Retrofit G6-300 + InvencoLink GVR Advantage (US) Installation Guide

Kit Part Number: RF00010-XX

Release History

Version	Prepared by	Date	Change description
0	Michael Doh	31-Oct-19	Based on DCV-00202 R03; initial version for UL approval
1	Michael Doh	02-Dec-19	Kit and OPT + panel part numbers update
2	Michael Doh	04-Dec-19	Corrected OPT + door part numbers and step numbers in install procedure
3	Michael Doh	05-Dec-19	Typing errors corrected
4	Michael Doh	26-Mar-20	Updated kit and sub-assembly part numbers, changed MN0031 to MN0029
5	Michael Doh	31-Mar-20	Added page numbers, corrected MN0031 part numbers to MN0029
6	Michael Doh	17-Nov-20	Add replacement lock and hinge parts, correct EK0125 image
7	Michael Doh	17-Dec-20	Revised hinge screw tightening step

Contents

1 Introduction

The documentation provides some basic guidelines for retro-fitting the G6-300 Outdoor Payment Terminal (OPT).

This Retro-Fit Kit can be installed into either Side One or Side Two of a Gilbarco Advantage dispenser;

- **For a single-sided installation, or if this Kit will be installed into Side One (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.**

1.1 Tools Required

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

- Philips #1 screwdriver
- Flat 5mm screwdriver
- Small adjustable spanner
- Large adjustable spanner (1”)
- Side cutters
- Cable (zip) ties
- Pliers
- 3/8” Socket or Nut Driver
- ¼” socket or nut torque driver
- #8 Socket or Nut driver
- 3/16” Hex (Allen) Key
- Towelling cleaning rags.
- Household sticky residue remover (containing limonene).
  e.g. “Goo Gone®”
- 100% Isopropyl Alcohol (IPA) cleaner

WARNING
Do NOT use power tools if working on a fuel station forecourt.
Any spark could cause an explosion.

1.2 Installation Kit Contents

Unpack the G6-300 Advantage Retro-Fit Kit (RF00010-XX) and check that all of the parts listed below are present. Also refer to the pre-installation procedure (section 4.2.1) relating to the communication method parts.

G6-300 OPT, Mounted on RFK Door Assembly (RP00010-XX)

PSU Plate with cables (EZ0631)

PSU plate mounting screws (MS0147)
6-32 x 5/16" machine screw SEMS – Quantity: 2

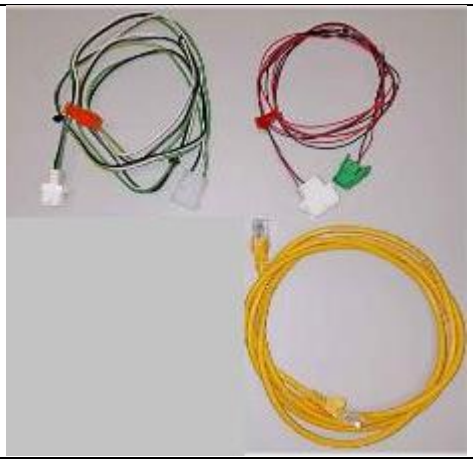
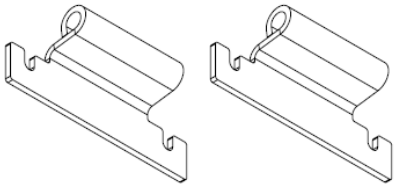
Gasket (MP0614):

Note: colour may vary

Fastener Kit (FK0012)

Comprising:

1 x MN0029	NUT, SEMS, #8-32 UNC
1 x MN0032	3/4" Nut for the door lock
4 x MS0101	#6-20 x ½", Type AB, Hex head ¼" Screws

Sundry Parts	
Comprising: (from the top left clockwise) 1 EK0124 GVR Pump to Pump Adaptor, 1.0m 1 EK0125 GVR to InvencoLink, 1.0m 1 EK0131 Cat-5e, Flexible, 2.5m, YELLOW 1 EK0132 Earth cable (below) 2 MF0046 Self-Adhesive cable clips 	
Door hinge pin (MP1077): 	2 x Door hinge brackets (MP1080): 

2 Safety & Compliance Information

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

2.1 Preliminary Precautions

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

2.2 Emergency Total Electrical Shut-Off

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

2.3 Total Electrical Shut-Off Before Access

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

2.4 Evacuation, Barricading and Shut-Off

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

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

2.5 Read the Manual

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

2.6 Follow the Regulations

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

2.7 Replacement Parts

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

3 Safety Symbols and Terminology

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

Signal Words

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

DANGER: Alerts you to a hazard or unsafe practice which will result in death or serious injury.

WARNING: Alerts you to a hazard or unsafe practice that could result in death or serious injury.

CAUTION: Designates a hazard or unsafe practice which may result in minor injury, property or equipment damage.

Working With Fuels and Electrical Energy

3.1 Prevent Explosions and Fires

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

3.1.1 No Open Flames

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

3.1.2 No Sparks - No Smoking

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

3.1.3 Working Alone

It is highly recommended that someone who is capable of rendering first aid be present during servicing. Be familiar with Cardiopulmonary Resuscitation (CPR) methods if you are working with or around high voltages. This information is available from the First Aid training providers. Always advise the station personnel about where you will be working, and caution them not to activate power while you are working 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.

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 G6-300 OPT has a UL File References of E469526 and E480135 and carries labelling similar to this:

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

3.2 Computer Programs and Documentation

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

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 a panel replacement. The panel will be removed from the door and replaced with a pre-built panel with the OPT pre-fitted.

4.1 Disassembly Procedure

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

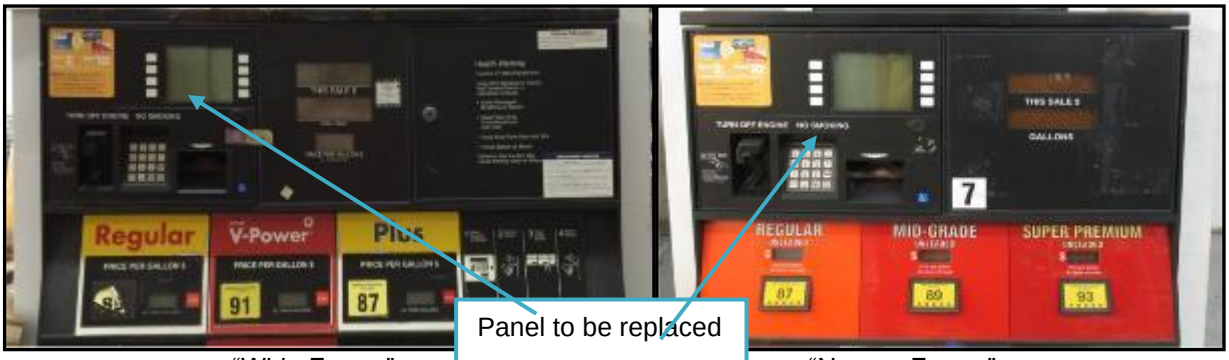
- The CRIND Panel Door with components (card reader, display, etc.)
- The printer
- The T19501-Gx Monochrome display CPU board or other installed screens.
- The CRIND Rack Assembly with wire assemblies

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

2. Identify the A Side of the dispenser.

Note: *For the purposes of this manual, Side One of the dispenser refers to the side with the manufacturer's label.*

3. Identify whether the pump is a "Wide Frame" or "Narrow Frame" version from the pictures below – some steps below vary depending which version you have:



"Wide Frame" "Narrow Frame"

4. Using a 3/16" Hex key, undo the retaining bolts located along the bottom edge of the main door. Depending on the model and dispenser setup, there could be between two to four bolts to remove. The bolts should be captive but may fall out. Do not discard these bolts. (Fig. 1.1)

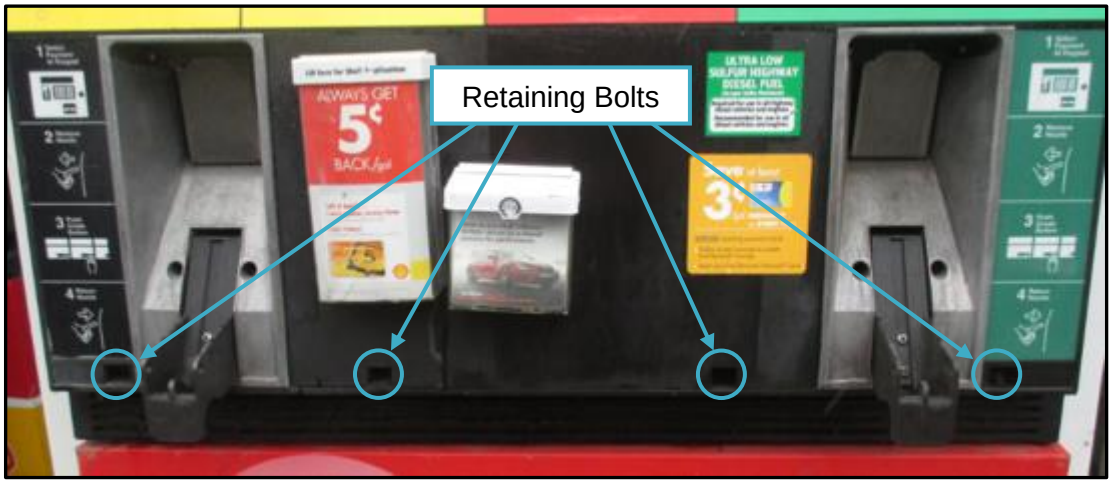


Fig. 1.1 – Remove the bolts from the main door

5. Unlock and open the door(s).

1) Wide Frame – unlock both left and right doors, then open them both.

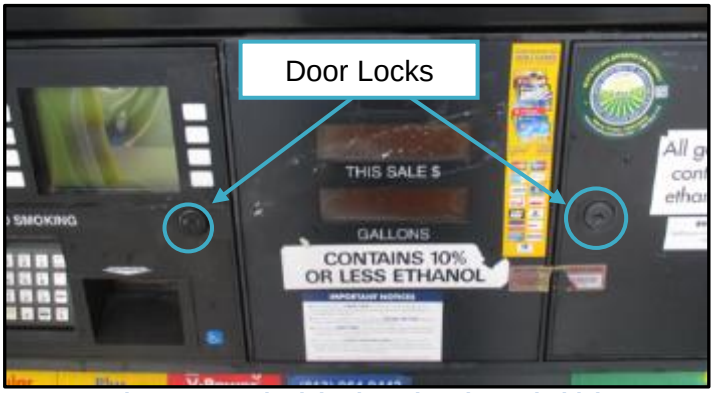


Fig. 1.2a – Unlock both option doors (Wide)

2) Narrow Frame – unlock and open the left door, then raise the latch for the right door and open it:

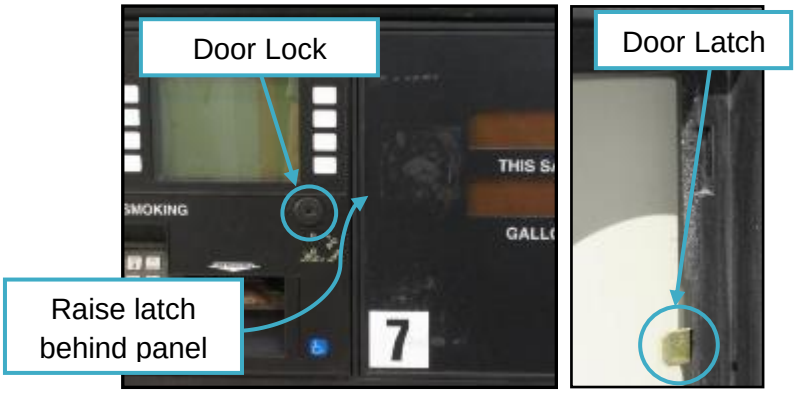


Fig. 1.2b – Unlock both option doors (Narrow)

6. Unplug all components on options door.

1) Remove or unfasten any cord restraints that may be present on the options door. (Fig. 1.3)

Fig. 1.3 – Unfasten cable restraints

2) There are different displays used in the pump. Use the pictures below to determine which cables to unplug (if present) for both the display and its backlight (Fig 1.4)

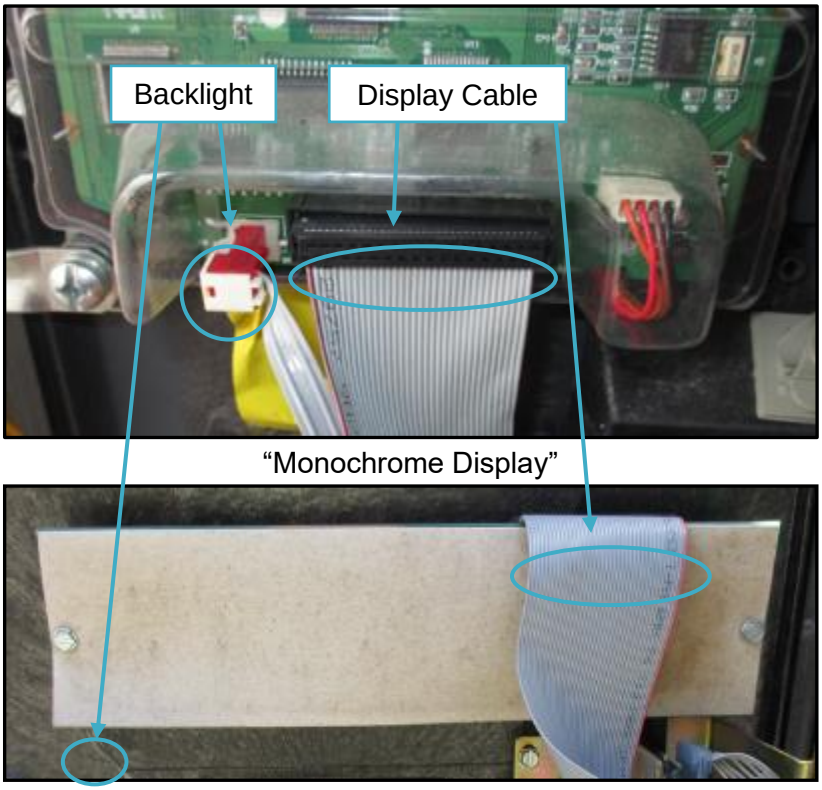


Fig. 1.4 – Unplug backlight and display cables.

3) Unplug the Handicap Assistance option cable if it is present. (Fig. 1.5)

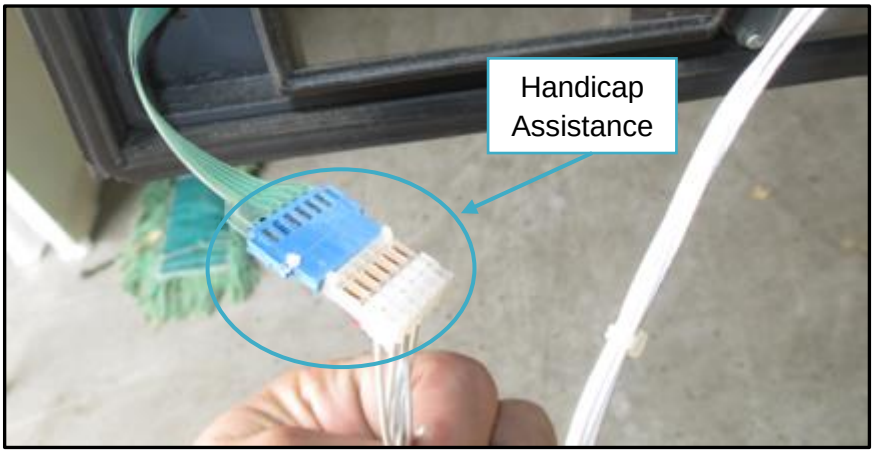


Fig. 1.5- Unplug handicap assistance cable

4) Unplug the user keypad harnesses if it is present. (Fig. 1.6)

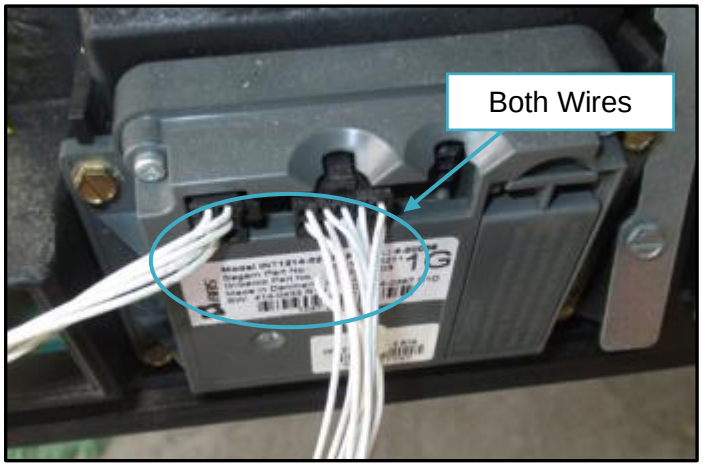


Fig. 1.6 – Unplug user keypad harnesses

5) Unplug the soft key cables. (Fig. 1.7)

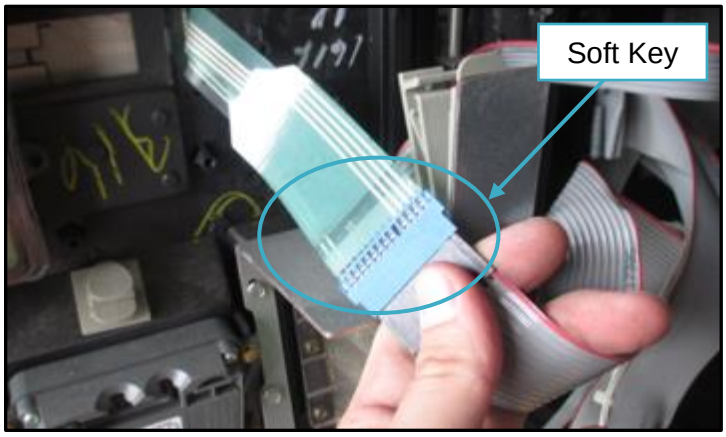


Fig. 1.7 – Unplug Soft key cables.

6) Unplug the card reader cable.

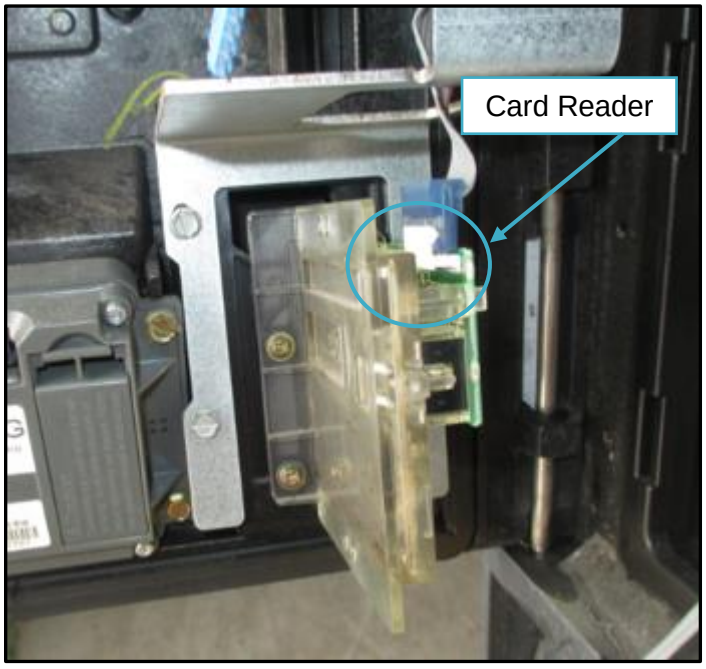
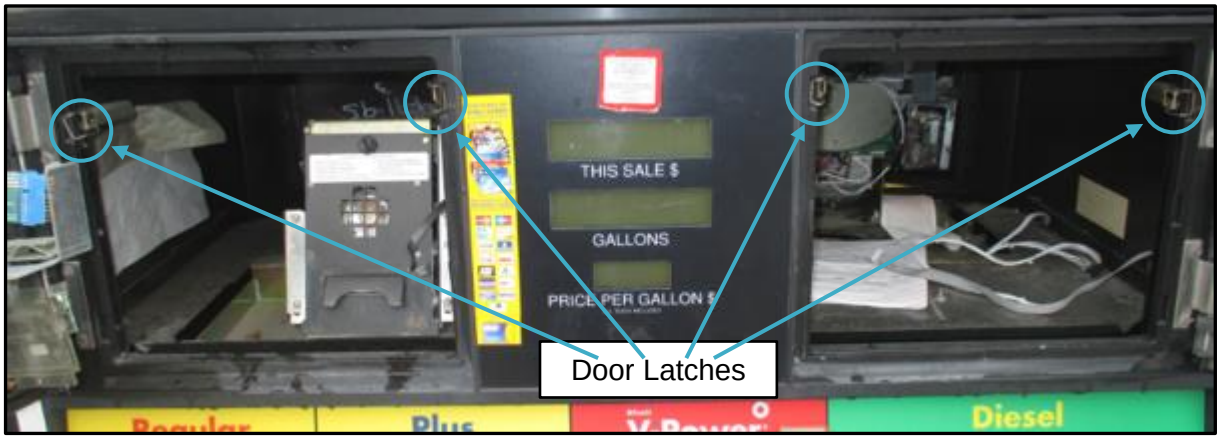


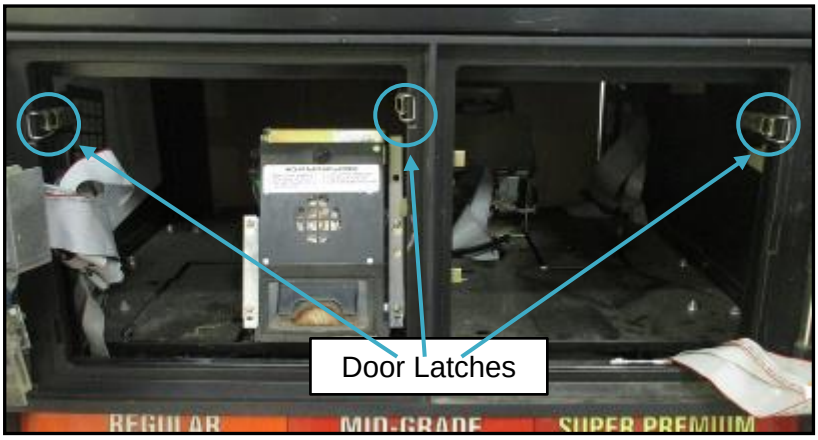
Fig 1.8 – Unplug the card reader cable

7. Place the loose cables from the options door components inside the dispenser cavity to set them out of the way.

8. Unlatch all the main door latches. The Wide Frame has four latches; the Narrow Frame has three latches. (Fig. 1.10a,b)



"Wide Frame"



"Narrow Frame"

Fig. 1.10a – Unlatch all door latches

Fig. 1.10b – Door latch in the unlock position

9. Open the main dispenser door until it locks into its fully open position. (Fig. 1.11)

"Wide Frame" **"Narrow Frame"**

Fig. 1.11 – Main door in its fully open position

10. To remove the left option door, use a pair of needle nose pliers to grasp the hinge pin and lift it upwards and pull it up through the top of the door until it is completely removed. The hinge pin will not be reused on the new OPT unit, it can be discarded.

Note: *The dispenser's main door must be fully open in order to remove the hinge pin*.

Note: *If the hinge pin is resistant to force, apply a general purpose penetrating oil to lubricate the area.*

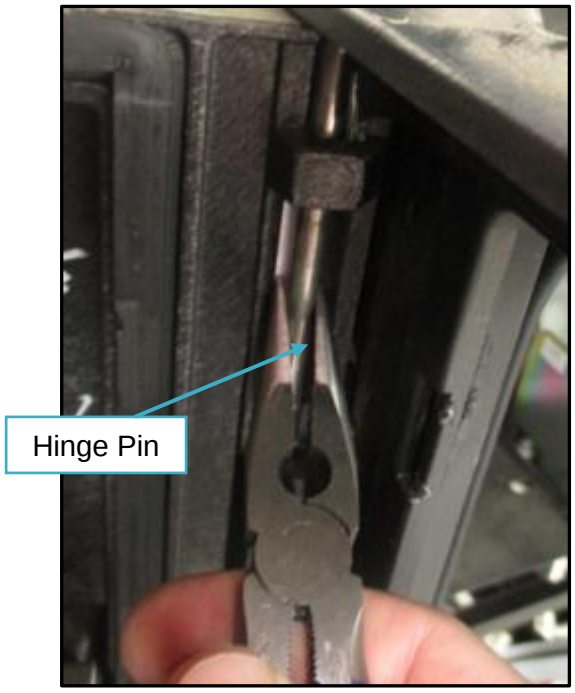


Fig. 1.12a – Firmly grasp the hinge pin with needle nose pliers

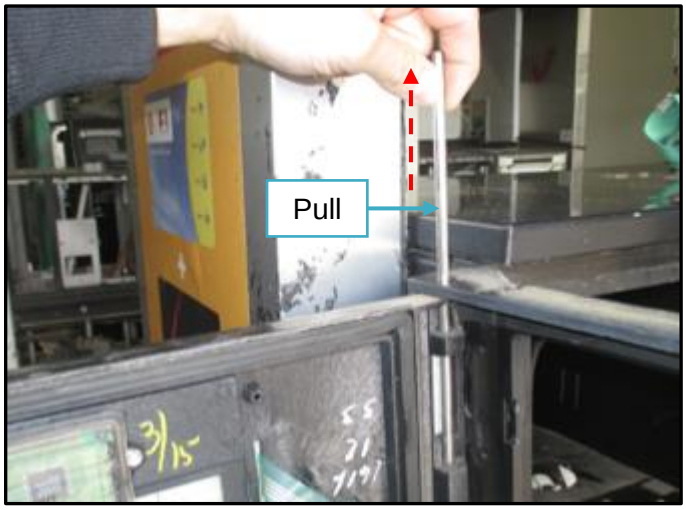


Fig. 1.12b – Remove hinge pin and keep. Discard the hinge pin.

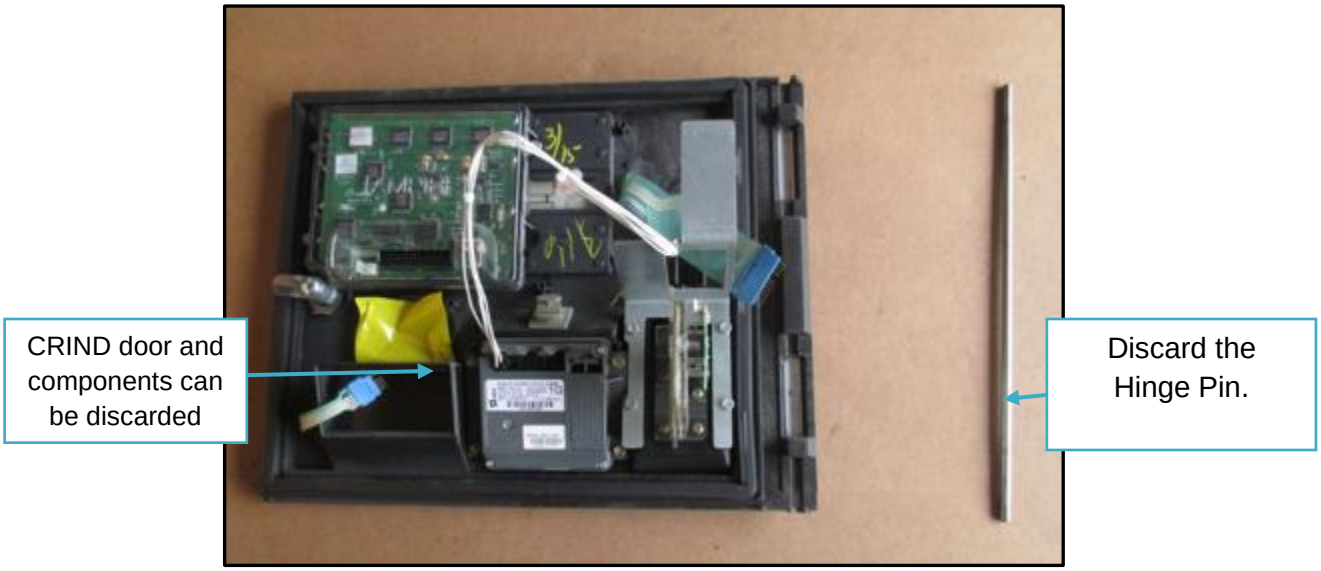
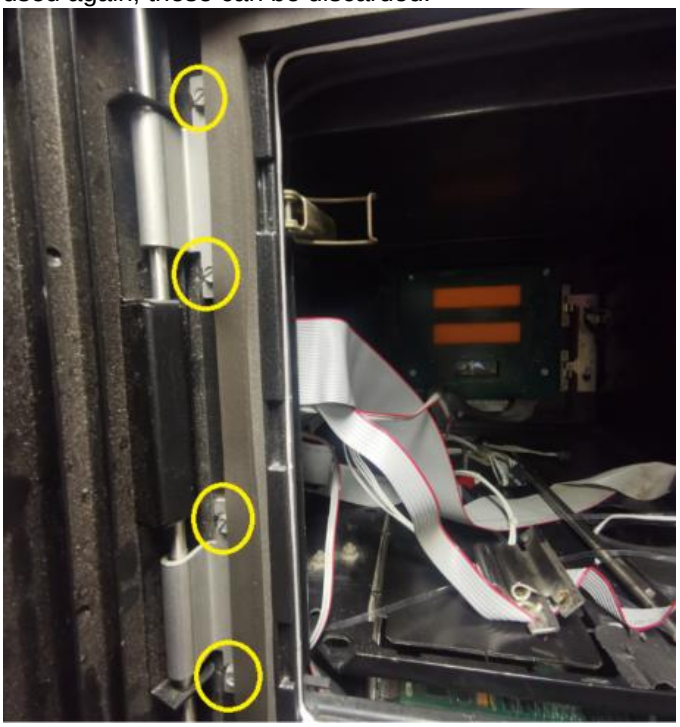


Fig. 1.12c – CRIND Door and hinge pin

11. Remove the two hinges that were holding the hinge pin.
Using a flat screwdriver, undo the four screws that are holding the two hinges in place. The screws and hinges will not be used again, these can be discarded.



12. Fit the replacement hinges (MP1080).
Align the screw holes on the hinges (MP1080) with the screw holes in the dispenser. Use the four MS0101 screws to secure the two hinges (MP1080) in place. Begin by hand tightening the screws only, and then use a ¼" socket or nut torque driver set to 0.55Nm to complete the tightening, in order to avoid stripping the thread.

13. Unplug power cable to the CRIND board (read the following notes and follow one of two different procedures).

Note: *There are two different styles of setups that Gilbarco employs to supply power to the CRIND boards and its peripherals. Either directly from the main transformer OR from an AC voltage bus cable via a universal comm and power cable assembly. Identify which setup the dispenser chosen for installation currently uses and follow one of the two following procedures for disassembly.*

Note: *These procedures are used for disassembly only. The installation procedure for the OPT kit will remain unchanged regardless of which CRIND power setup is currently installed.*

SETUP #1: Power supplied directly from transformer

1) Identify the main transformer located next to the board cage inside the dispenser's electronics cabinet. (Fig. 1.13a)

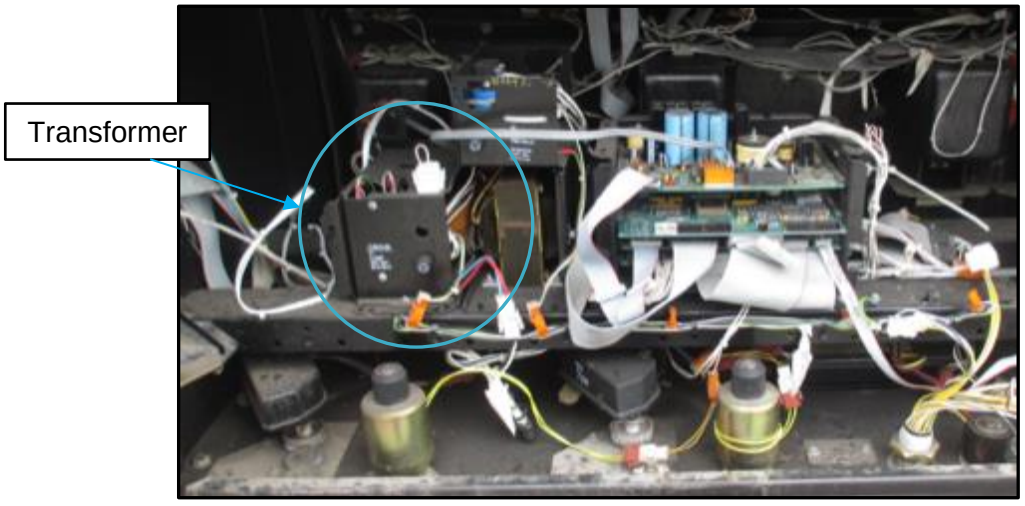


Fig. 1.13a – Location of transformer as viewed from A-Side

2) Unplug the 6-pin CRIND power terminal wire harness. (Fig 1.13b)

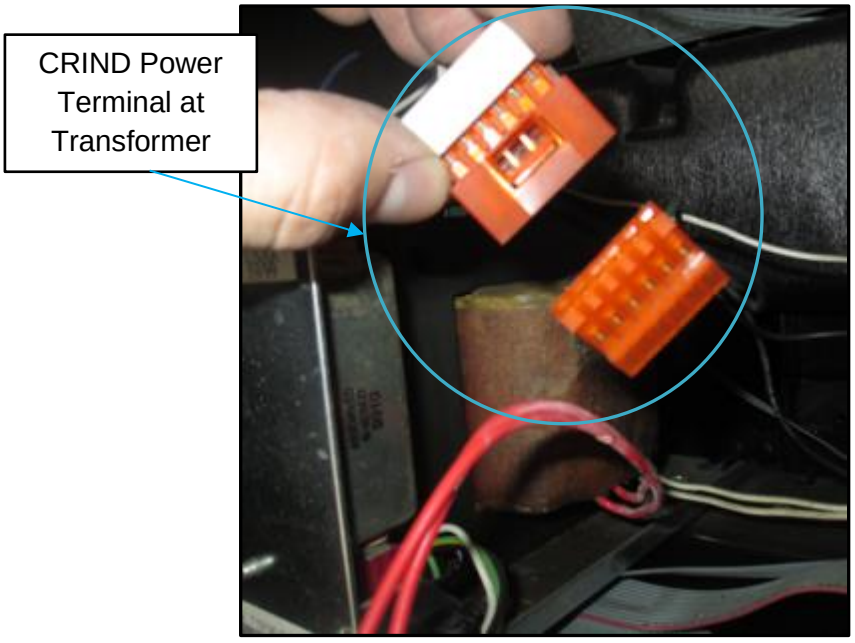


Fig. 1.13b – Unplug the CRIND power cable

3） Unplug any peripheral power cables that may be connected to the CRIND board assemblies such as backlights, speakers, etc. Refer to Fig 1.13c for the general arrangement.

Fig. 1.13c – CRIND boards on frame in pump

4） Unplug the communication wire harness (typically labeled J412) connected to the CRIND board assembly and unscrew the ground wire attached to it (if present). (Fig. 1.13c,d)

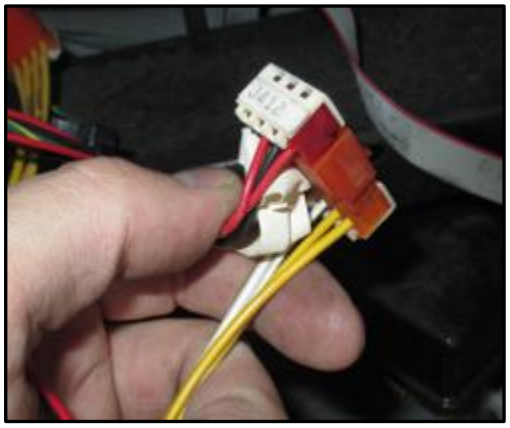


Fig. 1.13c – Unplug J412 harness

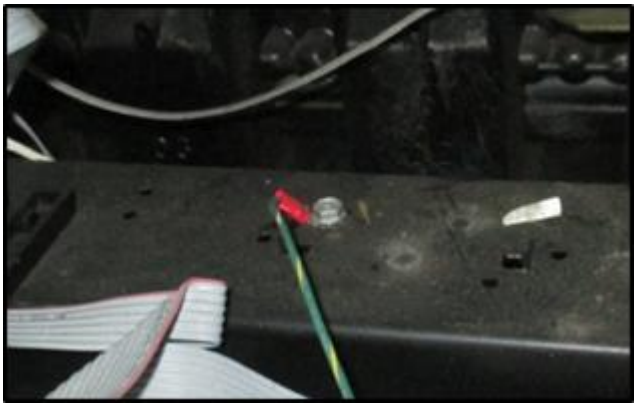


Fig. 1.13d – Unscrew ground wire

5) Proceed to step 14 of the Disassembly Procedure.

SETUP #2: Power supplied via universal Comm & Power cable assembly

1) Identify the universal comm and power cable assembly located on the right side of the CRIND rack. (Fig 1.14a)

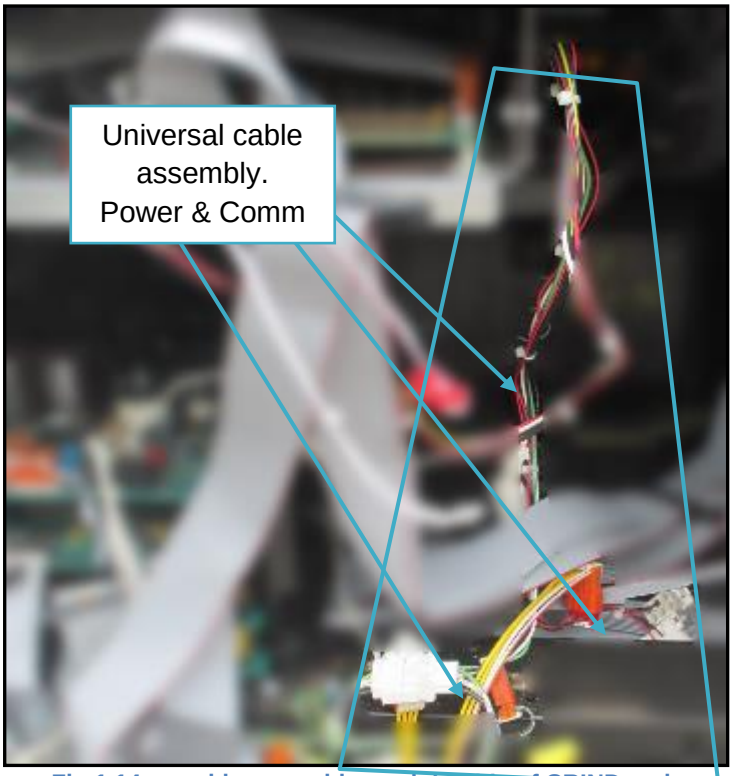


Fig 1.14a – cable assembly on right side of CRIND rack

2) Unplug the communication wire harness connected to the CRIND board assembly.
The connector is typically labeled J412 in a newer pump, or J402 in an older pump. (Fig 1.14b,c)

3) Unplug the 3-wire AC wire harness that is plugged into the voltage bus cable.
The connector is typically labeled J404 in a newer pump, or J550 in an older pump. (Fig 1.14b,c)

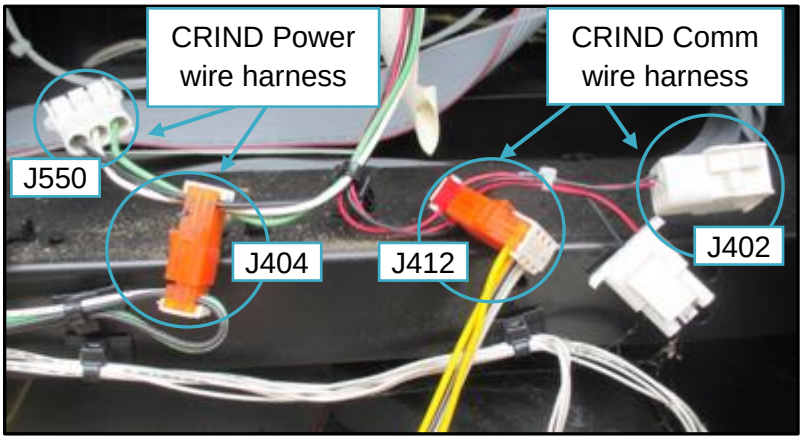


Fig. 1.14b – Location of CRIND Power and Comm wire harnesses

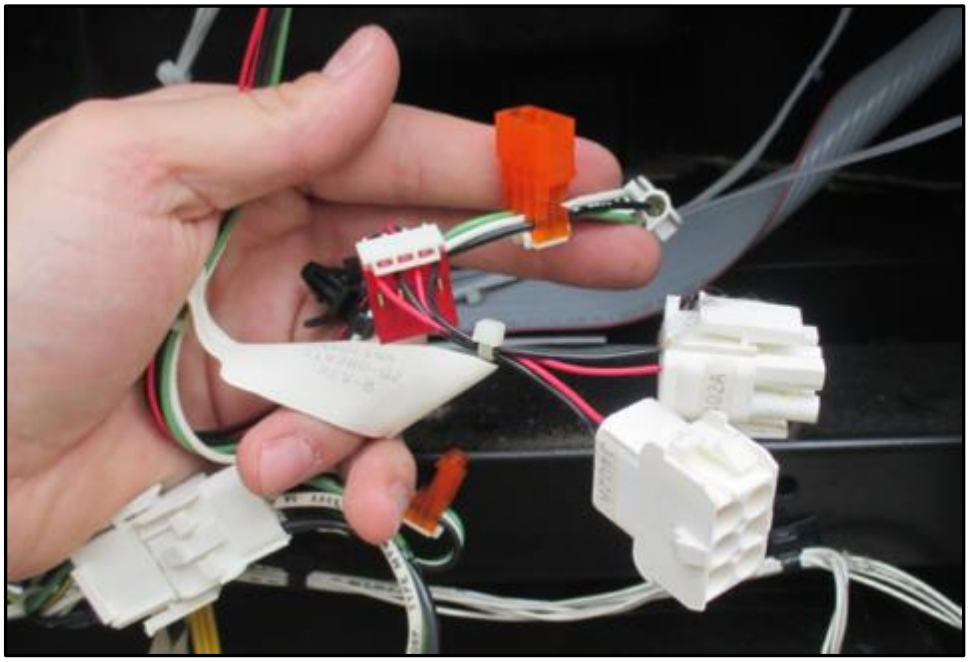


Fig 1.14c – Universal comm and power cable assembly after unplugging

4） Unscrew the ground wire connected to the CRIND board assembly (if present).

Fig. 1.14d – Unscrew ground wire

14. Unplug and remove the T19501-Gx Monochrome Display Board from the board cage if it is present. Note that it may not be the top board in the cage as shown, depending on other pump options. The board can be identified by the arrangement of the four connectors shown:

1) Unplug the cable from the terminal P2013. (Fig. 1.15)
2) Unplug the cable from the terminal P2015A. (Fig. 1.15)
3) Unplug the cable from the terminal P2014. (Fig 1.15)
4) Unplug the cable from the terminal P2015B. (Fig 1.15)

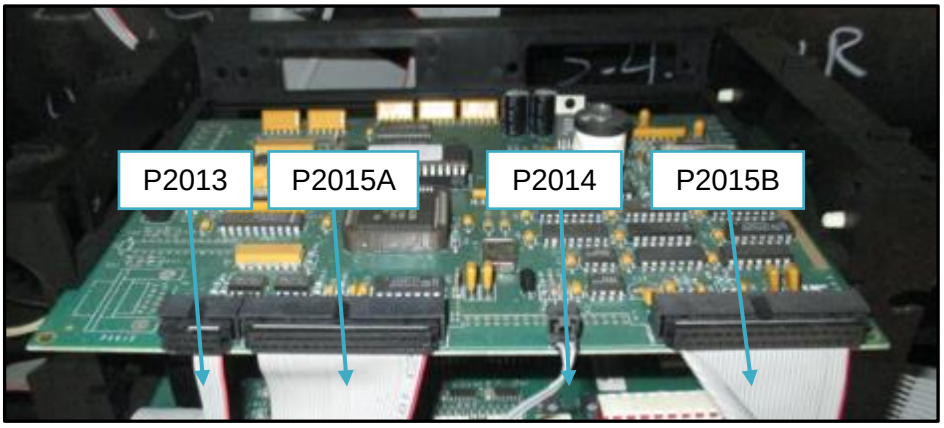


Fig. 1.15 – Remove all of the cables from the T19501-Gx

5) Slide the T19501-Gx board out from the board cage and set it aside. If you need to unplug or move any cables, you must re-connect them immediately after removing the T19501-Gx board.

15. Remove or unfasten any and all cord restraints that are present on any wire assemblies that are leading to the CRIND's rack assembly. This may require the use of needle-nose pliers, diagonal cutters, and/or a flat-head screwdriver to complete.

16. On the opposite side of the dispenser open the right-hand door using the same techniques outlined in steps 4 & 5 above. From that side, unplug the printer's data and power cables. Remove or unfasten any cord restraints that may be attached to the printer's cable assemblies. (Fig. 1.16)

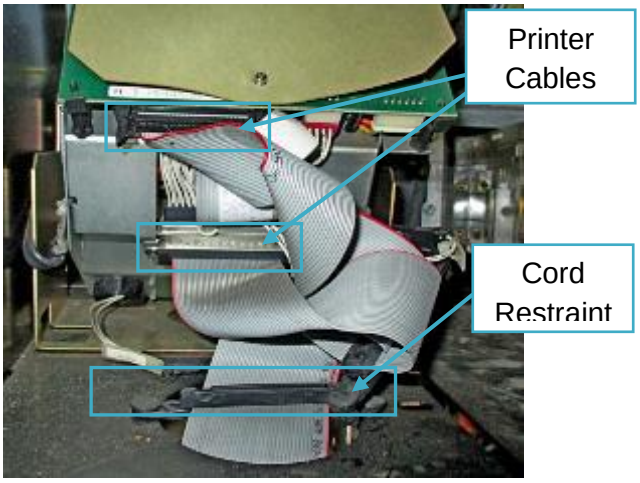


Fig. 1.16 – Remove printer cables and cord restraints

17. Repeat steps 6-12 and 16 for the B side of the dispenser. (If the dispenser is two-sided. Otherwise proceed to step 18.)

18. Remove the CRIND rack with boards and cable assemblies

1) Double check to ensure that all of the cord restraints to all of the cable assemblies lead to the CRIND rack are removed or unfastened.

2) Pull all of the wires towards the A side of the dispenser and let them hang down to be sure that they do not get caught when removing the CRIND rack assembly. (Fig. 1.17)

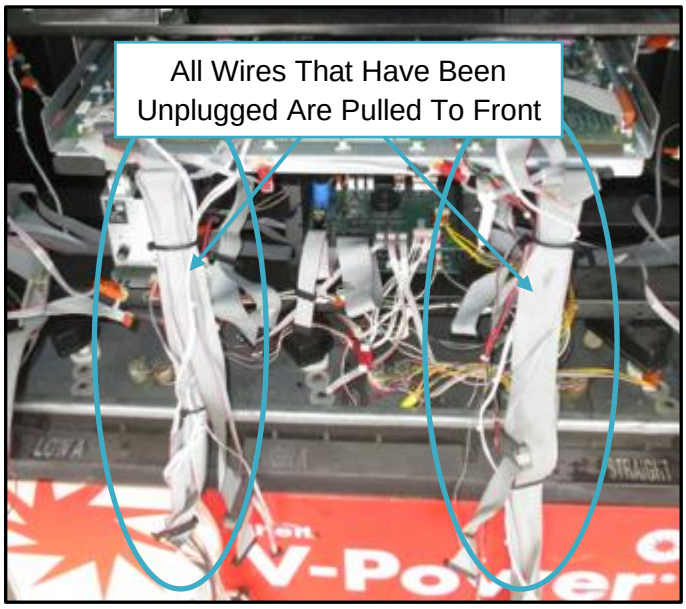


Fig. 1.17 – Pull all wire assemblies to front of dispenser

3) Pull the CRIND rack assembly forward towards the front of the dispenser until it stops. While tilting it down, lift up on the rack assembly to remove it from the slide brackets and completely remove it from the dispenser. (Fig. 1.18a,b)

Fig. 1.18a – Pull CRIND rack fully forward

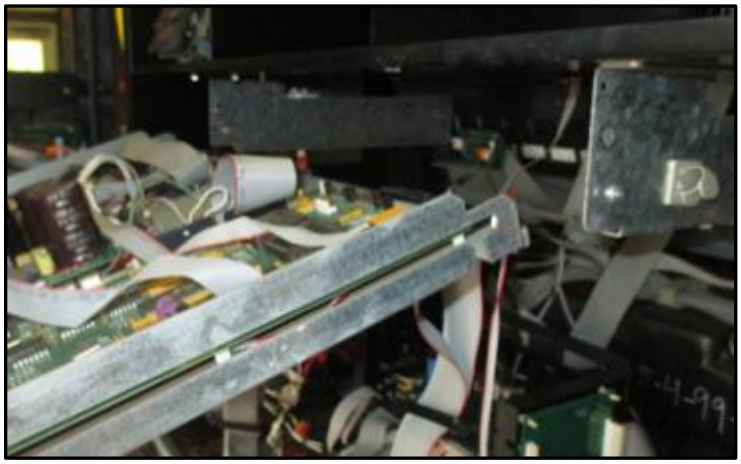


Fig. 1.18b – Lift CRIND rack up and pull out

4) Set the entire CRIND rack assembly aside.

19. Remove printers.

1) Remove the clip-on ground terminal. (Fig 1.19)

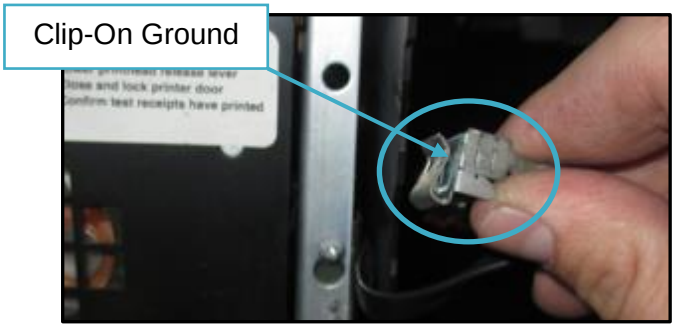


Fig. 1.19 – Remove clip-on ground wire

2) Using a 3/8” socket and ratchet, remove the three printer nuts from the underside of the printer. (Fig. 1.20)

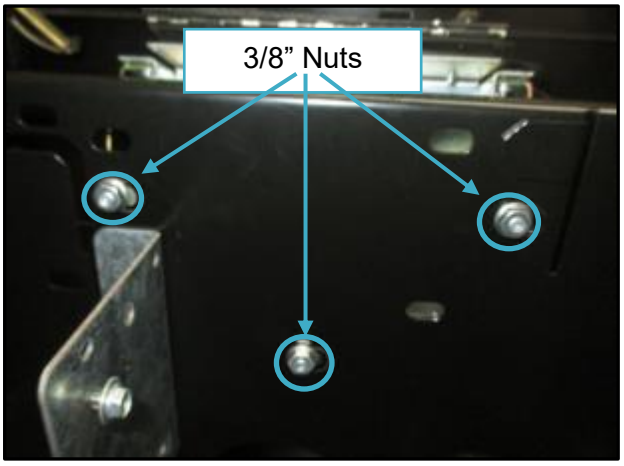


Fig. 1.20 – Remove three nuts underneath printer

3) Remove the printer and set it aside.
4) Repeat these steps for Side Two (if present).

20. Remove the CRIND rack rails. Using a 3/8” socket and ratchet, loosen the two nuts holding each rail in position. Unscrew the nuts completely and remove the rails:

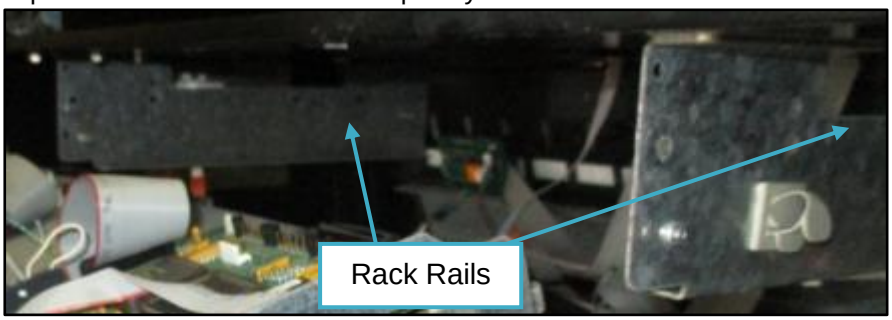


Fig. 1.21 – Remove two nuts on each rail

21. With the exception of the main door retaining bolts (removed in step 4),all of the removed components will not be used again and can be discarded. (Fig. 1.22)

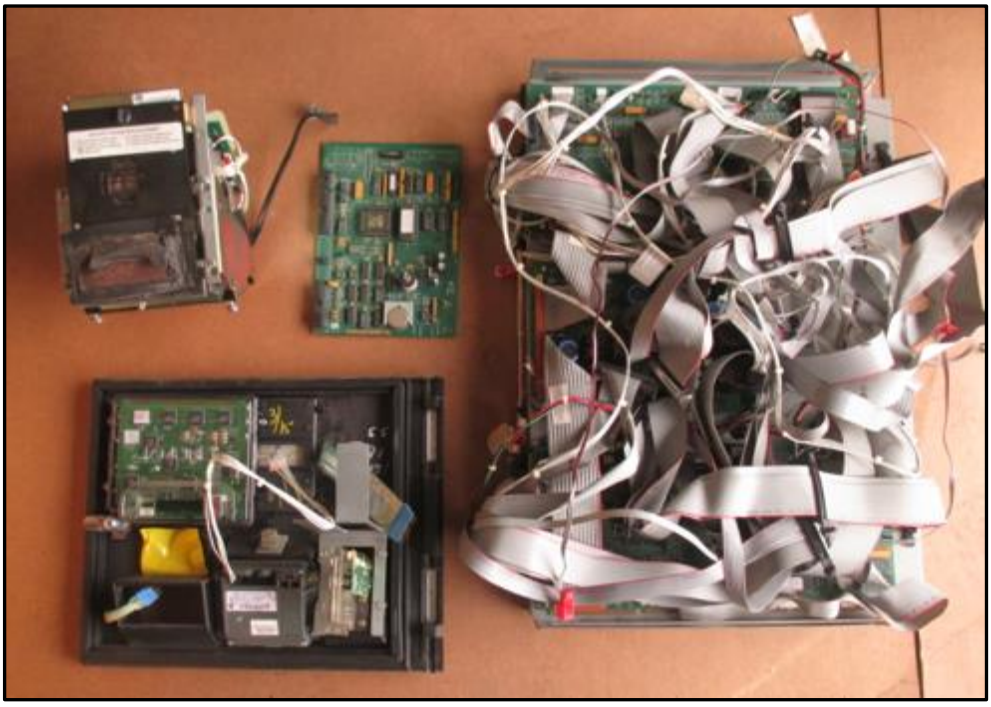


Fig. 1.22 – Removed components from dispenser that can be discarded

22. The disassembly process is complete. The dispenser is now ready for the Pre-Installation procedure to begin.

4.2 Pre-Installation Procedure

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

- If you are installing Side One, perform procedures 4.2.1, 4.2.2 and 4.2.3.
- If you are installing Side Two, perform procedures 4.2.1 and 4.2.2 and ensure you have installed Side One before continuing.

4.2.1 Secure the earth cable to the RFK Door.

You need to install the earth cable EK0132 to the earth stud on the RP00010-XX RFK Door Assembly.

a. Identify the earth stud (upper right-hand side of the inner side of the RP00010-XX RFK Door Assembly), and slip the ring terminal of the EK0132 earth cable over the stud.

Fig. 2.1 – Earth stud on the RP00010-XX RFK Door Assembly

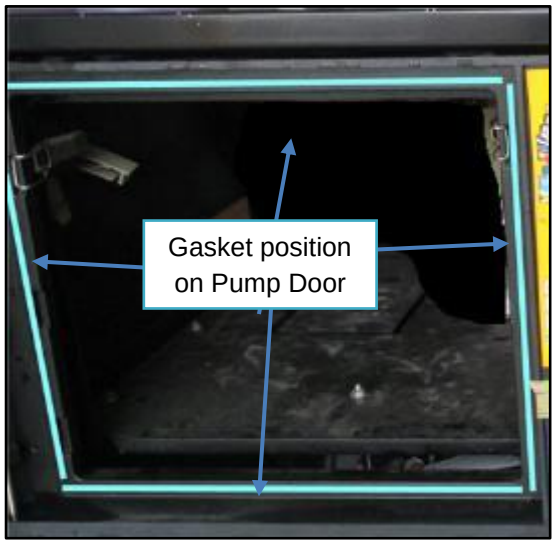
b. Place the MN0029 #8-32 SEMS nut over the stud and tighten to secure the connection.

Fig. 2.2 – Connection secured with MN0029 #8-32 SEMS nut

4.2.2 Replace the Gasket on the Pump Door

When the CRIND Option Door is replaced with the NCR/Invenco RFK Door, a new gasket is required on the plastic Advantage Pump Door panel to achieve a weather tight seal. In some Advantage models there is an existing gasket at the top of the Pump Door opening. If present, this gasket needs to be removed first.

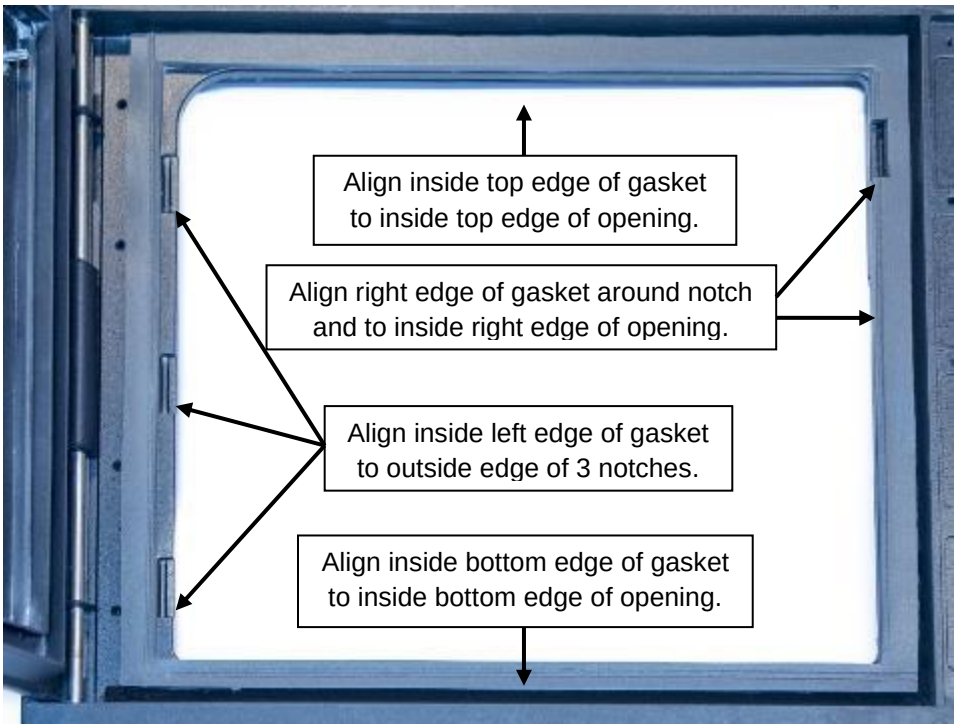
1. If there is no original gasket present, go to step 4.
2. Remove the existing gasket from the Pump Door panel:



a. Pull the gasket **extremely slowly** and at an approximate **angle of 45 degrees**.
b. Removing the gasket slowly will give the best chance of removing the old adhesive and preventing the gasket from breaking into many small fragments.

3. Remove remaining residue:
   a. Apply sticky residue cleaner to the cleaning rag and wipe away all the adhesive residue.
   b. Use the flat bladed scraper or the putty knife on stubborn areas, taking care not to gouge the plastic surface.

   WARNING: Do not flood the area being cleaned with a direct spray of sticky residue cleaner as excess cleaner may damage adjacent gaskets.
4. Apply IPA cleaner solution to a new cleaning rag and thoroughly wipe down the gasket area.
5. Allow the plastic to dry completely.
6. Apply the new MP0614 gasket, starting with the top right hand corner, using the notch feature for alignment. Peel off the backing paper section by section and follow the alignment guide below. Take care not to stretch the gasket material while it is being applied.



4.2.3 Install the InvencoLink Converter.

This Retro-Fit Kit does not include a communications method for the OPT. When this Retro-Fit Kit is being installed on Side One (i.e. the first side) of the dispenser, a communications method MUST first be installed.

The approved communications methods are listed below.

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

For Side Two (i.e. the second side), you MUST have Side One (i.e. the first side) already installed, and you may then proceed to §4.3 Installation Procedure.

For Side One (i.e. the first side), select the PSU Plate Assembly from this Retro-Fit Kit package and apply the communications method selected from the table above, following the installation instructions supplied with that Kit (DCV-00465).
Once the communications method has been installed onto the PSU Plate Assembly, proceed to §4.3 Installation Procedure.

4.3 Installation Procedure

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

1. Install the pre-assembled EZ0631 PSU plate into the pump, in the cavity behind where the left-hand CRIND door was. For Side One this is the PSU Plate Assembly that has just had the InvencoLink converter installed:
    a. Ensure the pump door is latched into the open position.
    b. Place the plate into the cavity as shown (Fig. 3.1b), and align the two standoffs (Fig. 3.1a) with the holes in the floor of the cavity:

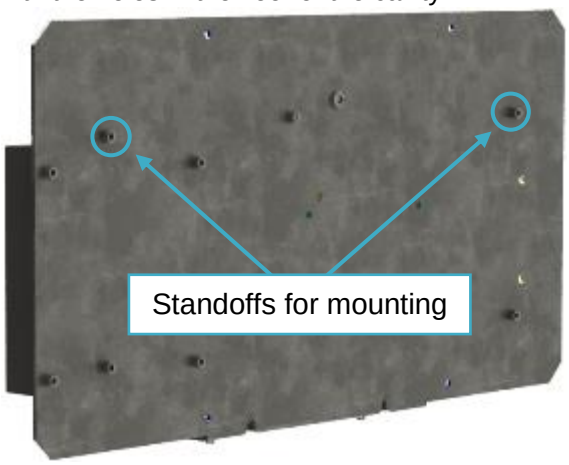


Fig. 3.1a – Standoff positions to align with dispenser

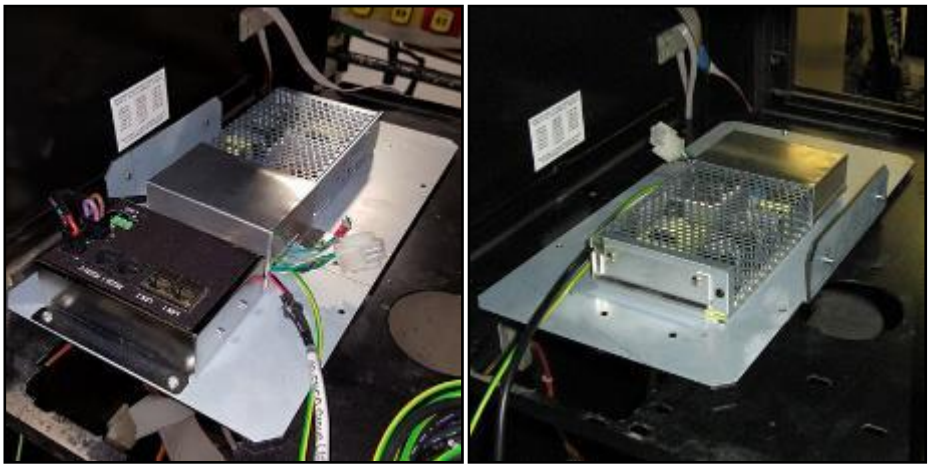


Fig. 3.1b – Side One **Plate in position** **Side Two**

c. Secure the plate in position using two MS0147 #6-32 5/16” SEMS screws up into the bottom of the plate:

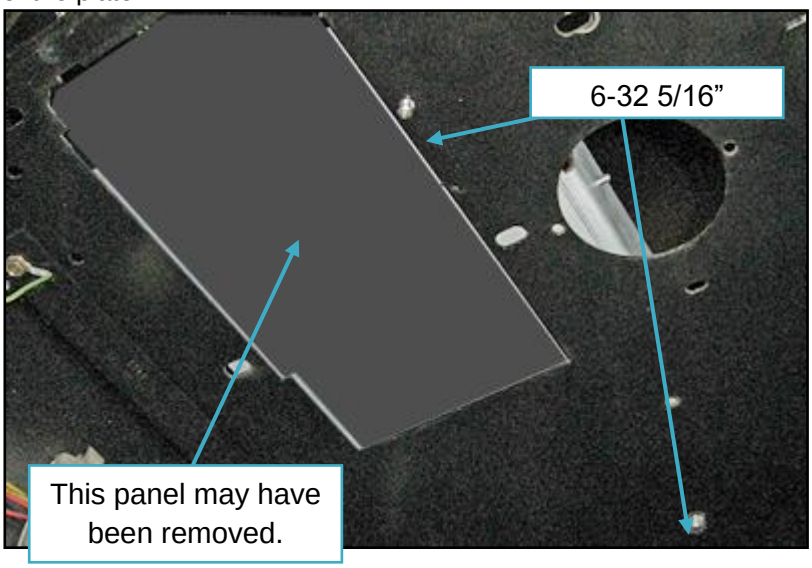


Fig. 3.2 – Plate secured with screws

2. Plug the patch cables into the InvencoLink converter sockets:
   a. For Side One the converter will be on the plate you have just installed.
      Plug the EK0131 YELLOW cable into the LAN-1 socket.
   b. For Side Two the converter will be on the plate on the other side of the dispenser and you should run the two cables under any central electronics.
      Plug the EK0131 YELLOW cable into the LAN-2 socket.

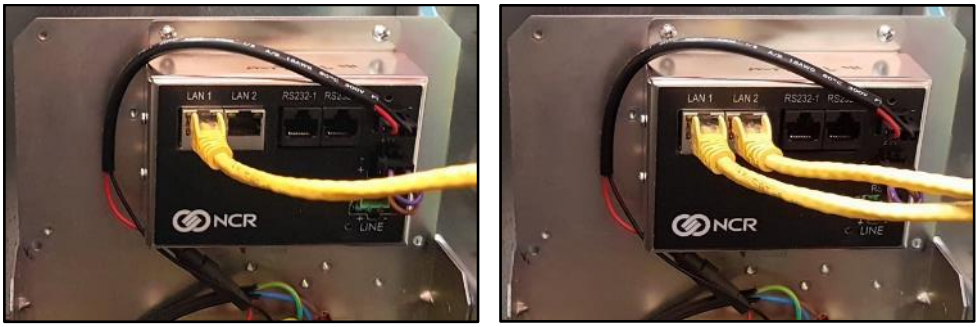


Fig. 3.3 – Side One Patch Cable installation Side Two

3. Temporarily coil the loose ends of the three cables (pre-installed Black low-voltage DC & Green/Yellow Earth; and Yellow patch) in the cavity where you’re working.

4. Unlock the pre-assembled RP00010-XX RFK door assembly from Section 4.2 (lock latch to vertical).

5. Place the RFK door in position on the pump and insert the replacement hinge pin (MP1077) from the top. Guide the hinge pin all the way thru the door until it seats into the recess in the bottom of the pump door opening.

Fig. 3.4 – Installing Hinge pin

6. Close the RFK door against the pump door and lock it to prevent it swinging during the next steps.
   Note: The lock is likely to be quite stiff because the seals are new.

7. Take the cable ends previously coiled into the cavity in the dispenser and connect them to the G6-300 OPT:
   a. Plug the Black low-voltage DC cable from the PSU Plate it into the OPT:

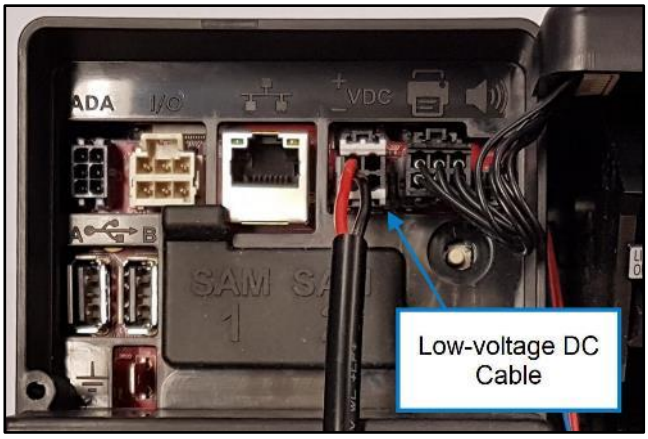


Fig. 3.5 – Low-voltage DC Cable connection

b. Connect the EK0131 YELLOW patch cable into the correct sockets on the OPT. The port number on the InvencoLink for the cable (e.g. LAN-1) must match the side you're working on (e.g. Side One):

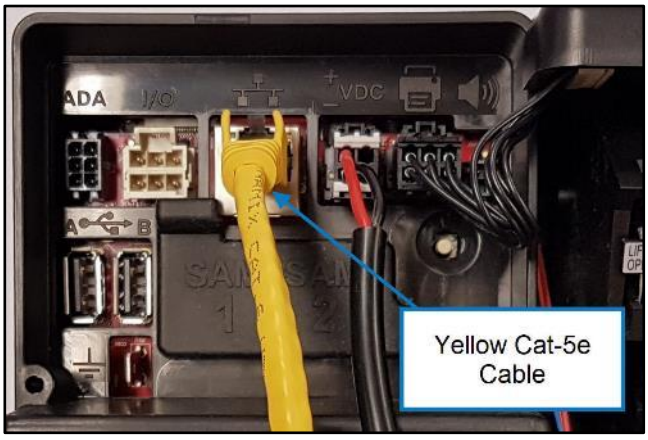


Fig. 3.6 – Patch Cable connections

c. Connect the Green/Yellow Earth cable from the Power Supply Assembly to the ¼" tab on the OPT:

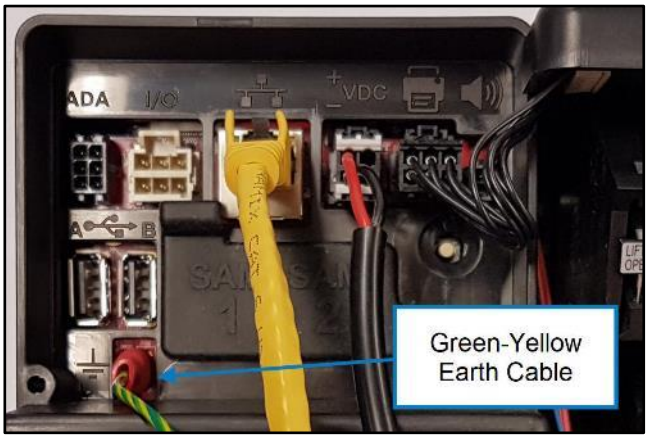


Fig. 3.7 – Plug-in Earth Cable

8. Connect the earth cable EK0132 from the RFK Door onto the EZ0631 PSU Plate earth stud. Remove the nut from the earth stud, slip the ring terminal over the stud, then re-install the nut and tighten it:

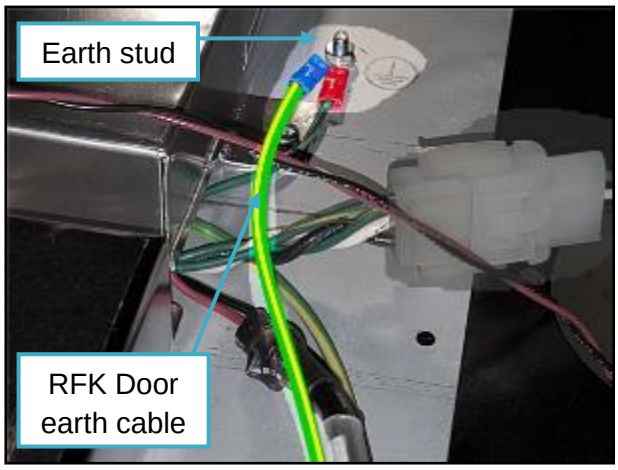


Fig. 3.8 – Connect the earth cable from the RFK Door

9. Use a MF0046 cable-retention clip to gather and route the cables across the pump door toward the pump door hinge area:

Fig. 3.9 – Cables retained on OPT

10. Then use the second cable-retention clips to route them into the pump cavity, to the area that contains the power supply and Datacom converter:

Fig. 3.12 – Cables retained in cavity near pump door clasp

11. Plug the single-connector end of the EK0124 Mains cable into the mains connector on the EZ0631 PSU Plate:

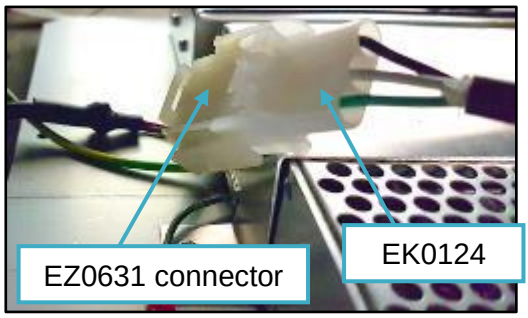


Fig. 3.13 – Plug EK0124 into EZ0631

12. For Side One only:
    a. Plug the green connector of the EK0125 InvencoLink cable into the LINE socket on the InvencoLink converter on EZ0631 that contains the InvencoLink converter:

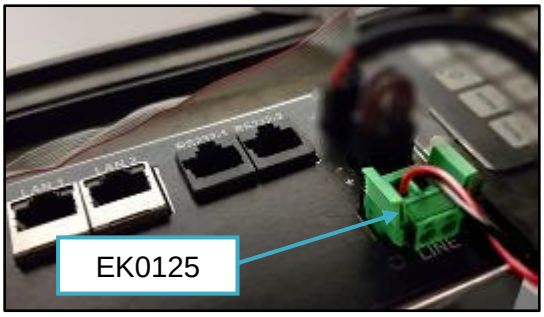


Fig. 3.14 – Plug EK0125 into InvencoLink converter

13. Route EK0124 (and for Side One only, also EK0125) through the circular printer access hole in the floor of the pump cavity beside the PSU Plate, and down to the pump loom connectors:

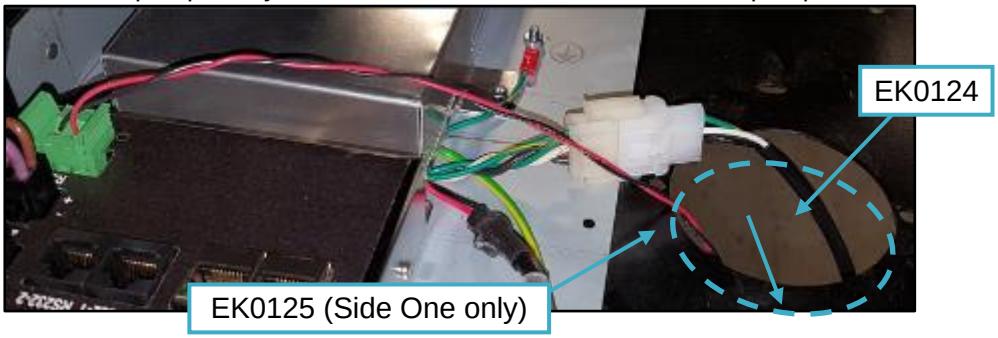
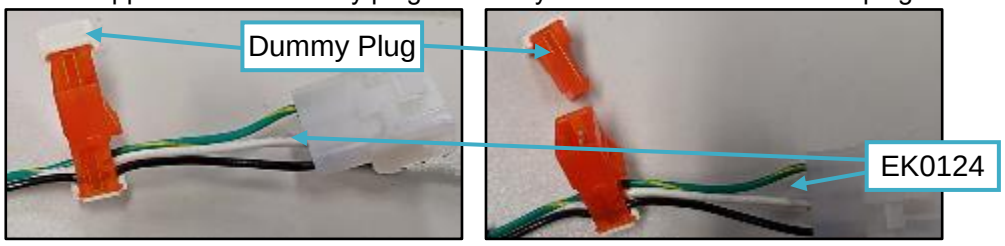


Fig. 3.15 – Routing EK0124 (& EK0125 For Side One)

EK0124 is supplied with a “dummy plug” for safety in some installations. The plug looks like this:



14. For Side One:
    a. For a newer pump, remove and discard the dummy plug from EK0124 large orange male connector, and plug that connector into J404 (typical) on the pump.
    b. For an older pump, plug EK0124 large white female connector into J550 (typical) on the pump:

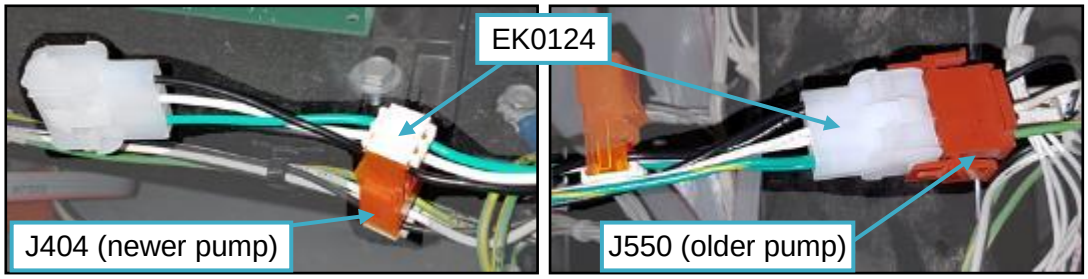


Fig. 3.16 – Connecting EK0124 mains cable to pump – Side One

15. For Side Two, remove the dummy plug from the large orange male connector on the EK0124 cable you ran in Step 13 (discard the dummy), then plug that large orange male connector into the smaller orange female connector on the EK0124 cable from Side One:

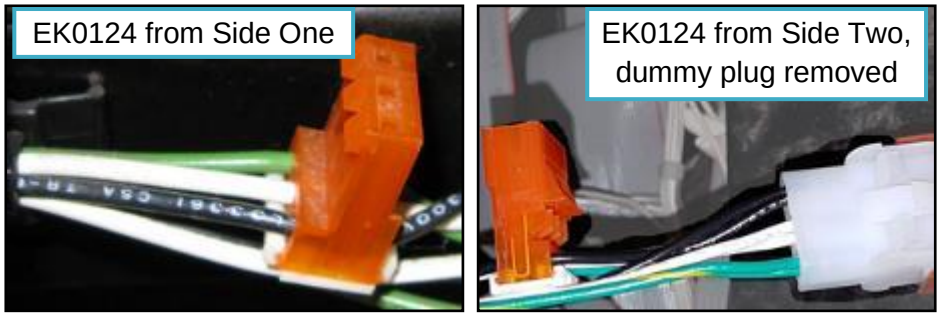


Fig. 3.17 – EK0124 orange connectors to be joined together.

16. For Side One only, connect the InvencoLink cable to the CRIND data loom:
    a. For a newer pump, plug the red connector of EK0125 into J412 (typical).
    b. For an older pump, plug the white connector of EK0125 into J402 (typical).
    The pump CRIND connector is the same as that previously unplugged in section 4.2.

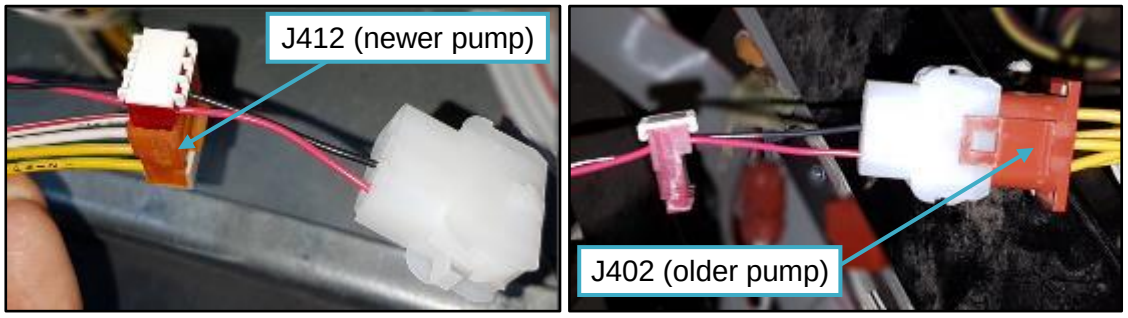


Fig. 3.18 – EK0125 Pump connections. Note: the pump's connectors are not always labelled

17. If this is a double-sided installation, repeat steps 1-11, 13 & 15 for Side Two.
18. Secure the EK0124 and EK0125 cables to existing pump wiring in the lower cabinet where possible, using cable ties. Ensure the cables will not be snagged or pinched when the door is closed.
19. Reassemble the rest of the pump:

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

    a. Ensure both the RFK door and the right-hand option door are unlocked and open.
    b. Carefully close the pump door after lifting the door-stay arm, making sure that no cables are pinched. If any cables will be pinched, use cable-ties and/or re-arrange the cables before continuing.
    c. Re-latch the three or four pump catches. Note that the pump door may need to be jiggled to bring it completely shut.
    d. Re-insert and tighten the bolts (that were saved during disassembly) along the bottom edge of the pump door using a 3/16" hex key.
    e. Close and lock the right-hand option door and the RFK door.
    f. For a double-sided installation, repeat steps a-e above for the other side of the pump.
20. If necessary, load paper into the OPT following the advice in the next section.
21. Test pump and OPT operation.
22. Installation of the retrofit kit is now complete.

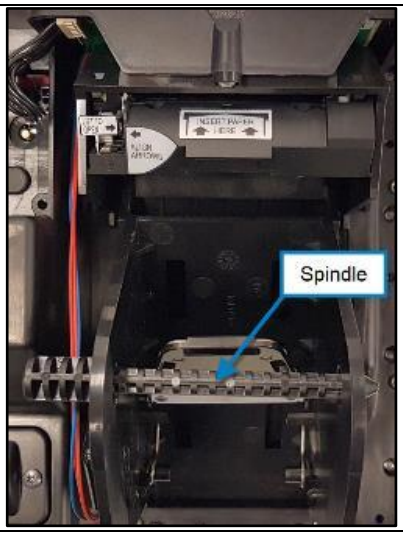
5 First Power-Up

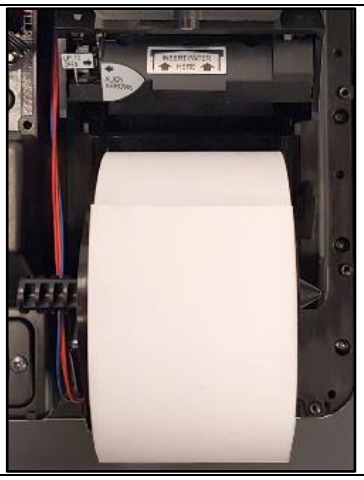
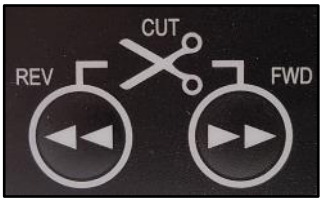
Once the installation is complete and the wiring is certified (if necessary), power may be applied. The G6-300 OPT takes a couple of minutes to complete its start-up phase during which several information screens will be presented.

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

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

The following steps describe the paper loading procedure.

Step	Description	Photo reference
1.	Ensure the paper roll has a neat cut edge.	
2.	Remove spindle from the paper holder position Note orientation of the spindle (handle to left)	

3.	Insert roll in place – the paper tension flap is spring-loaded so you will need to apply some pressure. Insert the spindle through the middle of the roll to hold in place.	
4.	Insert the cut edge of the paper into the slot as shown by the label. **Note**: Insert until the printer grips and feeds automatically.	
5.	The photo shows the paper loaded correctly.	
6.	Paper feed buttons are located on the top of the terminal. Press either button  to move the paper forward or back. Press both buttons together to cut the paper.	

6.	Use the paper-feed buttons to advance the paper through the terminal until it appears at the paper exit chute. Cut the paper using both paper feed buttons, then remove the cut length from the chute.