

Bally

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THEATRE OF MAGIC™



Operators Handbook

Midway Manufacturing Company, 3401 North California Avenue, Chicago, Illinois 60618

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MENU SYSTEM OPERATION

The Main Menu allows you to choose from several categories, which in turn lead to other menus. To access the Main Menu, open the coin door and press the Begin Test button, then press the Enter button. Press the Up or Down buttons to cycle through the Main Menu. Press the Enter button to access a menu. Press the Escape button to return to the Main Menu. Press the Start button for HELP at any time.

Main Menu

B. Bookkeeping Menu

- B.1 Main Audits
- B.2 Earnings Audits
- B.3 Standard Audits
- B.4 Feature Audits
- B.5 Histograms
- B.6 Time-Stamps

P. Printouts Menu

- P.1 Earnings Data
- P.2 Main Audits
- P.3 Standard Audits
- P.4 Feature Audits
- P.5 Score Histograms
- P.6 Game Time Histograms
- P.7 Time-Stamps
- P.8 All Data

T. Test Menu

- T.1 Switch Edges
- T.2 Switch Levels
- T.3 Single Switches
- T.4 Solenoid Test
- T.5 Flasher Test
- T.6 General Illumination
- T.7 Sound & Music Test
- T.8 Single Lamps
- T.9 All Lamps
- T.10 Lamp & Flasher Test
- T.11 Display Test
- T.12 Flipper Test
- T.13 Ordered Lamp Test
- T.14 Lamp Row-Col Test
- T.15 Dip Switch Test
- T.16 Trunk Test
- T.17 Trapdoor Test
- T.18 Empty Balls Test

U. Utilities Menu

- U.1 Clear Audits
- U.2 Clear Coins
- U.3 Reset H.S.T.D.
- U.4 Set Time & Date
- U.5 Custom Message
- U.6 Set Game I.D.
- U.7 Factory Adjustments
- U.8 Factory Resets
- U.9 Presets
- U.10 Clear Credits
- U.11 Auto Burn-In

A. Adjustments Menu

- A.1 Standard Adjustments
- A.2 Feature Adjustments
- A.3 Pricing Adjustments
- A.4 H.S.T.D. Adjustments
- A.5 Printer Adjustments

Press Escape

To move out of a menu selection.

Press Enter

To get into a menu selection.

Press Up

Increases sequence; Example A.1, A.2, A.3, A.4.

Press Down

Decreases Sequence; Example A.4, A.3, A.2, A.1.

Use Up and Down to cycle through the selections in a menu.

Use Escape and Enter to move into and out of the selected menu

LAMP MATRIX

Yellow (B+) 0 Red

Column \ Row	1 Yellow-Brown J137-1 Q98	2 Yellow-Red J137-2 Q97	3 Yellow-Orange J137-3 Q96	4 Yellow-Black J137-4 Q95	5 Yellow-Green J137-5 Q94	6 Yellow-Blue J137-6 Q93	7 Yellow-Violet J138-7 Q92	8 Yellow-Gray J138-9 Q91
1 Red-Brown J133-1 Q90	(T)HEATRE 11	HAUNTED BASEMENT 21	MA(G)IC 31	EXTRA BALL 41	TRUNK HIT 2 51	TIGER SAW 61	HAT MAGIC 71	SPECIAL 81
2 Red-Black J133-2 Q89	T(H)EATRE 12	META-MORPHISIS AWARD 22	MAG(I)C 32	VANISH 42	HURRY UP 52	LEVITATE WOMAN 62	SPIRIT AWARD 72	NOT USED 82
3 Red-Orange J133-4 Q88	TH(E)ATRE 13	RIGHT SPELL MAGIC 23	LIFT TRAPDOOR 33	SPELL THEATRE 43	TRUNK ESCAPE 53	GRAND FINALE 63	THEATRE 73	NOT USED 83
4 Red-Yellow J133-5 Q87	THE(A)TRE 14	SPIRIT RING 24	CENTER SPELL MAGIC 34	JACKPOT 44	LOCK BALL 54	TRUNK ESCAPE 64	MULTI-BALL 74	NOT USED 84
5 Red-Green J133-6 Q86	THEA(T)RE 15	ADVANCE CLOCK 25	LEVITATE AWARD 35	SAFE AWARD 45	HAT TRICK AWARD 55	SPIRIT CARDS 65	MIDNIGHT 75	LAMP IN CUBE 85
6 Red-Blue J133-7 Q85	THEAT(R)E 16	JACKET AWARD 26	MAG(I)C 36	TIGER SAW AWARD 46	START ILLUSION 56	SAFE ESCAPE 66	ILLUSIONS 76	SHOOT AGAIN 86
7 Red-Violet J133-8 Q84	THEATR(E) 17	M(A)GIC 27	TOP ROLLOVER 1 37	START FINALE 47	START MULTI-BALL 57	META-MORPHISIS 67	SAW MULTI-BALL 77	BUY-IN 87
8 Red-Gray J133-9 Q83	(M)AGIC 18	TRUNK HIT 3 28	TOP ROLLOVER 2 38	TRUNK HIT 1 48	LITE VANISH 58	STRAIT JACKET 68	HOCUS POCUS 78	START BUTTON 88

J1XX = Power Driver Board

Item No.	Bulb No.	Lamp Assy. No.	Description	Item No.	Bulb No.	Lamp Assy. No.	Description
11	24-8768	A-19982	(T)HEATRE	35	24-8768	A-19984	Levitate Award
12	24-8768	A-19982	T(H)EATRE	36	24-8768	A-19982	MAG(I)C
13	24-8768	A-19982	TH(E)ATRE	37	24-6549	A-17835	Top Rollover 1
14	24-8768	A-19982	THE(A)TRE	38	24-6549	A-17835	Top Rollover 2
15	24-8768	A-19982	THEA(T)RE	41	24-8768	A-19983	Extra Ball
16	24-8768	A-19982	THEAT(R)E	42	24-8768	A-19983	Vanish
17	24-8768	A-19982	THEATR(E)	43	24-8768	A-19983	Spell Theatre
18	24-8768	A-19982	(M)AGIC	44	24-8768	A-19983	Jackpot
21	24-8768	A-19982	Haunted Basement	45	24-8768	A-19983	Safe Award (2)
22	24-8768	A-19982	Metamorphosis Award	46	24-8768	A-19983	Tiger Saw Award
23	24-8768	A-19982	Right Spell Magic	47	24-8768	A-19983	Start Finale
24	24-8768	A-19982	Spirit Ring	48	24-8768	A-19983	Trunk Hit 1
25	24-8768	A-19982	Advance Clock	51	24-8768	A-19983	Trunk Hit 2
26	24-8768	A-19983	Jacket Award (2)	52	24-8768	A-19983	Hurry Up
27	24-8768	A-19982	M(A)GIC	53	24-8768	A-19983	Trunk Escape
28	24-6549	A-17836	Trunk Hit 3	54	24-8768	A-19983	Lock Ball (2)
31	24-8768	A-19982	MA(G)IC	55	24-8768	A-19983	Hat Trick Award
32	24-8768	A-19982	MAG(I)C	56	24-8768	A-19983	Start Illusion
33	24-8768	A-19984	Lift Trapdoor	57	24-8768	A-19983	Start Multi-Ball
34	24-8768	A-19984	Center Spell Magic	58	24-8768	A-19983	Lite Vanish

SWITCH MATRIX

White Green

Dedicated Grounded Switches	Column		1	2	3	4	5	6	7	8	Flipper Grounded Switches
	Row		Green-Brown J207-1 U20-18	Green-Red J207-2 U20-17	Green-Orange J207-3 U20-16	Green-Yellow J207-4 U20-15	Green-Black J207-5 U20-14	Green-Blue J207-6 U20-13	Green-Violet J207-7 U20-12	Green-Gray J207-9 U20-11	
Orange-Brown (1) J205-1 Left Coin Chute D1	1	White-Brown J209-1 U18-11	NOT USED 11	SLAM TILT 21	TROUGH JAM 31	LOCK 1 41	LEFT BANK TARGET 51	LEFT SLING 61	CENTER RAMP EXIT 71	LOOP RIGHT 81	Black-Green J906-1 Right Flipper EOS F1
Orange-Red (2) J205-2 Center Coin Chute D2	2	White-Red J209-2 U18-9	NOT USED 12	COIN DOOR CLOSED 22	TROUGH 1 32	LOCK 2 42	CAPTIVE BALL REST 52	RIGHT SLING 62	NOT USED 72	CENTER RAMP TARGETS 82	Black-Violet J905-1 Right Flipper Opto F2
Orange-Black (3) J205-3 Right Coin Chute D3	3	White-Orange J209-3 U18-5	START BUTTON 13	BUY-IN 23	TROUGH 2 33	LOCK 3 43	RIGHT LANE ENTER 53	BOTTOM JET 63	RIGHT RAMP EXIT 73	VANISH LOCK 1 83	Black-Blue J906-3 Left Flipper EOS F3
Orange-Yellow (4) J205-4 4th Coin Chute D4	4	White-Yellow J209-4 U18-7	PLUMB BOB TILT 14	ALWAYS CLOSED 24	TROUGH 3 34	POPPER 44	LEFT LANE ENTER 54	MIDDLE JET 64	RIGHT RAMP EXIT 2 74	VANISH LOCK 2 84	Black-Gray J905-2 Left Flipper Opto F4
Orange-Green (5) J205-6 Normal Function Ser Credits Test Function Esc D5	5	White-Green J209-5 U19-11	SHOOTER LANE 15	LEFT OUTLANE 25	TROUGH 4 35	LEFT DRAIN EDDY 45	CUBE POSITION 4 55	TOP JET 65	CENTER RAMP ENTER 75	TRUNK HIT 85	Black-Violet J906-4 Upper Right Flipper EOS F5
Orange-Blue (6) J205-7 Normal Function Vol Down Test Function Down D6	6	White-Blue J209-7 U19-9	NOT USED 16	LEFT RETURN LANE 26	SUBWAY OPTO 36	NOT USED 46	CUBE POSITION 1 56	TOP LANE 1 66	RIGHT RAMP ENTER 76	RIGHT LANE EXIT 86	Black-Yellow J905-3 Upper Right Flipper Opto F6
Orange-Violet (7) J205-8 Normal Function Vol Up Test Function Up D7	7	White-Violet J209-8 U19-5	NOT USED 17	RIGHT RETURN LANE 27	SPINNER 37	SUBWAY MICRO 47	CUBE POSITION 2 57	TOP LANE 2 67	CAPTIVE BALL TOP 77	LEFT LANE EXIT 87	Black-Gray J906-5 Upper Left Flipper EOS F7
Orange-Gray (8) J205-9 Normal Function Begin Test Test Function Enter D8	8	White-Gray J209-9 U19-7	NOT USED 18	RIGHT OUTLANE 28	RIGHT LOWER TARGET 38	RIGHT DRAIN EDDY 48	CUBE POSITION 3 58	NOT USED 68	LOOP LEFT 78	NOT USED 88	Black-Blue J905-5 Upper Left Flipper Opto F8

J2XX = CPU Board; J9XX = Fliptronic II Board; = Opto, Typically Closed

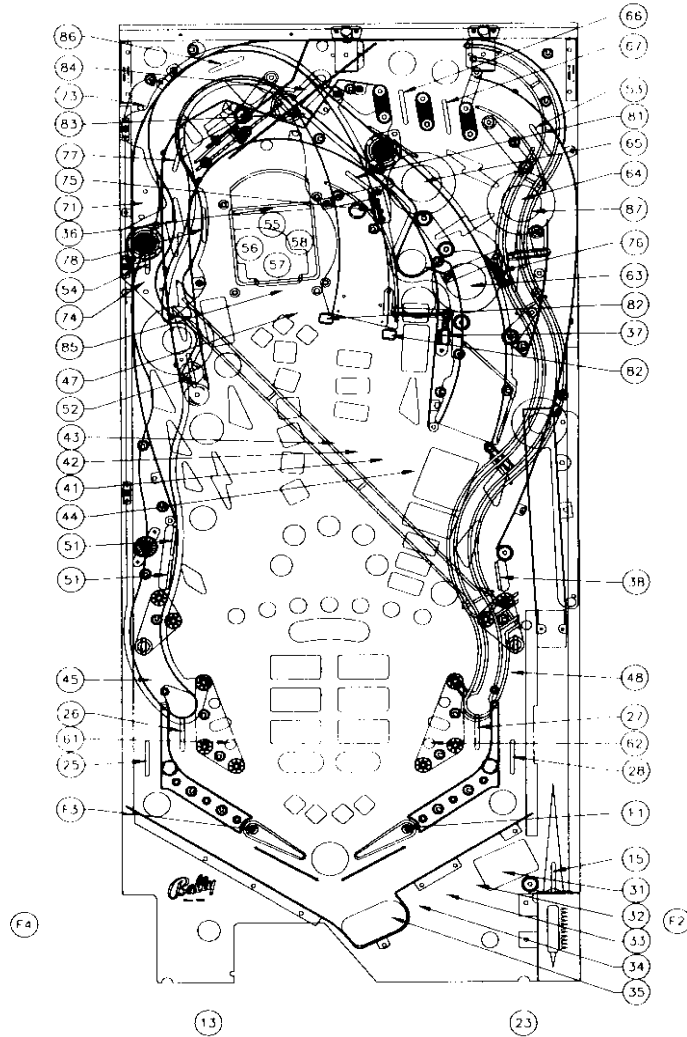
SWITCH LOCATIONS

Item No.	Switch Part No.	Description
F1	SW-1A-194	Lower Right Flipper EOS
F2	A-17316	*Lower Right Flipper Cabinet
F3	SW-1A-194	Lower Left Flipper EOS
F4	A-17316	*Lower Left Flipper Cabinet
F5	---	Not Used
F6	---	Not Used
F7	---	Not Used
F8	---	Not Used
11	---	Not Used
12	---	Not Used
13	20-9663-1	Start Button
14	A-15361	*Plumb Bob Tilt
15	5647-12693-32	Shooter Lane
16	---	Not Used
17	---	Not Used
18	---	Not Used
21	A-17238	*Slam Tilt
22	5643-09288-00	*Coin Door Closed
23	20-9663-18	Buy-In
24	5643-09112-00	*Always Closed
25	5647-12693-19	Left Outlane
26	5647-12693-19	Left Return Lane
27	5647-12693-19	Right Return Lane
28	5647-12693-19	Right Outlane

*Not Shown

Item No.	Switch Part No.	Description
31	A-18617-1	Trough JAM (LED)
	A-18618-1	(Trans)
32	A-18617-1	Trough 1 (LED)
	A-18618-1	(Trans)
33	A-18617-1	Trough 2 (LED)
	A-18618-1	(Trans)
34	A-18617-1	Trough 3 (LED)
	A-18618-1	(Trans)
35	A-18617-1	Trough 4 (LED)
	A-18618-1	(Trans)
36	A-16908	Subway Opto (LED)
	A-16909	(Trans)
37	5647-12693-24	Spinner
38	A-17799-6	Right Lower Target
41	5647-12693-34	Lock 1
42	5647-12693-33	Lock 2
43	5647-12693-32	Lock 3
44	5647-12693-11	Popper
45	A-18543-1	Left Drain Eddy
46	---	Not Used
47	5647-12693-13	Subway Micro
48	A-18543-1	Right Drain Eddy

SWITCH LOCATIONS (continued)



Item No.	Switch Part No.	Description	Item No.	Switch Part No.	Description
51	A-18059-15	Left Bank Target (2)	71	5647-12693-13	Center Ramp Exit
52	5647-12693-19	Captive Ball Rest	72	---	Not Used
53	5647-12693-19	Right Lane Enter	73	5647-12693-13	Right Ramp Exit
54	5647-12693-19	Left Lane Enter	74	5647-12693-13	Right Ramp Exit 2
55	A-19749	Cube Position 4	75	5647-12693-11	Center Ramp Enter
56	A-19749	Cube Position 1	76	5647-12693-11	Right Ramp Enter
57	A-19749	Cube Position 2	77	5647-12693-19	Captive Ball Top
58	A-19749	Cube Position 3	78	5647-12693-19	Loop Left
61	SW-1A-114	Left Sling (kicker)	81	5647-12693-19	Loop Right
	SW-1A-120	(score)	82	A-20014-5	Center Ramp Targets (2)
62	SW-1A-114	Right Sling(kicker)	83	5647-12133-11	Vanish Lock 1
	SW-1A-120	(score)	84	5647-12133-12	Vanish Lock 2
63	SW-11A-37	Bottom Jet	85	A-18543-2	Trunk Hit
64	SW-11A-37	Middle Jet	86	5647-12693-19	Right Lane Exit
65	SW-11A-37	Top Jet	87	5647-12693-13	Left Lane Exit
66	5647-12693-19	Top Lane 1	88	---	Not Used
67	5647-12693-19	Top Lane 2			
68	---	Not Used			

*Not Shown

SOLENOID/FLASHER TABLE

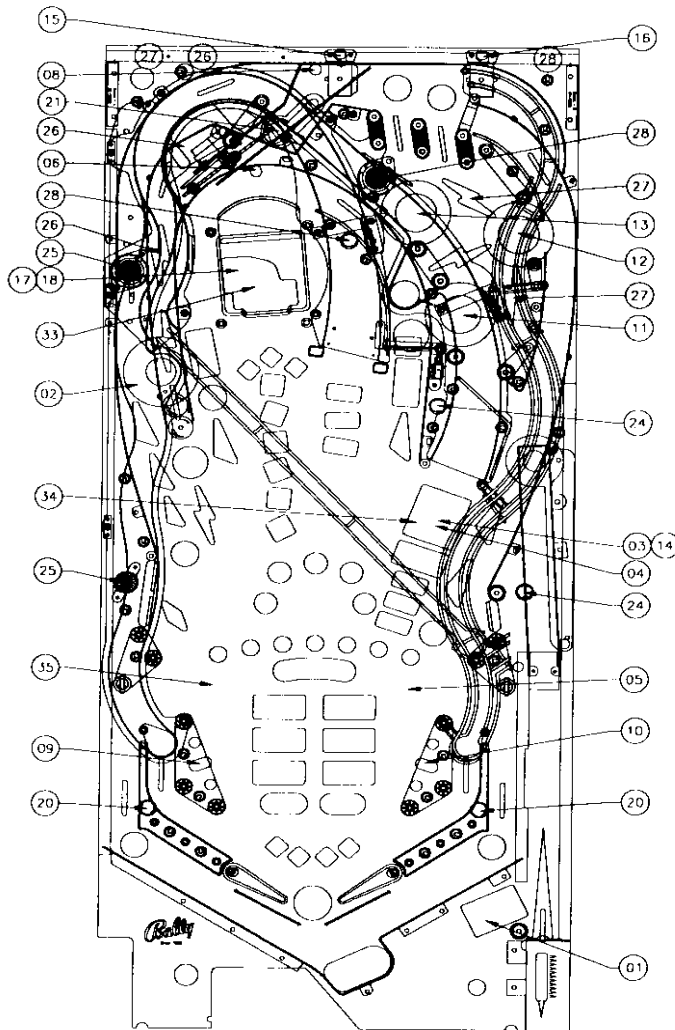
Sol. No.	Function	Solenoid Type	Voltage Connections			Drive Xister	Drive Connections			Drive Wire Color	Solenoid Part number		
			Playfield	Backbox	Cabinet		Playfield	Backbox	Cabinet		Flashlamp Type	Backbox	
01	BALL TROUGH	High Power	J107-2			Q82	J130-1			Vio-Brn	AE-26-1500		
02	MAGNET DIVERTER	High Power	J107-2			Q80	J130-2			Vio-Red	20-10179		
03	TRAP DOOR UP	High Power	J107-2			Q78	J130-4			Vio-Org	A-20099		
04	SUBWAY POPPER	High Power	J107-2			Q76	J130-5			Vio-Yel	AE-26-1200		
05	RIGHT DRAIN MAGNET	High Power	J107-2			Q64	J130-6			Vio-Grn	20-10197		
06	CENTER LOOP POST	High Power	J107-2			Q66	J130-7			Vio-Blu	AE-27-1200		
07	KNOCKER	High Power		J107-2		Q68		J130-8		Vio-Blk		AE-23-800	
08	TOP DIVERTER POST	High Power	J107-2			Q70	J130-9			Vio-Gry	AE-27-1200		
09	LEFT SLING	Low Power	J107-3			Q58	J127-1			Brn-Blk	AE-27-1200		
10	RIGHT SLING	Low Power	J107-3			Q56	J127-3			Brn-Red	AE-27-1200		
11	BOTTOM JET	Low Power	J107-3			Q54	J127-4			Brn-Org	AE-26-1200		
12	MIDDLE JET	Low Power	J107-3			Q52	J127-5			Brn-Yel	AE-26-1200		
13	TOP JET	Low Power	J107-3			Q50	J127-6			Brn-Grn	AE-26-1200		
14	TRAP DOOR HOLD	Low Power	J107-2			Q48	J127-7			Brn-Blu	A-20099		
15	LEFT UP/DOWN GATE	Low Power	J107-3			Q46	J127-8			Brn-Vio	A-14406		
16	RIGHT UP/DOWN GATE	Low Power	J107-3			Q44	J127-9			Brn-Gry	A-14406		
17	BOX CLOCKWISE	Flasher	J116-2			Q42	J126-1			Blk-Brn	14-8018		
18	BOX COUNTER CLOCKWISE	Flasher	J116-2			Q40	J126-2			Blk-Red	14-8018		
19	NOT USED	Flasher	J116-2			Q38	J126-3			Blk-Org	---		
20	RETURN LANE FLASHER	Flasher	J107-6			Q36	J126-4			Blk-Yel	#89 (2)		
21	TOP KICKOUT	Flasher	J107-1			Q28	*J126-5			Blu-Grn	AE-27-1200		
22	NOT USED	Flasher	J107-6			Q30	J126-6			Blu-Blk	---		
23	NOT USED	Flasher	J107-6			Q34	J126-7			Blu-Vio	---		
24	TRAP DOOR FLASHER	Flasher	J107-6			Q32	J126-8			Blu-Gry	#89 (2)		
25	SPIRIT RING FLASHER	Gen. Purpose	J107-6	J106-5		Q26	J122-1	J124-1		Blu-Brn	#906, #89	#906	
26	SAW FLASHER	Gen. Purpose	J107-6	J106-5		Q24	J122-2	J124-2		Blu-Red	#906, #89 (2)	#906	
27	JET FLASHER	Gen. Purpose	J107-6	J106-5		Q22	J122-3	J124-3		Blu-Org	#906, #89 (2)	#906	
28	BOX FLASHER	Gen. Purpose	J107-6	J106-5		Q20	J122-4	J124-5		Blu-Yel	#906, #89 (2)	#906	
33	CUBE MAGNET	High Power	J907-6,7			Q2	J902-6			Yel-Vio	20-10197		
34	SUB BALL RELEASE	Low Power	J907-6,7			Q7	J902-4			Org-Vio	AE-27-1200		
35	LEFT DRAIN MAGNET	High Power	J907-8,9			Q1	J902-3			Yel-Gry	20-10197		
General Illumination													
01	STRING 1	G.I.		J120-1		Q18		J120-7		Wht-Brn		#555	
02	STRING 2	G.I.		J120-2		Q10		J120-8		Wht-Org		#555	
03	STRING 3	G.I.	J121-3			Q14	J121-9			Wht-Yel	#44		
04	STRING 4	G.I.	J121-5			Q16	J121-10			Wht-Grn	#44		
05	STRING 5	G.I.	J121-6			Q12	J121-11			Wht-Vio	#44		
Flipper Circuits													
Item No.	Coil/ Flasher No.	Assy. Number.	Description	Voltage Connections		Drive Transistors		Drive Connectors		Drive Wire Colors		Coil Part No.	Coil Color
				Playfield	Power Hold	Power	Hold	Playfield	Power Hold	Power	Hold		
29				J907-1 (Red-Grn)		Q4		J902-13		Yel-Grn			
30	Lower Right Flipper			Lwr. Rt. Power J907-1 (Red-Grn)			Q11	J902-11		Org-Grn	FL-11629	BLUE	
31				Lwr. Lt. Power J907-4 (Red-Blu)		Q3		J902-9		Yel-Blu			
32	Lower Left Flipper			Lwr. Lt. Hold J907-4 (Red-Blu)			Q9	J902-7		Org-Blu	FL-11629	BLUE	
33				Upr. Rt. Power J907-6 (Red-Vio)		Q2		J902-6		Yel-Vio			
34	Upper Right Flipper			Upr. Rt. Hold J907-6 (Red-Vio)			Q7	J902-4		Org-Vio	NOT	USED	
35				Upr. Lt. Power J907-8 (Red-Gry)		Q1		J902-3		Yel-Gry			
36	Upper Left Flipper			Upr. Lt. Hold J907-8 (Red-Gry)			Q5	J902-1		Org-Gry	NOT	USED	

J1xx=Power Driver Board; J9xx=Fliptronic II Board; 24-6549=#44 bulb; 24-8704=#89 bulb; 24-8768=#555 bulb; 24-8802=#906 bulb
 *Tieback Diode J126-13

SOLENOID/FLASHER LOCATIONS

Item No.	Coil/ Flasher No.	Assy. Number.	Description	Item No.	Coil/ Flasher No.	Assy. Number.	Description
01	AE-26-1500	A-19963	Ball Trough	12	AE-26-1200	A-9415-2	Middle Jet
02	20-10179	A-19778	Magnet Diverter	13	AE-26-1200	A-9415-2	Top Jet
03	A-20099	A-19939	Trap Door Up	14	A-20099	A-19939	Trap Door Hold
04	AE-26-1200	A-19939	Subway Popper	15	A-14406	A-17796	Left Up/Down Gate
05	20-10197	---	Right Drain Magnet	16	A-14406	A-17796	Right Up/Down Gate
06	AE-27-1200	A-17932	Center Loop Post	17	14-8018	A-19782	Box Clockwise
07	AE-23-800	B-10686-1	*Knocker	18	14-8018	A-19782	Box Counter Clockwise
08	AE-27-1200	A-17932	Top Diverter Post	19	---	---	Not Used
09	AE-27-1200	B-9362-L-3	Left Sling	20	24-8704	A-17983	Return Lane Flasher (2)
10	AE-27-1200	B-9362-R-4	Right Sling	21	AE-27-1200	A-20003	Top Kickout
11	AE-26-1200	A-9415-2	Bottom Jet	22	---	---	Not Used

SOLENOID/FLASHER LOCATIONS (continued)



Item No.	Coil/Flasher No.	Assy. Number.	Description
23	24-8704	A-17803	Save Post Flasher
24	24-8704	A-17983	Trap Door Flasher
	24-8704	A-17803	
25	24-8802	---	Spirit Ring Flasher
	24-8704	A-17983	
26	24-8802	---	Saw Flasher
	24-8704 (2)	A-17903	
27	24-8802	---	Jet Flasher
	24-8704 (2)	A-17803	
28	24-8802 (2)	---	Box Flasher
	24-8704	A-17983	
33	20-10197	A-19778	Cube Magnet
34	AE-27-1200	A-19934	Sub Ball Release
35	20-10197	---	Left Drain Magnet

General Illumination Circuits

Item No.	Description	Bulb No.	
01	String 1	#555	G.I. String 1
02	String 2	#555	G.I. String 2
03	String 3	#44	G.I. String 3
04	String 4	#44	G.I. String 4
05	String 5	#44	G.I. String 5

Flipper Coils .

Coil No.	Color	Assy. No.	Description
FL-11629	(blue)	A-15849-R-2	Lower Right Flipper
FL-11629	(blue)	A-15849-L-2	Lower Left Flipper

24-6549 = #44 bulb
 24-8704 = #89 bulb
 24-8768 = #555 bulb
 24-8802 = #906 bulb

UPPER PLAYFIELD PARTS

Item No.	Part Number	Description	Item No.	Part Number	Description
1	01-9211	Playfield Hanger Bracket	41	04-10035	Ball Guide #9
2	01-13638	Bottom Arch Ball Guide	42	12-7265	Wireform Ball Guide #3
3	12-7210	Rebound Wireform (2)	43	A-20063-2	Playfield Plastic Assembly
4	A-15849-L-2 20-9250-5	Flipper Assembly Complete Flipper & Shaft, White	44	A-9415-2 B-9414-3 B-12030-2 23-6710-1	Jet Bumper Coil Assembly Jet Bumper Assy., Red Wafer Jet Bumper Leaf Switch Assy. Clear Tubing
5	A-20064-2	Flipper Ball Guide Assy., Left		03-8254-12	Jet Bumper Cap, Orange
6	A-17813	Rollover Switch Assembly	45	A-19955	Left Plastic Ramp Assembly
7	A-17811 B-9362-L-3 10-128	Sling Shot Kicker Assembly Coil & Bracket Assembly Kicker Spring	46	12-7267	Wireform Ball Guide #7
8	01-13892.1	Ramp Guard	47	A-20063-3	Playfield Plastic Assembly
9	A-17801	Kicker Count Switch Assembly	48	01-13819	Ball Guide #10
10	02-4250-20	Spacer, 6-32 x 1 1/4"	49	12-7266	Wireform Ball Guide #4
11	A-17064	*Inductor & Eddy Sensor Cable	50	A-20063-4	Playfield Plastic Assembly
	A-18543-1	*Generic Eddy Sensor P.C.B.	51	A-19954	Right Plastic Ramp Assembly
12	A-15257 20-9612 20-10197	*Bracket & Pole Piece Assembly *Wave Spring Washer *Coil Magnet with Bracket	52	04-10034	Ball Guide #8
13	02-5107	Adjusting Post (2)	53	A-16120	*D.C. Motor Control Assembly
14	A-18059-15	Rect. Stationary Target, Orange	54	A-19959	Crossover Wire Ramp Assy.
15	A-20063-1	Playfield Plastic Assembly	55	A-19938 A-19939	Scoop Assembly Complete Plate Assembly Complete
16	02-4250-20 A-12258-1	Spacer, 6-32 x 1 1/4" 6-32 Nut Plate	56	02-4568-6	Post 8-32 x 3 3/4"
17	04-10033	Ball Guide #6	57	04-10032	Ball Guide #2
18	A-19825	*Trough Assembly	58	A-20048	Shooter Ramp Assembly
19	04-10005	Newton Ball Assembly	59	A-17799-6	Round Stationary Target, Yellow
20	20-6500	Steel Ball 1 1/16"	60	A-19958	Right Wire Ramp Assembly
21	A-17813-1	Rollover Switch Assembly	61	A-17811 B-9362-R-4 10-128	Sling Shot Kicker Assembly Coil & Bracket Assembly Kicker Spring
22	A-20014-5	Oblong Stationary Target, White	62	A-20064-1	Flipper Ball Guide Assy., Right
23	A-19237	*Eddy Coil P.C.B. Assembly	63	A-15849-R-2 20-9250-5	Flipper Assembly Complete Flipper & Shaft, White
24	02-4250-40	Spacer, 6-32 x 2 1/2"	64	A-15802-P	Level & Holder Assembly
25	02-4250-44 A-12258-1	Spacer, 6-32 x 2 3/4" 6-32 Nut Plate	65	01-10621	Strike Plate
26	A-19778 A-19782 A-19791 A-20029 03-9317	Magic Trunk Assembly Magic Trunk Motor Assembly Front Trough Assembly Trunk and Light w/Cable Magic Trunk	66	A-19963	Ball Trough Assembly Complete
27	A-18543-2	*Generic Eddy Sensor P.C.B.	67	A-18973	Shooter Lane Switch Assembly
28	12-7268	Wireform Ball Guide #7	68	31-1009-50039	Screened Ball Shooter
29	A-17932	Disappearing Post Assembly	69	A-19002	Ball Gate Assembly
30	02-4250-20 02-4250-24 A-12258-1	Spacer, 6-32 x 1 1/4" Spacer, 6-32 x 1 1/2" 6-32 Nut Plate	70	A-19968	Mirror Assembly
31	A-19942	Complete Saw Assembly	71	A-20063-5	Playfield Plastic Assembly
32	A-10417 A-17985-R A-20003	Micro Switch Assembly Eject Switch Assembly Eject Assembly	72	04-10031.1	Ball Guide #1
33	02-4250-24	Spacer, 6-32 x 1 1/2"			
34	02-4250-42	Spacer, 6-32 x 2 5/8"			
35	A-17796	Ball Gate Actuator Coil Assy.			
36	A-19811	Back Panel Assembly			
37	A-20086	Coil Actuated Ball Gate Assy.			
38	A-17797-1	Special Ball Gate Assy., Left			
39	A-20102	Ball Gate & Wire Assembly			
40	03-8318-12	Double Sided Hood, Orange			

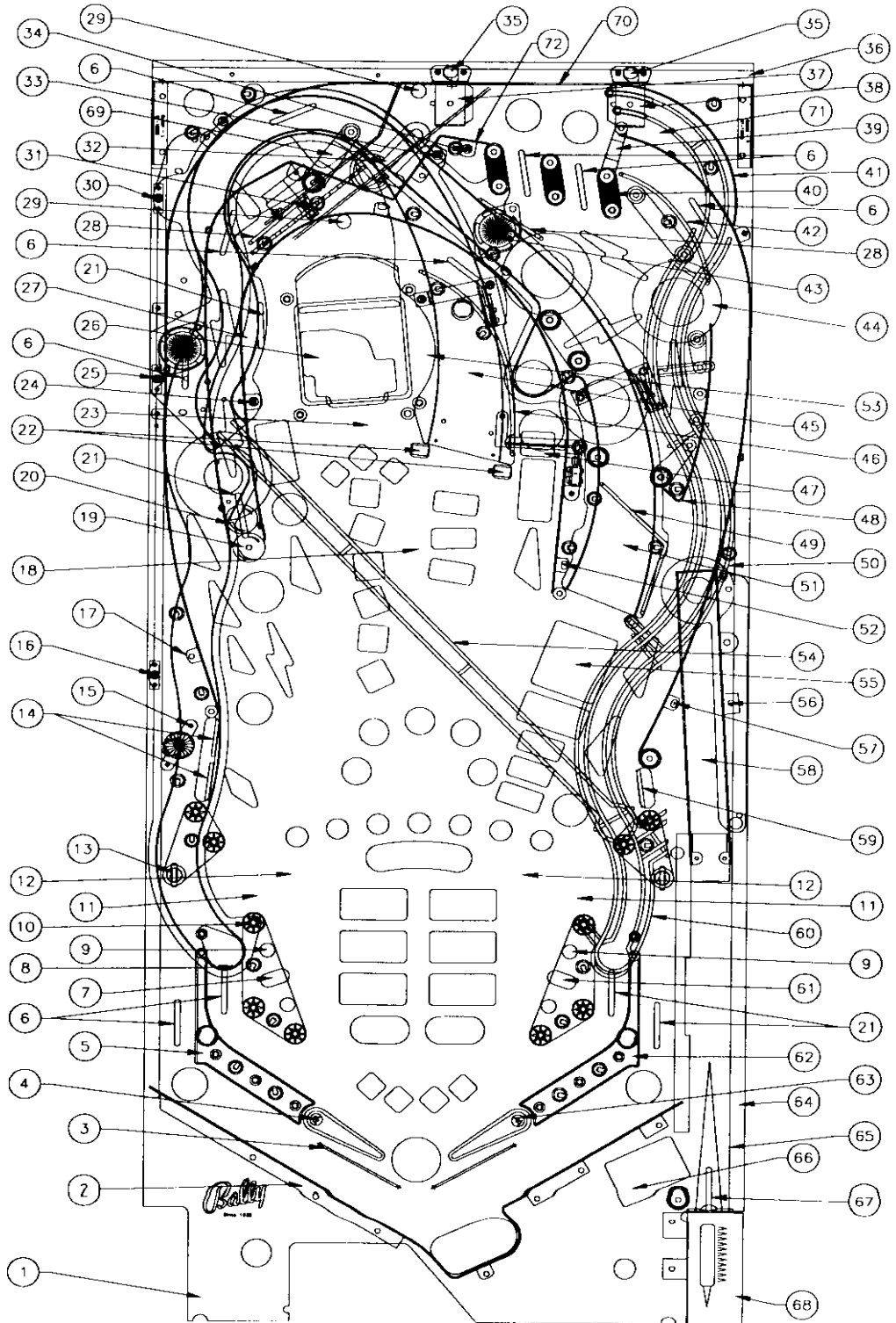
NOT SHOWN:

A-15576	*Opto SW7 P.C.B.
A-17812-2	*Cable Mounting Bracket, 1/2"
A-17812-4	*Cable Mounting Bracket, 1"
A-13204-50039	Bottom Arch Assembly
03-9351-1	**Full Playfield Mylar
03-9351-2	Playfield Mylar
03-9351-3	Playfield Mylar
36-50039	Screened Hardcoat Playfield

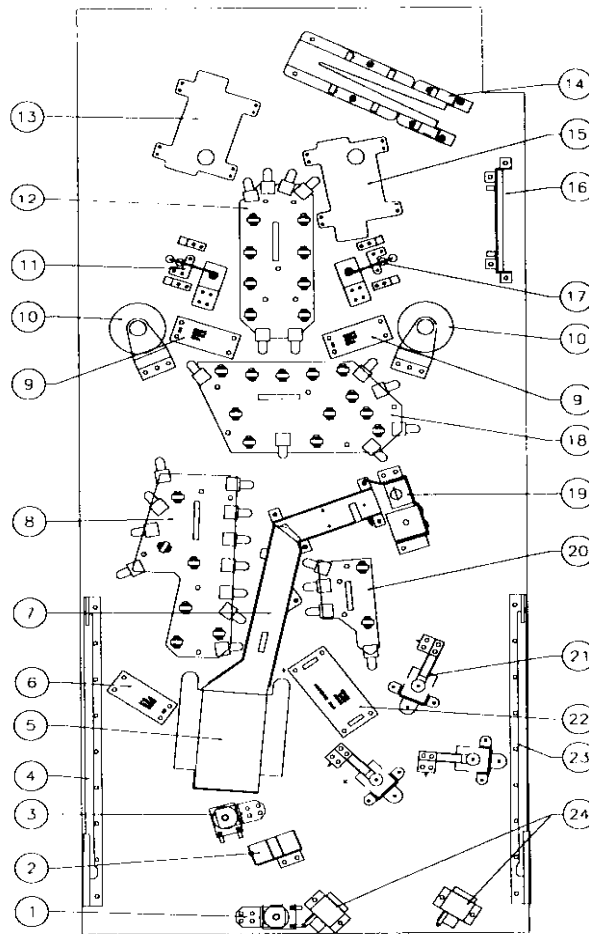
*Located under playfield.

**The Theatre of Magic hardcoat playfield does not require a full mylar. However, mylars can be purchased through your local Bally Distributor.

UPPER PLAYFIELD PARTS



LOWER PLAYFIELD PARTS



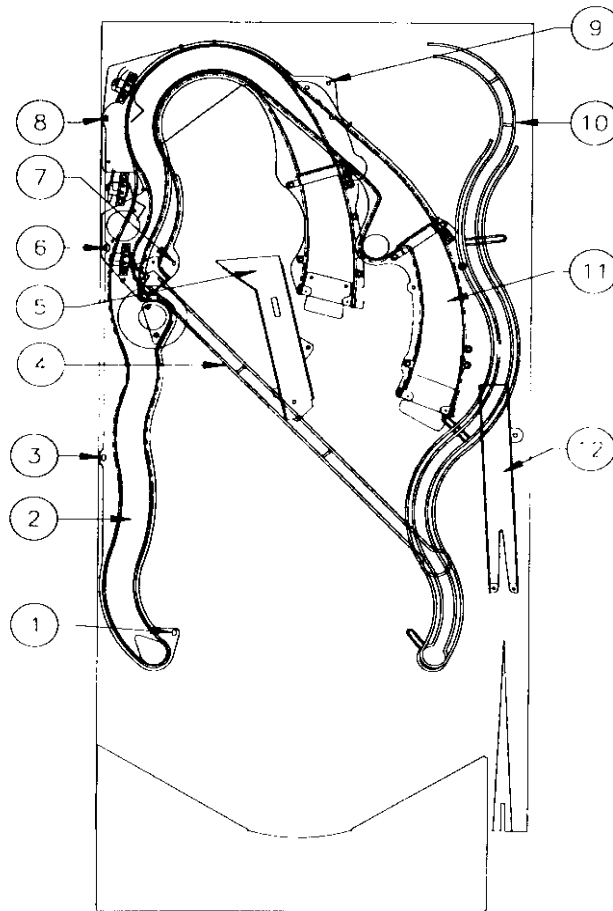
Item No. Part Number Description.

1	A-17932	Disappearing Post Assy.
2	A-20003	Eject Assembly
3	A-17932	Disappearing Post Assy.
4	A-17749.1-1	Playfield Slide Assy. Left
	10-439	Slide Spring
5	A-19778	Magic Trunk Assembly
	A-19782	Magic Trunk Motor Assy.
	A-19791	Front Trough Assembly
6	A-18543-2	Generic Eddy Sensor Bd
	A-20036	Magic Eddy Coil P.C.B.
7	A-19825	Trough Assembly
8	A-19983	17 Lamp P.C.B. Assy.
9	A-17064	Ind. & Eddy Sensor Cable
	A-18543-1	Generic Eddy Sensor Bd.
10	A-15257	Brkt & Pole Piece Assy.
	20-9612	Wave Spring Washer
	20-10197	Coil Magnet w/Bracket
11	A-17811	Sling Shot Kicker Assy.
	B-9362-L-3	Coil & Bracket Assembly
	10-128	Spring

Item No. Part Number Description.

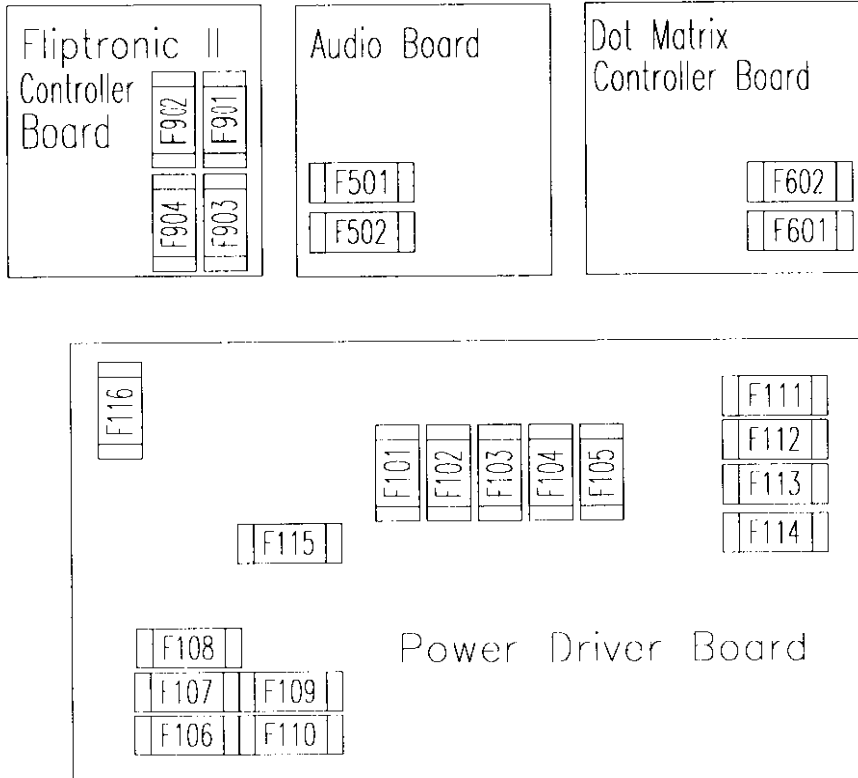
12	A-19981	14 Lamp P.C.B.
13	A-15849-L-2	Flipper Assembly Comp.
14	A-19963	Ball Trough Assy. Comp.
15	A-15849-R-2	Flipper Assembly Comp.
16	A-15576	Opto SW7 P.C.B.
17	A-17811	Sling Shot Kicker Assy.
	B-9362-R-4	Coil & Bracket Assembly
	10-128	Spring
18	A-19982	18 Lamp P.C.B.
19	A-19939	Plate Assembly Comp.
20	A-19984	6 Lamp P.C.B.
21	A-9415-2	Jet Bumper Coil Assy. (3)
	B-12030-2	Jet Bumper Sw. Assy. (3)
22	A-16120	D.C. Motor Control P.C.B.
23	A-17493.1-2	Playfield Slide Assy. Right
	10-439	Slide Spring
24	A-17796	Ball Gate Actuator Assy.

RAMPS



Item No.	Part Number	Description.	Item No.	Part Number	Description.
1	20-4250-20	6-32 x 1 1/4" Spacer	6	02-4250-44	6-32 x 2 3/4" Spacer
2	A-19954	Right Ramp Assembly	7	02-4250-40	6-32 x 2 1/2" Spacer
	03-9336.1	Right Ramp	8	02-4250-20	6-32 x 1 1/4" Spacer
	01-13849	Left Guard		02-4250-24	6-32 x 1 1/2" Spacer
	01-13850	Right Guard	9	02-4250-24	6-32 x 1 1/2" Spacer
	A-20037	Bracket & Switch Assembly	10	A-19958	Right Wire Ramp Assy.
	5647-12693-13	Sub Mini Switch Assembly		12-7262.2	Wire Ramp
	A-14265-13	Receptacle & Skt. Clear		5647-12693-13	Sub Mini Switch Assembly
	03-8171-10	Mini Dome, Blue	11	A-19954	Right Plastic Ramp Assy.
	03-8063-6	Light Sleeve, Yellow		03-9337.2	Plastic Ramp
3	20-4250-20	6-32 x 1 1/4" Spacer		A-20046	Brkt. & Switch Gate Assy.
4	A-19959	Crossover Ramp Assy.		01-13849	Left Guard
	12-7263.2	Wire Ramp		01-13850	Right Guard
	A-19779	Diverter Magnet Assembly		5647-12693-13	Sub Mini Switch Assembly
5	A-19825	Trough Assembly	12	A-20048	Shooter Ramp Assy.
	03-9324.1	Plastic Ramp			
	A-12238	Sub Mini Switch Assembly			

Fuse List



Audio Board

F501 -25V Circuit 3A, 250V, S.B.
 F502 +25V Circuit 3A, 250V, S.B.

Dot Matrix Controller Board

F601 +62V Circuit 3/8A, 250V, F.B.
 F602 -113V and -125V Circuits 3/8A, 250V, F.B.

Fliptronic II Controller Board

F901 Upper Right Flipper 3A, 250V, S.B.
 F902 Upper Left Flipper 3A, 250V, S.B.
 F903 Lower Right Flipper 3A, 250V, S.B.
 F904 Lower Left Flipper 3A, 250V, S.B.

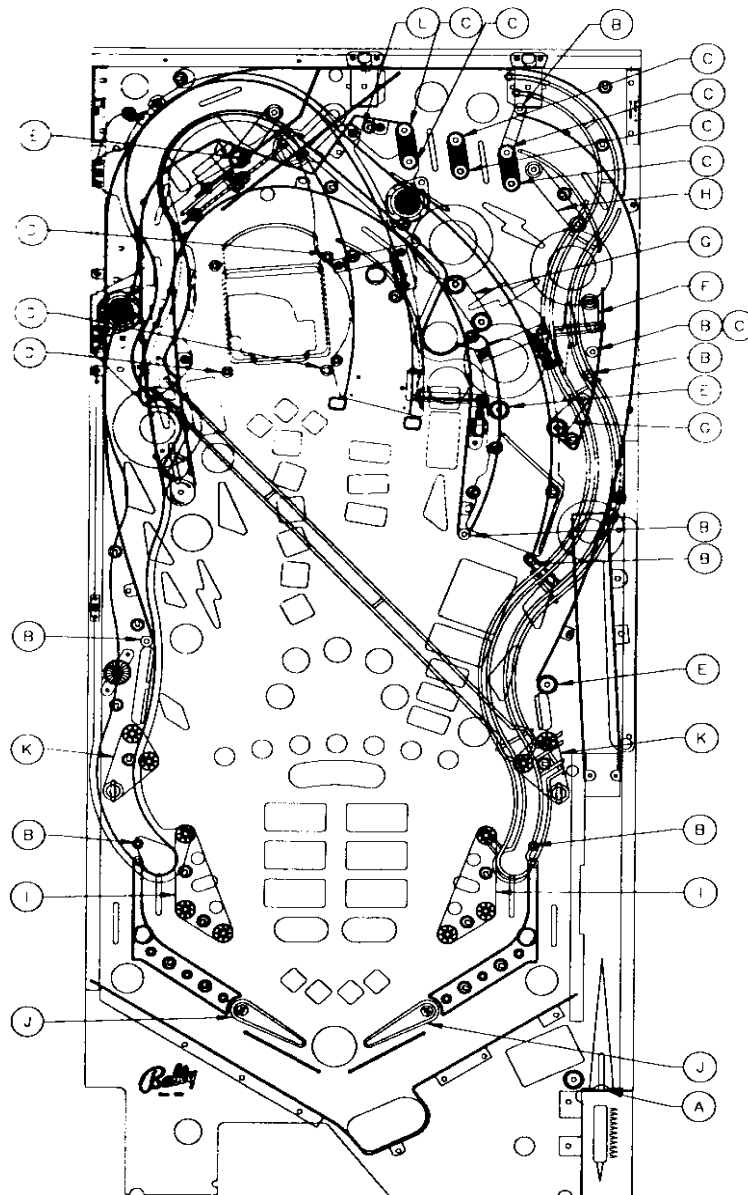
Power Driver Board

F101 +50VDC General (Left Flipper) 3A, 250V, S.B.
 F102 +50VDC General (Right Flipper) 3A, 250V, S.B.
 F103 Solenoid #25-#28 3A, 250V, S.B.
 F104 Solenoid #9-#16 3A, 250V, S.B.
 F105 Solenoid #1-#8 3A, 250V, S.B.
 F106 G.I. #5 Wht-Vio 5A, 250V, S.B.
 F107 G.I. #4 Wht-Gm 5A, 250V, S.B.
 F108 G.I. #3 Wht-Yel 5A, 250V, S.B.
 F109 G.I. #2 Wht-Org 5A, 250V, S.B.
 F110 G.I. #1 Wht-Brn 5A, 250V, S.B.
 F111 Flasher Secondary 5A, 250V, S.B.
 F112 Solenoid Secondary 7A, 250V, S.B.
 F113 +5V Logic 5A, 250V, S.B.
 F114 +18V Lamp Matrix 8A, 32V, N.B.
 F115 +12V Switch Matrix 3/4A, 250V, F.B.
 F116 +12V Secondary 3A, 250V, S.B.

Line Filter

Domestic Game 8A
 Foreign Game 5A, S.B.

RUBBER RINGS



Item No.	Part Number	Description.	Qty	Item No.	Part Number	Description.	Qty
A	23-6327	Ball Shooter Tip	1	G	23-6694-6	Rubber Ring 1"	4
B	23-6556	Black Sleeve	8	H	23-6694-8	Rubber Ring 1 1/2"	1
C	23-6641	Rubber Bumper .64 od	7	I	23-6694-10	Rubber Ring 2 1/2"	2
D	23-6694-1	Rubber Grommet 3/32"	3	J	23-6695	Flipper Ring 1 1/2"	2
E	23-6694-3	Rubber Ring 5/16"	6	K	23-6694-9	Rubber Ring 2"	2
F	23-6694-5	Rubber Ring 3/4"	1	L	23-6553-4	Flipper Rubber, Red	1

WARNINGS & NOTICES

WARNING

FOR SAFETY AND RELIABILITY, substitute parts and equipment modifications are not recommended. Use of Non-BALLY parts or modifications of game circuitry, may adversely affect game play, or may cause injuries.

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WARNING

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RF Interference Notice

CABLE HARNESS PLACEMENTS and ground strap routing on this game have been designed to keep RF radiation and conduction within levels accepted by the FCC Rules.

TO MAINTAIN THESE LEVELS, reposition harnesses and reconnect ground straps to their original placements, if they become disconnected during maintenance.

FCC STICKER. Check the back of your game to verify that an FCC-certification sticker was attached to your game at the factory. All Games that leave the BALLY plant have been tested and found to comply with FCC Rules. Because the sticker is proof of this fact, legal repercussions to the owner and distributor may result, if the sticker is missing. If you receive a game, manufactured after December 1982, that has no FCC sticker, call BALLY for advice or write us a note on your Game Registration Card. Be sure that the card bears your game's serial number.

FOR SERVICE...
CALL your authorized
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**CAUTION: Transport this game ONLY
with hinged backbox DOWN!**