

Introduction

Purpose

This manual provides instructions to install the following Ingenico® PIN Pad Kits on the Passport® system:

- PA0379XXXXX (i3070 PIN Pad)
- PA0380XXXXX (i6550 PIN Pad)
- PA0412XXXXXXXX (iSC250 PIN Pad)
- PA0411XXXXXXXX (iPP320 PIN Pad)

CAUTION

Gilbarco® strongly recommends that only Gilbarco-Authorized Service Contractors (ASCs) perform this installation.

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Required Tools

A Phillips® screwdriver is required for installing these kits.

Related Documents

Document Number	Title	GOLD SM Library
MDE-3620	Point of Sale (POS) Systems Site Preparation Manual	<ul style="list-style-type: none"> • Site Preparation • G-SITE
MDE-3816	Passport Hardware Start-up and Service Manual	<ul style="list-style-type: none"> • Passport • Service Manual
MDE-4017	Mat Reader Assembly Kit C00016-XXX Installation Manual	<ul style="list-style-type: none"> • POS Peripheral Devices • Passport

Document Number	Title	GOLD SM Library
MDE-4157	Passport Combined Cashier/Manager Workstation Poster	Passport
MDE-4158	Passport Cashier Workstation Poster	Passport
MDE-4159	Passport Standalone Manager Workstation Poster	Passport
MDE-4891	Passport Enhanced Dispenser Hub (Passport V8.02) Poster	Passport
MDE-4910	Passport Enhanced Dispenser Hub Connections Manual	Passport
MDE-5083	Passport Hardware Start-up and Service Manual for PX60 Platform	Passport
MDE-5100	PX60 Passport Cashier Workstation Installation Poster	Passport
MDE-5101	PX60 Passport Combined Cashier/Manager Workstation Installation Poster	Passport
MDE-5132	PX60 Passport Standalone Manager Workstation Installation Poster	Passport
MDE-5351	Passport PIN Pad Stand Installation Instructions	Passport

Abbreviations and Acronyms

Term	Description
ASC	Authorized Service Contractor
CAT-5	Category 5
COM	Communication
CRIND®	Card Reader in Dispenser
CWS	Cashier Workstation
DIN	Deutsche Industrie Norm
EBT	Electronic Benefits Transfer
EDH	Enhanced Dispenser Hub
ESD	Electrostatic Discharge
GOLD	Gilbarco Online Documentation
MWS	Manager Workstation
PCI	Payment Card Industry
POS	Point of Sale
UPS	Uninterruptible Power Supply
USB	Universal Serial Bus
VAC	Voltage Alternate Current
VDC	Voltage Direct Current

Required Reading



Before installing the PIN pad kits, read and understand this manual thoroughly. If you do not understand a procedure, ask someone who does, or call the Gilbarco Help Desk at 1-800-800-7498.

Hardware Specifications

This section lists the physical and electrical specifications for the components in the i3070, i6550, iSC250, and iPP320 PIN pad kits.

i3070 PIN Pad

The following table lists the electrical specifications for the components in the i3070 PIN pad kit:

Power Requirements	Units
Input Voltage	12 VDC
Input Current	0.9 A

The following table lists the physical specifications for the components in the i3070 PIN pad kit:

Parameters	Units
Width	3.15" (80-mm)
Height	1.378" (35-mm)
Depth	5.748" (146-mm)
Weight	0.441 lbs (200 g)
Cord Length	4.921' (1.5 m)

Power Supply

The following table lists the power specifications of the power supply used in the i3070 PIN pad kit:

Power Requirements	Units
Input Voltage	120-240 VAC
Input Power	24 W
Input Frequency	60 Hz

i6550 PIN Pad

The following table lists the electrical specifications for the components in the i6550 PIN pad kit:

Power Requirements	Units
Input Voltage	12 VDC
Input Current	0.9 A

The following table lists the physical specifications for the components in the i6550 PIN pad kit:

Parameters	Units
Width	6.3" (160-mm)
Height	6.929" (176-mm)
Depth	3.504" (89-mm)
Weight	1.323 lbs (600 g)
Cord Length	4.921' (1.5 m)

Power Supply

The following table lists the power specifications of the power supply used in the i6550 PIN pad kit:

Power Requirements	Units
Input Voltage	120 VAC
Input Power	24 W
Input Frequency	60 Hz

All Kit Components

The following table lists the environmental specifications of all the components used in the i3070, i6550, iSC250, and iPP320 PIN pad kits:

Parameters	Units
Operating Temperature	32 °F (0 °C) to 104 °F (40 °C)
	32 °F (0 °C) to 122 °F (50 °C)*
Operating Relative Humidity	5% to 90% (non-condensing)

*For iSC250 and iPP320 PIN pads.

iSC250 PIN Pad

The following table lists the electrical specifications for the components in the iSC250 PIN pad kit:

Power Requirements	Units
Input Voltage	10-27 VDC
Input Current	0.9 A

The following table lists the physical specifications for the components in the iSC250 PIN pad kit:

Parameters	Units
Width	6.1" (156-mm)
Height	6.6" (168-mm)
Depth	2" (50-mm)
Weight	1.3 lbs (600 g)
Cord Length	32.8' (10 m)

Power Supply

The following table lists the power specifications of the power supply used in the iSC250 PIN pad kit:

Power Requirements	Units
Input Voltage	120-240 VAC
Input Power	24 W
Input Frequency	60 Hz

iPP320 PIN Pad

The following table lists the electrical specifications for the components in the iPP320 PIN pad kit:

Power Requirements	Units
Input Voltage	7-9 VDC
Input Current	0.4 A

The following table lists the physical specifications for the components in the iPP320 PIN pad kit:

Parameters	Units
Width	3.15" (80-mm)
Height	1.378" (35-mm)
Depth	5.748" (146-mm)
Weight	0.44 lbs (200 g)
Cord Length	32.8' (10 m)

Power Supply

The following table lists the power specifications of the power supply used in the iPP320 PIN pad kit:

Power Requirements	Units
Input Voltage	120-240 VAC
Input Power	24 W
Input Frequency	60 Hz

Parts List

The following table lists the parts used in the i3070, i6550, iSC250, and iPP320 PIN pad kit:

Description	Part Number	i3070 PIN Pad	i6550 PIN Pad	iSC250 PIN Pad	iPP320 PIN Pad
i3070 Power Supply and AC Cord	M08212B003	X	-	-	-
i3070 Serial/Power Cable	M08212B004	X	-	-	-
Power Supply and AC Cord	M08213B003	-	X	-	-
i6550 Serial/Power Cable	M08213B004	-	X	-	-
i3070 PIN Pad	PA0379000XXXX	X	-	-	-
i6550 PIN Pad	PA0380001XXXX	-	X	-	-
RJ-45 to DB-9 Male Cable Adapter Enhanced Dispenser Hub (EDH) to Ingenico	M09747B010	X	X	X	X
9-pin Gender Mender EDH to Category 5 (CAT-5) Cable	Q13180-63B	X	X	X	X
9-pin Gender Mender Ingenico to CAT-5 Cable	Q13180-20B	X	X	X	X
iSC250 PIN Pad	PA0412000XXXX	-	-	X	-
iPP320 PIN Pad	PA0411000XXXX	-	-	-	X
iPP320 Power Supply and Cord	M12753B003	-	-	-	X
RS-232/Power Y Cable	M12753B004	-	-	-	X
iSC250 Power Supply and Cord	M12754B003	-	-	X	-
RS-232/Power Y Cable	M12754B004	-	-	X	-
Writing Stylus	M12754B005	-	-	X	-
Contactless Module	M12754B006	-	-	X	-

Note: An "X" indicates that the PIN pad configuration in the column heading uses the listed part.

CAUTION

Devices such as PIN pads, Car Wash, Tank Monitor™, and Price Sign controllers are connected to the EDH (after Passport V8.02 software upgrade) through an RS-232 connection. Gilbarco recommends an RS-232 line booster for these devices if the CAT-5 cable distance (run) is between 50 and 100 feet. If the CAT-5 cable distance (run) is greater than 100 feet, an additional booster for every additional 50 feet is required along with an RS-232 line booster.

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 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.

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.

Connecting Ingenico PIN Pads

Before You Begin

Before you connect the Ingenico PIN pad, unplug the system from the wall outlet and contact qualified personnel for servicing in the following instances:

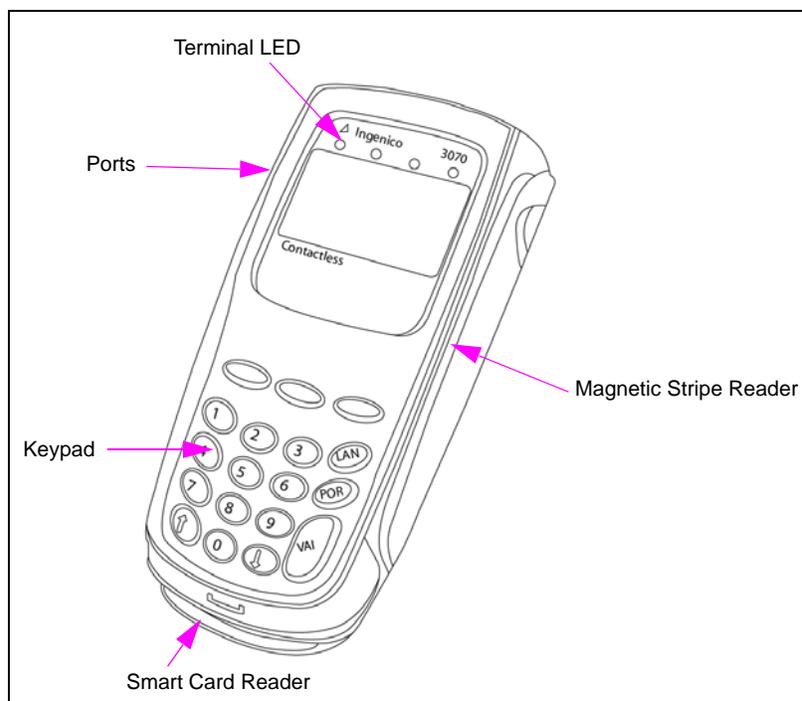
- The power cord is damaged.
- Liquid has spilled onto the system.
- The system does not operate properly when the operating instructions are followed.
- The PIN pad was dropped or its casing is damaged.

i3070 PIN Pad

Key Features

Figure 1 shows the i3070 PIN pad.

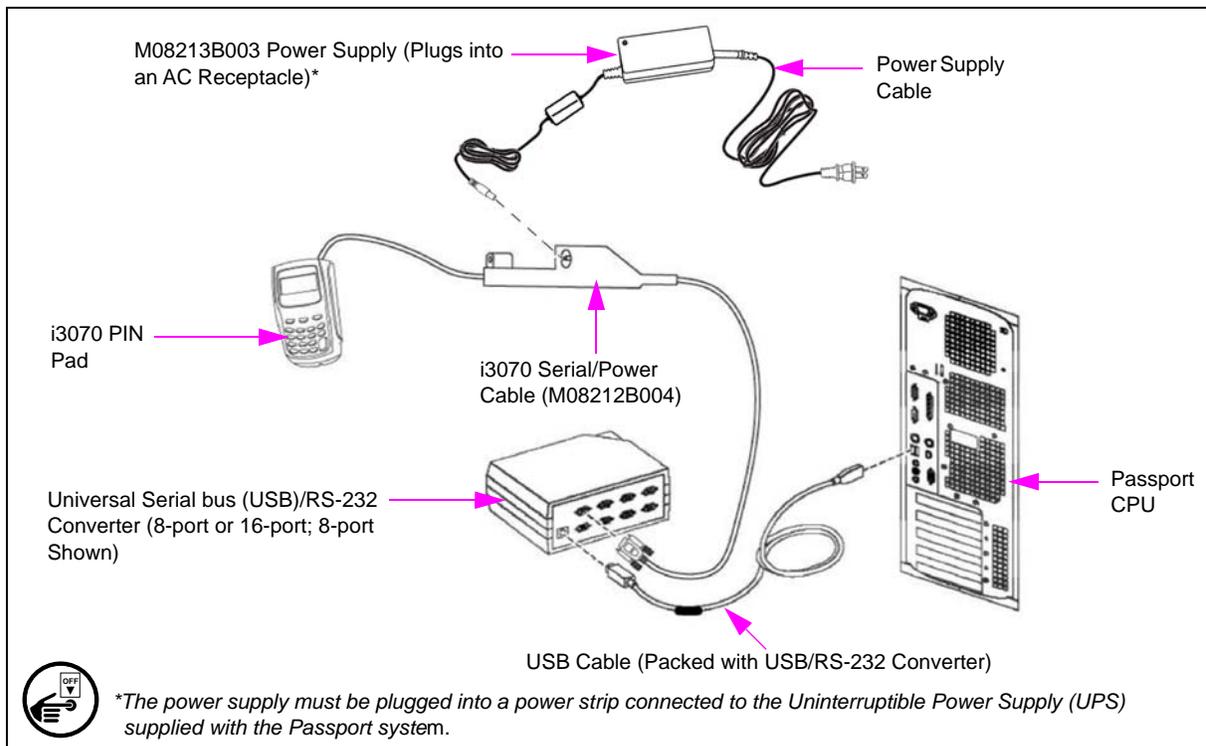
Figure 1: Ingenico 3070 Series



Connecting i3070 PIN Pad to Passport Systems V3.6 to V8.0

Figure 2 shows the connections from the i3070 PIN pad to Passport systems V3.6 to V8.0.

Figure 2: i3070 PIN Pad to Passport System Connections



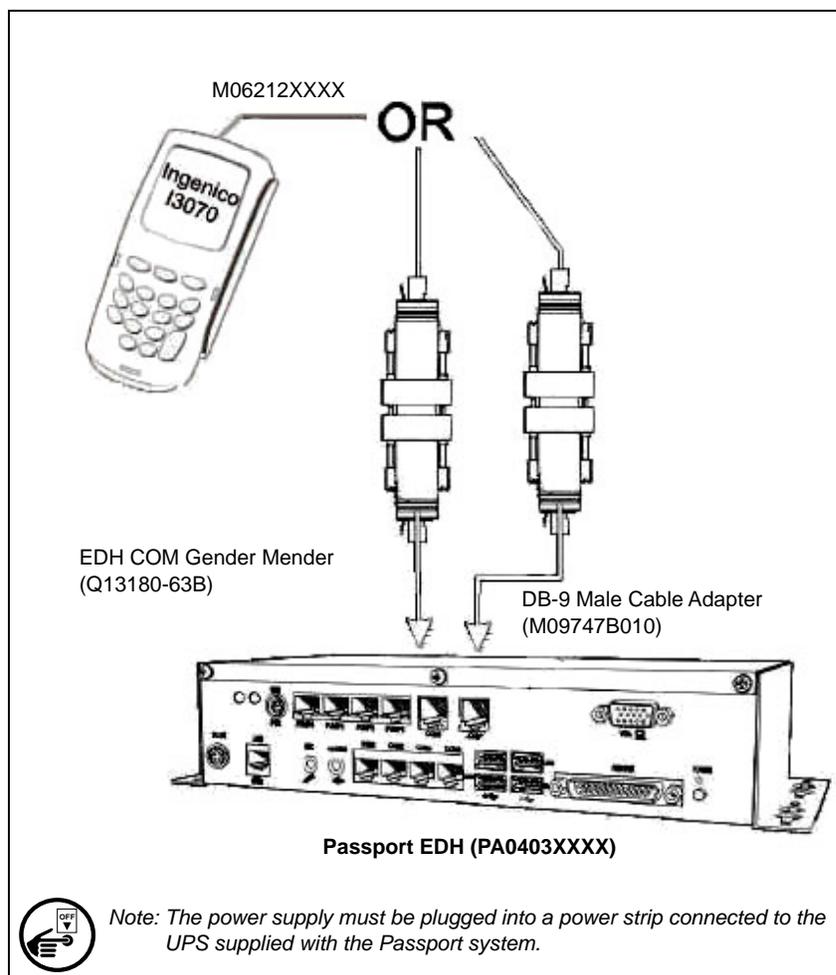
To connect the i3070 PIN pad to the Passport system, proceed as follows:

- 1 Turn off the Passport system using the System Maintenance toolbar. When the message, “It is now safe to turn off your computer” is displayed, turn off the affected standalone client or combined Manager Workstation (MWS)/Cashier Workstation (CWS) using the power button.
- 2 Connect the 8-pin end of the i3070 Serial/Power Cable (M08212B004) to the 8-pin port of the i3070 PIN pad and snap the strain relief onto the PIN pad.
- 3 Plug the power supply cable into the power port of the i3070 serial/power cable and secure it in the strain relief.
- 4 Connect the 9-pin end of the i3070 serial/power cable to port #2 of the USB/RS-232 converter.
- 5 Using the enclosed AC power cable, plug the power supply into an AC receptacle.
Note: The power supply must be plugged into a power strip connected to the UPS supplied with the Passport system.
- 6 Turn on power to the Passport system.

Connecting i3070 PIN Pad to V8.02+ Passport Systems

Figure 3 shows the connections from the i3070 PIN pad to V8.02+ Passport systems.

Figure 3: i3070 PIN Pad to Passport System Connections



CAUTION

Ingenico PIN pad devices will be connected to the EDH (after Passport V8.02 software upgrade) via an RS-232 connection. Gilbarco recommends an RS-232 line booster for these devices if the CAT-5 cable distance (run) is between 50 and 100 feet. If the CAT-5 cable distance (run) is greater than 100 feet, an additional booster for every additional 50 feet will be required along with an RS-232 line booster.

To connect the i3070 PIN pad to the Passport system, proceed as follows:

- 1 Turn off the Passport EDH system by tapping the power button. When the blue light is off on the EDH, proceed to step 2.
- 2 Connect the 8-pin end of the i3070 Serial/Power Cable (M08212B004) to the 8-pin port of the i3070 PIN pad and snap the strain relief onto the PIN pad.

- 3 Plug the power supply cable to the power port of the i3070 serial/power cable and secure it in the strain relief.
- 4 Connect the 9-pin end of the i3070 serial/power cable to an RJ-45 to DB-9 Male Cable Adapter (M09747B010), or attach the i3070 serial/power cable to an EDH COM Gender Mender (Q13180-63B). EDH COM gender mender will be attached to the EDH with a Q13850-XX CAT-5 Cable (see [Figure 3](#) on [page 11](#)).
- 5 Using the enclosed AC power cable, plug the power supply into an AC receptacle.
Note: The power supply must be plugged into a power strip connected to the UPS supplied with the Passport system.
- 6 Turn on power to the EDH by pushing the power button.

i6550 PIN Pad

Introduction

The Ingenico i6550 customer-activated terminal supports payment information processing and authorization at the POS in your business. With the appropriate application software, the Ingenico i6550 terminal supports the following payment types:

- Credit
- Debit, ATM
- Smart Card
- Electronic Benefits Transfer (EBT)

Key Features

The Ingenico i6550 terminal has a touch screen for stylus, finger input, and signature capture.

Note: The features that your terminal has will depend on the model ordered.

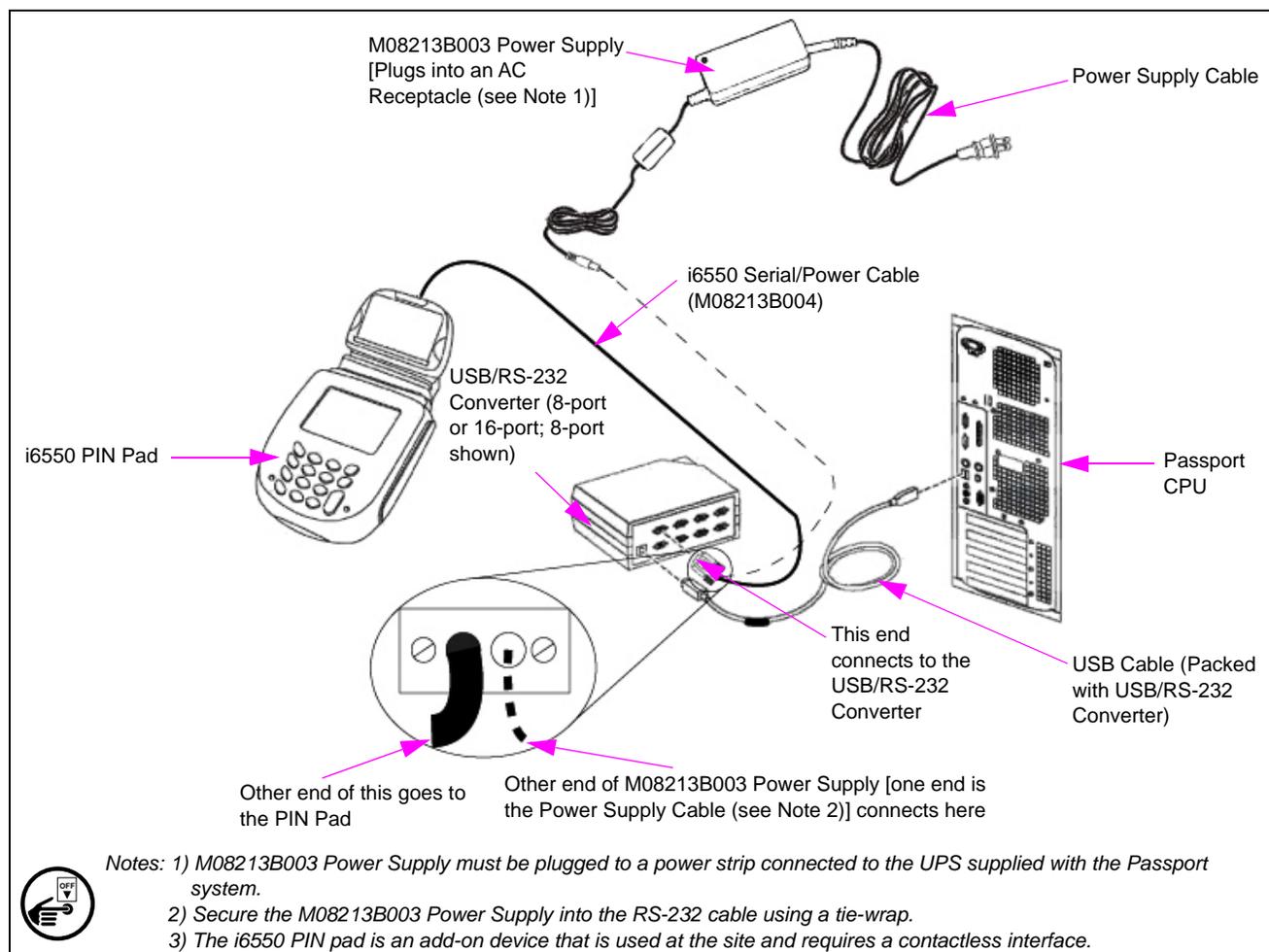
Figure 4: Ingenico i6550 Series



Connecting i6550 PIN Pad to Passport Systems V3.6 to V8.0

Figure 5 shows the connections from the i6550 PIN pad to Passport systems V3.6 to V8.0.

Figure 5: i6550 PIN Pad with Mat Reader to Passport System Connections



To connect the i6550 PIN pad with mat reader to the Passport system, proceed as follows:

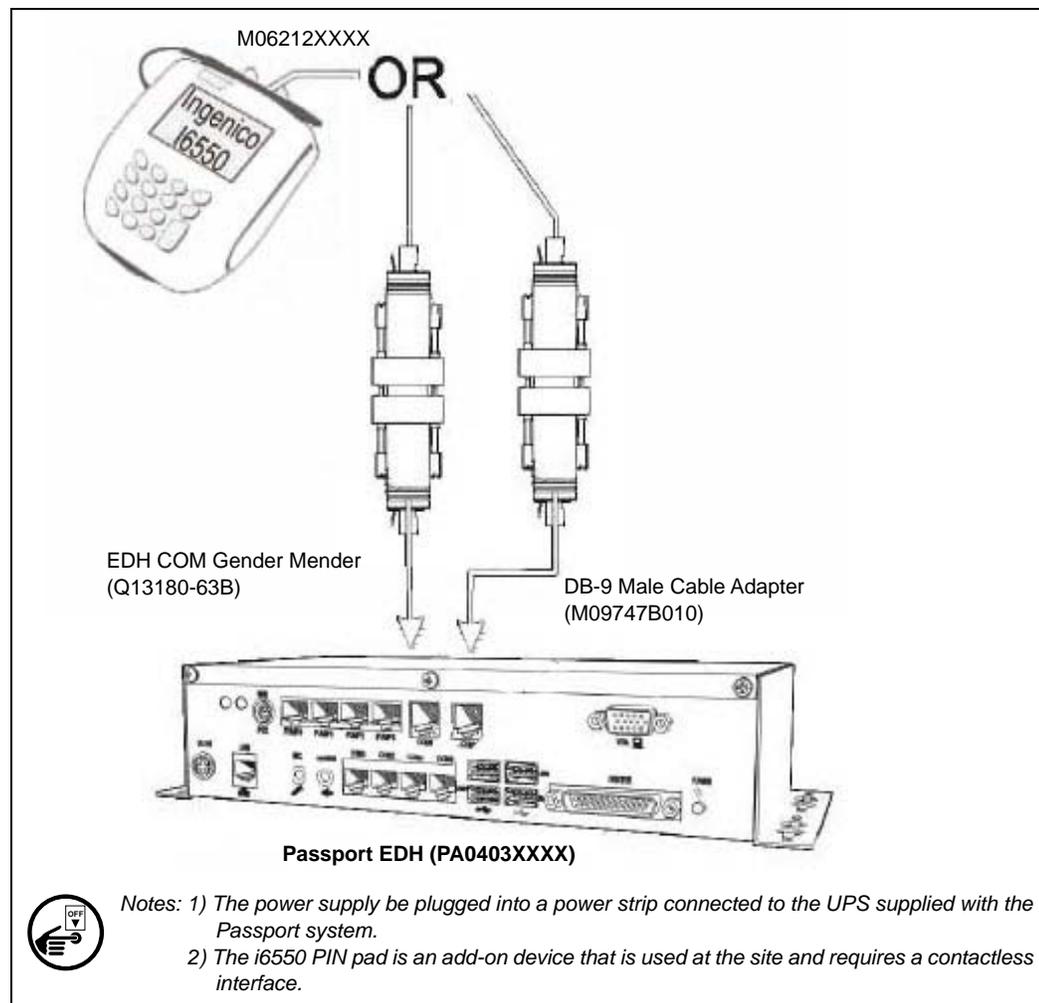
- 1 Turn off the Passport system using the System Maintenance toolbar. When the message, “It is now safe to turn off your computer” is displayed, turn off the affected standalone client or combined MWS/CWS using the power button.
- 2 Route the i6550 Serial/Power Cable (M08213B004) through the mat reader, pedestal, and countertop (see [Figure Note](#): on [page 18](#) through [Figure 17](#) on [page 21](#)).
- 3 Connect the 9-pin circular Deutsche Industrie Norm (DIN) end of the i6550 serial/power cable to the “Host” PIN pad and snap the mounting foot onto the bottom of the PIN pad.
- 4 Plug the power supply cable into the power port of the i6550 serial/power cable and using a tie-wrap secure the power supply cable to the data cable.

- 5 Connect the 9-pin end of the i6550 serial/power cable to port # 2 of the USB/RS-232 converter.
- 6 Using the enclosed AC cable, plug the power supply to an AC receptacle.
Note: The power supply must be plugged into a power strip connected to the UPS supplied with the Passport system.
- 7 Turn on power to the Passport system.

Connecting i6550 PIN Pad to V8.02+ Passport Systems

Figure 6 shows the connections from the i6550 PIN pad to V8.02+ Passport systems.

Figure 6: i6550 PIN Pad with Mat Reader to Passport System Connections



CAUTION

Ingenico PIN pad devices will be connected to the EDH (after Passport V8.02 software upgrade) via an RS-232 connection. Gilbarco recommends a RS-232 line booster for these devices if the CAT-5 cable distance (run) is between 50 and 100 feet. If the CAT-5 cable distance (run) is greater than 100 feet, an additional booster for every additional 50 feet will be required along with an RS-232 line booster.

To connect the i6550 PIN pad with mat reader to the Passport system, proceed as follows:

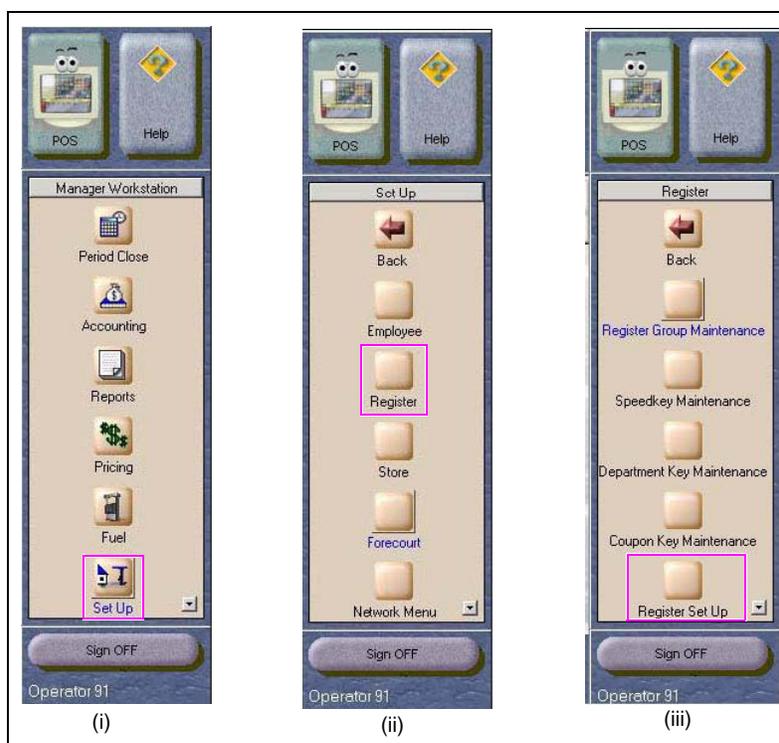
- 1 Turn off the Passport EDH system by tapping the power button. When the blue light is off on the EDH, proceed to step 2.
- 2 Route the M08213B004 Cable through the mat reader, pedestal, and countertop (see [Figure Note](#): on [page 18](#) through [Figure 17](#) on [page 21](#)).
- 3 Connect the 9-pin circular DIN end of the i6550 Serial/Power Cable (M08213B004) to the “Host” PIN pad and snap the mounting foot onto the bottom of the PIN pad.
- 4 Plug the power supply cable to the power port of the i6550 serial/power cable and using a tie-wrap secure the power supply cable to the data cable.
- 5 Connect the 9-pin end of the i3070 Serial/Power Cable (M08212B004) to an RJ-45 to DB-9 Male Cable Adapter (M09747B010), or attach the i3070 serial/power cable to an EDH COM Gender Mender (Q13180-63B). EDH COM gender mender will be attached to the EDH with a Q13850-XX CAT-5 Cable (see [Figure 6](#) on [page 14](#)).
- 6 Using the enclosed AC cable, plug the power supply to an AC receptacle.
Note: The power supply must be plugged into a power strip connected to the UPS supplied with the Passport system.
- 7 Turn on power to the EDH by pushing the power button.

Register Setup for Ingenico i6550

To set up a register for Ingenico i6550, proceed as follows:

- 1 From the MWS main menu, select **Set Up > Register > Register Set Up**. The Register Set Up screen opens.

Figure 7: MWS Main Menu

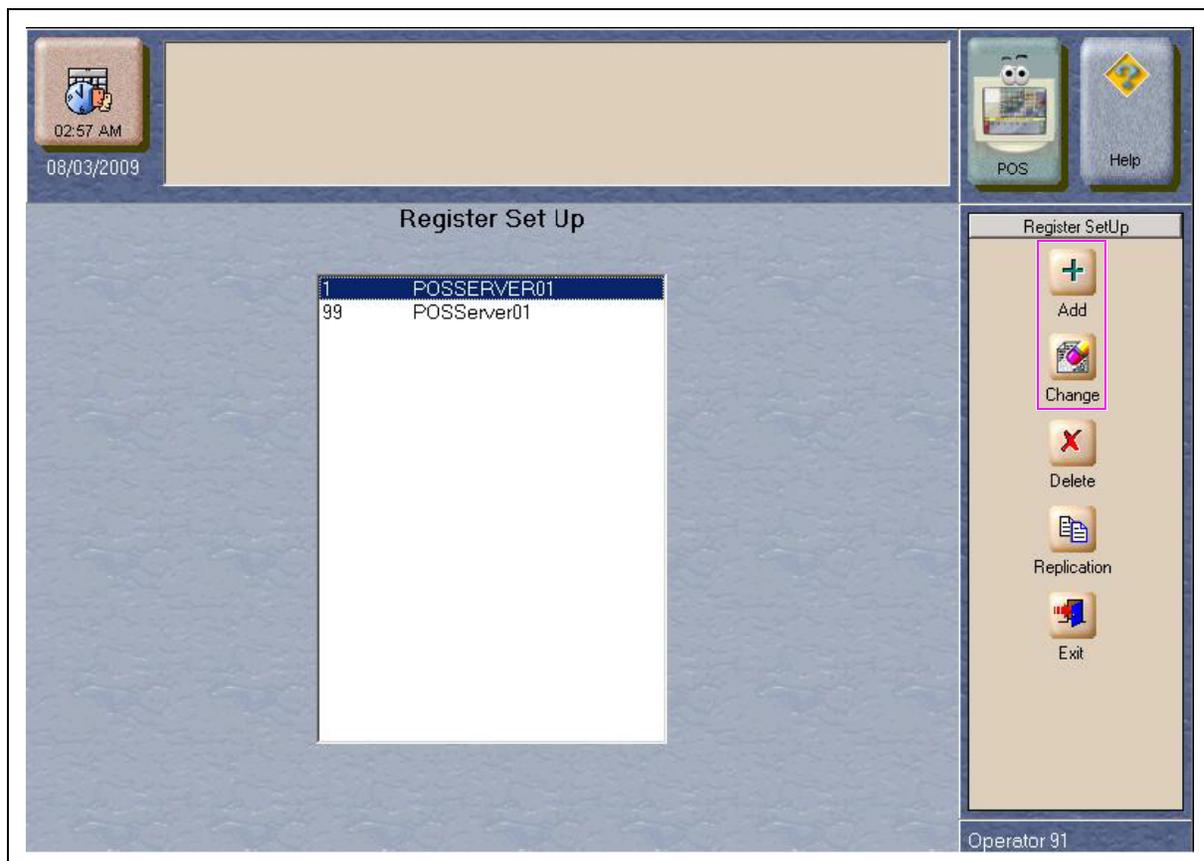


2 Select **Add**, if the register has not been set up.

~ OR ~

Select **Change**, if the register is already set up.

Figure 8: Register Set Up

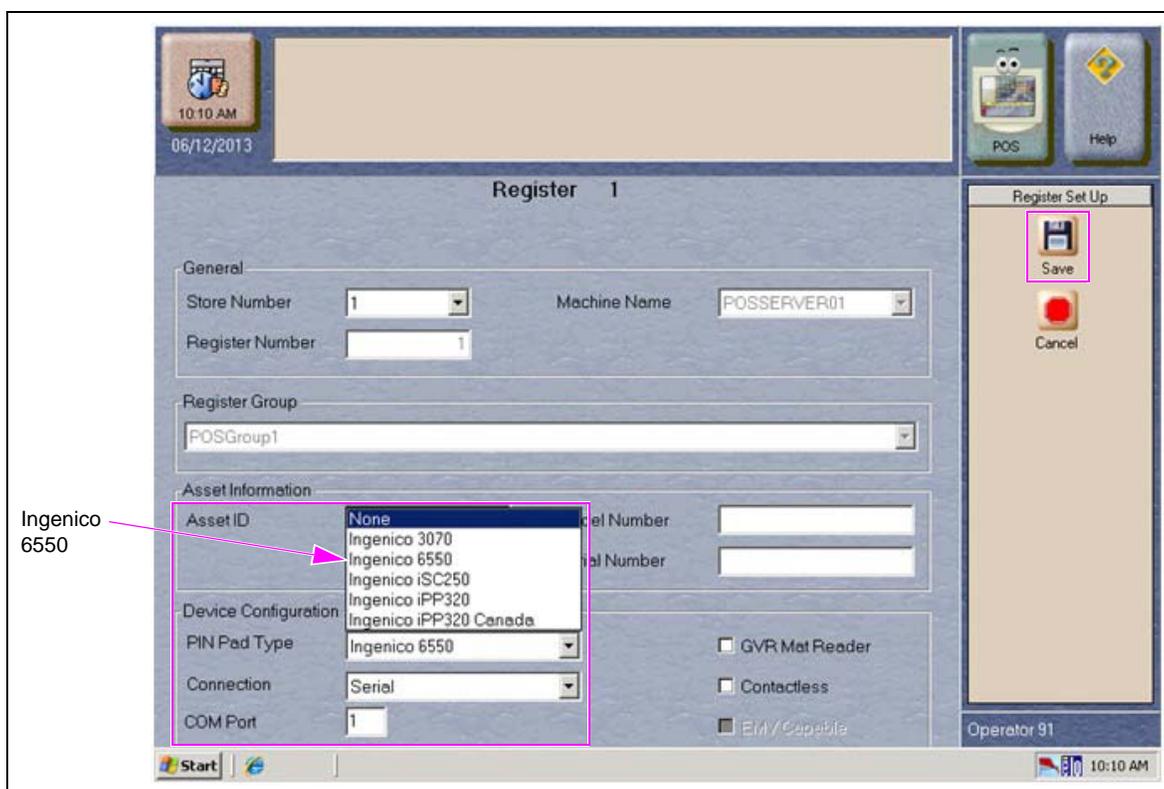


3 [Figure 9](#) on [page 17](#) is displayed. Select the required options for the following:

- PIN Pad Type
- Connection Type
- COM Port that the PIN pad for this register is connected to on the EDH

- 4 Select **Save** to finish the programming process.

Figure 9: Register 1 Screen



Illustrations for PIN Pad Mat Reader

This section contains figures for various configurations of i6550 PIN pads used in conjunction with mat readers.

- For a PIN pad mat reader with pedestal and a hole in the countertop, see the following:
[Figure Note: on page 18](#)
[Figure 11 on page 18](#)
[Figure 12 on page 19](#)
[Figure 13 on page 19](#)
[Figure Note: on page 20](#)
- For a PIN pad mat reader with pedestal and without a hole in countertop, see the following:
[Figure 12 on page 19](#)
[Figure 13 on page 19](#)
[Figure 14 on page 20](#)
[Figure Note: on page 20](#)
- For a PIN pad mat reader without pedestal and without a hole in the countertop, see the following:
[Figure 12 on page 19](#)
[Figure Note: on page 20](#)
[Figure 16 on page 21](#)
[Figure 17 on page 21](#)

For more information on installing the Mat Reader Assembly Kit on the Passport system, refer to *MDE-4017 Mat Reader Assembly Kit C00016-XXX Installation Manual*.

Passport Solution Overview

Figure 10: Passport Solution Overview



Note: For detailed installation instructions of Passport PIN pad stand, refer to MDE-5351 Passport PIN Pad Stand Installation Instructions.

Figure 11: i6550 PIN Pad Mat Reader Cable Routing - Through Pedestal and Countertop

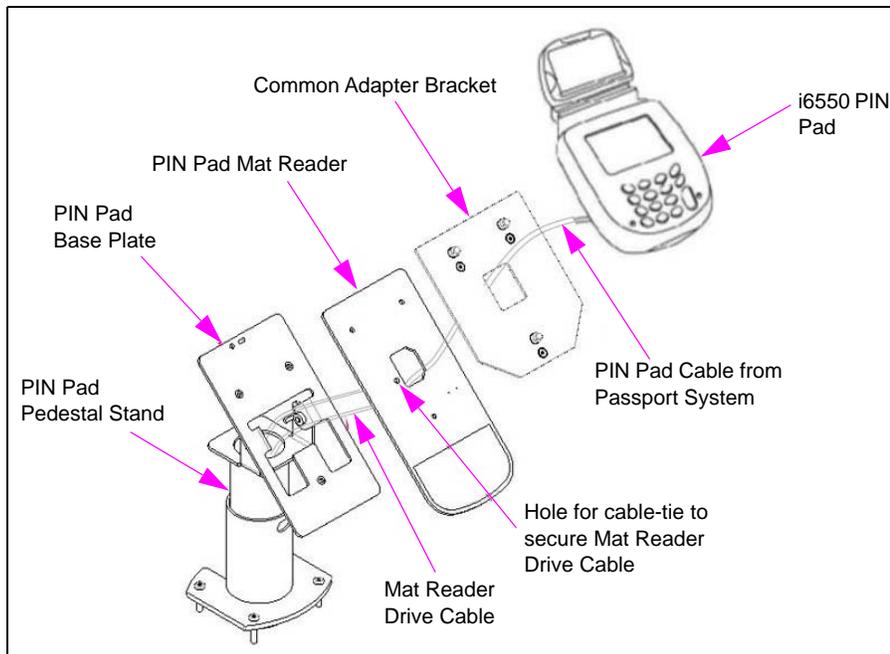


Figure 12: Rear Side of PIN Pad Mat Reader

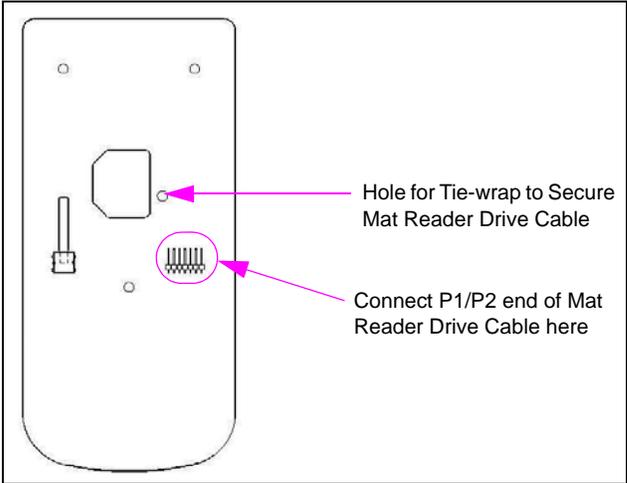
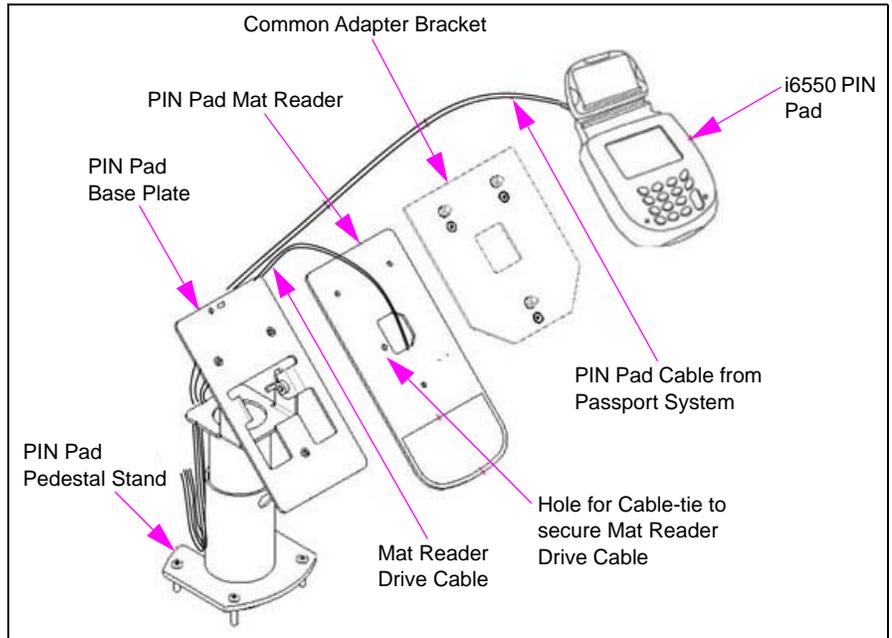


Figure 13: i6550 PIN Pad Mat Reader Assembly on Pedestal



Figure 14: i6550 PIN Pad Mat Reader Cable Routing - Outside Pedestal



Note: The cable can also be routed outside through the slot provided at the back of the pedestal.

Figure 15: M01382 Adapter Plate - Rear Side with Bumpers and Nut Locations

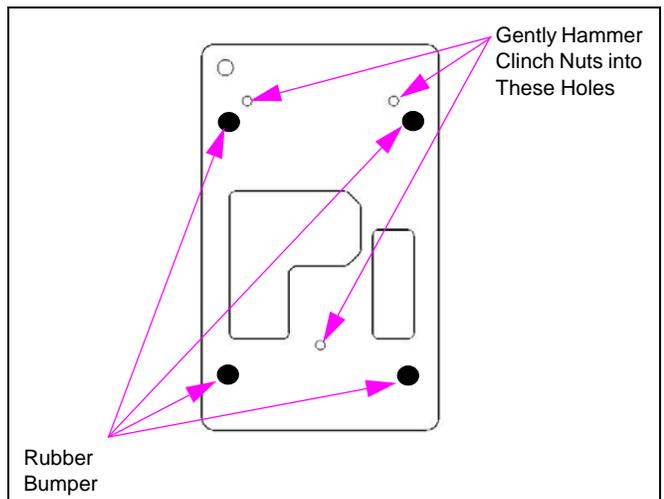


Figure 16: PIN Pad Mat Reader Cable Routing - Without Pedestal

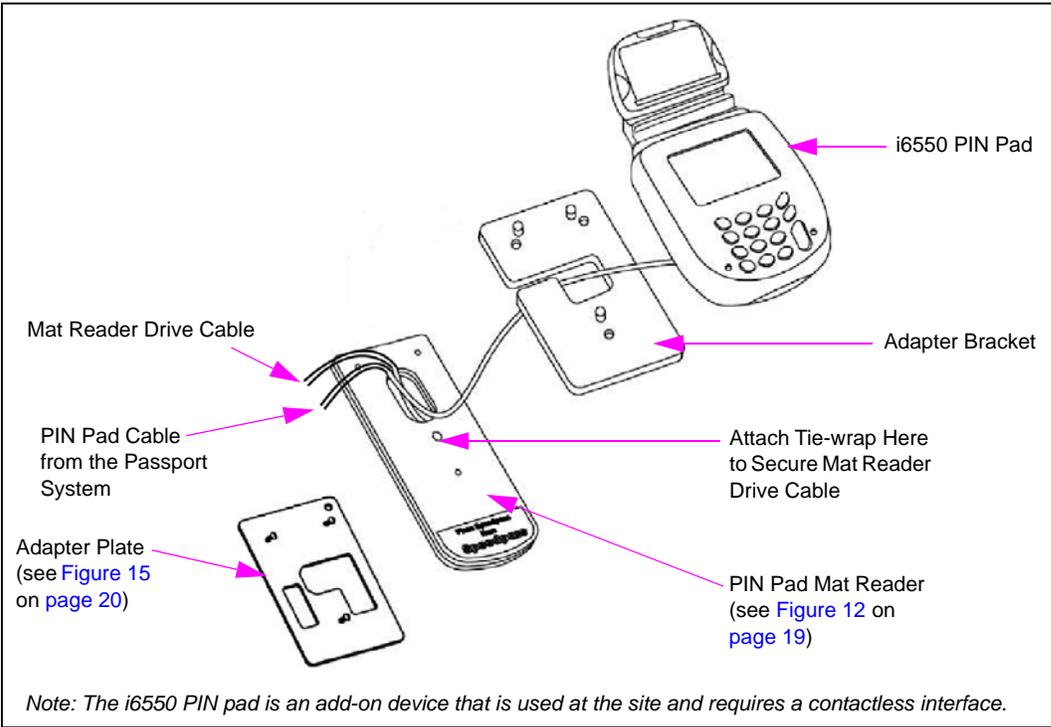
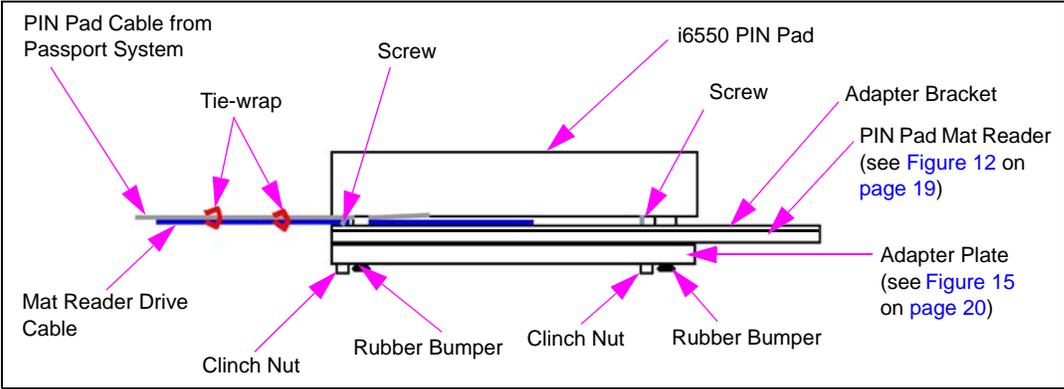


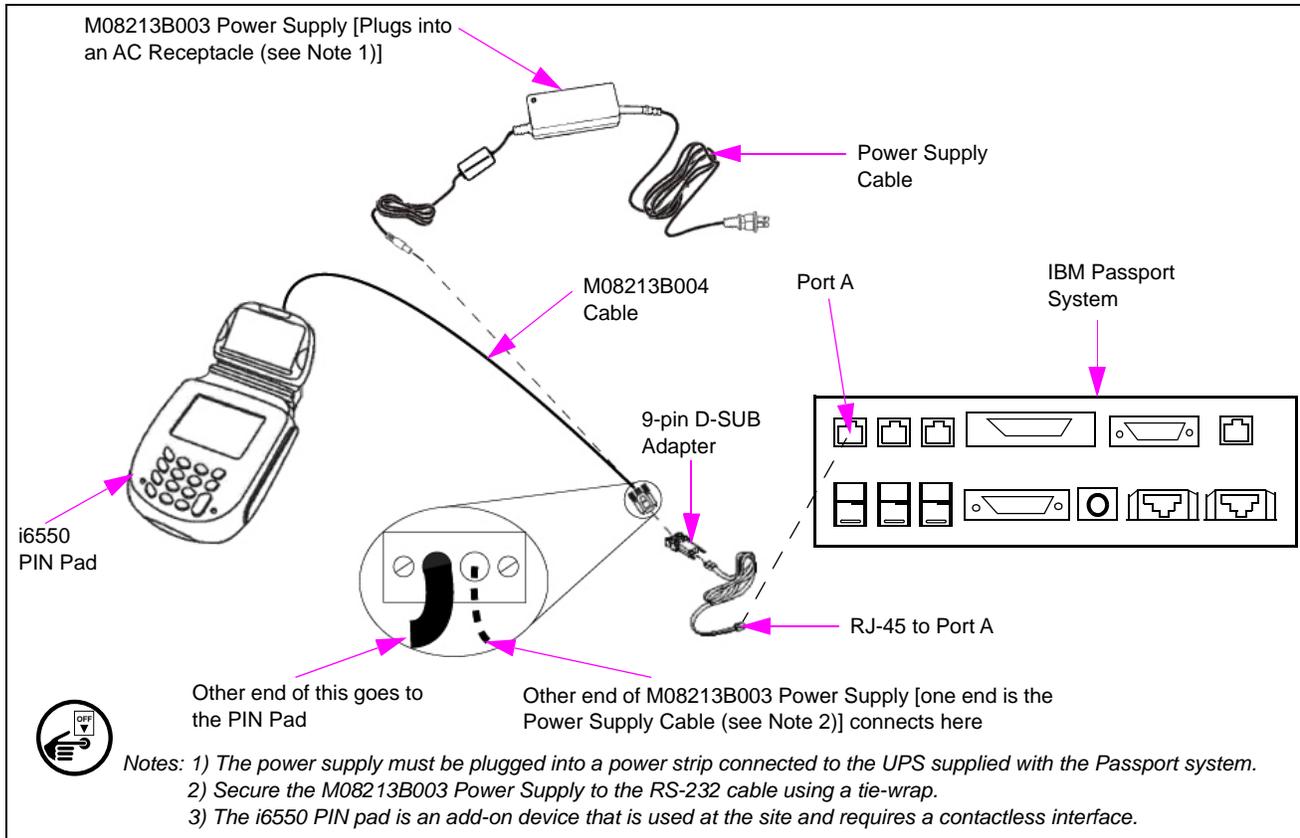
Figure 17: Adapter Plate/PIN Pad Mat Reader Combination/PIN Pad Unit



Connecting i6550 PIN Pad to IBM® Passport System

Figure 18 shows the connections from the i6550 PIN pad to IBM Passport system.

Figure 18: i6550 PIN Pad to IBM Passport System Connections



To connect the i6550 PIN pad that contains the contactless smart card reader option, to the IBM Passport system, proceed as follows:

- 1 Turn off the power to the Passport system.
- 2 Route the M08213B004 Cable through the mat reader, pedestal, and countertop (see [Figure Note](#): on [page 18](#) through [Figure 17](#) on [page 21](#)).
- 3 Connect the 9-pin circular DIN end of the M08213B004 Cable to the “Host” PIN pad and snap the mounting foot onto the bottom of the PIN pad.
- 4 Plug the power supply cable into the power port of the M08213B004 Cable and using a tie-wrap secure the power supply cable to the data cable.
- 5 Connect the 9-pin end of the M08213B004 Cable to the 9-pin D-SUB adapter supplied with the client. Connect the RJ-45 end of the adapter cable to port A on the Passport system.
- 6 Using the enclosed AC cable, plug the power supply into an AC receptacle.
Note: The power supply must be plugged into a power strip connected to the UPS supplied with the Passport system.
- 7 Turn on power to the Passport system.

iPP320 PIN Pad

Key Features

- Payment Card Industry (PCI) compliant card and PIN entry.

Figure 19: iPP320 PIN Pad



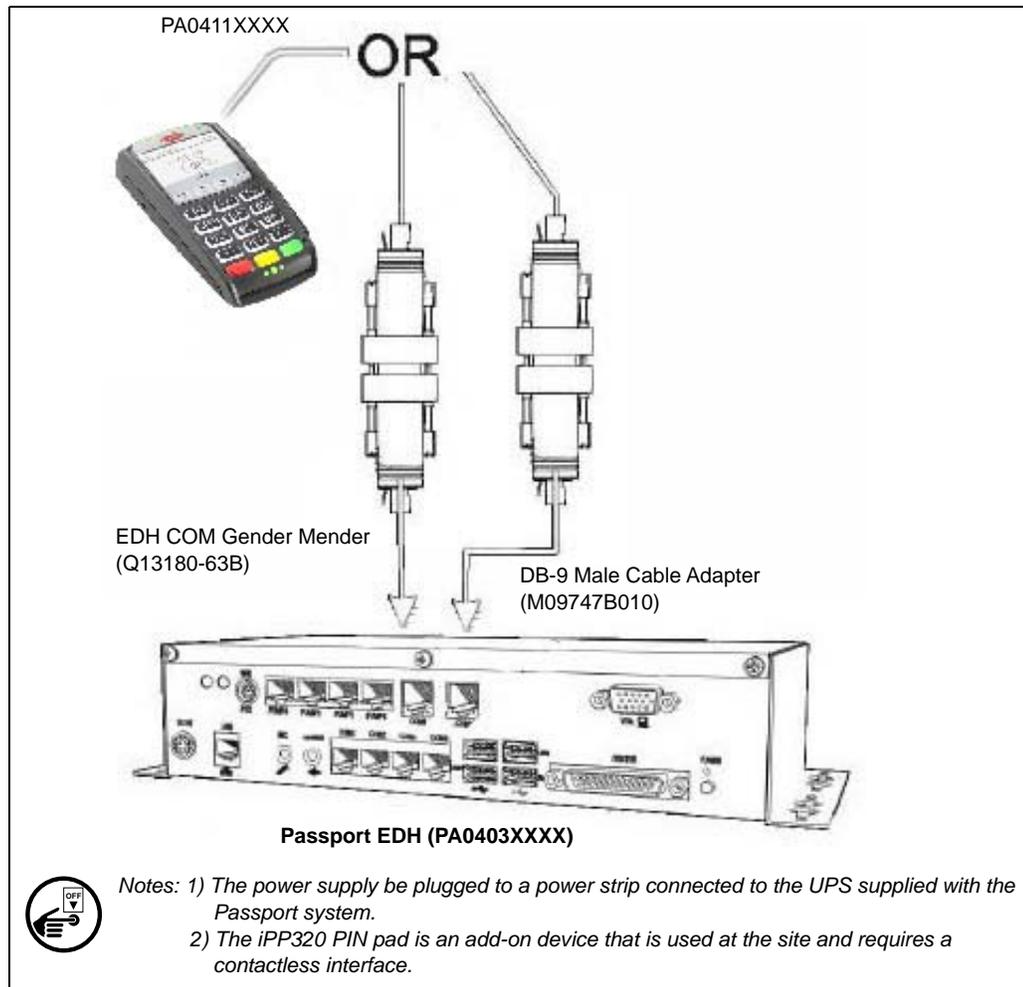
IMPORTANT INFORMATION

Do NOT plug an iPP320 PIN pad into an EDH that does not have the V10 K Service Pack or later software on it. Installing the PIN pad prior to the K Service Pack will result in an invalid configuration file being downloaded to the PIN pad, rendering it unusable.

Connecting iPP320 PIN Pad to V10 or Higher Passport System

Figure 20 shows the connections from the iPP320 PIN pad to V10 or higher Passport systems.

Figure 20: iPP320 PIN Pad with Mat Reader to Passport System Connections



CAUTION

Ingenico PIN pad devices will be connected to the EDH (Passport V10 D Service Pack software) via an RS-232 connection. Gilbarco recommends an RS-232 line booster for these devices if the CAT-5 cable distance (run) is between 50 and 100 feet. If the CAT-5 cable distance (run) is greater than 100 feet, an additional booster for every additional 50 feet will be required along with an RS-232 line booster.

To connect the iPP320 PIN pad with mat reader to the Passport system, proceed as follows:

- 1 Turn off the Passport EDH system by tapping the power button. When the blue light is off on the EDH, proceed to step 2.
- 2 Route the M12753B004 Cable through the mat reader, pedestal, and countertop (see Figure 24 on page 28 through Figure 31 on page 34).

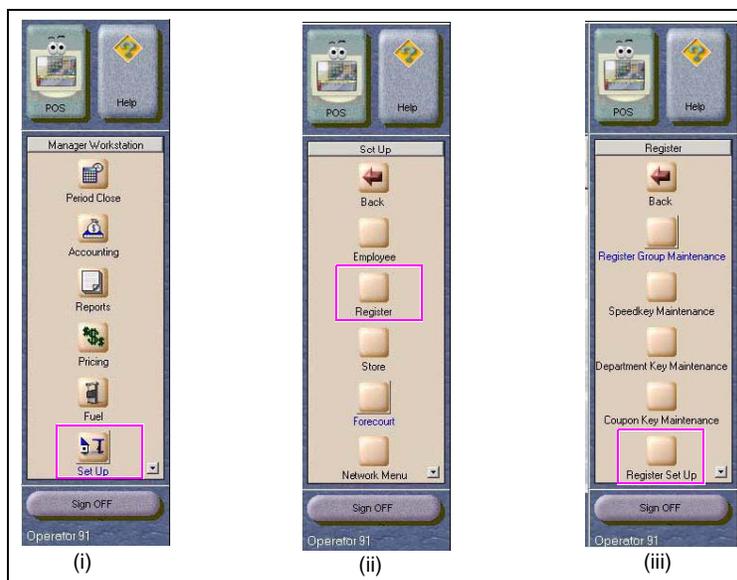
- 3 Connect the right angle, rectangular end of the M12753B004 Cable to the “Host” PIN pad.
- 4 Plug the power supply cable to the power port of the M12753B004 Cable and using a tie-wrap secure the power supply cable to the data cable.
- 5 Connect the 9-pin end of the M12753B004 Cable to an RJ-45 to DB-9 Male Cable Adapter (M09747B010), or attach the M12753B004 Cable to an EDH COM Gender Mender (Q13180-63B). EDH COM gender mender will be attached to the EDH with a Q13850-XX CAT-5 Cable (see [Figure 20](#) on [page 24](#)).
- 6 Using the enclosed AC cable, plug the power supply to an AC receptacle.
Note: The power supply must be plugged to a power strip connected to the UPS supplied with the Passport system.
- 7 Turn on power to the EDH by pushing the power button.

Register Setup for iPP320 PIN Pad

To set up a register for iPP320 PIN pad, proceed as follows:

- 1 From the MWS main menu, select **Set Up > Register > Register Set Up**. The Register Set Up screen opens.

Figure 21: MWS Main Menu

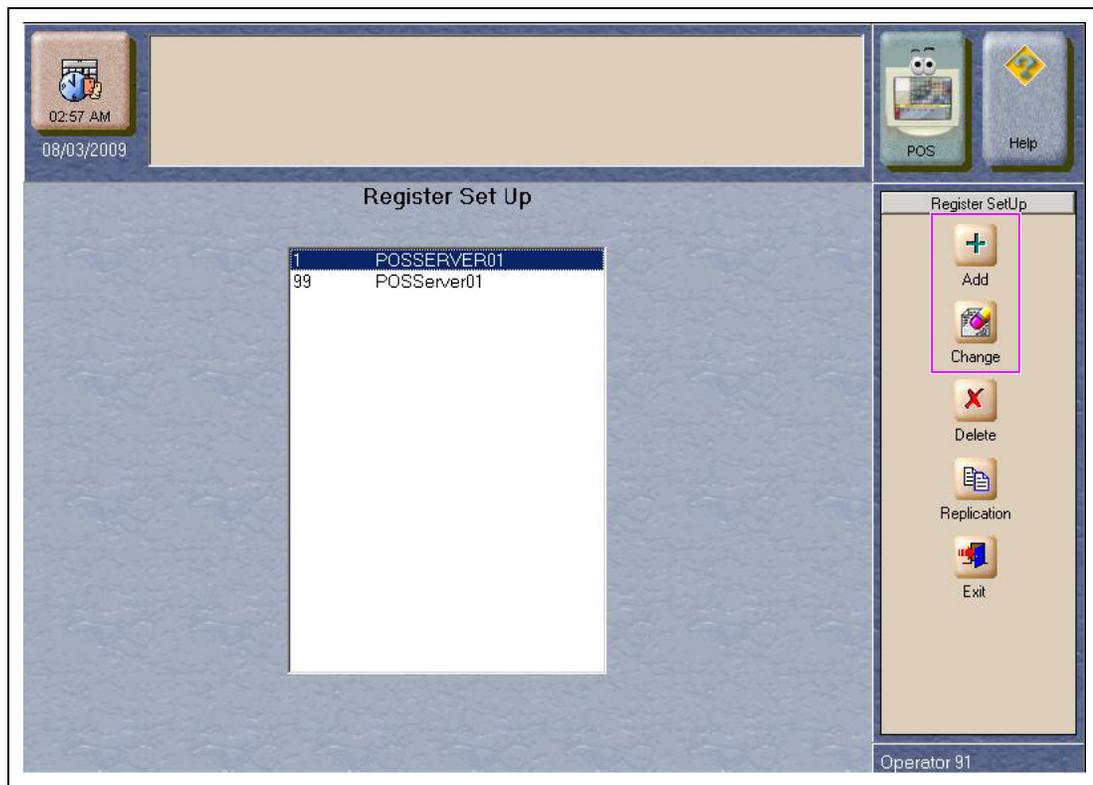


2 Select **Add**, if the register has not been set up.

~ OR ~

Select **Change**, if the register is already set up.

Figure 22: Register Set Up

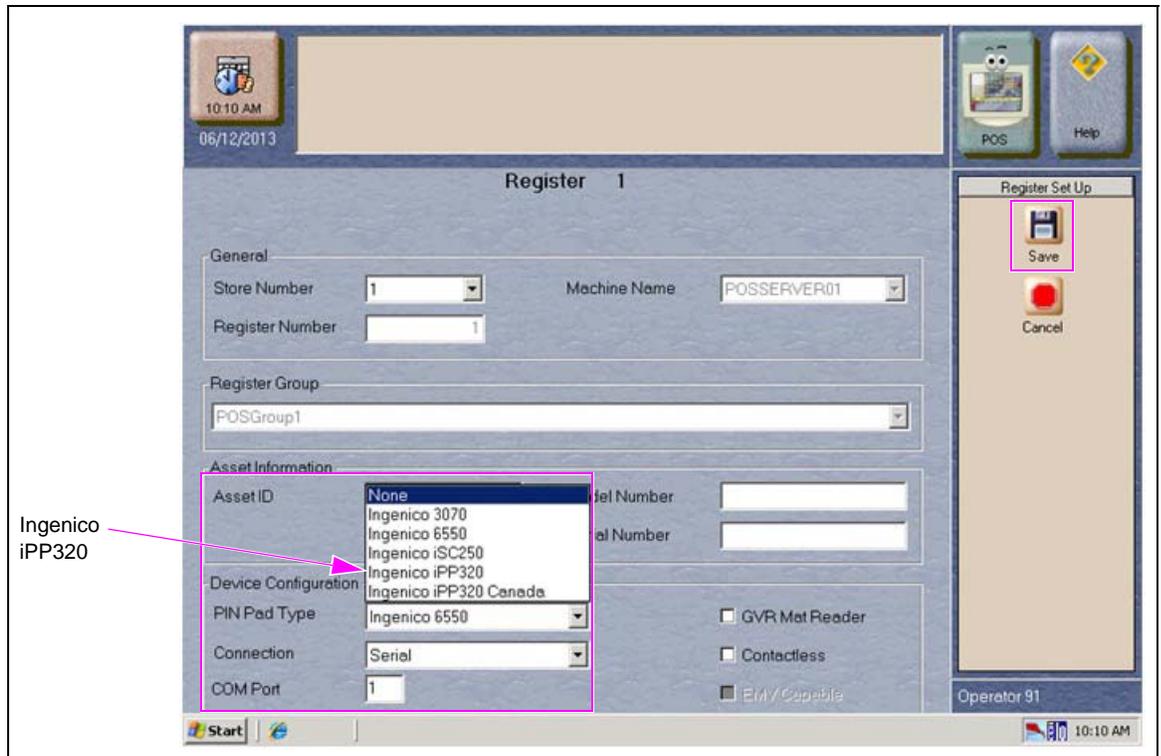


3 The Register 1 screen opens (see [Figure 23](#) on [page 27](#)). Select the required options for the following:

- PIN Pad Type
- Connection Type
- COM Port that the PIN Pad for this Register is connected to on the EDH

- 4 Select **Save** to finish the programming process.

Figure 23: Register 1 Screen



Note: The iPP320 is used in V10 and higher Passport systems.

iSC250 PIN Pad

Key Features

- PCI compliant card and PIN entry.
- Contactless card support (if supported by the Passport application).
- Signature capture (if supported by the Passport application).

Figure 24: iSC250 PIN Pad



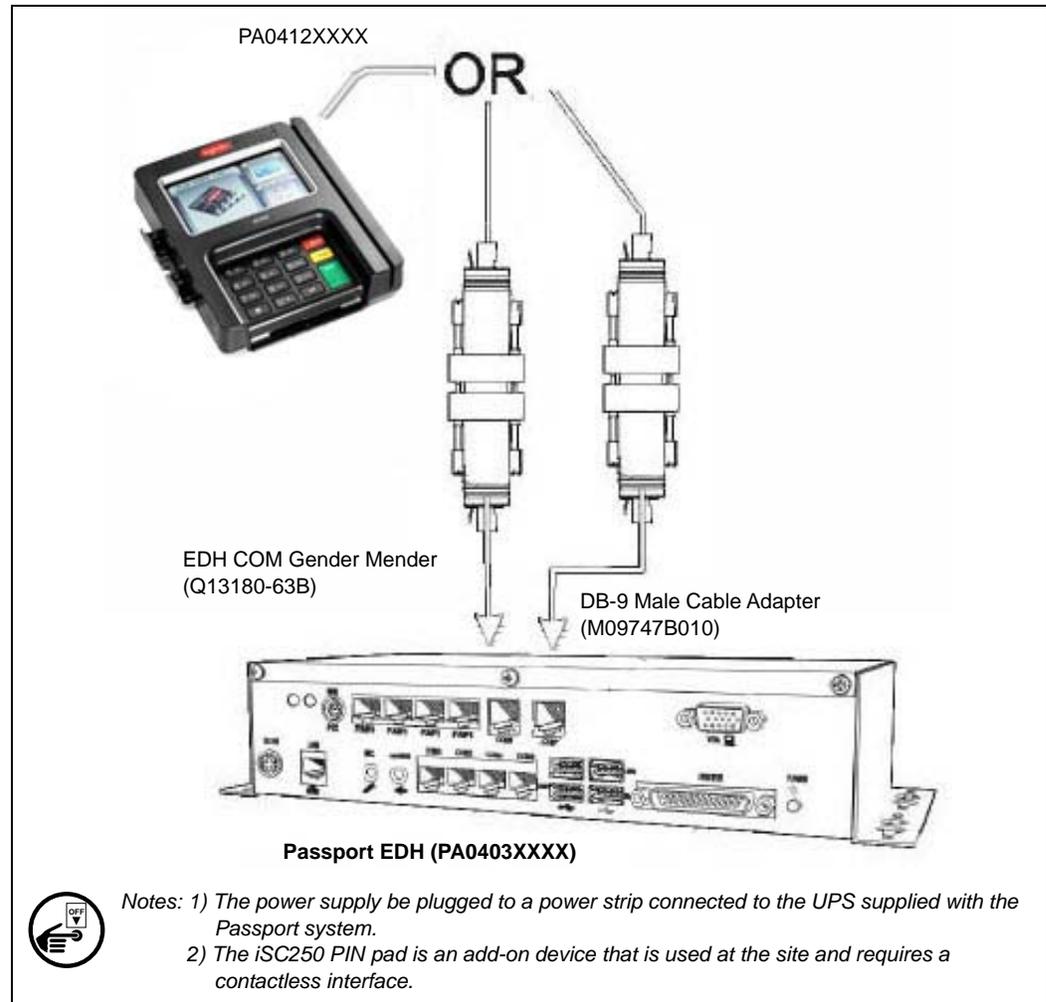
IMPORTANT INFORMATION

Do NOT plug an iSC250 PIN Pad into an EDH that does not have the V10 D Service Pack or later software on it. Installing the PIN pad prior to the D Service Pack will result in an invalid configuration file being downloaded to the PIN pad, rendering it unusable.

Connecting iSC250 PIN Pad to V10 or Higher Passport Systems

Figure 25 shows the connections from the iSC250 PIN pad to V10 or higher Passport systems.

Figure 25: iSC250 PIN Pad with Mat Reader to Passport System Connections



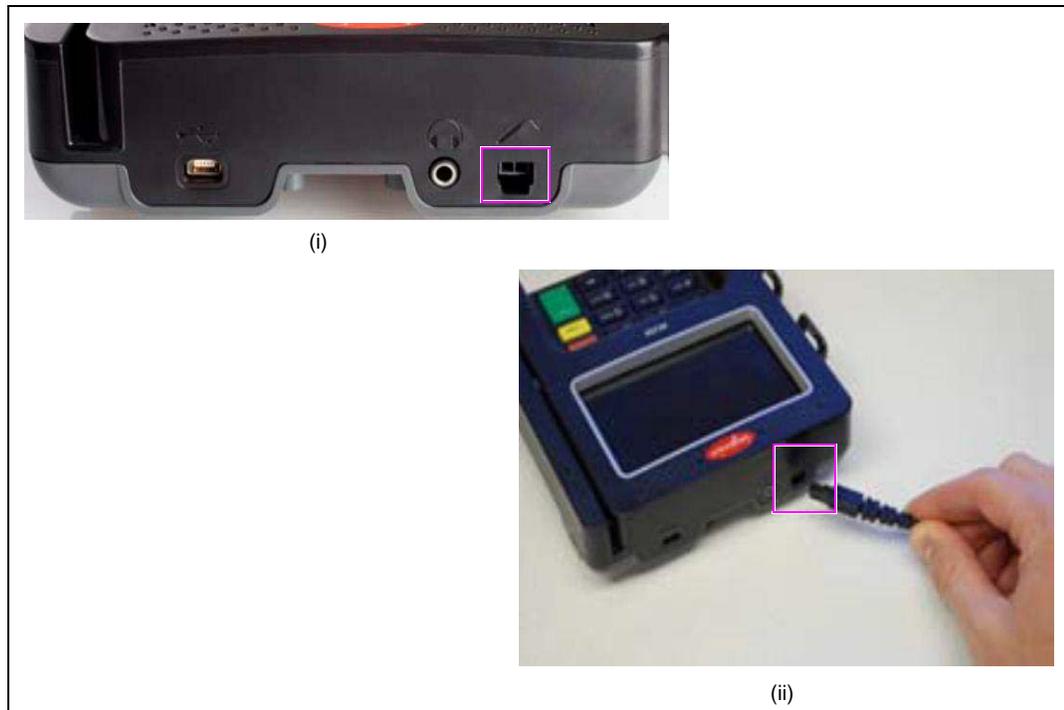
CAUTION

Ingenico PIN pad devices will be connected to the EDH (Passport V10 D Service Pack software) via an RS-232 connection. Gilbarco recommends an RS-232 line booster for these devices if the CAT-5 cable distance (run) is between 50 and 100 feet. If the CAT-5 cable distance (run) is greater than 100 feet, an additional booster for every additional 50 feet will be required along with an RS-232 line booster.

To connect the iSC250 PIN pad with mat reader to the Passport system, proceed as follows:

- 1 Turn off the Passport EDH system by tapping the power button. When the blue light is off on the EDH, proceed to step 2.
- 2 Route the M12754B004 Cable through the mat reader, pedestal, and countertop (see [Figure 30](#) on [page 34](#) through [Figure 35](#) on [page 36](#)).
- 3 Connect the right angle, rectangular end of the M12754B004 Cable to the “Host” PIN pad.
- 4 Plug the power supply cable to the power port of the M12754B004 Cable and using a tie-wrap secure the power supply cable to the data cable.
- 5 Connect the 9-pin end of the M12754B004 Cable to an RJ-45 to DB-9 Male Cable Adapter (M09747B010), or attach the M12754B004 Cable to an EDH COM Gender Mender (Q13180-63B). EDH COM gender mender will be attached to the EDH with a Q13850-XX CAT-5 Cable (see [Figure 25](#) on [page 29](#)).
- 6 To connect a Writing Stylus (M12754B005) to an iSC250 PIN pad, proceed as follows:
 - a Connect the stylus cable into to the back of the PIN pad as shown in [Figure 26](#).
 - b Place the stylus into the cradle on the left edge of the iSC250 device, or insert upright into the hole in the cradle.

Figure 26: Connecting Stylus



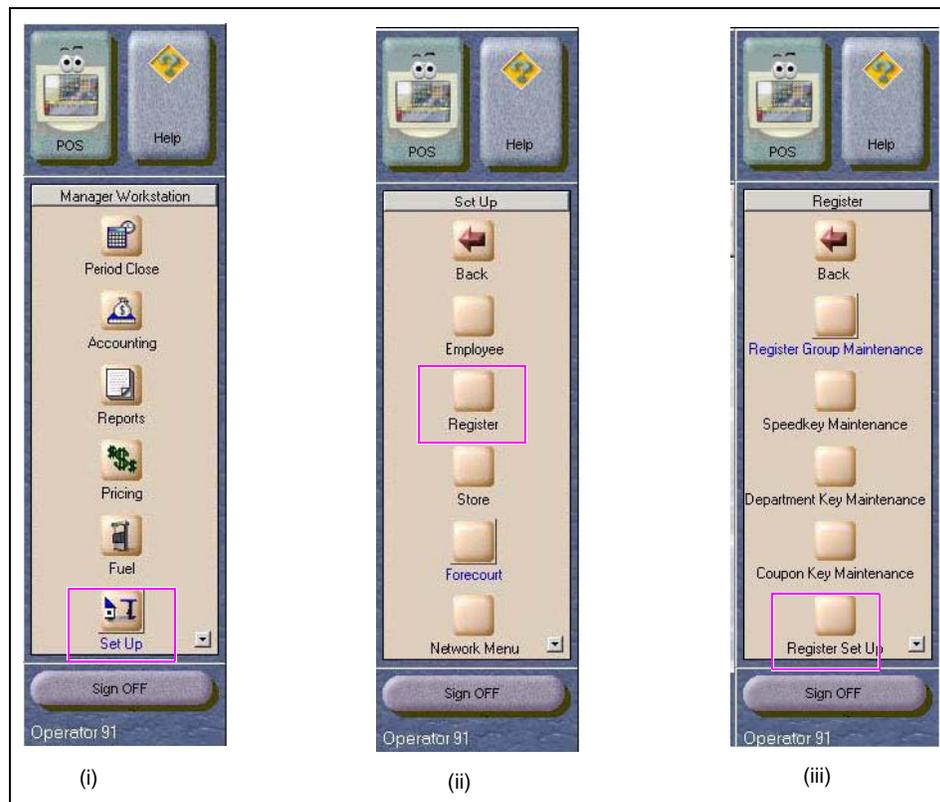
- 7 Using the enclosed AC cable, plug the power supply to an AC receptacle.
Note: The power supply must be plugged to a power strip connected to the UPS supplied with the Passport system.
- 8 Turn on power to the EDH by pushing the power button.

Register Setup for iSC250 PIN Pad

To set up a register for iSC250 PIN pad, proceed as follows:

- 1 From the MWS main menu, select **Set Up > Register > Register Set Up**. The Register Set Up screen opens.

Figure 27: MWS Main Menu

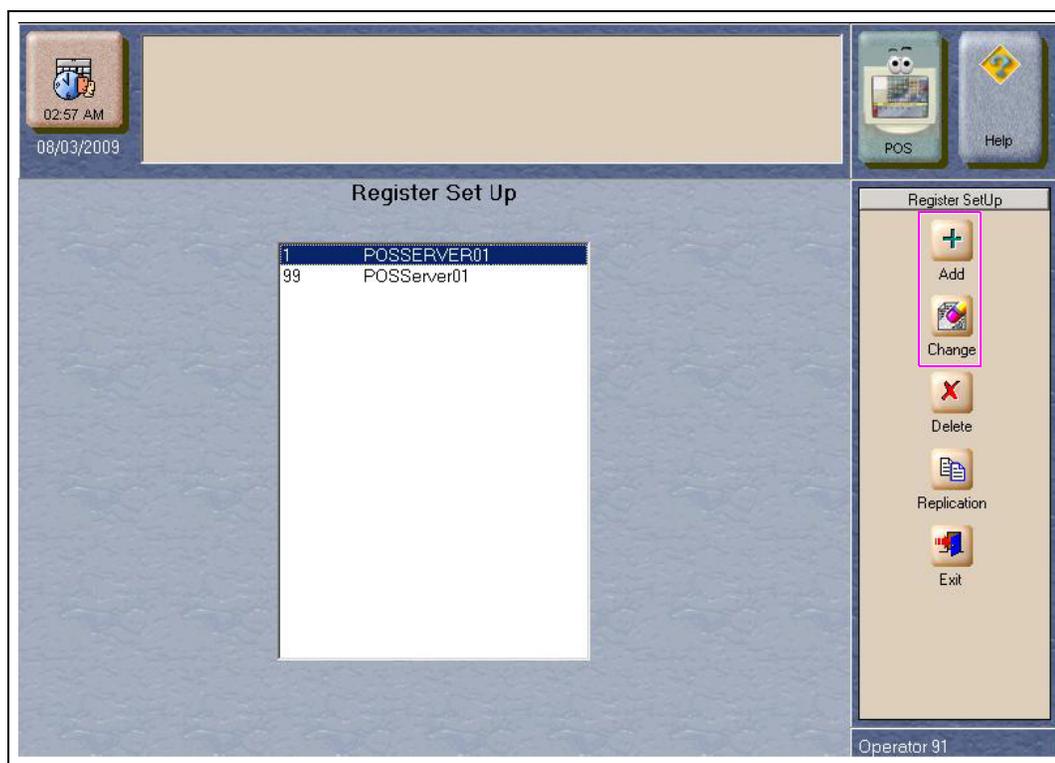


2 Select **Add**, if the register has not been set up.

~ OR ~

Select **Change**, if the register is already set up.

Figure 28: Register Set Up

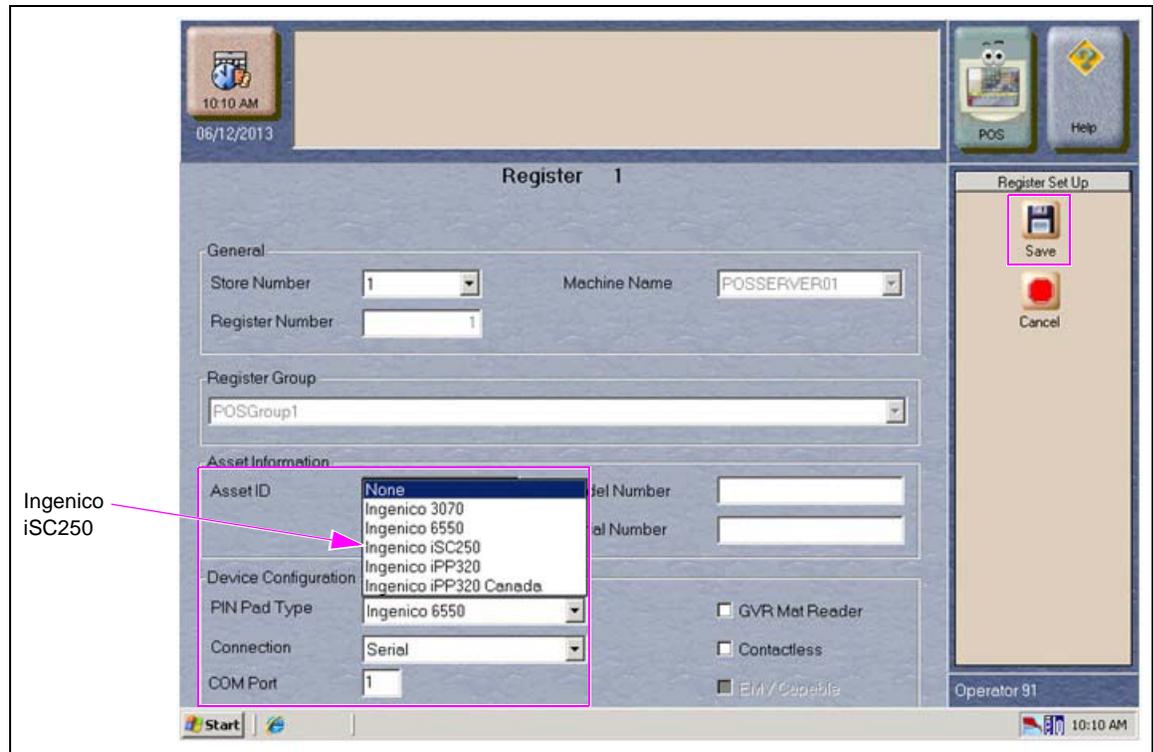


3 The Register 1 screen opens (see [Figure 29](#) on [page 33](#)). Select the required options for the following:

- PIN Pad Type
- Connection Type
- COM Port that the PIN Pad for this Register is connected to on the EDH

- 4 Select **Save** to finish the programming process.

Figure 29: Register 1 Screen



Note: The iSC250 is used in V10 or higher Passport systems.

Illustrations for PIN Pad Mat Reader

This section contains figures for various configurations of iSC250 PIN pads used in conjunction with mat readers.

- For a PIN pad mat reader with pedestal and a hole in the countertop, see the following:
 - [Figure 30 on page 34](#)
 - [Figure 31 on page 34](#)
 - [Figure 32 on page 35](#)
 - [Figure 33 on page 35](#)
 - [Figure Note: on page 35](#)
- For a PIN pad mat reader with pedestal and without a hole in countertop, see the following:
 - [Figure 31 on page 34](#)
 - [Figure 32 on page 35](#)
 - [Figure Note: on page 35](#)
- For a PIN pad mat reader without pedestal and without a hole in the countertop, see the following:
 - [Figure 31 on page 34](#)
 - [Figure Note: on page 35](#)
 - [Figure 34 on page 36](#)
 - [Figure 35 on page 36](#)

For more information on installing the Mat Reader Assembly Kit on the Passport system, refer to *MDE-4017 Mat Reader Assembly Kit C00016-XXX Installation Manual*.

Figure 30: iSC250 Pad Mat Reader Cable Routing - Through Pedestal and Countertop

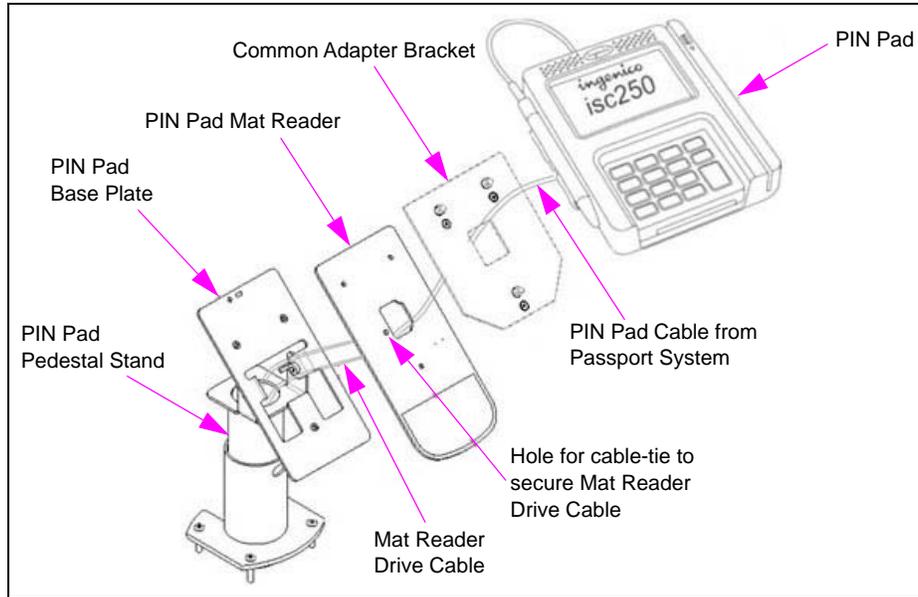


Figure 31: Rear Side of PIN Pad Mat Reader

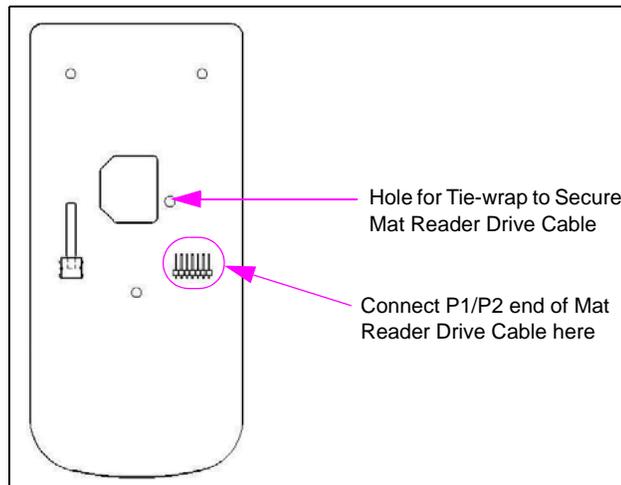
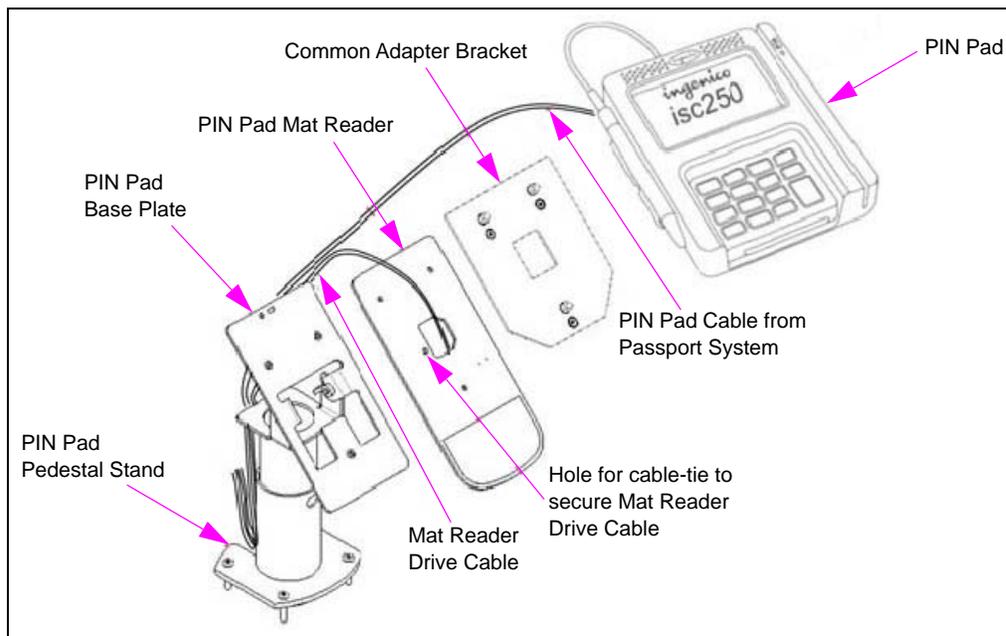


Figure 32: iSC250 Pad Mat Reader Cable Routing - Outside Pedestal



Note: The cable can also be routed outside through the slot provided at the back of the pedestal.

Figure 33: M01382 Adapter Plate - Rear Side with Bumpers and Nut Locations

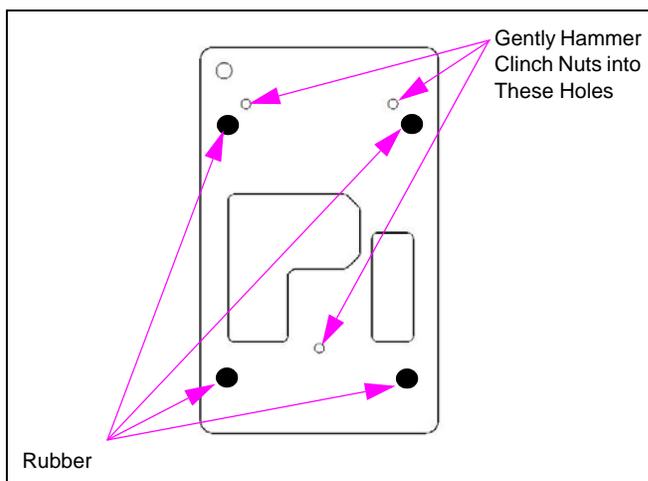


Figure 34: PIN Pad Mat Reader Cable Routing - Without Pedestal

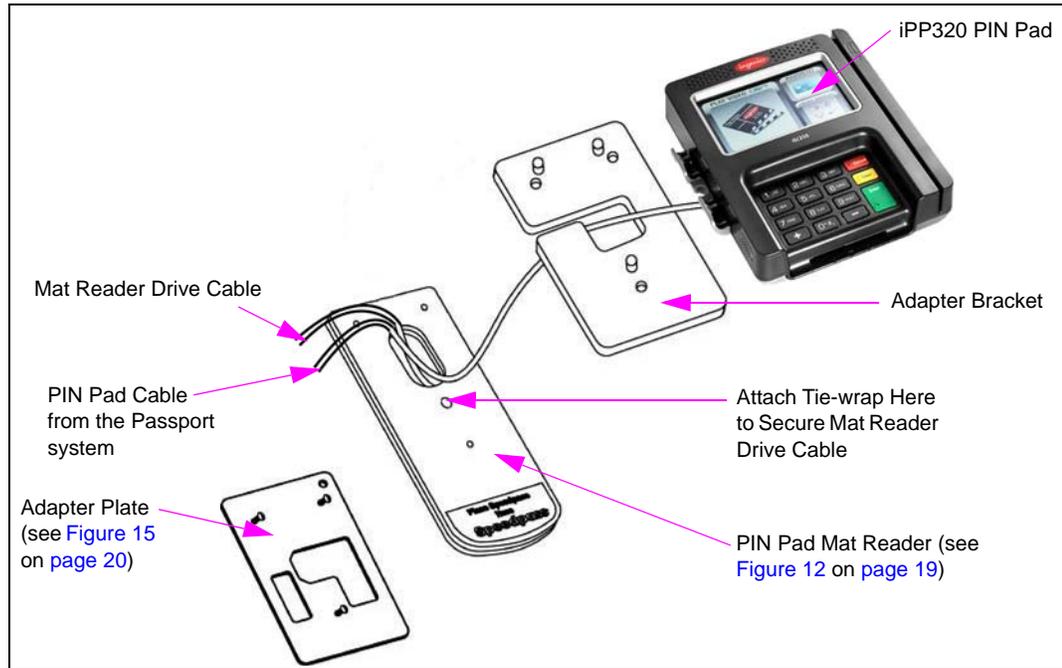
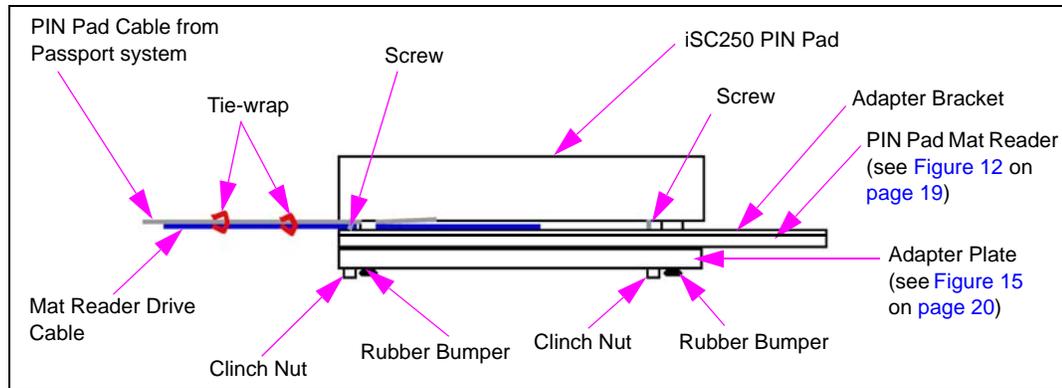


Figure 35: Adapter Plate/PIN Pad Mat Reader Combination/PIN Pad Unit



Troubleshooting

This section provides troubleshooting and diagnostic information. For troubleshooting the PIN pads, the ASC can perform the following:

- 1 Use the EPS Dashboard on the PIN Pad tab for troubleshooting the PIN pads.

STOP, START, and RESET buttons are available for each device with visual green or red indicators for the device.

- 2 Press **STOP** and you can see the text change on the device before it goes offline.

⚠ WARNING

Electrocution Danger

Working on console electronics without turning off power may lead to electrocution and death. Remove power and power cable.

⚠ CAUTION

Electrostatic Discharge (ESD) Damage

Working on console electronics without connecting to a ground or discharging static can damage electronic parts. Use a wrist strap and store parts in anti-static storage bags.

Error Message Displays

Error Message on PIN Pad Screen	Solution
DOWNLOAD NEEDED	Replace the PIN Pad
NO MASTER/DUKPT KEY LOADED	Replace the PIN Pad
No DUKPT Key Loaded	Replace the PIN Pad

PIN Pad Not Communicating with Passport Systems V3.06 to V8.0

If the PIN pad does not communicate with the Passport system, proceed as follows to verify proper communications:

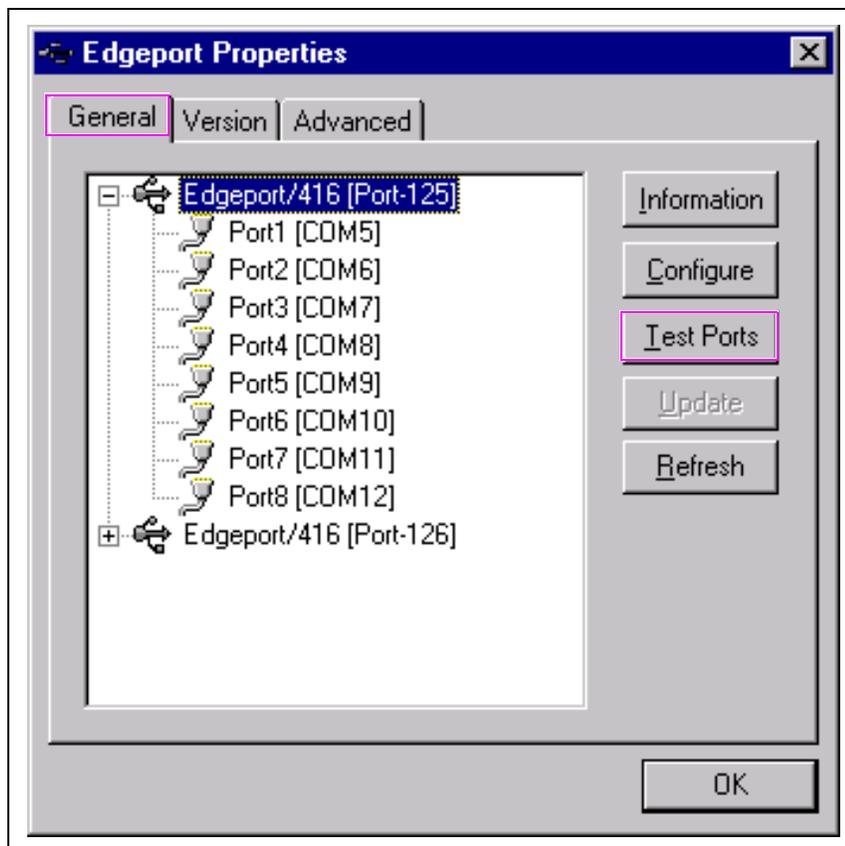
- 1 Unplug the COM/serial cable and the power supply to the PIN pad. Wait for the POS to report that the device is offline (or three minutes, whichever comes first). Then connect the power and wait for the device to fully boot up. Then, connect the communications cable.
- 2 Check the PIN pad settings in the Register Setup.
- 3 Stop the Passport system.
- 4 Cycle power on the PIN pad and wait for it to boot up.
- 5 Start the Passport system.

If the PIN pad does not communicate with the POS system, proceed as follows:

- 1 Verify if the gender mender and cables are connected properly.
- 2 Verify if the other Passport peripherals are working properly.
 - If the other peripherals are not working, verify if the USB/RS-232 converter is connected and that the LED status light on the converter is flashing either green or amber.
 - If the other peripherals are working, proceed to step 3.
- 3 If the PIN pad is connected to the EDH using an Edgeport® device, access the EDH via Remote Desktop and follow steps 4 through 8.

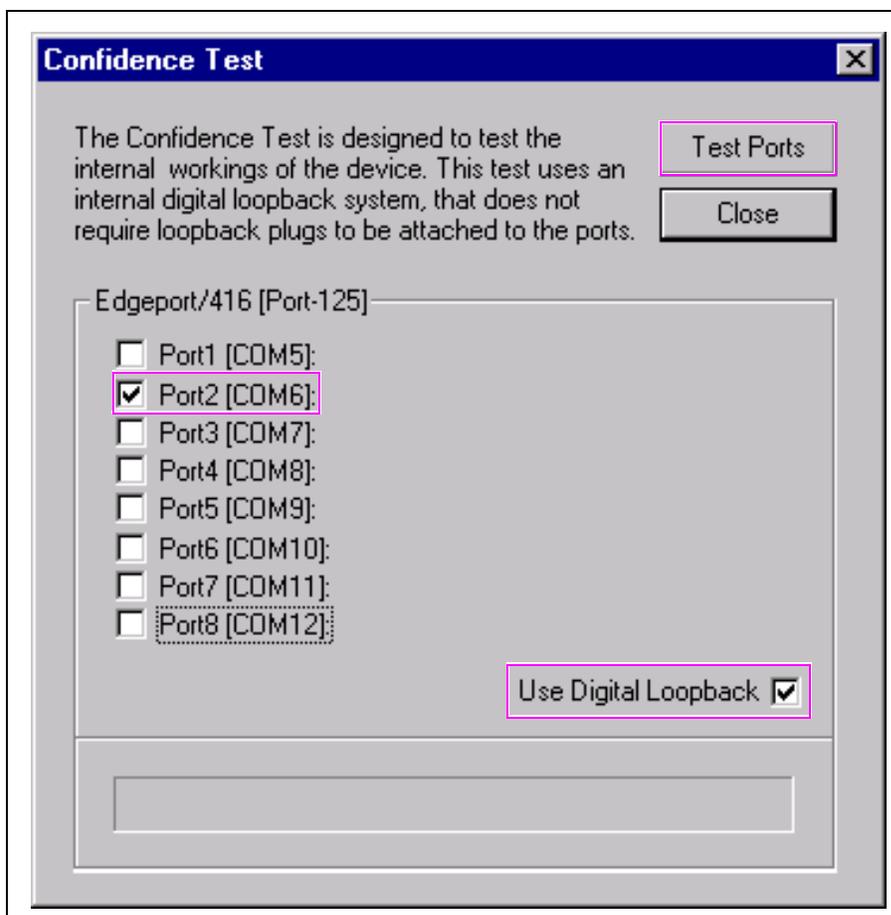
Note: Failure to stop the Passport application can result in a false indication of a test failure.
- 4 Access Passport Image Control Panel.
- 5 Select **Edgeport Configuration Utility**. The Edgeport Properties window opens.
- 6 Select the **General** tab and select the appropriate Edgeport device that lists Port2 [COM 6] as shown in [Figure 36](#).

Figure 36: Edgeport Properties Window



- 7 Click **Test Ports**. In the Confidence Test window, ensure that the **Use Digital Loopback** and **Port2 [COM 6]** check boxes are selected (see [Figure 37](#)).

Figure 37: Confidence Test Window



- 8 Click **Test Ports**.
 - If the result is not "Passed", replace the USB/RS-232 converter.
 - If the result is "Passed", restart the affected CWS using the System Maintenance toolbar. When the reboot has completed, test the PIN pad again. If the PIN pad does not work properly, replace the multiport cable and test the PIN pad again. If the PIN pad still does not work properly, replace the PIN pad.

Unsuccessful Debit Transactions on PIN Pad

If the PIN pad is unable to process debit transactions, proceed as follows:

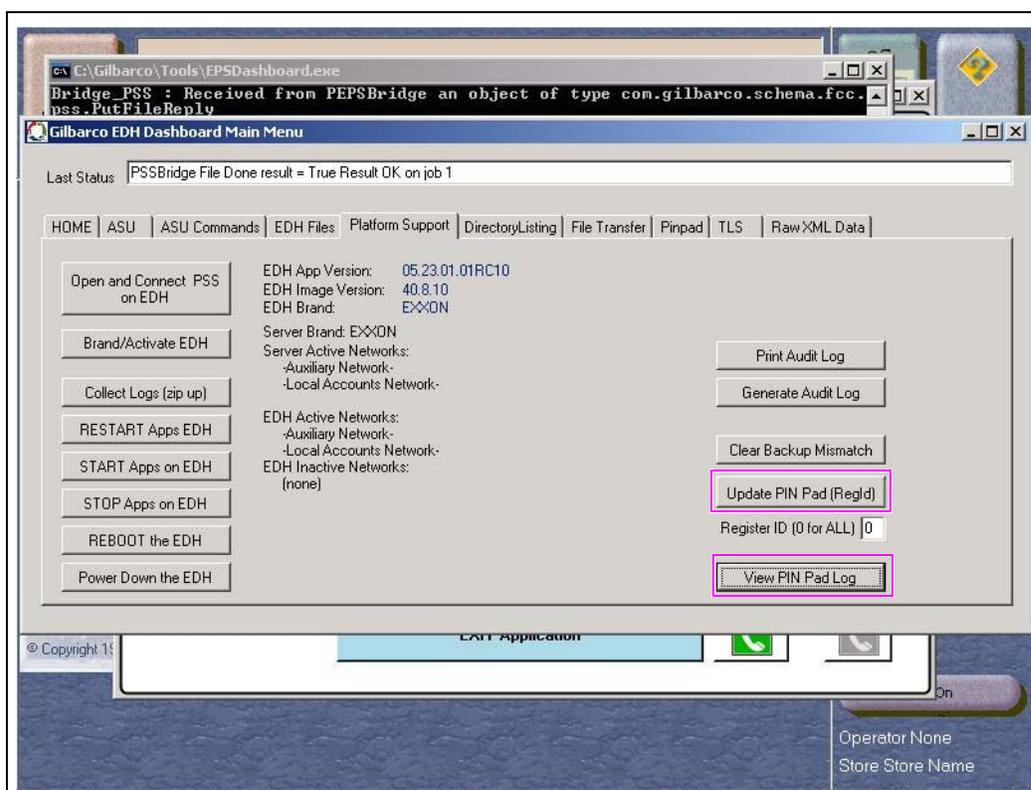
- 1 Power cycle the PIN pad. A message is displayed on the PIN pad.
 - If the display reads, “NO MASTER/DUKPT KEY LOADED” or “No Dukpt Key Loaded”, replace the PIN pad.
 - If the display reads, “UNIT WITH MASTER KEY LOADED” or “Unit With Dukpt Key Loaded”, the PIN pad has the local key required to process debit transactions. Proceed to step 2.
- 2 If the site has another register, verify debit operations on that register. If another register is not available, verify debit operations at the CRIND devices.
 - If debit transactions fail at the other register and/or CRIND devices, verify proper operation of the GSM. For more information, refer to *MDE-2597 Gilbarco Security Module (GSM) PA0258XXXXXX Installation and Service Instructions*. If the GSM is operating properly, contact the oil company network to verify if the site is correctly set up for debit at the network and that credit card transactions are processed properly with the Host.
Note: Debit transactions will not work if a site is processing cards in Store and Forward mode or Fallback.
 - If debit transactions are successful at the other register and/or CRIND devices, proceed to step 3.
- 3 Test if the PIN pad works with other non-debit cards.

Upgrading PIN Pad Firmware

To upgrade firmware on the i3070 and i6550 PIN pads, proceed as follows:

- 1 Access the EPS Dashboard from the Passport Image Control Panel on the server. From the Dashboard, you can view PIN Pad Logs and upgrade the firmware.

Figure 38: EDH Dashboard Main Menu



- 2 Click **Update PIN Pad** to upgrade the firmware version.
- 3 Click **View PIN Pad Log** to view the log details.

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July 2017

