

## Game Operating Manual



### Manual Includes:

Operation & Adjustment \* Parts Information \* Wiring Diagrams

Technical Support 1-800-524-2343

Shuffleally.com LLC., 1915 Swarthmore Avenue, Lake Wood, New Jersey 08701

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*Patru Bohm*

1

### Game Assembly Guide

Read and understand this guide before assembly.  
(For safety reasons, two (2) assemblers recommended)

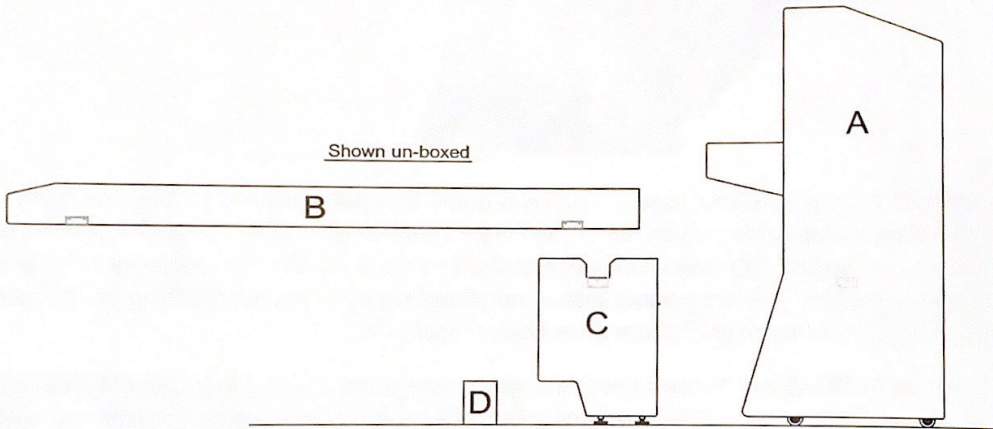
- A = Main Cabinet
- B = Playboard (Alley) Carrier
- C = Front Pedestal
- D = Corrugated Shipping Box  
(Save this box to assist in assembly procedure)

Shown as boxed



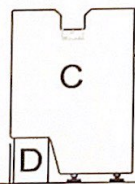
2

Shown un-boxed

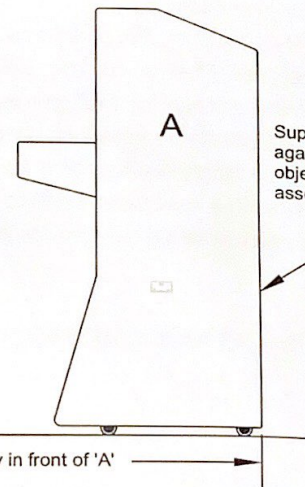


3

Slide 'D' under front end of 'C' to support during assembly.



Place 'C' approx. 105" directly in front of 'A'



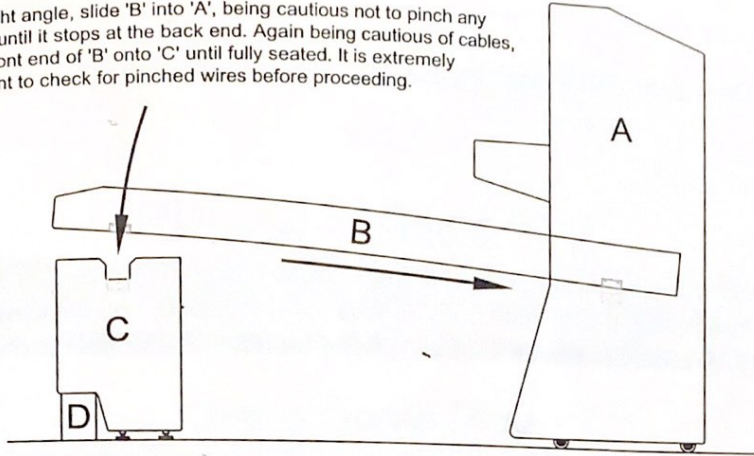
Support back surface against wall or stationary object during entire assembly.

*Patricia Bohm*



4

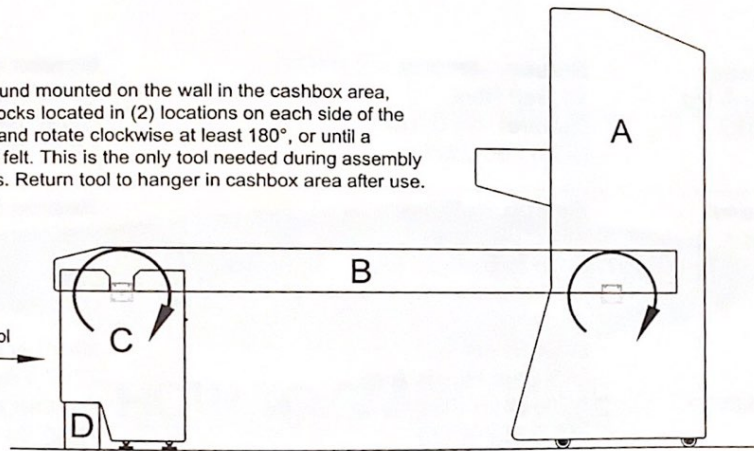
At a slight angle, slide 'B' into 'A', being cautious not to pinch any cables, until it stops at the back end. Again being cautious of cables, lower front end of 'B' onto 'C' until fully seated. It is extremely important to check for pinched wires before proceeding.



5

Using the Hex Tool found mounted on the wall in the cashbox area, insert tool into Roto Locks located in (2) locations on each side of the assembly (total of 4), and rotate clockwise at least 180°, or until a positive resistance is felt. This is the only tool needed during assembly of the cabinet sections. Return tool to hanger in cashbox area after use.

Roto Lock (5/16") Hex Tool  
97-1004-00  
(mounted on the wall  
in cashbox area)



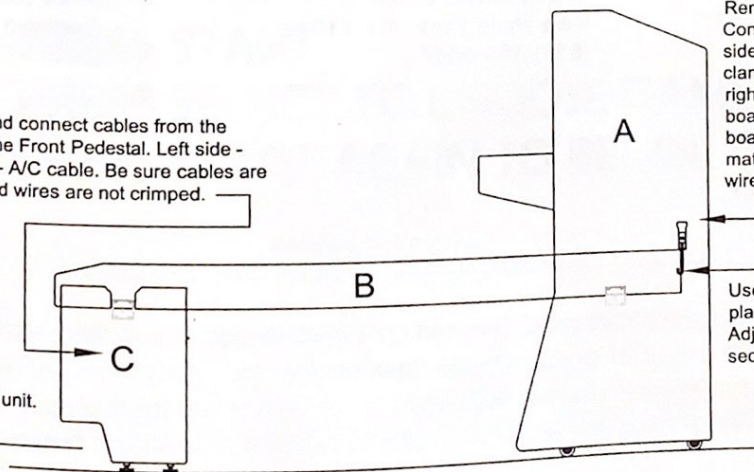
6

Open the coindoor and connect cables from the Playboard Carrier to the Front Pedestal. Left side - main cable, right side - A/C cable. Be sure cables are connected properly and wires are not crimped.

Remove both access doors. Connect cables and dress down sides of cabinet in existing clamps. Left side - A/C cable, right side - playboard to I/O board and main cable to I/O board. Be sure wire colors match up at connectors and no wires are crimped.

Remove 'D' after assembly is complete. Save for future dis-assembly and assembly of unit.

Use Clamp to secure playboard at center 1/2" hole. Adjust clamp to ensure a secure fit.



*Patrick Bohm*

Distribution offices associated with Shufflealley.com.

For parts and service, call your local distributor. The locations listed below are the Betson offices associated with ShuffleAlley. If your state doesn't have a distributor or you are in need of parts or service call 1-800-524-2343. Distributor's list and phone numbers are subject to change.

**Betson Enterprises**  
303 Paterson Plank Rd.  
Carlstadt, NJ 07072  
(201) 438-1300

**Betson Enterprises**  
1915 Swarthmore Ave  
LakeWood, NJ 08701  
(732) 942-7201

**Betson West**  
5660 Knott Ave  
Buena Park, CA 90621  
(714) 228-7500

**New England Coin Op**  
232 Vanderbilt Ave  
Norwood, MA 02062  
(781) 769-9760

**Betson West**  
10250 N. 19th Ave  
Suite A.  
Phoenix, AZ 85021  
(480) 380-8857

**Betson Carteret**  
11 Self Blvd  
Carteret, NJ 07008  
(732) 750-2200

**Betson Baltimore**  
3431-1A Benson  
Baltimore, MD 21227  
(410) 646-4100

**Betson West**  
213 East Harris Ave  
South San Francisco, CA 94080  
(650) 952-4220

**Betson Enterprises**  
141 Lakeville Road  
New Hyde Park, NY 11040  
(516) 354-4647

**Betson Advance**  
6743 Thompson RD.  
Syracuse, NY 13211  
(315) 437-2400

**Betson Philadelphia**  
310 Hansen Access Rd.  
King of Prussia, PA 19406  
(610) 265-1155

**Betson Pittsburgh**  
2707 West Carson Street  
Pittsburgh, PA 15204  
(412) 331-8703

**Betson West**  
5329 S.E. 80th Ave.  
Portland, OR 97206  
(503) 772-4567

*Patricia Bohm*



### REGULATION Game Play:

Scoring is Based on American Bowling Congress Rules and Regulations.

### MULLIGAN Game Play:

Scoring is the Same as Regulation, and Allows Unlimited Mulligans (Reset Pins and Play Frame Again) Purchased at 25¢ Each.

Purchased Mulligans Must Be Used Before Game Over.

### 3-6-9 Game Play:

Scoring is the Same as Regulation, and Gives an Automatic Strike on Frames 3, 6, and 9

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## HOW TO START GAME

1. INSERT MONEY
2. PRESS START
3. PRESS SELECT TO CHOOSE GAME
4. PRESS START AGAIN TO BEGIN

ShuffleAlley.com, LLC™ ©2003

We have included a copy of the Instruction and Game instruction cards to be used as a temporary replacement. Simply copy cards onto a sturdy card stock and cut out to size. Cards to be used until a replacement can be ordered. Instruction card P/N 71-0001-00. Game Instruction card P/N 71-0003-00.



*Patrick Bohm*

WHERE NOSTALGIA MEETS TECHNOLOGY  
**ShuffleAlley.com**

FOR AMUSEMENT ONLY

**1 PLAY for 50¢**

ShuffleAlley.com, LLC™ ©2003

WHERE NOSTALGIA MEETS TECHNOLOGY  
**ShuffleAlley.com**

FOR AMUSEMENT ONLY

**1 PLAY for 50¢**

**BEST VALUE**

**5 PLAYS for \$2.00**

ShuffleAlley.com, LLC™ ©2003

We have included a copy of the Coinage Cards to be used as a temporary replacement. Simply copy cards onto a sturdy card stock and cut to size. Cards to be used until a replacement can be ordered. Coinage card 1 is a double sided card. The P/N is 71-0002-00.

*Patru Bohm*





FOR AMUSEMENT ONLY

1 PLAY for 50¢

**BEST VALUE**

3 PLAYS for \$1.00

ShuffleAlley.com, LLC™ ©2003



FOR AMUSEMENT ONLY

1 PLAY for 50¢

**BEST VALUE**

12 PLAYS for \$5.00

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We have included a copy of the Coinage cards 2 to be used as a temporary replacement. Simply copy cards onto a sturdy card stock and cut to size. Cards to be used until a replacement can be ordered. Coinage card 2 is a double sided card. P/N is 71-0004-00.



*Patricia Bohm*





FOR AMUSEMENT ONLY

**1 PLAY for \$1.00**

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FOR AMUSEMENT ONLY

**1 PLAY for \$1.00**

**BEST VALUE**

**6 PLAYS for \$5.00**

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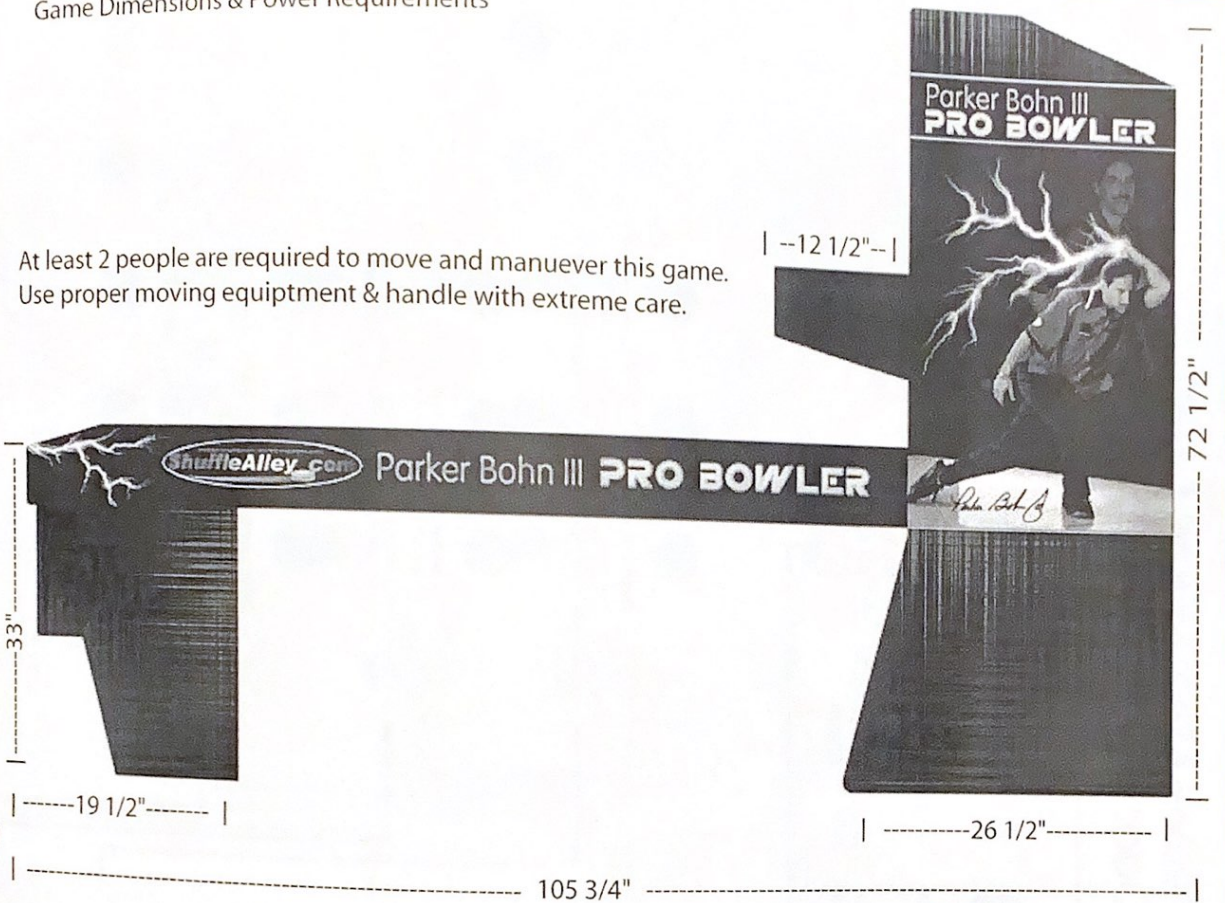
We have included a copy of Coinage Cards 3 to be used as a temporary replacement. Simply copy onto a sturdy card stock and cut to size. Cards to be used until a replacement can be ordered. Coinage card 3 is a double sided card. The P/N is 71-0005-00.

*Patricia Bohm*



Game Dimensions & Power Requirements

At least 2 people are required to move and maneuver this game.  
Use proper moving equipment & handle with extreme care.



Average Operation 2.0 amps ,235 Watts  
Max Operation 5.0 amps ,587.50 Watts

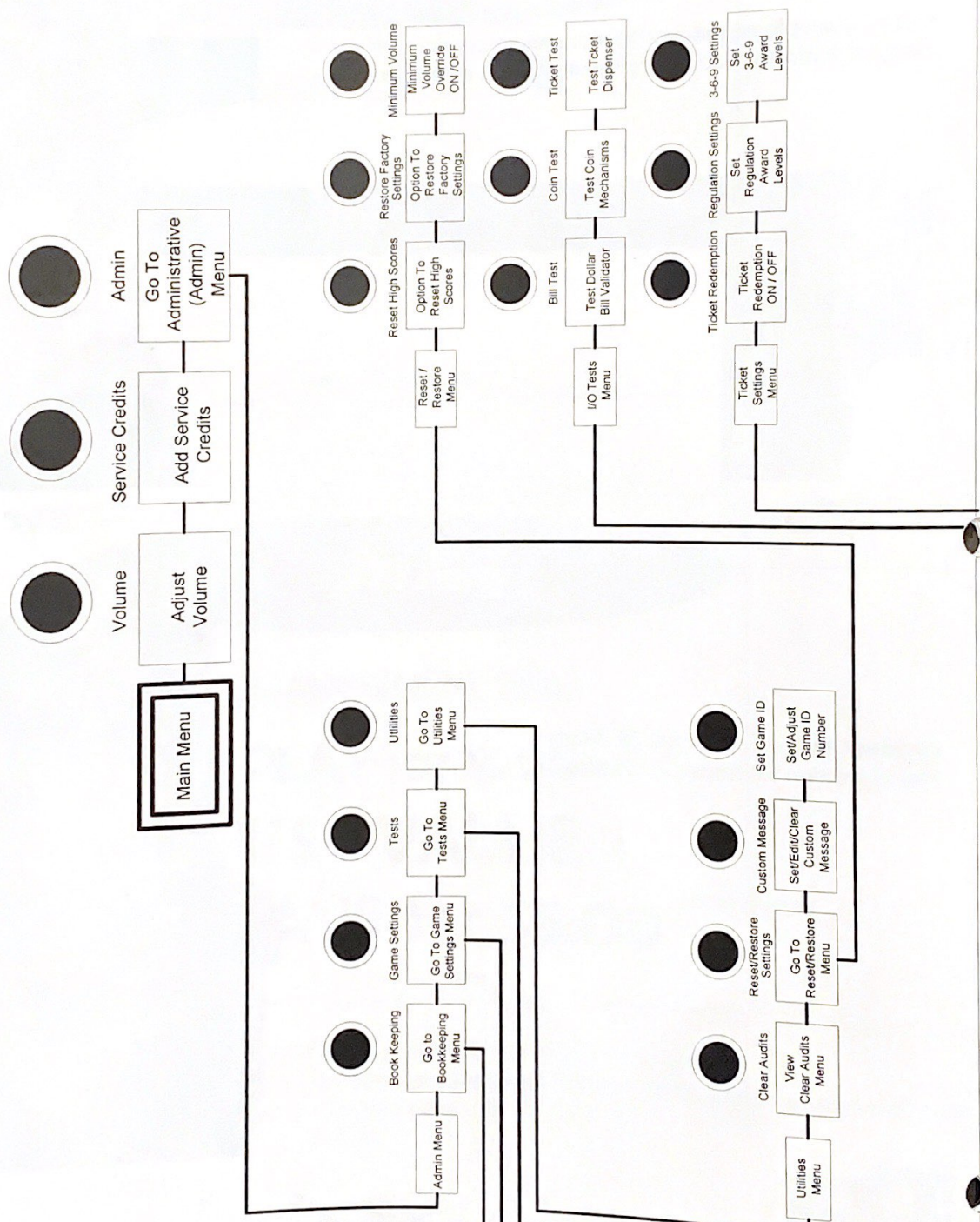
Weight 440lbs

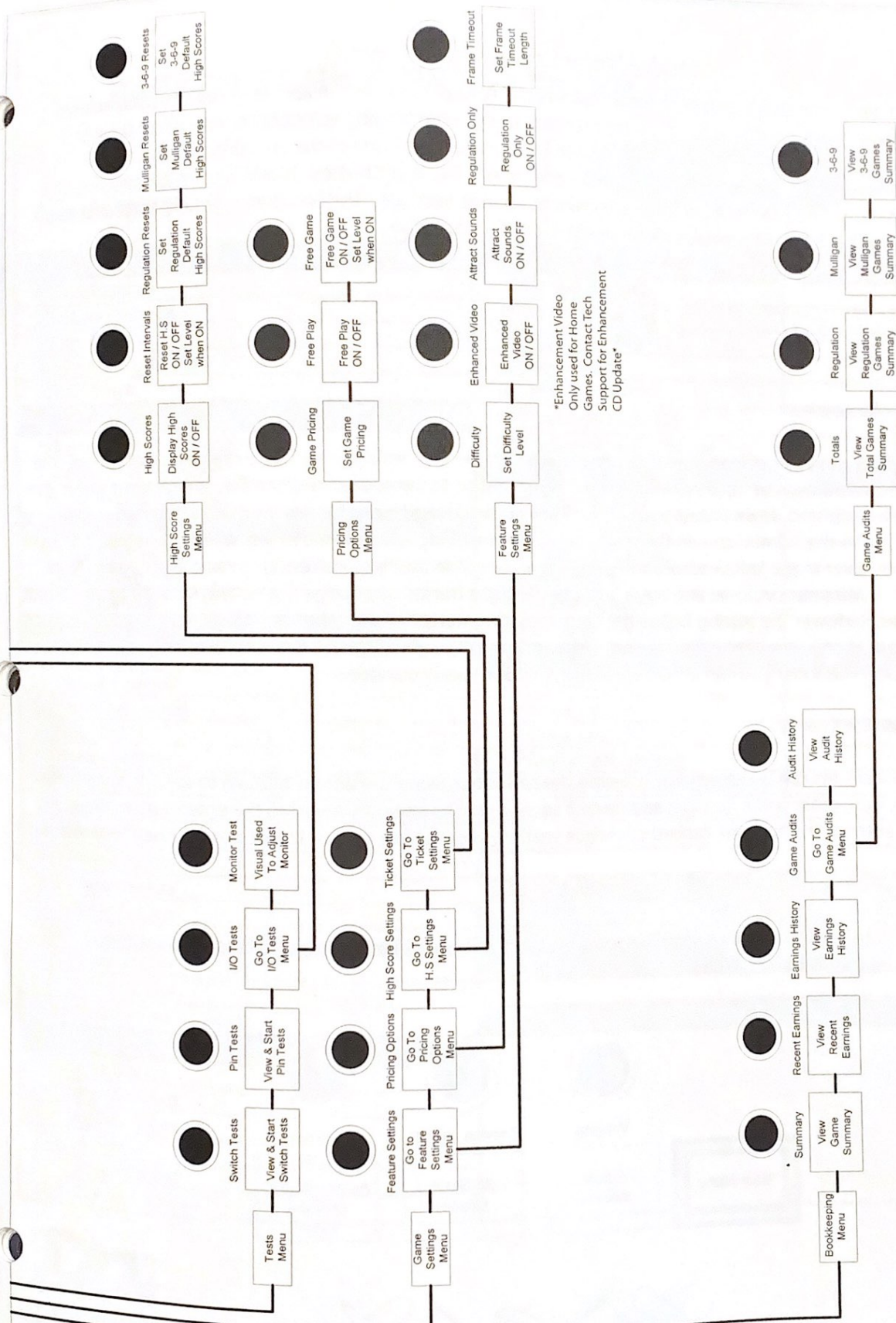
Game Dimensions: Height 72 1/2" x Width 27 1/2" x Length 106"



*Parker Bohn III*

# Service / Administrative Menu Flow Chart (Open Coin Door To Access)

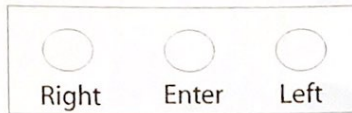




\*Enhancement Video  
 Only used for Home  
 Games. Contact Tech  
 Support for Enhancement  
 CD Update\*

## Service Menu System Operations

The main menu allows you to choose from several categories, which in turn leads to other sub-menus to choose from. To access the main menu, open the coin door and you will automatically enter into the Main menu. Locate the 3 buttons on the bottom left hand side of the coin door. These are the buttons used to maneuver through the service menu. The Right button (black) is used to scroll through the menu's. The Enter Button (green) is used to change settings. The Left button (red) is used as a way to return back from a previous menu or exit a existing function.



### 1. Volume menu.

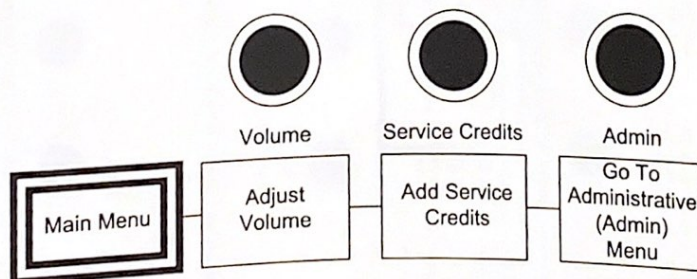
Highlight the volume icon, press the enter button to enter in volume menu. To raise or lower the volume use the left button to raise volume and the right button to lower the volume. The default is set to 40. This can't be adjusted down unless you set the Minimum volume to on. Minimum Volume can be located by scrolling to the Admin icon on the main menu, and pressing enter. Once in the admin menu you will need to scroll over to the Utilities icon, and press enter. Scroll to the Restore/reset icon and enter again. Now scroll to Minimum volume and enter and use the right button to change the setting from off to on. It's not advised to lower the setting below the factory setting because it may hurt earnings. There are two ways to exit and save. Either press enter again and use the left repeatedly to exit back to the main menu. Or you can simply close the coin door and your done.

### 2. Service Credits.

Service credits can be entered by opening the coin door, using the admin buttons to scroll to the service credit icon, press enter. You can add up to 3 service credits (max) by pressing the enter button. Once you have entered the amount desired of service credits press the left button to exit out or close the coin door.

### 3. Admin Menu.

All the remaining functions are accessed through the Admin Menu. You can access Bookkeeping, Game Settings, Tests, Utilities.



*Patru Bohu B.*



# PARKER BOHN III PRO BOWLER

## GAME AUDIT TABLE



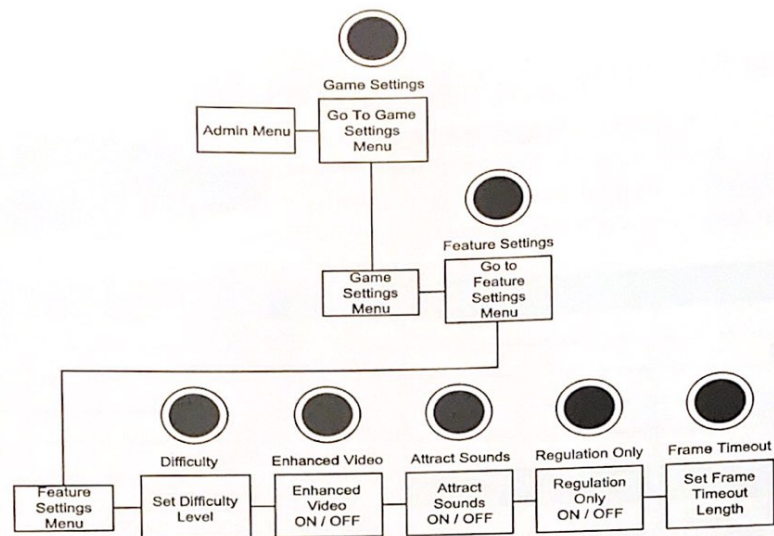
Bookkeeping:

Summary Audit		Fill-In	Mulligan Game Audit		Fill-In
1	Total Earnings		33	Games Started	
2	Recent Earnings		34	Games Finished	
3	Free Play %		35	Total Free Games	
4	Average Game Time		36	Free Play %	
5	Total Plays		37	Tickets Awarded	
Recent Earnings Audit		Fill-In	38	% Tickets Awarded	
6	\$ Amount in Bill Acceptor		39	Mulligan Credits Bought	
7	\$ Amount in Cash Box		3,6,9 Game Audit		Fill-In
8	Total Recent Earnings		40	Games Started	
Earnings History Audit		Fill-In	41	Games Finished	
9	Total \$ Bill Validator		42	Total Free Games	
10	Total \$ Coin Tray		43	Free Play %	
11	Total Earnings		44	Tickets Awarded	
Game Audits		Fill-In	45	% Tickets Awarded	
12	Games Started		Audit History		Fill-In
13	Games Finished		48	Current Time	
14	Total Free Games		49	Clock 1st Set	
15	Free Play %		50	Clock Last Set	
16	Tickets Awarded		51	Audits Last Cleared	
17	% Tickets		52	Factory Settings Last Cleared	
18	Minutes of Play		53	Last Game Start	
19	Minutes On		54	Last High Score Reset	
20	1 Player Games		Game Version:		
21	2 Player Games		Date Audited:		
22	3 Player Games		Audited By:		
23	4 Player Games		Location:		
24	5 Player Games		Notes:		
25	6 Player Games				
26	High Score Reset Count				
Regulation Game Audit		Fill-In			
27	Games Started				
28	Games Finished				
29	Total Free Games				
30	Free Play %				
31	Tickets Awarded				
32	% Tickets Awarded				



Parker Bohn III

## Game Settings



The Game Settings can be accessed by scrolling to the Admin icon and pressing enter. From there you scroll past bookkeeping to game settings and press enter again. You have a series of icons located here, this section will discuss the feature settings. To adjust any setting simply scroll to the icon you desire press enter once, press enter again once entered into setting desired and use the right button to change setting. As with any menu, when you have the change set on the screen press the left button to exit or close the door

### 5. Feature Settings

5:1 Set Difficulty level. Here you can adjust how hard the game level is. The default is set as factory setting. The factory setting auto adjusts to the player. If they play good and get a couple strikes, the game will progressively get harder for them. Getting strikes and even spares will become increasingly more difficult. Of course depending on location there are a number of settings to increase the odds of getting a 300. 1 - easy, 2 - medium, 3 - hard, 4 - factory setting. To adjust the settings enter into set difficulty level and press enter, once in you can scroll with the right button until you as satisfied with the selection highlighted. To exit and save, press the left button or simply close the door.

5:2 Enhanced Video. This Mode is only sent out with Home Games. If you want to add this mode to your game, Contact Technical Support and order an Enhancement upgrade CD to your arcade model. You can turn on Parker Bohn III video and sound clips to comeup on the monitor after every strike and spare. With the Enhanced CD the game play will be slowed a little bit so the player will enjoy hearing Parker's comments.

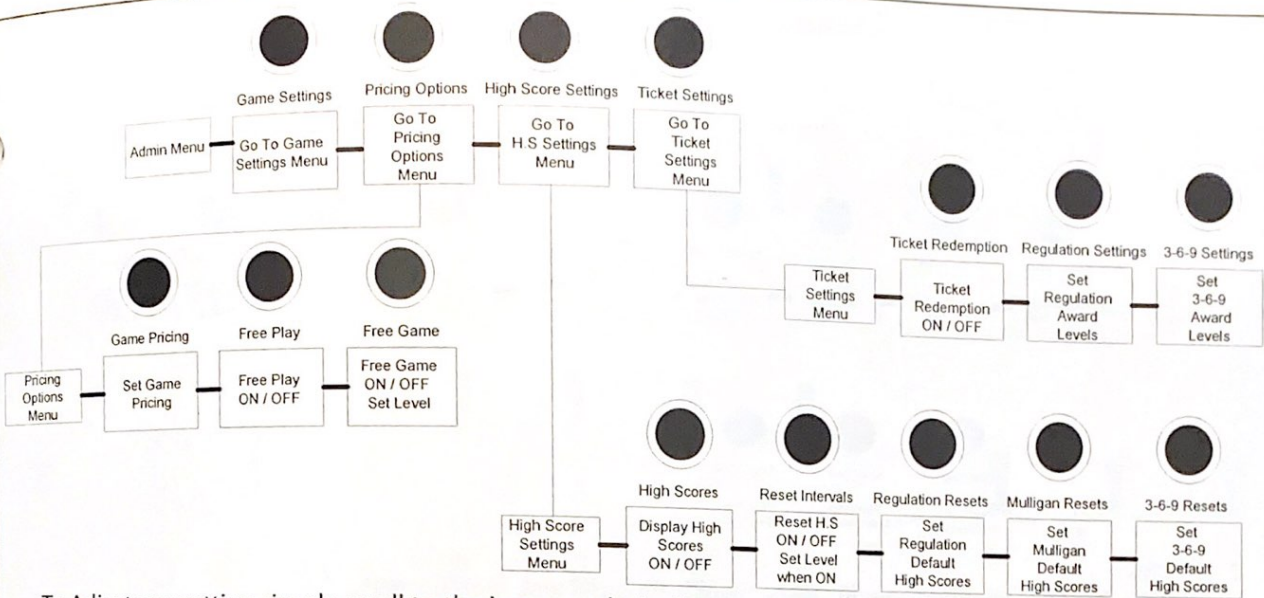
5:3 Attract sounds. Here you can shut off all the parker clips and sound in attract mode.

5:4 Regulation Only. This is a mode to shut off Mulligan and 3-6-9 mode to leave Regulation as the only accessible game. Default is set to off.

5:5 Set frame timeout length. The frame timeout is the time allowed between frames and the first & second shot slid. The default setting is 20 invisible & 10 seconds visible. The player will only see the 10 seconds on monitor as the 20 seconds is countdown silently. This is adjustable only for the invisible timer, from 10 seconds to 50 seconds. The visible timer is always set for 10 seconds.

*Parker Bohn III*





To Adjust any setting simply scroll to the icon you desire by pressing enter once, press enter again once entered into setting desired and use the right button to change setting. As with any menu, when you have change set on the screen, press the left button to exit back to a previous menu or close the door.

#### 6:1 Setting Pricing changes

We have a limited amount of settings for pricing. The default is set at 1 - \$0.50/ 5 - \$2.00. You can adjust the pricing to one of the following settings: \$0.50/3-\$1.00, \$0.50/ 12-\$5.00, \$0.50 only, \$1.00/6-\$5.00 or \$1.00 only. Follow the chart listed above to get to game pricing.

#### 7:1 Free Play.

This is a no coin needed mode or home setting. The default for this is set to Off.

#### 8:1 Free game.

This is a free game award for players who achieve a set score. The default is set to 0. The scores to be set ranges from 175-300. This mode is meant to give players a sense of achievement. If they acquire a set score they are awarded a free game.

#### 9:1 High score settings.

In this menu you can shut off the display of high scores in attract mode. The default is set to On. It is not recommended to turn this mode off, if players can't see the leader board, they have nothing to shoot for and ultimately it may hurt earnings. The reset intervals are the amount of games set that the system will reset high scores automatically. The setting is defaulted off but should be set to a minimum of 250 games. The maximum is 250,000 games. If you don't want to wait for a minimum of 250 games for the system to automatically reset your high scores, you can reset them by game in the high scores menu at any time.

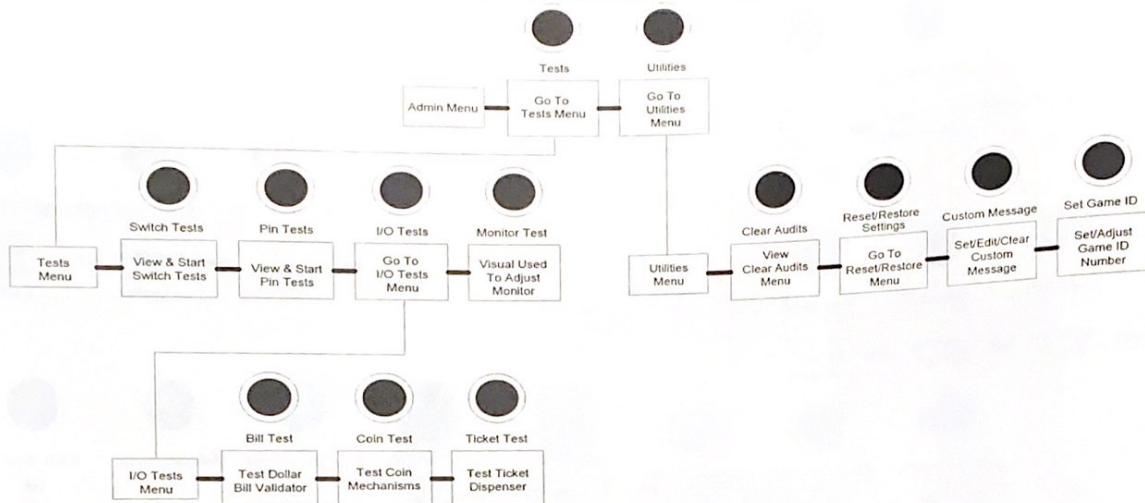
#### 10:1 Ticket Settings.

Ticket redemption gives you the option to dispense tickets. The default is set off. Set regulation and 3-6-9 award levels is set for a single payout of a preset ticket amount at a score level. The payout will commence at games end. Payouts can start as low as 90 all the way up to 300.



*Peter Bohm*





### 11:1 Tests.

Pro Bowler has the following specific tests: Switch, Pins, I/O test, Monitor test.

11:2 Switch tests has two specific tests, 1 is the playboard test. This will test all functions of the Playboard. You can view a visual of the playfield layout on the next page. To test any switch on the playboard, simply slide the puck with your hand slowly and place it across the switch in which you intend to test. The switch will be highlighted on the screen when it is closed by the puck. The 2nd test is called other switches. Here you can test the start button, the select button and the slam tilt button for functionality.

11:3 Once you enter into Pin tests it will automatically set all pins to the up position. If you would like to individually test them press the right button when the pins are up and you can scroll through one pin at a time with the enter button. When you are finished you can press the left button to exit or close the door.

11:4 I/O tests are all the dedicated switches. Bill validator and coin test is simply there to tell you if the function is working when you either drop a coin in the coin mech or enter a dollar bill into the dollar bill acceptor. The ticket test will dispense one ticket at a time as you press the enter button and visually be shown on the monitor as to how many ticket were dispensed.

11:5 Monitor test is a helpful tool for an operator to adjust the horizontal and vertical edges of the monitor screen. Be sure to fit the monitor edges within the window of the black bezel.

12:1 Utilities. Clearing audits, and resetting/restoring factory adjustments can be adjusted here by entering into the specific icon as shown on the pictorial above. It is recommended to reset all functions to factory standards and all audits should be cleared once every couple of months.

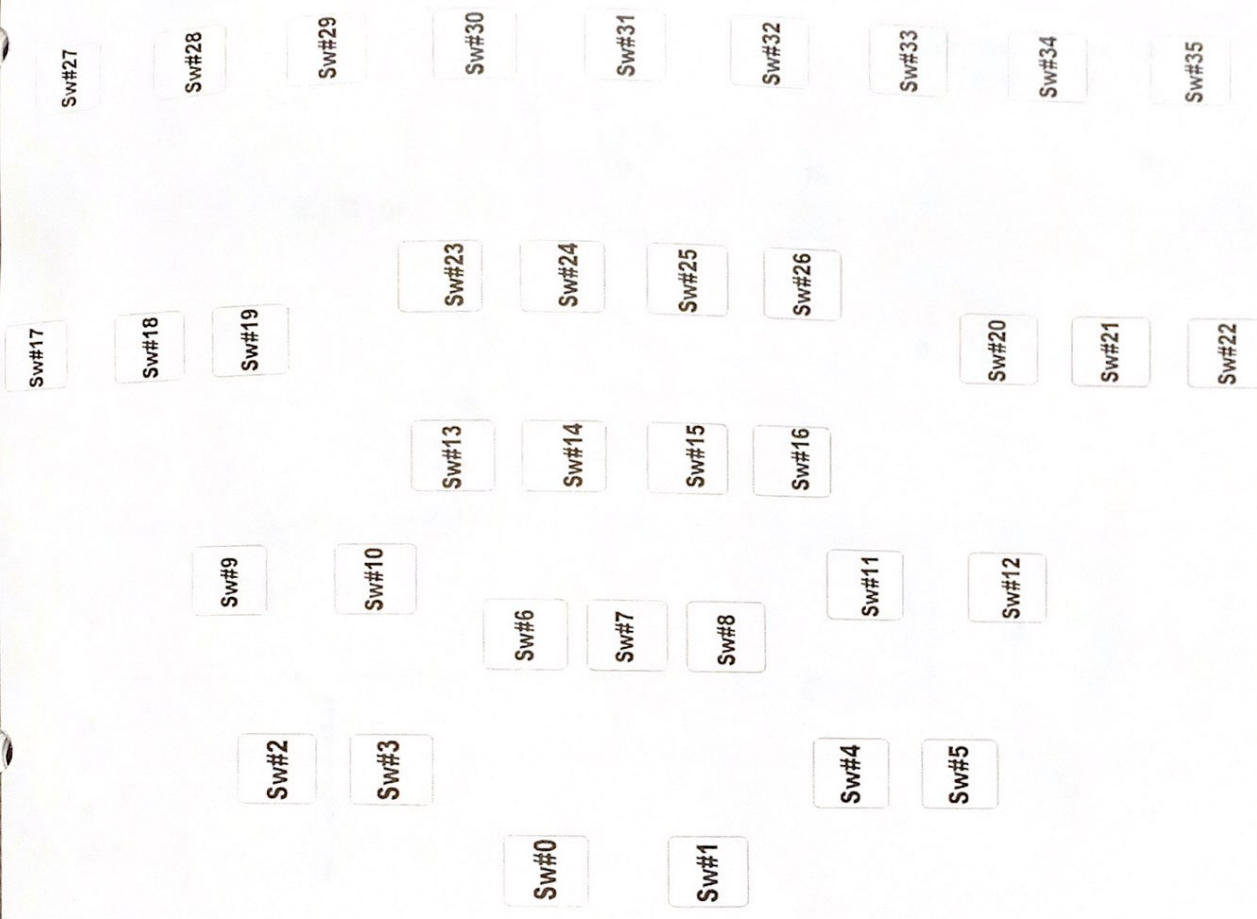
12:2 Custom Message is used for anyone who wants to advertise or simply put words on a monitor screen. The custom message is simple to use. Enter into edit custom message and use the right button to scroll to the letter in which you want to enter. Once entered the letter will begin back at end, scroll again until the message is finished. If you run out of room on line one and have more of a message to enter, scroll to the arrow facing left and that will drop to the second line. If at any time you want to be rid of the message entered on the screen, enter into clear custom message hit enter twice and it will clear from the attract mode.

*Patru Bohm*



Reed Switch Layout on PlayBoard

(Mechanism End)



Playfield view shown from Top View looking through

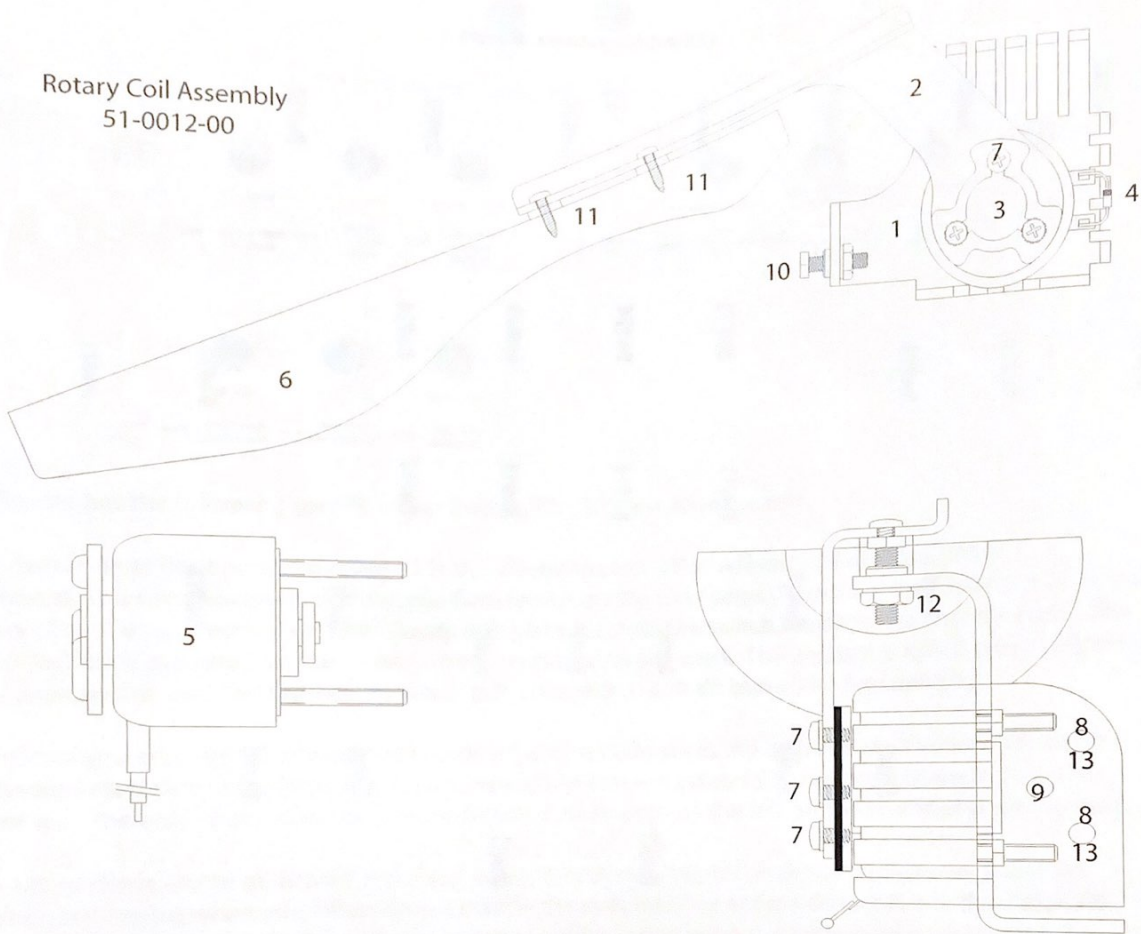


(Player End)



*Patrick Bohm*

Rotary Coil Assembly  
51-0012-00

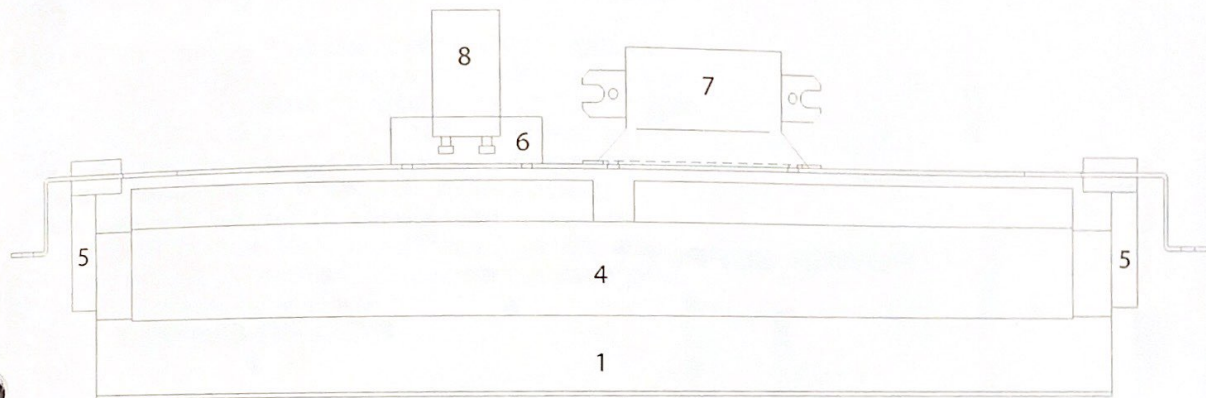
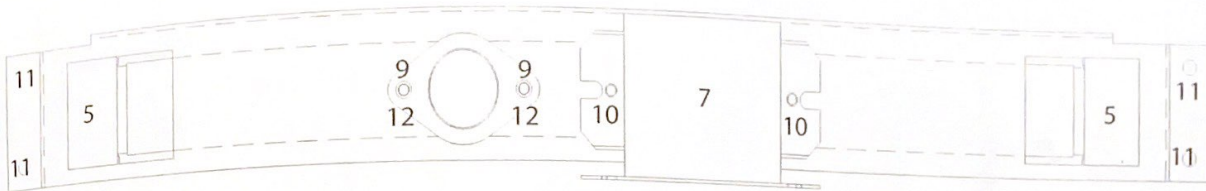


ID Number	Part Number	Assembly Part Name
#1	10-1001-00	Rotary Coil Bracket
#2	10-1002-02	Pin Bracket
#3	10-1004-00	Rotary Coil Spacer
#4	21-0001-00	1N4004 Diode
#5	23-0001-00	Rotary Coil
#6	30-0001-00	Bowling Pin W/Shuffle Artwork
#7	80-1005-04	6-32 x 1/4" Philip Pan Head Screw
#8	80-2010-10	10-24 x 5/8" Hex Washer Head Screw
#9	85-2010-08	#10 x 1/2" Hex Washer Head Screw
#10	85-3410-12	10-24 x 3/4" Nylon Hex bolt
#11	85-8006-08	#6 x 1/2" Philip Pan Head Type 25
#12	91-1010-00	10-24 Keps Nut
#13	91-5010-00	10-24 t-nut

*Patrick Bohm*



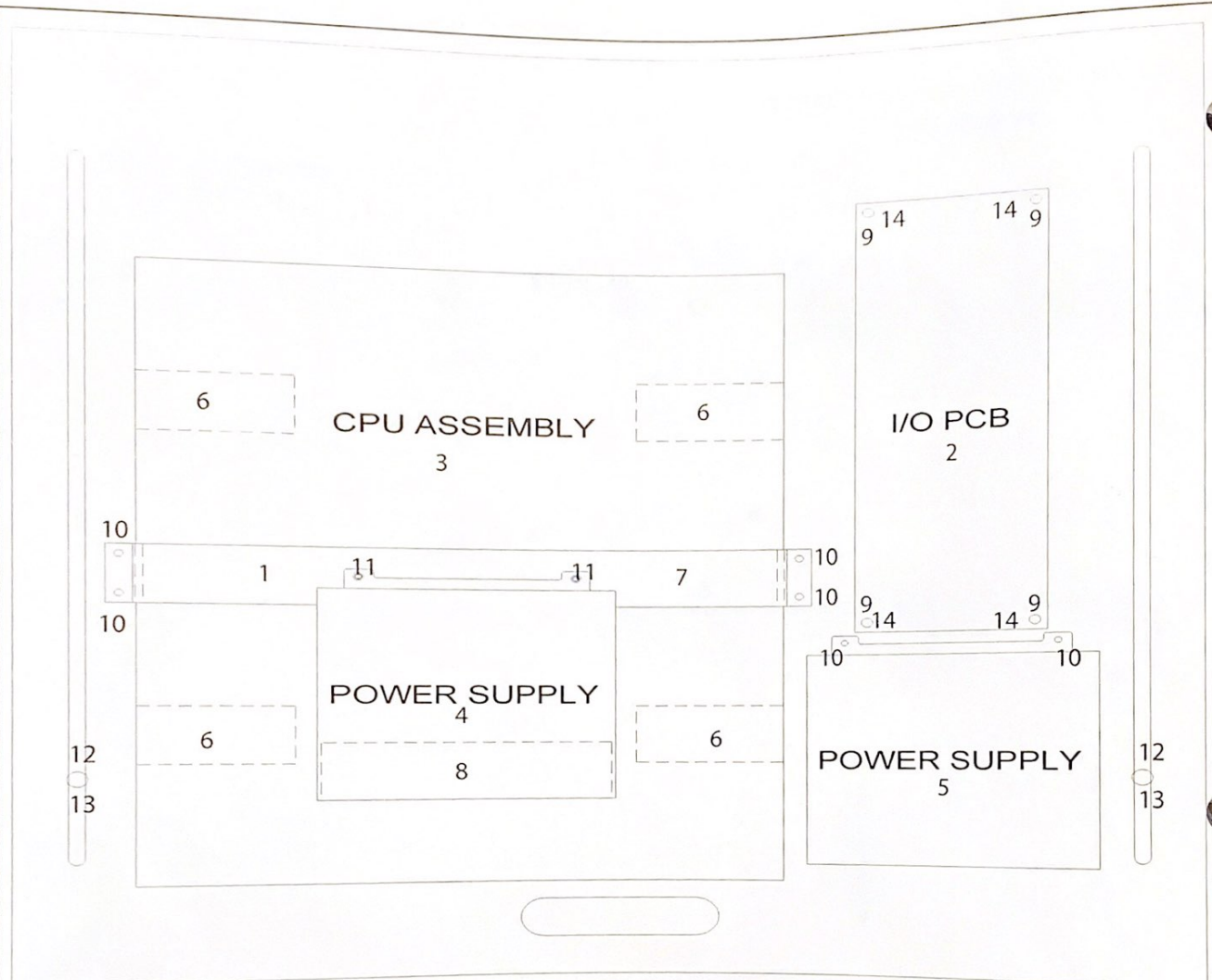
Fluorescent light Fixture Assembly  
24-4001-00



ID Number	Part number	Assembly Part Name
#1	10-1009-00	Lite Fixture Mounting Bracket
#2	20-0093-02	2 pin molex connector
#3	20-6002-00	0.93 pin molex
#4	24-0001-00	FL10T8CW Fluorescent bulb
#5	24-3001-00	Fluorescent lite socket
#6	24-3002-00	Fluorescent starter socket
#7	24-6001-00	Ballast 50/60 HZ
#8	24-6002-00	Starter FS-2
#9	80-0004-12	4-40 x 3/4" Philip Pan Head Screw
#10	82-0006-08	#6 x 1/2" Philip Pan Head Screw
#11	82-2008-04	#8 x 1/2" Hex Washer Head Screw
#12	91-0004-00	4-40 Nylon Stop Nut



*Patrick Bohm*



ID Number	Part Number	Part Name
#1	10-1015-00	CPU MTG Bracket
#2	15-1001-00	I/O Board
#3	15-1002-00	CPU - PB3
#4	16-0001-00	Power Supply +5v,+12v, +18v
#5	16-0002-00	Power Supply +20v
#6	25-2003-00	Anti-Shock Pad Cpu Bottom (X4)
#7	25-2003-01	Anti- Shock Pad Mounting Bracket
#8	25-2003-02	Anti-Shock Pad Power Supply Bottom
#9	82-0006-16	#6 x 1" Philip Pan Head Screw
#10	82-2008-10	#8 x 5/8 Hex Washer Head Screw (X6)
#11	91-0006-00	Nylon Stop Nut 6-32
#12	91-4000-00	1/4-20 Nylock Wing Nut
#13	92-0425-00	Nylon Washer (X2)
#14	94-0000-00	1/2" Standoffs (X4)

*Patrick Bohm*



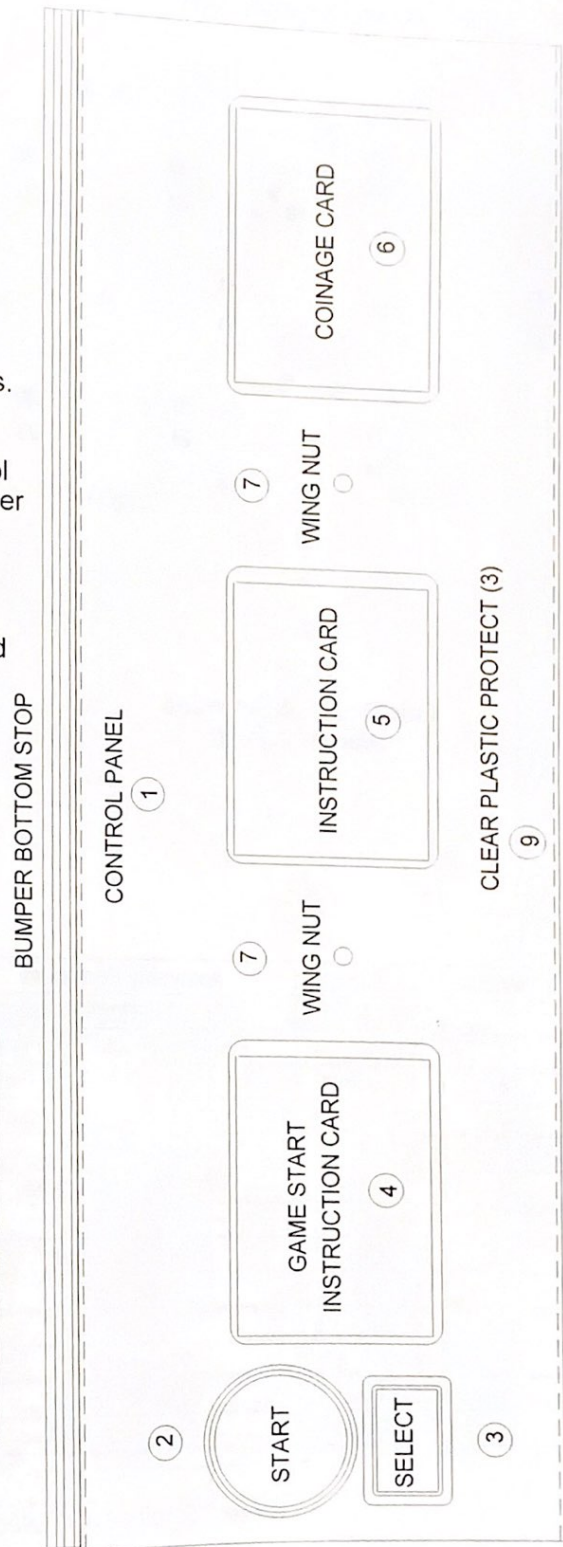
# CONTROL PANEL ASSEMBLY

51-0006-00

Instructions for changing Coinage and Instruction cards.

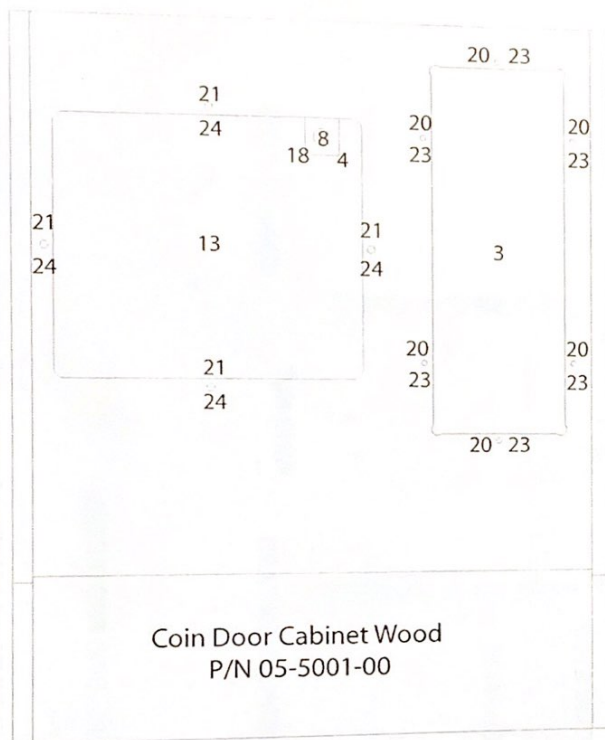
Open the coin door and remove both the wing nuts by twisting them clockwise. Proceed to remove the Control Panel by lifting up on either the front edge or the Bumper Bottom Stop. This will expose a wood panel with 3 cut-outs. Located in the cut-outs will be the coinage and instruction cards. Remove the clear plastic protect sheets from over the card that you intend to replace. Once finished, replace the Control Panel over the wood panel and use the wing nuts to re-secure the panel by turning them counter-clockwise.

ID Number	Part Number	Assembly Part Name
#1	10-1007-00	Control Panel Metal
#2	18-3001-05	Start Button
#3	18-3002-04	Select Button
#4	71-0003-00	Game Start Instruction Card
#5	71-0001-00	Instruction Card
#6	71-0002-00	Coinage card
#7	91-4000-00	Wing Nut (X2)
#8	25-5002-01	Bumper Bottom Stop
#9	30-0005-00	Clear plastic protect sheets(X3)

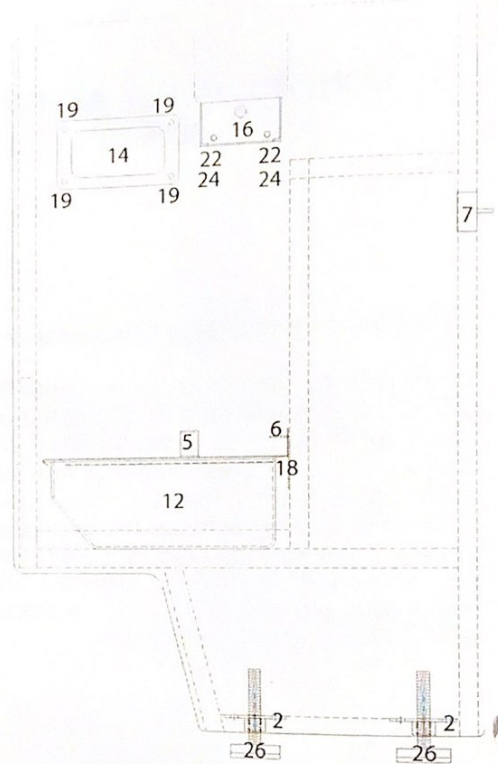


*Patrick Bohm*

# Coin Cabinet Assembly Parts



Coin Door Cabinet Wood  
P/N 05-5001-00



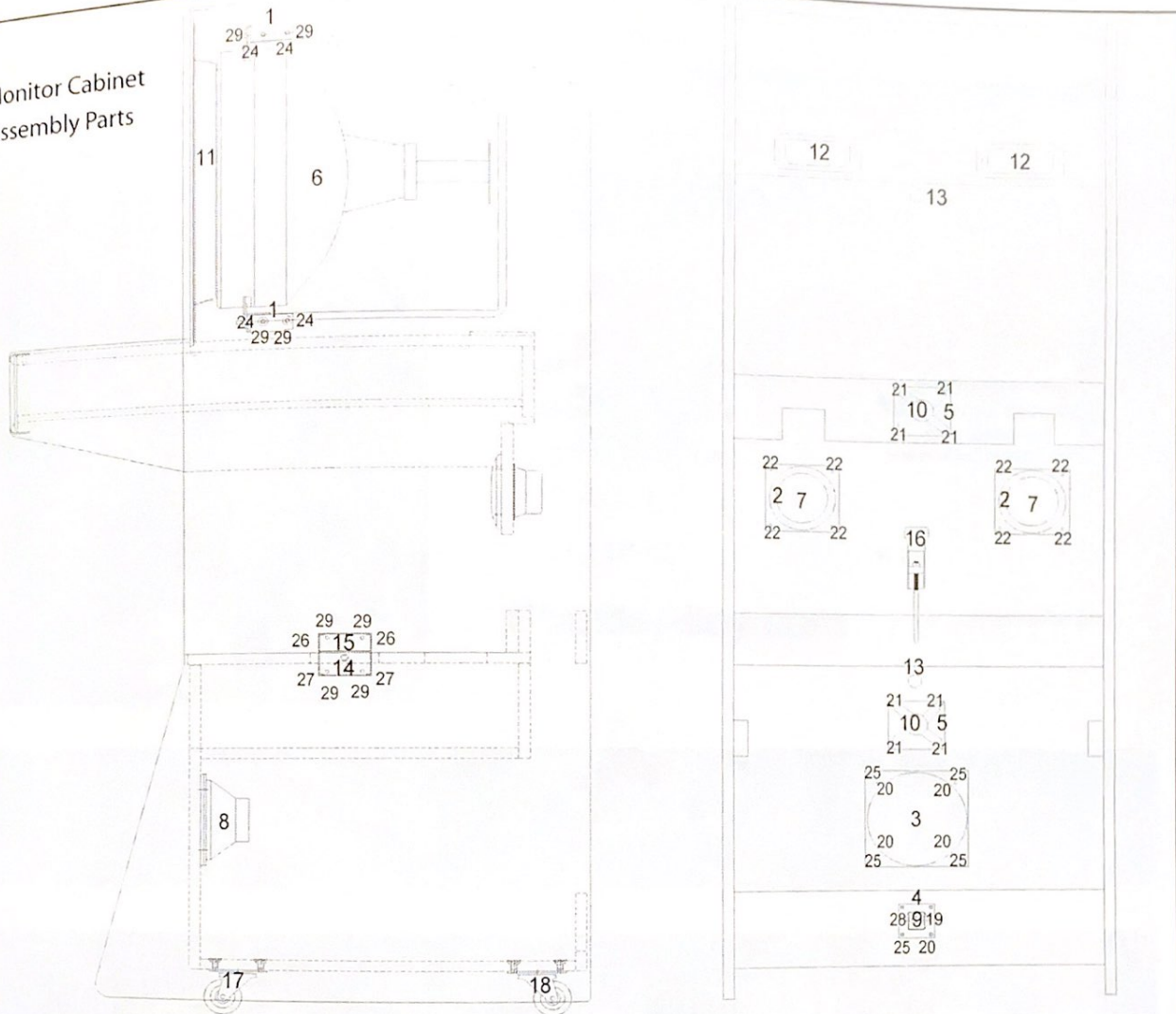
ID Number	Part Number	Assembly Part Name	ID Number	Part Number	Assembly Part Name
1	00-0001-00	*Puck W/ShuffleAlley artwork*	14	42-0001-00	Coin Door Cabinet Handles
2	10-1005-00	Leg Levelor Mounting Plate	15	42-2001-00	*Door Lock*
3	10-1006-00	Ticket Dispenser Blank Plate	16	42-5001-00	Roto Lock Male
4	10-1008-00	Door Open Switch Bracket	17	53-0001-00	*Shuffle Wax*
5	10-1012-00	Cash Box Cover	18	82-2008-10	#8 x 5/8" Hex Washer Head Screw
6	10-1013-00	Cash Box Lock Bracket	19	82-8108-10	#8 x 5/8" Tamper Proof Screw
7	18-0001-00	On & Off Switch	20	90-5110-20	10-24 x 1-1/4" Carriage bolt
8	18-0004-00	Door Open Switch	21	90-5125-24	1/4-20 x 1-1/2" Carriage bolt
9	19-9001-00	*Line Cord*	22	90-5125-28	1/4-20 x 1-13/4" Carriage Bolt
10	22-6001-12	*1- 1/2amp Fuse*	23	91-1010-00	10-24 Keps Nut
11	22-6001-63	*6.3amp Fuse*	24	91-3025-00	1/4-20 Flange Nut
12	30-0004-00	Cash Box Plastic	25	97-1001-50	*Hex Wrench*
13	40-0001-25	Coin Door - PB3	26	97-1004-00	Leg Levelor

Note: \* Signifies part used in Assembly but not shown visually.

*Saku Boba Co.*



Monitor Cabinet  
Assembly Parts



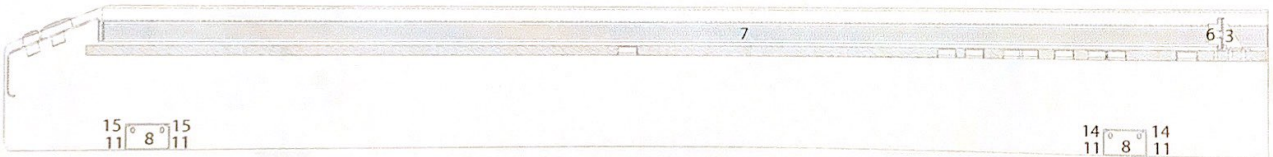
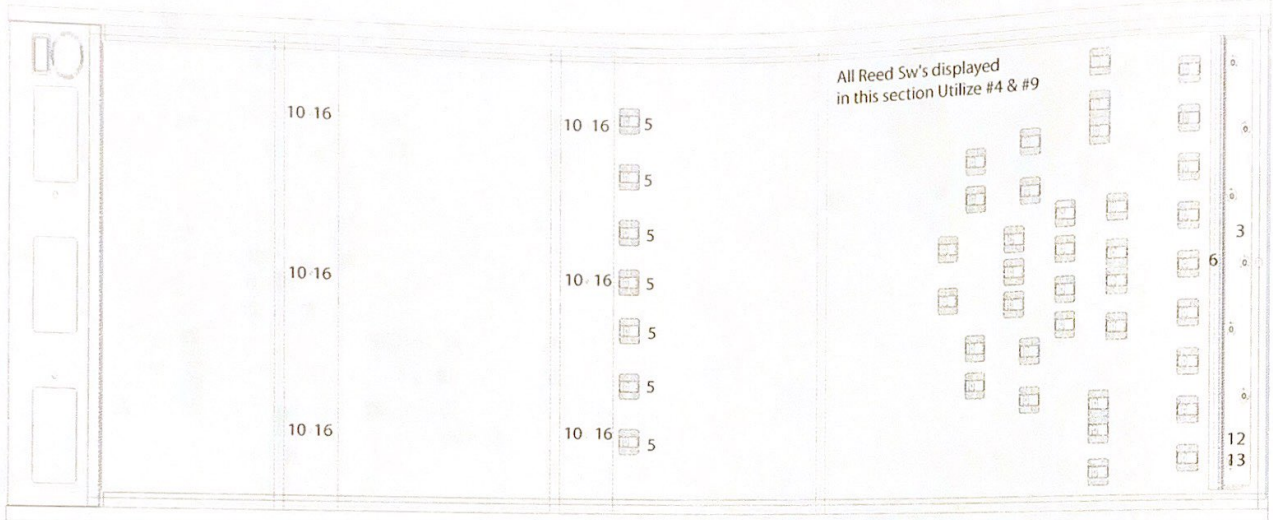
ID Number	Part Number	Assembly Part Name	ID Number	Part Number	Assembly Part Name
1	10-1011-00	Monitor Brackets	16	42-5002-00	Large Draw Latch
2	10-1014-00	Speaker Grille 5"	17	51-0009-00	Swivel Caster Wheels W/Brake
3	10-1014-01	Speaker Grille 8"	18	51-0010-00	Swivel Caster Wheels WO/Brake
4	10-1016-00	Line Filter Mounting Bracket	19	80-0004-06	4-40 x 3/8" Philip Pan Head Screw
5	10-1017-00	Fan Guard	20	80-6110-12	10-24 Keps Nut
6	17-0001-00	27" Flat Screen SVGA Monitor	21	82-008-34	#8 x 2 1/8" Philip Pan Head Screw
7	17-6001-00	5" Speakers 4 ohm	22	82-2008-10	#8 x 5/8" Hex Washer Head Screw
8	17-6002-00	8" Speaker 4 ohm	23	82-8108-10	#8 x 5/8" Tamper Proof Screw
9	22-0001-00	Line Filter	24	90-5110-20	1/4-20 x 1 1/4" Carriage Bolts
10	23-5001-00	Fan	25	90-5110-20	10-24 x 1 1/4" Carriage Bolts
11	30-0002-00	Flat Screen Monitor Bezel Black	26	90-5125-24	1/4-20 x 1 1/2" Carriage Bolt
12	42-0001-00	Cabinet Handle	27	90-5125-40	1/4-20 x 2 1/2" Carriage Bolt
13	42-2001-00	Lock	28	91-0004-00	4-40 Nylon Stop Nuts
14	42-5001-00	Roto Lock Male	29	91-3025-00	1/4-20 Flange Nuts
15	42-5001-01	Roto Lock Female			



*Patrick Bohm*



# Playboard Cabinet Assembly Parts



ID Number	Part Number	Assembly Part Name
1	05-5004-00	*Playboard With Artwork *
2	05-5006-00	*Under Playboard Access Panel*
3	10-1003-00	Rebound Bracket
4	18-0002-00	Reed Switch With Diode
5	18-0003-00	Reed Switch Without Diode (HCTP)
6	25-2001-00	Rebound Rubber
7	25-2002-00	Side Panel Rubber
8	42-5001-01	Roto Lock Female
9	80-0204-07	#4 x 7/16 Philip Pan Head Non Magnetic Screw
10	82-0008-18	#8 x 1 1/8 Philip Pan Head
11	90-3025-00	1/4-20 Flange Nut
12	90-3025-16	1/4-20 x 1 Hex Head Bolt
13	90-5025-00	1/4--20 T-nut
14	90-5125-28	1/4-20x 1 3/4 Carriage Bolt
15	90-5125-40	1/4-20 x 2 1/4 Carriage Bolt
16	92-0008-00	#8 Washer

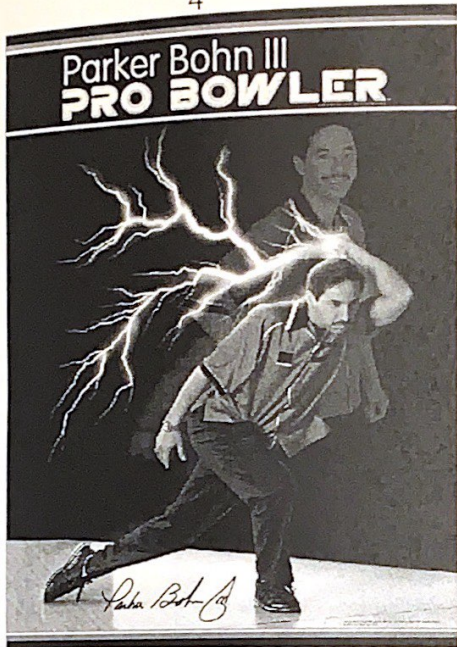
(\*) Indicates Object not shown Visually

*Patrick Bohm*



PB3 Production Art Part Numbers

4



5  
 ShuffleAlley.com

8

LEFT ENTER RIGHT  
 ShuffleAlley.com  
 TECHNICAL SERVICE  
 800-524-2343  
 www.shufflealley.com

6

ShuffleAlley.com  
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 800-524-2343  
 www.shufflealley.com

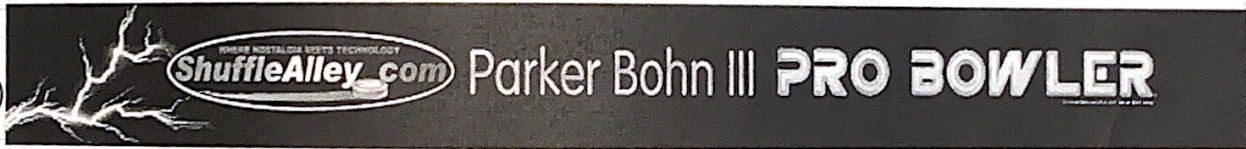
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ShuffleAlley.com

9

ShuffleAlley.com

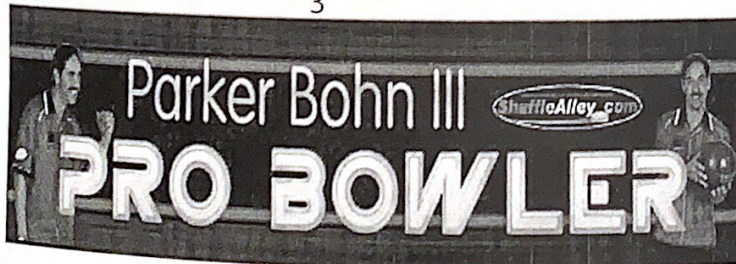
12



11



3



ID Number	Part Number	Art Part Name
1	60-0000-00	*Monitor plastic*
2	60-0001-00	*Marquee Plastic*
3	61-0001-00	Marquee Art
4	62-0000-00	Monitor Decal (Lt & Rt same Decal)
5	62-0001-01	Monitor Logo Decal
6	62-0001-02	Tech Decal
7	62-0001-03	Cpu Cover Decal
8	62-0001-04	Admin Button Decal
9	62-0001-05	Puck Decal
10	62-0001-XX	*Decal Sheet*
11	62-0002-00	Left Playboard Decal
12	62-0003-00	Right Playboard Decal

\* Indicates part not shown visually



*Parker Bohn III*

	GRN/ BRN	GRN/ RED	GRN/ ORG	GRN/ YEL	GRN/ BLK	GRN/ BLU	GRN/ VIO	GRN/ GRY
WHT/BRN	SW #0 <sup>1</sup>	SW #8 <sup>9</sup>	LEFT <sup>17</sup>	NOT USED <sup>25</sup>	NOT USED <sup>33</sup>	NOT USED <sup>41</sup>	NOT USED <sup>49</sup>	NOT USED <sup>57</sup>
WHT/RED	SW #1 <sup>2</sup>	SW #9 <sup>10</sup>	RIGHT <sup>18</sup>	NOT USED <sup>26</sup>	NOT USED <sup>34</sup>	NOT USED <sup>42</sup>	START <sup>50</sup>	NOT USED <sup>58</sup>
WHT/ORG	SW #2 <sup>3</sup>	SW #10 <sup>11</sup>	ENTER <sup>19</sup>	NOT USED <sup>27</sup>	NOT USED <sup>35</sup>	NOT USED <sup>43</sup>	SELECT <sup>51</sup>	NOT USED <sup>59</sup>
WHT/YEL	SW #3 <sup>4</sup>	SW #11 <sup>12</sup>	SW #16 <sup>20</sup>	SW #21 <sup>28</sup>	SW #26 <sup>36</sup>	SW #31 <sup>44</sup>	NOT USED <sup>52</sup>	NOT USED <sup>60</sup>
WHT/GRN	SW #4 <sup>5</sup>	SW #12 <sup>13</sup>	SW #17 <sup>21</sup>	SW #22 <sup>29</sup>	SW #27 <sup>37</sup>	SW #32 <sup>45</sup>	NOT USED <sup>53</sup>	NOT USED <sup>61</sup>
WHT/BLU	SW #5 <sup>6</sup>	SW #13 <sup>14</sup>	SW #18 <sup>22</sup>	SW #23 <sup>30</sup>	SW #28 <sup>38</sup>	SW #33 <sup>46</sup>	NOT USED <sup>54</sup>	NOT USED <sup>62</sup>
WHT/VIO	SW #6 <sup>7</sup>	SW #14 <sup>15</sup>	SW #19 <sup>23</sup>	SW #24 <sup>31</sup>	SW #29 <sup>39</sup>	SW #34 <sup>47</sup>	NOT USED <sup>55</sup>	NOT USED <sup>63</sup>
WHT/GRY	SW #7 <sup>8</sup>	SW #15 <sup>16</sup>	SW #20 <sup>24</sup>	SW #25 <sup>32</sup>	SW #30 <sup>40</sup>	SW #35 <sup>48</sup>	NOT USED <sup>56</sup>	NOT USED <sup>64</sup>

BRN BLU/BRN	BRN BLU/VIO
J7-1	J7-6
PIN 1	PIN 6
BRN BLU/RED	BRN BLU/GRY
J7-2	J7-8
PIN 2	PIN 7
BRN BLU/ORG	BRN BLU/WHT
J7-3	J7-9
PIN 3	PIN 8
BRN BLU/YEL	BRN VIO/BRN
J7-4	J4-1
PIN 4	PIN 9
BRN BLU/GRN	BRN VIO/RED
J7-5	J4-2
PIN 5	PIN 10
	YEL RED/ORG
	J4-3
	START LAMP
	YEL RED/GRN
	J4-4
	SELECT LAMP
	YEL WHT
	J4-6
	TICKET MOTOR ENABLE

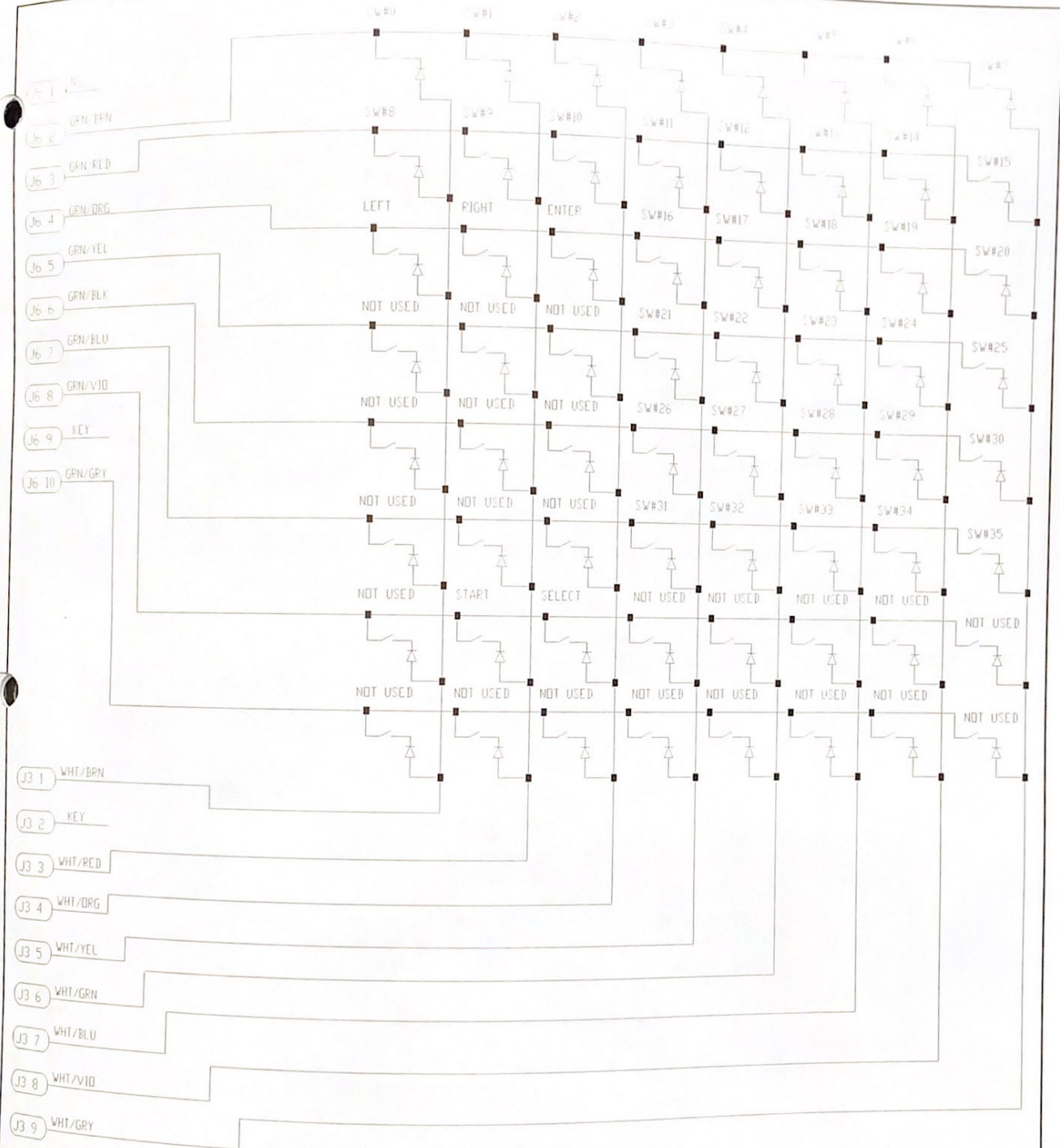
DEDICATED SWITCHES

GRN	YEL/BLK	GRN	BLUE	GRN	GRAY
	J2-1		J2-3		J2-6
	COIN SWITCH		TICKET NOTCH		HCTP SWITCH
GRN	BLU/BLK	GRN	VIOLET	GRN	BROWN
	J2-2		J2-5		J2-7
	BILL VALIDATOR		DOOR OPEN		SLAM TILT

COIL CHART AND SWITCH MATRIX GRID

*Patru Bohm*

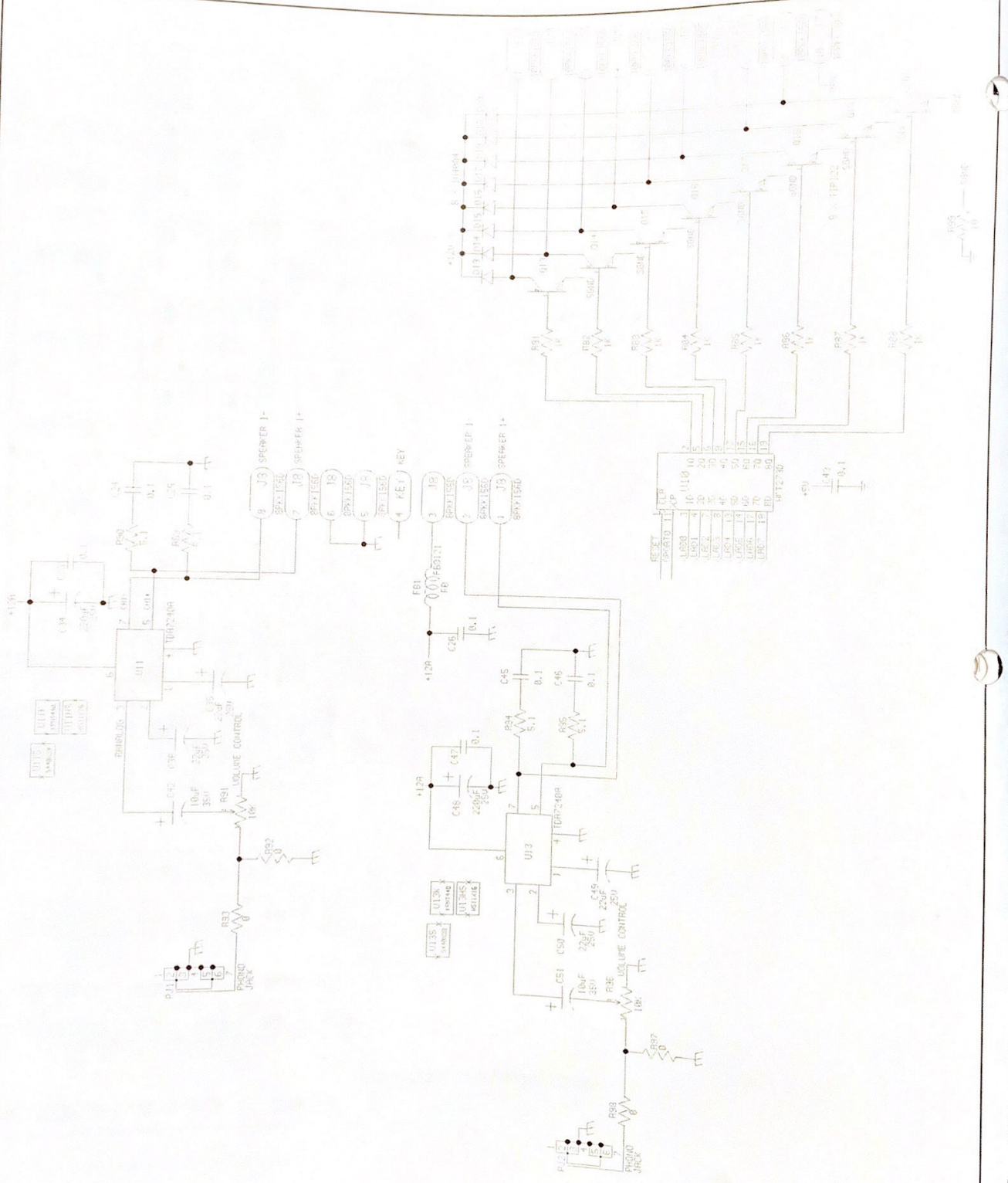


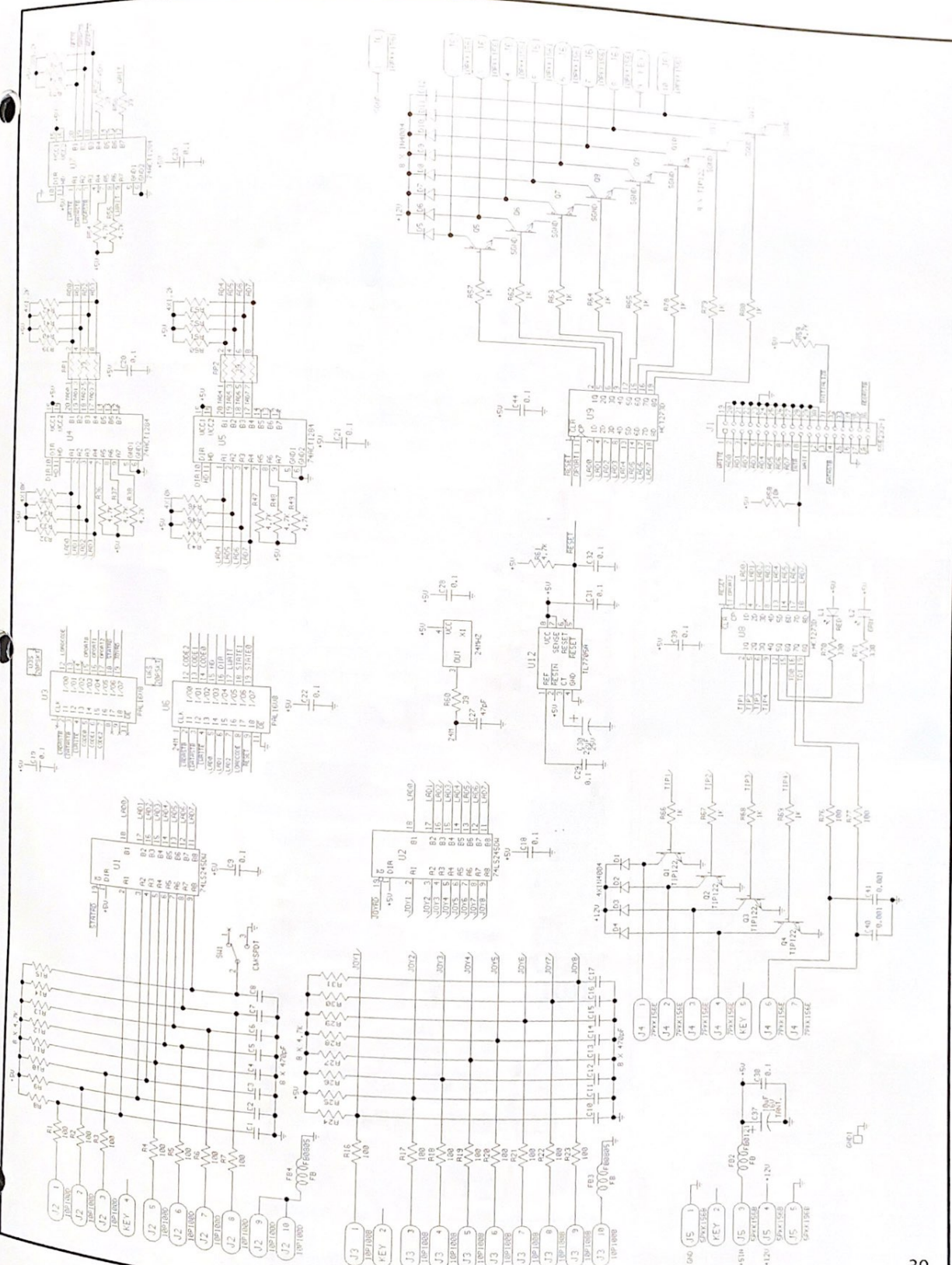


Switch Matrix Wiring Diagram



*Patrick Bohm*





Left & Right Speaker

Center Speaker

Switch Columns

J6 Connector		
Pin location	Wire Color	Purpose
I/O Pin 10	Grn-Gry	Column 8
I/O Pin 9	Key	N/C
I/O Pin 8	Grn-Vio	Column 7
I/O Pin 7	Grn/Blu	Column 6
I/O Pin 6	Grn/Blk	Column 5
I/O Pin 5	Grn/Yel	Column 4
I/O Pin 4	Grn/Org	Column 3
I/O Pin 3	Grn/Red	Column 2
I/O Pin 2	Grn/Brn	Column 1
I/O Pin 1	N/C	N/C

Low Current Solenoids

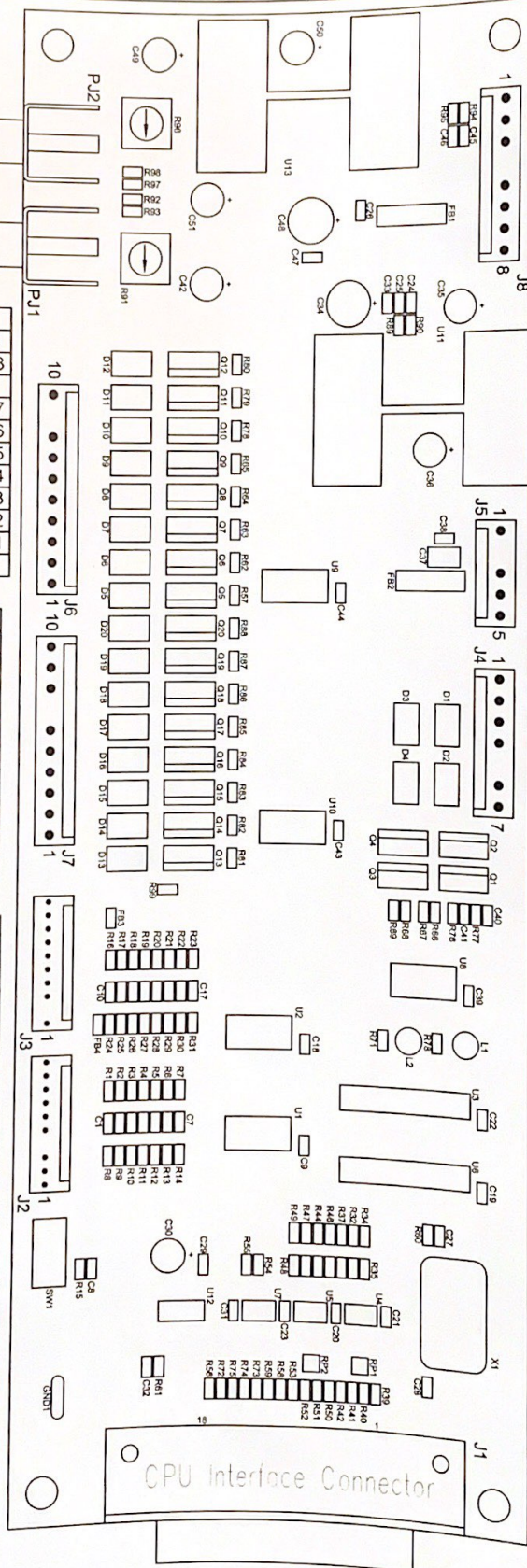
J7 Connector		
Pin Location	Wire Color	Purpose
I/O Pin 10	Black	Ground
I/O Pin 9	Blu/Wht	Bowl Pin # 8
I/O Pin 8	Blu/Gry	Bowl Pin # 7
I/O Pin 7	Key	N/C
I/O Pin 6	Blu/Vio	Bowl Pin # 6
I/O Pin 5	Blu/Grn	Bowl Pin # 5
I/O Pin 4	Blu/Yel	Bowl Pin # 4
I/O Pin 3	Blu/Org	Bowl Pin # 3
I/O Pin 2	Blu/Red	Bowl Pin # 2
I/O Pin 1	Blu/Brn	Bowl Pin # 1

Switch Rows

J3 Connector		
Pin Location	Wire Color	Purpose
I/O Pin 10	N/C	N/C
I/O Pin 9	Wht/Gry	Sw Row 8
I/O Pin 8	Wht/Vio	Sw Row 7
I/O Pin 7	Wht/Blu	Sw Row 6
I/O Pin 6	Wht/Grn	Sw Row 5
I/O Pin 5	Wht/Yel	Sw Row 4
I/O Pin 4	Wht/Org	Sw Row 3
I/O Pin 3	Wht/Red	Sw Row 2
I/O Pin 2	Key	N/C
I/O Pin 1	Wht/Brn	Sw Row 1

Dedicated Switches

J2 Connector		
Pin Location	Wire Color	Purpose
I/O Pin 10	Green	Common Ground
I/O Pin 9	N/C	N/C
I/O Pin 8	N/C	N/C
I/O Pin 7	Brn/Blk	Slam Tilt
I/O Pin 6	Gry	HCTP Switch
I/O Pin 5	Vio	Door Open
I/O Pin 4	Key	N/C
I/O Pin 3	Blue	Ticket Notch
I/O Pin 2	Blu/Blk	Bill Validator
I/O Pin 1	Yel/Blk	Coin Switch



Speakers

J8 Connector		
Pin Location	Wire Color	Purpose
I/O Pin 1	Org/Wht	Center Speaker +
I/O Pin 2	Org/Blk	Center Speaker -
I/O Pin 3	Blue	18V For Speaker Amps
I/O Pin 4	N/C	N/C
I/O Pin 5	N/C	N/C
I/O Pin 6	Black	Ground
I/O Pin 7	Red/Wht	Lt/Rt Speaker +
I/O Pin 8	Red/Blk	Lt/Rt Speaker -

Power

J5 Connector		
Pin Location	Wire Color	Purpose
I/O Pin 1	Black	Ground
I/O Pin 2	Key	N/C
I/O Pin 3	Red	5v I/O Power
I/O Pin 4	Brown	24v Power Bowling Pins
I/O Pin 5	N/C	N/C

Low Current Solenoids

J4 Connector		
Pin Location	Wire Color	Purpose
I/O Pin 1	Vio/Brn	Bowling Pin # 9
I/O Pin 2	Vio/Red	Bowling Pin # 10
I/O Pin 3	Red/Org	Start Lamp
I/O Pin 4	Red/Gm	Select Lamp
I/O Pin 5	Key	N/C
I/O Pin 6	White	Ticket Enable
I/O Pin 7	N/C	N/C

ITEM	PART NUMBER	DESCRIPTION	QTY	REF DESIGNATOR
#1	101-0001790	Resistor film 0.0k ohm 1/10w 5%	2	R93,R98
#2	101-0001798	Resistor film 1.2k ohm 1/10w 5%	11	R39,R40,R41,R42,R50 R51,R52,R53,R73,R74,R75
#3	101-0001815	Resistor film 10ohm 1/10w 5%	1	R99
#4	101-0001820	Resistor film 100ohm 1/10w 5%	17	R1,R2,R3,R4,R5,R6,R7,R16,R17 R18,R19,R20,R21,R22,R23,R76,R77
#5	101-0001827	Resistor film 10k 1/10w 5%	9	R32,R33,R34,R35,R43,R44,R45,R46,R58
#6	101-0001905	Resistor film 1k 1/10w 5%	28	R24,R25,R26,R27,R28,R29,R30,R31,R57,R62 R62,R63,R64,R65,R66,R68,R69,R78,R79,R80 R81,R82,R83,R84,R85,R86,R87,R88
#7	101-0002012	Resistor film 330ohm 1/10w 5%	2	R70,R71
#8	101-0002028	Resistor film 39ohm 1/10w 5%	3	R56,R60,R72
#9	101-0002046	Resistor film 4.7k 1/10w 5%	18	R8,R9,R10,R11,R12,R13,R14,R15,R36,R37 R38,R47,R48,R49,R54,R55,R59,R61
#10	101-0003185	Resistor film 5.1 ohm 1/10w 5%	4	R89,R90,R94,R95
#11	121-0000096	Capacitor Cer 470pf 50v 5% NPO	8	C1,C2,C3,C4,C5,C6,C7,C8
#12	121-0004234	Capacitor Cer 1000pf 50v 10% X7R	2	C40,C41
#13	121-0004238	Capacitor Cer .1uf 50v 20% Z5U	22	C9,C18,C19,C20,C21,C22,C23,C24,C25,C26,C28 C29,C31,C32,C33,C38,C39,C43,C44,C45,C46,C47 C10,C11,C12,C13,C14,C15,C16,C17,C27
#14	121-0004245	Capacitor Cer 47pf 50v 5% NPO	9	C37
#15	121-0004250	Capacitor smt case B 10uf 16v 20%	1	C42,C51
#16	131-0003792	Capacitor Radial Alum 10uf 35v 20%	2	C30,C35,C36,C49,C50
#17	131-0003843	Capacitor Radial Alum 22uf 25v 20%	5	C34,C48
#18	134-0003835	Capacitor Radial Alum 220uf 25v 20%	2	RP1,RP2
#19	141-0004733	Resn-SMT 39 ohm 62MW 5% iscolated	2	FB3,FB4
#20	161-0004958	Ferrite Chip, 150ohm, 200ma	2	FB1, FB2
#21	161-0004959	Ferrite 100ohm, 1234 smt pkg	2	
#22	181-0004478	Diode smt melf DL4004 400v 1.0a	12	D1,D2,D3,D4,D13,D14,D15,D16,D17,D18,D19,D20
#23	203-0004854	IRLZ14 Nfet logic level 60v, 10a	8	Q5,Q6,Q7,Q8,Q9,Q10,Q11,Q12
#24	213-0003565	Tip 122 NPN Transistor 100v,5a	12	Q1,Q2,Q3,Q4,Q13,Q14,Q15,Q16,Q17,Q18,Q19,Q20
#25	221-0000998	74ls245dw,oct bus xcvr	2	U1,U2
#26	221-0001287	74HCT273 OCT D F-F	3	U8,U9,10
#27	221-0003690	74act1284, 1284 Tranciever	3	U4,U5,U7
#28	225-0003637	Pentawattda7240 20w audio amplifier	2	U11,U13
#29	225-0003639	TL7705, supply volt supervisor	1	U12
#30	228-0003639	Programmed pal IC	1	U3
#31	228-0007002	Programmed pal IC	1	U6
#32	301-0005005	Dip socket 20pin tin for U3,U6 socket	2	SU3,SU6
#33	303-0004623	Test Point torsion spring, 0253 copper	1	GND1
#34	315-0003427	.156 Conn header 10pin, 1 row,VT,tin,	2	J6,J7
#35	315-0003429	.100 Conn header,10 pin, 1 row tin	2	J2,J3
#36	315-0003794	.156 Conn Header 5 pin 1 row, VT, tin	1	J5
#37	315-0003816	.156 Conn header 7 pin 1 row VT, tin	1	J4
#38	315-0003820	.156 Conn header 8 pin, 1 row, VT, tin	1	J8
#39	315-0005572	D sub Conn 36 pin 2 rowR/A tin,female	1	J1
#40	317-0004760	Phone Jack R/A, 2 conductor	2	PJ1, PJ2
#41	404-0004806	OSC Clock, 24.0000mhz 4 pin TTL	1	X1
#42	415-0004794	10k single top knob potentiometer	2	R91,R96
#43	426-0004552	LED green T1 3/4 top	1	L2
#44	426-0004555	LED Red T1 3/4 top	1	L1
#45	461-0003522	Vertical Mount Heat Sink BA, TO-220	2	Used for U11 & U13
#46	503-0004457	4-40 keps nut k-lock, steel, zinc	2	Used for heat sink mounting
#47	504-0004604	4-40 x 3/8" philip pan head steel, zinc	4	Used for heat sink & J8 connector mounting
#48	550-0005784	Raw PCB rev-B fr-4 .062" tested	1	Blank PCB Board





For Safety and reliability, substitute parts and board modifications are not recommended. Use of non-shufflealley parts may adversely affect game play.

This game is protected by Federal Copyright, trademark, and patent laws. Unauthorized game conversions may be illegal under federal law. This applies to all facsimiles of logo's, equipment, designs, publications, assemblies and games.

Shufflealley warrants only to the initial purchase of its products that the items listed below are free from defects in material and workmanship under normal use and service.

Printed Circuit boards 2 months  
Cpu Assembly 5 months

Monitor 6 months

All other parts of seller's product are warranted for a period of 90 days. Warranty periods are effective from the initial date of shipment from the seller to its Authorized Distributors.

Seller's sole liability shall be, at it's option, to repair or replace products which are returned to seller during specified warranty period. Warranty doesn't apply to any parts damaged during shipment and/or due to improper handling or due to improper installation or usage. In no event shall seller be liable for any anticpated profits, loss of profits or loss of use.

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## Shuffle Alley Maintenance & Inspection

We recommend once every two weeks to perform some simple maintenance to your shuffle Alley to insure proper operation of game play.

1. With POWER OFF, vacuum & clean Playboard. Players tend to get very generous when using the shuffle wax. For this very reason you want to clean any build up and clear the playboard so it looks well maintained. Failure to keep game cleanliness may hurt earnings. We recommend vacuuming all areas of the playboard, The shuffle wax is like a sand and tends to get everywhere. With the shuffle wax present it would make cleaning the playboard properly almost impossible.

Once shuffle wax is removed and your surface is clear we recommend using Novus Plastic Polish #2 on the playboard. This will pick up almost all the scratches and help protect the playboard surface. It is also recommended you wipe the bottom of the puck with the plastic polish to remove any excess of wax build up that may cause the puck performance to diminish.

2. Open the coin door and pull out the interlock switch. Insert coins to verify proper operation of coin mechanisms.

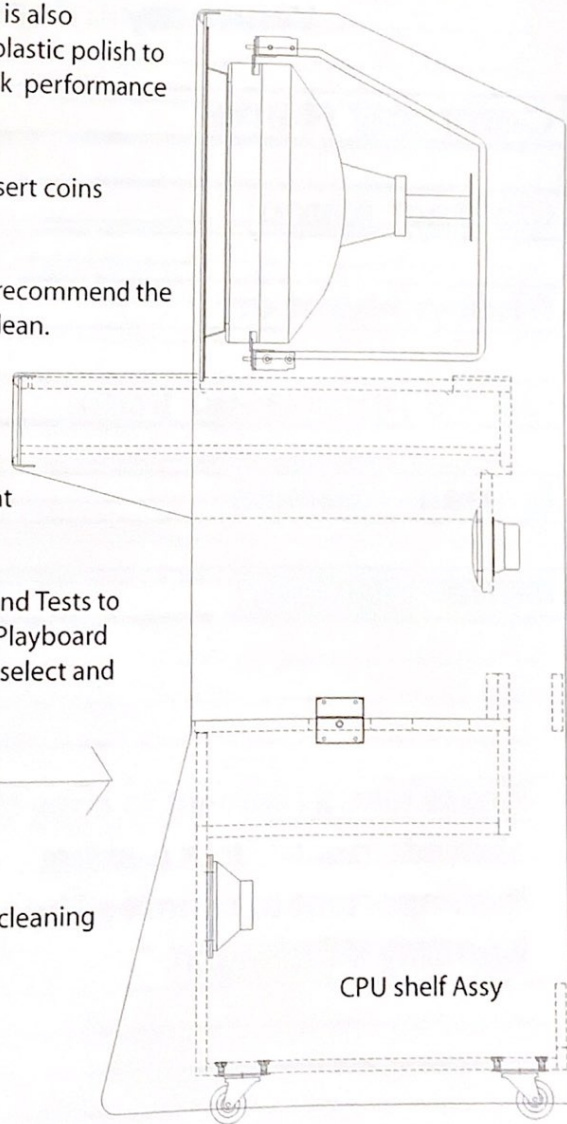
3. Clean Monitor Plastic with a non abrasive towel and we recommend the use of Plastic Polish # 1 to wipe surface dust off and #2 to clean.

4. With a Philips screwdriver remove the two screws for the Shuffle Wax Catch Tray (located in pictorial below). Once removed pull out tray and dispose of any shuffle wax present in tray. Once cleaned out replace screws and mount door back to monitor cabinet.

5. Turn Power Back on. Open Coin door and go to Admin and Tests to check for proper operation of Switches and Pins. Check all Playboard Switches, see page pg 17 for tests instructions. Check start, select and slam tilt switches.

6. Play Pro Bowler to insure game plays satisfactory. Close Coin door and lock door.

If any problems occur or you simply have any questions on cleaning and maintenance call tech support.



*Patrick Bohm*



Warranty Information.

Company Name:
Contact name:
Phone Number:
Game purchased from:
E-mail Address:
Serial Number:

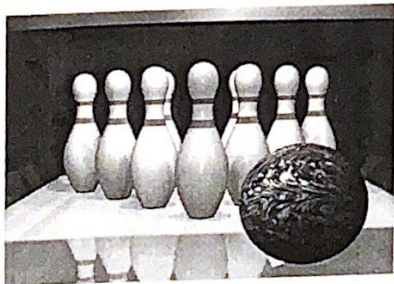
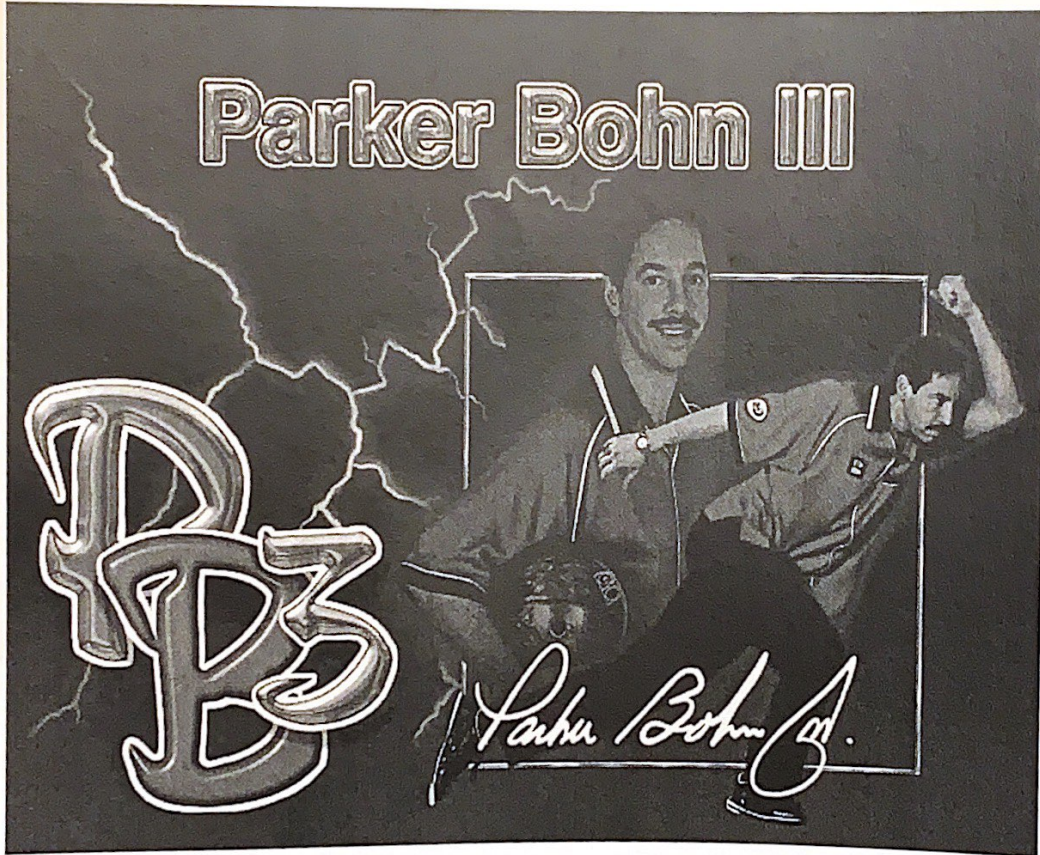
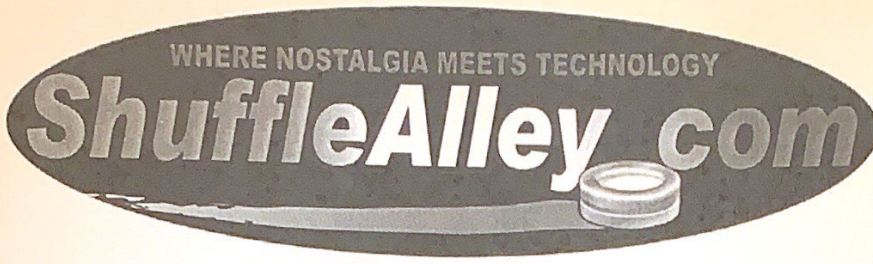
Please take a moment to copy this page and fax all information above to our toll free number 1-866-399-5225. It is important to submit all information to the above fax to set-up your warranty information.

*John Bohm Sr.*



Notes:

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If you have any Suggestions, Questions or need Technical Advice, Find errors or just have comments, call us Toll Free (USA or Canada).

**1-800-524-2343**

Although every effort has been put into making this manual accurate and complete, components, rules, software, programming are subject to change with or without notice.

**Verbatim**<sup>®</sup>

DataLifePlus<sup>®</sup>

**CD-R**

**80** MIN **700** MB

HL05B2005503

Parker Bohn III Pro Bowler  
Version 2.15 Update CD  
Sept. 02, 2003

DISC  
Recordable

## Procedure to Burn CD From E-mail Attachments.

The procedure to burn (copy) Game Program Updates to CD is a fairly simple process. No additional programs are needed, except a CD Burning program and a CD-Rewritable drive installed on your computer.

Note: All CD Burning programs are different, read instructions and understand your particular program before attempting to burn any CD, to maximize results.

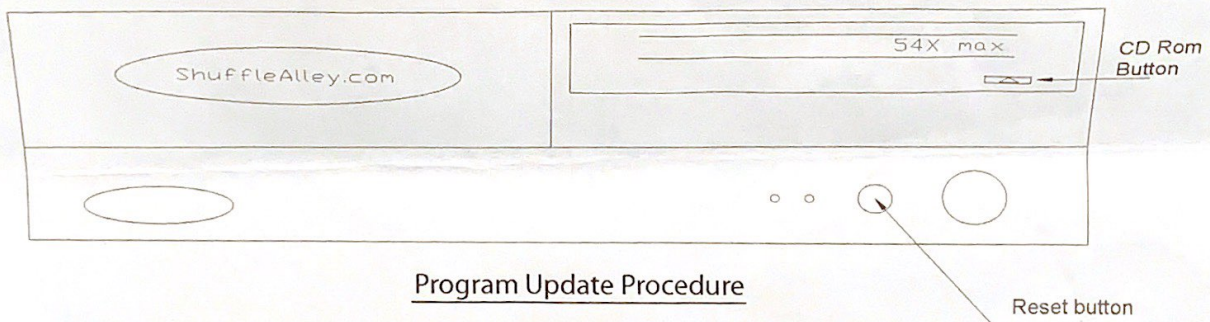
Follow the steps below to create a CD to update your game(s):

- (1) Open the email from ShuffleAlley.com – Subject Line: PROGRAM UPDATE (2.14)\*
- (2) You will find 3 separate file attachments – **PB3Install214.tgz**, **manifest** and **version**.
- (3) Select all 3 files and save them to your desktop, all 3 are needed for proper installation.
- (4) Open your CD Burning program and find the 'Compile a new Data CD' or similar command.
- (5) Select the 3 files from your desktop as the files to burn to CD, and begin that process. When the burning process is completed, it is very important to view the contents of the CD, making sure that all 3 files are present.

This completes the procedure to burn Game Program Updates to CD. After installing update CD to your game(s)\*\* , remove the CD and save as a backup for possible future use.

\*program version number will change per release

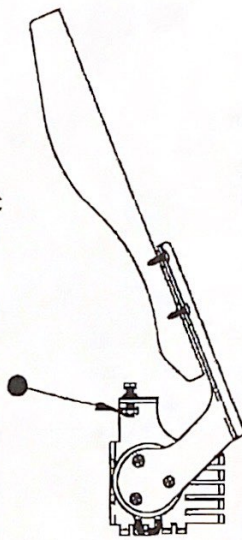
\*\*see Program Update Procedure



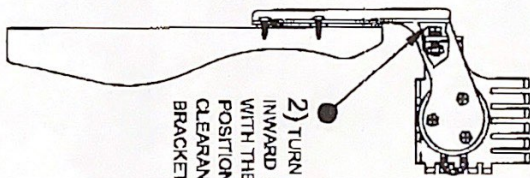
1. Locate the keys in coin door section. Open the lower back door & disconnect the fan cable.
2. Locate the CD rom drive on the right side of the CPU & press the button on the CD rom. When the drawer opens insert the CD into the drawer & press the CD rom button again to close.
3. There are 2 buttons located below the CD rom drive, locate the smallest button on the left & press. This will reset the game.
4. Wait for game to go through the boot screens and follow directions on the monitor. The game will automatically detect the CD and prompt you to press the Start button to install the new update or press the Select button to cancel the installation. Press the start button and the game will begin the update.
5. Once the game is finished with the update simply remove the CD. After the CD is removed press the CD rom button once again to close the drawer.
6. Replace the Lower back door. Once the door is in place make sure to re-connect the fan cable.
7. Replace the keys back onto the wire located on the coin door.

Note \* Power must be ON during entire procedure.

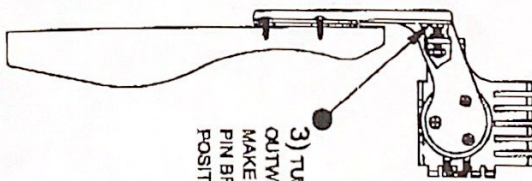
# PIN ASSEMBLY ADJUSTMENT PROCEDURE



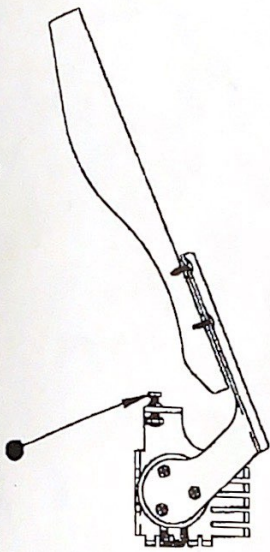
1) USING A 3/8" OPEN END OR BOX WRENCH, LOOSEN THE 10-24 LOCK NUT. AT THIS TIME, WHILE HOLDING THE PIN UP, CHECK THAT THE PIN CLEARS THE CUTOUT IN THE WOOD SHELF. ADJUST BRACKET BY SLIGHTLY FORMING LEFT OR RIGHT TO ENSURE CLEARANCE ON BOTH SIDES IN THE UP POSITION.



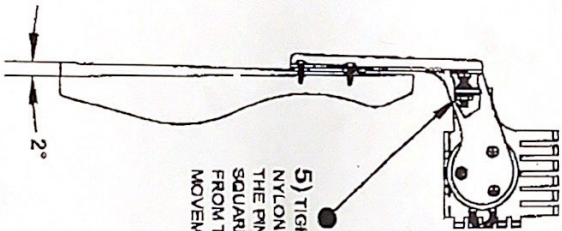
2) TURN NYLON STOP INWARD (CW) SO THAT WITH THE PIN IN THE DOWN POSITION THERE IS CLEARANCE BETWEEN THE BRACKET AND NYLON STOP.



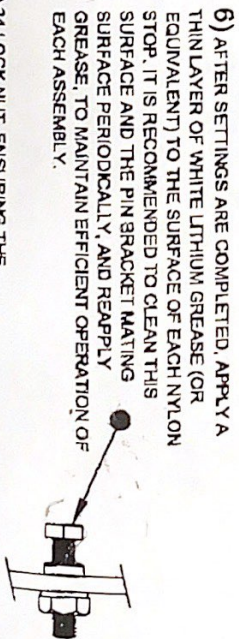
3) TURN NYLON STOP OUTWARD (CCW) TO JUST MAKE CONTACT WITH THE PIN BRACKET IN THE DOWN POSITION.



4) RAISE PIN AND TURN NYLON STOP (1) ONE REVOLUTION OUTWARD (CCW). HAND TIGHTEN THE LOCK NUT. DROP THE PIN FROM THE UP POSITION SEVERAL TIMES, ENSURING THAT IT STOPS SMOOTHLY WITHOUT EXCESSIVE BOUNCE (REBOUND). IF NECESSARY, READJUST THE NYLON STOP NO MORE THAN 1/2 TURN IN OR OUT. WHEN SET CORRECTLY, THE PIN WILL BOUNCE (REBOUND) 2-3 TIMES MAX. WHEN RELEASED FROM THE FULL UP POSITION.



5) TIGHTEN THE 10-24 LOCK NUT, ENSURING THE NYLON STOP MAINTAINS THE SETTING. OPTIMALLY THE PIN WILL REST AT APPROXIMATELY 2° FROM SQUARE. IT IS NOT RECOMMENDED TO DEVIATE FROM THIS SETTING, RISKING IMPROPER (WEAK) PIN MOVEMENT DURING GAME PLAY.



6) AFTER SETTINGS ARE COMPLETED, APPLY A THIN LAYER OF WHITE LITHIUM GREASE (OR EQUIVALENT) TO THE SURFACE OF EACH NYLON STOP. IT IS RECOMMENDED TO CLEAN THIS SURFACE AND THE PIN BRACKET MATING SURFACE PERIODICALLY, AND REAPPLY GREASE TO MAINTAIN EFFICIENT OPERATION OF EACH ASSEMBLY.