

# STAR RECEIPT PRINTER

# **MAINTENANCE MANUAL**

C08951

**GASBOY INTERNATIONAL LLC** 

# GASBOY STAR RECEIPT PRINTER MAINTENANCE MANUAL

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Rev. 03/20/03

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GASBOY INTERNATIONAL LLC LANSDALE, PA

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# **INTRODUCTION**

### DESCRIPTION

The Star Receipt Printer is a compact, multi-purpose dot-matrix printer that is used in GASBOY CFN and Series 1000 Card Systems. This optional printer enables you to print receipts for fueling transactions right at your card reader.

The printer is housed within the pedestal of your card reader. A printer access door is located on the side of the pedestal. Inside, the printer is mounted on a sliding drawer that enables you to easily slide it out for servicing or maintenance and then replace it. A receipt door on the front of the pedestal provides customer access to receipts. Indicator lamps, on the pedestal above the receipt door, indicate **PAPER LOW** or **PAPER OUT** conditions.

Figure 1-1 highlights the location and features of a card reader with a receipt printer. The remainder of this manual describes the printer, its internal switches and settings, and how to maintain it.

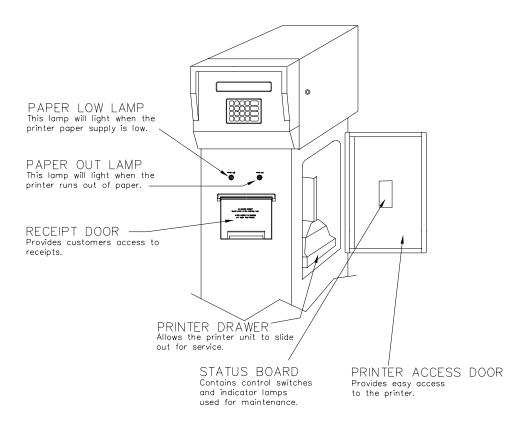


Figure 1-1. Card System With Receipt Printer

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# **SWITCHES AND SETTINGS**

### **PRINTER STATUS BOARD**

The printer status board (Figure 2-1) is attached to the inside of the printer access door (See Figure 1-1) This location provides the site attendant easy access to the switches and indicator lamps needed to perform paper loading, self-tests, and simple troubleshooting.

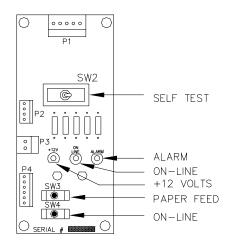


Figure 2-1. Printer Status Board

### STATUS BOARD SWITCHES

Table 2-1 summarizes switches and results for the printer status board.

Table 2-1. Status Board Switches

Switch	Function
SW2	SELF-TEST
	Switching SW2 to the left starts a self-test of the printer. It will print a barber-pole pattern of all the characters that may be printed on a receipt.
	Switching SW2 to the right stops the printing and cuts the paper.
	A short self-test should be performed whenever the paper or ribbon is changed.
SW3	PAPER FEED
	Pressing SW3 causes a continuous paper feed. This is used while loading new paper.
SW4	ON LINE
	Pushing this switch alternately puts the printer in the online or offline mode. The printer must always be online (green lamp on) to print receipts or do a self-test.

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### **STATUS BOARD LAMPS**

**Table 2-2. Status Board Lamps** 

Lamp	Function
D1	+12 VOLTS
	This lamp should be lit whenever SW1 (Power) is on.
D2	ON LINE
	This lamp must be on to print receipts or do a self-test. If it is not on, momentarily press
	SW4.
	NOTE: This lamp does not have to be lit to feed paper (SW3).
D3	ALARM
	This lamp will light when a mechanical failure occurs, or when the printer runs out of paper.

### **CONTROLLER BOARD DIP SWITCH SETTINGS**

The controller board DIP switches are set at the factory prior to shipment. For proper operation of the printer, the controller board switch settings should be as follows:

Table 2-3. Dip Switch Settings

SW1	Pos	SW2	Pos
1-1	ON	2-1	ON
1-2	ON	2-2	ON
1-3	ON	2-3	ON
1-4	ON	2-4	OFF
1-5	OFF		
1-6	ON		
1-7	ON		
1-8	OFF		

NOTE: DIP switches are only read by the controller at power up. DIP switch changes should be made with the power off.

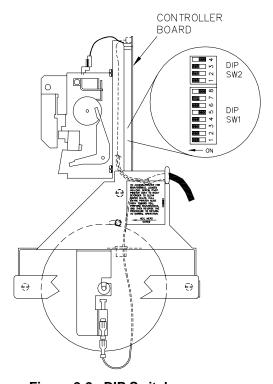


Figure 2-2. DIP Switches

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# **MAINTENANCE**

### ACCESSING THE PRINTER FOR MAINTENANCE OR SERVICE

Before beginning any of the following maintenance procedures, you must first turn off all power to the unit, then pull the printer out to a serviceable position. Follow these steps:

- 1. Open the printer access door and loosen the hex head screw.
- 2. Pivot the printer assembly to the right in order to clear the paper chute.
- 3. Pull the entire printer slide assembly toward you.
- 4. Perform any required maintenance or service. Reverse this procedure to return the printer to normal operation.

### ORDERING NEW PAPER OR RIBBON

When replacing paper or ribbon, use only GASBOY-supplied parts. Failure to do so will void the GASBOY warranty.

- C08946 Paper, #RF-4, 5-5, Low Bulk Star
- C08941 Ribbon, #SF-01P, Purple Star

It is recommended, in most cases, that the ribbon be replaced every 4000-5000 receipts or 2 to 3 rolls of paper to ensure acceptable print quality. Environmental conditions, such as temperature and humidity, may affect the life of the ribbon.

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### **CHANGING THE PAPER**

### **Removing the Paper**

- 1. Follow the procedure for accessing the printer.
- 2. Cut the paper where it comes off of the roll.
- 3. Press the PAPER FEED switch on the printer status board until all of the paper is removed from the printer mechanism.
- 4. Remove the paper roll, being careful not to bend the PAPER LOW switch.

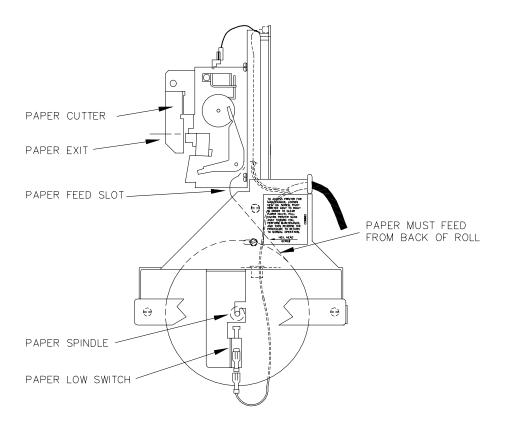


Figure 3-1. Printer Side View

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### Installing the Paper

- Insert spindle into paper roll.
- 2. Insert roll into holder, being careful not to bend the PAPER LOW switch.
- 3. Make sure the paper feeds from the back of the roll.
- 4. Insert the paper into the paper feed slot while pressing the PAPER FEED switch on the printer status board.
- 5. Make sure the paper feeds easily out of the paper cutter.
- 6. Perform a short self-test.
- 7. Return the printer slide assembly to its normal position and lock it in place with the hex head screw.
- Close and lock the printer access door.

NOTE: Make sure the printer access door is drawn tight in order to insure a watertight seal.

### CHANGING THE RIBBON

### **Removing Old Ribbon Spools**

- 1. Follow the procedure for accessing the printer.
- 2. Slide the cutter latch on the paper cutter unit to the right and swing the paper cutter up (Figure 3-2 A and B).
- 3. Rotate both spools to create some slack in the ribbon.
- 4. Pull one spool off of the shaft while pushing the ribbon detecting lever out of the way (Figure 3-2 C). Repeat for the other spool.

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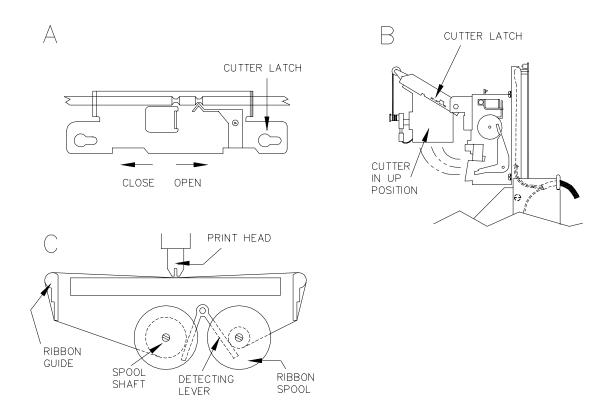


Figure 3-2. Ribbon Installation Sequence

### **Installing New Ribbon Spools**

- 1. Place the ribbon spool onto the left shaft with the spool-driving pins pointing toward the printer (Figure 3-2 C).
- 2. Feed the ribbon over the left ribbon guide, under the print head, and over the right ribbon guide.
- 3. Repeat Step 1 for the right spool.
- 4. Rotate both spools to remove the slack from the ribbon.
- 5. Return the paper cutter unit to the normal position and slide the cutter latch to the left to lock (Figure 3-2 A).
- 6. Perform a short self-test
- 7. Return the printer slide assembly to its normal position and lock it in place with the hex head screw.
- 8. Close and lock the printer access door.

NOTE: Make sure the printer door lock is drawn tight in order to insure a watertight seal.

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### **ADJUSTING CUTTER BLADES**

Adjustment of the cutter blades may become necessary if the cutter fails to operate properly. This may be indicated by receipts not being completely cut or paper becoming jammed inside the printer. Cutter blades are sharp! Keep fingers away from sharp edges of blade while making adjustments.

### **Adjust After Incomplete Cuts**

- 1. Follow the procedure for accessing the printer.
- Loosen the hex adjusting screw (located on the lower left side of the cutter) using a 2.5 mm hex key. Do not use pliers as damage to the screw head may result. Pivot the bottom cutter blade upward. Tighten the hex screw to lock the blade in place.
- 3. Perform a few self-tests to make sure the cutter operates properly.
- 4. Return the printer slide assembly to its normal position and lock it in place with the hex head screw.
- 5. Close and lock the printer access door.

NOTE: Make sure the printer door lock is drawn tight in order to insure a watertight seal.

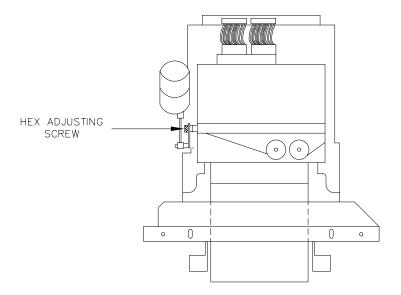


Figure 3-3. Cutter Bar Adjustment Screw

### **Adjust After Paper Jams**

- 1. Follow the procedure for accessing the printer.
- 2. Carefully remove any paper that may be stuck inside the printer.

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- 3. Loosen the hex adjusting screw (located on the lower left side of the cutter) using a 2.5 mm hex key. Do not use pliers as damage to the screw head may result. Pivot the bottom cutter blade down. Tighten the hex screw to lock the blade in place.
- 4. Perform a few self-tests to make sure the cutter operates properly.
- 5. Return the printer slide assembly to its normal position and lock it in place with the hex head screw.
- 6. Close and lock the printer access door.

NOTE: Make sure the printer door lock is drawn tight in order to insure a watertight seal.

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### WARRANTY

### General Statements:

Gasboy International LLC. warrants all new equipment manufactured by Gasboy against defective material and/or workmanship, for the warranty period specified below, when the equipment is installed in accordance with specifications prepared by Gasboy.

This warranty does not cover damage caused by accident, abuse, Acts of God, lack of surveillance of automatic recording systems, negligence, mis-application, faulty installation, improper or unauthorized maintenance, installation or use in violation of product manuals, instructions, or warnings. Under no circumstance shall Gasboy be liable for any indirect, special, or consequential damages, losses, or expenses to include, but not limited to, loss of product, loss of profits, litigation fees, or the use, or inability to use, our product for any for any purpose whatsoever.

Parts Only - During the warranty period, Gasboy will, at its option, repair or replace defective parts returned transportation prepaid to its factory. On-Site Labor Included - Gasboy will also provide, within the Continental United States and during the warranty period, the services of an Authorized Service Representative (ASR) for on-site repair or replacement of defective parts.

Replacement Parts - Any system components that are not part of the original system order, including Island Card Readers, Pump Control Units, etc., are considered replacement parts.

Equipment	Term	Coverage
Commercial Pumps and Dispensers Full-Cabinet Consumer Pumps	One year from date of installation or 18 mos. from date of Gasboy International's invoice to the purchaser, whichever comes first.	Parts and Labor.
Small Transfer Pumps, Meters, Pressure Regulators	One year from date of installation or 18 mos. from date of Gasboy International's invoice to the purchaser, whichever comes first Excepting the Model 2020 Hand Pump, which has a 90-day warranty from date of GASBOY International's invoice.	Parts Only.
Keytrol	One year from date of installation or 18 mos. from date of Gasboy International's invoice to the purchaser, whichever comes first.	Parts and Labor.
Fuel Management Systems: - CFN/ Profit Point - Series 1000/Fleetkey - TopKAT - Fuel Point Readers (sold with new systems)	One year from date of start-up or 15 mos. from date of Gasboy International's invoice to the purchaser, whichever comes first The basic warranty only applies to systems which have been started up by a Gasboy Authorized Service Representative (ASR).	Parts and Labor.
Additional Fuel Point Items: - Fuel Point Readers sold for retrofitting existing systems Fuel Point vehicle and dispenser components.	One year from date of start-up or 15 mos. from date of Gasboy International's invoice to the purchaser, whichever comes first.	Parts Only.
Encoders, Embossers, Modems, CRTs, and Logger Printers	Purchased with Fuel Management System (Encoders, Embossers only): 90 days from the date of start-up by a Gasboy ASR, or 180 days from date of Gasboy International's invoice, whichever occurs first.	Purchased with System (Encoders, Embossers only): Parts only.
	Purchased with Fuel Management System (Modems, CRTs, and Logger Printers only): Matches system warranty.	Purchased with System (Modems, CRTs, Logger Printers only): Matches system warranty.
	Purchased Separately: 90 days from date of Gasboy International's invoice to the purchaser.	Purchased Separately: Parts Only.
Air Diaphragm Pumps	Three years from date of purchase (for full warranty description, see Price List).	Parts Only.
Items not manufactured by Gasboy (ex. automatic nozzles, hoses, swivels, etc.)	Not warranted by Gasboy International (consult original manufacturer's warranty).	Not Applicable.
Replacement Parts	One year from date of Gasboy International's invoice to the purchaser.	Parts Only.

To the extent permitted by law, this warranty is made in lieu of all other warranties, expressed or implied, including warranties of freedom from patent infringement, or merchantability, or fitness for a particular purpose, or arising from a course of dealing or usage of trade. No one is authorized to vary the terms of the warranty nor may anyone make any warranty of representation, or assume any liability other than that herein stated, in connection with the sale described herein. The acceptance of any order by Gasboy International is expressly made subject to the purchaser's agreement to these conditions.

