

Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

Retrofit G7 or G7 15 inch + InvencoLink Wayne Ovation 2 (Canada & US) Installation Guide

Kit Part Numbers	Brief Description
RF00022-XX	G7 15 inch OVATION 2, Black Kit
RF00062-XX	G7 12 inch OVATION 2, Black Kit
RF00059-XX	G7 15 inch Ovation 2, Colored Kit



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

Release History

Version	Prepared by	Date	Change description
0	A. Hemus	23/06/2020	Created
1	Michael Doh	8-Jul-2020	Review and updates for initial draft
2	Michael Doh	16-Jul-2020	UL comments addressed
3	Michael Doh	03-Aug-2020	UL comments addressed
4	Michael Doh	6-Aug-2020	Corrected ADA/NFC gasket part numbers
5	Jojie Adigue	22-Oct-2020	Added new colored kit (RF00059-XX)
6	Michael Doh	03-Dec-2020	Printer reference, photo and type corrections
7	Jojie Adigue	20-Jan-2021	OPT modules installed at the factory instead
8	Michael Doh	14-Feb-2021	Corrected kit contents
9	Michael Doh	02-Sep-2021	Included Canada Certification
10	Michael Doh	20-Sep-2021	Added note to review the complete document prior to installing

© 2021 by Invenco Group Limited

© ZUZ I DY INVELLED GLOUP ENTITIES
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



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

Contents

R	elea	ise l	Histo	ory	2
1	Ir	ntro	duct	ion	5
	1.1		Tool	s Required	6
	1.2		Insta	allation Kit Contents	7
	1	.2.1		G7 15 inch (G7-100 SDC-15) Outdoor Payment Terminal (OPT) system, Bla	ck
	(1	RFC	0002	2-XX):	7
	1	.2.2	<u> </u>	G7 Outdoor Payment Terminal (OPT) system, Black (RF00062-XX):	11
	1	.2.3	3	G7 Outdoor Payment Terminal (OPT) system, Colored (RF00059-XX):	14
2	S	Safe	ty &	Compliance Information	17
	2.1			minary Precautions	
	2.2		Eme	ergency Total Electrical Shut-Off	17
	2.3	•	Tota	I Electrical Shut-Off Before Access	17
	2.4		Evad	cuation, Barricading and Shut-Off	17
	2.5		Rea	d the Manual	17
	2.6		Follo	ow the Regulations	18
	2.7		Rep	lacement Parts	18
3	S	Safe	ty S	ymbols and Terminology	18
	3.1		Prev	ent Explosions and Fires	19
	3	3.1.1		No Open Flames	19
	3	3.1.2	<u>-</u>	No Sparks - No Smoking	19
	3	3.1.3	3	Working Alone	19
	3	3.1.4		Working with Electricity Safety	
	3	1.5	5	Hazardous Materials	20
	3	.1.6	6	In an Emergency	20
	3	3.1.7	•	Approvals	20
	3	1.8		Laser Warning	
	3.2	(Com	puter Programs and Documentation	21
4	Ir			on Guide	
	4.1			ssembly Procedure	
	4.2			Installation Procedure	
	4	.2.1		Shut off the main power to the dispenser before beginning the deinstallation	
		.2.2		Identify Side A and Side B.	
		.2.3		Open the dispenser	
		.2.4		Remove the PPU panel.	
		.2.5		Remove the Metal Cosmetic Cover	
	4	.2.6	6	Remove the PPU Screen Lens.	27



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

	4.2.	7	Remove the PPU Paddles.	28
	4.2.	8	Detach the Customer Display node	29
	4.2.	9	Remove the two Security Bolts.	32
	4.2.	10	Remove Unused Cables and Wires from the Door Components	33
	4.2.	11	Removing the Door from the Dispenser	36
5	Ova	tion	Installation	38
	5.1	Nev	v Door Preparation	38
	5.1.	1	Drill PPU Flex Cable and Attachment Stud Holes to the replacement Ovation	2
	Doo	r ass	sembly (RP00022-XX, RP00062-XX or RP00059-XX)	38
	5.1.	2	Drill the PPU Attachment Bolt holes	40
	5.1.	3	Install the PPU Components	41
	5.1.	4	Install the retained PPU Screen Lens	43
	5.1.	5	Install the metal cosmetic cover.	45
	5.1.	6	Install the PPU panel	47
	5.1.	7	Install Retained Door Components	49
	5.1.	8	Install the security bolts	54
	5.1.	9	Install the optional Exciters (IA0015) if present for this installation	56
6	Inst	all th	e Power Supply (EZ0429)	58
	6.1	Inst	all the Dispenser Invenco Link converter to the PSU Panel	58
	6.1.	1	Install the PSU Panel to the pump	58
	6.1.	2	Install Ovation 2 Power Cable Harness	59
	6.1.	3	Plug in the Power Cable Harness to the Dispenser Power board	60
	6.2	Inst	all Invenco Link Dispenser Cables	62
	6.3	Inst	all the Network Cable	63
	6.4	Inst	all the New Door to the Dispenser	64
	6.5	Inst	all the Cables and Wiring to the Dispenser Door	66
	6.6	Inst	all the Printer Door and Gasket	68
	6.7	Con	npleting the installation	68
7	Firs	t Pov	ver-Up	69



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

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 15 inch (G7-100 SDC-15) Outdoor Payment Terminal (OPT) system, Black: Kit part number: RF00022-XX

G7 Outdoor Payment Terminal (OPT) system, Black:
 Kit part number: RF00062-XX

G7 15 inch (G7-100 SDC-15) Outdoor Payment Terminal (OPT) system, Colored;
 Kit part number: RF00059-XX

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.

This Retro-Fit Kit can be installed into either Side A or Side B of a Wayne Ovation2 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 requires the pre-installation of UL Listed by Report Retrofit Kit Part Number RF00033-XX (Invenco Link Converter) before installation into the dispenser. The process is covered in §6.1 Install the Dispenser Invenco Link converter to the PSU Pane procedure of this instruction, by reference to the instructions in that Kit.
- For a double-sided installation, two of these Kits are required.
- 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 RF00022-XX or RF00062-XX) or RF00058-XX (Retrofit G7
 Colored Printer Wayne Ovation, for installation with the colored G7 OPT system kit RF00059XX), by referencing the instructions in that kit (DCV-00464).



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

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.
- Towelling cleaning rags.
- Household sticky residue remover containing limonene
- 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-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

1.2 Installation Kit Contents

1.2.1 G7 15 inch (G7-100 SDC-15) Outdoor Payment Terminal (OPT) system, Black (RF00022-XX):

Unpack the G7 Retro-Fit Kit (RF00022-XX) and check that all the parts listed below are present. Also refer to the pre-installation procedure (section 6.1.) relating to the communication method parts.

Retrofit Kit Contents		
Part Number	Description	Illustration
RP00022-XX	Replacement Ovation 2 door assembly, G7 15"	



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

EZ0429	PSU Plate Assembly with cables	THE RESERVE TO SERVE THE PARTY OF THE PARTY
MP0985 (497-0515361)	Ovation PSU Bracket	
DK0015 (497-0518659)	PPU lens gasket, Ovation 2	



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

EP0095 (497-0518661)	Customer Display Lens Gasket	
Cables kit comprising of:		
EK0127 (497-0513684)	Wayne Pump to InvencoLink	
EK0131 (497-0513384)	Cat-5e, Flexible, YELLOW	
EK0137 (497-0513683)	Wayne Pump to Pump Adaptor	
2 x EK0132 (497-0513687)	Grounding cable	



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

Ovation Fastener kit, comprising of:

2x MN0029: #8-32 Lock Nuts (ext. washer)

Ovation 2 Fastner kit, comprising of:

29 x MS0050 (006-8625469): 3mm Hex Key Screws

6 x MW0057 (006-8625470): #8 Sealing Washers

4 x MS0253 (006-8626488): #6-19 x 1/2" Pan head philips screw (security switch scew)

2 x MN0077 (006-8611471): 1/4-20 Nuts

Optional Parts

2 x IA0015Audio Exciters





Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

1.2.2 G7 Outdoor Payment Terminal (OPT) system, Black (RF00062-XX):

Unpack the G7 Retro-Fit Kit (RF00062-XX) and check that all the parts listed below are present. Also refer to the pre-installation procedure (section 6.1.) relating to the communication method parts.

Retrofit Kit Contents		
Part Number	Description	Illustration
RP00062-XX	Replacement Ovation 2 door assembly, G7 12"	
EZ0429	PSU Plate Assembly with cables	HEREN.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

MP0985 (497-0515361)	Ovation PSU Bracket	
DK0015 (497-0518659)	PPU lens gasket, Ovation 2	
EP0095 (497-0518661)	Customer Display Lens Gasket	



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

Cables kit comprising of:		
EK0127 (497-0513684)	Wayne Pump to InvencoLink	
EK0131 (497-0513384)	Cat-5e, Flexible, YELLOW	
EK0137 (497-0513683)	Wayne Pump to Pump Adaptor	
2 x EK0132 (497-0513687)	Grounding cable	
Ovation Fastener kit, comprising of:		
2 x MN0029 : #8-32 Lock Nuts (ext. washer)		

Ovation 2 Fastner kit, comprising of:

29 x MS0050 (006-8625469): 3mm Hex Key Screws

6 x MW0057 (006-8625470): #8 Sealing Washers

4 x MS0253 (006-8626488): #6-19 x ½" Pan head philips screw (security switch scew)

2 x MN0077 (006-8611471): 1/4-20 Nuts

Optional Parts 2 x IA0015 Audio Exciters



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

1.2.3 G7 Outdoor Payment Terminal (OPT) system, Colored (RF00059-XX):

Unpack the G7 Retro-Fit Kit (RF00059-XX) and check that all the parts listed below are present. Also refer to the pre-installation procedure (section 6.1.) relating to the communication method parts.

Retrofit Kit Contents		
Part Number	Description	Illustration
RP00059-XX	Replacement Ovation 2 door assembly, G7 15", Colored	
EZ0429	PSU Plate Assembly with cables	The state of the s



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

MP0985 (497-0515361)	Ovation PSU Bracket	
DK0015 (497-0518659)	PPU lens gasket, Ovation 2	
EP0095 (497-0518661)	Customer Display Lens Gasket	



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

	Cables kit com	nprising of:
EK0127 (497-0513684)	Wayne Pump to InvencoLink	
EK0131 (497-0513384)	Cat-5e, Flexible, YELLOW	
EK0137 (497-0513683)	Wayne Pump to Pump Adaptor	
2 x EK0132 (497-0513687)	Grounding cable	
	Ovation Fastener ki	t, comprising of:
2 x MN0029 : #8-32 Lock Nuts (ext. washer)		
Ovation 2 Fastner kit, comprising of:		
29 x MS0050 (006-8625469): 3mm Hex Key Screws		
6 x MW0057 (006-8625470): #8 Sealing Washers		
4 x MS0253 (006-8626488): #6-19 x ½" Pan head philips screw (security switch scew)		
2 x MN0077 (006-8611471): 1/4-20 Nuts		
Optional Parts	2 x IA0015 Audio Exciters	Cast All States



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

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). 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 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 Invenco 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



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

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.

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.

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



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

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

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



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

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 a UL File References of E469526 and E480135 and carry labels similar to this:



The Invenco Retro-Fit Kit has UL File Reference of MH.61528

3.1.8 Laser Warning

Some modules of the G7 or G7 15 inch (G7-100 SDC-15) 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



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2



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.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

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 door assembly must be removed from the dispenser. This section covers the removal of these components including:

- Removal of reused components, e.g. PPU panel
- Unused cables and wires from door components

<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.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

- 4.2 Pre-Installation Procedure
- 4.2.1 Shut off the main power to the dispenser before beginning the deinstallation
- 4.2.2 Identify Side A and Side B.
 - a. Locate the Serial Plate on the side of the dispenser. See figure 1

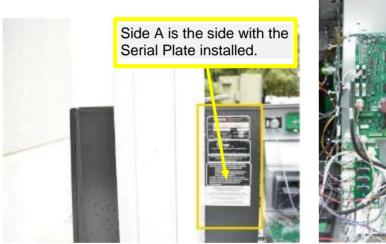


Figure 1: Serial Plate

NOTE:

If a Serial Plate is not present, Side B can be identified once the Pump has been opened. The IGEM Board will be located inside the electronic cabinet on Side A.

4.2.3 Open the dispenser.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

a. Use a Wayne Security Key to unscrew the two security bolts located on the left side of the dispenser electronics door.



Figure 2: Security Bolts

b. Open the Electronics door and engage the Prop Rod.



Figure 3: Door Prop



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

4.2.4 Remove the PPU panel.



Figure 4: PPU Panel Removal

a. Two wires are connected to the PPU panel. Connection J8 is power. Connection J1 is comm to the Customer Display Node. Detach both cables. The cable connected to J8 can be discarded. The connection to J1 must be retained.



Figure 5: Connectors J1 & J8

b. Detach all PPU Flex Cables from the PPU panel.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2



Figure 6: Flex Cable Removal

Note:

Record the positions of the PPU paddles so they can be reinstalled in the correct position

c. Unscrew with a 3mm Hex Key the 6 screws holding the PPU Panel from the door and set aside to be reinstalled. Discard the Screws.



Figure 7: Hex Screws

4.2.5 Remove the Metal Cosmetic Cover.

a. Unscrew the 6 Hex screw and washer assemblies attaching the cover to the door.



Decument Number	DCV/ 00527
Document Number	DCV-00537
Date Released	Sep. 2021
Bato Holoadda	OOP. 2021
Revision Number/Security level	R10 S2
11211211111111111111111111111111111111	3 32

Discard the washer and screw assemblies.



Figure 8: Hex screws & Washers

b. Pull away the PPU Cosmetic Cover and retain.



Figure 9: PPU Cosmetic Cover

4.2.6 Remove the PPU Screen Lens.

a. Unscrew the Lens Cover from the door using a 3mm Hex Key. Retain the Lens



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

Cover and discard the hardware.



Figure 10: Lens Cover Removal

b. Remove and retain the PPU Lens.



Figure 11: PPU Lens

4.2.7 Remove the PPU Paddles.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

Note:

Record the positions of the PPU paddles so they can be reinstalled in the correct position

a. Using a 11/32 socket wrench, remove each PPU Paddle nut and washer assembly and retain all components.



Figure 12: PPU Paddle Nut Removal

b. Slowly remove the PPU paddle with back gasket from the door. Feed the Flex Cables through the opening. Retain all PPU paddle components.



Figure 13: PPU Paddle with Gasket

4.2.8 Detach the Customer Display node.



Decument Number	DCV/ 00527
Document Number	DCV-00537
Date Released	Sep. 2021
Bato Holoadda	OOP. 2021
Revision Number/Security level	R10 S2
11211211111111111111111111111111111111	3 32

a. Mark the wired connections to the Customer Display node including the speaker connector to the QVGA or VGA Board.

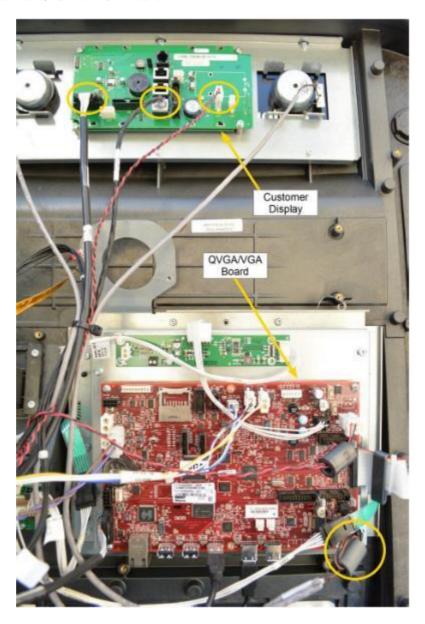


Figure 14: Cable Connections

b. Detach the marked cables and wires including the speaker wire (not shown).



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

Note:

Once the centre CAT cable is unplugged it will be loose. Set aside, **Do Not Discard**.



Figure 15: CAT Cable

c. Unscrew with a 3mm Hex Key the 6 screws holding the Customer Display node from the door, remove, and set aside to be reinstalled. Discard hardware. The display glass may be loose once removed. Use care once the Customer Display is removed. Retain the display glass as well.



Figure 16: Customer Display

d. Identify, mark, and detach the Comm cable attached to the QVGA/VGA board on the door.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

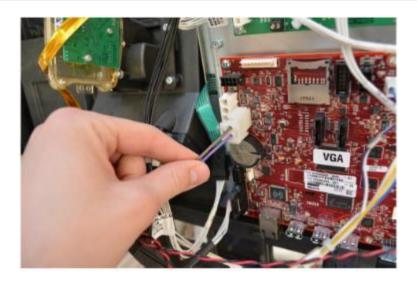


Figure 17: Detach Comm Cable

e. Remove the security switch if present and retain. Discard the attaching hardware.



Figure 18: Security Switch

4.2.9 Remove the two Security Bolts.

a. Pull off the plastic captive cone from the end of the security bolt and retain.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2



Figure 19: Plastic Captive Cone

b. Pull out the security bolt and retain.



Figure 20: Security Bolt

4.2.10 Remove Unused Cables and Wires from the Door Components

Detach the Card Reader and QVGA/VGA components.

a. Unplug all grounds and cables attaching the Card Reader to the electronics cabinet.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2



Figure 21: Card Reader Cable Removal

b. Unplug all cables attaching the QVGA/VGA to the electronics cabinet.



Figure 22: QVGA/VGA Cable Removal

c. Detach any remaining cables or wires connecting the dispenser door to the electronics cabinet.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2



Figure 23: Remove Remaining Cables



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

4.2.11 Removing the Door from the Dispenser

a. Detach the prop rod from the prop rod door bracket using a 4mm Hex Key. Remove and retain the now loose prop rod and connection hardware.



Figure 24: Prop Rod Removal

b. Unscrew the 3 screws using 3mm Hex Key holding the prop rod door bracket from the door. Remove and retain the bracket. Discard the three hex screws.



Figure 25: Prop Rod Bracket Removal



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

c. Push up the top hinge pin and retain.



Figure 26: Top Hinge Pin Removal

d. Lean the door forward off the top hinge. Lift the door up and away from the dispenser. Retain the bottom pin. Discard the door.



Figure 27: Door Lifted Off Dispenser



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

5 Ovation Installation

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 are working on.

- 5.1 New Door Preparation
- 5.1.1 Drill PPU Flex Cable and Attachment Stud Holes to the replacement Ovation 2 Door assembly (RP00022-XX, RP00062-XX or RP00059-XX)

Note:

Read all instructions prior to beginning this section.

Warning:

The following steps must be completed prior to beginning the installation process at the pump dispenser. Power tools like drills cannot be used near the pump dispensers. Power tools cannot be used in a hazardous location within a dispenser site. Remove the doors to a safe location prior to drilling or use pneumatic tools.

Caution:

Use care when drilling to align the holes and centre them as indicated.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

a. Identify the amount and location of PPUs according to the removed PPU plate from the old dispenser door.



Figure 28: PPU Plate

b. Begin drilling the PPU Flex Cable hole on the indention corresponding to the correct PPU location using a 3/8 drill bit. Plunge the hole to clean up the edges.

Caution:

Verify the PPU positions prior to drilling.



Figure 29: Drilling PPU Flex Holes



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

c. Repeat the process until all needed PPU Flex Cable holes are drilled.

Caution:

Verify the PPU positions prior to drilling.

5.1.2 Drill the PPU Attachment Bolt holes.

a. Identify the bolt hole wells corresponding to the drilled Flex Cable holes. these will be located above the Flex Cable hole.



Figure 30: Identifying Bolt Holes

b. Drill holes using a 3/16 drill bit in each identified bolt well following the indention as a centring guide. Plunge the holes to clean up the edges.

Caution:

Verify the PPU positions prior to drilling.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2



Figure 31: Drilling Bolt Wells

c. Repeat the process until all needed PPU attachment bolt holes are drilled.

5.1.3 Install the PPU Components

Warning:

The following steps must be completed prior to beginning the installation process at the pump dispenser. Power tools like drills cannot be used near the pump dispensers.

a. Install the PPU Paddles to the door. Route the top PPU Flex Cable through the drilled Flex Cable Hole from the outside.

Note:

Verify the PPU paddle corresponds with the proper PPU locations recorded during the reinstallation process.



Figure 32: PPU Paddle Installation



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

b. Route the lower flex cable through the Flex Cable Hole from the outside and pull the cables through the door until the PPU paddle's bolts line up into the bolt wells.



Figure 33: Routing Cable

c. Insert the bolts into the drilled bolt holes in the bolt wells.

Caution:

If the PPU paddle does not sit flush, plunge the bolt holes to open the area for the bolt until the paddle does sit flush against the door.

d. Attach the PPU paddles to the door by hand tightening the retained nuts and washers to the PPU paddle bolts on the back side of the new dispenser door.



Figure 34: Attaching PPU Paddles

e. Use a 11/32 socket wrench to tighten the nuts to the dispenser door. Repeat until all PPU paddles have been installed.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2



Figure 35: Tighten Paddles in Place

5.1.4 Install the retained PPU Screen Lens.

a. Remove the gasket material from the PPU Glass Lens Pane. Clean the surface of the glass where the gasket was removed.



Figure 36: PPU Glass

b. Install the new PPU Lens Gasket (DK0015 or 497-0518659) to the PPU Glass Lens Pane. Install the new gasket ensuring the gasket is properly seated around the glass lens pane, by firmly pushing the gasket into place around the lens.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2



Figure 37: Seating the Gasket

c. Install the PPU Lens into the lens recess in the new door.



Figure 38: Installing the PPU Lens

d. Place the retained Lens Cover over the lens, making sure the cover properly fits in the lens recess.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2



Figure 39: Fitting Retained Lens Cover

e. Use the 8 supplied screws (MS0050 or 006-8625469) to tighten the cover to the screen with a 3mm Hex Key. Alternate tightening each screw, starting in the centre and radiating out to apply even pressure for a proper water seal.



Figure 40: Sealing the screen

5.1.5 Install the metal cosmetic cover.

 Place the previously retained metal cosmetic cover over the PPU paddles and screen assembly.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2



Figure 41: Cosmetic Cover

b. Turnover and attach the metal cover with the 5 sealing washers (MW0057 or 006-8625470) and screws (MS0050 or 006-8625469) assemblies where indicated.

Note:

To properly thread the screws into the cover, push in the cover from the front opposite each screw location while installing each screw.

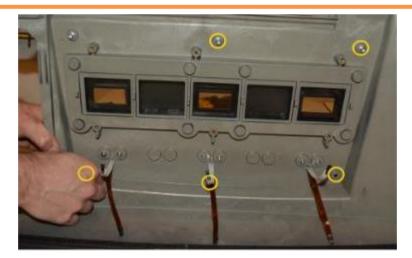


Figure 42: Attaching the Cosmetic Cover

c. Install the ground cable (EK0132 or 497-0513687) to the last (6th) screw and washer assembly.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

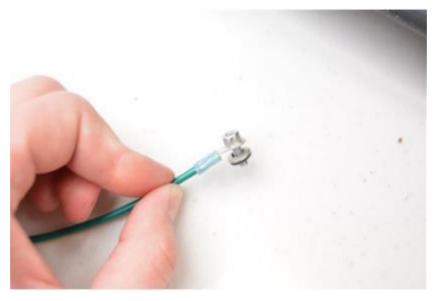


Figure 43: Ground Cable

d. Install the screw, cable, and washer assembly to the upper left corner as indicated below.



Figure 44: Upper Left-Hand Corner

5.1.6 Install the PPU panel.

a. Place the previously retained PPU board onto the door with the screens facing



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

forward and lining up the positioning key posts.



Figure 45: Positioning the PPU Panel

b. Attach the PPU board to the door with 6 screws (MS0050 or 006-8625469) with a 3mm Hex Key.

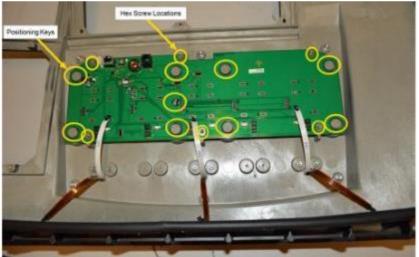


Figure 46: Attaching the PPU Board

c. Plug in PPU paddle connections to the PPU board. the white LED flex cable plugs into the lower connector, the brown ACT flex cable plugs into the upper connector.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2



Figure 47: Plug in PPU Paddles

5.1.7 Install Retained Door Components

Replace the gasket on the Customer Display.

Note:

Sometimes the Customer Display glass pane will adhere to the metal Customer Display bracket. Use care when removing the glass pane to not damage the metal bracket and speakers or crack the glass.

a. Remove the gasket from around the Customer Display glass pane. Clean the surface of the glass where the gasket was removed.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

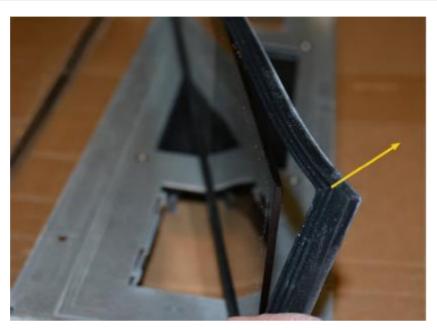


Figure 48: Remove Old Gasket

b. Install the new provided gasket (EP0095 or 497-0518661) around the glass pane.

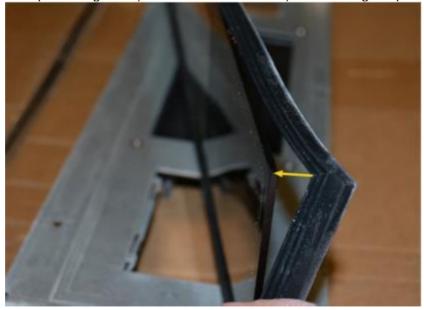


Figure 49: Install New Gasket



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

c. Install the Customer Display glass pane to the dispenser door. First, line up the glass pane with the top display opening. Verify the correct orientation: The speakers should be pointed to the inside of the dispenser. The display decal should be upright and readable from the front of the dispenser door.

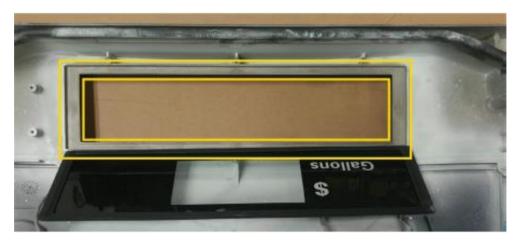


Figure 50: Check Orientation

d. Place in the glass pane and check to make sure the gasket is seated in the opening correctly. There should be no gaps.



Figure 51: Check Gasket Seating

e. Install the retained customer display with 5 screws (MS0050 or 006-8625469) using a 3mm Hex



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

Key to the positions indicated below. Be sure to route the speaker cables through the openings to avoid pinching or trapping them before tightening down the customer display metal bracket.

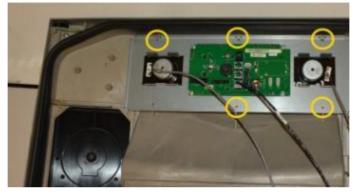


Figure 52: Install Customer Display

f. On the bottom left corner of the customer display, install the screw with the grounding cable (EK0132 or 497-0513687). Figure 53



Figure 53: Grounding cable onto the screw.

g. Install the screw cable assembly to the customer display where indicated below.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2



h. Install the Prop Rod door bracket previously retained using 3 hex screws (MS0050 or 006-8625469).



Figure 54: Prop Door Bracket

i. Install the security switches if present using the 4 provided screws (MS0253 or 006-8626488).



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2



Figure 55: Switch Locations



Figure 56: Install with 2 screws per switch

5.1.8 Install the security bolts.

a. Insert the previously retained security bolts into the security bolt holes in the



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

front of the door on the left-hand side.

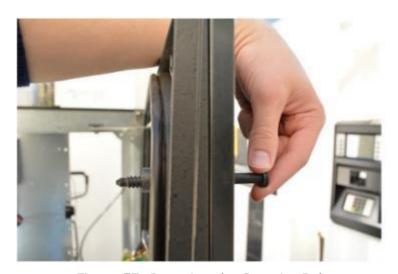


Figure 57: Inserting the Security Bolts

b. Install the retained plastic captive cone to the bolt on the back side as indicated below.



Figure 58: Plastic Captive Cone



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

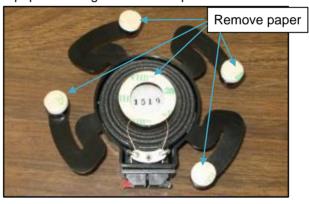
5.1.9 Install the optional Exciters (IA0015) if present for this installation.

If the customer has requested the installation of Exciters (for multimedia audio):

a. Clean the inside area of the Ovation 2 Pump Door above the G7 SDC Panel with rubbing alcohol. Make sure there is no dust or other residue from the cleaning process. The surface must be clean and dry.



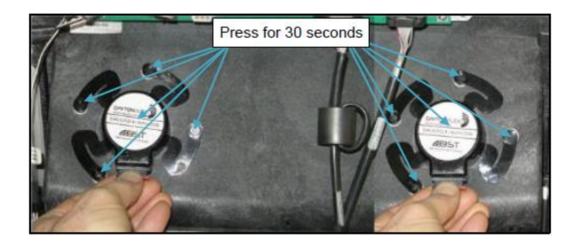
- b. Remove each IA0015 Exciter from its packaging.
- c. Carefully remove the craft paper backing from the four pads and the centre ring of each Exciter.



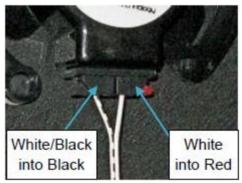
d. Place each Exciter in turn in position on the inside of the Pump Door. Press gently on the rear of each Exciter in the five positions and hold pressure for at least thirty seconds to enable the adhesive to stick properly.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2



e. There will be two 2-wire audio cables connected into the G7 SDC Panel, with their other ends left unconnected. Viewed from the inside of the Pump Door, connect the left-hand Exciter to the white audio cable marked RIGHT, and the right-hand Exciter to the white audio cable marked LEFT. Each cable must be connected such that the plain WHITE wire goes to the RED terminal, and the WHITE/BLACK wire goes to the BLACK terminal.





Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

6 Install the Power Supply (EZ0429)

6.1 Install the Dispenser Invenco Link converter to the PSU Panel

Note:

One Invenco Link per dispenser. The PSU Panel with Invenco Link is the Side A PSU. The PSU Panel without the Invenco Link is the Side B PSU. Install the Invenco Link on one universal Power Supply Bracket. This bracket will now become the Side A PSU bracket. Follow the Invenco Link Installation Instructions (DCV-00465). Acquire the Invenco Link Retrofit Kit UL Listed by Report Retrofit kit part number RF00033-XX.

6.1.1 Install the PSU Panel to the pump

a. Install the Ovation 2 Installation bracket (MP0985 or 497-0515361) with two nuts (MN0029) on the PSU panel with the orientation as shown on the Ovation wing.

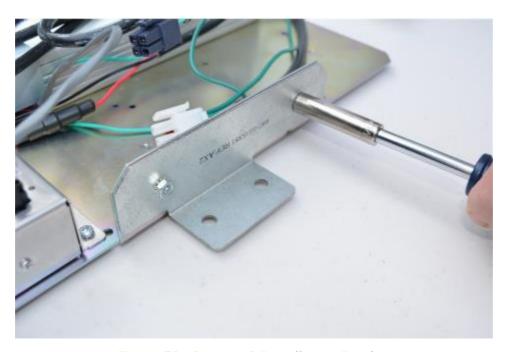


Figure 59: Ovation 2 Installation Bracket



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

b. Install the PSU Panel to the right side of the dispenser using the 2 supplied nuts (MN0077 or 006-8611471) to the bottom studs already in the dispenser cabinet.

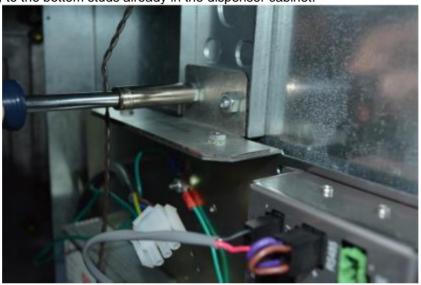


Figure 60: PSU Panel to RHS

6.1.2 Install Ovation 2 Power Cable Harness

a. Install the Ovation 2 Power Cable (EK0137 or 497-0513683) single connector end to the PSU Universal power connector.



Figure 61: Connect Power Cable



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

6.1.3 Plug in the Power Cable Harness to the Dispenser Power board.

a. Unplug the AC Power In cable from the AC Distribution board.

Note:

To identify the AC in cable, trace it back to the conduit into the dispenser cabinet.



Figure 62: AC Disconnected

b. Plug in the AC Power In cable to the Power Cable Harness.



Figure 63: AC Power into Power Cable Harness

c. Plug in the Power Cable Harness to the AC Distribution board.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

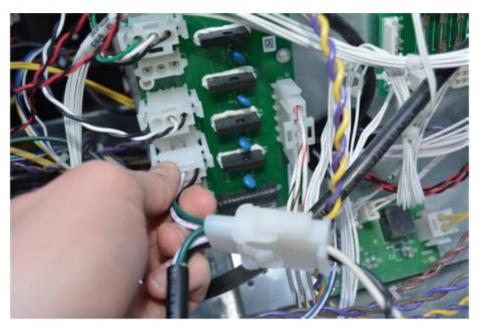


Figure 64: Power to the Distribution Board

d. If installing the Side B PSU, daisy chain the Side A PSU into the Side B PSU and plug the Cable Harness into the Power Distribution Board.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

6.2 Install Invenco Link Dispenser Cables

a. Install the Wayne Comm Cable adapter (EK0127 or 497-0513684) to the Dispenser Invenco Link.

Note:

This is only needed during the side A installation.



Figure 65: Wayne Cable Adapter

b. Install one of the Dispenser Comm Cables previously identified to the Cable Adapter.

Note:

Verify the correct cables match when connected. For example, brown to brown, purple to purple.

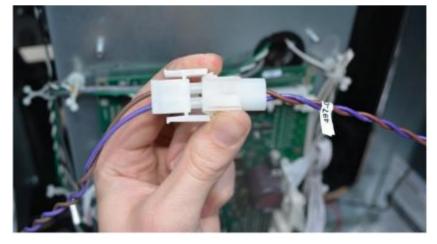


Figure 66: Comms Cables



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

6.3 Install the Network Cable.

a. Install yellow CAT network cable (EK0131 or 497-0513384) into the Invenco Link LAN 1 terminal (for Side A).

Note:

Use the LAN 2 terminal for Side B installation.



Figure 67: Yellow Cat Cable (the red cable is not required for this installation)



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

6.4 Install the New Door to the Dispenser

- a. Replace the retained lower pin into the lower dispenser door frame hinge.
- b. Install the new dispenser door onto the lower pin and rotate the door up into the upper hinge.



Figure 68: New Door

b. Install the retained upper pin into the door hinge.



Figure 69: Upper Door Pin



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

c. Reinstall the retained Prop Rod to the dispenser door.



Figure 70: Retaining Prop Rod

d. Install the Prop Rod to the Prop Rod Door Assembly with a 4mm hex key and the previously retained hardware. Place the washer between the prop rod and door assembly and tighten the retained hex screw from the bottom of the assembly as shown.



Figure 71: Prop Rod Retaining Hardware



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

6.5 Install the Cables and Wiring to the Dispenser Door

a. Reinstall the marked cables to the Customer Display Node.

Note:

The speaker cable is not reinstalled.

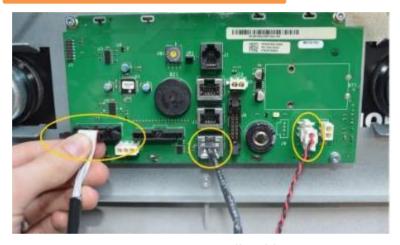


Figure 72: Reinstall Cables

b. Reinstall the marked cables to the PPU board.

Note:

Install the other end of the red and black power cable previously installed in the last step to the J8 connection on the PPU panel in place of the discarded white power cable.



Figure 73: PPU Cables Reinstalled



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

c. Plug in the corresponding yellow CAT5 LAN cable (the red RS232 cable is not required for this installation) and G7 power cable from the Invenco PSU Assembly to the G7 APC (mounted on the SDC screen assembly):



Figure 74: APC Connections



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

6.6 Install the Printer Door and Gasket

- Install the printer door and gasket with the G7 Printer Wayne Ovation Kit. Follow the G7 Wayne
 Ovation Printer Kit Installation Instructions (DCV-00464). Acquire the Printer Retrofit G7 Printer
 Wayne Ovation 2, UL Listed by Report Retrofit kit part number RF00038-XX (when installing with
 the black kits) or RF00058-XX (when installing the colored kit). Start at the Installation Sections.
 Deinstallation should already be completed.
- Attach all grounding wires to the PSU Grounding Stud shown below.

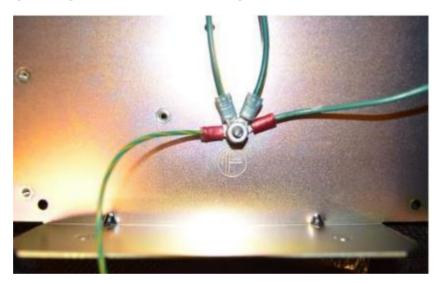


Figure 75: Grounding Stud

6.7 Completing the installation

- Route all cables around and away from seals, gaskets, and sharp edges.
- Repeat the process for Side B of the dispenser.
- Close and seal the pump with the security bolts using the Wayne Security Key. Power can be returned to the dispenser

Caution:

Follow local regulations for certification and inspection prior to returning power or reopening the dispenser for costumers.



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

7 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:





Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

Appendix A: List of figures

Figure 1: Serial Plate	23
Figure 2: Security Bolts	24
Figure 3: Door Prop	24
Figure 4: PPU Panel Removal	25
Figure 5: Connectors J1 & J8	25
Figure 6: Flex Cable Removal	26
Figure 7: Hex Screws	26
Figure 8: Hex screws & Washers	27
Figure 9: PPU Cosmetic Cover	27
Figure 10: Lens Cover Removal	28
Figure 11: PPU Lens	28
Figure 12: PPU Paddle Nut Removal	29
Figure 13: PPU Paddle with Gasket	29
Figure 14: Cable Connections	30
Figure 15: CAT Cable	31
Figure 16: Customer Display	31
Figure 17: Detach Comm Cable	32
Figure 18: Security Switch	32
Figure 19: Plastic Captive Cone	33
Figure 20: Security Bolt	33
Figure 21: Card Reader Cable Removal	34
Figure 22: QVGA/VGA Cable Removal	34
Figure 23: Remove Remaining Cables	35
Figure 24: Prop Rod Removal	36
Figure 25: Prop Rod Bracket Removal	36
Figure 26: Top Hinge Pin Removal	37
Figure 27: Door Lifted Off Dispenser	37
Figure 28: PPU Plate	39
Figure 29: Drilling PPU Flex Holes	39
Figure 30: Identifying Bolt Holes	40
Figure 31: Drilling Bolt Wells	41
Figure 32: PPLI Paddle Installation	41



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

Figure 33: Routing Cable	42
Figure 34: Attaching PPU Paddles	42
Figure 35: Tighten Paddles in Place	43
Figure 36: PPU Glass	43
Figure 37: Seating the Gasket	44
Figure 38: Installing the PPU Lens	44
Figure 39: Fitting Retained Lens Cover	45
Figure 40: Sealing the screen	45
Figure 41: Cosmetic Cover	46
Figure 42: Attaching the Cosmetic Cover	46
Figure 43: Ground Cable	47
Figure 44: Upper Left-Hand Corner	47
Figure 45: Positioning the PPU Panel	48
Figure 46: Attaching the PPU Board	48
Figure 47: Plug in PPU Paddles	49
Figure 48: Remove Old Gasket	50
Figure 49: Install New Gasket	50
Figure 50: Check Orientation	51
Figure 51: Check Gasket Seating	51
Figure 52: Install Customer Display	52
Figure 53: Grounding cable onto the screw	52
Figure 54: Prop Door Bracket	53
Figure 55: Switch Locations	54
Figure 56: Install with 2 screws per switch	54
Figure 57: Inserting the Security Bolts	55
Figure 58: Plastic Captive Cone	55
Figure 72: Ovation 2 Installation Bracket	58
Figure 73: PSU Panel to RHS	59
Figure 74: Connect Power Cable	59
Figure 75: AC Disconnected	60
Figure 76: AC Power into Power Cable Harness	60
Figure 77: Power to the Distribution Board	61
Figure 78: Wayne Cable Adapter	62
Figure 79: Comms Cables	62
Figure 80: Yellow Cat Cable (the red cable is not required for this installation)	63
Figure 81: New Door	64
Figure 82: Upper Door Pin	64



Document Number	DCV-00537
Date Released	Sep. 2021
Revision Number/Security level	R10 S2

Figure 83: Retaining Prop Rod	65
Figure 84: Prop Rod Retaining Hardware	65
Figure 85: Reinstall Cables	66
Figure 86: PPU Cables Reinstalled	66
Figure 87: APC Connections	67
Figure 88: Grounding Stud	68