

Gottlieb®

THE PREMIER NAME IN PINBALL



Premier®
Technology

INSTRUCTION MANUAL

V. SOUND

VI. GAME ADJUSTMENTS

SWITCH 32. _____ EXTRA BALL CONTROL (CELL TARGETS)
ON . . . CELL TARGETS WHEN HIT GO FROM LIT TO OFF . . . (LIBERAL)
OFF . . . CELL TARGETS WHEN HIT GO FROM LIT TO FLASHING
TO OFF (CONSERVATIVE)

VII. BOOKKEEPING AND SELF TEST

C. SELF/TEST

- Steps 16 through 21 are SELF/TEST or game tests the operator can use for quick troubleshooting.
- All the tests are explained in the flow chart.
- To advance to the next test, press the SELF/TEST switch.
- Each test can be repeated by pressing the credit button.

STEP 16—LAMP TEST

- Lamp Test—Lamps are sequentially strobed. Lamp assignment numbers appear in the lower display.

The Left Advance button stops lamp sequencing for repeated flashing of active lamp. (Single Step Mode).

Lamp number (L9, L16, etc.) can be referenced to the Driver Board Schematic where the specific transistor for each lamp can be identified.

STEP 17—RELAY AND SOLENOID TEST

- Relay Test—All relays are pulsed in the following order with their corresponding lamp driver number appearing in the lower display.

The left advance button stops sequencing for repeated activation of relay or solenoid. (Single Step Mode).

A3 Driver Board Transistor
Assignment (See Schematic)

Q (Game Over) Relay.....A3J3 PIN-A(Q1)
T (Tilt) Relay.....A3J3 PIN-B(Q2)
(Any other relays which may be used).

- Solenoid Test—Each solenoid on the playfield is sequentially pulsed. The solenoid number displayed identifies which solenoid is being tested. The following chart lists solenoid assignments.

NUMBER DISPLAYED	ASSIGNMENT	A3 DRIVER BOARD TRANSISTOR ASSIGN. SEE SCHEMATIC
Sol.1	Hole	Q60
Sol.2	Left Shooter	Q57/Q58
Sol.3	Left Top Dome #67	Q54
Sol.4	Right Top Dome #67	Q55
Sol.5	Right Shooter	Q61/Q62
Sol.6	Bank Reset	Q63/Q64
Sol.7	Right Side Dome #67	Q56
Sol.8	Knocker Assembly	Q53
Sol.9	Outhole	Q59

STEP 18—SWITCH TEST

- If all switches are open, "ALL SWITCHES OPEN" appears in the lower display. (Note: Slam switch is not part of this test.)
- If any switch(es) are closed, their corresponding matrix location will appear sequentially in the lower display.

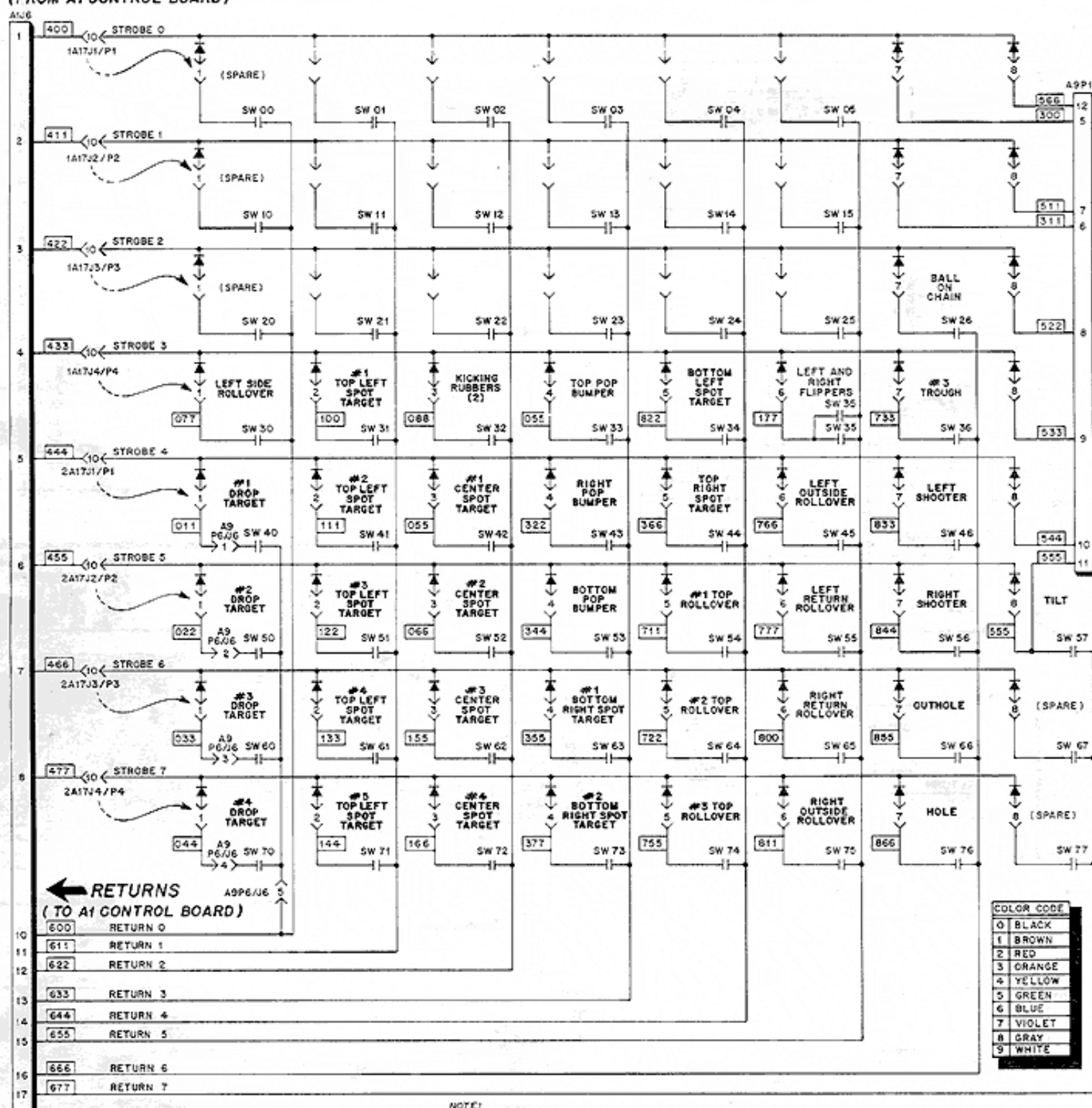
STEP 19—DIP SWITCH SETTINGS

- The status of the Control Board (A1) switches appears in the lower display.

DISPLAYED HEXADECIMAL	DECIMAL	BINARY
0	0	0000
1	1	0001
2	2	0010
3	3	0011
4	4	0100
5	5	0101
6	6	0110
7	7	0111
8	8	1000
9	9	1001
A	10	1010
B	11	1011
C	12	1100
D	13	1101
E	14	1110
F	15	1111

X. WIRING AND SCHEMATIC DIAGRAMS, PARTS LISTS

STROBES →
(FROM A1 CONTROL BOARD)

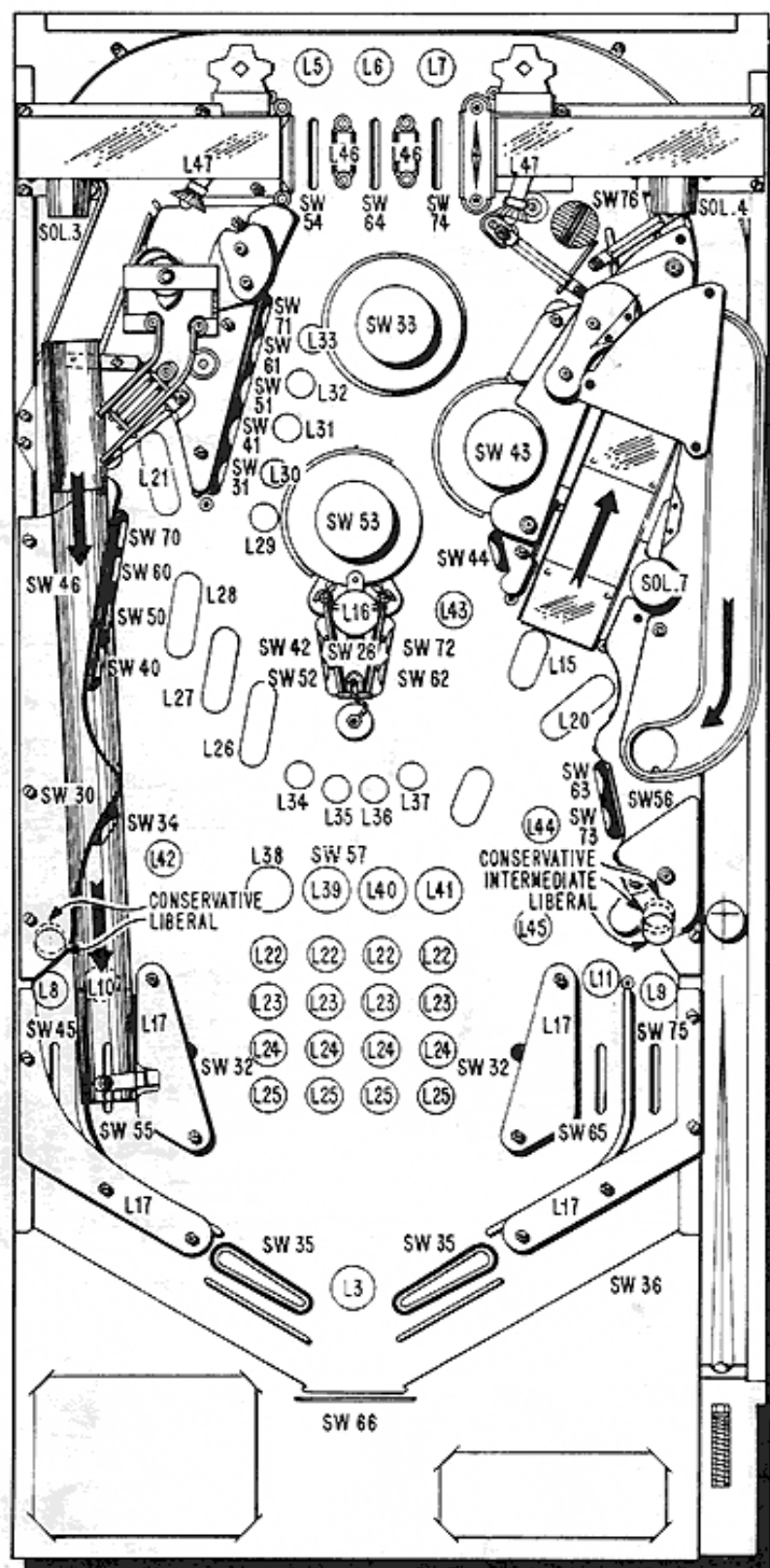


NOTE:
1. DIODES USED ARE TYPE 1N270.
2. DIODE BOARD ASSEMBLIES;
1A17 PART NO. MA-1239
2A17 PART NO. MA-1238

Premier Technology	
TITLE SWITCH MATRIX	
GAME # 713	
USED ON	DATE
DRAWN R.H.M.	APPROVED FEB 9 89
E-25887	

XI. PARTS INFORMATION

PLAYBOARD SWITCH AND LAMP ASSIGNMENTS



NOTE:

- L0 ENABLES RELAY "Q"
- L1 ENABLES RELAY "T"
- L2 ENABLES BALL RELEASE
- L12 ENABLES RAMP
- L13 ENABLES BALL GATE RELAY
- L14 ENABLES AUGER MOTOR RELAY "A"
- L16 ENABLES CENTER DOME (#67)
- L17 ENABLES BOTTOM LEFT AND RIGHT PLAYBOARD LIGHT SHOW
- L22 ENABLES "BRICK WALL" #4 (4x#44)
- L23 ENABLES "BRICK WALL" #3 (4x#44)
- L24 ENABLES "BRICK WALL" #2 (4x#44)
- L25 ENABLES "BRICK WALL" #1 (4x#44)

LAMP NUMBER LAMP ASSIGNMENT

- L3 "Escape Again"
- L4 Sound 16
- L5 #1 Top Rollover "Extra Ball"
- L6 #2 Top Rollover "Extra Ball"
- L7 #3 Top Rollover "Extra Ball"
- L8 Left Outside Rollover "Last Chance"
- L9 Right Outside Rollover "Last Chance"
- L10 Left Return Rollover "Special"
- L11 Right Return Rollover "Special"
- L15 Ramp "Lock"
- L18 "100,000 x Multiplier"
- L19 "Special"
- L20 Right Shooter "Escape"
- L21 Left Shooter "Lock"
- L26 "10,000 x Multiplier"
- L27 "100,000 x Multiplier"
- L28 "Lights Special"
- L29 #1 Top Left Spot Target "B"
- L30 #2 Top Left Spot Target "B"
- L31 #3 Top Left Spot Target "E"
- L32 #4 Top Left Spot Target "A"
- L33 #5 Top Left Spot Target "K"
- L34 #1 Center Spot Target "J"
- L35 #2 Center Spot Target "A"
- L36 #3 Center Spot Target "I"
- L37 #4 Center Spot Target "L"
- L38 1X
- L39 2X
- L40 4X
- L41 8X
- L42 Bottom Left Spot Target
- L43 "Cell Block #1"
- L44 Top Right Spot Target
- L45 "Cell Block #2"
- L46 #1 Bottom Right Spot Target
- L47 "Cell Block #3"
- L48 #2 Bottom Right Spot Target
- L49 "Cell Block #4"
- L50 Top Playboard Light Show
- L51 Spot Light
- L52 Search Light

SWITCH MATRIX NUMBER

SWITCH ASSIGNMENT

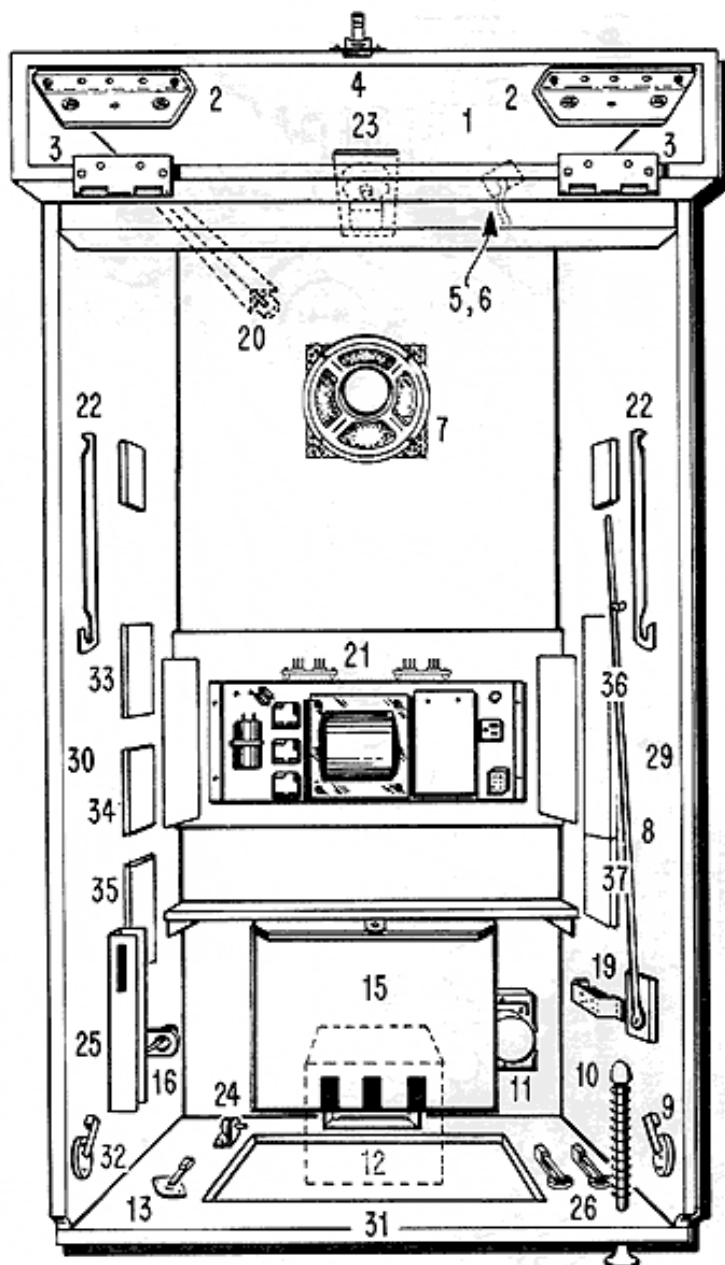
PART NO.

- SW 26 Scoring Ball Target 26375
- SW 30 Left Side Rollover 25824
- SW 31 #1 Top Left Spot Target With Bracket 25460Z
- SW 32 Kicking Rubber 18808
- Scoring Switch (2) 22224
- Actuating Switch and Bracket (4) 21352
- SW 33 Top Pop Bumper 25460U
- SW 34 Bottom Left Spot Target With Bkt. 26432
- SW 35 Left Flipper 26433
- SW 36 Right Flipper 25824
- SW 37 #3 Trough 25896
- SW 40 #1 Drop Target 25460Z
- SW 41 #2 Top Left Spot Target With Bracket 25460U
- SW 42 #1 Center Spot Target With Bracket 21352
- SW 43 Right Pop Bumper 25460U
- SW 44 Top Right Spot Target With Bracket 25824
- SW 45 Left Outside Rollover 19754
- SW 46 Left Shooter 25896
- SW 50 #2 Drop Target 25460Z
- SW 51 #3 Top Left Spot Target With Target 25460U
- SW 52 #2 Center Spot Target With Bracket 21352
- SW 53 Bottom Pop Bumper 25824
- SW 54 #1 Top Rollover 25824
- SW 55 Left Return Rollover 19754
- SW 56 Right Shooter 9141
- SW 57 Tilt (With Bracket) 25897
- SW 60 #3 Drop Target 25460Z
- SW 61 #4 Top Left Spot Target With Bracket 25460U
- SW 62 #3 Center Spot Target 25460U
- SW 63 #1 Bottom Right Spot Target With Target 25824
- SW 64 #2 Top Rollover 25824
- SW 65 Right Return Rollover 25824
- SW 66 Outhole 25895
- SW 70 #4 Drop Target 25460Z
- SW 71 #5 Top Left Spot Target With Target 25460U
- SW 72 #4 Center Spot Target With Bracket 25460U
- SW 73 #2 Bottom Right Spot Target With Target 25824
- SW 74 #3 Top Rollover 25824
- SW 75 Right Outside Rollover 25824
- SW 76 Hole

XI. PARTS INFORMATION

CABINET PARTS

ITEM	DESCRIPTION	PART NO.
1.	Cabinet	26274-713
2.	Lightbox Mounting Bracket (2)	19916
	Attaching Capscrew (2), Not Shown	FA-151
	Lockwasher (2), Not Shown	FA-641
3.	Butt Hinge, (Shown For Reference Only, P/O Lightbox Assy.) (2)	22734
4.	"U" Bolt (P/O Lightbox)	24659
	Latch Assembly (P/O Cabinet)	21969
5.	Cable Assembly, Domestic (High Voltage)	MA-1228
6.	Line Cord (Domestic)	23365
	Line Cord Cover Plate	23364
7.	Speaker, 4 Ohm, 15W, 6-1/2"	EL-83
	Speaker Guard	20931
8.	Prop Stick, Playfield	23940
9.	Right Flipper Switch	26424
10.	Ball Shooter Assembly	8835
11.	Switch, On/Off	23799
	Switch Plate (2)	18769
	Switch Housing	15163
12.	Front Door Assembly (Universal)	MA-688
	Cable Assembly	MA-676
	Slam Switch (N/O)	26130
	GV DC Lamp, Wedge Base	FD-2
	Frame, Door	FD-13
	Three Chute Door	24159
	Black Button Bezel	FD-14
	Entry/Reject Button	FD-15
	Button Spring	FD-16
	Reject Flap	FD-17
	Clamp, Frame	FD-18
	Flat Lock and Cam Assembly	FD-19
	Base Plate with Pivot and Stud	FD-20
	Microswitch Bracket	FD-21
	Clear Plastic Cover for Microswitch	FD-22
	Coin Microswitch with Wire	FD-23
	Lampholder	FD-24
	Black Reject Bezel	FD-26
13.	Replay Switch Assembly	18092
15.	Cashbox	25309
	Cover	25315
	Liner (Small) (3)	24870
	Liner (Large) (2)	24871
16.	Plumb Bob Tilt Switch Assembly	358
	Strike Plate	MH-30
	Carbon, Tilt Bob	357
	Rod, Tilt	22043
	Bracket	14653
	Clip	EL-66
18.	Interlock Switch	MA-12
19.	Knocker Assembly	MA-352
	Bell Assembly (Gong) (When Used)	4337
20.	Cabinet Leg (4)	3775
	Leg Bolt (8)	MH-21
	3" Leg Adjuster (4)	FA-665
	3/8-16", Jam Nut (8)	MA-1201
21.	Transformer Panel Assembly	EL-42
	Bridge Rectifier (3)	MA-1220
	Cable Assembly (Secondary)	XO-830
	Capacitor, 10,000UF, 25V	EL-10
	Fuse Block (8 Pos.)	23805
	Fuse Cover	EL-78
	Fuse Holder (F7 and F8) (2)	EL-28
	Fuses	EL-29
	F1, 1/2 Amp	EL-5
	F2, 6-1/4 Amp, SLO-BLO	EL-26
	F3, 1/4 Amp, SLO-BLO	EL-36
	F4, 8 Amp, SLO-BLO	EL-8
	F5, 10 Amp, SLO-BLO	EL-20
	F6, 5 Amp, SLO-BLO	EL-8
	F7, 1/2 Amp SLO-BLO	EL-21
	F8, 5 Amp, SLO-BLO (110V AC)	EL-3
	F8, 2.5 Amp, SLO-BLO (220V AC)	EL-3
	F9, 1 Amp	25374
	F9A, 1 Amp	18133
	Ground Bus Assembly (2)	XO-154
	Outlet, Service	25662
	Resistor, 0.33 Ohm, 10%	25658
	5W, Wire-Wound (2)	25657
	Transformer	MA-1136
22.	Cabinet Pivot Bracket (Left)	EL-78
	Cabinet Pivot Bracket (Right)	EL-26
23.	Line Filter Assembly	EL-33
	Fuse Holder	EL-50
	F20, 8 Amp, SLO-BLO (110V AC)	EL-51
	F20, 4 Amp, SLO-BLO (220V AC)	
	Line Filter	
	Line Filter (Germany)	



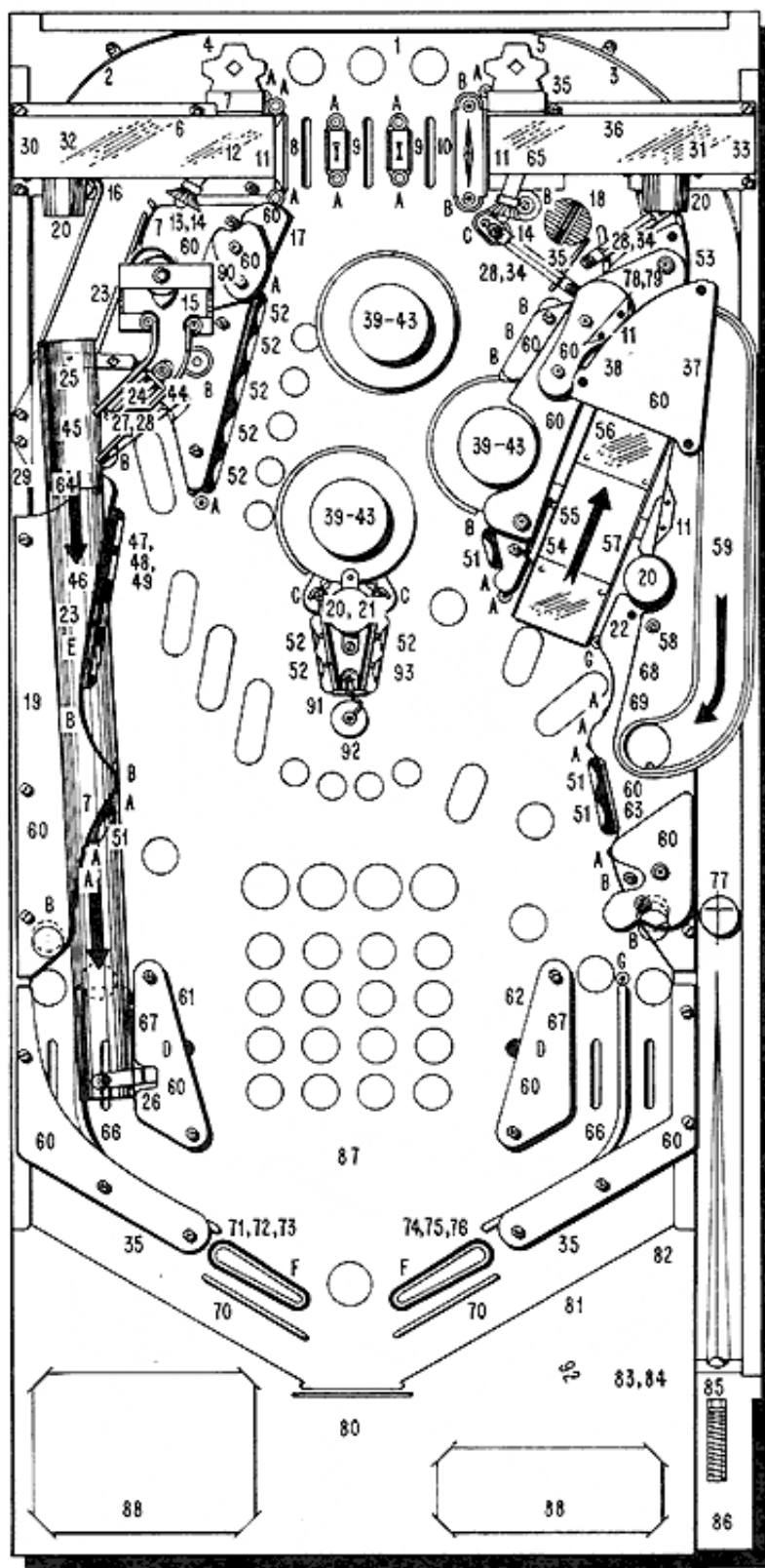
ITEM	DESCRIPTION	PART NO.
24.	Mounting Bracket	24149
	Control, Volume, 100 Ohm, 2W	XO-199
	Switch, PLAY/TEST	EL-57
25.	Ball Roll Tilt	24394
	Housing and Switch Assembly	24393
26.	Button Holder and Switch (2)	23503
	Pushbutton (2) (Black)	24293
28.	Lightbox (Not Shown)	26082-713
29.	Right Moulding (Not Shown)	22735
30.	Left Moulding (Not Shown)	22736
31.	Front Moulding (Not Shown)	16951
32.	Left Flipper Switch	26075
33.	Mounting Board Assembly	MA-1236
	Transistor Driver Board 4A16	MA-1124
34.	Mounting Board Assembly	MA-1197
	Transistor Driver Board 3A16	MA-1013
35.	Mounting Board Assembly	MA-1237
	Transistor Driver Board 2A16	MA-1234
36.	Mounting Board Assembly	MA-1054
	Pop Bumper Driver Boards (3)	19741
37.	Mounting Board Assembly	MA-1074
	Transistor Driver Board 1A16	MA-1078

XI. PARTS INFORMATION

PLAYBOARD PARTS INFORMATION

PARTS LIST

ITEM	DESCRIPTION	PART NO.
1	Flat Rail	25789
2	Flat Rail	26329
3	Flat Rail	25066
4	Arch Gate Assembly	19645
5	Arch Rebound Assembly	19646
6	Ball Guide Rail	4832
7	Ball Guide Rail (3)	6931
8	Rollover Guide, White	15648Z
9	Rollover Guide, Red (2)	15646U
10	Ball Guide Rail, 2-1/2", White	9397Z
11	Ball Deflector (4)	21158
12	Ball Guide Rail	25764
13	Lamp Socket	16002
14	Lamp Reflector (2)	25827
15	Auger, Motor Assembly (See Exploded View Illustration)	26256
16	Ball Gate Assembly (See Exploded View Illustration)	MA-968
17	Kicking Target Assembly (See Exploded View Assembly)	MA-1084
18	Kicking Target Decal	26365
19	Ball Hole Kicker Assembly (See Exploded View Assembly)	MA-853
20	Flat Rail	26330
21	Plastic Dome Hat (Clear) (4)	25147P
22	Plastic Dome Hat Decal	26283
23	Plastic Rivet (10)	MP-10
24	Ball Guide Rail (2)	4833
25	Ball Run-Off Wireform	26254
26	Tube Support Bracket	25779
27	Tube Support Bracket	25778
28	Wireform Gate	25798
29	Gate Shield (3)	17300
30	Ball deflector	25594
31	Plastic Housing (Left)	25815
32	Plastic Housing (Right)	25816
33	Left Housing Decal	25890
34	Right Housing Decal	25891
35	Wireform Gate (2)	21696
36	Ball Guide Rail (4)	6612
37	Ball Guide Rail	20786
38	Ball Guide Rail	25790
39	Ball Guide Rail	25782
40	Pop Bumper Cap, White (3)	10434Z
41	Pop Bumper Body, White (3)	10435Z
42	Pop Bumper Skirt, White (3)	10433Z
43	Pop Bumper Trim Platter (4)	25732
44	Pop Bumper Cap Decal (3)	26363
45	Ball Guide Rail	25661
46	Ball Guide Rail	4831
47	Tube Ramp	25770
48	Drop Target Assembly	MA-1075
49	Target Arm, Nylon (White) (4)	11905Z
50	Target Arm Decal (4)	26364
51	Spot Target Assembly (Yellow) (4)	25460T
52	Spot Target Assembly (Red) (8)	25640U
53	Ball Guide Rail	5977
54	Ramp Flap Assembly	25768
55	Ramp Lever Assembly	25769
56	Ramp Fence And Roller Assembly	25785
57	Ramp Right Fence	25773
58	Ramp Spacer	25389
59	Molded Ramp	25771
60	Plastic Shield Set	25889
61	Contact Kicker Assembly	MA-135A
62	Contact Kicker Assembly	MA-135
63	Kicker Assembly	MA-1083
64	Kicker Assembly	MA-1085
65	Search Light Assembly	MA-1134
66	Ball Guide Rail (2)	23833
67	Ball Guide Rail (2)	17106
68	Flat Rail	25799
69	Ball Guide Rail	12782
70	Snubber Rail (2)	13798
71	Left Flipper Assembly	MA-1139D
72	Left Flipper Coil	20095
73	Left Flipper Switch	26432
74	Right Flipper Assembly	MA-1140F
75	Right Flipper Coil	20095
76	Right Flipper Switch	26433
77	1-1/16" Steel Ball (3)	21864
78	Post Base (10)	14478Z
79	Split Post Cap (10)	14488Z
80	Cardholder	13647-713
81	Ball Return Unit Assembly	21622
82	Ball Return Gate Assembly	20607
83	Ball Return Fence	23856
84	Ball Return Gate Fence	23856
85	Ball Shooter Gauge	9767-713
86	Ball Shooter Assembly	25879
87	Mylar Overlay	25885
88	Playboard Rest Brackets (2) (Located On Playboard Bottom)	21194
89	Wireform Gate	25795
90	Ball Guide Rail	18070
91	Wire Cage	25792
92	Scoring Ball Target Assembly	MA-1235
93	Ball Chain	26347
	Spot Target Assembly (Red)	26418U



RUBBER RINGS

ITEM	DESCRIPTION	PART NO.
A	Mini-Post (19)	15705
B	5/16" (13)	10217
C	Siamese, 7/16" (3)	17493
D	2-1/2" (2)	10222
E	3"	10223
F	Flipper, Red (2)	13151
G	Mini-Post (Small) (2)	14793

MISCELLANEOUS PARTS

DESCRIPTION	PART NO.
"T" Relay	MA-25
"A" Relay	MA-833
"Q" Relay	MA-23
"B" Relay	MA-888
Plastic Support Post	20635P
Mini-Post Screw	14792
Siamese Post	17492
Plastic Post, 1"	11561P
Mini-Post Screw	25161
Plastic Post, 1-3/16"	11562