



# ***PERIPHERALS***

## **MODULE 8**

**MK8-SVMOD-0001**  
**PERIPHERALS**

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**Bally Gaming & Systems**

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or visit our website at <http://www.ballygaming.com>**

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# Peripherals

## Coin Acceptors



### Coin Mechanisms CC-16

#### Power Requirements:

Fixed VDC Models, 11.5 to 12.5 VDC.

#### General

Feed Rate, 7 Coins per second.  
Operating temperature recommended 0° to 60° C.

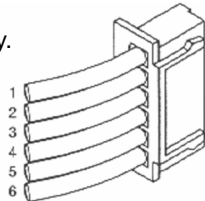
#### Installing Sample Coin (CC-16, 62, & 46)

Slide the sensor coil assembly to the right. Replace the sample with the desired coin, and then carefully release. When seated, the coin will rest parallel between the sensor coil assembly and the ribs on the rail insert.

#### Wiring

The CC-16 Printed Circuit Board requires a 6 pin JST terminated interface. The following drawing denotes the typical voltage line pinouts to the Printed Circuit Board.

1. Inhibit input, 12 VDC models only.  
Triac load, all others.
2. Sense output
3. 48 Volt
4. 24 Volt
5. 12 Volt
6. Ground



#### Potentiometer Adjustment (CC-16, 62, & 46)

Using a high quality slug, adjust the potentiometer clockwise until the slug is rejected. Drop good coins through to ensure accurate acceptance.

### Coin Mechanisms CC-62

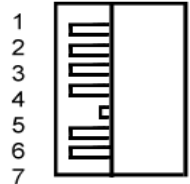
#### Power Requirements:

Voltage Range, 11.5 VDC to 12.5 VDC.

#### Wiring

The CC-62 Printed Circuit Board requires a 7-pin AMP right-angel locking connector interface.

1. Ground
2. Coin Sense
3. Error
4. Credit
5. Key
6. 12 Volt
7. Inhibit



#### Two Separate Outputs

When the sensing coils sense a good coin, a pulse is sent out to the host machine. Following this, the accept gate opens, and as the coin passes the LED optics, a credit pulse is also sent out to the host machine. Together these two pulses provide optimum security against cheating. The host machine can be configured to recognize a valid coin only when both outputs have been detected.

### Coin Mechanisms CC-46

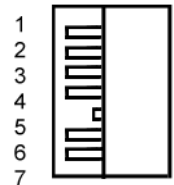
#### Power Requirements:

Voltage Range, 11.5 to 15 VDC.

#### Wiring

Mating connector is an AMP P/N 770602-7 (terminals 770666-1 or Molex P/N 22-01-3077. Series 2695 Housing (terminals 2795 or 6459 Series).

1. Ground
2. Coin Sense
3. Error
4. Credit
5. Key
6. +12 VDC



## Coin Mechanisms CC-46 (cont.)



### LED Feature

The CC-46 incorporates a bi-color (red and green) LED on the front cover to indicate the operating status of the mechanism. Green indicates it's enabled. Red indicates it's disabled.

Coin Controls International  
2925 E Patrick Lane, Suite C,  
Las Vegas, NV 89120  
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### General Features

Feed Rate: 8 Coins per second  
Operating temperature: recommended 0° to 60°C.  
Inhibit: Allows you to disable the device without removing power from the unit.  
Error: Alerts the machine of a malfunction or tampering of the device.  
Credit Signal: This is an output which occurs for every valid coin accepted through the device.  
Sense Signal: This is an output which indicates a valid coin has passed the sensor coils.

### Condor CN103

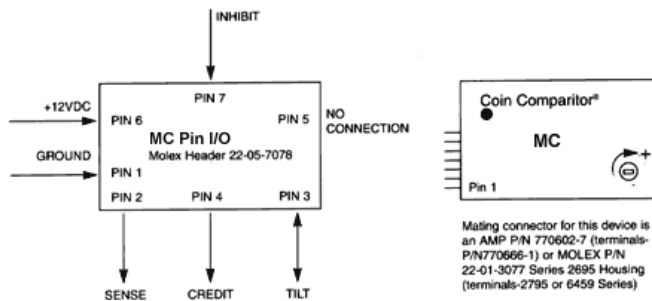
#### Power Requirements:

Voltage, 12 VDC to 32 VDC

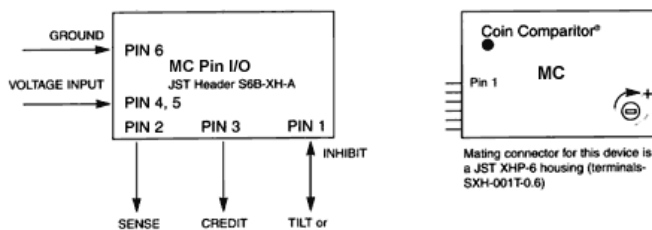
#### General

Operating temperature: 0° to 60° C.  
Maintainable life of 20 million coins.  
Coinage: Accepts coins within the diameter range of .59-1.75" (15-44.5 mm) and the thickness range of .059-.148" (1.5-3.75 mm).

### Micro Comparator MC (Replacement for CC-16 and CC-62)



CC-16 Emulation



CC-62 Emulation

#### Wiring

Connector 1	Pin 1 Inhibit all. Pin 2 VACS +6V Pin 3 +12 to 32 VDC Pin 4 +12 to 32 VDC Pin 5 +12 to 32 VDC Pin 6 +0V
Connector 2	Pin 1 Accept (b) NPN generation Pin 2 VACS NPN Pin 3 Alarm Pin 4 Error
Connector 3	Serial Port
Connector 4	LCD display

#### Alarm

Open collector NPN is activated for 2 seconds with inhibit all. This condition occurs when coins travel in reverse, too slowly or block the opto beams. A continuous yellow LED will result for the duration of the alarm. During this time a pulse will appear on the error pin.

# Peripherals

Condor CN103 (cont.)




National Rejectors, Inc. GmbH  
Postfach 1461  
D-2150 Buxtehude, Germany

## Error

When a critical failure is detected at power up a 500ms pulse will be given on the error line and will repeat every 2 seconds. The LED will flash red and all coins will be inhibited.

## Teach and Run™ Programming

Follow these steps to program:



**Teach Coin  
or Token**


**LED Status**

• Select window 1	■
• Press button	■
• Start feeding coins/tokens until	■
• Press button - normal operation	■
• Select security (see 5.0)	■

## Security

The acceptance window can be adjusted to increase fraud rejection or increase coin acceptance.

**Increase  
True Coin  
Acceptance**



**Increase  
Fraud  
Rejection**

- Clockwise (Increase fraud rejection)
- Anticlockwise (Increase true coin acceptance)
- 0 (Normal)

## G-13, 0000 Coin Acceptor

### Power Requirements:

12 VDC +3/-1 Volts tolerances

### General:

Operating temperature 0° to 55° C.

Acceptance: Up to 6 different coins

Diameter: between .59" and 1.22" (15 and 31mm).

Thickness of coins: between .059" and .1" (1.5 and 2.6 mm)

Dimensions: Height: 4" (102 mm) Width: 3.5" (89 mm) Depth: 2" (52 mm). Temperature range 0 C up to +55 C

### Coin inhibit

A common blocking line for all coins is available. Single coin inhibit may be achieved by DIP switches on the G-13.

### Measuring principle

Three inductive sensors are arranged to detect material, thickness, diameter and embossing of coins as they pass. The passing coin activates the sensors, providing different voltage measuring values. These voltages are digitized and processed within the microprocessor.

### Programming of acceptor

A standard computer (IBM PC or compatible) allows programming of the acceptor for any coin acceptance. Programming means just the insertion of a coin which should be accepted. Please refer to the document "Use of program PROEMP."

### Wiring

1. Ground
2. +12 VDC
- 3, 4, 7, 8, 9, 10. Coin Signals

Wire Insertion View

9	7	5	3	1
10	8	6	4	2

Coin Signals: <.07 volts active low / 150 mA Open collector NPN. I max = 150 mA, Umax = 35 volts. Time of pulses: 100 msec +/- 10%.

5. N.C.
6. Coin Inhibit

# Bill Acceptors



North Las Vegas, NV 89031  
Tel: +1 702 651 0000  
Fax: +1 702 651 0003  
Toll Free: 1-800-683-7248

## JCM WBA-SS Bill Acceptor

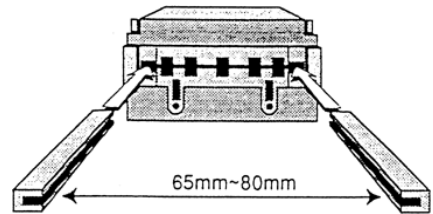
### Power Requirements:

Voltage Range, 95 to 135 VAC with power supply 50 to 60 Hz, or 12 VDC max 20 VA.

### General

Magazine capacity 600 notes.  
Operating temperature recommended 0° to 45° C.

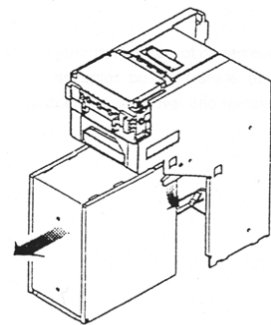
### Adjustable Bill Slot



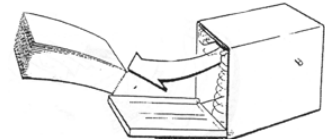
The WBA-SS has the ability to read a wide range of bill sizes. Four adjustment guides are available for bills that are 65 mm to 80 mm wide.

### Collecting Bills

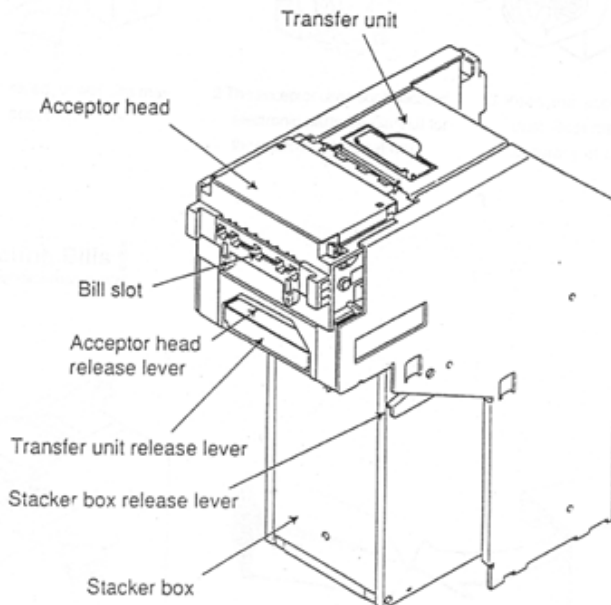
Collect bills by pressing the release lever and pulling the stacker box towards you.



Open the stacker box cover and remove the bills inside.

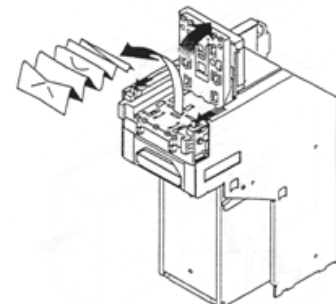


### Component Identification



### Bill Jams

Remove jammed bills from the bill head by moving the release catches on both sides of the head towards you. Open the acceptor head to access the jammed bill.



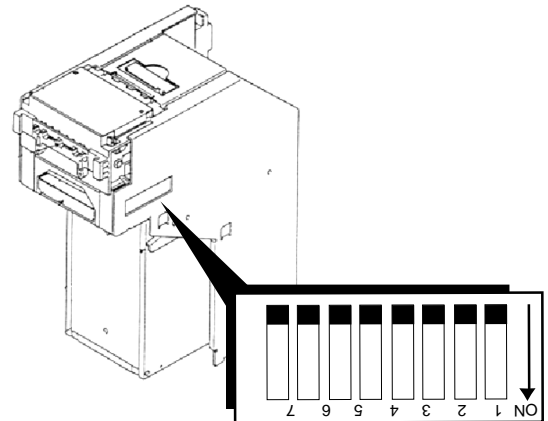
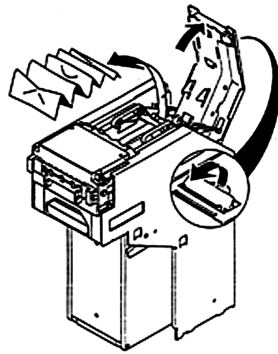


# Peripherals

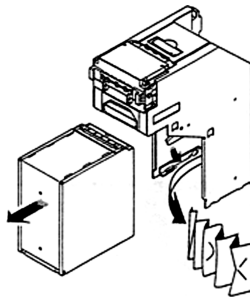
## JCM WBA-SS Bill Acceptor (cont.)

## WBA DIP Switch Selection

Remove jammed bills from the transfer area by pulling the access lever and opening the top cover.



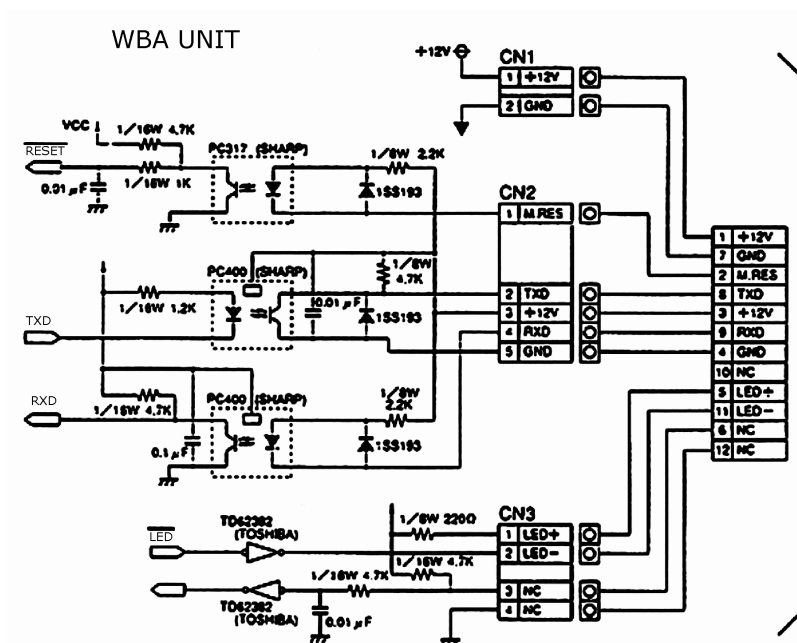
Occasionally, a bill jams near the inlet of the stacker box. Push the release lever of the stacker box and remove it to access the jammed bill.



WBA DIP Switch Selection		
Switch	ON	OFF
1	Reject \$1	Accept \$1
2	Must be set to OFF	OFF
3	Reject \$5	Accept \$5
4	Reject \$10	Accept \$10
5	Reject \$20	Accept \$20
6	Reject \$50	Accept \$50
7	Reject \$100	Accept \$100
8	Must be set to OFF	OFF

## Interface

The WBA-SS uses an ID-003 interface. The ID-003 interface is a bidirectional serial interface. The machine is able to receive status reports from the WBA in response to appropriate commands.

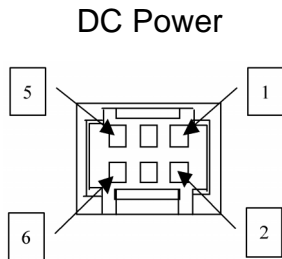


# JCM DBV-200

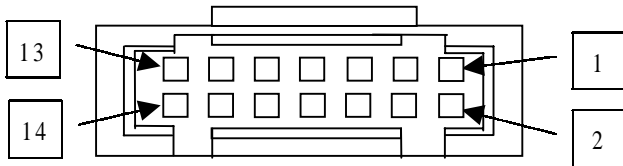
Power Requirements  
+12VDC

## Wiring

DBV-200 Power		
Pin #	Signal	Function
1	Power Supply	+12VDC
2	Power Supply	Ground
3	NC	Not Used
4	NC	Not Used
5	NC	Not Used
6	NC	Not Used

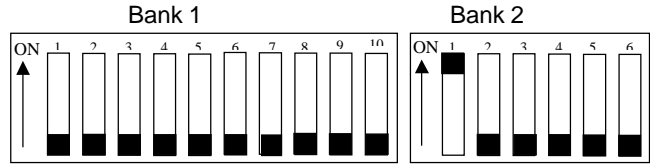


## Interface



DBV-200 Connection		
Pin #	Signal	Function
1	NC	Not Used
2	NC	Not Used
3	Busy	Indicates that the validator is in operation
4	Soft Reset	Signal to clear ABN (abnormal) or STKF (stacker full) signal.
5	Data	Terminal to output communication message.
6	CTS	Signal allows to send any communication message.
7	Ground	Ground
8	LED Power	Power supply to drive LED
9	NC	Not Used
10	Disable/-Enable	Validator can accept bill when Low, and can not accept when High
11	RTS	Confirms the start of communication message.
12	NC	Not Used
13	NC	Not Used
14	ABN	To be output when the validator is in trouble, or when the stacker is full.

## DIP Switch Selection

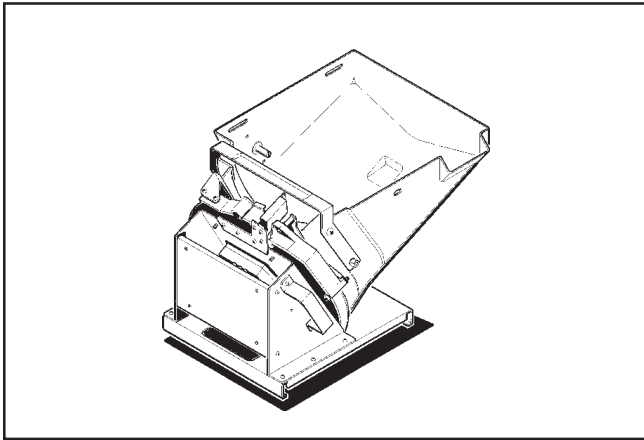


DBV-200 Bank 1 Switch Selections		
Switch	ON	OFF
1	Reject \$1	Accept \$1
2	Reject \$5	Accept \$5
3	Reject \$10	Accept \$10
4	Reject \$20	Accept \$20
5	Reject \$50	Accept \$50
6	Reject \$100	Accept \$100
7	Must be set to OFF	OFF
8	Must be set to OFF	OFF
9	Must be set to OFF	OFF
10	ID-045	ID-044

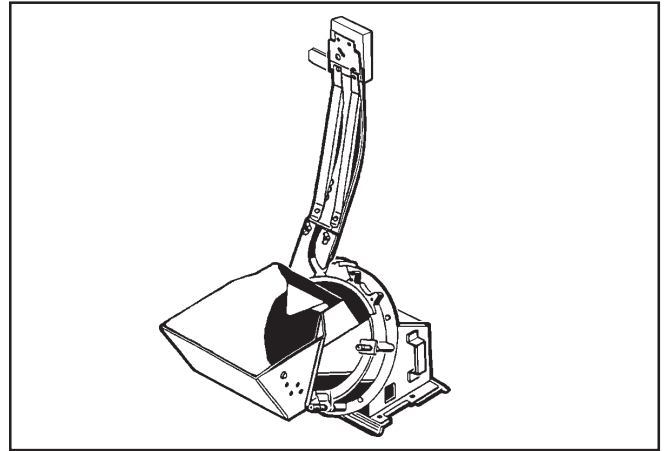
DBV-200 Bank 2 DIP Switch Selections		
Switch	ON	OFF
1	With Stacker	Without Stacker
2	Must be set to OFF	OFF
2	Must be set to OFF	OFF
3	Must be set to OFF	OFF
4	Must be set to OFF	OFF
5	Must be set to OFF	OFF
6	Test Mode	Normal

## Hoppers

Bally Gaming and Systems products use the XS-1200 Standard hopper. Some cabinet styles may use hoppers manufactured by Asahi Seiko, Inc.

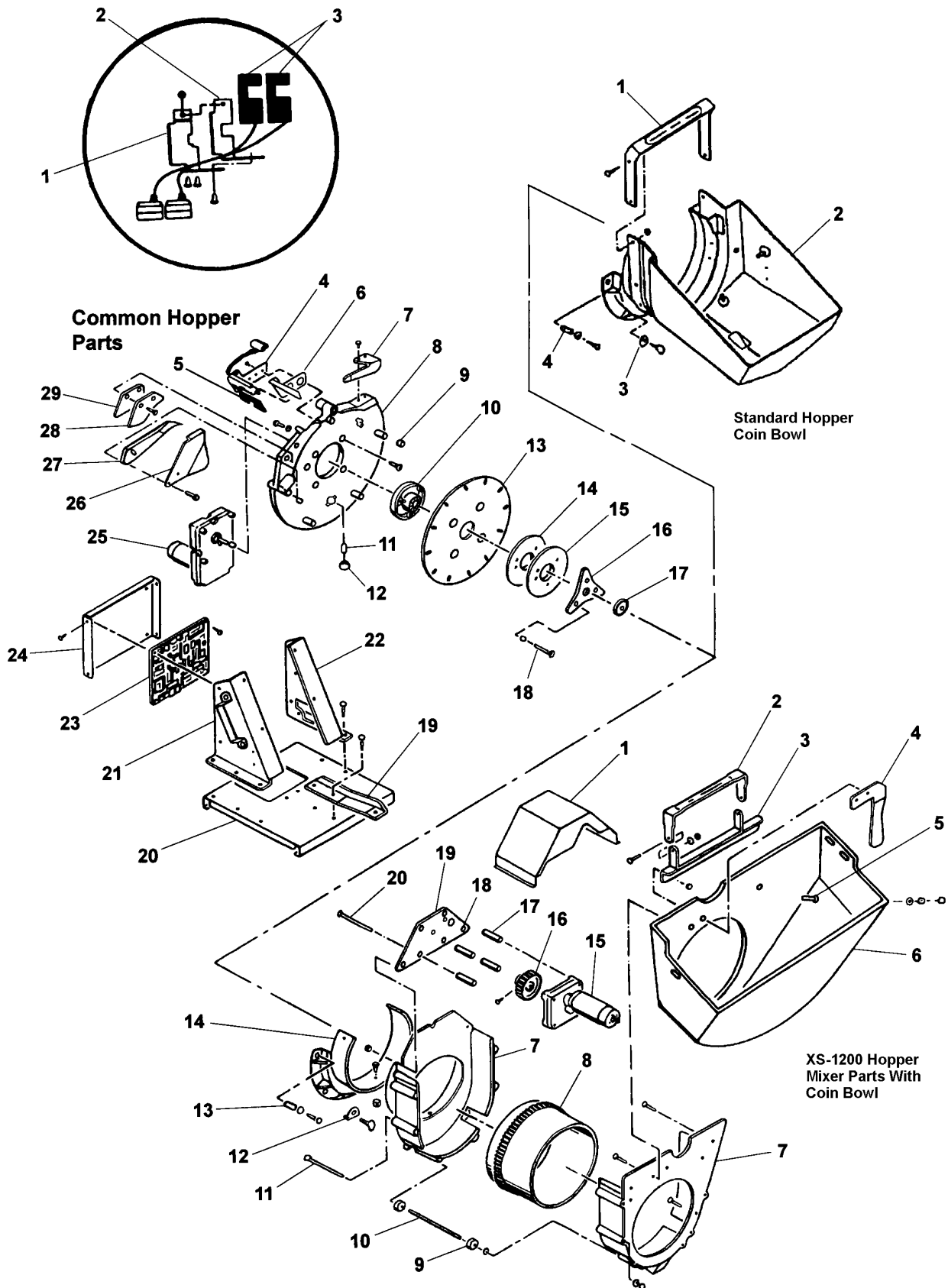


**Bally XS-1200 Standard Hopper**



**Asahi Seiko Hopper**

**Bally Gaming XS-1200 Hopper (AS-04787-SERIES)**



# Peripherals

## Bally Gaming XS-1200 Hopper (AS-04787-SERIES) (cont.)

### XS1200 Hopper Parts

Item	Part #	Description
1.	P-09319-0512	Bracket, Outer Mounting
2.	P-09319-0511	Bracket, Inner Mounting
3.	E-00733-0008	Optic Switch Assembly (2)
4.	P-09319-0204	Bracket, Hopper Optic Guard, Outer
5.	E-00733-0008	Optic Switch Assembly (Single)
	TFPP-00632-1114	Screw
6.	P-09319-0203	Bracket, Hopper Optic Guard, Inner
7.	P-00845	Wiper
8.	M-03073-0002	Wheel Housing, Hopper
9.	S-00231-0978	Spacer
10.	M-03072-001B	Drive Coupling, Pinwheel, Hopper
11.	S-02562-001A	Roller Shaft
12.	M-03009-A001	Roller (3)
13.	P-00842-011B	Pin Wheel, 12 Pin (1.00Token)
	P-00482-010B	Pin Wheel, 15 Pin (25¢)
	P-00482-009B	Pin Wheel, 16 Pin (5¢)
	A-04308-001A	Pin Wheel (5.00 Token)
14.	P-00847-0024	Spacer, Shelf Wheel (5.00 Token)
15.	P-00847	Shelf Wheel (25¢) .836" (21,23 mm) To .902" (22,91 mm) Diameter X .062" (1,58 mm) Width
16.	R-00526-0003	Agitator, 5¢ to \$1
17.	S-02569-0002	Cup, Washer, Pin Wheel Hold Down
18.	S-00231-0825	Bushing, Agitator Mounting
19.	P-09278-0004	Bracket, Counter Balance
		Adjustment, Super (mixer) Hopper
	P-09278-0005	Bracket, Counter Balance Adj.
	P-09278-0008	Bracket, Counter Balance
		Adjustment, V72,
	NLS-25020-1112	Nut
	MSOH-25020-1124	Screw
20.	P-09277-001B	Platform Bracket, (mixer)
21.	P-09263-0005	Bracket, Hopper Mounting, Left
	TFPP-00832-1106	Screw (6)
22.	P-09263-0006	Bracket, Hopper Mounting, Right
	TFPP-01032-1106	Screw (6)
23.	AS-03356-0363	Hopper Control Board
24.	P-06629-523A	Bracket, PCB
	TFPP_00832-1104	Screw (4)
	LSPP-00632-1108	Screw (4)
25.	E-00119-0532	Motor, Pinwheel, Hi-Torque, 24RPM
26.	P-00838-0011	Outlet Cover
	P-00838-006B	Outlet Cover, 5¢ & 25¢
	P-00838-0009	Outlet Cover, 5¢-50¢
	P-00838-007A	Outlet Cover, 1.00 Token
	P-00838-005A	Outlet Cover, 5.00-100.00 Token
	P-00838-0008	Outlet Cover, 5.00-100.00 Token
	P-00838-0012	Outlet Cover, 5.00-100.00 Token
27.	M-03068-0006	Knife, Coin, Up To 1.625" (41,28mm) Diameter
	M-03068-0007	Knife, Coin, Over 1.625" (41,28mm) Diameter
28.	P-00839	Coin Deflector
	P-00839-0004	Coin Deflector, 1.00, 5.00, 25.00, 100.00 Token
	MSPF-0832-1106	Screw (2)
29.	P-09291-001B	Spacer, Deflector Plate

### XS1200 Hopper With Mixer Parts

Item	Part #	Description
1.	M-03082-001A	Cover, Mixer Drive
2.	P-06264-0309	Handle
	TFPP-01032-1108	Screw
3.	A-04349-0002	Bracket, Handle Mounting
	NLS-00832-1112	Nut (2)
	M-00319-0001	Stop Nut,Elastic (2)
4.	P-09295-002D	Baffle
	NLS-00832-112	Nut (2)
5.	S-00463-0053	Pin, Level Contact (Probe)
	P-00800-0006	Washer (2)
	NLS-00832-112	Nut (2)
6.	M-03048-0013	Coin Bowl, V7K
	M-03048-0015	Coin Bowl, S6K
	A-04394-0001	Grounding Stud
7.	AS-03368-0001	Assembly, Hopper Mixer Front/ Back Bracket
8.	M-03047-001A	Mix Cylinder
9.	M-03066-001A	Roller (4)
	P-02891-0006	Retainer Ring
10.	S-02558-001A	Shaft Roller (2)
11.	TFPP-00832-1924	Screw (6)
12.	M-01348-0043	Thumbscrew
13.	SP-00200-0203	Spring (2)
	MSPT-01032-110B	Nut (2)
	PW-00010-0012	Washer (2)
14.	M-03074-001B	Adaptor
	NLS-00832-0112	Nut (2)
	MSPT-01032-1108	Screw (3)
	NLS-01032-1112	Screw (3)
15.	E-00119-0529	Mixer Cylinder Motor
16.	M-03069-001B	Drive Gear Hopper
	CPAO-01032-1804	Set Screw
17.	S-00231-0979	Spacer (4)
	S-00231-0978	Spacer (4)
	NLS-00832-1112	Nut (2)
18.	R-00111-0029	Rubber Grommet For Elec.Wire
19.	P-09276-0002	Bracket, Drive Motor
20.	MSPF-00832-1132	Screw

### Standard Hopper Coin Bowl

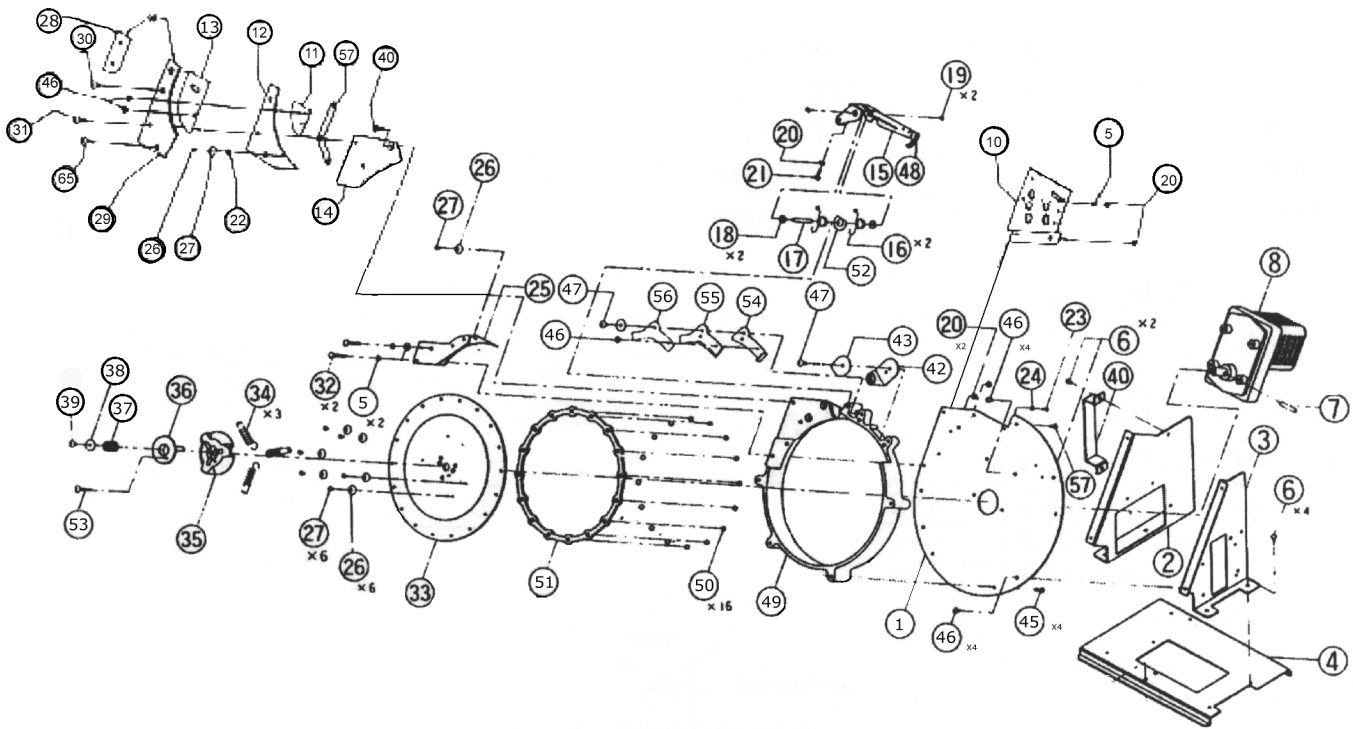
Item	Part #	Description
1.	P-09334-002B	Handle
2.	M-03048-0015	Coin Bowl, S6K, V8K
	M-03048-0012	Coin Bowl, V7K
	M-03048-0017	Coin Bowl, V7 Casino
	M-03048-0019	Coin bowl, V72
	S-00463-0053	Pin,Level Contact
3.	P-09278-003A	Retaining Bracket
	M-01348-0043	Thumbscrew
4.	SP-00200-203	Spring (2)

**Asahi Seiko Hoppers**



**Asahi Seiko USA, Inc.**  
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**Asahi Seiko DH-750 Hopper, Model 53, Slant Top (AS-03105-SERIES)**



**DH-750 Model 53 Hopper Assembly**

# Peripherals

## Asahi Seiko Hoppers (cont.)

### DH-750 Model 53, Slant Top Coin Hopper (cont.)

Item#	Bally Part #	Asahi Seiko Part #	Description
1		DH7991M025001	PLATE, CHASSIS
2		DH7534M025002	FRAME, SIDE (R)
3		DH7534M025003	FRAME, SIDE (L)
4		DH7534M025004	PLATE, BASE
5		W4000SW99	WASHER, M4 SPLIT
6		S4006RHSW	SCREW, M4x6 W/SW
7	ASH-05000-0005	DH7001M025007	PIN, MOTOR DRIVE
8	ASH-05000-0040	DH7004M025008	MOTOR, 24VDC (DME44S7C-272)
9		DH7001M025055	HANDLE
10	ASH-05000-0097	DH7101M025536	BRACKET, ESCALATOR MOUNTING
11	ASH-05000-0168	DH7101M005530	GUIDE, TRANSITION (R), US 5¢
	ASH-05000-0094	DH7101M025530	GUIDE, TRANSITION (R), US 25¢
	ASH-05000-0044	DH7101M10T530	GUIDE, TRANSITION (R), \$1 TOKEN
12	ASH-05000-0169	DH7101M005531	GUIDE, TRANSITION (L), US 5¢
	ASH-05000-0095	DH7101M025531	GUIDE, TRANSITION (L), US 25¢
	ASH-05000-0045	DH7101M10T531	GUIDE, TRANSITION (L), \$1 TOKEN
13	ASH-05000-0077	DH7534M025529	COVER, TRANSITION (R)
14:	ASH-05000-0096	DH7101M025534	PLATE, COIN SLIDE
15	ASH-05000-0043	DH7101M025015	ROLLER LEVER, ESCALATOR
16	ASH-05000-0006	DH7001M025016	SPRING, ROLLER LEVER
17	ASH-05000-0007	DH7001M025017	PIN, ROLLER LEVER
18	ASH-05000-0008	DH7001M025018	BEARING, ROLLER LEVER
19	ASH-05000-0112	W3000ER99	03 E-RING
20		N4000HX99	NUT, M4
21		B4012HX99	BOLT, M4x12
22	ASH-05000-0113	W3008FW08	WASHER, 3x8x0.8 FLAT
23	ASH-05000-0106	S3010RH99	SCREW, M3x10
24	ASH-05000-0086	N3000HX99	NUT, M3
25	ASH-05000-0002	DH7001M005025	KNIFE, US 5¢
	ASH-05000-0009	DH7001M025025	KNIFE, US 25¢
	ASH-05000-0034	DH7001M10T025	KNIFE, \$1 TOKEN
26	ASH-05000-0010	DH7001M025026	BOSS, PLASTIC
27	ASH-05000-0011	DH7001M025027	SCREW, BEVEL-HEADED
28		DH7101M10T538	COVER, TRANSITION (L) \$1T
29	ASH-05000-0099	DH7101M025538	COVER, TRANSITION (L)
30		S4012HXSS	SCREW, M4x12 UPSET SF SS
31		S4025HXSS	SCREW, M4x25 UPSET SF SS

Item #	Bally Part #	Asahi Seiko Part #	Description
32	ASH-05000-0001	B4025HXSS	BOLT, M4x25, SS
33	ASH-05000-0003	DH7001M005033	DISC, US 5¢
	ASH-05000-0012	DH7001M025033	DISC, US 25¢
	ASH-05000-0035	DH7001M10T033	DISC, \$1 TOKEN
34	ASH-05000-0013	DH7001M025034	SPRING, STIRRING
35	ASH-05000-0014	DH7001M025035	COVER, SPRING
36	ASH-05000-0015	DH7001M025036	HOLDER, SPRING
37	ASH-05000-0016	DH7001M025037	SPRING, DISC
38		W4015FW10	WASHER, 4x15x1.0 FLAT
39	ASH-05000-0170	S4008LHSS	SCREW, M4x8 TRUSS HEAD SS
40	ASH-05000-0108	S4015CS99	SCREW, M4x15 COUNTERSUNK
41		W4010FW10	WASHER, 4x10x1.0 FLAT
42	ASH-05000-0029	DH7001M025073	SEPARATOR, COIN
43	ASH-05000-0030	DH7001M025074	RETAINER, SEPARATOR
	ASH-05000-0037	DH7001M10T074	RETAINER, SEPARATOR, \$1 TOKEN
44		S4010HXSS	SCREW, M4x10 UPSET SF SS
45		S4015HXSS	SCREW, M4x15 UPSET SF SS
46		S3010HXSS	SCREW, M3x10 UPSET SF SS
47		S4012HXSS	SCREW, M4x12 UPSET SF SS
48		S4008HXSX	SCREW, M4x8 UPSET SW SS
49	ASH-05000-0022	DH7001M025057	CAST FRAME
50		DH7001M025058	06 BALL BEARING
51		DH7001M025059	RETAINER, BEARING
52		DH7001M025064	WASHER, ROLLER LEVER
53		S4025LHSS	SCREW, M4x25 LARGE HEAD SS
54		DH7001M005070	PLATE, ADJUSTING, US 5¢
	ASH-05000-0026	DH7001M025070	PLATE, ADJUSTING, US 25¢
		DH7001M10T070	PLATE, ADJUSTING, \$1 TOKEN
55		DH7001M005071	RUBBER, JUMP, US 5¢
	ASH-05000-0027	DH7001M025071	RUBBER, JUMP, US 25¢
	ASH-05000-0036	DH7001M10T071	RUBBER, JUMP, \$1 TOKEN
56	ASH-05000-0004	DH7001M005072	COVER, JUMP, US 5¢
	ASH-05000-0028	DH7001M025072	COVER, JUMP
57		DH7514M025650	SHIM, TRANSITION (L) 0.3t
		DH7514M10T650	SHIM, TRANSITION (L) 0.5t
58		S4020HXSS	SCREW, M4x20 UPSET SF SS



**Note:** Items without Bally Part numbers are not stocked by Bally Gaming and Systems.

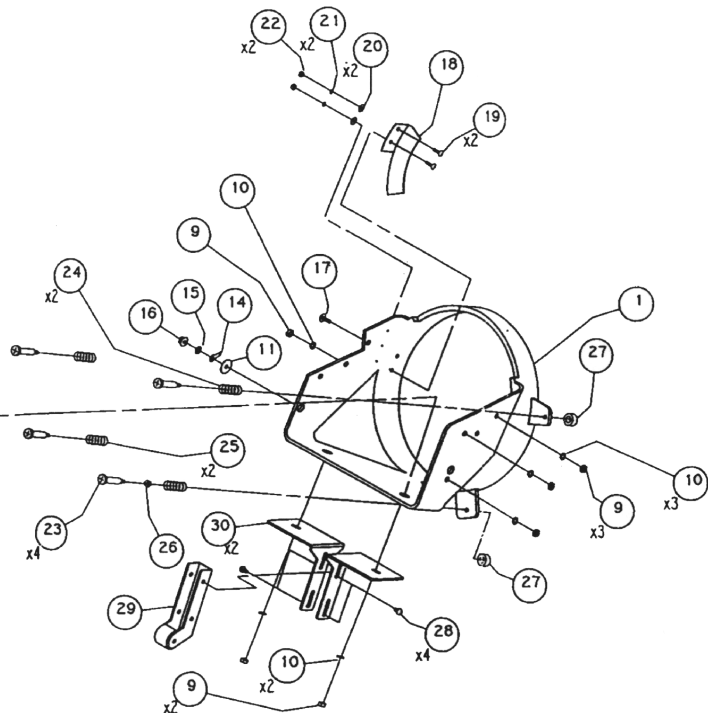
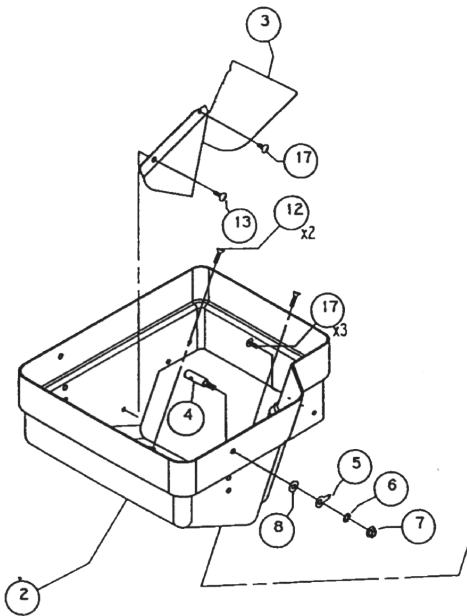
## Asahi Seiko Hoppers (cont.)

### DH-750 Model 53, Slant Top Bowl Assembly (Plastic)



**Note:** Items without Bally Part numbers are not stocked by Bally Gaming and Systems.

Item #	Bally Part #	Asahi Seiko Part #	Description
1		DH7031M025322	SCOOP. ALUMINUM
2		DH7534M025950	BOWL, HOPPER (PLASTIC)
3		DH7031M025046	PLATE, REGULATOR
4		DH7011M025153	.PROBE PIN
5		DH7011M025093	05 WIRE TERMINAL
6		W5000SR99	WASHER, M5,STAR
7		N5000SN99	NUT,M5 SHOULDER
8		W5012FVW08	WASHER, 5x12X0.8 FLAT
9		M4000HX99	NUT, M4
10		W4000SW99	WASHER, M4 SPLIT
11		W4015FW10	WASHER, 4x15x1.0 FLAT
12	ASH-05000-0108	S4015CS99	SCREW, M4X15 COUNTERSUNK
13	ASH-05000-0109	S4015LHSS	SCREW, M4X15 LARGE HEAD SS
14		DH7011M025307	04 WIRE TERMINAL
15		W4000SR99	WASHER. M4 STAR
16		N4000SN99	NUT, M4 SHOULDER
17		S4012LH99	SCREW. M4x12 LARGE HEAD
18	ASH-05000-0021	DH7001M025052	INSULATOR
19		S3010LH99	SCREW. M3x10 LARGE HEAD
20	ASH-05000-0113	W3008FW05	WASHER, 3x8x0.5 FLAT
21		W3000SW99	WASHER. M3 SPLIT
22	ASH-05000-0086	N3000HX99	NUT, M3
23	ASH-05000-0018	DH7001M025047	SCREW, BOWL MOUNTING
24	ASH-05000-0019	DH7001M025048	SPRING. BOWL MOUNTING, UPPER
25	ASH-05000-0020	DH7001M025049	SPRING, BOWL MOUNTING, LOWER
26	ASH-05000-0104	N4006HX99	NUT, M4 SMALL
27	ASH-05000-0038	DH7001M10T081	COLLAR. SPACING (\$1 TOKEN ONLY)
28		S4008RHSF	SCREW, M4x8 W/SW & FW
29		DH7031M025324	ROLLER, SUPPORT
30		DH7534M025325	BRACKET, SUPPORT





# Peripherals

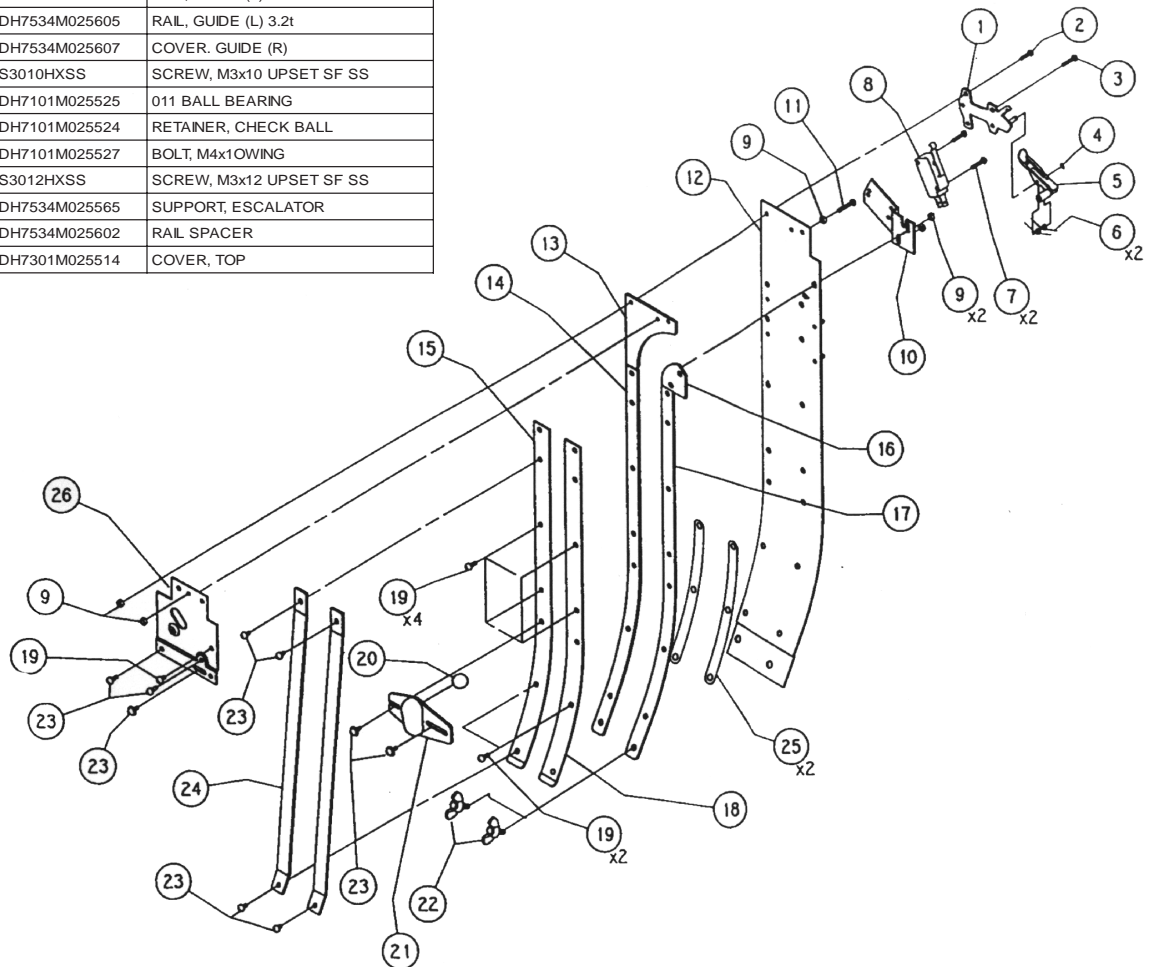
## Asahi Seiko Hoppers (cont.)

Item #	Bally Part #	Asahi Seiko Part #	Description
1	ASH-05000-0020	DH7101M025516	PLATE, ACTUATOR MOUNTING
2		S3010HXSW	SCREW, M3x10 UPSET SW SS
3		S3012HXSW	SCREW, M3x12 UPSET SW SS
4	ASH-05000-0111	W2000ER99	02 E-RING
5	ASH-05000-0088	DH7101M025522	ACTUATOR, M/S INBOARD
6	ASH-05000-0089	DH7101M025523	SPRING, ACTUATOR
7		S3013RH99	SCREW, M3x13
8	ASH-05000-0140	DH7534M025068	MICROSWITCH (D44L-R1LD)
	ASH-05000-0039	DH7001P025013	PROXIMITY SENSOR
9	ASH-05000-0086	N3000HX99	NUT, M3
10		DH7301M025069	BRACKET, M/S MOUNTING (INBOARD)
11		S3016RH99	SCREW, M3x16
12		DH7534M005601	PLATE, BACK US 5¢
		DH7534M025601	PLATE, BACK US 25¢
		DH7534M10T601	PLATE, BACK \$1T
13		DH7301M005507	GUIDE, TOP (L) US 5¢
	ASH-05000-0047	DH7301M025507	GUIDE, TOP (L) US 25¢
	ASH-05000-0052	DH7301M10T507	GUIDE, TOP (L) \$1T
14		DH7534M005604	RAIL, GUIDE (L) 2.5t
		DH7534M025604	RAIL, GUIDE (L) 2.0t
		DH7534M10T604	RAIL, GUIDE (L) 3.2t
15		DH7534M025606	COVER, GUIDE (L)
16	ASH-05000-0160	DH7301M005560	GUIDE, TOP (R) US 5¢
	ASH-05000-0049	DH7301M025560	GUIDE, TOP (R) US 25¢
17		DH7534M005605	RAIL, GUIDE (L) 2.5t
		DH7534M025605	RAIL, GUIDE (L) 2.0t
		DH7534M025605	RAIL, GUIDE (L) 3.2t
18		DH7534M025607	COVER, GUIDE (R)
19		S3010HXSS	SCREW, M3x10 UPSET SF SS
20	ASH-05000-0091	DH7101M025525	011 BALL BEARING
21	ASH-05000-0090	DH7101M025524	RETAINER, CHECK BALL
22	ASH-05000-0092	DH7101M025527	BOLT, M4x10WING
23		S3012HXSS	SCREW, M3x12 UPSET SF SS
24	ASH-05000-0079	DH7534M025565	SUPPORT, ESCALATOR
25		DH7534M025602	RAIL SPACER
26	ASH-05000-0048	DH7301M025514	COVER, TOP

### DH-750 Model 53, Slant Top Escalator Assembly

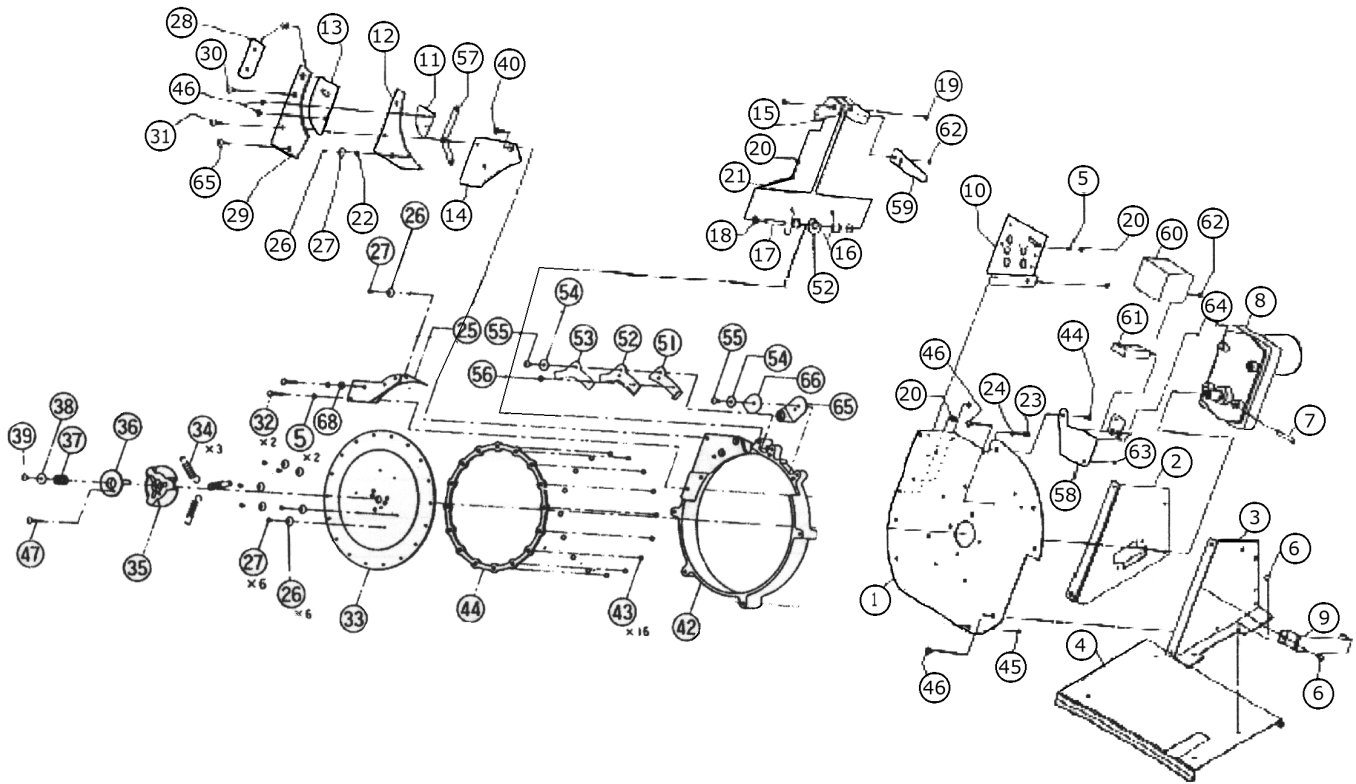


**Note:** Items without Bally Part numbers are not stocked by Bally Gaming and Systems.



**Asahi Seiko Hoppers (cont.)**

**Asahi Seiko DH-750 Hopper Model 51, Bar Top (AS-03107-SERIES)**



**DH-750 Model 51 Hopper Assembly**

# Peripherals

## Asahi Seiko Hoppers (cont.)

### Asahi Seiko DH-750 Hopper Model 51, Bar Top (AS-03107-SERIES) (cont)

Item #	Bally Part #	Asahi Seiko Part #	Description
1		DH7991M025001	PLATE, CHASSIS
2		DH7534M025002	FRAME, SIDE (R)
3		DH7514M025003	FRAME, SIDE (L)
4		DH7534M025004	PLATE, BASE
5		W4000SW99	WASHER, M4 SPLIT
6		S4006RHSW	SCREW, M4x6 W/SW
7	ASH-05000-0005	DH7001M025007	PIN, MOTOR DRIVE
8	ASH-05000-0040	DH7004M025008	MOTOR, 24VDC (DME44S7C-272)
9		DH7001M025055	HANDLE
10	ASH-05000-0097	DH7101M025536	BRACKET, ESCALATOR MOUNTING
11	ASH-05000-0168	DH7101M005530	GUIDE, TRANSITION (R), US 5¢
		DH7101M025530	GUIDE, TRANSITION (R), US 25¢
	ASH-05000-0044	DH7101M10T530	GUIDE, TRANSITION (R), \$1 TOKEN
12	ASH-05000-0169	DH7101M005531	GUIDE, TRANSITION (L), US 5¢
		DH7101M025531	GUIDE, TRANSITION (L), US 25¢
	ASH-05000-0045	DH7101M10T531	GUIDE, TRANSITION (L), \$1 TOKEN
13	ASH-05000-0077	DH7534M025529	COVER, TRANSITION (R)
14	ASH-05000-0096	DH7101M025534	PLATE, COIN SLIDE
15		DH7514M025918	LEVER, ROLLER
16	ASH-05000-0006	DH7001M025016	SPRING, ROLLER LEVER
17	ASH-05000-0007	DH7001M025017	PIN, ROLLER LEVER
18	ASH-05000-0008	DH7001M025018	BEARING, ROLLER LEVER
19	ASH-05000-0112	W3000ER99	03 E-RING
20		N4000HX99	NUT, M4
21		B4012HX99	BOLT, M4x12
22	ASH-05000-0113	W3008FW08	WASHER, 3x8x0,8 FLAT
23	ASH-05000-0106	S3010RH99	SCREW, M3x10
24	ASH-05000-0086	N3000HX99	NUT, M3
25	ASH-05000-0002	DH7001M005025	KNIFE, US 5¢
	ASH-05000-0009	DH7001M025025	KNIFE, US 25¢
	ASH-05000-0034	DH7001M10T025	KNIFE, \$1 TOKEN
26	ASH-05000-0010	DH7001M025026	BOSS, PLASTIC
27	ASH-05000-0011	DH7001M025027	SCREW, BEVEL-HEADED
28		DH7101M10T538	COVER, TRANSITION (L) \$1T
29	ASH-05000-0099	DH7101M025538	COVER, TRANSITION (L)
30		S4012HXSS	SCREW, M4x12 UPSET SF SS
31		S4025HXSS	SCREW, M4x25 UPSET SF SS
32	ASH-05000-0001	B4025HXSS	BOLT, M4x25, SS
33	ASH-05000-0003	DH7001M005033	DISC, US 5¢
	ASH-05000-0012	DH7001M025033	DISC, US 25¢
	ASH-05000-0035	DH7001M10T033	DISC, \$1 TOKEN
34	ASH-05000-0013	DH7001M025034	SPRING, STIRRING
35	ASH-05000-0014	DH7001M025035	COVER, SPRING
36	ASH-05000-0015	DH7001M025036	HOLDER, SPRING

Item #	Bally Part #	Asahi Seiko Part #	Description
37	ASH-05000-0016	DH7001M025037	SPRING, DISC
38		W4015FW10	WASHER, 4x15x1.0 FLAT
39	ASH-05000-0170	S4008LHSS	SCREW, M4x8 TRUSS HEAD SS
40	ASH-05000-0108	S4015CS99	SCREW, M4x15 COUNTERSUNK
41		W4010FW10	WASHER, 4x10x1.0 FLAT (US 5¢ ONLY)
42	ASH-05000-0029	DH7001M025073	SEPARATOR, COIN
43	ASH-05000-0030	DH7001M025074	RETAINER, SEPARATOR
	ASH-05000-0037	DH7001M10T074	RETAINER, SEPARATOR, \$1 TOKEN
44		S4010HXSS	SCREW, M4x10 UPSET SF SS
45		S4014HXSS	SCREW, M4x14 UPSET SF SS
46		S3010HXSS	SCREW, M3x10 UPSET SF SS
47		S4012HXSS	SCREW, M4x12 UPSET SF SS
48		S4008HXSW	SCREW, M4x8 UPSET SW SS
49	ASH-05000-0022	DH7001M025057	CAST FRAME
50		DH7001M025058	06 BALL BEARING
51		DH7001M025059	RETAINER, BEARING
52		DH7001M025064	WASHER, ROLLER LEVER
53		S4025LHSS	SCREW, M4x25 LARGE HEAD, SS
54		DH7001M005070	PLATE, ADJUSTING, US 5¢
	ASH-05000-0026	DH7001M025070	PLATE, ADJUSTING, US 25¢
		DH7001M10T070	PLATE, ADJUSTING, \$1 TOKEN
55		DH7001M005071	RUBBER, JUMP, US 5¢
	ASH-05000-0027	DH7001M025071	RUBBER, JUMP, US 25¢
	ASH-05000-0036	DH7001M10T071	RUBBER, JUMP, \$1 TOKEN
56	ASH-05000-0004	DH7001M005072	COVER, JUMP, US 5¢
	ASH-05000-0028	DH7001M025072	COVER, JUMP
57		DH7514M025650	SHIM, TRANSITION (L) 0.3t
		DH7514M10T650	SHIM, TRANSITION (L) 0.5t
58		DH7514M025915	BRACKET, OPTIC MOUNTING
59		DH7514M025916	FLAG, OPTIC
60		DH7514M025917	COVER, OPTIC
61		DH7514M025920	OPTIC
62		N3000LN99	NUT, M3 NYLON LOCK
63		S3005RHSF	SCREW, M3x5 W/SW & FW
64		S3595TP99	SCREW, M3.5x9.5 TAPPING
65		S4020HXSS	SCREW, M4x20 UPSET SF SS



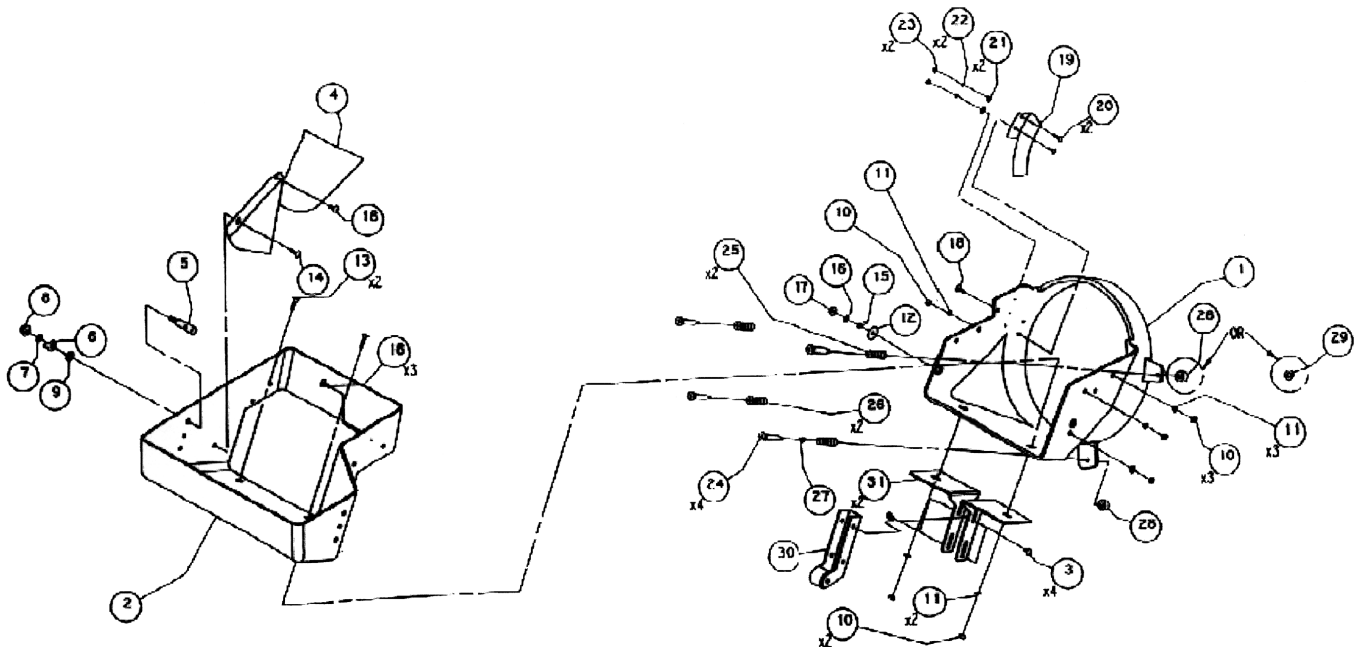
**Note:** Items without Bally Part numbers are not stocked by Bally Gaming and Systems.

## Asahi Seiko Hoppers (cont.)

Item #	Bally Part #	Asahi Seiko Part #	Description
1		DH7031M025322	SCOOP, ALUMNUM
2		DH7514M025050	BOWL, HOPPER
3		S4008RHSF	SCREW, M4x8 W/SW & FW
4		DH7031M025046	PLATE, REGULATOR
5		DH7011M025153	PROBE PIN
6		DH7011M025093	05 WIRE TERMINAL
7		W5000SR99	WASHER, M5 STAR
8		N5000SN99	NUT, M5 SHOULDER
9		W5012PW08	WASHER, 5x12x0.8 FLAT
10		N4000HX99	NUT, M4
11		W4000SW99	WASHER, M4 SPLIT
12		W4015FW10	WASHER, 4x15x1.0 FLAT
13	ASH-05000-0108	S4015CS99	SCREW, M4x15 COUNTERSUNK
14	ASH-05000-0109	S4015LHSS	SCREW, M4x15 LARGE HEAD SS
15		DH7011M025307	04 WIRE TERMINAL
16		W4000SR99	WASHER, M4 STAR
17		N4000SN99	NUT, M4 SHOULDER
18		S4010LH99	SCREW, M4x10 LARGE HEAD
19	ASH-05000-0021	DH7001M025052	INSULATOR
20		S3010LH99	SCREW, M3x10 LARGE HEAD
21	ASH-05000-0113	W3008FW05	WASHER, 3x8x0.5 FLAT
22		W3000SW99	WASHER, M3 SPLIT
23	ASH-05000-0086	N3000HX99	NUT, M3
24	ASH-05000-0018	DH7001M025047	SCREW, BOWL MOUNTING
25	ASH-05000-0019	DH7001M025048	SPRING, BOWL MOUNTING, UPPER
26	ASH-05000-0020	DH7001M025049	SPRING, BOWL MOUNTING, LOWER
27	ASH-05000-0104	N4006HX99	NUT, M4 SMALL
28	ASH-05000-0038	DH7001M10T081	COLLAR, SPACING (\$1 TOKEN ONLY)
29		W4010FW16	WASHER, 4x10x1.6 FLAT (5° ONLY)
30		DH7031M025324	ROLLER, SUPPORT
31		DH7534M025325	BRACKET, BOWL SUPPORT

### DH-750 Model 51, Bar Top Bowl Assembly

Note: Items without Bally Part # are not stocked by Bally Gaming and Systems.



# Peripherals

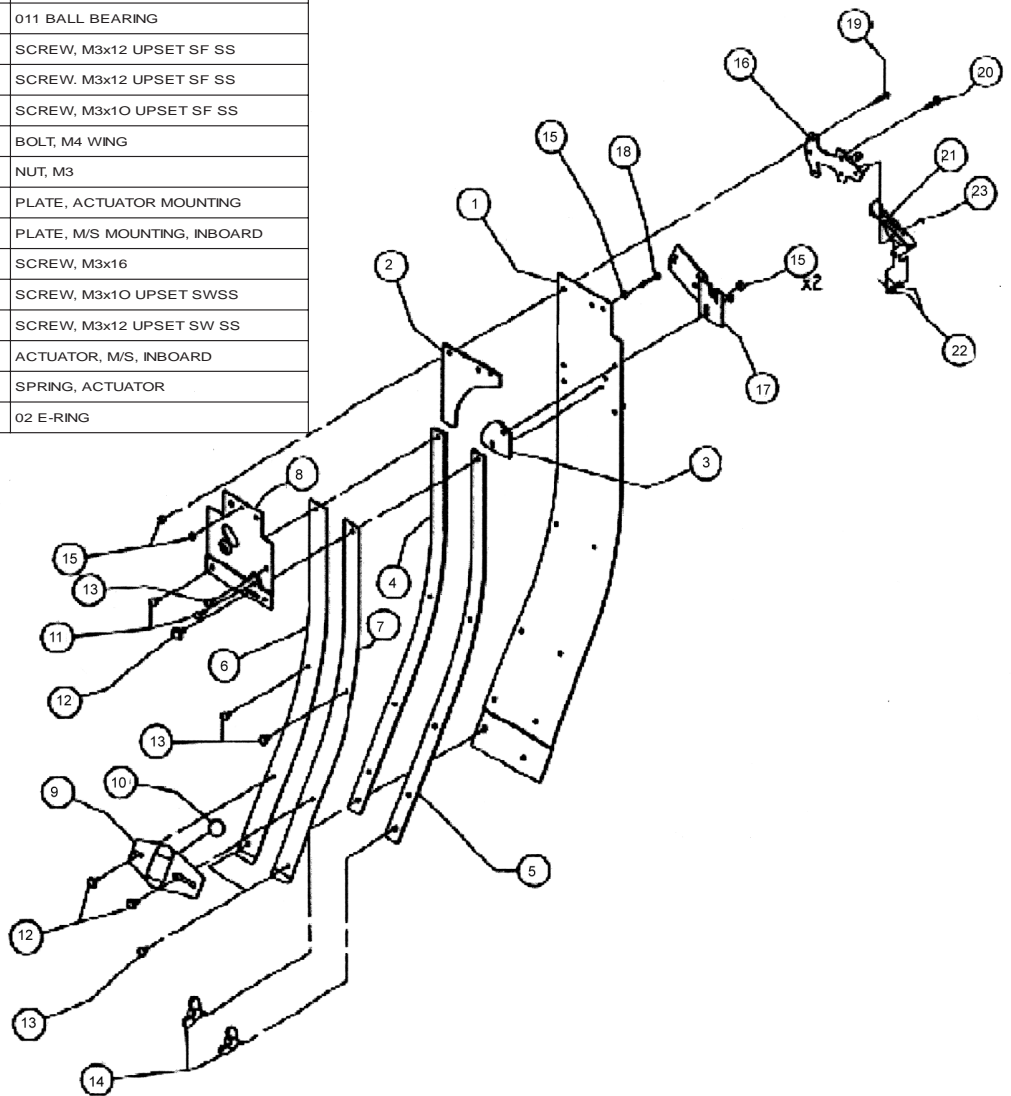
## Asahi Seiko Hoppers (cont.)

Item #	Bally Part #	Asahi Seiko Part #	Description
1		DH7514M005505	PLATE, BACK, US 5¢
		DH7514M025505	PLATE, BACK, US 25¢
		DH7514M10T505	PLATE, BACK, \$1 TOKEN
2		DH7301M005507	GUIDE, 1 UP (L), US 5¢
	ASH-05000-0047	DH7301M025507	GUIDE, TOP (L), US 25¢
	ASH-05000-0052	DH7301M10T507	GUIDE, TOP (L), \$1 TOKEN
3		DH7301M005560	GUIDE, TOP (R), US 5¢
	ASH-05000-0049	DH7301M025560	GUIDE, TOP (R), US 25¢
4	ASH-05000-0146	DH7514M005506	RAIL, GUIDE (L), US 5¢
	ASH-05000-0147	DH7514M025506	RAIL, GUIDE (L), US 25¢
		DH7514M10T506	RAIL, GUIDE (L), \$1 TOKEN
5	ASH-05000-0149	DH7514M005508	RAIL, GUIDE (R), US 5¢
	ASH-05000-0150	DH7514M025508	RAIL, GUIDE (R), US 25¢
	ASH-05000-0151	DH7514M10T508	RAIL, GUIDE (R), \$1 TOKEN
6	ASH-05000-0152	DH7514M025509	COVER, GUIDE (L)
7	ASH-05000-0153	DH7514M025511	COVER, GUIDE (R)
8	ASH-05000-0048	DH7301M025514	COVER, TOP
9		DH7101M025524	BRACKET, BALL RETAINING
10		DH7101M025525	011 BALL BEARING
11		S3012HXSS	SCREW, M3x12 UPSET SF SS
12		S3012HXSS	SCREW, M3x12 UPSET SF SS
13		S3010HXSS	SCREW, M3x10 UPSET SF SS
14		DH7101M025527	BOLT, M4 WING
15	ASH-05000-0086	N3000HX99	NUT, M3
16		DH7101M025516	PLATE, ACTUATOR MOUNTING
17	ASH-05000-0025	DH7001M025069	PLATE, M/S MOUNTING, INBOARD
18		S3016RH99	SCREW, M3x16
19		S3010HXSW	SCREW, M3x10 UPSET SWSS
20		S3012HXSW	SCREW, M3x12 UPSET SW SS
21		DH7301M025522	ACTUATOR, M/S, INBOARD
22		DH7101M025523	SPRING, ACTUATOR
23	ASH-05000-0111	W2000ER99	02 E-RING



**Note:** Items without Bally Part numbers are not stocked by Bally Gaming and Systems.

### DH-750 Model 51, Bar Top Escalator Assembly



# Ithaca Series 70 Printer

Ithaca Perpherals, Inc.

Tel: +1 607 257 8901  
Fax: +1 607 257 8922



## Description:

The IPI Series 70 Printer is a nine-pin impact printer designed for video lottery systems. It prints receipt and journal entries for each transaction using two-ply paper.

## Features

**Print Speed**  
200 characters per second in normal mode  
100 characters per second in double-wide mode

**Interface**  
Centronics Parallel  
RS-232

**Character Sets**  
IBM Character Set I  
IBM Character Set II

**Character Modes**  
Normal Mode (17, 12, 10 characters per inch)  
Double-Wide Mode

**Line Spacing**  
Eight lines per inch  
Selectable in n/216 inch increments

**Automatic Knife Cutter**  
.002 to .007 inch ply thickness  
Full cut only

2-Ply Receipt-Journal Printing

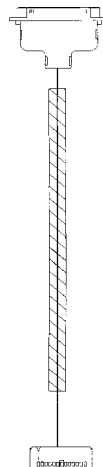
Low Paper Sensor

**Mounting**  
Vertical  
Horizontal

**Graphics**  
Block graphics (characters from character set)  
Dot addressable graphics

## Connection Printer (Centronics)

Pin	Wire	Signal	Pin	Wire	Signal	Pin	Wire	Signal	Pin	Wire	Signal
1	BK/RD	Strobe	10		No connection	19		No connection	28		No connection
2	BR	Data 1	11	WT/BL	Busy	20		No connection	29		No connection
3	WT	Data 2	12	WT/BR	Paper End	21		No connection	30		No connection
4	OR/BL	Data 3	13	WT/OR	Select	22		No connection	31	BR/BK	Printer Reset
5	YE	Data 4	14		No connection	23		No connection	32	WT/BK	Printer Fault
6	OR	Data 5	15		No connection	24		No connection	33	BK	Ground
7	GY	Data 6	16	BK	Ground	25		No connection	34		No connection
8	BL	Data 7	17		No connection	26		No connection	35		No connection
9	YE/WT	Data 8	18		No connection	27		No connection	36		No connection



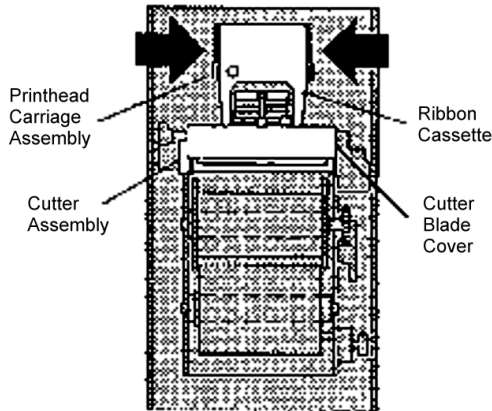
## Backplane (Dual Row Header)

Pin	Wire	Signal	Pin	Wire	Signal
1	BR	Data 1	14		No Connection
2	WT/OR	Select	15	YE/WT	Data 8
3	WT	Data 2	16		No Connection
4	WT/BL	Busy	17	BK/RD	Strobe
5	OR/BL	Data 3	18		No Connection
6		No Connection	19	BR/BK	Printer Reset
7	YE	Data 4	20		No Connection
8	BK-1	Ground	21	WT/BK	Printer Fault
9	OR	Data 5	22		No Connection
10	BK-2	Ground	23	WT/BR	Paper End
11	GY	Data 6	24		No Connection
12		No Connection	25		No Connection
13	BL	Data 7	26		No Connection

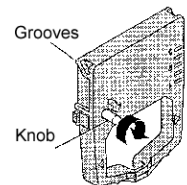
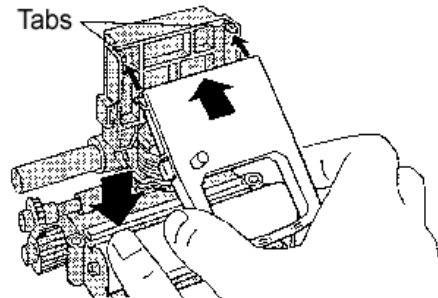
# Peripherals

## Changing the Ribbon Cassette

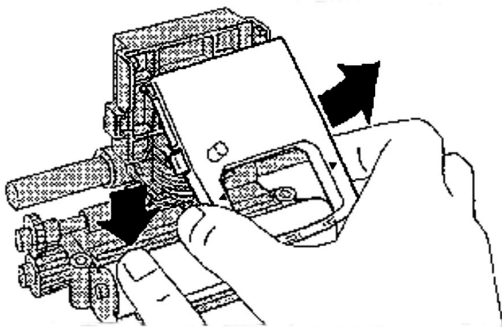
Change the cassette when the print becomes faded. Worn ribbons can damage the print head.



- To install the new cassette hold down the Cutter Blade Cover.
- Align the grooves at the top of the cassette with the tabs on the Printhead Carriage Assembly.
- Pivot the ribbon cassette into the Printhead Carriage Assembly until it snaps into place.
- Tighten the ribbon by turning the knob on the cassette clockwise.



- To remove the old cassette slide the Printhead Carriage Assembly to the middle.
- Hold down the Cutter Blade Cover.
- Grasp the bottom of the ribbon cassette and pull out.



## Ordering Supplies

Order supplies by calling or faxing Ithaca Peripherals Inc.

Phone: (607) 257-8901, ask for Sales

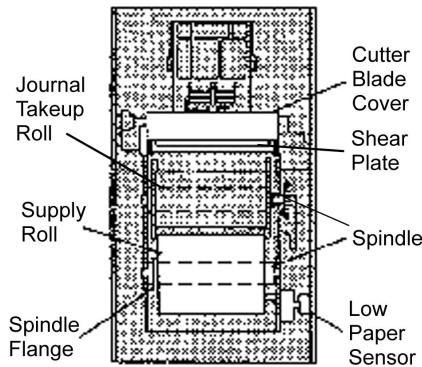
Fax: (607)257-8922

The following parts are available:

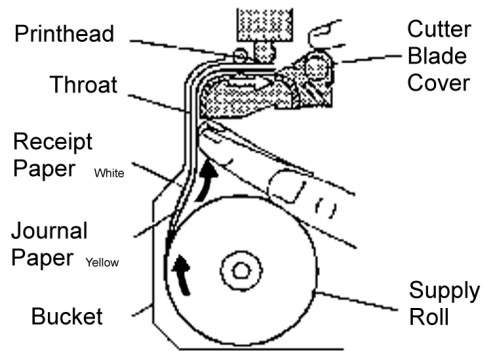
Description	Part #
Paper (two-ply)	98-0558
Ribbon Cassette (black or dark purple)	06-0560 (case of 12)
Supply Roll Spindle Large Diameter	09-1230
Supply Roll Spindle Small Diameter	09-1494
Take-up Spindle Take-up Core	06-0597
Take-up Flange	06-0599
Take-up Assembly (both core and flange)	06-0993
Power Cord	06-0561
Fuses 1.0 Amp, 125 Volt	150-9810010
1.5 Amp, 125 Volt	150-9810015
Printhead	06-0565
Printhead Clamp	06-0571

## Changing Paper

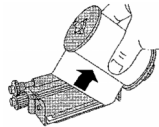
Change the Supply Roll paper when you see the pink stripe on the receipt paper or when the terminal indicates the paper is low. Although the pink stripe appears with eight to ten feet left on the roll, the printer will print only 21 inches after the Paper Low sensor activates.



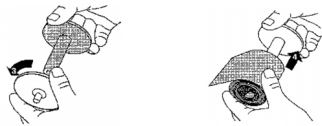
- Trim enough of the new Supply Roll for a straight edge free from glue.
- Put the spindle that was removed from the used supply roll into the new roll so that the white receipt paper is on the outside (See figure below). Snap the spindle into the lower set of snaps in the Bucket.
- Hold down the Cutter Blade Cover and push the paper up through the throat in the back of the Bucket until the paper passes the printhead.



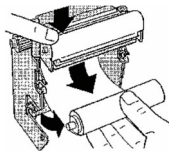
- Unsnap the Journal Takeup Roll Spindle from the bracket. Tear off the yellow journal paper using the Shear Plate.



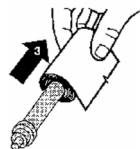
- Remove the spindle from the journal by unscrewing the left flange in the direction of the OFF arrow. Secure and store the journal roll as required.



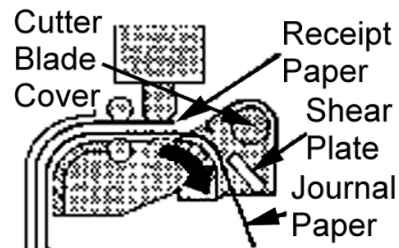
- Unsnap the Supply Roll Spindle from the bracket. Hold down the Cutter Blade Cover and pull the remaining paper out of the printer.



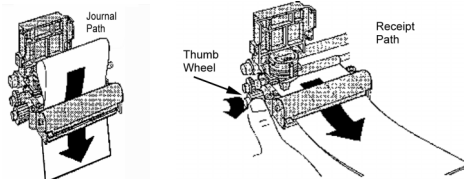
- Remove the spindle from the used supply roll and set it aside. Don't throw it away.



- The receipt and journal thread through different paths. Using the Thumb Wheel ( Gear on the left side. See bottom figure) to advance the paper, guide the journal and receipt paper so that they are separated by the Shear Plate.



- Advance about six inches of paper then tear off only the white receipt ply.



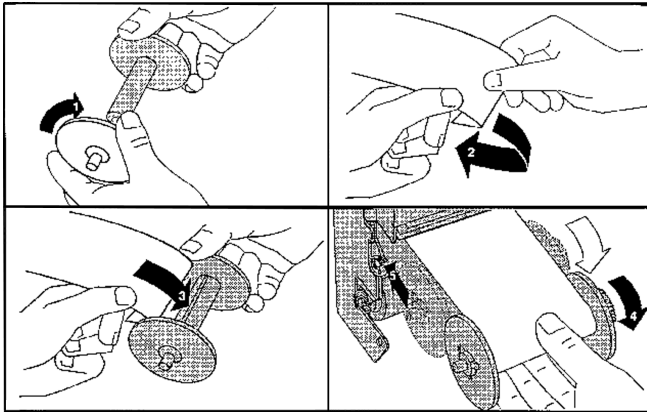


# Peripherals

- Reassemble the Journal Takeup Spindle by turning the the flange in the direction of the ON arrow. Do not overtighten.

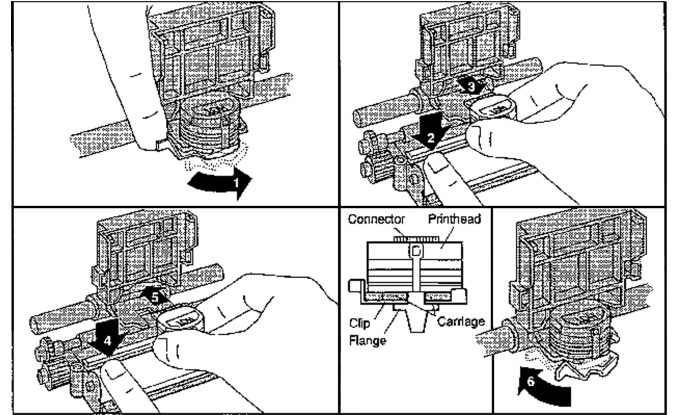
- Fold about ½” of the journal paper and insert it into the groove of the Journal Takeup Spindle so that the gear is to the right.

- Turn the Journal Takeup Spindle a few turns in the direction of the ON arrow to take up the excess journal paper.



## Replacing the Printhead

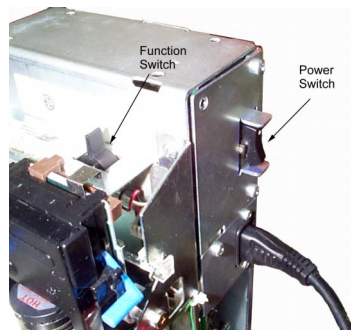
Caution: The printhead may be hot.



- Remove the ribbon cassette.
- Release the printhead by unfastening the Printhead Clamp. Pull the tab on the left to swing it open.
- Hold down the Cutter Blade Cover.
- Pull the printhead free from the edge connector and carriage.
- Using the guide on the printhead, slide the new printhead onto the carriage and into the edge connector.
- Secure the printhead with the Printhead Clamp.
- Put the ribbon cassette back in.
- Check the print quality. Use the blue lever on the side of the carriage for lighter or darker printing.

## Function Switch

The Function Switch is a momentary two-position switch that provides the following functions:



With power ON:

- Left: Incremental paper advance
- Right: Auto paper advance and cut.

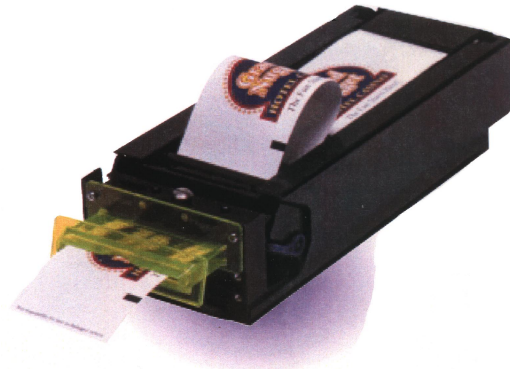
Position switch with power OFF, then power ON:

- Left: Print Test
- Right: Hex Data Dump

# Vivo™ Printers



Seiko Instruments USA Inc.  
Micro Printer Division  
2990 West Lornita Blvd., Torrance, CA 90505  
Phone: (800) 553-6570 \* Facsimile: (310) 517-8154  
E-Mail: [siumpd.id@salesupport.com](mailto:siumpd.id@salesupport.com)  
World Wide Web: <http://www.seikoprinters.com>



PSA-66-ST Direct Thermal Printer System

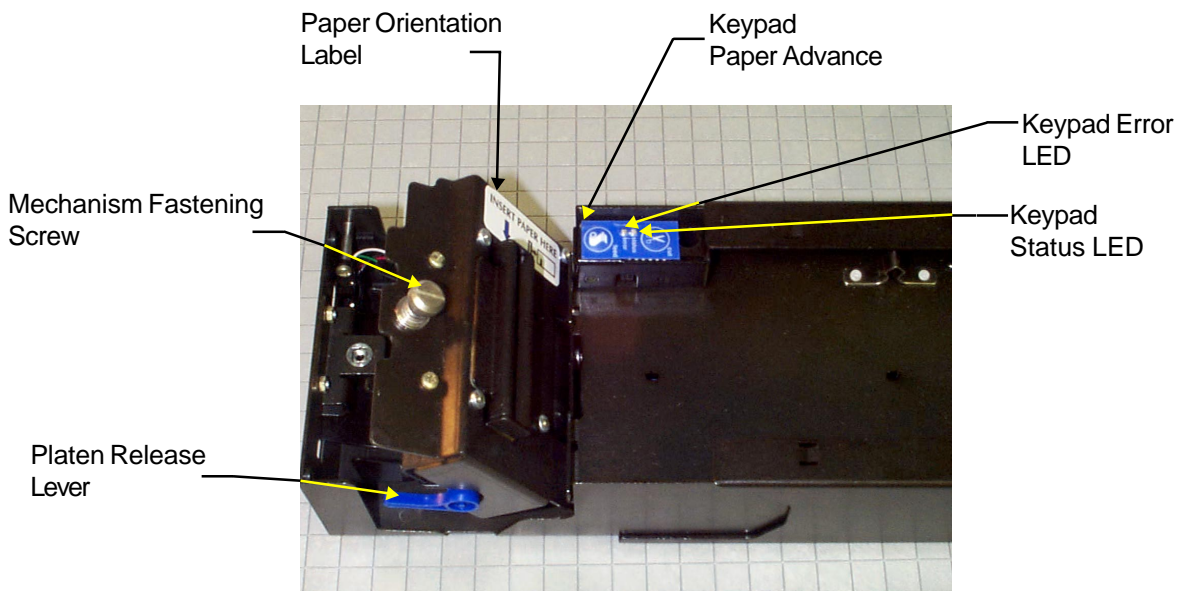
## PSA Series

PSA-66 PRINTER

### Operator Interface

The printer has status indicators and two controls. The status indicators are part of the Keypad. They are LEDs labeled STATUS and ERROR. The Operator controls are the Keypad and the Platen Release Lever.

### Component Identification



**Note:** The Keypad CUT function is inoperative.

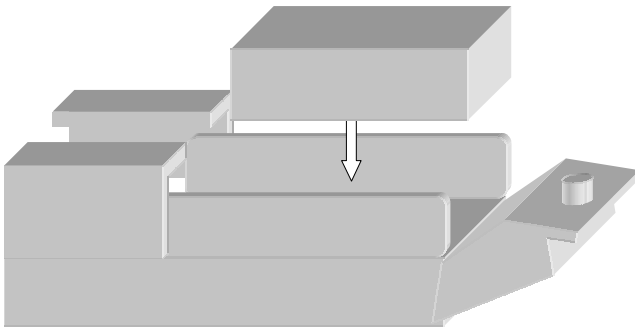
# Peripherals

## Vivo™ Printers (cont.)

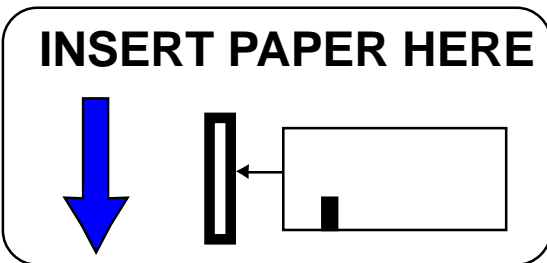
### Loading Paper

To load paper, pull open the printer drawer until the paper tray is completely accessible. Place the paper stack in the printer as indicated by the band around the stack and the Paper Orientation Label in the paper tray. Present the paper to the Paperfeed slot.

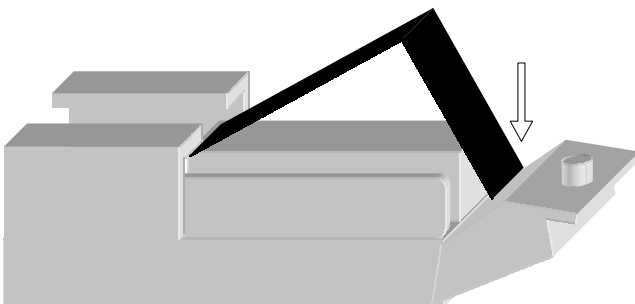
The automatic loading feature of this system will advance at least one ticket through the printer. The Platen Release Lever and the paper advance button are provided as support, but usually are not required to load paper.



Place paper stack in Paper Tray



Paper Orientation Label



Present end of paper stack to the paper insertion slot

### Keypad LED Operation

The following table lists the conditions reported by the keypad LEDs.

CONDITION	STATUS LED	EERR LED
Unit in Powered Off	OFF	OFF
Unit Ready	ON	OFF
Unit Flushed	ON	ON
Paper out	OFF	ON
Head Up	OFF	ON
Temperature Error	OFF	MED BLINK
Voltage Error	OFF	SLOW BLINK
Print Head Error	ON	FAST BLINK
Flash Memory Error	SLOW BLINK	MED BLINK
Buffer Overflow	OFF	FAST BLINK
Missing Black Index Mark	ON	FAST BLINK
Paper Jam	ON	FAST BLINK

### Error Conditions

**PAPER OUT:** The printer detects that paper is not present. The printer scans for a paper-out condition at all times. Remedy by loading a new paper stack.

**HEAD UP:** This condition results from lowering the Platen Release Lever. To remedy, raise the blue lever on the side of the unit.

**TEMPERATURE ERROR:** The printer has over-heated. If the printer is operating environment is at room-temperature, this error would most likely be the result of a hardware problem. The printer will automatically resume operation when the head temperature cools within operational limits.

**VOLTAGE ERROR:** The printer detected a power supply voltage (+24VDC to +25VDC) outside of legal limits. The printer will automatically resume operation when the power supply is within range.

**PRINT HEAD ERROR:** The printer senses an interfacing problem with the thermal print head. The error state remains until the power is cycled or the unit is reset. If the problem persists, the printer will require service.

**FLASH MEMORY ERROR:** The printer is unable to program the Flash memory on the board. The printer will remain in error state until the power is cycled or the unit is reset. If the problem persists, the printer will require service before font or graphic data can be downloaded.

**BUFFER OVERFLOW:** A buffer overflow typically results from a mismatch in handshaking. The printer will remain in error

## Vivo™ Printers (cont.)

### Error Conditions (cont.)

state until the power is cycled or the unit is reset.

**MISSING INDEX MARK:** While feeding paper or while printing, a black mark has not been seen within approximately 10" of paper. Remedy by using the correct paper in the printer, or installing the paper in the correct orientation. The condition is removed by raising the Platen Release Lever (presumably to change the paper).

**PAPER JAM:** The printer detected an obstruction in the paper path. Remedy by opening the printer head and inspecting for a jammed ticket.

### Self Test

If the Keypad FEED is held during power on or reset, a self test will be triggered. Proper operation will result in the printing of a configuration ticket.

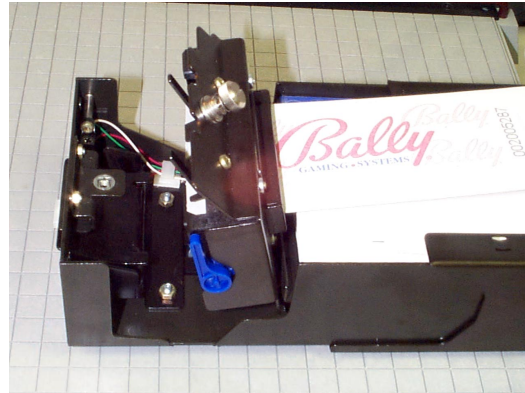
<b>Model:</b>	<b>PSA-66-ST</b>
<b>Firmware:</b>	<b>1.0.0.0.0</b>
<b>COMMUNICATION</b>	
<b>Interface:</b>	<b>serial</b>
<b>Baud Rate:</b>	<b>19200</b>
<b>Data Bits:</b>	<b>8</b>
<b>Parity:</b>	<b>NONE</b>
<b>Handshaking:</b>	<b>HARDWARE</b>
<b>PRINT CONTROL</b>	
<b>Darkness Control:</b>	<b>+00%</b>
<b>Black Bar Index:</b>	<b>Disabled</b>
<b>Print On Demand:</b>	<b>Disabled</b>
<b>Auto Sleep Timer:</b>	<b>Off</b>
<b>SYSTEM RESOURCES</b>	
<b>FLASH -Used:</b>	<b>000000</b>
<b>-Free:</b>	<b>024064</b>
<b>LIBRARY INVENTORY</b>	
<b>Templates:</b>	
<b>Print Regions:</b>	
<b>Graphics:</b>	
<b>Fonts:</b>	<b>3(0), 7(0), 8(0), 5(0)</b>

Sample Self-Test Ticket

## Servicing the Printer

### Accessing the Paper Path

The paper path can be accessed by loosening the Mechanism Fastening Screw. The head swivels to expose the paper path.

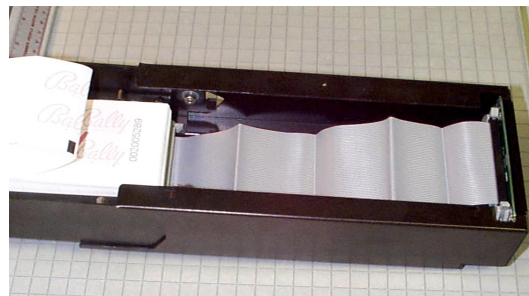
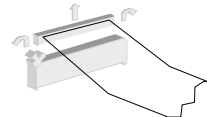


Accessing the Paper Path

### Separating the Drawer

The drawer can be removed from the stationary module by the following procedure.

- Remove power from the printer.
- Slide the drawer open until it locks into position.
- Spread the latching cable connector to release the ribbon cable for removal.



Ribbon Cable

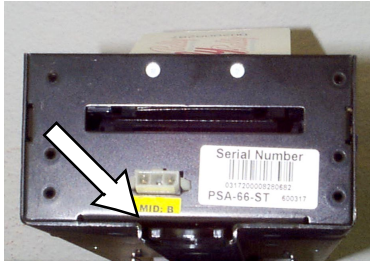


**Note:** The connectors of the ribbon cable are keyed. The black connector fits into the stationary unit. The gray connector fits into the drawer.

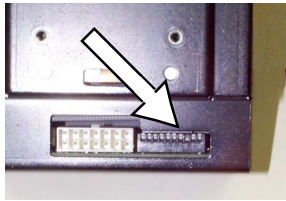
## Vivo™ Printers (cont.)

### Separating the Drawer (cont.)

- Press the spring-loaded release bar on the front of the drawer to unlock it from the stationary unit. Pull on the drawer to separate.



Release Bar



Dip Switch

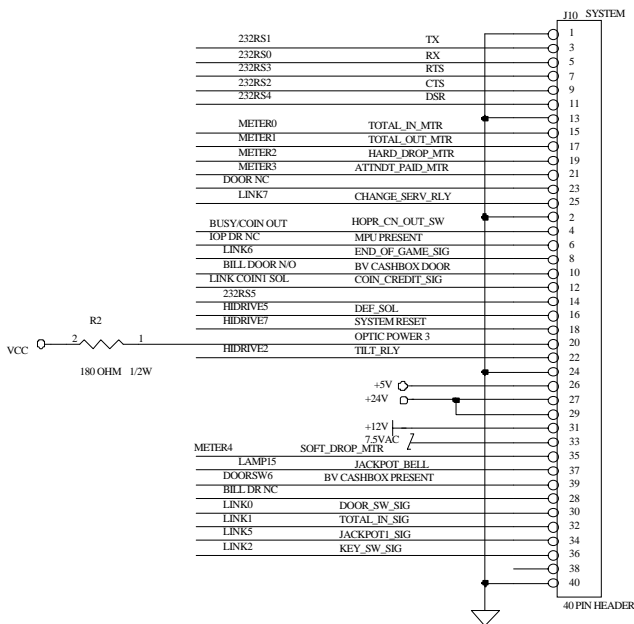


**Caution:** Do not disturb DIP Switch settings on the stationary unit. Switches 7 and 9 must be ON for proper operation.

# Accounting System Interface

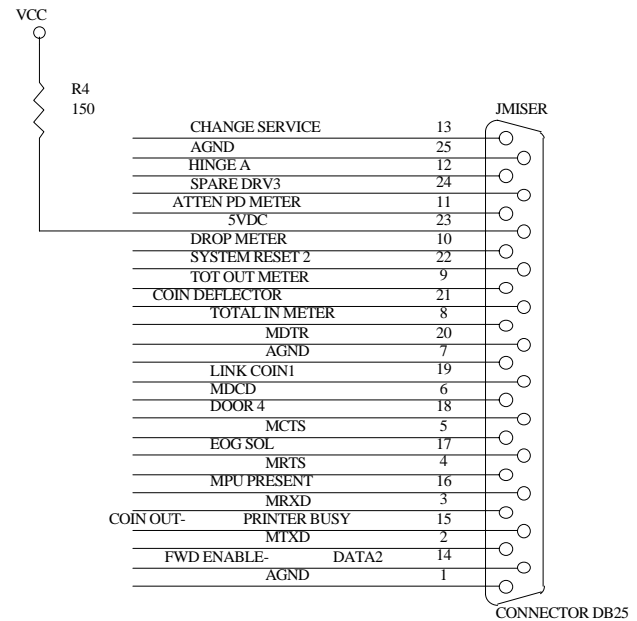
All Bally Gaming machines can interface accounting systems through a connection on the Backplane Board. Protocols supported are SDS® and SAS®.

## Evo® V87



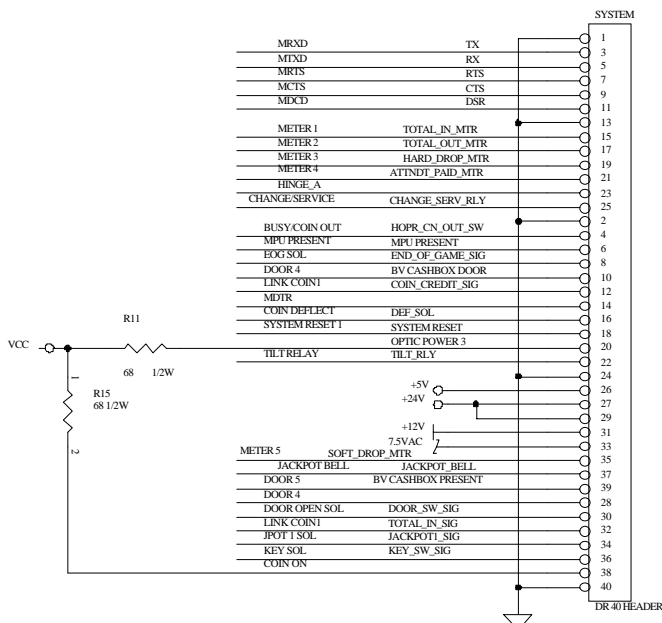
AS-03356-0501 Backplane Board

## Game Maker® V7



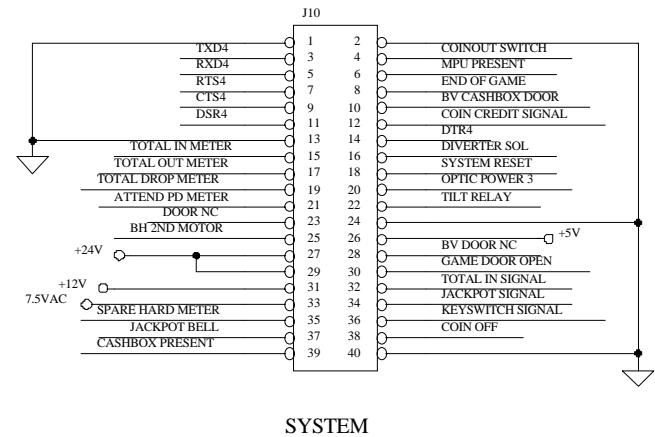
AS-03356-0247 Backplane Board

## Game Maker® V72



AS-03356-0432 Backplane Board

## ProSlot® 6000

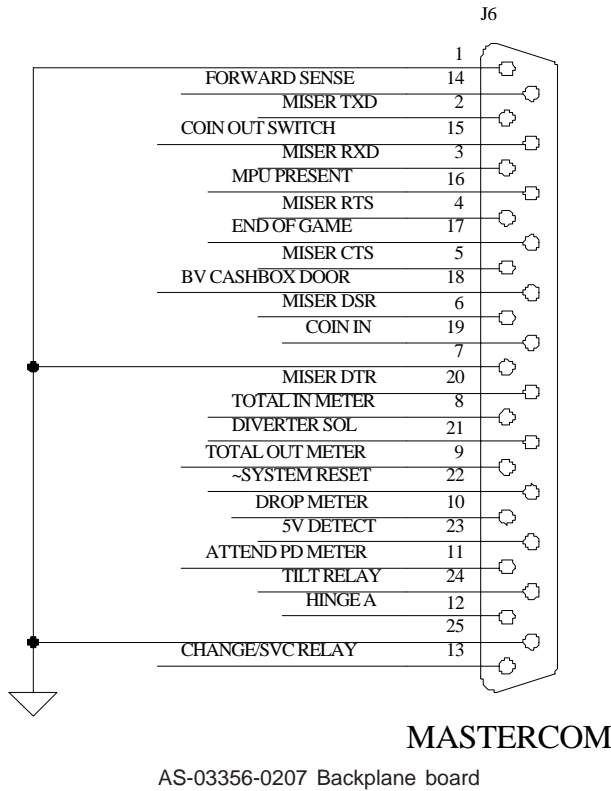


AS-03356-0445 Backplane Board

# Peripherals

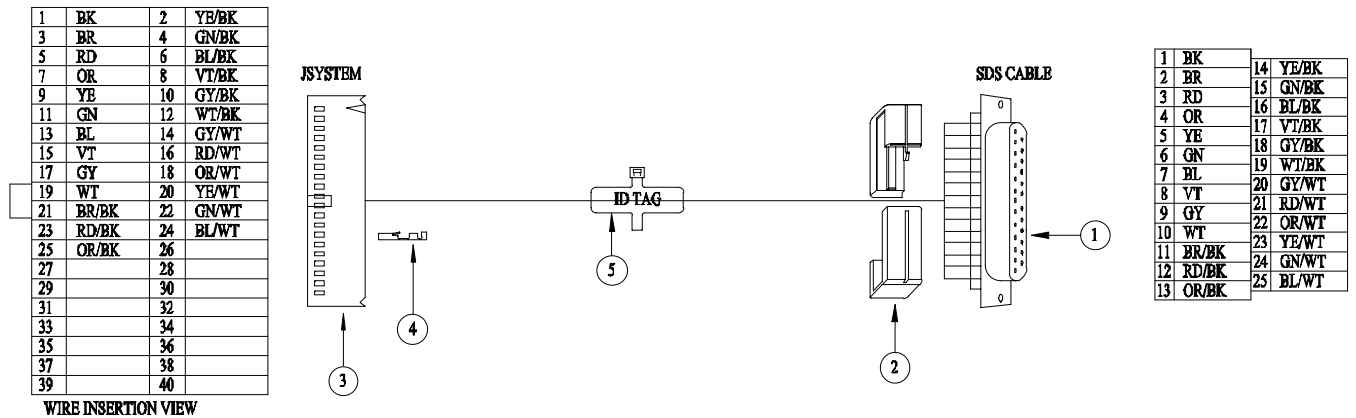
## Accounting System Interface (cont.)

### ProSlot® 5500



**Note:** See Module MK10-SVMOD-0003 SDS Parts Reference for hardware requirements.

### CBL-20234-0001 System Interface Cable



**MATERIALS LIST**

REF.	PART NUMBER	DESCRIPTION	QTY.
1	E-00910-0061	RECEPTACLE, DB25, SINGLE WIRE I.D.C	1
2	E-00910-0065	COVER, PLASTIC, DB25	1
3	E-01011-0140	CONN, HOUSING, DUAL ROW, 40 PIN	1
4	E-00671-0003	TERMINAL, MOD IV, 24-20 AWG	25
5	E-00647-0020	MARKER TIE	1
6	E-00647-0004	CABLE TIE, 3/32" X 3 7/8"	-