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Date Released	Feb 2023
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# Retrofit G6-300 / G6-400 + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide

**Kit Part Numbers:** 

RF00020-XX: Black

RF00047-XX: Painted Color



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## Release History

Version	Prepared by	Date	Change description
0	Michael Doh	03-Dec-19	Based on the G6 US version (DCV- 00216 R02); initial version for UL approval
1	Michael Doh	04-Dec-19	Remove unused cable EK0129 and correct step no. in install procedure
2	Michael Doh	26-Mar-20	Updated kit and sub-assembly part numbers
3	Michael Doh	30-Mar-20	Replaced MN0031 with MN0029. Added MN0029 in fastener kit.
4	Michael Doh	10-Apr-20	Corrected the InvencoLink part number
5	Michael Doh	04-Aug-20	Added new painted color kit
6	Michael Doh	08-Aug-20	Added the new alternative part numbers in the relevant references
7	Michael Doh	01-Oct-20	Corrected part number typing error



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8	Shibani Joshi	23-Feb-22	Pump Interface Board (PIB) install procedure added and changed the PSU P/N from EZ0632 to EZ0704
9	Shibani Joshi	12-April-22	UL comments addressed
10	Shibani Joshi	16-June-22	UL comments addressed
11	Shibani Joshi	2-Feb-23	Added content for G6-400 OPT installation and updated PSU to EZ0853 with the two power cable connections.
12	Shibani Joshi	14-June-23	UL Comments Addressed. No BoM changes needed

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## 1 Introduction

The documentation provides some basic guidelines for installing the /G6-300 / G6-400 Outdoor Payment Terminal (OPT) system:

- G6-300 / G6-400 Outdoor Payment Terminal (OPT) system with black panels Kit part number: RF00020-XX
- G6-300 / G6-400 Outdoor Payment Terminal (OPT) system with painted color panels Kit part number: RF00047-XX (can be any painted color)

For a double-sided installation, two of these Kits are required.

IMPORTANT NOTE: The installer must review the entire installation guide prior to starting any work on the dispenser. If the construction of the dispenser in the installation guide does not match the construction of the dispenser being retrofitted, then do not proceed with the installation and contact customer service.

In particular, an earlier revision of these Retrofit kits may not have the InvencoLink DC power cable fitted on the PSU assembly. If this is the case, stop the installation and contact technical support to obtain the correct matching revision of the kit.

Note: There are images with the OPT fitted during the installation procedure throughout the document. Depending on which kit you are installing, it could be the G6-300 or the G6-400 OPT. Refer to the below images to identify the OPT you are working with:







G6-400 OPT

This Retro-Fit Kit can be installed into either Side A or Side B of a Wayne Ovation dispenser;

• For a single-sided installation, or if this Kit will be installed into Side A (i.e. the first side installed) of a double-sided installation, it MAY require the pre-installation of UL Listed by



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Report Retrofit Kit Part Number RF00033-XX (InvencoLink Converter) before installation into the dispenser. The process is covered in §4.2 Pre-Installation Procedure of this instruction, by reference to the instructions in that Kit.

**Note:** The Invenco Link is NOT required if the Ethernet cable is plugged in the JADE Board as per step 17 of the Disassembly Process. This should be checked prior to the installation.

 This installation MAY require the pre-installation of UL Listed by Report Retrofit Kit Part Number RF00100-XX (Pump Interface Board) before installation into the dispenser. The process is covered in §4.2.3 Pre-Installation Procedure of this instruction, by reference to the instructions in those Kits.

Note: The PIB Installation is only for the G6-300 / G6-400 OPT (RF00020-XX and RF00047-XX)

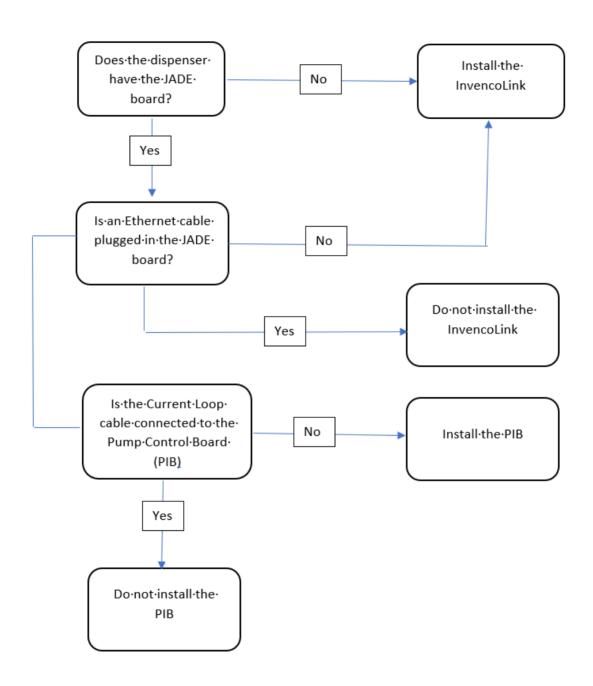
**Note:** The PIB is only required if the Current Loop Cable is not connected to the Pump Control Board as per step 18 of the Disassembly Process. This should be checked prior to the installation.

**Note:** The PIB can only be installed in a double-sided pump. The pre-installation will be required on side B of the dispenser.

Refer to the below flowchart for further reference:



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## 1.1 Tools Required

The following tools are required to mount the G6-300 / G6-400 OPT:

- Torx T25 security screwdriver
- Philips #1 screwdriver
- Philips #1 screwdriver with >5" shaft
- Philips #2 screw driver
- Flat 5mm screwdriver
- Small adjustable spanner
- Side cutters
- Cable (zip) ties
- Pliers
- 1/4" Socket or Nut Driver
- 9/32" Socket or Nut Driver
- Small flat blade scraper or putty knife.
- Toweling cleaning rags.
- Household sticky residue remover containing limonene.
   e.g. Goo Gone®
- 100% Isopropyl Alcohol (IPA) cleaner.



#### **WARNING**

**Do NOT** use power tools if working on a fuel station forecourt.

Any spark could cause an explosion.



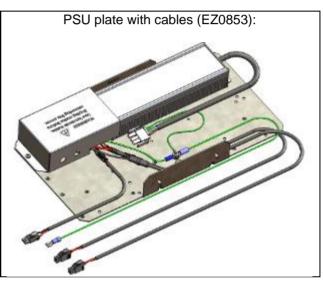
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#### 1.2 Installation Kit Contents

## G6-300 / G6-400 Outdoor Payment Terminal (OPT) system with black panels (RF00020-XX):

Unpack the G6-300 / G6-400 Ovation Black Retro-Fit Kit (RF00020-XX) and check that all of the parts listed below are present.







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Printer blank panel assembly (IA0044):

Consisting of:

MZ0109 Printer blank panel (right top)

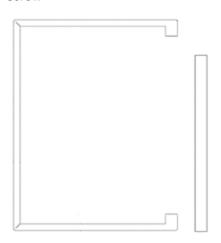
MP0618 Printer blank panel clamp (right mid)

MP0620 Printer blank panel gasket A (below left)

MP0621 Printer blank panel gasket B (below right)

FK0020 Printer blank panel fastener kit (right bottom) consisting of:

- 6 x MS0148: M3x10 Philips #1 screw
- 4 x MS0121: #6 Type AB, X 3/8" Philips #2 screw













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2 x UPC blank panel assembly (IA0045): Consisting of:

MZ0103 UPC blank panel (right)
MP0527 UPC blank panel gasket (right)
FK0019 UPC blank panel fastener kit (below)
consisting of:

4 x MS0148: M3x10 Philips #1 screw







Sundry Parts & Cables:



EK0131 Cat-5e, Flexible 2.5m, YELLOW



EK0130 Ground Cable 8G fork to 1/4" QC female 2m



EK0137 Wayne Pump to PSU Adaptor

EK0127 Wayne Pump to InvencoLink



- 8 MN0043 M3X15 SEMS Stand Off (right)
- 2 MN0029 NUT, 8-32 UNC,11/32" AF, ZINC



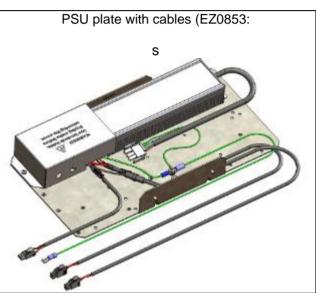


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## G6-300 / G6-400 Outdoor Payment Terminal (OPT) system with painted color panels (RF00047-XX):

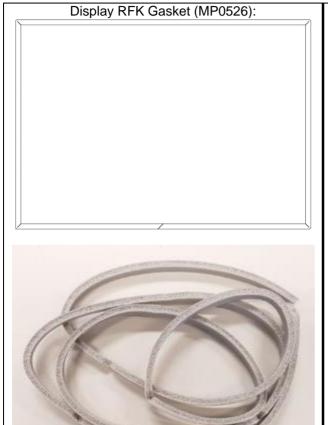
Unpack the G6-300 / G6-400 Ovation Painted Color Retro-Fit Kit (RF00047-XX) and check that all of the parts listed below are present.







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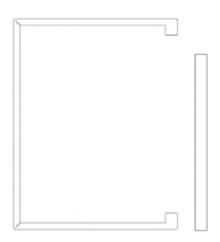
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Printer blank panel assembly (IA0094-XX): Consisting of:

MZ0238-XX Printer blank panel (right top)
MP0618 Printer blank panel clamp (right mid)
MP0620 Printer blank panel gasket A (below left)
MP0621 Printer blank panel gasket B (below right)

FK0020 Printer blank panel fastener kit (right bottom) consisting of:

- 6 x MS0148: M3x10 Philips #1 screw
- 4 x MS0121: #6 Type AB, X 3/8" Philips #2 screw













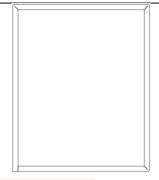
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2 x UPC blank panel assembly (IA0095-XX): Consisting of:

MZ0239-XX UPC blank panel (right) MP0527 UPC blank panel gasket (right) FK0019 UPC blank panel fastener kit (below) consisting of:

• 4 x MS0148: M3x10 Philips #1 screw







Sundry Parts & Cables:



EK0131 Cat-5e, Flexible 2.5m, YELLOW



EK0130 Ground Cable 8G fork to 1/4" QC female 2m



EK0137 Wayne Pump to PSU Adaptor

EK0127 Wayne Pump to InvencoLink



- 8 MN0043 M3X15 SEMS Stand Off (right)
- 2 MN0029 NUT, 8-32 UNC,11/32" AF, ZINC





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## 2 Safety & Compliance Information

This section introduces the hazards and safety precautions associated with installing, inspecting, maintaining or servicing the G6-300 / G6-400s OPT. Before proceeding, check the relevant hazard and safety information. Fire, explosion or electrical shock could occur and cause death or serious injury if these safe service procedures are not followed.

## 2.1 Preliminary Precautions

You are working in a potentially dangerous environment of flammable fuels, vapor, and high voltage. Only trained or authorized individuals knowledgeable in the related procedures should install, inspect,

maintain or service this equipment.

## 2.2 Emergency Total Electrical Shut-Off

Locate the forecourt emergency fuel shut-off valves and electrical isolation breakers. Understand how to use these, should they be required. Locate the switch or circuit breakers that shut-off all power to all fueling equipment and dispensing devices.

#### 2.3 Total Electrical Shut-Off Before Access

Any procedure requiring access to electrical components, or the electronics of a pump/dispenser requires total electrical shut-off of that unit. Understand the function and location of this switch or circuit breaker before inspecting, installing, maintaining, or servicing the G6-300 / G6-400 OPT.

#### 2.4 Evacuation, Barricading and Shut-Off

Any procedures requiring accessing a pump/dispenser head requires the following three actions:

- An evacuation of all unauthorized persons and vehicles
- Using safety tape or cones as barricades to the effected units
- A total electrical shut-off of the affected unit(s)

#### 2.5 Read the Manual

Read, understand and follow this manual and any other labels or related materials supplied with the equipment. If you do not understand a procedure, call an Invenco Authorized Service Centre or Invenco Service Officer. It is imperative to your safety and the safety of others to understand the procedures before beginning work.



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## 2.6 Follow the Regulations

Regulations in OSHR (Occupational Safety and Health Regulations), national, state and local codes, including customer requirements must be followed. Failure to install, inspect, maintain or service this equipment in accordance with these codes, regulations and standards may lead to legal citations with penalties and may affect the safe use and operation of the equipment.

#### 2.7 Replacement Parts

Use only genuine Invenco replacement parts and retrofit kits on your installation. Using parts other than genuine Invenco replacement parts could create a safety hazard and violate local regulations.

## 3 Safety Symbols and Terminology



This safety alert symbol is used in this manual and on warning labels to alert you to a precaution which must be followed to prevent potential personal safety hazard. Obey safety directives that follow this symbol to avoid possible injury or death.

#### **Signal Words**

These signal words used in this manual and on warning labels tell you the seriousness of particular safety hazards. The precautions below must be followed to prevent death, injury or damage to the equipment:

1

**DANGER:** Alerts you to a hazard or unsafe practice which will result in death or

serious injury.

1

**WARNING:** Alerts you to a hazard or unsafe practice that could result in death or

serious injury.

1

**CAUTION:** Designates a hazard or unsafe practice which may result in minor

injury, property or equipment damage.

#### Working With Fuels and Electrical Energy

#### 3.1 Prevent Explosions and Fires

Fuels and their vapors may explode or burn if ignited. Spilled or leaking fuels cause vapors. Even filling customer tanks will cause potentially explosive vapors in the vicinity of the dispenser or island.



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#### 3.1.1 No Open Flames



Open flames from matches, lighters, welding torches or other sources can ignite fuels and their vapors.

#### 3.1.2 No Sparks - No Smoking



Sparks from starting vehicles, starting or using power tools, burning cigarettes, cigars or pipes can also ignite fuels and their vapor. Static electricity, including an electrostatic charge on your body, can cause a spark sufficient to ignite fuels and their vapors. After getting out of a vehicle, touch the metal of your vehicle to discharge any electrostatic charge before you approach the dispenser island.

#### 3.1.3 Working Alone

It is highly recommended that someone who is capable of rendering first aid be present during servicing. Be familiar with Cardiopulmonary Resuscitation (CPR) methods if you are working with or around high voltages. This information is available from the First Aid training providers. Always advise the station personnel about where you will be working, and caution them not to activate power while you are working on the equipment. Use the OSHA Tag-out/Lockout procedures. If you are not familiar with this requirement, refer to information in the relevant manual and OSHA documentation.

#### 3.1.4 Working with Electricity Safety

Ensure that you use safe and established practices in working with electrical devices. Poorly wired devices may cause a fire, explosion or electrical shock. Ensure that grounding connections are properly made. Take care that sealing devices and compounds are in place. Ensure that you do not pinch wires when replacing covers. Follow OSHA Tag-out/Lockout requirements. Station employees and service contractors need to understand and comply with this program completely to ensure safety while equipment is down.

For US: Follow all applicable requirements in NFPA 30, 30A and 70, and those of the Local Authority Having Jurisdiction for electrical wiring.

For Canada: Follow all applicable requirements in Canadian Electrical Code (CE Code), CSA C22.1.

#### 3.1.5 Hazardous Materials

Some materials present inside electronic enclosures may present a health hazard if not handled correctly. Be sure to clean hands after handling equipment. Do not place any equipment in mouth.

#### 3.1.6 In an Emergency

Compile the following information in case of emergency:

• Location of accident (e.g. address, front/back of building, etc).



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- Nature of accident (e.g. possible heart attack, struck by a vehicle, burns, etc).
- Age of victim (e.g. baby, teenager, middle-age, elderly).
- Whether or not victim has received first aid (e.g. stopped bleeding by application of pressure etc).
- Whether or not victim has vomited (e.g. if swallowed or inhaled something etc).

IMPORTANT: Oxygen may be needed at scene if gasoline has been ingested or inhaled. Seek medical advice immediately.

#### 3.1.7 Approvals

Invenco develops and maintains its hardware and software products using industry-standard quality processes and is audited by various bodies.

The Invenco G6-300 / G6-400 has UL File Reference of E469526 and E480135 and carry labels similar to this:





The Invenco Retro-Fit Kit has UL File Reference of MH61528.

#### 3.2 Computer Programs and Documentation

All Invenco Group Ltd. computer programs (including software on discs and within memory chips) and documentation are copyrighted by, and shall remain the property of, Invenco Group Ltd. Such computer programs and documents may also contain trade secret information. The duplication, disclosure, modification, or unauthorized use of computer programs or documentation is strictly prohibited, unless otherwise licensed by Invenco Group Ltd.



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## 4 Installation Guide

- 1. Please ensure all safety procedures are followed per requirement by the customer before installing the retrofit kit.
- Remove power to Pump and follow the OSHA Lock-out/Tag-out procedures.



## **WARNING**

Failure to turn off the unit during installation of the kit may cause injury or bodily harm from electrical shock. Ensure that all power to the unit is switched off before opening the door of the unit and during kit installation.

3. This installation will require various panel replacements. The panels will be removed from the door and replaced with pre-built panels with the OPT modules pre-fitted.

#### 4.1 Disassembly Procedure

Before installation of the equipment can take place, the existing electronic payment assembly must be removed from the dispenser. This section covers the removal of these components including:

- QVGA Panel Assembly (with QCAT / JADE Board and QVGA Display)
- Card Reader Assembly
- Printer Assembly
- Various Cable Assemblies

<u>Note</u>: Throughout this disassembly procedure there are many cable assemblies that will be unplugged and will not be reused. It is up to the discretion of the installer whether to remove these cables or position them inside of the dispenser cavity. The loose cables need to be bundled and restrained using zip-ties or cable restraints. After the cables have been bundled they must be placed in a location that will not cause obstruction, exposure, or hazard.

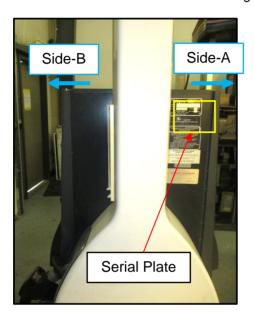
<u>Note</u>: It may be necessary to disconnect cable assemblies on various boards during this disassembly procedure in order to more easily access other components. Disconnect these cables as necessary. It is recommended that the installer of this kit either re-connect these cables immediately afterwards or mark each disconnected cable before it is unplugged to make it easier to identify when it comes time for reinstallation.

1. At the main disconnect panel, disconnect all power to the dispenser and the pump servicing the dispenser. Tag all disconnected breakers to prevent others from reconnecting power.



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2. Identify the A Side of the dispenser. The side that the serial plate is mounted on, typically located on the upper left or right hand side of the dispenser, is Side-A. However, if no serial plate is present, Side-A can be identified by opening up the Dispenser Main Door and locating the IGEM board on the Electronics Mounting Bracket inside of the Electronics Cavity.





Identifying Side-A using Serial plate

Identifying Side-B using IGEM Board

**3.** Use a Wayne Security Key to unscrew the two security bolts located on the left-hand side of the dispenser's door face.

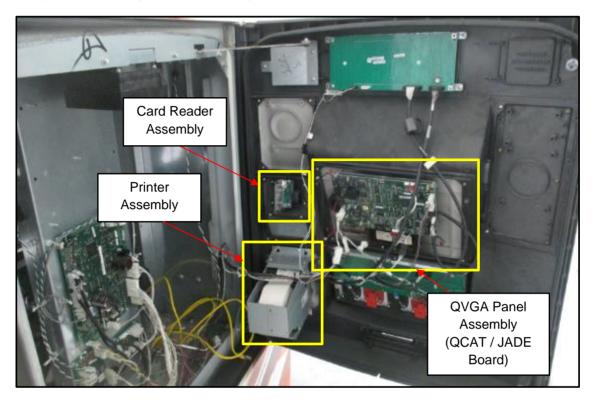


Location of security bolts



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4. Open the door fully until it locks into place.



Door in its fully open and locked position

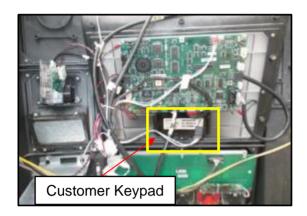
5. Unplug the customer keypad and unfasten any ground straps that may be present.

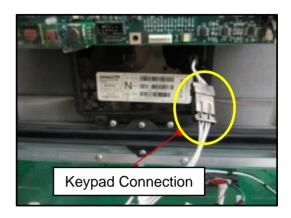
<u>Note:</u> There are two different dispenser configurations in which the customer keypad is in two separate locations. In Setup 1 the customer keypad is situated directly on the QVGA Panel, underneath the QCAT / JADE board. In Setup 2 the Customer Keypad is situated on the Card Reader Panel underneath the Card Reader Assembly.

#### Setup 1:

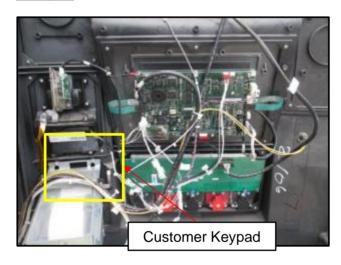


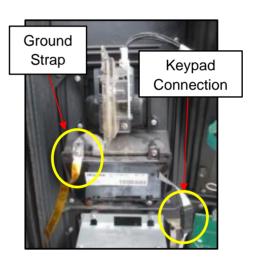
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#### Setup 2:

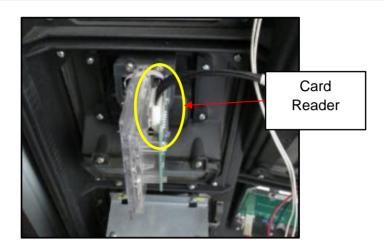




6. Unplug the card reader cable assembly.



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Card Reader Cable



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7. Remove the 4 #6 3/8" screws that fasten the card reader panel assembly and the blank panel (above the card reader panel) to the dispenser door and remove these panels. The card reader panel assembly and the blank panel can be discarded. They will not be re-installed.



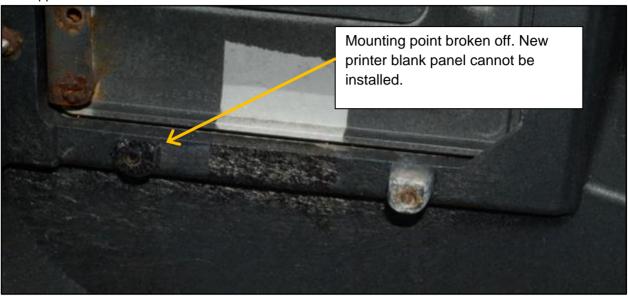
Location of card reader panel screws

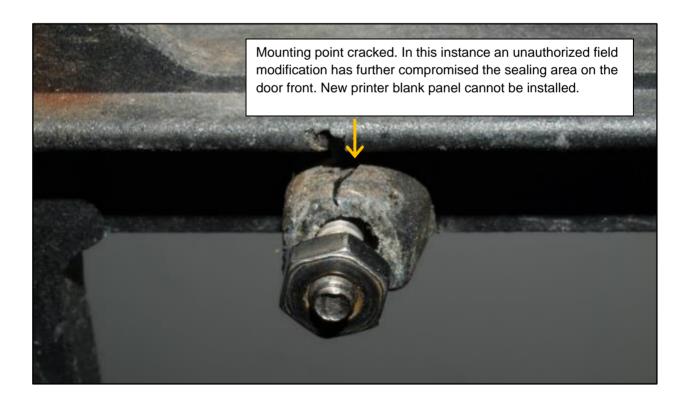
**8.** Before removing the Printer Assembly, Inspect the printer-mounting bosses for cracking and any other signs of damage. If any of the bosses are damaged or cracked, the printer blank panel cannot



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be installed. Leave the existing printer in place, skip steps 9 through 16 and contact technical support for advice.







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**9.** Remove the Printer Assembly. There are two variants of the Printer Assembly – please refer below for the variant you have:

Citizen, DW-10 or DW-12



Front Rear

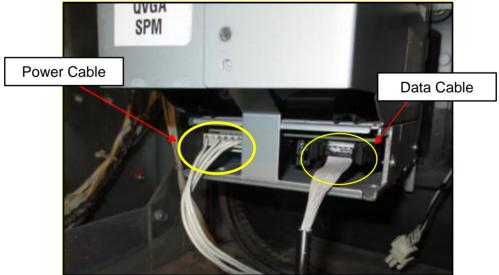
Axiohm "Clamshell", R01 or R02



Front Rear

#### If you have the DW-10 or DW-12 Printer Assembly:

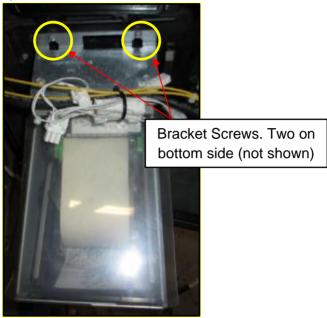
a. Unplug the Printer's Power Cable and Data Cable located on the backside of the bottom of the Printer Assembly.





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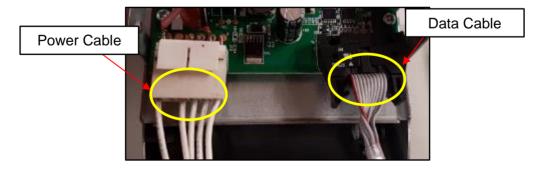
b. Loosen the four Philips head screws (two on top and two on bottom) that are fastening the Printer Bracket to the Dispenser's Main Door.



- c. Lift the Printer Assembly up and off the Dispenser Door. The Printer Assembly and bracket can be discarded; they will not be re-installed.
- d. Remove the four screws loosened in step b and discard them.

#### If you have the R01 or R02 "Clamshell" Printer Assembly:

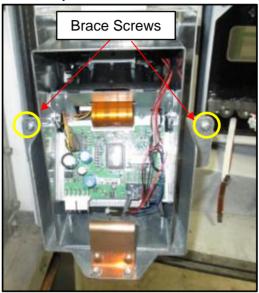
1) Unplug the Printer's Power Cable and Data Cable located on the backside of the Printer Assembly.



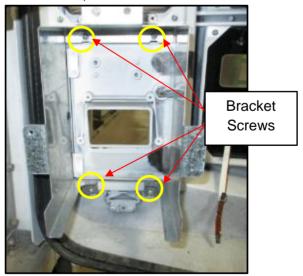


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2) Remove the two Philips head screws fastening the Bracket Brace to the Printer Bracket. The Printer is attached to the Brace. Remove the Brace and Printer together. The Brace and Printer can be discarded; they will not be re-installed.



3) Loosen the four Philips head screws (two on top and two on bottom) that are fastening the Printer Bracket to the Dispenser's Main Door, then lift to remove the Printer Bracket. The Printer Bracket can be discarded; it will not be re-installed.

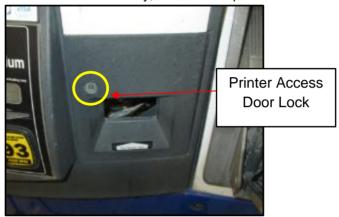


- 4) Remove the four screws loosened in step 3 and discard them.
- **10.** Discard the printer's Data Cable it will not be re-used:



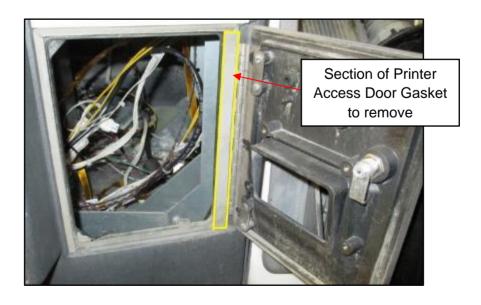
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- **11.** If you wish, trace the printer's Power Cable to its source, unplug that end and then discard the cable it will not be re-used.
- **12.** At this point, re-examine the screw bosses for signs of damage and/or cracking. If any of the bosses are damaged, stop the installation and contact technical support.
- 13. Using a Wayne "1001" Printer Access Door key, unlock and open the Printer Access Door.



**Note**: Because the Printer Access Door's hinge is situated behind the door gasket, you will need to remove part of the gasket before removing the door. The gasket and door can be discarded – they will not be re-used.

**14.** Remove the section of the gasket covering the Printer Access Door hinge, as highlighted below. Use a flat edged blade to scrape the Printer Access Door gasket off. Take care not to damage any of the plastic near the hinge:

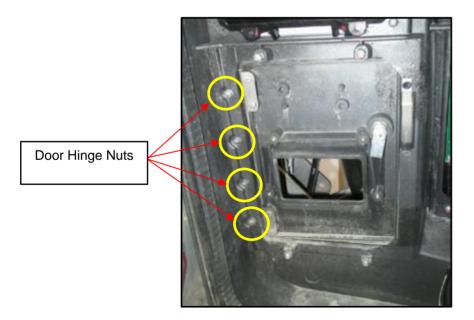




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**15.** Remove the four locking hex nuts that are fastening the Printer Access Door Hinge to the Dispenser's Main Door. Depending on the dispenser variant/model, the size of the hex nuts may vary. Typically, they are either 1/4" or 9/32". The nuts can be discarded, they will not be re-used.



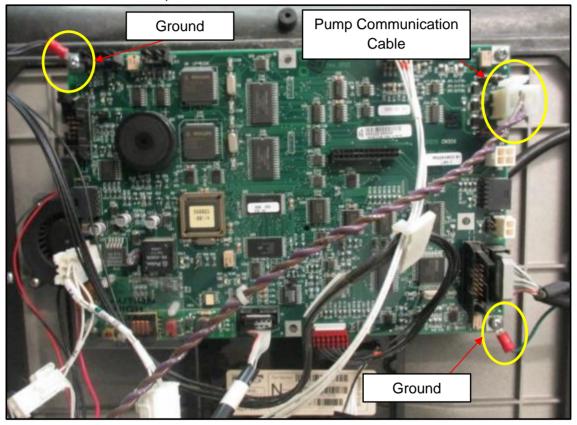
- **16.** Pull the Printer Access Door away from the front of the Dispenser's Main Door. It can be discarded; it will not be re-installed.
- 17. Identify if the dispenser has the QCAT Board Assembly or the JADE Board Assembly
  - a. For the QCAT Board Assembly: Unplug every cable on the QCAT Board Assembly and unscrew any ground screws that may be fastened to the board. The number of



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connections may vary depending on customer specifications when the dispenser was purchased, however, each cable must be unplugged regardless.

**Note:** For Side A only, mark the Pump communication cable (Purple & Brown wires) for reconnection in a later step. All of these other wires can be discarded.



Unplug every component on the QCAT Board

b. For the JADE Board Assembly: Identify whether an Ethernet cable is plugged in at the location marked below. If the Ethernet cable exists, label and unplug the Ethernet cable for later reconnection. If the Ethernet cable does not exist, (For Side A only), mark the Pump communication cable (Purple & Brown, could also be Brown & White wire) for reconnection in a later step. All of these other wires can be discarded.



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Unplug every component on the JADE Board

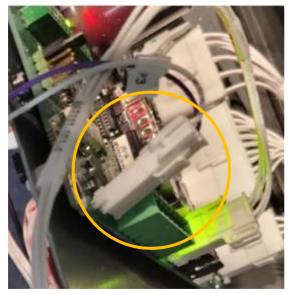


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**18.** Identify the Pump Control Board and check for the Current Loop Connector. If the Current Loop Cable is attached here, then you don't need to install the PIB.





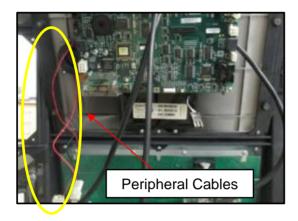


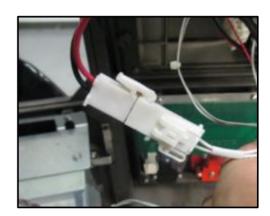


**19.** Unplug any peripherals (such as backlights) that may be connected to the QVGA Panel.



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#### 20. Remove the QVGA Panel.

<u>Note:</u> There are two different dispenser configurations in which each one involves different steps in order to remove the QVGA Panel. Setup 1 involves removing the QCAT / JADE board, then the QVGA Retainer Bracket and Display Glass, then the QVGA Panel. Setup 2 involves only removing the QVGA Panel, leaving the QCAT / JADE Board, QVGA Retainer Bracket, and Display Glass intact and fastened to the QVGA Panel. Follow the appropriate steps according to your dispenser setup.

#### Removal of QVGA Panel (Setup 1)

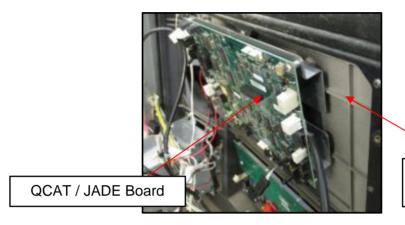
 Remove and discard the four #6 ¼" screws (may be fewer after removal of ground screws) that fasten the QCAT / JADE Board to the metal QVGA retainer bracket and remove the board from the retainer assembly. The "Caution High Voltage" shield may



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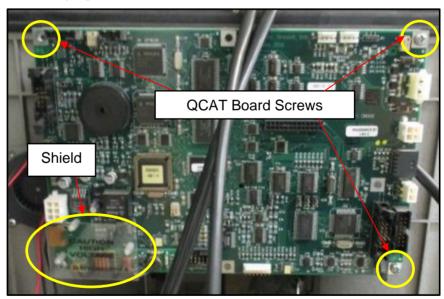
need to be removed to access one of the screws. The QCAT /JADE Board can be discarded. It will not be re-installed.

**Note**: the QCAT / JADE Board may have plastic standoffs in addition to or in substitute of screws. If so, those standoffs should also be discarded.



QVGA Retainer Bracket

Identifying the QVGA Bracket and QCAT /JADE Board



Location of QCAT / JADE Board screws and "High Voltage" Shield



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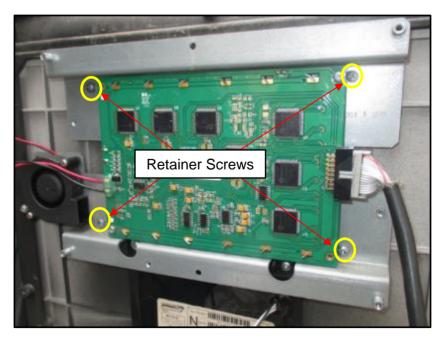
### **Caution**:

The QVGA display glass is secured in place by the QVGA retainer bracket (removed in sub-step 2). Use care when removing the QVGA retainer bracket screws as to not allow the glass to fall in the process. Gravity may cause both the retainer and glass to fall before the final screw is removed.



Front side of QVGA Panel showing display glass

2) Remove and discard the four #6 ¼" screws that fasten the QVGA retainer bracket and QVGA display glass to the door assembly. Remove the retainer bracket, customer LCD Display, and display glass, they can be discarded and will not be re-installed.





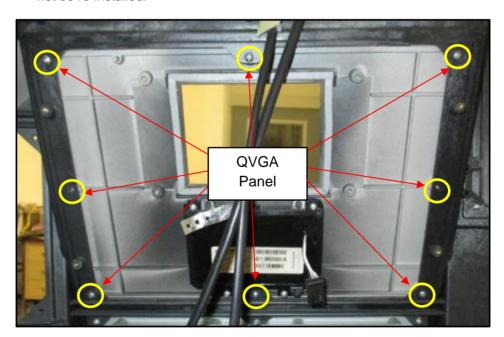
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Backside of QVGA retainer bracket and customer LCD display



QVGA LCD display, retainer, and glass after removal

3) Remove and discard the eight #8 screws fastening the QVGA Panel to the dispenser door and remove the panel from the dispenser door. The Panel can be discarded. It will not be re-installed.



QVGA Panel and customer keypad after retainer removal



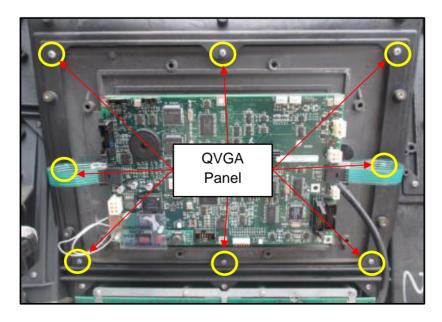
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QVGA Panel and Customer keypad after removal

#### Removal of QVGA Panel (Setup 2)

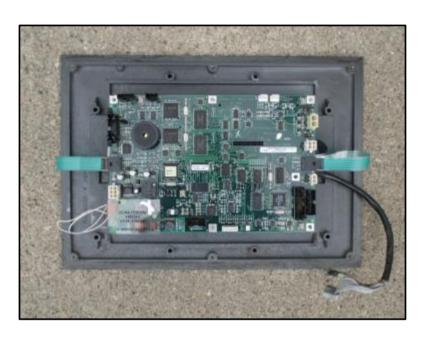
 Remove and discard the eight #8 screws fastening the QVGA Panel to the dispenser door and remove the panel from the dispenser door. The Panel can be discarded. It will not be re-installed.



Location of QVGA Panel screws



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QVGA Panel after removal

- **21.** The disassembly process is complete for this side. For a double-sided installation, repeat Steps 3-20 for the other side.
- 22. The dispenser is now ready for the Installation procedure to begin.



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### 4.2 Pre-Installation Procedure

There are one or two pre-installation procedures to be performed, depending on which side you are installing:

- If you are installing Side A, perform procedures 4.2.1 and 4.2.2.
- If you are installing Side B, perform procedure 4.2.1, and ensure you have installed Side A before continuing.

#### 4.2.1 Replace the RFK Panel Gasket

The Wayne Ovation dispenser series utilizes a modularized replaceable panel system in the dispenser door to permit maintenance and upgrading of various electronic modules and displays. When these panels are replaced, the gaskets found between the panels and the dispenser door will need replacing to ensure the weatherproof integrity of the dispenser is maintained.

For this retro-fit there are four gaskets that must be replaced. All gaskets are applied to the front (outside) surface of the associated bezel opening, as indicated:



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#### To remove the old gaskets:

Apply to below procedures to remove all three existing gaskets.

- 1. Starting at the join (or a torn end), carefully remove the old gasket material.
  - a. Pull the gasket **extremely slowly** and at an approximate **angle of 45 degrees**.
  - b. Removing the gasket slowly will give the best chance of removing the old adhesive and preventing the gasket from breaking into many small fragments.
- 2. Remove any remaining residue.
  - a. Apply sticky residue cleaner to the cleaning rag and wipe away all the adhesive residue.
  - b. Use the flat bladed scraper or the putty knife on stubborn areas, taking care not to gouge the plastic surface.

WARNING: Do not flood the area being cleaned with a direct spray of sticky residue cleaner as excess cleaner may damage adjacent gaskets.

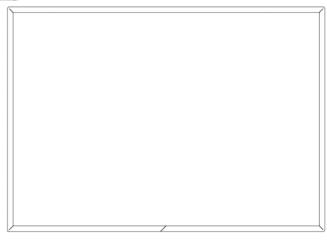


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- 3. Apply IPA cleaner solution to a new cleaning rag and thoroughly wipe down the area cleaned with the sticky residue cleaner.
- 4. Allow the plastic to dry completely.

#### To apply the new RFK Hatch Panel Gasket (MP0526):

- Start with the horizontal segment along the top edge. Peel off the backing paper on this segment only, align the gasket in the gasket channel and press into place. Take care not to stretch the gasket.
- 2. Peel off the backing paper on a vertical segment, align the gasket in the channel and press into place. The corner should be closed and the edges touching.
- 3. Repeat step 2 with the other vertical channel.
- 4. Before removing the backing paper, check that the two remaining segments meet successfully in the middle. Adjust alignment of the vertical sections if necessary.
- Peel off the remaining backing paper on the last two segments and press into place. The corners should be closed and the edges touching. A small witness gap is permissible at the join at the middle bottom edge.

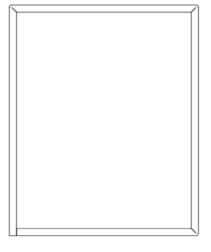




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To apply the 2 new UPC blank panels in the upper right and mid right panel openings (gasket part number MP0527):

- Apply new gasket, starting with the horizontal segment along the top edge of the bezel opening. Peel off the backing paper on this segment only, align the gasket in the gasket channel and press into place. Take care not to stretch the gasket.
- 2. Peel off the backing paper on the left vertical segment, align the gasket in the channel and press into place. The top corner should be closed and the edges touching.
- 3. Repeat step 2 with the other vertical channel.
- 4. Peel off the backing paper on the bottom horizontal segment, align the gasket in the channel and press into place. The bottom-right corner should be closed and the edges touching. The bottom-left corner should be just touching the vertical segment as shown. A small witness gap is permissible at this join.



### To apply the new printer blank panel (gasket part numbers MP0620 and MP0621):

- Apply new gasket MP0620 first, starting with the horizontal segment along the top edge of the bezel opening. Peel off the backing paper on this segment only, align the gasket in the gasket channel and press into place. Take care not to stretch the gasket.
- Apply the new gasket MP0621 next, by aligning the vertical upper end to the vertical lower end of the MP0620 to ensure there is no gap at this joint. Peel off the backing paper and align the gasket in the channel and press into place.
- Apply the remaining sections of MP0620. Peel off the backing paper on the left vertical segment, align the gasket in the channel and press into place. The top corner should be closed and the edges touching.
- 4. Peel off the backing paper on the bottom horizontal segment, align the gasket in the channel and press into place. Also align with the lower end of MP0621 to ensure there are no gaps at this joint. The bottom-right corner should be closed and the edges touching. The bottom-left corner should be just touching the vertical segment as shown.

Note: If you make a mistake with the gasket, it can be gently removed <u>once</u>. If you remove it more than once the adhesive will fail and a replacement gasket will be needed.



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#### 4.2.2 Install the InvencoLink Converter

This Retro-Fit Kit does not include a communications method for the OPT. When this Retro-Fit Kit is being installed on Side A (i.e. the first side) of the dispenser, a communications method MAY first need to be installed, as per the note in the Introduction section of this manual, as repeated below:

**Note**: The Invenco Link is NOT required if the Ethernet cable is plugged in the JADE Board as per step 17 of the Disassembly Process. This should be checked prior to the installation.

If it is confirmed that the InvencoLink Converter needs to be installed, then follow the procedure outlined in the rest of this section. Otherwise proceed to §4.2.3 Pump Interface Board Procedure.

The approved communications methods are listed below.

UL Report Number	Kit Part Number	Retro-Fit Kit Description
MH61528	RF00033-XX	InvencoLink DSP232

For Side B (i.e. the second side), you MUST have Side A (i.e. the first side) already installed, and you may then proceed to §4.2.3 Install the Pump Interface Board.

For Side A (i.e. the first side), select the PSU Plate Assembly from this Retro-Fit Kit package (EZ0853) and apply the communications method selected from the table above, following the installation instructions supplied with that Kit (DCV-00465).

Once the communications method has been installed onto the PSU Plate Assembly, proceed to §4.2.3 Install the Pump Interface Board.

#### 4.2.3 Install the Pump Interface Board (PIB)

When this Retro-Fit Kit is being installed on Side B (i.e. the second side) of the dispenser, a Pump Control method MAY first need to be installed for the OPT as per the note in the Introduction section of this manual, as repeated below.

**Note:** The PIB is only required if the Current Loop Cable is not connected to the Pump Control Board as per step 18 of the Disassembly Process. This should be checked prior to the installation.

If it is confirmed that the Pump Interface Board needs to be installed, then follow the procedure outlined in the rest of this section. Otherwise proceed to §4.3 Installation Procedure.

The approved Pump Control methods are listed below.

UL Report Number	Kit Part Number	Retro-Fit Kit Description
MH61528	RF00100-XX	Pump Interface Board (PIB)

**Note:** The PIB can only be installed in a double-sided pump.



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The pre-installation will be required on side B of the dispenser.

For Side B (i.e. the second side), select the PSU Plate Assembly from this Retro-Fit Kit package and apply the Pump Control method selected from the table above, following the installation instructions supplied with that Kit.

Once the Pump Control method has been installed onto the PSU Plate Assembly, proceed to §4.3 Installation Procedure.

### 4.3 Installation Procedure

This section follows from the Disassembly procedure above, and assumes the pump is still open. References to "left-hand" and "right-hand" are as viewed into the pump on the Side you're working on.

1. Install the EZ0853 PSU Plate assembly. For Side A this is the PSU Plate Assembly that MAY just had the InvencoLink converter installed. For Side B this is the PSU Plate Assembly that May just had the Pump Interface Board installed.



InvencoLink Converter



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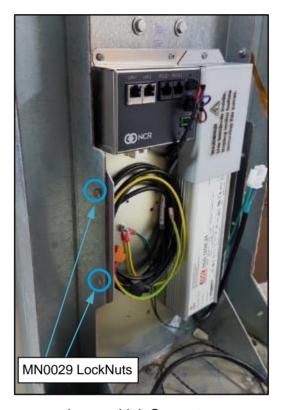


PIB

- a. Go to the other-side of the pump from that being retro-fitted, unlock and open the door.
- b. Place the EZ0853 PSU plate assembly on the left-hand side internal channel as shown. The studs will protrude through the side of the channel.
- c. Place an MN0029 #8 LockNut on each stud and tighten with a 5/16" nut driver.



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InvencoLink Converter

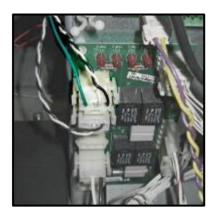
2. The EK0137 AC Mains cable has double-connectors at one end and a single connector at the other end. Plug the single-connector end into the mains connection on the EZ0853 PSU Plate assembly.



- 3. From Side A, unplug the mains connector from the relay board.
  - If doing Side A, that plug belongs to the pump.
  - If doing Side B, that plug belongs to Side A. Regardless, unplug it.



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4. Connect the Plug on the double-connector end of the EK0137 AC Mains cable into the Socket on the pump's relay board:



5. Connect the Plug removed in Step 3 into the Socket on the double-connector end of the EK0137 AC Mains cable:



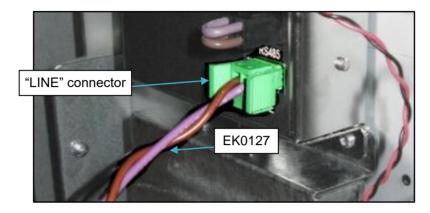
Note: For a double-sided installation, you will finish with a daisy-chain of two cables between the pump's mains connector and the relay board.

6. This step only applies if the InvencoLink is being installed For Side A only:

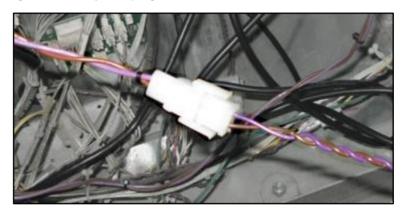


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a. Plug in the GREEN connector of the EK0127 Cable into the "RS485" socket on the InvencoLink converter.



b. Locate the purple/brown (could also be Brown/White) pump data cable that was marked during disassembly and plug in the white connector of EK0127.

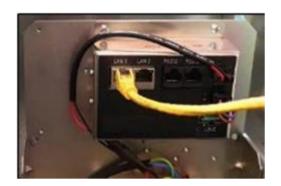


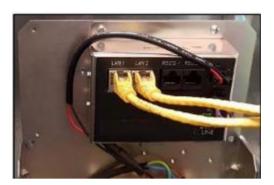
7. This step applies only if the InvencoLink is being installed

Plug the EK0131 YELLOW patch cable into the LAN-1 socket on the InvencoLink converter. If doing Side Two, then plug the cable into the LAN-2 socket.



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### 8. This step applies only if the PIB is being installed For Side B only:

Identify the Pump Control Board and the port circled below (designated P1109). Identify the Wayne Current Loop cable (EK0243) that is screwed on the PIB terminal on one end. Trace the other end of the cable to identify the connector and plug it into the Pump Control Board.



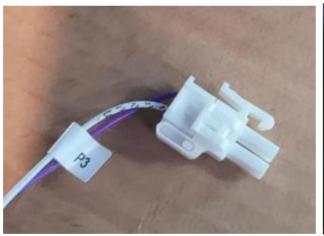


**Pump Control Board** 



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Wayne Current Loop Cable

9. Gather the DC Power and green/yellow earth cables from the EZ0853 PSU Plate assembly and the EK0131 Yellow patch cables, (if the InvencoLink is being installed), or the EK0243 the Wayne Current Loop Cable (if the PIB is being installed) and place them in the bottom of the pump cabinet near the side you are installing, ready for connection.

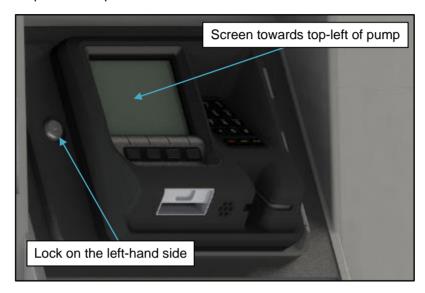
To avoid damaging the RFK panels in the following steps where screws are being placed into the brass bushes, it is very important to start each screw by hand, ensuring you use the existing thread.

DO NOT USE any type of powered tool to start the screws.

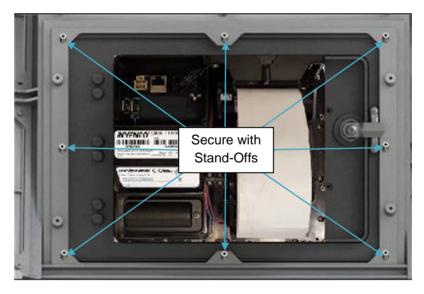


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10. Take the RP00020-XX or RP00047-X RFK Hatch Panel with the G6-300 / G6-400 pre-mounted and place it in the largest opening in the pump door from the outside. Ensure the panel is the correct way up, with the G6-300 (shown in the image below) / G6-400 OPT's display screen towards the top-left of the panel.



11. Carefully start eight MN0043 M3x15 Stand-Offs by hand into the bushes on the inside of the RFK Hatch Panel.





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12. Tighten all of the Stand-Offs with a 1/4" nut driver.



13. Carefully place the MZ0103 or MZ0239-XX UPC blank panel over the mid-right and upper-right opening (looking from the outside) of the pump door. Ensure correct orientation as per the image below (the keyhole shaped innermost outline is upright). Carefully start four MS0148 M3x10 SEMS screws by hand into the bushes on the inside of the pump door.





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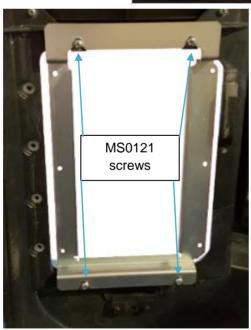
14. Tighten all of the screws with a Philips #1 screw driver.



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15. From inside the pump door, carefully place the MP0618 printer blank panel clamp over the lower-right opening (looking from the outside) of the pump door. Carefully start four MS0121 #6 x 3/8" screws by hand into the bushes on the inside of the pump door.



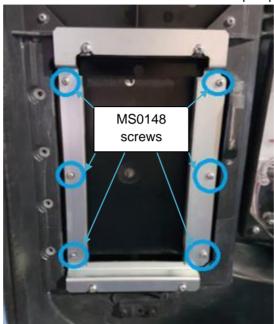


16. Tighten all of the screws with a Philips #2 screw driver.



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17. From outside the pump door, carefully place the MZ0109 or MZ0238-XX printer blank panel over the lower-right opening (looking from the outside) of the pump door. Carefully start six MS0148 M3x10 SEMS screws by hand into the bushes on the inside of the pump door.



- 18. Tighten all of the screws with a Philips #1 screw driver.
- 19. Route the three cables from step 9 along the bottom of the dispenser cabinet and up the right-hand side. Use the dispenser's cable-clip to retain the cables about halfway up the right-hand side.





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20. This step only applies if the PIB is being installed. Identify one of the USB cables plugged in the PIB. Trace the other end of one of the cables and plug into a spare USB port on the G6-300 SDC. It can be any of the 2 USB ports. (Each of the two USB cables will need to be plugged into Side A and Side B).



**For The G6-400 OPT:** Open the cover on the G6-400 unit to allow access to the connections. The other end of one of the USB cables plugged in the PIB can be inserted into any of the 3 spare USB ports on the G6-400 module.



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- 21. Take the three cable ends routed in step 19 and connect them to the G6-300 / G6-400 OPT:
  - a. Plug the Black low-voltage DC cable from the EZ0853 PSU plate assembly into the OPT:
    - i. For the G6-300: Plug one of the DC cables into the OPT and leave the other one unplugged.
    - ii. For the G6-400: Plug both the DC cables into the OPT.



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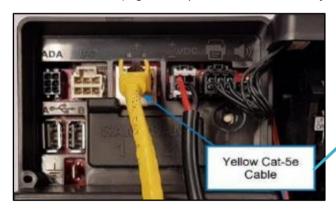




G6-400 OPT

G6-300 OPT

b. Connect the EK0131 Yellow Ethernet cable into the correct Ethernet socket on the OPT (if the InvencoLink is being installed), otherwise the ethernet cable that was uninstalled in the dispenser from the disassembly procedure. The port numbers on the InvencoLink for the cable (e.g. LAN-1) must match the side you're working on (e.g. Side A).





G6-300 OPT G6-400 OPT



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c. Clip the green earth cable from the EZ0853 PSU plate onto the  $\frac{1}{4}$ " tab on the G6-300 / G6-400 OPT:





G6-300 OPT

G6-400 OPT

22. Gather the YELLOW, BLACK and GREEN/YELLOW cables (and the PIB USB cable if its being installed) from the above steps into a cable-tie on the upper left rear (as viewed from its rear) of the G6-300 / G6-400 OPT RFK Door. Draw any excess cable length back towards the pump door hinge, and re-secure them with the dispenser's cable clip used in step 19.





G6-300 OPT

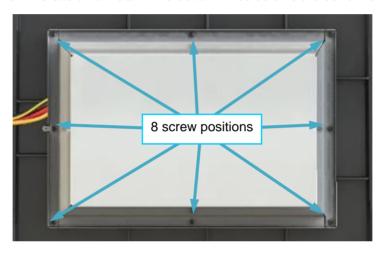
G6-400 OPT



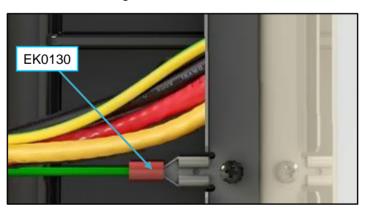
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For The G6-400 OPT: Close the cover on the G6-400 unit.

- 23. Install the MZ0116 Isolating Cover over the rear of the G6-300 / G6-400 OPT, onto the RFK Hatch Door.
  - a. Place the cover with the ground tab to the left over the G6-300 / G6-400 OPT, ensuring that the cables exit the cover above the Stand-Off by the earth tab, and that no cables are snagged.
  - b. MZ0116 has captive screws for attachment. Tighten the eight captive screws into the previously-installed Stand-Offs, using a Philips screwdriver: Start with the bottom three screws. It is easier to install if the bottom three screws are done first.



c. Plug the EK0130 Grounding Cable onto the tab on the left of the Isolating Cover:

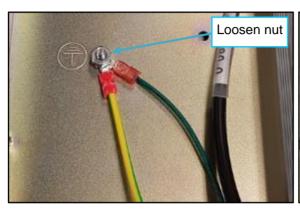


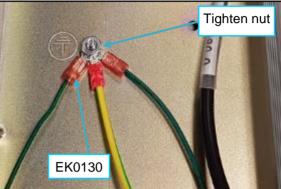
d. Gather EK0130 into the loom of cables established in Step 22



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e. Loosen the nut on the earth stud on the EZ0853 PSU Plate assembly, and secure the unconnected end of EK0130 under the nut. Re-tighten the nut, and ensure all the earth connections are secure:





- 24. Gather any excess wire of EK0130 and tidy it into the loom. Use cable ties to tidy up the installation. Excessive lengths should be bundled and tied so they stay inside the pump cabinet frame.
- 25. For a double-sided installation (i.e., for Side B), please repeat Steps 1-5 and 7-25
- 26. Close and lock the pump door
  - a. Lift the latch lever to release the door.





- b. Swing the door shut slowly ensuring that cables are not being pinched. If cables are being pinched open the door and re-secure the cables before re-closing it.
- Use the Ovation 1 door key to tighten the bolts at the top & bottom left corners of the door.

### 4.3.1 Wiring Completion

Ensure that all cables are tidy and cannot become snagged or pinched when the door of the cabinet is opened and closed.



WARNING – Local regulations may also require that the installation is electrically tested and certified BEFORE switch-on.



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### 5 First Power-Up

Once the installation is complete and the wiring is certified (if necessary), power may be applied. The G6-300 / G6-400 OPT takes a couple of minutes to complete its start-up phase, during which several information screens will be presented.

The terminal will display the following screen whilst attempting to connect to the LAN. This screen will persist until a connection can be made (Note: reported Firmware version may vary):



If the terminal is successful in connecting to the LAN it will display the following screen and the rest of the start-up sequence will continue:





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The following steps describe the paper loading procedure.



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Step	Description	Photo reference (G6-300)	Photo reference (G6-400)
1.	Ensure the paper roll has a neat cut edge.		
2.	Remove spindle from the paper holder position. Note orientation of the spindle (handle to left)	Spindle	
3.	Insert roll in place – the paper tension flap is spring-loaded so you will need to apply some pressure. Insert the spindle through the middle of the roll to hold in place.		
4.	Insert the cut edge of the paper into the slot as shown by the label.  Note: Insert until the printer grips and feeds automatically.	ASSENT PAPER  LECH  FROM  FROM	



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5.	The photo shows the paper loaded correctly.		
6.	Paper-feed buttons are located on the top of the terminal.  Press either button  to move the paper forward or back.  Press both buttons together to cut the paper.	REV FWD	
7.	Use the paper-feed buttons to advance the paper through the terminal until it appears at the paper exit chute. Cut the paper using both paper-feed buttons, then remove the cut length from the chute.	Inviewce    Inviewce	