



**GILBARCO
VEEDER-ROOT**

**MDE-5285D
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FlexPay™ IV UX400 Upgrade Kit



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SECTION 1 - INTRODUCTION

Purpose

This manual provides instructions to install FlexPay™ IV UX400 Upgrade Kit on Encore® 900, 700 S, Encore 300/500, The Advantage® Series, and Wayne® units.

Intended Users

This manual is intended for Gilbarco® trained and certified Authorized Service Contractors (ASCs).

Required Tools

- Phillips® and Flat-blade Screwdrivers
- 1/4-inch Socket Set (Nut Driver)
- Scraper Tool (for removing graphics and adhesive)

Configured Kits - Parts List

FlexPay IV CRIND® Retrofit Kits are configured based on the serial number of the pump/dispenser (unit) for which they are intended. Therefore, the parts list will vary for each configured kit and unit/option type. For additional parts details, refer to the Bill of Materials (BOM) in the kit, your distributor, or contact Gilbarco Customer Service.

FlexPay IV CRIND Retrofit Kit for will include the following parts based on the unit type:

Unit Type	Parts Description	Part Number
Encore 900	UX400, Contactless Card Reader VeriFone®	M14331A001
	Screws (4X)	Q11677-26
	Decal, FCC ID N6Sgcm FlexPay Contactless	M02962B019
<i>Note: This kit may contain graphic depending on the configuration of the unit.</i>		
Encore 700 S	UX400, Contactless Card Reader Graphic	ENE0706GXXX
	UX400, Contactless Card Reader VeriFone	M14331A001
	Coax Cable	See Note
	Indicator Cable	
	Screws	Q11677-26
Encore 300/500	Contactless Antenna Adapter	M14298B001
	UX400, Contactless Card Reader VeriFone	M14331A001
	Screws	Q11677-26
	Gilbarco Security Module (GSM) Adapter Gasket	M14311B001
The Advantage Series	UX400, Contactless Card Reader VeriFone	M14331A001
	Screws	Q11677-26
Wayne Vista	UX400, Contactless Card Reader VeriFone	M14331A001
	Screws	Q11677-26

Note: Coax and Indicator cables are included in M14331A001.

SECTION 1 - INTRODUCTION

1

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SECTION 2 - IMPORTANT SAFETY INFORMATION

Important Safety Information

Notes: 1) *Save this Important Safety Information section in a readily accessible location.*

- 2) *Although DEF is non-flammable, Diesel is flammable. Therefore, for DEF cabinets that are attached to Diesel dispensers, follow all the notes in this section that pertain to flammable fuels.*

This section introduces the hazards and safety precautions associated with installing, inspecting, maintaining, or servicing this product. Before performing any task on this product, read this safety information and the applicable sections in this manual, where additional hazards and safety precautions for your task will be found. Fire, explosion, electrical shock, or pressure release could occur and cause death or serious injury, if these safe service procedures are not followed.

Preliminary Precautions

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

Emergency Total Electrical Shut-Off

The first and most important information you must know is how to stop all fuel flow to the pump/dispenser and island. Locate the switch or circuit breakers that shut off all power to all fueling equipment, dispensing devices, and Submerged Turbine Pumps (STPs).

WARNING



The EMERGENCY STOP, ALL STOP, and PUMP STOP buttons at the cashier's station WILL NOT shut off electrical power to the pump/dispenser. This means that even if you activate these stops, fuel may continue to flow uncontrolled.



You must use the TOTAL ELECTRICAL SHUT-OFF in the case of an emergency and not the console's ALL STOP and PUMP STOP or similar keys.

Total Electrical Shut-Off Before Access

Any procedure that requires access to electrical components or the electronics of the 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 Gilbarco equipment.

Evacuating, Barricading, and Shutting Off

Any procedure that requires access to the pump/dispenser or STPs requires the following actions:



- An evacuation of all unauthorized persons and vehicles from the work area
- Use of safety tape, cones, or barricades at the affected unit(s)
- A total electrical shut-off of the affected unit(s)

Read the Manual

Read, understand, and follow this manual and any other labels or related materials supplied with this equipment. If you do not understand a procedure, call the Gilbarco Technical Assistance Center (TAC) at 1-800-743-7501. It is imperative to your safety and the safety of others to understand the procedures before beginning work.

Follow the Regulations

Applicable information is available in National Fire Protection Association (NFPA) 30A; *Code for Motor Fuel Dispensing Facilities and Repair Garages*, NFPA 70; *National Electrical Code (NEC)*, Occupational Safety and Health Administration (OSHA) regulations and federal, state, and local codes. All these regulations 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 or affect the safe use and operation of the equipment.

Replacement Parts

Use only genuine Gilbarco replacement parts and retrofit kits on your pump/dispenser. Using parts other than genuine Gilbarco replacement parts could create a safety hazard and violate local regulations.

Federal Communications Commission (FCC) Warning

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

Safety Symbols and Warning Words

This section provides important information about warning symbols and boxes.

Alert Symbol



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 hazards. 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 with Alert symbol: Designates a hazard or unsafe practice which may result in minor injury.



CAUTION without Alert symbol: Designates a hazard or unsafe practice which may result in property or equipment damage.

Working With Fuels and Electrical Energy

Prevent Explosions and Fires

Fuels and their vapors will explode or burn, if ignited. Spilled or leaking fuels cause vapors. Even filling customer tanks will cause potentially dangerous vapors in the vicinity of the dispenser or island. DEF is non-flammable. Therefore, explosion and fire safety warnings do not apply to DEF lines.

SECTION 2 - IMPORTANT SAFETY INFORMATION

No Open Fire



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

No Sparks - No Smoking



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

Working Alone

It is highly recommended that someone who is capable of rendering first aid be present during servicing. Familiarize yourself with Cardiopulmonary Resuscitation (CPR) methods, if you work with or around high voltages. This information is available from the American Red Cross. 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 Lockout/Tagout procedures. If you are not familiar with this requirement, refer to this information in the service manual and OSHA documentation.

Working With Electricity Safely

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 Lockout/Tagout requirements. Station employees and service contractors need to understand and comply with this program completely to ensure safety while the equipment is down.

Hazardous Materials

Some materials present inside electronic enclosures may present a health hazard if not handled correctly. Ensure that you clean hands after handling equipment. Do not place any equipment in the mouth

WARNING

In the event of inclement weather, including snow, ice, or flooding that makes driving conditions dangerous, please avoid servicing units. Always use available door stops to secure upper doors against unwanted/unexpected movement, especially during high winds. If necessary, reschedule service to avoid damage to the equipment. Weather may change unexpectedly; be aware of local weather conditions. During service, if conditions develop making service unsafe, close the unit(s) and proceed to a safe location.

WARNING

The pump/dispenser contains a chemical known to the State of California to cause cancer.

WARNING

The pump/dispenser contains a chemical known to the State of California to cause birth defects or other reproductive harm.



Gilbarco Veeder-Root encourages the recycling of our products. Some products contain electronics, batteries, or other materials that may require special management practices depending on your location. Please refer to your local, state, or country regulations for these requirements.

In an Emergency

Inform Emergency Personnel

Compile the following information and inform emergency personnel:

- Location of accident (for example, address, front/back of building, and so on)
- Nature of accident (for example, possible heart attack, run over by car, burns, and so on)
- Age of victim (for example, baby, teenager, middle-age, elderly)
- Whether or not victim has received first aid (for example, stopped bleeding by pressure, and so on)
- Whether or not a victim has vomited (for example, if swallowed or inhaled something, and so on)

WARNING



Gasoline/DEF ingested may cause unconsciousness and burns to internal organs. Do not induce vomiting. Keep airway open. Oxygen may be needed at scene. Seek medical advice immediately.

WARNING

DEF generates ammonia gas at higher temperatures. When opening enclosed panels, allow the unit to air out to avoid breathing vapors. If respiratory difficulties develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention.

WARNING



Gasoline inhaled may cause unconsciousness and burns to lips, mouth and lungs. Keep airway open. Seek medical advice immediately.

WARNING



Gasoline/DEF spilled in eyes may cause burns to eye tissue. Irrigate eyes with water for approximately 15 minutes. Seek medical advice immediately.

WARNING



Gasoline/DEF spilled on skin may cause burns. Wash area thoroughly with clear water. Seek medical advice immediately.

WARNING

DEF is mildly corrosive. Avoid contact with eyes, skin, and clothing. Ensure that eyewash stations and safety showers are close to the work location. Seek medical advice/recommended treatment if DEF spills into eyes.

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

Lockout/Tagout

Lockout/Tagout covers servicing and maintenance of machines and equipment in which the unexpected energization or start-up of the machine(s) or equipment or release of stored energy could cause injury to employees or personnel. Lockout/Tagout applies to all mechanical, hydraulic, chemical, or other energy, but does not cover electrical hazards. Subpart S of 29 CFR Part 1910 - Electrical Hazards, 29 CFR Part 1910.333 contains specific Lockout/Tagout provision for electrical hazards.

SECTION 3 - REMOVING COMPONENTS

Before You Begin

CAUTION



A properly grounded Electrostatic Discharge (ESD) wrist strap must be worn while servicing any electronic devices or components. Failure to use electrostatic precautions may damage electronic components and void warranty.

3

To prepare the site and unit for the installation:

- 1 Perform an inventory of the parts list provided. Ensure that there is no damage to the parts and that all the parts are accounted for based on the BOM shipped with the kit. Ensure that you carry the recommended spare parts to the installation site.
- 2 Read all the safety information found in [“Important Safety Information”](#) on [page 3](#). Perform a Job Safety Analysis (JSA) before beginning the installation.
- 3 Inform the manager.
- 4 Barricade the unit to be worked on.
- 5 Remove power to the unit at the breaker panel. Follow OSHA lockout/tagout procedures.
- 6 Isolate two-wire to the unit.



WARNING

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

WARNING

In the event of inclement weather, including snow, ice, or flooding that makes driving conditions dangerous, please avoid servicing units. Always use available door stops to secure upper doors against unwanted/unexpected movement, especially during high winds. If necessary, reschedule service to avoid damage to the equipment. Weather may change unexpectedly; be aware of local weather conditions. During service, if conditions develop making service unsafe, close the unit(s) and proceed to a safe location.

Note: There is no configuration required in the CRIND to enable the contactless reader. The contactless reader should be tested in the Selfcheck menu option in the green screen. If required, configure the POS to enable the contactless reader. Verify if the network requires any changes to enable the contactless reader. If a contactless card is available, run a transaction test.

SECTION 3 - REMOVING COMPONENTS

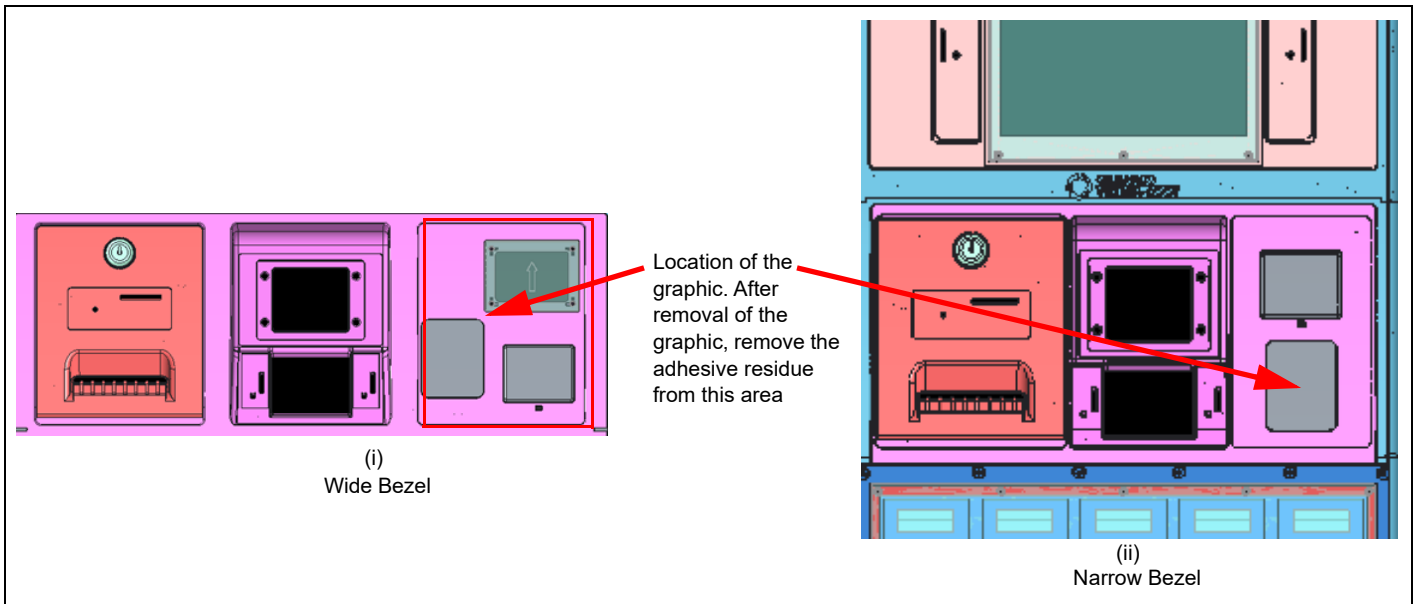
Encore 900

Graphic Decal

3

Remove existing graphic decal and scrape the adhesive residue, if any.

Figure 1: Removing the Existing Graphic Decal and Adhesive Residue

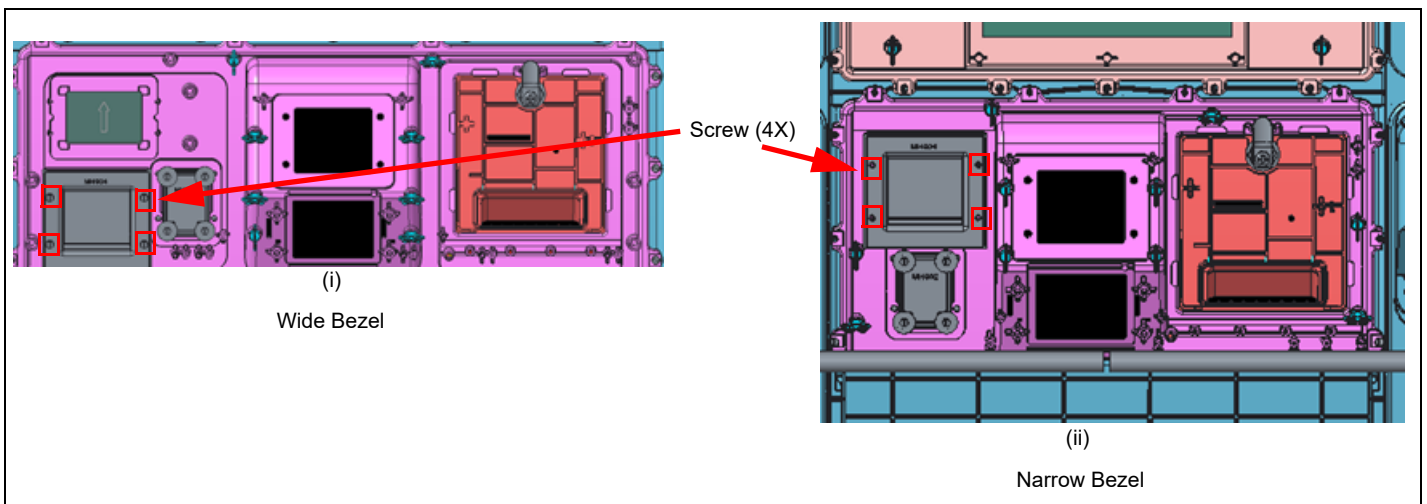


Contactless Antenna Plug

Remove the four screws securing the GCM Contactless Antenna Plug (M14904) and then remove the plug.

Note: Retain the four screws for reinstallation.

Figure 2: Removing Contactless Antenna Plug



SECTION 3 - REMOVING COMPONENTS

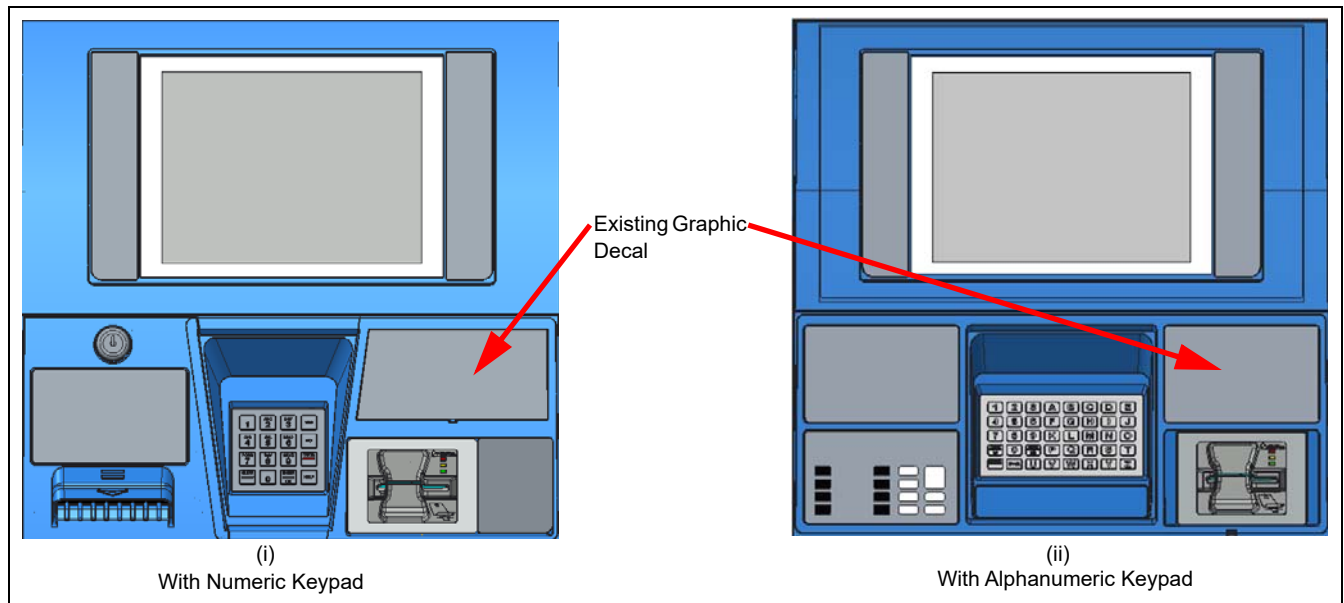
Encore 700 S

Graphic Decal

To remove the graphic decal:

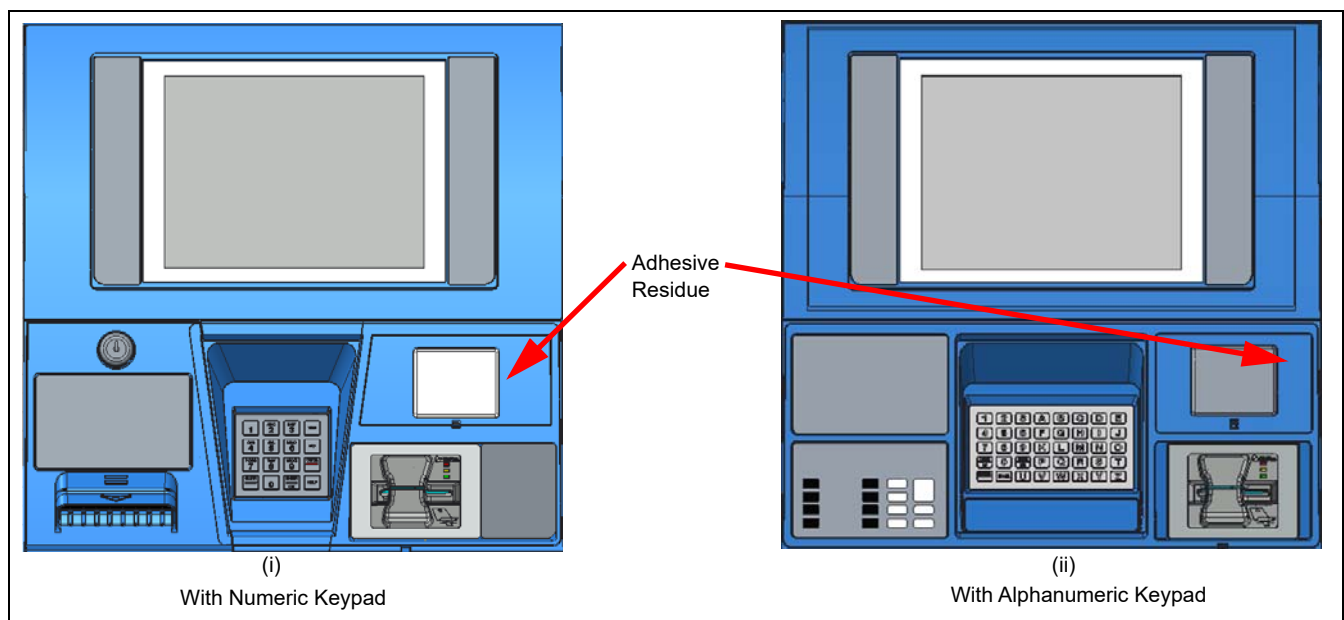
- 1 Remove existing graphic decal.

Figure 3: Removing Existing Graphic Decal



- 2 Remove any adhesive residue from the graphics.

Figure 4: Removing Adhesive Residue



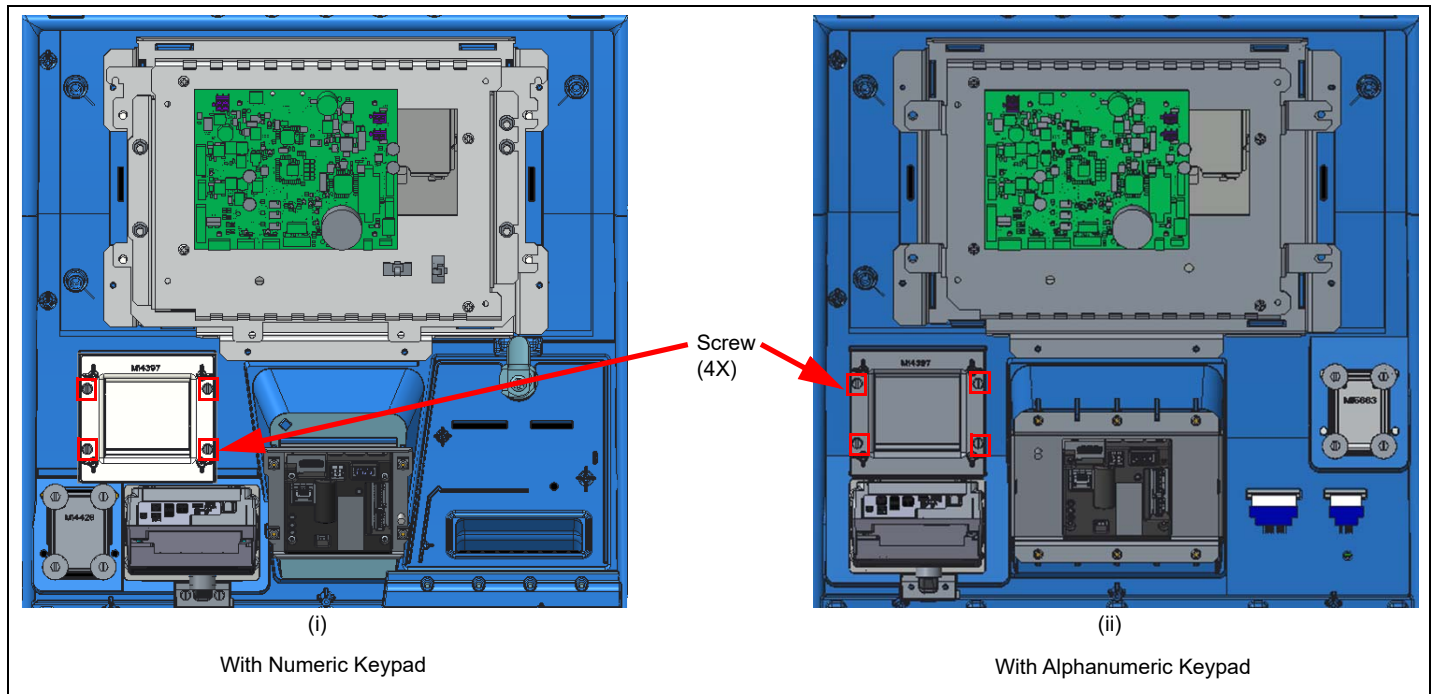
SECTION 3 - REMOVING COMPONENTS

Contactless Antenna Plug

Remove the four screws securing the Contactless Antenna Plug (M14397), gasket, and then remove the plug.

Note: Retain the four screws for reinstallation.

Figure 5: Removing Contactless Antenna Plug



SECTION 3 - REMOVING COMPONENTS

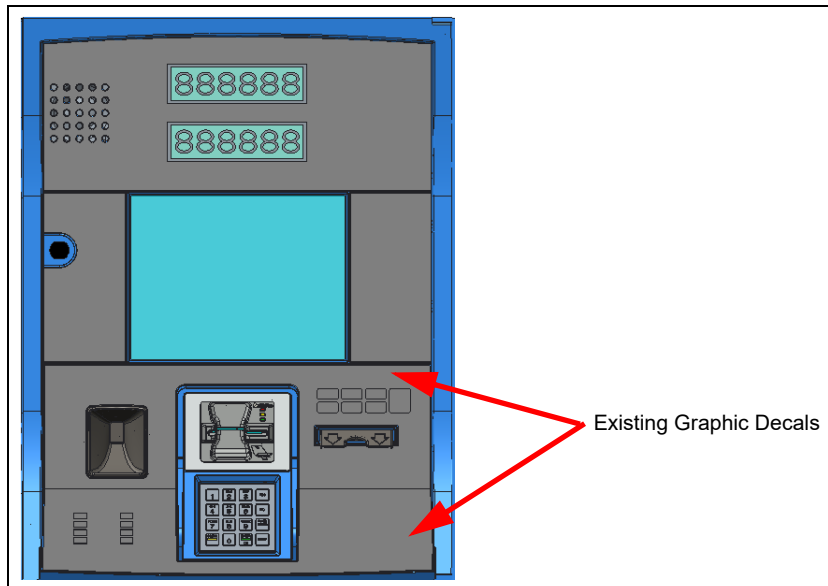
Encore 300/500

Graphic Decals

To remove the graphic decals:

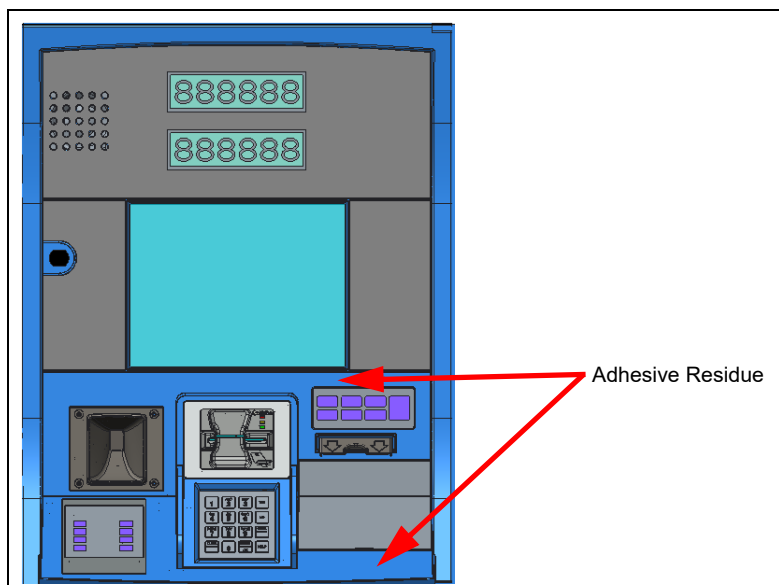
- 1 Remove existing graphic decals.

Figure 6: Removing Existing Graphic Decals



- 2 Remove any adhesive residue from the graphics.

Figure 7: Removing Adhesive Residue



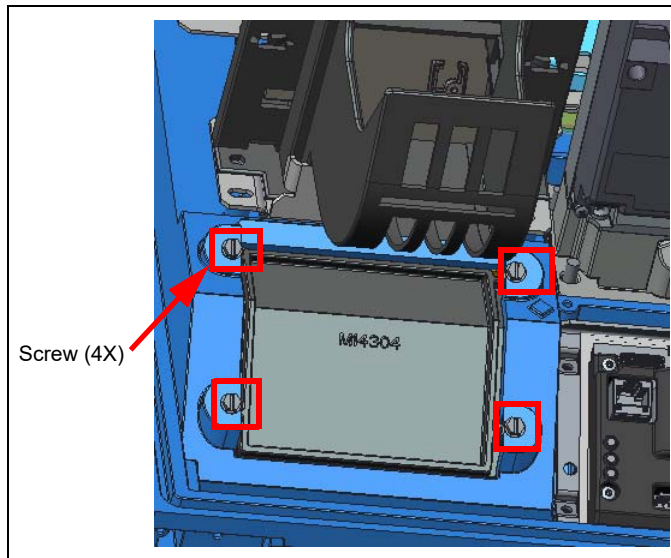
SECTION 3 - REMOVING COMPONENTS

Contactless Antenna Plug

To remove the contactless antenna plug:

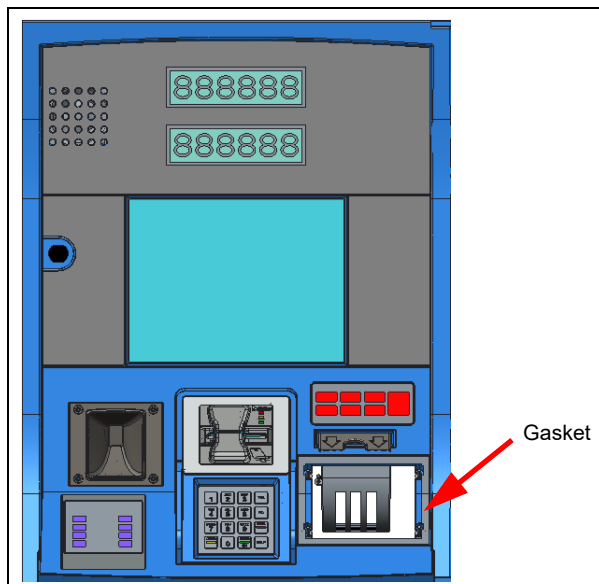
- 1 Remove the Contactless Antenna Plug (M14304).
Note: Retain the four screws for reinstallation.

Figure 8: Removing Contactless Antenna Plug



- 2 Remove the gasket.

Figure 9: Removing Gasket



SECTION 3 - REMOVING COMPONENTS

The Advantage Series

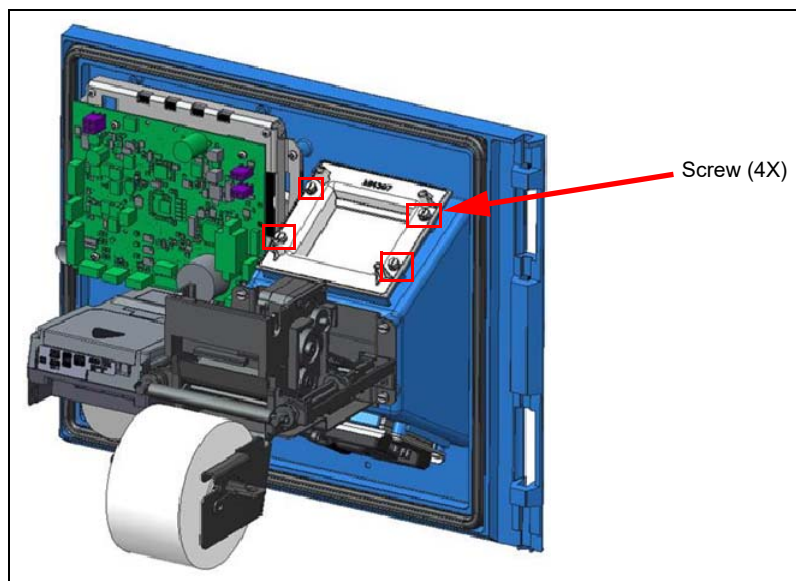
Contactless Antenna Plug

Remove the four screws securing the Contactless Antenna Plug (M14397), gasket, and then remove the plug.

Note: Retain the four screws for reinstallation.

3

Figure 10: Removing Contactless Antenna Plug



SECTION 3 - REMOVING COMPONENTS

Wayne Vista

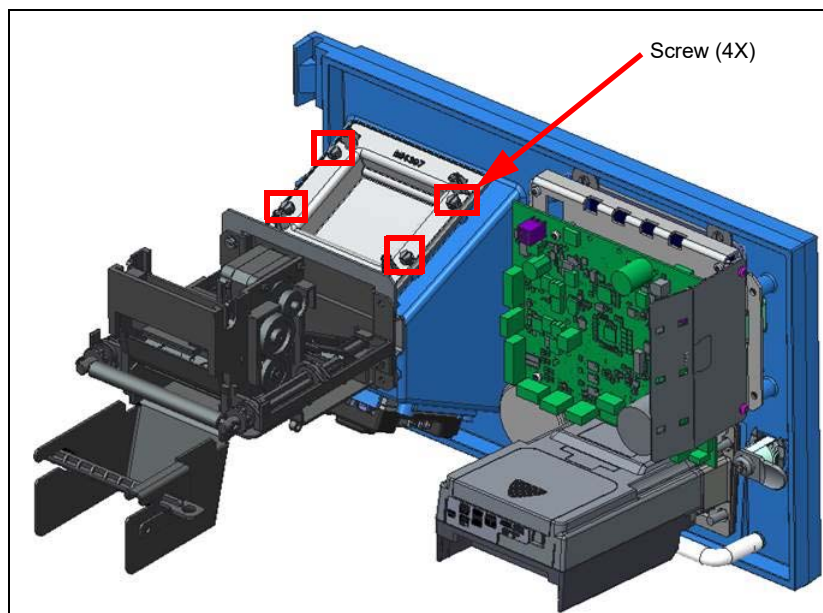
Contactless Antenna Plug

3

Remove the four screws securing the contactless antenna plug, gasket, and then remove the plug.

Note: Retain the four screws for reinstallation.

Figure 11: Removing Contactless Antenna Plug



SECTION 4 - INSTALLATION

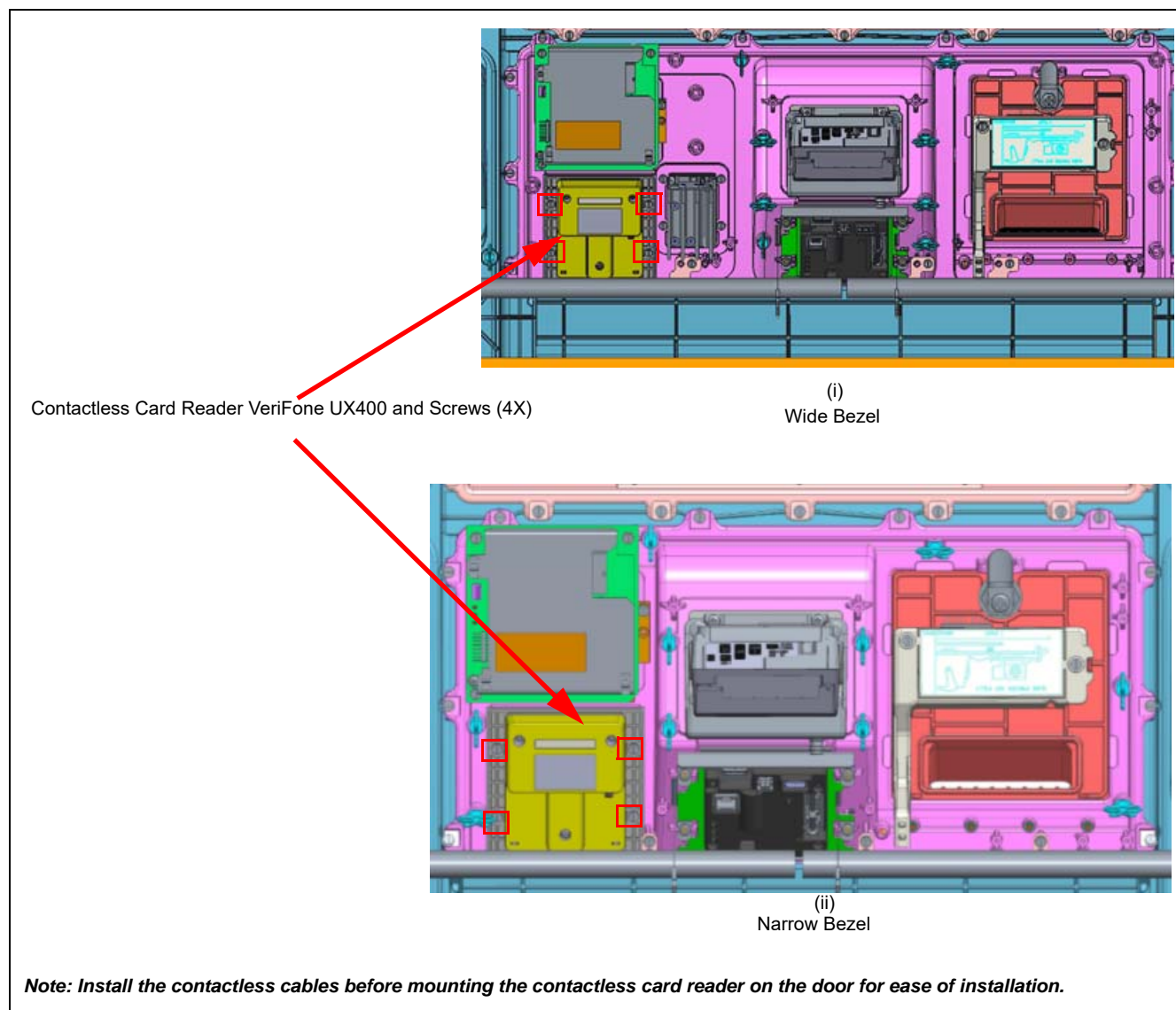
Encore 900

Contactless Card Reader VeriFone UX400

Install the Contactless Card Reader VeriFone UX400 (M14331A001), using the four Q11677-26 Screws.

Figure 1: Installing Contactless Card Reader VeriFone UX400

4



SECTION 4 - INSTALLATION

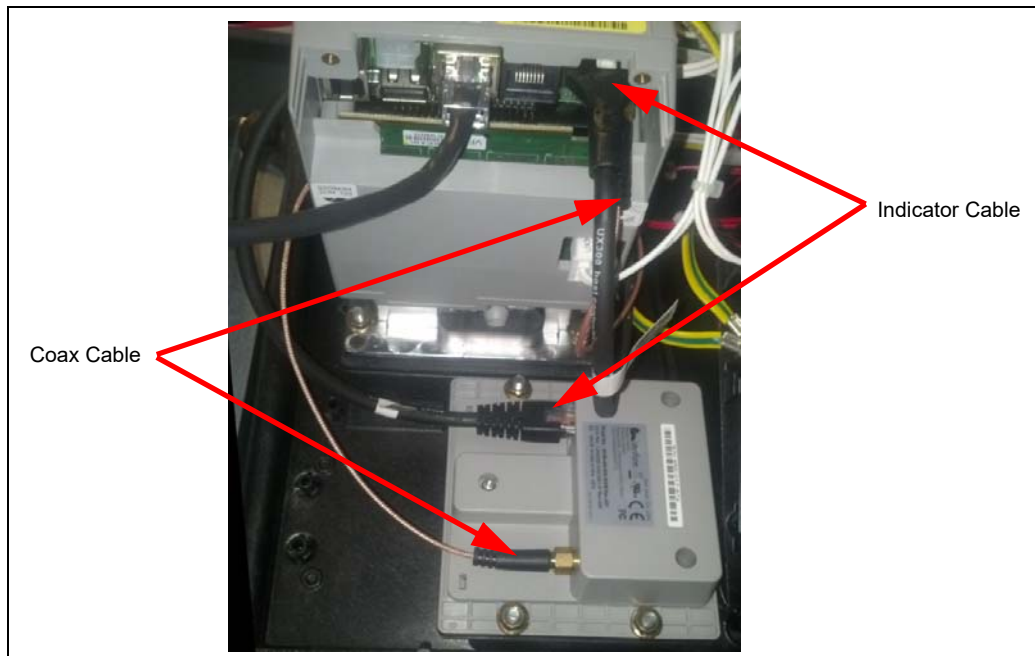
Indicator Cable and Coax Cable

Notes: 1) Installation of indicator cable and coax cable is applicable to all types of units.

2) Ensure that the two cables going to the card reader can be within 2 inches of the antenna. If other cables are routed near the antenna within 2 inches, they will carry the contactless signal and create side-to-side performance issues.

Install the coax cable and then install the indicator cable between the UX400 contactless antenna and card reader.

Figure 2: Installing Indicator Cable and Coax Cable

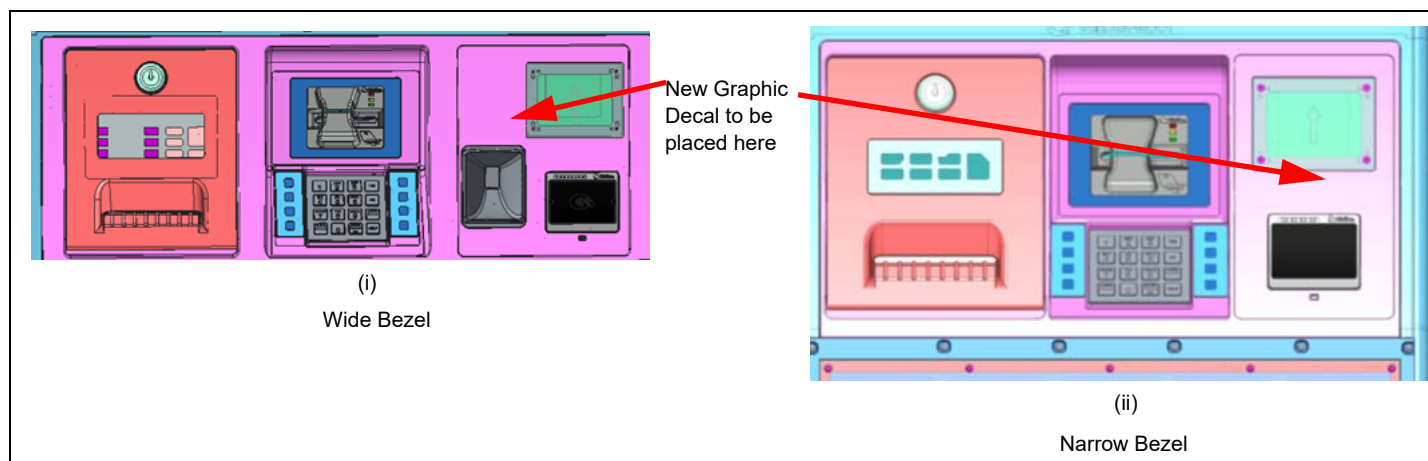


SECTION 4 - INSTALLATION

Graphic Decal

Install the new graphic decal.

Figure 3: Installing New Graphic Decal



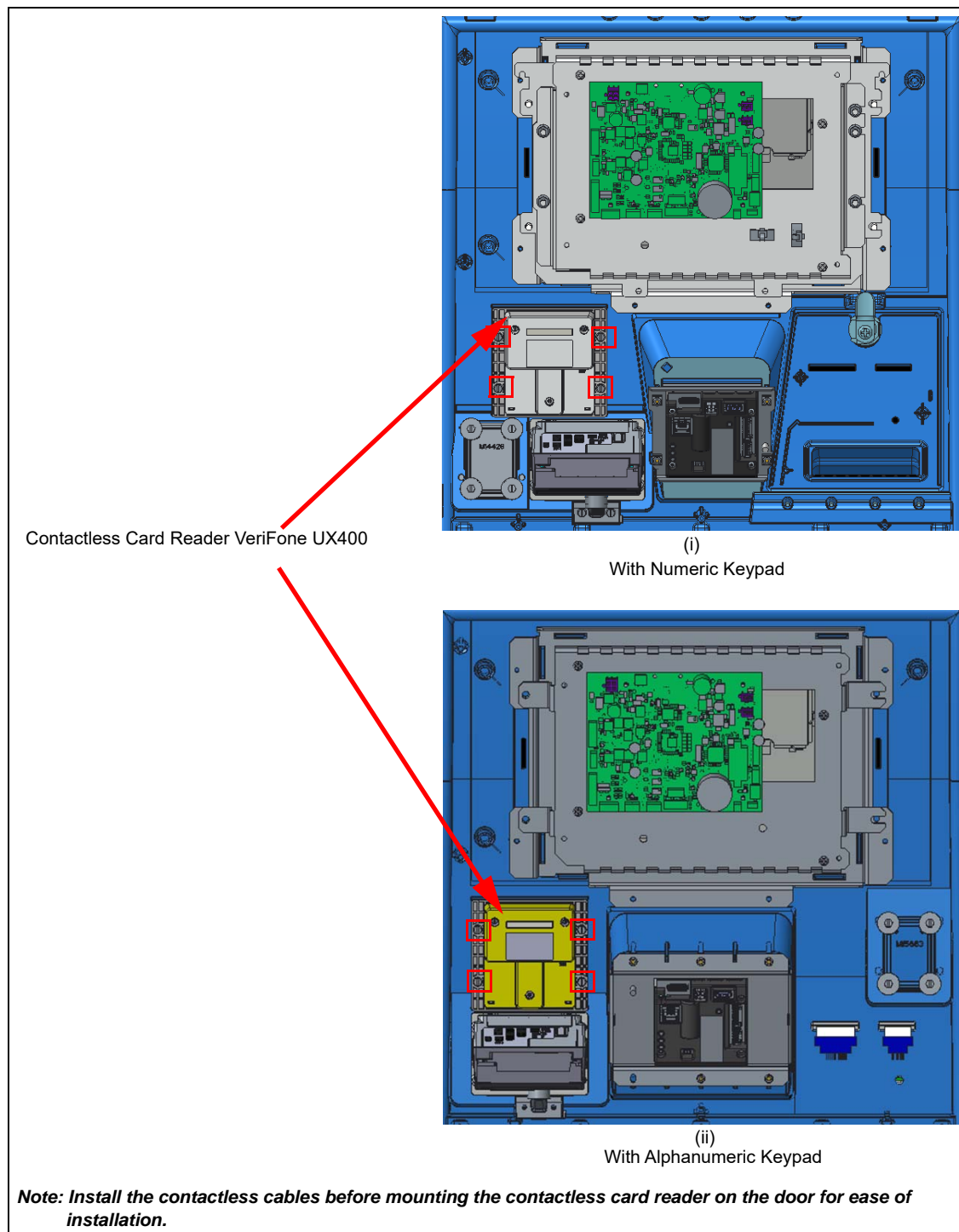
SECTION 4 - INSTALLATION

Encore 700 S

Contactless Card Reader VeriFone UX400

Install the Contactless Card Reader VeriFone UX400 (M14331A001), using the four Q11677-26 Screws.

Figure 4: Installing Contactless Card Reader VeriFone UX400



SECTION 4 - INSTALLATION

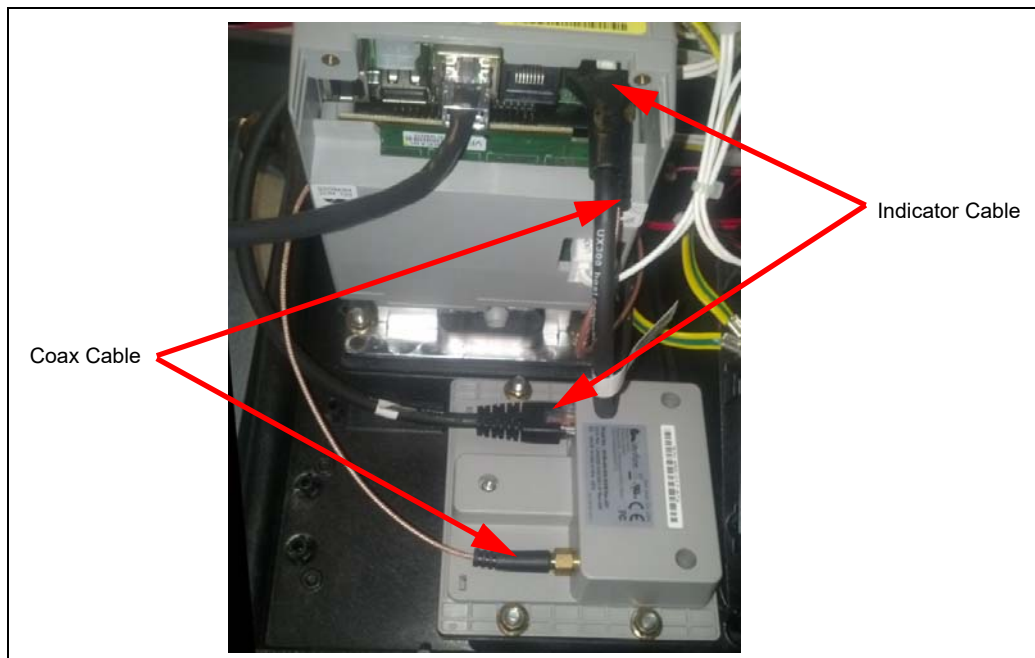
Indicator Cable and Coax Cable

- Notes: 1) Installation of indicator cable and coax cable is applicable to all types of units.
- 2) Ensure that the two cables going to the card reader can be within 2 inches of the antenna. If other cables are routed near the antenna within 2 inches, they will carry the contactless signal and create side-to-side performance issues.

Install the coax cable and then install the indicator cable between the UX400 contactless antenna and card reader.

4

Figure 5: Installing Indicator Cable and Coax Cable

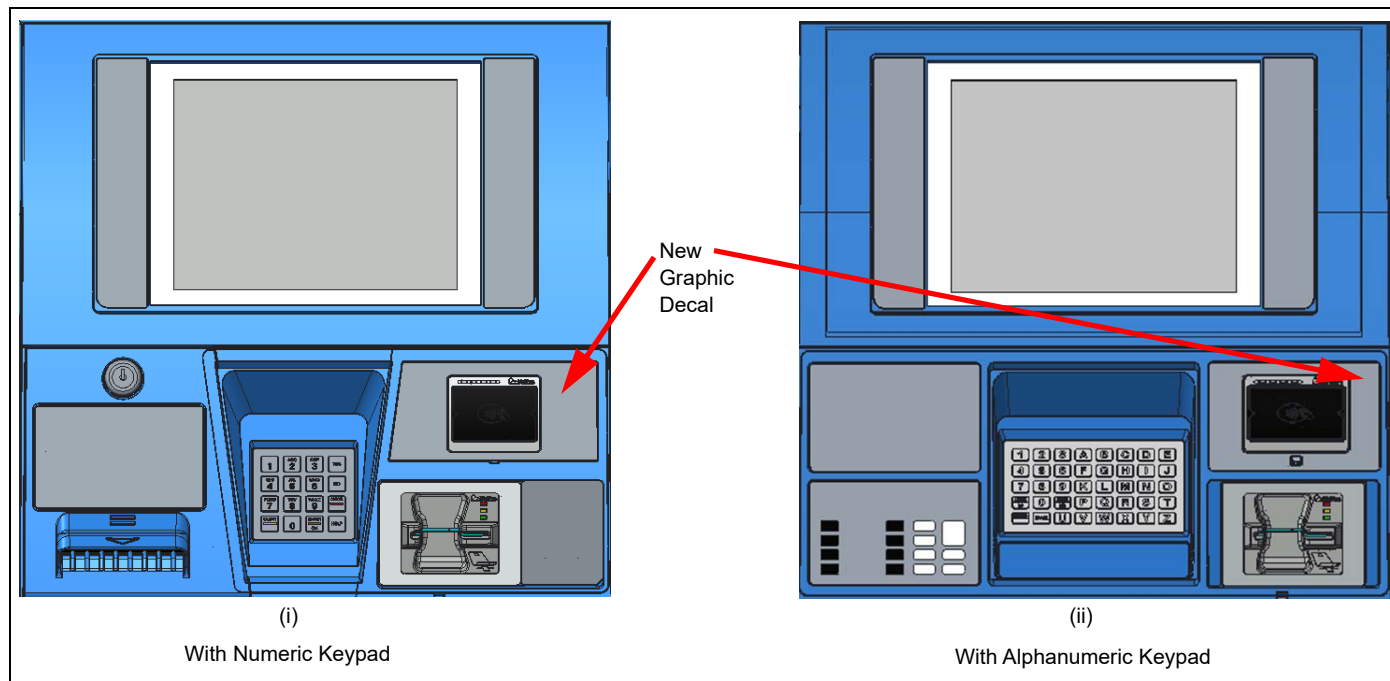


SECTION 4 - INSTALLATION

Graphic Decal

Install the new graphic decal.

Figure 6: Installing New Graphic Decal



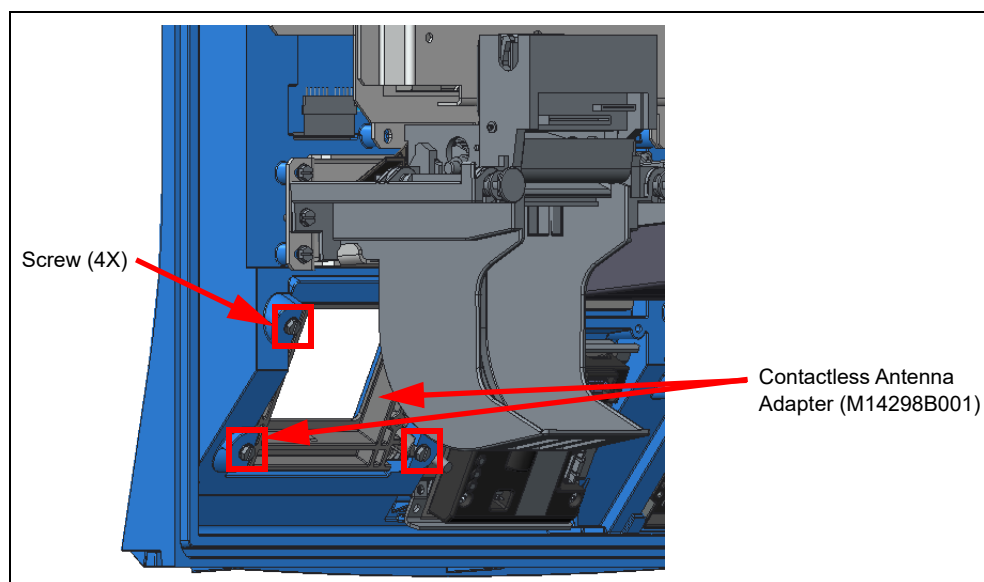
SECTION 4 - INSTALLATION

Encore 300/500

Contactless Antenna Adapter

Install the Contactless Antenna Adapter (M14298B001), using the four screws.

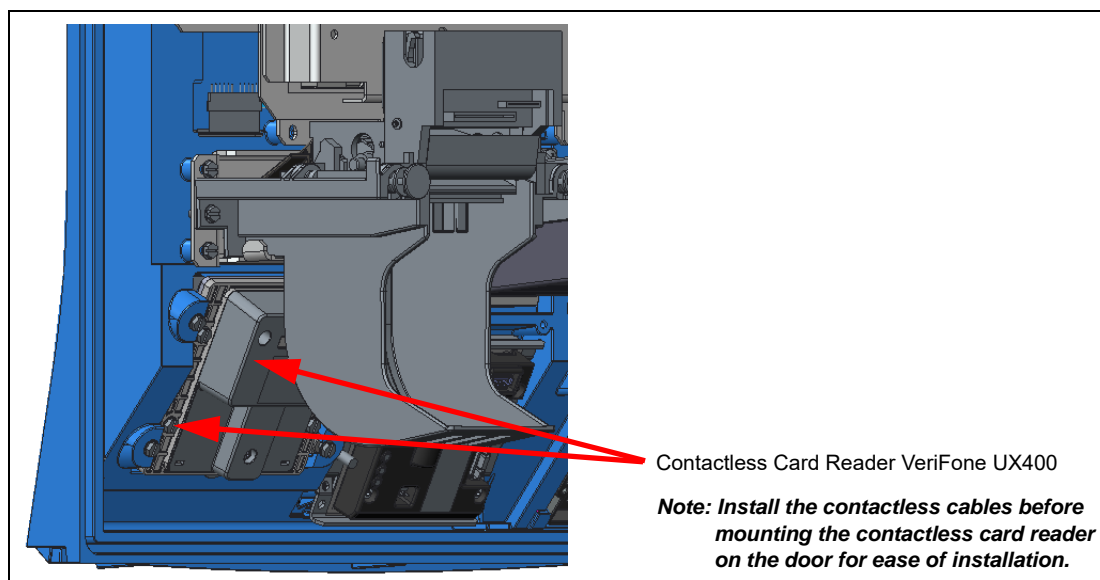
Figure 7: Installing Contactless Antenna Adapter



Contactless Card Reader VeriFone UX400

Install the Contactless Card Reader VeriFone UX400 (M14331A001), using the four Q11677-26 Screws.

Figure 8: Installing Contactless Card Reader VeriFone UX400

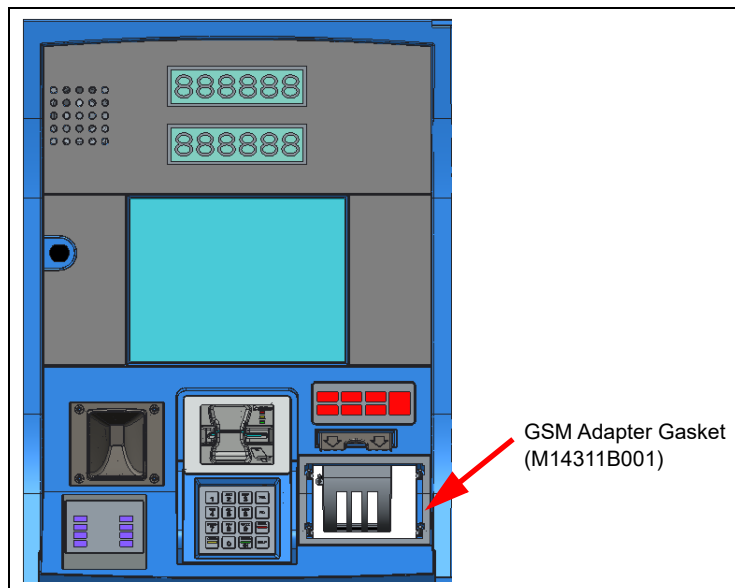


SECTION 4 - INSTALLATION

Contactless Antenna Plug

Install the GSM Adapter Gasket (M14311B001).

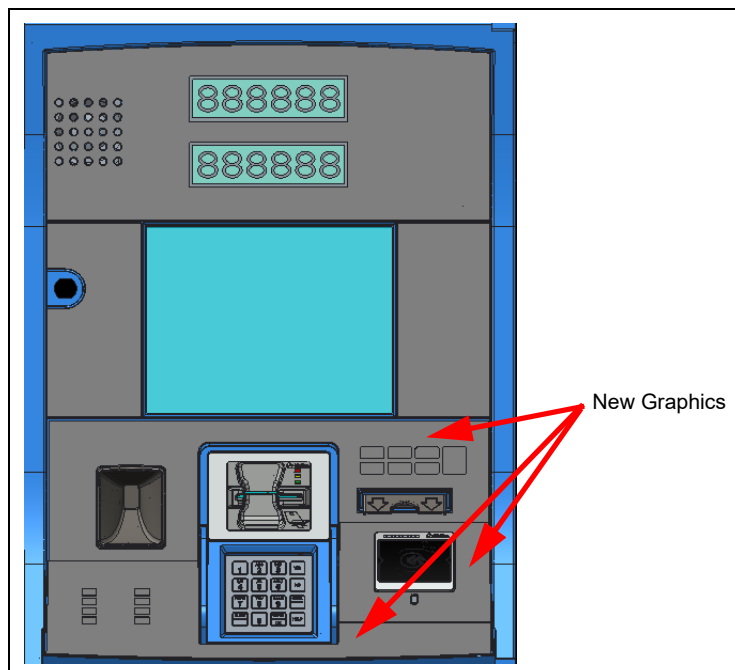
Figure 9: Installing GSM Adapter Gasket



Graphic Decal

Install the new graphics.

Figure 10: Installing New Graphics



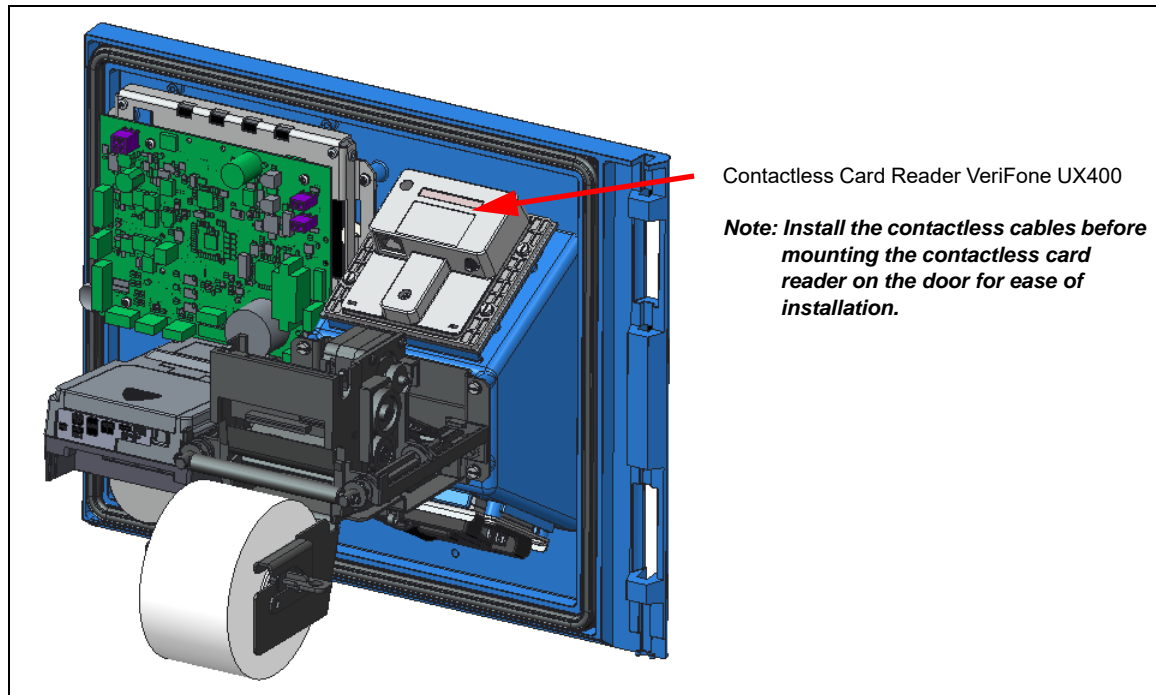
SECTION 4 - INSTALLATION

The Advantage Series

Contactless Card Reader VeriFone UX400

Install the Contactless Card Reader VeriFone UX400 (M14331A001), using the four Q11677-26 Screws.

Figure 11: Installing Contactless Card Reader VeriFone UX400



Note: Installing a graphic decal is not required.

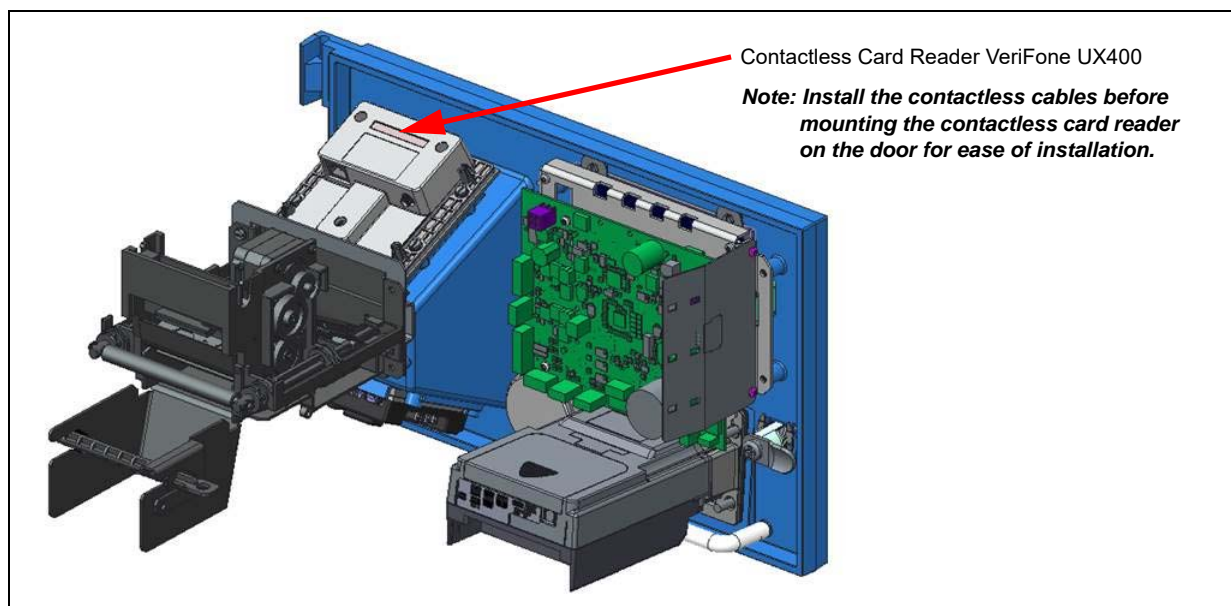
SECTION 4 - INSTALLATION

Wayne Vista

Contactless Card Reader VeriFone UX400

Install the Contactless Card Reader VeriFone UX400 (M14331A001), using the four Q11677-26 Screws.

Figure 12: Installing Contactless Card Reader VeriFone UX400



Note: Installing a graphic decal is not required.

SECTION 4 - INSTALLATION

Completing Installation

There is no configuration required in the CRIND to enable the contactless reader. The contactless reader should be tested in the Selfcheck menu option in the green screen. If required, configure the POS to enable the contactless reader. Verify if the network requires any changes to enable the contactless reader. If a contactless card is available, run a transaction test.

SECTION 4 - INSTALLATION

4

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SECTION 5 - REFERENCE INFORMATION

Related Documents

Document No.	Title
MDE-5220	FlexPay IV CRIND Retrofit Kit Installation Instructions for Encore S E-CIM™
MDE-5221	FlexPay IV CRIND Start-up Manual
MDE-5222	FlexPay IV CRIND Retrofit Kit Installation Instructions for Encore 300/500
MDE-5223	FlexPay IV CRIND Service/Troubleshooting Guide
MDE-5224	FlexPay IV CRIND Retrofit Kit Installation Instructions for The Advantage Series
MDE-5226	FlexPay IV CRIND Retrofit Kit Installation Instructions for Encore 500 S

Abbreviations and Acronyms

Term	Description
ASC	Authorized Service Contractor
BOM	Bill of Materials
CRIND	Card Reader In Dispenser
E-CIM	Enhanced Customer Interface Module
ESD	Electrostatic Discharge
GSM	Gilbarco Security Module
JSA	Job Safety Analysis
OSHA	Occupational Safety and Health Administration

The Advantage® Series, CRIND®, Encore®, and Gilbarco® are registered trademarks of Gilbarco Inc. E-CIM™ and FlexPay™ are trademarks of Gilbarco Inc.

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MDE-5285D FlexPay™ IV UX400 Upgrade Kit