


iNVENCO®	Document Number	DCV-00562
	Date Released	Jul 2022
	Revision Number/Security level	R04 S2
Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide		

Retrofit Encore 500S Non- ECIM G7 or G7 15 inch + InvencoLink (US) Installation Guide

Kit Part Number:

RF00072-XX: G7 Encore 500S Non-ECIM

RF00077-XX: G7 15" Encore 500S Non-ECIM

	Document Number	DCV-00562
	Date Released	Jul 2022
	Revision Number/Security level	R04 S2
Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide		

Release History

Version	Prepared by	Date	Change description
0	Jojie Adigue	Jul 2020	Initial release, based on NCR installation instructions 497-0513238-E.
1	Jojie Adigue	Mar 2021	Updated to have the OPT installed at the factory
2	Sravani Palukuri	Aug 2021	Parts review, format and references update
3	Shibani Joshi	Mar 2022	UL Comments and updates
4	Michael Doh	Jul 2022	Exciter procedures removed (installation completed at the factory instead)

© 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



Document Number

DCV-00562

Date Released

Jul 2022

Revision Number/Security level

R04 S2

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide

Contents

Release History	2
1 Introduction.....	5
1.1 Tools Required.....	6
1.2 Recommended Materials.....	6
1.3 Installation Kit Contents.....	7
1.3.1 G7 Retro-Fit Kit (RF00072-XX).....	7
1.3.2 G7 15 inch Retro-Fit Kit (RF00077-XX)	9
2 Safety & Compliance Information	11
2.1 Preliminary Precautions.....	11
2.2 Emergency Total Electrical Shut-Off.....	11
2.3 Total Electrical Shut-Off Before Access	11
2.4 Evacuation, Barricading and Shut-Off.....	11
2.5 Read the Manual	12
2.6 Follow the Regulations	12
2.7 Replacement Parts	12
3 Safety Symbols and Terminology	12
3.1 Prevent Explosions and Fires	13
3.1.1 No Open Flames	13
3.1.2 No Sparks - No Smoking	13
3.1.3 Working Alone.....	13
3.1.4 Working with Electricity Safety.....	13
3.1.5 Hazardous Materials.....	14
3.1.6 In an Emergency	14
3.1.7 Approvals	14
3.1.8 Laser Warning.....	14
3.2 Computer Programs and Documentation.....	15
4 Installation Guide.....	16
4.1 Disassembly Procedure.....	16
4.1.1 Before Uninstalling Begins.....	16
4.1.2 Remove Reused Exterior Door Components.....	16
4.1.3 Open the Dispenser.....	19
4.1.4 Uninstall the Printer	21
4.1.5 Uninstall the PPU	23
4.1.6 Remove the Magnetic Boot Switch	24
4.1.7 Uninstall the Comm Speaker (if present)	25
4.1.8 Uninstall the Totalizers (if present)	27
4.1.9 Remove All Cable Harnesses from the Non-Modular Door.....	28



Document Number

DCV-00562

Date Released


Jul 2022

Revision Number/Security level

R04 S2

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide

4.1.10	Uninstall the Weather Shield	29
4.1.11	Uninstall the Non-Modular Door.....	29
4.2	Installation Procedure.....	32
4.2.1	Mount the Door Panel Assembly	32
4.2.2	Prepare the Door Panel Assembly.....	35
4.2.3	Install the PPU Bracket.....	39
4.2.4	Transfer the Magnetic Boot Switch or Switches.....	40
4.2.5	Transfer Components.....	40
4.2.6	Power Supply Assembly EZ0703 Installation.....	46
4.2.7	Install the Power and Data Connections to the G7 or G7 15inch	60
4.2.8	Install the Printer	62
4.2.9	Closing the Dispenser	62

	Document Number	DCV-00562
	Date Released	Jul 2022
	Revision Number/Security level	R04 S2
Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide		

1 Introduction

The documentation provides some basic guidelines for installing the G7 or G7 15 inch (G7-100 SDC-15) Outdoor Payment Terminal (OPT) system onto the Encore 500S Non-ECIM dispenser (Where the suffix -XX in the part numbers are any numbers or letters relating to optional configurations).

- G7 Outdoor Payment Terminal (OPT) Black System:
Kit part number: RF00072-XX
- G7 15 inch (G7-100 SDC-15) Outdoor Payment Terminal (OPT)
Kit part number: RF00077-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.


- 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 RF00024-XX (Retrofit G7 Printer GVR Encore 300, 500, 500S/700S Non-ECIM), by referencing the instructions in that kit (DCV-00463).

Invenco Link

An InvencoLink converter is required to be fitted in the pump to communicate to the store.

This Retro-Fit Kit can be installed into either Side A or Side B of Encore 500S Non-ECIM 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 (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.
- **For a double-sided installation, two of these Kits are required.**

	Document Number	DCV-00562
	Date Released	Jul 2022
	Revision Number/Security level	R04 S2
Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide		

1.1 Tools Required

The following tools are required to mount the G7 door upgrade onto the GVR.

- Safety Glasses
- GCBO Key
- GVR 751 key
- Medium Flathead Screwdriver
- #6 (or small) and medium Phillips Screwdriver
- Socket Wrench and Assorted Hex Socket or Nut Drivers
- ¼ and 7/16" (Could vary by pumps)
- Wire Stripper and Cutter
- Needle-Nosed Pliers
- UL Listed Crimp-on Fork Connectors/ Terminals
- Small Wire/ Zip-Tie Clippers

Warning: DO NOT use power tools if working on a fuel station forecourt Any spark could cause an explosion.

1.2 Recommended Materials

The following tools are not provided in the kit:

- Cable Restraints or Zip Ties
- Cloth Rags
- All-Purpose Lubricant
- Adhesive Remover
- Rust Penetrator Oil

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide

1.3 Installation Kit Contents

1.3.1 G7 Retro-Fit Kit (RF00072-XX)

Unpack the G7 (G7-100) Retro-Fit Kit (RF00072-XX) and check that all the parts listed below are present. Also refer to the [pre-installation procedure \(section 4.2\)](#) relating to the communication method parts.

(x1) [RP00072-XX](#) - Door Panel Assembly with G7 OPT system



(x1) [EZ0703](#) - PSU Assembly



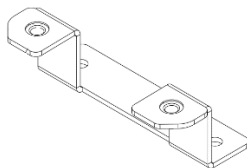
(x2) [DL0350](#), Single Blank Panel



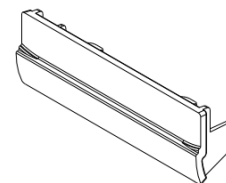
(x1) [MP0938](#), Top Hinge Pin



(x4) [MP0956](#), Encore 500S Nozzle Bracket

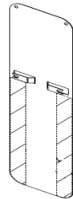


(x4) [MP0957](#), Lower Blank Plug

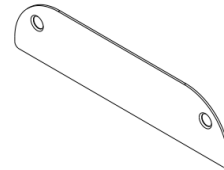


Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide

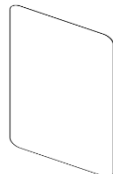
(x3) MP0962, Blanking Panel



(x4) MP0964, Top Boot Aluminum Blank



(x1) DL0349, Full Panel Blank Label



Fasteners:

(x9) MS0101, Screw #6-20 X 1/2" Type AB, Hex Head 1/4", SS410

(x8) MS0237, Screw 10-16 X 0.75", Thread Forming, Pan, Phillips, #2 SST

(x8) MS0238, Screw, Flat Head, #5 x 0.375", Phillips, #2, SST

(x8) MS0239, Machine Screw, M6 X 20mm

(x4) MS0240, Screw, Hex, #8 x 0.250", Slotted, MS ZN

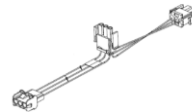
(x3) MW0044, Washer, Oversized, #6 x 0.75" OD, SS304

(x2) MN0029, Nut, K-Lock, 8-32 UNC, 11/32" AF, Zinc Plated

(x3) MF0040, Cable Tie, Dia 15mm, PA6 Nylon UL94V2

Cables:

(x1) EK0208, Encore AC Adapter Y cable



(x1) EK0124, GVR Pump to PSU Adaptor



(x1) EK0139, GVR Encore to InvencoLink



(x1) EK0131, Cat-5e, Flexible, Yellow



Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide

1.3.2 G7 15 inch Retro-Fit Kit (RF00077-XX)

Unpack the G7 15 inch (G7-100 SDC-15) Retro-Fit Kit (RF00077-XX) and check that all the parts listed below are present. Also refer to the pre-installation procedure (section 4.2) relating to the communication method parts.

(x1) RP00077-XX - Door Panel Assembly with G7 15 inch OPT system



(x1) EZ0703 - PSU Assembly



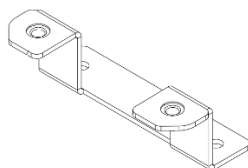
(x2) DL0350, Single Blank Panel



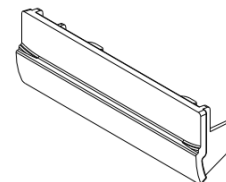
(x1) MP0938, Top Hinge Pin



(x4) MP0956, Encore 500S Nozzle Bracket

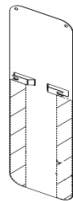


(x4) MP0957, Lower Blank Plug

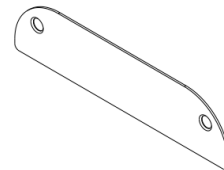


Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide

(x3) MP0962, Blanking Panel



(x4) MP0964, Top Boot Aluminum Blank



(x1) DL0349, Full Panel Blank Label



Fasteners:

(x9) MS0101, Screw #6-20 X 1/2" Type AB, Hex Head 1/4", SS410

(x8) MS0237, Screw 10-16 X 0.75", Thread Forming, Pan, Phillips, #2 SST

(x8) MS0238, Screw, Flat Head, #5 x 0.375", Phillips, #2, SST

(x8) MS0239, Machine Screw, M6 X 20mm

(x4) MS0240, Screw, Hex, #8 x 0.250", Slotted, MS ZN

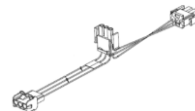
(x3) MW0044, Washer, Oversized, #6 x 0.75" OD, SS304

(x2) MN0029, Nut, K-Lock, 8-32 UNC, 11/32" AF, Zinc Plated

(x3) MF0040, Cable Tie, Dia 15mm, PA6 Nylon UL94V2

Cables:

(x1) EK0208, Encore AC Adapter Y cable



(x1) EK0124, GVR Pump to PSU Adaptor




(x1) EK0139, GVR Encore to InvencoLink



(x1) EK0131, Cat-5e, Flexible, Yellow



	Document Number	DCV-00562
	Date Released	Jul 2022
	Revision Number/Security level	R04 S2
Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide		

2 Safety & Compliance Information

This section introduces the hazards and safety precautions associated with installing, inspecting, maintaining or servicing the G7 and G7 15 inch OPT. Before proceeding, check the relevant hazard and safety information. Fire, explosion or electrical shock could occur and cause death or serious injury if these safe service procedures are not followed.

2.1 Preliminary Precautions

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

2.2 Emergency Total Electrical Shut-Off

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


2.3 Total Electrical Shut-Off Before Access

Any procedure requiring access to electrical components or the electronics of a pump/dispenser requires total electrical shut-off of that unit. Understand the function and location of this switch or circuit breaker before inspecting, installing, maintaining, or servicing the G7 and G7 15inch 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)

	Document Number	DCV-00562
	Date Released	Jul 2022
	Revision Number/Security level	R04 S2
Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide		

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.

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.

	Document Number	DCV-00562
	Date Released	Jul 2022
	Revision Number/Security level	R04 S2
Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide		

Working With Fuels and Electrical Energy

3.1 Prevent Explosions and Fires

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

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.

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

	Document Number	DCV-00562
	Date Released	Jul 2022
	Revision Number/Security level	R04 S2
Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide		

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

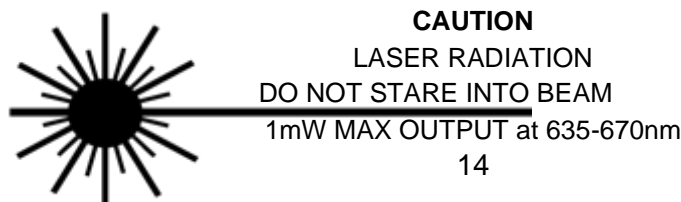
Invenco develops and maintains its hardware and software products using industry-standard quality processes, and is audited by various bodies.


The Invenco G7 and G7 15inch Modules have a UL File Reference of MH61528 and carry labels similar to this:



3.1.8 Laser Warning

The G7 and G7 15inch OPT incorporates 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-00562
	Date Released	Jul 2022
	Revision Number/Security level	R04 S2
Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide		

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.

	Document Number	DCV-00562
	Date Released	Jul 2022
	Revision Number/Security level	R04 S2
Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) 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.

4.1 Disassembly Procedure

4.1.1 Before Uninstalling Begins

1. Disconnect the main power from the dispenser.
2. Side A is the side with the Junction box located directly under the electronic cabinet. If no junction box is present open the electronic cabinet and locate the customer node. Follow the indication for side one on the customer node jumper cluster to determine side 1/A.

4.1.2 Remove Reused Exterior Door Components

1. Remove the Nozzle Boot by removing the two screws on each side. Set the boot aside. Discard the screws. Note the location of the nozzle for installation process.



Note: Screws will be medium Phillips or Square Bit #SQ3.

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



Fig 1.2 – Nozzle Boot before removal

2. Remove the Grade Select buttons.



Note: Keep track of the order to correctly reinstall the Grade Select Switches.

- a. Use a medium flathead screwdriver to firmly push in the lock tab located on the bottom side of the grade select buttons. (Fig 1.3a,b)



Fig 1.3a – Button before removal

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



Fig 1.3b – Location of lock tab



Fig 1.3c – Flathead screwdriver pushing in on lock tab

- b. Lift up on the buttons while pushing in the lock tab until the button disengages. (Fig 1.3c)
- c. Set the buttons aside and note their positions on the door. They will be reinstalled later in the process.
- d. Remove the Grade Select switches.
- e. Use a ¼" socket to remove both screws holding down the grade select switch. Retain screws for reinstallation. (Fig 1.4)

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



Fig 1.4 – Grade select switch and screws

- f. Set the switches aside. Do not discard.

4.1.3 Open the Dispenser

1. Remove the lower door using the GCBO Lower Door Key. (Fig 1.01) Set aside.



Fig 1.01 – Lower Doors Removed

2. Using a '751' key, unlock the main door on the dispenser.
3. Undo door latch located underneath the lower left hand side of the dispenser door. (Fig 1.1a,b).

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



Fig. 1.1a – Far picture of door latch



Fig 1.1b- Door Latch

4. Open the door until it fully locks into place. (Fig 1.5)

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



Fig 1.5 – Door in its fully open and locked position

4.1.4 Uninstall the Printer

1. Unplug the power and communication cables from the printer and discard.
2. Remove the two screws holding the printer assembly to the door. Set the assembly and the screw aside to be discarded. They will not be re-installed. (Fig 1.13)

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



Fig 1.13 – Screws holding down printer bracket

3. Remove the interior Printer Shield.
4. Remove the four 5/16th bolts securing the interior printer shield. (Fig 1.14b,c) and retain to be reinstalled if needed.



Fig 1.14b – Far picture of printer shield

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide

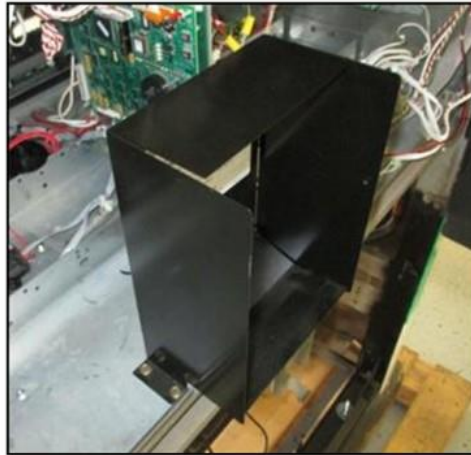


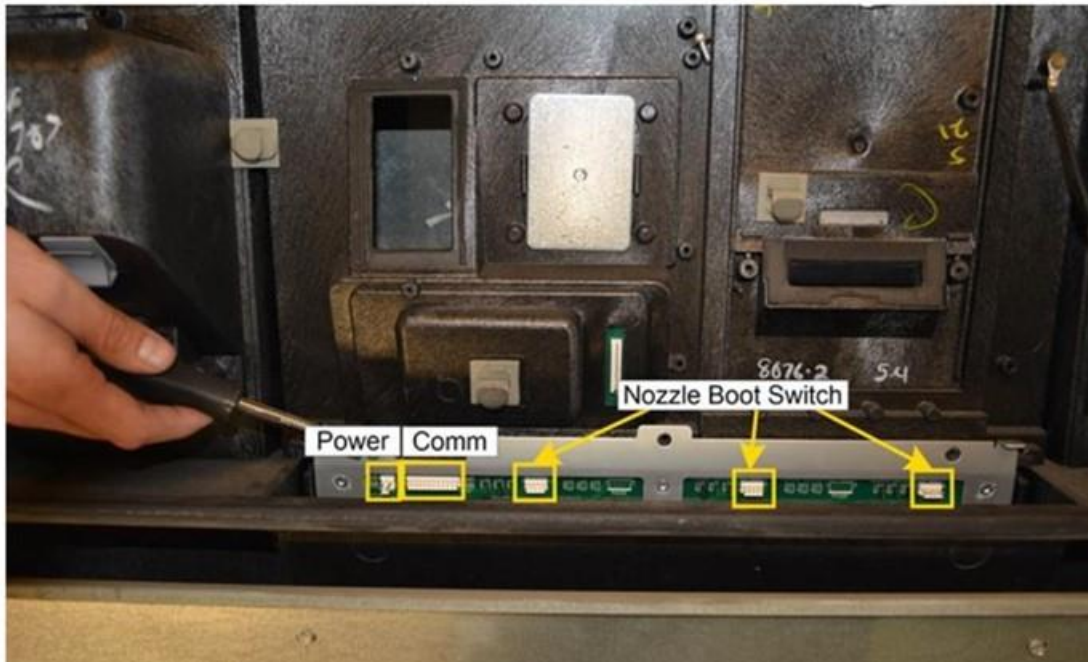
Fig 1.14c –Interior Printer Shield

5. Set the interior printer shield aside to be discarded.

4.1.5 Uninstall the PPU

1. Remove the power, communication, and nozzle boot switch or switches. Retain the cables and switches. Make note of the PPU and Nozzle Boot Switch connections so they are reinstalled in the same locations. Mark the Power and Comm cable and their connections to the Customer Node for installation in the new Modular Door.

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



2. Detach the PPU bracket from the non-modular door with three screw bolts. Discard the screw bolts.
3. Remove the PPU bracket and set aside.

4.1.6 Remove the Magnetic Boot Switch

1. Record the switch connections to the PPU so the grade selection paddles will match the correct nozzle boot location during the installation process.
2. Locate the Magnetic Boot Switches behind the boot cavities on the non modular door. Using a small Philips screwdriver or 1/4" nut driver, remove the screw holding the magnetic boot switch in place. (Fig 1.15)

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide

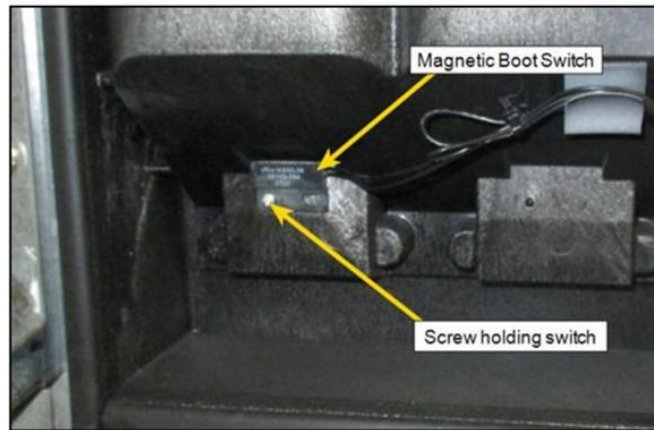


Fig 1.15 – Location of magnetic handle switch

3. Set the switch aside. Screw can be discarded. Repeat steps until all boot switches are removed.

4.1.7 Uninstall the Comm Speaker (if present)

1. Unscrew the three screws from speaker assembly and remove from the non-modular door. The screws can be discarded.

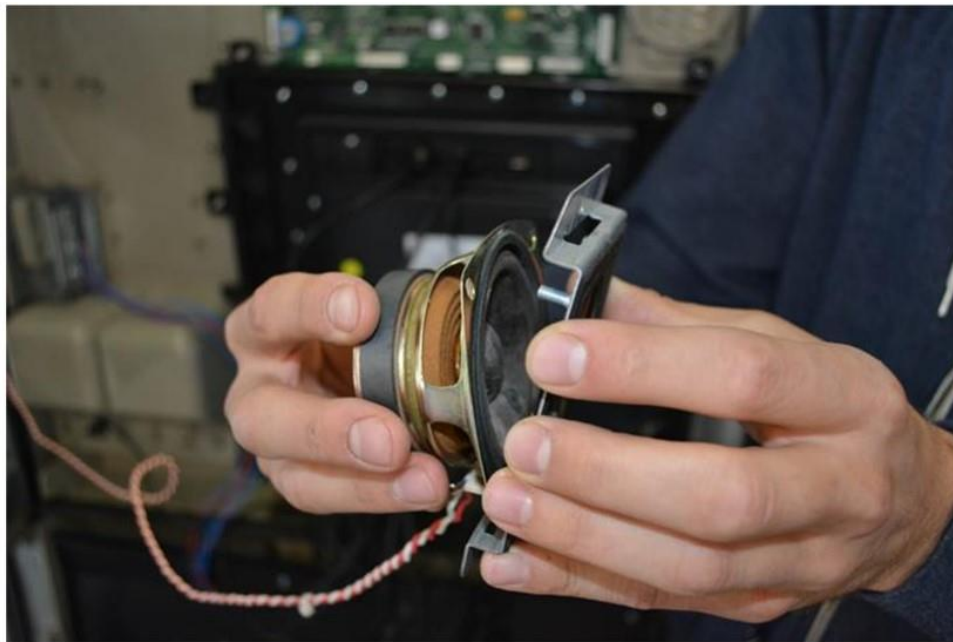


2. Remove from any speaker bracket present. The comm speaker bracket and hardware can be discarded. place the speaker inside the electronic opening.



Note: To remove from bracket deflect the two tabbed side in and pull up on the bracket. Because of the magnet, the bracket cover may stick.

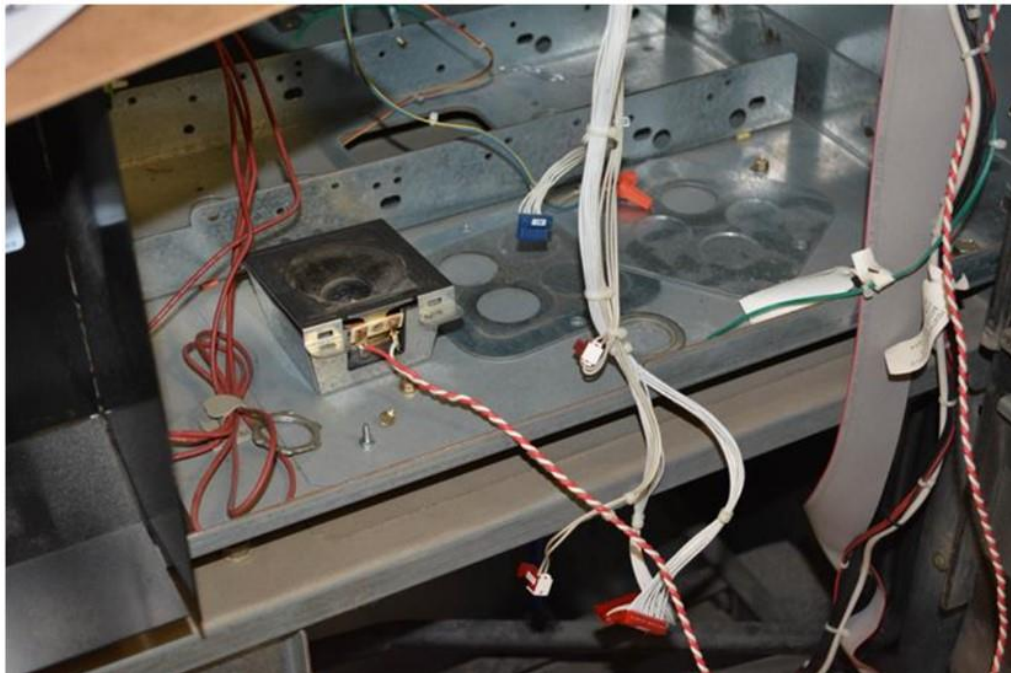
Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



Note: Not all speakers will have a bracket.



Place the speaker inside the cabinet.



Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide

4.1.8 Uninstall the Totalizers (if present)

1. Mark all the connections of the totalizers to the customer node. Unplug the totalizers from the customer node.



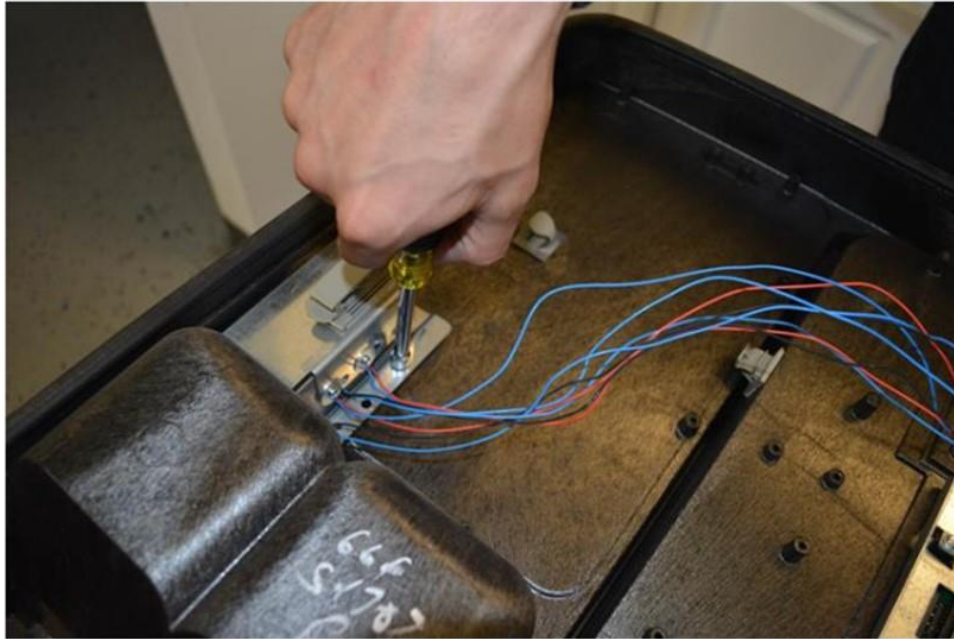
Marking the Totalizers



Customer Node

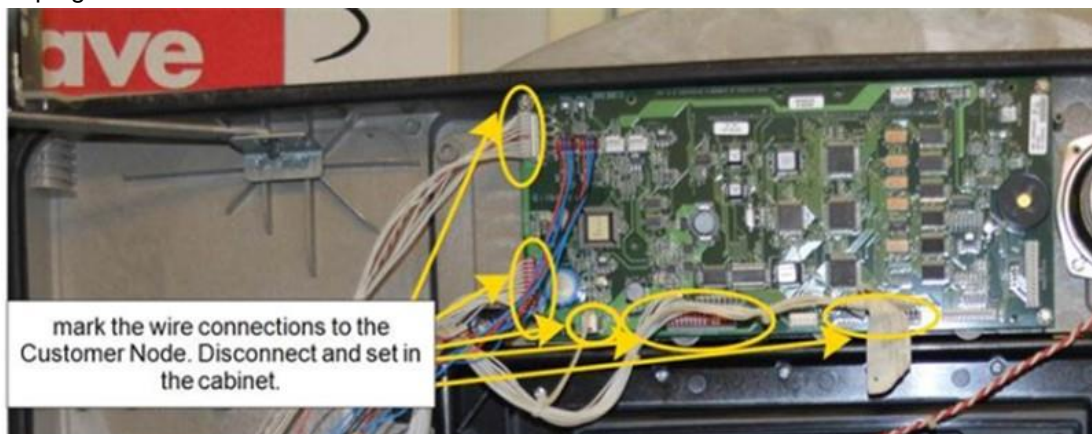
2. Remove the totalizer bracket with totalizers still installed from the non-modular door. Set aside. Discard any screws.

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide




4.1.9 Remove All Cable Harnesses from the Non-Modular Door

1. Identify the connections on the Customer Node to any other components on the door. Remove and discard.
2. Identify the remaining connections to the Customer Node and note the connections for re-installation. Unplug the now marked cables from the Customer Node. Set inside the cabinet.



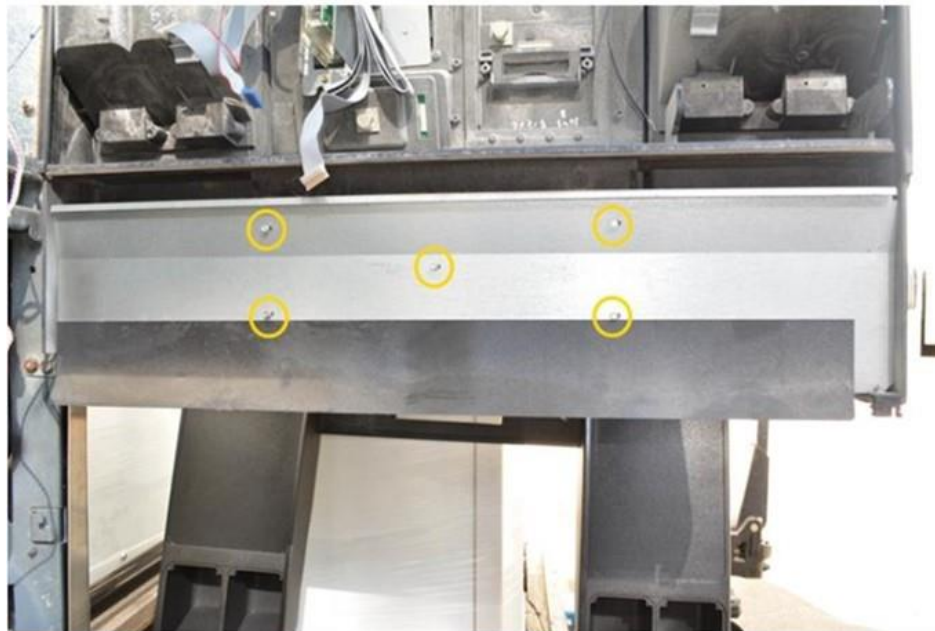
3. Unplug all remaining cables on the non-modular door.

	Document Number	DCV-00562
	Date Released	Jul 2022
	Revision Number/Security level	R04 S2
Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide		

4. Detach the ground wires.
5. Check for any other cables or wires attached from the cabinet to the Non-Modular Door. Place into the cabinet. Remove and discard any loose cables no longer connected to any components.

4.1.10 Uninstall the Weather Shield

1. Remove five 1/4-inch screw bolts from the splash shield. Remove the shield and set aside to be reinstalled on new door. Retain the screw bolts for reinstallation.



Repeat all previous steps on the other side of the dispenser prior to continuing.

4.1.11 Uninstall the Non-Modular Door

1. Remove the non-modular door.
Caution: Read ALL of the following steps (Uninstall the Non Modular door) before executing.
Caution: To prevent injury or damage to any equipment or components, it is recommended a second individual assist with removing the original non-modular door.
2. Push the prop stick up and pull out of the slot of the dispenser frame. (Fig 1.18)

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



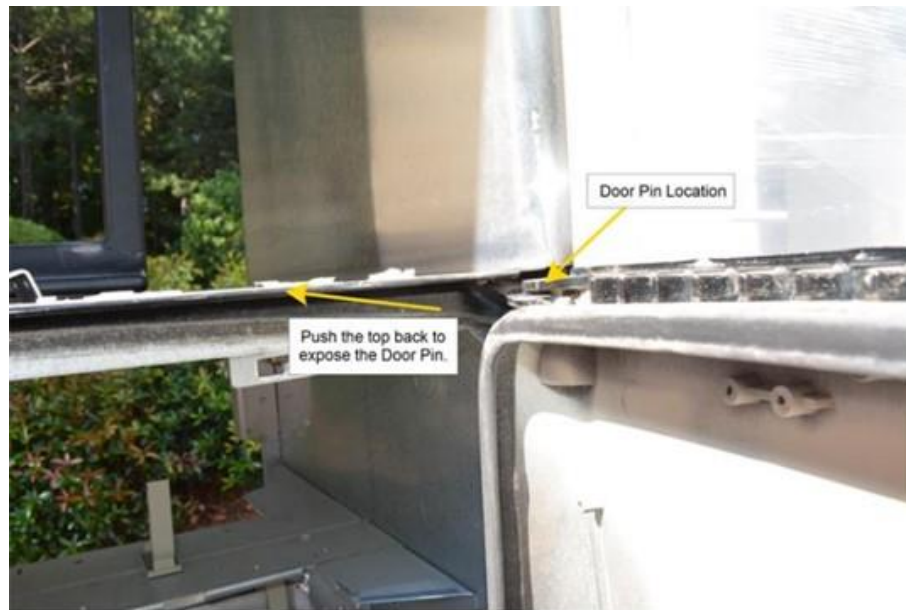
Fig 1.18 – Removing the prop stick from the dispenser frame

3. Remove the prop stick bracket from the non-modular door by removing the two screws holding it in place. Set the prop stick assembly aside and retain all screw bolts.



4. With the other side's door open, push the Electrical Top cover out of the way until the hinge pin is accessible.

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



5. With the door fully open and supported at the bottom, use a pair of needle nosed pliers to firmly grasp the hinge pin and pull upwards to remove it. Discard the pin.



Removal of hinge pin

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide

6. Lift the door upwards to remove it from the dispenser. Set aside to transfer door components.



Repeat the door removal on the other side of the dispenser.

4.2 Installation Procedure

4.2.1 Mount the Door Panel Assembly



Caution: Read ALL of the following steps (Uninstall the Non-Modular door) before executing.



Caution: To prevent injury or damage to any equipment or components, it is recommended a second individual assist with mounting the modular.

1. Before mounting the modular door push the Electrical Top cover out of the way of the hinge pin.
2. Mount the new Door Panel Assembly with G7 OPT system (**RP00072-XX**) or G7 15 inch OPT system (**RP00077-XX**).
 - a. Place onto bottom pin bracket.

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



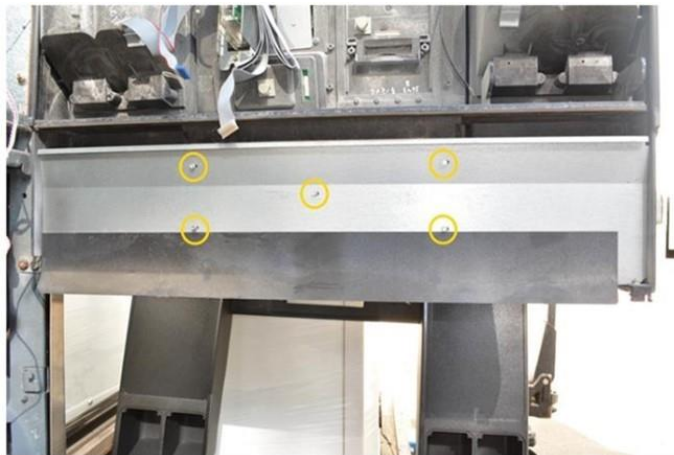
- b. Rotate up and into place on the Pin Bracket.



- c. Install the top pin **MP0938** into the Modular Door and Pin Bracket.

**Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US)
Installation Guide**

3. Install the weather shield (previously retained) to the modular door with five screw bolts (previously retained) with the prop bar storage hooks facing towards you.



4. Install the prop stick assembly (previously retained) with two screws (previously retained).

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



Insert the prop rod into the cabinet bracket.

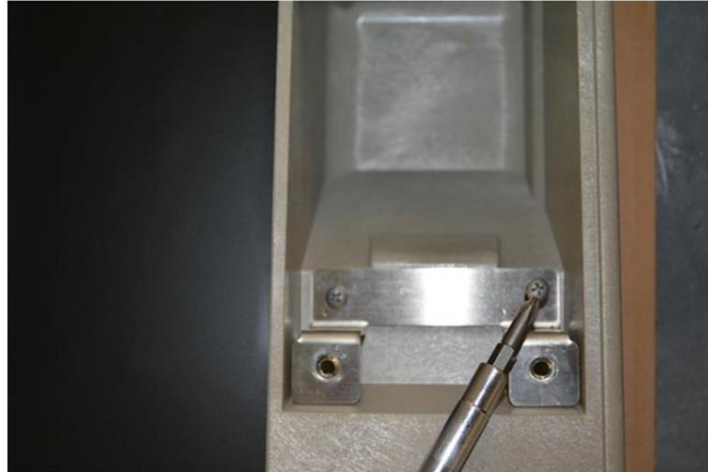


4.2.2 Prepare the Door Panel Assembly

Prepare the Nozzle Boot

1. Install the nozzle boot bracket **MP0956** as shown in the picture. with two thread forming screws **MS0237**. Repeat on each nozzle boot recess.

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



Install the Nozzle Blanks and Decals

1. Install the lower blanking plugs **MP0957** in all positions.

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



2. Remove the adhesive liner on the Aluminum Blank **MP0962** and place into the boot recess adhesive side towards the door. Attach with two Phillips screws **MS0238** at the top and two machine screws in the middle **MS0239**. Install the blanks where a nozzle boot will **not** be installed.



3. Install the top boot bracket aluminum blank **MP0964** to fill any gaps in the boot recess where the boot will be installed. Attach with two Phillips screws **MS0238**.

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



4. Carefully install the boot blank decal covers.

Note: Depending on the nozzle configuration there may be a variety of decal configurations using the full blanking label **DL0349** and single blanking label **DL0350**.



Note: After installing the decal remove the protective film on the front of the decal.

Install the Nozzle Boot

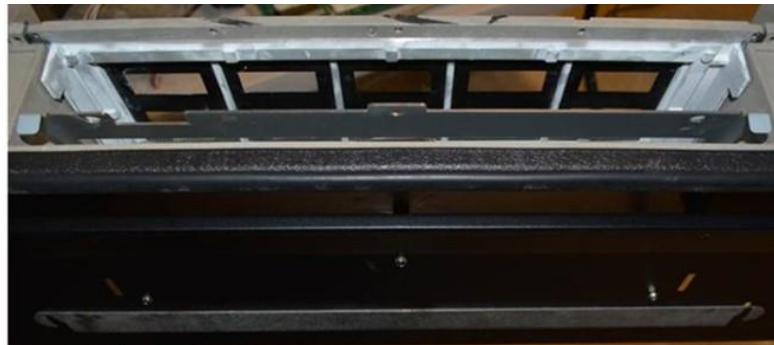
1. Install the previously retained nozzle boot to the modular door and install with two Phillips machine screws **MS0239**.

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



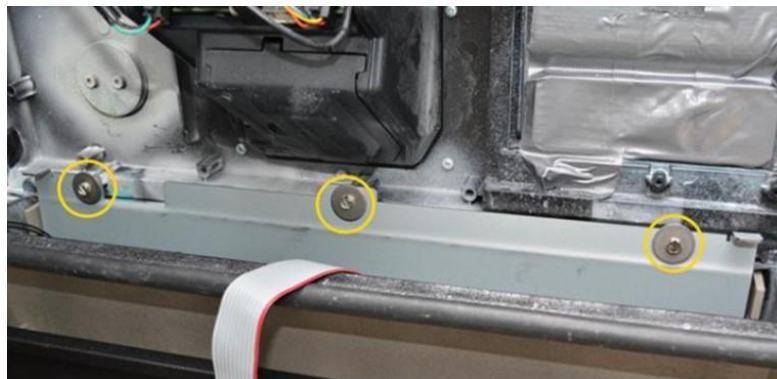
4.2.3 Install the PPU Bracket


1. Slide the PPU plate into place in the new modular door.



Note: Verify the correct orientation and locations of the PPU screens when installing the PPU Bracket.

2. Attach the PPU bracket to the Modular Plate with three screw bolt MS0101 and washer MW0044 assembly.



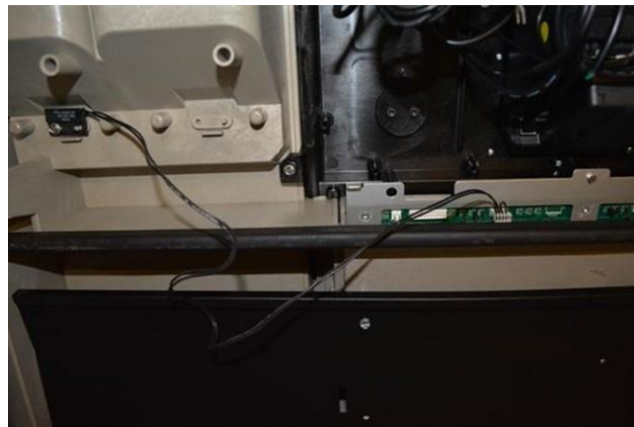
	Document Number	DCV-00562
	Date Released	Jul 2022
	Revision Number/Security level	R04 S2
Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide		

4.2.4 Transfer the Magnetic Boot Switch or Switches

1. Install the previously retained Nozzle Boot Switch to the modular door for each nozzle boot present with the provided screw **MS0240** behind each installed nozzle boot.



2. Plug in the Magnetic Boot Switches into the corresponding PPU according to the previous location on the non-modular door.



4.2.5 Transfer Components

1. Transfer and install the customer display Node.
 - a. Remove the Node from the old door. If present discard hardware.

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide

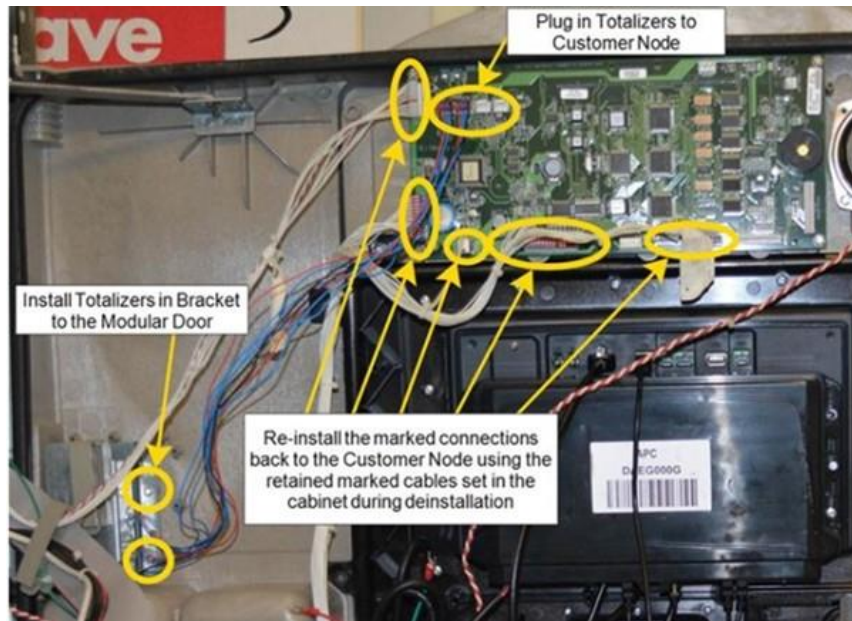


- b. Attach the Customer Node to the modular door with the four provided screw bolts **MS0101**. Verify the upright orientation of the board before installing.




2. Transfer the Totalizers (if present) and plug in the marked cables.
- a. Install the Totalizers and Bracket with two provided screw bolts **MS0101**. plug in the Totalizers to the Customer Node according to the previously made marks during deinstallation. reinstall the rest of the cable connections back to the Customer Node. Install the marked cables from the deinstallation process back to the Customer Node.

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



- b. Reconnect the marked PPU power and comm cables back to the PPU plate and Customer Node connections previously retained.

3. Install the Comm Speaker (if present).

 **Note:** If no speaker is present the speaker plate must still be installed for water sealing. Verify the speaker plate is properly installed.

- a. Remove the speaker plate from the modular door and retain the hardware.
- b. Place the speaker plate onto the comm speaker as shown below.



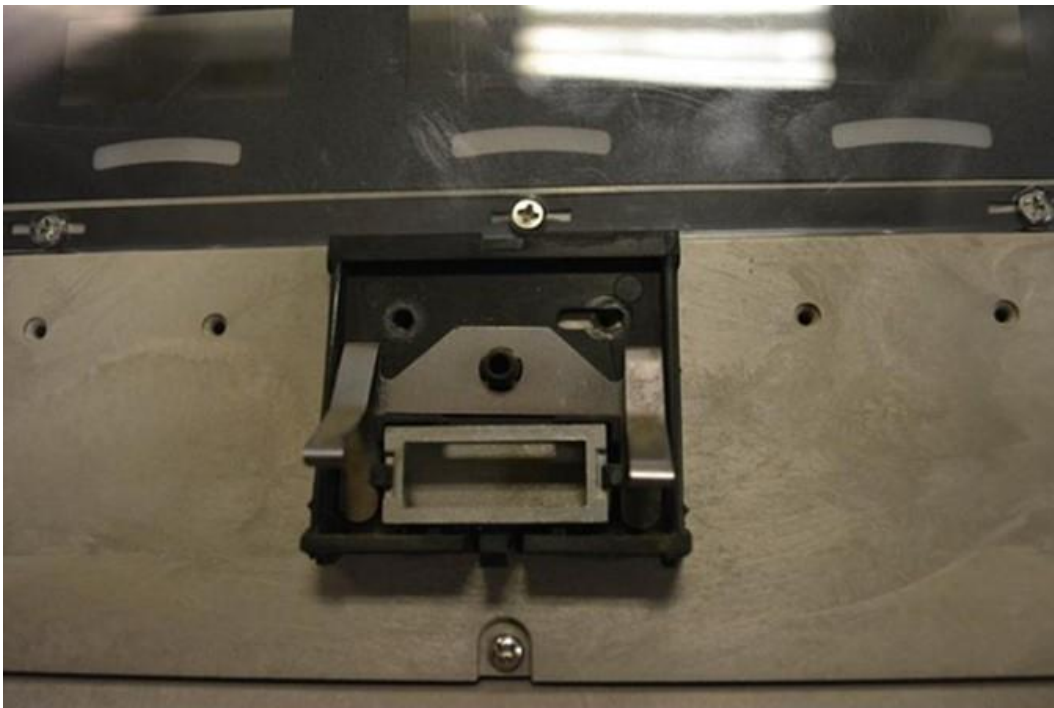
- c. Install the speaker plate and speaker onto the modular door with retained hardware.

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



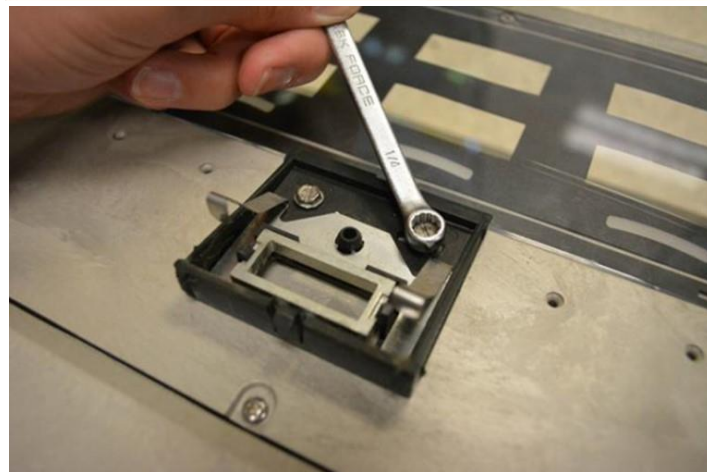
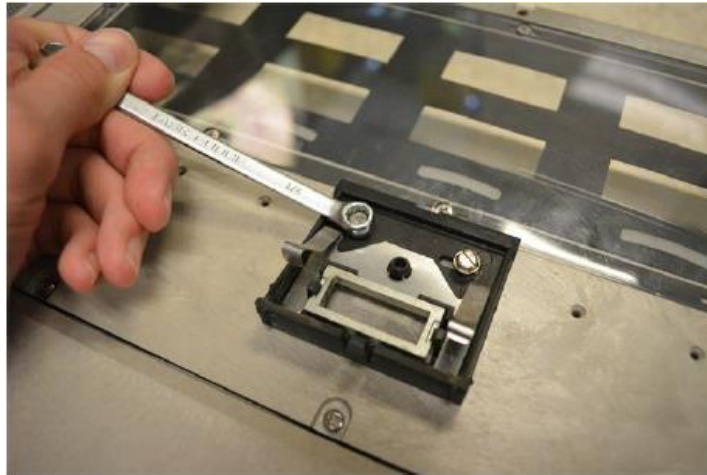
Install the Grade Selection Assembly

Install the Grade Selection Assembly onto the Modular Door to match with the previously installed PPU's locations.



Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide


1. Install using the retained 1/4" screw bolts.



2. Repeat step a until all pump paddle assemblies from the deinstalled door have been transferred to the Modular Door.

**Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US)
Installation Guide**

3. Install the decal and retained Grade Select Paddles in the correct positions noted during deinstallation.

	Document Number	DCV-00562
	Date Released	Jul 2022
	Revision Number/Security level	R04 S2
Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide		

4.2.6 Power Supply Assembly EZ0703 Installation

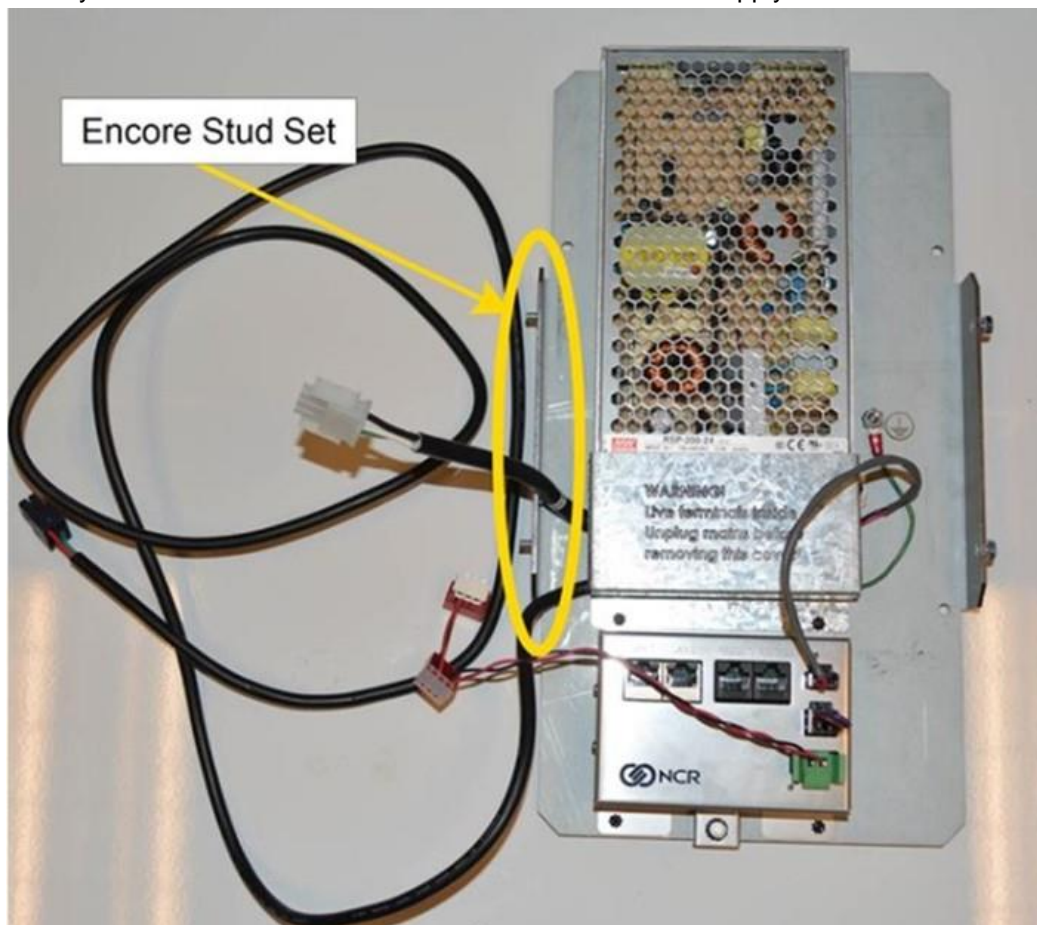
Prepare the Power Supply Brackets

1. 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.
2. The second power supply bracket without the Invenco Link is now the Side B universal Power Supply Bracket.

Installing the Power Supply

Install the Power Supply Bracket with Power Supply (PSU) EZ0703 attached.

1. Identify the correct Encore stud set on the universal Power Supply Bracket.



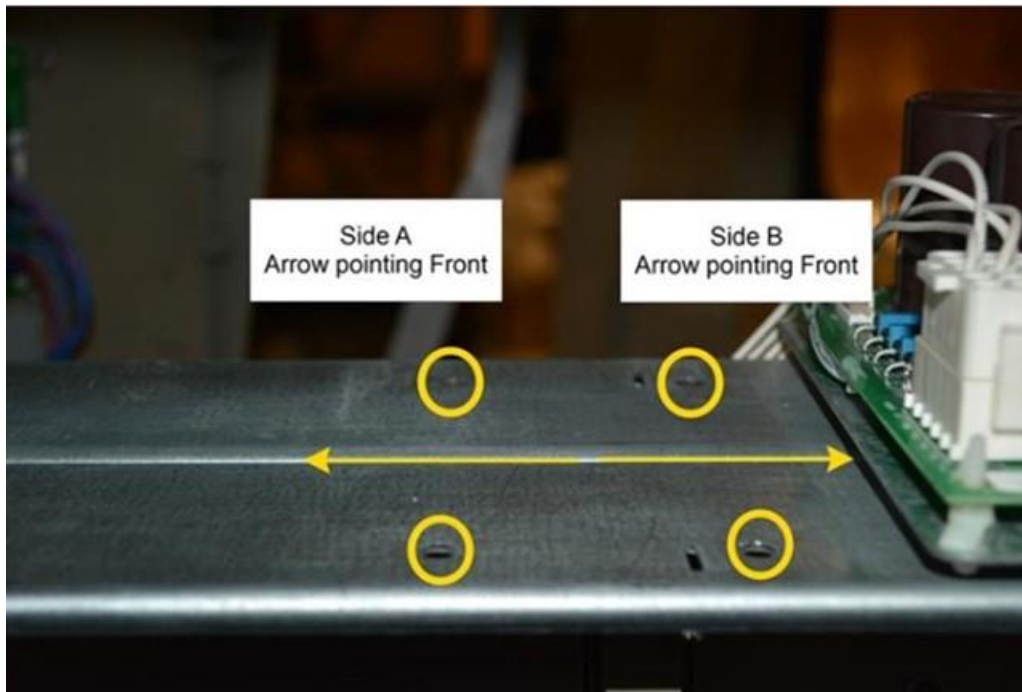
**Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US)
Installation Guide**

Note: The correct studs will be labeled "ENCORE" as below.



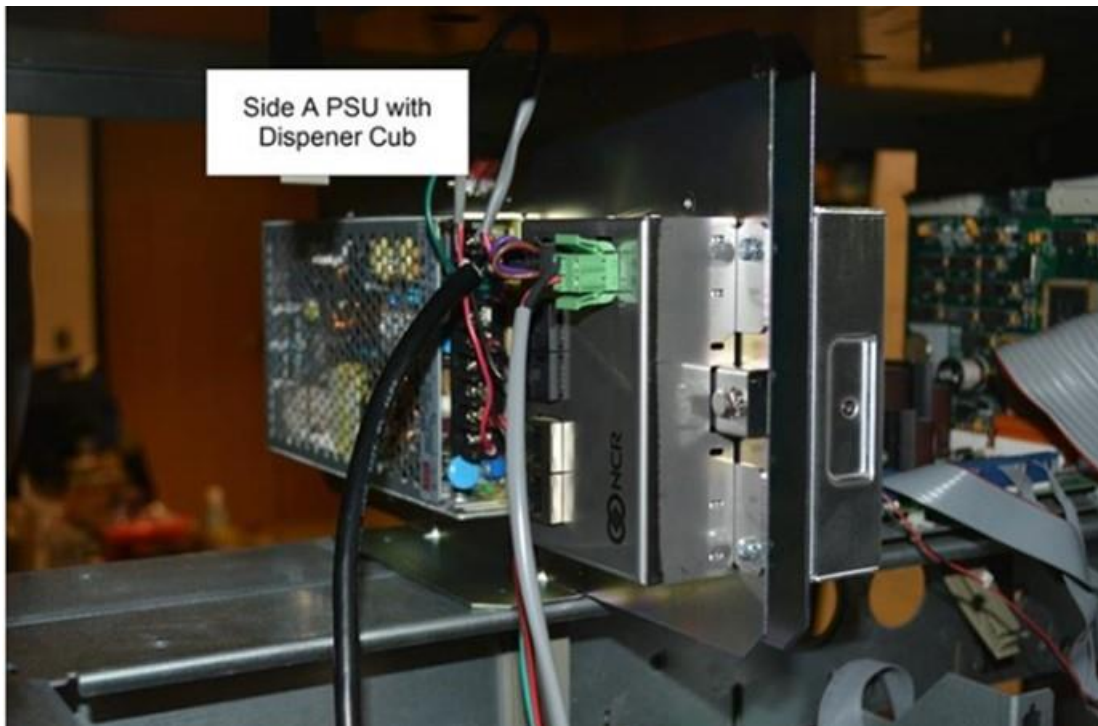
2. Place the studs into holes on the Encore electronic rail. install on the side closest to the Comm connection.

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide

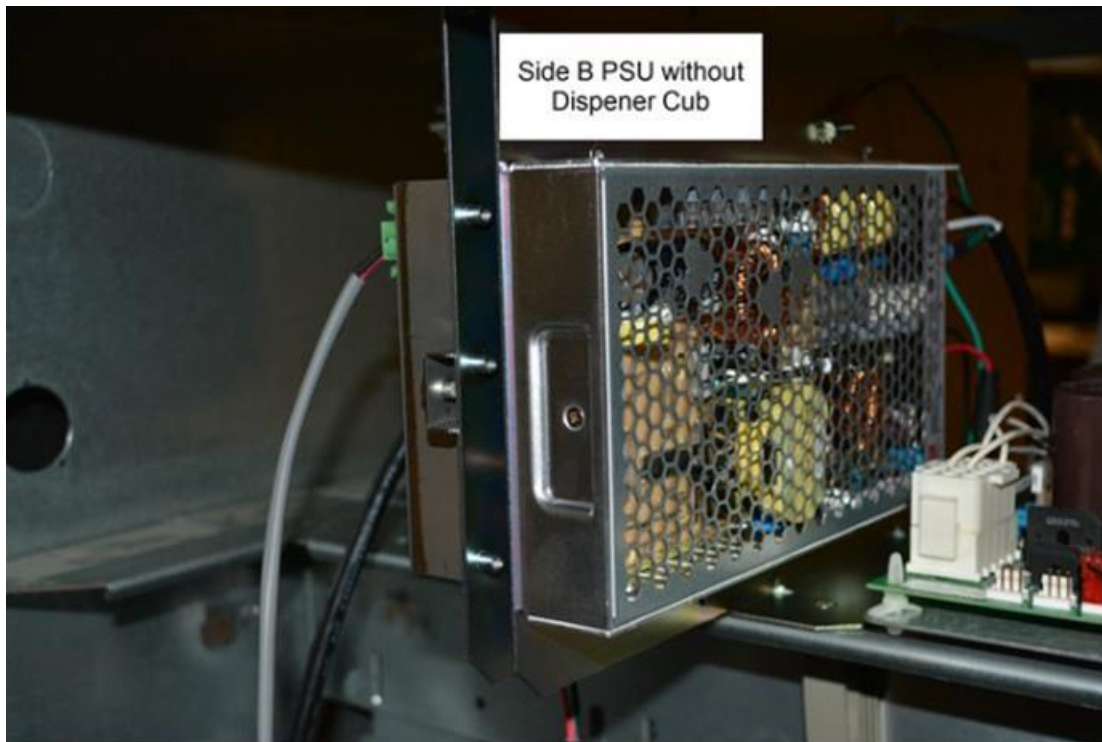


3. When looking from Side A, the power supply for Side A will be mounted in the third set of holes from the left. The power supply for side B will be mounted in the next set of holes with the backs facing each other.

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



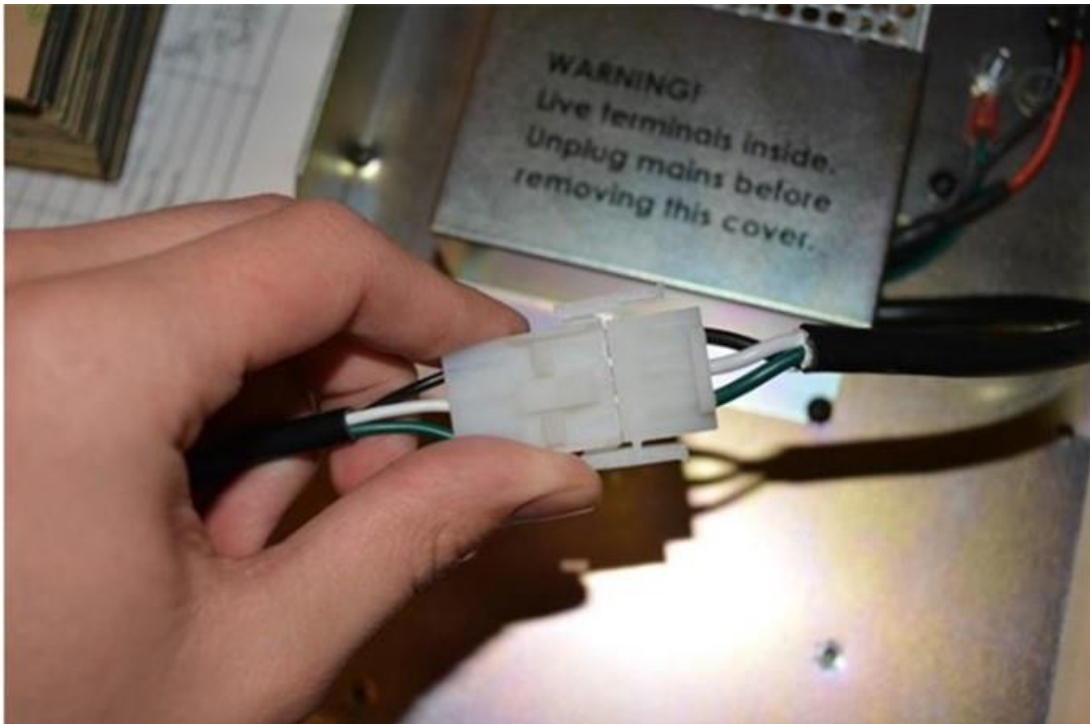
Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide

- Secure in place with the two supplied nuts **MN0029** per Universal Power Supply Bracket (four nuts total).



- Install the single connector end of the Encore adapter cable **EK0124** to the PSU universal plug connector.

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



Install the Comm Cable to the Dispenser Invenco Link

Note: This section is only needed during Side A Install.

1. Plug in the green connector of the Encore Comm adapter cable **EK0139** to the Dispenser Invenco Link.
2. Disconnect the Comm Two Wire from the CRIND control node board.

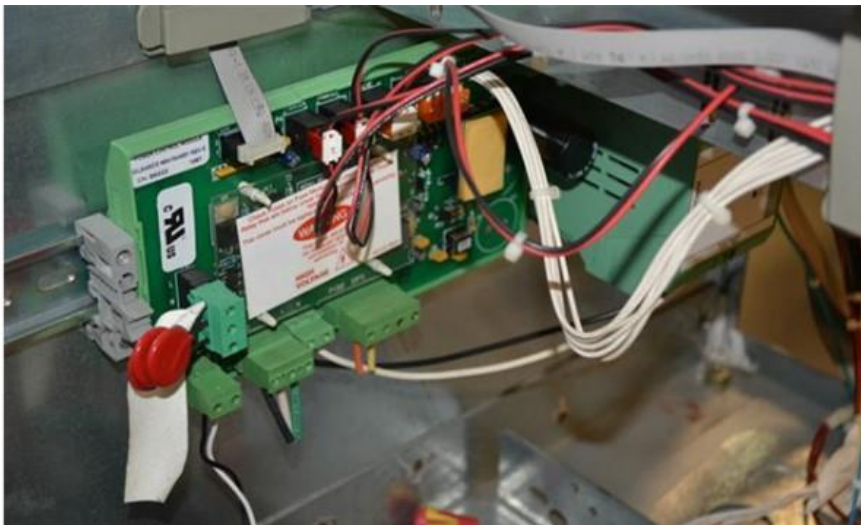
Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



3. Plug in the Encore Comm adapter cable to the Comm Two Wire.

Wiring in the Power Supply to the Pump Power Distributor for the First (Side A) PSU

1. Identify the correct power distributor assembly.
 - a. Power Control Module upgraded distributor

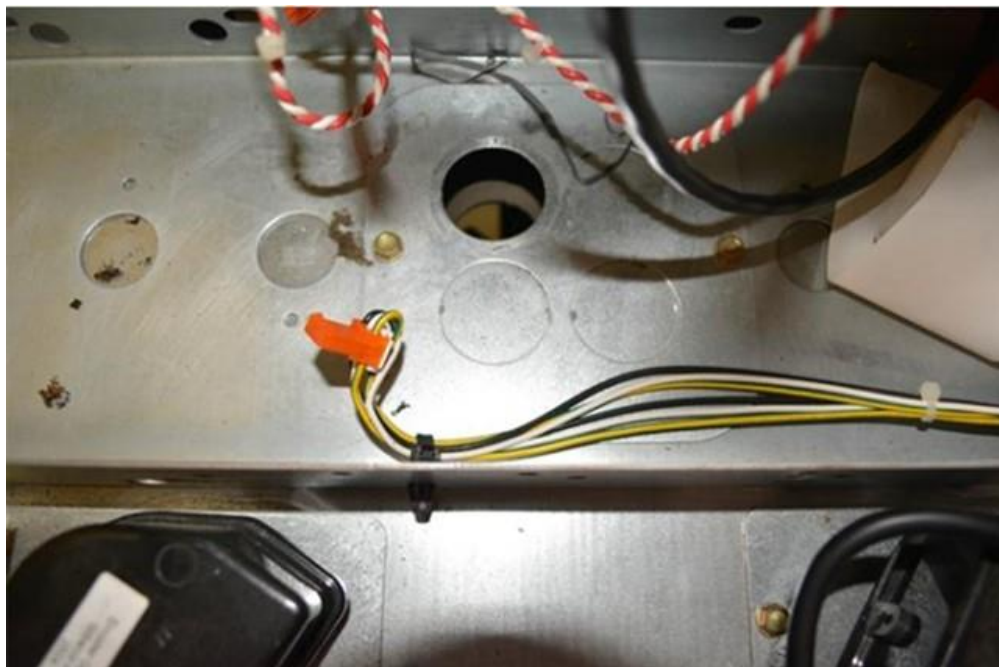


- b. AC Terminal Board

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



c. AC Bus Line (single cable bus connections)



2. Follow the correct wiring steps for the corresponding power distributor assembly.
A. Power Control Module

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide

1. Install the Y cable **EK0208** to the Encore adapter cable that was previously installed.
 - a. Cut off the far female end of the Y cable as close to the connector as possible.



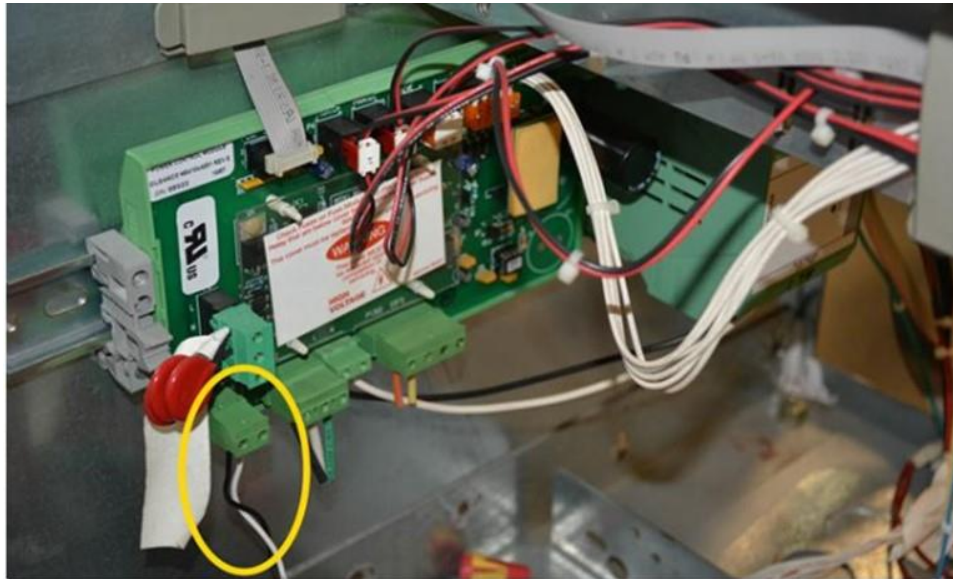
- b. Strip the wires and crimp on a UL Listed crimp on fork connector/terminal to the green ground wire.
 - c. Identify the P1 terminal on the Power Control Module.



Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide

- d. Attach the corresponding leads on the adapter cable to the P1 two prong connector.

Note: Do not unplug the connector until the line and neutral terminals are identified. White corresponds to neutral and black corresponds to live.



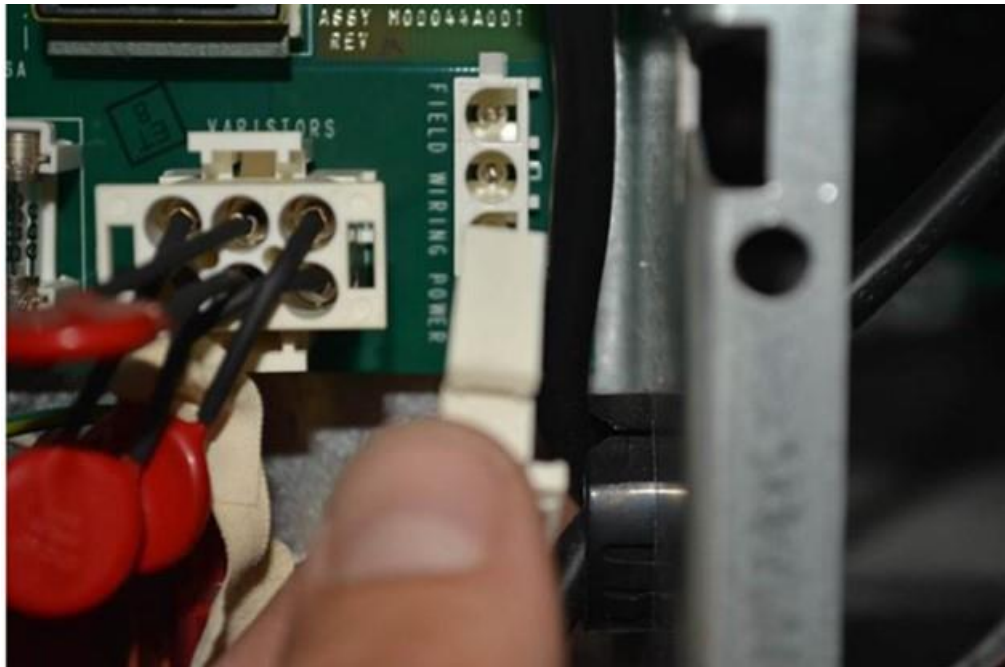
- e. Unscrew a bolt with attached ground. Add the new ground wire to floor of electric cabinet and re-tighten bolt.



B. AC Terminal Board

1. Plug in the Y cable **EK0208** to the Encore adapter cable previously installed.
2. Unplug the main AC power cable from the AC Terminal Board and retain for reassembly.

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



3. Plug in the middle connector of the Y cable to the AC Terminal Board.



4. Attach the main AC power line previously unplugged from the AC board to the Y cable's far end pigtail.

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



C. AC Bus Line

1. Plug in the previously installed Encore adapter cable's bus connector to the AC Bus Line

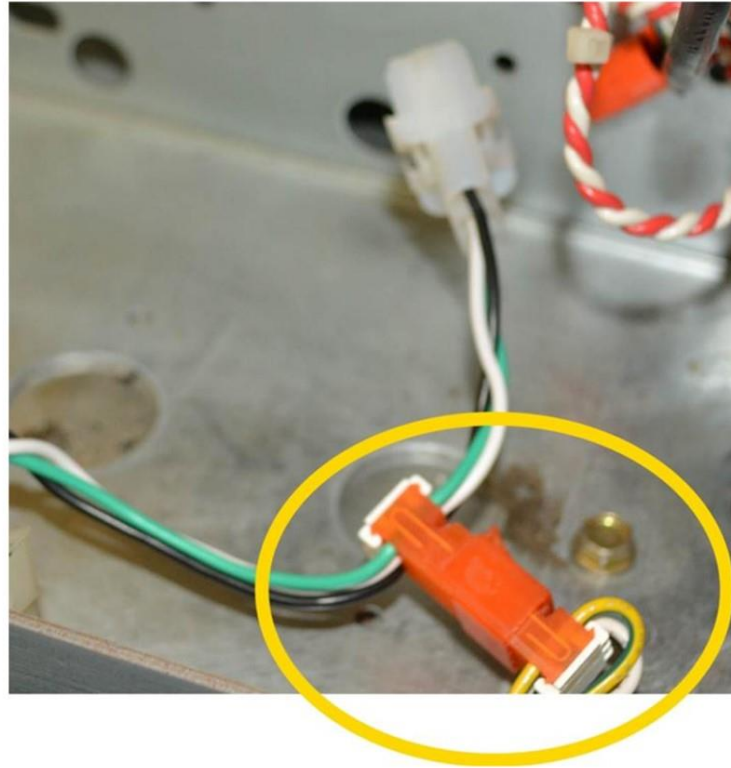
Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



Wiring in the Power Supply to the Pump Power Distributor for Second Installed (B Side) PSU

Plug directly into the first PSU Adapter cable's AC Bus Connector.

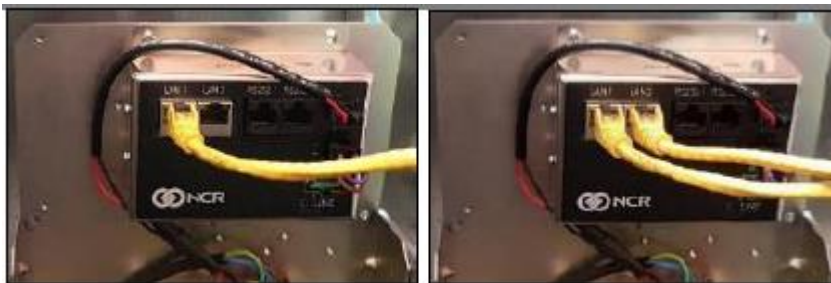
Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



4.2.7 Install the Power and Data Connections to the G7 or G7 15inch

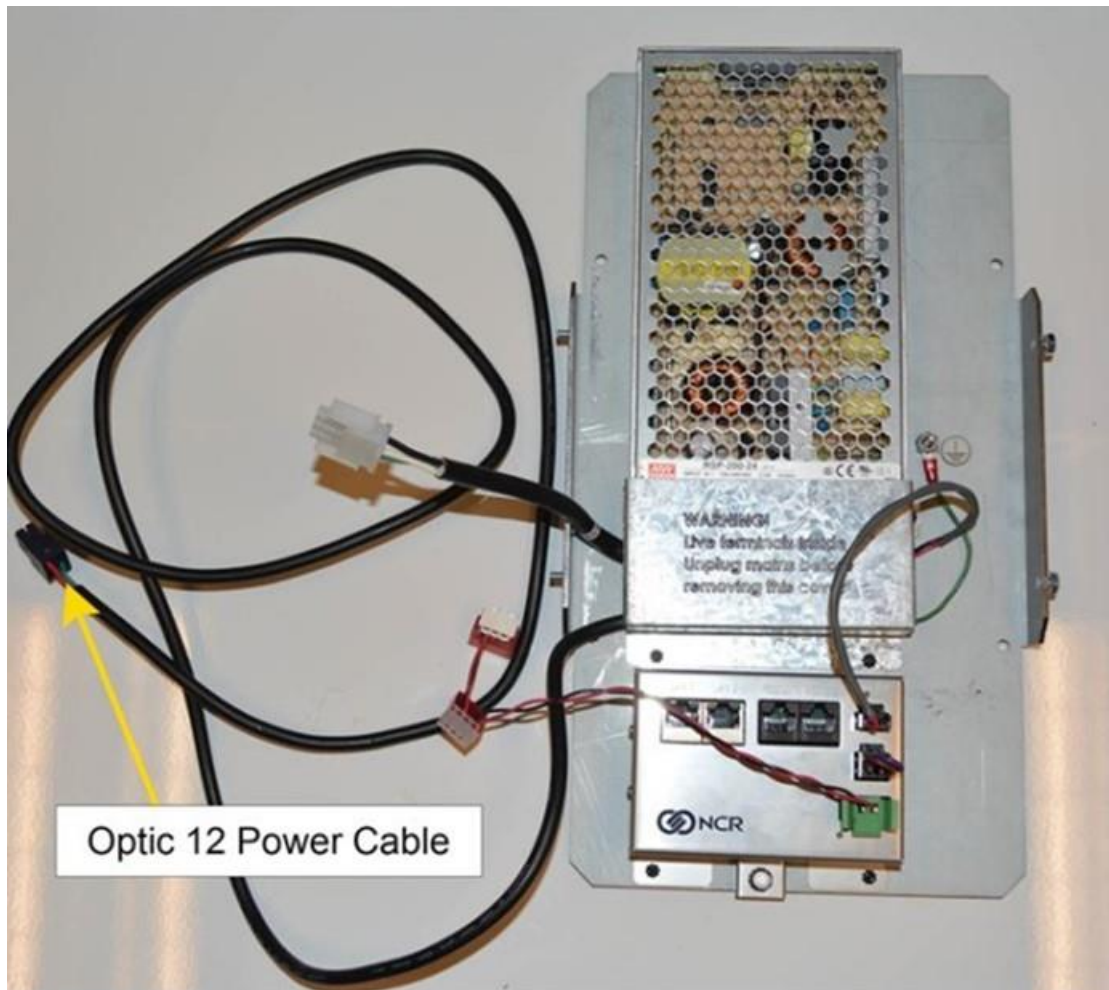
1. Install the yellow CAT-5e network cable **EK0131** into the Invenco Link LAN 1 terminal (for Side A).

Note: Use the LAN 2 terminal for Side B installation.




2. Install the power and network cables into the G7 or G7 15 inch unit.

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



NOTE: the RS232 connection is not used for this installation

	Document Number	DCV-00562
	Date Released	Jul 2022
	Revision Number/Security level	R04 S2
Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide		

4.2.8 Install the Printer

Install the receipt printer kit RF00024-XX (G7 Encore Printer Retrofit Kit) following the Printer Kit Instructions (DCV-00463). Acquire the G7 Encore Printer Retrofit Kit, UL Listed by Report Retrofit kit part number RF-00024-XX.

Repeat installation procedure for Side B.



Caution: If after the printer installation is completed bolt holes are not fully covered or being used, fill them in with the retained bolts from the Printer Shield deinstallation process and discard unused bolts. If no holes are exposed the retained bolts can now be discarded.

4.2.9 Closing the Dispenser

1. Route cables and wires away from sharp edges or pinching in the modular door gasket. Use the provided **MF0040** cable ties as required.
2. Disengage the prop rod and close the door.
3. Push the door slightly up and in to engage the bottom latch.

**Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US)
Installation Guide**

4. Secure and lock the top of the door.

Retrofit G7 or G7 15 inch Encore 500S Non-ECIM + InvencoLink (US) Installation Guide



5. Replace Lower door using GCBO Lower Door Key.
6. Repeat closing steps for Side B.
7. Return Main Power after all installs are complete.

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