WaveRider G6V2
Installation & Setup

Speed Queen ACA
Speed Queen MDC
Maytag PR / PD

Heartland

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This document is intended to illustrate the installation and field setup for the Heartland MicroPayments G6 laundry control devices. There instructions should cover three main types of laundry machines:

- Speed Queen ACA controls
- Speed Queen MDC controls
- Maytag PR / PD controls

If you cannot locate and/or identify any of the components listed, or have any questions about these instructions, please contact the Heartland MicroPayments Customer Service team at 800-332-4835 , then press 2.

Required Tools

- Pliers
- Tape Measure
- 5/32" Drill Bit & Drill
- Step-Bit, up to at least 1"
- Phillips Head screwdriver (Speed Queen)
- #T20 Torx - Security driver (Maytag)
- 1/8" Hex head bit, or key
- Pocket level

Kit Components (by type)

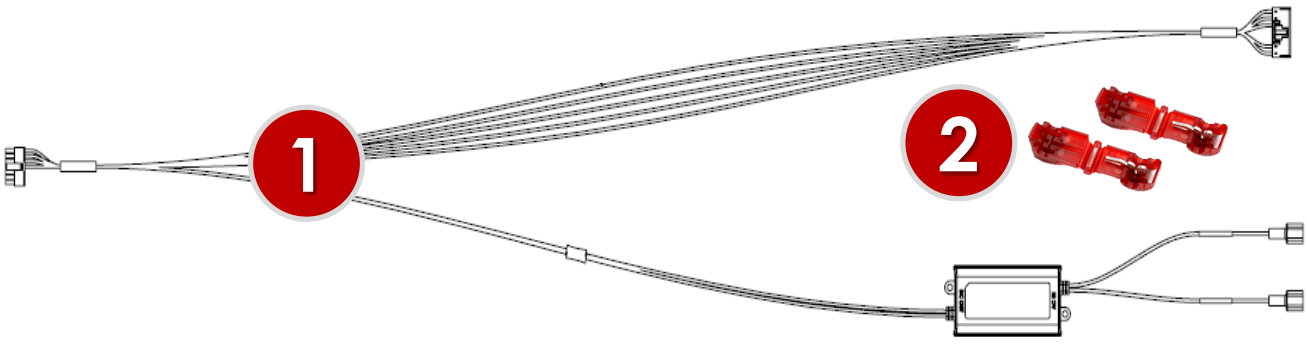
The components for each G6 kit will vary depending on the type of machine the device is being installed into. Please take the time to identify which kit you are working with. Note, harness kits contain zip-ties and adhesive anchors but are not represented here.

G6 Reader Kit: WLAU-READER-G6V2

Item	Qty	Part Number	Description
1	1	WLAU-READER-G6V2	WaveRider EMV and NFC Reader includes laundry interface board and communications module
2	4	SRW-M4X8PPM	Phillips screws to attach G6 to bracket

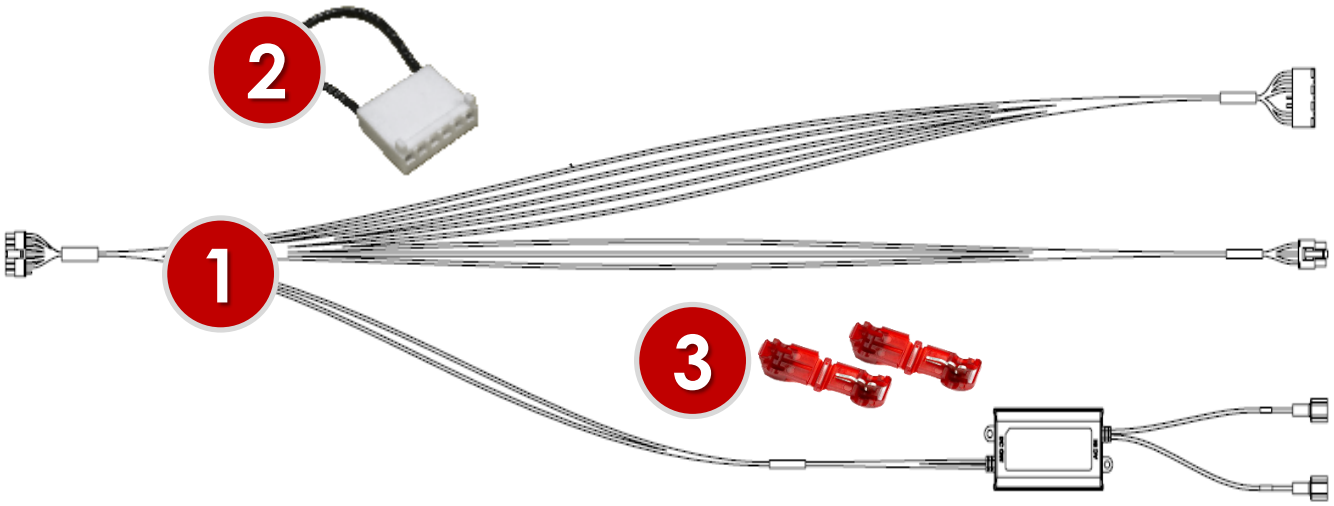
Speed Queen ACA Harness Kit: KIT-HRN-068066

Item	Qty	Part Number	Description
1	1	CBL-068052-1	G6V2 ACA Interface harness with built-in transformer
2	2	HDW-TAP250-F18	Female QuickSlide Disconnect, T-Tap Nylon Insulated Self-Stripping, 22-18 AWG



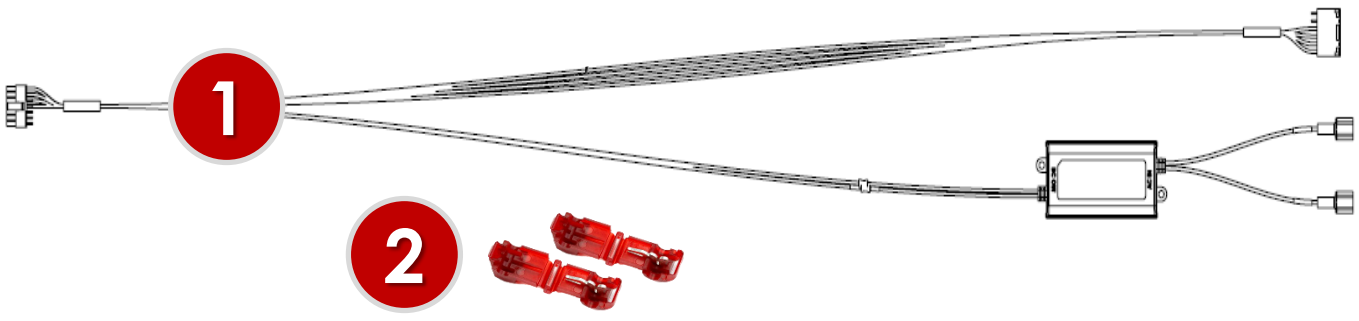
Speed Queen MDC Harness Kit: KIT-HRN-068065

Item	Qty	Part Number	Description
1	1	CBL-068051-1	G6V2 MDC Interface harness with built-in transformer
2	1	MFP-175009	Speed Queen MDC/Q Serial Jumper
3	1	HDW-TAP250-F18	Female QuickSlide Disconnect, T-Tap Nylon Insulated Self-Stripping, 22-18 AWG



Maytag PR / PD Harness Kit: KIT-HRN-068067

Item	Qty	Part Number	Description
1	1	CBL-068064	G6V2 Maytag PR/PD Interface harness with built-in transformer
2	1	HDW-TAP250-F18	Female QuickSlide Disconnect, T-Tap Nylon Insulated Self-Stripping, 22-18 AWG



Prerequisites

These items should be completed before installation of the G6 devices is performed.

a. The **Provider** and **Location** have been properly setup to support G6 devices on WaveCentral (https://provider.mywavevision.com/)

b. The **Room(s)**, and **Machine Layouts** should already be configured on the WaveCentral website prior to installation.

If these steps have not been completed, the installation process will not be able to proceed. Please contact your management team or our Customer Service team at (800-332-4835 , then press 2, or email HMPSupport@e-hps.com) to confirm.

G6
Hardware Installation

G6 + COIN

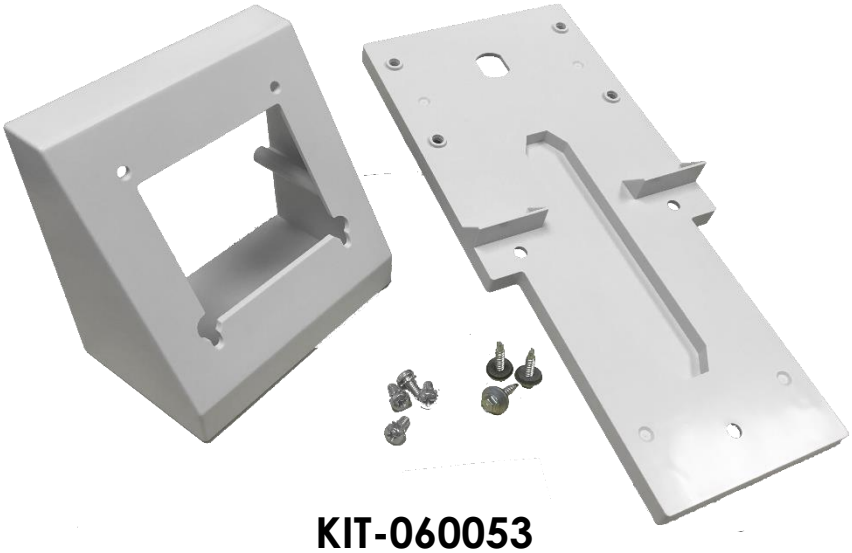
G6 + Coin Bracket Kits

For coin machines that are being equipped with G6V2 readers, there are three installation options.

- Rear control Wedge with back-plate
- Front control / stack Wedge Mount
- Direct Mount onto surface of machine (no bracket)

Current bracket kits:

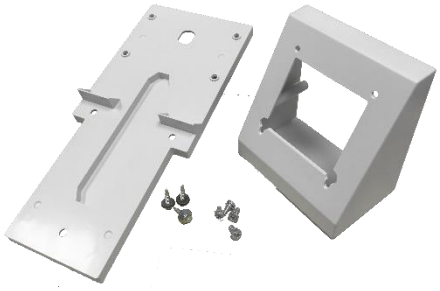
G6 Bracket Kits	*Rear Control & Front Control with Coin*
KIT-068053	Bracket Kit, Rear Control coin and card installs
KIT-068049	Bracket kit, Wedge Mount, front control, stack dryers



KIT-060053

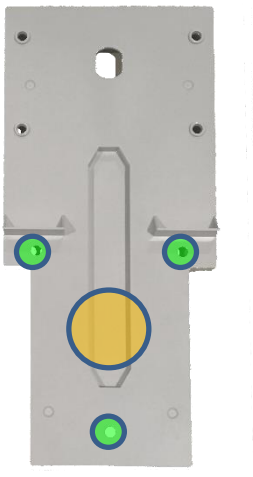
KIT-068049

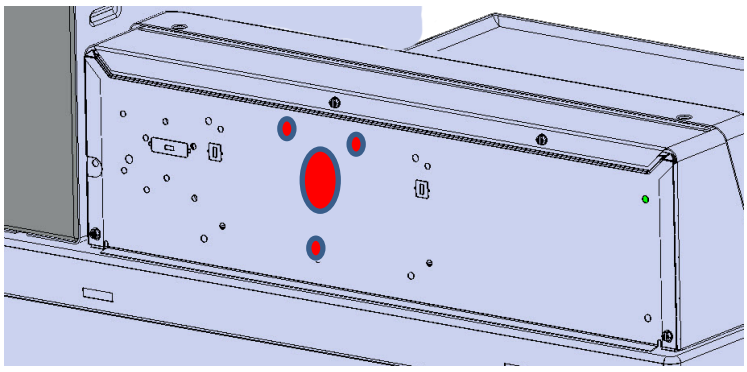
Rear Control , Coin & Card Mount: KIT-050222



This G6V2 bracket kit can be installed on almost any rear control machine.

1. Position the upright bracket against the back of the machine and position it as desired. The two guide tabs on the front of the upright should rest on top of the backsplash.
2. Mark the three hole positions (green dots). Set the upright aside.
3. Where the orange circle below rests in the middle of the marked positions on the panel, use the step drill to punch a hole at least 1.25" in diameter. Remove any sharp edges to avoid wire chafing. DO NOT DRILL THROUGH THE ARA MARKED IN ORANGE ON THE UPRIGHT.
4. Drop the backsplash and feed at least 18" of the J2 (Reader) end of the interface harness through the hole (from the inside-out).

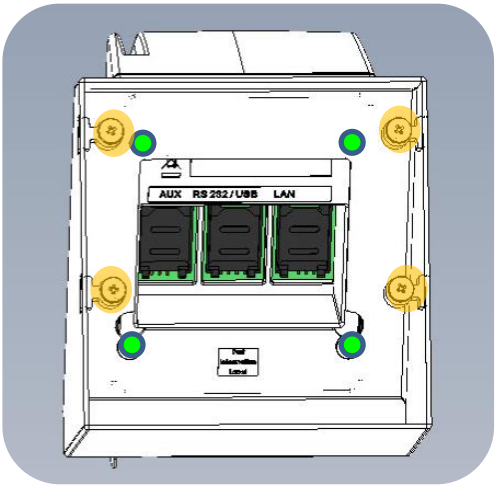




Back panel of machine

Rear Control , Coin & Card Mount: KIT-068053

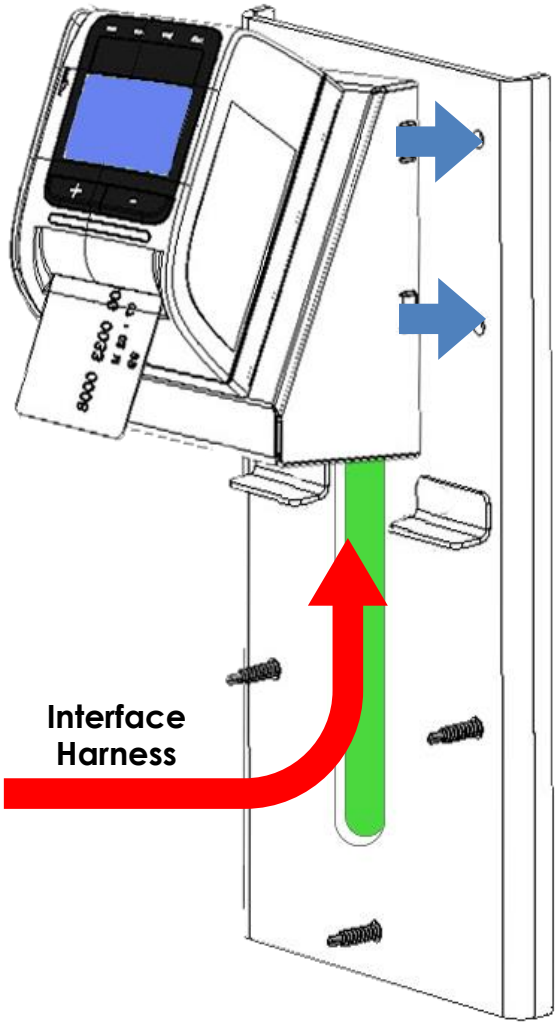
4. Use the machine screws supplied with the G6V2 reader to secure it to wedge bracket (green circles).



5. Connect the J1 end of the interface harness to the back of the G6V2 reader.

6. Position the wedge bracket with G6V2 & interface cable onto the upright bracket. The interface cable should run along the provided channel (in green to the right) and follow the direction of the red arrow.

7. Using the screws provided with the wedge bracket, secure it (with mounted G6V2) to the upright bracket (orange circles).

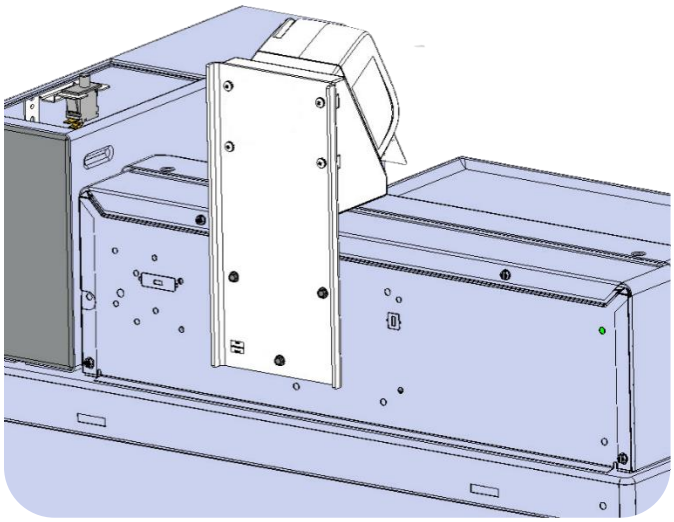


Rear Control , Coin & Card Mount: KIT-068053

8. Feed the slack of the interface cable back into the machine.

9. Line up the upright bracket with the marks made in step 2 and using the self-tapping drill screws provided with the kit, secure the upright to the machine.

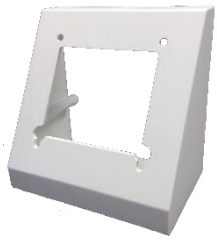
10. Proceed to the **G6V2 Machine Wiring** section.



Back panel of machine

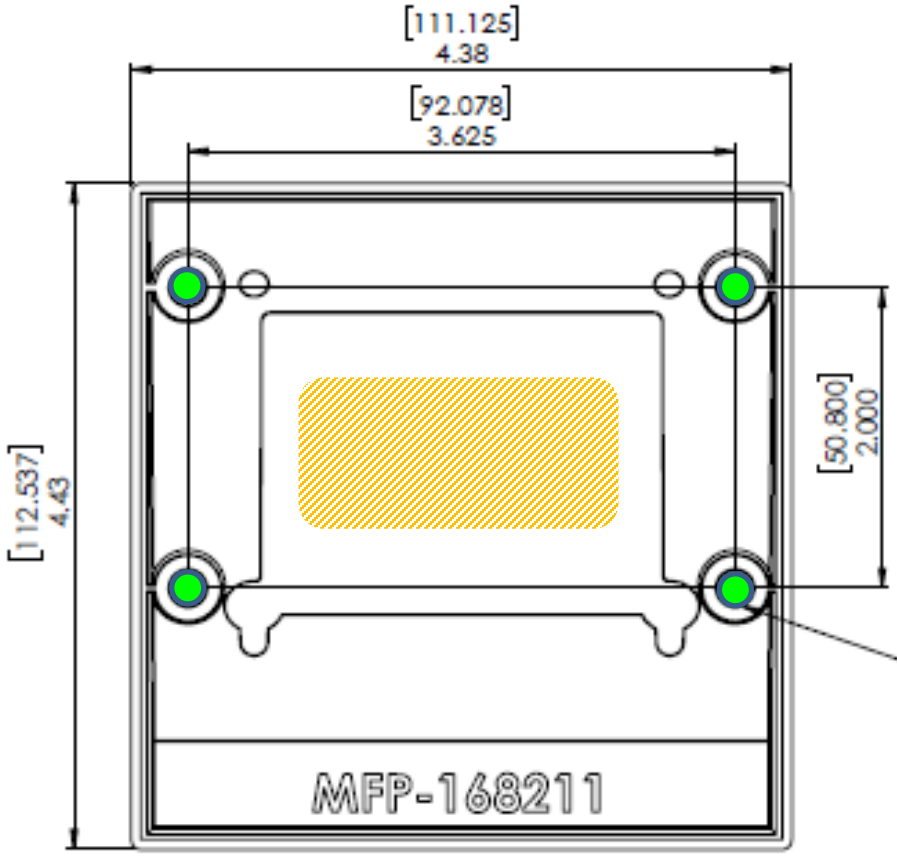
Installation Example

Front Control / Stack Wedge Mount: KIT-068049



The G6V2 wedge bracket can be installed on almost any machine (vertically or horizontally).

1. Using the dimensions referenced below, mark the hole locations (green circles) for the Wedge Bracket's mounting screws. Use the level to ensure that the bracket is straight.
2. Use the 5/32" bit and drill out the holes.
3. Using the Step-Bit, create a 1" hole in the center square area (orange rectangle) to accommodate the interface harness. De-burr any sharp edges to prevent chafing. The harness can be routed through the card reader opening on front control prep-for-card machines.



This is a dimensional reference diagram only, do not use this as a template!

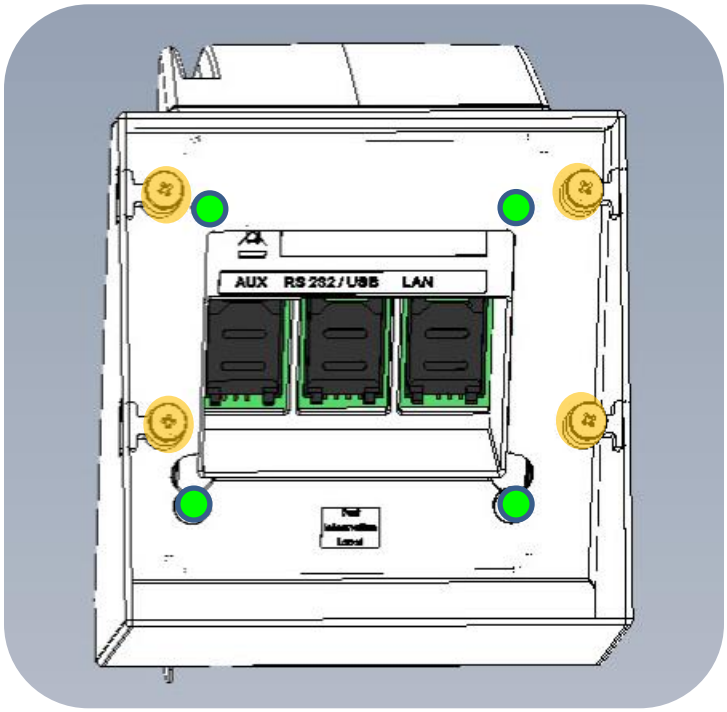
Front Control / Stack Wedge Mount: KIT-068049

4. Use the machine screws supplied with the G6V2 reader to secure it to wedge bracket (green circles).

5. Thread the 14-pin J1 end of the interface harness through the 1" hole and connect it to the back of the G6V2 reader

6. Using the screws provided with the wedge bracket, secure it (with mounted G6V2) to the machine (orange circles)

7. Proceed to the **G6V2 Machine Wiring** section.



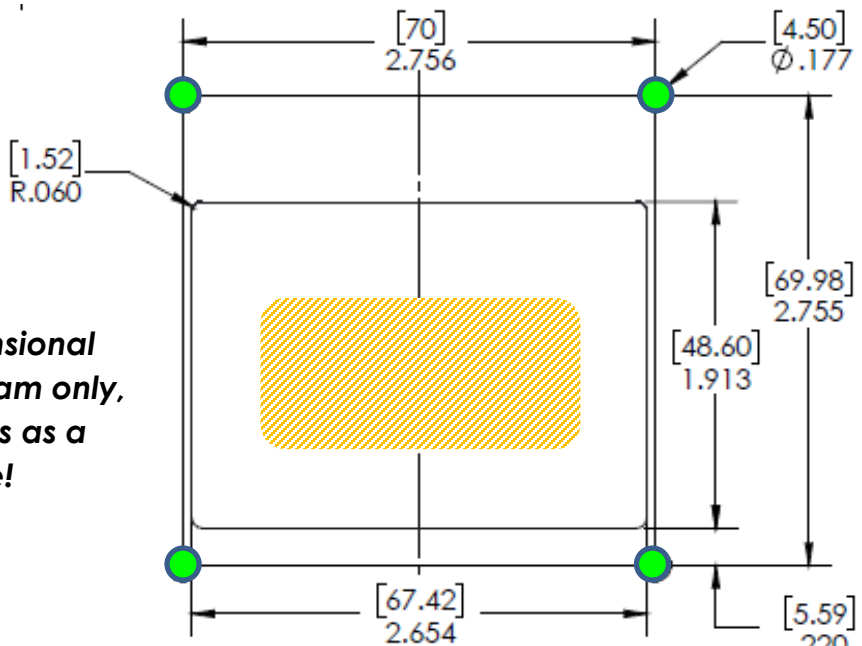
Installation Example

Direct Mount on Machine

The G6V2 can be installed directly on the machine's without a bracket, if so desired.

1. Using the dimensions referenced below, mark the hole locations (green circles) for the G6V2's mounting screws. Use the level to ensure that the reader is straight.
2. Use the 5/32" bit and drill out the holes.
3. Using the Step-Bit, create a 1" hole in the center square area (orange rectangle) to accommodate the interface harness. De-burr any sharp edges to prevent chafing.
4. Thread the 14-pin J1 end of the interface harness through the 1" hole and connect it to the back of the G6V2 reader
5. Use the machine screws supplied with the G6V2 reader to secure it to the machine.
6. Proceed to the **G6V2 Machine Wiring** section.

This is a dimensional reference diagram only, do not use this as a template!



Mounting Cutout

G6
Hardware Installation

Meter Case Brackets

G6 Meter Case Bracket Kits

For coin machines that are being converted to only operate G6 devices, there are options to install directly into the meter case opening. All kits available for this purpose have three components and are installed in a similar manner.

Current meter case bracket kits:

G6 Bracket Kits	*METER CASE MOUNTS*
KIT-068038	EMV Coin Conversion 10° Front Control Single & Stack Mount
KIT-068039	EMV Coin Conversion Standard Capacity Meter case Mount Kit
KIT-068040	EMV Coin Conversion High Capacity Meter Case Mount Kit
KIT-068041	EMV Alliance Flat Front Control Small Vault Coin Drop Mount Kit

KIT-068038

KIT-068039

KIT-068040

KIT-068041

All kits come with 4 reader mounting screws (hex) and at least one wing-nut & large washer.

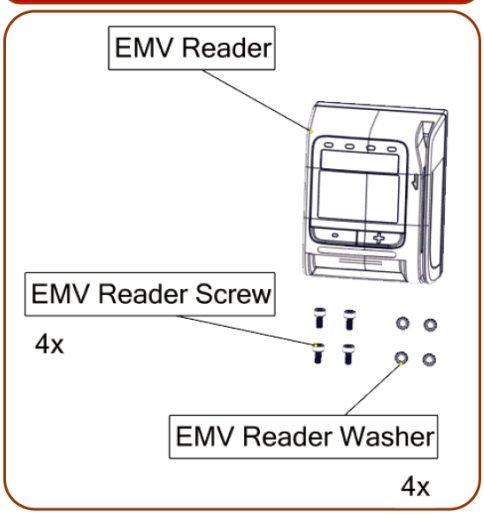
STOP

Please make sure the machine is unplugged before you start.

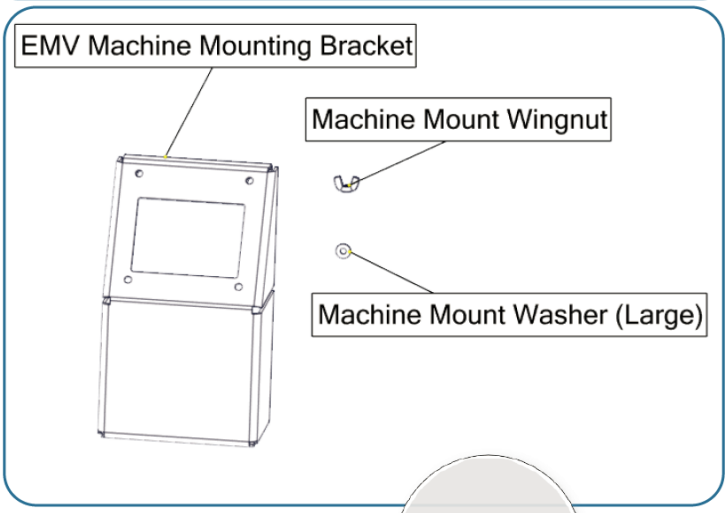
Tools Needed:

- Phillips Screwdriver

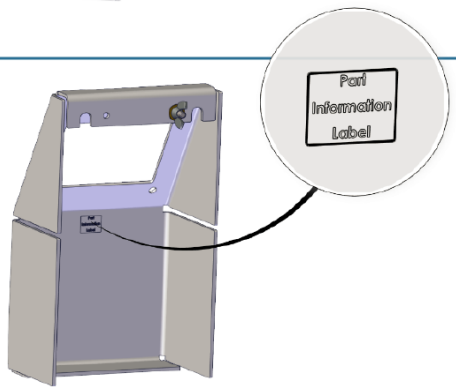
EMV Reader



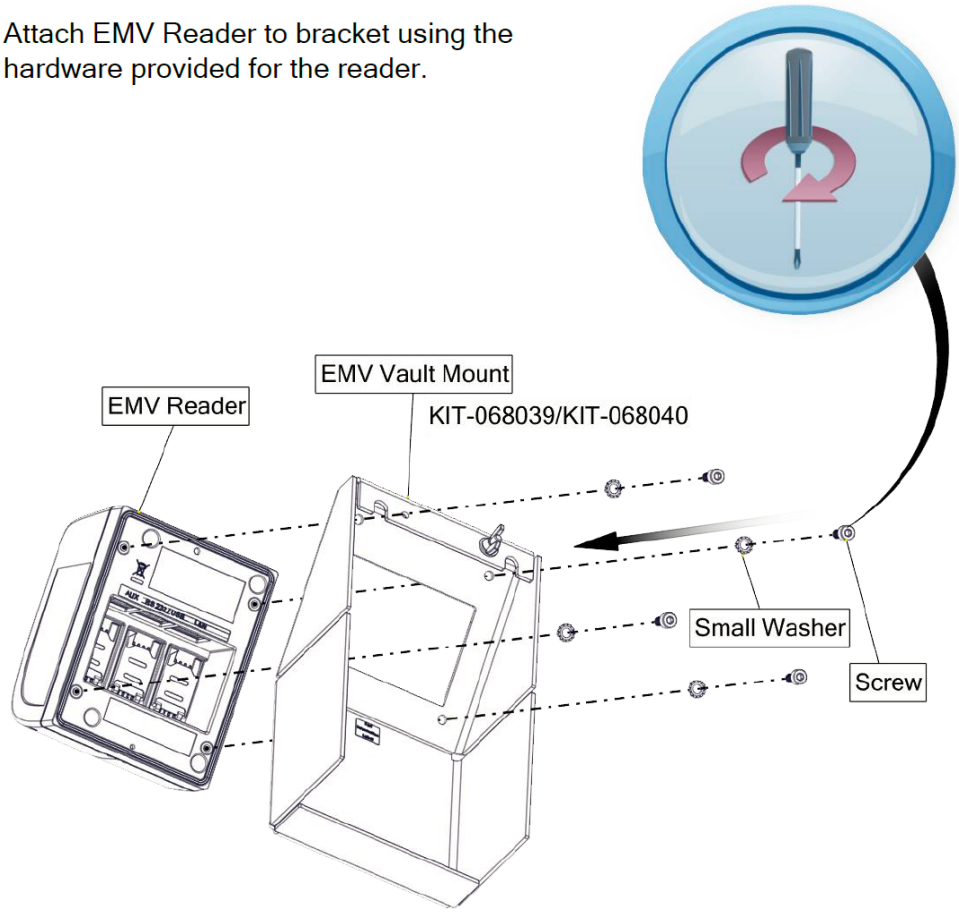
KIT-068039 Standard Metercase
KIT-068040 High Capacity Metercase



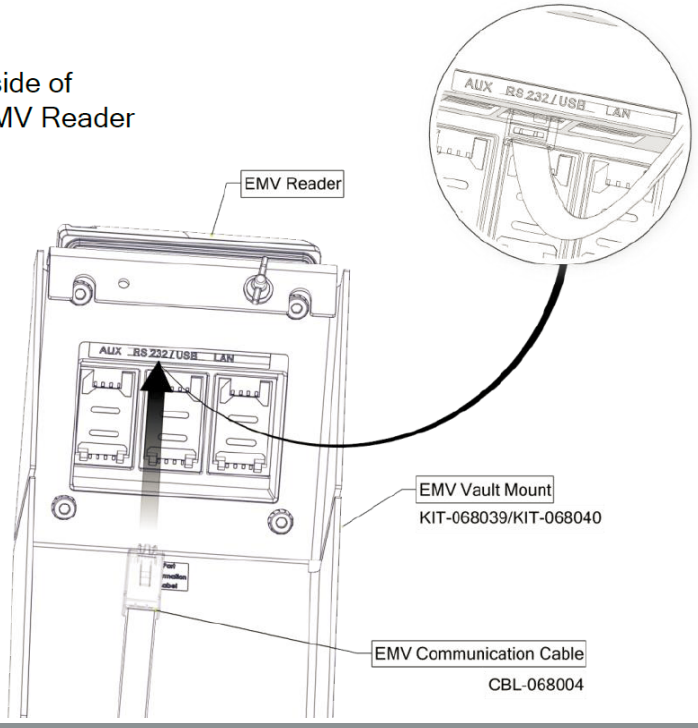
Bracket part number and information is located in the back interior of part.

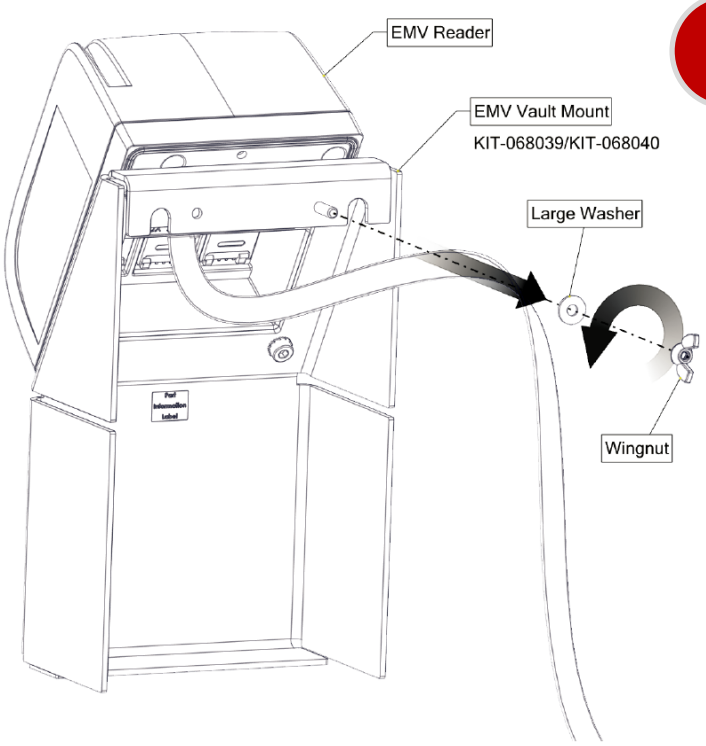


1 Attach EMV Reader to bracket using the hardware provided for the reader.



2 Insert cable end connector from outside of machine into RS 232/USB slot on EMV Reader while attached to bracket as shown.



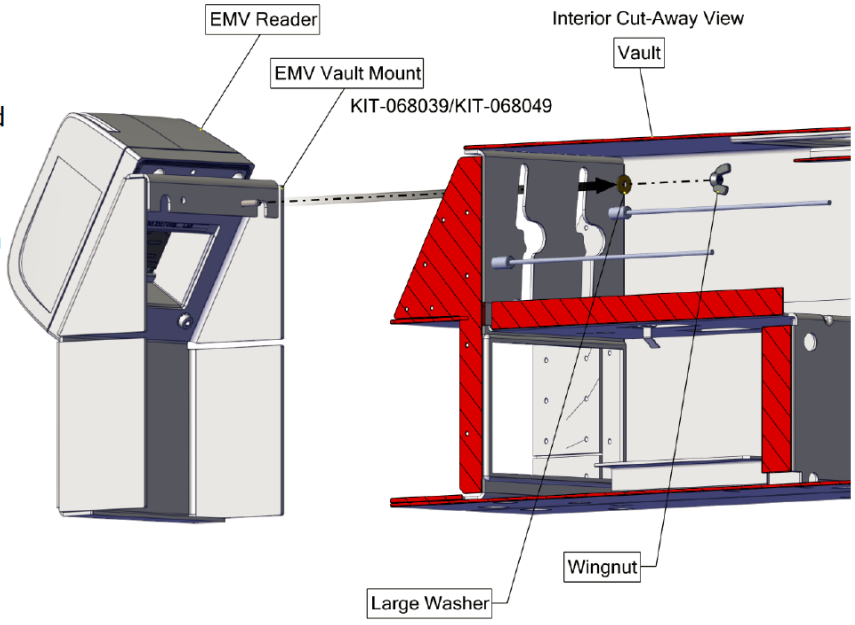


3 Remove wingnut and larger washer provided on bracket. This will be used in the next assembly.

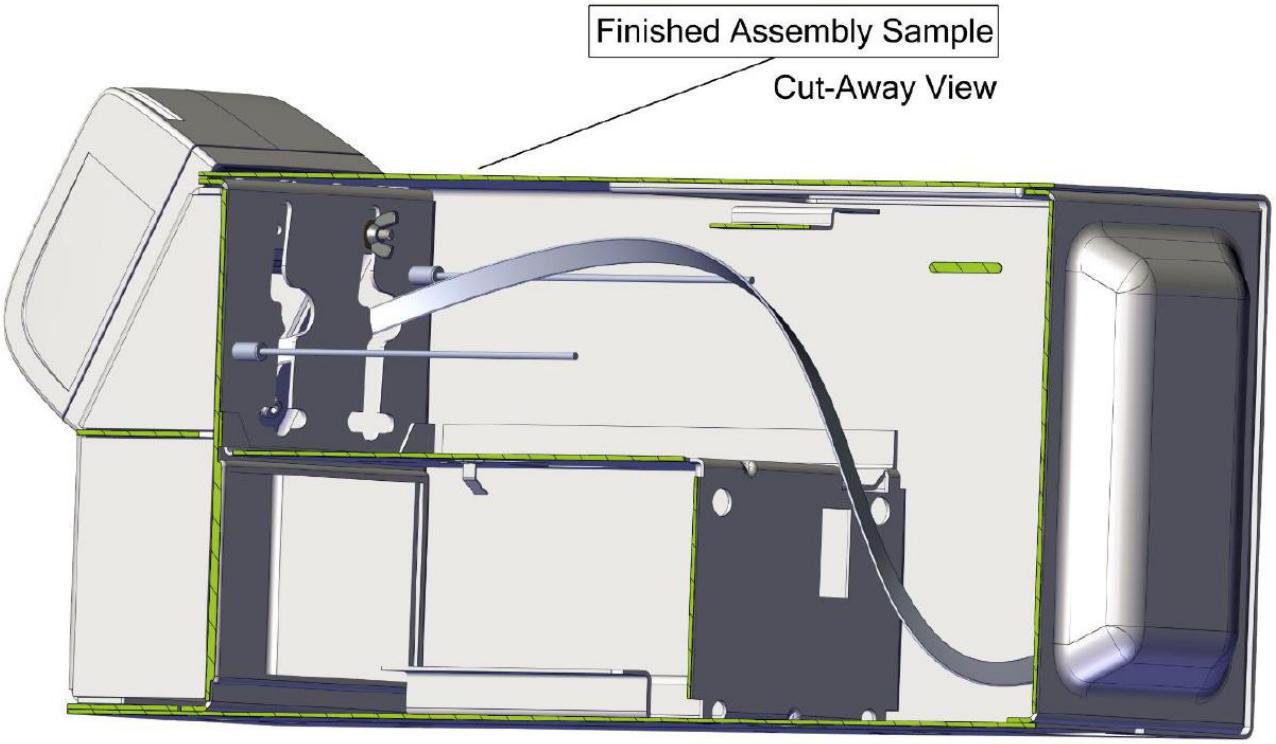
---

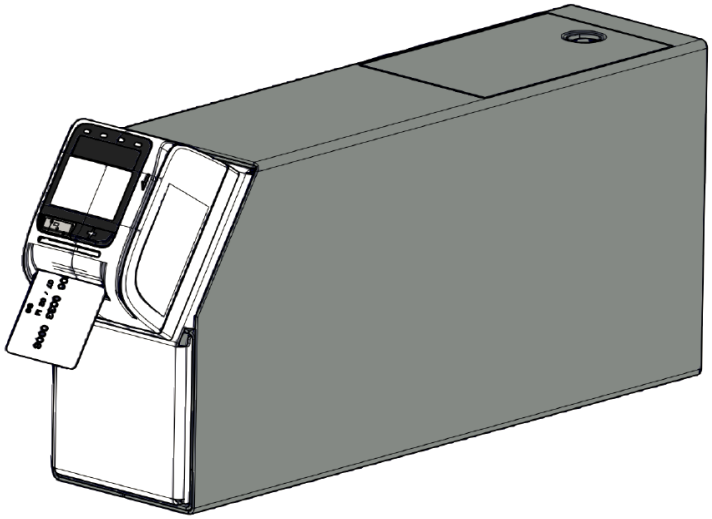
4 Assemble EMV Reader bracket to vault by allowing the threaded stud to pass through the coin drop opening.

Secure from the back with larger washer and wingnut.



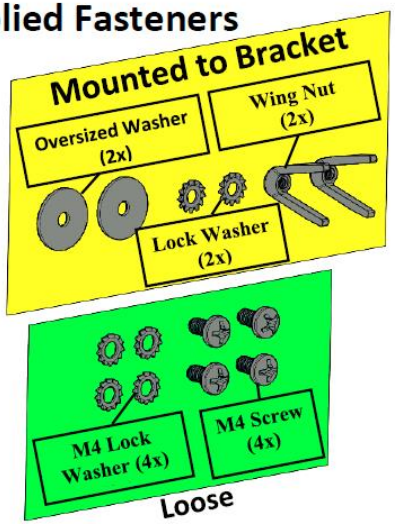
5 Finished assembly should appear similar to the image shown below.



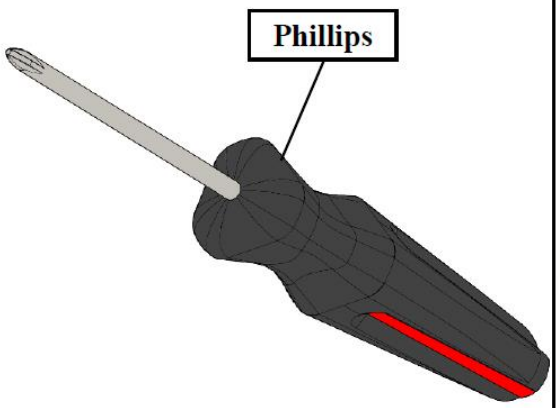


G6 Meter Case Quick Reference Guide

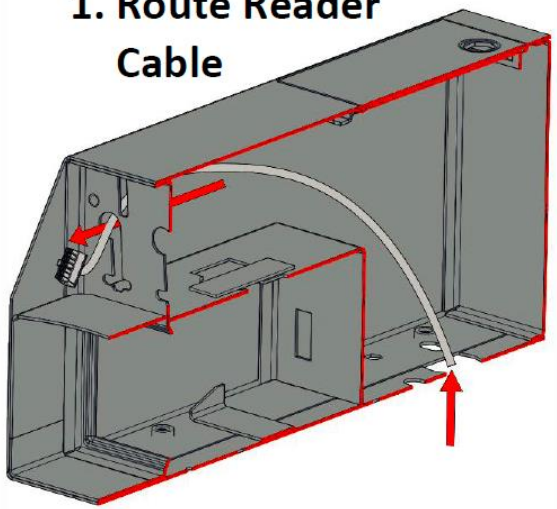
Supplied Fasteners



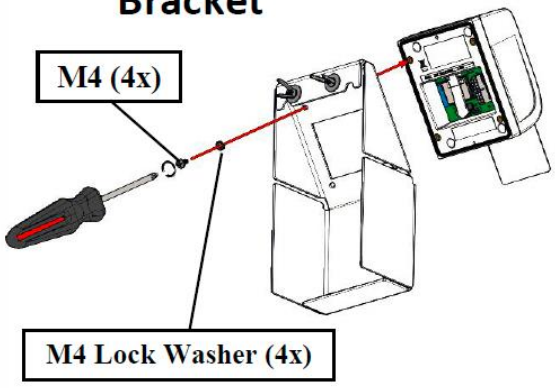
Needed Tools



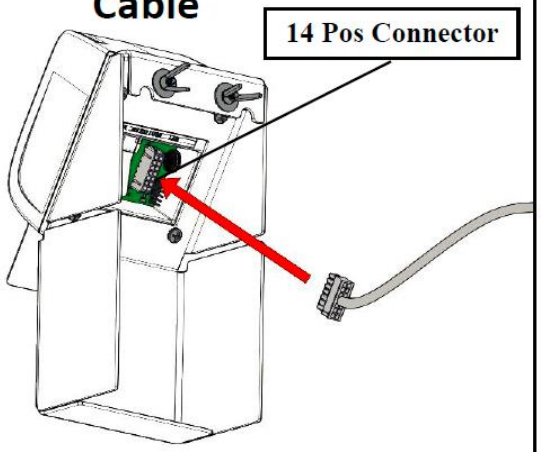
1. Route Reader Cable



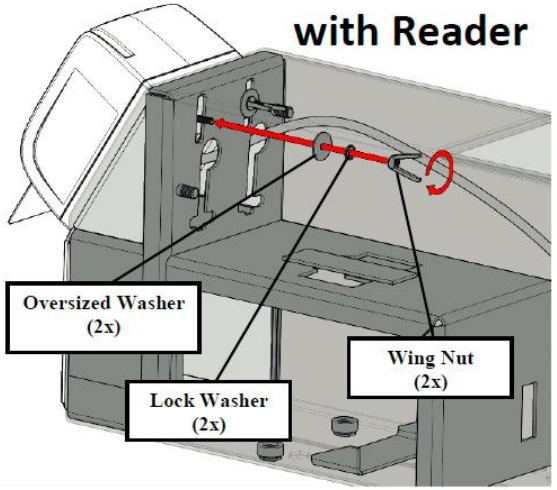
2. Mount Reader to Bracket



3. Connect Reader Cable



4. Mount Bracket with Reader



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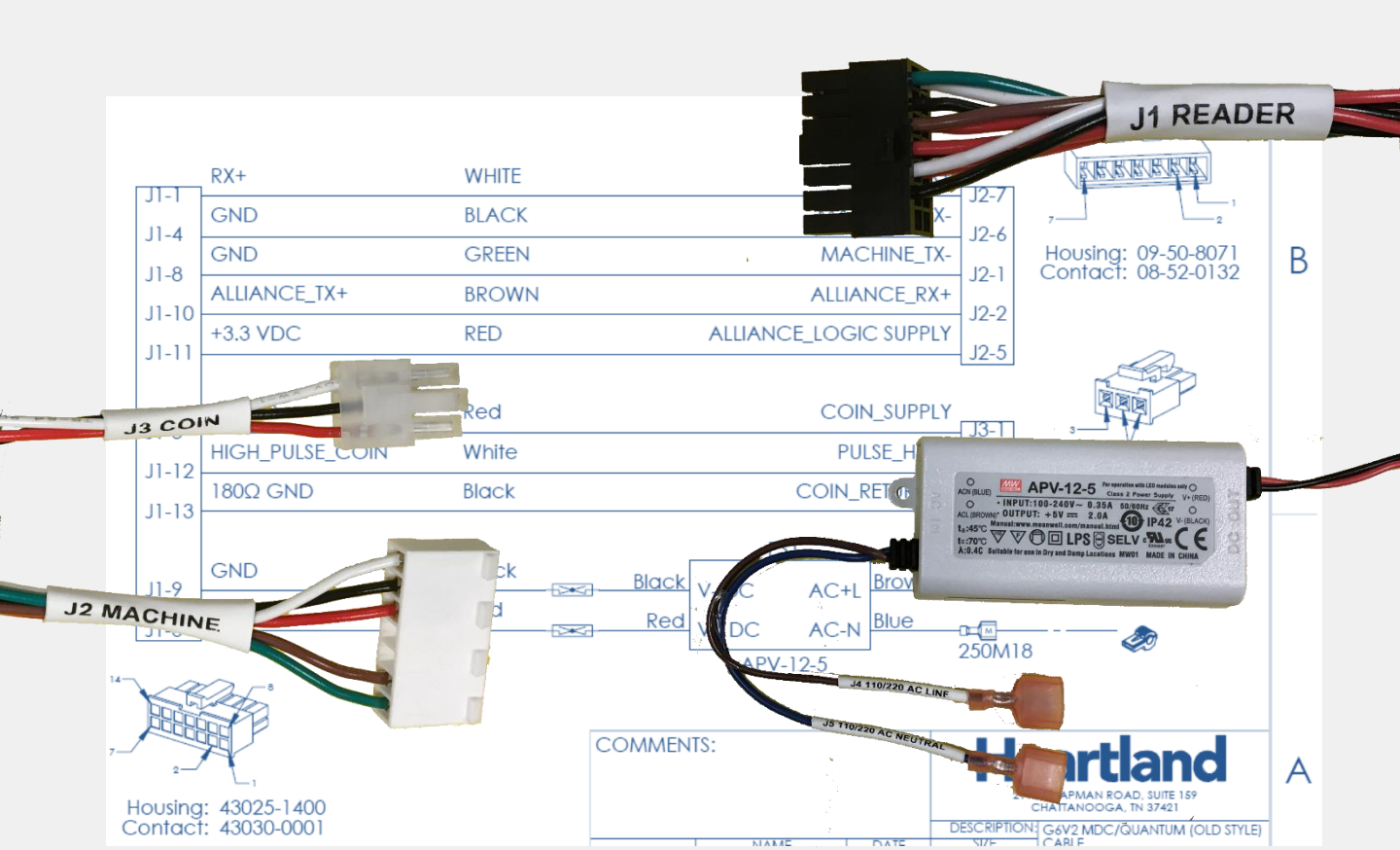
G6V2
Machine Wiring



Speed Queen ACA
Speed Queen MDC
Maytag PR / PD

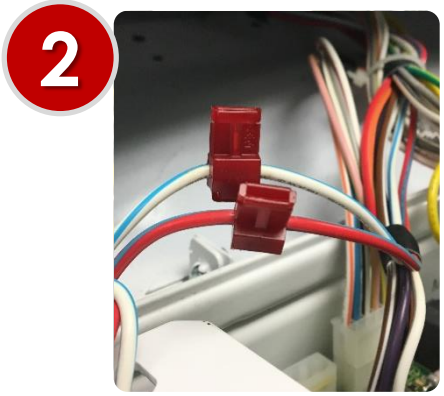
G6V2 Machine Wiring Guides

Using the appropriate driver, open the backsplash and/or all access panels.

Common elements of all G6V2 harnesses:

Power - All G6V2 harnesses have a transformer built in. It is a wide input transformer and can handle 100 – 240 VAC on the primary side. Therefore, the kit for a washer, gas dryer, and electric dyer are all the same.

2. Locate a source for clean AC power (100 – 240 VAC) and crimp the two tap-splices onto the hot & neutral as shown in the example below.
3. Connect the two mating plugs from the primary side of the transformer to the tap splices (Black to hot, blue to neutral).

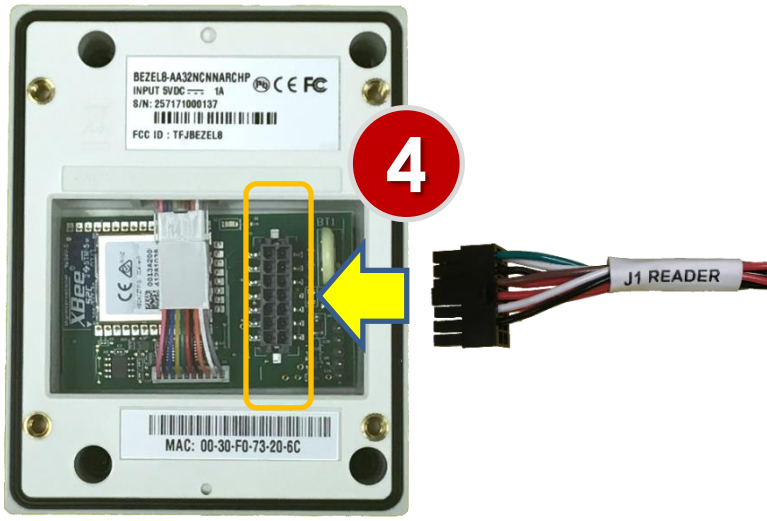


Common elements of all G6V2 harnesses

Reader - All G6V2 harnesses have a common connection to the reader. The 14-pin connector is labeled as '**J1 Reader**' and connects to the mating plug highlighted at the right.

The only end of the harness left free is the Machine Interface plug:

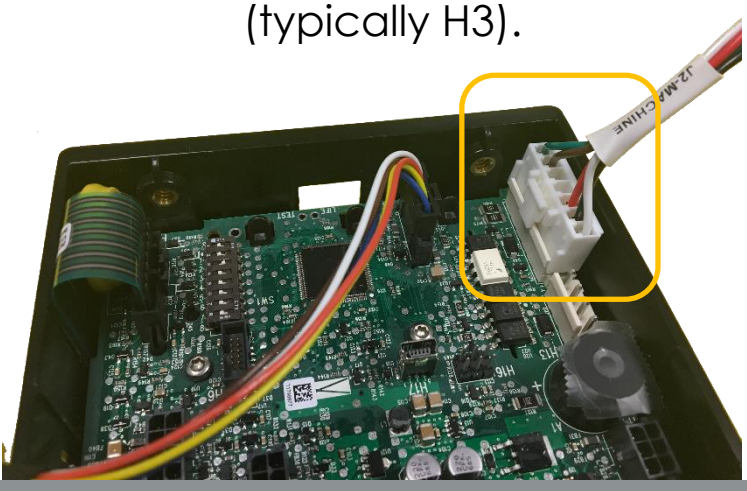
- **ACA – steps 5 and 6**
- **MDC – steps 7, 8, and 9**
- **Maytag – step 10**



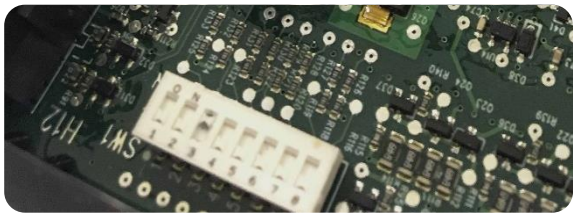
G6V2 Back View

Wiring G6V2 to ACA

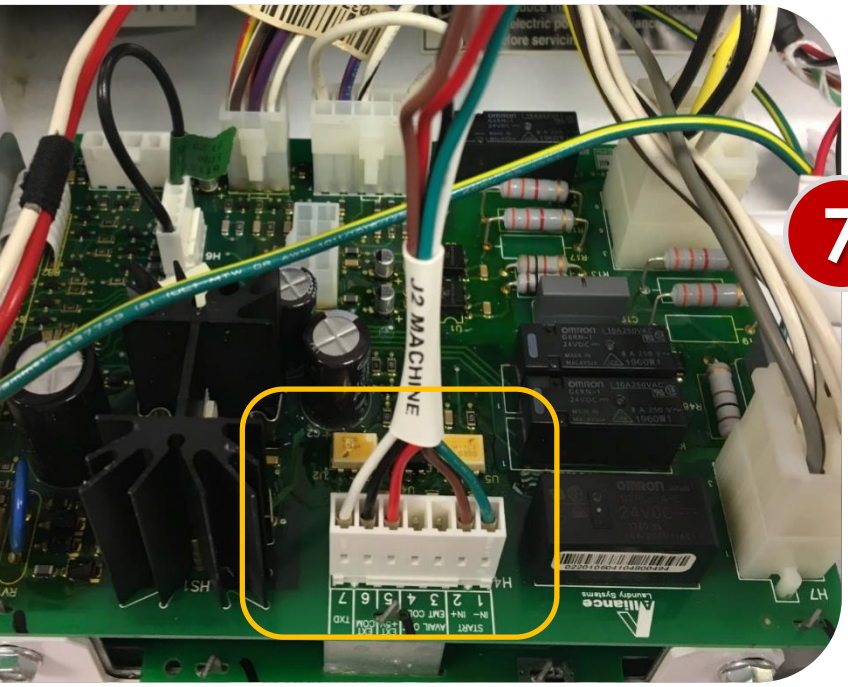
5 Plug white 7-pin end (J2) of the G6V2 ACA harness into the mating connector on the control board (typically H3).



6 Make sure that position **#3** on the dip-switch SW1 on the ACA control board is **ON**. The machine must be in serial mode to function properly.

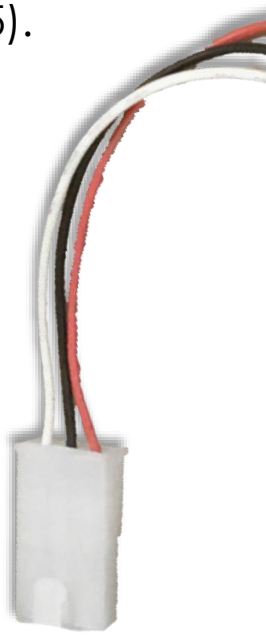


Wiring G6V2 to MDC



7

Plug white 7-pin end (J2) of the G6V2 MDC cable into the mating connector on the control board (typically H5).

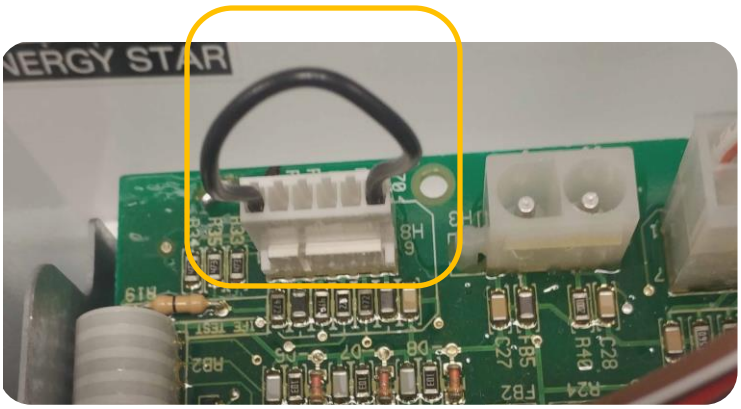


8

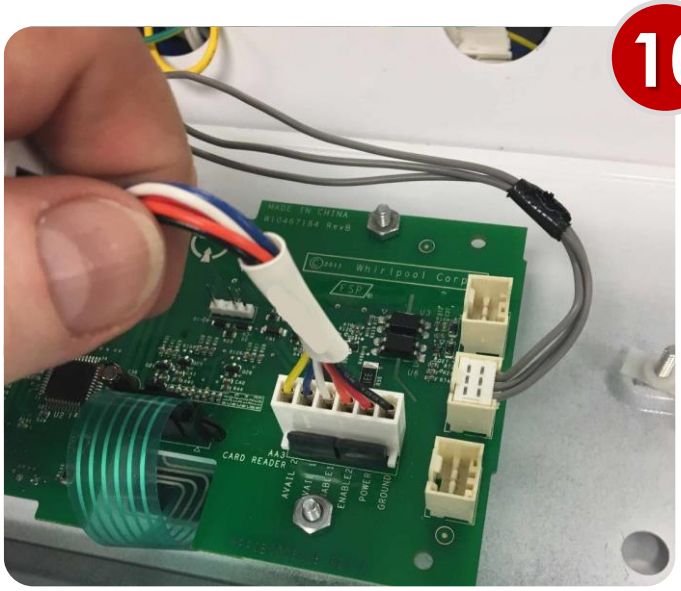
Plug Coin Drop adapter (J2) of the G6V2 MDC cable into the coin drop in the meter case.

9

Locate the **Serial Jumper** connector on the control board and install the MFP-175009 connector onto it.



Wiring G6V2 to Maytag



10 Plug white 6-pin end (J2) of the G6V2 Maytag cable into the debit connector on the control board (typically AA3).

11 Using the appropriate driver, secure the backsplash and/or all access panels.

12 Reapply power to the machine.

13 The reader should power up and display the this menu screen. Make note of the number next to the letters 'ZG'. They will be needed to link the reader to the controller.

P2425 S 01
ID: 001
ZG: 12AB

14 Go to Section Titled '**G6 Linking and De-Linking**'.

G6 Linking and De-Linking

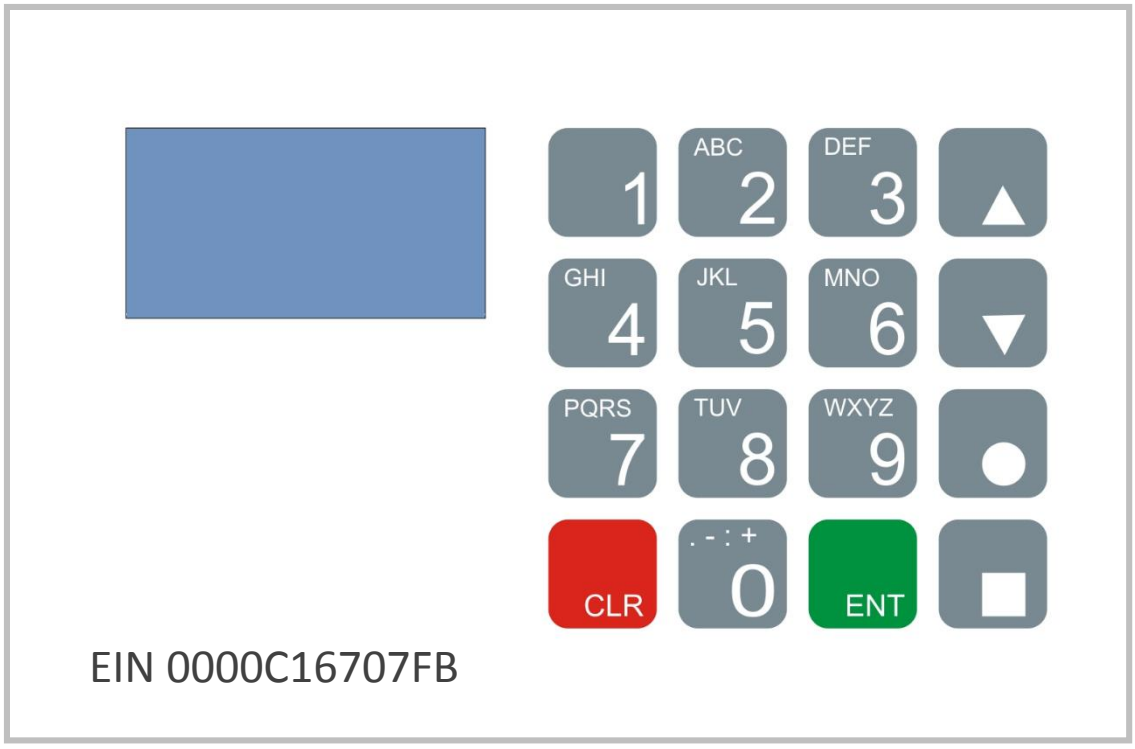
1.0 Scope

This document provides instructions for Linking WaveReaders to the WaveController as well as Viewing/Deleting WaveReader Names associated with the WaveController

A. *Linking* - Follow Section 3 followed by Section 4

B. *View/Delete* - Follow Section 3 Followed by Section 5

2.0 Keypad Layout

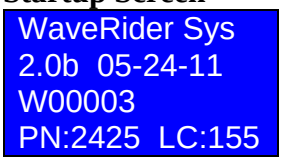


3.0 Entering Configuration Mode

Upon Power-Up the WaveController will display a Startup Screen. Typically, the WaveController will be at the Status Screen as its Home Screen.

3.1 Startup Screen

Startup Screen



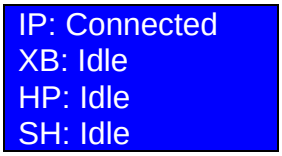
This screen will show up at Power-Up and will change to the Status Screen once an IP Address is obtained.

It will display the Software Revision/Revision Date, the WaveController ID Name, Zigbee PAN, and Location ID.

If the WaveController is already ON and has been communicating, this screen will not be seen. It will be at the Status Screen.

3.2 Status Screen (Home)

Status Screen



The Status Screen is the Home Screen. It displays the following communication traffic:

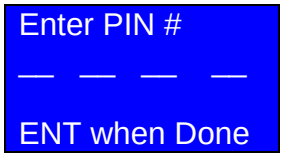
- IP - Connected if has a Valid IP Address
- XB – Zigbee Message Traffic
- HP – Heartland Exchange Traffic
- SH – Heartland Status Host Traffic

Press the

Button to enter the PIN Screen

3.3 PIN Screen

PIN Screen



You must enter the PIN number to access most functions. If you do not remember your PIN #, call **1-800-332-4835**, then **Press 2**.

Press

When numbers are pressed, * is displayed.

Press the

Button

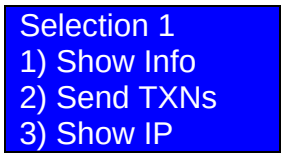
Note: Future Release will have a Configurable PIN code via setup webpage.

Entering Correct PIN will display the Selection Screen 1

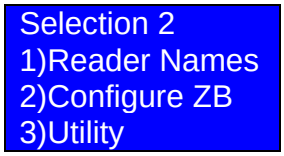
3.4 Selection Screens

The available options can be viewed on the selection screens. Linking and Deleting use the Selection 2 Screen.

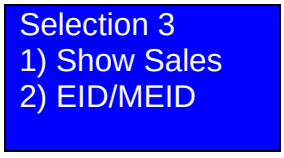
Selection 1 Screen



Selection 2 Screen



Selection 3 Screen



Use the and Buttons to move between Selection Screens

Press

Button to return to Status Screen

3.5 Additional Notes

- After entering correct PIN, the WaveController is in Configuration mode.
- When in Configuration mode, all WaveReaders will connect to the WaveController. When the WaveReader has connected to the WaveController, the screen of the WaveReader should show its setup information with the Zigbee PAN and Zigbee Address.
- If the WaveReader has not joined the WaveController's Zigbee PAN, the WaveReader display will scroll through 2425, 2426, 2427, 2428, 2429, 242A, 242B, and 242C.
- The WaveReader will look as follows:

- In the screen menus, use the CLR **Button** to go back to a previous screen.
- To exit Configuration Mode, continue to Press CLR until the Status Screen (Section 3.2) is displayed again.

4.0 Linking a WaveReader to the WaveController

The following steps will Link a WaveReader to the WaveController.

NOTE: The example screens show a Machine Names as *"001",002","003*" and *"004"* and Zigbee Addresses as *"12AB"* and *"74CD"*. Actual Machine Names and Zigbee Address will vary upon installation.

Step 1: Go to Selection 2 Screen to select Configure ZB

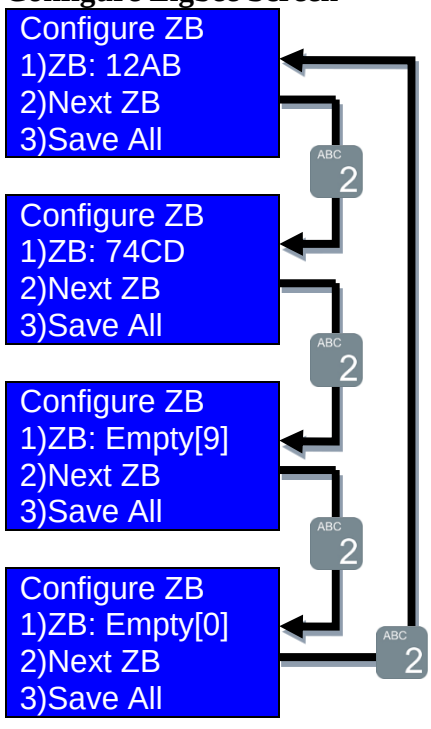
Selection 2 Screen

Selection 2
1)Reader Names
2)Configure ZB
3)Utility

- Press ABC 2 on the Selection 2 Screen to enter Zigbee Configuration

Step 2: Select Zigbee Address to Link

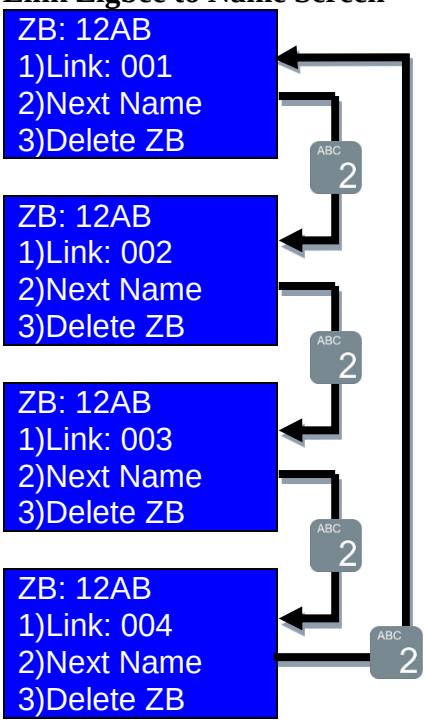
Configure Zigbee Screen



- Press the ABC 2 Button to select the Zigbee Address wanting to link up. The Zigbee Address next to ZB: will change after each button press or show Empty[] if there is no Unknown Zigbee Address has connected. Continue to press even if Empty[0] – Empty[9] is displayed.
- There are 10 Unknown Zigbee locations to be filled. When there is no new Zigbee Address Connected, Empty[0] – Empty[9] will be displayed.
- **NOTE**: May have to wait until a WaveReader connects to the WaveController. Continue to Press the ABC 2 Button to scroll through the connected Zigbee Addresses or the Empty[] locations.
- Select the Zigbee Address to link up by pressing the 1 Button

Step 3: Select Name to Link to Zigbee Address

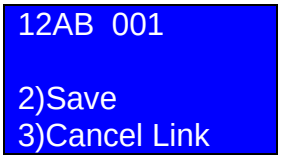
Link Zigbee to Name Screen



- The top of the screen shows the Zigbee Address selected to link to a Name
- Press the ABC 2 Button to scroll through the Machine Names
- The Machine Name appears next to Link:
- **NOTE**: For a Shared Escrow Stack Machine (2 Machines and 1 WaveReader), Link the BOTTOM Machine Name to the Zigbee Address. Do **NOT** use the TOP Machine Name.
- When the correct Machine is found to match with the Zigbee Address, Press the 1 Button to select that Link

Step 4: Save Link

Save/Cancel Zigbee Link Screen



- The Zigbee Address along with the Machine Name is displayed on the top of the screen
- To Save the Link, Press the ABC 2 Button
- To Cancel the Link, Press the DEF 3 Button
- It will return to the Configure Zigbee Screen

Step 5: Restart Step 2 until all Zigbee Address have been linked up

Step 6: Save All Zigbee Address

Configure Zigbee Screen Configure ZB 1) ZB: Empty[0] 2) Next ZB 3) Save All	• Be sure the Configure Zigbee Screen is viewed • After linking all the WaveReaders, Press the Button to save all the links into memory. • **NOTE**: Failure to Save All will result with the WaveReaders not Connecting to the WaveController upon Power-up

Step 7: Exit out of Configuration Mode.

Status Screen IP: Connected XB: Idle HP: Idle SH: Idle	• When complete, continue to Press the Button to return to the Status Screen. This will exit Configuration Mode • Now when the WaveController responds to the WaveReaders, the WaveReaders will display Insert Card. This may take several minutes before the WaveReader attempts to communicate to the WaveController.

5.0 View/Delete Reader Names and Zigbee Links

The following steps will show how to View/Delete links between a WaveReader and a WaveController.

NOTE: The example screens shows Machine Names as *"001",002","003*" and *"004"* and a Zigbee Address as *"12AB".* Actual Machine Names and Zigbee Address will vary upon installation.

Step 1: Go to Selection 2 Screen to select Reader Names

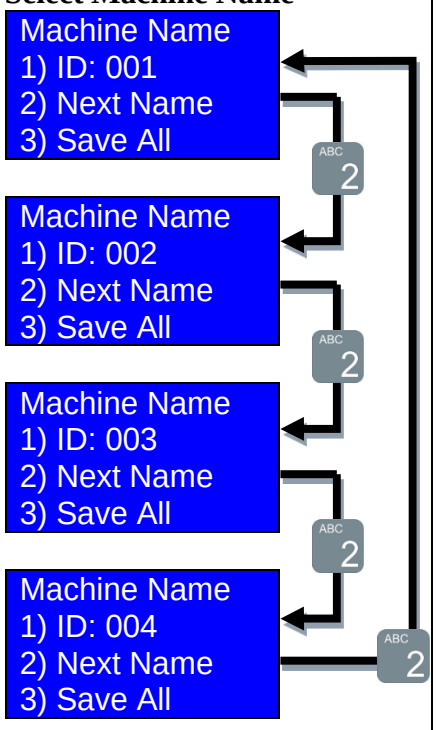
Selection 2 Screen

Selection 2
1)Reader Names
2)Configure ZB
3)Utility

- Press 1 Button on this screen to view Reader Names and Zigbee Links

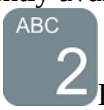
Step 2: Select the Machine Name you want to View/Delete

Select Machine Name



- Press the ABC 2 Button to go select Machine Name you want to view.
- The name next to ID: will change upon each button press
- Select the Machine Name you wish to view by pressing the 1 Button
- To save all the changes made, Press the DEF 3 Button

Step 3: View/Delete Machine Information

Machine Information 001 12AB 1) Get Config 2) Delete Link	• Top of the screen shows the Machine Name and the Zigbee Address associated with it. • If there is no Zigbee address associated with the name, NO_ZB will appear next to the Reader Name • Press the Button to get Reader Configuration. **Note**: Not currently available. • Press the  Button to delete the link between the Machine Name and Zigbee Address.

Step 4: Restart Step 2 if more Reader and Zigbee Links will be deleted

Step 5: Save Changes

Select Machine Name Machine Name 1) ID: 001 2) Next Name 3) Save All	• If a Reader and Zigbee Link has been deleted, save the change by Pressing the Button

Step 6: Exit out of Configuration Mode.

Status Screen IP: Connected XB: Idle HP: Idle SH: Idle	• When complete, continue to Press the Button to return to the Status Screen. This will exit Configuration Mode • Now when the WaveController responds to the WaveReaders, the WaveReaders will display Insert Card

G6 Linking – Quick Reference Guide

Linking a WaveReader to a Controller

1. At the Controller idle screen, press these buttons:

2. Press the DOWN ARROW key once. The Controller's screen will be titled "**Selection 2**" .

3. Apply power to the card reader to be linked. Record it's Zigbee ID. It is the 6 character identifier to the right of "**ZB:** " on the reader display. *Only the last 4 characters will be shown on the Controller.*

4. Make sure the card reader is set to the same PAN as the controller. It is the 4 digit number to the right of "**PAN:**" on the reader's display. If the number does not match the controller, press the upper button to the right of the card reader's display till they match, then repower the reader.

5. Wait for the card reader to reach "**State: 04**" (top line) or "**Waiting for Config**", on its; display.

6. On the Controller, press for "**Configure ZB**".

7. Continue to press until the Zigbee ID appears on line "**1) ZB: ???**" then press .

8. The Zigbee ID is now on the top line. Press the key until the "**Reader Name"** being linked is shown, then press to "**Link.**"

9. Press to "**Save"**.

10. Press to "**Save All**".

11. Wait until the last line of the Controller display reads "**CLR to Exit**". Then press until the main menu appears.

12. The card reader should now be linked, and displaying "**Insert Card".**

De-Linking a WaveReader from a Controller

1. Identify the **Reader/Machine Name** that needs to be de-linked.
2. At the Controller idle screen, press these buttons:

3. Press the DOWN ARROW key once. The Controller's screen will be titled "**Selection 2**" .
4. Press the key to select "**Reader Names**".
5. The Controller Screen will read "**Machine Name**" on the top line.
6. Press the key until the "**Machine Name**" to be de-linked is being shown in line "**1) ID: ????**".
7. Press the key to select the machine.
8. Press the key to "**Delete Link**".
9. Press the key to "**Save All**".
10. Wait until the last line of the Controller display reads "**CLR to Exit**".
11. Press the until the main menu appears.
12. The card reader should now be de-linked, and can be removed from the machine and replaced.

For additional questions, please contact us at HMPSupport@e-hps.com or call 800-332-4835 , then select option 2 to speak with our Customer Service Team.