

**16-50012-103
September 1991**

Hurricane Operator's Handbook

Including----

Main Menu Chart

Playfield Parts and Locations

Solenoid Table and Locations

Lamp Matrix and Locations

Switch Matrix and Location

**Williams Electronics Games, Inc.
3401 N. California Ave.
Chicago. IL 60618**

Main Menu

B. Bookkeeping Menu

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

P. Printouts Menu

- P.1 Earnings Data
- P.2 Main Audits
- P.3 Standard Audits
- P.4 Feature Audits
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- P.6 Game Time Histograms
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- T.3 Single Switches
- T.4 Solenoid Test
- T.5 Flasher Test
- T.6 General Illumination
- T.7 Sound and Music Test
- T.8 Single Lamps
- T.9 All Lamps
- T.10 Lamp & Flasher Test
- T.11 Display 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
etc., etc.
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A. Adjustments Menu

- A.1 Standard Adjustments
etc., etc.
- A.2 Feature Adjustments
etc., etc.
- A.3 Pricing Adjustments
etc., etc.
- A.4 H.S.T.D. Adjustments
etc., etc.
- 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; (ex. A.1, A.2, A.3, A.4).

Press Down

Decreases sequence; (ex. A.4, A.3, A.2, A.1).

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

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

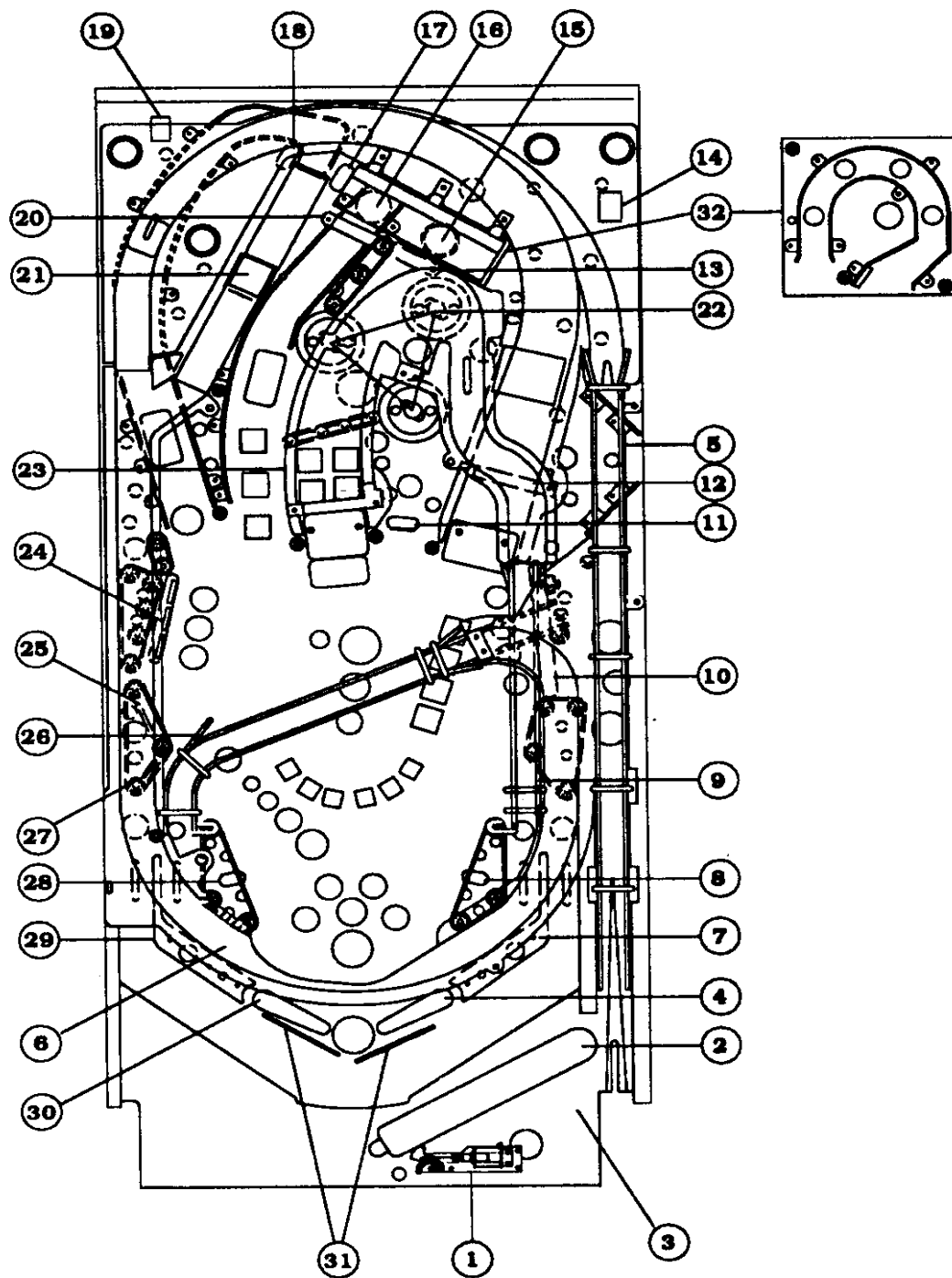
Playfield Parts

Item	Part Number	Description
1	A-10417	Outhole Switch
2	B-8925	Switch Plate
3a	B-9362-R-3	Coil & Bracket
b	A-11619-2	Switch
c	C-9638	Outhole Eject
4	C-13174-R	Right Flipper
5	12-6982	Entry Ramp
6	A-14709	Hurricane Ramp
7	B-12363-R	Flipper Return Guide
8a	B-11203-R-1	Slingshot Coil & Bracket
b	B-8284-1	Slingshot Switch
9	12-6980	Center Ramp
10	B-11854-4	Stand-up Targets
11	B-11854-4	Stand-up Targets
12	A-14708	Hurricane Top Ramp
13	A-14786	Ball Gate
14	A-13901-3	Opto Board
15a	B-9361-R Ball	Eject Coil & Bracket
b	A-9361-R	Switch Assembly
16a	D-11335-1	Ball Popper Coil & Brckt
b	A-11657	Ball Popper Switch Assy
17	A-14725	Opto Mounting Assembly
18	A-14724	Opto Mounting Assembly
19	A-14423-1	Relay Assembly
20	A-14788	Ball Gate
21	A-14741	Ferris Wheel
22a	A-9415-2	Jet Bumper Coil & Bracket
b	B-12030-2	Switch Assembly
23	A-14710	Comet Ramp
24	A-13595-3	3-bank Drop Target
25	12-6981	Lower Ramp
27	12-6466-3	Wireform
28a	B-11203-R-1	Sling Coil & Bracket
b	B-8284-1	Sling Switch
29	B-12363-J	Flipper Return Guide
30	C-13174-L	Left Flipper
31	12-6468	Rebound Wire
32	A-14787	Juggler Assembly

Not Shown

A-13204	Bottom Arch Assembly
12-6842	Wire Fence
16-50012-1	Instruction Card
20-9041	Tinnerman
20-9045	Instruction Card
23-6313-1	Grommet
31-1008-50012	Screened Bottom Arch
31-1-50012	Screened Playfield Plastic Set
31-1002-50012	Screened Playfield
03-7557	Slingshot Mylar
03-7960-50012-1	Full Playfield Mylar
03-7960-50012-2	Ramp Mylar
03-7960-50012-3	Ramp Mylar

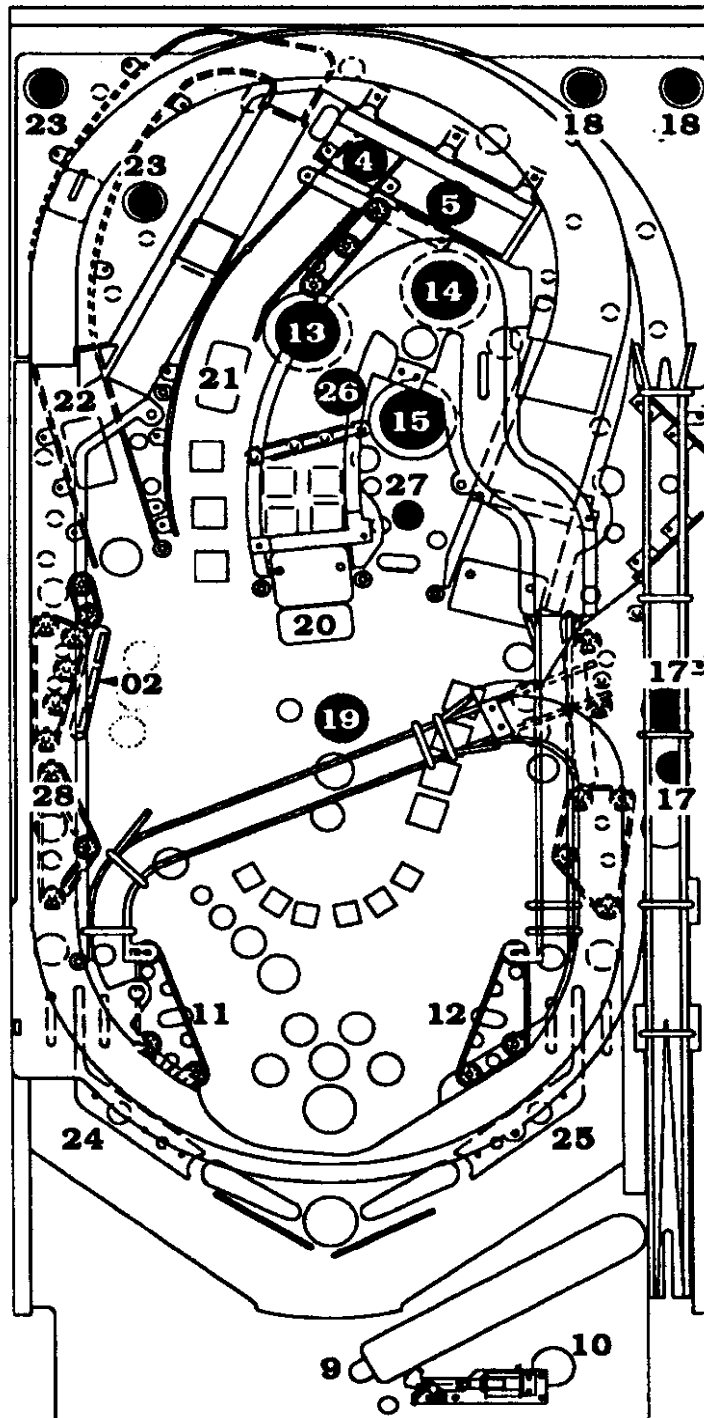
Playfield Parts Locations



Solenoid Table

Sol. No.	Function	Solenoid Type	Wire Color	Connections Playfield - Insert - Hood	Driver Trmstr	Solenoid Part Number Flashlamp Type
01	Backbox Motor	High Power	Vio-Brn	J132-1	Q82	A-14750
02	Left Bank	High Power	Vio-Red	J130-2	Q80	AE-26-1200
03	Not Used	High Power	Vio-Org		Q78	
04	Left Jumper	High Power	Vio-Yel	J130-5	Q76	AE-24-900
05	Right Jumper	High Power	Vio-Grn	J130-6	Q64	AE-26-1500
06	Ferris Wheel	High Power	Vio-Blu	J130-7	Q66	A-14593-1
07	Knecker	High Power	Vio-Blk	J130-8	Q68	AE-23-600
08	Not Used	High Power	Vio-Gry		Q70	
09	Outsole	Low Power	Brn-Blk	J127-1	Q58	AE-27-1200
10	Ball Release	Low Power	Brn-Red	J127-3	Q56	AE-26-1200
11	Left Slingshot	Low Power	Brn-Org	J127-4	Q54	AE-25-1500
12	Right Slingshot	Low Power	Brn-Yel	J127-5	Q52	AE-26-1500
13	Left Jet Bumper	Low Power	Brn-Grn	J127-6	Q50	AE-26-1200
14	Right Jet Bumper	Low Power	Brn-Blu	J127-7	Q48	AE-26-1200
15	Bottom Jet Bumper	Low Power	Brn-Vio	J127-8	Q46	AE-26-1200
16	Not Used	Low Power	Brn-Gry		Q44	
17	Right Side Flasher	Flasher	Blk-Brn	J126-1 J125-1	Q42	#906 2 PL - 1 BB
18	Top Right Flasher	Flasher	Blk-Red	J126-2 J125-2	Q40	#906 2 PL - 1 BB
19	All Scores X3 Flasher	Flasher	Blk-Org	J126-3 J125-3	Q38	#906 1 PL - 1 BB
20	Cornet Million Flasher	Flasher	Blk-Yel	J126-4 J125-5	Q36	#906 1 PL - 1 BB
21	Jackpot Flasher	Special	Blu-Grn	J126-5 J125-6	Q28	#906 1 PL - 1 BB
22	Ferris Wheel Flasher	Special	Blu-Blk	J126-6 J125-7	Q30	#906 1 PL - 1 BB
23	Top Left Flasher	Special	Blu-Vio	J126-7 J125-8	Q34	#906 2 PL - 1 BB
24	Left Return Flasher	Special	Blu-Gry	J126-8 J125-9	Q32	#89/#906 1 PL - 1 Hood
25	Right Return Flasher	Special	Blu-Brn	J122-1 J123-1	Q26	#89/#906 1 PL - 1 Hood
26	Jet Bumper Flasher	Special	Blu-Red	J122-2 J123-3	Q24	#906 1 PL - 1 BB
27	Dunk the Dummy Flasher	Special	Blu-Org	J122-3 J123-4	Q22	#89/#906 1 PL - 1 BB
28	Left Side Flasher	Special	Blu-Yel	J122-4 J123-5	Q20	#89/#906 1 PL - 1 BB
General Illumination				Playfield - Insert - Cabinet		
01	Backbox G.I.	G.I.	Wht-Brn	J121-7	Q18	#555
02	Backbox G.I.	G.I.	Wht-Org	J121-8	Q10	#555
03	Playfield G.I.	G.I.	Wht-Yel	J120-9	Q14	#44
04	Backbox G.I.	G.I.	Wht-Grn	J121-10	Q16	#555
05	Playfield G.I.	G.I.	Wht-Vio	J120-11 J119-1	Q12	#44
	Lower Right Flipper		Blu-Yel	J109-7		FL-11630
	Lower Left Flipper		Gry-Yel	J109-5		FL-11630

Solenoid Locations

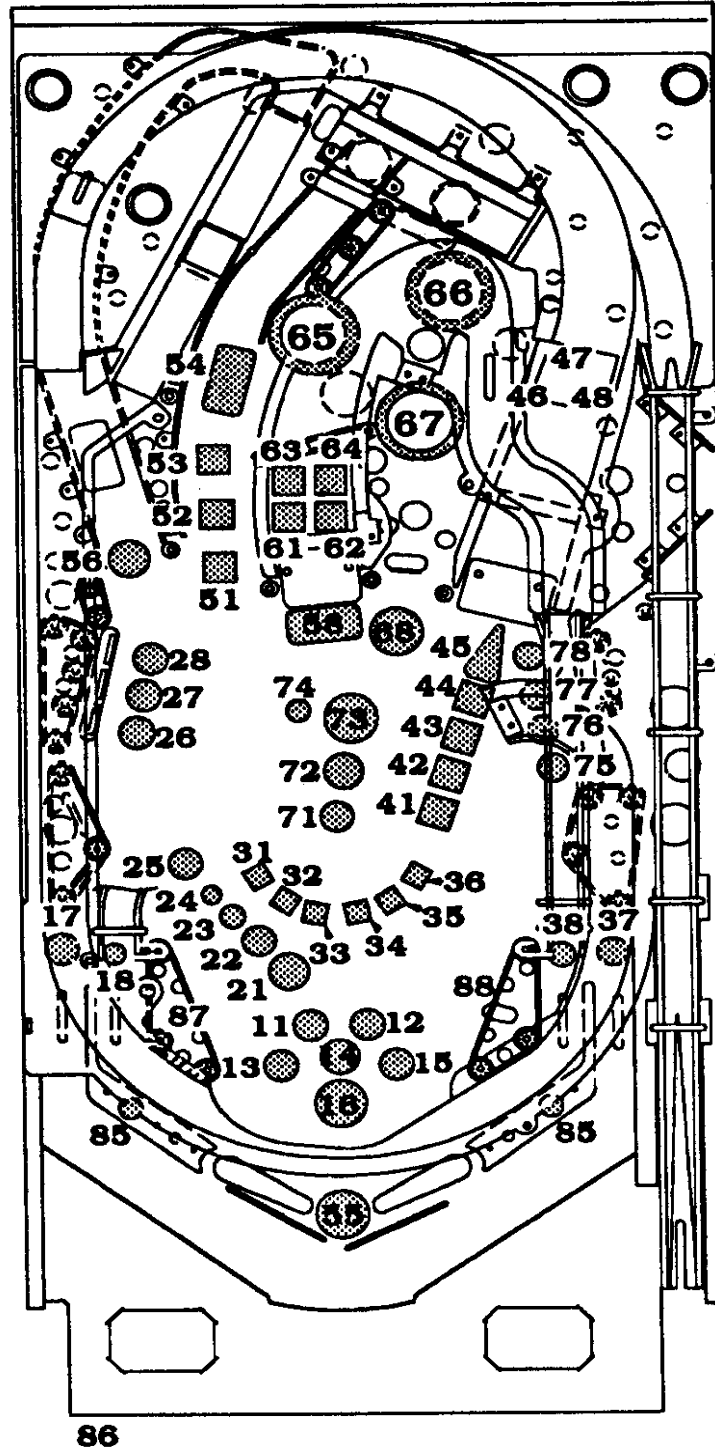
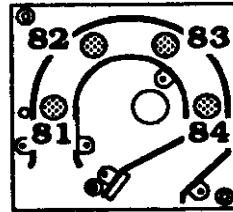


Yellow (B+) → Red

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Lamp Locations

Juggler Assy.

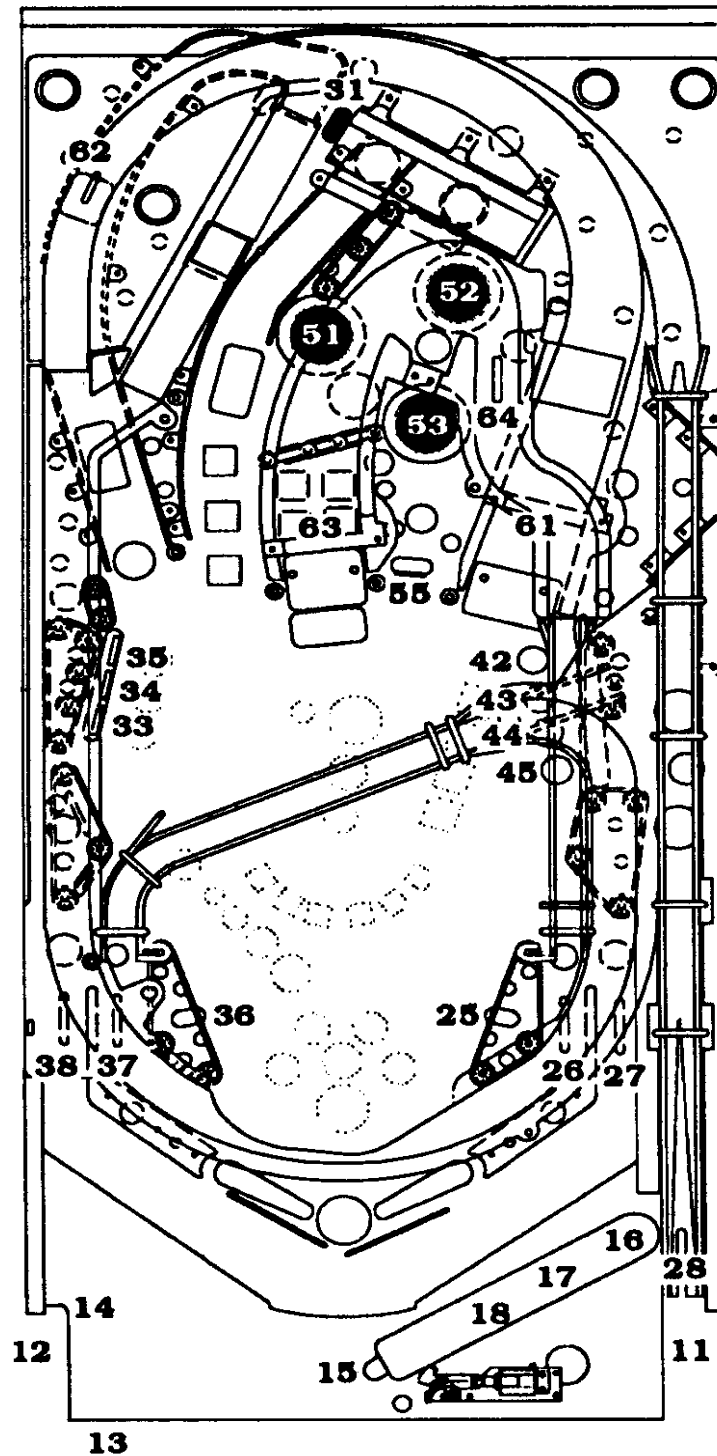


Switch Matrix

White → ← Green

Dedicated Grounded Switches	Column Row	1	2	3	4	5	6	7	8
		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 J207-8 U20-11
Orange-Brown Left Coin Chute	D1	White-Brown J208-1 U18-11	Slam Tilt	Ferris Wheel	Not Used	Left Jet Bumper	Hurricane Entry	Not Used	Not Used
	D2	White-Red J208-2 U18-9	Coin Door Closed	Not Used	Right Stand-up 1	Right Jet Bumper	Hurricane Exit	Not Used	Not Used
Orange-Black Right Coin Chute	D3	White-Orange J208-3 U18-5	Ticket Dispenser	Left Drop Target 1	Right Stand-up 2	Bottom Jet Bumper	Comet Entry	Not Used	Not Used
	D4	White-Yellow J208-4 U18-7	Plumb Bob Tilt	Test Position, Always Closed	Right Stand-up 3	Not Used	Comet Exit	Not Used	Not Used
Orange-Green Normal Function Test Function Service Escape Credits	D5	White-Green J208-5 U18-11	Outtake	Right Singebot	Left Drop Target 3	Dunk the Dummy	Not Used	Not Used	Not Used
	D6	White-Blue J208-7 U18-6	Trough 1	Right Return	Left Singebot	Left Juggler	Not Used	Not Used	Not Used
Orange-Violet Normal Function Test Function Volume Up	D7	White-Violet J208-8 U18-5	Trough 2	Right Outlane	Left Return	Right Juggler	Not Used	Not Used	Not Used
	D8	White-Gray J208-9 U18-7	Trough 3	Ball Shooter	Left Outlane	Not Used	Not Used	Not Used	Not Used

Switch Locations



WARNINGS & NOTICES

WARNING

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

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This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

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 WILLIAMS 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 WILLIAMS 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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WILLIAMS ELECTRONICS GAMES, INC.

3401 N. California
Chicago, IL 60618



CAUTION

**Transport this game ONLY
with hinged backbox DOWN!**