## American Changer



## Bill/Note Breaker Series Installation, Operation, and Service Manual



Changing the Industry ${ }^{\text {sM }}$

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



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AMERICANCHANGER FORT LAUDERDALE, FL USA CONFORMS TO ULSTD. 75 CERTIFIED TO CAN/CSA STANDARD C22.2\#128

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## Section 1 - Product Overview

## 1.1 - Machine Specifications

| Operating Voltage (selectable by switch on power <br> supply) | Set at 115VAC: $90 \sim 132 \mathrm{VAC} 4.0 \mathrm{~A}$ <br> Set at 230VAC: $180 \sim 264 \mathrm{VAC} 6.0 \mathrm{~A}$ |
| :--- | :--- |
| Power Consumption | Controller: 10 W Max |
|  | Puloon Bill Dispenser: 120 W Max |
|  | Bill Validator: 50 W Max |
| Operating Temperature | $41^{\circ} \mathrm{F}$ to $104^{\circ} \mathrm{F} / 5^{\circ} \mathrm{C}$ to $40^{\circ} \mathrm{C}$ |
| Interface to Coin Hopper | $24 \mathrm{VDC}, 2.5$ amps max |

*Note: Specifications stated herein may vary without notice. Capacities are approximations and may vary.

## 1.2 - Warranty Information

PLEASE REFERENCE SECTION 4.5 ON PAGES 55 AND 56 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.
## Section 1.3 - 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:
$\triangle$ DANGER
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.


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.
NOTICE


NOTICE: Ensure this machine is level when installed


## 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.

## Section 2 - Setup \& Installation

## 2.1 - Setup

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 $1 / 4$ 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 220VAC outlet. The machine is preset to accept 10p, 20p, 50p, $£ 1$ and $£ 2$ coins and dispense $\mathbf{2 p}$ coins (unless otherwise specified at the time of purchase).

Fill each of the coin hoppers with a minimum of 100 coins. On the Main Logic Board, turn the switch on the bottom right corner "ON." The rocker switch has an " $I$ " and " $O$ " printed on it. When the " $I$ " is pressed down, the changer is "ON."

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

## 2.2 - Mounting Instructions

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.

1. Disconnect any and all $A C$ power going to the machine. (Unplug AC line cord from the rear of the machine.)
2. Note: You will need to verify with the building code enforcement to see if it is allowable to plug the changer into a grounded outlet. If it is not, there must be 220 VAC run through conduit or other means to meet local codes to the changer. If it is not required, proceed to step \#6.
3. Have a licensed electrician run the conduit, install the new breaker, wire and help decide how the wiring will enter the changer (from the back or the bottom).
4. After the conduit has been installed, proceed with securing the machine to a stable structure.
5. Find an appropriate stable structure which to secure the machine to.
6. NOTICE: BEFORE SECURING ENSURE THE MACHINE IS LEVEL.


# 7. ! DANGER: PROPERLY SECURE MACHINE (PRODUCT) TO THE FLOOR 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. 


8. Use the four holes located in the bottom of the cabinet to secure the machine to a stable structure.
9. Verify that the machine is properly secured to the stable structure.
10. Connect your AC line to the rear of the changer. Then plug it into the outlet.
a. Do not use an extension cord unless allowed by the building electrical code.
b. Installation is completed. Proceed to the "Programming the Changer" section.

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.

## Section 3 - Operational Overview

## 3.1 - Component Description

## Coin Hopper

The hopper uses the ccTalk communication protocol. It can dispense coins or tokens ranging in size from 21.01 mm to 30 mm in diameter and 1.25 mm to 3.30 mm in thickness. An option is available to dispense smaller coins. This machine's coin capacity is approximately $45,00025 \mathrm{~mm}$ diameter coins.


## Bill Validator

This model machine may have been sold without a bill validator. It is intended to work with a 24VDC bill validator using the MDB protocol.

6-Pin (MDB) Connector Pinout:
Pin \#1 -+24VDC Power
Pin \#2 - DC Power return
Pin \#3 - Not Used
Pin \#4 - Master Receive
Pin \#5 - Master Transmit
Pin \#6 - Communications Common

6-Pin (MDB)


## Flex Programmer Board

This device is used to view and edit the machine's settings. When in normal operation the Flex Programmer Board displays payout information to the person using the machine.


Flex-2 Main Logic Board


## Bill Dispenser

The bill dispenser can dispense bills ranging in size from 100 mm to 162 mm wide and 62 mm to 78 mm high. This machine's bill capacity is approximately 1000 per cassette.

## LCDM1000 <br> Single Denomination Dispenser



24VDC Power Bill Dispenser
Input Communication
Located in the rear of the dispenser

LCDM2000
Dual Denomination Dispenser


Located in the rear of the dispenser

## 3.2 - Functional Description

1. Dispense
2. Payment

The machine dispenses bills and/or coins.
The machine accepts payment in the form of cash only.

## 3.3 - Out-of-Service Conditions \& Error Codes

## System <br> Failures

Below are conditions that will cause the machine to go into an "Out-of-Service" mode. The message "Temporarily out of Service" will be displayed on the external LCD display when the machine is in an "Out-of-Service" mode.

Note: These error messages can only be viewed by using the Flex Programmer Board.

Bill Validator Error Conditions

Motor $\quad$ Validator stacker/transport motor has failed
Sensor Sensor failure

CheckSum Indicates error with file stored on validator main board

Jammed A bill or debris is jammed in the validator bill path

Cashbox The cashbox is not installed on the bill validator

No Comm. The Flex-2 main logic board is unable to communicate with the bill validator.

Can't The Flex-2 main logic board has tried to enable the
Enable validator several times without success.

Coin Hopper Error Conditions

Opto's Indicates the coin counting optic is blocked.

No Comm. The Flex-2 main logic board is unable to communicate with the coin hopper.

High The hopper motor exceeded its maximum current rating.
Current


|  | Low | The amount of coins in the coin hopper is below its operational threshold. |
| :---: | :---: | :---: |
|  | Timed Out | The coin hopper did not complete a payout in its allotted time frame. |
| Coin |  | Coin Acceptor Error Conditions |
| Acceptor | Credit Sns. |  |
|  | Piezo Sns. | Piezo sensor blockage or failure |
|  | Exit Sns. | Exit sensor blockage or failure |
|  | Reject Sns. | Reject sensor blockage or failure |
|  | Return <br> Mech | Unit failure. Needs to be replaced. |
|  | Thermistor | Thermistor failure |
|  | No Comm | The Flex-2 main logic board is unable to communicate with the coin acceptor. |
| Programmer |  | Flex Programmer Board Error Conditions |
|  | No Comm | The Flex-2 main logic board is unable to communicate with the Flex Programmer Board. |
|  | Disabled | The use of a secondary display is not enabled. |
|  | Enabled | The use of a secondary display is enabled. |
| Bill |  | Bill Dispenser Error Conditions |
| Dispenser |  |  |
|  |  | Clear these errors by resetting counts |
|  | Rjct | The reject bin exceeded the 100 notes capacity |
|  | Bin>100 |  |
|  | High Limit | The set max limit of the high cassette has reached capacity |
|  | Mid Limit | The set max limit of the middle cassette has reached capacity |

Clear these errors by printing the status information
Hgh Csst Low bill sensor of the high cassette has been triggered
Low

Mid Csst Low bill sensor of the middle cassette has been triggered Low

Dspns The unit tried 10 times to dispense and failed Issue!

No Comm2 No communication with the ezCDM 1000. CDM

| Counter | Disagreement of the pick and eject counts |
| :--- | :--- |
| Eject <br> Sensor | Abnormal detection of note at eject sensor after <br> dispensing notes |
| Reject Rate | If more than eight notes are rejected |
| Eject Init | Eject sensor error |
| Pck/Ejct <br> Hgh | A note was picked from the high cassette and failed to <br> dispense |

Pck/Ejct A note was picked from the middle cassette and failed to Mid dispense

Pick Failure Failed to pick bill
These errors must be serviced by checking the bill dispenser

No Comm1 No communication from Bill dispenser, Check USB Port 2 for RS232 device!

Distance Distance between notes in the path is out of range

Feed Check feed sensor Sensor

Delay Eject Eject sensor error during dispensing notes
Wheel Cntr BLDC motor exceed speed limit
Expansion Delay at (Expansion module 1,2 -> DM)
Tm

| MOTD | The initial value of the MOTD is out of range |
| :--- | :--- |
| Initial |  |
| Diverter | Diverter Solenoid Error |
| MOTD 2F | The initial value of the MOTD is out of range during <br> dispensing notes |
| Irreg cmnd Irregular command |  |
| Purge Time Purge timeout error |  |
| Currency There is no information of currency. Host did not provide <br> Set currency information |  |
| DM Fd Snsr DM feed sensor error |  |
| DM Delay at delivery direction (DM->Eject or Reject Sensor) |  |
| Timeout |  |
| Count | A detection of the abnormal counts is more than a |
| Ovrflw | allowable value of notes dispensed |
| at one transaction |  |

## 3.4 - Programming Menu

To enter the programming menu, begin by pressing the "Select Switch" on the Flex-2 main logic board.

Pressing the select switch will bring the display to show "Enter Access Code."
Use the Flex Programmer Board to enter the access code. The default code from the factory is " 1234 "

To exit the programming menu or the "Enter Access Code" screens press the "Select Switch"

Use the Flex Programmer Board to navigate the menus. Press the "Cancel" button and enter a menu number to be brought immediately to that menu or press the Back/Next button to step through the menus.

All the menus work the same:
No/Yes: Selects status
Back/Next: Selects the item
Exit: Exits the setup menu

## NOTE: ALL MENUS MAY NOT APPLY TO YOUR SPECIFIC MODEL MACHINE. UNUSED MENUS WILL BE IDENTIFIED BY AN ASTERISK *.

## Menu 01 - Print Help Menu

A list of the menus and their corresponding numbers is printed by the external printer.

## Menu 02 - System Info

The payout information and configuration settings are printed by the external printer. Aside from those, the following information is also included in the System Info printout:

Software Revision
Valid1 Status
Valid2 Status
Hopper \#1 Status
Hopper \#2 Status
Hopper \#3 Status
Hopper \#4 Status
Credit Status
Printer Status
Coin Acceptor
Bill Dispenser
Temperature Info
WebServer Info

## Menu 03 - Button Price*

Define the amount charged for each selection (1-4).

## Menu 04 - Button Payout*

Sets up payout count for the 4 selection buttons.

$$
15
$$

## Menu 05 - Enable Bill

This system only uses MDB validators. Depending on what type of MDB validator is used, the display will only toggle between the denominations accepted by the bill validator.

## Menu 06 - Payout Table

Only bills enabled in Menu 05 will be available in this menu. Enter the \# of items dispensed for each bill denomination.

## Menu 07 - Enable Hoppers

Enable or disable hoppers 1, 2, 3 and/or 4.

## Menu 08 - Hopper Coin Value

Set the value of the coin being dispensed. Used only when providing tokens with change or when selections are not in use.

## Menu 09 - Enable Coin Acceptor

Select between a Pulse or ccTalk coin acceptor. Enable or disable the coin acceptor.
Pulse - Enable $\rightarrow$ High or Low
ccTalk - Enable $\rightarrow$ Coin Values

## Menu 10 - System Disable

Disables the machine if any of the selected devices goes offline.

Hopper 1
Hopper 2
CassetteU
CassetteL
ccTalk coin acceptor

## Menu 11 - Promo-Token Payout*

Enter the \# of items paid for each promotional token.

## Menu 12 - Dump Hoppers

Dumps the coins from all hoppers. A receipt is printed by the external printer.

## Menu 13 - Audit Information

Prints a summary of all the sales. There are separate counters for tokens dispensed from each hopper.

Reset - Prints 2 copies of all the audit values and resets all the "Resettable Counters" to 0. Every time Reset button is pushed the audit sequence number increases by one.

Print - Pushing the Print button prints all the audit values without resetting.
All the values are max 99,999 except for the Total Cash value which is $\$ 100,000.00$.

## Menu 14 - Vend Item Name*

Choose from Items, Tickets or Tokens.

Menu 15 - Date Setup
Enter the date in this format: 20YY-MM-DD.
Menu 16 - Time Setup
Enter the time in this format: HH:MM. 24 hour format.

## Menu 17 - Machine Number

Assign a machine number that will appear in audit report print out.
Menu 18 - Marquee Timer*
Setup a time to turn On/OFF the marquee.

Menu 19 - Zip Code Enable*
Enable or disable zip code verification for credit card transactions.
Menu 20 - Access Code
Change the access code.

## Menu 21 - Key Beep Enable*

Enable or disable beep when a button is pressed.

## Menu 22 - Location Name

Enter location name to print on credit card receipts.

## Menu 23 - Bills Loaded Cassette Upper

Enter number of bills loaded in the upper cassette. If this number is zero the machine will use the Bill Dispenser's low bill sensor instead.

## Menu 24 - Bills Loaded Cassette Lower

Enter number of bills loaded in the lower cassette. If this number is zero the machine will use the Bill Dispenser's low bill sensor instead.

## Menu 25 - Bill Value Cassette Upper

Enter the value of the bill being dispensed from the upper cassette.

## Menu 26 - Bill Value Cassette Lower

Enter the value of the bill being dispensed from the lower cassette.

## Menu 27 - Printer Options*

## Menu 28 - Validator Enable

Enable or disable the bank note validator.
Menu 29 - Nayax Test Mode*
Menu 30 - Country*
Select between U.S and U.K. Selecting U.S. displays " $\$$ ". Selecting U.K. displays " $£$ " and " $p$ ".

Menu 31 - Webserver*
The Webserver IP configuration is displayed.

## Menu 32 - Minimum Credit*

Enter a minimum value for credit card transactions.

## Menu 33 - Anti Stringing

Setup a maximum cash amount, maximum time and shut-off time for anti- stringing purposes.

## Menu 34 - Programmer

Enable or disable dual display mode. In dual display mode the Flex Programmer Board is able to be used as a secondary display to access the programming menu.

## 3.5 - Remote Loading Software to the Flex-2 Board

## 1. What you need

1.1 Windows XP, or later pc with MicroSD port or USB to MicroSD card reader
1.2 MicroSD card (comes installed in the Flex-2 main logic board)
2. Transferring the file into the MicroSD card
2.1 Turn power off to the controller board.
2.2 Remove SD card.
2.3 The software is in a zip format and will be sent as an attachment to an email.
2.4 Save the zipped file and then unzip it.
2.5 Do not change the name or the file extension!!!
2.6 Copy the program file to the SD card.
3. Loading the file from the MicroSD card to the controller board

Note: All system settings will be erased once software is updated!!! We recommend making a print
out of the settings before doing anything.
3.1 Turn power off to the controller board.
3.2 Gently push the MicroSD card into the MicroSD connector on the board.
3.3 Turn power on while holding the Button on the board for 2 seconds then release.

Update Software? Press Yes to continue loading the software. Press Exit to cancel.
3.4 Once the Yes key has been pressed a brief reminder will be displayed followed by a confirmation.

System Settings will be erased if Updated - This reminder will stay on for a few seconds before transitioning to the final confirmation message.

Update: XXXX-XX-XXX Start Next Exit - Press Start to load the software. Press Next view the next file loaded on the MicroSD card or Press Exit to cancel.
3.5 Software updating and completion.

Update: XXXX-XX-XXX Addr : 0x00012000 - Software name and flash memory address being programmed. Address should be cycling every $1 / 2$ second.

Software Updated! Please Cycle Power - Cycle power to complete update.

## 4 Error messages:

One of the following messages may occur if there is a problem loading the software. In that case, remove the MicroSD card and check that the correct file is loaded on the MicroSD card.
4.1 EEPROM Error Please Try Again - EEPROM error.
4.2 Main CRC Error V:XXX Update Required! - The computed main program CRC is incorrect.
4.3 Frame Error V:XXX While Reading File - There was a checksum error while reading one of the files entries.
THE FOLLOWING IS A FATAL ERROR AND THE BOARD CAN NOT BE USED!!
2.4 Fatal Error V:XXX Invalid Boot CRC! - Do not load any software if this message occurs.

## Section 4 - Maintenance

## AWARNING



## 4.1 - Coin Hopper Maintenance

## 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!

## Low Coin Contact Plates

Looking inside the hopper through the top opening locate the two brass plates at the bottom of the hopper. If they appear to be dull and/or dirty remove the right section of the hopper by removing the 6 screws on that side. Use a ScotchBrite pad, or another item made with abrasive material, to scrub the oxidation and dirt off of the brass plates.


## 4.2 - Bill Validator Maintenance

## Pyramid Acceptors Apex Model

The Apex Series bill acceptor is relatively maintenance free. An occasional cleaning is all that is needed to keep the acceptor in top operation. Please Visit the "service" section of the pyramidacceptos.com website to view videos explaining how install, clean, program, and troubleshoot the Apex bill acceptor.

To clean the acceptor:

- Remove power from the machine.
- If equipped with a stacker, unlatch the cassette by pushing in the top latch and lifting the cassette up and out.
- Unplug the I/O connector and/or power connector from the right side of the acceptor.
- Remove the Lower Transport by pushing in the latch located on the bottom of the acceptor at the rear. Gently pull the Lower Transport out of the assembly.
- Clean the bill path using a soft cloth or towel. Do not use any cleaners other than a 50/50 mixture of water and isopropyl alcohol.

NOTE: Pay particular attention to the gray oval pieces of plastic in the lower and upper transport area. They must be cleaned well for proper operation.

Do not use any oils or silicon spray on the acceptor!


## Crane Payment Innovations (CPI) AE 2600 Series

You can clean the bill acceptor while it is still mounted in the machine

1. Remove power from the machine.
2. Unlatch the magazine by pushing the yelow latch (located on the top of the unit) toward the front of the unit.
3. Unhook and remove the magazine by holding the latch and lifting up and then back on the magazine.
4. Unlatch the LED Housing by lifting up on the metal bar (located below the Status LED).
5. Remove the LED Housing by holding the metal bar and pulling back on the LED Housing.
6. Clean the bill path with a soft cloth. You may use mild, non-abrasive, non-petroleum based cleaners if sprayed on the cloth.


## Astro Systems GBA ST1-C

## Cleaning the Validator Note Path

## Cleaning the Validator Note Path

## Equipment Required

- Cotton swab or lint-free cloth.
- Cleaning solution - a mix of water and up to 50\% Iso-Propyl Alcohol (IPA) is recommended.
- DO NOT use more than 50\% IPA. NEVER use solvent-based cleaning agents, such as Amberclens, pure alcohol, petrol, methylated spirit or white spirit on this product as the unit will be severely damaged.


## Anti-Static precautions should always be observed when cleaning the GBA ST1C unit.

1. Ensure the power supply to the GBA ST1C unit is switched OFF.
2. Remove the Cassette.
3. Lift up the purple Access Latch on the back of the Bottom Sensor Assembly, and gently slide the module out of the Channel Assembly.
4. Pick off and discard any large items of debris from the note path of the Bottom Sensor Assembly. Repeat for the other side of the note path (on the drive belt assembly).
5. Using the cotton swab, or lint-free cloth, wetted with cleaning solution and applying light force only, carefully clean all sensor windows in both halves (upper and lower) of the note path. If a sensor window has become badly scratched do not attempt to polish it, contact your local regional office for further advice.
6. Continue with the swab, or lint-free cloth, to clean the rest of the note path, including sprung rollers.
7. Visible parts of belts can be cleaned by wiping with a cleaning solution-soaked cotton swab or wipe. It is not possible to clean the whole belt surface without removing the belts from the unit.
8. Use an additional swab or cloth to dry the cleaned area, if required.
9. Slide the clean Bottom Sensor Assembly back into the Channel, ensuring that the Access Latch clips securely into the Channel.
10. Re-fit the Cassette.
11. The supply to the unit can now be switched ON.

## Clearing a Note Jam

1. Ensure the power supply to the GBA ST1C unit is switched OFF.
2. Remove the Cassette.
3. Lift up the purple Access Latch on the back of the Bottom Sensor Assembly, and gently slide the module out of the Channel Assembly.
4. Clear the jammed note(s) from the note path.


## 4.3 - LCDM1000 Bill Dispenser Maintenance

Dispenser Codes and Recommended Actions

| Dispenser Code | Description | Solution |
| :---: | :--- | :--- |
| 30 H | "Good" Normal Status | No Action Required |
| 31 H | Normal Stop Status | No Action Required |
| 32 H | Pickup Error | Table 1, Page 26 |
| 33 H | Jam at CHK Sensor | Table 2, Page 27 |
| 34 H | Overflow Bill | Table 3, Page 28 |
| 35 H | Jam at EXIT Sensor or EJT Sensor | Table 3, Page 28 |
| 36 H | Jam at DIV Sensor | Table 4, Page 29 |
| 37 H | Undefined Command | Issue with Host |
| 38 H | Bill End | Table 10, Page 38 |
| 3 BH | Note Request Error | Table 11, Page 39 |
| 3 CH | Counting Error (between DIV and EJT Sensors) | Table 3, Page 28 |
| 3 DH | Counting Error (between EJT and EXIT sensors) | Table 3, Page 28 |
| 3 FH | Reject Tray is not Recognized | Table 6, Page 30 31 |
| 41 H | Motor Stop | Table 3, Page 28 |
| 43 H | Timeout (From DIV Sensor to EJT Sensor) | Table 7, Pages 32-35 |
| 44 H | Over Reject | Table 8, Page 36 |
| 45 H | Cassette is not Recognized | Table 1, Page 26 |
| 47 H | Dispensing Timeout | Table 9, Page 37 |
| 49 H | Diverter Solenoid or SOL Sensor Error | Table 9, Page 37 |
| 4 AH | SOL Sensor | Table 4, Page 29 |
| 4 EH | Purge Error (Indicates a possible jam at the DIV Sensor) |  |

TABLE 1

| CODE | $32 \mathrm{H}, 47 \mathrm{H}$ |
| :--- | :--- |
| Meaning | Pickup error |
| Check <br> Point | - Is CASH CASSETTE located properly? <br> - Is Bill inserted proper in the CASH CASSETTE? <br> - Is Push plate work smoothly in CASH CASSETTE? <br> - Is any bill out from CASH CASSETTE? |
| Action | - Re install CASH CASSETTE after checking above |

< Normal loading >

< Abnormal loading >


TABLE 2

| CODE | 33H |
| :---: | :---: |
| Meaning | JAM at CHK Sensor |
| Check Point | - Is CHK SENSOR $1 \& 2$ normal? <br> - Is the assembling condition of GUIDE CASH FEED 1\& GUIDE CASH FEED 3 ASS' ${ }^{\prime}$ normal ? <br> - Is idle roller rotation in the GUIDE CASH FEED 2 ASS'Y normal? <br> - Is fixing screw in GUIDE CASH FEED $1 / 2 / 3$ ASS'Y normal? |
| Action | - Try again after checking above situation. <br> - In case of Jam, Turn a knob shown below |



TABLE 3

| CODE | 34H, 35H, 3CH, 3DH, 43H <br> Meaning <br> - Overflow bill <br> -JAM at EXIT Sensor or EJT Sensor <br> - Counting Error(between DIV Sensor and EJT Sensor) <br> - Counting Error(between EJT Sensor and EXIT Sensor) <br> - Timeout(From DIV Sensor to EJT Sensor) |
| :--- | :--- |
| Check <br> Point <br> - Are EXIT SENSOR \& EJT SENSOR normal? <br> - Is LOCKING device in GUIDE CASH FEED 7 ASS'Y <br> locked normally? <br> - Is idle roller rotation status in GUIDE CASH FEED 7 ASS'Y <br> normal? |  |
| - Try again after checking above situation. <br> - Replace ASS'Y in case of roller rotation problem in GUIDE <br> CASH FEED 7 ASS'Y. |  |

TABLE 4


TABLE 5

| CODE | 3FH |
| :--- | :--- |
| Meaning | REJECT TRAY is not recognized |
| Check Point | - Is the location of REJECT TRAY normal? <br> - Is the location of J18 CONNECTOR normal? |
| Action | - Insert REJECT TRAY to main body. <br> - Connect J18 CONNECTOR in the MAIN PCB. |



TABLE 6

| CODE | 41H |
| :---: | :---: |
| Meaning | Motor stop |
| Check <br> Point | - Is any obstacle in Power Transportation part? <br> - Is the location of J3 CONNECTOR correct? <br> - Is the location of J2 CONNECTOR correct? <br> - Is the wheel sensor normal or not? <br> - Is the wheel assembled on its center point properly? (Is the wheel assembled with biased position?) |
| Action | -Try again after checking above situation. <br> - Check J3 CONNECTOR. <br> - Check J2 CONNECTOR <br> - Replace with new wheel senor (Interrupt sensor) <br> - Assemble the wheel on the center position. |
|  |  |

TABLE 7

| CODE | 44H |
| :---: | :---: |
| Meaning | Over Reject |
| Check Point | - Are the banknotes normally loaded in the CASH CASSETTE ? <br> - Are the DIP SWITCHES properly set to your banknotes? <br> - Check the reject code referred to the below Table 7-1. <br> ( To catch the reject code on TEST PROGRAM, you should set the dip switch \#3 to OFF like the Table 7-2. ) |
| Action | - Please do the proper service action for each case referred to the Table 7. |
| < Table 7-1 : Reject Code> |  |
| Reject Code | Suspected Cause |
| 33 | The distance between banknotes is too close. |
| 3F | One more banknote is picked and followed in the final pickup trial. |
| 36 | One more banknote is picked up during the processing the dispense command. |
| 38 | The banknote is skewed too much on the diverter sensor. |
| 3C | The banknotes suspected as double are detected. |
| 3D | The thickness of banknote is abnormally thin. |
| 35 | The banknote length is so long that it may be the overlapped banknotes. |
| 3E | The banknote length is so short that it may be the damaged or folded banknote. |
| 9C 80 | Either check sensor could not detect the banknote. |
| $\begin{aligned} & 9 \mathrm{C} \mathrm{9E} \\ & 9 \mathrm{C} \mathrm{9F} \end{aligned}$ | The length measured on check sensors is not out of limit. |
| 9C 9D | The banknote passed on check sensors is considered as too much skewed. |
| $\begin{aligned} & 9 C 03 \\ & 9 \mathrm{C} 00 \end{aligned}$ | The banknote are not normally passing on the check sensor because of fast consequential pickup. |

TABLE 7


TABLE 7

| CODE | 44 H |
| :--- | :--- |
| Meaning | Over Reject |

< Table 7-3 Over Reject by Double Detect Problem (Code: 3C) >

Case 1. PLATE D/D SENSOR deflected by external force.
It should be positioned like the picture and attached to RVDT SENSOR BLOCK and PIN properly.
If the deflection is too serious, you should replace with new ones.


Case 2. Abnormal RVDT Sensor, Shaft Error in Production
It is rare case but sometimes the sensor or shaft error in production causes such a over-reject. It should be very serious and difficult to fix that in customer's house. It is recommended the RVDT should be replaced with new one.

TABLE 7

| CODE | 44 H |
| :--- | :--- |
| Meaning | Over Reject |

< Table 7-4 Abnormal Clutch or Pick-up Roller (Code: 9C 03, 9C 00) >

It may be caused by the out-of-quality clutch, which is sticking to the power transmission all the time. So the clutch should be replaced with new one.

Otherwise, the abnormal pick-up roller may cause the over-reject. It needs replacement with new one, in order to fix the problem.
< Table 7-5 Skew, Obstacle on Path (Code: 9C 80, 9C 9D, 9C 9E, 9F) >

In case of piece cut from the bad banknote or improper material on the path, it enables to cause the skew amplification, which can occur over-reject.
The note be changed with new one or the path should be cleared by dispensing the thick note size paper.

TABLE 8

| CODE | 45 H |
| :--- | :--- |
| Meaning | Cassette is not recognized |
| Check <br> Point | - Is Cassette fully inserted to main body? <br> - Is the location of J18 CONNECTOR correct? |
| Action | -Try again after checking above situation. <br> - Check J18 CONNECTOR |



TABLE 9


TABLE 10

| CODE | 38 H |
| :--- | :--- |
| Meaning | - Bill-End |
| Check <br> Point | - Is enough notes in the CASH CASSETTE? |
| Action | - Loading notes in the CASH CASSETTE |

TABLE 11

| CODE | 3 BH |
| :--- | :--- |
| Meaning | -Note request error |
| Check <br> Point | - Is requested dispensing notes of one transaction correct? |
| Action | - Dispensing notes of one transaction is from 1 note to 20 <br> notes |

## 4.4 - LCDM2000 Bill Dispenser Maintenance

## Dispenser Codes and Recommended Actions

| Dispenser Code |  | Description |
| :---: | :--- | :--- |
|  |  | Solution |
| 30 H | "Good" Normal Status | No Action Required |
| 31 H | Normal Stop Status | Ta Action Required |
| 32 H | Pickup Error | Table 2, Page 41 |
| 33 H | Jam at CHK1,2 Sensor | Table 3, Page 43 |
| 34 H | Overflow Bill | Table 3, Page 43 |
| 35 H | Jam at EXIT Sensor or EJT Sensor | Table 4, Page 44 |
| 36 H | Jam at DIV Sensor | Issue with Host |
| 37 H | Undefined Command | Table 10, Page 53 |
| 38 H | Upper Bill End | Table 2, Page 42 |
| 3AH | Counting Error (between CHK3,4 and DIV Sensors) | Table 11, Page 54 |
| 3BH | Note Request Error | Table 3, Page 43 |
| 3CH | Counting Error (between DIV and EJT Sensors) | Table 3, Page 43 |
| 3DH | Counting Error (between EJT and EXIT sensors) | Table 5, Page 45 |
| 3 FH | Reject Tray is not Recognized | Table 10, Page |
| 40 H | Lower Bill End | Table 6, Page 46 |
| 41 H | Motor Stop | Table 2, Page 42 |
| 42 H | Jam at DIV Sensor | Table 3, Page 43 |
| 43 H | Timeout (From DIV Sensor to EJT Sensor) | Table 7, Pages 47-50 |
| 44 H | Over Reject | Table 8, Page 51 |
| 45 H | Upper Cassette is not Recognized | Table 8, Page 51 |
| 46 H | Lower Cassette is not Recognized | Table 1, Page 41 |
| 47 H | Dispensing Timeout | Table 3, Page 43 |
| 48 H | Jam at EJT Sensor | Table 9, Page 52 |
| 49 H | Diverter Solenoid or SOL Sensor Error | Table 9, Page 52 |
| 4 AH | SOL Sensor | Table 2, Page 42 |
| 4 CH | Jam at CHK3,4 Sensor | Table 4, Page 44 |
| 4 EH | Purge Error (Indicates a possible jam at the DIV Sensor) |  |

TABLE 1

| CODE | $32 \mathrm{H}, 47 \mathrm{H}$ |
| :--- | :--- |
| Meaning | Pickup error |
| Check Point | - Is CASH CASSETTE located properly? <br> - Is Bill inserted proper in the CASH CASSETTE? <br> - Is Push plate work smoothly in CASH CASSETTE? <br> - Is any bill out from CASH CASSETTE? |
| Action | - Re install CASH CASSETTE after checking above |

< Normal loading >

<Abnormal loading >


TABLE 2

| CODE | 33H, 4CH, 3AH |
| :--- | :--- |
| Meaning | - JAM at CHK1/2 Sensor <br> - JAM at CHK3/4 Sensor <br> - Counting Error(between CHK3, 4 Sensor and Div Sensor) |
| Check Point | - Is CHK SENSOR 1\& 2 normal? <br> - Is CHK SENSOR 3\& 4 normal? <br> - Is the assembling condition of GUIDE CASH FEED 1\& GUIDE <br> - Is idle roller rotation in the GUIDE CASH FEED 2 ASS'Y normal? <br> - Is fixing screw in GUIDE CASH FEED $1 / 2 / 3$ ASS'Y normal? |
| Action | - Try again after checking above situation. <br> - In case of Jam, Turn a knob shown below |

TABLE 3

| CODE | $34 \mathrm{H}, 35 \mathrm{H}, 3 \mathrm{CH}, 3 \mathrm{DH}, 43 \mathrm{H}, 48 \mathrm{H}$ |
| :---: | :---: |
| Meaning | - Overflow bill <br> - JAM at EXIT Sensor or EJT Sensor <br> - Counting Error(between DIV Sensor and EJT Sensor) <br> - Counting Error(between EJT Sensor and EXIT Sensor) <br> -Timeout(From DIV Sensor to EJT Sensor) <br> - JAM at EJT |
| Check Point | - Are EXIT SENSOR \& EJT SENSOR normal? <br> - Is LOCKING device in GUIDE CASH FEED 7 ASS'Y locked normally? <br> - Is idle roller rotation status in GUIDE CASH FEED 7 ASS'Y normal? |
| Action | - Try again after checking above situation. <br> - Replace ASS' $Y$ in case of roller rotation problem in GUIDE CASH FEED 7 ASS' ${ }^{\prime}$. |
|  |  |

TABLE 4

| CODE | $36 \mathrm{H}, 42 \mathrm{H}, 4 \mathrm{HEH}$ |
| :--- | :--- |
| Meaning | - JAM at DIV Sensor <br> - Purge error(JAM at DIV Sensor) |
| Point | - Is DIV SENSOR 1 / 2 normal? <br> - Is GAP between SHAFT DIVERTER ASS'Y and SHAFT <br> ASS'Y CASH FEED proper? <br> - Is idle roller rotation in GUIDE CASH FEED 5 ASS'Y normal? |
| Action | - Try again after checking above situation. <br> - In case of interference between SHAFT DIVERTER ASS'Y <br> \& SHAFT ASS'Y CASH FEED 3, Adjust location of <br> SOLENOID PIN( Please refer to below picture) <br> - Replace ASS'Y in case of idle roller rotation problem in <br> GUIDE CASH FEED 7 ASS'Y. |



Solenoid and
Solenoid pin should be adjusted in arrow direction

TABLE 5

| CODE | 3 FH |
| :--- | :--- |
| Meaning | REJECT TRAY is not recognized |
| Check Point | -Is the location of REJECT TRAY normal? <br> -Is the location of J20 CONNECTOR normal? |
| Action | - Insert REJECT TRAY to main body. <br> - Connect J20 CONNECTOR in the MAIN PCB. |



TABLE 6

| CODE | 41H |
| :---: | :---: |
| Meaning | Motor stop |
| Check Point | - Is any obstacle in Power Transportation part? <br> - Is the location of J15 CONNECTOR correct? <br> - Is the location of J14 CONNECTOR correct? <br> - Is the wheel sensor normal or not? <br> - Is the wheel assembled on its center point properly? (Is the wheel assembled with biased position?) |
| Action | -Try again after checking above situation. <br> - Check J14 CONNECTOR. <br> - Check J15 CONNECTOR <br> - Replace with new wheel senor (Interrupt sensor) <br> - Assemble the wheel on the center position. |
| $\begin{aligned} & \mathrm{J} 8 \longleftarrow \\ & \mathrm{~J} 4 \longleftarrow \\ & \mathrm{JP} 3 \longleftarrow \\ & \mathrm{~J} 2 \longleftarrow \\ & \mathrm{JP2} \longleftarrow \\ & \mathrm{~J} 15 \longleftarrow \\ & \\ & \text { J14 } \\ & \hline \end{aligned}$ |  |

TABLE 7

| CODE | 44 H |
| :--- | :--- |
| Meaning | Over Reject |
| Check <br> Point | - Are the banknotes normally loaded in the CASH CASSETTE ? <br> - Check the reject code referred to the below Table 7-1. <br> ( To catch the reject code on TEST PROGRAM, you should <br> set the dip switch \#3 to OFF like the Table 7-2. ) |
| Action | - Please do the proper service action for each case referred to <br> the Table 7. |

< Table 7-1 : Reject Code>

| Reject <br> Code | Suspected Cause |
| :---: | :--- |
| 33 | The distance between banknotes is too close. |
| 3 F | One more banknote is picked and followed in the final <br> pickup trial. |
| 36 | One more banknote is picked up during the processing the <br> dispense command. |
| 38 | The banknote is skewed too much on the diverter sensor. |
| 3 C | The banknotes suspected as double are detected. |
| 3 D | The thickness of banknote is abnormally thin. |
| 35 | The banknote length is so long that it may be the overlapped <br> banknotes. |
| 3 E | The banknote length is so short that it may be the damaged <br> or folded banknote. |
| 9 C 80 | Either check sensor could not detect the banknote. |
| $9 \mathrm{C} \mathrm{9E}$ | The length measured on check sensors is not out of limit. |
| $9 \mathrm{C} \mathrm{9F}$ | The banknote passed on check sensors is considered as too <br> much skewed. |
| $9 \mathrm{C} \mathrm{9D}$ |  |
| 9 C 03 <br> 9 C 00 | The banknote are not normally passing on the check sensor <br> because of fast consequential pickup. |

TABLE 7

| CODE | 44 H |
| :--- | :--- |
| Meaning | Over Reject |

< Table 7-2 Dip Switch Setting for Display of Reject Code >


| No. | FUNCTION | S/W ON | S/W OFF |
| :---: | :---: | :---: | :---: |
| 1 | ACTIVATION OF NEAREND/BILL END <br> (NEAREND : 10~30 NOTES REMAINS.) | NEAREND | BILL END |
| 2 | OPERATION ON OVER-REJECT <br> (OVER REJECT: 6 REJECTS IN SERIES) | CONTINUE <br> NEXT TRA. | STOP <br> UNTIL M/A |
| 3 | THICKNESS OF BANKNOTE <br> IN LOWER CASSETTE | $0.10 \sim 0.12$ <br> mm | $0.13 \sim 0.15$ <br> mm |
| 4 | THICKNESS OF BANKNOTE <br> IN UPPER CASSETTE | $0.10 \sim 0.12$ <br> mm | $0.13 \sim 0.15$ <br> mm |
| 5 | BAUD RATE | 9600 | 19200 |
| 6 | DISPLAY OF REJECT CODE <br> ON TEST PROGRAM | NOT <br> DISPLAYED | DISPLAY |
| 7 | CHOICE OF BANKNOTE HEIGHT <br> IN LOWER CASSETTE | $73 \sim 78 \mathrm{~mm}$ | $62 \sim 72 \mathrm{~mm}$ |
| 8 | CHOICE OF BANKNOTE HEIGHT <br> IN UPPER CASSETTE | $73 \sim 78 \mathrm{~mm}$ | $62 \sim 72 \mathrm{~mm}$ |

TABLE 7

| CODE | 44 H |
| :--- | :--- |
| Meaning | Over Reject |

< Table 7-3 Over Reject by Double Detect Problem (Code: 3C) >

Case 1. PLATE D/D SENSOR deflected by external force.
: It should be positioned like the picture and attached to RVDT SENSOR BLOCK and PIN properly.
: If the deflection is too serious, you should replace with new ones.


Case 2. Abnormal RVDT Sensor, Shaft Error in Production
: It is rare case but sometimes the sensor or shaft error in production causes such a over-reject. It should be very serious and difficult to fix that in customer's house. It is recommended the RVDT should be replaced with new one.

TABLE 7

| CODE | 44 H |
| :--- | :--- |
| Meaning | Over Reject |

< Table 7-4 Abnormal Clutch or Pick-up Roller (Code: 9C 03, 9C 00) >
It may be caused by the out-of-quality clutch, which is sticking to the power transmission all the time. So the clutch should be replaced with new one.

Otherwise, the abnormal pick-up roller may cause the over-reject. It needs replacement with new one, in order to fix the problem.
< Table 7-5 Skew, Obstacle on Path (Code: 9C 80, 9C 9D, 9C 9E, 9F) >
In case of piece cut from the bad banknote or improper material on the path, it enables to cause the skew amplification, which can occur over-reject.
The note be changed with new one or the path should be cleared by dispensing the thick note size paper.

TABLE 8

| CODE | $45 \mathrm{H}, 46 \mathrm{H}$ |
| :--- | :--- |
| Meaning | - Upper Cassette is not recognized <br> - Lower Cassette is not recognized |
| Check <br> Point | - Is Cassette fully inserted to main body? <br> - Is the location of J7 CONNECTOR correct? |
| Action | -Try again after checking above situation. <br> - - Check J7 CONNECTOR |



TABLE 9

| CODE | 49H, 4AH |
| :---: | :---: |
| Meaning | - Diverter solenoid or SOL Sensor error <br> - SOL Sensor error |
| Check Point | - Is the location of J7 CONNECTOR correct? <br> - Is the location of J10 CONNECTOR correct? |
| Action | -Try again after checking above situation. <br> - Check J7 CONNECTOR. <br> - Check J10 CONNECTOR |
| $\begin{array}{r} \text { J8 } \longleftarrow \\ \text { J4 } \longleftarrow \\ \text { JP3 } \longleftarrow \\ \text { J2 } \longleftarrow \\ \text { JP2 } \longleftarrow \\ \text { J15 } \longleftarrow \\ \\ \text { J14 } \longleftarrow \end{array}$ |  |

TABLE 10

| CODE | $38 \mathrm{H}, 40 \mathrm{H}$ |
| :--- | :--- |
| Meaning | - Upper Bill-End <br> - Lower Bill-End |
| Check <br> Point | - Are enough notes in the Upper CASH CASSETTE? <br> - Are enough notes in the Lower CASH CASSETTE? |
| Action | - Loading notes in the Upper or Lower CASH CASSETTE |

TABLE 11

| CODE | 3 BH |
| :--- | :--- |
| Meaning | -Note request error |
| Check <br> Point | - Are requested notes of one transaction correct? |
| Action |  |

## 4.5 - 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, startup, 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 MERCHANTIBILITY OR FITNESS FOR A PARTICULAR PURPOSE TO THE EXTENT PERMITTED BY LAW.


#### Abstract

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 STOREAGE 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 $65^{\text {th }}$ 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.

