

American Changer



Model
500RL CC-2
Rear Load



Model
500RL C1-2
Rear Load



Model
500FL C1-2
Front Load

Triad Model 500 Series Installation, Operation, and Service Manual



Changing the IndustrySM

! WARNING

Improper installation, adjustment, alteration, service, maintenance, or use of this machine can result in death, injury or property damage.

Installers & Service Technicians

Read and understand the instructions detailed in this manual.

Owners & Operators

Keep this manual in a safe place to provide to any service technicians working on this machine.

American Changer

1400 N.W. 65th Place, Ft. Lauderdale, FL 33309

Tel (954) 917-3009 • Fax (954) 917-3079

www.americanchanger.com www.hoffmanmint.com

©2019 American Changer

All rights reserved. No part of this work covered by copyrights herein may be reproduced or copied in any form or by means – graphic, electronic or mechanical, including photocopying, recording, taping or information storage and retrieval systems – without the written permission of American Changer

Table of Contents

| | |
|--|----|
| Warranty Statement | 2 |
| Machine Safety | 3 |
| New Changer Installation – Power Cord and Keys | 5 |
| Mounting Specifications (Dimensions, Weights, Electrical) | 6 |
| Power Cord, Toggle Switches, ON/OFF, and Fuse Locations | 9 |
| Changer Installation to meet ADA Requirements | 10 |
| Installing a Rear Load in the Wall | 11 |
| Installing a Front Load | 12 |
| Set Up/General Operation | 13 |
| “Cassettes \$1, \$5, \$10” | 15 |
| Reconciliation | 16 |
| Currency Cassette Configuration | 17 |
| Program Reset | 18 |
| “Out of Currency” Currency Load / Reconciliation | 19 |
| “Coin Low or Empty” | 19 |
| Printer Set Up | 20 |
| Help Code Chart | 21 |
| Status Report | 23 |
| Voltage Test Points | 23 |
| Two Denomination, Model F53, Bill Dispenser Maintenance Schedule | 24 |
| Mars Bill Acceptor | 25 |
| MEI VN2700R – Bill Recycler | 27 |
| USA Technologies Credit Card System Set Up | 33 |
| Cassette Low Level Sensor | 36 |
| Replace Cassette Pick Roller | 37 |
| Cleaning Cash Dispenser Belts, Top Section Rollers & Thickness Roller | 40 |
| Coin Hoppers | 41 |
| Parts Catalog: 500RL-2 Rear Load, 2 Denomination Dispenser | 43 |
| Parts Catalog: 500RL-3 Rear Load, 3 Denomination Dispenser | 45 |
| Parts Catalog: 500C1-2 Front Load, 1 Coin Hopper, 2 Denomination Dispenser | 47 |
| Printer | 49 |
| Cash Cassette | 50 |
| Warranty Terms and Conditions | 51 |
| Warranty Form | 53 |

Warranty Statement

PLEASE REFERENCE PAGES 51 AND 52 FOR AMERICAN CHANGER'S DETAILED LIMITED WARRANTY AND EXCLUSIVE REMEDIES. SOME HIGHLIGHTS FROM SAID SECTION ARE:

Coin Hopper(s), Coin Acceptors and Logic Board

These items are warranted for one year from date of purchase.

Banknote Validator

This item is warranted for two years from the date of purchase.

COVERED

- Manufacturers' defects in workmanship or materials

NOT COVERED

- Damage caused by shipping or physical abuse
- Misapplication
- Vandalism
- End users' attempt, on their own, to repair components
- Cleaning and maintenance
- Power surges and lightning strikes

A Return Material Authorization number (RMA #) must be obtained from American Changer Corporation before returning a unit for repair; warranty or otherwise. A copy of invoices must accompany any and all warranty work.

Machine Safety

Your safety and the safety of others are very important to American Changer.

We have provided important safety messages in this manual and on your machine. Always read and obey all safety messages.



This is a safety alert symbol.

This symbol alerts you to potential hazards that can kill or hurt you and others. All safety messages will follow the safety alert symbol and either “DANGER”, “WARNING”, or “CAUTION”.

These words mean:



You can be killed or seriously injured if you don't immediately follow instructions



You can be killed or seriously injured if you don't follow instructions

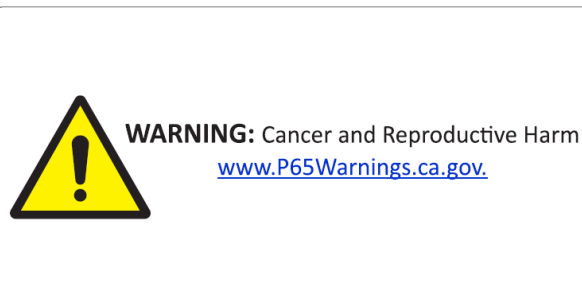


You can be injured if you don't follow instructions

All safety messages will tell you what the potential hazard is, tell you how reduce the risk of injury, and tell you what can happen if the instructions are not followed.

Distributors, retailers, operators, and/or service people are to insure the following warning label is properly affixed on the ACC products to which you/they are using and/or servicing in order to help meet the applicable Proposition 65 requirements. For more information go to

www.P65Warnings.ca.gov



Important Safety Instructions

DANGER: To reduce the risks of severe injury secure the machine to a stable structure.



Severe Injury Hazard

This machine is to be secured to a stable structure.

Equipment will fall if not properly secured to a stable structure.

Failure to follow these instructions may result in death, injury, product damage, or property damage.

WARNING: To reduce the risk of electrical shock, disconnect all electrical power to the machine before servicing.



Electric Shock Hazard

Disconnect all electrical power to the machine before servicing.

Electric shock will occur while servicing the machine with electrical power applied to it.

Failure to follow these instructions may result in death, injury, product damage, or property damage.

NOTICE: For indoor use only.



For indoor use only.

Solo para usos en el interior.

Pour une utilisation en intérieur uniquement.



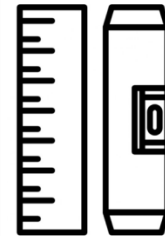
NOTICE: Ensure this machine is level when installed



Ensure this machine is level when installed.

Asegurarse que esta máquina esté nivelada cuando haya sido instalada.

S'assurer que la machine soit de niveau lorsqu'installée.



SAVE THESE INSTRUCTIONS

American Changer does not guarantee machines (products) or services to be 100% secure against criminal attempts. All machines (products) and services are to be used in accordance with business best practices and the owner's or operator's best judgement.

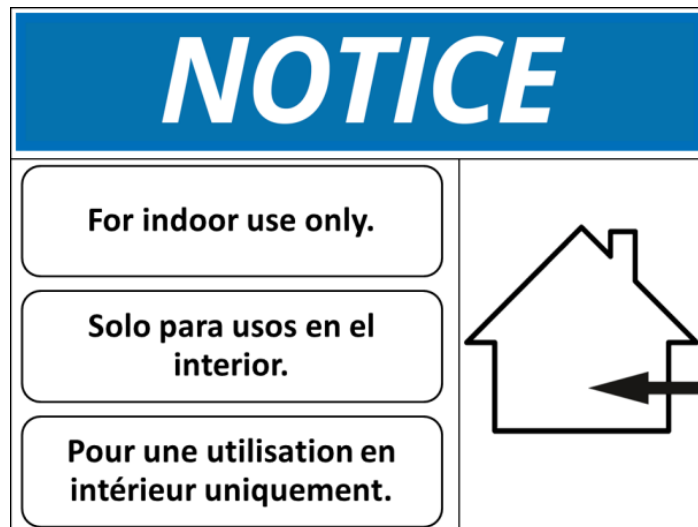
Installation, use, service and maintenance must be performed in accordance with applicable machine (product) manuals provided by American Changer and comply with any and all pertinent laws or regulations.

Inspect your machine (product), at a minimum annually, by a qualified service technician.

Dimensions and weights are reasonably close estimates. Specifications in this manual can vary without notice.

New Changer Installation - Location of Power Cord & Keys

NOTICE: THIS MODEL MACHINE IS FOR INDOOR USE ONLY.



Inspect for any connectors or components that may have been dislodged during shipping. The lock and keys for your changer will be inside the manila envelope along with this manual and other pertinent information. To install the lock, insert the cylinder into the hole in the middle of the T-handle and push until it stops. Turn the key until you hear it “snap.” Turn the key counterclockwise ¼ turn and remove the keys.

NOTE: The only way to get a duplicate set of keys made is to save the tag that comes with the keys. The ID # begins with “AC” or “ACC” followed by digits.” If you purchased Medeco locks with your machine the ID will begin with “7RA” followed by digits.”

CHECKING SHIPMENT: Be sure to check the shipment against the Bill of Lading for shortages. Also, check for external damage to the packaging. Note any shortages and/or damage to the packaging on the Bill of Lading in the presence of the carrier and ask the carrier to initial on the Bill of Lading accordingly. Immediately report any shortages or damage to the packaging to the carrier and American Changer.

TEST: Before permanently installing the changer, do a functional test to verify that there is no shipping damage to your new changer.

Plug the power cord into a ***dedicated, grounded 120VAC outlet.*** The machine is preset to accept U.S. currency (unless otherwise specified at the time of purchase).

Fill each of the coin hoppers with a minimum of 100 coins. On the Controller Assembly, turn the switch, labeled on/off, to the “ON” position.

If the machine does not function properly please contact American Changer’s Technical Support Department at service@americanchanger.com or 1-888-741-9840.

When unpacking a new changer, the power cord and keys are found as shown below.



Mounting Specifications

This machine must be installed in accordance with local codes. If you are unsure in any way what your local codes are or unsure of anything in the following steps, please hire a licensed professional to mount your machine.

| Model: | 500FL-2, 500FL-3 500-2, 500-3 500FLC1-2, 500FLC1-3 | 500RL-2 500RL-3 | 500RLC1-2 500RLC1-3 |
|---|---|--|---|
| Type: | Front Load | Rear Load | Rear Load |
| Number of Bill Denominations Dispensed: | 2 or 3 | 2 or 3 | 2 or 3 |
| Number of Coin Hoppers | 0 or 1 | 0 | 1 |
| Cabinet Dimensions - Width: - Depth: - Height: | 12.06 in. 18 in. 38.62 in. | 12.06 in. 18 in. 38.62 in. | 12.06 in. 18 in. 38.62 in. |
| Face Plate (DxWxH): | n/a | .125" x 18" x 43" | .125" x 18" x 43" |
| Approx. Shipping Weight: | 500FL-2: 115 lbs. 500C1-2: 125 lbs. 500FL-3: 140 lbs. 500FLC1-3: 150 lbs. | 500RL-2: 135 lbs. 500RL-3: 160 lbs. | 500RLC1-2: 145 lbs. 500RLC1-3: 170 lbs. |
| Power* - Line Voltage: - Idle: - Active: | 115 VAC, 95-125 VAC 110/115 AC; 60Hz, 130w/1.5A 110/115 VAC; 60Hz, 230w / 3.5A | 115 VAC, 95-125 VAC 110/115 AC; 60Hz, 130w/1.5A 110/115 VAC; 60Hz, 230w / 3.5A | 115 VAC, 95-125 VAC 110/115 AC; 60Hz, 130w/1.5A 110/115 VAC; 60Hz, 230w / 3.5A |

*No more than three (3) Bill Breaker units may be connected to a single 15 amp circuit.


NOTICE: BEFORE SECURING ENSURE THE MACHINE IS LEVEL.

NOTICE

Ensure this machine is level when installed.

Asegurarse que esta máquina esté nivelada cuando haya sido instalada.

S'assurer que la machine soit de niveau lorsqu'installée.



⚠ DANGER: PROPERLY SECURE MACHINE (PRODUCT) TO A STABLE STRUCTURE SO THE MACHINE (PRODUCT) CANNOT BE MOVED OR TIPPED. USE STRUCTURAL SOUND FASTENERS THAT CAN BE PROPERLY TIGHTENED AND SECURE THE MACHINE (PRODUCT) THROUGH EACH OF THE HOLES IN THE BASE OF THE MACHINE (PRODUCT) TO THE APPLICABLE SURFACE TO WHICH IT IS BEING SECURED.

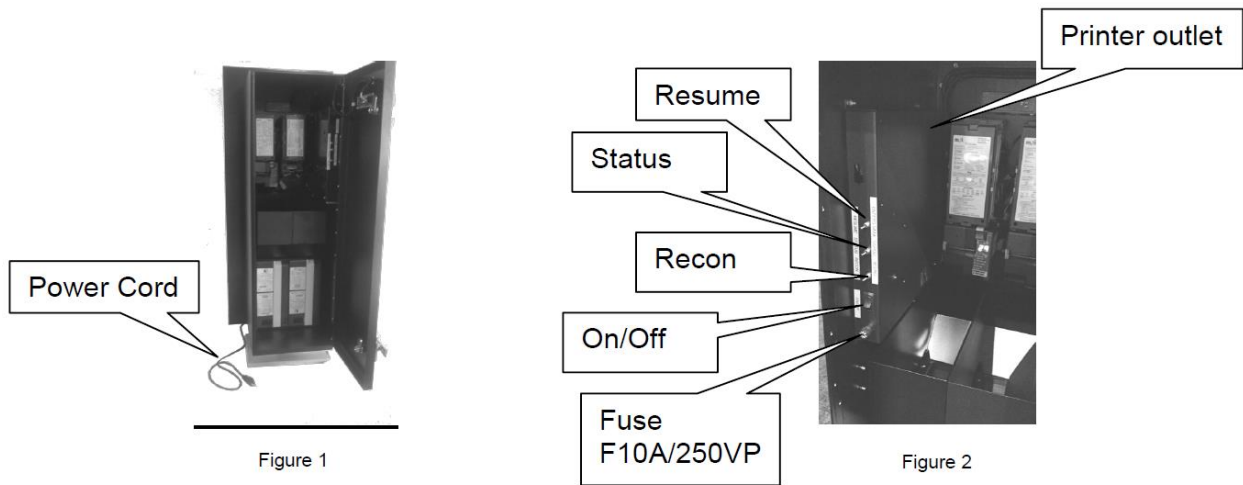


The proper performance of your American Changer machine is directly related to the quality of the power it is supplied. AC power fluctuations, including blackouts, brownouts, over voltages, sags, surges, and spikes may cause the machine to miss pay. To ensure the most trouble-free operation, we strongly recommend plugging all of our machines into a DEDICATED AC outlet (this means there are no other machines on location plugged into the same AC line). A simple way to check if this is true is to turn off the breaker associated with our machine at the breaker box. No other equipment on location should lose power.

Additionally, if your unit is located in an area prone to lightning storms or other sources of frequent power disturbances, we also strongly recommend using an Uninterruptible Power Supply (UPS). If power is lost during a payout to a customer, a UPS will allow your machines to complete the transaction that would otherwise not be completed. In some cases, a UPS may also correct long-term under and/or over voltages on the AC line by converting to the proper line voltage before the power reaches the machine.

Every American Changer machine has a surge suppressor built into the main logic board. This helps eliminate power related noise problems, but it will not protect from substantial voltage spikes or nearby lightning strikes. If this is a concern for your area, we recommend purchasing a commercial grade UPS with integrated surge protection. **NOTE: A POWER STRIP IS NOT A SURGE PROTECTOR.**

On/Off Switch, Toggle Switches, and Fuses



Power Cord

See Figure 1 for Power Cord location.

On/Off Switch, Toggle Switches, and Fuses

On/Off, Resume, Status, Recon Switches are shown in Figure 2.

Fuse Locations

There are two fuses used.

1. Fuse, 61 NM, 250V 5A slow blow: Located in the power module above the on/off switch of the toggle switch box (shown above in Figure 1).
2. Fuse F3.15AH, 250V slow blow: Located on the power supply assembly (see figure below).

IMPORTANT NOTE

Plugging any device (such as drill, vacuum, etc.) into the printer power receptacle may cause a blown fuse.

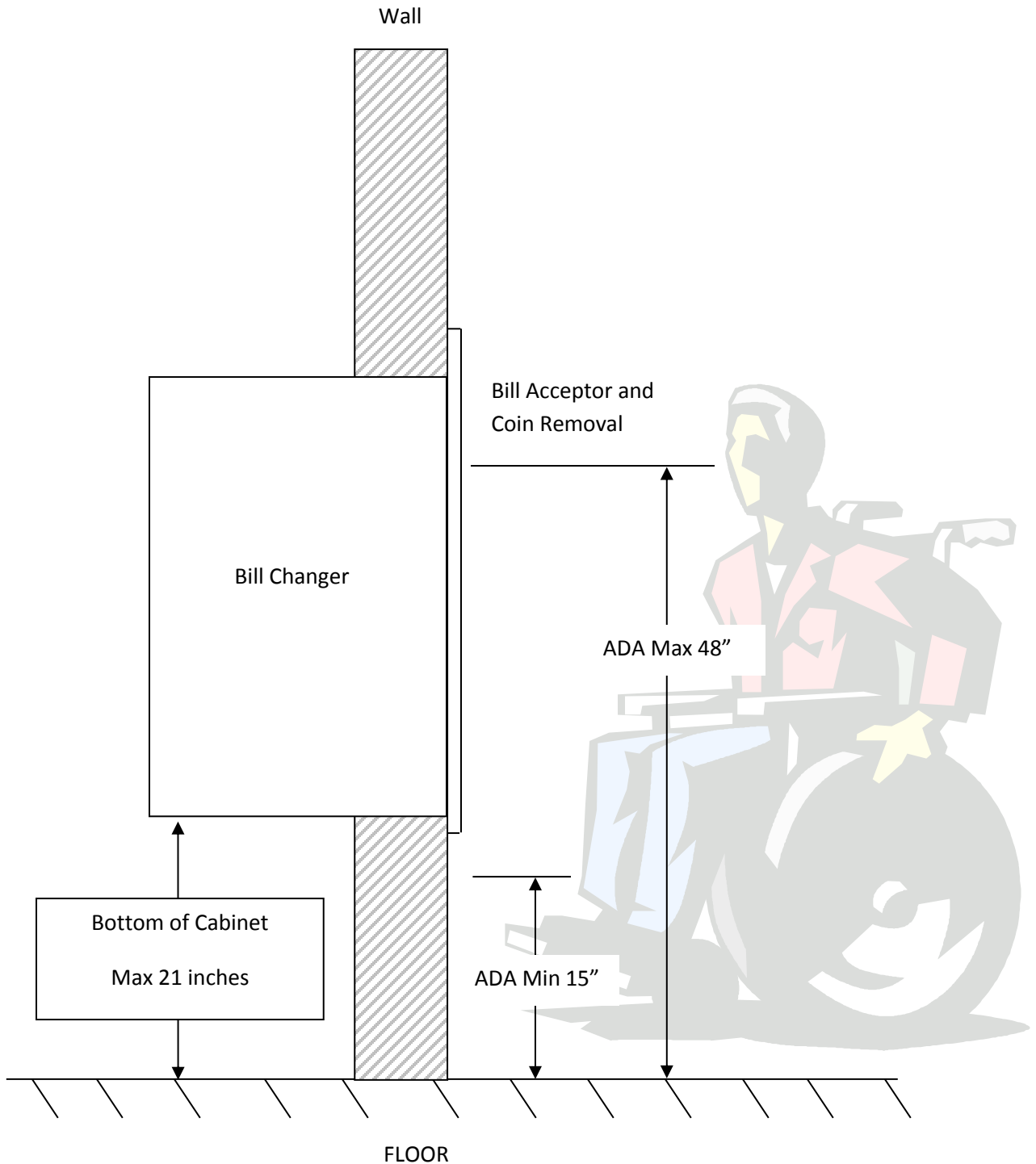
Fuse F3.15AH,250 V
Slow Blow



Power Supply Assembly

In the Wall Changer Installation to Meet ADA Requirements

The American Disabilities Act requires unobstructed access to equipment. Bill insertion and coin removal are to be no lower than 15 inches and no higher than 48 inches from the floor. This requirement must be met whether a changer is installed on a base, on a table, or in the wall. NOTE: This drawing is not to scale.



Installing a Rear Load Model 500

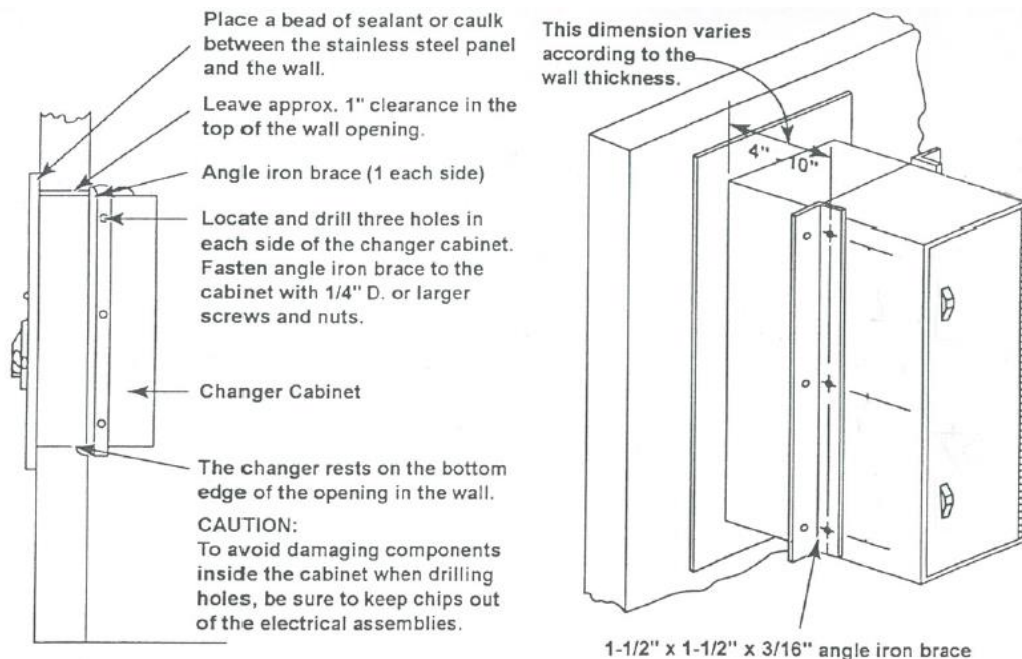
General

For all methods of installation, locate a convenient power source and be sure that the bill changer is mounted level.

The Rear Load Changer is primarily designed to be flush mounted on a wall with the cabinet itself protruding through a hole (or cutout) in the wall. The cutout should be determined by the cabinet dimensions shown on page 7. The faceplate, attached to the cabinet, is mounted tight (or flush) against the outside surface of the wall and secured with two angle braces (one on each side of the bill changer). See below for an illustration of this mounting technique. The wall should be flat and vertical so that when the changer is mounted to the wall, no gap exists between the wall and the stainless steel panel. If the changer is mounted on an outside wall, apply a liberal bead of sealant or caulking to the backside of the panel near the four outside edges to ensure a good weather seal and discourage prying.

Typical Wall Mounting

1. Refer to page 8 for cabinet dimensions and then make an opening in the wall just large enough for the changer cabinet. (Determine the bill changer mounting height before you start cutting into the wall.)
2. Depending on the wall thickness, locate and drill three ¼-inch diameter (or larger) holes in each side of the cabinet as shown below. Drill the holes in the angle-iron to match the holes in the cabinet.
3. Set the bill changer in the opening in the wall and apply a bead of sealant or caulking to the back side of the faceplate. Position the faceplate tight against the wall and fasten the angle braces to the sides of the bill changer with ¼-inch diameter screws or screws that match the holes drilled in Step#2. Make sure that the faceplate is tight against the wall.



Installing a Front Load Bill Breaker on a Base (Models 500-1, 500CX-1, 500-2, 500CX-2)

SAFETY & SECURITY NOTE:

For both safety and security, American Changer strongly recommends that this bill changer be securely anchored to the floor and/or wall.

IMPORTANT NOTE:

Do not position the rear side of the mounting base flush with a wall. The rear side of the cabinet must hang over the rear side of the base by 1 inch to allow for the power cord to exit from the underside rear corner of the cabinet.

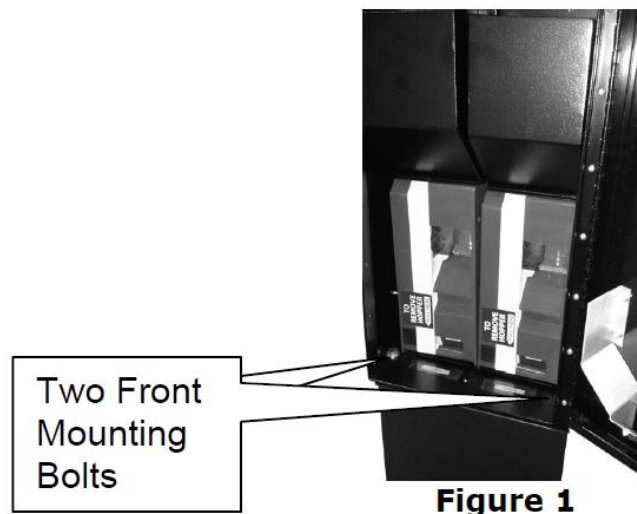
IMPORTANT NOTE:

Check to be sure there is no excess paint buildup on the 2 positioning studs at the mounting base.

1. Position the changer on the base, then mark the mounting hole locations on the floor and/or wall.
2. Mount the base to the floor leaving at least 1 inch clearance between the rear base panel and the wall.

NOTE: A spacer may be needed between the rear base panel and the wall.

3. Remove the coin hoppers from the cabinet.
4. Place the Model 500 Changer on top of the base.
5. Push the cabinet $\frac{3}{4}$ " toward the wall so the positioning studs secure the back of the cabinet.
6. Square up the cabinet to the base and install the Four (4) 3/8x16 bolts in the two (2) front holes as shown in Figure 1 and two (2) rear bolts (not shown).
7. For extra security, additional screws can be inserted through the rear cabinet panel into the wall.

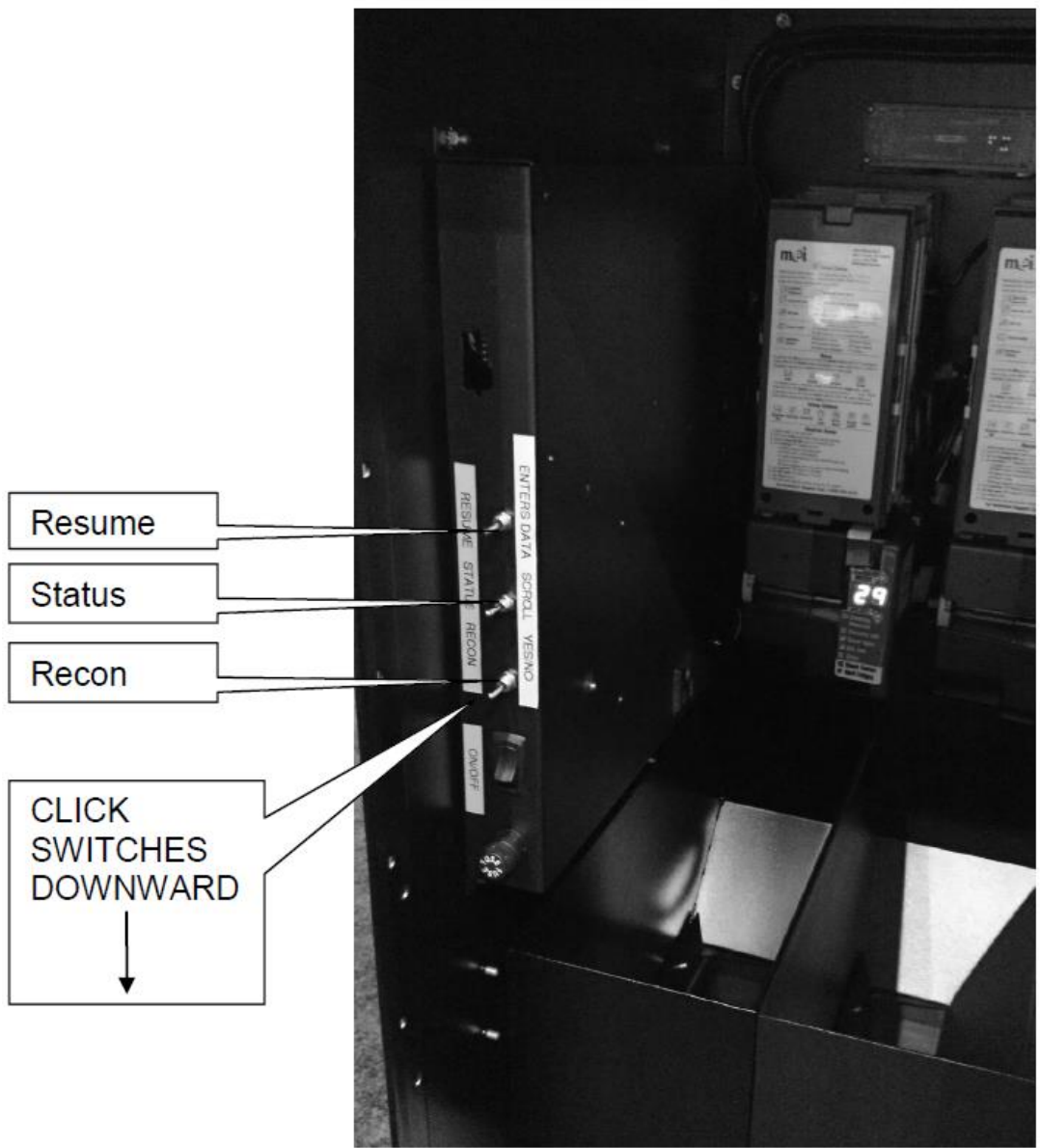


Set Up/General Operation

When you first receive your new Changer, it may need to be configured for your use. Some options may be factory set but they are generic and may need to be reset. Refer to Program Reset on page 18.

There are three toggle switches on the side of the control panel, located in the upper left side of the cabinet or upper right side of the cabinet.

IMPORTANT NOTE:
To activate switches click them downward.
They will not work by clicking upward or by pushing them.



Setup/General Operation Continued

Switches Results

Resume Brings you to the next part of the program.

Status Moves the cursor on the display during the setup procedures.

Recon Toggles between all yes/no questions and is used for all number entries (1, 2, 3, 4, ...).

| Display | Function (Press Resume switch after completing each function) |
|---|--|
| Cassette \$1, \$5 (See note below) (Will show \$10 for 3 rd cassette. These values match the cassette magnet positions.) | Shows cassette denomination. Load each cassette with at least 50 bills and click Resume. |
| Enter Mach # | Establishes machine ID; choose number using Recon switch; click Resume. |
| Printer Installed | Answer yes or no using Recon switch. Then click Resume switch. |
| Enter bill load in \$ | Enter total dollar value inside cassettes using Status & Recon. |
| \$ XXXX Load OK Y/N? | Verifies total dollar value inside cassettes |
| Coin Dispenser #1 Y/N? | Checks to see if coin dispenser #1 is installed |
| a) If yes, Resume Ent Load In # Pieces | The total # of coins using Status & Recon. |
| b) # of pieces OK? _ _ _ | Verifies the # of coins |
| c) Enter piece value x.xx | x.25 – quarters using Status & Recon. |
| Enable \$1 through \$100 | Allows you to choose which bills you want accepted (Example enable \$100 <Y>) |
| # From \$1 Cassette | Number of notes to be dispensed from \$1 Cassette using Status & Recon switches. |
| # From \$5 Cassette | Number of notes to be dispensed from \$5 Cassette using Status & Recon switches. |
| # From \$10 Cassette (if 3 rd cassette used) | Number of notes dispensed from \$10 or \$20 cassettes using Status & Recon switches. |
| # From Coin #1 | Number of coins to be dispensed from Coin Hopper #1 using Status & Recon switches. |
| Configuration OK Y/N | If correct, press Resume. With a printer, the machine configuration prints out. "No" returns to the beginning. |
| Printed Report OK Y/N Y | Answer Yes and Resume |

Note: Cassette values \$1,\$5,\$10,\$20 shown or display match the cassette magnet location discussed on page 16.

Note: MaxTrans rate only used in models built prior to January 2014.

Cassettes \$1, \$5 for Two Denomination Models

Cassettes \$1, \$5, \$10 for Three Denomination Models

“Cassettes \$1, \$5” showing on display indicates normal two denomination Bill Breaker start up identifying that the cassettes are set up to handle \$1 and \$5 notes. “Cassettes \$5, \$10” showing on display indicates that the cassettes are set up to handle \$5 and \$10 notes and so on. “Cassettes \$1,\$5,\$10” showing or display indicates normal three denomination Bill Breaker start up for \$1,\$5, & \$10 bills. “Cassettes \$1,\$5,\$20” in display indicates set up for \$1,\$5, & \$20 bills and so on. Change the cassette configuration on page 19 in “Currency Cassette Configuration”

Note: These values match the cassette magnet position, see page 16.

Important Note:

Dispensing \$5s, \$10s or \$20s is recommended when accepting \$10, \$20, \$50 and/or \$100 bills.

Reconciliation

Click the Recon switch. Each cycle of the switch will display a different line item. To end the cycle, press the Resume switch moving on to the next line item.

The display will prompt, "Print recon Y/N?"

Select "Y" and press the resume switch. The reconciliation report prints and the display reads "printed report OK?"

Respond "Y" and press the resume switch. The display will read "? CLR recon data Y/N?"

Respond to the CLR Recon Data message above by selecting "Y" and press the resume switch. Bill Breaker will read "Ready To Accept Bills".

IMPORTANT NOTE:

The Bill Breaker **MUST BE RECONCILED BEFORE ANY EXSISTING OPTIONS ARE CHANGED**. This does not apply to initial setup, ONLY if you wish to change any pre-existing options or settings. Failure to do so will delete all bookkeeping functions and events for the current period.

| Sample Reconciliation Report | |
|---|----------------------------|
| Software Version | RECONCILIATION RPT |
| # of times unit Reconciled | F53C_2_5 |
| # of Incoming Bills | MACHINE # - - - - 1 |
| Value of Bills in Reject Tray | RECON AUDIT - - 0 |
| Value of Bills Dispensed from Cassette #1 | MAINTENANCE - - 17 |
| Value of Beginning Cassette inventory Cassette #1 + Cassette #2 | DOC STACKED - - 5 |
| Value of Bill Load and Bills Paid = Bill Left | STACK DOLLAR \$46 |
| Value of Coins Paid | REJECTED - - - - \$0 |
| Value of Beginning Bill + Coin Inventory | CAS#1 DOLLAR - \$15 |
| | CAS#2 DOLLAR - \$10 |
| | BILL LOAD - - - - \$3000 |
| | BILLS PAID - - - - \$25 |
| | BILLS LEFT - - - - \$2975 |
| | #1 COIN LOAD - \$250.00 |
| | #1 COIN PAID - \$21.00 |
| | #1 COIN LEFT - \$229.00 |
| | - - - MACHINE TOTALS - - - |
| | TTL LOAD \$3250.00 |
| | TTL PAID \$46.00 |
| | TTL LEFT \$3204.00 |

Currency Cassette Configuration

Note: Loading Currency into the cassettes must be done properly to assure the reliability of the Bill Breaker. Take your time while loading currency and never try to insert more than 100 bills at a time until you reach the desired amount. PLEASE refer to the section in the enclosed “Fujitsu Cash Dispensers Operators Guide” pertaining to loading currency.

The following information will allow you to set up or modify the denominations of currency that your Bill Breaker will dispense.

Note: It is important to complete “Reconciliation” and “Reset Machine Y/N”. Click Y before changing cassette configuration.

Follow these steps to change cassette magnet locations:

This example changes a \$1 cassette to a \$10 cassette.

1. Do a fast recon that clears totals to \$0.
2. Turn off changer.
3. Hold resume switch down and turn power on.
4. Release resume switch when shown.
5. Answer Y to Reset machine.
6. Display shows present cassette set up that may be- “Cassettes \$1 & \$5”.
7. Now make the desired cassette set up change. For example if the \$1 cassette is changed to a \$10 cassette, remove the \$1 cassette, add the second magnet in the “C” position, replace cassette. You now have magnets in the “C” & “D” positions.
8. Click Resume again or turn power off then on and now display shows cassettes \$5 & \$10.
9. Click Resume to begin reprogramming the unit. (See Set Up instructions on page 14.)

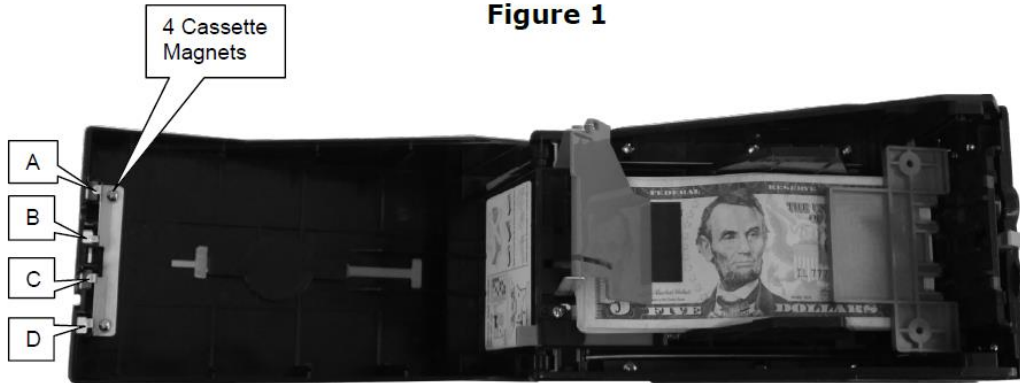
Cassette Magnet

The currency cassettes have magnets built into them. The currency dispenser “reads” these magnet configurations, and relays this data to the Bill Breaker’s main board. **It cannot be stressed enough that extreme care must be taken while changing these configurations. The Bill Breaker will only read these magnet settings for denomination recognition. It does not matter if the correct denomination is placed into the cassettes, because if the magnets are *set wrong*, the dispenser will *dispense incorrectly*.**

To access the magnets open the cassette (See Figure 1). There is a metal clip which is part of the top cover. Remove bracket to access magnets. There are 4 magnet positions in each cassette. They are marked A,B,C, and D on the top lid. **IMPORTANT NOTE: The position of the white side and white top face is critical. The magnet’s white side faces the outside cassette edge. The white top faces the top cassette edge. If magnets are in the incorrect position, the error code is “?Wrong Cassette?”.** One end and one side of the magnets is painted, while the other end and side is not. When inserting a magnet, the paint goes towards the top and the front of the cassette. The top 22190006 November 2014 Page 21 of 59 Of the cassette is where the letters ABCD appear. The front of the cassette is where the button is located to open the top lid. See Figure 1 on next page.

| <u>DENOMINATION</u> | <u>POSITIONS</u> | <u># OF MAGNETS</u> |
|---------------------|------------------|---------------------|
| \$1.00 | D | 1 |
| \$5.00 | C | 1 |
| \$10.00 | D & C | 2 |
| \$20.00 | B | 1 |

Figure 1



Program Reset

Important Note:

Before Starting the Reset Process, a Reconciliation “Recon” must be completed.

Answer “Y” to Program Reset Y/N? to do the following:

- * Change Beginning Bill Load in the cassettes.
- * Change Beginning Coin Load in the coin hopper.
- * Change value of bills accepted.
- * Change mix of bills or coins dispensed.
- * Change the Value of Coins/Tokens in hopper.
- * Change the Denomination Values in cassettes. (When cassette magnet locations change, for example when a \$1 cassette is changed to a \$10 cassette.)

Turn power OFF.

Hold down Resume switch.

While holding down Resume switch, turn power ON and hold Resume down for several seconds. The following prompts will be displayed:

- “Hold Resume to CONFIG”
- “Release Resume”
- “Reset Machine Y/N”
- Answer “Y” by cycling Recon switch
- “Cassettes \$1 \$5” (Depending on how the cassettes are set up).

Follow display Prompts.

“Out of Currency” Currency Load / Reconciliation

The Bill Breaker will shut down and will not accept further currency if:

- EITHER cassette is drawn down to approximately 15-35 notes
- Coin hopper is empty
- the Bill Validator stacker is full

You must perform a reconciliation and reload the cassettes and/or coin hopper making sure the bill level is above the cassettes low level sensor.

Remove and unload the MEI bill box and reject bill tray. The bills in the bill tray should be checked to be sure they are of good quality and can be returned to cassettes. Bills in reject bill tray have not been subtracted from the cassettes inventory.

Click the resume switch. The display will prompt, “Print recon Y/N?” if a printer is used. Select “Y” and click the resume switch. The reconciliation report prints and the display reads “printed report OK?”

Respond “Y” and click the resume switch. The display will read “? CLR recon data Y/N?”

Respond “y” and click the resume switch.

Bill breaker will read “Ready To Accept Bills”.

IMPORTANT NOTE:

The Bill Breaker ***MUST BE RECONCILED BEFORE ANY EXSISTING OPTIONS ARE CHANGED.*** This does not apply to initial setup, ONLY if you wish to change any pre-existing options or settings.

Failure to do so will delete all bookkeeping functions and events for the current period.

“Coin Low or Empty”

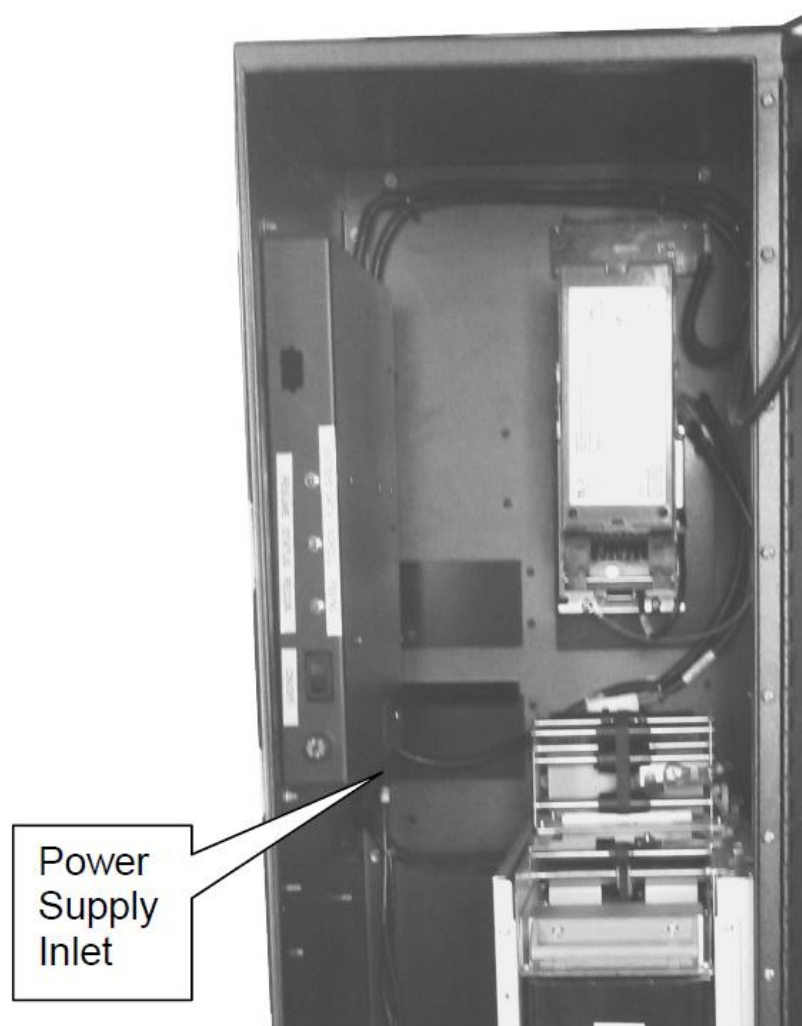
The Bill Breaker will shut down and will not accept further currency if: Coin hopper is empty.

You must perform a reconciliation (Fast Recon Y/N, Y) and reload the hopper. To preserve the "Coin Load" data in the Bill Breaker, reload with the same amount of money that you originally started with.

Printer Set Up

Make sure the power is **OFF**.

1. Attach 25 pin "D" connector to rear of the printer.
2. Attach printer power supply to the outlet (outlet is located at the rear of the AC power & switch box).
3. Attach power supply plug connector to the back of the printer.
4. Turn printer ON/OFF switch to ON (printer power switch is located on the right side of the printer).



Help Code Chart

| HELP CODE | DESCRIPTION/CORRECTIVE ACTION |
|--|---|
| ?Out of Currency? | Reload cassette or magazine with currency and reconcile unit, answer “Y” to clear Recon data prompt; Be sure bill load amount is greater than or equal to amount of bills in the cassette or magazine, press Resume switch. |
| ?No top cassette? | Replace Top Cassette, press resume switch |
| ?No 2 nd cassette? | Replace Bottom Cassette, press resume switch |
| Dispenser Error Code - 1800 | Remove top cassette, remove jammed bill, replace cassette, press resume switch, check for worn pick rollers. |
| Dispenser Error Code - 2800 | Remove bottom cassette, remove jammed bill, replace cassette, press resume switch, check for worn pick rollers. |
| Dispenser Error Code – 78xx | Remove Bill Jam In Dispenser, press resume switch |
| In \$20 Pay \$10.00 Dispenser Error Code – 7A03 | Bill Jam at BPS Sensor (NOTE: Check to be sure there is no interference between the dispenser bill exit area and the bill chute mounted to the cabinet). Remove jam and press resume. Clean sensors, belts and rubber/plastic pinch rollers where bills exit the dispenser. See page 47. |
| Dispenser Error Code – 89xx | Thickness Sensor Error, contact technician to realign thickness sensor, |
| ?Wrong Cassette? | Magnet configuration on cassette is wrong – see pg. 20 |
| Bill Acceptor Error | Validator isn’t communicating with the host, check validation harness connections, press resume switch. If red LED on rear of acceptor is glowing ON and LED around outside bezel is flashing, the acceptor is operating normally. If rear LED is flashing, an error condition exists. |
| “BILL ACCEPTOR ERROR” | When a bill jams inside the validator, the transaction is aborted, and the message “Bill Acceptor Error” is displayed. The jam will have to be cleared before the Bill Breaker can be put back into operation. To recover from this condition: <ol style="list-style-type: none"> 1. Open the Bill Breaker door. 2. Recover jammed bill from the validator head or the stacker. 3. Press the resume switch to return to run mode. Close Bill Breaker door. |
| “NO STACKER ATTACHED” | The Bill Breaker senses that the stacker is loose or missing. The display will read, “No stacker attached”. To recover from this condition: Open Bill Breaker door. Disconnect and reconnect the stacker to the validator head assembly. Press the resume switch to return to run mode. Close the Bill Breaker door. |

Help Code Chart Continued

| HELP CODE | DESCRIPTION/CORRECTIVE ACTION |
|---|--|
| Stacker is Full | Stacker has reached its capacity. Empty stacker and reconcile unit |
| ? Bill Jam? | Remove jammed bill from dispenser; press Resume. |
| In \$20 Pay \$10 Error Code 7A02 | Bill jam occurred between DFSS and BPS sensor. Remove jammed bill and press Resume. Clean sensors and belts, see page 39. |
| ? No Command Finish ? | Turn power off. Remove EPROM from its socket on main control PCB and put back in socket. |
| Blank Display | <ol style="list-style-type: none"> 1. If unit has second display and the second display is working, (a) check for damaged display, (b) check for loose harness, (c) swap displays. 2. If only the bill acceptor activates (bill dispenser does not cycle as normal) when the unit is turned off and on, check voltages on main control PCB at TP1 & TP2. See Page 23. 3. If no power at TP1 & TP2, replace fuse on power supply. See Page 9. |
| "BILL JAM" | <p>If an error occurs, the display will show a difference between the dollar value requested and the dollar value dispensed, along with an error message "Bill Jam." For example IN \$20 PAID \$10. To recover from this condition:</p> <ol style="list-style-type: none"> 1. Open Bill Breaker door. 2. Inspect for currency jam in the Cash dispensers cassettes, or the transport unit. Note: The highest probability is that the jam occurred in the currency cassette. Remove all currency from the cassette and reload it. 3. If no jammed bills are found, press Resume. The display will read "? Do reconciliation?" 4. Respond with "N". Display will read "? Cont dispense Y/N?" 5. IMPORTANT! Respond with "Y" and BE PREPARED TO CATCH the remainder of the currency from the dispenser because the door will be open in the front load models. |
| "?COIN EMPTY OR JAM?" "IN \$1.00 PAY 0.50" | <p>If an error occurs, the display will show a difference between the dollar value requested and the dollar value dispensed, along with an error message "?Coin empty or jam?" For example IN \$1.00 PAY \$0.50. To recover from this condition:</p> <ol style="list-style-type: none"> 1. Open Bill Breaker door. 2. Coin hoppers may be low on coins and need refilling. 3. Be sure coin hopper connector is secured in socket on lower rear corner of hopper. 4. If using 2 hoppers, hoppers can swap positions to determine if a problem follows the hopper. 5. Inspect for coin jam in the coin hoppers. Note: The highest probability is that the jam occurred in the coin hopper. Remove all coin from the hopper using coin purge cycle. If 2 hoppers are used, rotate them checking to see if problem follows the hopper. 6. Press Resume. The display will read "? Do reconciliation?" 7. Respond with "Y". Display will read "Purge coin, press Resume & follow prompts" 8. IMPORTANT! Respond with "Y" and BE PREPARED TO CATCH the remainder of the coin from the hoppers. |

Status Report

Every time you click the Status switch, data will appear. Vital information such as starting amount of currency, amount of currency left, and the dollar amount in the stacker will be shown on the display. You can also print out all of this data for your records, if you have a printer.

Click Resume switch.

Choose Y or N on printing report, hit Resume switch, and the Bill Breaker will return to normal, "Ready to Accept Bill".

Voltage Test Points

The following test points with their voltage settings are found on the main control board shown in Figure 4.

| <u>Test Point</u> | <u>Action</u> | <u>Voltage Expected</u> |
|--|--|-------------------------|
| Jumper to TP 1 & 9 th pin on the 40 pin processor | Occasionally when the unit has been turned off for long periods of time, it is necessary to reset the processor. The action of the unit will be that the bill acceptor and dispenser can be heard activating but the display is blank. This action puts +5 VDC to the processor for the reset. | +5 VDC |
| TP1 | Power to the main logic board | +5 VDC |
| TP 2 | Power to the processor | +5 VDC |
| TP 3 | Power for RS 232 for dispenser and PC interface | + 9 VDC to +12 VDC |
| TP 4 | Power for RS 232 for dispenser and PC interface | - 9 VDC to - 12 VDC |
| TP 5 | Ground | Ground |

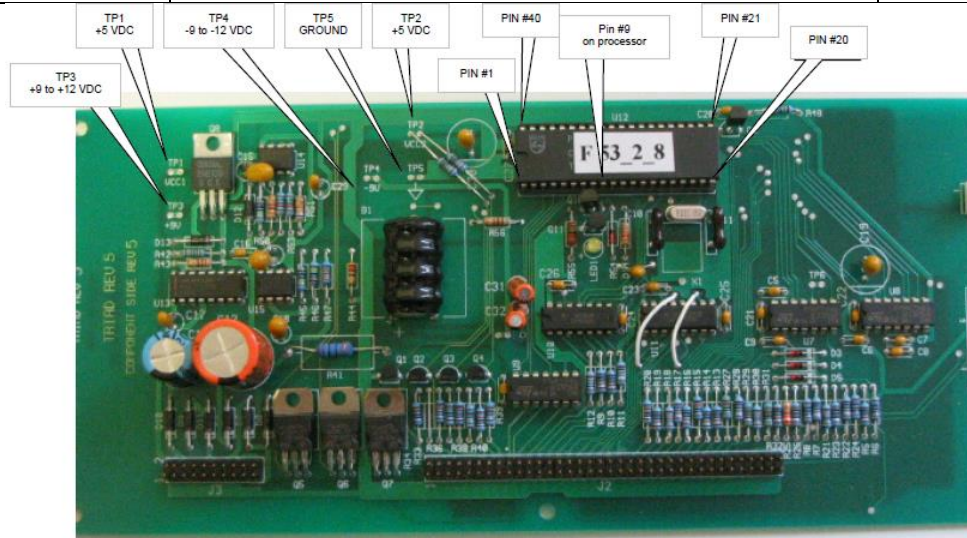
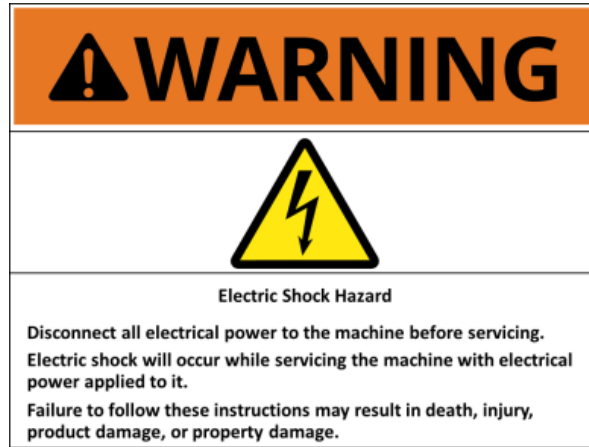


Figure 4

⚠️ WARNING : DISCONNECT ALL ELECTRICAL POWER TO THE MACHINE BEFORE SERVICING.



F-53 MAINTENANCE AND INSPECTION SCHEDULE

| Adjustment, Cleaning and Lubrication Item | Inspection Description | Inspection Period | |
|---|---|-------------------|--|
| | | Four Months | One Year |
| Thickness Sensor Inspection | Confirm the value of the amplifier board output | | ○ |
| Detection Lever Inspection | Check whether paper dust is attached to the thickness detection. See main belt and thickness detector cleaning procedures on page 40. | ○ | |
| Gate Inspection | Check whether the gate operates smoothly | | ○ |
| Belt Tension Inspection | Inspect the belt tension | | ○ |
| Sensor Output Check | Check the outputs of the sensors, and clean the dirty sensors if any. | ○ | |
| Carrying Flat Belt Check | Check whether the flat belt is loose due to its expansion. See main belt and thickness detector cleaning procedures on page 36. | | See main belt and thickness detector cleaning procedures on page 40. |
| Pick/Sub Roller | Change pick/sub roller. See the pick roller change procedure on page 35. | ○ | See the pick roller change procedure on page 37. |
| Cleaning Sensors | Clean with soft dry cloth | | |
| Cleaning Belts | Clean with soft dry cloth and Isopropyl Alcohol | ○ | |
| Cleaning Pick and Sub Roller | Clean with soft dry cloth and Isopropyl Alcohol | ○ | |

Mars Bill Acceptor

The model AE 2611-U5E, part #22135607 is used to accept \$1, \$2, \$5, \$10 & \$20 United States bills. The optional model AE 2811-U5E, part #22135608 is used to accept \$1, \$2, \$5, \$10, \$20, \$50 & \$100 United States bills.

New Bill Design Updates

To update Bill Breaker to handle new bill designs, new software is downloaded into the bill acceptor. Contact a local MEI distributor to purchase a BPM (Bill Programming Module) or have the MEI distributor download new software into the bill acceptor. This is a simple procedure that most operators can do themselves. There is a nominal charge for the BPM and downloading service.

Download New MEI Software

Follow these steps to download new software into MEI unit. The download time is about 4 minutes. **DO NOT CHANGE THE DIP SETTINGS ON THE ACCEPTORS.**

CAREFULLY WATCH THE BILL ACCEPTOR THRU THE DOWNLOAD. DO NOT LEAVE THE UNIT UNATTENDED. BE SURE TO TIME THE DOWNLOAD. SOFTWARE MUST BE DOWNLOADED INTO ACCEPTOR.

1. Turn changer's power off.
2. Connect BPM as shown to Acceptor. See Figure #1.
3. Be sure Bill Box is in normal operational position.
4. Turn power on.
5. Hear the Bill Acceptor Pusher Plate activate.
6. When complete Acceptor's Pusher Plate will activate a second time.

Note: If this cycle takes longer than 6 minutes, turn Changer off for 5 seconds and restart download process turning changer on.

MEI AE2611 or AE2811 connected to BPM

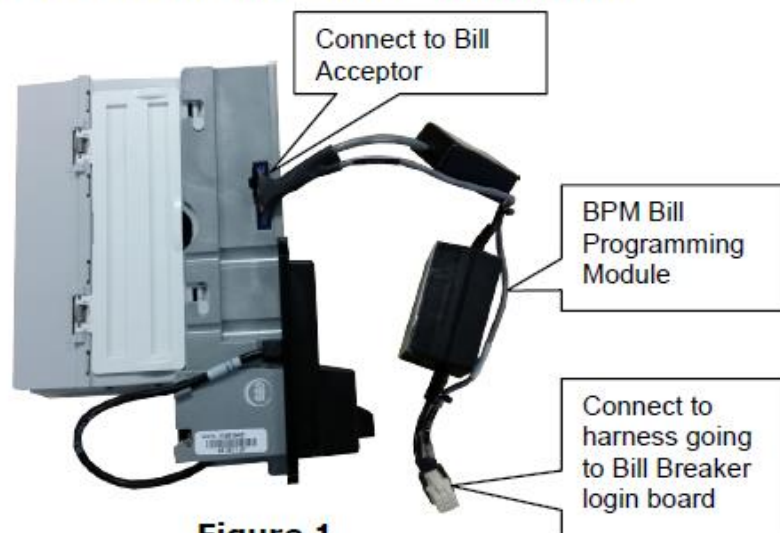


Figure 1

DIP Switch Settings for MEI AE2611/2811

Note: DO NOT change DIP settings on the Bill Acceptor to control bill denominations accepted. This is controlled by a programmable setting through the changer software. It is fine to change DIP setting to control; direction of bill acceptance and security features.

Cleaning

It is time to clean the bill acceptor when bills are being returned to patrons at an unacceptable rate. Turn Bill Breaker power off. Lift chrome plated rod at the rear of the bill acceptor pulling the bill track out toward you. See Figure 1. Using a clean cloth dampened with warm water and liquid hand soap, wipe the bill track and white feed rollers removing dirt and ink. Also wipe clean the prism at the bottom of the bill box. Replace the bill track and bill box. Turn Bill Breaker power on.

For More Information

Contact the www.cranepi.com for more detailed service and maintenance information.

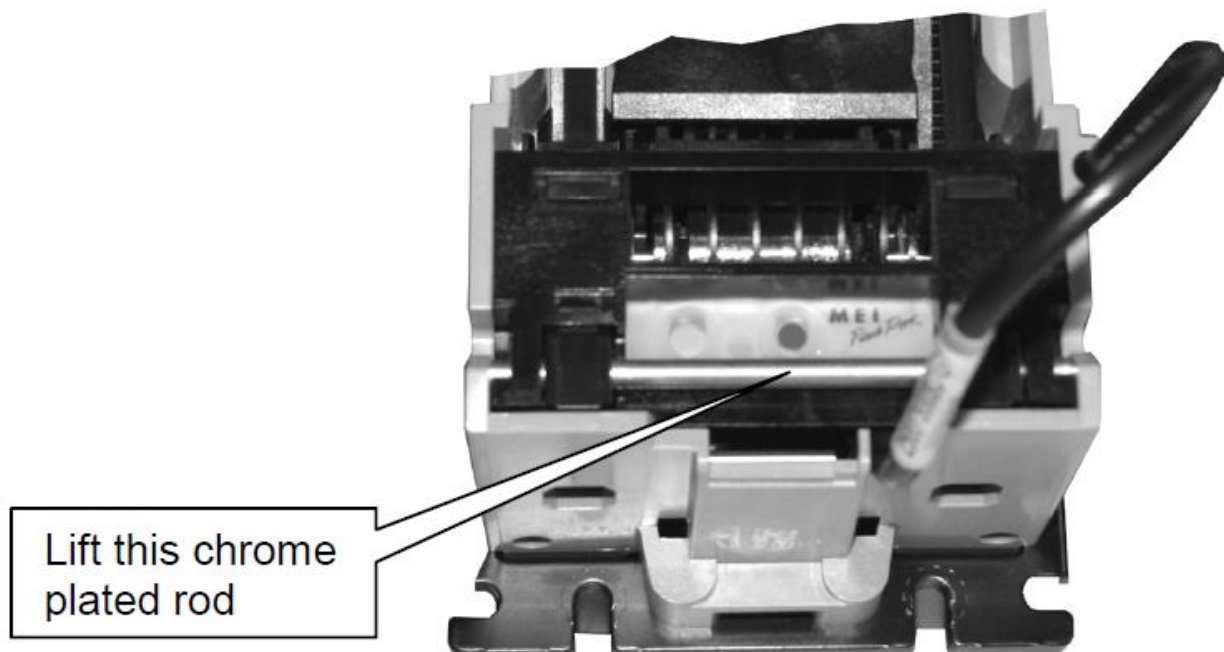


Figure 2

MEI VN2700R – Bill Acceptor and Bill Recycler

Important Note: When changers are equipped with this bill recycler – VN2712R-U5M ONLY \$5 BILLS can be recycled.

The model VN2712R-U5M is used to accept \$1, \$2, \$5, \$10 & \$20 United States bill with a secure narrow ½”Hx 2 ¾”W compact bezel and 500 bill box. Optional Model VN27D2R-U5M is used to accept \$1, \$2, \$5, \$10, \$20 United States bills with high visibility 3 ¼”W x 4 ¼”H bezel and 500 bill box.

We suggest loading ATM quality bills into the recycler for best performance.

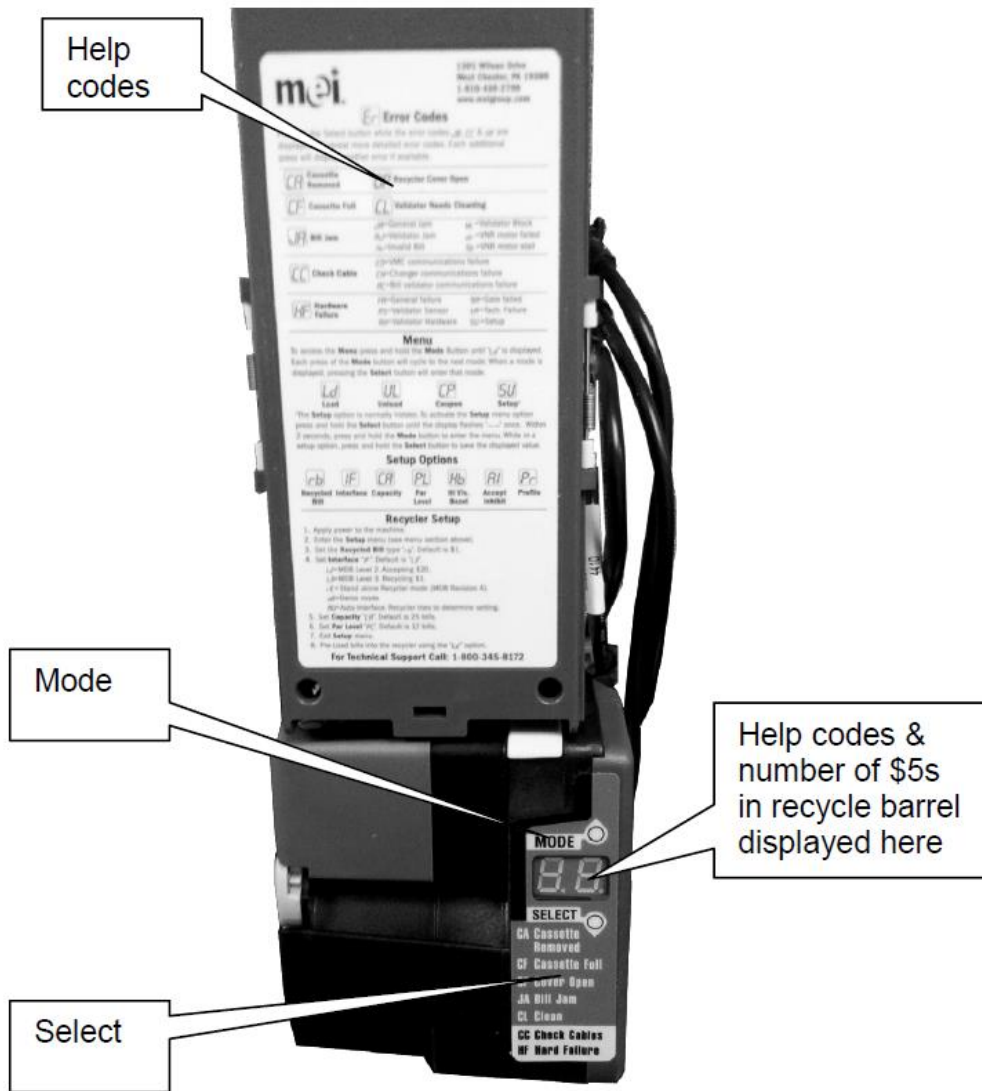
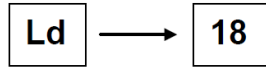


Figure 1

Load Bills Into Recycler

Press Mode button for 2 seconds, then press select button and display flashes between



“Ld” load and “18” number of bills currently (in this example, 18 bills are inside the recycler) inside the recycler. Insert bills into the bill acceptor to a maximum of 30.



To return to normal operation, press Mode button. With no activity for 30 seconds, the recycler will “time out” and return to normal operation.

Clearing Bill Jams

NOTE:

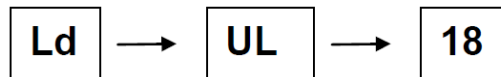
When a Bill Jam occurs ALL the bills in the recycler’s barrel must be removed and replaced to be sure the problem bill(s) are removed.

There are 3 ways to clear bill jams:

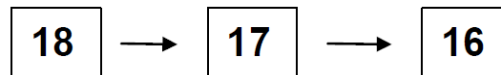
1. Use unload mode below by pressing the mode button twice and select button twice. Each time select button is pressed, bills will unload into the bill box. These buttons are located on rear of the recycler below the bill box.
2. Remove the bill box and open the recycle barrel. With the barrel open press and hold the mode button pulsing bills out of the barrel.
3. Remove the bill box and open the recycle barrel. Manually rotate the yellow knob at the bottom of the barrel winding out each bill.

Unload Bills From Recycler

Press Mode button twice and then press Select button and display shows:



Each time Select button is pressed, one more bill is moved from the recycler to the bill box.

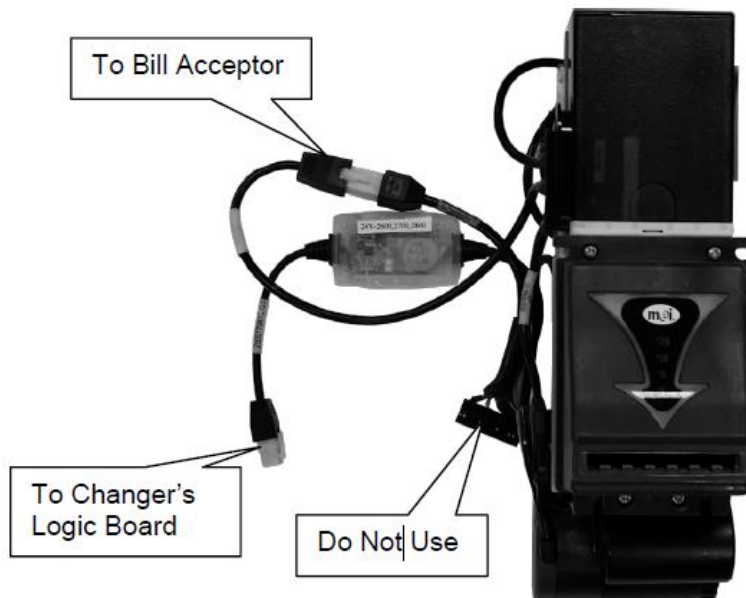
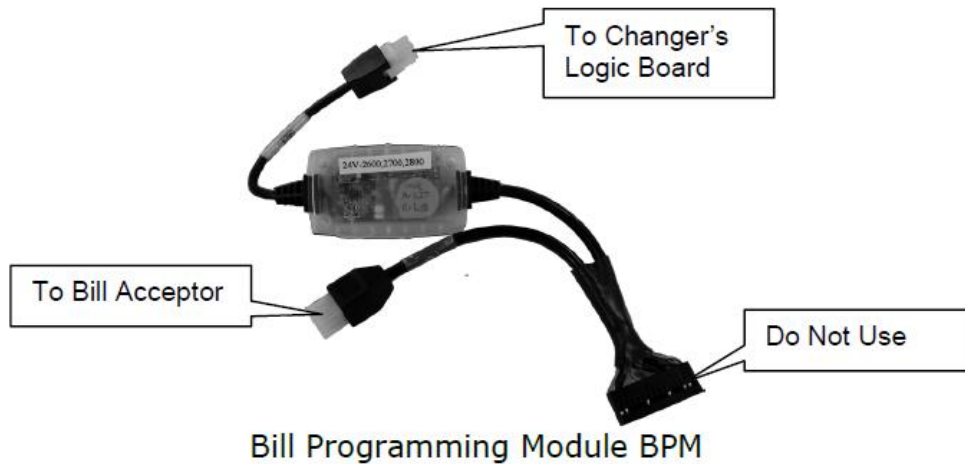


If the select button is pressed for more than 2 seconds, the recycler will continuously move bills from the recycler into the bill box. Press the Mode button to stop bill unloading. With no activity for 30 seconds, the recycler will “time out” and return to normal operation.

New Bill Design Updates

To update Bill Acceptor/Recycler to handle new bill designs, new software is downloaded into the AE2612 and VN2700 Recycler bill acceptor using a BPM. Contact a local MEI distributor to purchase a BPM (Bill Programming Module) or have the MEI distributor download new software into the bill acceptor. This is a simple procedure that most operators can do themselves. There is a nominal charge for the BPM and downloading service.

Contact Crane Tech Support – 800-345-8172, if help is needed.



Connect BPM to the Bill Recycler or Bill Acceptor as shown

Download New MEI Software

Follow these steps to download new software into the MEI unit. The download time is about 8 minutes.
DO NOT CHANGE THE DIP SETTINGS ON THE ACCEPTORS.

CAREFULLY WATCH THE BILL RECYCLER THRU THE DOWNLOAD. DO NOT LEAVE THE UNIT UNATTENDED. BE SURE TO TIME THE DOWNLOAD. SOFTWARE MUST BE DOWNLOADED INTO ACCEPTOR #1 AND ACCEPTOR #2. THIS TAKES 2 SEPARATE STEPS.

1. Turn changer's power off.
2. Remove bills from Bill Box and Recycle Barrel.
3. Connect BPM as shown to Acceptor #1 – See Page 29.
4. Be sure Bill Box and Recycle Barrel are in normal operational position.
5. Turn power on.
6. Hear the Bill Acceptor Pusher Plate activate.
7. Red and Green LED in BPM will flash.
8. See the following in the VNR's display; bt, the AP, then solid green.
9. When complete Acceptor's Pusher Plate will activate displaying new software version, and display will show "0".

Note: If this cycle takes longer than 8 minutes or if red and green LED alternate flashes, turn changer off for 5 seconds and restart the download process turning changer on.

10. Do same procedures for #2 Acceptor. You must disconnect BPM from Acceptor #1 and reconnect to Acceptor #2.

DIP Switch Settings

Note: DO NOT change DIP settings on the bill acceptor to control bill denominations accepted. This is controlled by a programmable setting through the changer software. It is fine to change DIP setting to control; direction of bill acceptance and security features.

1, 2, 4, 5, 6, 7 & 8 on; 3 off.....normal operation accepting bills in 4 directions

Cleaning

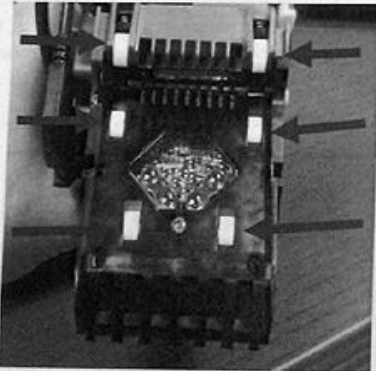
It is time to clean the Bill Acceptor when bills are being returned to patrons at an unacceptable rate. Turn Changer power off. Remove Bill Box. Follow instructions in the Bill Recycle module. See Figure 2. Using a clean cloth dampened with warm soapy water wipe the Bill Track and White Feed Rollers removing dirt and ink. Also wipe clean the prism at the bottom of the Bill Box. **DO NOT USE IPA – ISOPROPAL ALCOHOL.** Replace the Bill Track and Bill Box. Turn Changer power on.

mei. VNR Cleaning Recommendations - V1.5
29 November 2012

Cleaning Tools
Canned Air/Low Pressure CO2
Microfiber Cloth
Water Bottle

Cleaning Frequency Guideline
Heavy Use/Outside Areas – 3-6 Months
Low Use/Inside Areas – 12 Months

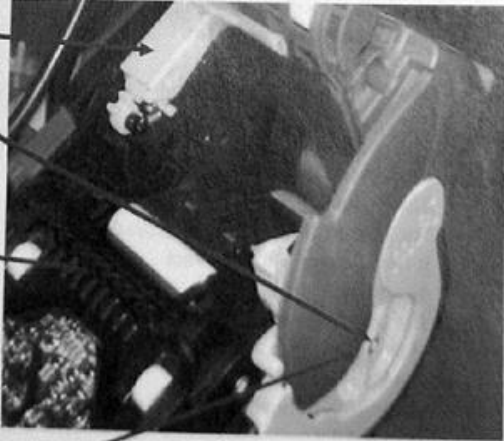
VNR Cleaning Procedure



1. With a water dampened microfiber cloth, wipe down the white wheels until they are clear of debris. Do not over moisten the cloth.
2. Clean the bill path area using the water dampened microfiber cloth.

****WARNING – MEI does not recommend the use of any cleaning cards. Use of cleaning cards may leave a permanent film on the translucent lens which will degrade acceptance of bills. The use of solvents or reason.****

3. Lift the yellow lever to open the clam shell. Empty the recycler of bills by turning the manual turn wheel counterclockwise.
4. Use the bottle of canned air to blow the diverter gate area free of debris. Point the can away from the recycler belt and toward the bill exit path.
5. Continue using the bottle of canned air to blow any dust or debris. You may need to turn the recycler upside down.
6. Turn the manual turn wheel and inspect the mylar tape for cuts or excessive damage. Send in for repair if noted.



1

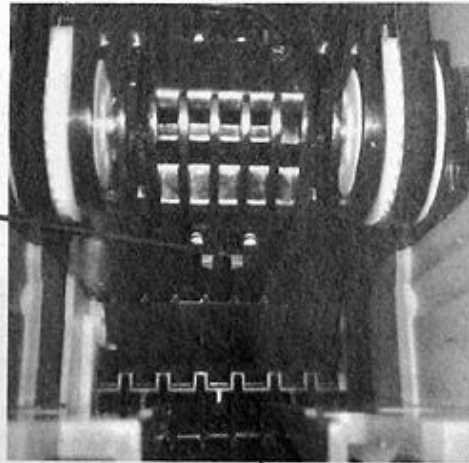


7. Use canned air and blow dust and debris from the back pusher plate area.
8. Use the water dampened microfiber cloth and wipe down the entire area including the cashbox sensor.
9. Cleaning the belts is not a manual process. It requires cycling power to the unit to clean properly.
 - a. Cycle power the machine. With the damp microfiber cloth, gently press against the belt where shown.
 - b. The belts will not travel a complete cycle. It may take two restarts per belt to fully clean.

10. Using compressed air or low pressure CO2, blow out the upper sensor board area.
11. Using a damp, microfiber cloth clean the upper sensor board lens area.
12. Put the recycler and cashbox back into place. Log the cleaning event with a sticker for tracking purposes.

Return to an Authorized Service Center when...

- The belts look excessively worn, loose, torn, or frayed.
- The cashbox prism is missing.
- The mylar film is torn. Discoloration is normal and will not affect operation.
- The black index marks at either end of the mylar film are worn off.
- The diverter gate is hard or impossible to move as shown above in step 4.



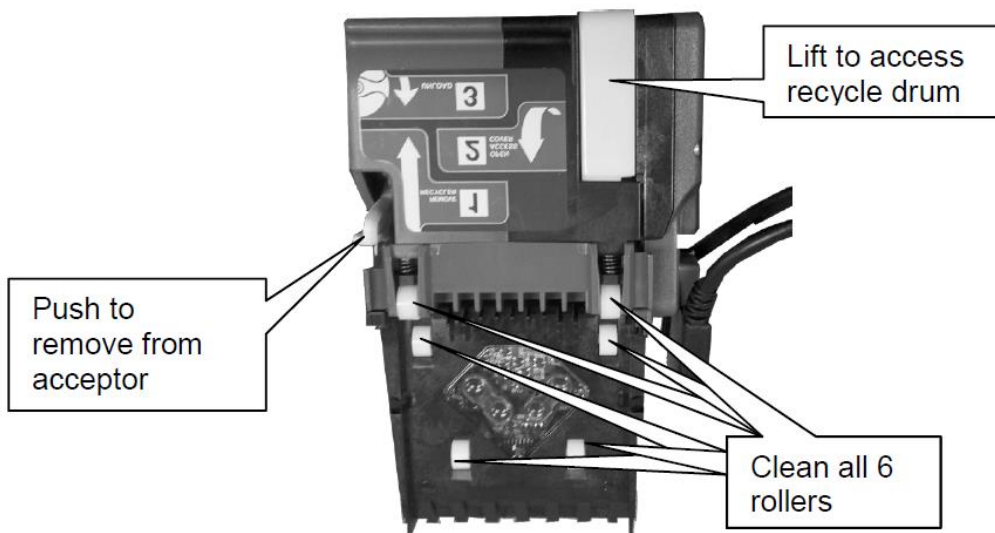


Figure 2

USA Technologies Credit Card System Set Up

- Install Antenna
- Install Paper (Optional)
- Credit Card Receipt
- Bonus Tokens

IMPORTANT NOTE:

Be sure to save the small box labeled "SAVE PARTS". This box contains the antenna, paper track and paper roll.



Paper Roll



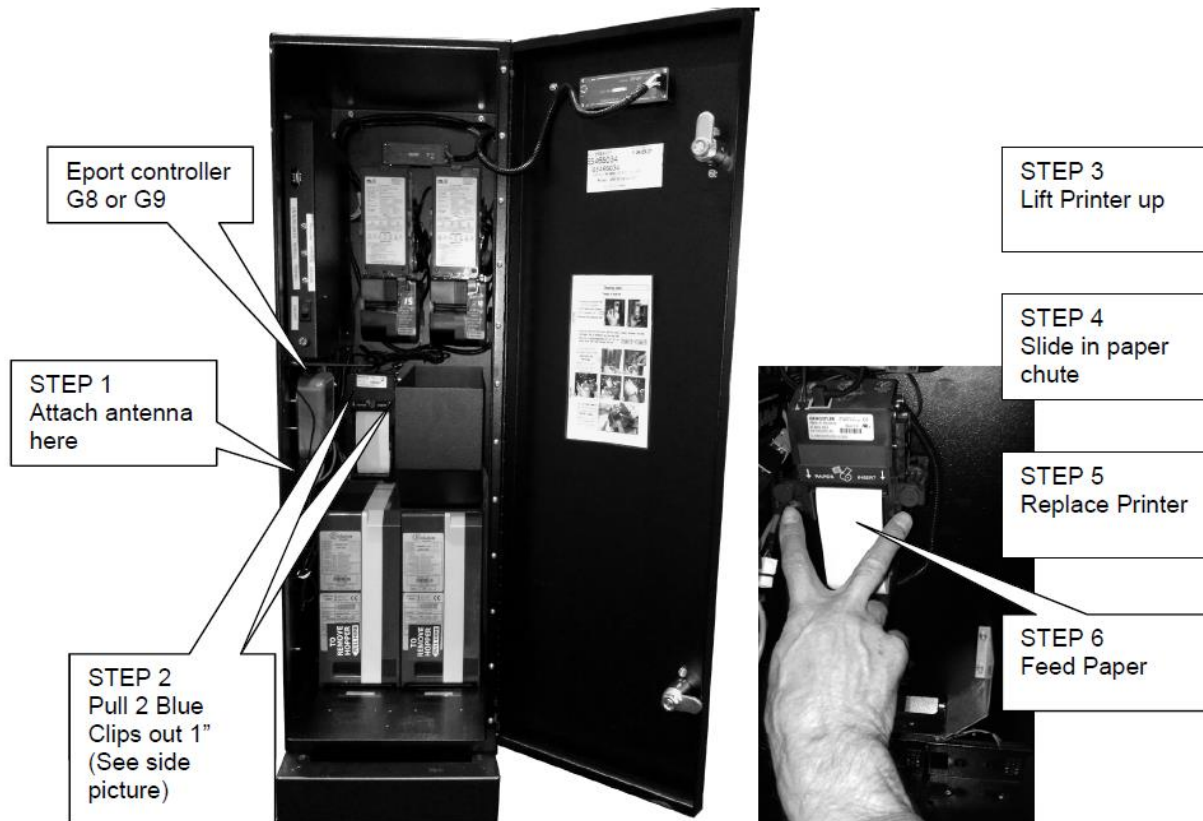
Paper Track



Antenna

Bonus Tokens

Bonus Token software is needed in order to handle bonus tokens. Contact your distributor or technical support to obtain this software. Bonus token quantities can be simply programmed following the steps on page 14 by indicating the number of tokens and then value to be dispensed from hopper #1 or hopper #2.



Credit Card Receipt for Patrons

Sample Receipt

CREDIT RECEIPT

REPORT PRINTED AT 13:00
ON MON 12/24/14

CREDIT VALUE \$20

TOKENS PAID \$20

THANK YOU FOR YOUR
BUSINESS

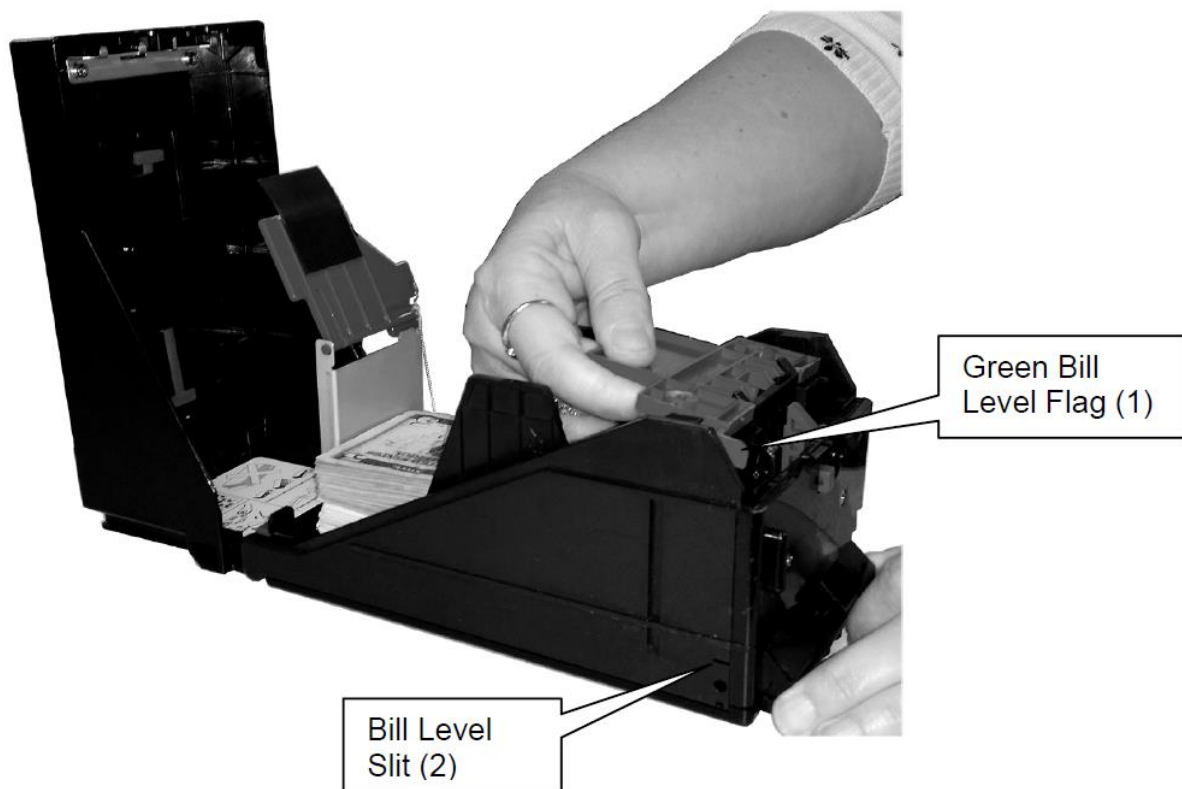
NOTE:
Bonus Tokens can
also be paid

If changer is equipped with optional external printer, patrons will receive this receipt for each credit card transaction.

Cassette Low Level Sensor

Load at least 50 bills into the cassette so that the Green Bill Level Flag (1) is not sensed in the Bill Level Slot (2).

The cassettes will always have 10-15 bills left in the bottom of the cassette. As the green bill level flag (1) lowers as the bill level decreases, the green bill level flag will be sensed in the bill level slit (2). If the green bill level flag is sensed in the bill level slit, more bills must be placed in the cassette. Then click Resume so the Bill Breakers know that the bills have been loaded into the cassette.



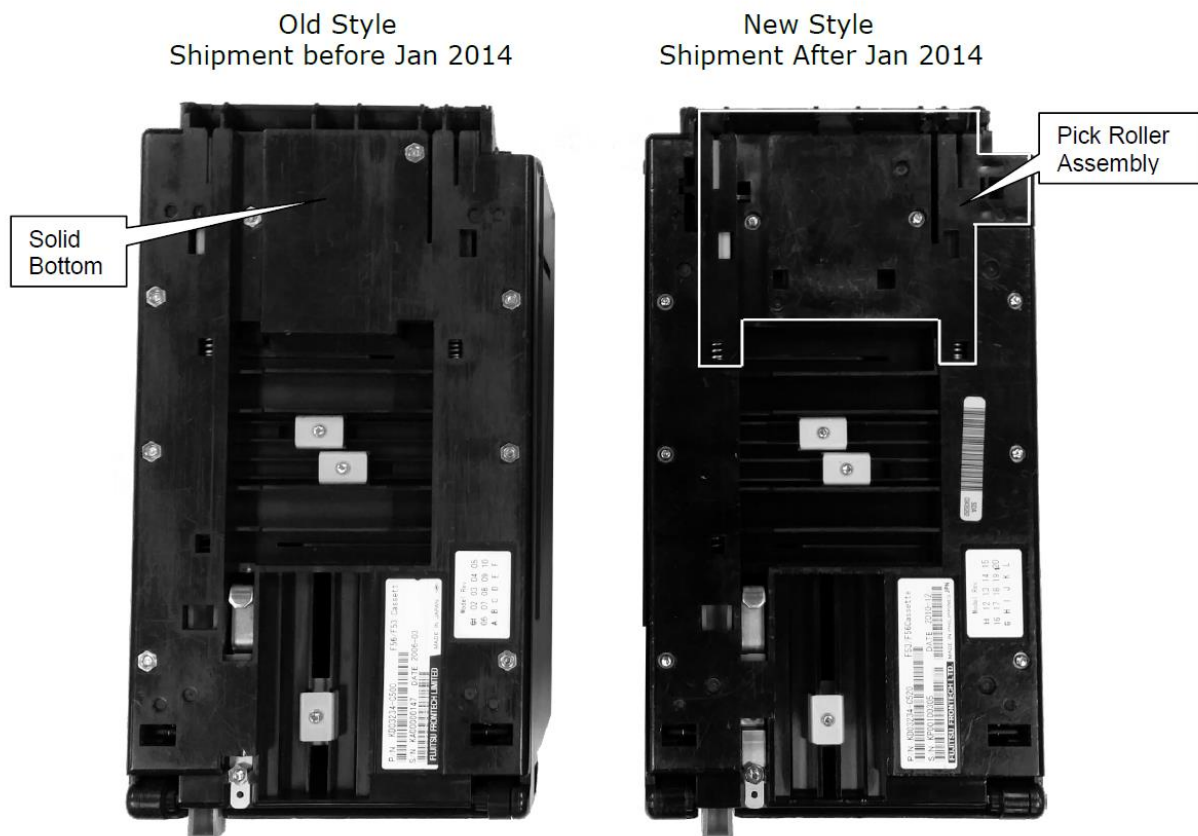
Replacing Pick Rollers

NOTE:

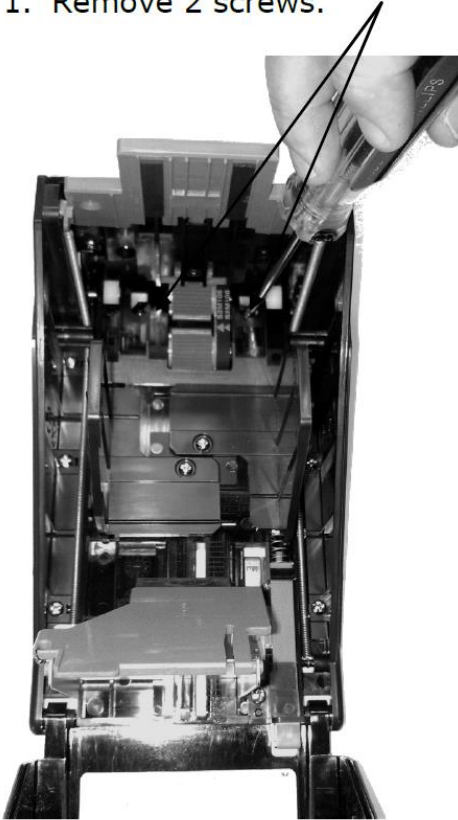
For Bill Breakers installed after January 2014.

Cleaning & Replacing Cassette New Design Pick Rollers

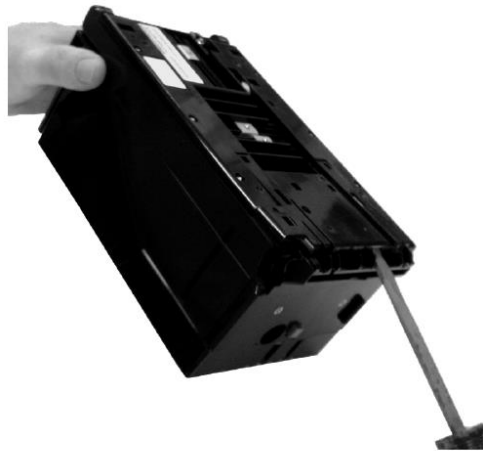
The cash dispenser manufacturer, Fujitsu, recommends the pick rollers be cleaned every 4 months with isopropyl alcohol and replaced every 12-18 months. The symptom to watch for is when a number of bills are found in the reject tray and or increasing bill jams. Each time bills are loaded into the cassette, pay attention to the wear of the pick rollers. They will look like worn car tires that are losing the tread. For Bill Breakers installed after January 2013 use the following procedure. For models installed before January 2013 contact American Changer Technical Support for the pick roller replacement procedure. At the time that pick rollers are changed, be sure to clean the main dispenser belts explained on page 24.



1. Remove 2 screws.

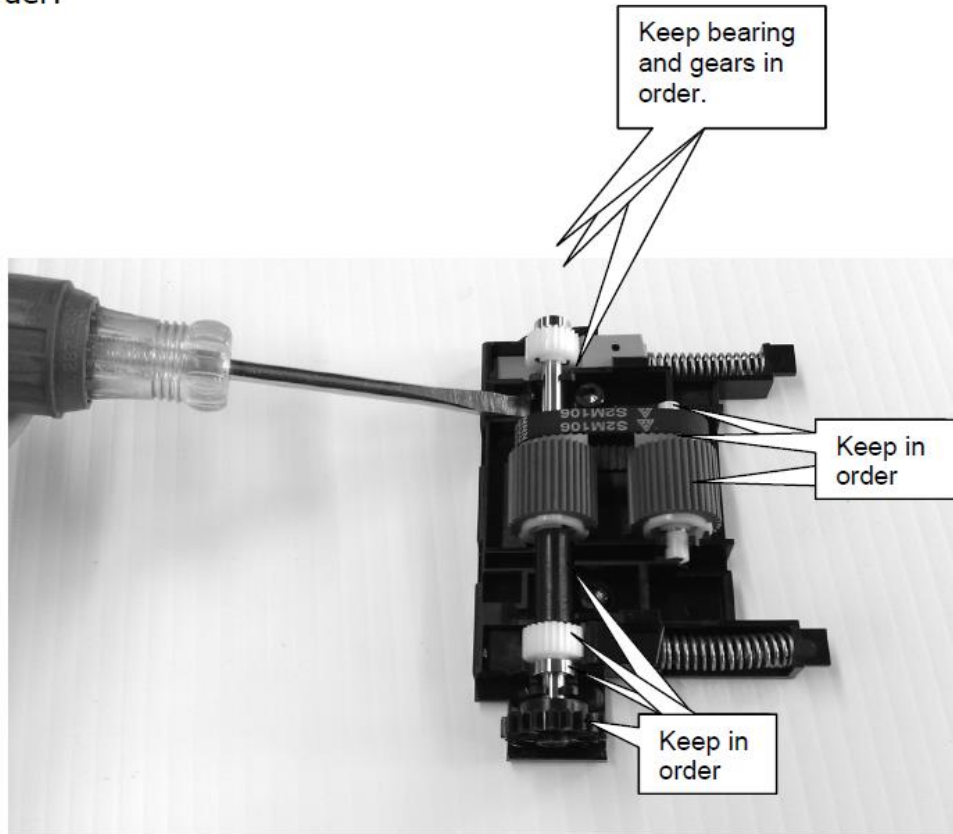


2. Remove Pick Roller module by gently prying the pick roller assembly out of position and remove.



3. With Pick Roller Assembly on a bench do the following:

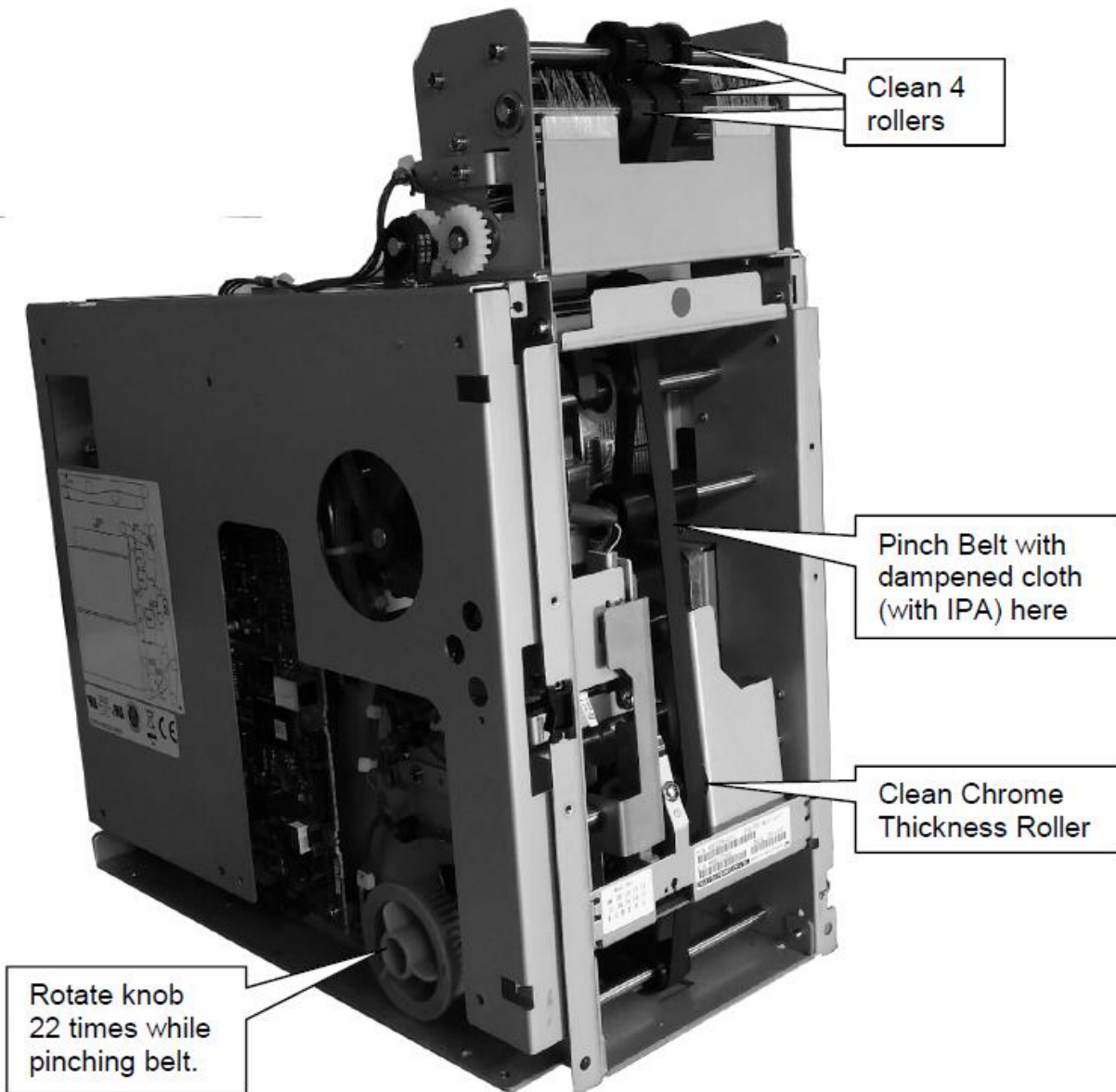
- 1) Gently Remove each shaft one at a time keeping the gears and bearings in order.



- 2) Remove the worn roller covers by cutting with a knife.
- 3) Slide new roller covers over the white hubs.
- 4) Reinstall each shaft.
- 5) Reassembly the assembly onto the cassette.

Cleaning Cash Dispenser Belts and Thickness Roller

The cash dispenser manufacturer, Fujitsu, recommends the main belts, top section rollers and thickness detectors be cleaned every 4 months with isopropyl alcohol. Dampen a clean cloth with isopropyl alcohol and pinch belt while rotating the Green knob 22 times. Be sure to clean the top section black rubber pinch rollers (these are the 4 rollers that last touch bills as they exit the dispenser) and chrome thickness detector roller. This will prevent jamming of bills in the feed path. See figure below.



Coin Hoppers

The SUZO-HAPP Evolution Hoppers are used to dispense coins and tokens. The standard hopper set up will reliably dispense United States nickel to dollar sized coins and tokens. Check for both hoppers dispensing properly.

United States dimes (10¢) and dime sized tokens

A specially designed elevator track is needed to handle the United States dime and tokens smaller than a dime. Contact American Changer for more information.

Optional Hopper Extensions

Optional hopper extensions are available that hold an additional 2000 or 3000 quarters.

Cleaning

Periodically remove hopper by sliding hopper out of the slide plate and socket. Turn the hopper upside down shaking out the dirt. Canned air or vacuum can also be used. Using a clean cloth dampened with IPA (isopropyl alcohol) wipe the debris inside of the hopper. Focus the canned air and wiping action toward the count sensor located above the coin exit area. Also use a “scrubby” type pad to wipe away accumulated dirt on the low level sensor plates at the bottom of the hopper.

Removal of the Electronics and Opto Sensor Board

All the electronics and sensors are placed on one board located behind the exit door at the side of the hopper. Slide the yellow button to the opposite position and remove the exit door where the electronics are mounted. All dirt must be cleaned with a soft moistened cloth. Isopropyl Alcohol is recommended for cleaning excessively dirty exit windows. The red LED on the exit window board will begin flashing indicating a dirty opto-sensor.

Warning: Be careful when re-inserting the board back in the hopper not to damage the cable located at the back of the board!



Clear Jammed Coins



Picture 1

1. Turn changer power switch "OFF".

IMPORTANT NOTE: Turn power switch off before removing hopper.

2. Remove jammed hopper and empty contents. Watch for bent coins, nuts, bolts or washers.
3. Turn hopper upside down as shown in picture 1 above.
4. Insert medium size straight blade screwdriver into slot pushing the conveyor tracks to restore movement.
5. Install hopper and reload coin.
6. Click Recon switch and complete "Fast Recon" to restore the hopper operation.
7. If jam condition continues remove the 7 screws on side and 2 screws at the bottom of the hopper to remove the cover for access to the coin conveyor.

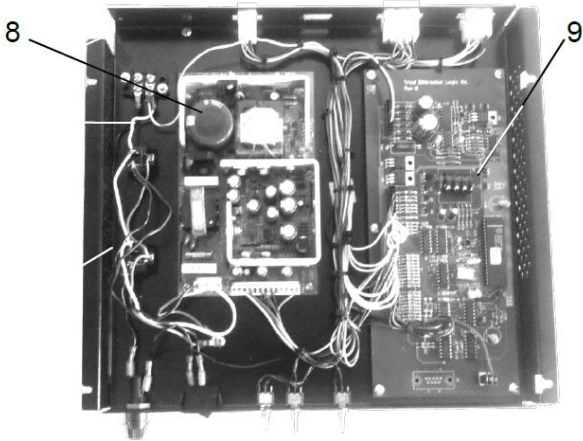
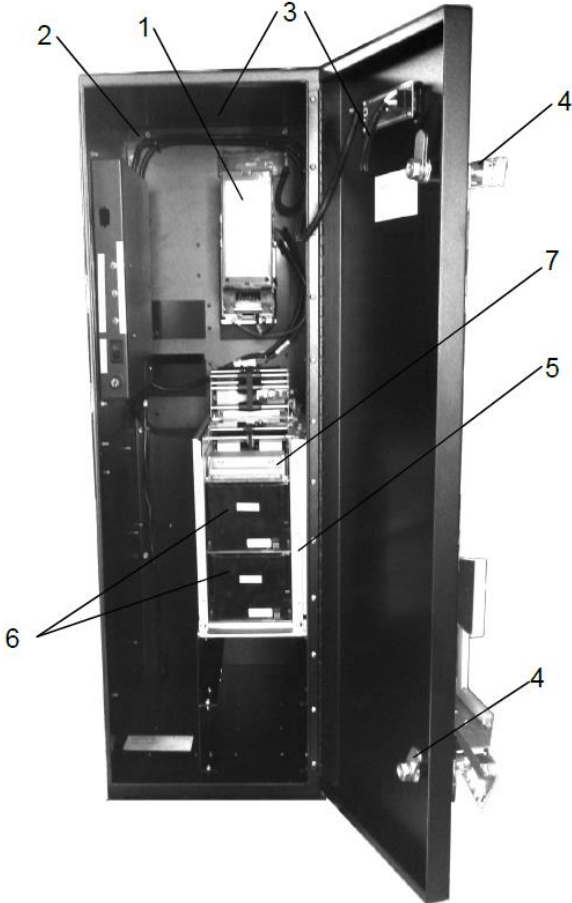
Check for Both Hoppers Dispensing Properly

If there is doubt that either hopper is working correctly, do the following:

1. Complete "Fast Recon" "Y" setting all categories to "0".
2. Test by inserting \$1 bill dispensing 4 quarters, 2 quarters from each hopper.
3. Click Status switch showing that Hopper #1 and Hopper #2 both paid 50 cents.

NOTE: An adjustment to this procedure will be needed if different value coins are being dispensed from each hopper.

Model 500 Parts Catalog
500RL-2 - Rear Load Bill Breaker



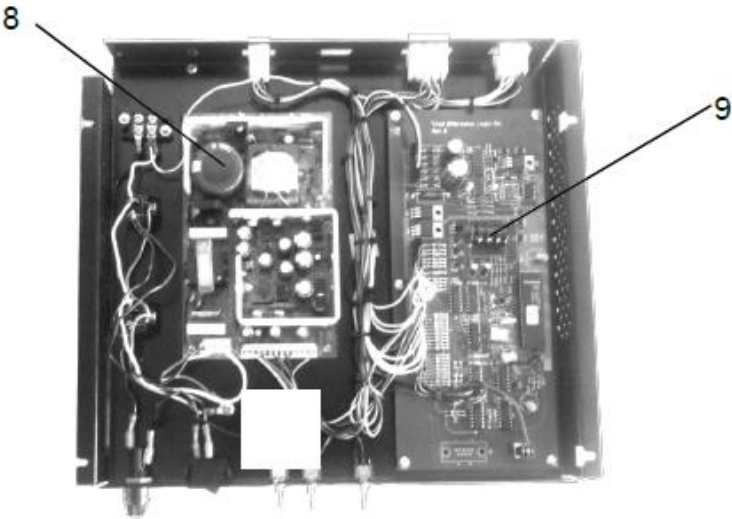
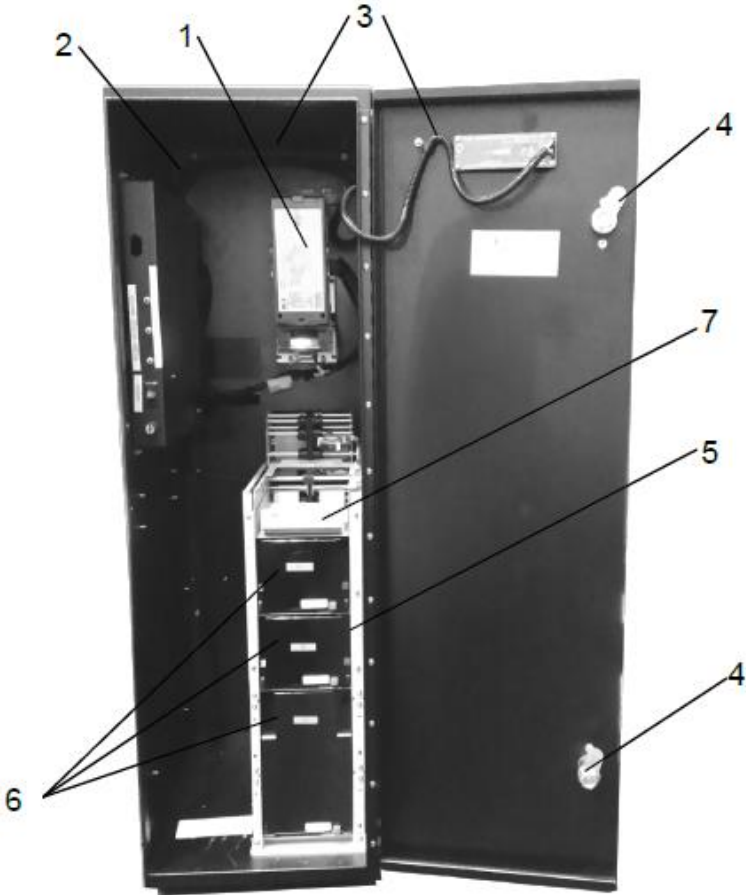
500RL-2 - Rear Load Bill Breaker (with 2 denomination bill dispenser)

| Ref. | Part No. | Description | Qty |
|--------------------------------|----------|--|-----|
| Cabinet Assembly Internal View | | | |
| 1 | 22135607 | Mars 2611 Bill Acceptor \$1, 2, 5, 10, 20 with 500 Bill Box | 1 |
| | 22135608 | Optional Mars 2811 Bill Acceptor \$1, 2, 5, 10, 20, 50, 100 with 500 Bill Box | 1 |
| | 22135618 | Optional MEI Recycler with compact bezel & 500 Bill Box | 1 |
| | 22135619 | Optional MEI Recycler with high visibility bezel & 500 Bill Box | 1 |
| 2 | 22196202 | Main Harness | 1 |
| 3 | 22196101 | Display | 1 |
| 4 | 35027809 | T-Handle Assembly with Hardware | 2 |
| | 25223407 | Lock Cylinder with 2 Keys | 2 |
| 5 | 22203501 | Fujitsu F53 Dispenser for 500-2 | 1 |
| 6 | 22197301 | \$1 – Cassette – No Lock – 400 Bill Capacity | 2 |
| | 22197305 | \$5 – Cassette – No Lock – 400 Bill Capacity | 2 |
| | 22197310 | \$10 – Cassette – No Lock – 400 Bill Capacity | 2 |
| | 22197320 | \$20 – Cassette – No Lock – 400 Bill Capacity | 2 |
| | 22197302 | \$1 – Cassette – No Lock – 800 Bill Capacity | 2 |
| 7 | NA | Reject Bill Tray | 1 |
| 8 | 22196001 | Logic Printed Circuit Board | 1 |
| 9 | 22196301 | Power Supply | 1 |
| Not Shown | | | |
| | 22197303 | Cassette Magnet for Bill Breakers | |
| | 22199701 | Power Cord | 1 |
| | 22199201 | Citizen Printer | 1 |
| | 22203301 | Coin Hopper holds 1600 U.S. Quarters | 1 |
| | NA | Optional 2" Extension holds 1000 U.S. Quarters | 1 |
| | 22135621 | Optional 4" Extension holds 2000 U.S. Quarters | 1 |

IMPORTANT NOTE:

When ordering logic board #22196001 be sure to specify the machine serial number. For example:
Serial number #1875, so the correct software can be installed on the logic board.

500RL-3 - Rear Load Bill Breaker



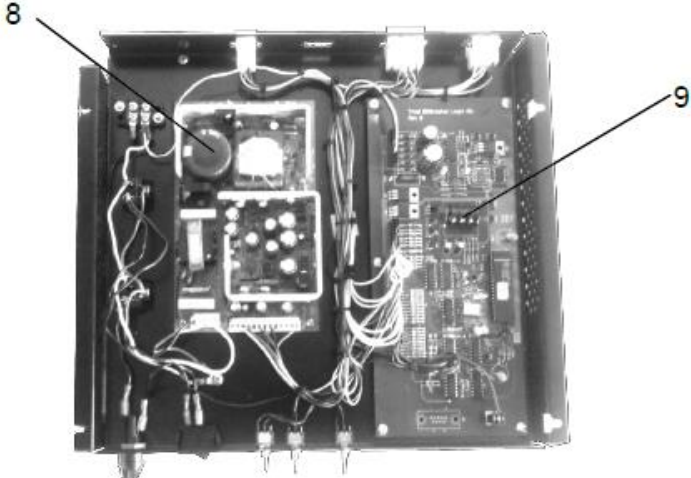
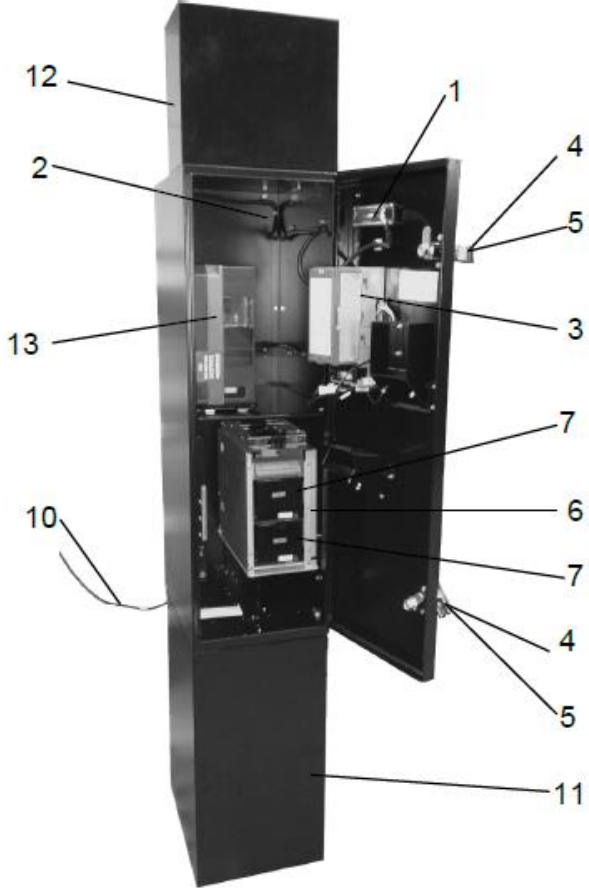
500RL-3 - Rear Load Bill Breaker (with 3 denomination bill dispenser)

| Ref. | Part No. | Description | Qty |
|--------------------------------|----------|--|-----|
| Cabinet Assembly Internal View | | | |
| 1 | 22135607 | Mars 2611 Bill Acceptor \$1, 2, 5, 10, 20 with 500 Bill Box | 1 |
| | 22135608 | Optional Mars 2811 Bill Acceptor \$1, 2, 5, 10, 20, 50, 100 with 500 Bill Box | 1 |
| | 22135618 | Optional MEI Recycler with compact bezel & 500 Bill Box | 1 |
| | 22135619 | Optional MEI Recycler with high visibility bezel & 500 Bill Box | 1 |
| 2 | 22196202 | Main Harness | 1 |
| 3 | 22196101 | Display | 1 |
| 4 | 35027809 | T-Handle Assembly with Hardware | 2 |
| | 25223407 | Lock Cylinder with 2 Keys | 2 |
| 5 | 22203501 | Fujitsu F53 Dispenser for 500-2 | 1 |
| 6 | 22197301 | \$1 – Cassette – No Lock – 400 Bill Capacity | 2 |
| | 22197305 | \$5 – Cassette – No Lock – 400 Bill Capacity | 2 |
| | 22197310 | \$10 – Cassette – No Lock – 400 Bill Capacity | 2 |
| | 22197320 | \$20 – Cassette – No Lock – 400 Bill Capacity | 2 |
| | 22197302 | \$1 – Cassette – No Lock – 800 Bill Capacity | 2 |
| 7 | NA | Reject Bill Tray | 1 |
| 8 | 22196001 | Logic Printed Circuit Board | 1 |
| 9 | 22196301 | Power Supply | 1 |
| Not Shown | | | |
| | 22197303 | Cassette Magnet for Bill Breakers | |
| | 22199701 | Power Cord | 1 |
| | 22199201 | Citizen Printer | 1 |
| | 22203301 | Coin Hopper holds 1600 U.S. Quarters | 1 |
| | NA | Optional 2" Extension holds 1000 U.S. Quarters | 1 |
| | 22135621 | Optional 4" Extension holds 2000 U.S. Quarters | 1 |

IMPORTANT NOTE:

When ordering logic board #22196904 be sure to specify the machine serial number. For example:
Serial number #1875, so the correct software can be installed on the logic board.

**500C1-2 Front Load Bill Breaker
(with 2 denomination bill dispenser and 1 coin hopper)**



500C1-2 Front Load Bill Breaker (with 2 denomination bill dispenser and 1 coin hopper)

| Ref. | Part No. | Description | Qty |
|--------------------------------|----------|--|-----|
| Cabinet Assembly Internal View | | | |
| 1 | 22196101 | Display | 1 |
| 2 | 22196201 | Main Harness | 1 |
| 3 | 22135607 | Mars 2611 Bill Acceptor \$1, 2, 5, 10, 20 with 500 Bill Box | 1 |
| | 22135608 | Optional Mars 2811 Bill Acceptor \$1, 2, 5, 10, 20, 50, 100 with 500 Bill Box | 1 |
| 4 | 35027809 | T-Handle Assembly with Hardware | 2 |
| 5 | 25223407 | Lock Cylinder with 2 Keys | 2 |
| 6 | 22203501 | Fujitsu F53 Dispenser for 500-2 | 1 |
| 7 | 22197301 | \$1 – Cassette – No Lock – 400 Bill Capacity | 2 |
| | 22197305 | \$5 – Cassette – No Lock – 400 Bill Capacity | 2 |
| | 22197310 | \$10 – Cassette – No Lock – 400 Bill Capacity | 2 |
| | 22197320 | \$20 – Cassette – No Lock – 400 Bill Capacity | 2 |
| | 22197302 | \$1 – Cassette – No Lock – 800 Bill Capacity | 2 |
| 8 | 22196301 | Power Supply | 1 |
| 9 | 22196001 | Logic Printed Circuit Board | 1 |
| 10 | 22199701 | Power Cord | 1 |
| 11 | 22200602 | Optional Mounting Base | 1 |
| 12 | 22200603 | Optional Top Filler | 1 |
| 13 | 22203301 | Coin Hoppers hold 1600 Quarters | 1 |
| Not Shown | | | |
| | NA | Optional 2" Extension holds 1000 U.S. Quarters | 1 |
| | 22135621 | Optional 4" Extension holds 2000 U.S. Quarters | 1 |

IMPORTANT NOTE:

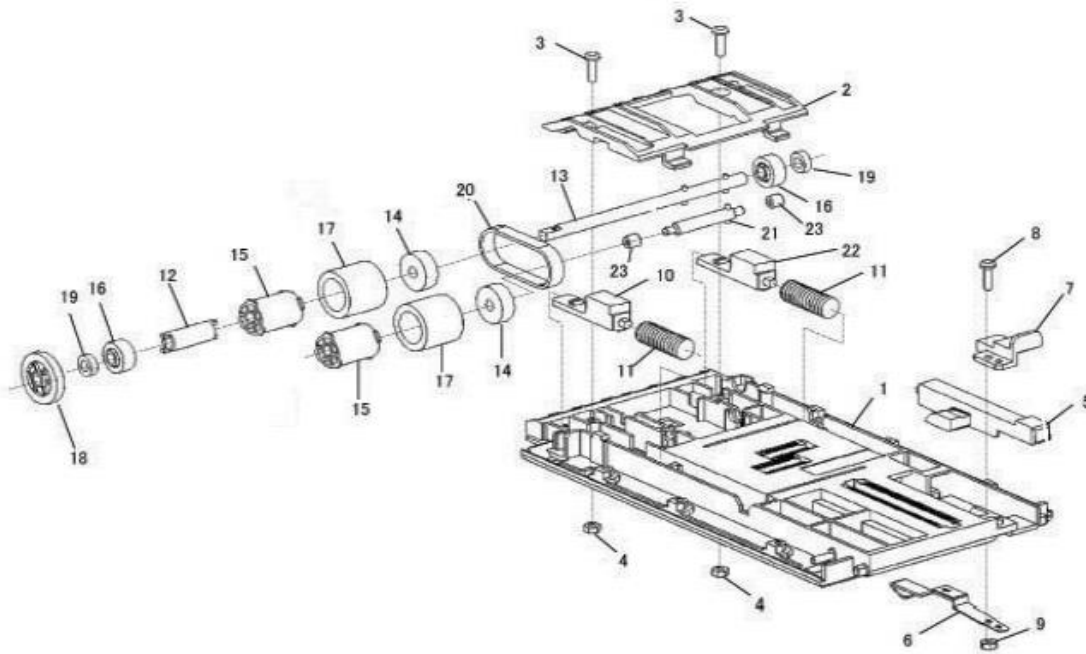
When ordering logic board #22196904 be sure to specify the machine serial number. For example:
Serial number #1875, so the correct software can be installed on the logic board.

OPTIONAL INTERNAL PRINTER



| Ref. | Part No. | Description | Qty |
|------|----------|---|-----|
| | 22199201 | Printer Assembly includes all items below | |
| 1 | 22199901 | Paper Roll 2.25" W x 2" Diameter | 1 |
| 2 | | Citizen Dot-Impact Printer (optional) with User's Manual | 1 |
| 3 | 22200101 | Ribbon Cassette – Black | 1 |
| 4 | 22196301 | Power Supply (Input 120 VAC., 60 Hz, 20 W) (Output: DC 7.0V, 1.6A) | 1 |

Cash Cassette



| Item No. | Part Number | Description | Quantity |
|----------|-------------|----------------|----------|
| | 22197301 | Cash Cassette | 1 |
| 1 | | Button Frame | 1 |
| 2 | | Passway | 1 |
| 3 | | Screw | 2 |
| 4 | 22217101 | Nut | 2 |
| 5 | | Lock Lever | 1 |
| 6 | 22217201 | Lock Assembly | 1 |
| 7 | | Lockfixer | 1 |
| 8 | 22217401 | Screw | 1 |
| 9 | | Nut | 1 |
| 10 | | Gear Lock | 1 |
| 11 | | Spring | 2 |
| 12 | 22194601 | Spacer | 1 |
| 13 | 22197701 | Shaft Assembly | 1 |
| 14 | 22197801 | Pulley | 2 |
| 15 | 22197901 | Oneway Roller | 2 |
| 16 | 22198001 | Gear | 2 |
| 17 | 22213501 | Roller | 2 |
| 18 | 22198201 | Gear | 1 |
| 19 | 22198301 | Bearing | 2 |
| 20 | 22198401 | Timing Belt | 1 |
| 21 | 22198501 | Shaft Assembly | 1 |
| 22 | | Gear Lock | 1 |
| 23 | | Collar | 2 |

Warranty Terms and Conditions

LIMITED WARRANTY AND EXCLUSIVE REMEDIES – The goods delivered hereunder are subject to the terms of American Changer Corporation’s (Seller or Seller’s) Limited Warranty provided with the deliverable, or if there is no such warranty, the terms set forth herein. In the event of any inconsistency between the written warranty provided with deliverable, and the description of the warranty set forth herein, the written warranty shall govern.

Seller warrants that its new products and parts are free from defects in material or workmanship in normal use for one year from the date of shipment by Seller. In addition, this warranty will be extended for a second year for Bill Validators. Refurbished parts carry a six-month warranty from date of shipment by Seller.

Seller will furnish without charge, F.O.B. Fort Lauderdale, repair or replacement of any defective part qualifying for repair and/or replacement under the terms of its warranty, within one year of the date of delivery. Any transportation, diagnosis calls, or similar expenses are not included. The warranty for any replacement part will only apply to the remainder of the warranty period.

This warranty may not be changed or modified without the consent of an Executive Officer of Seller.

To make a claim under this warranty, Buyer must call Seller’s Service Department and provide the model number and serial number of the goods. If the goods were purchased from a reseller, Buyer must provide the name, address and telephone number of the reseller. Seller reserves the right to request proof that the reseller purchased the goods from the Seller.

Seller’s Limited Warranty does not cover damage caused by: (I) shipping or physical abuse; (II), misapplication or misuse including improper installation, startup, storage, or failure to comply with any instructions for use set forth in the owner’s manual supplied with the goods, or use, storage or operation of the goods in a manner that fails to comply with all applicable laws, rules and regulations, including, without limitation, any local labeling requirements or labeling required under California’s Safe Drinking Water and Toxic Enforcement Act of 1986 (also known as “Proposition 65”) and its implementing regulations; (III) failure to perform necessary maintenance and cleaning in accordance with the owner’s manual provided with the goods or comply with all applicable law or regulation, all applicable labeling requirements (IV) power surges, improper electrical supply and/or lightning strike; (V) operation, use or storage of goods in weather or outdoor conditions which do not comply with the guidelines set forth in the owner’s manual supplied with the goods; and (VI) fires, floods, or other casualty or Acts of God outside of Seller’s control.

This warranty is void if: (I) repairs and/or replacement are performed by anyone other than Seller or a qualified repair technician; (II) the goods were purchased in a used condition or not in the original packaging; (III) the goods have any defects or damage due to any alterations, or damage caused by improper electrical supply, shipping and handling, fire, flood, misuse, vandalism, or any other condition or event outside of Seller’s control, or the goods are used, stored or operated in a manner that fails to comply with any applicable law, rule, or regulation,

including, without limitation any local labeling requirements or labeling required under California’s Safe Drinking Water and Toxic Enforcement Act of 1986 (also known as “Proposition 65”) and its implementing regulations; (IV) the failure to clean and maintain the product in accordance with the owner’s manual supplied with the goods or comply with all applicable law and regulations and any applicable labeling requirements; (V) the goods are operated, used, or stored in weather or outdoor conditions which do not comply with the guidelines set forth in the owner’s manual.

The owner is responsible for: (I) using the goods supplied by the Seller in accordance with the installation, start-up, use, storage, inspection, and service requirements, and all other instructions set forth in the owner's manual supplied with the goods; (II) providing normal cleaning and maintenance in accordance with the owner's manual supplied with the goods; (III) operating, using, and storing the goods in accordance with the owner's manual supplied with the goods and in compliance with all applicable laws, rules, or regulations, including any local labeling requirements or labeling required under California's Safe Drinking Water and Toxic Enforcement Act of 1986 (also known as "Proposition 65") and its implementing regulations; (IV) contacting American Changer during the warranty period to obtain a Return Material Authorization to make a claim under this warranty; (V) providing proof of purchase if requested, and if the goods were purchased from a reseller, the name, address, and telephone number of the reseller; (VI) providing any other information American Changer may reasonably request to confirm that the goods are eligible for repair/replacement under this warranty; (VII) paying for any repairs or replacement of parts outside the scope of this warranty; (VIII) paying any shipping costs.

ENTIRE WARRANTY

THIS WARRANTY CONSTITUTES THE EXCLUSIVE REMEDY OF THE PURCHASER AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE TO THE EXTENT PERMITTED BY LAW.

SELLER EXPRESSLY DISCLAIMS ALL LIABILITY ARISING OUT OF THE THEFT, MISAPPROPRIATION, OR MISUSE OF ANY PERSONAL FINANCIAL INFORMATION OF AN END USER OF THE GOODS, INCLUDING, BUT NOT LIMITED TO, CREDIT CARD AND/OR DEBIT CARD NUMBERS, PERSONAL IDENTIFICATION NUMBERS, PERSONAL PASSWORDS OR PASSCODES, OR OTHER SIMILAR PERSONAL INFORMATION OF THE USER OF THE GOODS.

IN NO EVENT SHALL AMERICAN CHANGER BE LIABLE TO BUYER UNDER THIS WARRANTY FOR AN AMOUNT WHICH EXCEEDS THE PURCHASE PRICE OF THE GOODS.

IN NO EVENT SHALL AMERICAN CHANGER BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOST PROFITS, OR FOR DAMAGES ARISING OUT OF BUYER'S INSTALLATION, OPERATION OR STORAGE OF THE GOODS IN A MANNER THAT FAILS TO COMPLY WITH ANY APPLICABLE LAW, RULE, OR REGULATION, INCLUDING ANY LABELING LAW, RULE OR REGULATION INCLUDING, WITHOUT LIMITATION, CALIFORNIA'S SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 (ALSO KNOWN AS "PROPOSITION 65") AND ITS IMPLEMENTING REGULATIONS.

SELLER EXPRESSLY DISCLAIMS ALL GUARANTEES AND/OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, OR USEFUL LIFE.

LIMITATIONS OF DAMAGES – Seller's liability for any loss or damage arising out of, or resulting from, any breach or default by Seller in connection with the sale of goods hereunder, shall not exceed the purchase price thereof, regardless of whether such liability arises in contract, tort (including, without limitation, negligence or strict liability) or otherwise, and in no event shall Seller be liable for incidental or consequential damages of any kind or for lost profits.

Buyer is solely responsible for installing, storing, operating and maintaining the goods delivered hereunder in compliance with all applicable laws, rules and regulations, and any local labeling requirements or labeling required under California's Safe Drinking Water and Toxic Enforcement Act of 1986 (also known as "Proposition 65") and its implementing regulations. In no event shall Seller be liable for Buyer's failure to install, store, operate or maintain the goods in compliance with any applicable law, rule or regulation.

WARRANTY FORM

The Warranty Form must be filled out completely and mailed to:

American Changer Corp.

1400 NW 65th Place

Ft. Lauderdale, FL 33309

Attention: Extended Warranty Department

Machine Information

Machine Model & Serial Number: _____

Validator Serial Number: _____

Validator Serial Number: _____

Hopper Serial Number: _____

Hopper Serial Number: _____

Logic Board Serial Number: _____

Coin Mechanism Serial Number: _____

Your Name: _____

Company Name: _____

Billing Address: _____

Billing Address: _____

City: _____

State and Zip Code: _____

Phone Number: _____

Email Address: _____

Note: The purpose of this form is to enter your information in our customer database. This information will not be shared with anyone outside of American Changer Corp. It will be used to inform you of equipment upgrades.