American Changer

AC2001-GM
Installation, Operation, and Service Manual

Changing the Industry℠

⚠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.

Table of Contents

Section 1 – Product Overview

Section 2 – Setup & Installation

Section 3 – Operational Overview

Section 4 – Maintenance

Section 1 – Product Overview

1.1 – Machine Specifications

Operating Voltage (selectable by switch on power supply)	Set at 115VAC: 90 ~ 132VAC 4.0A
	Set at 230VAC: 180 ~ 264VAC 6.0A
Power Consumption	10 amps
Operating Temperature	0°F to 120°F / -18°C to 49°C
Interface to Coin Hopper	24VDC, 2.5 amps max
Interface to Bill Validator	24VDC, 2.0 amps max
Interface to Printers	24VDC, 4.8 amps max (Motor and Thermal Head)
Cabinet Dimensions	13.5" W x 26.0" H x 13.0" D
	34.29cm W x 66.04cm H x 33.02cm D
Machine Dry Weight	78 lbs / 35.38 kg

1.2 – Warranty Information

PLEASE REFERENCE SECTION 4.4 ON PAGE 26 FOR AMERICAN CHANGER'S DETAILED LIMITED WARRANTY AND EXCLUSIVE REMEDIES. SOME HIGHLIGHTS FROM SAID SECTION ARE:

Bill Validators

Validators are warranted for two years from date of purchase.

Coin Hopper(s) and Logic Board

These items are warranted for one year from 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:

⚠ DANGER   **You can be killed or seriously injured if you don't <u>immediately</u> follow instructions**

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

⚠ CAUTION   **You can be injured if you don't follow instructions**

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

The California Safe Drinking Water and Toxic Enforcement Act requires the Governor of California to publish a list of substances known to the state of California to cause cancer, birth defects, or other reproductive harm, and requires businesses to warn of potential exposure to such substances.

⚠ WARNING

This machine contains, and dispenses, items which contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information please visit www.P65Warnings.ca.gov.

Important Safety Instructions

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

⚠ DANGER

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.

⚠ WARNING

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

For indoor use only.

Solo para usos en el interior.
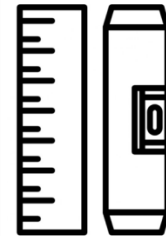
Pour une utilisation en intérieur uniquement.

NOTICE: Ensure this machine is level when installed

NOTICE

Ensure this machine is level when installed.

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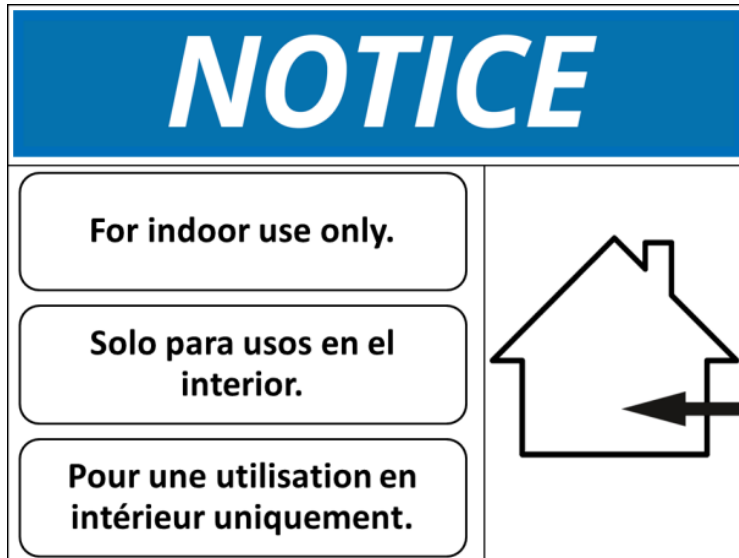
Inspect your machine (product), at a minimum annually, by a qualified service technician.

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

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 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. This ID # starts with "AC or ACC ####." If you purchased Medeco locks with your machine the ID will begin with "7RA ####."

SHIPPING DAMAGE: If the machine was damaged in shipping contact your distributor or American Changer immediately. The shipping carrier needs to be notified in a timely manner.

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 $1, $5, $10 and $20 U.S. dollar bills and pay out 4 coins per dollar (unless otherwise specified at the time of purchase).**

Fill the hopper with a minimum of 100 coins to a maximum of 2,800 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 AC power going to the machine. (Unplug AC line cord from the wall.)

2. Remove the hopper from the cabinet.

3. Note: You will need to verify with the building code enforcement to see if it is allowable to plug the changer into a 3-prong grounded outlet. If it is not, there must be 120VAC run through conduit or other means to meet local codes to the changer. If it is not required, proceed to step #6.

4. 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).

5. After the conduit has been installed, proceed with securing the machine to a stable structure.

6. Locate the 4 punch-outs on the back or side wall of the changer. Using a screwdriver and hammer, remove the punch-outs by striking them from the inside of the machine.

7. Find an appropriate stable structure which to secure the machine to.

8. **NOTICE: BEFORE SECURING ENSURE THE MACHINE IS LEVEL.**
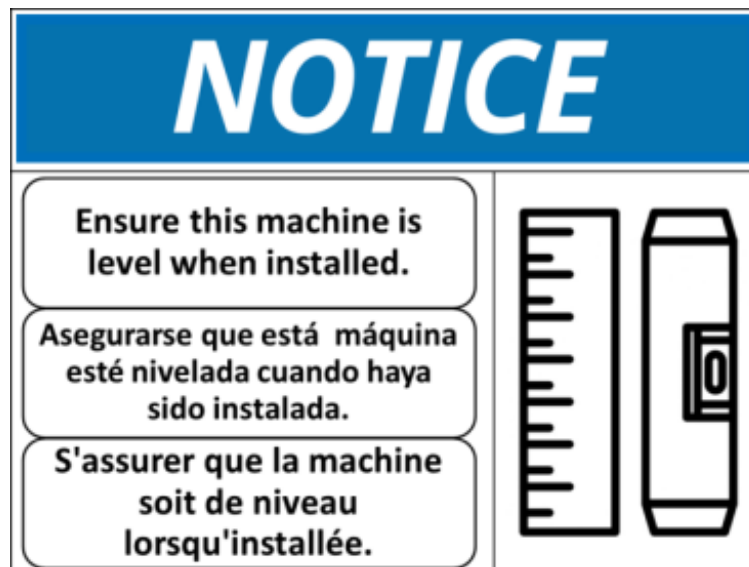
9. **⚠ DANGER**: *PROPERLY SECURE MACHINE (PRODUCT) TO THE FLOOR SO THE MACHINE (PRODUCT) CANNOT BE MOVED OR TIPPED. USE STRUCTURAL SOUND FASTENERS THAT CAN BE PROPERLY TIGHTENED AND SECURE THE MACHINE (PRODUCT) THROUGH EACH OF THE HOLES IN THE BASE OF THE MACHINE (PRODUCT) TO THE APPLICABLE SURFACE TO WHICH IT IS BEING SECURED.*

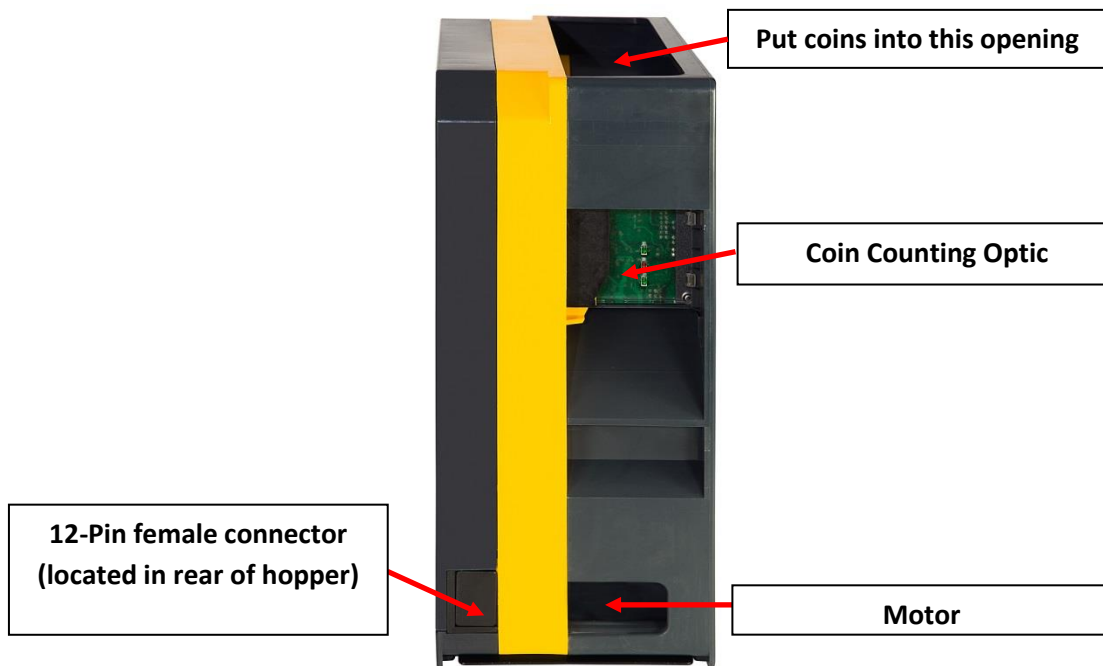10. Verify that the machine is properly secured to the stable structure.

11. Feed the AC line cord out the bottom or the back of the machine by moving the "L" bracket if necessary, and   the perform the following:

   a. Plug the male end into the AC wall outlet. ***Do not use an extension cord unless allowed by the building electrical code***.
   b. Installation is completed. Proceed to the "Programming the Changer" section.

Section 3 – Operational Overview

3.1 – Component Description

Coin Hopper

The hopper can dispense coins or tokens ranging in size from 21.01mm to 30mm in diameter and 1.25mm to 3.30mm in thickness. An option is available to dispense smaller coins. This machine's coin capacity with hopper extension is approximately 2,800 25mm diameter coins.

Put coins into this opening

Coin Counting Optic

12-Pin female connector
(located in rear of hopper)

Motor

Bill Validator

This model machine is 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)
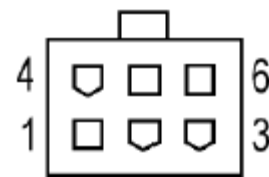
Flex Programmer Board

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.

Connection to Flex-2 Main Logic Board

Inserta Dinero Para
Recivir $.25

Flex-2 Main Logic Board

Coin Hopper

Internal Printer

Flex Programmer Board

External Printer

Bill Validator

Select Switch for accessing the programming menu

24VDC Power Input

SD Card

On/Off Switch
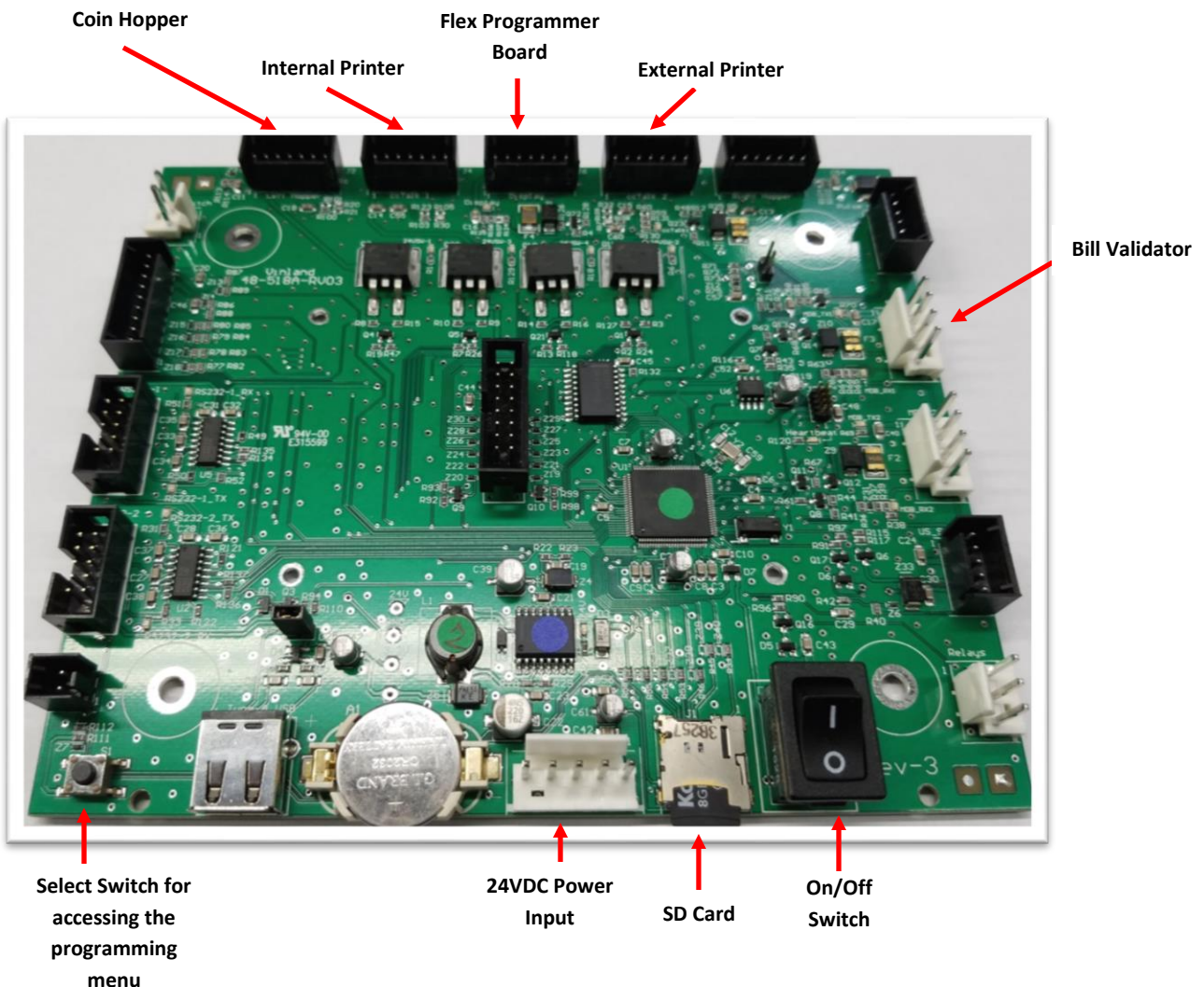
Printers

This machine operates with two printers. The external printer provides a receipt to the person making the purchase. The internal printer prints a copy of the receipt for the owner of the machine to retain. The printer is assigned an address by the placement of a jumper on the printer logic board. The address tells the Flex-2 main logic board which device is the internal printer and which device is the external printer.

Printer In (Internal Printer)   Printer Out (External Printer)

Printer In Jumper Placement   Printer Out Jumper Placement

Jumper →

Jumper →
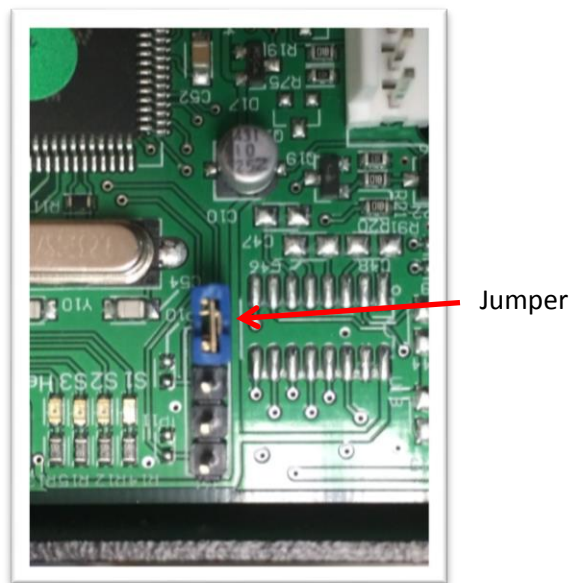
Replacing the Printer Paper
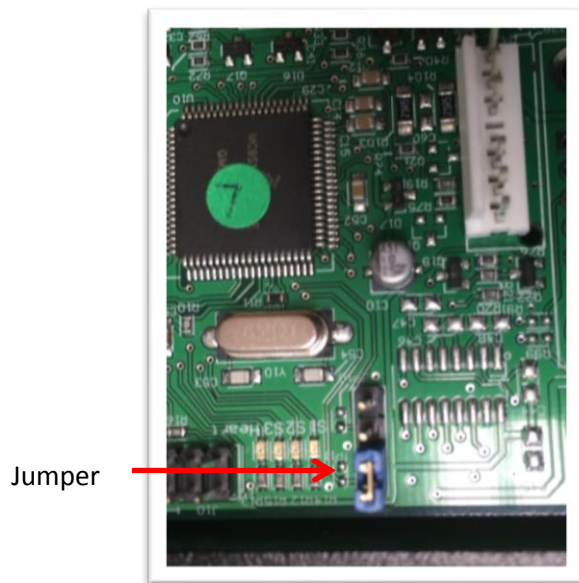
Before the printer paper runs out, you might wish to contact your distributor and order more printer thermal paper. The American Changer part number is **AC7071-01**, and it is a special brand which is hard to find. Many owners of this product make the mistake of purchasing the incorrect paper type or have a problem loading the paper. Please follow the steps of either Method #1 or Method #2 below to properly load your thermal printer with new paper.

Opening in rear of printer. Paper is loaded through this opening

Method #1 – Automatic Feed:
NOTE: This method must be performed with the board power ON.

1. If there is paper remaining on the previous roll, it must be removed before proceeding. Move the "Paper Feed Lever" from the DOWN to the UP position (refer to Figure P2), and then pull out the remaining paper from the rear of the printer and discard the roll.

Paper Feed Lever

Paper Feed Lever in the down position
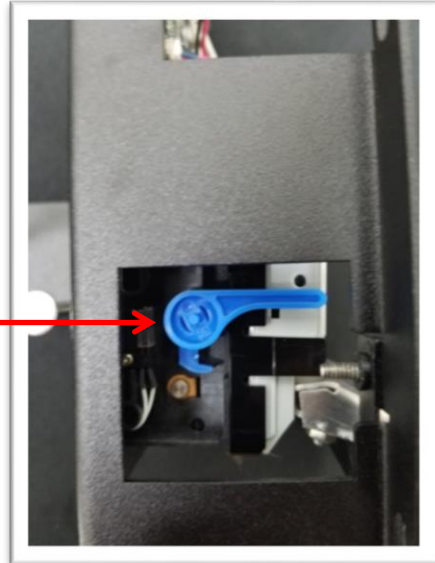
Paper Feed Lever in the up position

2. Move the "Paper Feed Lever" back to the DOWN position. Slide a new roll of paper onto the "Roll Holder," oriented so the paper comes off on the side toward the printer (refer to Figure P3 for the correct placement).
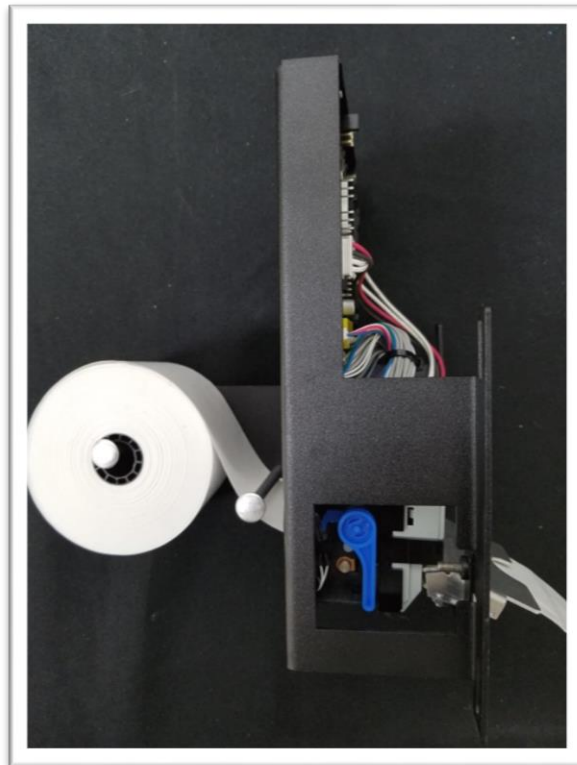
3. Wrap the paper under the "Paper Guide" and begin to feed it into the "Paper Slot." You do not need to fold or cut the paper in any way; it should be left square in the front. At a certain point as the paper is being fed in, the printer will detect it and automatically feed it to the printing position. When done, the setup should look like Figure P3.

1. *IMPORTANT!* Turn OFF the Main Board power, and turn it ON again after a few seconds. *Note: The printer will not work until the power has been cycled!*

2. Enter the Setup Mode and perform a Printer Test. Make sure the printer prints all of the lines of text and cuts off the paper.

Method #2 – Manual Feed:
NOTE: This method can be performed with the board powered ON or OFF.

1. If there is paper remaining on the previous roll, it must be removed before proceeding. Move the "Paper Feed Lever" from the DOWN to the UP position (refer to Figure P2), and then pull out the remaining paper from the rear of the printer and discard the roll.

2. With the "Paper Feed Lever" still in the UP position, slide a new roll of paper onto the "Roll Holder," oriented so the paper comes off on the side toward the printer (refer to Figure P3 for the correct placement).

3. Wrap the paper under the "Paper Guide," and begin to feed it into the "Paper Slot." You do not need to fold or cut the paper in any way; it should be left square in the front. Continue to feed the paper into the slot, through the print head, until it passes out through the front of the machine (refer to   Figure P4).

4. Move the "Paper Feed Lever" back to the DOWN position. The printer is now ready to print.

5. Enter the Setup Mode and perform a Printer Test. Make sure the printer prints all of the lines of text and cuts off the paper.

3.2 Functional Description

1. **Dispense** — The machine can only dispense coins.

2. **Payment** — The machine accepts payment in the form of paper currency only.

3. **Printer** — Two printers are supported in this machine. Printers must be loaded with the latest VIPR-1C-XXX software and must have jumpers in the correct position to be properly identified. See previous page for detailed information on jumper placement.

   3.1 Internal Printer — The printer used for internal use (Identified as "Printer In" in all software menus) prints only duplicate copies of the customer receipt using the Receipt.txt file on the SD card and will always perform a full cut. If there is a problem with the SD card and/or the Receipt.txt file a general receipt will be printed as shown below:

   === Menu 22 for Heading ===
   Fecha : 20**-**-**
   Hora : 15:20
   No. :
   Total : $
   Pago :
   Cambio : $

   3.2 External Printer — The printer mounted on the door (Identified as "Printer Out" in all software menus) prints customer receipts and can be used to print audit reports.

4. **MicroSD Card** — **The microSD card must be present at all times for software to print receipts properly!**

   The microSD card must have a receipt file with this exact name, Receipt.txt. Without this file the system will not function properly.

   The information stored in the file named Receipt.txt is shown on the next page for your reference.

Reciept.txt File Contents

```
# ========== Receipt Definition file ==========
#
# Lines starting with "#" will be ignored
# Lines cannot be longer than 36 characters
# Longer lines will be cut off
# DO NOT USE TABS!
# Information filled in by the computer is indicated by "^^^^^^^^^^"
# The 1st item is  6 characters for the Invoice Sequence,   999999
# The 2nd item is 10 characters for the Date,           DD/MM/YYYY
# The 3rd item is 10 characters for the Total Amount,   999,999.00
# The 4th item is 10 characters for the Paid Amount,       99,9999
# The 5th item is 10 characters for the Change Amount,  999,999.00
#
# NOTE: The above five items must be in proper sequence!
# Only use a plain text editor, for example, Window's Notepad
# The vertical bar "|" in the sample file below shows the 36 character limit
# The filename saved to the SD card shall be named: Receipt.txt
#
#
                  Parqueo Plaza Antigua        |
          Parques Comodos, Sociedad Anónima    |
              Calle Real No. 18 zona 1         |
                 Guatemala, Guatemala          |
                                               |
                    NIT: 7339404-3             |
                                               |
                  FACTURA SERIE B              |
                  No.   ^^^^^^                 |
                                               |
            FECHA DE EMISION: ^^^^^^^^^^        |
                                               |
              Servicio de Entretenimeinto      |
                                               |
              Total     Q ^^^^^^^^^^           |
              PAGO      Q ^^^^^^^              |
              CAMBIO    Q ^^^^^^^^^^           |
                                               |
          Nombre:      _____|
          Nit:         _____|
          Dirección:   _____|
                                               |
                Gracias por su visita,         |
                esperamos que regrese          |
                                               |
            Subjeto a Pago Directo de ISR      |
            No. Resolución: 2008-1-30-21864    |
                   Fecha 13/09/2011            |
              Rango facturas: 5,000 a 50,000   |
```

3.3 – Out-of-Service Conditions & Error Codes

<u>**System Failures**</u>

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 Flex Programmer Board display when the machine is in an "Out-of-Service" mode.

Coin Hopper

Coin Hopper Error Conditions

Opto's — This indicates the coin counting optic is blocked.

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

High Current — The hopper motor exceeded its maximum current rating.

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.

Bill Validator

Bill Validator Error Conditions

Motor — 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. — This means the Flex-2 main logic board is unable to communicate with the bill validator.

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

Printer In/Out		Printer Error Conditions
	Error	An error occurred while printing
	Head Up	Printer head is not in its locked position
	RAM Fail	A RAM failure occurred
	Out of Paper	Paper is not present in the printer
	CRC Failure	A CRC failure occurred
	Cutter Fail	Cutting blade is unable to reset to home position.
	No Comm.	This means the Flex-2 main logic board is unable to communicate with the printer
	High Temp	The thermal head temperature is above its operational range.
MicroSD Card		MicroSD card error conditions
	No Card	An SD card was not detected
	FailInit	The Flex-2 main logic board failed to initialize the SD card
	FailMount	The Flex-2 main logic board failed to mount the SD card driver
	FailDriver	The SD card driver failed

3.4 – Programming Menu

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

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 MENUES 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
Printer In
Printer Out
SD Card
Coin Acceptor
Temperature 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.

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*
Enable or disable the coin acceptor.

Menu 10 – System Disable*
Puts the machine in an "Out-of-Service" mode if any of the selected devices go offline.

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.
The "**Non-resettable Counters**" can be set to 0 by a hidden "Memory Dump".

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 then go by 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 then go by Bill Dispenser's low bill sensor instead.

Menu 25 – Bill Value Cassette Upper*
Enter bill value for upper cassette.

Menu 26 – Bill Value Cassette Lower*
Enter bill value for lower cassette.

Menu 27 – Printer Options
Cash receipt printing options: Always, Never, or Prompt.
Receipt length options: Long or Short. **(For Printer Out only)**
Cut options: Full or Partial. **(For Printer Out only)**

Menu 28 – Enable Validators
Enable or disable the bill validators.

Menu 29 – Nayax Test Mode*

Menu 30 – Country*
Sets country to US or UK.

Menu 31 – Webserver*
Configure Webserver board

Menu 32 – Minimum Credit*
Enter minimum value for credit card transactions.

Menu 33 – Anti Stringing
Setup maximum value, maximum number of times and the shut-off time for anti- stringing purposes.

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 ½ 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.
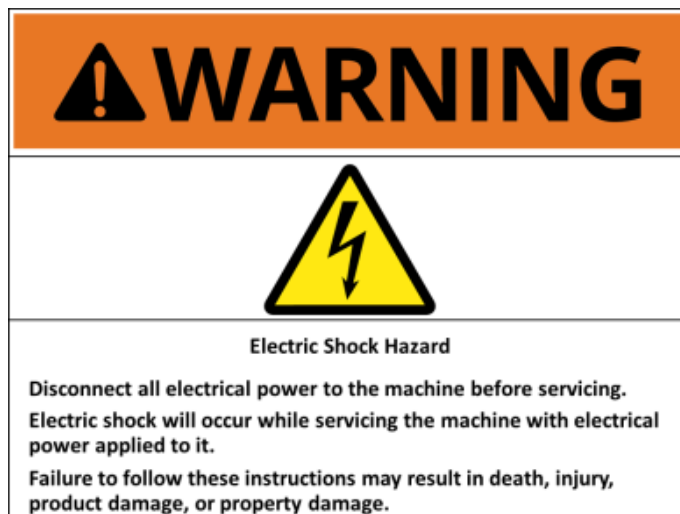
   4.3 **Frame Error V:XXX While Reading File –** There was a checksum error while reading one of the

      files entries.

THE FOLLOWING IS A FATAL ERROR AND THE BOARD CAN NOT BE USED!!

   4.4 **Fatal Error V:XXX Invalid Boot CRC! –** Do not load any software if this message occurs.

Section 4 – Maintenance

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

4.1 – Bill Validator Maintenance

This model machine is sold without a bill validator. The cabinet was designed to fit a CPI Currenza bill validator. Please read below for maintenance information for the CPI Currenza bill validator. If anything other than a CPI Currenza bill validator is being used please refer your bill validator's user manual for proper cleaning and maintenance procedures.

During normal operation dust and dirt accumulate on the optical sensors and the rollers. This could result in reduced acceptance rate. It is recommended to clean the bill path as explained below every 6 months or 60,000 bills whichever comes first.

Remove the cassette.
Open the clamshell by pushing the button as shown below.
Ensure:
No scratches present on the guides and optical sensors.
No dirt or cracks present on the surface of the transport rollers
No dirt on the surface of the optical sensors.
The entire bill path is clean of paper debris or residue.

All dirt must be cleaned with a soft moistened cloth. Isopropyl Alcohol is recommended for cleaning excessively dirty rollers.

DO NOT USE ACETONE OR PETROLEUM BASED PRODUCTS AS THEY COULD CAUSE DAMAGE TO PLASTIC PARTS.

Inspect the cassette chamber to see no bill fragments or paper residue is left behind.
This may be blown away with the use of compressed air.
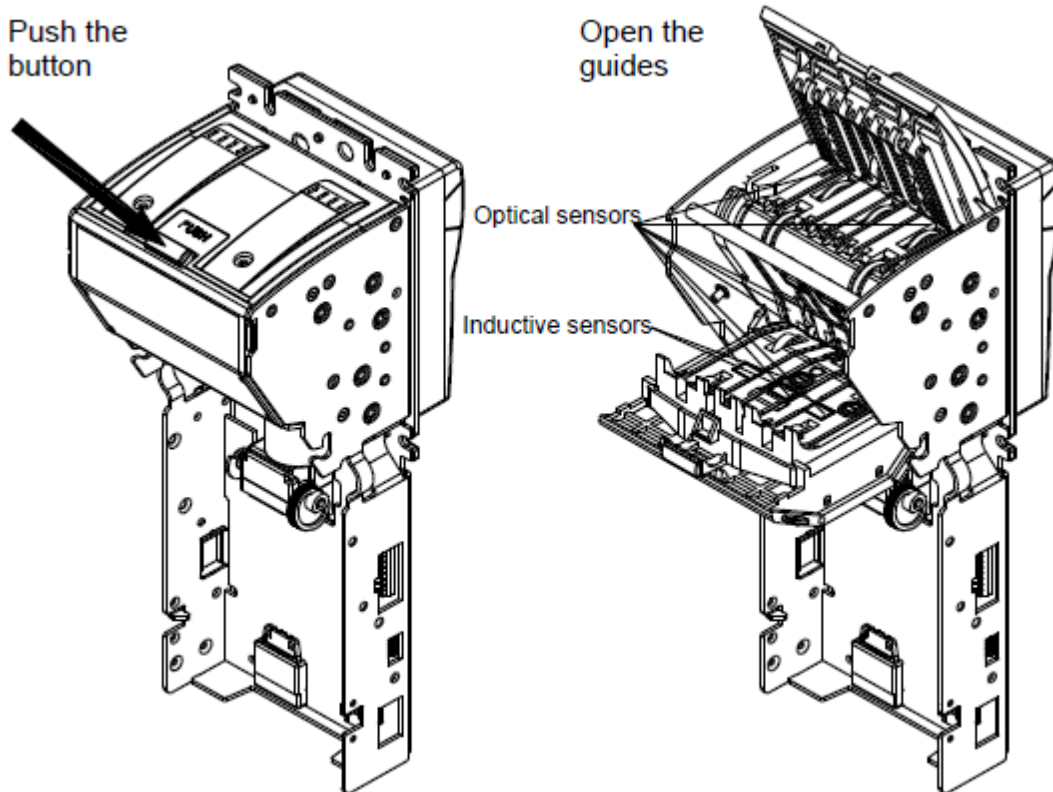
4.2 – Coin Hopper Maintenance

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.

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 Scotch-Brite pad, or another item made with abrasive material, to scrub the oxidation and dirt off of the brass plates.

4.3 – Parts List

Number	American Changer Part #	Description
1	AC2010-GM	AC2000/2001 Cabinet
2	AC3078-PSY	SE-350-24 Power Supply
3	AC8001-FLEX2BD	Flex-2 Main Logic Board
4	AC1002-HEXTASSY	Coin Hopper Extension
5	AC1000-LB	Lock Bracket
6	AC7090.2	Internal Printer
7	AC2061-02	Power Cord
8	AC1047-SUZO	Coin Hopper
9	AC8001-FLXPBD	Flex Programmer Board
10	AC7090	External Printer
11	N/A	Bill Validator (Not Supplied with Machine)
12	AC7071-01	Thermal Printer Paper
13	AC5080-QS	T-Handle
14	AC5400-UCC	Coin Cup Chute
15	AC1013-P	Coin Cup

4.4 – 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 MERCHANTIBILITY 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 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.