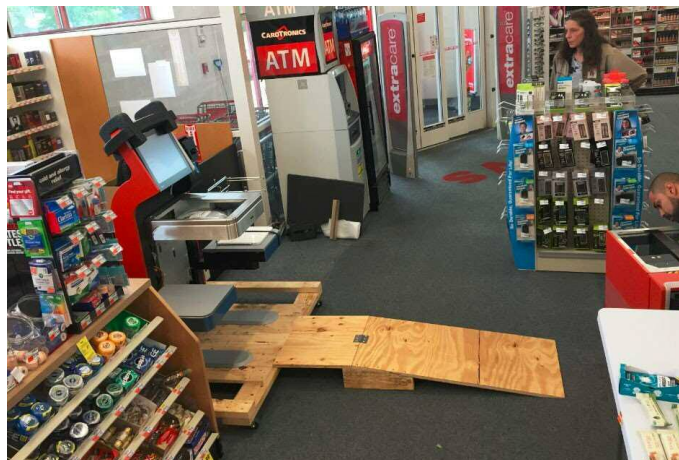
After transporting the lanes to the front of the store, bring the pallet ramp to the front as well to facilitate unloading the cash module from the cash lane. The ramp is not required to remove the cash lane from the pallet.



Ramp for offloading cash module

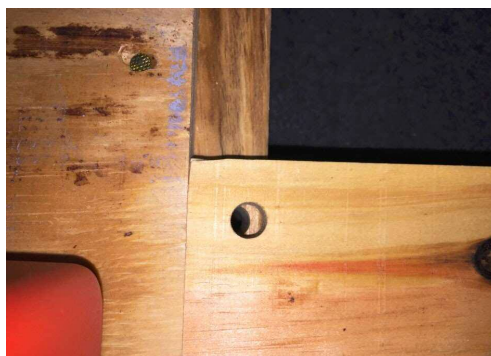
Position the pallet to allow the ramp to be attached to the front of the pallet.

NOTE: The cash module has already been removed from the core module and is just representative of pallet placement for removing the cash module.



Set the ramp in place on the front of the pallet. Align the holes in the ramp with the matching fastener on the pallet. Utilizing two of the allen head screws that secured the blocks to the pallet, secure the ramp to the pallet to prevent ramp from sliding off the pallet.

NOTE: 1" wood screws screwed through the ramp into the pallet can also be used if there are any alignment issues with the allen head screws.



Carefully slide the cash module down the ramp and place away from the work area.



Remove the ramp from the pallet. If there are other cash lanes to be installed, you can leave the ramp up front. If there are not, the ramp can be taken to the rear of the store. The ramps will not be returned/reused so the customer can dispose of the pallet.

Reposition the pallet to allow access to the rear of the lane. Remove the four straps that secure the lane to the pallet.

NOTE: DO NOT use the lane light assembly as a hand hold for the lane removal or placement process. Even though it looks like a nice handle to grab on to, it is not made to do so.



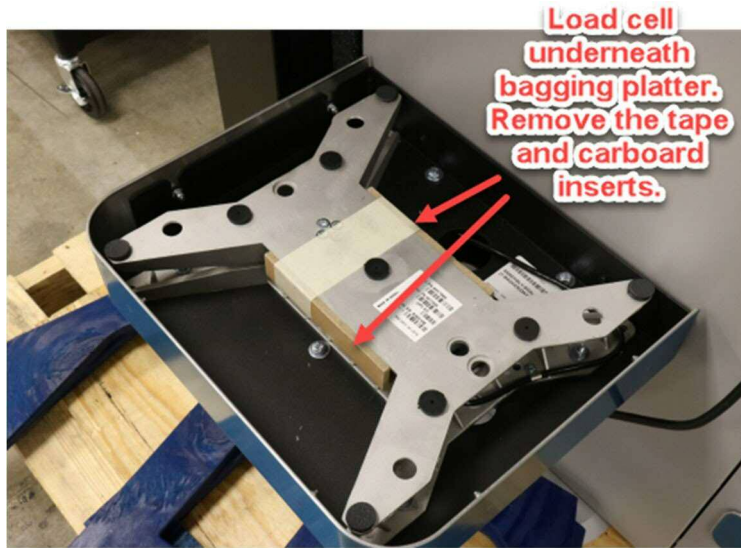
Grip the side of the core unit and gently slide back and forth to carefully ease it off the pallet. Once the back feet of the system are on the ground it can be slowly lowered to the floor.





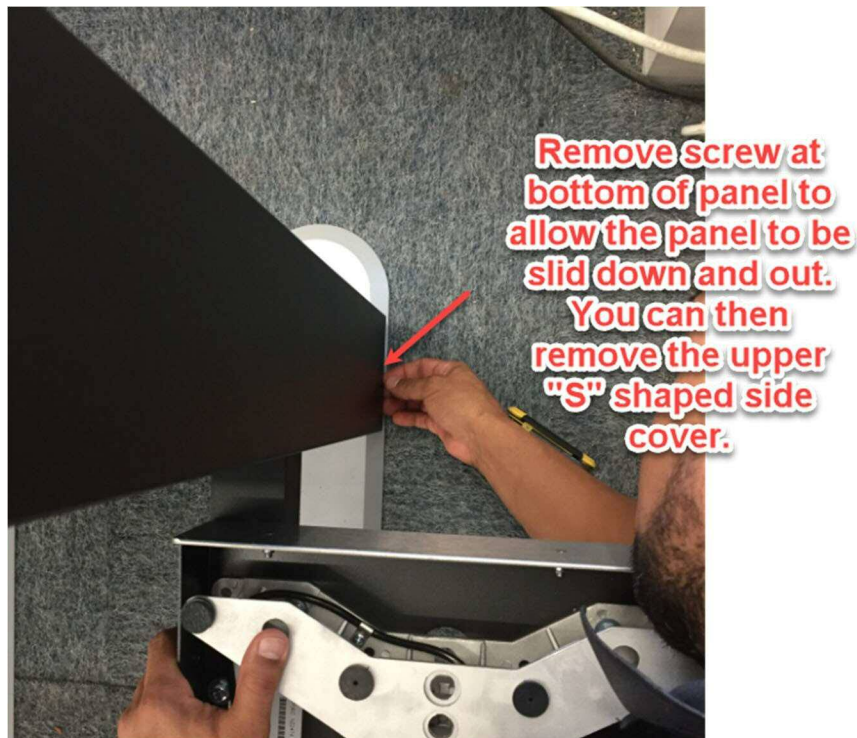
Once the core unit is off the pallet, you can “walk” the lane into position by sliding back and forth. Leave the lane away from the wall to allow room to work on the lane.

Remove any remaining packing straps, stainless plastic wrap, and load cell shipping inserts (picture below) from the lane and dispose of trash from the production floor.



## SIDE PANEL REMOVAL

You may have to remove the side panels to access the cabling or possibly the leveling bolts. In order to access side cabling areas of the left and right side panels of the core module, you must remove the screw at the bottom. This will allow you to slide the long panel down and out. You can then remove the upper “S” shaped panels up top.





## TRANSACTION AWARENESS LIGHT INSTALLATION (TAL)

The TAL will be packaged in a cardboard tube wrapped with the palletted lane. To install the TAL, you will need to remove the pin pad and printer.

Reference the drawing to the right to understand which pins retain the pin pad and printer

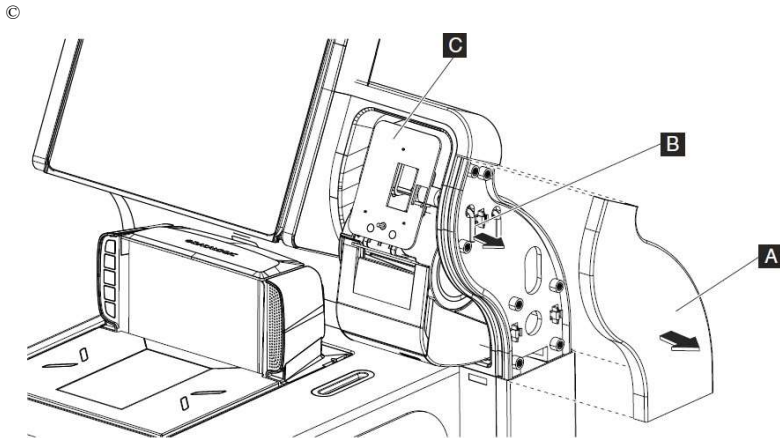
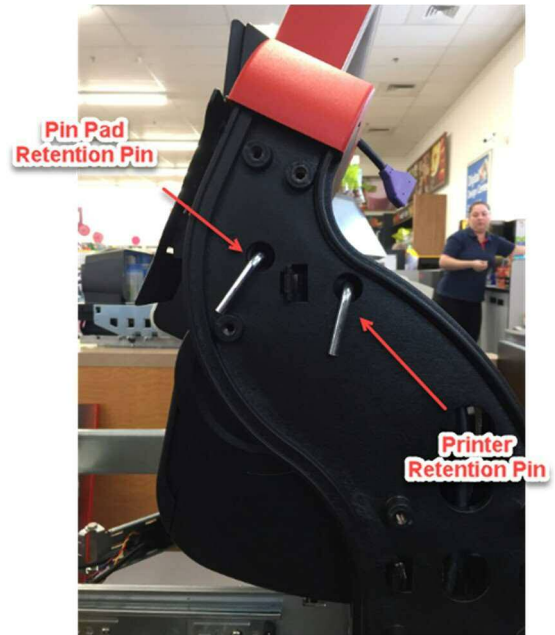


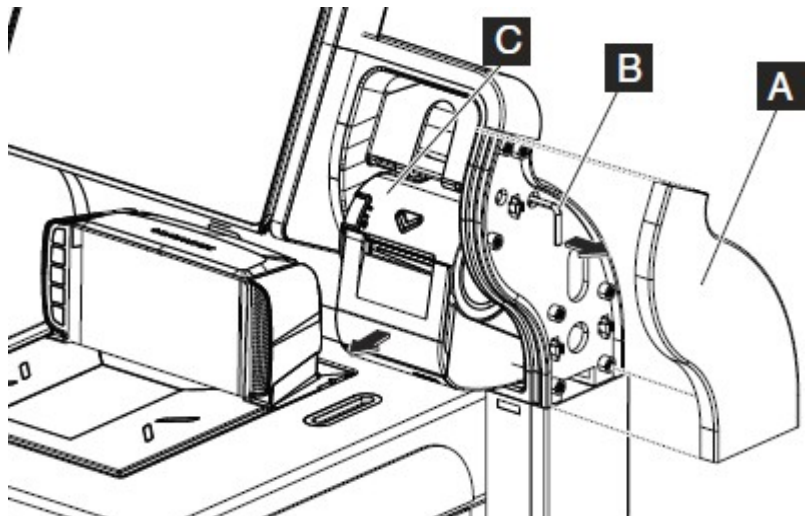
Figure 52. Pin pad mount removal

Figure 52: In order to remove the pin pad, you will need to remove the upper right side cover "A" by gripping it firmly and pulling it away from the core unit.

While holding the pin pad/mount "C" in one hand, pull the pin pad retention pin "B" from the core unit.

After removing the pin pad/mount from the core unit, you can now remove the printer.

While holding the printer securely in one hand, remove the printer retention pin "B" from the side of the core unit.



You can now install the TAL following the instructions below.

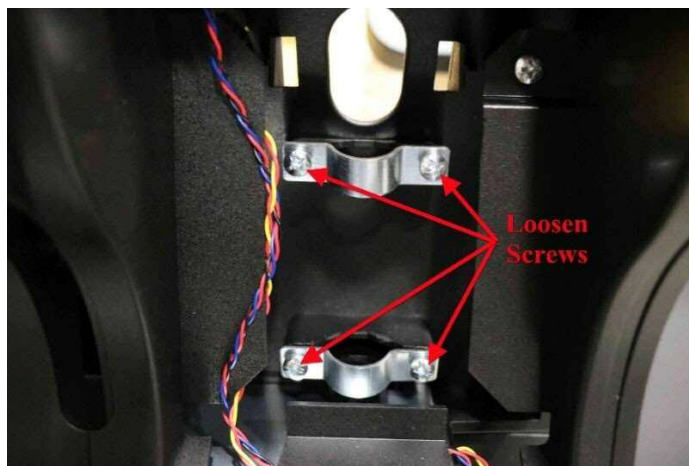
1. The TAL boot will be attached to the TAL cord as noted below. If you do not see the boot, please check inside the shipping tube to make sure it did become dislodged in the shipping tube.



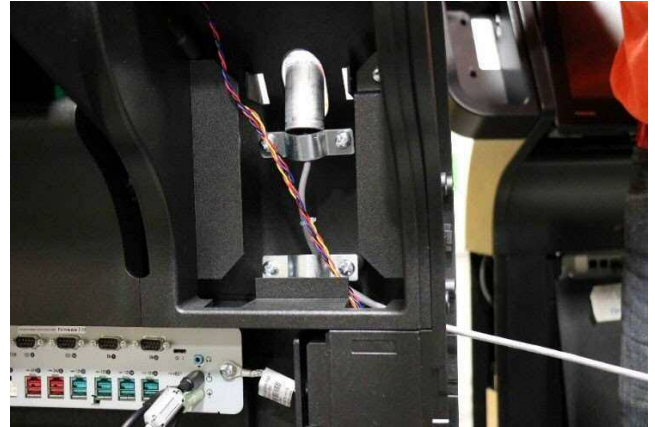
2. Insert TAL cable through TAL cover and position on the bottom of the pole.
- 3.



4. Loosen the 2 brackets so that the TAL lights can be inserted.



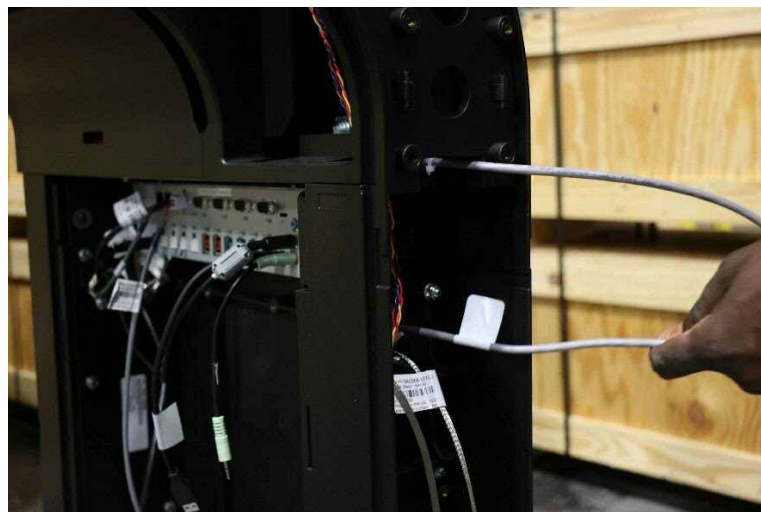
5. Route the cable through the opening in the back of the cabinet and through the 2 brackets as shown below.



6. Insert the pole through the brackets and tighten screws.

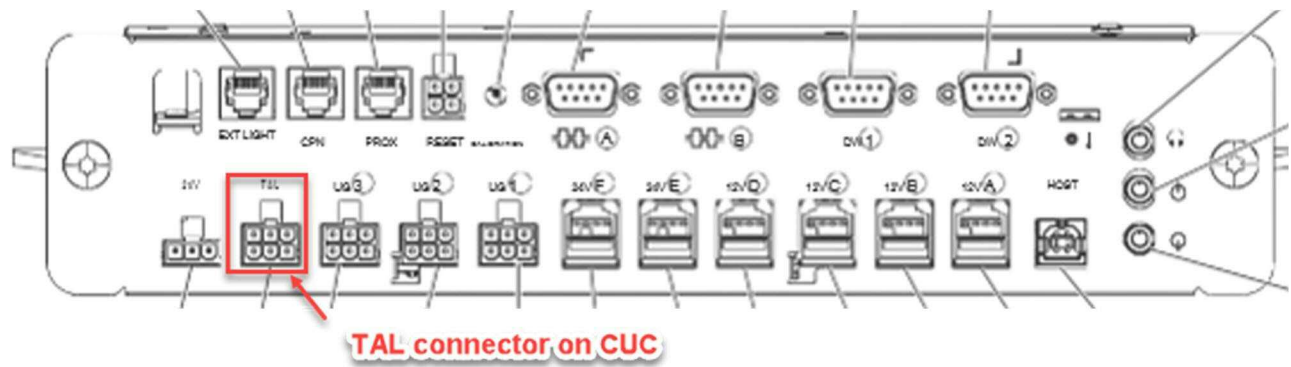


7. Route the cable into the core unit.

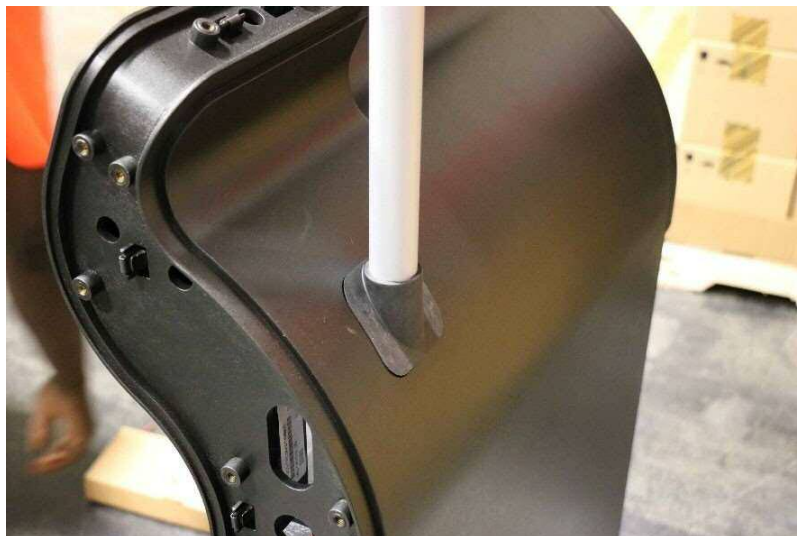




- Slide out the scanner scale to allow access to the CUC. Plug the cable into the TAL connector on the CUC.



- Verify the gaps are covered by the TAL cover.



- Reinstall the printer and pin pad by reversing the removal steps identified earlier.



## POWER ON PROCEDURE

Verify the battery is connected in the UPS prior to powering up. You may see a small spark when connecting leads.



Figure 21. Press on the retention tab and open the battery door  
**Power up continued...**

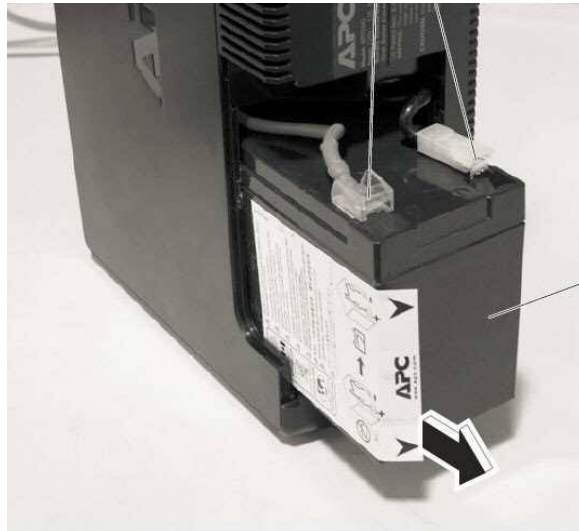


Figure 22. Pull the battery out, and connect the leads

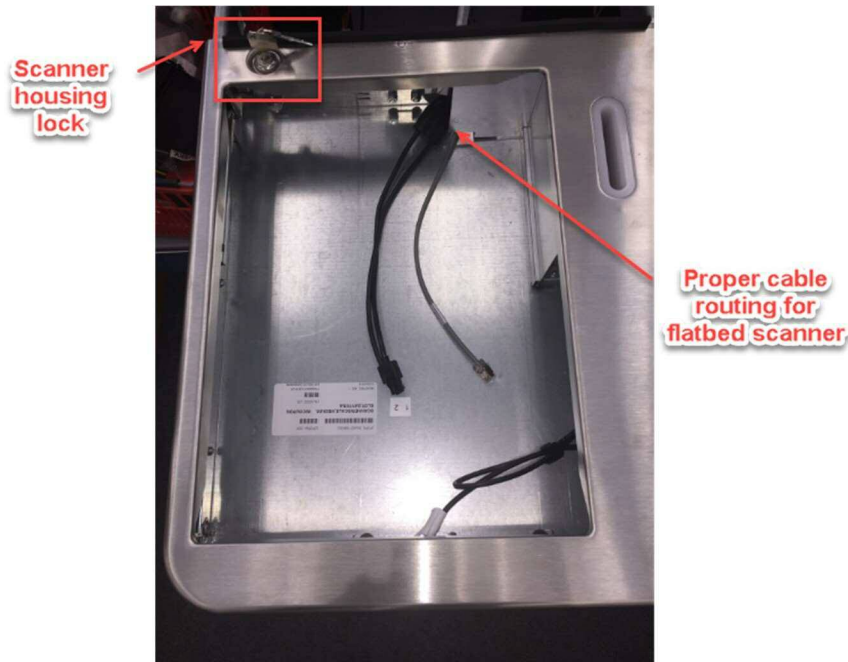
After verifying the battery leads are connected, ensure the UPS is re-installed in its original position as shown below. When installed correctly the controls will be visible in the cutout on the right side of the core module.



# FLATBED SCANNER INSTALLATION

Complete the following procedure to install the scanner/scale.

1. Unlock and open the scanner unit by pulling away from the core.



2. If present, remove the platter from the scanner/scale.
3. Place the scanner/scale onto the edge of the scanner/scale cabinet and connect all cables to the scanner as outlined below. Please follow this closely as you will prevent wasted trouble shooting time if not checked up front

## Flatbed Scanner Connectivity

The flatbed scanners should be installed at manufacturing. However, there may be times that you will have to install on site if they were not shipped installed. **The flatbed scanners should currently be installed in serial configuration.**

**NOTE: CVS currently uses serial communication on their scanners. However, you could see the power for the scanner scale provided in one of two ways**

**Option 1 – power provided by power brick. Please see option 1 picture below**

**Option 2 – power provided using powered USB cable. This is a Y cable and you will not use data cable section of the Y. Please see option 2 pictures below**

**The serial connection does not change you will always use a serial cable from port A on the PC to the Host port on the scanner. Let me repeat that...the scanner will always use a serial cable from port A on the PC to the Host port on the scanner no matter which way the power for the scanner is provided.**

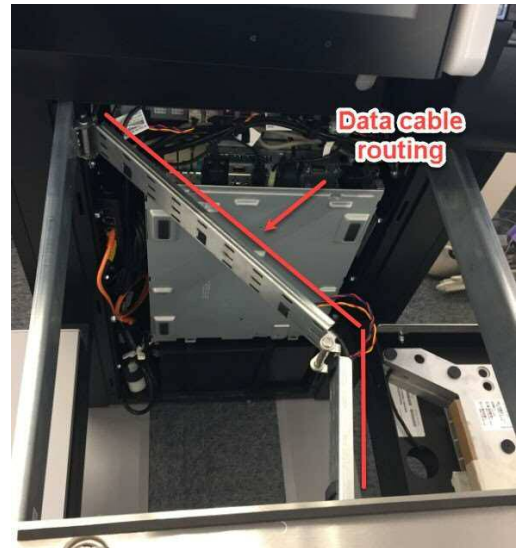
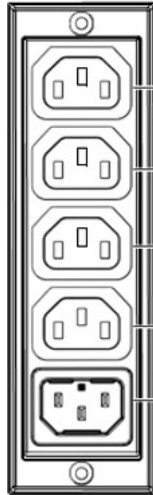
**NOTE: Even if the cable is pre-run from manufacturing, please verify cable connectivity to avoid unnecessary troubleshooting delays if issues are encountered.**

## OPTION 1 – SCANNER USING POWER BRICK

If the scanner power/data cables are not preinstalled from the factory, you will need to remove the left side panel and place power brick there. Plug the power brick into PDU (Center picture below) using a supplied pig tail. The data cable will have to be routed along the scanner scale articulating arm and held fastened with the included Velcro.



Flatbed scanner  
power brick  
placement



Data cable  
routing

## OPTION 2 – POWERED USB

If the lane has a powered USB cable already installed, you will use only the power leg of the “Y” cable.

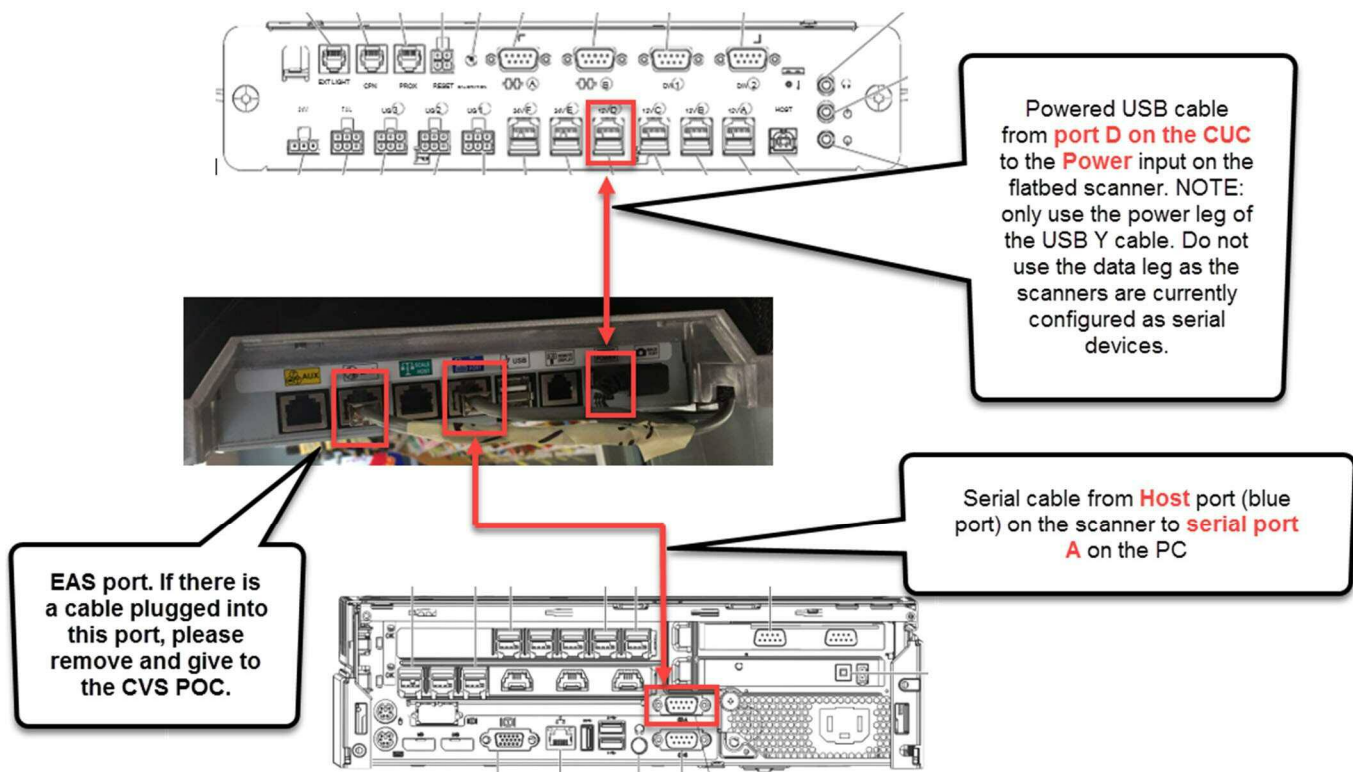
DO NOT USE as  
scanners are  
configured as serial  
devices

Use the power leg of  
the cable only as the  
scanners are configured  
as serial devices



Powered USB  
cable plugs  
into port D on  
the CUC





4. After completing all required connections, using the lift points (see Figure 195), lift the scanner/scale and place it into the scanner/scale cabinet.



Figure 195. Scanner/scale lift points

Grasp the scanner/scale by lift point **A** and the lift point **B** closest to you and lift the scanner/scale out of the cabinet.



5. Using a torpedo level, test for level front to back and side to side and make sure the scanner is stable. If necessary, adjust the four leveling screws on the flatbed scanner from the top side as illustrated below.

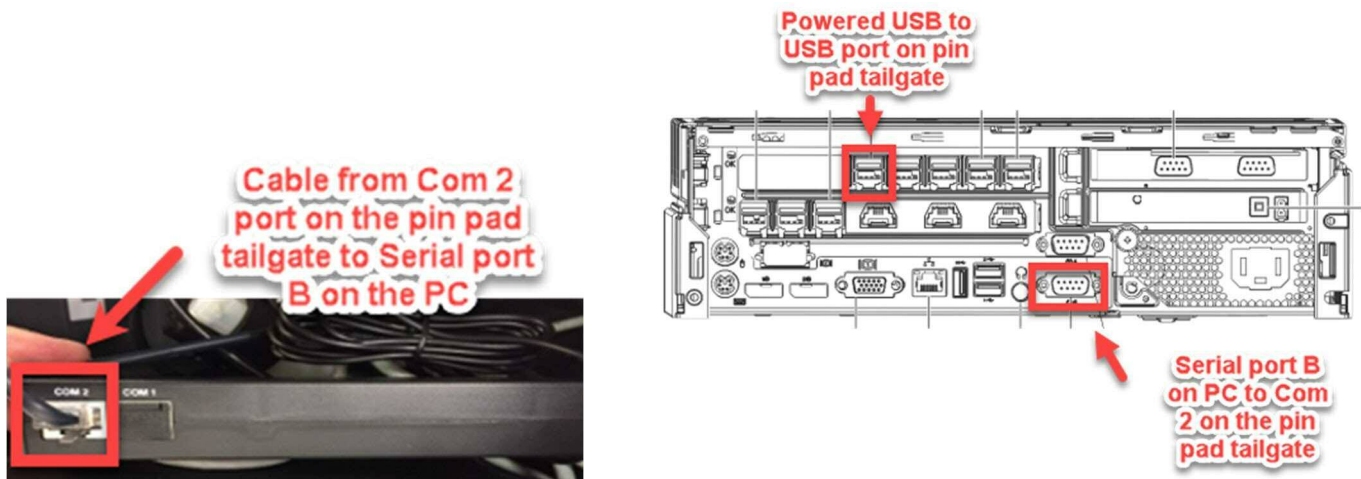


## PIN PAD INSTALLATION

The pin pad cabling should be installed at manufacturing. However, there may be times that you will have to install on site if they were not shipped installed. The actual pin pads will be on site at the customer location and will need to be installed. You may need to have the store remove the pin pads from existing lanes for use on the SCO lanes.

### Connectivity

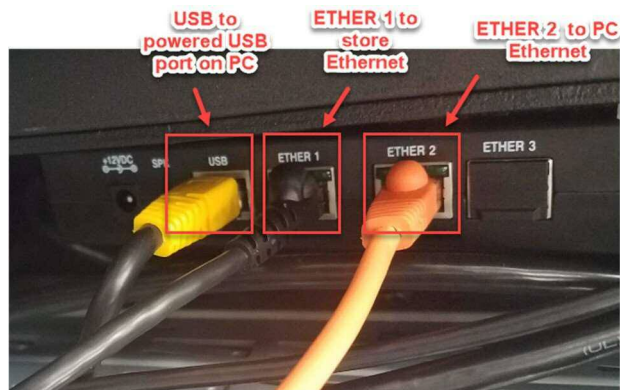
Verify pin pad serial connection on the pin pad tailgate in the core unit module. **Confirm that the serial cable is plugged into COM port 2 on the pin pad tailgate and serial port B on the back of the lane PC.** The pin pad tailgate will be powered through a 12v USB connection via powered USB on lane PC to USB port on tailgate.



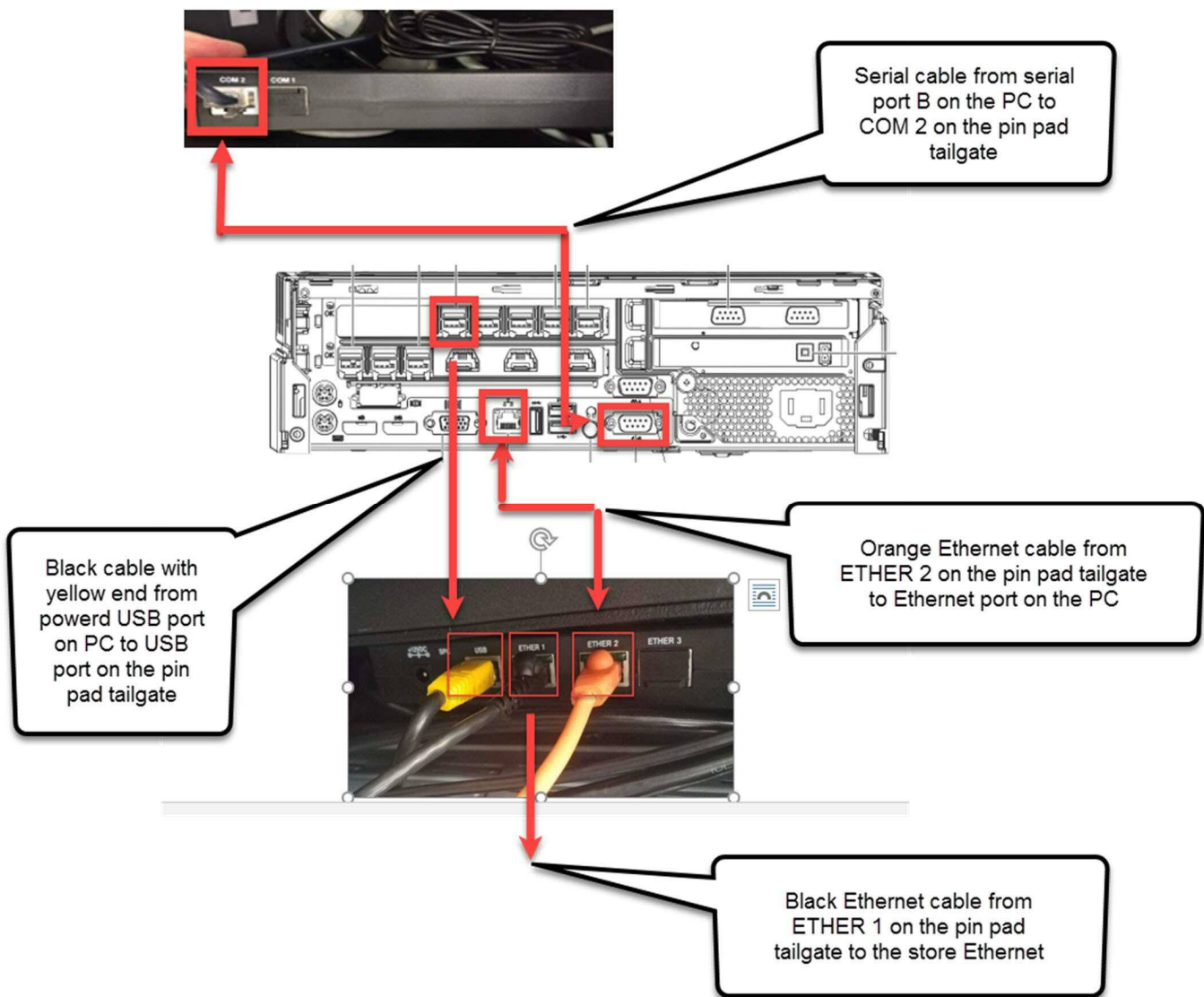
Com 2 o

### Data (Internal to the SCO Lane)

Data cabling internal to the lane will need to be completed by installer. The installer will run a Cat5 cable from the pin pad tailgate ETHER 1 to the data demarc (demarcation point or data biscuit) in the bagging area labeled "Register" or "POS." The installer will run a Cat5 cable from pin pad tailgate ETHER 2 to the lane PC.

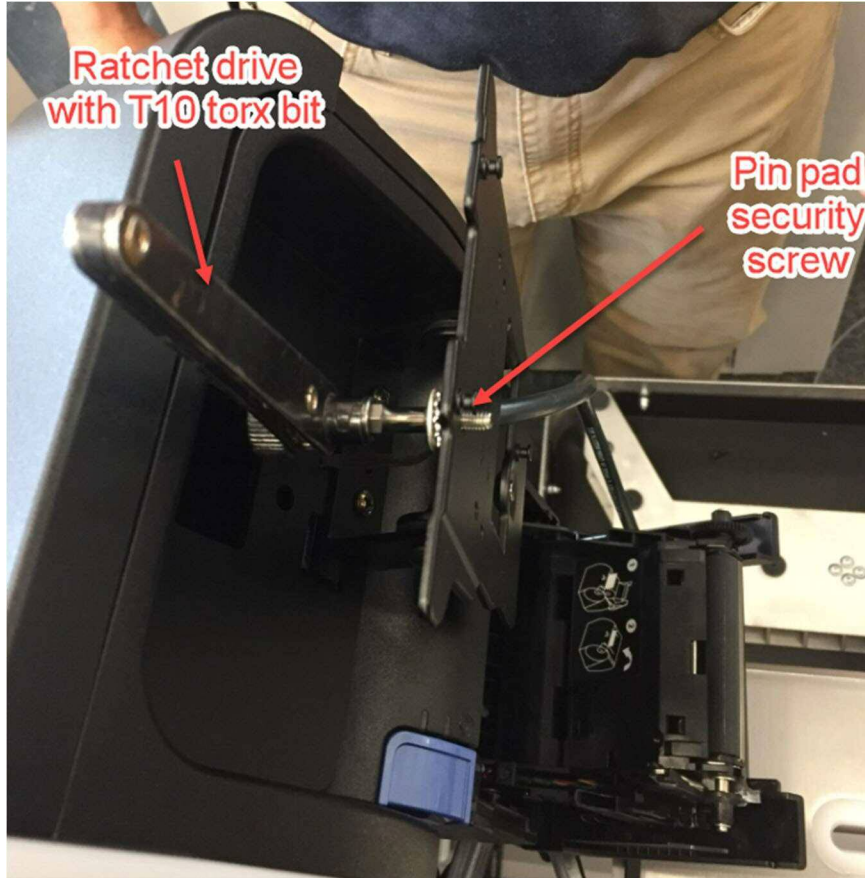


Additional overview connectivity information for pin pad and Ethernet connectivity.





Loosen the security screw (T10 torx) on the pin pad mount. Plug the tailgate cable into the pin pad and slide the pin pad on the mounting bracket. Tighten the pin pad security screw into the bracket to prevent removal of the pin pad. A small ratcheting drive works well for this process.



## FINAL LANE PLACEMENT

After all connectivity has been completed, you can plug in the main power cord from the lane into the store wall outlet and also plug in the network cable from the pin pad tailgate to the network jack on the wall. You can then slide the lane back into its final position.

## LANE LEVELING

Leveling and stabilizing each system is critical to load cell/scale accuracy and stability of the system. Once the core unit is positioned and secure, the core unit must be leveled. Using a torpedo or multidirectional level, level the core unit before attaching the cash cabinet (Model 110) or bagging unit (Model 100 and 110).

Verify the core unit is level side to side and front to rear. If the core unit is not level, follow the instructions below.

**NOTE: Only small adjustments in leveling can be made on CASH lanes or mating the cash module to the core module will be affected. This procedure should not need to be performed very often and with only slight adjustments if necessary. On CASHLESS lanes, you may adjust as necessary without negatively affecting alignment.**

Complete the steps below to level the self-checkout system:

6. Remove the left and right lower side panels from the core unit by removing the screw at the bottom of the panel, grasping the recess beneath the bottom edge of the panel and pulling to unsnap the bottom of the panel. Then slide the panel downward 25mm (1") and off. Some older units do not have a recess at the bottom. For those units remove the panel by pushing firmly downward 25 mm (1") and then pulling away from the side of the core unit. Loosen the locking nuts on the leveling studs.
7. Level the core unit by adjusting the leveling nuts at the bottom of the cabinet. Level the side of the cabinet first and then level the front of the cabinet. Once level, tighten the locking nuts, and reinstall the side panels.

When leveling the unit to the front (or back), the stud nearest to the front (or back) needs to be locked and the bottom nut opposite to that nut needs to be raised. See Figure 28 for an example of leveling the unit to the front.

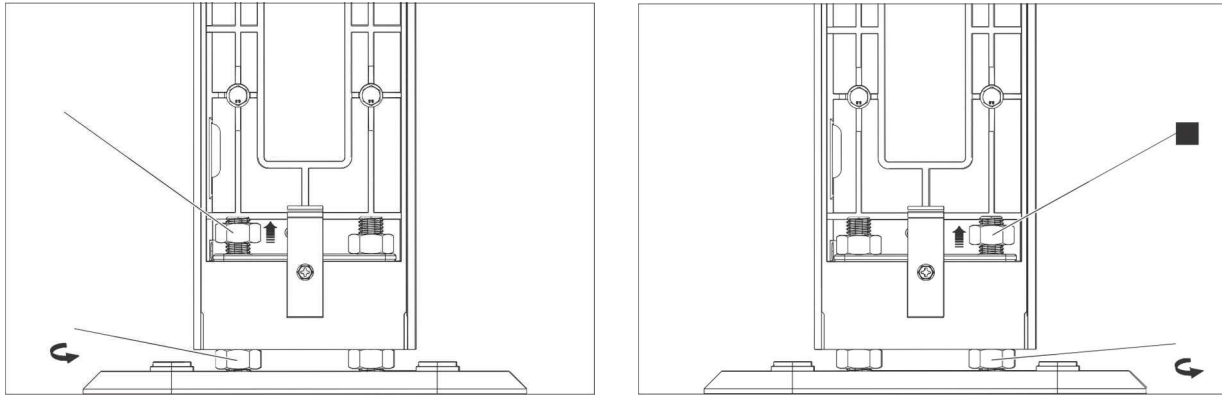


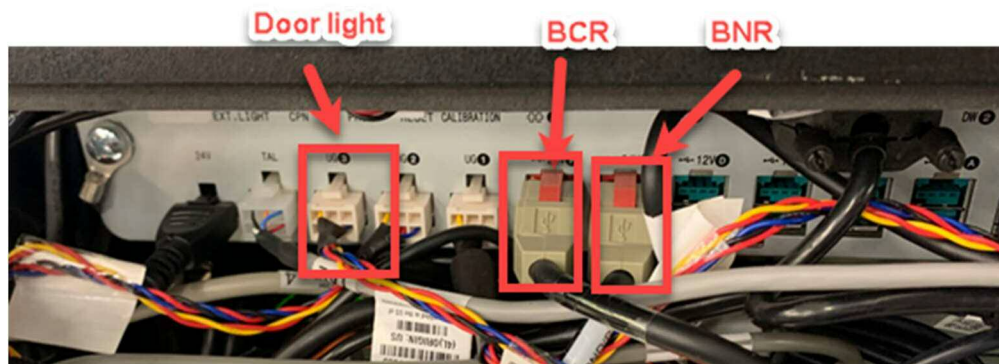
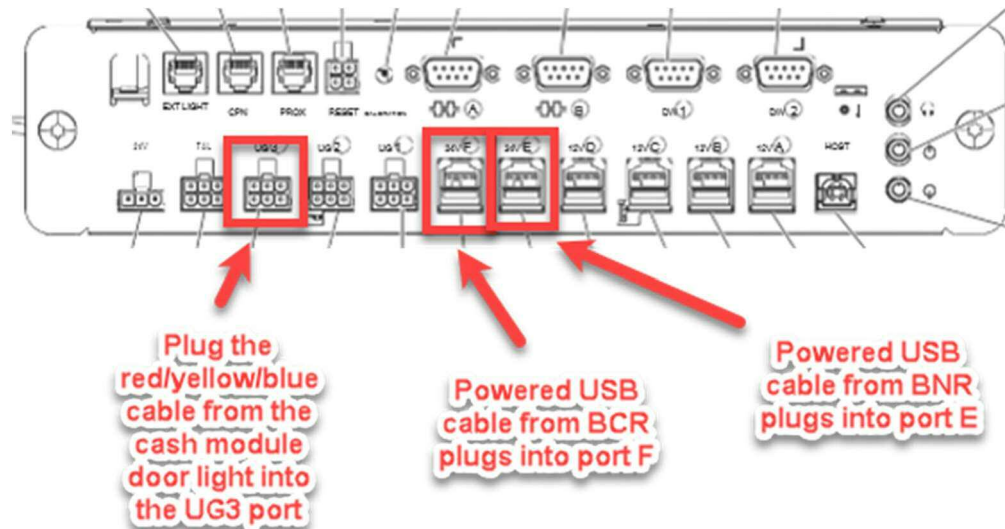
Figure 28. Leveling unit to the front

8. For Models 100 and 110, check that the top of scanner/scale unit is level. If not, loosen the bolts connecting the unit to the core, level the scanner/scale and retighten the bolts.
9. Use a 7/8 in. (22 mm) socket to tighten the locking nuts against the threaded holes in the core cabinet. The bagger locking nuts require a 3/4 in. (19mm) socket. Failure to lock down the levelers in this way can cause weight instability.
10. Repeat steps 1 through 4 for each lane to be installed.

## LANE ASSEMBLY (CASH AND CASHLESS)

### CASH LANE

Plug the BCR (bulk coin recycler) and BNR (Bank Note Recycler) into the appropriate ports on the CUC as identified below.



Squeeze the clamp on the cash module latch to allow the cash module to slide into place and mate with the core module. As shown at right, a simple spring clamp can assist in holding the latch open to assist in this capacity.





Follow the steps below to install the cash cabinet.

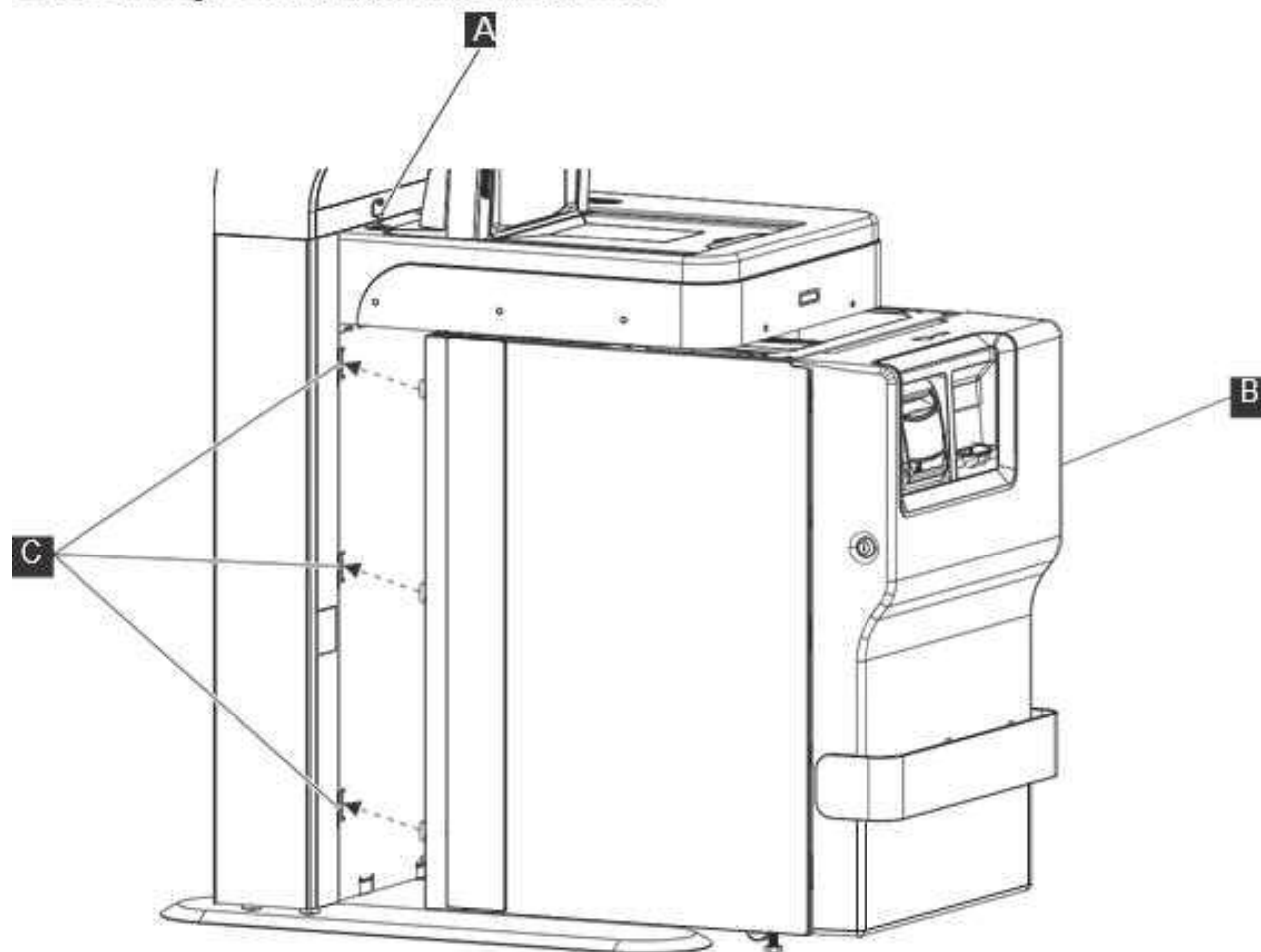
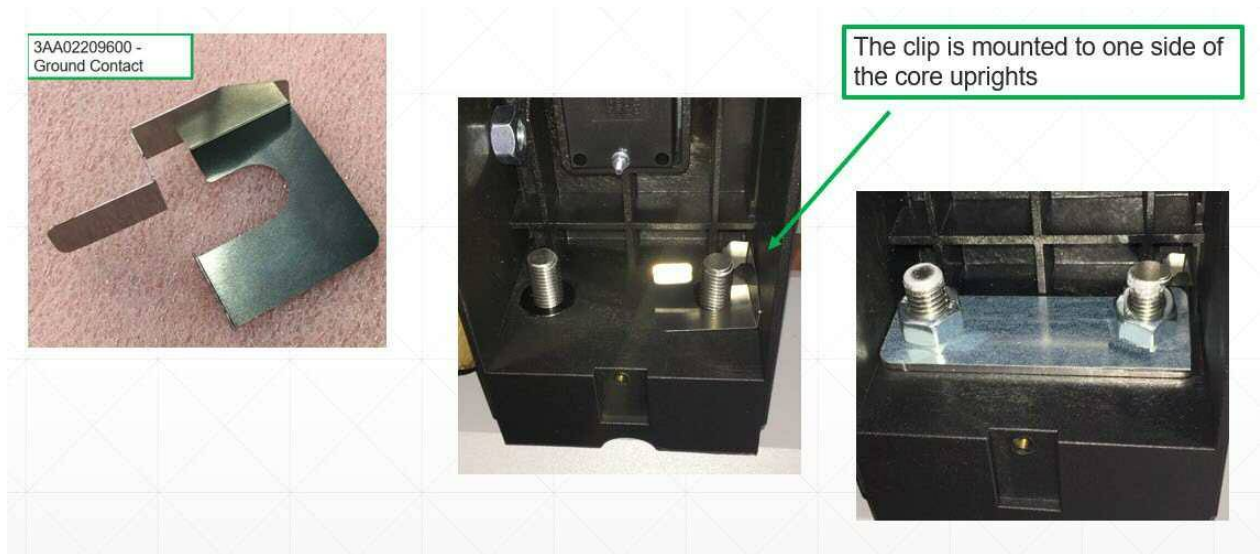


Figure 30. Cash cabinet

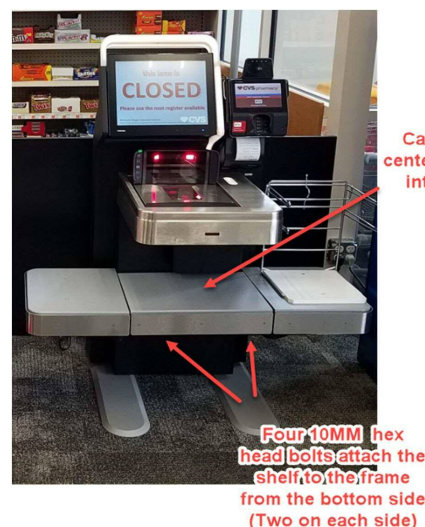
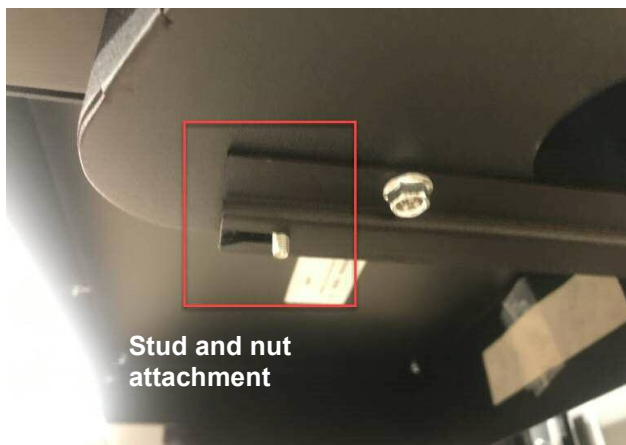
1. Unlock and open the scanner/scale cabinet (A).
2. Connect the coin recycler (RCH), bill recycler (BNR), and cash door cables to the core unit controller. Connect the ground strap between the cash cabinet and the core unit.
3. Position the cash cabinet (B) beneath the scanner/scale cabinet and back against the front of the core unit.
4. Check that the guide pins at the lower rear of the cash cabinet are aligned with the holes (C) on the face of the core unit.
5. Lift the latch mechanism at the upper rear of the cash cabinet and push the cash cabinet fully back against the face of the core cabinet. Lower the latch to engage the two cabinets.

NOTE: The cash cabinet no longer uses a grounding strap. There is now a grounding clip used in place. When the cash cabinet is mated to the core the clip creates grounding connection .



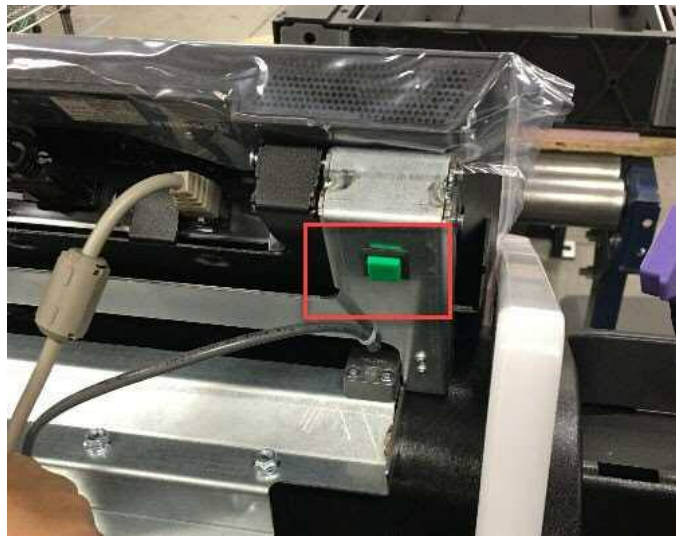
## CASHLESS LANE

After completing all cabling, install the center cabinet section that covers the internal equipment. Then install the center shelf using the four 10MM bolts or you may see the engineering change of the center shelf bracket that only uses two nuts to secure the center shelf



After plugging the main lane power cord into the appropriate outlet, perform the following procedure to turn on the lane.

1. **Locate the green Reset button which is on the rear right corner of the touch screen display. The display can be rotated for better access.**



2. Press and hold the green Reset button or until you hear the lane components powering on.

**Note:**

- If you turn off power to the lane, wait at least 90 seconds to allow attached devices, such as the scanner-scale, to shut down before you try to power on the lane again.
- If the lane PC does not power on, open the front panel of the core unit (Model 1K0) or open the scanner/scale unit (Model 100 and 110) and manually power on the lane PC. The power button can be found on the right top side of the PC.
- Make sure the UPS is also turned on.



## FLATBED SCANNER PROGRAMMING

Once the lane is powered on, follow the programming instructions below.

**Note:** The lanes will be shipped with USB cable that are not being used at this time as they are using serial/RS232 connectivity. Please give these cables to the CVS POC when you turn over the keys, shopper assistant cards, etc.

**NOTE:** Make sure you cover all barcodes except the one you are trying to scan to prevent any crossover unwanted scanning. If you do not hear the tones as indicated, the scanner is not accepting the barcode. It could be a print quality issue. Please contact the PMO team if this occurs

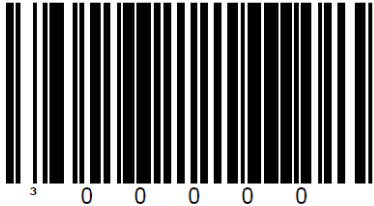
- Scan the Programming label below to put the Magellan into the **RS232 Standard Interface**.
  - Scanner will beep three (3) times, enter programming mode, set the interface, exit programming mode and reset.

Interface = RS232 Standard (Dual Cable)



- Scan the **Switch Label** below to enter Programming Mode
  - Scanner will beep **one (1) time** putting the scanner into Programming Mode.
  - **Green LED** on the Bonnet is flashing.

Switch Label



- Scan the **Composite Label** below.
  - Scanner will beep three (3) times, exit programming mode and reset.

Composite Label



- Scan the **Switch Label** below to enter Programming Mode
  - Scanner will beep **one (1) time** putting the scanner into Programming Mode.
  - **Green LED** on the Bonnet is flashing.



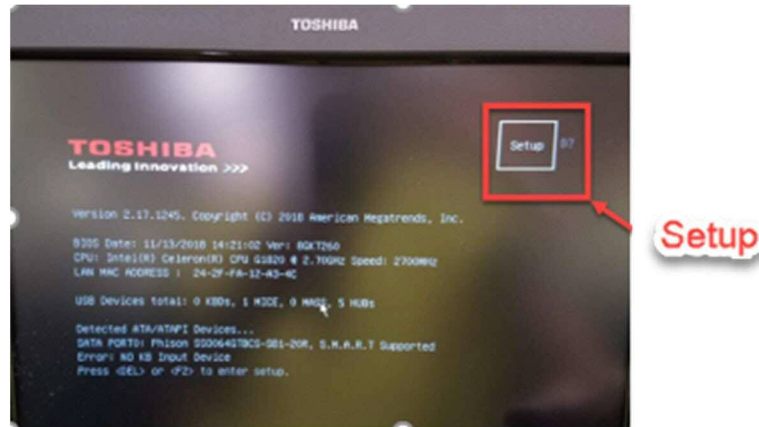
- Scan the **Composite Label** (PDF4517 barcodes for the Extra Care Cards)
  - Scanner will beep three (3) times, exit programming mode and reset.



## BIOS

Set or validate the BIOS is set as follows:

1. Power on or reboot the PC.
2. Press the **DEL** key to enter the BIOS set up. As an alternate option, you can press the "Setup" button on the touchscreen.



3. Load the default settings. An option is displayed on the BIOS screen that allows you to load the default settings.
4. **Configure the Boot Mode Select under the "Boot" tab to LEGACY**
5. Configure the *Fixed Boot Order* under "Boot" tab as follows:
  - a. USB Floppy
  - b. USB KEY
  - c. USB Hard Disk
  - d. USB CD/DVD
  - e. CD/DVD
  - f. Hard Disk
  - g. Network
6. Edit the power management settings to ensure that the computer is automatically turned on when power is restored to the system. This setting is called "After Power Failure" on the 4900-786. The power management settings should be set to the following:
  - a. **Last State** for Model 6800 Lanes
  - b. The setting for the "Power Button Mode" is the default value.
7. Complete the following steps:
  - a. Go to "SATA Mode" under "Devices". Press **Enter** at this option.
  - b. Press **Enter** on "IDE Mode".



## HARDWARE DIAGNOSTICS

Insert the USB diagnostics into the lane PC and reboot the lane. Follow the setup instructions below for diags. Make sure you test all hardware functionality by following the instructions in Appendix B of this document.

**NOTE:** After completing diagnostics, don't forget to remove your diagnostic key from the USB port before proceeding to the next section on flatbed scanner programming. Basically, the scanner can be programmed anytime there is power applied, so this was moved up in the process in case there is trouble with the software load.

When the PC boots into diags, choose OK to the licensing question

On the four menu option screen, choose the SCO diags.

When you reach the screen to the right, set up as **System 7, COM 1, and MAGELLAN, SCANNER ONLY**

The system configuration file was not found or has not been initialized.  
To create a temporary configuration file that can be used until this lane is configured by a BOSS, Specify the correct information below and press 'OK'. Otherwise press 'Cancel' to exit.

Country	Cash hardware
Slovakia	Currency accepted and dispensed
Slovenia	AUD - Australian Dollar
South Africa	BGN - Bulgarian Lev
South Korea	CAD - Canadian Dollar
Spain	CHF - Swiss Franc
Sudan	CLP - Chilean Peso
Sweden	EUR - Euro
Switzerland	GBP - British Pound
Syria	HRK - Croatian Kuna
Taiwan	HUF - Hungarian Forint
Thailand	NZD - New Zealand Dollar
Tunisia	PLN - Polish Zloty
Turkey	RSD - Serbian Dinar
Ukraine	RUB - Russian Rouble
United Arab Emirates	SAR - Saudi Arabian Riyal
United Kingdom	SEK - Swedish Krona
United States	TRY - Turkish Lira
Uruguay	UAH - Ukrainian Hryvnia
Venezuela	USD - U.S. Dollar
Vietnam	
Yemen	

System Model	Scanner/Scale connection	Scanner/Scale type	Hand Scanner type & port
4845	Security Module	NCR_7870	NONE 2
4855 with bill recycling	USB or other	MAGELLAN	SYMBOL_LS4071 3
4855 w/o bill recycling	Serial COM1	MAGELLAN_DUAL_CABLE	SYMBOL_LS9100 4
iTAB with bill recycling	Serial COM2	MAGELLAN_SCANNER_ONLY	DATALOGIC_GD4400
iTAB w/o bill recycling	Serial COM3		
System7			
Manufacturing/Lab Mode			

OK Cancel

## Coupon Sensor Verification

To fully test the functionality of the coupon sensor assembly, you must test both the unblocked and blocked condition while monitoring the readings in diagnostics.

NOTE: Please take pictures of the diagnostic screen for both the unblocked/blocked condition as they are required for checking out with PMO team.

Open the **Coupon Box** tab in the diagnostics utility. Test the unblocked condition per the following instructions.

### 1) Unblocked Verification Test

Test the unblocked condition (nothing inserted or blocking sensors) by verifying the values on the top and bottom rows. Notice the top and bottom row values (Figure 1). When the coupon box is clear with no blockages, the top row should have a value between 0300 and 03FF. The bottom row value should also have a value between the 0300 and 03FF range.

If the reported values are **below** 0300 or **greater** than 03FF, the coupon potentiometers for each row will need to be adjusted as outlined in step 2. If values are within the correct range proceed to step 4.

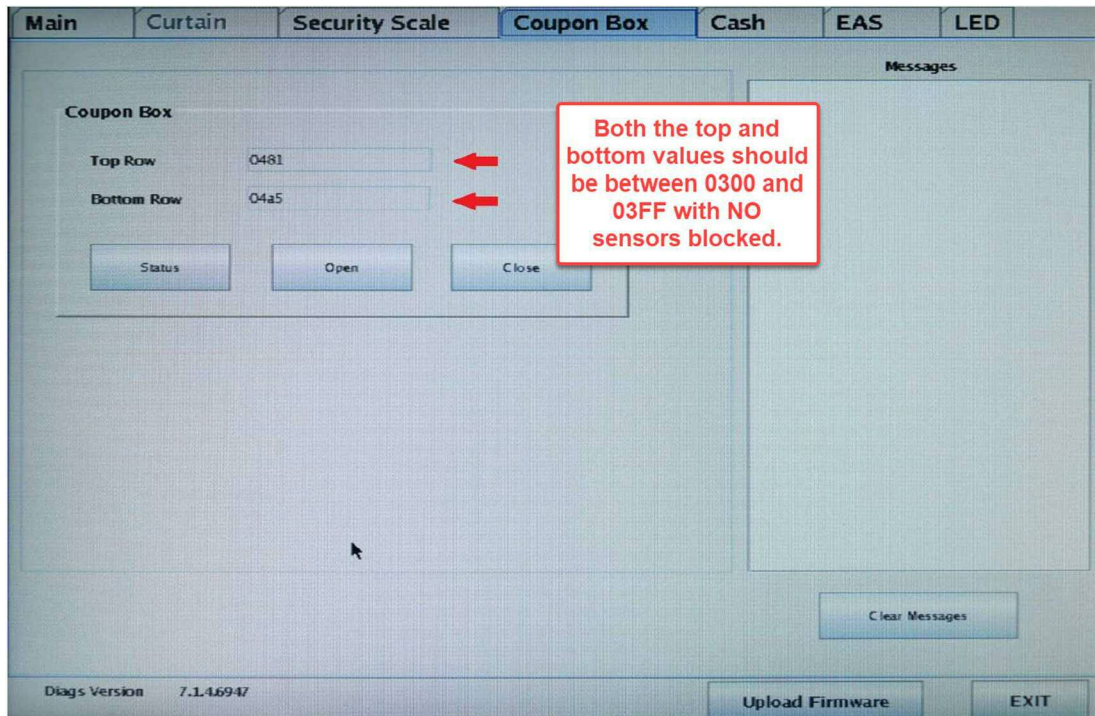


Figure 1

### 2) Remove the coupon box

- a) Unlock and pull the scanner shelf open.
- b) Remove the 4 (2.5MM hex head) black corner screws (**B**) in the mounting plate to drop the assembly from the cabinet as showing in Figure 2. You **DO NOT** need to remove the 2 screws (**C**) mounting the coupon sensor to the mounting plate. Confirm hex key size to prevent stripping of fastener.

NOTE: On the cash lane you will have to unlatch and roll the cash module out of the way to allow access to the coupon sensor. Make sure you do not affect any cabling between the cash module and core module in the process.

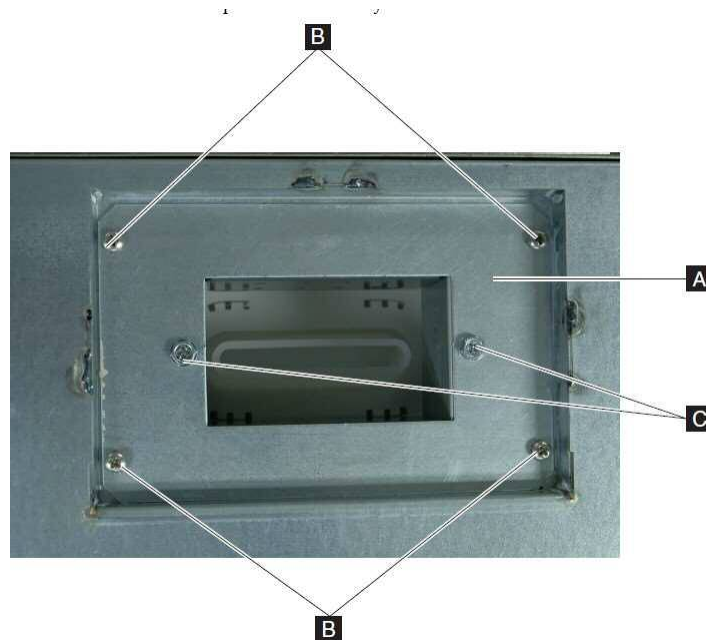


Figure 2: Coupon box view from below

- 3) Even though the acceptable range is between 0300 and 03FF, you will need to calibrate to within a tightened range of between 0370 and 0390 to improve the performance and eliminate any potential for the sensors to drift out of calibration. Again, adjust the coupon box to values between 0370 and 0390 values for both the bottom and bottom rows.

To adjust the top and bottom values use the two potentiometer adjuster screws (Figure 3). Turn clockwise to increase values and counterclockwise to decrease the values. Once the values for the top and bottom row are between 0370 and 0390 then proceed to step 5.

**When calibrating the coupon sensors, do not place the coupon assembly flat on the table as shown in Figure 3. Hold in your hand or place vertically on the table as shown in Figure 5a. Figure 3 is just indicating the potentiometer and sensor locations.**

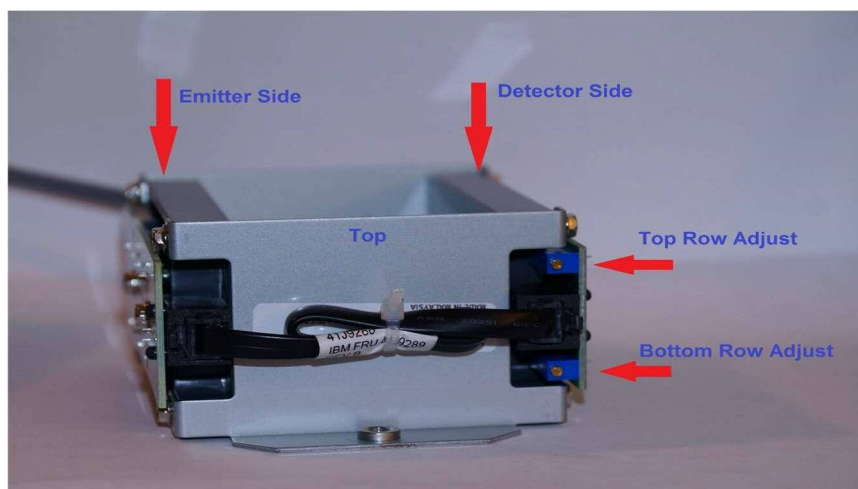


Figure 3



#### 4) Blocked Verification Test

Test the blocked sensor condition by following the instructions below.

Note: If you did not have to remove the coupon assembly to calibrate the potentiometers, you may perform the BLOCK TEST with the coupon assembly installed in the lane. It will require some dexterity. For cashless lanes: remove front cover of core module. Reaching from under the scanner scale drawer locate the coupon box. The left side of coupon box (scanner scale side) are the emitters. Using your finger as shown below, you can block each row of sensors. For a cash lane it is much more difficult. You will need to extend the scanner scale drawer forward and reach your hand up and in the cash module next to the recycling coin handler to get access to the coupon assembly. On the emitter side of the coupon assembly (Emitter side is identified in Figure 3), block each of the four columns as shown in figure 3a-3d with a non-transparent and non-reflective item. (Use of finger is acceptable). Monitor the top and bottom values on the coupon diagnostics screen

With the column blocked, the top and bottom values should not exceed **00FF**. If none of the values exceeds **00FF**, then the coupon box is working properly.

If the test fails for any of the columns, then the coupon box should be replaced.

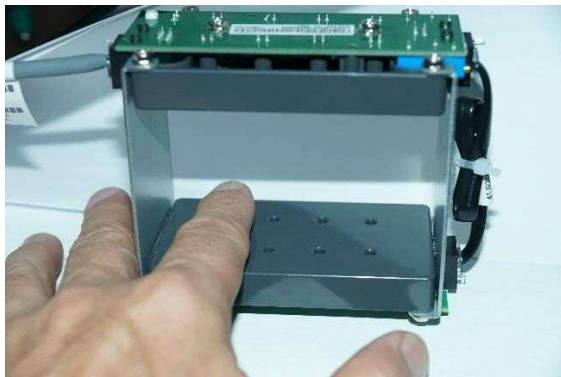


Figure 3a: Column 1

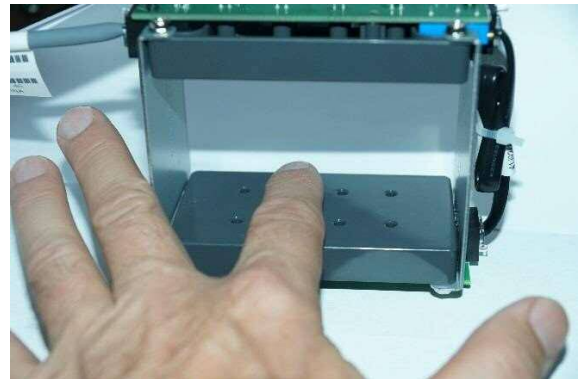


Figure 3b: Column 2

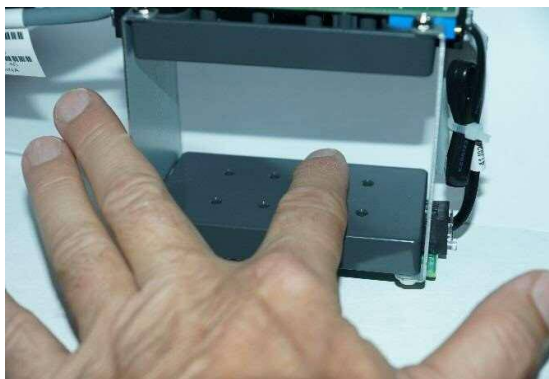


Figure 3c: Column 3

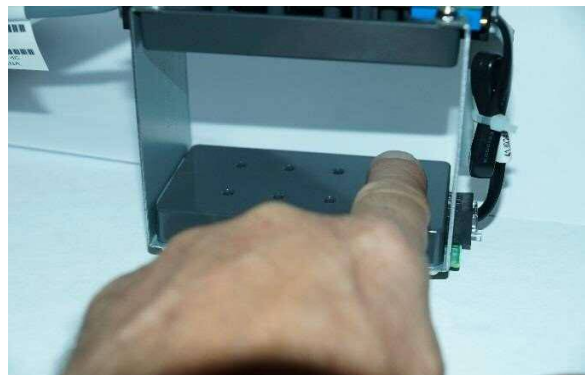


Figure 3d: Column 4

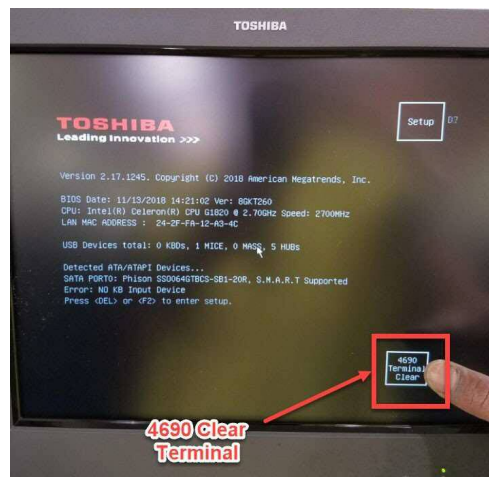
## CONFIGURE THE LANE AND LOAD SOFTWARE

Follow the following process to load the lane application software.

The lanes will be configured using the 4690 POS numbering system. Please reference the procedure below.

1. Power on or reboot the PC and the lane will load to a Z001 screen and display a number pad.

NOTE: Prior to loading to the Z001 screen, the **Terminal Clear** button will flash on and then off and then on again for a period of about 10 seconds. If for any reason the lane needs to be **reloaded** (corrupt load not allowing lane to come up, lane ID'd as wrong terminal, etc.) you can press **4690 Terminal Clear** button on the display during the boot process. This will clear the load and allow the lane to load to the Z001.

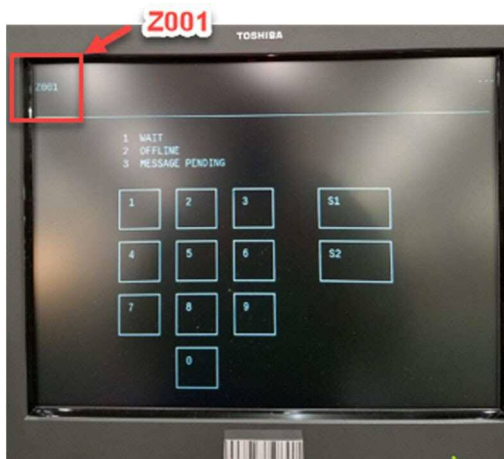


2. When the display shows **Z001**, enter the terminal number **1xxx** (xxx= actual terminal number as identified in the *Terminal Numbering Options* diagram below and then press **S2**.

**NOTE: DO NOT DOUBLE TAP S2 AT THIS TIME OR THE LANE WILL NOT FORMAT THE HDD AND THE LOAD WILL NOT COMPLETE CORRECTLY.**

As a general guideline, CVS terminals should be numbered per the following format. The cash lane closest to the conventional lanes should be Lane 1/Terminal 017 and then should progress towards the door, Lane 2/Terminal 018, Lane 3/Terminal 008, etc. The highlighted terminal numbers below will cover most store lay outs.

**NOTE: For installs in which you are replacing existing SCO lanes, you will be provided the correct IDs to use for each lane by the CVS support team.**

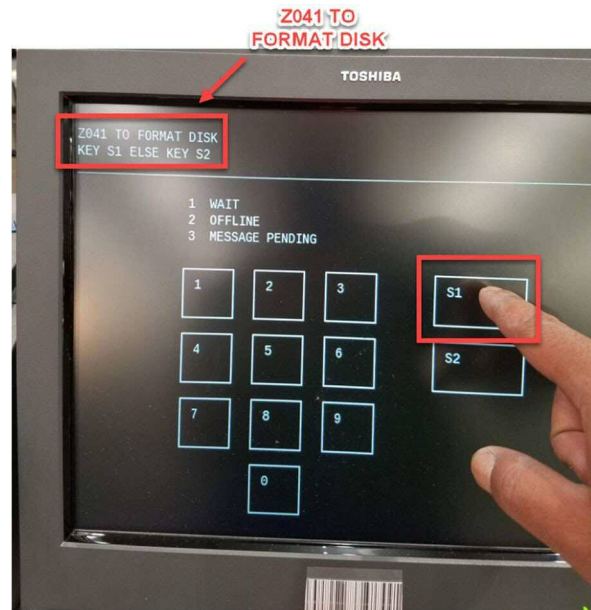


### LANE STORE TERMINAL NUMBERING

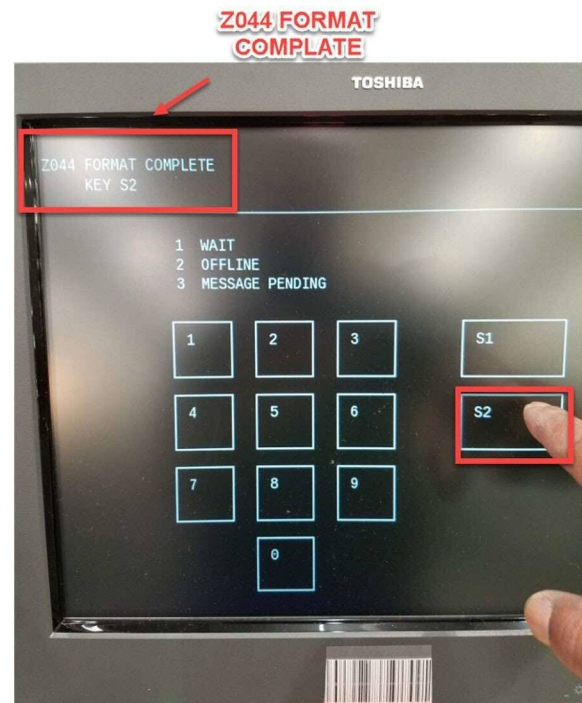
- Lane 1 = Terminal 017 = 1017 – 1<sup>st</sup> cash lane
- Lane 2 = Terminal 018 = 1018 – 1<sup>st</sup> cashless lane
- Lane 3 = Terminal 008 = 1008 – 2<sup>nd</sup> cashless lane
- Lane 4 = Terminal 009 = 1009 – 2<sup>nd</sup> cash lane
- Lane 5 = Terminal 010 = 1010 – 3<sup>rd</sup> cashless lane
- Lane 6 = Terminal 011 = 1011 – 3<sup>rd</sup> cash lane
- Lane 7 = Terminal 012 = 1012 – 4<sup>th</sup> cashless lane
- Lane 8 = Terminal 013 = 1013 – 4<sup>th</sup> cash lane

**General rule: EVEN Terminal ID numbers are CASHLESS and ODD Terminal ID numbers are CASH**

4. At the **Z041 TO FORMAT DISK** message prompt, press **S1** on the screen to format the hard drive (**DO NOT DOUBLE TAP**).



5. At the **Z044 FORMAT COMPLETE** message prompt, press **S2** on the screen (**DO NOT DOUBLE TAP**).



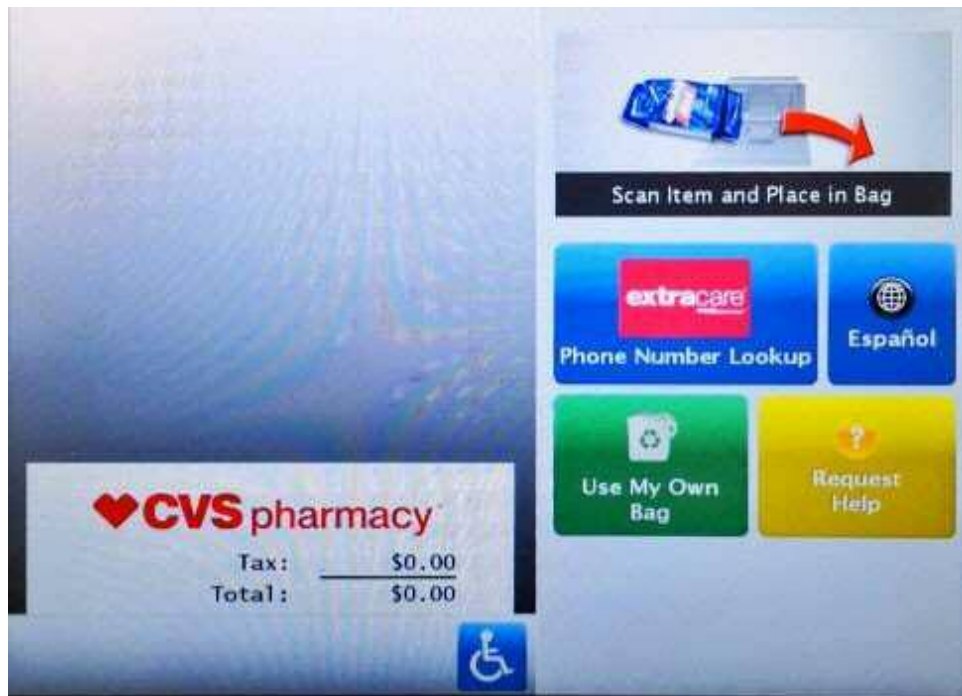
- a. The system will reboot and begin the loading process. This could take anywhere from 20-40 minutes depending on network speed and bandwidth.
- b. Software installation is complete once lane comes up to a "Closed" screen on the SCO lane.



## PIN PAD “77” LOAD

Have the store associate open the lane using their shopper assist card. Follow the following process to perform the “77” load. Do this whether you think this is required or not.

1. On connecting the new Payment terminal, reload the ACO and navigate to the Home screen shown below.

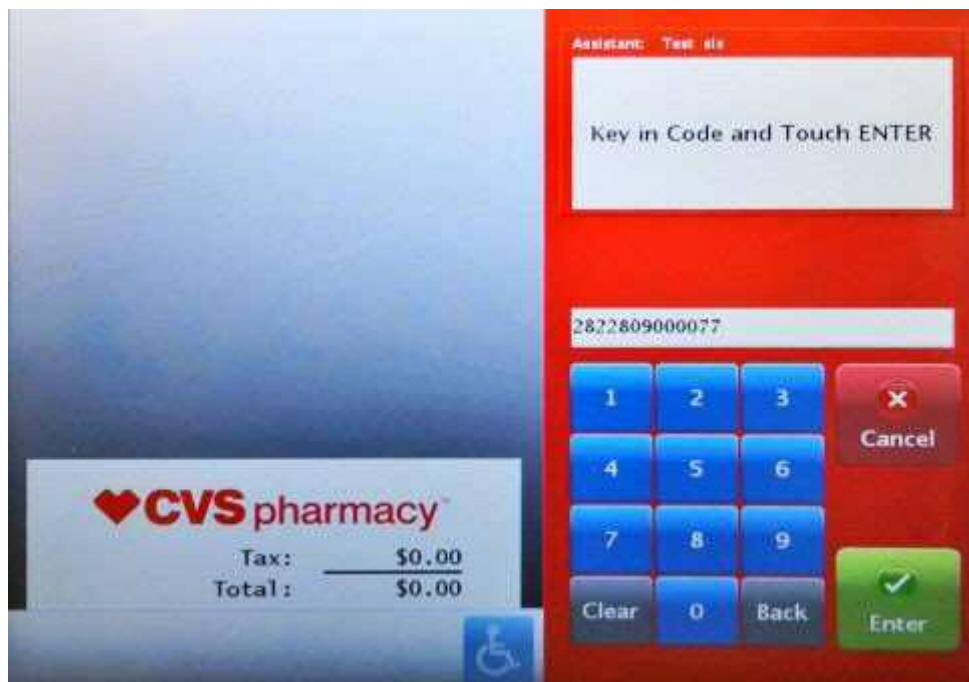


2. From the Home Screen, scan the Shopper Assistant card and select the “Keypad” button (highlighted).
- 3.

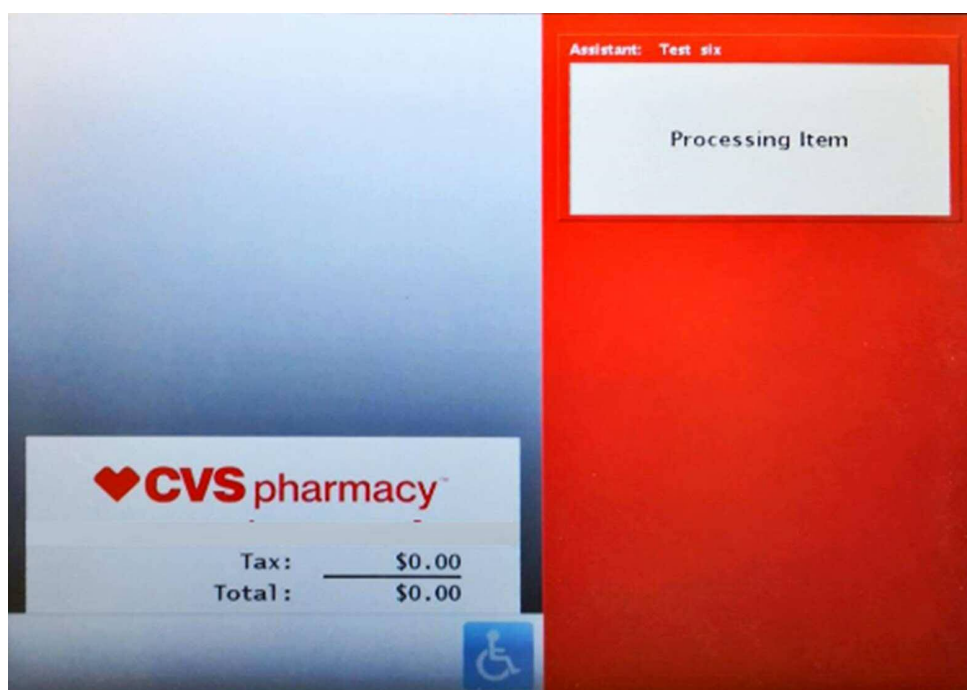




4. Key in the Code 2822809000077 to begin the payment terminal update.

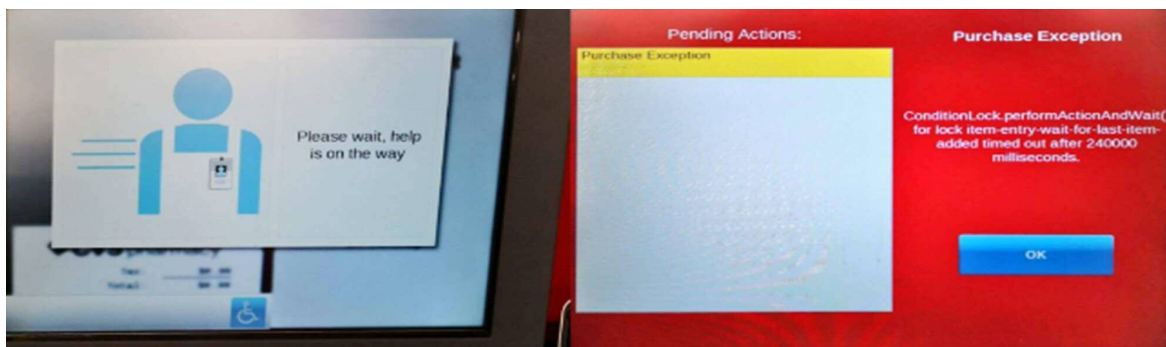


5. The payment terminal will download multiple files and reboot a few times during the process, give it 15-20 minutes for the process to complete.





6. During the update process, getting any of the below exceptions is not a problem and you don't have to respond the prompts until the 15 – 20 minute wait is over.



7. Once the 15 – 20 minute wait is over, scan the Shopper Assistant card again to Close the Lane once and open it again, before performing any transactions.

## CLEANUP

Before you can acquire the final sign-off, you will need to police your work area and remove all trash generated from your install. This is to be removed to the customer disposal area. Make sure you have given all keys, shopper assistant cards, Customer Service Call Buttons (2 per lane), flatbed scanner USB cables, and any additional unused equipment to your CVS POC and had them sign off on quantity and receipt.



Customer Service Call Buttons

Move all debris and pallets to rear of the store per the POC/store manager's direction.

## STORE TRAINING

CVS is responsible for providing their own training. If anyone from store management asks about training, please have them reach out to [ACO\\_FieldMailbox@CVSHealth.com](mailto:ACO_FieldMailbox@CVSHealth.com) with any questions.

## INSTALL CHECKLIST SIGN-OFF

**NOTE:** Sign off documentation and required pictures need to be submitted to the PMO team prior to leaving the site.

Fill out the *CVS – TGCS ACO Installation TASK list and Lane Verification of Completion Sign off* and have the POC sign the report when all the above activities are completed. The on-site portion of this installation is complete.

Record any relative comments and/or open issues (defective or missing parts) on the installation report. If there are any open issues, make sure they are reported verbally to the PMO contact indicated at the beginning of the document.

There are a series of pictures required to be sent in with the sign off. Please ensure you send in all the required pictures or you will be asked to return to the site to obtain to ensure all steps have been completed.

- Picture of the serial number for each lane.



- Picture of the serial numbers of the three components of the camera...the actual camera, the Main Unit, and the PoE Injector.

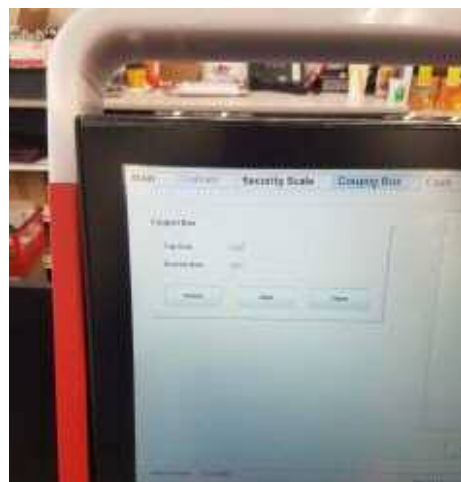


Camera

- Picture of the serial number of the flatbed scanner in each lane. This should start with an F1.



- Picture of diagnostics showing “Blocked” and “Unblocked” sensor readings of the coupon sensor prior to any adjustments for each lane. If adjustment is required, please provide another picture showing the readings after adjustment and make sure to identify which lane(s) required adjustment.



- Picture of receipt for transaction validation of pin pad for each lane. (This can be customer bought, MOD bought, or self bought).





- Picture of lane area showing lanes in an “Open” state. If the area cannot be captured with one picture, take multiple pictures ensuring you capture all lanes showing the “Open” status.



Submit the completed checklist to the PMO at ***PMO\_Team\_Projects@toshibagcs.com*** and copy the SCO Installation Manager at ***ron.fritz@toshibagcs.com*** and the Deployment Team at ***TGCS-Deployment\_Field\_Team@toshibagcs.com***

Depending on the project, you may have to check out with the ROC (1-888-401-4601, Option 9, Option 2) to report you have completed the installation and are leaving the site. The PMO team will provide this information prior to the install.

# APPENDIX A - WIRING DIAGRAMS AND CONNECTIONS

**NOTE:** Please note the flatbed scanner connections for CVS are not consistent with the connections noted below. Connectivity as outlined in the *Flatbed Scanner Installation* section in the main body of the manual should be followed and not the connectivity noted below.

## Wiring diagrams and connections

This section contains the wiring diagrams and connections for the self checkout system.

### Power routing diagram

**Attention:** All power for the lane must be routed to the lane using the power distribution unit 1 (PDU1). Failure to route power correctly can cause problems when diagnosing and repairing the self checkout system.

### Lane PC Connectors (4900-786)

Figure 39 shows the connectors on the rear of the lane PC. See the table below the figure to help identify the connectors on the lane PC.

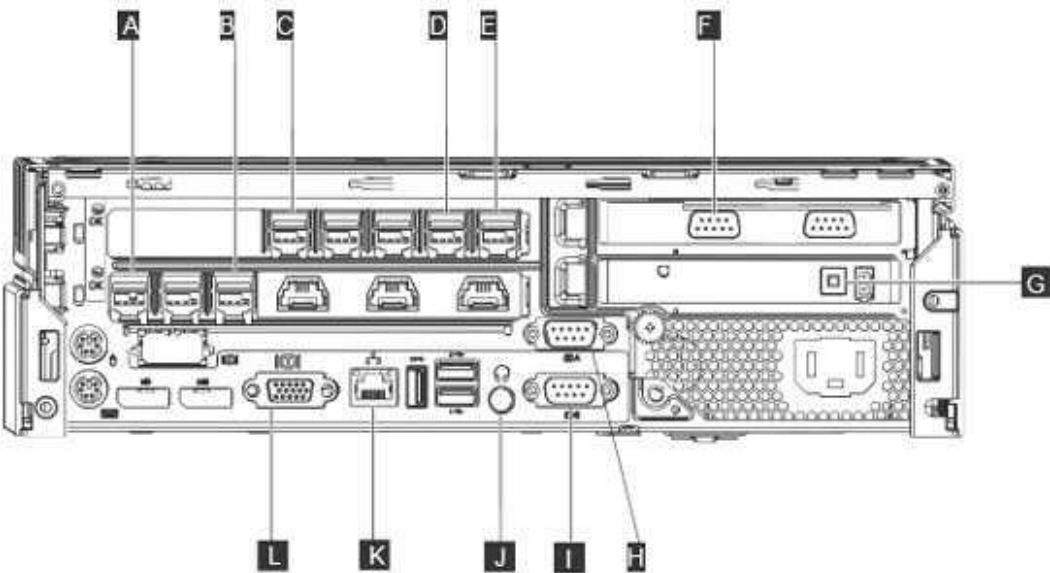


Figure 39. Lane PC (4900-786) rear connector panel

Key	Connector
A	Printer
B	Touchscreen
C	Keyboard/Mouse
D	UPS
E	Core Unit Controller
F	Scanner/Scale (if RS232 attached)
G	Reset Switch
H	Keyboard/Mouse (if RS232 attached)
I	Hand Scanner (if RS232 attached)
J	Audio Out

Key	Connector
<b>K</b>	Ethernet
<b>L</b>	Video

## Core unit controller connectors

Refer to the following when connecting or disconnecting cables from the core unit controller:

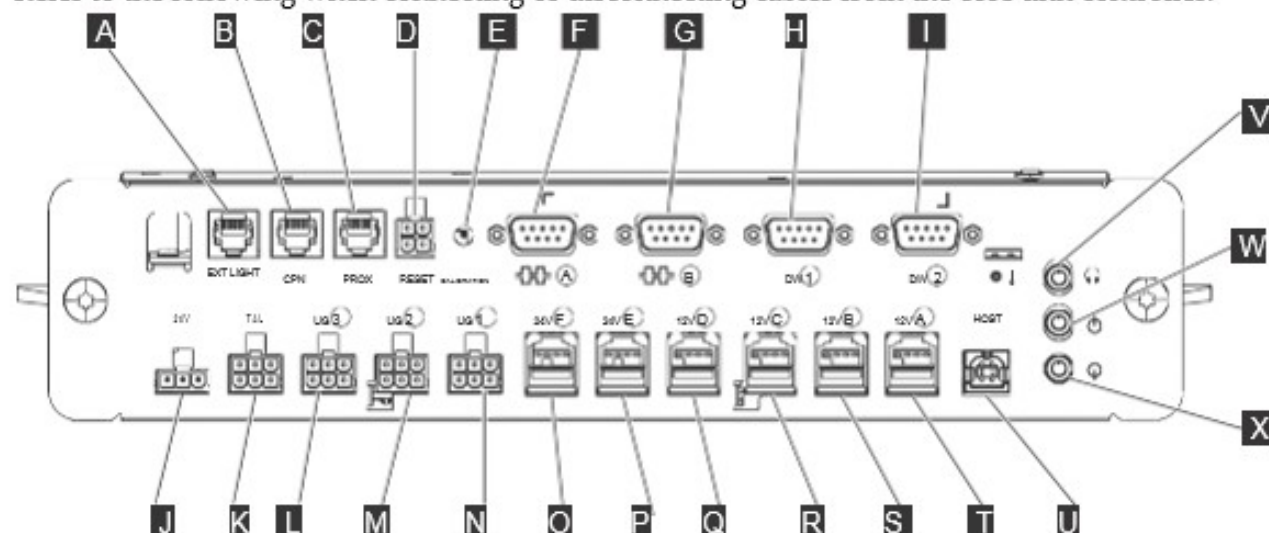


Figure 40. Core unit controller connectors

Table 4. Core unit controller connector assignments

<b>A</b>	AC Lane light controller
<b>B</b>	Coupon sensor
<b>C</b>	Proximity sensor
<b>D</b>	Reset button
<b>E</b>	Scale calibration
<b>F</b>	EAS controller
<b>G</b>	Spare (RS232)
<b>H</b>	Load cell 1
<b>I</b>	Load cell 2
<b>J</b>	24V power in
<b>K</b>	Transaction awareness light
<b>L</b>	Cash door light
<b>M</b>	Coupon light
<b>N</b>	Lane light and print/pay light
<b>O</b>	Bulk coin recycler
<b>P</b>	Banknote recycler
<b>Q</b>	Scanner/scale

<b>R</b>	Handheld scanner
<b>S</b>	UPS signal
<b>T</b>	Spare (USB)
<b>U</b>	Lane PC
<b>V</b>	Headphone
<b>W</b>	Speaker
<b>X</b>	Audio in

## Power distribution units

This section shows the connections made to PDU 1 and optional PDU 2.

### Power distribution unit 1

Figure 41 shows the connectors on power distribution unit 1, located in the lower portion of the core cabinet.

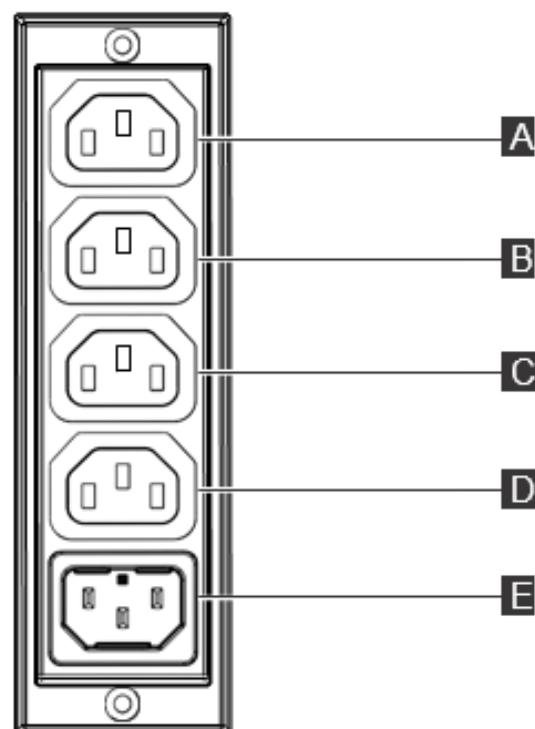


Figure 41. Power distribution unit 1 connectors

Table 5. Power distribution unit 1 connectors

Key	Connector	Key	Connector
<b>A</b>	UPS/ PDU2 or lane PC (if no UPS/ PDU2)	<b>D</b>	AC lane light control module (if present)
<b>B</b>	Core unit controller power adapter (if no UPS)	<b>E</b>	Input customer supplied AC power
<b>C</b>	EAS Controller (if present)		



**NOTE: CVS lanes will not have the PDU 2 installed**

**Power distribution unit 2**

Figure 42 shows the connectors on power distribution unit 2, located in the lower right corner of the core unit. PDU2 is optional and only used if there is no UPS.

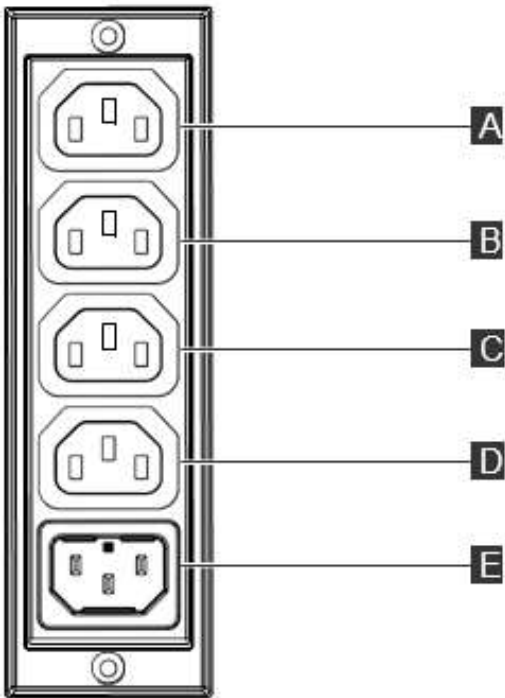


Figure 42. Power distribution unit 2 connectors

Table 6. Power distribution unit 2 connectors

Key	Connector	Key	Connector
<b>A</b>	Input from PDU 1	<b>D</b>	Additional customer supplied device
<b>B</b>	Additional customer supplied device	<b>E</b>	Additional customer supplied device
<b>C</b>	Additional customer supplied device		

**UPS plug chart**

This section provides information about the connectors on the UPS.

Refer to the following when connecting or disconnecting cables from the UPS:

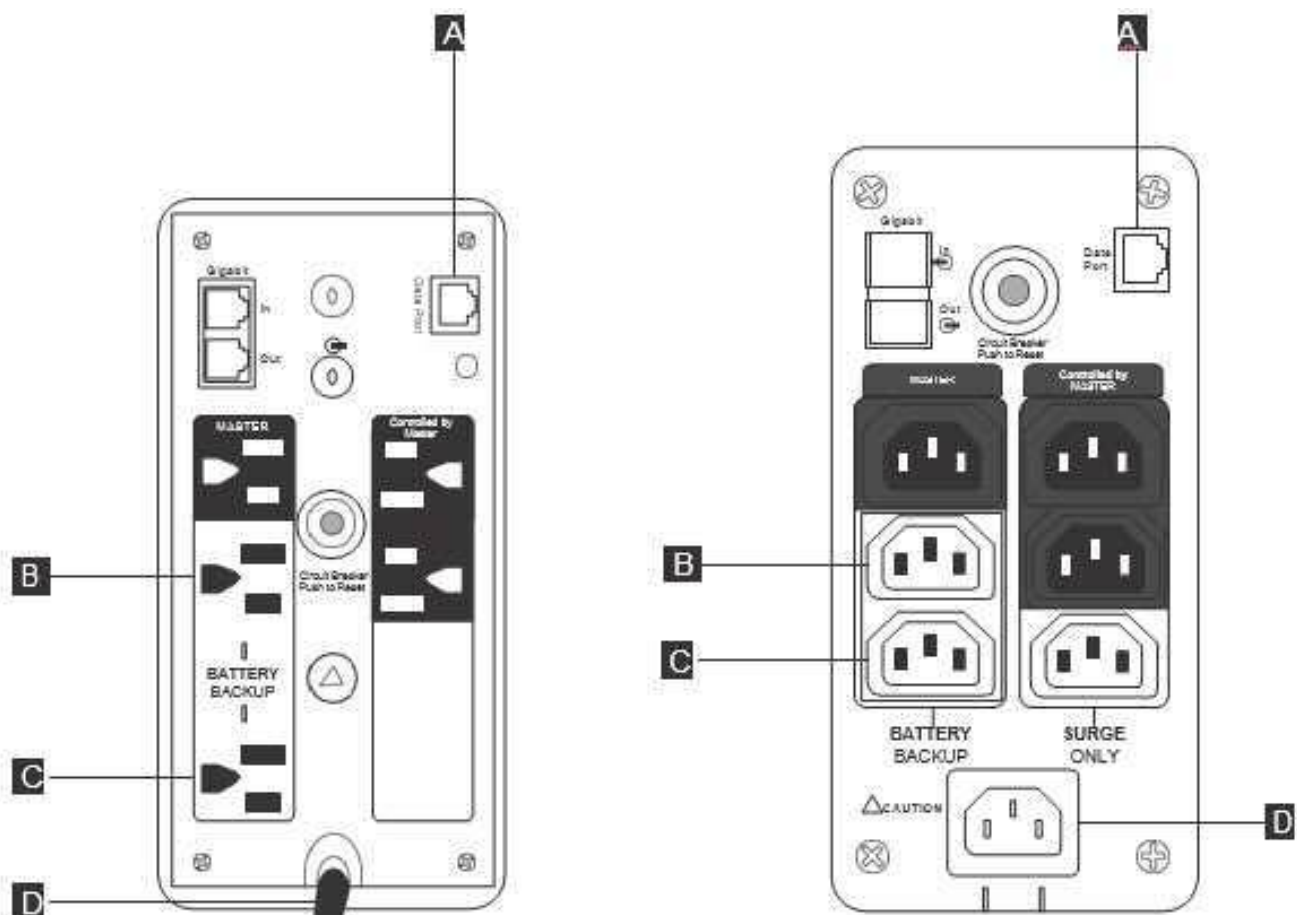


Figure 43. UPS connectors (Low Volt UPS on left, High Volt UPS on right)

Table 7. UPS connectors

<b>A</b>	USB ( to lane PC)
<b>B</b>	AC UPS out power cord (to lane PC)
<b>C</b>	AC UPS out power cord (to core unit controller power adapter)
<b>D</b>	AC power IN (from PDU 1)

# APENDIX B - LANE DIAGNOSTICS

Lane diagnostics can be run by booting from the USB diagnostics key or via the lane application. The diagnostics are the same in both cases.

**Note:** The diagnostic panels shown are representative; actual screens might vary for different self checkout lane models and different levels of the diagnostics code.

- 1. Close the lane.
- 2. Scan a shopper assistant card that can access diagnostics.
- 3. Touch **Diagnostics**. An Initialization screen will be visible with message Initializing Lane Diagnostics.



Figure 44. Lane diagnostics Main tab

- 4. Once initialization finishes, the Lane Diagnostics Main tab opens (see [Figure 44](#)).

## Verifying the core unit controller firmware version

Complete the following procedure to verify the core unit controller firmware version.

1. From the Lane Diagnostics main panel, inside the core unit controller box, verify that the firmware version is correct.

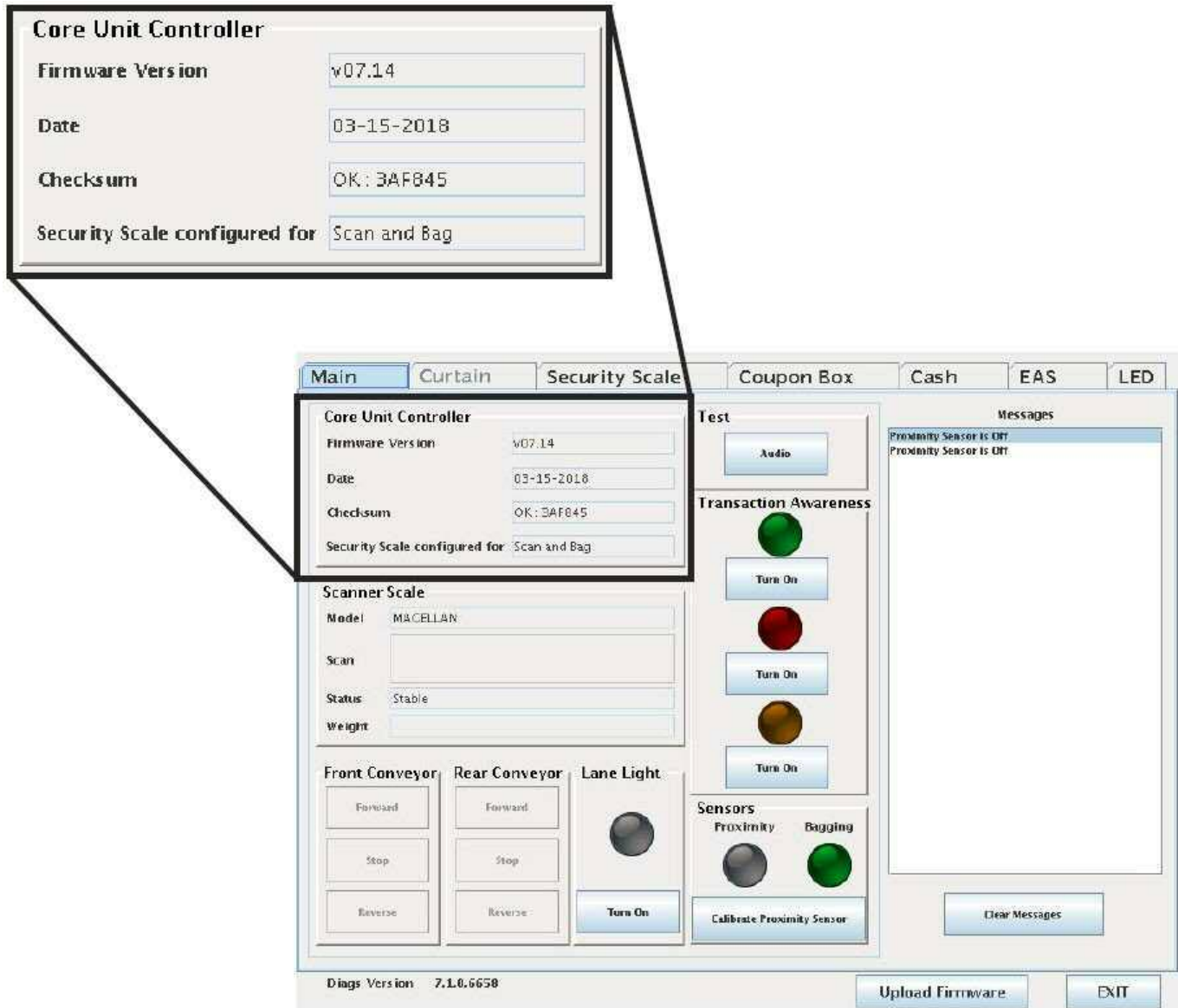


Figure 45. The core unit controller box displays the firmware version.



# Testing the scanner/scale

Complete the following procedure to test the scanner/scale:

- 1. From the Lane Diagnostics main panel, inside the Scanner/Scale box, verify that the model information is correct.

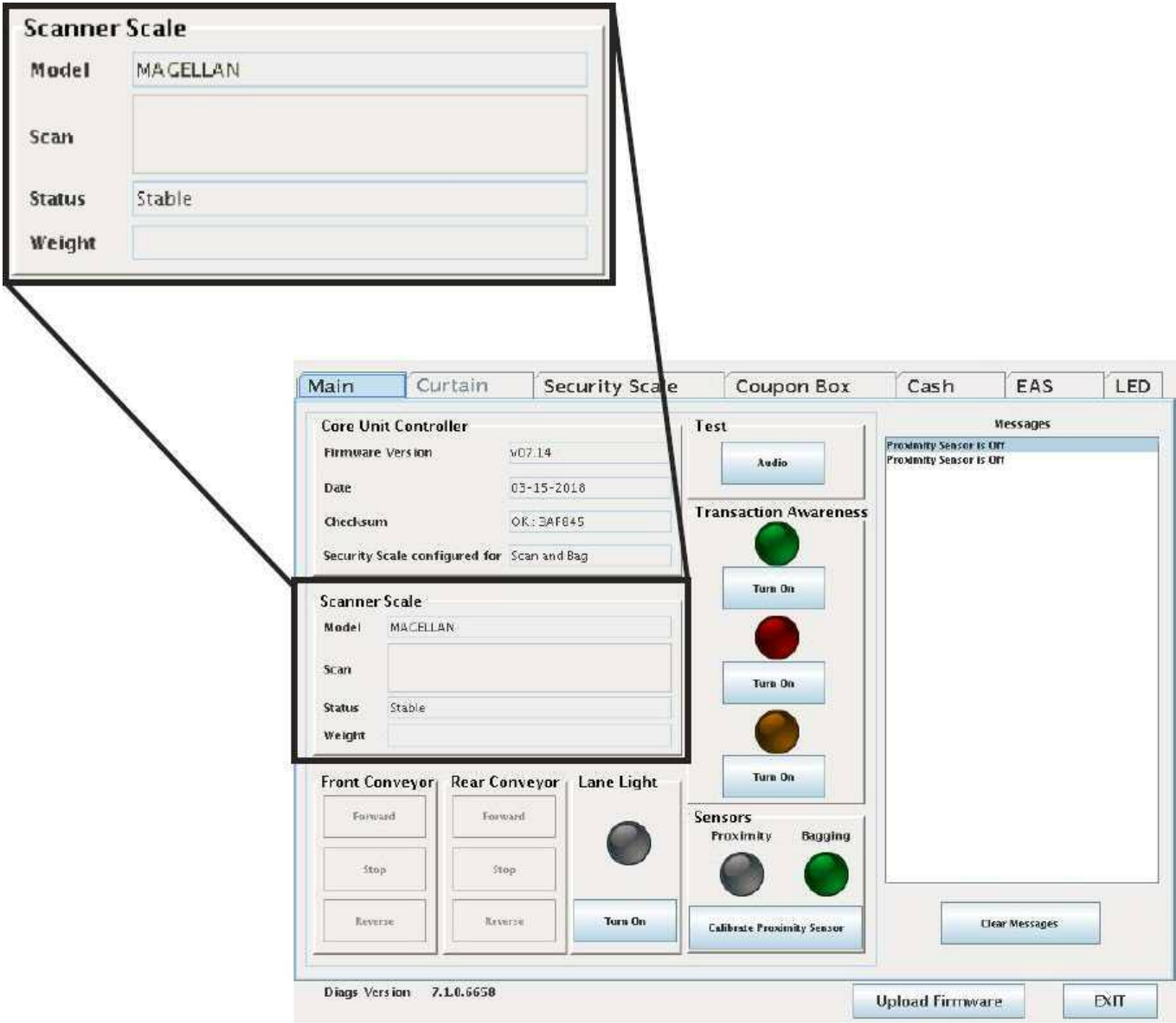


Figure 46. Diagnostics scanner view

**Model**

Identifies type of scanner/scale

**Scan**

Identifies last barcode scanned

**Status**

Identifies the stability of the scale

**Weight**

Identifies the current weight present on the scale

2. Scan a shopper assistant card that can access diagnostics and verify that numbers are displayed beside **Scan**.

**Note:** The status might be displayed as **Unstable** until weight has been placed on the scale.

3. Place an item on the scanner. Verify that the correct weight of that item is displayed next to **Weight**.
4. Scan an item. Verify that the correct bar code appears beside **Scan**.

---

## Testing the transaction awareness lights

Complete the following procedure to test the transaction awareness lights.

1. From the Lane Diagnostics Main panel, touch the appropriate button in the transaction awareness box. The indicators above the buttons are color-coded to match the transaction awareness lights. Refer to [Figure 44](#).
2. The indicator should respond to the command in the same fashion as the corresponding transaction awareness light assembly. The button displays the next option each time you touch it.

---

## Testing lane light and lane light control module operation

1. From the Lane Diagnostics Main panel, touch the button in the **Lane Light** box. Refer to [Figure 44](#). The indicator above the button should respond to the command in the same fashion as the lane light assembly.
2. Check the lane light for On and Off operation. The button displays the next option each time you touch it.

---

## LED testing

Complete the following procedure to test LED.

With CHEC, the LEDs will sometimes turn white/blue during power up for 1 minute, while the the required LED control script is loading. If the LEDs turn white/orange, an LED script fault has occurred and a new application or script load is required.

1. From the Lane Diagnostics main panel (see [Figure 47](#)), touch the **LED** button. The LED panel will appear.  
LED Information is listed on the upper right. This contains the firmware (LED Application) and Script versions in use by the LED controller.
2. By default, the lights will be turned off. To test each color (RGBW) of the LED Lights, select the appropriate button under the LED Lights sub-panel.
3. The LED Calibration can also be modified. This adjusts the intensity of the RGBW LED colors. To modify these, adjust the sliders as needed.

If you are content with the changes, press the **SET CALIBRATION** button.

**Note:** Values are only saved to the controller by pressing this button.

4. To revert back to what is currently on the LED Controller, press the **GET CALIBRATION** button.

The factory default values for the LED Calibration is 80 for all four colors, Red, Green, Blue, and White. LED intensity is reduced as it ages. If an older string color begins to dim it can be corrected by raising the calibration value. Alternatively, a replacement string can be adjusted to match older strings by lowering the calibration values.

### Notes on LED controller behavior:

1. If the LEDs are alternating white and orange, the application or script code is missing or damaged. New application and/or script code upload is required.

---

## Testing the proximity sensor

1. Open Lane Diagnostics to the Lane Diagnostics Main panel.
2. Move an object in a back and forth motion in front of the proximity sensor.
3. The proximity indicator light in the Sensors box illuminates when the proximity sensor is triggered.

---

## Calibrating the proximity sensor

To calibrate the proximity sensor you need a sheet of white printer or copier paper.

1. Open **Lane Diagnostics** to the lane diagnostics main panel.
2. Select **Calibrate Proximity Sensor** in the menu.
3. Hold a white sheet of paper directly in front of the proximity sensor at a distance of 18 in. or greater, depending on the calibration distance required. Do not hold the sheet of paper any closer than 18 in. (457.2 mm) as this will cause the sensor to be improperly calibrated.
4. Press any key to begin calibration. Calibration takes about 5 seconds. Ensure that the white sheet of paper is maintained at the required calibration distance for the entire 5 seconds.
5. When calibration is complete, a **Calibration Complete!** message is displayed. If the proximity sensor does not respond as desired or a **Calibration failed** message is displayed, try to recalibrate the proximity sensor while verifying that the white sheet of paper is held no closer than 18 in. (457.2 mm). If the proximity sensor still has not calibrated after a



second calibration retry, the proximity sensor might be defective. To test the proximity sensor, see [“Testing the proximity sensor” on page 81](#). To replace the proximity sensor, see [“Proximity sensor removal and installation” on page 228](#).

6. The Lane Application can now be restarted.

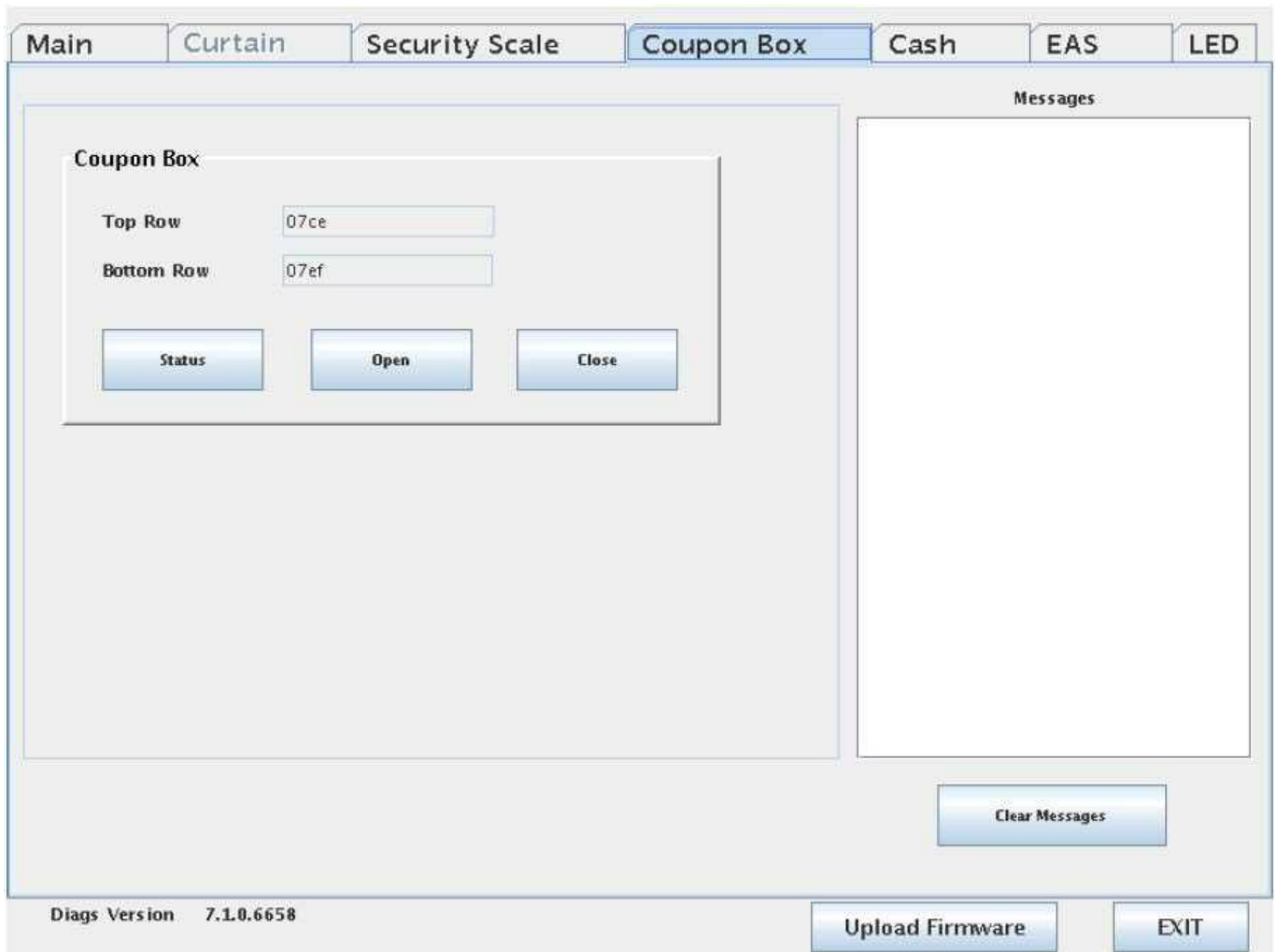


Figure 48. Coupon box panel view

---

## Testing the cash machine (cash models only)

Complete the following procedure to test the cash machine for a cash model.

1. Touch **Cash** at the top of the diagnostics panel. The Lane Diagnostics - Cash Machine panel is displayed.





- **Coin handler** - Shows the status of the coin handler, also shows the firmware levels of the device and whichoppers are installed. For each hopper the coin column displays the currency (first two displayed characters) and denominations (next three characters displayed).
- **Bill handler** - Shows the status of the bill handler. The Transfer all bills to cash box button is also displayed. Press this button to transfer all the bills or banknotes in the bill handler to the cash box (see [Figure 49](#)).
- **Dispense** - Press this button to dispense all the money that was accepted during testing.
- **Messages** - Shows a log of messages received from the cash machine devices.
- **Clear messages** - Press this button to clear the log of messages received from the cash machine devices.
- **Enable acceptors** - Press this button to enable all the acceptors installed in the lane.
- **Disable acceptors** - Press this button to disable all the acceptors installed in the lane.
- **Reset Cash Machine** - Press this button to reset all cash devices installed in the lane after clearing jams, replacing, or servicing the cash devices.

When the Cash Machine panel is shown, all cash devices are enabled and the amount of money accepted is shown at the bottom of the panel. Press the **Enable Acceptors** or **Disable Acceptors** buttons to manually enable or disable acceptors.

2. Test the cash machine devices by inserting coins, bills, or both in the coin and bill acceptors. Verify that the correct amount of money accepted is displayed at the bottom of the panel.
3. Touch the **Dispense** button and the cash machine should dispense whatever amount of money was accepted.

**Note:** Touching the **Reset Cash Machine** button resets all the cash devices present in the cash cabinet.

---

## Balancing and calibrating the load cells

This section provides the information necessary to balance and calibrate the load cells.

Before performing any of the procedures in this section, gain access to the core unit controller by unlocking the scanner/scale shelf and sliding it forward.

**Note:**

- The load cells in the small bagging units do not require balancing.
- This procedure is intended to balance the load cells in a medium, large, extra large bagger or carousel. If your lane has a small bagger, skip this procedure and continue to ["Calibrating the small, medium, large, extra-large, and carousel bagging unit load cells" on page 87](#) to calibrate them.
- Ensure that all cable connections for the load cells are secure before starting the procedure for calibrating the load cells.

**NOTE:** You only need to perform the actual calibration process if the weight you use as your known weight is not weighing accurately. Most of the time, the load cells do not need calibration.

## Calibrating the small, medium, large, extra-large, and carousel bagging unit load cells

Complete the following procedure to calibrate the load cells on a bagging unit. Refer to [Figure 51](#) as you complete the steps.

**Note:** Any non-liquid item that weighs between 25 and 30 pounds (or 11 to 14 kilograms) can be used as a calibration weight. Two items each weighing at or between 15 and 25 pounds (7kg to 11kg) can be used to calibrate the carousel load cells. The exact weight of the object must be known. Use [“Testing the scanner/scale” on page 78](#) to obtain the exact weight of the item. Record the weight of the item with  $\pm 0.01$  lb. ( $\pm 0.005$  kg) accuracy.

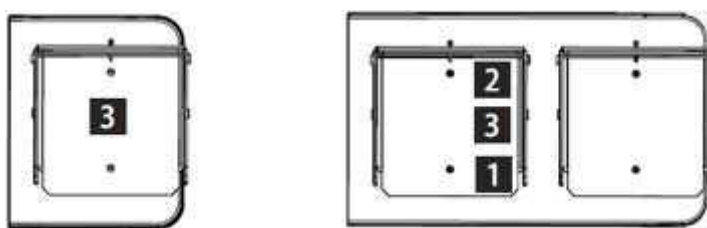


Figure 51

1. Open lane diagnostics.
2. Touch the **Security Scale** button on the Lane Diagnostics Main panel. The Security Scale panel is displayed.





Figure 50. Security Scale panel

3. Touch the **Continuous update mode** button.
4. Touch the **Reset to defaults** button and wait for the scale weight response.
5. Touch the **Tare Platter/Conveyor** button and wait for the scale weight response. A weight between 2.5 lb (1.13 kg) and 12.00 lb (5.4 kg) will be displayed in the scale messages pane.  
**Note:** It can take up to 30 seconds for the weight to be displayed.
6. Touch the **Tare weight mode** button.
7. Touch the **Zero** button.
8. Touch the **Continuous update mode** button.
9. Place a calibration weight on the load cells in position **3**. For more information, see [“Balancing the medium, large, extra-large, or carousel bagging unit load cells” on page 84](#). If you are calibrating a small bagging unit place the weight in the center of the bagging area.
10. Use the arrow buttons under the Scale Calibration section to set the current reading to reflect the exact weight of the object placed on the load cells.
11. Touch **Calibrate**. After the calibration is accepted, a window displays the message Calibration successful. Press OK and then remove weight. (Please note that it might take a few minutes for this window to open.)  
**Note:** If an error occurs or if an *Unsuccessful* message is displayed, ensure that nothing is touching the scale or shaking the lane and repeat steps 9 through 12 of this procedure.
12. Press OK and remove the weight.

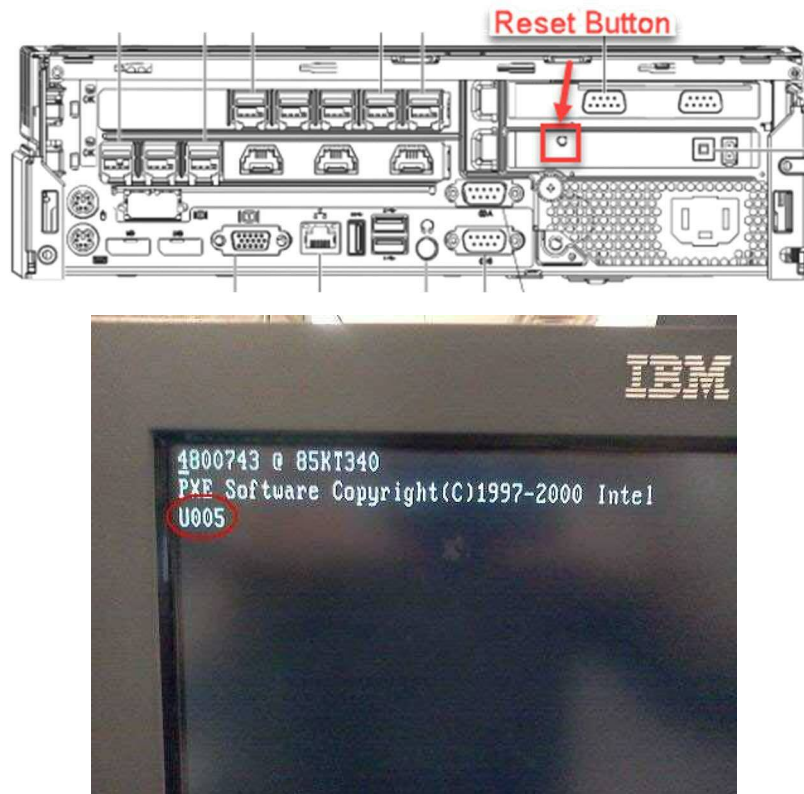


## APPENDIX C – ALTERNATE LANE LOAD PROCESS

Alternative method for IDing lanes to load lane application software. This is only a backup process and is not required...more of an FYI.

The lanes will be configured using the 4690 POS numbering system.

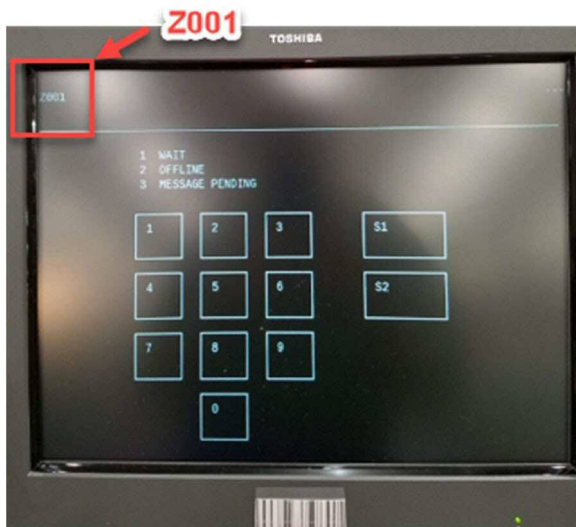
3. Power on or reboot the PC.
4. Repeatedly press F12 during the boot process until you see **DHCP** appear on screen.
5. Option 2 - Press the reset button (red outline below) when the display reads U005. The reset button is recessed so it is easier to use a paper clip or small pointed object to press it. (If for some reason you missed the point where the register shows **U005** you can reboot the register again, press **<F12>** to get it to boot up from the network and wait for U005 to show up again).



6. When the display shows Z001, enter the terminal number 1xxx (xxx= actual terminal number as identified in the *Terminal Numbering Options* diagram below and then press S2.

**NOTE: DO NOT DOUBLE TAP S2 AT THIS TIME OR THE LANE WILL NOT FORMAT THE HDD AND THE LOAD WILL NOT COMPLETE CORRECTLY.**

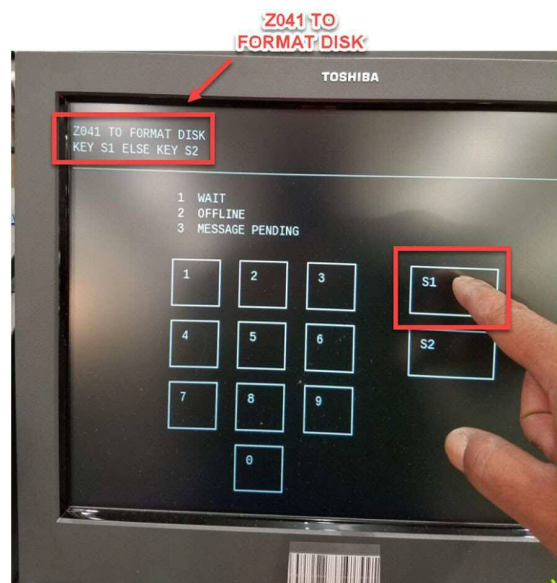
As a general guideline, CVS terminals should be numbered per the following format. The lane closest to the conventional lanes should be Lane 1/Terminal 017 and then should progress towards the door, Lane 2/Terminal 018, Lane 3/Terminal 008, etc.



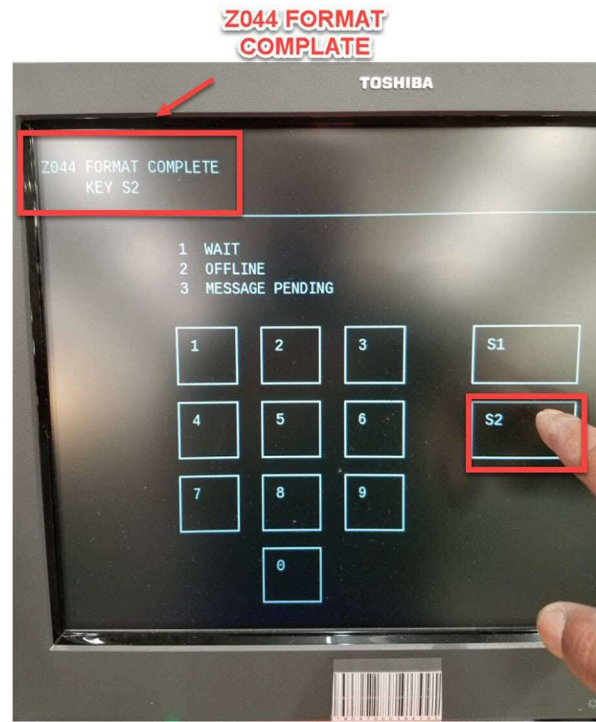
## TERMINAL NUMBERING

Lane 1 = Terminal 017  
 Lane 2 = Terminal 018  
 Lane 3 = Terminal 008  
 Lane 4 = Terminal 009  
 Lane 5 = Terminal 010  
 Lane 6 = Terminal 011  
 Lane 7 = Terminal 012  
 Lane 8 = Terminal 013

- At the **Z041 TO FORMAT DISK** message prompt, press **S1** on the screen to format the hard drive (**DO NOT DOUBLE TAP**).



5. At the **Z044 FORMAT COMPLETE** message prompt, press **S2** on the screen (**DO NOT DOUBLE TAP**).



- The system will reboot and begin the loading process. This could take anywhere from 20-40 minutes depending on network speed and bandwidth.
- Software installation is complete once lane comes up to a "Closed" screen on the SCO lane.

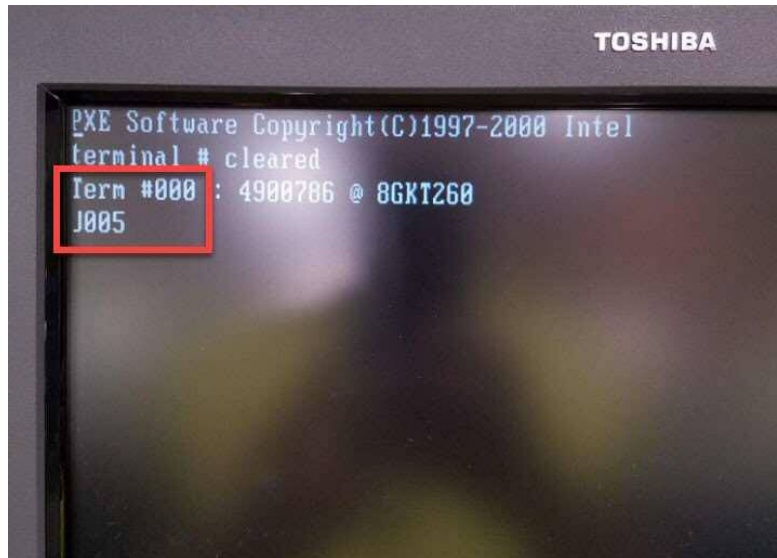


## APPENDIX D - 4690 BOOT SEQUENCE

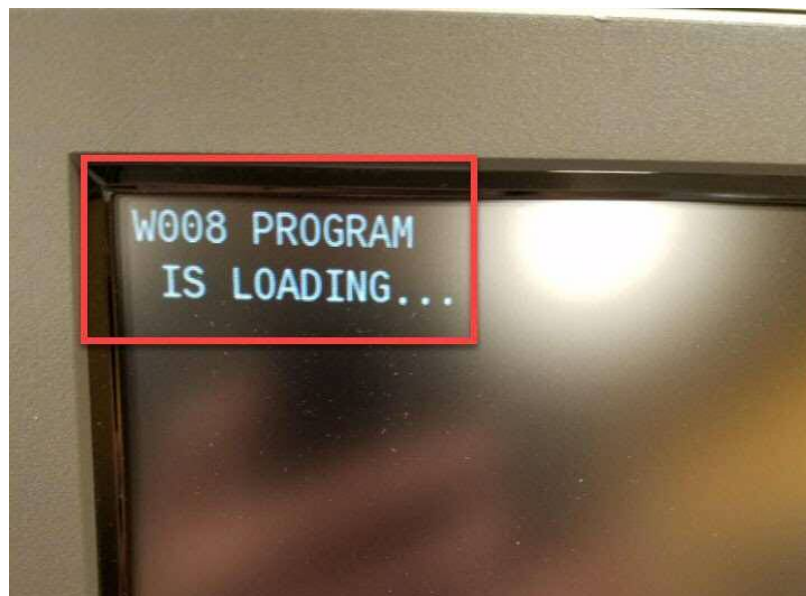
This section is more of an FYI/informative section of the various screens you will see as the you progress through the lane ID/load sequence.

1. Power on Lane PC, if store controller doesn't lock out unknown mac addresses, or address is already submitted to customer the PC will connect with an IP address assigned by controller.
2. The initial communication between store controller and lane PC will begin. Several base files will load for approx. 3 min. Example display - *U005.xxx*

NOTE: The Term # below is showing 000 as the terminal has not yet been ID'd.

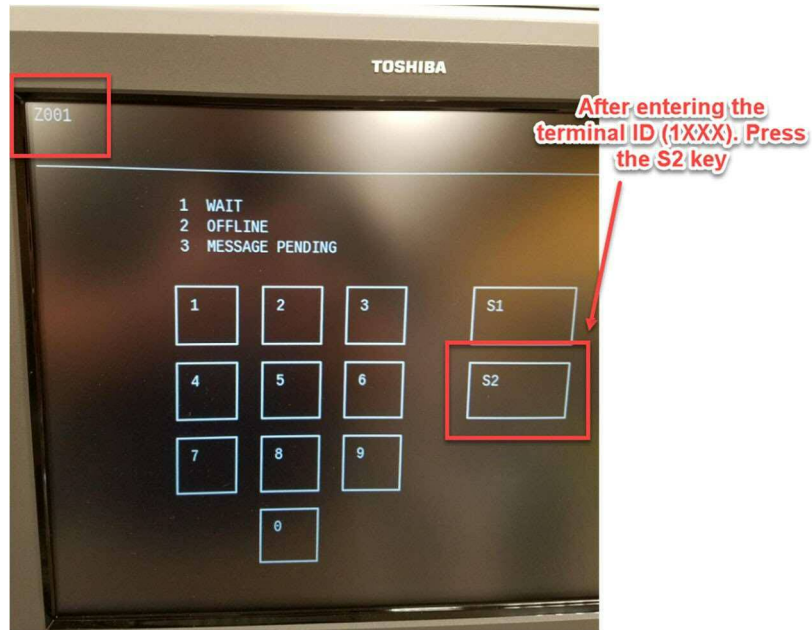


3. Once all necessary files have been transferred the lane PC will reboot and start system services to continue downloading files, you may see *W008 PROGRAM LOADING* as an example.

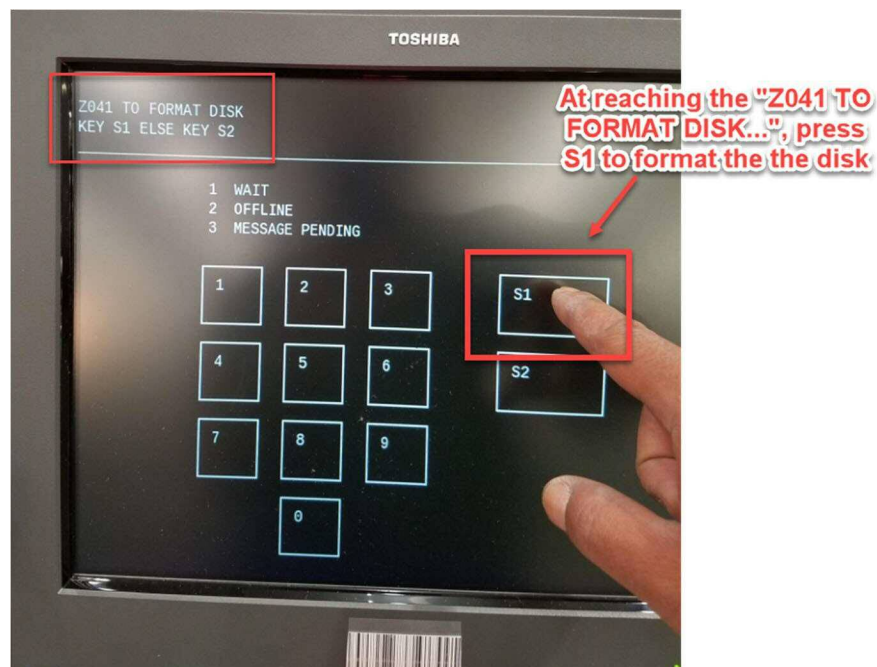




4. The load will stop at Z001 – This Lane ID screen should appear around 4 minutes after powering on PC. **Enter the appropriate number (1XXX) to ID the lane and press S2. Do not double tap!**

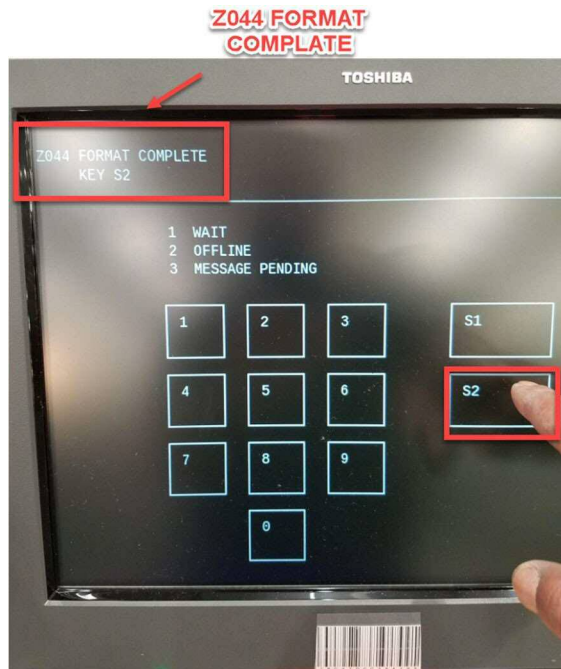


5. The lane will load to the Z041 screen below with a prompt "TO FORMAT DISK KEY S1". **Press S1 at this time. Do not double tap!**



6. After formatting the drive, the lane will load to the **Z044 FORMAT COMPLETE** screen. At this time, **press S2 to complete the lane load process. Do not double tap!**

NOTE: Remember S2 – S1 – S2 is the sequence to submit. Only hit each button 1 time and wait for prompt to continue before hitting second button then 3<sup>rd</sup>.

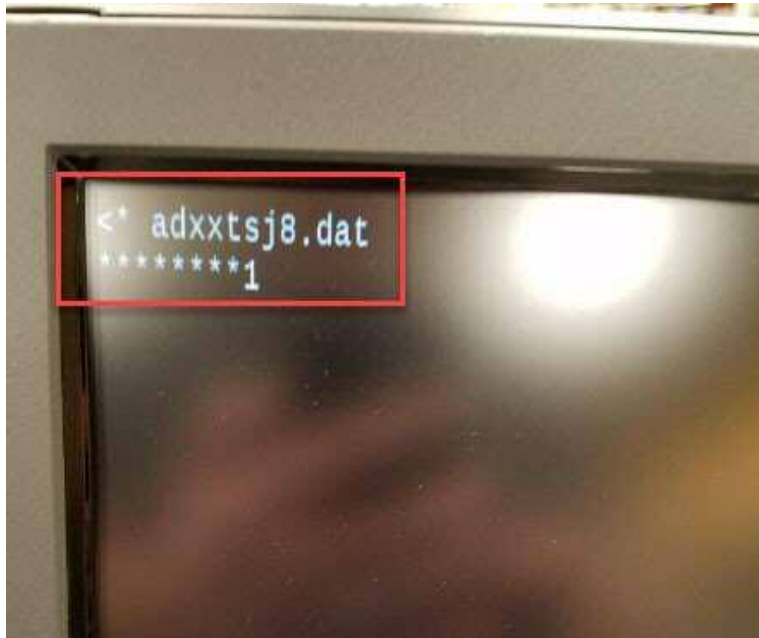


7. The lane will reboot and will now begin downloading Terminal Specific files or Terminal Definitions. Sample display would be *U005.xxx* and counting down various numbers.

NOTE: In the particular example below, the *Term #* is showing as 510, meaning the terminal was ID'd as terminal 510 in the above step.



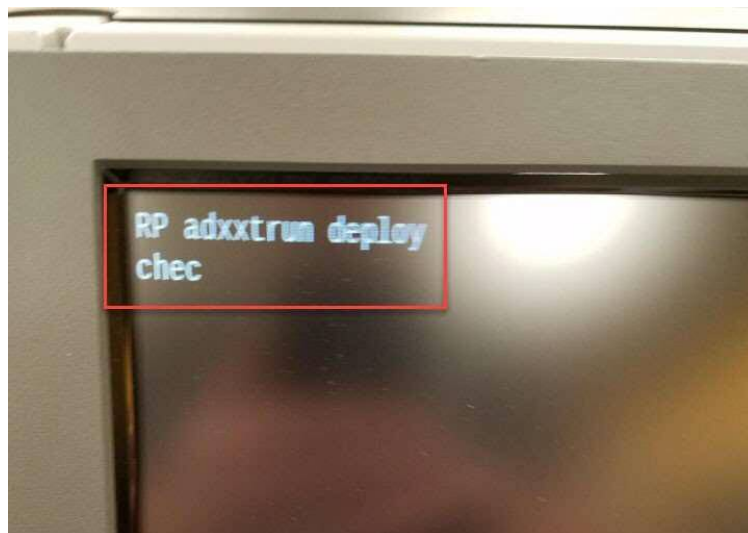
8. The screen will flash and display the Toshiba Logo and then will begin system services, for instance you may see *W064 CONTACTING CONTROLLER* along with various *xxx.bzp* files, and *adxxxx.dat* files. This will take place approximately 15 min after powering on the lane.



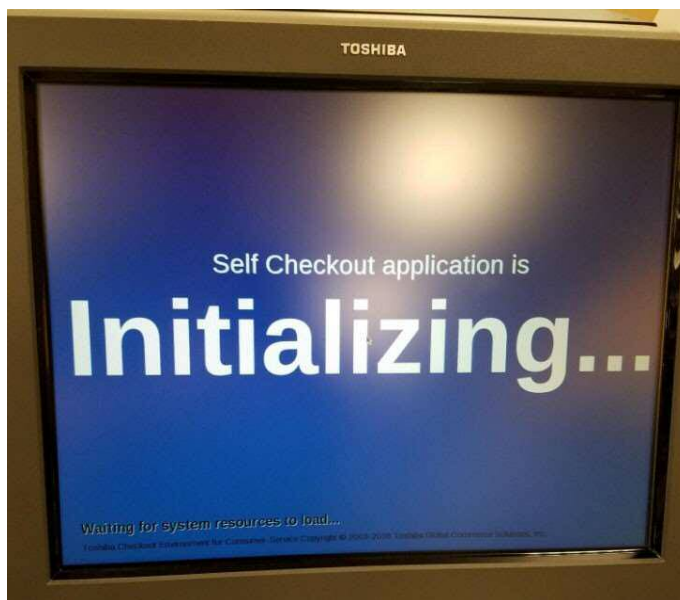
9. Next you will see ADX Deploy of DB2, ADXJPOS, and dba. The store controller is finalizing terminal definitions and is starting to load the necessary CHEC files.

CHEC will begin to load and you will see the files named ie. VXTINRD.DA2 with stars underneath scrolling across as a progress indicator.

At 19 or 20 min you will see ADXJPOS displayed. This may stay on the screen for a couple minutes and that is normal. This is the store controller sending down Firmware updates to various devices on the lane. When it is finished the lane will reboot and a couple files will load and ADXJPOS will run again.

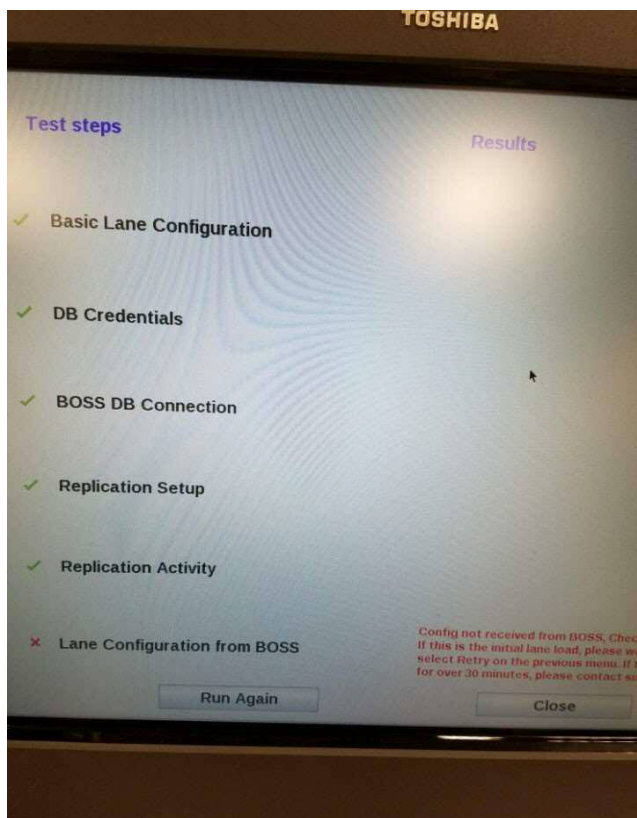


10. At the 25 min mark or sooner, your lane should now switch to a GUI screen showing INITIALIZING in big letters. The lane is now communicating with the EBOSS and finalizing system devices.



11. If all goes well you should be at the MENU for lane Health Check at around the 30 minute mark, now you just wait until system loads.

NOTE: The *Lane configuration from the BOSS* may fail. You may hit the *Run Again* button to retry this step of the Health Check.






# CVS – TGCS ACO Installation TASK List and Lane Verification of Completion Sign Off

Version 6.3

**PLEASE FULLY COMPLETE AND SEND REPORT BEFORE LEAVING INSTALL SITE**

Store Name:	Division #	Store #	Date
Address:			Cluster #

<b>Technician Info: Please provide On-Site Start and Stop times for all TGCS technicians.</b>	<b>Store POC</b>
Technician 1 Name:	NAME:
<b>On-Site Time:</b>	
Technician 2 Name:	
<b>On-Site Time:</b>	

<b>Task List TGCS</b>	<b>Place (X) when Completed →</b>	<b>X</b>
<b>PRE-INSTALL</b>		
Check in with the store front desk and introduce yourself to Store Management. Contact Name _____ and Position _____		
Work with the Store POC to locate the ACO lanes and to determine process and path to bring the lanes to location for installation. Bring one lane up front at a time.		
Verify data connections are available and that power outlet is a L5-15P twist lock. For Power Check/record voltage reading on next page - <b>escalate if needed To CVS ROC - @ 888-401-4601 Option 9, Option 2 for Expansion, FSOM, and Low Volume stores only. The ROC is staffed Tuesday – Saturday 5:30 to 2pm or until last known scheduled store is out.</b> Contact number for New, Relo and Project sites is 401-770-7666 Option2, Option 1 which is STS team – Log time and details in Issue section below		
Unpack and inventory the Toshiba lanes shipment for parts and any Customer Furbished Equipment (henceforth, CFE).		
Provide the SA card box to the Store POC and request pin pads be provided. (store can setup SA cards while CASH lane is being installed) Collect and maintain control of all keys and extra cables until turned over to POC. Current parts to verify - see list attached at end		
<b>ATTENTION:</b> Complete all installation steps for one lane, <b>CASH LANE ALWAYS FIRST</b> , then install remaining lanes.		
<b>SCO LANE INSTALL TASKS</b>		
Lane Placement		
Leveling Lanes		
Load Cell Shipping Brace Removal		
		


Check the UPS power connections as well as the battery to ensure the battery is connected properly.	
Verify that the UPS power button is accessible and visible from right side panel (when panel is off).	
Test each Lock and key by unlocking, open and move part then lock again - repeat 3 times each for Cash cabinet door and Scanner shelf.	
<b>CFE INSTALLATION</b>	
Pin Pad - Store POC should have pin pads - if not record issue and have the store reach out to CVS to report. <b>Escalate if needed To CVS ROC - @ 888-401-4601 Option 9, Option 2 for Expansion, FSOM and Low Volume stores only. The ROC is staffed Tuesday –Saturday 5:30 to 2pm or until last known scheduled store is out.</b> Contact number for New, Relo and Project sites is 401-770-7666 Option 2, Option 1 which is STS team - Log time and details in Issue section below.	
Scanner - ensure proper connections. Grey RS232 cable should run from Port A on lane PC to the blue host port on Scanner. CHECK INSTALLATION GUIDE for proper steps and PORTS.	

Verify that the USB cable is connected to Core Module and the one "Y" Cable is used for power and connected to correct port on scanner. CHECK INSTALLATION GUIDE for proper steps and PORTS.	
Scanner - ensure scanner is properly leveled in the scanner shelf location.	
Pin pad - ensure pin pad cables are connected to correctly, CHECK INSTALLATION GUIDE for proper PORT and Ethernet cable connections.	
Verify you received EAS cable - de-install if connected and place cables in bag with all other parts to give to manager.	
TAL Light	
<b>TESTING &amp; PROGRAMMING</b>	
Scanner Programming was completed - ensure you scan correct tags CHECK INSTALLATION GUIDE for proper bar codes and steps	
Lane Diagnostics tool - perform all tasks below:	
- Test Scanner reads barcode	
- Test TAL	
- Test and calibrate the proximity sensor	
- Test LED lights	
- Verify Correct Lane Audio Volume	
- Validate Load Cell accuracy	
- Test CASH Devices	
- Verify Lane PC BIOS	
- Perform terminal ID/Address / Program lane per Installation Guide (ODD cash, EVEN cashless), Check Installation guide for details.	
- Test Coupon Sensor	

Coupon Sensor Clear Values - Unblocked (0300 – 03FF) Blocked (Less than 0100)								
Terminal ID	Unblocked Before Top	Unblocked After Top	Unblocked Before Bottom	Unblocked After Bottom	Blocked Before Top	Blocked After Top	Blocked Before Bottom	Blocked After Bottom
1017								
1019								
1009								
1008								
1011								
1010								
1013								
1012								

Task List TGCS	Place (X) when Completed →	X
Verify data connection is loading SW correctly and inform Store POC that second lane install will start		
Constantly observe SW status. If SW error occurs power OFF, try Full Terminal ID process a second time. If error repeats take photo of error screen, inform Store POC and escalate To <b>CVS ROC or CVS STS</b> (along with PMO Support team) - Log time and details in Issue section below		
<b>POST INSTALL by Lane - Complete one lane (CASH) and request Store POC to start their TASKS, Repeat for Cashless lane when ready</b>		
Inventory spare parts and keys and place in bag then provide all to the store manager, POC. NOTE: SA card box was provided to Store POC earlier		
Provide the keys to Store POC and review with Store POC how the keys work. How to open cash cabinet door, scanner shelf and show BNR and BCR key use.		
When the Lane is at the <b>CLOSED Screen</b> Contact Store POC and request that they begin their tasks to test the completed lane.		
STORE POC starts their task list at this stage on the CASH lane - TGCS technician continues install on CASHLESS lane. Tasks for the STORE POC are at the end of this report.		
<b>TGCS Installer will utilize the Generic SA card to Perform the Pin Pad Load, "77", per Instructions provided by CVS in the TGCS Installation Manual - wait appropriate time for it to completes (15-20 minutes). Follow provided instructions. (REPEAT for CASHLESS LANE WHEN NEEDED)</b>		

[illegible]

<b>CVS Tasks</b>
<b>PRE-INSTALL</b>
Review with TGCS technician plan for install, verify that the CASH lane will be installed first.
In the office begin preparations for cash and compile CASH for loading the lane/s
Collect all documents needed in Store Resources for accessing the lane - Generic SA card, Pin Pad load instructions, and other necessary training materials.
Obtain ACO Shopper Assistant (SA) cards from technician to program cards with full or limited access.
Go To eBOSS to set up SA cards for all/some colleagues (See initial set-up module). NOTE: There is a generic CVS card setup in the eBOSS which should be in your training packet as a fall back for store use. Use this card if eBOSS cannot be accessed or store POC does not have time to setup cards.
<b>TASKS TO BE COMPLETED DURING HW INSTALL</b>
Review with TGCS lane placement and check on candy rack
Lift the Bag rack and observe LOAD CELL VERIFY THERE IS NO CARDBOARD VISIBLE.

<b>Store POC needs to provide the pin pads to TGCS tech. - To report missing or nonworking pin pad/s - email: ACO_FieldMailbox@CVSHealth.com</b>
Verify the scanner is installed and the light inside the scanner is red
Store will test the items in the rows below later when Lane SW is done – by scanning SA card to open lane – but, while TGCS tech is running diagnostics, you can ask them to go to main screen and scan an item. The UPC code will appear on the screen Box indicating the scanner is reading barcodes.
<b>- Test a CVS Extra-Care Card from a cell phone – the manager or store associate is assumed to have this Digital ExtraCare Card on their cell phone to test.</b>
- Tested later during transaction - White light lane OPEN, GREEN when transaction completed.
- Test later by standing on side allowing Screen to change form Base to OPEN. Then move in front audio should be heard and Screen moves to BASE

<b>CVS Tasks</b>
- Test During transaction – lights change color as transaction moves through steps.
- Test coupon during transaction – drop folded paper coupon through center of slot. If coupon not dropped through coupon should be auto voided – if through sensor is working.
- Test via SA menu
- Tested when bags or item was placed on bagger
- Tested during cash load and cash transaction
When SW Terminal ID step is started there is 30 to 40 minutes to load all SW.
<b>Check with the Technician to verify the software is downloaded. The screen will be “CLOSED”</b>
Work with TGCS tech to verify keys for cash lane are operational and take provided keys and miscellaneous parts to OFFICE for safe keeping
<b>At this point Store POC is key resources to complete the install for that lane.</b>
From the office take SA card/s entered eBOSS and generic card to ACO cash lane. Scan your (Store POC) card and verify lane begins to OPEN from the CLOSED screen, if not revert to use of generic card with Toshiba. (If both fail eBOSS link is not active or cards not setup properly). email: <a href="mailto:ACO_FieldMailbox@CVSHealth.com">ACO_FieldMailbox@CVSHealth.com</a>
<b>Provide the TGCS installer a SA card you set up in eBOSS or the Generic SA card in Store Resources, while they Perform the Pin Pad Load per Instructions. – WAIT 20 Minutes for this process to complete before doing any tasks with the ACO lane.</b>
Work with TGCS tech to obtain and test the keys for cash lane. Remove the Bill Loader from the BNR and take it to the office.
Load all bills properly in Bill Loader and bring all coins to CASH lane. Load all per instructions. Note: that if the Bill Cash Box was removed it must be opened and then closed prior to inserting the Bill Loader device.
Inform TGCS tech that cash load is starting. Then Scan the SA card provided and OPEN lane per instructions. Use one of the SA cards entered if this was done – if it works continue. If not hold for fix later and use the generic card.



Use SA card to access SA menu and locate the CASH TRACKING function, continue with all cash steps to enter coin totals and to then verify both COIN and bill totals. Ask TGCS tech for assistance
EXIT CASH TRACKING when it is completed and pick up printed report. NOTE that not all \$1 bills load - Should be 35 \$1 in recycler and 65 balance in Bill Loader so total Bills would be \$65 off as bills in Bill Loader are not counted in total.
With LANE OPEN - Add plastic Bags if used at store if not add any item with a reasonable weight 1lb or more - correct error message that arises from change in weight on security scale platen
Use working SA card or Generic SA card to access SA menu to check on <ul style="list-style-type: none"> <li>- Speaker volume and sound,</li> <li>- language versions (English/Spanish)</li> <li>- observe TAL Light is On White when lane Open Off when lane is closed</li> </ul>

## CVS Tasks

Per the Task list instructions perform one cash transaction and one debit/credit transaction to ensure all the parts are working and are not defective. <b>If the credit/debit transaction does not process inform the TGCS tech and then follow correct process to inform CVS team. email: <a href="mailto:ACO_FieldMailbox@CVSHealth.com">ACO_FieldMailbox@CVSHealth.com</a>.</b>
CASHLESS LANE - Scan working SA card and verify lane begins to OPEN from the CLOSED screen, if not revert to use of generic card. with Toshiba.
<b>REPEAT for CASHLESS LANE - Assist TGCS installer by providing Generic SA card as needed. As they Perform the Pin Pad Load per Instructions. Then continue with Store tasks that can be done while lane Pin Pad reloads. DO NOT USE SA CARD OR WORK ON LANE UNTIL THE PIN PAD LOAD IS COMPLETED.</b>
<b>Wait for CASHLESS lane to COMPLETE PIN PAD LOAD following all instructions to CLOSED screen. Then repeat ALL the above process steps for that lane - except for cash related tasks.</b>
Stores are provided with three keys and can open all locks on the ACO unit. TEST ALL KEYS WORK IN THEIR RESPECTIVE LOCK
Store Continues with all CASHLESS LANE TASKS - <b>PRIORITY TASK IS to perform one credit transaction and or one debit/credit transaction to ensure that the pin pad is working.</b>
Ensure any outstanding issues are listed below and complete paperwork.
<b>Approve that TGCS Tasks are completed</b>
Scan the ACO SA cards that were entered eBOSS to ensure they are functional, and colleagues have access to all tabs on the ACO menu assigned.
<b>NOTE THAT ALL THE ABOVE STORE POC tasks must be completed in an efficient and TIMELY MANNER. TGCS technician will be onsite for a limited amount of time while he/she completes install of lanes, cleans up and does required paperwork.</b>
<b>PLEASE FULLY COMPLETE AND SEND REPORT BEFORE TECH LEAVES SITE</b>
<b>DELAYS: Describe the issue and include how long it extended completion time. Include any customer ticket #s</b>
Delay 1)
Delay 2)
Delay 3)

Lane Type	Lane ID#/Initial	Lane ID#/Initial	Lane ID#/Initial	Lane ID#/Initial
Cash	17 -	09 -	11 -	13 -
Cashless	18 -	08 -	10 -	12 -

<b>ATTENTION:</b> By signing this form you are certifying the above information is accurate as of the time the services were delivered to you by Toshiba and that the lane functionality has been demonstrated to you for operational verification.	
Print Store POC Name:	Print TGCS Tech name:
Store POC Signature:	TGCS Tech Signature:
Date Completed:	Time Completed: