

13

Component Replacement: Switches, Lamps, and Locks

This chapter provides replacement procedures for the following switches, lamps, locks, and related components:

- ◆ Bezel control button microswitch and lamp
- ◆ Change and Cash/credit button microswitch and lamp
- ◆ Service candle lamp
- ◆ Currency cartridge microswitch
- ◆ Credit and diagnostic LED display
- ◆ Fluorescent starter, ballast, lamp, and lamp socket
- ◆ Belly glass
- ◆ Door locks
- ◆ Door switches

Overview

This chapter contains replacement procedures for switches, lamps, and locks. Figure 13-1 and Figure 13-2 on page 13-3 show the locations of these components.

Figure 13-1 Switch, Lamp, and Lock Locations

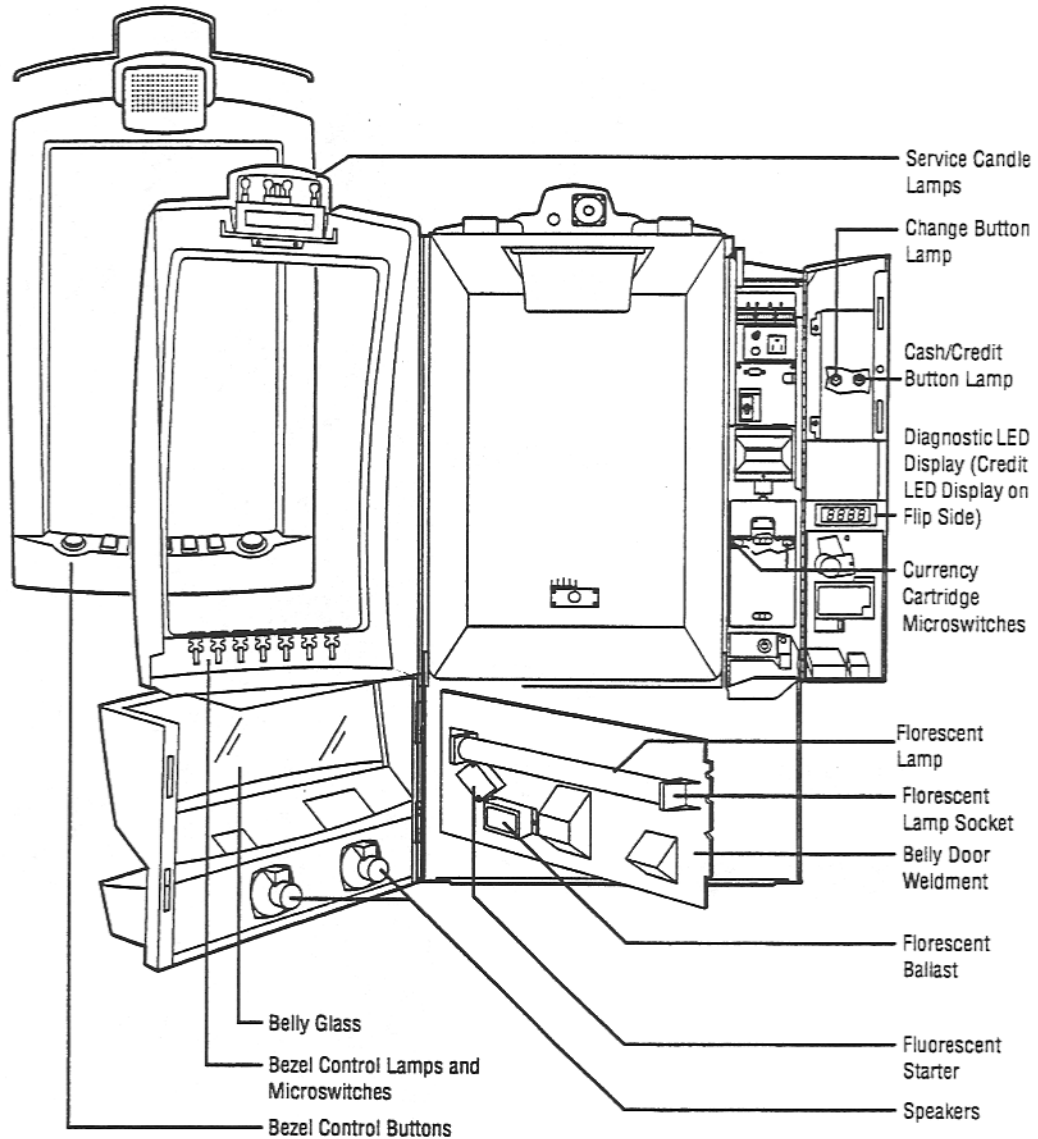
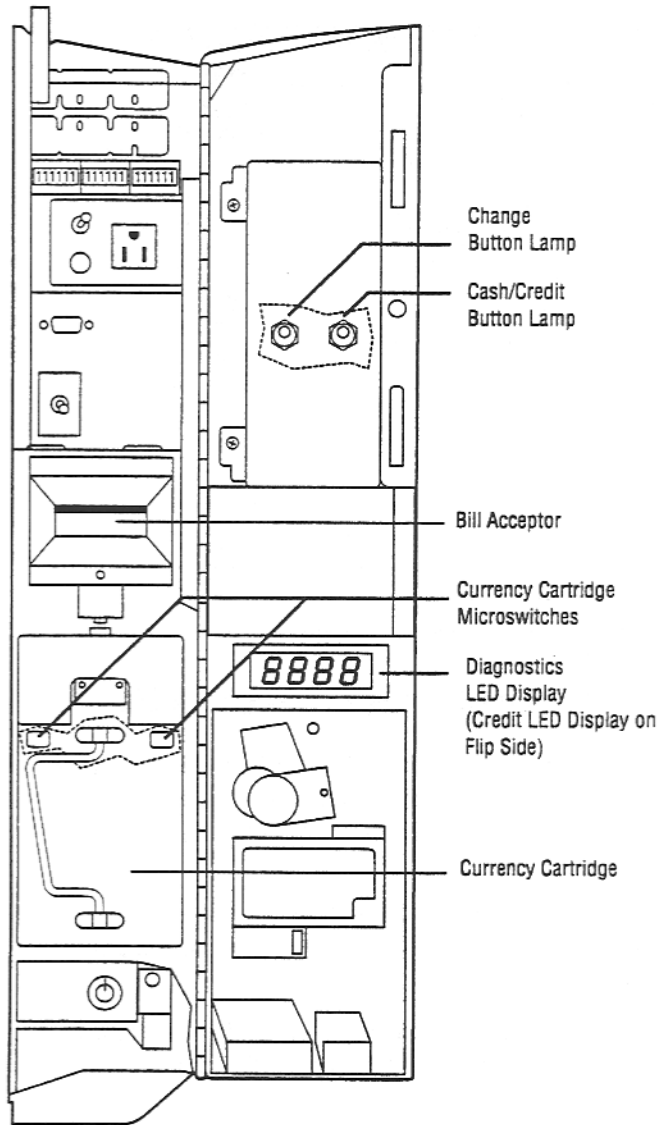


Figure 13-2 Currency Column




The following table lists the procedures in this chapter.

| | See |
|---|------------|
| Replacing a Bezel Control Button Microswitch | page 13-4 |
| Replacing a Bezel Control Button Lamp | page 13-7 |
| Replacing the Change and Cash/Credit Button Microswitches | page 13-9 |
| Replacing the Change and Cash/Credit Button Lamps | page 13-12 |
| Replacing a Service Candle Lamp | page 13-14 |
| Replacing the Currency Cartridge Microswitches | page 13-15 |
| Replacing the Credit and Diagnostic LED Display | page 13-22 |
| Replacing the Fluorescent Starter | page 13-23 |
| Replacing the Fluorescent Ballast | page 13-25 |
| Replacing the Fluorescent Lamp | page 13-27 |
| Replacing a Fluorescent Lamp Socket | page 13-29 |
| Replacing the Belly Glass | page 13-31 |
| Replacing a Door Lock | page 13-33 |
| Replacing a Door Switch | page 13-34 |
| Replacing the Currency Column Door Switch | page 13-35 |
| Replacing the Belly Door Switch | page 13-37 |
| Replacing the Electronics Box Door Switch | page 13-38 |
| Replacing the Drop-Door Switch | page 13-40 |

Replacing a Bezel Control Button Microswitch

The bezel contains seven control buttons. A round yellow button is on one end, a round blue one is on the other end, and five square buttons are in the middle. Each button is part of an assembly, which includes the button, the lamp, and the lamp microswitch.

 **Important:** The microswitches for the yellow and blue buttons are larger than those for the white buttons. Be sure you have the correct part for the microswitch you are replacing.

The following table is a summary of the sections in this procedure. If you are familiar with the procedure, you may prefer to read the text in the indicated sections only when necessary.


| |
|--|
| Replacing a Bezel Control Button Microswitch |
| Removing a Bezel Control Button Microswitch |
| "Removing the Button Panel Bracket" on page 13-5 |
| "Removing the Microswitch" on page 13-5 |
| Installing a Bezel Control Button Microswitch |
| "Installing the Microswitch" on page 13-6 |
| "Installing the Button Panel Bracket" on page 13-7 |
| "Verifying Bezel Control Button Microswitch Operation" on page 13-7 |

Removing a Bezel Control Button Microswitch

Before beginning the procedure, be sure to turn the power off.

To turn the power off, perform the following steps:

1. Open the currency column door. Refer to "Opening the Currency Column Door" on page 2-8.
2. Flip the power switch to the Off position.

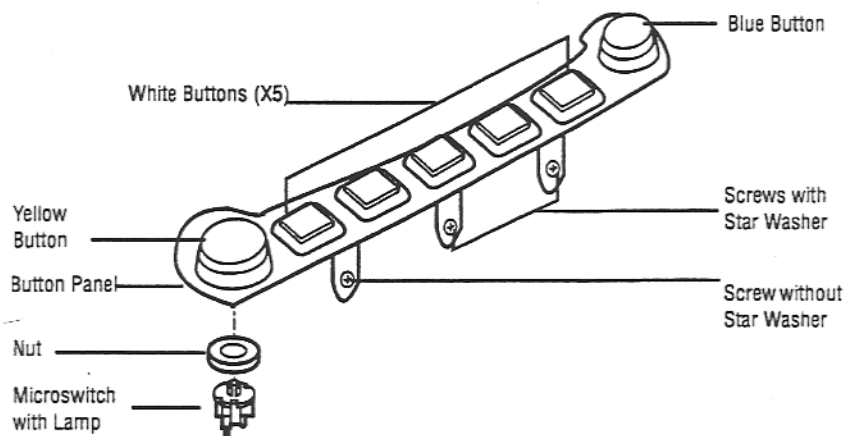
 **Warning:** Failure to turn off the machine can result in personal injury or damage to equipment.

Removing the Button Panel Bracket

To remove the bracket from the bezel, perform the following steps:

1. To access the inside of the monitor bezel, open the display cavity bezel. Refer to "Opening the Display Cavity Bezel" on page 2-9.
2. Unplug the P20 connector between the wiring for microswitches and harnesses.
3. Refer to Figure 13-3 and remove the three screws and two star washers that secure the panel to the bezel.

Figure 13-3 Buttons and Button Panel Viewed from Inside Open Bezel



4. Pull the panel from the bezel.

Removing the Microswitch

To remove the microswitch from the button, perform the following steps:

1. Unscrew and remove the nut from above the microswitch.
2. Four wires are attached with quick connects to four terminals on each microswitch. Note which wires are attached to which terminals and remove the four wires by pulling the quick connects off the terminals.
3. Use your thumb and forefinger to wiggle the microswitch until it loosens from the button.
4. Pull the microswitch from the button.

Installing a Bezel Control Button Microswitch

First you install the microswitch and then you install the button panel bracket.

Installing the Microswitch

To install a microswitch in a button, perform the following steps:

1. The table below lists the buttons in sequence, from left to right, when the bezel is open and you are standing between the bezel and the machine.

Slip the four harness wires onto the correct terminals on the microswitch, as indicated in Table 13-1.


Table 13-1 Wire Connections for Bezel Control Button Microswitch

| Button Lamp | Terminal Label | Harness Wire Connector and Pin | Harness Wire Color |
|--------------|----------------|--------------------------------|--------------------|
| Yellow | COM | P20-1 | Black |
| | Lamp 1 | P20-3 | Orange |
| | NO | P20-5 | Blue |
| | Lamp 2 | P20-13 | White/Blue |
| First White | COM | P20-1 | Black |
| | Lamp 1 | P20-3 | Orange |
| | NO | P20-6 | Violet |
| | Lamp 2 | P20-14 | White/Violet |
| Second White | COM | P20-1 | Black |
| | Lamp 1 | P20-3 | Orange |
| | NO | P20-7 | Green |
| | Lamp 2 | P20-15 | White/Green |
| Third White | COM | P20-1 | Black |
| | Lamp 1 | P20-3 | Orange |
| | NO | P20-8 | Yellow |
| | Lamp 2 | P20-16 | White/Yellow |
| Fourth White | COM | P-20-2 | Black |
| | Lamp 1 | P20-4 | Orange |
| | NO | P20-9 | Gray |
| | Lamp 2 | P20-17 | White/Gray |
| Fifth White | COM | P20-2 | Black |
| | Lamp 1 | P20-4 | Orange |
| | NO | P20-10 | Brown |
| | Lamp 2 | P20-18 | White/Brown |
| Blue | COM | P20-2 | Black |
| | Lamp 1 | P20-4 | Orange |
| | NO | P20-11 | Red |
| | Lamp 2 | P20-19 | White/Red |

2. Insert the microswitch into the hole in the button part of the assembly and snap the microswitch into place.
3. Slide the nut over the button part of the assembly and hand-tighten it.

Installing the Button Panel Bracket

To install the bracket on the bezel, perform the following steps:

1. Slide the button panel bracket onto the bezel and secure the panel to the bezel, using the two star washers and three screws.
 -  **Warning:** The star washers ground the wiring. Failure to insert the washers between the screws and the bezel could result in injury to personnel and damage to equipment. Do not use a star washer on the left-most screw. This may cause interference with some touchscreens.
2. Connect the wiring from the microswitches to the P20 connector on the harness.


Verifying Bezel Control Button Microswitch Operation

To verify bezel control button microswitch operation, perform the following steps:

1. Flip the power switch for the slot machine to the On position.
2. Test the new microswitch as follows:
 - a. Invoke the MMS and access the MMS Diagnostics page. Refer to “Invoking the MMS” on page 2-23.
 - b. Press the button for the microswitch you replaced and verify that the same button illuminates on the representation of the machine displayed on the Diagnostics page.
 - c. Test all other buttons and lamps on the bezel in the same manner.
 - d. Test the *Change* and *Cash/Credit* buttons and lamps at this time, including the two lamps above and below these buttons.
3. Exit the MMS. Refer to “Exiting the MMS” on page 2-25.
4. Close the display cavity bezel. Refer to “Closing the Display Cavity Bezel” on page 2-9.
5. Close the currency column door. Refer to “Closing and Locking the Currency Column Door” on page 2-9.

Replacing a Bezel Control Button Lamp

The bezel contains seven control buttons. A round yellow button is on one end, a round blue one is on the other end, and five square buttons are in the middle. The lamp in each button is part of an assembly, which includes the button, the lamp, and the lamp microswitch. Lamps are all 14-volt AC.

-  **Important:** The lamps for the yellow and blue buttons are larger than those for the white buttons. Be sure you have the correct part for the lamp you are replacing.

The following table is a summary of the sections in this procedure. If you are familiar with the procedure, you may prefer to read the text in the indicated sections only when necessary.

| |
|--|
| Replacing a Bezel Control Button Lamp |
| Removing a Bezel Control Button Microswitch |
| "Removing the Button Panel Bracket" on page 13-5 |
| "Removing the Lamp" on page 13-8 |
| Installing a Bezel Control Button Microswitch |
| "Installing the Lamp" on page 13-9 |
| "Installing the Button Panel Bracket" on page 13-7 |
| "Verifying Bezel Control Button Lamp Operation" on page 13-9 |

Removing a Bezel Control Button Lamp

Before beginning the procedure, be sure to turn the power off.

To turn the power off, perform the following steps:

1. Open the currency column door. Refer to "Opening the Currency Column Door" on page 2-8.
2. Flip the power switch to the Off position.



Warning: Failure to turn off the machine can result in personal injury or damage to equipment.

Before you remove the lamp, you must first remove the button panel bracket from the inside of the bezel.

Removing the Button Panel Bracket

To remove the bracket from the bezel, perform the following steps:

1. To access the inside of the monitor bezel, open the display cavity bezel. Refer to "Opening the Display Cavity Bezel" on page 2-9.
2. Remove the button panel bracket from the bezel. Refer to "Removing the Button Panel Bracket" on page 13-5.

Removing the Lamp

To remove the lamp from the button, perform the following steps:

1. Unscrew and remove the nut from above the microswitch.
2. Pull the microswitch from the button, exposing the lamp.
3. Remove the lamp by gently wiggling it until you can pull it from the socket.

Installing a Bezel Control Button Lamp

First you install the microswitch and then you install the button panel bracket.

Installing the Lamp

To install the lamp in the microswitch, perform the following steps:


1. Push the new lamp into the socket of the microswitch until the lamp is secure.
2. Insert the microswitch into the hole in the button part of the assembly and snap the microswitch into place.
3. Slide the nut over the microswitch and hand-tighten it.

Installing the Button Panel Bracket

Refer to "Installing the Button Panel Bracket" on page 13-7.

Verifying Bezel Control Button Lamp Operation

To verify operation of a bezel control button lamp, perform the following steps:

1. Flip the power switch for the slot machine to the On position.
2. Test the new control button lamp as follows:
 - a. Invoke the MMS and access the MMS **Diagnostics** page. Refer to "Invoking the MMS" on page 2-23.
 -  **Note:** When you invoke the **Diagnostics** page, the machine should automatically light the service candle lamp farthest to the right, the bezel lamps, and the change and cash/credit lamps.
 - b. Press the button for the lamp you replaced and verify that the same button illuminates on the representation of the machine displayed on the **Diagnostics** page.
3. Exit the MMS. Refer to "Exiting the MMS" on page 2-25.
4. Close the display cavity bezel. Refer to "Closing the Display Cavity Bezel" on page 2-9.
5. Close the currency column door. Refer to "Closing and Locking the Currency Column Door" on page 2-9.

Replacing the Change and Cash/Credit Button Microswitches

The *Change* button is to the left of the *Cash/Credit* button, near the top of the currency column door. When the *Change* button is pressed, the hopper disperses the cash won. The *Cash/Credit* button is lit if the slot machine is in credit mode. You change the mode by pressing the button.

Each button microswitch is part of an assembly that includes the button, the lamp, and the lamp microswitch.

The following table is a summary of the sections in this procedure. If you are familiar with the procedure, you may prefer to read the text in the indicated sections only when necessary.

Replacing the Change and Cash/Credit Button Microswitches**Removing the Microswitch**

"Removing the Bracket" on page 13-10

"Removing the Microswitch from the Button" on page 13-10

Installing the Microswitch

"Installing the Microswitch in the Button" on page 13-11

"Installing the Bracket" on page 13-11

"Verifying Microswitch Operation" on page 13-11

Removing the Microswitch

Before beginning the procedure, be sure to turn the power off.

To turn the power off, perform the following steps:

1. Open the currency column door. Refer to "Opening the Currency Column Door" on page 2-8.
2. Flip the power switch to the Off position.



Warning: Failure to turn off the machine can result in personal injury or damage to equipment.

To remove the microswitch, you must first remove the bracket from the currency column door.

Removing the Bracket

Remove the bracket covering the button microswitch assemblies by loosening the two captive screws on the left side of the bracket and pulling the bracket from the door.

Removing the Microswitch from the Button

To remove the microswitch from the microswitch button, perform the following steps:

1. Each of the four terminals on the microswitch has a wire attached. Note which wire is attached to each terminal and remove the four wires by pulling the quick connect off the terminals.
2. Use your thumb and forefinger to wiggle the microswitch until it loosens from the button part of the assembly.
3. Pull the microswitch from the assembly.

Installing the Microswitch

After installing the microswitch, you must install the bracket.

Installing the Microswitch in the Button

To install the microswitch in the microswitch button, perform the following steps:

1. Slip the four colored harness wires onto the correct terminals on the microswitch, as indicated in Table 13-2.

Table 13-2 Wire Connections for Change and Cash/Credit Button Microswitches

| Button Lamp | Terminal Label | Harness Wire Connector and Pin | Harness Wire Color |
|-------------|----------------|--------------------------------|--------------------|
| Change | COM | P56-1 | Black |
| | Lamp 1 | P56-6 | Brown |
| | NO | P56-2 | Blue |
| | Lamp 2 | P56-7 | White/Blue |
| Cash/Credit | COM | P56-1 | Black |
| | Lamp 1 | P56-6 | Brown |
| | NO | P56-3 | Violet |
| | Lamp 2 | P56-8 | White/Violet |

2. Insert the microswitch into the hole in the button part of the assembly and snap the microswitch into place.

Installing the Bracket

To install the bracket in the currency column, perform the following steps:

1. Place the bracket over the button microswitch assemblies so that the two captive screws are to the left and aligned with the holes in the weldment.
2. Tighten the two screws.

Verifying Microswitch Operation

To verify operation of the *Change* or *Cash/Credit* button microswitch, perform the following steps:

1. Flip the power switch for the slot machine to the On position.
2. Test the new microswitch as follows:
 - a. Invoke the MMS and access the MMS Diagnostics page. Refer to "Invoking the MMS" on page 2-23.
 - b. Press the new button and verify that the same button illuminates on the machine pictorial on the Diagnostics page.
3. Test all other buttons and lamps on the display bezel including the two lamps above and below the *Change* and *Cash/Credit* buttons.
4. Exit the MMS. Refer to "Exiting the MMS" on page 2-25.
5. Close the currency column door. Refer to "Closing and Locking the Currency Column Door" on page 2-9.

Replacing the Change and Cash/Credit Button Lamps

The *Change* and *Cash/Credit* button lamps are behind the *Change* and *Cash/Credit* buttons. Each 14-volt AC lamp is part of an assembly that includes the button, the lamp, and the lamp microswitch.

The following table is a summary of the sections in this procedure. If you are familiar with the procedure, you may prefer to read the text in the indicated sections only when necessary.


| Replacing the Change and Cash/Credit Button Lamps |
|--|
| Removing a Button Lamp |
| "Removing the Bracket" on page 13-12 |
| "Removing the Button Lamp from the Socket" on page 13-12 |
| Installing a Button Lamp |
| "Installing the Button Lamp in the Socket" on page 13-13 |
| "Installing the Bracket" on page 13-13 |
| "Verifying Button Lamp Operation" on page 13-13 |

Removing a Button Lamp

Before beginning the procedure, be sure to turn the power off.

To turn the power off, perform the following steps:

1. Open the currency column door. Refer to "Opening the Currency Column Door" on page 2-8.
2. Flip the power switch to the Off position.

 **Warning:** Failure to turn off the machine can result in personal injury or damage to equipment.

Before removing a button lamp, you must remove the bracket.

Removing the Bracket

Remove the bracket covering the lamps by loosening the two captive screws on the left side of the bracket and pulling the bracket from the door.

Removing the Button Lamp from the Socket

To remove the button lamp from the socket, perform the following steps:

1. Pull the microswitch from the button microswitch assembly, exposing the lamp.
2. Remove the lamp by gently wiggling it until you can pull it from the socket.

Installing a Button Lamp

After installing the button lamp, you must install the bracket.

Installing the Button Lamp in the Socket

To install the button lamp in the socket, perform the following steps:

1. Push the new lamp into the socket of the microswitch until the lamp is secure.
2. Insert the microswitch into the hole in the button part of the assembly and snap the microswitch into place.


Installing the Bracket

To install the bracket in the currency column door, perform the following steps:

1. Place the bracket over the button microswitch assemblies so that the two captive screws are to the left and aligned with the holes in the weldment.
2. Tighten the two screws.

Verifying Button Lamp Operation

To verify operation of a button lamp, perform the following steps:

1. Flip the power switch for the slot machine to the On position.
2. Test the button lamp as follows:
 - a. Invoke the MMS and access the MMS Diagnostics page. Refer to "Invoking the MMS" on page 2-23.
 - b. The Diagnostics page is displayed. All lamps should be lit at this time.
 *Note:* Entering the Diagnostics page automatically lights all of the control button lamps plus the *Change* and *Cash/Credit* button lamps.
3. Exit the MMS. Refer to "Exiting the MMS" on page 2-25.
4. Close the currency column door. Refer to "Closing and Locking the Currency Column Door" on page 2-9.

Replacing a Service Candle Lamp

The service candle has four identical 14-volt AC service candle lamps. You replace each lamp in the same way.

The following table is a summary of the sections in this procedure. If you are familiar with the procedure, you may prefer to read the text in the indicated sections only when necessary.

Replacing a Service Candle Lamp

"Removing a Candle Lamp" on page 13-14

"Installing a Candle Lamp" on page 13-14

"Verifying Candle Lamp Operation" on page 13-14

"Finishing Up" on page 13-15

Removing a Candle Lamp

Before beginning the procedure, be sure to turn the power off.

To turn the power off, perform the following steps:

1. Open the currency column door. Refer to "Opening the Currency Column Door" on page 2-8.
2. Flip the power switch to the Off position.



Warning: Failure to turn off the machine can result in personal injury or damage to equipment.

To remove a candle lamp, perform the following steps:

1. To access the inside of the service candle, open the display cavity bezel. Refer to "Opening the Display Cavity Bezel" on page 2-9.
2. Remove the screw from the top of the candle lens.
3. Remove the candle lens.
4. Remove the defective lamp.
5. Remove the candle cover sleeve to reuse on the new lamp.

Installing a Candle Lamp

To install a candle lamp, perform the following steps:

1. Place the candle cover sleeve from the old lamp on the new lamp.
2. Insert the new lamp into the service candle housing and snap it in place.

Verifying Candle Lamp Operation

To verify operation of a candle lamp, perform the following steps:

1. Flip the power switch for the slot machine to the On position.
2. Test the new lamp as follows:

- a. Invoke the MMS and access the MMS Diagnostics page. Refer to "Invoking the MMS" on page 2-23.
 - b. Touch the *Test Candle* button.
 - c. Verify that all of the candle lamps light. They should flash on and off in sequence.
3. Exit the MMS. Refer to "Exiting the MMS" on page 2-25.

Finishing Up

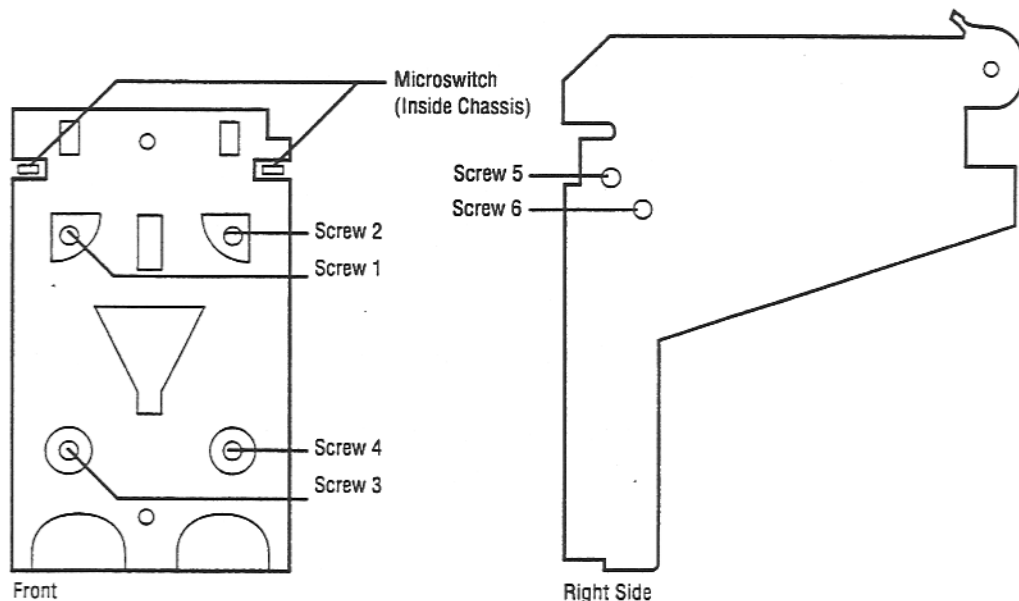
To finish this procedure, perform the following steps:


1. Align the screw hole in the candle lens with the hole in the candle lens bracket and secure the lens to the bracket with a screw.
2. Close the display cavity bezel. Refer to "Closing the Display Cavity Bezel" on page 2-9.
3. Close the currency column door. Refer to "Closing and Locking the Currency Column Door" on page 2-9.

Replacing the Currency Cartridge Microswitches

Two microswitches detect when the currency cartridge is removed. They are located behind the currency cartridge, on the back wall of the currency column. Figure 13-1 on page 13-2 shows the location of the currency cartridge and microswitches. Figure 13-4 shows a close-up view of the switch locations.

Figure 13-4 Bill Acceptor Chassis with Microswitches and Six Screws



 **Note:** You usually replace both microswitches at the same time.

The following table is a summary of the sections in this procedure. If you are familiar with the procedure, you may prefer to read the text in the indicated sections only when necessary.

Replacing the Currency Cartridge Microswitches

Removing the Currency Cartridge Microswitches

"Removing the Currency Cartridge" on page 13-16

"Removing the Vertical Security Flange" on page 13-17

"Removing the Bill Acceptor" on page 13-17

"Removing the Coin Guard" on page 13-17

"Removing the Bill Acceptor Chassis and Bracket" on page 13-19

"Removing the Microswitches" on page 13-20

Installing the Currency Cartridge Microswitches

"Installing the Microswitches" on page 13-20

"Installing the Bill Acceptor Chassis and Bracket" on page 13-20

"Installing the Coin Guard" on page 13-21

"Installing the Bill Acceptor" on page 13-21

"Installing the Vertical Security Flange" on page 13-21

"Installing the Currency Cartridge" on page 13-21

"Verifying Microswitch Operation" on page 13-21

Removing the Currency Cartridge Microswitches

Before beginning the procedure, be sure to turn the power off.

To turn the power off, perform the following steps:

1. Open the currency column door. Refer to "Opening the Currency Column Door" on page 2-8.
2. Flip the power switch to the Off position.



Warning: Failure to turn off the machine can result in personal injury or damage to equipment.

To access the microswitches, you must remove the currency cartridge, vertical security flange (if the machine has one), the bill acceptor, bill acceptor chassis (if the bill acceptor mounting bracket is too wide), and possibly the coin guard.

Removing the Currency Cartridge

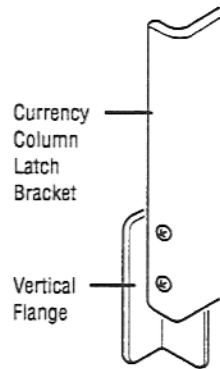
To remove the currency cartridge from the currency cartridge cavity, perform the following steps:

1. To locate the currency cartridge, see Figure 13-2 on page 13-3.
Remove the currency cartridge as follows:
 - a. Turn the key below the currency cartridge counter-clockwise until it stops.
 - b. Pull down on the metal tab above the currency cartridge handle.
 - c. Grasping the handle, pull the currency cartridge toward you until it is free from the cavity.
 - d. Place the currency cartridge on a flat surface.

Removing the Vertical Security Flange

If the machine has a vertical security flange, refer to Figure 13-5 and remove the flange from the left side of the bill acceptor by removing the two screws securing the flange to the currency column latch bracket.

Figure 13-5 Currency Column Latch Bracket and Vertical Flange



Removing the Bill Acceptor

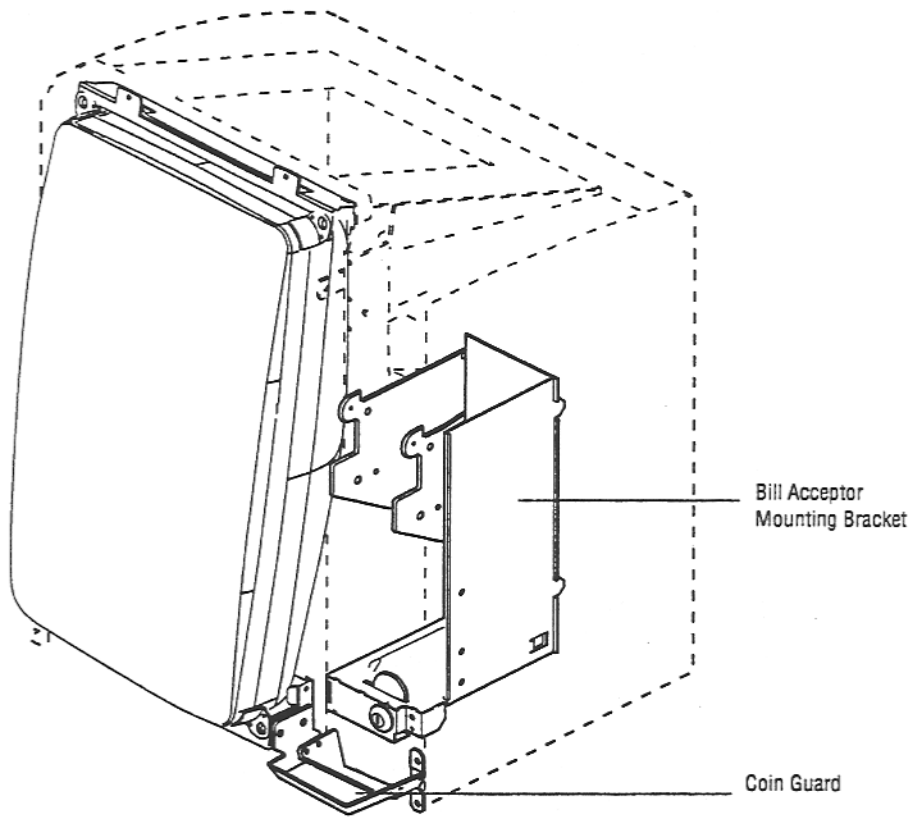
To remove the bill acceptor from the bill acceptor chassis, perform the following steps:

1. Refer to Figure 13-2 on page 13-3 to locate the bill acceptor. Hold the bill acceptor with one hand and, using the other hand, pull forward on the spring-loaded black securing bracket above the bill acceptor.
2. With the securing bracket pulled forward, pull the bill acceptor halfway out.
3. Check for a cable with a 10-pin connector hanging to the left of the bill acceptor. Older bill acceptors have this cable. Newer bill acceptors and older bill acceptors that have been upgraded do not. If you find the cable, unplug the connector.
4. Pull the bill acceptor all the way out of the bill acceptor chassis.

Removing the Coin Guard

1. Open the display cavity bezel. Refer to "Opening the Display Cavity Bezel" on page 2-9.
2. To determine whether the coin guard must be removed, refer to Figure 13-6 on page 13-18.

Figure 13-6 Bill Acceptor Mounting Bracket and Screws

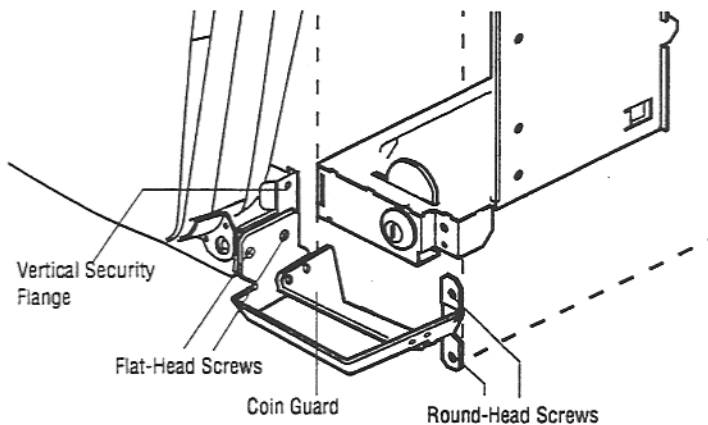


If the bill acceptor mounting bracket is too wide to remove from the right cabinet wall without removing the coin guard, you must remove the guard.

To remove the guard, refer to Figure 13-7 on page 13-19 and perform the following steps:

1. Open the belly door. Refer to "Opening the Belly Door" on page 2-9.
2. Remove the two flat-head screws to the left of the guard.
3. Remove the two round-head screws to the right of the guard.
4. Remove the coin guard and the attached vertical security flange.

Figure 13-7 Screws Securing Coin Guard

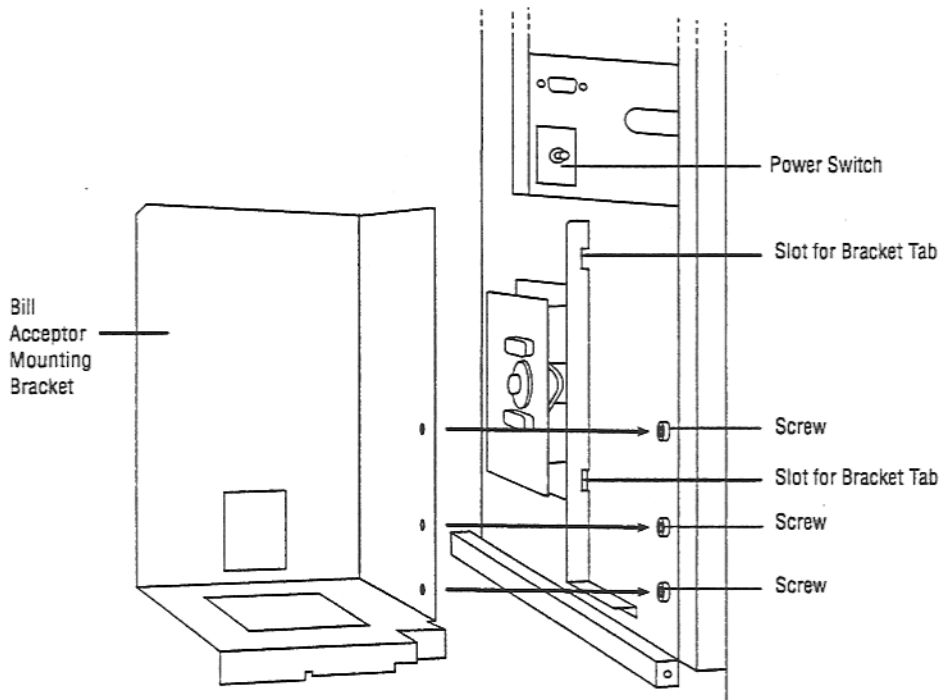


Removing the Bill Acceptor Chassis and Bracket

To remove the bill acceptor chassis and bracket, perform the following steps:

1. Refer to Figure 13-8 and remove the three screws securing the bill acceptor chassis to the right cabinet wall.
2. Pull the chassis out far enough to access the P32, P33, P34, and P35 cable connectors.
3. Unplug the four connectors.
4. Pull the bill acceptor mounting bracket and bill acceptor chassis all the way out of the cavity.

Figure 13-8 Bill Acceptor and Right Cabinet Wall



Removing the Microswitches

The microswitches are inside the currency cartridge cavity, in the top two corners of the bill acceptor chassis. See Figure 13-4 on page 13-15.

Each microswitch is secured to the bill acceptor chassis by two screws on the side of the chassis. Screws 5 and 6, shown in Figure 13-4 on page 13-15, secure the right microswitch to the bill acceptor chassis. Two screws on the left side of the chassis secure the left microswitch to the chassis.

Remove all four screws and remove the two microswitches.

Installing the Currency Cartridge Microswitches

After installing the microswitches, you must install the bill acceptor chassis and bracket, coin guard, bill acceptor, vertical security flange, and currency cartridge.

Installing the Microswitches

To install the currency cartridge microswitches, perform the following steps:

1. Attach the four quick connects to the microswitch terminals listed in Table 13-3.

Table 13-3 Wire Connections for Currency Column Microswitch

| Switch (When Facing Slot Machine) | Terminal Label on Front of Switch | Harness Wire Connector and Pin | Harness Wire Color |
|-----------------------------------|-----------------------------------|--------------------------------|-----------------------|
| Right Switch | NO | P34-1 | Violet |
| | NC | - | - |
| | C | P34-2 | Gray |
| Left Switch | C | P35-2 | White/Yellow (Ground) |
| | NC | - | - |
| | NO | P35-1 | Yellow |

2. Place the right microswitch inside the chassis and align the holes with the holes in the right wall of the bill acceptor chassis. Secure the microswitch inside the chassis with screws 5 and 6, shown in Figure 13-4 on page 13-15.
3. In a similar way, place the left microswitch inside the chassis and align the holes with the holes in the left wall of the bill acceptor chassis. Secure the microswitch inside the chassis with two screws.

Installing the Bill Acceptor Chassis and Bracket

To install the chassis and bracket to the right cabinet wall, perform the following steps:

1. Plug the P32, P33, P34, and P35 connectors into the main harness.
2. Insert the two bracket tabs, located on the back right edge of the bracket, into the slots for the tabs, shown in Figure 13-8 on page 13-19.
3. Refer to Figure 13-8 on page 13-19 and align the three screw holes in the bill acceptor mounting bracket with the three screw holes in the right cabinet wall.
4. Secure the bracket and the chassis to the wall, using three screws.

Installing the Coin Guard

If you have removed the coin guard, you must re-install it.

To install the guard outside the bottom-right corner of the display monitor chassis, refer to Figure 13-7 on page 13-19 and perform the following steps:

1. Align the two screw holes on the left of the guard with those on the corner of the chassis.
2. Secure the guard and the flange to the chassis with two flat-head screws on the left of the guard.
3. Align the two screw holes on the right of the guard with those in the bracket on the right cabinet wall.
4. Secure the right side of the guard to the bracket with two round-head screws.

Installing the Bill Acceptor

To install the bill acceptor in the bill acceptor chassis, refer to Figure 13-2 on page 13-3 and perform the following steps:

1. Insert the bill acceptor halfway into the cavity.
2. If you have disconnected a cable with a 10-pin connector hanging to the left of the bill acceptor, plug the 10-pin connector on the bill acceptor into the 10-pin cable.
3. Push the bill acceptor all the way into the cavity until it locks in place.

Installing the Vertical Security Flange

If the machine has a vertical security flange, you must re-install it.

To install the flange on the bill acceptor, perform the following steps:

1. Align the two holes in the flange with the two holes in the bill acceptor.
2. Secure the flange to the acceptor, using two screws.

Installing the Currency Cartridge

To install the cartridge in the currency cartridge cavity, perform the following steps:

1. Insert the cartridge into the currency cartridge cavity and push it in until it stops.
2. Turn the key below the cartridge clockwise until it stops.

Verifying Microswitch Operation

To verify microswitch operation, perform the following steps:

1. Flip the power switch for the slot machine to the On position.
2. Invoke the MMS and access the MMS Diagnostics page. Refer to "Invoking the MMS" on page 2-23.
3. Pull the currency cartridge out of the cavity. If a *Door Open* banner displays, the switch is correctly detecting an open door.

4. Exit the MMS. Refer to "Exiting the MMS" on page 2-25.
5. Close the display cavity bezel. Refer to "Closing the Display Cavity Bezel" on page 2-9.
6. Close the currency column door. Refer to "Closing and Locking the Currency Column Door" on page 2-9.

Replacing the Credit and Diagnostic LED Display

The credit LED display indicates the number of credits the player has available to wager. The diagnostic LED display shows the MMS diagnostic code representing the current state of the slot machine. The diagnostic display is mounted behind the credit display.

The replacement LED board is the same for both the credit display and the diagnostic display.

The following table is a summary of the sections in this procedure. If you are familiar with the procedure, you may prefer to read the text in the indicated sections only when necessary.


| |
|--|
| Replacing the Credit and Diagnostic LED Display |
| "Removing the LED Display Board" on page 13-22 |
| "Installing the LED Display Board" on page 13-22 |
| "Verifying LED Display Board Operation" on page 13-23 |

Removing the LED Display Board

Before beginning the procedure, be sure to turn the power off.

To turn the power off, perform the following steps:

1. Open the currency column door. Refer to "Opening the Currency Column Door" on page 2-8.
2. Flip the power switch to the Off position.

 **Warning:** Failure to turn off the machine can result in personal injury or damage to equipment.

To remove the LED display board, perform the following steps:

1. Remove the small wiring connector at the right side of the board.
2. Remove the four screws securing the board to the mounting plate.
3. Remove the board.

Installing the LED Display Board

To install the LED display board, perform the following steps:

1. Mount the new LED display board and secure it to the mounting plate with four screws.
2. Reconnect the wiring connector to the right side of the board.

Verifying LED Display Board Operation

To verify operation of the LED display board, perform the following steps:

1. Flip the power switch for the slot machine to the On position.
2. Test the credit display and the diagnostic display in the same way:
 - a. Invoke the MMS and access the MMS Diagnostics page. Refer to "Invoking the MMS" on page 2-23.
 - b. Touch the *Test Credit LED* button. The display is operating correctly if the numbers display sequentially, starting at 9999 and ending at 0. They must then revert to the numbers that were displayed before the test was performed.
3. Exit the MMS. Refer to "Exiting the MMS" on page 2-25.
4. Close the currency column door. Refer to "Closing and Locking the Currency Column Door" on page 2-9.

Replacing the Fluorescent Starter

The fluorescent starter triggers the light in the fluorescent lamp. The starter is inside the belly door, mounted on the belly door weldment. Part of the starter protrudes through the weldment and is visible from the back side of the belly door, as shown in Figure 13-1 on page 13-2.


The following table is a summary of the sections in this procedure. If you are familiar with the procedure, you may prefer to read the text in the indicated sections only when necessary.

| |
|---|
| Replacing the Fluorescent Starter |
| Removing the Fluorescent Starter |
| "Removing the Belly Door Weldment" on page 13-24 |
| "Removing the Starter" on page 13-24 |
| Installing the Fluorescent Starter |
| "Installing the Starter" on page 13-24 |
| "Installing the Belly Door Weldment" on page 13-25 |
| "Verifying Fluorescent Starter Operation" on page 13-25 |

Removing the Fluorescent Starter

Before beginning the procedure, be sure to turn the power off.

To turn the power off, perform the following steps:

1. Open the currency column door. Refer to "Opening the Currency Column Door" on page 2-8.
2. Flip the power switch to the Off position.
 -  **Warning:** Failure to turn off the machine can result in personal injury or damage to equipment.

To access the fluorescent starter, you must remove the belly door weldment.

Removing the Belly Door Weldment

To remove the weldment from the belly door, perform the following steps:

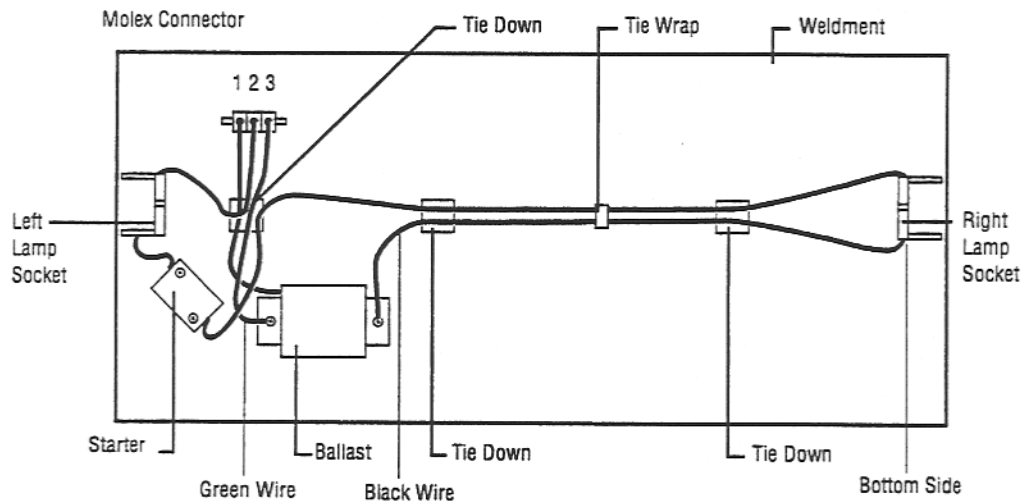
1. Remove the two screws near the right edge of the weldment, by the belly door hinge.
2. The left side of the weldment is secured to the door by a metal lip. To free the weldment from the lip, place the palm of your hand flat against the weldment and push to the left while lifting the weldment on the right.

Removing the Starter

To remove the fluorescent starter from the weldment, perform the following steps:

1. Place the weldment on a flat surface so that it is oriented as shown in Figure 13-9. The fluorescent starter is in the lower left corner.

Figure 13-9 Belly Door Weldment



2. Remove the screw and spade lug attached to each of the two wires coming from the starter.
3. Remove the two screws that secure the starter to the weldment.
4. Remove the starter.

Installing the Fluorescent Starter

You must first install the starter and then install the belly door weldment.

Installing the Starter

To install the starter on the weldment, perform the following steps:

1. Align the two screws in the starter with the holes on the weldment and secure the starter to the weldment using the two screws.
2. Secure the two wires to the starter using two spade lugs and two screws.

Installing the Belly Door Weldment

To install the weldment on the belly door, perform the following steps:

1. Slide the left side of the weldment under the lip on the left side of the back of the belly door.
2. Using the palm of your hand, push the weldment to the left until the two screw holes near the right edge align with the screw holes on the right side of the belly door.
3. Secure the weldment to the belly door using two screws.
4. Close the belly door. Refer to "Closing and Locking the Belly Door" on page 2-9.

Verifying Fluorescent Starter Operation

To verify fluorescent starter operation, perform the following steps:

1. Flip the power switch for the slot machine to the On position.
2. Verify the fluorescent lamp is lit.
3. Close the currency column door. Refer to "Closing and Locking the Currency Column Door" on page 2-9.

Replacing the Fluorescent Ballast

The fluorescent ballast regulates the resistance in the fluorescent lamp. The ballast is inside the belly door, mounted on the belly door weldment. See Figure 13-1 on page 13-2.

The following table is a summary of the sections in this procedure. If you are familiar with the procedure, you may prefer to read the text in the indicated sections only when necessary.


| |
|---|
| Replacing the Fluorescent Ballast |
| Removing the Fluorescent Ballast |
| "Removing the Belly Door Weldment" on page 13-24 |
| "Removing the Ballast" on page 13-26 |
| Installing the Fluorescent Ballast |
| "Installing the Ballast" on page 13-26 |
| "Installing the Ballast Wires" on page 13-26 |
| "Installing the Belly Door Weldment" on page 13-25 |
| "Verifying Fluorescent Ballast Operation" on page 13-27 |

Removing the Fluorescent Ballast

Before beginning the procedure, be sure to turn the power off.

To turn the power off, perform the following steps:

1. Open the currency column door. Refer to "Opening the Currency Column Door" on page 2-8.
2. Flip the power switch to the Off position.

 **Warning:** Failure to turn off the machine can result in personal injury or damage to equipment.

To access the fluorescent ballast, you must first remove the weldment on the belly door.

Removing the Belly Door Weldment

Refer to "Removing the Belly Door Weldment" on page 13-24.

Removing the Ballast

To remove the ballast from the weldment, perform the following steps:

1. Place the weldment on a flat surface so that it is oriented as shown in Figure 13-9 on page 13-24. The ballast is near the bottom-left corner of the weldment.
2. Refer to Figure 13-9 on page 13-24 and remove the ballast as follows:
 - a. Unscrew the lug end of the green wire attached to the left side of the ballast
 - b. Unplug the black wire on the right side of the ballast from the right lamp socket.
 - c. Follow the wire coming from the left side of the ballast until it reaches the tie wrap. Cut the wire above the shrink tubing.
 - d. Remove the two mounting screws from the ballast and remove the ballast from the weldment.

Installing the Fluorescent Ballast

You must install the ballast first and then install the wires and the belly door weldment.

Installing the Ballast

To install the fluorescent ballast on the weldment, perform the following steps:

1. Refer to Figure 13-9 on page 13-24 for ballast placement and align the two screw holes for the ballast with the two holes on the weldment. Secure the ballast to the weldment using two mounting screws.
2. Secure the lug end of the green wire coming from #3 hole in the Molex connector to the left side of the ballast, using a screw.

Installing the Ballast Wires

To prepare and attach the wires coming from the right side of the ballast, perform the following steps:

1. Cut the wire to 13-1/4" and strip the end 1/4".
2. String the wire through the tie down to the left of the right lamp socket.
3. Insert the stripped end into the bottom side of the right lamp socket. To determine the bottom side, see Figure 13-9 on page 13-24.

4. Secure the wire with a tie wrap midway between the two tie downs on the weldment.

To prepare and attach the black wire coming from the left side of the ballast, perform the following steps:

1. Cut the wire to 3" and strip the end 3/8".
2. Tin the end of the black wire coming from #1 on the Molex connector.
3. Cut 1/2" of shrink tubing and slip it onto the wire.
4. Solder the tinned end of the connector wire to the loose end of the wire coming from the ballast.
5. Slip the tubing over the solder and shrink it, using a heat gun.
6. Run the wire through the tie down located below the Molex connector.
7. Secure the wire to the tie down with a tie wrap.

Installing the Belly Door Weldment

Refer to "Installing the Belly Door Weldment" on page 13-25.

Verifying Fluorescent Ballast Operation

To verify fluorescent ballast operation, perform the following steps:

1. Flip the power switch for the slot machine to the On position.
2. Verify the fluorescent lamp is lit.
3. Close the currency column door. Refer to "Closing and Locking the Currency Column Door" on page 2-9.

Replacing the Fluorescent Lamp

The fluorescent lamp is on the back side of the belly door weldment. See Figure 13-1 on page 13-2.

The following table is a summary of the sections in this procedure. If you are familiar with the procedure, you may prefer to read the text in the indicated sections only when necessary.

| |
|--|
| Replacing the Fluorescent Lamp |
| Removing the Fluorescent Lamp |
| "Removing the Belly Door Weldment" on page 13-24 |
| "Removing the Lamp" on page 13-28 |
| Installing the Fluorescent Lamp |
| "Installing the Lamp" on page 13-28 |
| "Installing the Belly Door Weldment" on page 13-25 |
| "Verifying Fluorescent Lamp Operation" on page 13-29 |

Removing the Fluorescent Lamp

Before beginning the procedure, be sure to turn the power off.

To turn the power off, perform the following steps:

1. Open the currency column door. Refer to "Opening the Currency Column Door" on page 2-8.
2. Flip the power switch to the Off position.



Warning: Failure to turn off the machine can result in personal injury or damage to equipment.

To access the lamp, you must remove the weldment from the belly door.

Removing the Belly Door Weldment

Refer to "Removing the Belly Door Weldment" on page 13-24.

Removing the Lamp

To remove the lamp from the socket, perform the following steps:

1. Place the weldment on a flat surface so that it is oriented as shown in Figure 13-9 on page 13-24. The ballast is near the bottom left corner of the weldment.
2. Rotate the lamp until the pins at each end of the lamp align with the corresponding notches in the two lamp sockets.
3. Gently pull the lamp from the sockets.

Installing the Fluorescent Lamp

First you install the lamp and then you install the belly door weldment.

Installing the Lamp

To install the lamp in the socket, perform the following steps:

1. Place each end of the lamp in a lamp socket, aligning the pins with the notches in the socket.
2. Gently push the lamp into the sockets.
3. Rotate the lamp until it is secure in the sockets.

Installing the Belly Door Weldment

Refer to "Installing the Belly Door Weldment" on page 13-25.

Verifying Fluorescent Lamp Operation

To verify fluorescent lamp operation, perform the following steps:

1. Flip the power switch for the slot machine to the On position.
2. Verify the fluorescent lamp is lit.
3. Close the belly door. Refer to "Closing and Locking the Belly Door" on page 2-9.
4. Close the currency column door. Refer to "Closing and Locking the Currency Column Door" on page 2-9.

Replacing a Fluorescent Lamp Socket

Two sockets hold the fluorescent lamp that shines through the belly door.

The following table is a summary of the sections in this procedure. If you are familiar with the procedure, you may prefer to read the text in the indicated sections only when necessary.

| Replacing a Fluorescent Lamp Socket | |
|--|--|
| Removing a Lamp Socket | |
| "Removing the Belly Door Weldment" on page 13-24 | |
| "Removing the Lamp" on page 13-28 | |
| "Removing the Socket" on page 13-30 | |
| Installing a Lamp Socket | |
| "Installing the Socket" on page 13-30 | |
| "Installing the Lamp" on page 13-28 | |
| "Installing the Belly Door Weldment" on page 13-25 | |
| "Verifying Lamp Socket Operation" on page 13-30 | |

Removing a Lamp Socket

Before beginning the procedure, be sure to turn the power off.

To turn the power off, perform the following steps:

1. Open the currency column door. Refer to "Opening the Currency Column Door" on page 2-8.
2. Flip the power switch to the Off position.



Warning: Failure to turn off the machine can result in personal injury or damage to equipment.

To remove a socket, you must remove the weldment from the belly door

Removing the Belly Door Weldment

Refer to "Removing the Belly Door Weldment" on page 13-24.

Removing the Lamp

You must remove the fluorescent lamp from the socket. Refer to "Removing the Lamp" on page 13-28.

Removing the Socket

To remove the socket from the weldment, perform the following steps:

1. Unplug the wires coming from the top and bottom of the lamp socket.
2. Loosen the two captive screws that secure the socket to the belly door weldment.
3. Remove the socket.

Installing a Lamp Socket

First you install the socket and then you install the lamp, connect the wires, and install the belly door weldment.

Installing the Socket

To install a socket on the weldment, align the two captive screws in the socket with the two holes in the belly door weldment and secure the socket to the weldment by tightening the screws.

Installing the Lamp

Refer to "Installing the Lamp" on page 13-28.

Connecting the Wires

To plug in the wires to the lamp socket, refer to Figure 13-9 on page 13-24 and perform the following steps:

1. For the right socket, plug black wire coming from the right side of the starter into the top of the socket. Plug the black wire coming from the right side of the ballast into the bottom of the socket.
2. For the left socket, plug black wire, soldered to the white wire coming from the #2 hole in the Molex connector, to the top side of the socket. Plug the black wire coming from the left side of the starter into the bottom of the socket.

Installing the Belly Door Weldment

Refer to "Installing the Belly Door Weldment" on page 13-25.

Verifying Lamp Socket Operation

To verify lamp socket operation, perform the following steps:

1. Flip the power switch for the slot machine to the On position.
2. Verify the fluorescent lamp is lit.
3. Close the currency column door. Refer to "Closing and Locking the Currency Column Door" on page 2-9.

Replacing the Belly Glass

The belly glass is in the belly door and it covers the fluorescent lamp.

The following table is a summary of the sections in this procedure. If you are familiar with the procedure, you may prefer to read the text in the indicated sections only when necessary.


| |
|--|
| Replacing the Belly Glass |
| Removing the Belly Glass |
| “Removing the Belly Door Weldment” on page 13-24 |
| “Removing the Belly Glass from the Door” on page 13-31 |
| Installing the Belly Glass |
| “Installing the Belly Glass in the Door” on page 13-32 |
| “Installing the Belly Door Weldment” on page 13-25 |

Removing the Belly Glass

Before beginning the procedure, be sure to turn the power off.

To turn the power off, perform the following steps:

1. Open the currency column door. Refer to “Opening the Currency Column Door” on page 2-8.
2. Flip the power switch to the Off position.

 **Warning:** Failure to turn off the machine can result in personal injury or damage to equipment.

Before removing the belly glass, you must remove the belly door weldment.

Removing the Belly Door Weldment

Refer to “Removing the Belly Door Weldment” on page 13-24.

Removing the Belly Glass from the Door

To remove the belly glass, perform the following steps:

1. Remove the two screws in each of the clamps at each end of the belly glass.
2. Remove the stiffener that rests around the rim of the belly glass.
3. Remove the belly glass.

Installing the Belly Glass

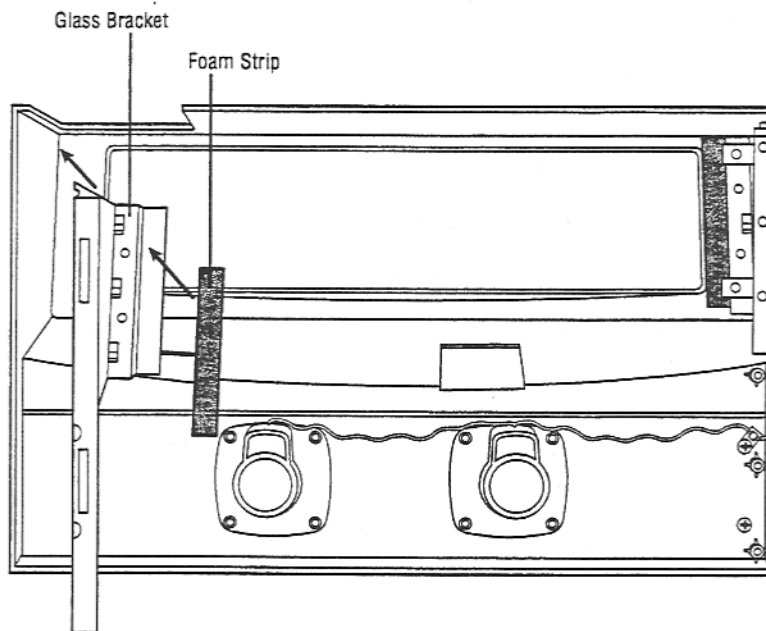
First you install the belly glass and then install the belly door weldment.

Installing the Belly Glass in the Door

To install the belly glass in the belly door, perform the following steps:

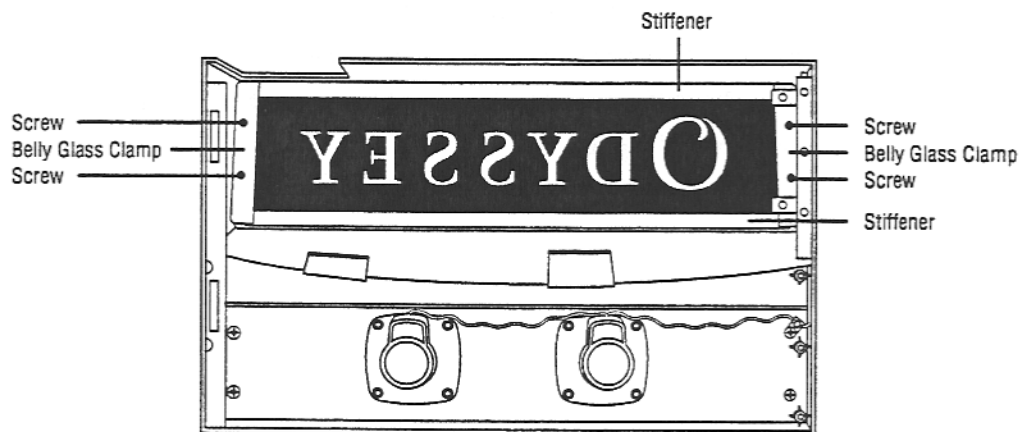
1. Place the belly glass so the left and right edges are behind the two strips of foam on the left and right brackets of the belly door. Figure 13-10 shows the foam strips inside the belly door.

Figure 13-10 Belly Glass Behind Foam Strips



2. Make sure you can read the logo from the outside of the belly door. Figure 13-11 shows the label as seen on the inside of the door.

Figure 13-11 Placement of Mylar Label, Brackets, Clamps, and Stiffeners



3. Place the stiffener on the belly glass so that it frames the glass.

- Secure the glass and stiffener to the bracket with two belly glass clamps and two screws in each clamp.

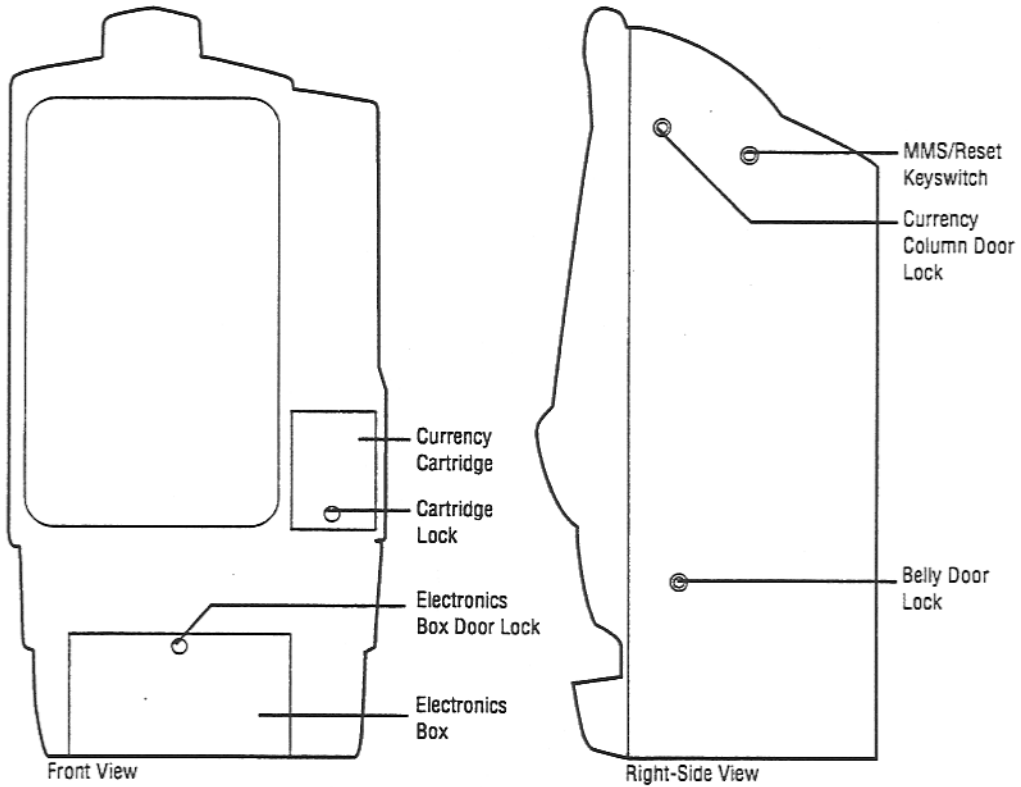
Installing the Belly Door Weldment

Refer to “Installing the Belly Door Weldment” on page 13-25. Installation is complete.

Replacing a Door Lock

Figure 13-12 shows the locations of the door locks.

Figure 13-12 Machine Lock Locations



The locks on the right side of the machine secure the currency column door and the belly door. A lock is also inside the machine on the electronics box door and on the currency cartridge.

All locks used on the Odyssey machine are provided by the casino and usually are the same type. Only the locking cam differs, depending on the location and use of the lock.

Important: Some jurisdictions require Medeco locks on the currency column door, electronics box door, and belly door.

For information on replacing door locks, see “Installing Door Locks” on page 3-7.

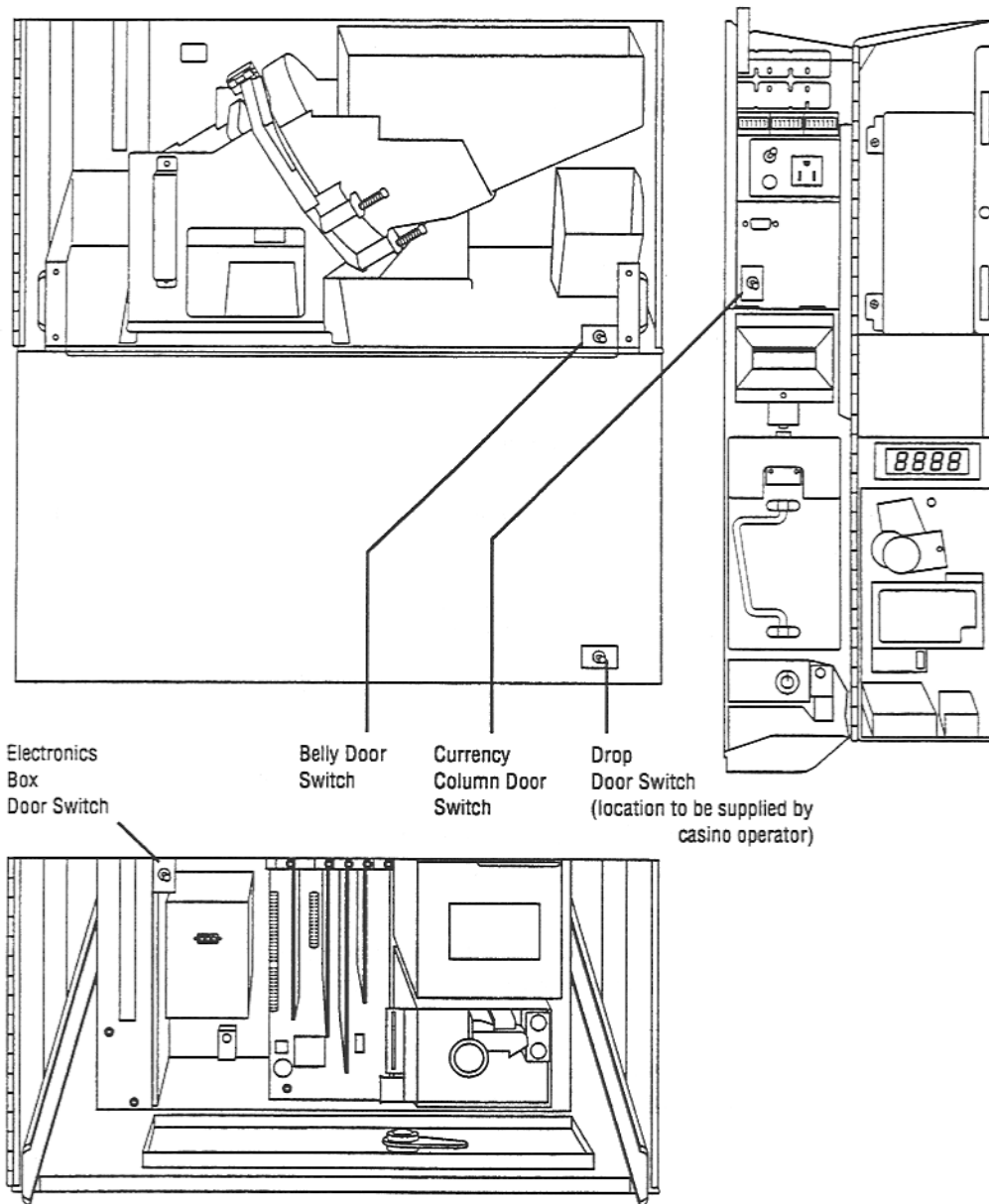
Replacing a Door Switch

Four panel-mount switches detect when the following are open:

- ◆ currency column door
- ◆ belly door
- ◆ electronics box door
- ◆ drop door

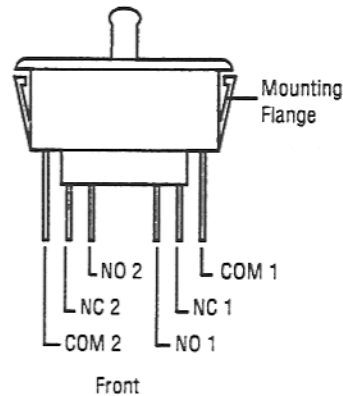
Figure 13-13 shows the locations of the door switches.

Figure 13-13 Door Switch Locations



Each door switch resembles the switch that is used to turn on a light inside a refrigerator when the door is opened and it operates in the same way. The terminals on a switch are labeled. See Figure 13-14.

Figure 13-14 Door Switch Terminals



The following table is a summary of the sections in this procedure. If you are familiar with the procedure, you may prefer to read the text in the indicated sections only when necessary.


| Replacing the Currency Column Door Switch |
|---|
| "Removing the Currency Column Door Switch" on page 13-35 |
| "Installing the Currency Column Door Switch" on page 13-36 |
| "Verifying Currency Column Door Switch Operation" on page 13-36 |

Replacing the Currency Column Door Switch

Before beginning the procedure, be sure to turn the power off.

To turn the power off, perform the following steps:

1. Open the currency column door. Refer to "Opening the Currency Column Door" on page 2-8.
2. Flip the power switch to the Off position.

 **Warning:** Failure to turn off the machine can result in personal injury or damage to equipment.

The currency column door switch is located in the currency column, above the bill acceptor, and is shown in Figure 13-13 on page 13-34.

Removing the Currency Column Door Switch

The switch is above the bill acceptor, shown in Figure 13-13 on page 13-34.

To remove the currency column door switch, perform the following steps:

1. Push in the flanges on the switch and pull the switch from the mounting panel.
2. Using long-nose pliers, pull the quick connects off the terminal.
3. Remove the switch.

Installing the Currency Column Door Switch

To install the currency column door switch, perform the following steps:


1. Using long-nose pliers to hold each color-coded wire, push the quick connect onto the terminal, making sure the wire is on the correct terminal. Table 13-4 provides the connection information.

Table 13-4 Wire Connections for Currency Column Door Switch

| Terminal Label on Switch | Harness Wire Connector and Pin | Harness Wire Color |
|--------------------------|--------------------------------|--------------------|
| COM 2 | P43-1 | Green |
| NC 2 | - | - |
| NO 2 | - | - |
| NO 1 | P42-2 | Violet |
| NC 1 | P43-2 | White/Green |
| COM 1 | P42-1 | Gray |

2. Push the switch back into the panel until the mounting flanges are behind the mounting panel and the switch is secure.

Verifying Currency Column Door Switch Operation

 **Tip:** If you pull the door switch activator out as far as it will go, the switch remains closed, simulating a closed-door condition. This is a useful way to keep a door open and suppress the diagnostic messages while you test the switch on another door.

To verify currency column door switch operation, perform the following steps:

1. Flip the power switch for the slot machine to the On position.
2. Invoke the MMS and access the MMS **Diagnostics** page. Refer to “Invoking the MMS” on page 2-23.
3. If a *Door Open* banner is displayed, the switch is correctly detecting an open door.
4. Close the door. If no banner is displayed, the switch is correctly detecting a closed door.
5. Exit the MMS. Refer to “Exiting the MMS” on page 2-25.
6. Close the currency column door. Refer to “Closing and Locking the Currency Column Door” on page 2-9.

Replacing the Belly Door Switch

The belly door switch is located in the front lower-right corner of the display cavity and is shown in Figure 13-13 on page 13-34. The following table is a summary of the sections in this procedure. If you are familiar with the procedure, you may prefer to read the text in the indicated sections only when necessary.


| |
|--|
| Replacing the Belly Door Switch |
| "Removing the Belly Door Switch" on page 13-37 |
| "Installing the Belly Door Switch" on page 13-37 |
| "Verifying Belly Door Switch Operation" on page 13-38 |

Removing the Belly Door Switch

Before beginning the procedure, be sure to turn the power off.

To turn the power off, perform the following steps:

1. Open the currency column door. Refer to "Opening the Currency Column Door" on page 2-8.
2. Flip the power switch to the Off position.

 **Warning:** Failure to turn off the machine can result in personal injury or damage to equipment.

The belly door switch is in the lower-right corner of the lower cavity, in front of the hopper drawer, and is shown in Figure 13-13 on page 13-34.

3. Push in the flanges on the switch and pull the switch from the mounting panel.
4. Using long-nose pliers, pull the quick connects off the terminals.
5. Remove the switch.

Installing the Belly Door Switch

To install the belly door switch, perform the following steps:


1. Using long-nosed pliers, hold each color-coded wire and push the quick connect onto the terminal, making sure the wire is on the correct terminal. Table 13-5 provides the connection information.

Table 13-5 Wire Connections for Belly Door Switch

| Terminal Label on Switch | Harness Wire Connector and Pin | Harness Wire Color |
|--------------------------|--------------------------------|--------------------|
| COM 2 | P37-1 | Red |
| NC 2 | - | - |
| NO 2 | - | - |
| NO 1 | P16-2 | Violet |
| NC 1 | P37-2 | White/Red |
| COM 1 | P16-1 | Gray |

2. Push the switch back into the panel until the mounting flanges are behind the mounting panel and the switch is secure.

Verifying Belly Door Switch Operation


 **Tip:** If you pull the door switch activator out as far as it will go, the switch remains closed, simulating a closed door condition. This is a useful way to keep a door open and suppress the door's diagnostics while you test the switch on another door.

To verify belly door switch operation, perform the following steps:

1. Flip the power switch for the slot machine to the On position.
2. Invoke the MMS and access the MMS **Diagnostics** page. Refer to "Invoking the MMS" on page 2-23.
3. If a *Door Open* banner is displayed, the switch is correctly detecting an open door.
4. Close the door. If no banner is displayed, the switch is correctly detecting a closed door.
5. Exit the MMS. Refer to "Exiting the MMS" on page 2-25.
6. Close the belly door. Refer to "Closing and Locking the Belly Door" on page 2-9.
7. Close the currency column door. Refer to "Closing and Locking the Currency Column Door" on page 2-9.

Replacing the Electronics Box Door Switch

The electronics box door switch is located in the front upper-left corner of the electronics box, when the electronics box is standing in the slot machine cabinet. To access it you must open the door to the electronics box.

 **Important:** Slot machines that are connected to a Wide Area Progressive System have a tamper-proof seal that prevents you from opening the door to the electronics box. Do not break the seal unless you are an authorized Silicon Gaming field engineer. To replace a component inside the electronics box, call 1-888-44-SLOTS.

The following table is a summary of the sections in this procedure. If you are familiar with the procedure, you may prefer to read the text in the indicated sections only when necessary.


| |
|--|
| Replacing the Electronics Box Door Switch |
| Removing the Electronics Box Door Switch |
| "Removing the Hopper Drawer" on page 2-9 |
| "Removing the Electronics Box Door" on page 2-12 |
| "Removing the Door Switch from the Mounting Panel" on page 13-39 |
| "Installing the Electronics Box Door Switch" on page 13-39 |
| "Verifying Electronics Box Door Switch Operation" on page 13-40 |
| Finishing Up |
| "Installing the Electronics Box Door" on page 13-40 |
| "Installing the Hopper Drawer" on page 2-10 |

Removing the Electronics Box Door Switch

Before beginning the procedure, be sure to turn the power off.

To turn the power off, perform the following steps:

1. Open the currency column door. Refer to "Opening the Currency Column Door" on page 2-8.
2. Flip the power switch to the Off position.

 **Warning:** Failure to turn off the machine can result in personal injury or damage to equipment.

To remove the electronics box door switch, you must remove the hopper drawer and the door on the electronics box.

Removing the Hopper Drawer

Refer to "Removing the Hopper Drawer" on page 2-9.

Removing the Electronics Box Door

Refer to "Removing the Electronics Box Door" on page 2-12.

Removing the Door Switch from the Mounting Panel

To remove the door switch, perform the following steps:

1. Push in the flanges on the switch and pull the switch from the mounting panel.
2. Using long-nosed pliers, pull the two quick connects off the terminals.
3. Remove the switch.

Installing the Electronics Box Door Switch

To install the electronics box door switch, perform the following steps:


1. Using long-nosed pliers, hold each color-coded wire and push the quick connect onto the terminal, making sure the wire is on the correct terminal. Table 13-6 provides the connections.

Table 13-6 Wire Connections for Electronics Box Door Switch

| Terminal Label on Switch | Harness Wire Color |
|--------------------------|--------------------|
| COM 2 | - |
| NC 2 | - |
| NO 2 | - |
| NO 1 | White |
| NC 1 | - |
| COM 1 | Red |

2. Push the switch back into the panel until the mounting flanges are behind the mounting panel and the switch is secure.

Verifying Electronics Box Door Switch Operation

 **Tip:** If you pull the door switch activator out as far as it will go, the switch remains closed, simulating a closed door condition. This is a useful way to keep a door open and suppress the door's diagnostics while you test the switch on another door.

To verify electronics box door switch operation, perform the following steps:

1. Flip the power switch for the slot machine to the On position.
2. Invoke the MMS and access the MMS Diagnostics page. Refer to "Invoking the MMS" on page 2-23.
3. Open the electronics box door. Refer to "Opening the Electronics Box Door" on page 2-11.
4. If a *Door Open* banner is displayed, the switch is correctly detecting an open door.
5. Close the door. If no banner is displayed, the switch is correctly detecting a closed door.
6. Exit the MMS. Refer to "Exiting the MMS" on page 2-25.

Finishing Up

Finish up by installing the electronics box door and the hopper drawer.

Installing the Electronics Box Door

To install the door, perform the following steps:

1. Refer to "Installing the Electronics Box Door" on page 2-12.
2. Close and lock the door on the electronics box. Refer to "Closing the Electronics Box Door" on page 2-12.

Installing the Hopper Drawer

To install the hopper drawer in the lower cavity, perform the following steps:

1. Refer to "Installing the Hopper Drawer" on page 2-10.
2. Close the belly door. Refer to "Closing and Locking the Belly Door" on page 2-9.
3. Close the currency column door. Refer to "Closing and Locking the Currency Column Door" on page 2-9.

Replacing the Drop-Door Switch

The drop door is the door below the lower cavity. The drop-door switch detects whether the drop door is open. The casino operator supplies the drop-door switch and determines its location.

To replace this door switch, use the following instructions and the instructions provided by the manufacturer of the door switch.

The following table is a summary of the sections in this procedure. If you are familiar with the procedure, you may prefer to read the text in the indicated sections only when necessary.


| |
|--|
| Replacing the Drop-Door Switch |
| “Removing the Drop-Door Switch” on page 13-41 |
| “Installing the Drop-Door Switch” on page 13-41 |
| “Verifying Drop-Door Switch Operation” on page 13-42 |

Removing the Drop-Door Switch


Before beginning the procedure, be sure to turn the power off.

To turn the power off, perform the following steps:

1. Open the currency column door. Refer to “Opening the Currency Column Door” on page 2-8.
2. Flip the power switch to the Off position.

 **Warning:** Failure to turn off the machine can result in personal injury or damage to equipment.

To remove the drop-door switch, perform the following steps:

1. Push in the flanges on the switch and pull the switch from the mounting panel.
 -  **Tip:** You may have to contact the casino operator to determine the location of the door switch. Refer to the switch instructions provided by the manufacturer, if necessary.
2. Using long-nosed pliers, pull the quick connects off the terminals.
3. Remove the switch.

Installing the Drop-Door Switch

To install the drop-door switch, perform the following steps:

1. Using long-nosed pliers, hold each color-coded wire and push the quick connect onto the terminal, making sure the wire is on the correct terminal. Table 13-7 provides the connections.

Table 13-7 Wire Connections for Drop-Door Switch

| Terminal Label on Switch | Harness Wire Connector and Pin | Harness Wire Color |
|--------------------------|--------------------------------|--------------------|
| COM 2 | P31-1 | Orange |
| NC 2 | - | - |
| NO 2 | P31-2 | White/Orange |
| NO 1 | P30-1 | Violet |
| NC 1 | - | - |
| COM 1 | P30-2 | Black (Ground) |

2. Refer to the instructions provided by the manufacturer of the door switch and mount the switch. (For example, you may have to push the switch into a mounting panel until the mounting flanges are behind the mounting panel.)

Verifying Drop-Door Switch Operation

Tip: If you pull the door-switch button out as far as it will go, the switch remains closed, simulating a closed door condition. This is a useful way to keep a door open and suppress the door's diagnostics while you test the switch on another door.

To verify drop-door switch operation, perform the following steps:

1. Flip the power switch for the slot machine to the On position.
2. Invoke the MMS and access the MMS **Diagnostics** page. Refer to "Invoking the MMS" on page 2-23.
3. Press in the activator on the switch. If a *Door Open* banner is displayed, the switch is correctly detecting an open door.
4. Close the door. If no banner is displayed, the switch is correctly detecting a closed door.
5. Exit the MMS. Refer to "Exiting the MMS" on page 2-25.
6. Close and lock the cabinet door.