

Hamilton Manufacturing Corporation

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Gold Line[®] ACW Parking & Gold Line Plus ACW Parking Operational Manual

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ABOUT THIS MANUAL

PLEASE READ THIS MANUAL CAREFULLY PRIOR TO INSTALLING THIS UNIT. A complete understanding of the operation of this unit is essential for a successful installation. Refer to the Table of Contents for easy navigation through this manual.

This manual was designed to introduce the Gold Line® Parking Autocashier and to provide general information about operation, installation and maintenance. This manual will enable the operator to program the GL-ACW-P, perform audits, detect error codes and perform basic troubleshooting procedures. Also included are pre-programmed factory settings, Item Names and Welcome Messages, as well as a Tokenote® Training Guide for use with the optional Tokenotes®. Basic information is provided for the hopper, stacker and validator. However, if additional information is needed for these components, refer to the appropriate manual. To obtain assistance from the manufacturer, please call (800) 837-5561 or (419) 867-4858. Or contact Hamilton Mfg. online @ <http://www.hamiltonmfg.com>.

When calling for assistance, it is important to have serial numbers readily available. Please record these numbers in the spaces provided.

GL-ACW-P MODEL & SERIAL # _____

CONTROLLER MODEL & SERIAL # _____

HOPPER MODEL & SERIAL # _____

STACKER MODEL & SERIAL # _____

VALIDATOR MODEL & SERIAL # _____

LOCK/KEY # _____

EIC SERIAL # _____ **(OPTIONAL)**

Please complete the warranty card, which was included with your machine, and return it to the manufacturer.

I. INTRODUCTION

- ❑ **The many benefits offered by the GL-ACW-P automated car wash system include:**
 - ◆ Reduced personnel, and thus lower payroll.
 - ◆ Increased security by eliminating the “silent partner” employee theft problem.
 - ◆ Increased operating time as a result of a tireless customer interface that is capable of working 24 hours per day.

- ❑ **The following is a list of features for the GL-ACW-P:**
 - ◆ A large, bright character display that welcomes customers and guides them through their transactions.
 - ◆ It allows customers to pay for one of nine possible parking programs, returning change if necessary.
 - ◆ The GL-ACW-P is capable of accepting Hamilton Tokenotes®. Tokenotes® are paper tokens that are inserted into the Hamilton HVX, XE or STA Validator like dollar bills and used as credit towards the desired parking selection.
 - ◆ Voice prompts to walk customers through the transaction process.
 - ◆ An Out of Service Relay used to signal an auto-dialing modem to contact the owner if the unit shuts down. (Only the signaling relay is provided. The auto-dialer is not included.)
 - ◆ An environmental control unit to help protect against the elements.
 - ◆ Newly designed Relay Panel that includes a Ground Fault Circuit Interrupter.
 - ◆ Universal harnessing and door for ease of adding options.

- ❑ **The following optional equipment is available for use with the GL-ACW-P:**
 - ◆ An External Display featuring a 3" x 18" display area. The External Display is used to display customized messages and to guide customers through transactions by displaying instructions in a large, bold fashion.
 - ◆ Preformed bases that place the GL-ACW-P at the factory recommended height for various mounting situations.
 - ◆ A Lighted Hood, which is recommended if the ACW is mounted on a base.
 - ◆ A hand-held printer used to receive a hard copy of all the audit information collected by the GL-ACW-P.
 - ◆ A receipt printer to offer customers a hard copy of their transaction. This can also be used to print an audit or configuration report.
 - ◆ A credit card acceptance system that gives the capability of accepting all major credit cards.
 - ◆ A variety of bill acceptors. Choose from the Hamilton STA or XE or a Coinco® or Mars® Validator. Tokenote® acceptance is available in the Hamilton STA or XE Validators only.

II. INSTALLATION



NOTE: It is very important to read and understand all of these instructions before attempting installation. **Hamilton will not be responsible for injury due to improper installation.**

The installation process contains two distinct operations, **Mechanical Installation**, and **Electrical Installation**

MECHANICAL INSTALLATION

□ Unpacking

There are a number of points to keep in mind while unpacking your GL-ACW-P. These items will make the installation and continued operation of your machine run smoother. These tips are listed below.

Be sure to save your keys

The keys and lock inserts are placed inside a small cloth bag, then packaged in a cushioned envelope and attached to the outside of the machine. When removing the shrink-wrap, be sure to locate the bag containing the keys and set it aside so it does not get thrown away. **MAKE A PERMANENT RECORD OF THE NUMBERS ON YOUR KEYS IN CASE A KEY IS LOST AND MUST BE REORDERED.**

Remove the packing strap from the hopper

The hopper comes shipped with a packing strap secured around it to minimize the vibrations caused by shipping. If this strap is not removed, the hopper will not tip out for easy filling. The strap may be cut off with a pair of wire cutters or sturdy scissors. Cardboard is placed around the edges of the hopper to protect it during shipping. After removing the strap, be sure to remove the cardboard as well.

Remove all packing debris from the hopper

During unpacking, ensure that debris does not fall into the hopper bowl. If this material is not removed, the hopper could jam. With the power completely disconnected, remove all loose material inside the hopper bowl.

Fill hopper with coins

Before powering up the machine for the first time, it is recommended that the hopper be filled with coins. In order for the hopper to dispense coins, there must be enough coins in the hopper bowl to touch the two sensing plates located at the bottom of the bowl. Otherwise, the hopper will register as empty.

□ Positioning

There are no set guidelines for the placement of the GL-ACW-P. However, it is recommended that the machine is positioned far enough away from the wash entrance to minimize the amount of over spray that may get into the GL-ACW-P. Also, there is a typical height, from the pavement to the bottom of the cabinet, of approximately 26".

❑ **Mounting**

It is recommended that the GL-ACW-P be mounted in a permanent enclosure. Safety is a primary concern, so the equipment must be securely mounted. Hamilton recommends using one of the following methods:

- The first method is to construct a small brick or concrete kiosk that will house the Autocashier. Figure 2-1 gives the GL-ACW-P mounting hole locations. Have your engineer or contractor recommend construction suitable for strength and stability.
- The other method involves mounting the GL-ACW-P on an optional ACW Base described in the INTRODUCTION section. In this situation, the base is secured to the pavement and the GL-ACW-P is secured to the base. Fasteners to be used should be recommended by your engineer as to strength and suitability. If this method is chosen, it is strongly recommended that the optional ACW Lighted Hood be installed. This addition serves to better insulate the GL-ACW-P from harsh environmental conditions as well as offering an attractive lighted top. Contact Hamilton Mfg. for installation instructions for the ACW Lighted Hood.

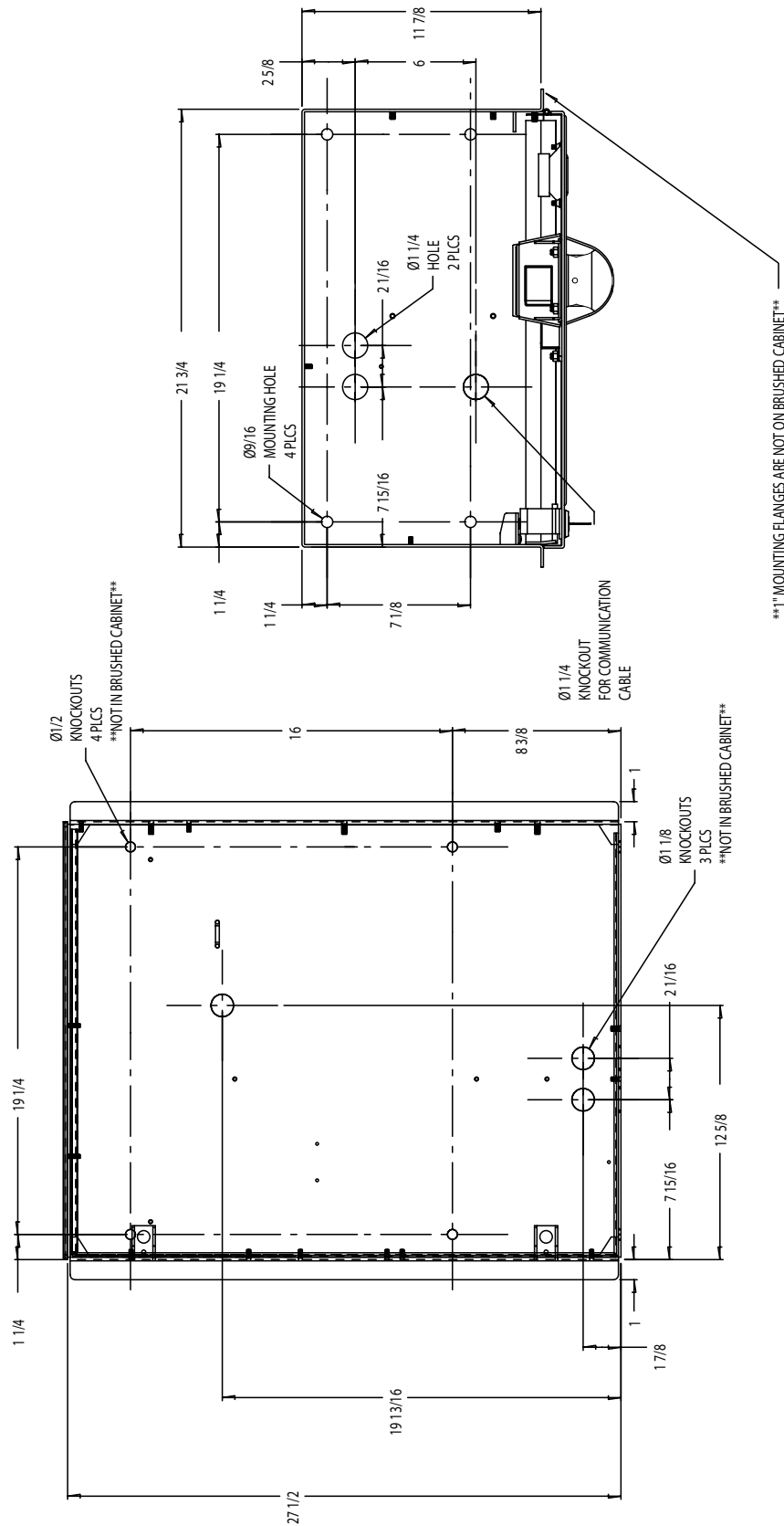
❑ **Running Conduit**

Typical electrical code requires low and high voltage wiring to be run in separate conduits. Because of this, the GL-ACW-P has one ½" conduit holes in the bottom of the cabinet. These bottom holes are matched with identical holes in any of the optional ACW Bases offered by Hamilton Mfg.

NOTE: At least one bottom hole must remain unused at all times.

- Conduit carrying high voltage 120VAC power lines, as well as any signal lines containing 120VAC, should be connected to the bottom left conduit hole, as viewed from the front of the machine.
- Conduit carrying lines with 24VAC, 24VDC, 12VAC or 12VDC signals should be connected to the bottom right conduit hole, as viewed from the front of the machine.
- If any external communication lines (telephone, POS etc.) are used, they should be run through separate conduit.

Figure 2-1 Mounting Details



ELECTRICAL INSTALLATION

CAUTION! TO AVOID SEVERE INJURY OR DEATH, ALWAYS DISCONNECT POWER TO THE MACHINE WHEN SERVICING!

This Autocashier operates on 120 VAC, 60 Hz. This unit uses a 5 AMP Circuit Breaker. This unit needs to be hard-wired with conduit. A **Ground Fault Interrupter** is included with the GL-ACW-P.

□ Pulling Wires

The number of wires needed to be pulled for the GL-ACW-P system is shown below:

Three Wires	Electrical Power (Hot, Neutral and Ground)
Two Wires	For Gate
Two Wires	Cycle Inhibit
Spare Wires	For Future Options

For proper operation of the GL-ACW-P, all wires listed above must be pulled and terminated as explained in the following section.

□ Wire Terminations

The wire terminations should proceed as follows:

- One side of the three power supply wires (120VAC HOT, 120VAC NEU, and 120VAC GND) should be attached directly to the electrical service panel supplying power to the installation. They should be connected to a 15 AMP circuit breaker and the GL-ACW-P should be the only device on this circuit. The other end of these three wires should be routed into the GL-ACW-P through the installed conduit. The wires should be terminated as follows:
 - **L1 (HOT) to terminal C1**
 - **L2 (NEU) to terminal C2**
 - **G (GROUND) to terminal C3.**
- The ITEM 1 wire pair (ITEM 1 SIGNAL and ITEM 1 RETURN) is used to signal the parking controller that a customer has completed a transaction and is ready to enter lot. The signal presented to the parking controller is a normally open, dry contact relay closure. In the GL-ACW-P, connect one end of this pair to terminals A1 and A2 on the Relay Panel terminal block. Refer to your parking controller literature for proper connections on the other end of this pair.
- The CYCLE/INHIBIT pair is used for the parking controller to signal the GL-ACW-P when the ACW should be out of service. The signal coming from the parking controller must be able to energize the coil of a relay on the Relay Panel. This means that the parking controller is supplying both voltage and current when it energizes the coil. Inside the ACW, the wiring connections depend on the signal provided by the parking controller. The CYCLE/INHIBIT pair should be connected directly to the terminal block of the Relay Panel. The proper connection will have one wire of this pair connected to terminal C5 of the Relay Panel (it doesn't matter which one) and the other wire of the pair connected to terminal C6.
- The OUT-OF-SERVICE RELAY is included in the GL-ACW-P. Terminals B3 (normally open), B4 (common) and B5 (normally closed) are supplied as well. If an error occurs that causes the GL-ACW-P to go out of service, the relay will be activated.

❑ **Additional Wire Terminations For Use With The Credit Card System**

The installation of the machine should proceed as outlined in the above section. However, if a Credit Card System is being used, the following must be performed, as well.

- The telephone line used for the ACW must be a dedicated line. No other telephones or equipment can be connected with the same line. **(The use of line splitters is not permitted.)** If more than one machine is to be installed at the same location, a dedicated phone line must be run to each machine.
- The telephone line should be run in a separate conduit. If any other wiring is run in the same conduit, communication problems could occur.

❑ **Setting Cycle Synchronization Switch**

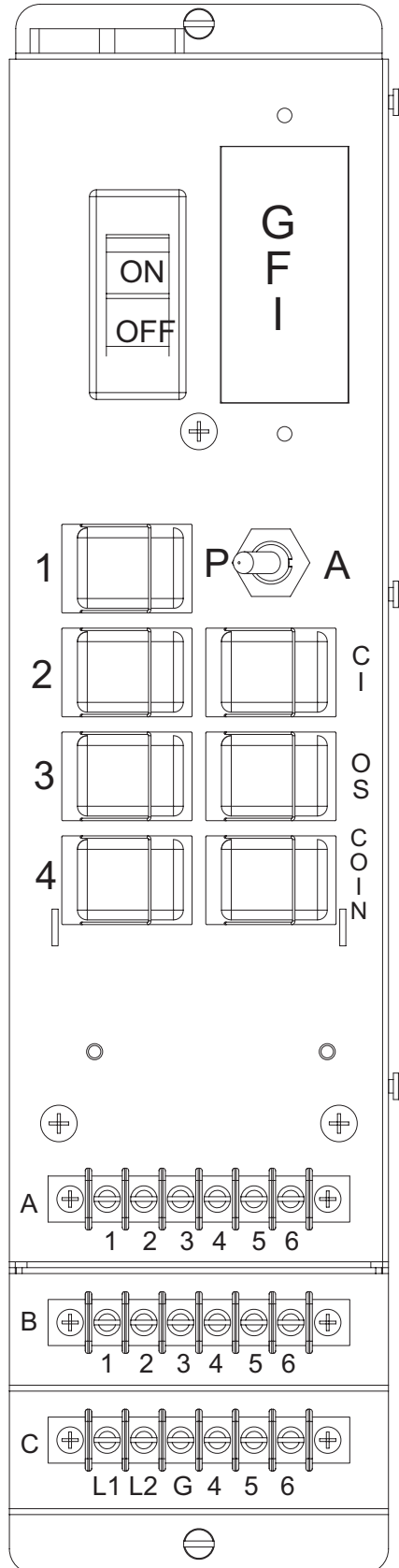
The Cycle Synchronization Switch is the silver toggle switch located on the Relay Panel. If an external signal is being used to inhibit the operation of the GL-ACW-P this switch determines how the Cycle/Inhibit relay should operate. In the **(A)** active mode external power must be supplied to the coil of the relay during normal operation then removed to inhibit the GL-ACW-P. In the **(P)** passive mode no external power is supplied to the coil of the relay during normal operation. The coil would be energized to inhibit the GL-ACW-P. When not using an external inhibit signal this switch should be set to the **(P)** passive mode.

❑ **General Test**

After completing all of the steps under **Mechanical** and **Electrical Installation**, be sure to test the following items for proper function.

- Turn on power at the Relay Panel.
- Be sure to test all facets of the operation, including the bill acceptor and coin acceptors.
- Test for proper actuation of gate and Cycle/Inhibit control.
- Ensure that coins are being dispensed for both change and as a refund. If there are any problems refer to the TROUBLESHOOTING section or contact Hamilton Mfg.

Figure 2-2 Relay Panel



ELECTRICAL INSTALLATION Cont.

CAUTION! TO AVOID SEVERE INJURY OR DEATH, ALWAYS DISCONNECT POWER TO THE MACHINE WHEN SERVICING!

This Autocashier operates on 120 VAC, 60 Hz. This unit uses a 5 AMP Circuit Breaker. This unit needs to be hard-wired with conduit. A **Ground Fault Interrupter** is included with the GL-ACW-P.

□ Pulling Wires

The number of wires needed to be pulled for the GL-ACW-P system is shown below:

Three Wires	Electrical Power (Hot, Neutral and Ground)
Two Wires	For Gate
Two Wires	Cycle Inhibit
Spare Wires	For Future Options

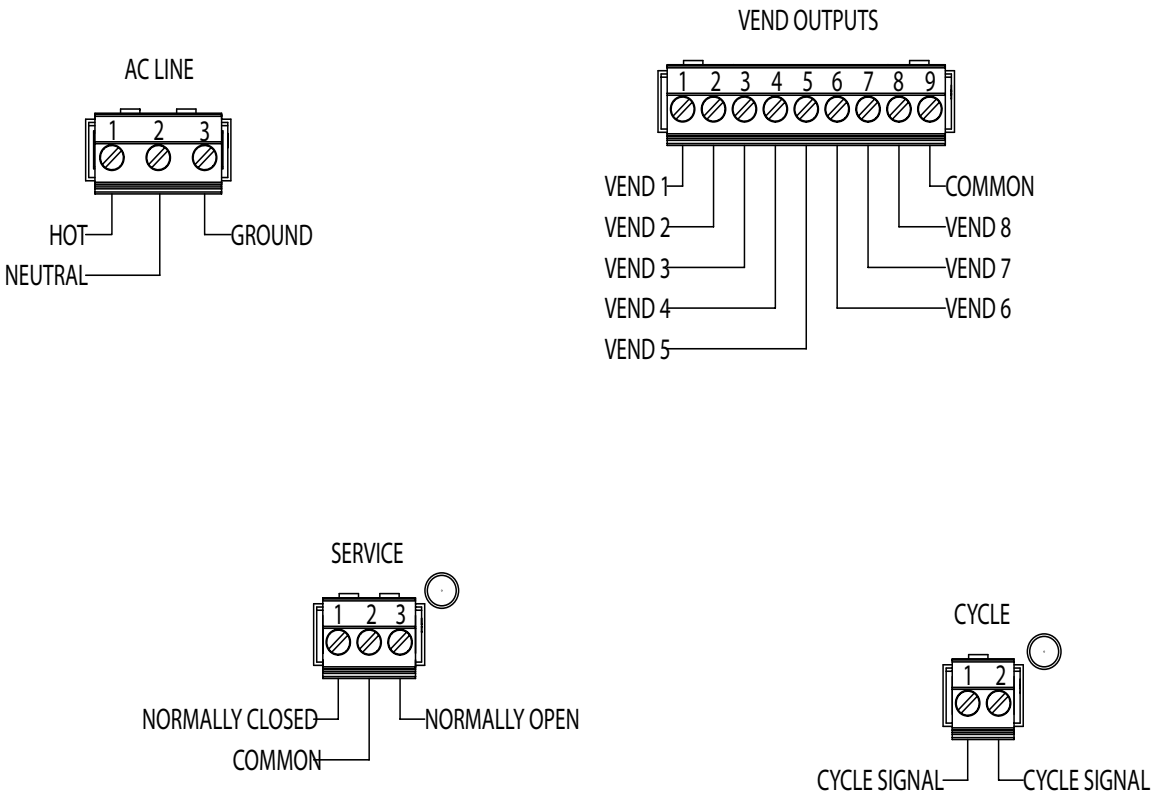
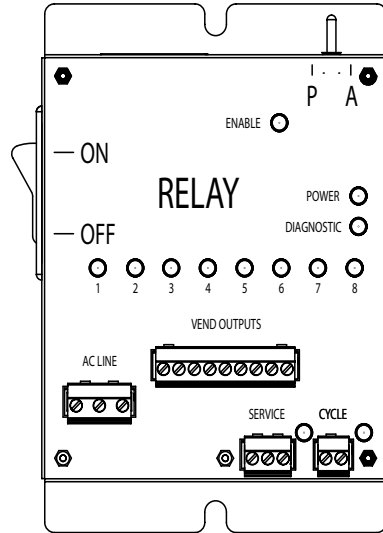
For proper operation of the GL-ACW-P, all wires listed above must be pulled and terminated as explained in the following section.

□ Wire Terminations

The wire terminations should proceed as follows:

- One side of the three power supply wires (120VAC HOT, 120VAC NEU, and 120VAC GND) should be attached directly to the electrical service panel supplying power to the installation. They should be connected to a 15 AMP circuit breaker and the GL-ACW-P should be the only device on this circuit. The other end of these three wires should be routed into the GL-ACW-P through the installed conduit. The wires should be terminated as follows:
 - **L1 (HOT) to terminal C1**
 - **L2 (NEU) to terminal C2**
 - **G (GROUND) to terminal C3.**
- The Vend 1 wire and Common wire are used to signal the parking controller that a customer has completed a transaction and is ready to enter lot. The signal presented to the parking controller is a normally open, dry contact relay closure. In the GL-ACW-P, connect one end of this pair to terminals Vend 1 and Common 11 on the Universal Relay Panel Phoenix connector. Refer to your parking controller literature for proper connections on the other end of this pair.
- The CYCLE/INHIBIT pair is used for the parking controller to signal the GL-ACW-P when the ACW should be out of service. The signal coming from the parking controller must be able to energize the coil of a relay on the Relay Panel. This means that the parking controller is supplying both voltage and current when it energizes the coil. Inside the ACW, the wiring connections depend on the signal provided by the parking controller. The CYCLE/INHIBIT pair should be connected directly to the Phoenix connector of the Universal Relay Panel. The proper connection will have one wire of this pair connected to Cycle 1 of the Universal Relay Panel (it doesn't matter which one) and the other wire of the pair connected to Cycle 2.
- The OUT-OF-SERVICE RELAY is included in the GL-ACW-P. Phoenix connector "Service" S3 (normally open), S2 (common) and S1 (normally closed) are supplied as well. If an error occurs that causes the GL-ACW-P to go out of service, the relay will be activated.

Universal Relay Panel



III. OPERATION

NORMAL OPERATION

When a customer drives up to the Autocashier, they are greeted by a bright display that welcomes and/or instructs them on how to proceed.

When operating in the FEE ON ENTRY or FEE ON EXIT mode a flat fee is charged depending on which time zone is active. The customer is prompted to deposit that amount. Once the customer has deposited enough credit in money, tokens, credit or Tokenotes to pay the parking fee, the transaction is complete. At this point, the GL-ACW-P will:

- Return any necessary change.
- Activate the gate.
- Signal the driver to proceed by displaying the Proceed Messages.
- After several seconds of displaying the message, the display will return to the sequencing Welcome Messages and the system prepares for the next transaction.

When operating in the FEE BY TIME mode a customer exiting the lot is first prompted to enter the code from the ticket issued at the point of entry. The Hamilton *Time Pass* system then calculates the elapsed time and computes the fee. Next, the customer is prompted to deposit that amount. Once the customer has deposited enough credit in money, tokens, credit or Tokenotes to pay the parking fee, the transaction is complete. At this point, the GL-ACW-P will:

- Return any necessary change.
- Activate the gate.
- Signal the driver to proceed by displaying the Proceed Messages.
- After several seconds of displaying the message, the display will return to the sequencing Welcome Messages and the system prepares for the next transaction.

AUXILIARY STATUS RELAYS

There are four relays located on the left side of the Relay Panel numbered 1 – 4 (see Figure 2-2). Relay 1 fires momentarily when the GL-ACW-P has completed the transaction to signal the gate to open. The normally open contacts for Relay 1 are at terminals A1 and A2 on the Relay Panel. The remaining three relays provide some optional status signals as follows:

- Relay 2 goes active at the same time as relay 1, to open a gate. A typical application for Relay 2 would be to connect it to an external counter to keep track of the number of cars entering or exiting the lot. The normally open contacts for Relay 2 are at terminals A3 and A4 on the Relay Panel.
- Relay 3 goes active whenever events 1–8 are active and goes off when the base event 0 is active. This signal is intended for use with the Hamilton *Time Pass* system in order to inhibit the Ticket Dispenser from issuing a ticket when the Autocashier is in one of the higher

priority flat rate events. The normally open contacts for Relay 3 are at terminals A5 and A6 on the Relay Panel.

- Relay 4 goes active whenever an active event is programmed as closed. An application for this signal would be to inhibit the entry gate when the GL-ACW-P is at a time when it is programmed to have the parking lot closed. The normally open contacts for Relay 4 are at terminals B1 and B2 on the Relay Panel.

DISTRIBUTION PANEL

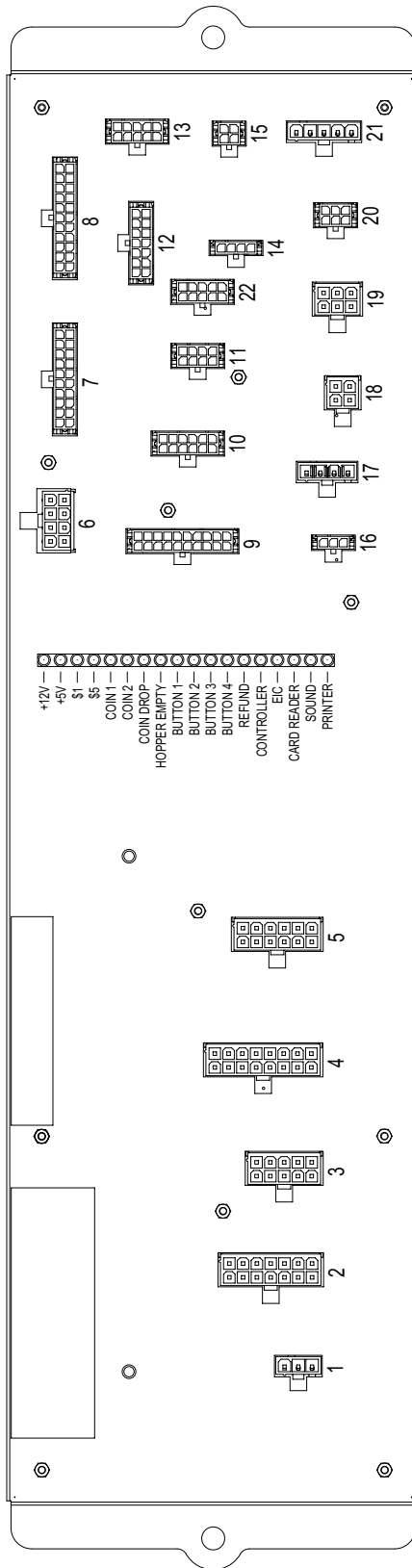
The Distribution Panel is the distribution point for connections to individual components. When removing harnesses from the Distribution Panel, you must first squeeze the release tabs on the connectors. The harnesses are connected as follows:

1	DC Power Supply Input	12	Keypad
2	ACW Controller AC1	13	Sound
3	Hamilton Stacker/Validator	14	Credit Card
4	Relay Pan	15	ACW Internal Display
5	Hopper/24V Transformer Input	16	POS N/A
6	DC Power Supply Output	17	External Serial Interface
7	ACW Controller DC1	18	External Display
8	ACW Controller DC2	19	3rd Party Validator
9	Printer	20	Coin Mechs
10	EIC	21	24V Transformer Output
11	YES, NO and REFUND Select Buttons	22	Wash Select Buttons Eight Function

A series of red LED's on the Distribution Panel will help in the troubleshooting process. The following is a list of their indications. See Figure 3-1 for a complete diagram of the Distribution Panel.

+12V	Should always be on. If it is off, check AC power supplies and fuses under Hopper as well as GFI.
+5V	Same as above.
\$1	Should flash when a \$1 or a Tokenote is accepted.
\$5	Should flash when a \$5, \$10, \$20 or Tokenote is accepted.
COIN 1	Will flash when a coin is accepted in Coin Mech #1.
COIN 2	Will flash when a coin is accepted in Coin Mech #2.
COIN DROP	Will flash each time a coin is paid out of the Hopper.
HOPPER EMPTY	Will be on steady when Hopper is empty.
BUTTON 1	Will flash when the selection buttons or the refund button is pressed.
BUTTON 2	
BUTTON 3	
BUTTON 4	
REFUND	
CONTROLLER	Flashes as Controller communicates with EIC.
EIC	Flashes as Controller receives signal back from EIC.
CARD READER	Will flash when card is swiped.
SOUND	Will flash when voice is operating.
PRINTER	Will be on steady while report is printing from external printer.

Figure 3-1 Distribution Panel



ENVIRONMENTAL CONTROLLER

The Environmental Controller is used to maintain temperature in the GL-ACW-P. It contains the two replaceable fuses, as well as the thermostat. See Figures 3-2 and 3-3 for illustrations of their locations.

2 Amp Fuse

The 2 amp fuse is on the primary side of two 24VAC transformers that power the coin mechs, external display and 3rd party validators.

5 Amp Fuse

The 5 amp fuse is for the fan and heater.

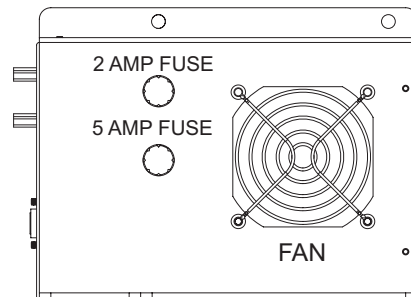


Figure 3-2 Left Side View

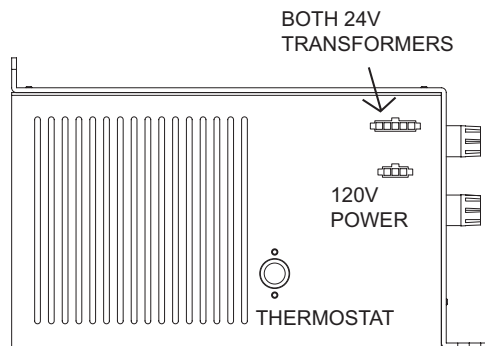


Figure 3-3 Rear View

IV. AUDITS

For added security, the GL-ACW-P contains two complete sets of audits.

The RESETTABLE audit categories include:

- INVENTORY DEPOSITS?
- INVENTORY VENDING?
- INVENTORY OVERPAID?
- AUDIT VAULT COUNT?

The NON-RESETTABLE audit categories include:

- TOTAL DEPOSITS?
- TOTAL VENDING?
- TOTAL OVERPAID?
- TOTAL VAULT COUNT?

The information stored is the same for both sets. However, the RESETTABLE AUDITS are values accumulated since the last time the audits were cleared. The NON-RESETTABLE AUDITS contain values accumulated throughout the entire life of the controller while it has been inside the GL-ACW-P.

For details on how to view the audit information on your GL-ACW-P, refer to the PROGRAMMING section. (It may be necessary to read the entire section to get a complete understanding of how the controller functions.)

The information stored in each audit is described below.

Inventory and Total Deposits

The DEPOSITS category shows a complete dollar amount of everything deposited into the machine, minus the change returned to the customer. It is broken down into three subcategories, CASH, TOKENS and CARDS. The CASH deposit subcategory gives a total dollar amount of all \$1, \$5, \$10, \$20 bills and quarters deposited. It takes into consideration change that has been returned to the customer, displaying the amount of profit made. The TOKEN deposit subcategory gives a total dollar amount of all Tokenotes® and token coins deposited. The CARDS subcategory gives the total dollar amount of all WashCard®, debit card and credit card transactions, if applicable.

Inventory and Total Vending

The VENDING category gives a complete breakdown of each parking use purchased and the method of payment for each wash. It does this by showing the total amount of cash received in payment for each of the parking options as well as the dollar amount of token credit and debit card credit received. The VENDING category also takes into consideration the amount of change that has been returned to the customer, displaying the amount of profit made.

Inventory and Total Overpaid

The OVERPAID category totals the amount of change that could not be dispensed to customers. Most frequently, this category is adjusted when the coin hopper is empty and the GL-ACW-P is operating in

the USE EXACT AMOUNT mode. If a customer deposits more than the selected wash price, the difference between the amount deposited and the selected wash price will be added to the overpaid categories.

Audit and Total Vault Count

The VAULT COUNT category gives a complete breakdown of all deposits and cash pay outs. It does this by offering specific counts on the number of each denomination bill that has been deposited, the number of each type of Tokenote® deposited, and the number of token coins, debit card approvals and quarters deposited. There is also a count of the number of quarters dispensed as change.

Clear Resettable Inventories

Clearing the RESETTABLE INVENTORIES has the effect of zeroing out all values and counts that have been accumulated since the last time these inventories were cleared. The categories affected are INVENTORY DEPOSITS, INVENTORY VENDING, INVENTORY OVERPAID, and AUDIT VAULT COUNT. The NON-RESETTABLE categories remain unchanged. Refer to the PROGRAMMING section for details on how to clear the inventories.

CONFIGURATION REPORT

At the top of the Configuration Report the title of the report and the date will be displayed. Next the settings for:

- Token Coin Mode
- Token Coin Value
- Tokenote Mode
- Tokenote Value
- Coupon #1 Value
- Coupon #2 Value
- Coupon #3 Value
- Coupon #4 Value

The rest of the Configuration Report is divided into nine different categories.

Event

This category shows the prices set for the nine available events. (0-8)

Programed Proceed Prompts

The four available lines of the Proceed Prompts are displayed.

Custom Proceed Prompts

The eight Custom Proceed Prompts are displayed.

Programed Welcome Prompts

The four available lines of the Welcome Prompt are displayed.

Custom Welcome Prompts

The eight available lines of the Custom Welcome Prompts are displayed.

Programmed Closed Prompts

The four available lines of the Closed Prompt are displayed.

Custom Closed Prompts

The eight available lines of the Custom Closed Prompts are displayed.

Custom External Display Message

The first and second half of the four available External Display Messages is displayed.

At the bottom of the report the settings for the following are displayed:

- Empty Mode
- Hopper Contents
- Pay Default
- Refund Button
- Receipt Headers (1-8)
- Receipt Mode
- Printer Model
- Unit Number
- Fee Mode
- Welcome Delay
- Vend Duration
- Proceed Time

AUDIT REPORT

At the top of the report, the date and time that the report was generated will be displayed, followed by the settings for:

Event

The nine events (0-8) will be listed along with type, start, end and fee.

Cashier Data Sales-Resetable

The resettable inventory for cash, tokens and card.

Cashier Data Sales-Perpetual

The non erasable inventory for cash, tokens and card.

Transaction Summary

The resettable and perpetual inventory of bills, coins, tokens, tokenotes, cards and the hopper coin out count.

Reconciliation Of Current Cash

This area will show currency deposited, coins deposited and dispensed, net coins and cashier balance.

V. PROGRAMMABLE OPTIONS

The GL-ACW-P has a number of programmable options that can be used by the parking lot owner to customize the operation of the machine. These programmable options give the car wash owner the ability to:

- ◆ Set the desired prices
- ◆ Program custom messages
- ◆ Program the amount of credit given for token coins and/or Hamilton Tokenotes®

The following is a description of all of the programmable options, in the order they will be encountered in the PROGRAMMING MODE. For information on how to program these options, refer to the PROGRAMMING section.

SET ITEM PASSWORDS

This category allows for a code to be created to discount or activate a gate. (For units with keypads only)

Token Coin Mode

There are two choices for the TOKEN COIN MODE, MULTIPLE CREDITS and SINGLE CREDIT. MULTIPLE CREDITS allows the customer to insert as many token coins as necessary to pay for the selected rate. The SINGLE CREDIT MODE, limits the customer to receiving credit for only one token coin per transaction. SINGLE CREDIT MODE is often used when token coins are distributed as a promotion to get customers to choose your lot for reduced parking rates. By only accepting one credit per customer, the customer will not be able to accumulate the promotional token coins and receive free parking. In this mode, you will still be collecting some revenue on every car parked.

Token Coin Value

This category is used to program the amount of credit given when a token coin is accepted by the GL-ACW-P. The value can be anything from \$0.00 to \$63.75 programmable in \$0.25 increments.

Tokenote® Mode

There are two choices for the TOKENOTE® MODE, MULTIPLE CREDITS and SINGLE CREDIT MODE. MULTIPLE CREDITS allows the customer to insert as many Tokenotes® as necessary to pay for parking. The SINGLE CREDIT MODE, on the other hand, limits the customer to receiving credit for only one Tokenote® per transaction. SINGLE CREDIT MODE is often used when Tokenotes® are distributed as a promotion to get customers to choose your lot for reduced parking rates. By only accepting one credit per customer, the customer will not be able to accumulate the promotional Tokenotes® and receive a free wash. In this mode, you will still be collecting some revenue on every car parked.

Tokenote® Value

This category is used to program the amount of credit given when the validator accepts a Tokenote® trained without a Training Coupon. The value can be anything from \$0.00 to \$63.75 programmable in \$0.25 increments.

Coupon Values

This category is used to program the amount of credit given when a Tokenote, trained with one of four Training Coupons (Coupon #1 – 4), is accepted by the validator. Each coupon can have a separate value for

each of the four washes that range from \$0.00 to \$63.75 programmable in \$0.25 increments.

Set Fee Mode

This category is used to select how the parking fee is calculated and displayed to the customer. The FEE ON ENTRY and FEE ON EXIT modes determine the charges based on the time zone and fees set in the SET FEES category. Both of these modes display a flat fee to the customer. The difference is that the voice prompting has been tailored for a customer either entering the lot or exiting the lot. The FEE BY TIME mode is used in conjunction with the Hamilton *Time Pass* system, which calculates the fee, based on the amount of time the customer has been parked. If this mode is selected the customer is first prompted to enter a code from the ticket received on entry. The GL-ACW-P then transmits this code to the *Time Pass* controller where the fee is calculated and returned for display to the customer.

Set Fees

When operating in the FEE ON ENTRY or FEE ON EXIT mode, this category is used to program the price for each of the nine parking selections available on the GL-ACW-P. The values can be anything from \$0.25 to \$99.75 programmable in \$.25 increments.

The nine parking selections are numbered 0-8. The Base Fee or the Fee that will be charged the majority of time is set in position 0.

Additional fees that will be charged for specific events or days will be entered in positions 1-8.

You must keep in mind that when programming in positions 1-8 that position 1 will override position 0, position 2 will override position 0 & 1, position 3 will override position 0, 1 & 2 and so on. The larger position number will always override a lower position number.

Example:

- If you wish to have three different pricing levels programmed at your lot (\$5 for daytime Monday – Friday 6AM- 5:30PM, \$2 for night time Monday – Friday 5:30PM – 6AM and \$10 weekends 6AM Saturday – 6AM Monday).
- The Monday – Friday 6AM-5:30PM would be the Base Fee programmed in position 0.
- The night fee (Monday – Friday 5:30PM – 6AM) would be programmed in position 1.
- Finally place the weekend fee in position 2.

NOTE: Always keep in mind that the larger position number will always override a lower position number.

Set Lost Ticket Fee

This category is used when operating in the FEE BY TIME mode as part of the Hamilton *Time Pass* system. It allows an operator to set a fixed fee that will be charged whenever a customer enters the lost ticket code of *1234. With appropriate signage at the lot, this fixed code can be used by a customer that may have lost the ticket that was issued to them when they entered the parking lot. Usually the Lost Ticket Fee would be set to the highest amount likely to be charged for parking in the lot. This eliminates any incentive for a customer to use the lost ticket code instead of the code on the ticket he was issued; while still providing a method for someone that has truly lost their ticket to make payment and exit the lot. The Lost Ticket Fee can be set to any value from \$0.25 to \$99.75 program-

mable in \$0.25 increments. If you do not want to use this feature it can also be set to DISABLED which causes the *1234 code to be ignored.

Proceed Prompts

This category is used to select the sequencing messages that are seen after a customer pays for parking and is waiting to proceed into the wash. There are up to four sequencing Proceed Prompts possible. These four messages may be chosen from a list of pre-programmed messages or a custom message may be created. Up to eight different custom messages can be programmed. If a ninth custom message is attempted, it overwrites the first custom message programmed. Once a custom message is programmed, it will be listed along with the pre-programmed messages when scrolling through the available message choices. These custom messages can be deselected or overwritten, but never erased. If you do not wish to use all four messages, simply program the desired messages with the pre-programmed or custom messages and program the remaining messages with the “-NOT USED-” message located in the pre-programmed message list. This message will not appear on the screen. When this message is encountered in the message sequence, it automatically skips to the next message in the sequence without any time delay.

Proceed Prompts Example: To guide a customer through a transaction, the following messages may be selected:

PROCEED MESSAGE #1	“THANK YOU”
PROCEED MESSAGE #2	“PLEASE DRIVE AHEAD”
PROCEED MESSAGE #3	“-NOT USED-”
PROCEED MESSAGE #4	“-NOT USED-”

Welcome Prompts

This category is used to select the sequencing messages that are seen when a customer first pulls up to the GL-ACW-P. There are up to four sequencing Welcome Messages possible. These four messages may be chosen from a list of pre-programmed messages or a custom message may be created. Up to eight different custom messages can be programmed. If a ninth custom message is attempted, it overwrites the first custom message programmed. Once a custom message is programmed, it will be listed along with the pre-programmed messages when scrolling through the available message choices. These custom messages can be deselected or overwritten, but never erased. If you do not wish to use all four messages, simply program the desired messages with the pre-programmed or custom messages and program the remaining messages with the “-NOT USED-” message located in the pre-programmed message list. This message will not appear on the screen. When this message is encountered in the message sequence, it automatically skips to the next message in the sequence without any time delay.

Welcome Prompts Example: To guide a customer through a transaction, the following messages may be selected:

WELCOME MESSAGE #1	“TO ENTER LOT”
WELCOME MESSAGE #2	“DEPOSIT”
WELCOME MESSAGE #3	“-NOT USED-”
WELCOME MESSAGE #4	“-NOT USED-”

Closed Prompts

This category is used to select the sequencing messages that are displayed when the GOLD LINE ACW

PARKING is signaled that the lot is full or it is programmed to be disabled. There are up to four sequencing messages possible. The four messages may be chosen from a list of pre-programmed messages or a custom message may be created. Up to eight different custom messages can be programmed. If a ninth custom message is attempted, it overwrites the first custom message programmed. Once a custom message is programmed, it will be listed along with the pre-programmed messages when scrolling through the available message choices. These custom messages can be deselected or overwritten, but never erased. If it is undesirable to sequence through all four messages, program the desired messages with pre-programmed or custom messages and program the remaining messages with the “ — NOT USED —” message located in the pre-programmed message list. This message will not appear on the screen. When this message is encountered in the message sequence, it will automatically skip to the next message in the sequence without any time delay. As a programming example, to tell a customer that the lot is full and to try again some other time, the Closed Messages may be programmed as follows:

Closed Prompts Example: To guide a customer through a transaction, the following messages may be selected:

CLOSED MESSAGE #1	“PARKING LOT FULL”
CLOSED MESSAGE #2	“PLEASE COME AGAIN”
CLOSED MESSAGE #3	“—NOT USED—”
CLOSED MESSAGE #4	“—NOT USED—”

Ext Display Messages

This category is used to program up to four personalized External Display messages. The messages displayed are divided into two halves.

Set Date & Time

This category is used to program the current day, date and time. The time is programmed similar to the following example:

WED_05-30-01_05:30_P

The day is selected followed by the month, date, and year, then the hour and minute, and finally the AM/PM specification.

Set Empty Mode

This category is used to program how the GL-ACW-P will respond when the hopper runs out of coins. There are two choices, OUT OF SERVICE and USE EXACT AMOUNT. If OUT OF SERVICE is selected and the hopper goes empty, the display will stop showing the Welcome Messages and instead show the sequencing messages “OUT OF SERVICE” and “HOPPER EMPTY”. When this occurs, the bill acceptor and coin acceptors will be deactivated so no further transactions can occur until the hopper is filled with coins. If USE EXACT AMOUNT is selected and the hopper goes empty, the bill acceptor and coin acceptors will remain activated and the display will stop showing the Welcome Messages and instead show the sequencing messages “USE EXACT AMOUNT” and “NO CHANGE RETURNED”. In this mode, it is possible to continue performing transactions even though the hopper is empty since the customer is being notified that no change will be returned and the exact amount must be deposited.

Set Hopper Contents

This category is used to set the type of coin being dispensed from the hopper. It can be quarters, \$1 coins or \$2 coins.

Set Bonus Tokens

This category is used to set the amount of bonus tokens being dispensed per transaction. The amount of tokens that can be dispensed range from 0 to 9. The hopper contents must be set for tokens for the bonus coins to be dispensed.

Set Bill Dispenser

This category is used to set the denomination of bill that will be dispensed from the bill dispenser. Note: The bill dispenser must be enabled to dispense bills. The only denomination that can be dispensed are the \$1 and \$5 dollar bill.

Set Change Rule

This category is used to set the amount of change that is dispensed from the hopper when both the hopper and bill dispenser are enabled to dispense bills. Note: If machine is set to quarters in the hopper and \$1 bills in the bill dispenser. The change rule can be to \$1.00 to always give four quarters first before defaulting to the bill dispenser for the rest of the change. The change rate can be set from \$0.00 to \$20.00

Set Pay Default

This mode is used when a fault is detected in one of the payment devices, such as the validator or one of the coin acceptors. There are two options to choose from in this mode, USE ALT PAYMENT or OUT OF SERVICE. If a fault has been detected and the default payment mode is set to OUT OF SERVICE, the ACW will shut itself down until the error has been corrected. However, if the default payment mode is set to USE ALT PAYMENT, the ACW can continue operating, even if there is a fault in one or more of its payment devices. The display will give examples for payment methods that will be accepted. If all payment options are determined to be faulty, the machine will shutdown, displaying an error message for the last device to have a problem.

Set Refund Enable

This category is used to enable or disable the refund button.

Receipt Headers

When using the optional receipt printer, this category allows up to 8 customized lines of text to be printed on the top of every receipt printed.

Set Receipt Mode

When using the optional printer, this category offers a choice of when a receipt will be printed. You may select from NEVER, ALWAYS, or ASK.

Set Printer Model

When an optional printer has been installed, this category selects which specific model of printer will be supported.

Set Unit Number

Allows you to set the unit number for the ACW when it is connected to a Hamilton Time Pass network. Each ACW on the network must have a unique unit number.

Set Welcome Delay

This category is used to set the verbal welcome greeting to be delayed from 0 to 30 seconds. This allows a customer time to completely drive up to the ACW and open their window before the welcome greeting begins speaking.

Vend Duration

This category is used to program the length of time that the GL-ACW-P turns on its vend relays. The vend relays get turned on to signal the parking gate that the customer has finished the transaction and is ready to drive ahead. The length of time these relays should be held depends on the requirements of the particular parking gate being used. Refer to the parking gate manual before setting this category. The possible values range from 0.1 - 4.0 seconds.

Set Proceed Time

parking lot after the customer has completed a transaction. The possible values range from 1 to 9.9 seconds. **The PROCEED TIME must be longer or equal to the VEND DURATION. If the PROCEED TIME is set for a shorter time, the value of the VEND DURATION will also be used as the PROCEED TIME.**

Time Event Status

This category is a non-programming category. The category only displays the status of the event which is enabled. In addition, it displays the number of the event which is enabled.

Example: "Event #0 Enabled"

VI. PROGRAMMING

The GL-ACW-P comes pre-programmed from the factory. However, you may decide to program the GL-ACW-P to meet your individual needs. **DO NOT program a category that you do not fully understand! Refer to the Programmable Options section of this manual for a complete explanation of each category's function.**

❑ **In order to program the GL-ACW-P, begin at the Welcome Prompt, then follow the steps below:**

1. Open the machine, and locate the controller on the lower inside left hand cabinet wall. Push the top and bottom buttons simultaneously for about 3-5 seconds to enter the programming mode.
2. To begin programming, you must use the buttons located on the inside of the door above the display, numbered 1-4.
 - The F2 button is always used as a scroll button. The F4 button is always used to enter a category. The F1 button is used to save options and exit that category. The refund button is used to exit the programming mode.

Note: After three minutes of inactivity in programming mode, the machine will automatically return to “normal” mode to prevent from being accidentally left in the programing mode after completion.

❑ **In order to program the GL-ACW Park with an Ether Controller, begin at the Welcome Prompt, then follow the steps below.**

1. Open the machine and locate the controller on the lower inside left hand cabinet wall.
2. Press and Release the “Program” button on the controller.
3. The display should now show “Inventory Deposits”.
4. To begin programming, you will use the four button keypad on top of the internal display and the refund button located on the door.
 - The Refund button is used to exit the programming mode.
 - The F1 function button is used to save options and exit the category.
 - The F2 function button is used to scroll up through the categories.
 - The F3 function button is used to scroll down through the categories.
 - The F4 function button is used to enter a category.

When in the programming mode use the F2 or F3 function buttons to scroll up and down through the menu choices. Once you have selected a category, use the F4 function button to enter into that category. If a change is needed, then use the F2 or F3 function buttons to make that change. Once the change is made press the F1 function button to exit the category.

5. When all changes are complete and you are at the programming categories level (not inside of a category) Press the “Refund” button (located on the door) to return to Welcome message. Programming complete.
3. The categories and specific programming instructions begin below and are

NOTE: If you purchased your Gold Line Park with an E-Controller and Graphic Display the 4 Position Keypad that would normally be above the 2-Line Display will not be there. To program your machine you will be required to have an Audit Pro Hand-Held and Cable (100-0136). You will then use the function buttons (F1, F2, F3, F4) on the hand-held to program the controller.

The categories and specific programming instructions begin below and are listed in order as they appear in the menu.

INVENTORY DEPOSITS?

To view the current Inventory Deposits:

- Press the F4 button to enter the category.
- Press the F4 button to scroll between the options:
CASH =
TOKENS =
CARDS =
- Press the F1 button to exit the category.
- Press the F2 button to scroll to the next category.

INVENTORY VENDING?

To view the current Inventory Vending:

- Press the F4 button to enter the category.
- Press the F4 button to scroll between the options (Event 0-8):

EVENT 0 CNT (count)

EVENT 0 CSH (cash)

EVENT 0 TOK (token)

EVENT 0 DEB (debit)

EVENT 1 CNT

EVENT 1 CSH

EVENT 1 TOK

EVENT 1 DEB

EVENT 2 CNT

EVENT 2 CSH

EVENT 2 TOK

EVENT 2 DEB

EVENT 3 CNT

EVENT 3 CSH

EVENT 3 TOK

EVENT 3 DEB

EVENT 4 CNT

EVENT 4 CSH

EVENT 4 TOK

EVENT 4 DEB

(continues through EVENT 8)

- Press the F1 button to exit the category.
- Press the F2 button to scroll to the next category.

INVENTORY OVERPAID?

To view the current Inventory Overpaid:

- Press the F4 button to enter the category.
- The display will read:
OVERPAID \$
- Press the F1 button to exit the category.
- Press the F2 button to scroll to the next category.

AUDIT VAULT COUNT?

To view the current Audit Vault Count:

- Press the F4 button to enter the category.
- Press the F4 button to scroll between the options:
\$20 BILL CNT
\$10 BILL CNT
\$5 BILL CNT
\$2 COIN CNT
\$1 BILL CNT
\$1 COIN CNT
QUARTER CNT
TOKEN CNT
TOKENOTE CNT
COUPON 1 CNT
COUPON 2 CNT
COUPON 3 CNT
COUPON 4 CNT
CARD CNT
HOPPER CNT
- Press the F1 button to exit the category.
- Press the F2 button to scroll to the next category.

Clearing Inventories (GL-ACW-P)

Note: Clearing memory clears ALL resettable inventory categories at once.

Resettable categories: Inventory Deposits, Inventory Vending, Inventory Overpaid, and Audit Vault Count

- Enter a resettable inventory category, such as INVENTORY DEPOSITS?, by pressing the F4 button.
- Press the F2 and F3 buttons simultaneously for about five seconds.
- The display will show the sequencing messages:
ACTION TO CLEAR

OR RETURN TO ABORT

- Pressing the F4 button will now clear the memory, and the display will then read:
MEMORY CLEARED!
- Or to abort, press the F1 button. You will then be returned to the menu mode.
- Press the F2 button to scroll to the next category, or press the F4 button to exit the programming mode.

Clearing Inventories (GL-ACW-P with Ether Controller)

Clearing memory clears ALL resettable inventory categories at once
Resettable categories: Inventory Deposits, Inventory Vending, Inventory Overpaid, and Audit Vault Count

Note: There are three different processes to clear the Inventories from an Ether Controller.

Process #1

In order to clear inventories at the GL-ACW Park with the Ether Controller, begin at the Welcome Prompt, then follow the steps below:

1. Open the machine and locate the controller on the lower inside left hand cabinet wall.
2. Press and Hold the “Inventory” button on the controller for about 3 seconds.
3. The display should now show “Clear Inventories?”, “Action to Clear”, “Or Return to Abort”.
 - The F1 function button will be used to abort the inventory clear.
 - The F4 function button will be used to clear the inventories.
4. If you select to abort the inventory clear, press the F1 function button and the display will show “Memory Not Cleared”. Then in about 3 seconds you will return to the Welcome Prompt.
5. If you select to clear the inventories, press the F4 function button and the display will show “Memory Cleared”. Then in about 3 seconds you will return to the Welcome Prompt.

Process #2

In order to clear the inventories at the GL-ACW Park with an Ether Controller, begin at the Welcome Prompt, then follow the steps below:

1. Open the machine and locate the controller on the lower inside left hand cabinet wall.
2. Press and Release the “Program” button on the controller.
3. The display should now show “Inventory Deposits”.
4. To clear the Inventories, you will use the four button keypad on top of the internal display and the refund button located on the door.
 - The Refund button is used to exit the programming mode.
 - The F1 function button is used to save options and exit the category.
 - The F2 function button is used to scroll up through the categories.

- The F3 function button is used to scroll down through the categories.
- The F4 function button is used to enter a category.

When in the programming mode use the F2 or F3 function button to scroll up or down through the menu choices to select one of the four resettable inventory categories. Once you have selected the category, use the F4 function button to enter into that category. (Example Inventory Deposits selected)

5. To clear the inventories press and hold the F2 and F3 function buttons until display shows “Clear Inventories?”.
6. If you select to abort the clearing of inventories, then press the F1 function button and the display will show “Memory Not Cleared”. Then in about 3 seconds the display will show “Inventory Deposits”.
7. If you select to clear the inventories, then press the F4 function button and the display will show “Memory Cleared”. Then in about 3 seconds the display will show “Inventory Deposits”.
8. Once the inventories have been cleared and you are at the programming categories level, Press the “Refund” button to return to Welcome Prompt.

Process #3

In order to clear the inventories at the GL-ACW with an Ether Controller, begin at the Welcome Prompt, then follow the steps below:

1. Open the machine and locate the controller on the lower inside left hand cabinet wall.
2. Press and Hold the “Inventory” button on the controller for about 3 seconds.
3. The display should now show “Clear Inventories?”, “Action to Clear”, “Or Return to Abort?”.
 - The “Inventory” button on the side of the controller will be used to abort the inventory clear.
 - The “Program” button on the side of the controller will be used to clear the inventories.
4. If you select to abort the inventory clear, press the “Inventory” button and the display will show “Memory Not Cleared”. Then in about 3 seconds you will return to the Welcome Prompt.
5. If you select to clear the inventories, press the “Program” button and the display will show “Memory Cleared”. Then in about 3 seconds you will return to the Welcome Prompt.

PRINT AUDIT REPORT?

To print an Audit Report:

- If not using a receipt printer, you must first plug in the hand-held printer to the EIC.
- Press the F4 button to enter the category.
- Press the F2 button to scroll between the options:
 - PRINT TO RECEIPT PRINTER***
 - PRINT TO HAND-HELD PRINTER***
- Press the F4 button and the display will read:

PRINTING REPORT!

- Upon completion, it will return to the menu options automatically.
- Press the F2 button to scroll to the next category.

PRINT CONFIGURATION REPORT?

To print a Configuration Report:

- If not using a receipt printer, you must first plug in the hand-held printer to the EIC.
- Press the F4 button to enter the category.
- Press the F2 button to scroll between the options:
PRINT TO RECEIPT PRINTER
PRINT TO HAND-HELD PRINTER
- Press the F4 button and the display will read:
PRINTING REPORT!
- Upon completion, it will return to the menu options automatically.
- Press the F2 button to scroll to the next category.

SET ITEM PASSWORDS?

To set an Item Password:

- Press the F4 wash select button to enter the category.
- The display will read:
PASSWORD #1=
- Press the F2 button to increase, or the F3 button to decrease the Password number in increments of 10. This number can be set from 10 to 99990.
- Repeat the process for Password F2-F4
- Press the F1 button to exit the category.
- Press the F2 button to scroll to the next category.

TOKEN COIN MODE?

To set the Token Coin Mode:

- Press the F4 button to enter the category.
- Press the F2 button to scroll between the options:
SINGLE CREDIT MODE
MULTIPLE CREDITS
- Press the F1 button to save and exit the category.
- Press the F2 button to scroll to the next category.

TOKEN COIN VALUE?

To set the Token Coin Value:

- Press the F4 button to enter the category.
- The display will read:
TOKEN COIN =
- The amount can be set from \$0.00 to \$63.75.
- Press the F2 button to increase the amount in \$.25 increments.
- Pressing the F3 button will decrease the amount in \$.25 increments.

- Press the F1 button to save and exit the category.
- Press the F2 button to scroll to the next category.

TOKENOTE MODE?

To set the Tokenote Mode:

- Press the F4 button to enter the category.
- Press the F2 button to scroll between the options:
MULTIPLE CREDITS
SINGLE CREDIT MODE
- Press the F1 button to save and exit the category.
- Press the F2 button to scroll to the next category.

TOKENOTE VALUE?

To set the Tokenote Value:

- Press the F4 button to enter the category.
- Press the F2 button to scroll between the options:
TOKENOTE=
- The amount can be set from \$0.00 to \$63.75.
- Press the F2 button to increase the amount in \$.25 increments.
- Pressing the F3 button will decrease the amount in \$.25 increments.
- Press the F1 button to save and exit the category.
- Press the F2 button to scroll to the next category.

COUPON VALUES?

To set the Coupon Discounts:

- Press the F4 button to enter the category.
SET COUPON 1 VALUES
ITEM 1 =
ITEM 2 =
ITEM 3 =
ITEM 4 =
- The amount can be set from \$0.00 to \$63.75.
- Press the F2 button to increase the amount in \$.25 increments.
- Pressing the F3 button will decrease the amount in \$.25 increments.
- Each coupon may be programmed with a different value for each wash. If you want the coupon to have the same value for each wash, simply program all the washes to have the same value for that coupon.
- When finished programming desired amounts, press the F1 button to exit the category.
- Press the F2 button to scroll to the next category.

SET FEE MODE?

To set the Fee Mode:

- Press the F4 button to enter the category.
- Press the F2 button to scroll between the options:
FEE ON ENTRY
FEE ON EXIT

FEE BY TIME

- Press the F1 button to save and exit the category.
- Press the F2 button to scroll to the next category.

SET FEES?

To set the parking rates:

- Press the F4 button to enter the category.
- Press the F4 button to enter Event 0.
- The display will read:
Base Fee = \$0.00
- Use the F2 & F3 buttons to scroll in \$.25 increments to the desired price.
- Press the F1 button to set the price.
- Use the F2 & F3 buttons to toggle between EVENT 0 – 8.
- Press the F4 button to enter the desired event.
- The display will then show two categories:
Disabled Daily
- The cursor will be flashing on the DISABLED side, press the F2 & F3 buttons to toggle between DISABLED and ENABLED.
- Press the F4 button to shift to DAILY.
- The cursor will be flashing on the DAILY side, press the F2 & F3 buttons to toggle between DAILY, WEEKLY, and SPECIAL.
- Daily will give you the option of having the event occur each day at the time set seven days a week.
- Press the F4 button and the display will read:
Start: 00:00AM
- With the cursor flashing on the second 0.
- Press the F2 & F3 buttons to scroll between 0-12.
- Press the F4 button to move to the minute side.
- Press the F2 & F3 buttons to scroll between 0-59.
- Press the F4 button to move to the AM/PM category.
- Press the F2 & F3 buttons to scroll between AM and PM.
- Press the F4 button and the display will read:
End: 00:00AM
- The cursor will be flashing on the second 0.
- Press the F2 & F3 buttons to scroll between 0-12.
- Press the F4 button to move to the minute side.
- Press the F2 & F3 buttons to scroll between 0-59.
- Press the F4 button to move to the AM/PM category.
- Press the F2 & F3 buttons to scroll between AM and PM.
- Press the F4 button and the display will read:
Fee \$0.25 Opened
- The cursor will be flashing on the \$ amount. Press the F2 & F3 button to toggle in \$.25 increments to set the desired fee.
- Press the F4 button to shift to the opened column.
- Press the F2 & F3 buttons to toggle between opened and closed (whether or not the lot is opened or closed during this time period).

- Press the F1 button to lock in these settings.
- Continue programming events. Keep in mind that if you want to have one event override another event, the event with the higher event number (0-9) will override a event with a lower number.

SET LOST TICKET FEE?

To set the Lost Ticket Fee:

- Press the F4 button to enter the category.
- The display will read:
LOST TICKET =
- The value can be set from DISABLED to \$99.75.
- Press the F2 button to increase the amount in \$.25 increments.
- Pressing the F3 button will decrease the amount in \$.25 increments.
- Press the F1 button to save and exit the category.
- Press the F2 button to scroll to the next category.

PROCEED PROMPTS?

To set the Proceed Prompts:

- Press the F4 button to enter the category.
- Use the button F4 to scroll through the Proceed Messages 1-4
PROCEED MESSAGE #1
PROCEED MESSAGE #2
PROCEED MESSAGE #3
PROCEED MESSAGE #4
- Press button F4 to select the Message numbers to be programmed.
- Press button F2 to then scroll through the six pre-programmed messages and the one “NOT USED” message.
- Press the F1 button to select a message.
- You may also program eight custom messages.

To begin programming a **custom message**:

1. You must first be on a custom message screen which appears blank.
 2. Hold button F4 to make the cursor appear.
 3. Use button F2 to scroll to desired letters or punctuation. Button F3 will scroll through letters and punctuation in the opposite direction.
 4. Button F4 moves to the next space.
 5. When you have completed your message, push button F1 to save it into memory and select it as the message to be displayed.
 6. Press the F4 button to check
- To scroll to the next Proceed Message number, press the F4 button.
 - Press the F2 button to scroll through the options.
 - Press F1 to select or repeat steps 1-6 for custom messages.
 - Press the F1 button to exit the category.

- Press the F2 button to scroll to the next category.

WELCOME PROMPTS?

To set the Welcome Prompts:

- Press the F4 button to enter the category.
- Use the button F2 to scroll through the Welcome Messages 1-4
WELCOME MESSAGE #1
WELCOME MESSAGE #2
WELCOME MESSAGE #3
WELCOME MESSAGE #4
- Press button F4 to select the Message numbers to be programmed.
- Press button F2 to then scroll through the 18 pre-programmed messages and the one “NOT USED” message or use the Time & Date stamp.
- Press the F1 button to select a message.
- You may also program eight custom messages.

To begin programming a **custom message**:

1. You must first be on a custom message screen which appears blank.
 2. Hold button F4 to make the cursor appear.
 3. Use button F2 to scroll to desired letters or punctuation. Button F3 will scroll through letters and punctuation in the opposite direction.
 4. Button F4 moves to the next space.
 5. When you have completed your message, push button F1 to save it into memory and select it as the message to be displayed.
 6. Press the F4 button to check.
- To scroll to the next Welcome Prompt Message number, press the F4 button.
 - Press the F2 button to scroll through the options.
 - Press F1 to select or repeat steps 1-6 for custom messages.
 - Press the F1 button to exit the category.
 - Press the F2 button to scroll to the next category.

CLOSED PROMPTS

To set the Closed Prompts:

- Press the F4 button to enter the category.
- Use the F2 & F3 buttons to scroll between the CLOSED MESSAGES 1-4.
CLOSED MESSAGE #1
CLOSED MESSAGE #2
CLOSED MESSAGE #3
CLOSED MESSAGE #4
- Press the F4 button to program a message.
- Press the F2 & F3 buttons to scroll between the pre-programmed messages.
- Press the F1 button to lock in that message. Continue to program any additional

closed messages. Press the F1 button to exit the category.

To begin programming a **custom message**:

1. You must first be on a custom message screen which appears blank.
 2. Hold button F4 to make the cursor appear.
 3. Use button F2 to scroll to desired letters or punctuation. Button F3 will scroll through letters and punctuation in the opposite direction.
 4. Button F4 moves to the next space.
 5. When you have completed your message, push button F1 to save it into memory and select it as the message to be displayed.
 6. Press the F4 button to check.
- To scroll to the next Welcome Prompt Message number, press the F4 button.
 - Press the F2 button to scroll through the options.
 - Press F1 to select or repeat steps 1-6 for custom messages.
 - Press the F1 button to exit the category.
 - Press the F2 button to scroll to the next category.

EXT DISPLAY MSGS?

To set the messages to appear on the External Display:

- Press the F4 button to enter the category.
- The display will read:

MESSAGE #1 FIRST HALF

To begin programming this **custom message**:

1. You must first be on a custom message which appears blank.
 2. Hold button F4 to make the cursor appear.
 3. Use button F2 to scroll to desired letters or punctuation. Button F3 will scroll through letters and punctuation in the opposite direction.
 4. Button F4 moves to the next space.
 5. When you have completed your message, push button F1 to save it into memory and select it as the message to be displayed.
 6. Press the F4 button to check.
- To scroll to the next message half, press the F4 button.
 - Repeat steps 1-6 for custom messages or press F2 to scroll to the “NOT USED” message.
 - Press the F1 button to exit the category
 - Press the F2 button to scroll to the next category.

SET DATE & TIME?

To set the Date & Time:

- Press the F4 button to enter the category.
- The cursor will be flashing.
- Press the F2 button to change the day.
- Press the F4 button to go to the month.
- Press the F2 button to change the month.
- Press the F4 button to go to the year.
- Press the F2 button to change the year.
- Press the F4 button to go to the hour.
- Press the F2 button to change the hour.
- Press the F4 button to go to the minute.
- Press the F2 button to change the minute.
- Press the F4 button to go to the AM/PM.
- Press the F2 button to change AM/PM.
- Press the F1 button to set and exit the category.
- Press the F2 button to scroll to the next category.

SET EMPTY MODE?

To set the machines mode of operation when the hopper is empty:

- Press the F4 button to enter the category.
- Press the F2 button to scroll between the options:
OUT OF SERVICE
USE EXACT AMOUNT
- Press the F1 button to save and exit the category.
- Press the F2 button to scroll to the next category.

SET HOPPER CONTENTS?

To set the Hopper Contents:

- Press the F4 button to enter the category.
- Press the F2 button to scroll between the options:
QUARTERS
\$1 COINS
\$2 COINS
- Press the F1 button to save and exit the category.
- Press the F2 button to scroll to the next category.

SET BONUS TOKEN?

To set the Bonus Token:

- To set the number of Bonus Tokens to be dispensed per Event:
- Press the F4 button to enter the category
EVENT 0 = 0 TOKENS
EVENT 1 = 0 TOKENS
EVENT 2 = 0 TOKENS

EVENT 3 = 0 TOKENS
EVENT 4 = 0 TOKENS
EVENT 5 = 0 TOKENS
EVENT 6 = 0 TOKENS
EVENT 7 = 0 TOKENS
EVENT 8 = 0 TOKENS

- The amount can be set from 0 to 9.
- Press the F2 button to increase the amount by 1 increment.
- Press the F3 button to decrease the amount by 1 increment.
- To continue programming EVENT 1 through EVENT 8. Press the F4 button to select the next event and then use button F2 or F3 to program amount.
- When finished programming press the F1 button to save the changes and exit the category.
- Press the F2 button to scroll to next category.

SET BILL DISPENSER?

To set the Bill Dispenser:

- To set the bill denomination to be dispensed:
- Press the F4 button to enter category.
- Press the F2 button to scroll through the options.

DISABLED
DISPENSE \$1 BILLS
DISPENSE \$5 BILLS

- Press the F1 button to save and exit the category.
- Press the F2 button to scroll to the next category.

SET CHANGE RULE?

To set the Change Rule:

- To set the amount of change to be dispensed from hopper.
- Press the F4 button to enter category.
COIN CHANGE = 0.00
- The amount can be set from \$0.00 to \$20.00
- Press the F2 button to increase the amount by \$.25 increments.
- Press the F3 button to decrease the amount by \$.25 increments.
- When finished programming press the F1 button to save the changes and exit the category.
- Press the F2 button to scroll to the next category.

SET PAY DEFAULT?

To set the machines mode of operation when a money acceptor is faulty:

- Press the F4 button to enter the category.
- Press the F2 button to scroll between the options:
USE ALT PAYMENT
OUT OF SERVICE
- Press the F1 button to save and exit the category.

- Press the F2 button to scroll to the next category.

SET REFUND ENABLE?

To set the status of the Refund Button :

- Press the F4 button to enter the category.
- The display will read:
REFUND=
- Press the F2 button to scroll between the options:
ENABLE
DISABLE
- Press the F1 button to exit the category.

RECEIPT HEADERS?

To set the Receipt Headers:

- Press the F4 button to enter the category.
- Up to eight lines of text may be selected.
- Press the F2 button to scroll between the options:
NOT USED
CUSTOM

To begin programming a **custom message**:

1. You must first be on a custom message screen which appears blank.
 2. Hold button F4 to make the cursor appear.
 3. Use button F2 to scroll to desired letters or punctuation. Button F3 will scroll through letters and punctuation in the opposite direction.
 4. Button F4 moves to the next space.
 5. When you have completed your message, push button F1 to save it into memory and select it as the message to be displayed.
 6. Press the F4 button to check.
- To scroll to the next line, press the F4 button.
 - Press the F2 button to scroll through the options.
 - Press F1 to select or repeat steps 1-6 for custom messages.
 - Press the F1 button to exit the category.
 - Press the F2 button to scroll to the next category.

SET RECEIPT MODE?

To set the Receipt Mode:

- Press the F4 button to enter the category.
- Press the F2 button to scroll between the options:
NEVER
ALWAYS PRINT
ASK
- Press the F1 button to save and exit the category.
- Press the F2 button to scroll to the next category.

SET PRINTER MODEL?

To set the model of printer:

- Press the F4 wash select button to enter the category.
- Press the F2 button to scroll between the options:
SEIKO SAM-1245
SEIKO LTPF247
- Press the F1 button to save and exit the category.
- Press the F2 button to scroll to the next category.

SET UNIT NUMBER?

To designate the Unit Number:

- Press the F4 wash select button to enter the category.
- Press the F2 button to scroll between the options:
UNIT #1
UNIT #2
UNIT #3
UNIT #4
UNIT #5
UNIT #6
UNIT #7
UNIT #8
UNIT #9
- Press the F1 button to save and exit the category.
- Press the F2 button to scroll to the next category.

SET WELCOME DELAY?

To set the Welcome Delay:

- Press the F4 wash select button to enter the category.
- Press the F2 button to increase, or the F3 button to decrease in one second increments between 0 and 30 seconds.
- Press the F1 button to save and exit the category.
- Press the F2 button to scroll to the next category.

VEND DURATION?

To set the Vend Duration:

- Press the F4 button to enter the category.
- Press the F2 button to move in .1 second increments between .1 and 4.0 seconds.
- Press the F1 button to exit the category.
- Press the F2 button to scroll to the next category.

SET PROCEED TIME?

To set the Proceed Time:

- Press the F4 button to enter the category.
- Press the F2 & F3 buttons to select between 1 and 9.9 seconds increasing by .1 second increments.
- Press the F1 to exit category

TOTAL DEPOSITS?

To view the Total Deposits:

- Press the F4 button to enter the category.
- Press the F2 button to scroll between the options:
CASH =
TOKENS =
CARDS =
- Press the F1 button to exit the category.
- Press the F2 button to scroll to the next category.

TOTAL VENDING?

To view the Total Vending:

- Press the F4 button to enter the category.
- Press the F2 button to scroll between the option:
EVENT 1 CNT
EVENT 1 CSH
EVENT 1 TOK
EVENT 1 DEB
EVENT 2 CNT
EVENT 2 CSH
EVENT 2 TOK
EVENT 2 DEB
EVENT 3 CNT
EVENT 3 CSH
EVENT 3 TOK
EVENT 3 DEB
EVENT 4 CNT
EVENT 4 CSH
EVENT 4 TOK
EVENT 4 DEB
- Press the F1 button to exit the category.
- Press the F2 button to scroll to the next category.

TOTAL OVERPAID?

To view the Total Overpaid:

- Press the F4 button to enter the category.
- The display will read:
OVERPAID \$
- Press the F1 button to exit the category.
- Press the F2 button to scroll to the next category.

TOTAL VAULT COUNT?

To view the Total Vault Count:

- Press the F4 button to enter the category.
- Press the F2 button to scroll between the options:
\$20 BILL CNT
\$10 BILL CNT
\$5 BILL CNT
\$2 COIN CNT
\$1 BILL CNT
\$1 COIN CNT
QUARTER CNT
TOKEN CNT
TOKENOTE CNT
COUPON 1 CNT
COUPON 2 CNT
COUPON 3 CNT
COUPON 4 CNT
CARD CNT
HOPPER CNT
- Press the F1 button to exit the category.

VII. MAINTENANCE

A few simple maintenance routines can extend the productivity of the Autocashier.

CAUTION! DO NOT USE OIL, GREASE OR SOLVENTS ON ANY PART OF THIS UNIT EXCEPT AS CLEARLY SPECIFIED IN THIS MANUAL, THE HOPPER, VALIDATOR, OR STACKER MANUAL.

MONTHLY MAINTENANCE

Hopper

The hopper should be cleaned at least every other month. To do so, please refer to the Hamilton HSH Hopper Operational Manual.

Validator

Please refer to the appropriate validator manual.

Stacker

Please refer to the appropriate manual.

ANNUAL MAINTENANCE

Hamilton Validators

The validator should be serviced annually to maintain maximum performance. This work should only be done by a trained technician.

Hamilton Stackers

- All pivot points must be cleaned and re-greased.
- Check the switch tightness and the cam to see if it is still in round.
- Check for bent, loose, worn, rusted or corroded parts.
- Check the motor for coasting.
- Use a small amount of Dry Slick™ on the slides. **Do not use grease or WD-40™.**

VIII. ERROR CODES

The GL-ACW-P is equipped with a self-diagnostic capability that makes it possible for common problems to be quickly detected and serviced. When most errors occur, the controller will automatically shut down the entire unit as a precaution in order to prevent further malfunctions. When the GL-ACW-P shuts itself down after an error has been detected, it deactivates the bill acceptor and coin acceptors so that further deposits cannot be accepted. When this occurs, the display will read:

OUT OF SERVICE

It is necessary to troubleshoot and correct the problem before normal operation can resume. Shutting off power to the unit will not erase this error condition. **To resume normal operation, it is necessary to:**

1. Acknowledge that you have seen the error. To do this, press the YELLOW button on the controller. When this button is pressed the display will show the detected error. (Possible errors and their descriptions are covered later in this section.)
2. After making note of the error and correcting the problem, it is necessary to once again press the YELLOW button to return to normal operation. When this button is pressed the display will read:

ERROR ACKNOWLEDGED

3. The display will then return to the welcome prompt.

It is possible for the GL-ACW-P to detect an error and still remain operational. This occurs when the default payment mode has been set to “USE ALT PAYMENT” instead of “OUT OF SERVICE”. In the “USE ALT PAYMENT” mode, the controller will only shut down the component that is malfunctioning. The controller will stop displaying the normal Welcome Messages and instead display the messages “PAYMENT OPTIONS...” and “USE BILLS ONLY” (depending on which payment options are available). When all the payment options have been exhausted, the GL-ACW-P will shut down and display an error message for the last component malfunction. When this occurs, follow the above steps to return to normal operation.

ERROR CODES

\$5 Input Stuck

When signaling that a \$5, \$10 or a \$20 bill has been accepted this line gets pulled low briefly. If the \$5 line should get pulled low for an extended period of time, this error will result and the machine will be shut down.

\$1 Input Stuck

When signaling that a \$1 bill has been accepted this line gets pulled low briefly. If the \$1 line should get pulled low for an extended period of time, this error will result and the machine will be shut down.

25¢ Input Stuck

When signaling that a quarter has been accepted this line gets pulled low briefly. If the Quarter line should get pulled low for an extended period of time, this error will result and the machine will be shut down.

Token Input Stuck

When signaling that a token coin has been accepted this line gets pulled low briefly. If the Token line should get pulled low for an extended period of time, this error will result and the machine will be shut down.

Drop Switch Stuck

When signaling that a coin is being dispensed this line gets pulled high briefly. If the Drop line should get pulled high for an extended period of time, this error will result and the machine will be shut down. to remedy this error. If the error still does not clear, there may be damage to the CPU, in which case you should contact the Hamilton Customer Service Department for assistance.

This situation is only tested during the time a payout is occurring.

Unexpected Coin Drop

When a coin is dispensed, the Drop line goes high briefly, then returns to its logic low state. If the controller records two unexpected coin drop signals while in standby, the machine will shut down with this error.

Hopper Coasting Error

If two coin drop signals are recorded immediately after the hopper has paid out, the machine will shut down with this error.

Hopper Time-out

When a coin is dispensed, the Drop line goes high briefly then returns to its logic low state. If during the time a payout is occurring a high pulse is not detected for 10 consecutive seconds this error will result and the machine will be shut down.

Stacker Time-out

The Busy line goes high during the bill stacking process then returns to its logic low state when the stacker reaches its home position. If the stacker never returns to its home position, this error will result and the machine will be shut down.

Multiple Power Int

There is special circuitry inside the controller to determine if a power outage has occurred. If there are several power outages while processing money (dispensing coins, stacking bills, etc.) this error will occur and the machine will be shut down.

Memory Data Altered!

There are special detection routines built into the Controller's program that can determine if its memory has been corrupted. If the memory is corrupted, values such as wash prices and the audits can no longer be trusted. If this should occur, the entire memory is cleared and the machine will be shut down. Reprogramming the controller will be necessary since all settings will default to the lowest possible denomination (\$0.00) for credits and the highest possible denomination (\$63.75) for any payment option. This default mechanism is used as a safeguard to ensure that the machine does not give away free washes. The following errors will be displayed as long as the faulty condition exists, but will be cleared as soon as the condition is corrected. THIS MEANS THESE ERRORS DO NOT NEED TO BE ACKNOWLEDGED BY PRESSING THE YELLOW BUTTON.

Hopper Empty

When there are not enough coins to make a connection from the bottom of the hopper up to the two coin sensing plates in the hopper bowl, the Empty line goes high. When this happens, the Hopper Empty error will result. Refilling the hopper with coins will automatically clear this error.

IX. TROUBLESHOOTING

In addition to the self-diagnostic error codes, there are other possibilities that could arise in the installation or at some point during the extended operation of your GL-ACW-P. This section provides a general troubleshooting guide, broken down into categories of symptoms.

Money Acceptance

SITUATION	PROBABLE CAUSE	CORRECTIONS
<ul style="list-style-type: none"> Cannot activate refund Credit is showing on display 	<p>A. In "USE EXACT AMOUNT" mode</p> <p>B. Selection buttons are not working</p> <p>C. CPU input is missing</p>	<p>A. Fill coin Hopper or change mode to "OUT OF SERVICE"</p> <p>B. Replace button</p> <p>C. Contact the factory for assistance</p>
<ul style="list-style-type: none"> Accepts fee, but car wash does not start "DRIVE AHEAD" or similar message shown on ACW Display 	Observe the VEND RELAYS and see below	Observe the VEND RELAYS and see below
IF THE RELAY ACTIVATES...	<p>A. Duration of relay closure is too long or too short for wash equipment to recognize</p> <p>B. Wash equipment is not accepting signal from ACW</p> <p>C. Broken connection in wiring between ACW and wash equipment</p>	<p>A. Reprogram "VEND DURATION" setting in ACW Controller</p> <p>B. Refer to the car wash manual</p> <p>C. Locate and repair connection</p>
IF RELAY DOES NOT ACTIVATE...	<p>A. Vend relay is loose or defective</p> <p>B. Broken connection in wiring between ACW Controller and relay panel</p> <p>C. Output missing from Controller</p>	<p>A. Reinstall or replace relay</p> <p>B. Locate and repair connection</p> <p>C. Contact the factory for assistance</p>
One Coin Acceptor does not accept coins	<p>A. Broken connection on power wires to Coin Acceptor</p> <p>B. Coin Acceptor sensitivity is too high</p> <p>C. Coin Acceptor is defective</p>	<p>A. Locate and repair connection</p> <p>B. Adjust sensitivity</p> <p>C. Replace Coin Acceptor</p>

Money Acceptance (Continued)

SITUATION	PROBABLE CAUSE	CORRECTIONS
<ul style="list-style-type: none"> • Both Coin Acceptors do not accept coins • Validator does accept bills 	<p>A. Broken connection on either the power wires supplying the Transformer, or the wires from the Transformer to the Coin Acceptor</p> <p>B. Transformer not working</p> <p>C. Both Coin Acceptors are defective</p>	<p>A. Locate and repair connection</p> <p>B. Replace Transformer</p> <p>C. Replace Coin Acceptors</p>
<ul style="list-style-type: none"> • Both Coin Acceptors do not accept coins • Validator is disabled 	<p>A. Controller is either OUT OF SERVICE, in PROGRAMMING MODE or TRANSMITTING DATA</p> <p>B. Broken connection on ENABLE wire which runs from the Controller to the Validator and Transformer</p> <p>C. ENABLE output missing from Controller</p>	<p>A. Place Controller in normal operating mode</p> <p>B. Locate and repair connection</p> <p>C. Contact the factory for assistance</p>
Coin Acceptor accepts only some coins	<p>A. Coins being used are of poor quality</p> <p>B. Coin Acceptor sensitivity too high</p> <p>C. Loose connection to Coin Acceptor</p>	<p>A. Use a different coin sample</p> <p>B. Adjust sensitivity</p> <p>C. Locate and repair connection</p>
<ul style="list-style-type: none"> • Validator disabled (Refer to appropriate manual) • Coin Acceptor is working 	<p>A. Broken connection on ENABLE wire from Controller to Validator</p> <p>B. Validator ENABLE circuit changed</p>	<p>A. Locate and repair connection</p> <p>B. Contact the factory for assistance</p>
<ul style="list-style-type: none"> • Validator dead (No LED lit on Validator) • Coin Acceptor is working 	<p>A. Broken connection on power wires to Validator</p> <p>B. Validator is defective</p>	<p>A. Locate and repair connection</p> <p>B. Contact the factory for assistance</p>
<ul style="list-style-type: none"> • Validator dead (LED lit, but not displaying error code) • Coin Acceptor is working 	<p>A. Dirty or blocked sensor inside Validator</p> <p>B. Blocked bill path (will not allow insertion)</p> <p>C. Validator drive train problems</p> <p>D. Validator PCB damaged</p>	<p>A. Remove obstruction or clean sensors</p> <p>B. Remove obstruction</p> <p>C. Contact the factory for assistance</p> <p>D. Contact the factory for assistance</p>

Money Acceptance (Continued)

SITUATION	PROBABLE CAUSE	CORRECTIONS
Validator dead (LED flashing error code)	Error detected by Validator PCB	Refer to the Validator Manual for Validator error codes
Validator runs without inserting a bill	Dirty blocked sensor inside Validator	Remove obstruction or clean sensors
Validator rejects too many bills or all bills (bill goes in and comes back out)	<p>A. Dirty sensor, magnetic heads or rollers</p> <p>B. Validator requires service</p>	<p>A. Clean as needed or contact the factory for assistance</p> <p>B. Contact the factory for assistance</p>
<ul style="list-style-type: none"> • Validator accepts bills • Does not give credit 	<p>A. Bill stuck completely or partially in Validator</p> <p>B. Error detected</p> <p>C. Broken connection on vend wires between Validator and Controller</p> <p>D. Controller CPU missing input</p>	<p>A. Determine cause of jam and remove bill from Validator (Refer to the Validator Manual), or Contact the factory for assistance</p> <p>B. Refer to the Validator Manual or contact the factory for assistance</p> <p>C. Locate and repair connection</p> <p>D. Contact the factory for assistance</p>

Hopper

SITUATION	PROBABLE CAUSE	CORRECTION
Overpayment of change	<ul style="list-style-type: none"> A. Wash prices set incorrectly B. Hopper not counting coins 	<ul style="list-style-type: none"> A. Check wash prices B. Perform HOPPER PAYOUT TEST (Refer to the Hopper Manual)
<ul style="list-style-type: none"> • Hopper does not run • Hopper does not pay back change 	<ul style="list-style-type: none"> A. Coin or foreign material lodged in Hopper B. Broken connection in wire between Controller and Hopper motor C. Output missing from Controller 	<ul style="list-style-type: none"> A. Clear obstruction in Hopper B. Locate and repair connection C. Contact the factory for assistance
Hopper runs slowly	<ul style="list-style-type: none"> A. Foreign material in Hopper B. Output weak from Controller 	<ul style="list-style-type: none"> A. Remove foreign material B. Contact the factory for assistance
<ul style="list-style-type: none"> • Underpayment of change • Controller does not go into "OUT OF SERVICE" 	<ul style="list-style-type: none"> A. Wash prices set incorrectly B. Coins fall back into Hopper after counting C. CPU misreads coin count 	<ul style="list-style-type: none"> A. Check wash prices B. Perform HOPPER PAYOUT TEST (Refer to the Hopper Manual) C. Contact the factory for assistance
<ul style="list-style-type: none"> • Underpayment of change • Controller does go into "OUT OF SERVICE" 	Error detected by Controller (See ERROR CODES)	Correct malfunction, acknowledge error

Display

SITUATION	PROBABLE CAUSE	CORRECTIONS
<ul style="list-style-type: none"> • Display is blank • No manual Hopper run • No functions • No LED on Validator 	<ul style="list-style-type: none"> A. No power source B. Circuit Breaker is set to off 	<ul style="list-style-type: none"> A. Switch on main power B. Switch on Circuit Breaker
<ul style="list-style-type: none"> • Display is always blank • Hopper runs using manual switch located on bottom rear of Hopper 	Controller display problems	Contact the factory for assistance
Display is blank until button is pushed or credit is deposited	Welcome Messages are not programmed	Program Welcome messages
Display reads "OUT OF SERVICE" alternating to "HOPPER EMPTY", or display reads "USE EXACT AMOUNT" alternating to "NO CHANGE"	<ul style="list-style-type: none"> A. Coin Hopper is empty B. Sensors are dirty C. Loose connection on Empty Circuit 	<ul style="list-style-type: none"> A. Refill Hopper B. Clean Sensors (See MAINTENANCE section) C. Locate and repair the connection
Display reads "OUT OF SERVICE"	Error detected by Controller (See Error Codes)	Correct malfunction, acknowledge error
Display reads "RELEASE BUTTON"	<ul style="list-style-type: none"> A. Refund Button or contact block is stuck B. Damage to CPU 	<ul style="list-style-type: none"> A. Dislodge stuck button or contact block B. Contact the factory for assistance

X. PARTS

The following is a list of parts for the GL-ACW-P, which may be ordered from your Hamilton Distributor or direct from the factory. When calling to place a part order, make sure you have the machine model and serial number available.

PART #	DESCRIPTION	QTY.
05-0043	GOLD LINE GRAPHIC DISPLAY	1
05-0002	ASSM, LCD DISPLAY	1
05-0008	ASSM, DISPLAY 2 LINE VFD (ALTERNATE)	1
11-0101	ACW HOPPER ASSM.	1
47-0300	110VAC RELAY	7
47-0301	24VAC RELAY	0
47-0302	24VDC RELAY	0
49-4000A	DISTRIBUTION PANEL COMPLETE	1
49-9395	CONTROLLER COMPLETE	1
49-9305	BLUE BUTTON	2
49-9373	RED BUTTON	1
49-9376	PRINTER PAPER (OPTIONAL)	1
60-2012A	POWER SUPPLY ASSM.	1
60-2027A	VOICE SENSOR ASSM.	1
60-2030A	ENVIRONMENTAL CONTROLLER ASSM.	1
60-2031A	VOICE MODULE ASSM.	1
60-2032A	110VAC RELAY BOX ASSM.	1
	Or	
60-2032B	ASSM, 24VAC RELAY	1
	Or	
05-0049	UNIVERSAL RELAY PANEL	1
60-2032C	ASSM, 24VDC RELAY	1
60-2039B	EIC ASSM.	1
05-0009	LTPF PRINTER ASSM. (OPTIONAL)	1
60-2058A	ASSM., ACW G/L CARD READER (OPTIONAL)	1
49-9530	SINGLE NOTE DISPENSER	1
63-5005	LOCK PAIR	1
63-5040	LOCK CRANK	1

Interchanging Validators

To replace an existing validator with a **Coinco® Validator**, the following parts are needed. The Coinco® mounting kit is part #60-2103B. Please note the Coinco® Validator (part #46-0169) is not included in the kit and must be purchased separately.

Part #	Description	Qty
60-2053	Security Bracket	1
90-0145	#8-32 X 5/8 Phillips Head Screw	4
90-0331	#1/4-20 Hex Nut	4
90-0403	#1/4 Internal Lock Washer	4
60-2051	U-Channel	1
90-0629	#10-32 x 1/2 Thumb Screw	1
60-2050	Validator Plate	1
90-0321	#8-32 Nylon Nut	4
60-2054	Slider	1
90-0517	#8-32 x 5/8 Ball Stud	4
90-0628	#10-32 x 3/16 Phillister	4
46-0169	Validator Coinco 24v	1
48-3044	ACW G/L Coinco 24v cable	1
48-3046	ACW G/L 3 rd Party Stacker	1

To replace an existing validator with a **Mars® Validator**, the following parts are needed. The Mars® mounting kit is part #60-2104B. Please note the Mars® Validator (part #46-0201) is not included in the kit and must be purchased separately.

Part #	Description	Qty
60-2055	Security Bracket	1
90-0145	#8-32 x 5/8 Phillips Head Screw	4
90-0331	#1/4-20 Hex Nut	4
90-0403	#1/4 Internal Lock Washer	4
60-2051	U-Channel	1
90-0629	#10-32 x 1/2 Thumb Screw	1
60-2050	Validator Plate	1
90-0321	#8-32 Nylon	4
60-2052	UVM Slider	1
90-0517	#8-32 x 5/8 Ball Stud	4
90-0628	#10-32 x 3/16 Phillister Head	4
46-0201	Validator Mars 24v	1
48-3043	ACW G/L Mars 24v cable	1
48-3046	ACW G/L 3 rd Party Stacker	1

XI. OPTIONAL RECEIPT PRINTER

Safety Precautions

- The motor is hot immediately after printing. Allow cooling before handling.
- The edge of the mechanism is sharp, use caution when handling.

Inserting Paper

Loading Paper

Automatic paper loading operation:

1. Open platen by lifting blue lever on right side of printer. (Be sure to hold platen to prevent it from swinging down when released.)

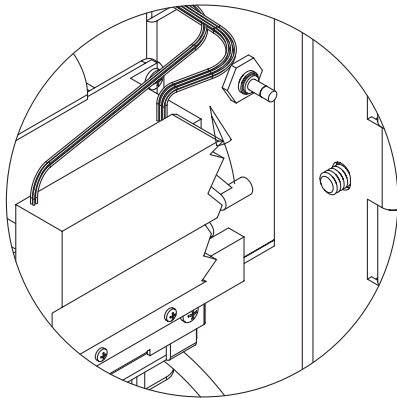


Figure 11-1

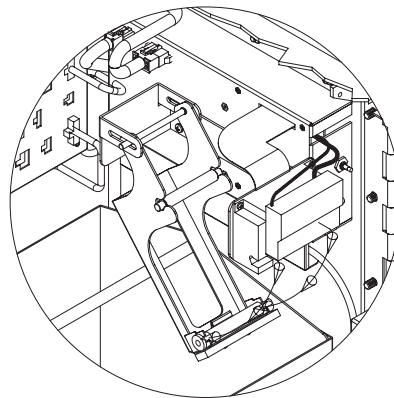


Figure 11-2

2. Remove printer rod and place in center of paper roll and replace on platen.

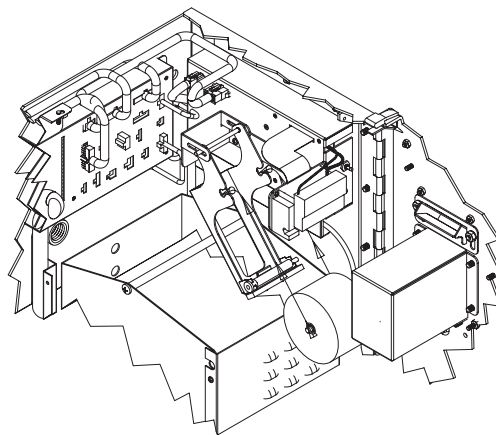


Figure 11-3

- Unroll about 4 inches of paper and center on roller and close the platen by rotating it upward and sliding it back until it snaps into position.

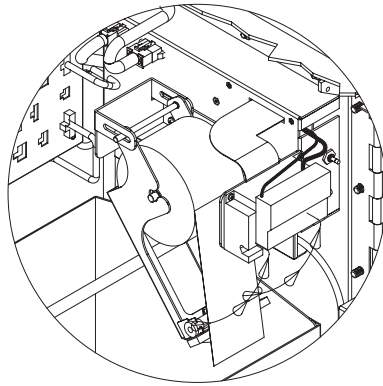


Figure 11-4

- Push button to ensure straight feed and tear off by pulling down on excess.

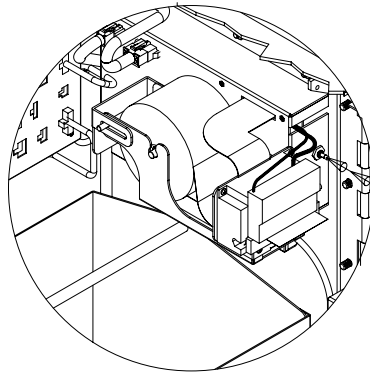


Figure 11-5

Clearing a Paper Jam in the Autocutter

If the cutter has been locked during paper cutting, power off the motor immediately and cancel the lock by performing the following procedures manually:

- Tear transparent film from the upper surface of the autocutter (figure 11-6A), turn the knob in the direction shown in figure 11-6B until the entire hole of the warm wheel can be seen from the standby position confirmation window and retreat the moveable blade. (Figure 11-6B)

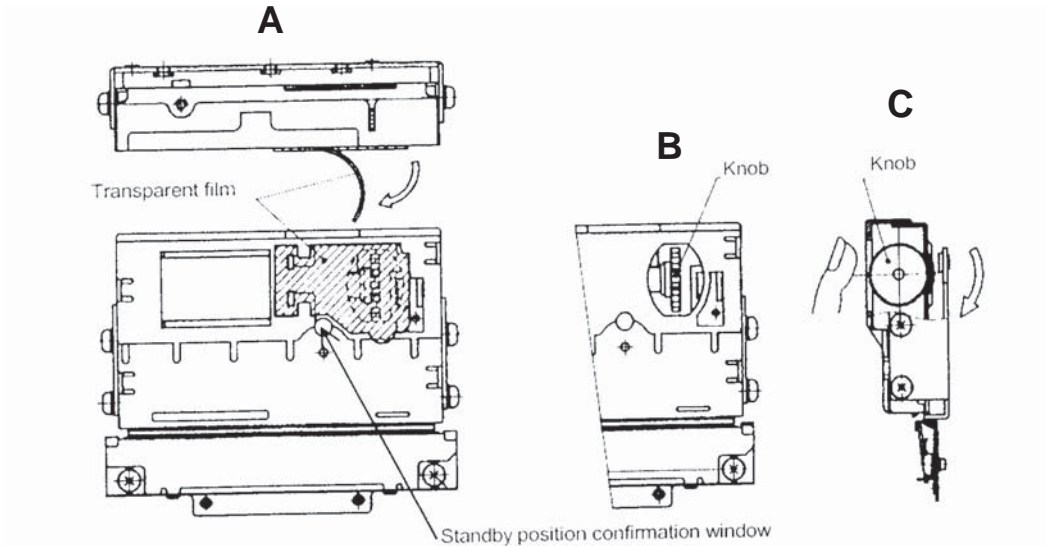


Figure 11-6

Head Cleaning Precautions and Procedure

Cleaning Precautions

1. Do not clean the head directly after printing because the thermal head and its periphery are hot during and after printing.
2. Do not use sandpaper, paper knife etc. when cleaning as it could damage the heat elements.

Cleaning Procedure:

1. Turn over the lever to the direction of the arrow in figure 11-7. Pull up the platen after making sure that the platen is released from the lever. (Open state)
2. Clean the heat elements with a cotton swab immersed in ethyl alcohol or isopropyl alcohol.
3. After the alcohol has completely dried, close the platen. (Closed state)

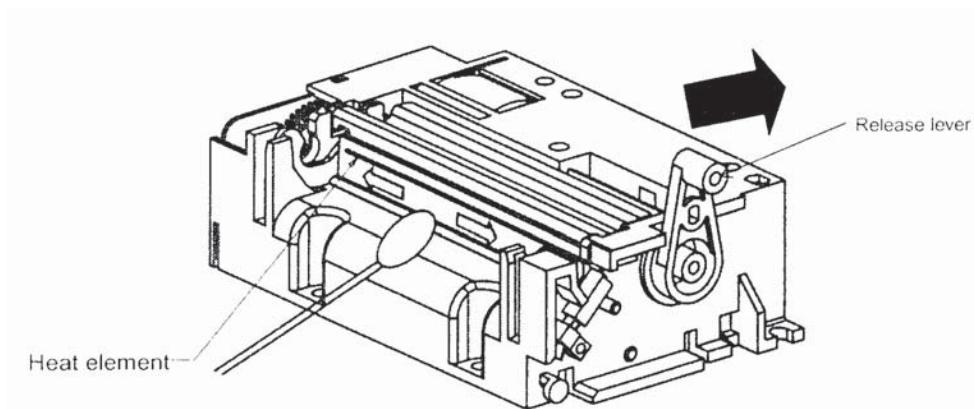


Figure 11-7

THERMAL PAPER SPECIFICATIONS

Model

TF50KS-E2C: Normal thermal paper

PD160R-N: Medium proof paper

HP220AB1: Medium proof paper

- 58 -1 mm Paper width

XII. Third Party Card/Tag System Interface Option

Gold Line Park ACW's provide an option for connecting to 3rd party private label card/tag systems. These systems are typically added to offer special loyalty features or unique customer billing programs.

The interface can be used with systems that don't require a selection by the user at the time of purchase (typical of parking applications). This model is typical of RFID systems that detect a cars approach, verify the tag, and send a signal to open a gate. A similar type of transaction can be performed using a card reader and private label cards. The signals used and their connections, as made available through the Gold Line Private Label Interface Kit (#100-0165), are shown below. More detailed installation instructions (document #101-0206) are included with the kit.

Signal	Kit Connection	Description
Coin Mech Enable	WHT	Signal indicating if teller is able to accept package activation signals Enabled = 24VAC Disabled = 0-8VAC
Package Activation	BRN	Return signal from private label system indicating a package to vend
Common	BLK	Common connection for both the Coin Mech Enable and Package Activation signals

Since the Package Activation Signal from the private label system shares one of the coin input lines of the teller it is important that the private label system follows a strictly defined return signal. If an improper signal is used the teller may interpret the signal as a series of coin deposits instead of the intended package activate signal. For proper operation this signal must adhere to the following specification.

Package Activation Signal Specification	
Pulse Scheme	5 pulses = Open Gate
Pulse Timing	50ms ON / 50ms OFF

XIII. EIC COMMUNICATION PANEL

The External Interface controller contains a 386 processor and modem, which is used for processing credit card transactions. The EIC allows communication with external equipment. See Figures 12-1 and 12-2.

Figure 13-1 EIC Left Side View

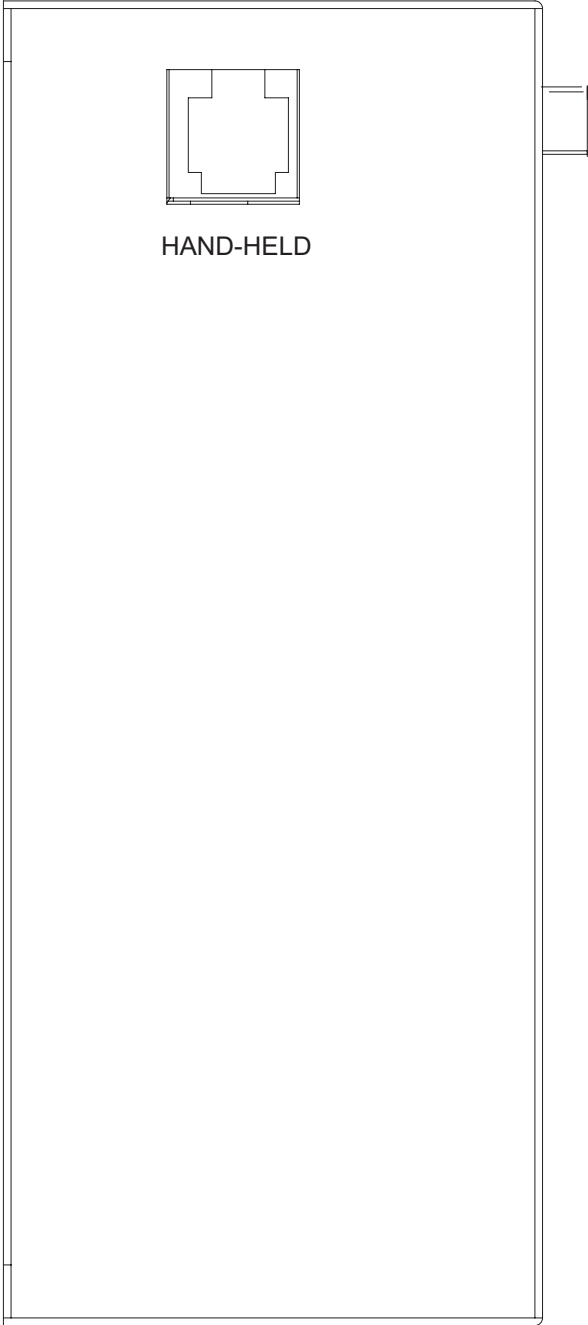
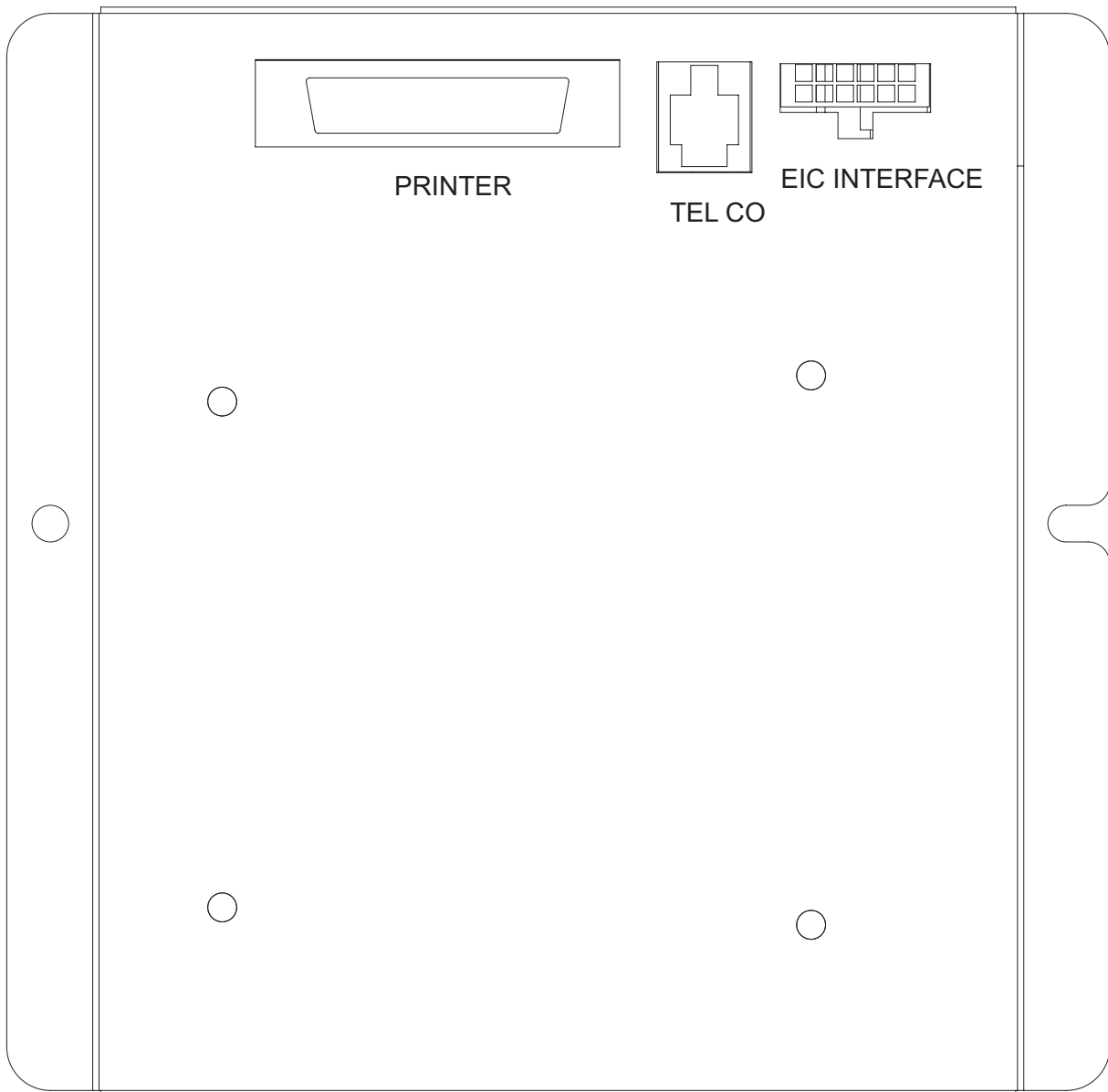


Figure 13-2 EIC Front View



PRINTER: Optional parallel port printer to print credit reports.

TELCO: Outside telephone line. Connect to a dedicated telephone line for credit card processing and remote maintenance.

EIC Interface: This connects to P10 on the distribution panel.

XIV. Optional Note Dispenser

The Specifications for the F50-Note Dispenser.

The Bill capacity is 1,000 Notes

Number of Notes dispensing per transaction is 20.

Storage tray for rejected bills.

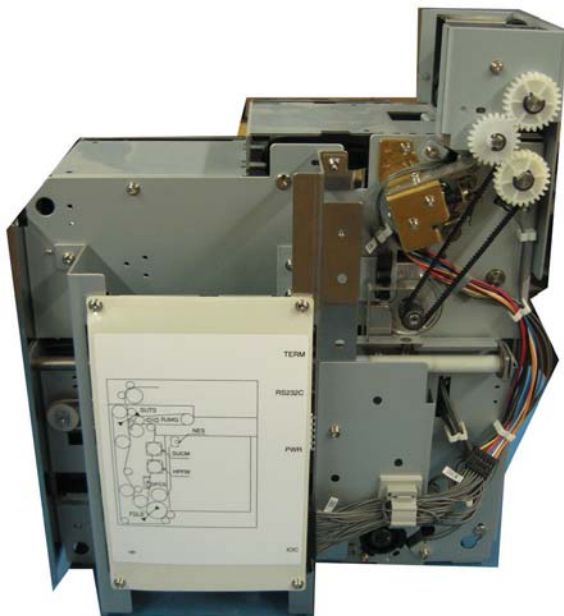
Manual knob for jammed bill removal.

Note Dispenser

Right Side View



Left Side View



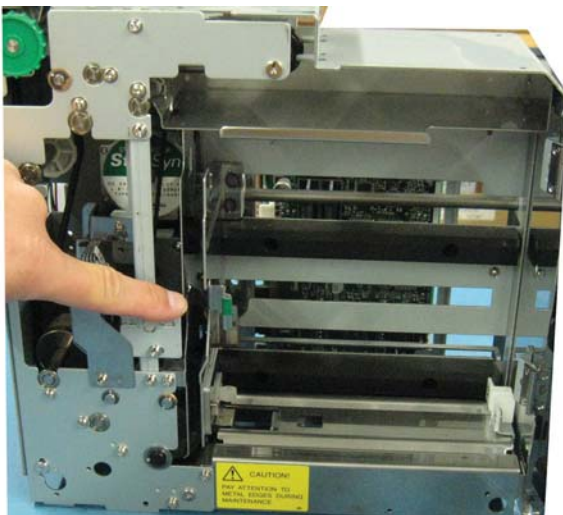
Loading Notes



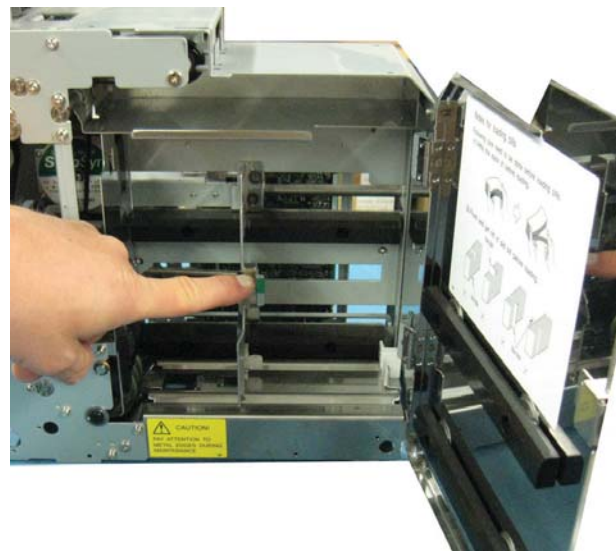
1. Located handle on door. Indicated by green sticker.



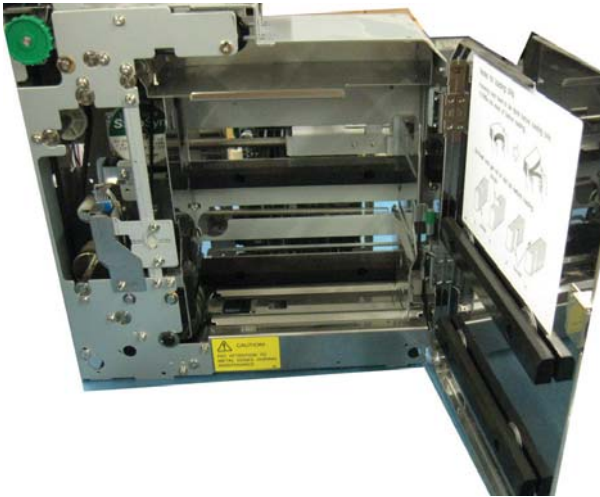
2. Pull door away from note dispenser.



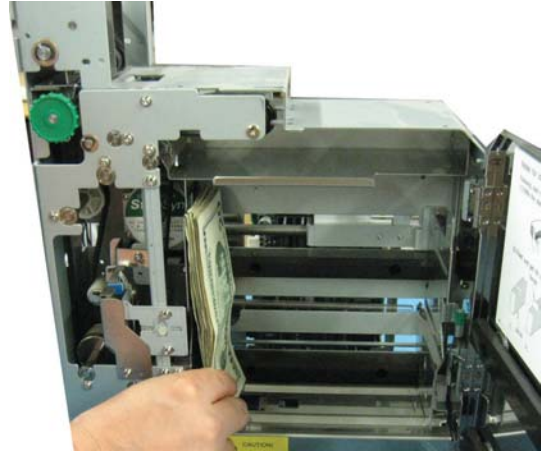
3. Locate Bill Handle Holder. Indicated by green sticker.



4. Push Bill Holder toward back of note dispenser.



5. Lock in Bill Holder on back wall.



6. Insert notes in note dispenser.



7. Pull Bill Holder back to hold notes in place.

Note dispenser is loaded.



8. Close door

Troubleshooting

Care of notes before loading

1. Always riffle the stack of notes before loading
2. Remove any shifted bills before loading
3. Load notes in staggered units of 100
4. Straighten any folded corners
5. Do not use and repaired notes with tape.

Bill Jams

Bill Jams in the pulley system can be cleared by turning the Manual Knob either clockwise or counter clockwise. This will be determined by viewing the pulley system to assess where the bill is jammed. **Note:** If a bill is pulled out by force, the belts can come off from the pulley.

If a jam occurs in the dispensing area then press down the metal fitting, turn the manual knob and remove jammed bill.

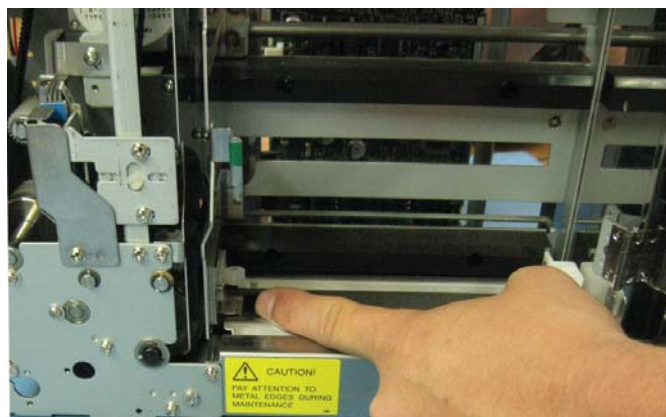
Manual Knob



Pulley System



Metal Fitting



XV. TOKENOTES®

A Tokenote® is a paper coupon that can be accepted by the Hamilton Validator. It is intended to give credit towards the wash price and not as a substitute for cash. Because of this, change will not be dispensed if the value of a Tokenote® exceeds the wash price. Likewise, the value of a Tokenote® cannot be refunded in cash.

It is important to realize that accepted Tokenotes® will issue a programmable amount of credit good towards all wash selections. Tokenote® use cannot be limited to a specific wash or subset of washes.

These must be specially ordered from Hamilton Mfg. or your Hamilton Distributor.

When programming your machine to accept Tokenotes®, refer to the options listed below to help you decide which programming method to use.

Programming One or More Tokenotes® with the Same Value

PROGRAMMING THE STA VALIDATOR:

1. With the power on, check the operation of the validator. A dot flashing on the LED indicates it is operating normally.
2. Note the position of each switch on the DIP switch. (The DIP switch is located on the side of the validator.)
3. Set all 8 DIP switches to the OFF position. Then, starting with switch #8, slowly move the switches to the ON position, one switch at a time and in descending order (8, 7, 6, 5...). The LED should now be flashing the letter "P". This signifies that the validator is in the Tokenote® Programming Mode.
4. At this point, it is recommended to insert the CLEAR ALL Training Coupon, especially if this is the first time the validator is being programmed or if it has just been returned after being serviced. The CLEAR ALL Coupon will erase all previously trained Tokenotes® from the validator's memory but will not affect the controller's memory.
5. Insert one coded Tokenote® into the validator, making sure that it is accepted.
6. Repeat step 5 for each uniquely coded Tokenote® you wish to program. (Make sure that each Tokenote® is equal in value.) Up to 15 different codes can be programmed.
7. Starting with switch #1, slowly move the switches back to their original positions one at a time. This must be done in ascending order (1, 2, 3, 4...). A dot should now be flashing on the LED. Switch #2 must be in the OFF position in order to accept Tokenotes®.

PROGRAMMING THE HVX or XE VALIDATOR:

1. With the power on, check the operation of the validator. A dot flashing on the LED indicates it is operating normally.
2. Note the position of each switch on the DIP switch. (The DIP switch is located on the side of the validator.)
3. Set all 10 DIP switches to the OFF position. Then, starting with switch #10, slowly move the switches to the ON position, one switch at a time and in descending order (10, 9, 8, 7...). The LED should now be flashing the letter "P". This signifies that the validator is in the Tokenote® Programming Mode.
4. At this point, it is recommended to insert the CLEAR ALL Training Coupon, especially if this is the first time the validator is being programmed or if it has just been returned after being serviced. The CLEAR ALL Coupon will erase all previously trained Tokenotes® from the validator's memory but will not affect the controller's memory.
5. Insert one coded Tokenote® into the validator, making sure that it is accepted.
6. Repeat step 5 for each uniquely coded Tokenote® you wish to program. (Make sure that each Tokenote® is equal in value.) Up to 14 different codes can be programmed.
7. Starting with switch #1, slowly move the switches back to their original positions one at a time. This must be done in ascending order (1, 2, 3, 4...). A dot should now be flashing on the LED. Switch #2 must be in the OFF position in order to accept Tokenotes®.

PROGRAMMING THE CONTROLLER:

You must set the Tokenote® Value:

- Push the top and bottom buttons on the ACW Controller simultaneously for about 3-5 seconds to enter the programming mode.
- You must use the four wash select buttons and the refund button located on the door. For ease of reference, the top blue button will be #1. The second down will be #2, the third will be #3 and the bottom will be known as #4.
- Press the #2 button to scroll to the TOKENOTE VALUE? category.
- Press the #4 button to enter the category.
- Press the #2 button to scroll between the options:
TOKENOTE=
- The amount can be set from \$0.00 to \$63.75.
- Press the #2 button to increase the amount in \$.25 increments.
- Pressing the #3 button will decrease the amount in \$.25 increments.
- Press the #1 button to exit the category.
- Press the #2 button to scroll to the next category.

Programming Two Or More Tokenotes® With Different Values

You will need:

1. **Training Coupons** - Training Coupons are used to program Tokenotes® into the Validator's memory. There are four different Training Coupons: Coupon #1, Coupon #2, Coupon #3, and Coupon #4.
2. **Clear All Coupon** – The CLEAR ALL Coupon is used to erase all previously trained Tokenotes® so that the validator will no longer accept any of those Tokenotes®.

The following table shows the different types of Training Coupons needed to successfully program Tokenotes® on an Autocashier.

Training Coupon Type	Usage
COUPON #1	Used to program credit for Coupon #1 discount
COUPON #2	Used to program credit for Coupon #2 discount
COUPON #3	Used to program credit for Coupon #3 discount
COUPON #4	Used to program credit for Coupon #4 discount
CLEAR ALL	Used to erase all trained Tokenotes® so that the Validator will no longer accept any Tokenotes®
NULL	Used to accept a particular Tokenote® without giving credit for it (such as an expired note)
CLEAR ONE	Used to erase one or more trained Tokenotes® so that the Validator will no longer accept cleared Tokenotes®

PROGRAMMING THE STA VALIDATOR:

1. With the power on, check the operation of the validator. A dot flashing on the LED indicates it is operating normally.
2. Note the position of each switch on the DIP switch. (The DIP switch is located on the side of the validator.)
3. Set all 8 DIP switches to the OFF position. Then, starting with switch #8, slowly move the switches to the ON position, one switch at a time and in descending order (8, 7, 6, 5...). The LED should now be flashing the letter "P". This signifies that the validator is in the Tokenote® Programming Mode.
4. At this point, it is recommended to insert the CLEAR ALL Training Coupon, especially if this is the first time the validator is being programmed or if it has just been returned after being serviced. The CLEAR ALL Coupon will erase all previously trained Tokenotes® from the validator's memory but will not affect the controller's memory.
5. Insert one coded Tokenote® into the validator, making sure that it is accepted.

6. Insert Training Coupon #1 into the validator, making sure that it is accepted.
7. Repeat steps 5 and 6 to program each uniquely coded Tokenote® of the same value.
8. To program a differently coded Tokenote® with a different payout, simply insert that Tokenote® into the validator, followed by Coupon #2. Repeat as needed, using Coupons #3-4 for each Tokenote® coded differently. Altogether, up to 15 different codes can be programmed.
9. Starting with Switch #1, slowly move the switches back to their original positions one at a time. This must be done in ascending order (1, 2, 3, 4...). A dot should now be flashing on the LED. Switch #2 must be in the OFF position in order to accept Tokenotes®.

PROGRAMMING THE HVX or XE VALIDATOR:

1. With the power on, check the operation of the validator. A dot flashing on the LED indicates it is operating normally.
2. Note the position of each switch on the DIP switch. (The DIP switch is located on the side of the validator.)
3. Set all 10 DIP switches to the OFF position. Then, starting with switch #10, slowly move the switches to the ON position, one switch at a time and in descending order (10, 9, 8, 7...). The LED should now be flashing the letter "P". This signifies that the validator is in the Tokenote® Programming Mode.
4. At this point, it is recommended to insert the CLEAR ALL Training Coupon, especially if this is the first time the validator is being programmed or if it has just been returned after being serviced. The CLEAR ALL Coupon will erase all previously trained Tokenotes® from the validator's memory but will not affect the controller's memory.
5. Insert one coded Tokenote® into the validator, making sure that it is accepted.
6. Insert Training Coupon #1 into the validator, making sure that it is accepted.
7. Repeat steps 5 and 6 to program each uniquely coded Tokenote® of the same value.
8. To program a differently coded Tokenote® with a different payout, simply insert that Tokenote® into the validator, followed by Coupon #2. Repeat as needed, using Coupons #3-4 for each Tokenote® coded differently. Altogether, up to 14 different codes can be programmed.
9. Starting with switch #1, slowly move the switches back to their original positions one at a time. This must be done in ascending order (1, 2, 3, 4...). A dot should now be flashing on the LED. Switch #2 must be in the OFF position in order to accept Tokenotes®.

PROGRAMMING THE CONTROLLER:

You must set the Tokenote® Value:

- Push the top and bottom buttons on the ACW Controller simultaneously for about 3-5 seconds to enter the programming mode.
- You must use the four wash select buttons and the refund button located on the door. For ease of reference, the top blue button will be #1. The second down will be #2, the third will be #3 and the bottom will be known as #4.
- Press the #2 button to scroll to the TOKENOTE VALUE? category.
- Press the #4 button to enter the category.
- Press the #2 button to scroll between the options:
TOKENOTE=
- The amount can be set from \$0.00 to \$63.75.
- Press the #2 button to increase the amount in \$.25 increments.
- Pressing the #3 button will decrease the amount in \$.25 increments.
- Press the #1 button to exit the category.
- Press the #2 button to scroll to the COUPON DISCOUNTS? category.

You must then set the Coupon Discounts Values:

- Press the #4 button to enter the category.
COUPON 1=
COUPON 2=
COUPON 3=
COUPON 4=
- The amount can be set from \$0.00 to \$63.75.
- Press the #2 button to increase, or the #3 button to decrease the amount in \$.25 increments.
- Pressing the #3 button will decrease the amount in \$.25 increments.
- To continue programming Coupon 2 through Coupon 4, press the #2 button to select the Coupon number and then use the #2 or #3 buttons to program the amount.
- When finished programming desired amounts, press the #1 button to exit the category.

When programming more than one Tokenote®, it is important to keep the following in mind:

- ◆ Up to 14 differently coded Tokenotes® can be programmed at one time into the HVX or XE Validator or 15 different coded Tokenotes® for the STA Validator.
- ◆ It is possible to use one coupon to program several differently coded Tokenotes®, as long as they are of equal value. (For example, Coupon #1 can be used to program 3 differently coded Tokenotes® with a value of \$5 each.)

The same Tokenote® code cannot be programmed into different categories.

- ◆ Tokenotes® may be programmed into the four COUPON DISCOUNTS categories (Coupon #1-4) and the TOKENOTE® VALUE? category all at the same time (allowing a total of five categories). Tokenotes® may be distributed evenly throughout these categories, or spread out using any combination, as long as the Tokenote® values are the same for each category.

Voiding Tokenotes®

To void unwanted Tokenotes® it is necessary to have three additional Training Coupons; NULL, VENDING CLEAR ONE, and CLEAR ALL. The use of any Tokenote® can be eliminated by one of the three methods described below.

- **To continue to accept, but no longer give credit for a particular Tokenote®.**
(Erase a value)

PROGRAMMING THE STA VALIDATOR:

1. With the power on, check the operation of the validator. A dot flashing on the LED indicates it is operating normally.
2. Note the position of each switch on the DIP switch. (The DIP switch is located on the side of the validator.)
3. Set all 8 DIP switches to the OFF position. Then, starting with switch #8, slowly move the switches to the ON position, one switch at a time and in descending order (8, 7, 6, 5...). The LED should now be flashing the letter "P". This signifies that the validator is in the Tokenote® Programming Mode.
4. Insert the Tokenote® you no longer wish to credit into the validator, making sure that it is accepted.
5. Insert the NULL Training Coupon into the validator, making sure that it is accepted.
6. Repeat steps 4-5 for each Tokenote® that you no longer wish to give credit for.
7. Starting with switch #1, slowly move the switches back to their original positions one at a time. This must be done in ascending order (1, 2, 3, 4...). A dot should now be flashing on the LED.

PROGRAMMING THE HVX or XE VALIDATOR:

1. With the power on, check the operation of the validator. A dot flashing on the LED indicates it is operating normally.
2. Note the position of each switch on the DIP switch. (The DIP switch is located on the side of the validator.)
3. Set all 10 DIP switches to the OFF position. Then, starting with switch #10, slowly move the switches to the ON position, one switch at a time and in descending order (10, 9, 8, 7...). The LED should now be flashing the letter "P". This signifies that the validator is in the Tokenote® Programming Mode.
4. Insert the Tokenote® you no longer wish to credit into the validator, making sure that it is accepted.
5. Insert the NULL Training Coupon into the validator, making sure that it is accepted.
6. Repeat steps 4-5 for each Tokenote® that you no longer wish to give credit for.

7. Starting with switch #1, slowly move the switches back to their original positions one at a time. This must be done in ascending order (1, 2, 3, 4...). A dot should now be flashing on the LED.

➤ **To stop accepting a particular Tokenote®** (Erase any record that the Tokenote® was ever programmed)

PROGRAMMING THE STA VALIDATOR:

1. With the power on, check the operation of the validator. A dot flashing on the LED indicates it is operating normally.
2. Note the position of each switch on the DIP switch. (The DIP switch is located on the side of the validator.)
3. Set all 8 DIP switches to the OFF position. Then, starting with switch #8, slowly move the switches to the ON position, one switch at a time and in descending order (8, 7, 6, 5...). The LED should now be flashing the letter "P". This signifies that the validator is in the Tokenote® Programming Mode.
4. Insert the Tokenote® you wish to clear into the validator, making sure that it is accepted.
5. Insert the VENDING CLEAR ONE Training Coupon into the validator, making sure that it is accepted.
6. Repeat steps 4-5 for each Tokenote® you wish to void.
7. Starting with switch #1, slowly move the switches back to their original positions one at a time. This must be done in ascending order (1, 2, 3, 4...). A dot should now be flashing on the LED.

PROGRAMMING THE HVX or XE VALIDATOR:

1. With the power on, check the operation of the validator. A dot flashing on the LED indicates it is operating normally.
2. Note the position of each switch on the DIP switch. (The DIP switch is located on the side of the validator.)
3. Set all 10 DIP switches to the OFF position. Then, starting with Switch #10, slowly move the switches to the ON position, one switch at a time and in descending order (10, 9, 8, 7...). The LED should now be flashing the letter "P". This signifies that the validator is in the Tokenote® Programming Mode.
4. Insert the Tokenote® you wish to clear into the validator, making sure that it is accepted.
5. Insert the VENDING CLEAR ONE Training Coupon into the validator, making sure that it is accepted.
6. Repeat steps 4-5 for each Tokenote® you wish to void.
7. Starting with switch #1, slowly move the switches back to their original positions one at a time. This must be done in ascending order (1, 2, 3, 4...). A dot should now be flashing on the LED.

- **To stop accepting all Tokenotes® already programmed into the validator.**
(This erases any record that the Tokenotes® were ever programmed)

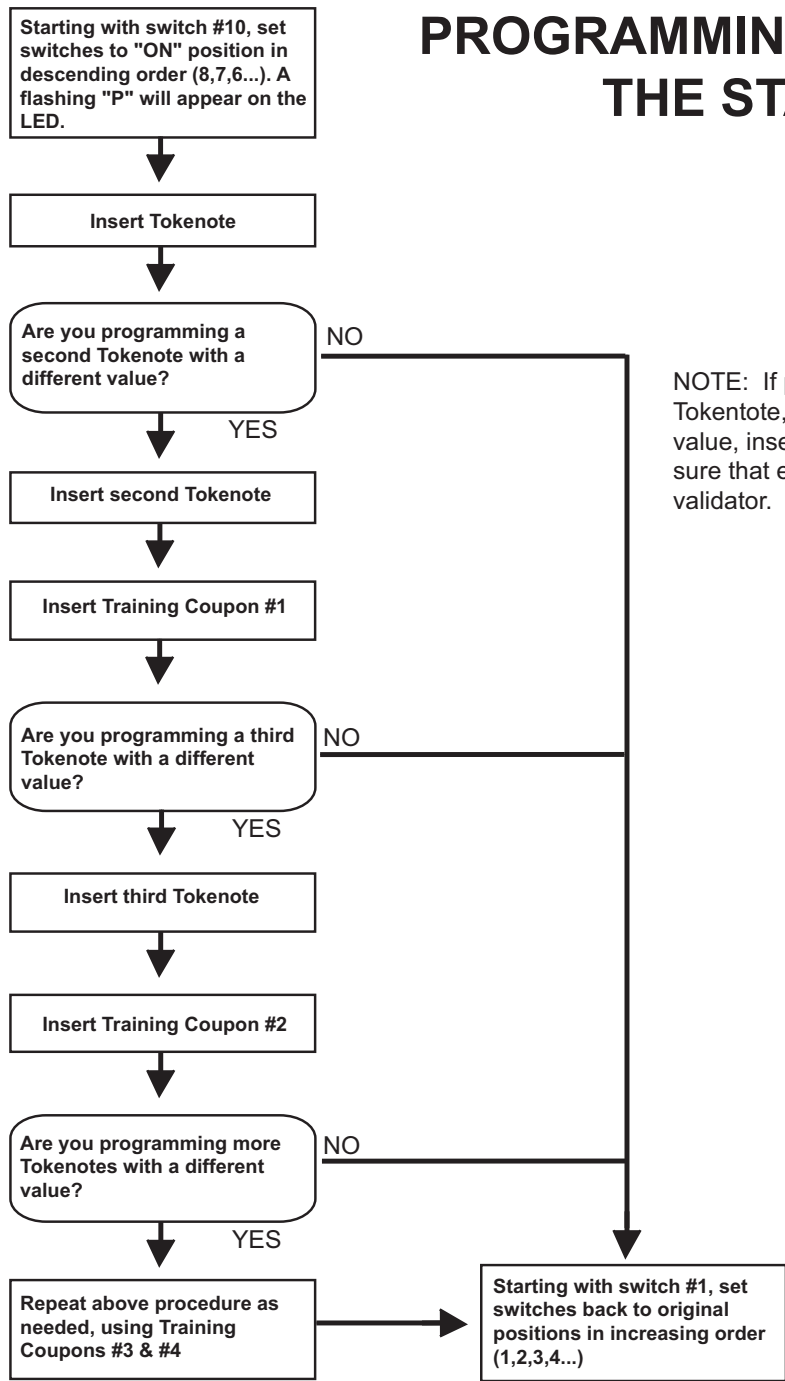
PROGRAMMING THE STA VALIDATOR:

1. With the power on, check the operation of the validator. A dot flashing on the LED indicates it is operating normally.
2. Note the position of each switch on the DIP switch. (The DIP switch is located on the side of the validator.)
3. Set all 8 DIP switches to the OFF position. Then, starting with switch #8, slowly move the switches to the ON position, one switch at a time and in descending order (8, 7, 6, 5...). The LED should now be flashing the letter “P”. This signifies that the validator is in the Tokenote® Programming Mode.
4. Insert the CLEAR ALL Training Coupon into the validator, making sure that it is accepted.
5. Starting with switch #1, slowly move the switches back to their original positions one at a time. This must be done in ascending order (1, 2, 3, 4...). A dot should now be flashing on the LED.

PROGRAMMING THE HVX or XE VALIDATOR:

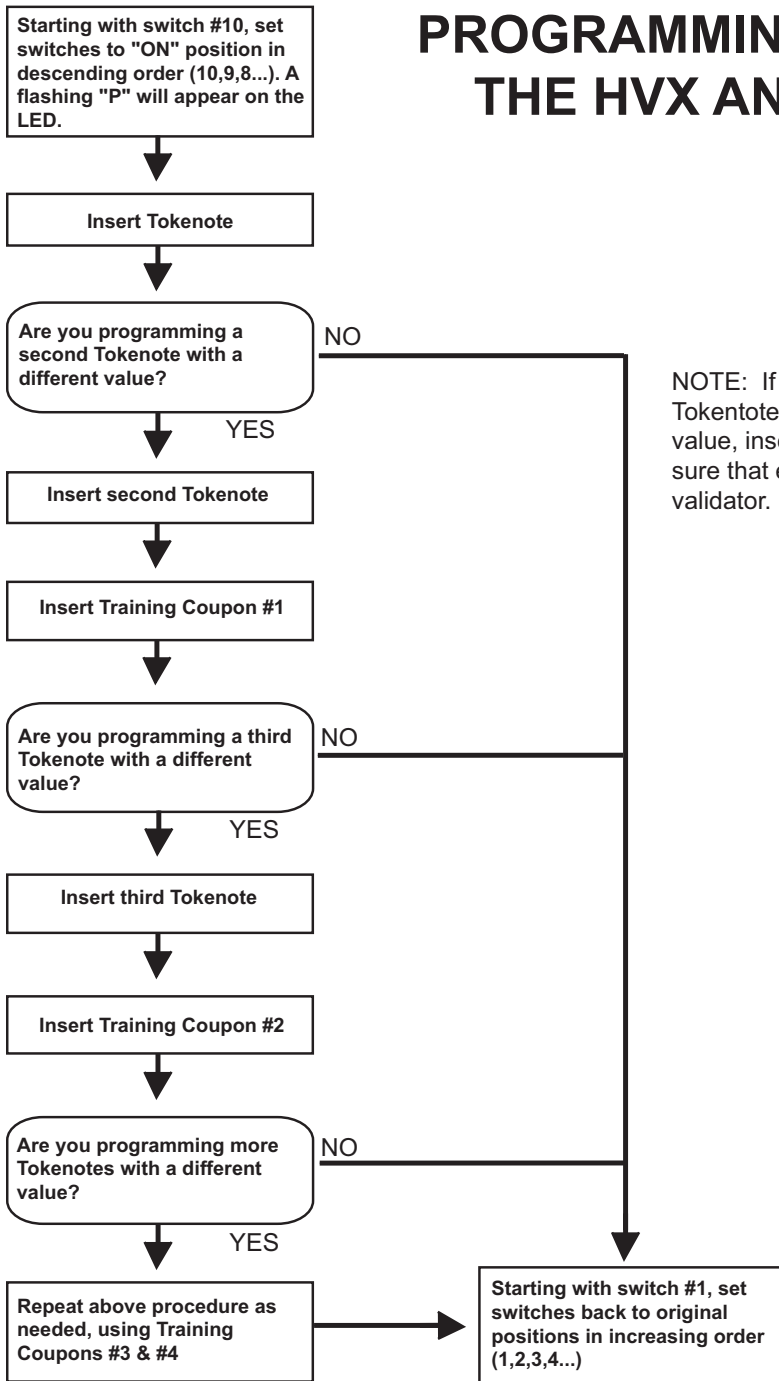
1. With the power on, check the operation of the validator. A dot flashing on the LED indicates it is operating normally.
2. Note the position of each switch on the DIP switch. (The DIP switch is located on the side of the validator.)
3. Set all 10 DIP switches to the OFF position. Then, starting with switch #10, slowly move the switches to the ON position, one switch at a time and in descending order (10, 9, 8, 7...). The LED should now be flashing the letter “P”. This signifies that the validator is in the Tokenote® Programming Mode.
4. Insert the CLEAR ALL Training Coupon into the validator, making sure that it is accepted.
5. Starting with switch #1, slowly move the switches back to their original positions one at a time. This must be done in ascending order (1, 2, 3, 4...). A dot should now be flashing on the LED.

PROGRAMMING TOKENOTES WITH THE STA VALIDATOR



NOTE: If programming more than one Tokenote, coded differently but of equal value, insert one right after the other. Make sure that each Tokenote is accepted by the validator.

PROGRAMMING TOKENOTES WITH THE HVX AND XE VALIDATORS



NOTE: If programming more than one Tokenote, coded differently but of equal value, insert one right after the other. Make sure that each Tokenote is accepted by the validator.

Appendix A

Default Settings

TOKEN COIN MODE	MULTIPLE CREDITS
TOKEN COIN VALUE	\$1.00
TOKENOTE MODE	MULTIPLE CREDITS
TOKENOTE VALUE	\$1.25
COUPON #1 VALUE	\$0.25
COUPON #2 VALUE	\$0.50
COUPON #3 VALUE	\$0.75
COUPON #4 VALUE	\$1.00
SET FEE MODE	FEE ON EXIT
EVENT #0	\$1.25
SET LOST TICKET FEE	DISABLED
PROCEED MESSAGE #1	THANK YOU
PROCEED MESSAGE #2	PLEASE DRIVE AHEAD
PROCEED MESSAGE #3	--NOT USED--
PROCEED MESSAGE #4	--NOT USED--
WELCOME MESSAGE #1	TO ENTER LOT
WELCOME MESSAGE #2	--NOT USED--
WELCOME MESSAGE #3	--NOT USED--
WELCOME MESSAGE #4	--NOT USED--
VEND DURATION	1.0 seconds
EMPTY MODE	OUT OF SERVICE
PAY DEFAULT	OUT OF SERVICE
SET DATE & TIME?	SUN 01-01-00 12:00 A
SET HOPPER CONTENTS?	QTR
RECEIPT HEADERS?	(All) NOT USED
RECEIPT MODE?	NO RECEIPT
EXTERNAL DISPLAY MESSAGES	NOT USED

Appendix B Welcome Messages

WELCOME
TO PARK HERE
SPACE AVAILABLE
PAY IN CASH OR TOKEN
USE CASH OR TOKEN
USE CASH OR CARD
INSERT CREDIT CARD AND REMOVE SLOWLY
DATE
TO ENTER LOT
DEPOSIT MONEY
WAIT FOR GATE AND DRIVE THROUGH

Appendix C Proceed Prompts

NOT USED
THANK YOU
PLEASE DRIVE AHEAD
PUT CAR IN NEUTRAL
DO NOT BRAKE/STEER
PLEASE PROCEED
(BLANK)
DRIVE FORWARD

Appendix D Closed Prompts

COME AGAIN
PARKING LOT CLOSED
DATE
PLEASE WAIT
PARKING LOT FULL
PULL FORWARD
TAKE TICKET

LIMITED WARRANTY AGREEMENT OF HAMILTON MANUFACTURING CORP.

Hamilton Manufacturing Corp., an Ohio Corporation, (“Seller”) warrants to Purchaser that all new equipment shall be free from defects in material and factory workmanship for a period of one (1) year from the original shipping date. Hamilton Manufacturing Corp. further warrants if any part of said new equipment in Seller’s sole opinion, requires replacement or repair due to a defect in material or factory workmanship during said period, Seller will repair or replace said new equipment. Purchaser’s remedies and the liabilities and obligations of Seller herein shall be limited to repair or replacement of the equipment as Seller may choose, and Seller’s obligation to remedy such defects shall not exceed the Purchaser’s original cost for the equipment. Purchaser EXPRESSLY AGREES this is the EXCLUSIVE REMEDY under this warranty. There are no other express or implied warranties which extend beyond the face hereof. All warranty repair service must be performed by either a Factory Trained Service Representative or **HAMILTON MANUFACTURING CORP., 1026 Hamilton Drive, Holland, Ohio 43528 PHONE (419) 867-4858 or (800) 837-5561, FAX (419) 867-4867.**

The limited warranty for new equipment is conditioned upon the following:

1. The subject equipment has not, in the Seller’s sole opinion, been subjected to: accident, abuse, misuse, vandalism, civil disobedience, riots, acts of God, natural disaster, acts of war or terrorism.
2. The Seller shall not be liable for any expense incurred by Purchaser incidental to the repair or replacement of equipment and Purchaser shall assume full responsibility for any freight or shipping charges.
3. The coverage of this warranty shall not extend to expendable parts.
4. Purchaser shall have a warranty registration card on file with Seller prior to any claim in order for warranty protection to apply.
5. No warranty coverage is applicable to any equipment used for currency other than that specified at the time of the purchase.
6. Seller expressly disclaims any warranty that counterfeit currency will not activate said equipment.
7. Seller expressly disclaims any warranty for any losses due to bill manipulation or theft or loss of cash under any circumstances.
8. Use of the equipment for anything other than its intended and designed use will void the Limited Warranty Agreement. Use of equipment for anything other than its intended and designed use includes, but is not limited to, downloading software/applications not certified by Seller such as e-mail, spyware, screen savers, viruses, worms, third party software, web search engines, cookies, spam, desktop applications, games, web surfing, etc.

Seller further warrants all repair or service work performed by a factory trained representative or Hamilton Manufacturing Corp. for a period of ninety (90) days from the date the repair or service work was performed. Purchaser’s remedies and the liabilities and obligations of Seller herein shall be limited to repair or replacement of equipment as Seller may choose, and Seller’s obligation to remedy such defects shall not exceed the Purchaser’s depreciated value of the equipment. Purchaser EXPRESSLY AGREES this is an EXCLUSIVE REMEDY under this warranty. There are no other express or implied warranties on repair or service work performed by a factory trained representative or Hamilton Manufacturing Corp. which extend beyond the face hereof.

The limited warranty for repair and service work is conditioned upon the following:

1. The subject equipment has not, in the Seller's sole opinion, been subjected to: accident, abuse, misuse, vandalism, civil disobedience, riots, acts of God, natural disaster, acts of war or terrorism.
2. The Seller shall not be liable for any expense incurred by Purchaser incidental to the repair or replacement of equipment and Purchaser shall assume full responsibility for any freight or shipping charges.
3. The coverage of this warranty shall not extend to expendable parts.
4. Purchaser shall have a warranty registration card on file with Seller prior to any claim in order for warranty protection to apply.
5. No warranty coverage is applicable to any equipment used for currency other than that specified at the time of the purchase.
6. Seller expressly disclaims any warranty that counterfeit currency will not activate said equipment.
7. Seller expressly disclaims any warranty for any losses due to bill manipulation or theft or loss of cash under any circumstances.
8. No person or entity other than a factory trained representative or Hamilton Manufacturing Corp. has performed or attempted to perform the subject repair or service.
9. Using equipment which has been serviced or repaired for anything other than its intended or designed use such as downloading software applications not certified by Seller will void the Limited Warranty Agreement. This includes software/applications such as e-mail, spyware, screen savers, viruses, worms, third party software, web search engines, cookies, spam, desktop applications, games, web surfing, etc.

THIS AGREEMENT IS MADE WITH THE EXPRESS UNDERSTANDING THAT THERE ARE NO IMPLIED WARRANTIES THAT THE EQUIPMENT SHALL BE MERCHANTABLE, OR THAT THE GOODS SHALL BE FIT FOR ANY PARTICULAR PURPOSE. PURCHASER HEREBY ACKNOWLEDGES THAT IT IS NOT RELYING ON THE SELLER'S SKILL OR JUDGMENT TO SELECT OR FURNISH EQUIPMENT SUITABLE FOR ANY PARTICULAR PURPOSE AND THAT THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THAT WHICH IS DESCRIBED HEREIN.

The Purchaser agrees that in no event will the Seller be liable for direct, indirect, or consequential damages or for injury resulting from any defective or nonconforming new, repaired or serviced equipment, or for any loss, damage or expense of any kind, including loss of profits, business interruption, loss of business information or other pecuniary loss arising in connection with this Limited Warranty Agreement, or with the use of, or inability to use the subject equipment regardless of Sellers knowledge of the possibility of the same.

Hamilton Manufacturing Corporation

1026 Hamilton Drive
Holland, OH 43528

Sales Phone: (888) 723-4858 **Sales Fax:** (419) 867-4850
Customer Service Phone: (800) 837-5561 **Customer Service Fax:** (419) 867-4857
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