



SELF-TEST PROCEDURE

ST-108
1st PRINTING

TEST NAME	TEST INSTRUCTION	INDICATION OF TEST MODE	TEST RESULTS	OPERATOR ACTION																											
Lamp Test	See Notes 1 and 2. Press and release (once only) TEST pushbutton located on inside top middle of coin door.	(Test number) 1 appears on 4TH UP score display.	All lamps are lighted (ignore back box lamps). If elimination of SECOND REPLAY/ADD-A-BALL is selected, 2ND UP score is blank. If SECOND REPLAY/ADD-A-BALL is selected, SECOND REPLAY/ADD-A-BALL score is displayed in 2ND UP score display. The FIRST REPLAY/ADD-A-BALL score is displayed in 1ST UP score display. Number of balls per game is displayed in BALL display. Maximum credits is displayed in CREDIT display.	Check to ensure that all playfield lamps are lighted. To add SECOND REPLAY/ADD-A-BALL score, set PROG SW1 toggle 3 to ON To eliminate SECOND REPLAY/ADD-A-BALL, set PROG SW1 toggle 3 to OFF To change REPLAY/ADD-A-BALL values, adjust REPLAY rotary switch and PROG SW1 toggle 7 for the results as listed in the REPLAY/ADD-A-BALL SCORE SETTINGS below. Please note that by setting the score multiplier switch, PROG SW1 toggle 7 to OFF, all playfield scores are multiplied by 5. Check that REPLAY/ADD-A-BALL level display card is appropriately displayed on the playfield lower arch. For an ADD-A-BALL award, set PROG SW1 toggle 8 to OFF. For a REPLAY award, set PROG SW1 toggle 8 to ON. To change, set PROG SW2 toggle 1 to OFF for 3-ball game, ON for 5-ball game. To change, set PROG SW1 toggle 5 and 6 as listed in MAXIMUM CREDITS PER GAME SETTING below. NOTE: To exit Self-Test, press and release TEST pushbutton three times.																											
Solenoid Test	1.Press and release (once only) TEST pushbutton. 2. Press and release START pushbutton. 3.Press right and left flipper buttons.	(Test number) 2 appears in 4TH UP score display.	Playfield solenoids are activated, then deactivated one at a time. As each solenoid does so, a number identifying that solenoid is displayed in CREDIT display. The solenoids are activated only once each. To repeat activation, press and release START pushbutton. Right and left flippers are activated.	Listen and watch for playfield solenoids being activated then deactivated in the following order. <table><tr><th colspan="2">NUMBER IN CREDIT DISPLAY</th><th>SOLENOID</th></tr><tr><td>1</td><td></td><td>Outhole Kicker</td></tr><tr><td>2</td><td></td><td>Right Slingshot Kicker</td></tr><tr><td>3</td><td></td><td>Upper Drop Target</td></tr><tr><td>4</td><td></td><td>Right Thumper Bumper</td></tr><tr><td>5</td><td></td><td>Left Thumper Bumper</td></tr><tr><td>6</td><td></td><td>Lower Drop Target</td></tr><tr><td>7</td><td></td><td>Left Slingshot Kicker</td></tr><tr><td>8</td><td></td><td>Coin Door Lock-Out Coil</td></tr></table> NOTE: To exit Self-Test, press and release TEST pushbutton two times.	NUMBER IN CREDIT DISPLAY		SOLENOID	1		Outhole Kicker	2		Right Slingshot Kicker	3		Upper Drop Target	4		Right Thumper Bumper	5		Left Thumper Bumper	6		Lower Drop Target	7		Left Slingshot Kicker	8		Coin Door Lock-Out Coil
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Switch Test	Press and release (once only) TEST pushbutton.	(Test number) 3 appears in 4TH UP score display	Any activated or stuck switches are identified by a number in the CREDIT display. A pulsing tone is heard when a switch is activated or stuck.	Identify activated or stuck switches as shown in Figure 6. NOTE: To exit Self-Test, press and release TEST pushbutton one time.																											
Volume Adjustment	Activate left or right coin acceptor switch.	Repeated "oink" sound is emitted from the game speaker.		Reach through coin door and adjust volume control (located behind and above the game speaker) for the desired volume.																											
Display Check	Press and release (once only) TEST pushbutton.		All displays (SCORE, BALL and CREDIT) have an 8 in each number location.	Check that all displays have 8s. Displays will go blank in approximately 30 seconds.																											

NOTES: 1. PROG SW1 toggle 1 must always be turned to OFF.
2. Games will enter Self-Test from any mode. However, when Self-Test is entered, all credits (if any) are erased from the credit accumulator.
3. If score multiplier is used, attach the "ALL SCORING 5 TIMES" label to the playfield lower arch.

MAXIMUM CREDITS PER GAME SETTINGS

5 Credits — Set PROG SW1 toggles 5 and 6 OFF
10 Credits — Set PROG SW1 toggles 5 ON and 6 OFF
15 Credits — Set PROG SW1 toggles 5 OFF and 6 ON
20 Credits — Set PROG SW1 toggles 5 and 6 ON

COINS PER GAME SETTINGS		PROG SW2 toggles			
Left Coin Acceptor	Right Coin Acceptor	3	4	5	6
1 coin / 1 credit	1 coin / 1 credit	OFF	OFF	OFF	OFF
1 coin / 2 credits	1 coin / 2 credits	ON	OFF	OFF	OFF
1 coin / 3 credits	1 coin / 3 credits	OFF	ON	OFF	OFF
1 coin / 4 credits	1 coin / 4 credits	ON	ON	OFF	OFF
* 2 coins / 1 credit	2 coins / 1 credit	OFF	OFF	ON	OFF
* 2 coins / 3 credits	2 coins / 3 credits	ON	OFF	ON	OFF
* 2 coins / 5 credits	2 coins / 5 credits	OFF	ON	ON	OFF
* 2 coins / 1 credit	1 coin / 1 credit	ON	ON	ON	OFF
1 coin / 1 credit	1 coin / 2 credits	OFF	OFF	OFF	ON
1 coin / 2 credits	1 coin / 4 credits	ON	OFF	OFF	ON
1 coin / 3 credits	1 coin / 6 credits	OFF	ON	OFF	ON
* 2 coins / 3 credits	* 2 coins / 7 credits	ON	ON	OFF	ON
* 2 coins / 5 credits	1 coin / 5 credits	OFF	OFF	ON	ON
* 2 coins / 7 credits	* 1 coin / 7 credits	ON	OFF	ON	ON
** 3 coins / 1 credit	1 coin / 1 credit	OFF	ON	ON	ON
1 coin / 1 credit	1 coin / 3 credit	ON	ON	ON	ON

* Indicates that second coin results in one more credit than first coin, providing no scoring takes place between coins.

** Indicates that no credits until third coin.

FIVE TIMES MULTIPLIER SETTING

All scores same as indicated on playfield — Set PROG SW1 toggle 7 ON
All scores five times indicated value on playfield — Set PROG SW1 toggle 7 OFF

EXTRA BALL SEQUENCE SETTING

Extra ball awarded for completing Extra Ball sequence — Set PROG SW1 toggle 2 ON
10,000 Points (50,000 points if 5x multiplier is on) for completing Extra Ball sequence — Set PROG SW1 toggle 2 OFF

BONUS ADVANCE FEATURE SETTING

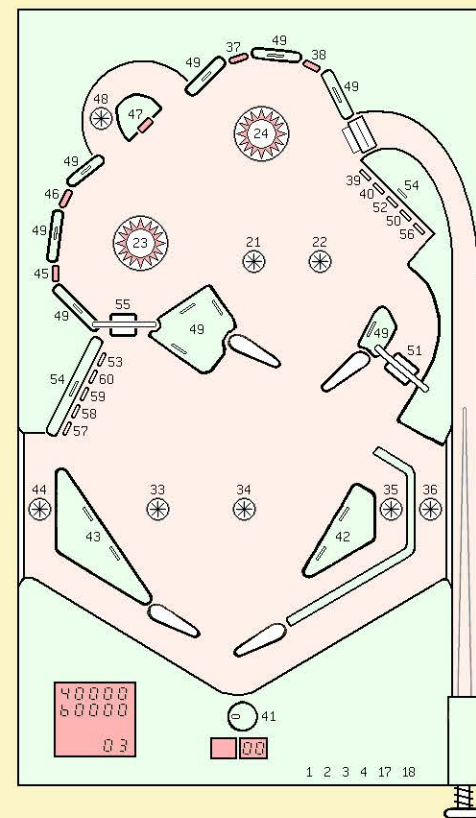
Bonus advance as indicated on playfield — Set PROG SW1 toggle 4 to ON
Bonus advance as indicated on playfield, plus double bonus is advance on last ball — Set PROG SW1 toggle 4 to OFF

REPLAY ADD-A-BALL SCORE SETTINGS (Normal Levels)				REPLAY ADD-A-BALL SCORE SETTINGS (5X Multiplied)			
FIRST REPLAY / ADD-A-BALL SCORE	SECOND REPLAY / ADD-A-BALL SCORE	REPLAY Rotary Switch	PROG SW1 Toggle 7	FIRST REPLAY / ADD-A-BALL SCORE	SECOND REPLAY / ADD-A-BALL SCORE	REPLAY Rotary Switch	PROG SW1 Toggle 7
NO REPLAY /	ADD-A-BALL SCORE			NO REPLAY /	ADD-A-BALL SCORE		
40,000	60,000	0	ON	200,000	300,000	1	OFF
50,000	70,000	1	ON	250,000	350,000	2	OFF
60,000	90,000	2	ON	300,000	450,000	3	OFF
70,000	100,000	3	ON	350,000	500,000	4	OFF
80,000	110,000	4	ON	400,000	550,000	5	OFF
90,000	120,000	5	ON	450,000	600,000	6	OFF
100,000	130,000	6	ON	500,000	650,000	7	OFF
110,000	140,000	7	ON	550,000	700,000	8	OFF
120,000	150,000	8	ON	600,000	750,000	9	OFF
130,000	160,000	9	ON	650,000	800,000	10	OFF
140,000	170,000	10	ON	700,000	850,000	11	OFF
160,000	200,000	11	ON	800,000	950,000	12	OFF
180,000	220,000	12	ON	800,000	950,000	13	OFF
200,000	250,000	13	ON	850,000	950,000	14	OFF
220,000	270,000	14	ON	850,000	950,000	15	OFF
		15	ON				

NOTES:

- SECOND REPLAY / ADD-A-BALL score is eliminated by setting PROG SW1 toggle 3 to OFF
- To have SECOND REPLAY/ADD-A-BALL score, set PROG SW1 toggle 3 to ON

Switches



NUMBER	SWITCH	NUMBER	SWITCH
1	LEFT COIN SWITCH	42	RIGHT SLINGSHOT
2	RIGHT COIN SWITCH	43	LEFT SLINGSHOT
3	START BUTTON	44	LEFT DRAIN LANE
4	SLAM SWITCH	45	TARGET
17	CABINET TILT	46	TARGET
18	PENDULUM TILT	47	TARGET IN FRONT OF ROLLTHRU
21	LEFT UPPER ROLLOVER	48	ROLLOVER INSIDE ROLLTHRU
22	RIGHT UPPER ROLLOVER	49	10 POINT SWITCHES (TEN IN ALL)
23	LEFT THUMPER BUMPER	50	UPPER DROP TARGET NO.2
24	RIGHT THUMPER BUMPER	51	RIGHT SPINNING TARGET
33	LEFT LOWER ROLLOVER	52	UPPER DROP TARGET NO.3
34	RIGHT LOWER ROLLOVER	53	LOWER DROP TARGET NO.5
35	LOWER INNER BALL LANE	54	SWITCHES BEHIND BOTH DROP TARGETS
36	RIGHT DRAIN LANE	55	LEFT SPINNING TARGET
37	TARGET	56	UPPER DROP TARGET NO.1
38	TARGET	57	LOWER DROP TARGET NO.1
39	UPPER DROP TARGET NO.5	58	LOWER DROP TARGET NO.2
40	UPPER DROP TARGET NO.4	59	LOWER DROP TARGET NO.3
41	OUTHOLE KICKER	60	LOWER DROP TARGET NO.4

BALLS PER GAME SETTINGS

3 Balls — Set PROG SW2 toggle 1 to OFF
5 Balls — Set PROG SW2 toggle 1 to ON

MATCH FEATURE SETTING

Match ON — Set PROG SW2 toggle 2 to ON
Match OFF — Set PROG SW2 toggle 2 to OFF

SPECIAL FEATURE SETTINGS

Replay — Set PROG SW2 toggles 7 and 8 to ON
Extra Ball — Set PROG SW2 toggle 7 to ON and toggle 8 to OFF
10,000 Points (50,000 points if score multiplier is ON) — Set PROG SW2 toggle 7 to OFF and toggle 8 to ON
20,000 Points (100,000 points if score multiplier is ON) — Set PROG SW2 toggle 7 and 8 to OFF