GILBARCO VEEDER-ROOT

Introduction

Purpose

This manual provides instructions for installing the FlexPay™ Encrypting PIN Pad (EPP)/Americans with Disabilities Act (ADA) Card Reader Kit (EPK ADA RF) on The Advantage® Series dispensers. The kit includes the drill template for the Main Access Door and instructions for partial disassembly/reassembly to adjust for nozzle right units.

The FlexPay EPP/ADA Card Reader Kit (EPK ADA RF) may be installed on the new Advantage Series units, as well as on units installed after October 1, 1998. Installation of this kit brings customer-operated controls within 40" of the dispenser base. Current ADA guidelines indicate that controls must not be more than 54" from the ground, even when installed on an island.

Due to the differences in, and local interpretations of the state and local regulations and building codes, other factors may be involved in determining ADA compliance. Check the local regulations and codes, if ADA compliance is an issue.

The FlexPay EPP/ADA Card Reader is compatible with Monochrome or InfoScreen® CRIND® devices. All upper ADA Card Reader function keys are mapped to lower keypad keys. The functionality of the ADA key is determined by the Point of Sale (POS) application software. Some third-party POS systems may require a POS application software upgrade for this key to function. For additional information, consult your third-party POS vendor.

> ⚠ **WARNING**
> Electric tools CANNOT be used on the island.

Table of Contents

Required Tools

The following tools are required for installing the FlexPay EPP/ADA Card Reader Kit:
- Allen® Wrench Set
- Approved Gasoline Container
- Air-powered and Variable Speed Drill
- 1/4" and 1-3/8" Drill Bits
- Metal File
- Nut Driver Set
- Standard and Phillips® Screwdrivers
- Sealant
- 13/32" Nut Driver or Socket
- 3/8" Nut Driver or Socket

Parts List - (EPK ADA RF)

This section lists the parts provided in the FlexPay EPP/ADA Card Reader Kit.

Card Reader Assembly

Description	Part Number	Quantity	
		1-sided Kit	2-sided Kit
Card Reader, ADA	M09822A001	1	2

Keypad Assembly

Description	Part Number	Quantity M09764A00X Right or Left (w/out Stop)		Quantity M09764A00X Right or Left (w/ Stop)	
		1-sided Kit	2-sided Kit	1-sided Kit	2-sided Kit
Housing, FlexPay EPP ADA	M09761A001	1	2	1	2
Keypad FlexPay EPP Auxiliary	M08418B001	1	2	-	-
	M08418B003	-	-	1	2
Nut Hex Keps™ with Ext Lock Washer 8	Q12068-03	4	8	4	8
Plate, ADA Auxiliary	M09763B001	1	2	1	2
Plate, FlexPay EPP ADA Mounting	M09762A001	1	2	1	2
Screw Sems Pan Head Phillips M4 X 10	Q12845-58	8	16	8	16
Keypad FlexPay EPP PCI X-M08228K003	M08228B003	1	2	1	2
Plug Cap Plastic Short	Q10554-26	2	4	2	4
Cable, FlexPay EPP +5 V/Data	M08414A003	1	2	1	2
Cable, FlexPay EPP Auxiliary Keypad	M08409A003	1	2	-	-
	M08409A004	-	-	1	2
Cable, Ground	M04431A001	1	2	1	2
	M04431A002	1	2	-	-

Door Assembly

Description	Part Number	Quantity	
		1-sided Kit	2-sided Kit
Door, FlexPay EPP	M12113AXXX	1	2
Plate, FlexPay EPP ADA	M09870B001	1	2
Gasket	M08084B001	1	8
Screw Sel Tp Hex Head 6-20X	Q11677-24	4	8
Keypad Monochrome/InfoScreen	M08481B001	1	2

Parts Shipped Loose

Description	Part Number	Quantity	
		1-sided Kit	2-sided Kit
Nut, Metric Serrated	M00414B002	4	4
Screw Tc Flt Phl 6-19X	Q12014-15	6	2
Paint Conversion FlexPay EPP	PK0999-01	1	2
Template ADA Auxiliary Card	R20634-01	1	2
Nut Hex Keps with ext Lock Washer 6	Q12068-02	2	2
Bracket Mounting 5.7 Display	M08451A001	1	2
Washer Lock Ext Th #10 X 0.022	K50866	1	2
Washer 10 SAE-N (0.28 X 0.50 X 0.0)	K65235-22	4	8
Nut Hex Self Locking 10-32	Q10218-05	4	8
Cable, FlexPay EPP +5 V/Data	M08414A003	1	2
Cable, ADA Auxiliary ESD	R20644-G1	1	2
Cable, ADA Auxiliary Interface	R20642-G1	1	2
Clamp, 2" Ribbon Adhesive	Q13459-01	1	1
Screw Sel Tp Hex Head 6-20X	Q11677-24	5	5
Shield Rain	M02206A006	1	1
Bracket Card Reader	M08452B001	1	1
Gasket Left Option Door (Printer Gasket)	R20317-01	1	1
Software CRIND BIOS (Gilbarco POS)	K93744-06	1	1
Gasket Vert Card Reader	N23505-02	1	1
Software CRIND BIOS (Third-party POS)	K93744-20	1	1
Plastic Standoffs	Q10651-01	4	8
FlexPay EPP Start-up and Service Manual	MDE-4784	1	1
FlexPay EPP/ADA Card Reader Kit (EPK ADA RF) Installation Manual for The Advantage Series	MDE-4825	1	1

Narrow Frame Adapter

Description	Part Number	Quantity	
		1-sided Kit	2-sided Kit
Plate, Keypad Filler	M10099B001	1	2

Monochrome Upgrade Kit

Description	Part Number	Quantity 1-sided Kit	2-sided Kit
Assembly, OPT Door Cable	W03690-G4	-	1
	W03690-G3	1	1
PCA, Monochrome CPU	T19501-G2	1	1
Cable Assembly, 24 VAC	R20778-G1	1	2
EOL Cable Assembly Reg/Logic	R17995-G7	1	1
Clamp, 2" Ribbon Adhesive	Q13459-01	10	10
Connt Jumper 0.100 CTR	Q11011-01	2	2
Tie Cable	Q10178-09	10	10
Cable, DC Power	N23727-G1	1	1
Display, Monochrome	M02636A001	1	2
Software Monochrome V15.1.70	K94247-01	1	1
Assembly Printer Mounting Bracket	T18172-G3	1	2

FlexPay EPP Speaker Option

Description	Part Number	Quantity 1-sided Kit	2-sided Kit
Speaker (MISCO®)	M08567B001	1	2
Gasket, Speaker	M08566B001	1	2
Screw Sel Tp Hex Head 6-20X	Q11677-24	4	8

ADA Gasket Kit (M10276K001)

Description	Part Number	Quantity 1-sided Kit	2-sided Kit
Gasket, ADA	M09841B001	1	2
	M09839B001	1	2
	M09840B001	1	2
Mounting Bracket Gasket	R20625-01	2	4

Related Documents

Document Number	Title	GOLD Library
MDE-2410	Modular Electronics SW Installation	Advantage & Legacy® Models
MDE-2530	Pump and Dispenser Installation Manual	Footprint and Elevation
MDE-2531	Pump and Dispenser Start-Up and Service Manual	• Pmp & Disp Start-Up & Service Manual • Service Manual
MDE-2562	CRIND Service Manual	Service Manual
MDE-3366	SmartPad™ Keypad Retrofit Kit	CRIND and TRIND®
MDE-3425	CRIND Retrofit Kit and CRIND Kit Selection Guide	Kit Selection
MDE-3637	CRIND Diagnostic (Z180) Quick Reference	• CRIND and TRIND • Service Manual
MDE-4782	FlexPay EPP and SCR kit (EPK ADV RF) Installation Instructions for The Advantage Series	• FlexPay EPP & SCR • Advantage & Legacy Models
MDE-4784	FlexPay Encrypting PIN Pad Start-up and Service Manual	• FlexPay EPP & SCR • Encore® and Eclipse®
PT-1728	The Advantage Illustrated Parts Manual	Parts Manual
PT-1736	The Advantage/MPD®/CRIND Illus. Parts Manual	Parts Manual

Abbreviations and Acronyms

Term	Description
ADA	Americans with Disabilities Act
BIOS	Basic Input/Output System
CRIND	Card Reader IN Dispenser
EPP	Encrypting PIN Pad
MOC	Major Oil Company
POS	Point of Sale
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.

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.

Installation of the FlexPay EPP/ADA Card Reader Kit (EPK ADA RF)

To install the FlexPay EPP/ADA Card Reader Kit (EPK ADA RF), proceed as follows:

Before Beginning

Perform the following steps before installation:

1 Read all the instructions before proceeding with the installation procedure.

2 Follow all the safety precautions provided in "Important Safety Information" on page 6.

3 Turn off power to the unit, unit lights, and CRIND devices.
   • Use System Circuit Breakers.
   • Multiple disconnects may be required.
   • Isolate each pump at the Distribution Box.
   • For OSHA Lock-out/Tag-out procedures, refer to MDE-2531 Pump and Dispenser Start-up and Service Manual.

4 When a system battery is present, press **CLEAR** to deactivate the system battery. Then, press **ENTER** on the Manager Keypad.

Drilling Holes in the Main Access Door

The following table provides the mounting positions for the FlexPay EPP/ADA Card Reader Kit (EPK ADA RF).

Type of Unit	Position
Nozzle boot left	Left
Nozzle boot right	Right
Nozzle boot right and left	Customer preference

To drill holes in the Main Access Door, proceed as follows:

1 Verify if the unit is turned off.

2 Open the Main Access Door.

3 Remove any graphics from the area of the door where the FlexPay EPP/Card Reader Kit will be mounted. If the unit has a metal plate installed in the FlexPay EPP/Card Reader mounting position, remove the metal plate (see Figure 1).

Figure 1: Removing the Graphics

Graphics   (i)   (ii)   Graphics Removed
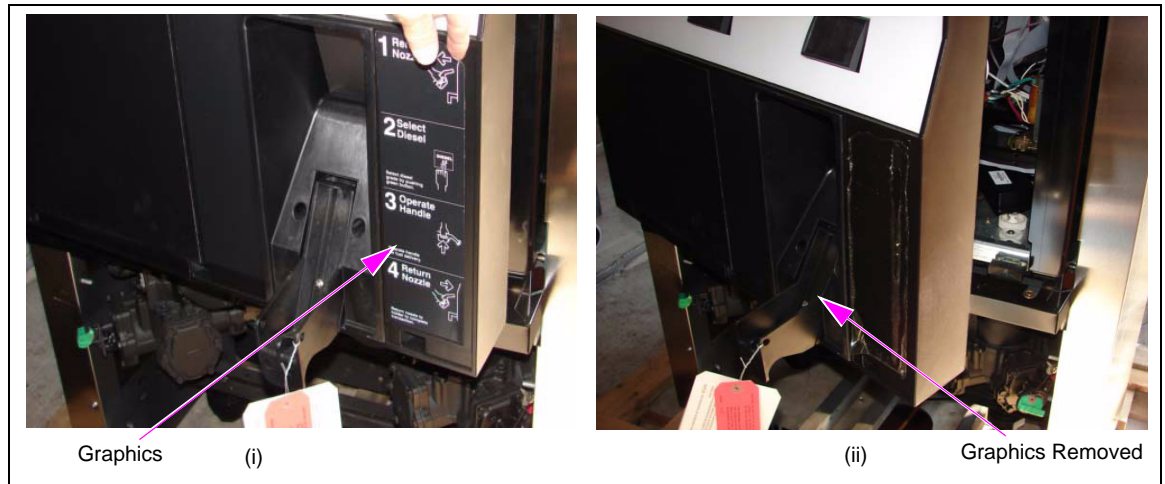
> **CAUTION**
>
> Installing the assembly without removing graphics or metal plate may result in loss of seal and will void the warranty.

4 Inspect inside the door to ensure that cables do not interfere with drilling.

Narrow Frame Advantage Series Units
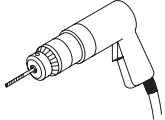
To install the FlexPay EPP/ADA Card Reader Kit in Narrow Frame Advantage Series units, proceed as follows:

1 Before drilling new holes, align the narrow frame adapter plate as shown in Figure 2 on page 10 with the gasket against the door. The plate must be aligned directly against the nozzle boot, to ensure proper alignment of the FlexPay EPP/ADA Card Reader Kit.

Also, note the orientation of the adapter with regard to the large hole. If you are installing the FlexPay EPP/ADA Card Reader Kit on the right nozzle boot as shown in Figure 2 on page 10, the large hole will be offset to the right when facing the door. If you are replacing an existing ADA Keypad model, the holes may or may not line up. The alignment of the holes will depend on the previous installation.

2 With the narrow frame adapter plate in place, drill the mounting holes using the adapter plate as a template.

⚠ **WARNING**

🚫 (Electric drill prohibited)

🔧 **Pneumatic Drill**

Electric tools CANNOT be used on the island. Use a Pneumatic Drill to drill the holes.

---

3 After drilling all the four mounting holes, install the FlexPay EPP/ADA Card Reader Kit with the adapter in place (for instructions, refer to "Installing the FlexPay EPP/Card Reader Kit" on page 12).

Figure 2: Narrow Frame Advantage Series Unit

Narrow Frame Adapter Plate

The large hole offset to the right when facing the door.
Note: The orientation will be reversed when the installation is performed on the Left Nozzle boot.
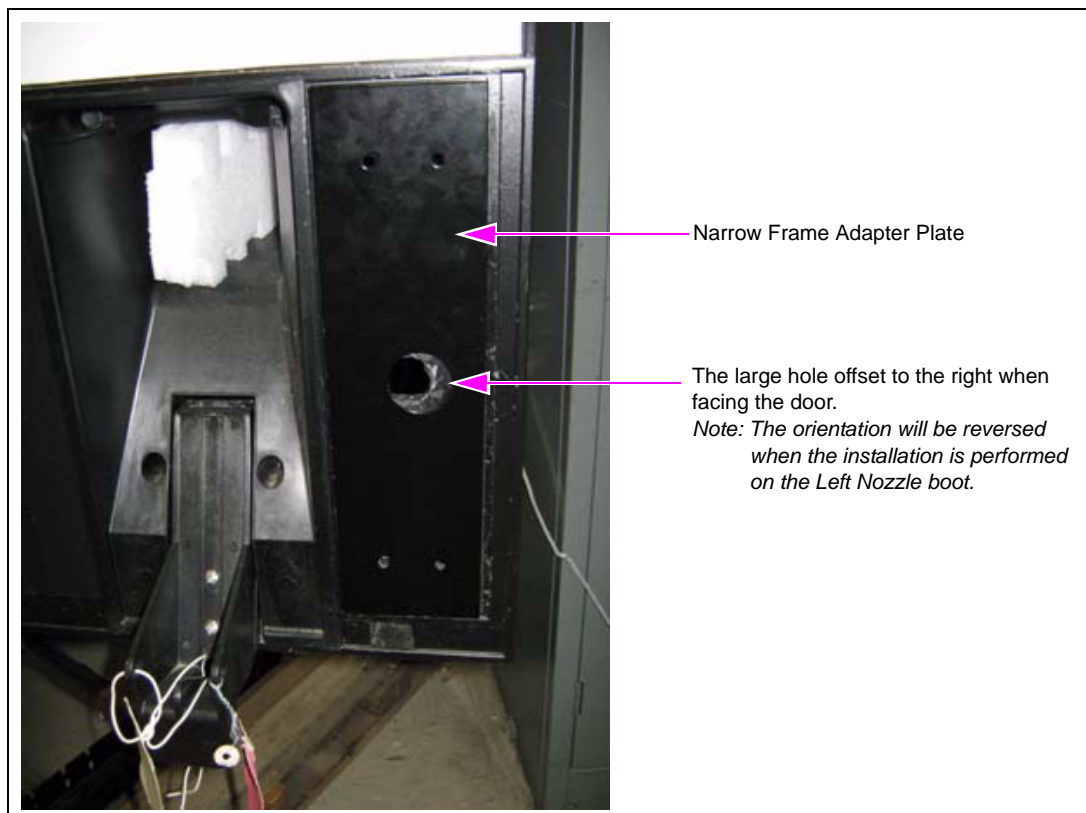
Wide Frame Advantage Series Units

To install the FlexPay EPP/ADA Card Reader Kit in Wide Frame Advantage Series units, proceed as follows:

1 Orient the drill template as shown in Figure 3, such that the holes are closer to the nozzle boot than to the edge of the door. Place the drill template within the indented surface and align the upper edge of the drill template with the top of the indented surface between the nozzle boot and the edge of the door. Use a tape to secure the template in place.

Figure 3: Drilling Holes in the Main Access Door

Drill Template   (i)   (ii)

Drill Templates

(iii)
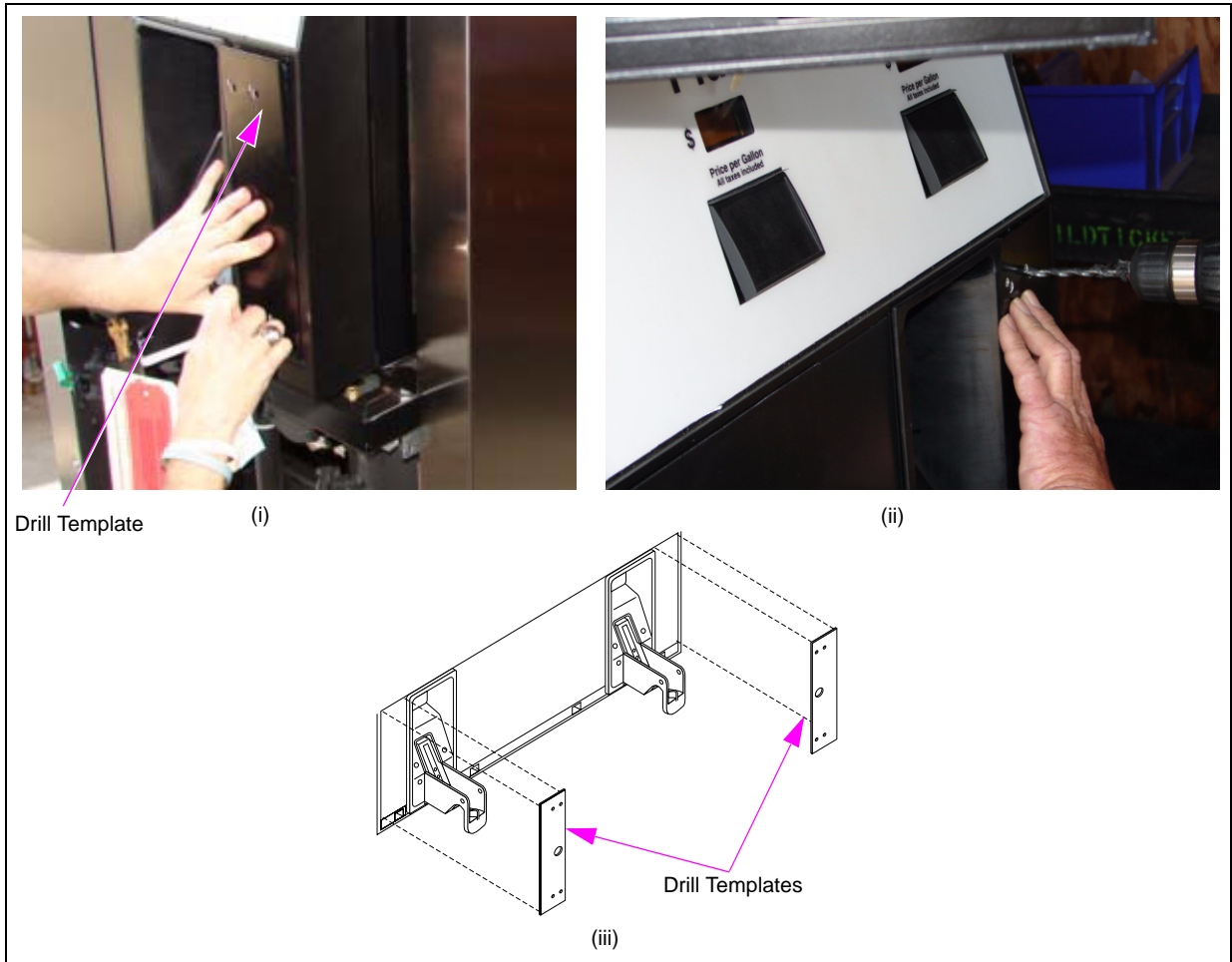
2 With the template in place, drill through the template and door.
Note: Make pilot holes using the template, before drilling holes of the required size (1/4").

⚠ **WARNING**

Pneumatic Drill

Electric tools CANNOT be used on the island. Use a Pneumatic Drill to drill the holes.

Installing the FlexPay EPP/Card Reader Kit

To install the FlexPay EPP/Card Reader Kit, proceed as follows:

Note: The barrier must always remain between the nozzle boot and the FlexPay EPP/Card Reader, and the Card Reader must be at top of the assembly, when installed.

1 Install the Card Reader Assembly on the door, feeding the Keypad Cables through the large drilled hole in the door (see Figure 4).
Note: Do not pinch the Keypad Cable. Only fold the cable when you feed it through the hole.

Figure 4: Installation of the Card Reader Kit

Keypad Cable   (i)   (ii)

Card Reader Kit

(iii)   Drilled Hole   (iv)
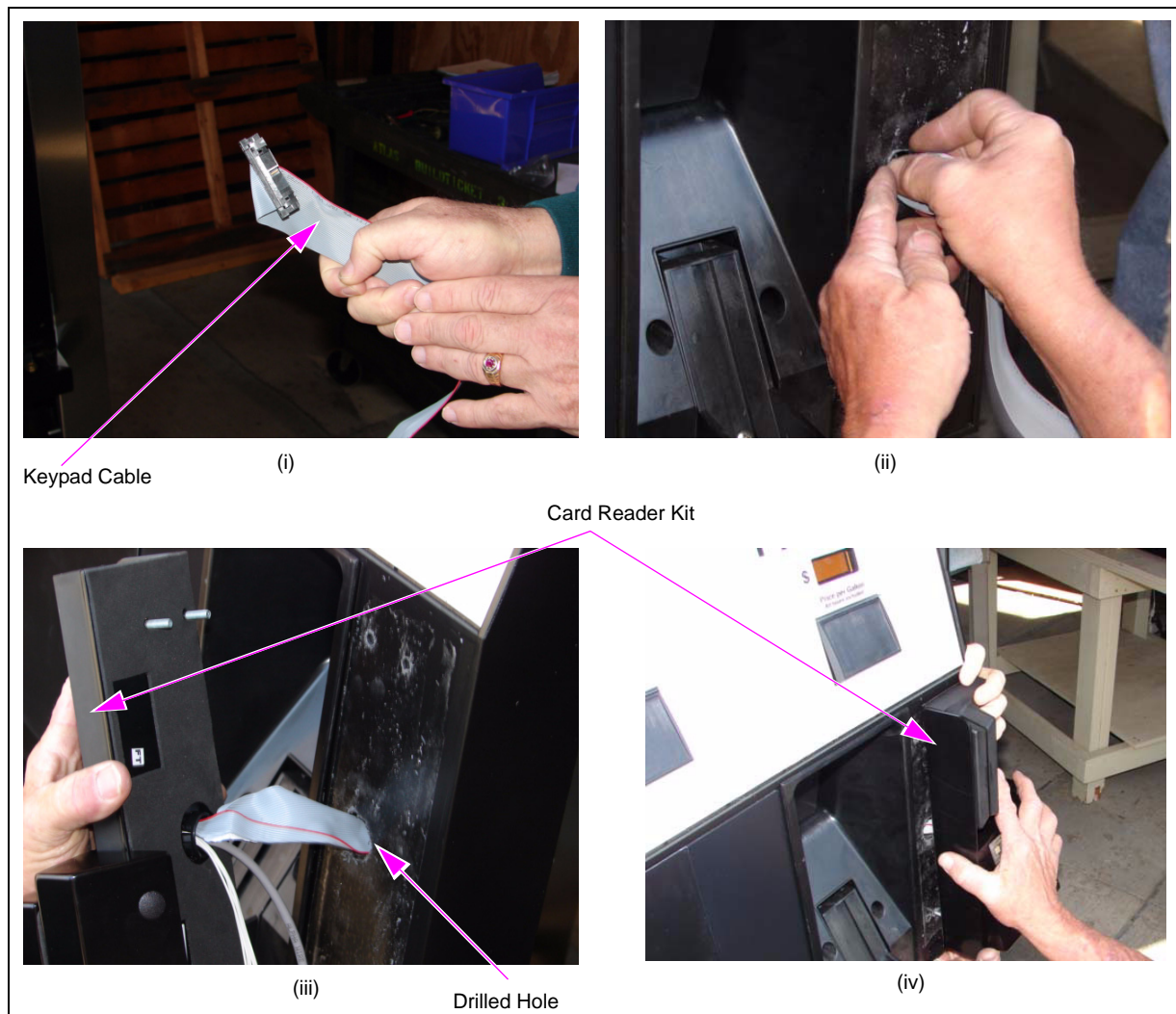
2 Install the washers and nuts on the bracket studs on the inside of the door and tighten the fasteners.

Figure 5: Installing the Washers and Nuts to the Bracket Studs

Washers and Nuts

(i)

(ii)

(iii)
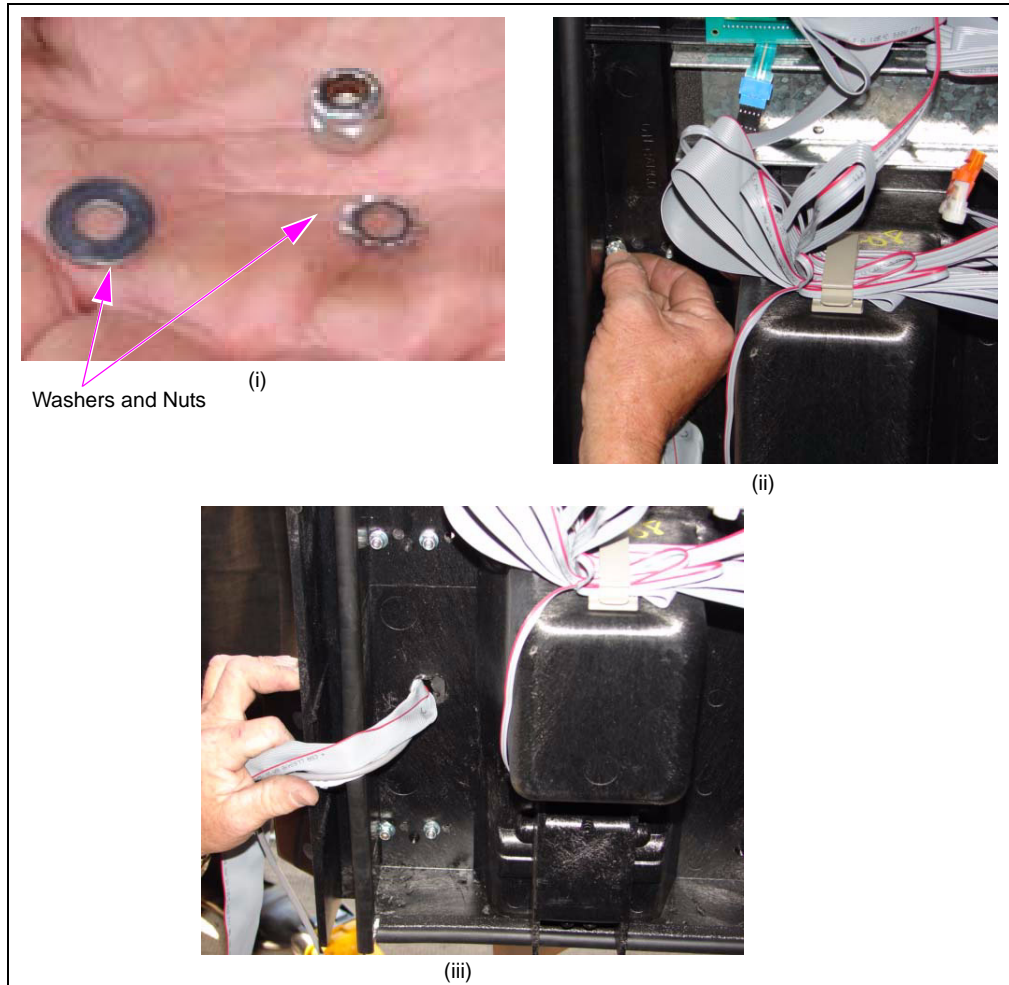
3 Connect the Ground Cable (see Figure 6).
Note: Ensure that you connect the Ground Cable inside the dispenser and not on the door.

Figure 6: Connecting the Ground Cable

(i)   (ii)

Ground Cable
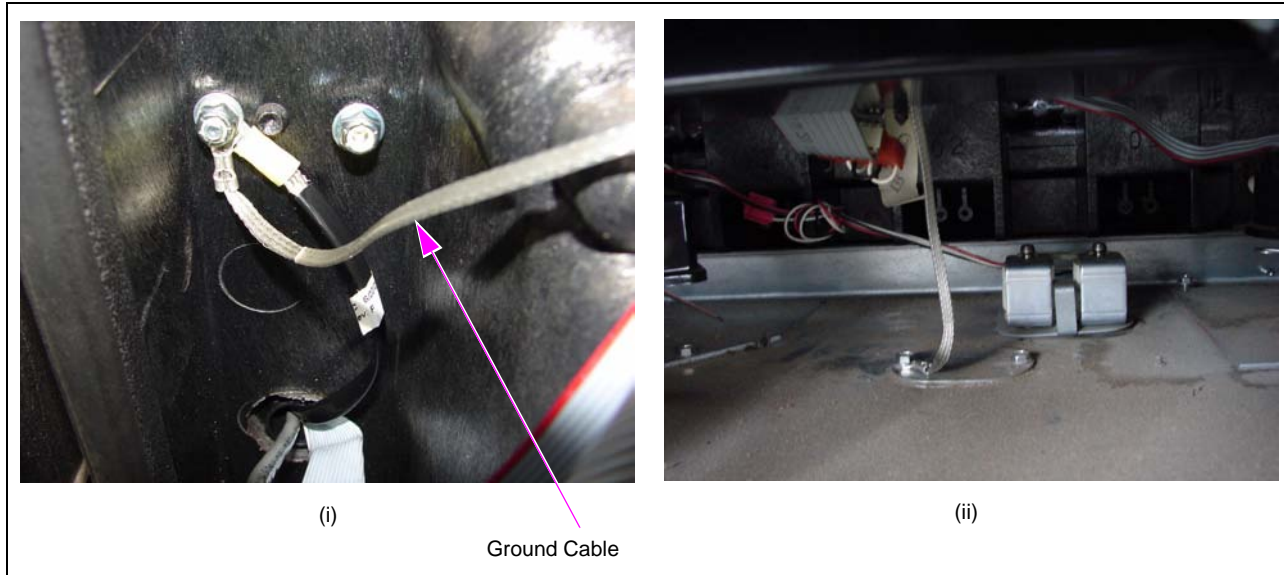
Connecting the FlexPay EPP Auxiliary Keypad Cable (M08409A004) to the Pump Stop Switch [for M09764A00X Right or Left (with Stop)]

Connect the black and red wires of the FlexPay EPP Auxiliary Keypad Cable [M08409A004 (originating from the FlexPay EPP Assembly)] to switch terminals on each side of the Stop Switch Base Assembly as shown in Figure 7 (ii).

Figure 7: Connecting the FlexPay EPP Auxiliary Keypad Cable (M08409A004)
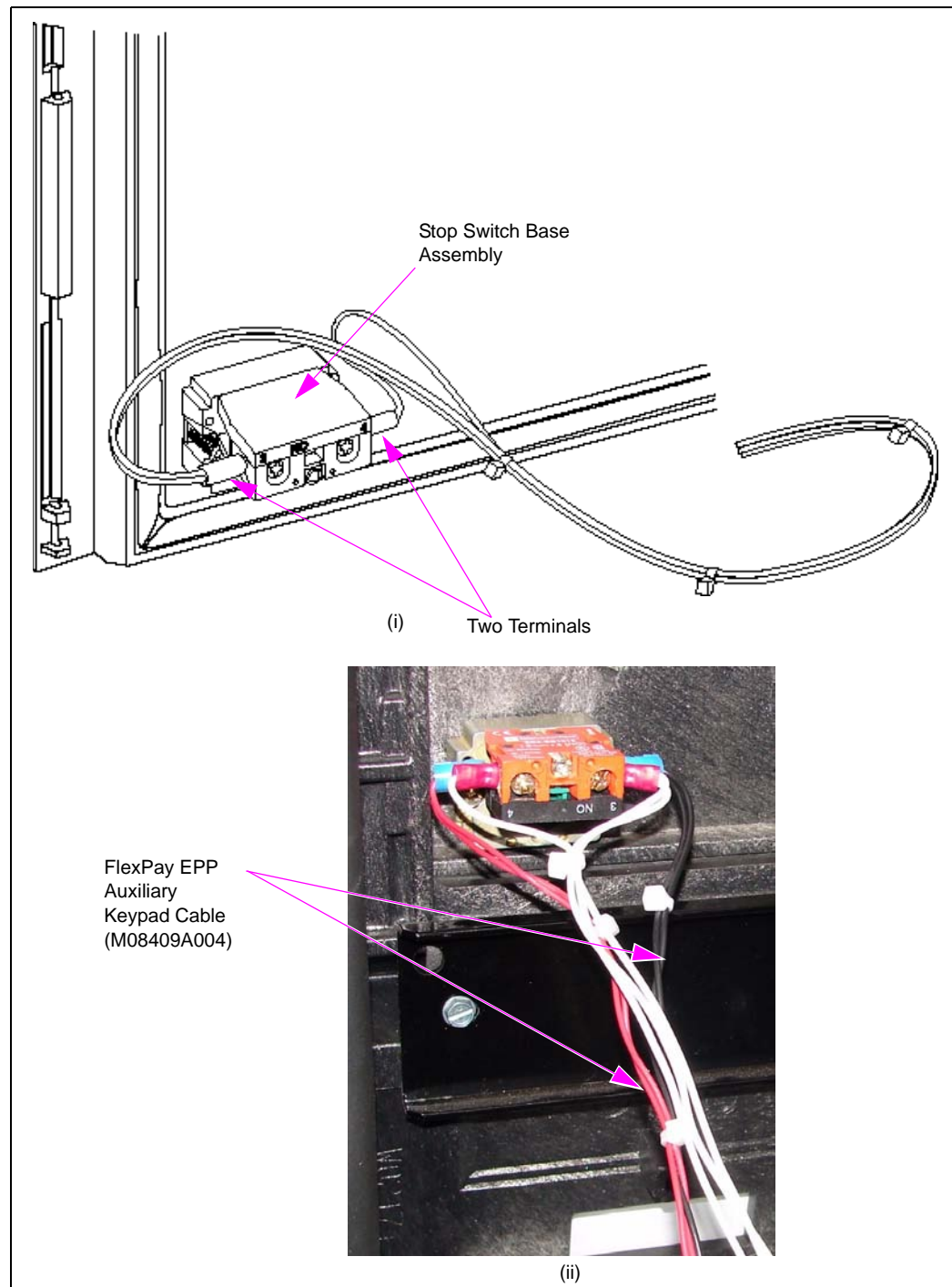
Connecting the FlexPay EPP Auxiliary Keypad Cable (M08409A003 or M08409A004) to the Auxiliary Keypad

Connect the FlexPay EPP Auxiliary Keypad Cable (M08409A003 or M08409A004) to the Auxiliary Keypad as shown in Figure 8 (i) and Figure 8 (ii).

Note: The FlexPay Auxiliary Keypad Cable (M08409A004) is provided when the dispenser contains a pump stop switch. Ensure that the orientation of the red and black wires are as shown in Figure 8, when connecting this cable.

Figure 8: Connecting the FlexPay EPP Auxiliary Keypad Cable (M08409A003 or M08409A004) to the Auxiliary Keypad
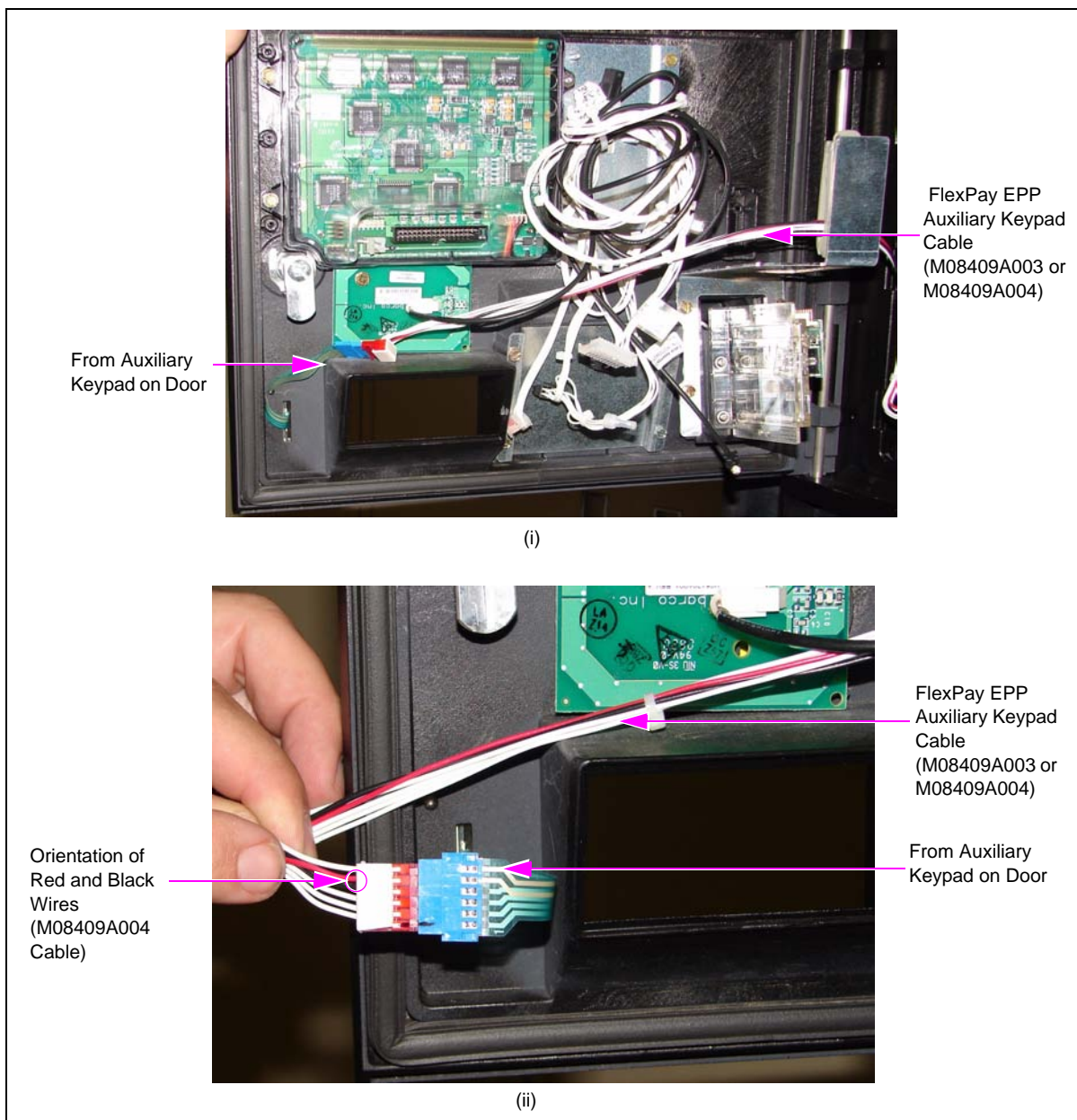
Insert the four plastic standoffs (Q10651-01) into the existing holes on the option door bracket as shown in Figure 9. You must first reverse or turn the standoffs backwards before installing them to the display bracket. Then, attach the Monochrome display to the plastic standoff and onto the mounted bracket by inserting them into the four holes located on the top and bottom of the Monochrome display.

Figure 9: Securing the Display with Plastic Standoffs (Q10651-01)

Plastic Standoffs*
[Q10651-01 (4X)]
Note: Ensure that you reverse the plastic standoffs as shown.

Monochrome Display
(M02636A001)

Bracket
Note: Do not remove the bracket.

*Plastic Standoffs must be used to hold the display securely.
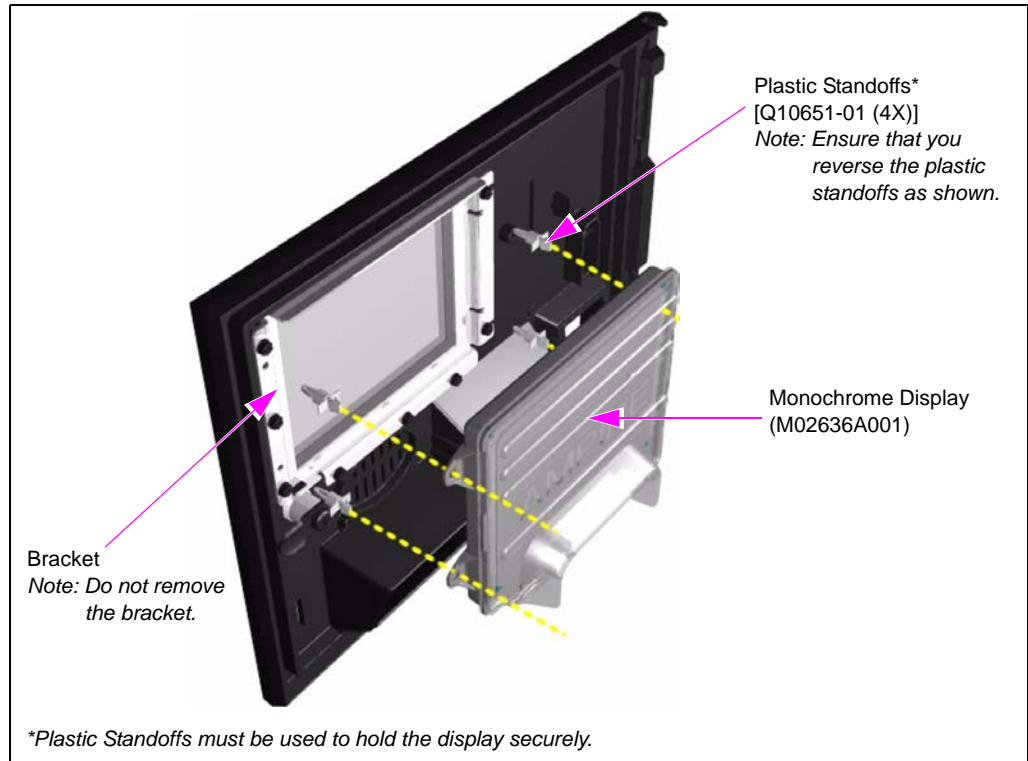
Upgrading the CRIND Logic Boards

If you must upgrade the CRIND Logic Boards to M03651A001 and M03651A002 for The Advantage Series, refer to MDE-4782 FlexPay EPP and SCR kit (EPK ADV RF) Installation Instructions.

Installing the Cables

To install the ADA Auxiliary Interface Cable Assembly (R20642-G1), proceed as follows:

1   Obtain the ADA Auxiliary Interface Cable Assembly [R20642-G1 (see Figure 10)] from the FlexPay EPP/ADA Card Reader Kit (EPK ADA RF).

Figure 10: ADA Auxiliary Interface Cable Assembly (R20642-G1)

(i)

J2ADA

P282S

J254S

J282S

P254S   (ii)
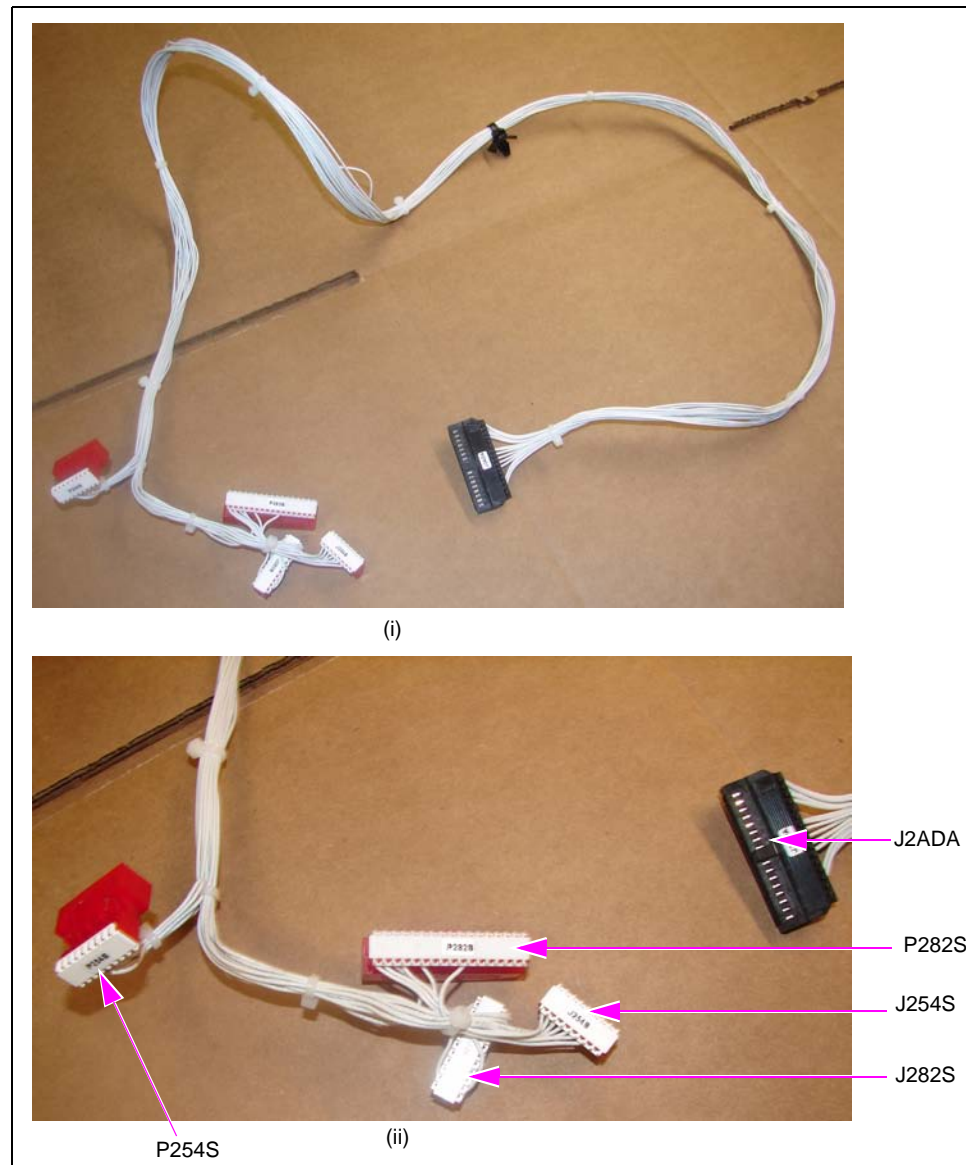
2 Insert the J2ADA jack of the R20642-G1 Cable Assembly into the P2ADA plug of the ADA Card Reader Cable [R20643-G1 (see Figure 11)].

Figure 11: Connecting the J2ADA Jack of the ADA Auxiliary Interface Cable (R20642G1)
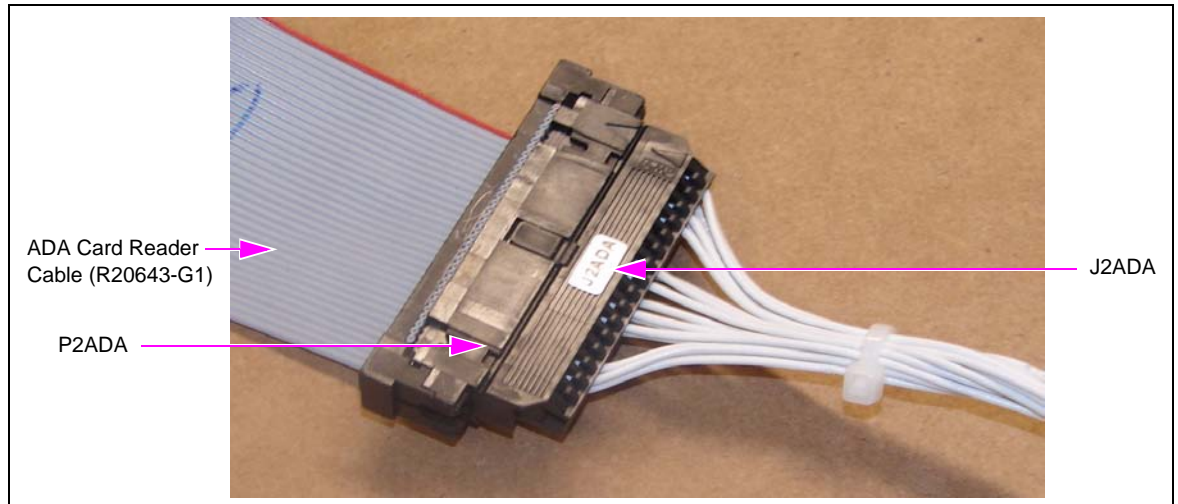
Disconnect the J254 Card Reader Cable that was plugged into P254 on the CRIND Logic Board and plug it into P254S of the ADA Auxiliary Interface Cable [R20642-G1 (see Figure 12)].

Figure 12: Connecting P254S of the ADA Auxiliary Interface Cable (R20642-G1)
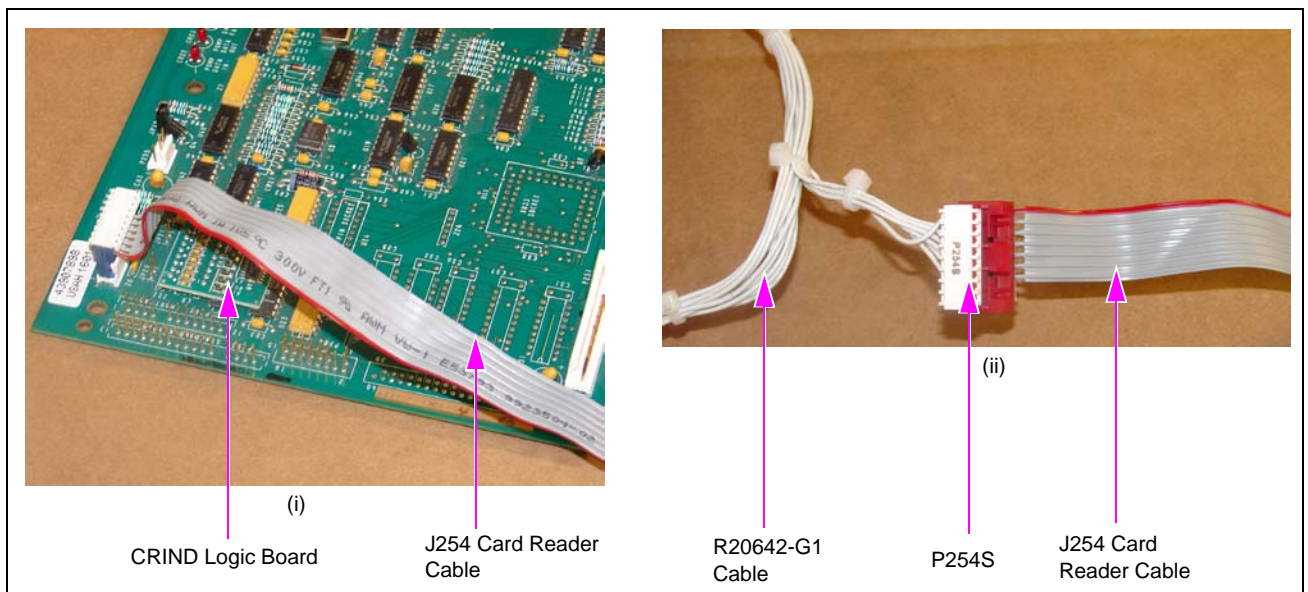
3 Connect J254S of the ADA Auxiliary Interface Cable (R20642-G1) to P254 on the CRIND Logic Board (see Figure 13).

Figure 13: Connecting J254S of the ADA Auxiliary Interface Cable (R20642-G1)
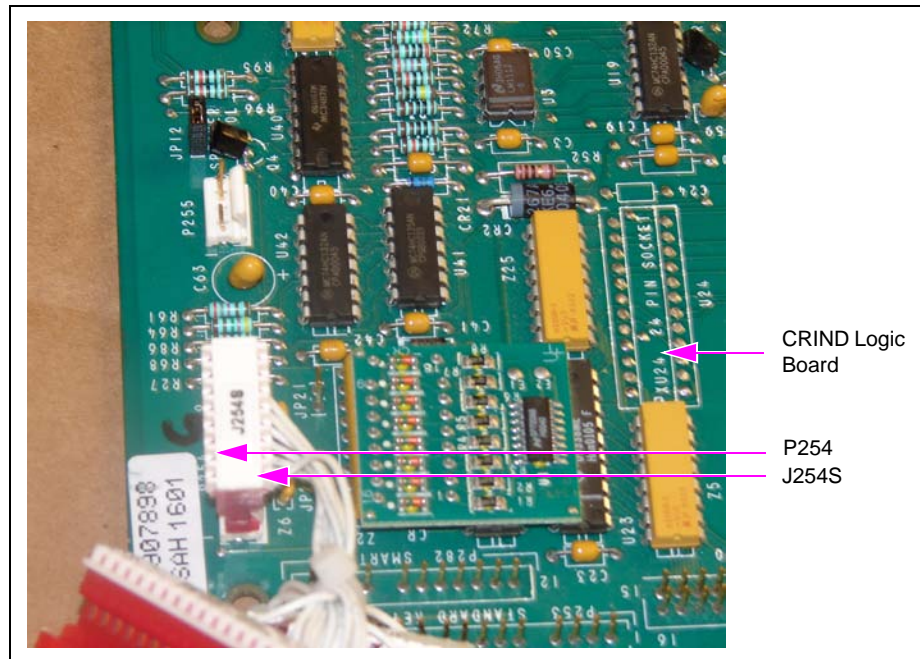
4 Connect J282S of the ADA Auxiliary Interface Cable (R20642-G1) to P282 (Smartpad Port) on the CRIND Logic Board (see Figure 14).

Figure 14: Connecting J282S of the ADA Auxiliary Interface Cable (R20642-G1)
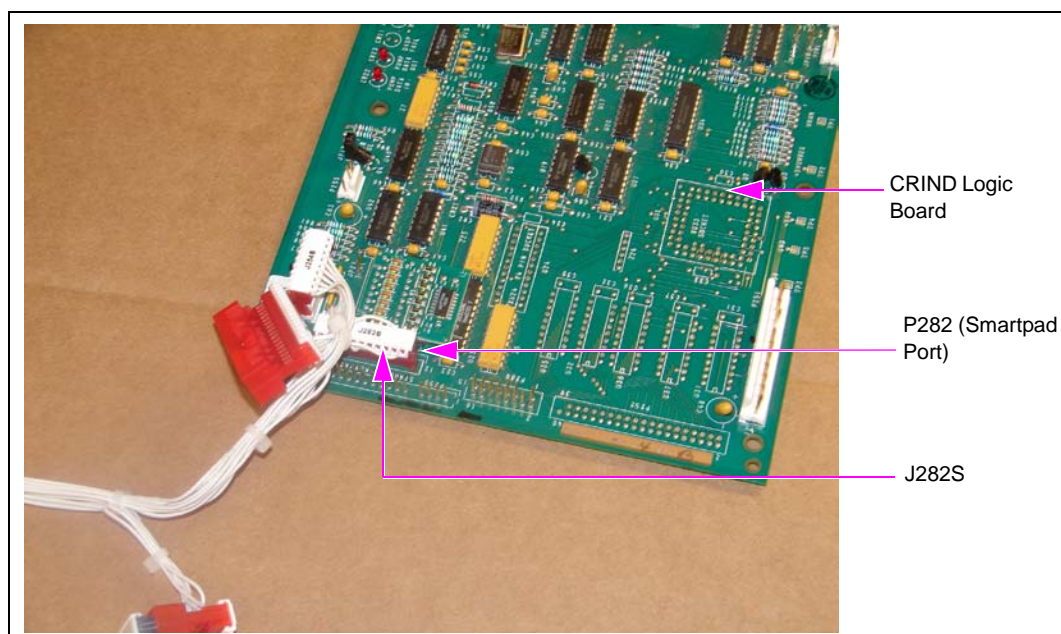
5 Plug the 11-pin connector (that has six wires on it - 1,2,3,4,6, and 11) originating from the ADA Card Reader Cable to P282S on the Auxiliary Interface Cable Assembly [R20642-G1 (see Figure 15)].

Figure 15: Connecting P282S on the ADA Auxiliary Interface Cable (R20642-G1)

(i)

11-pin Connector

ADA Auxiliary Interface Cable Assembly (R20642-G1)

(ii)

Six Wires (1, 2, 3, 4, 6 and 11)

P282S
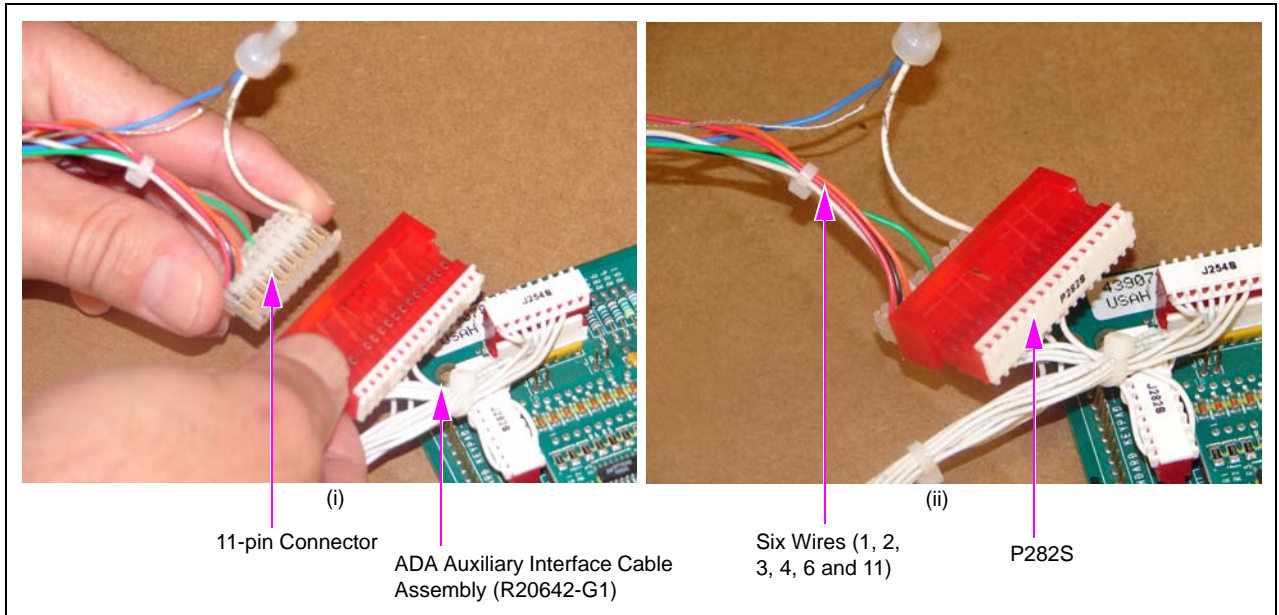
6 Repeat steps 1 (on page 18) to 5 for the opposite side of the unit.

7 After all cable connections have been made and verified, insert jumpers on the coldstart pins on each CRIND Logic Board.

Figure 16: Inserting Jumpers
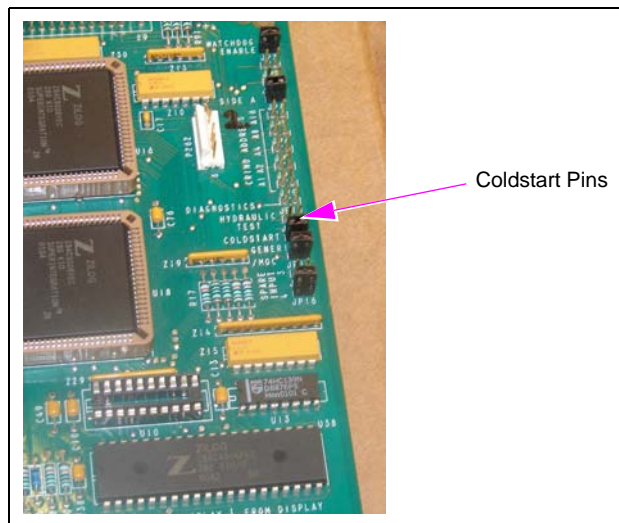
Coldstart Pins

8 Reconnect power to the dispenser and perform a coldstart on both CRIND Logic Boards.

9 Clamp the ADA Auxiliary Interface Cable (R20642-G1) at the following locations:

Note: When you clamp the cable to the side door, ensure that you have enough slack to pull the CRIND tray on which the CRIND Logic Boards are located.

Location
Clamp excess ADA Auxiliary Interface Cable (R20642-G1) with existing clamps. Double the cable over, if required.
Install the clamp* to the inside wall of the electronics cabinet.
Install the snap-in cable clamp* to the side bracket of the CRIND device tray. Use the available hole in CRIND device mounting bracket.

*Already installed on the Cable Assembly.

Figure 17: Clamping the ADA Auxiliary Interface Cable (R20642-G1)

ADA Auxiliary Interface Cable (R20642-G1)

Completing the Installation

After the CRIND has been coldstarted, use the CRIND Diagnostic Card on the upper and lower Card Readers and perform the required tests. After exiting from diagnostics, perform a debit card test on the Card Readers (one Card Reader at a time) on both sides of the dispenser to verify if the Card Reader and FlexPay EPP are operating properly.

Notes: 1) The only observable difference between the upper and lower keypad is that when the lower keypad is used for a transaction, the CRIND device will automatically print a longer receipt.

2) The above test can only be performed if the FlexPay EPP has already been mapped.

3) When testing the ADA Card Reader, ensure that the magnetic stripe on the card is oriented to the right before swiping the card, or else the Card Reader will not read the card.

Appendix A: Replacing the ADA Card Reader

To replace the ADA Card Reader, proceed as follows:

1 Disconnect the Ribbon Cable, FlexPay EPP Data Cable, and Auxiliary FlexPay EPP Softkey Cables.

2 Remove the ADA Housing from the Main Bezel Door by loosening and removing the four nuts on the rear of the door.

3 Disassemble the ADA Housing by removing the six Phillips Head screws located under the Gasket (see Figure 18).

Figure 18: Disassembling the ADA Housing
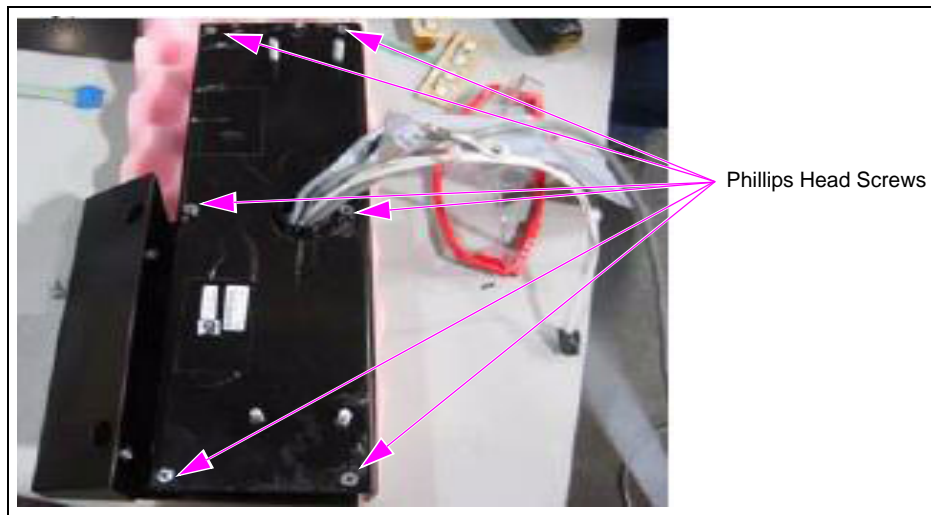
Phillips Head Screws

4 After the back cover or Card Reader Housing is free, disconnect the Ribbon Cable from the Card Reader. Then, pull the back cover away from the Housing Assembly and allow the FlexPay EPP Data Cable, FlexPay EPP Auxiliary Softkey Cable, and Ground Wire to come through the back cover (see Figure 19).

Figure 19: Disconnecting the Ribbon Cable
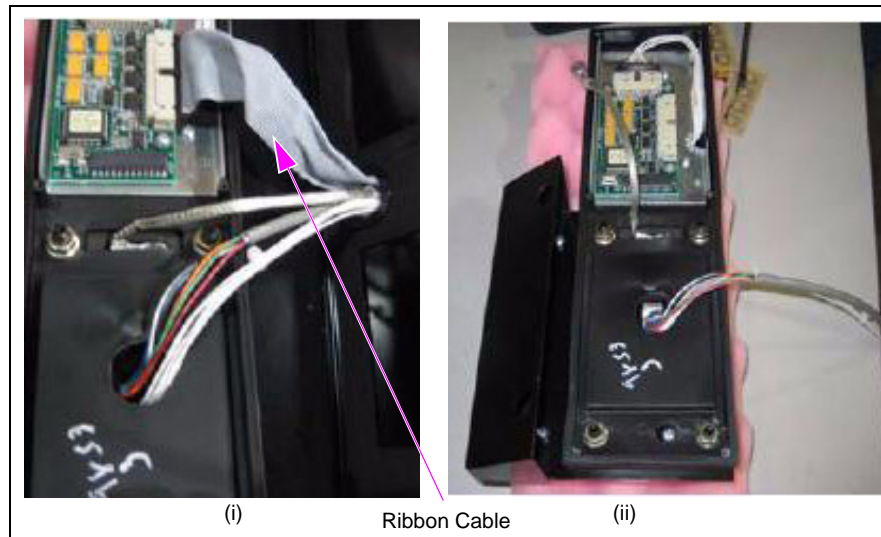
(i)   Ribbon Cable   (ii)

5 Remove the Card Reader from the Housing by loosening the four nuts on the rear of the Card Reader. Feed cables through the opening, to allow the Card Reader to come out freely (see Figure 20).

Figure 20: Removing the Card Reader

(i)   (ii)
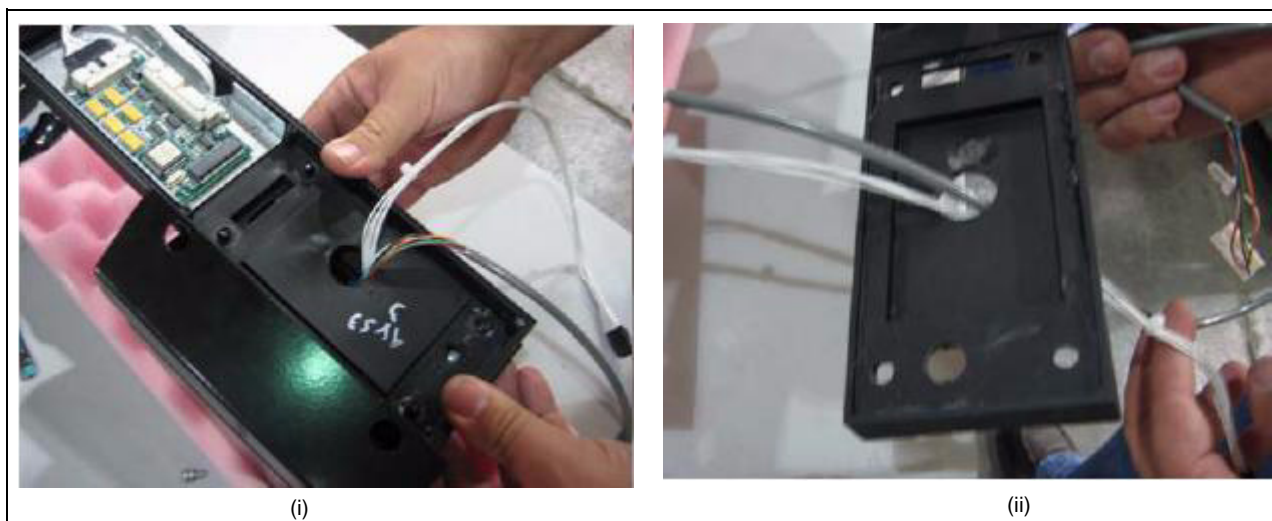
6 Remove and replace the ADA Gasket (M09841B001) with the new gasket provided (see Figure 21).

Figure 21: Removing the ADA Gasket (M09841B001)

ADA Gasket (M09841B001)
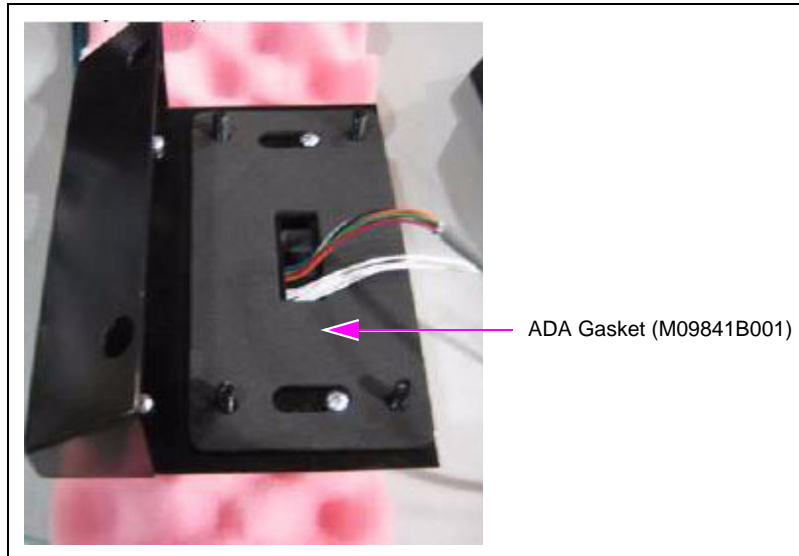
7 Feed cables through the new Card Reader Housing and mount the assembly on to the FlexPay EPP Housing using the four nuts removed in step 5 on page 24 (see Figure 22).

**Figure 22: Feed Cables through the New Card Reader Housing**

Cables

New Card Reader Housing
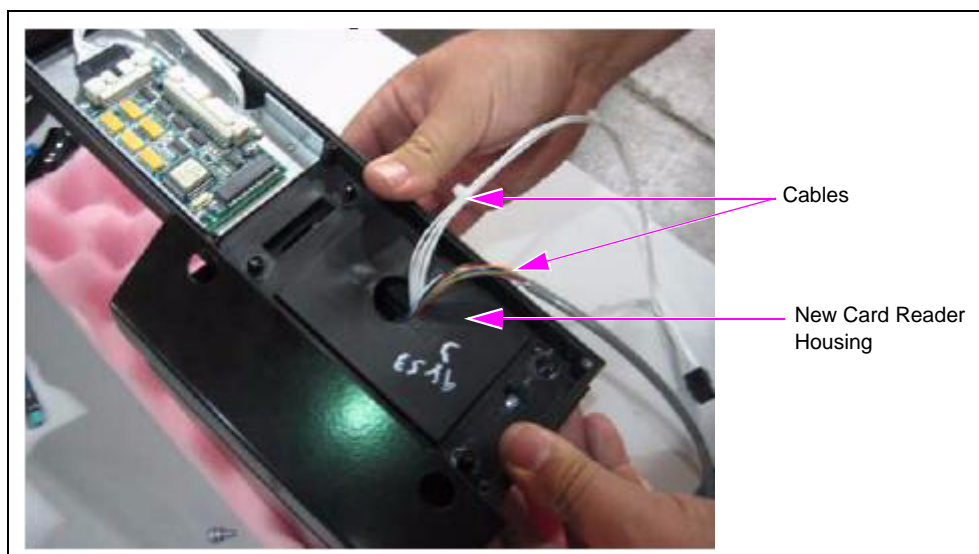
8 Feed all cables through the new Card Reader back plate provided and plug in the new Ribbon Cable (see Figure 23).

Figure 23: Feeding Cables

New Ribbon Cable
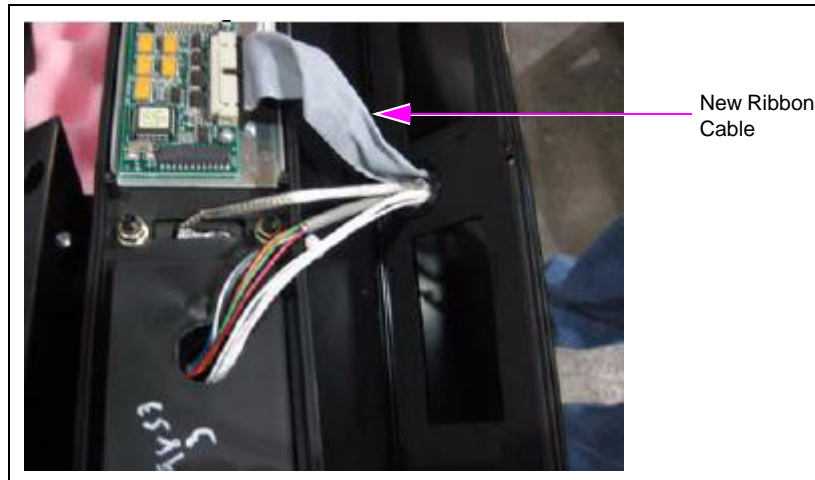
9 Pull the excess cable length through the Card Reader back plate and position the back cover over the Card Reader Assembly and install the six Phillips Head screws removed in step 3 on page 23 (see Figure 24).

Figure 24: Installing the Phillips Head Screws

Phillips Head Screws
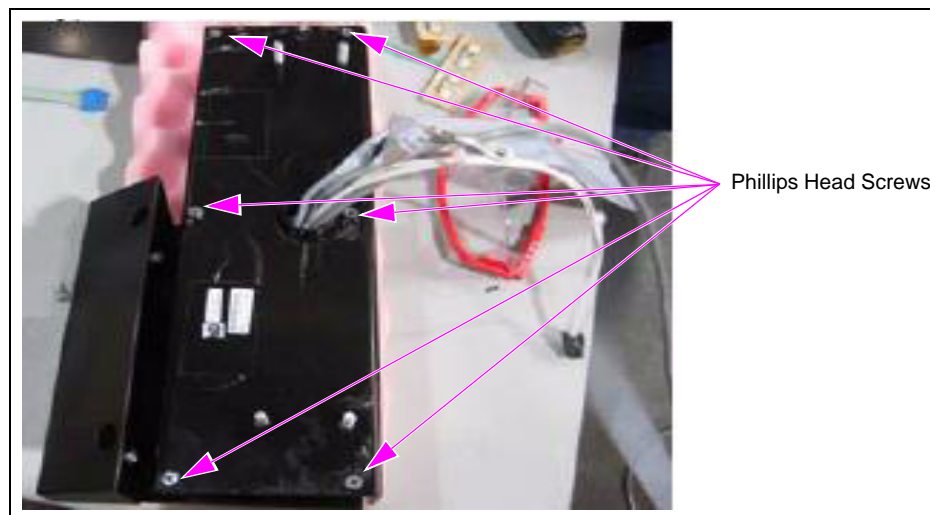
10 Install the Mounting Bracket Gasket [R20625-01 (see Figure 25)].

Figure 25: Installing the Gasket

(i)

Mounting Bracket Gasket (R20625-01)

(ii)
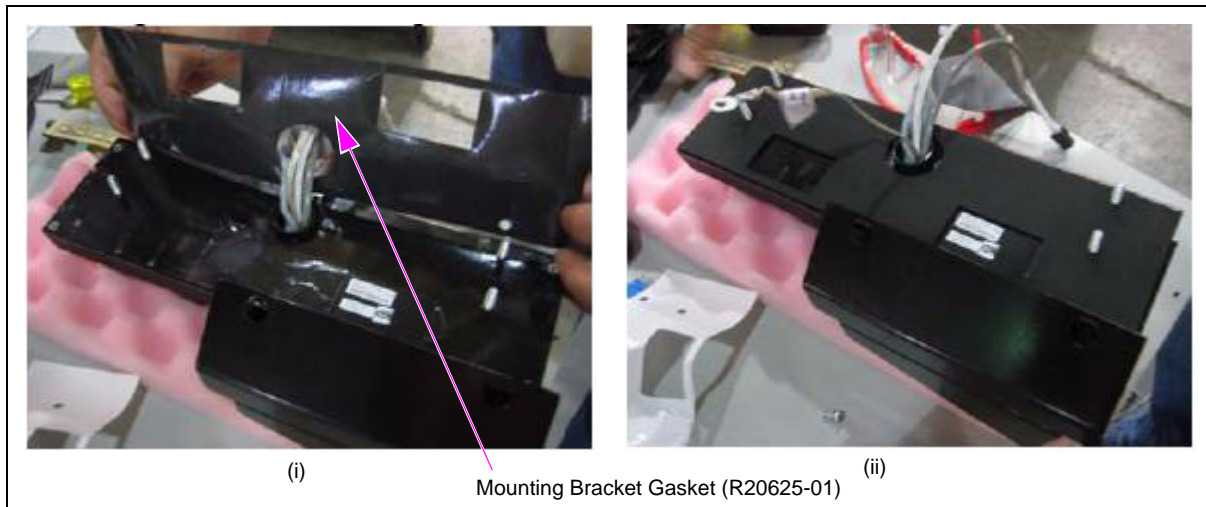
11 Reinstall the completed assembly using the nuts that were removed in step 2 on page 23. Ensure that you reinstall the ground straps on one of the studs.

Appendix B: Replacing Components in the ADA Housing

Replacing the FlexPay EPP or Membrane Switch

To replace the FlexPay EPP or Membrane Switch, proceed as follows:

1 Disconnect the Ribbon Cable, FlexPay EPP Data Cable, and Auxiliary FlexPay EPP Softkey Cables.

2 Remove the ADA Housing from the Main Bezel Door by loosening and removing the four nuts on the rear of the door.

3 Disassemble the ADA Housing by removing six Phillips Head screws located under the Gasket (see Figure 26).

**Figure 26: Disassembling the ADA Housing**
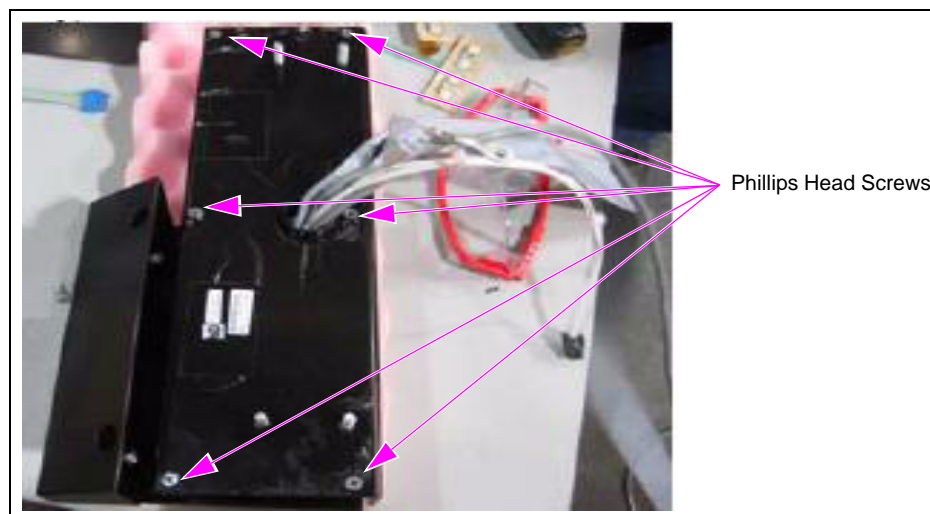
Phillips Head Screws

4 After the back cover or Card Reader Housing is free, disconnect the Ribbon Cable from the Card Reader. Then, pull the back cover away from the Housing Assembly and allow the FlexPay EPP Data Cable, FlexPay EPP Auxiliary Softkey Cable, and Ground Wire to come through the back cover (see Figure 27).

**Figure 27: Disconnecting the Ribbon Cable**
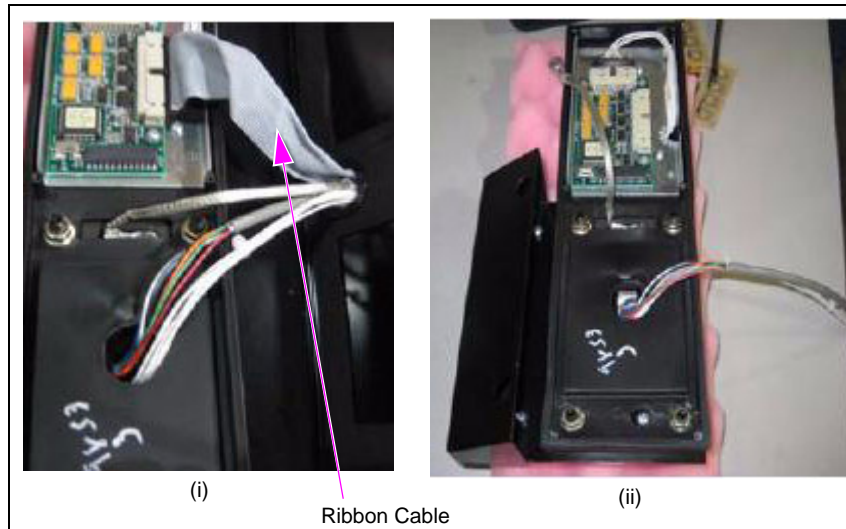
(i)

Ribbon Cable

(ii)

5 Remove the Card Reader from the Housing by loosening the four nuts on the rear of the Card Reader. Feed cables through the opening to allow the Card Reader to come out freely (see Figure 28).

Figure 28: Removing the Card Reader

(i)

(ii)
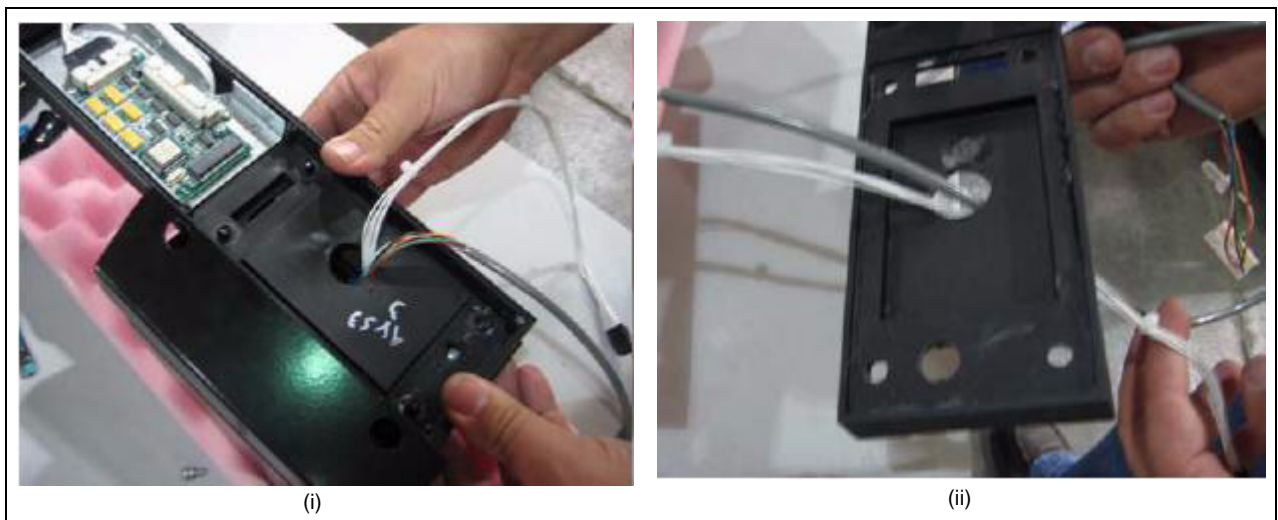
6 Remove the ADA Gasket (M09841B001), four screws, and Keypad Back Cover Plate (see Figure 29).

Figure 29: Removing the ADA Gasket (M09841B001)

ADA Gasket (M09841B001)
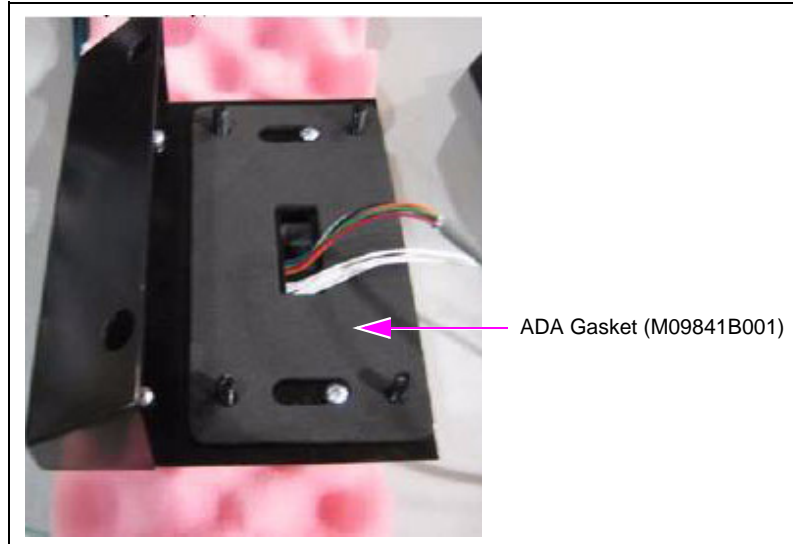
7 Replace the ADA Gasket [M09840B001 (see Figure 30)].
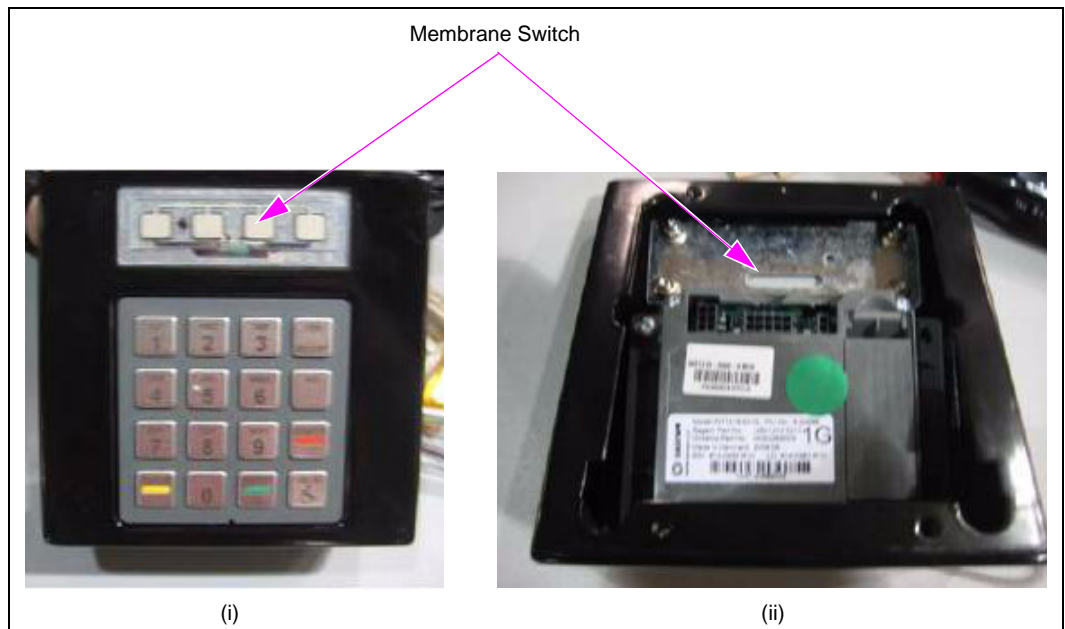
Figure 30: Replacing the ADA Gasket (M09840B001)

8 To replace the FlexPay EPP, disconnect the cables and remove four screws. Install the new keypad and screws (see Figure 31).

**Figure 31: Installing the New Keypad and Screws**

9 To replace the Auxiliary Membrane Switch, peel the Membrane Switch and Graphic off the Housing. Push a flathead screwdriver through the Membrane Switch cable slot to remove the keypad. Install the new Membrane Switch such that the tail is appropriately lined up with the opening (see Figure 32).

**Figure 32: Replacing the Auxiliary Membrane Switch**

10 Plug the cables back into the Membrane Switch and FlexPay EPP. Replace the Keypad Back Cover Plate, and install four screws and the new ADA Gasket [M09841B001 (see Figure 33)].

Figure 33: Replacing the Keypad Back Cover Plate

ADA Gasket (M09841B001)
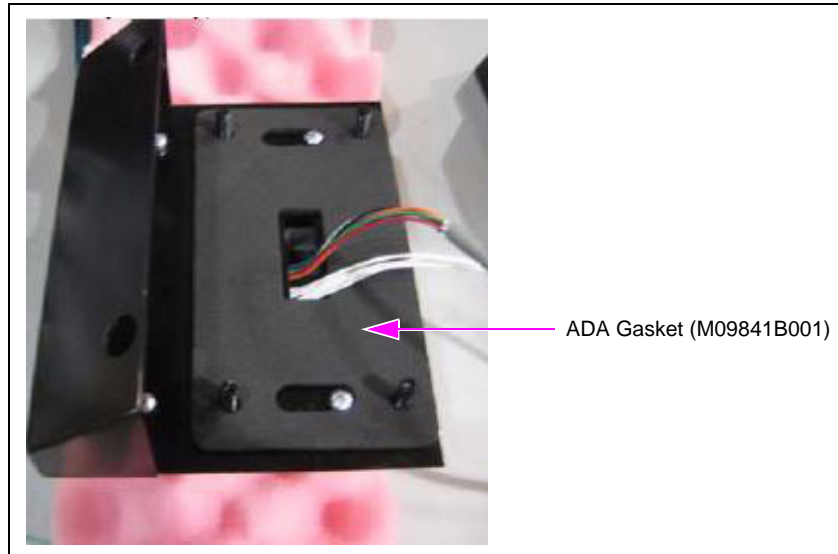
11 Feed cables through the Card Reader Housing and mount to the FlexPay EPP Housing using the four nuts removed in step 5 on page 29 (see Figure 34).

Figure 34: Feeding Cables through the Card Reader
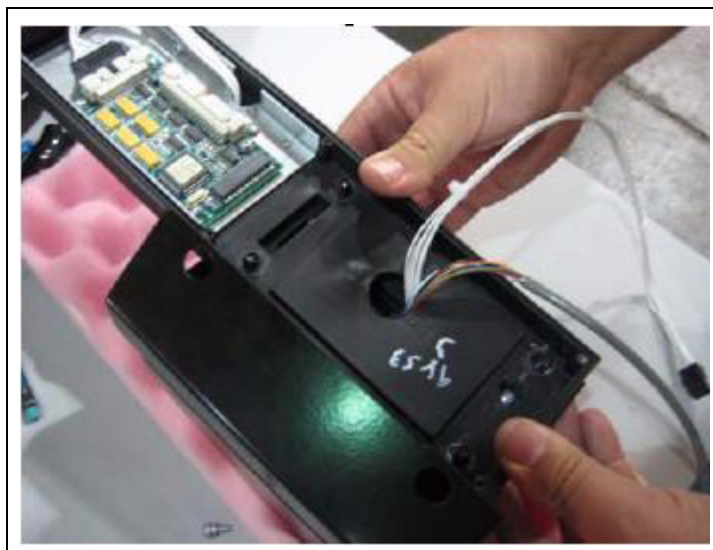
12 Feed all cables through the Card Reader Back Plate provided and plug in the Ribbon Cable (see Figure 35).

Figure 35: Plugging the Ribbon Cable

Ribbon Cable
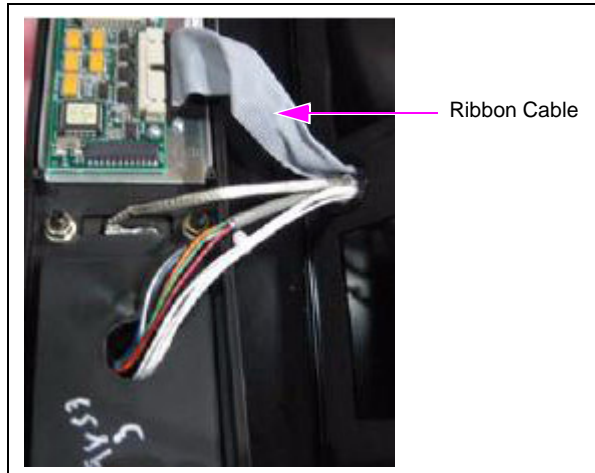
13 Pull the excess cable length through the Card Reader Back Plate and position the back cover over the Card Reader Assembly and install the six Phillips Head screws removed in step 3 on page 28 (see Figure 36).

Figure 36: Installing the Phillips Head Screws

Phillips Head Screws
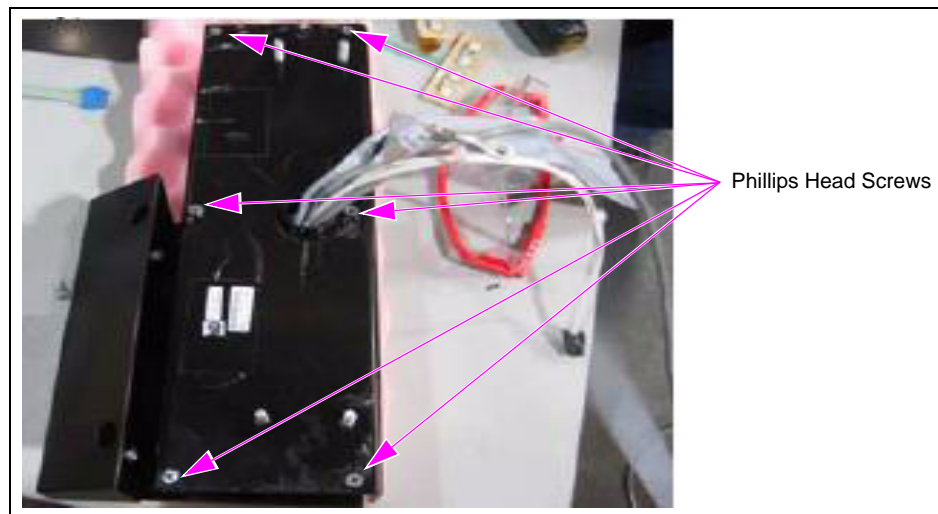
14 Install the Mounting Bracket Gasket [R20625-01 (see Figure 37)].

Figure 37: Installing the Mounting Bracket Gasket (R20625-01)

(i)   (ii)

Mounting Bracket Gasket (R20625-01)

15 Reinstall the completed assembly using the nuts that were removed in step 2 on page 28. Ensure that you reinstall the ground straps on one of the studs.

The Advantage® Series, CRIND®, Encore®, Eclipse®, Infoscreen®, Legacy®, MPD®, and TRIND® are registered trademarks of Gilbarco Inc. Allen® is a registered trademark of Industrial Fasteners Inc. FlexPay™ and SmartPad™ are trademarks for Gilbarco Inc. Keps™ is a trademark of ITW Shakeproof. MISCO® is a registered trademark of Minneapolis Speaker Company. Phillips® is a registered trademark of Phillips Screw Company.