

Jun. 2022
R16 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide

Kit Part Numbers: RF00021-XX: G7 15 inch Black RF00028-XX: G7 Black RF00048-XX: G7 15 inch Painted Color RF00080-XX: G7 Painted Colo



R13 S2

Date Released Revision Number/Security level

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide

Release History

Version	Prepared by	Date	Change description
0	Michael Doh	October 2019	Initial version to be approved by UL (Based on DCV-00206 R1)
1	Michael Doh	December 2019	Added G7 15 inch SDC module kit
2	Michael Doh	January 2020	Corrected typing errors
3	Michael Doh	March 2020	Updated kit and sub assembly part numbers, changed MN0031 to MN0029
4	Michael Doh	04-Aug-20	Added new painted color kits
5	Michael Doh	05-Aug-20	Added the new alternative part numbers in the relevant references
6	Michael Doh	01-Oct-20	Corrected part number typing error
7	Jojie Adigue	20-Jan-21	Added updates relating to the new SCC module
8	Michael Doh	28-Jan-21	Corrected arrow position in installation procedure step 21d
9	Michael Doh	05-Oct-21	Revised installation wiring connections, removed references and cables no longer required and added additional UPC blank panel
10	Michael Doh	19-Nov-21	Added printer kit information and note regarding the orientation of the UPC blank panel.
11	Shibani Joshi	23-Feb-22	Pump Interface Board (PIB) install procedure added Updated procedure for installing audio exciter kits and Updated PSU Assembly P/N from EZ0429 to EZ0702
12	Shibani Joshi	12-Apr-22	UL comments addressed



Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide

13	Shibani Joshi	17-Jun-22	Updates made to the exciter kit based on UL comments (refer to DCV-00462 for comments)
14	Shibani Joshi	05-Jul-22	UL comments addressed
15	Shibani Joshi	11-Jul-22	Revised guide for when neither NFC or SCC are fitted
16	Shibani Joshi	28-Jul-2022	Updated the Exciter Mounting Kit to remove MS0306 screw

© 2022 by Invenco Group Limited

All rights reserved No part of this document may be copied or reproduced in any form without prior written consent from Invenco. Invenco has taken great effort to verify the accuracy of this document but assumes no responsibility for any technical inaccuracies or typographical errors



Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide

Contents

Release History2	2
1 Introduction 5	5
1.1 Tools Required	8
1.2 Installation Kit Contents	9
2 Safety & Compliance Information 20	0
2.1 Preliminary Precautions	0
2.2 Emergency Total Electrical Shut-Off	0
2.3 Total Electrical Shut-Off Before Access	1
2.4 Evacuation, Barricading and Shut-Off21	1
2.5 Read the Manual21	1
2.6 Follow the Regulations21	1
2.7 Replacement Parts	1
3 Safety Symbols and Terminology 21	1
3.1 Prevent Explosions and Fires	2
3.1.1 No Open Flames22	2
3.1.2 No Sparks - No Smoking22	2
3.1.3 Working Alone	2
3.1.4 Working with Electricity Safety	3
3.1.5 Hazardous Materials 23	3
3.1.6 In an Emergency23	3
3.1.7 Approvals	3
3.1.8 Laser Warning 24	4
3.2 Computer Programs and Documentation	4
4 Installation Guide	5
4.1 Disassembly Procedure	5
4.2 Pre-Installation Procedure	2
4.2.1 Replace the Panel Gaskets	2
4.2.2 Install the InvencoLink Converter	5
4.2.3 Install the Pump Interface Board (PIB) 45	5
4.3 Installation Procedure	7
4.3.1 Wiring Completion73	3
5 First Power-Up	4



1 Introduction

The documentation provides some basic guidelines for installing the G7 or the G7 15 inch (G7-100 SDC-15) Outdoor Payment Terminal (OPT) system.

- G7 Outdoor Payment Terminal (OPT) system, Black: Kit part number: RF00028-XX
- G7 Outdoor Payment Terminal (OPT) system, painted color: Kit part number: RF00080-XX
- G7 15 inch (G7-100 SDC-15) Outdoor Payment Terminal (OPT) system, Black: Kit part number: RF00021-XX
- G7 15 inch (G7-100 SDC-15) Outdoor Payment Terminal (OPT) system, painted color: Kit part number: RF00048-XX

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.

 For each side installation, a printer kit is also required to be installed with this kit. Following the completion of the installation of this kit, it requires the installation of UL Listed by Report Retrofit Kit Part Number RF00038-XX (Retrofit G7 Black Printer Wayne Ovation, for installation with the black G7 OPT system kits RF00021-XX or RF00028-XX) or RF00058-XX (Retrofit G7 Colored Printer Wayne Ovation, for installation with the colored G7 OPT system kits RF00048-XX or RF00080-XX), by referencing the instructions in that kit (DCV-00464).

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 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 8 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 G7 15 inch OPT (RF00021-XX and RF00048-XX)

Note: The PIB is only required if the Current Loop Cable is not connected to the Pump Control Board as per step 9 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:

	Document Number	DCV-00460	
	Date Released	Jun. 2022	
	Revision Number/Security level	R13 S2	
Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada)			

Installation Guide





R13 S2

Date Released Revision Number/Security level

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide

1.1 Tools Required

The following tools are required to mount the G7 or the G7 15 inch (G7-100 SDC-15) OPT:

- Torx T25 security screwdriver
- Philips #1 screwdriver
- Philips #1 screwdriver with >5" shaft
- Flat 5mm screwdriver
- Small adjustable spanner
- Side cutters
- Cable (zip) ties
- Pliers
- 1/4" 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.



Document Number	DCV-00460
Date Released	Jun. 2022
Revision Number/Security level	R13 S2

1.2 Installation Kit Contents

G7 Outdoor Payment Terminal (OPT) system, Black (RF00028-XX):

Unpack the G7 Ovation Black Retro-Fit Kit (RF00028-XX) and check that all the parts listed below are present. Also refer to the pre-installation procedure (section 4.2.2.) relating to the communication method parts.



	Document Number	DCV-00460
	Date Released	Jun. 2022
	Revision Number/Security level	R13 S2
Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada)		

Installation Guide





Document Number

DCV-00460

Date Released

Jun. 2022

Revision Number/Security level

R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



G7 Outdoor Payment Terminal (OPT) system, painted colored panels (RF00080-XX):

Unpack the G7 Ovation painted colored panels Retro-Fit Kit (RF00080-XX) and check that all of the parts listed below are present. Also refer to the pre-installation procedure (section 4.2.2.) relating to the communication method parts.



Document Number

DCV-00460

Date Released

Jun. 2022

Revision Number/Security level

R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



	Document Number	DCV-00460
	Date Released	Jun. 2022
	Revision Number/Security level	R13 S2
Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada)		

Installation Guide





Date Released

Jun. 2022

Revision Number/Security level

R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



G7 15 inch (G7-100 SDC-15) Outdoor Payment Terminal (OPT) system, Black (RF00021-XX):

Unpack the G7 15 inch (G7-100 SDC-15) Ovation Black Retro-Fit Kit (RF00021-XX) and check that all of the parts listed below are present. Also refer to the pre-installation procedure (section 4.2.2.) relating to the communication method parts.



Document Number

DCV-00460

Date Released

Jun. 2022

Revision Number/Security level

R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



	Document Number	DCV-00460
	Date Released	Jun. 2022
	Revision Number/Security level	R13 S2
Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada)		

Installation Guide





Date Released

Jun. 2022

Revision Number/Security level

R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide

Fastener Kit:			Optional Part:
Comprising:		1 x IA(0133 Audio Exciter Kit
1	MP0590 Bracket for Contactless RFK Panel	Comprising:	
2	MN0029 #8-32 Lock Nuts (ext. washer)		
18	MS0148 M3 x 10 machine screws	2001	
1	MS0009 Screw M3 x 6, -Pan Philips		
			T X EO0095 Exciter
		A Second	
		00	
		(Carl	1 x MO0050 Exciter Mounting Lug
			5 5

G7 15 inch (G7-100 SDC-15) Outdoor Payment Terminal (OPT) system, painted colored panels (RF00048-XX):

Unpack the G7 15 inch (G7-100 SDC-15) Ovation painted colored panels Retro-Fit Kit (RF00048-XX) and check that all of the parts listed below are present. Also refer to the pre-installation procedure (section 4.2.2.) relating to the communication method parts.



Document Number

DCV-00460

Date Released

Jun. 2022

Revision Number/Security level

R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



	Document Number	DCV-00460
	Date Released	Jun. 2022
	Revision Number/Security level	R13 S2
Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada)		

Installation Guide





Date Released

Jun. 2022

Revision Number/Security level

R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide

Fastener Kit:			Optional Part:
Comprising:		1 x IA0	0133 Audio Exciter Kit
1	MP0590 Bracket for Contactless RFK Panel	Comprising:	
2	MN0029 #8-32 Lock Nuts (ext. washer)		
18	MS0148 M3 x 10 machine screws	h m	
1	MS0009 Screw M3 x 6, -Pan Philips	2141	1 x EQ0005 Excitor
		0	1 x MO0050 Exciter Mounting Lug

2 Safety & Compliance Information

This section introduces the hazards and safety precautions associated with installing, inspecting, maintaining or servicing the G7 or G7 15 inch (G7-100 SDC-15) 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, vapour, 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 fuelling 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 G7 or G7 15 inch (G7-100 SDC-15) 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.

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.



R13 S2

Date Released Revision Number/Security level

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide

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:

DANGER:	Alerts you to a hazard or unsafe practice which will result in death or serious injury.
WARNING:	Alerts you to a hazard or unsafe practice that could result in death or serious injury.
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 dispenser or island.

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 vapour. 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



Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide

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 USA: 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).
- 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 G7 or G7 15 inch (G7-100 SDC-15) Modules have UL File References of E469526 and E480135 and carry labels similar to this:



Jun. 2022 R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



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

3.1.8 Laser Warning

Some modules of the G7 OPT may incorporate a barcode reader. The barcode reader incorporates a laser aiming system. The Laser has a Class 2 output power to IEC 60825-1:2007 / ANSI Z136.1



CAUTION LASER RADIATION DO NOT STARE INTO BEAM 1mW MAX OUTPUT at 635-670nm CLASS 2 LASER PRODUCT

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.



Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide

4 Installation Guide

- 1. Please ensure all safety procedures are followed per requirement by the customer before installing the retrofit kit.
- 2. 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
- Scan Panel
- 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.

Note: 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 re-installation.

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.



Document Number	DCV-00460
Date Released	Jun. 2022
Revision Number/Security level	R13 S2

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.



Jun. 2022 R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



location of security bolts

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



Date Released

Jun. 2022 R13 S2

Revision Number/Security levelR13 S2Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada)

Installation Guide



Door in its fully open and locked position

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

Note: 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:



Document Number	
Date Released	

Jun. 2

Revision Number/Security level

Jun. 2022 R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



Setup 2:



6. Unplug the card reader cable assembly.







Jun. 2022

 Revision Number/Security level
 R13 S2

 Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide
 Installation Guide



Card Reader Cable

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. 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 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



Document Number	DCV-00460
Date Released	Jun. 2022
Revision Number/Security level	R13 S2

> communication cable (Purple & Brown, could also be Brown & White wire) for reconnection in a later step. All of these other wires can be discarded.



Unplug every component on the JADE Board



DCV-00460
Jun. 2022
R13 S2

9. 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.









Document Number	DCV-00460			
Date Released	Jun. 2022			
Revision Number/Security level	R13 S2			

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





Example of possible existing peripheral cables

Terminal connecting peripheral power

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

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



Jun. 2022 R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



Identifying the QVGA Bracket and QCAT / JADE Board



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

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.



Jun. 2022 R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



Front side of QVGA Panel showing display glass

 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.


Document Number	DCV-00460
Date Released	Jun. 2022
Revision Number/Security level	R13 S2



Backside of QVGA retainer bracket and customer LCD display



QVGA LCD display, retainer, and glass after removal

 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.



Date Released Revision Number/Security level Jun. 2022 R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



QVGA Panel and customer keypad after retainer removal



QVGA Panel and Customer keypad after removal



Installation Guide

Removal of QVGA Panel (Setup 2)

1) 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



Date Released

Jun. 2022

Revision Number/Security level

R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



QVGA Panel after removal

12. Remove and discard the six #6 screws that fasten the Scan Panel to the dispenser door. The Panel can be discarded. It will not be re-installed.



Location of Scan Panel Screws (Note: two variations)



Document Number	DCV-00460
Date Released	Jun. 2022
Revision Number/Security level	R13 S2

3 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



Scan panel after removal

- 13. The disassembly process is complete for this side. For a double-sided installation, repeat Steps 3-12 for the other side.
- **14.** The dispenser is now ready for the Installation procedure to begin.



Date Released Revision Number/Security level

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide

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 One before continuing.

4.2.1 Replace the Panel Gaskets

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 weather proof integrity of the dispenser is maintained.

There are four gaskets that must be replaced. All gaskets are applied to the front (outside) surface of the associated bezel opening, as indicated:



To remove an old gasket

1. Starting at the join or a torn end, carefully remove the old gasket material.



Date Released Revision Number/Security level

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide

- 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.

- 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 install a new gasket

Display RFK Panel (gasket part number MP0526):

- 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.
- 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.





R13 S2

Date Released Revision Number/Security level

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide

- 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.
- 5. 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.

Contactless RFK Panel (gasket part number MP0525+MP0589):

- Apply new gasket MP0525, starting with the horizontal segment along the top edge of the bezel opening.
 Peel off the backing paper from the long, narrow gasket piece 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 right 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 bottom horizontal segment.
- 4. Peel off the backing paper on the left vertical segment (MP0589), align the gasket in the channel and press into place. The top & bottom corners should be closed and the edges touching. A small witness gap is permissible at the bottom join.

<u>1 x Keypad RFK and 1 x (UPC Blank) Panels in the upper right and mid right panel openings</u> (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.





Revision Number/Security level R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide

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

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 Invence Link is NOT required if the Ethernet cable is plugged in the JADE Board as per 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 and apply the communications method selected from the table above, following the installation instructions supplied with that Kit.

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 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 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.



Date Released Revision Number/Security level Jun. 2022 R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide

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.

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 EZ0702 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



DCV-00460

Date Released Revision Number/Security level Jun. 2022 R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



ΡIΒ

- a. Go to the other-side of the pump from that being retro-fitted, unlock and open the door.
- b. Place the EZ0702 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.



Date Released

Jun. 2022

Revision Number/Security level

R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



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 EZ0702 PSU Plate Assembly.



DCV-00460

Date Released

Jun. 2022

Revision Number/Security level

R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



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



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



Date Released

Jun. 2022

Revision Number/Security level

R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



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



Date Released

Jun. 2022 R13 S2

Revision Number/Security levelR13 S2Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada)

Installation Guide



b. Locate the purple/brown (could also be Brown & White wire) 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.



8. This step applies only if the PIB is being installed



Document Number	DCV-00460
Date Released	Jun. 2022
Revision Number/Security level	R13 S2

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



DCV-00460

Date Released

Jun. 2022

Revision Number/Security level

R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



Wayne Current Loop Cable

9. Gather the DC Power cable from the EZ0702 PSU Plate Assembly and the EK0131 Yellow patch cable (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.

<u>To avoid damaging the RFK panels in the following steps where screws are being</u> <u>placed into the brass bushes, it is very important to start each screw</u> by hand, <u>ensuring you use the existing thread.</u> DO NOT USE <u>any type of powered tool to start the screws.</u>



10. Take the RP00021-XX, RP00028-XX, RP00048-XX or RP00080-XX Display RFK Panel. Feed its cables through the largest opening in the pump door from the outside, then carefully place the Display RFK panel into the opening. To ensure the panel is the correct way up, observe that the four keys on either side of the display are not vertically symmetric. Install the panel so the four keys are towards the bottom of the pump.

Make sure no cables are pinched when seating the Display RFK Panel.



11. Carefully start eight MS0148 M3x10 screws by hand into the bushes on the inside of the Display RFK Panel.



12. Tighten all of the screws with a Philips-head screwdriver.



Date Released

Jun. 2022

Revision Number/Security level

R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



13. Carefully place the (RP00039-XX or RP00049-XX) Keypad RFK Panel into the mid-right opening and the (MZ0103 or MZ0239-XX) UPC blank panel into the upper-right opening (looking from the outside) of the pump door. Note the orientation of the keypad. The card reader slot should be at the bottom, as shown.



Also note the orientation of the UPC blank panel as per the right-hand side image in the next step below (the keyhole shaped innermost outline is upright).

14. Carefully start four MS0148 M3x10 screws into the bushes on the inside of the Keypad RFK and the UPC blank Panels.



Document Number	DCV-00460
Date Released	Jun. 2022
Revision Number/Security level	R13 S2



- 15. Tighten all of the screws with a Philips-head screwdriver.
- 16. Carefully place the (RP00035-XX or RP00050-XX) Contactless RFK panel into the left opening of the pump door.
- 17. There are two versions of the pump door that have a slightly different arrangement for securing the RFK Panel. Use the pictures below to determine if you need to use the MP0590 Bracket for Contactless RFK from the RFK pack.



Installation Guide





Viewed from inside the pump door. Left style requires the bracket from the RFK parts. Right style accepts the RFK Panel as is.

- 18. If you have the Left Style:
 - a. Start two MS0148 M3x10 screws in the left bushes and tighten them with a Philips-head screwdriver.
 - b. Place the MP0590 bracket over the right -hand area (see below for orientation of the bracket), then start three MS0148 **M3x10** screws in the right bushes and tighten them with a Philips-head screwdriver.
 - c. Proceed to step 20.
- 19. If you have the Right Style:
 - a. Start six MS0148 **M3x10** screws in the bushes and tighten them with a Philips-head screwdriver.

	Document Number	DCV-00460
	Date Released	Jun. 2022
	Revision Number/Security level	R13 S2
Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada)		

Installation Guide



Viewed from inside the pump door, RFK panel installed. Left style with bracket fitted. Right style without bracket.

20. There are up to six connections to make onto the Keypad RFK Panel. Four cables come from the Display RFK Panel and up to two other cables come from the Contactless module on the Contactless RFK Panel (for the NFC module only). The main connection positions are like this:



All of the cables on the Display RFK Panel are pre-installed and loomed, and each connector is different so there can be no wrong connections made.



a. Insert the DC power connector (shown) from RP00021-XX RP00028-XX, RP00048-XX or RP00080-XX into the keypad module PWR socket.



b. Insert the Audio connector (shown) from RP00021-XX, RP00028-XX, RP00048-XX or RP00080-XX into the keypad module AUD socket.





c. Refer to the below pictures for the next two connections – **keypad USB and Barcode USB** (Note: for the G7 15 inch, cables could be inserted into any of the four USB slots)



Keypad USB connection:

A USB cable will be already fitted on the Display RFK Module, where indicated by "keypad USB". Insert the keypad USB connector (shown) from RP00021-XX, RP00028-XX, RP00048-XX or RP00080-XX into the keypad module USB socket.



Date Released

Jun. 2022 R13 S2

Revision Number/Security levelR13 S2Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada)

Installation Guide



Barcode USB connection:

Insert the barcode USB connector (shown) from RP00021-XX, RP00028-XX, RP00048-XX or RP00080-XX into the keypad module BARCODE USB socket.



d. At this stage, check and identify which contactless reader module is fitted (NFC or the SCC) on the RP00035-XX or RP00050-XX panel assembly. If neither of them are fitted, skip the below steps and go to step 22



Document Number	DCV-00460
Date Released	Jun. 2022
Revision Number/Security level	R13 S2

If it is the **NFC module**, the two connectors at the end of the cables are the RF and LED connectors:



If it is the **SCC module**, the two connectors at the end of the cables are the USB type A and USB type B connectors:



e. For the NFC module only, Insert the Contactless RF connector (shown) from the NFC module fitted on the RP00035-XX or RP00050-XX into the keypad module NFC ANT socket.



f. For the NFC module only, Insert the Contactless LED connector (shown) from the NFC module fitted on the RP00035-XX or RP00049-XX into the keypad module NFC LED socket.



Document Number	DCV-00460
Date Released	Jun. 2022
Revision Number/Security level	R13 S2

022 R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



- 21. If the installation has an SCC module instead of NFC:
 - a) Identify the Type A USB connector at the end of one of the cables on the SCC module.





Document Number	DCV-00460
Date Released	Jun. 2022
Revision Number/Security level	R13 S2

Insert this connector to the USB connector on the APC module (mounted on the rear of the Display RFK Module), where indicated by "USB-L". When the SCC module is included in the kit, there should not be a USB cable already connected in this slot, however, if there is, this can be removed and discarded.





- Installation Guide
- b) Identify the Type B USB connector at the end of one of the cables on the SCC module.



Insert the Type B connector into the "APC-USB" socket on the display (SDC) module.



For the G7-100 SDC (12 inch display) "APC-USB" connector socket:

For the G7-100 SDC-15 (15 inch display) or the G7-100 SDC-08 (8 inch display) "APC-USB" connector socket:



Document Number	DCV-00460
Date Released	Jun. 2022
Revision Number/Security level	R13 S2



22. If this installation has an ADA keypad (found beside the Contactless module on the Contactless RFK Panel), insert the ADA connection cable (shown bottom left) from that module into the Display RFK Panel ADA socket.





Date Released

Jun. 2022 R13 S2

Revision Number/Security levelR13 S2Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada)

Installation Guide



23. 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 G7 15 inch SDC. It can be any of the 4 USB ports. (Each of the two USB cables will need to be plugged into Side A and Side B).



24. Locate the DC POWER connector on the Display RFK Panel (use pictures below).



Date Released Revision Number/Security level Jun. 2022 R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide



25. Plug the BLACK DC cable (from Step 9) into the DC POWER socket and ensure it clips into place.



26. Locate the ETHERNET connector on the Display RFK Panel (also use picture in Step 24).



Document Number	DCV-00460
Date Released	Jun. 2022
Revision Number/Security level	R13 S2



27. Plug the EK0131 YELLOW Ethernet cable (from Step 9 if the InvencoLink is being installed), otherwise the ethernet cable that was uninstalled in the dispenser from Step 8 of the disassembly procedure) into the ETHERNET socket and ensure it clips into place.



- 28. This completes the installation of the supplied modules and their connecting cables.
- 29. If the customer has requested the installation of Exciters (for multimedia audio):
 - a. On the panel place the lug (MO0050) on one of the bosses.
 - b. Screw the lug in by using theMS0009 screw depending on the boss chosen.



Document Number	DCV-00460
Date Released	Jun. 2022
Revision Number/Security level	R13 S2

n. 2022 R13 S2

Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide







- c. Screw the Exciter EO0095 onto the mounting lug by turning clockwise.
- d. There will be an audio cable connected into the RFK Door with its other end left unconnected. Connect the free end of this cable to the exciter EO0095 with the red wire connector to the red terminal on the exciter



Document Number	DCV-00460
Date Released	Jun. 2022
Revision Number/Security level	R13 S2



- 30. Use cable ties to tidy up the installation. Excessive lengths should be bundled and tied so they stay inside the pump cabinet frame.
- 31. For a double-sided installation (i.e., for Side B), please repeat Steps 1-5 and 7-30.
- 32. Close and lock the pump doors (both sides if open):
 - 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.
- c. 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.





Retrofit G7 or G7 15 inch + InvencoLink / PIB Wayne Ovation (US & Canada) Installation Guide

5 First Power-Up

Once the installation is complete and the wiring is certified (if necessary), power may be applied. The G7 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:



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:

