

Introduction

Purpose

This document provides instructions to install the FlexPay™ EMV® CRIND® Retrofit Kit (EPK EMV ADV) in The Advantage® Series units for Petronas® sites.

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Required Tools

Following tools are required for the installation of FlexPay EMV CRIND Retrofit Kit:

- 1/4” Nut Driver
- 9/32” Nut Driver
- 5/8” Nut Driver
- Phillips® Head Screwdriver
- Pneumatic Hand Drill with 1/4” Drill Bit

Parts List - EPK EMV ADV

Part Number	Description	Used On	Quantity
M09967AXXX	Door, EMV Left Option	All Advantage Models	2
T20416-XX	Door, Right Access with N/F Main Display and Antenna	All Advantage Narrow Frame Units with Contactless	2
PKM10278A001	PTGP, HIP Electronics Advantage EMV Kit	All Advantage Models	1
PKM10278A002	PTGP, EMV Door Assembly Advantage Kit	All Advantage Models	2
PKM10278A008	PTGP, Power Supply Electronics Advantage EMV Kit	Petronas Only	2
PKM10352A003	PTGP, Display, Generic	All Generic Display Customers	2
PKM10352A004	PTGP, Display, Global Pay Network	All Global Pay Customers	2
PKM11269AXXX	EMV Display	Specific Banks	2
PKM10352A012	PTGP, Display, Mounting Kit	No Display	2
PKM10278A003	PTGP, Printer Upgrade	All Advantage Models with USB Printer Upgrade	2
PKM10278A005	PTGP, Printer Converter	All Advantage Models without USB Printer Upgrade (Bulloch POS Only)	2
PKM10353A003	PTGP, Contactless Option	Units with Contactless	2

Part Number	Description	Used On	Quantity
PKM10278A004	PTGP, Main Display N/F Contactless	All Advantage Narrow Frame Units with Contactless	2
PKM10353A005	PTGP, TRIND® EMV	All Advantage Units with Existing TRIND	2
PKM10352A006	PTGP, TRIND EMV	All Advantage Units with Existing TRIND	1
M07333K001	Heater, Cabinet	All Advantage Units Requiring Heater	1
T50190GXXX	Right Door Graphics	All Advantage Models	2
T50192GXXX	Left Door Main Graphics	All Advantage Models	2
T50193GXXX	Left Door Auxiliary Keypad	All Advantage Models	2
Various	Nozzle Boot Left Door Graphics	All Advantage Models	2

Note: Parts are supplied as ordered.

Related Documents

Document Number	Title	GOLD Library
MDE-3804	Encore®/Eclipse® Start-Up/Service Manual	<ul style="list-style-type: none"> Encore and Eclipse Service Manual
MDE-4771	FlexPay CRIND Start-up/Service Manual	<ul style="list-style-type: none"> Encore and Eclipse FlexPay EMV

Abbreviations and Acronyms

Term	Description
CIM™	Customer Interface Module
CRIND	Card Reader IN Dispenser
CSC	Contactless SMART Card
EMV	Europay MasterCard® Visa®
OSHA	Occupational Safety and Hazard Association
PCA	Printed Circuit Assembly
PCB	Printed Circuit Board
POS	Point Of Sale
SIP	Serial Interface PCB
SPOT	Secure PIN Pad for Outdoor Terminals
TRIND	Transmitter/Receiver IN Dispenser

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 a Gilbarco Authorized Service Contractor or call the Gilbarco Support Center at 1-800-800-7498. 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 Hazard Association (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.

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.

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

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.

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.

Installing the FlexPay EMV CRIND Retrofit Kit in The Advantage Series Units

Installing the FlexPay EMV CRIND Door in The Advantage Series Units

Before you begin, read and understand all safety information found in MDE-3804 Encore/Eclipse Start-Up/Service Manual - Safety Instructions.

Inform the Manager that the power will be removed and remove all the power supplied to the unit at the breaker located in the building. Block off the unit from customers.

Before installing the new FlexPay EMV CRIND door, ensure that the FlexPay EMV CRIND Retrofit Kit is pre-staged. To install the new FlexPay EMV CRIND door in the The Advantage Series units, proceed as follows:

- 1 Remove power to The Advantage Series unit. Follow OSHA Lock-out/Tag-out procedures.

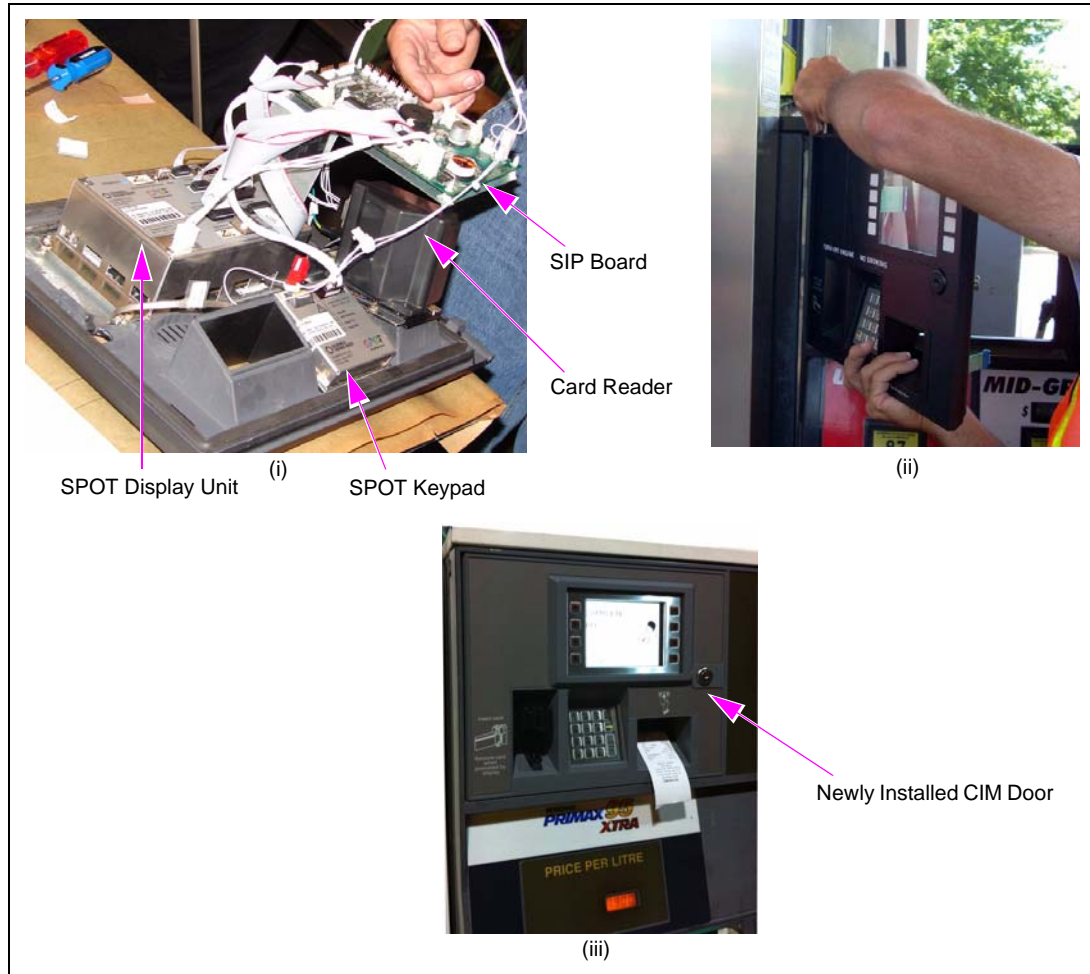
WARNING

Failure to turn off the unit during the 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.

- 2 Open the left option door and disconnect cables from the keypads, CRIND Display, Card Reader, and Contactless SMART Card (CSC) Antenna (if present).
- 3 Open the main door and pull the hinge pin up through the hole in the Customer Interface Module (CIM) door. Remove the CIM door.

- 4 Place the new left option door in the opening. Reinsert the hinge pin to secure the new left option door.

Figure 1: Installing the CIM Door



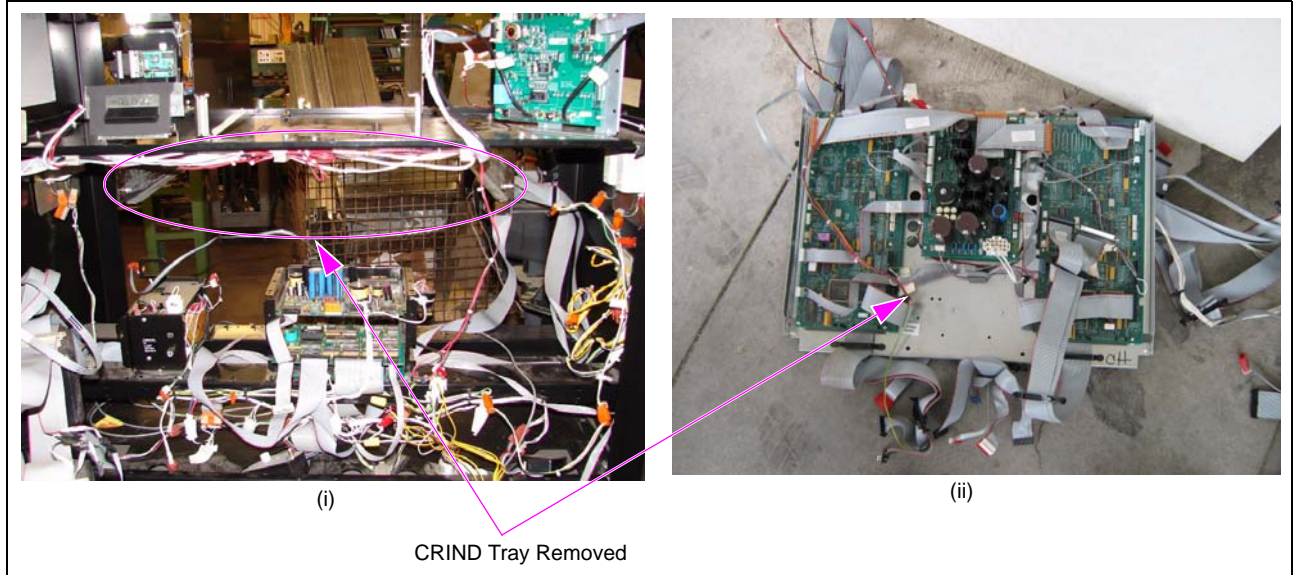
Removing the Existing CRIND Electronics from the Cabinet

FlexPay EMV CRIND Retrofit Kit with a New Printer

If your kit is provided with a new printer, proceed as follows:

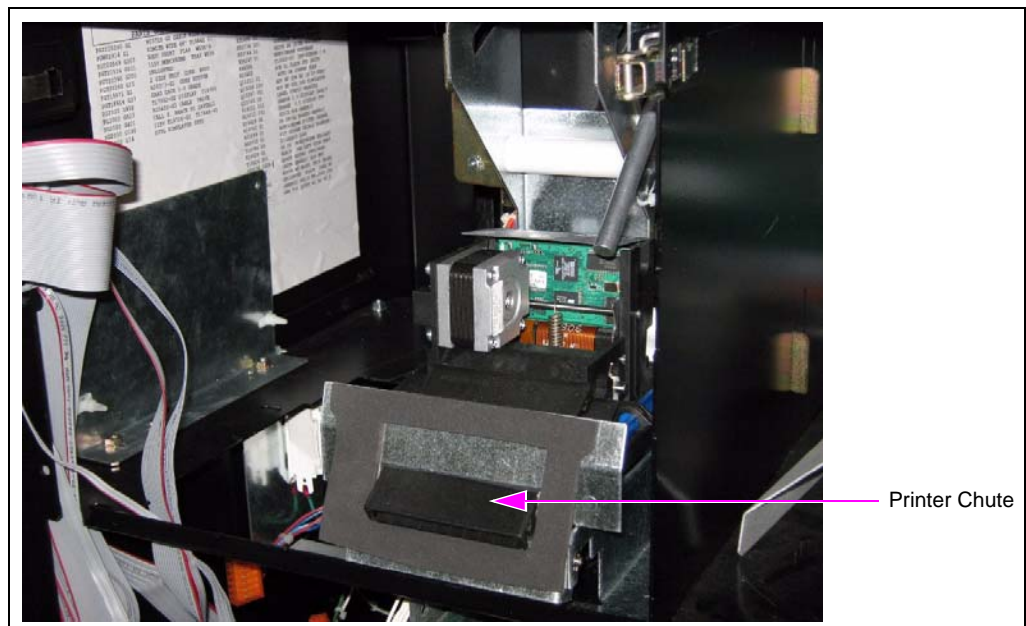
- 1 Remove the entire CRIND tray, including all cables connected to the CRIND Regulator Board and CRIND Logic Boards (see [Figure 2](#) on [page 7](#)).

Figure 2: Removing the CRIND Tray



- 2 Remove the existing printer and printer cables by removing the nuts beneath the printer.
- 3 Install the new printer using the M00414B001 nuts and M00415B003 screws provided. Align the printer base against the front lip of the printer tray. Before tightening the nuts, ensure that the Printer Chute aligns with the opening on the new left option door. Else, ensure that you use the correct holes to align the printer, since each model of The Advantage Series may have a different hole pattern on the printer tray.

Figure 3: Installing the New Printer



- 4 Route the USB portion of the M06745A001 Cable provided to the USB Printer Port on the EMV Display mounted on the left option door.

Connect Cables to FlexPay

To connect cables to FlexPay, proceed as follows:

- 1 Connect the Ethernet Cable to Ethernet Port on the SPOT Display.
Note: An Ethernet Splitter Cable may be present from the lightening barrier if there are two SPOT displays to support.
- 2 Connect the primary circuit from the FlexPay power supply to the power supply socket in the pump head (see [Figure 4](#)).

Figure 4: Primary Power Supply Connector



- 3 Load the supplied paper roll into the printer.

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