



**1981**  
**PARTS CATALOG**  
**ELECTRONIC PINBALL GAMES**  
**EIGHT BALL DELUXE • FIREBALL II**  
**EMBRYON • FATHOM • MEDUSA**  
**CENTAUR**

BALLY PINBALL DIVISION, 90 O'LEARY DRIVE, BENSENVILLE, ILLINOIS 60106

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# BALLY FLIPPER TYPE PINBALL GAMES

NUMBER IN PARENTHESIS INDICATES NUMBER OF PLAYERS

(A) INDICATES ADD-A-BALL MODEL OF PRECEDING GAME

(E) INDICATES ELECTRONIC

(S) INDICATES SUPER SIZE

## Listed Chronologically

NO.	NAME	DATE
1	MOON-SHOT (1)	February, 1963
2	CROSS COUNTRY (1)	March, 1963
3	CUE-TEASE (2)	July, 1963
4	3-IN LINE (4)	July, 1963
5	HOOTENANNY (1)	November, 1963
6	STAR-JET (2)	December, 1963
7	MONTE CARLO (1)	February, 1964
8	BONGO (2)	March, 1964
9	SKY DIVERS (1)	April, 1964
10	MAD WORLD (2)	May, 1964
11	GRAND TOUR (1)	June, 1964
12	HAPPY TOUR (1) (A)	June, 1964
13	2 IN 1 (2)	July, 1964
14	BIG DAY (4)	August, 1964
15	HARVEST (1)	October, 1964
16	HAYRIDE (1) (A)	October, 1964
17	BUS STOP (2)	December, 1964
18	BULLFIGHT (1)	January, 1965
19	SHEBA (2)	February, 1965
20	BANDWAGON (4)	March, 1965
21	MAGIC CIRCLE (1)	June, 1965
22	50/50 (2)	July, 1965
23	ACES HIGH (4)	August, 1965
24	DISCOTEK (2)	September, 1965
25	TRIO (1)	November, 1965
26	TRIO (1) (A)	November, 1965
27	BLUE RIBBON (4)	December, 1965
28	WILD WHEELS (2)	February, 1966
29	SIX STICKS (6)	March, 1966
30	GOLD RUSH (1)	April, 1966
31	GOLD RUSH (1) (A)	April, 1966
32	CAMPUS QUEEN (4)	August, 1966
33	LOOP THE LOOP (2)	September, 1966
34	LOOP THE LOOP (2) (A)	September, 1966
35	BAZAAR (1)	October, 1966
36	BAZAAR (1) (A)	October, 1966
37	CAPERSVILLE (4)	December, 1966
38	ROCKET III (1)	April, 1967
39	THE WIGGLER (4)	August, 1967
40	SURFERS (1)	December, 1967
41	DOGIES (4)	January, 1968
42	DIXIELAND (1)	April, 1968
43	SAFARI (2)	May, 1968
44	ROCK MAKERS (4)	August, 1968
45	MINI-ZAG (1)	November, 1968
46	COSMOS (4)	January, 1969
47	OP-POP-POP (1)	April, 1969
48	GATOR (4)	June, 1969
49	ON BEAM(1)	August, 1969
50	JOUST (2)	September, 1969

## Listed Alphabetically

NAME	NO. IN LIST AT LEFT
ACES HIGH (4)	23
AIR ACES (4)	89
ALADDIN'S CASTLE (2)	98
ALLIGATOR: See GATOR	
AMIGO (4)	83
BALLYHOO (4)	51
BANDWAGON (4)	20
BAZAAR (1)	35
BAZAAR (1) (A)	36
BIG DAY (4)	14
BIG SHOW (2)	79
BIG VALLEY (4)	57
BLACK JACK (4)	106
BLACK JACK (4) (E)	113
BLUE RIBBON (4)	27
BONGO (2)	8
BON VOYAGE (1)	86
BOOMERANG (4)	87
BOW AND ARROW (4)	93
BOWL-O (1)	56
BULLFIGHT (1)	18
BUS STOP (2)	17
CAMELOT (4)	55
CAMPUS QUEEN (4)	32
CAPERSVILLE (4)	37
CAPT. FANTASTIC (4)	97
CENTAUR	141
CHAMP (4)	80
CIRCUS (4)	78
COSMINT: See COSMOS	
COSMOS (4)	46
CROSS COUNTRY (1)	2
CUE-TEASE (2)	3
DELTA QUEEN (1)	84
DISCOTEK (2)	24
DIXIELAND (1)	42
DOGIES (4)	41
DOLLY PARTON (4) (A)	123
EIGHT BALL (4) (E)	110
EIGHT BALL DELUXE	136
EL TORO (1)	70
EMBRYON	138
EVEL KNIEVEL (4)	104
EVEL KNIEVEL (4) (E)	109
EXPRESSWAY (1)	66
50/50 (2)	22
FATHOM	139
FIREBALL (4)	69
FIREBALL II	137
FIRECRACKER (4)	63

# BALLY FLIPPER TYPE PINBALL GAMES

NUMBER IN PARENTHESIS INDICATES NUMBER OF PLAYERS

(A) INDICATES ADD-A-BALL MODEL OF PRECEDING GAME

(E) INDICATES ELECTRONIC

(S) INDICATES SUPER SIZE

## Listed Chronologically

NO.	NAME	DATE
51	BALLYHOO (4)	October, 1969
52	KING TUT (1)	December, 1969
53	KING REX (1) (A)	January, 1970
54	GALAHAD (2)	January, 1970
55	CAMELOT (4)	February, 1970
56	BOWL-O (1)	April, 1970
57	BIG VALLEY (4)	May, 1970
58	ZIP-A-DOO (2)	August, 1970
59	TRAIL DRIVE (1)	September, 1970
60	SEE-SAW (4)	November, 1970
61	4 QUEENS (1)	December, 1970
62	VAMPIRE (2)	January, 1971
63	FIRECRACKER (4)	February, 1971
64	SKYROCKET (2)	May, 1971
65	FOUR MILLION B.C. (4)	May, 1971
66	EXPRESSWAY (1)	August, 1971
67	SEA RAY (2)	September, 1971
68	MARINER (4)	November, 1971
69	FIREBALL (4)	February, 1972
70	EL TORO (1)	April, 1972
71	LITTLE JOE (4)	August, 1972
72	SPACE TIME (4)	September, 1972
73	MONTE CARLO (4)	March, 1973
74	ODDS & EVENS (1)	March, 1973
75	TIME ZONE (2)	May, 1973
76	NIP-IT (4)	July, 1973
77	HI-LO ACE (1)	October, 1973
78	CIRCUS (4)	November, 1973
79	BIG SHOW	January, 1974
80	CHAMP (4)	February, 1974
81	TWIN WIN (2)	February, 1974
82	SKY KINGS (1)	April, 1974
83	AMIGO (4)	May, 1974
84	DELTA QUEEN (1)	July, 1974
85	ROGO (4)	August, 1974
86	BON VOYAGE (1)	November, 1974
87	BOOMERANG (4)	December, 1974
88	FLICKER (2)	January, 1975
89	AIR ACES (4)	February, 1975
90	KNOCKOUT (2)	April, 1975
91	WIZARD (4)	May, 1975
92	HI-DEAL (1)	October, 1975
93	BOW AND ARROW (4)	November, 1975
94	FLIP FLOP (4)	January, 1976
95	HOKUS POKUS (2)	March, 1976
96	OLD CHICAGO (4)	April, 1976
97	CAPT. FANTASTIC (4)	June, 1976
98	ALADDIN'S CASTLE (2)	June, 1976
99	FREEDOM (4)	July, 1976
100	QUARTERBACK (2)	September, 1976

## Listed Alphabetically

NAME	NO. IN LIST AT LEFT
FLASH GORDON (4) (E)	135
FLICKER (2)	88
FLIP FLOP (4)	94
FOUR MILLION B.C. (4)	65
4 QUEENS (1)	61
FREEDOM (4)	99
FREEDOM (4) (E)	103
FRONTIER (4) (E)	133
FUTURE SPA (4) (E) (S)	124
GALAHAD (2)	54
GATOR (4)	48
GOLD RUSH (1)	30
GOLD RUSH (1) (A)	31
GRAND TOUR (1)	11
HANG GLIDER (4)	102
HAPPY TOUR (1) (A)	12
HARLEM GLOBETROTTERS (4) (E)	122
HARVEST (1)	15
HAY-RIDE (1) (A)	16
HI-DEAL (1)	92
HI-LO ACE (1)	77
HOKUS POKUS (2)	95
HOO: See BALLYHOO	
HOOTENANNY (1)	5
HOTDOGGIN' (4) (E) (S)	130
JOUST (2)	50
KICK OFF (4)	108
KING REX (1) (A)	53
KING TUT (1)	52
KIDD (4) (E)	120
KNOCKOUT (2)	90
LITTLE JOE (4)	71
LOOP THE LOOP (2)	33
LOOP THE LOOP (2) (A)	34
LOST WORLD (4) (E)	115
MAD WORLD (2)	10
MAGIC CIRCLE (1)	21
MARINER (4)	68
MATA HARI (4)	107
MATA HARI (4) (E)	112
MEDUSA	140
MINI-ZAG (1)	45
MONTE CARLO (1)	7
MONTE CARLO (4)	73
MOON-SHOT (1)	1
MYSTIC (4) (E)	129
NIGHT RIDER (4)	101
NIGHT RIDER (4) (E)	105
NIP-IT (4)	76
NITRO GROUNDSHAKER (4) (E)	125

• ALL ELECTRONIC GAMES

NUMBER IN PARENTHESIS INDICATES NUMBER OF PLAYERS

(A) INDICATES ADD-A-BALL MODEL OF PRECEDING GAME

(E) INDICATES ELECTRONIC

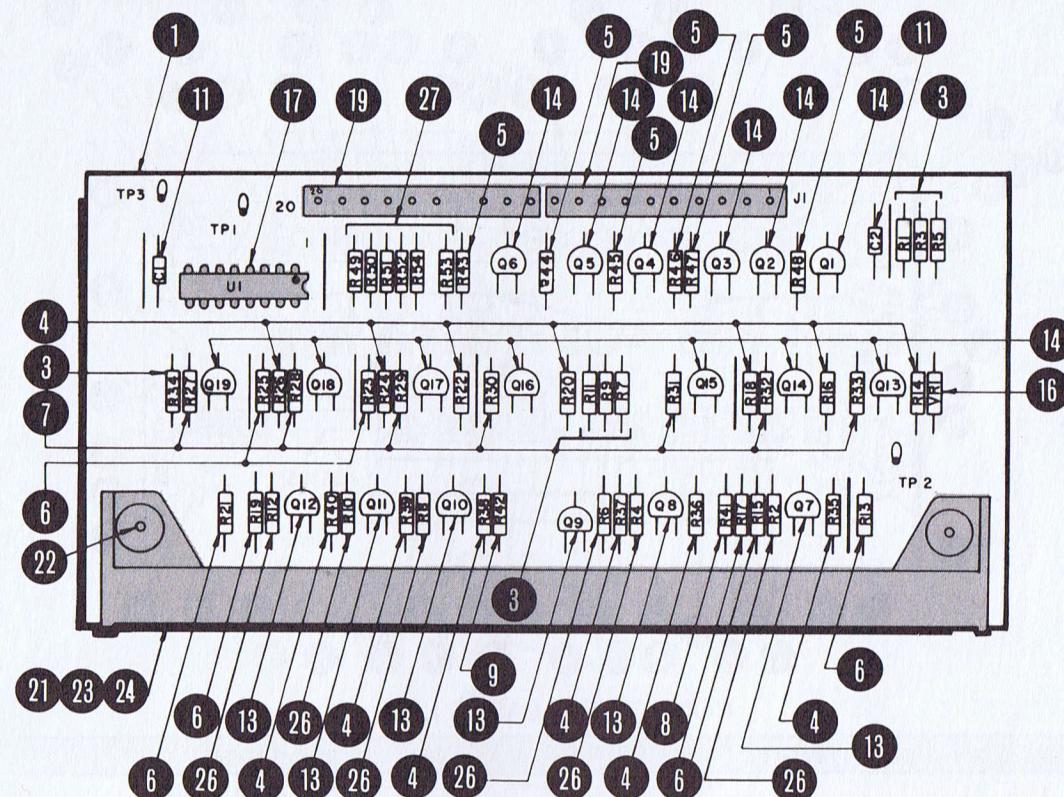
(S) INDICATES SUPER SIZE

## Listed Chronologically

NO.	NAME	DATE
101	NIGHT RIDER (4)	November, 1976
102	HANG GLIDER (4)	December, 1976
103	FREEDOM (4) (E)	December, 1976
104	EVEL KNIEVEL (4)	January, 1977
105	NIGHT RIDER (4) (E)	February, 1977
106	BLACK JACK (4)	April, 1977
107	MATA HARI (4)	May, 1977
108	KICK OFF (4)	June, 1977
109	EVEL KNIEVEL (4) (E)	June, 1977
110	EIGHT BALL (4) (E)	September, 1977
111	POWER PLAY (4) (E)	January, 1978
112	MATA HARI (4) (E)	April, 1978
113	BLACK JACK (4) (E)	June, 1978
114	STRIKES AND SPARES (4) (E)	June, 1978
115	LOST WORLD (4) (E)	August, 1978
116	SIX MILLION DOLLAR MAN (6) (E)	October, 1978
117	PLAYBOY (4) (E)	December, 1978
118	SUPersonic (4) (E)	March, 1979
119	STAR TREK (4) (E)	April, 1979
120	KISS (4) (E)	June, 1979
121	PARAGON (4) (E) (S)	June, 1979
122	HARLEM GLOBETROTTERS	September, 1979
123	DOLLY PARTON	November 1979
124	FUTURE SPA	December 1979
125	NITRO GROUNDSHAKER	January, 1980
126	SILVERBALL MANIA	February, 1980
127	SPACE INVADER	April, 1980
128	ROLLING STONES	May, 1980
129	MYSTIC	June, 1980
130	HOTDOGGIN'	July, 1980
131	VIKING	July, 1980
132	SKATEBALL	September, 1980
133	FRONTIER	November, 1980
134	XENON	November, 1980
135	FLASH GORDON	February, 1981
136	EIGHT BALL DELUXE	April, 1981
137	FIREBALL II	June, 1981
138	EMBRYON	June, 1981
139	FATHOM	August, 1981
140	MEDUSA	September, 1981
141	CENTAUR	October, 1981

## Listed Alphabetically

NAME	NO. IN LIST AT LEFT
ODDS & EVENS (1)	74
OLD CHICAGO (4)	96
ON BEAM (1)	49
OP-POP-POP (1)	47
PARAGON (4) (E) (S)	121
PLAYBOY (4) (E)	117
POWER PLAY (4) (E)	111
QUARTERBACK (2)	100
ROCKET III (1)	38
ROCK MAKERS (4)	44
ROGO (4)	85
ROLLING STONES (4) (E)	128
SAFARI (2)	43
SEA RAY (2)	67
SEE-SAW (4)	60
SHEBA (2)	19
SILVERBALL MANIA (4) (E)	126
SIX MILLION DOLLAR MAN (6) (E)	116
SIX STICKS (6)	29
SKATEBALL (4) (E)	132
SKY DIVERS (1)	9
SKY KINGS (1)	82
SKYROCKET (2)	64
SPACE INVADER (4) (S)	127
SPACE TIME (4)	72
STAR-JET (2)	6
STAR TREK (4) (E)	119
SUPERSONIC (4) (E)	118
SURFERS (1)	40
THE WIGGLER (4)	39
TIME ZONE (2)	75
TRAIL DRIVE (1)	59
TRIO (1)	25
TRIO (1) (A)	26
TWIN WIN (2)	81
VAMPIRE (2)	62
VIKING (4) (E)	131
WILD WHEELS (2)	28
WIGGLER: See THE WIGGLER	
WIZARD (4)	91
XENON (4) (E)	134
ZIP-A-DOO (2)	58
2 IN 1 (2)	13
3-IN-LINE (4)	4



COMPONENT PARTS LIST

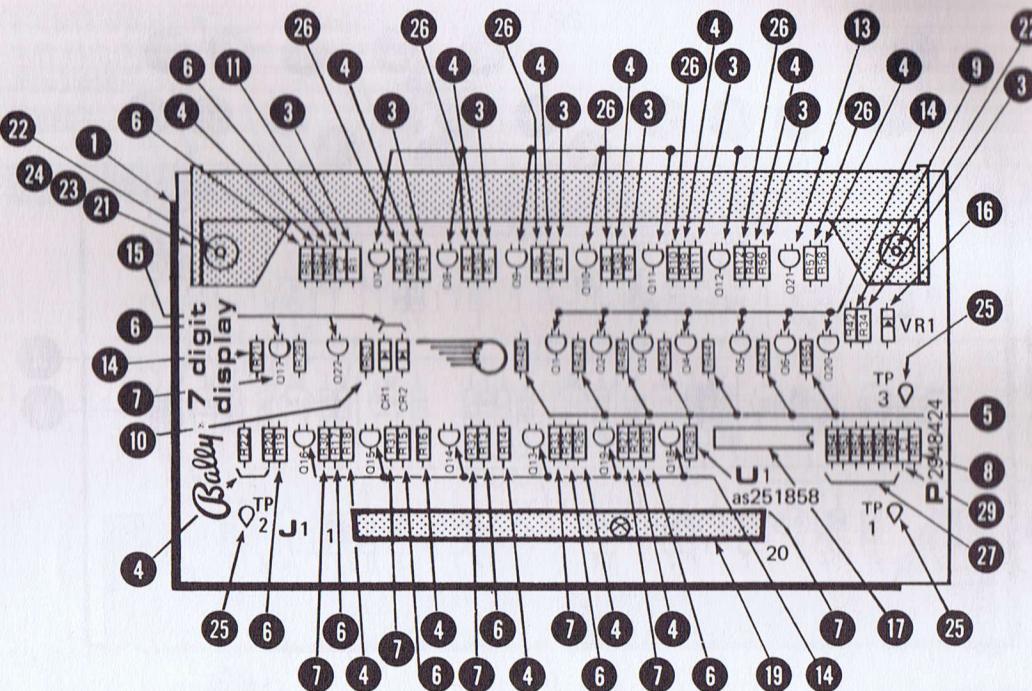
ITEM	REFERENCE DESIGNATION	BALLY PART NO.	DESCRIPTION
1		P-2948-296	P.C. Board, M-645-392
3	R1, R3, R5, R7, R9, R11, R34	E-105-331	Resistor, 100K
4	R14, R16, R18, R20, R22, R24, R26, R35, R36, R37, R38, R39, R40	E-105-227	Resistor, 300K
5	R43, R44, R45, R46, R47, R48	E-105-228	Resistor, 9.1K
6	R13, R15, R17, R19, R21, R23, R25	E-105-229	Resistor, 1.5K
7	R27, R28, R29, R30, R31, R32, R33	E-105-222	Resistor, 1.2K
8	R41	E-105-231	Resistor, 39K
9	R42	E-105-271	Resistor, 240K
10			
11	C1, C2	E-586-65	Capacitor, .01 MFD
13	Q7, Q8, Q9, Q10, Q11, Q12	E-585-32	Transistor (2N5401)
14	Q1, Q2, Q3, Q4, Q5, Q6, Q13, Q14, Q15, Q16, Q17, Q18, Q19	E-585-33	Transistor (MPS-A42)
16	VR1	E-598-7	Zener Diode, 110V
17	U1	E-620-38	I.C. Decoder
18			
19	J1	E736-10	10 Pin Wafer Pin Connector
21	DS1	E-680	Digital Display Panel
22		M-1836	Hi-Lo Screw, W/H
23		P-2399	Display Mounting (Top)
24		P-2399-1	Display Mounting (Bottom)
26	R2, R4, R6, R8, R10, R12	E-105-287	Resistor, 2.2K
27	R49, R50, R51, R52, R53, R54	E-105-242	Resistor, 20K
28			Wire Jumper

NOTE: INTERCHANGEABLE WITH AS-2518-15

WHEN ORDERING PART,  
SPECIFY PART NO.  
AND NAME OF GAME

# A1 AS-2518-58 7 DIGIT DISPLAY DRIVER MODULE

EIGHT BALL  
DELUXE  
FIREBALL II  
FATHOM  
MEDUSA  
CENTAUR



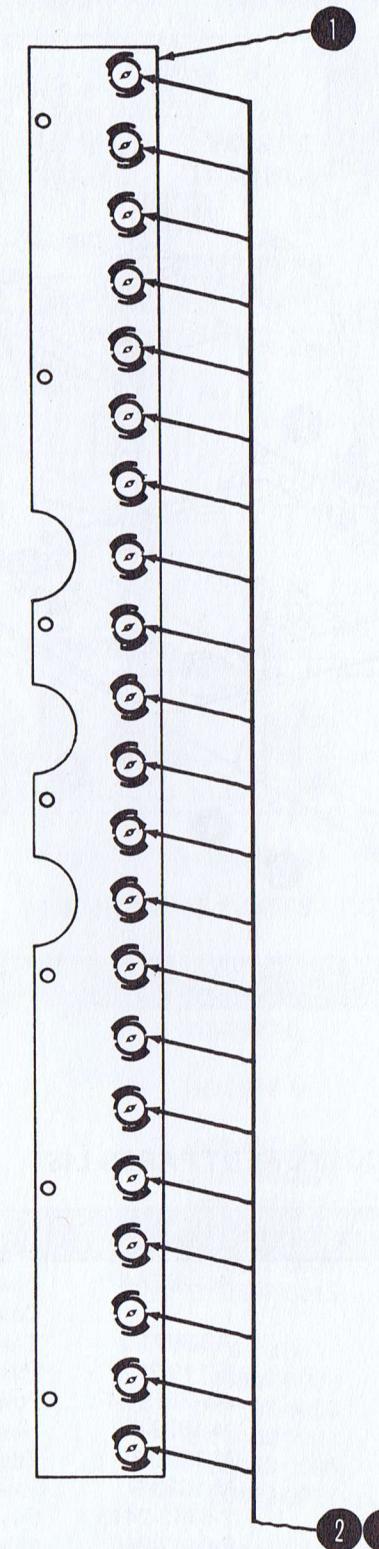
COMPONENT PARTS LIST

ITEM	QTY.	DESIGNATION	PART NO.	DESCRIPTION
1	1		P-2948-424	P. C. B. M-645-546
2				
3	8	R1, 3, 5, 7, 9, 11, 56, 34	E-105-331	100K Resistor
4	15	R14, 16, 18, 20, 22, 24, 26, 35-40, 58, 60	E-105-227	300K Resistor
5	7	R43-48, 55	E-105-228	9.1K Resistor
6	8	R13, 15, 17, 19, 21, 23, 25, 61	E-105-229	1.5K Resistor
7	8	R27-33, 60	E-105-222	1.2K Resistor
8	1	R41	E-105-231	39K Resistor
9	1	R42	E-105-271	240K Resistor
10	1	R63	E-105-248	150K Resistor
11	1	C2	E-586-65	.01 uF Capacitor 500 V
12				
13	7	Q7-12, 21	E-585-32	2N5401 Transistor
14	15	O1-6, 13-19, 20, 22	E-585-33	MPSA-42 Transistor
15	2	CR1 -2	E-587-14	1N4148 Diode
16	1	VR1	E-598-7	IN3045A Zener Diode 100 V
17	1	U1	E-620-38	MC14543 I.C.
18				
19	2	J1	E-736-10	10 Pin Wafer KK-156
20				
21	1	DS1	E-680-7	7 Digit Display Panel
22	2		M-1836	Hi-Low Screw W/H
23	1		P-2399	Display Mtg. Top
24	1		P-2399-1	Display Mtg. Bottom
25	3	TP1-3	P-5399	Test Clip
26	7	R2, 4, 6, 8, 12, 57	E-105-287	2.2K Resistor
27	6	R49-54	E-105-242	20K Resistor
28				
29	1	C1	E-586-85	.01 uF Capacitor 25 V

NOTE: 1. All E-105 Resistors are 1/4 Watt 5%  
2. Remove Pin 14 for key on J1 Assembled P.C. board.  
3. Board to be tested using procedures as outlined in FO-503 except temp. cycle and post cycle test, not required.

# MEDUSA FEATURE DISPLAY A1

• MEDUSA



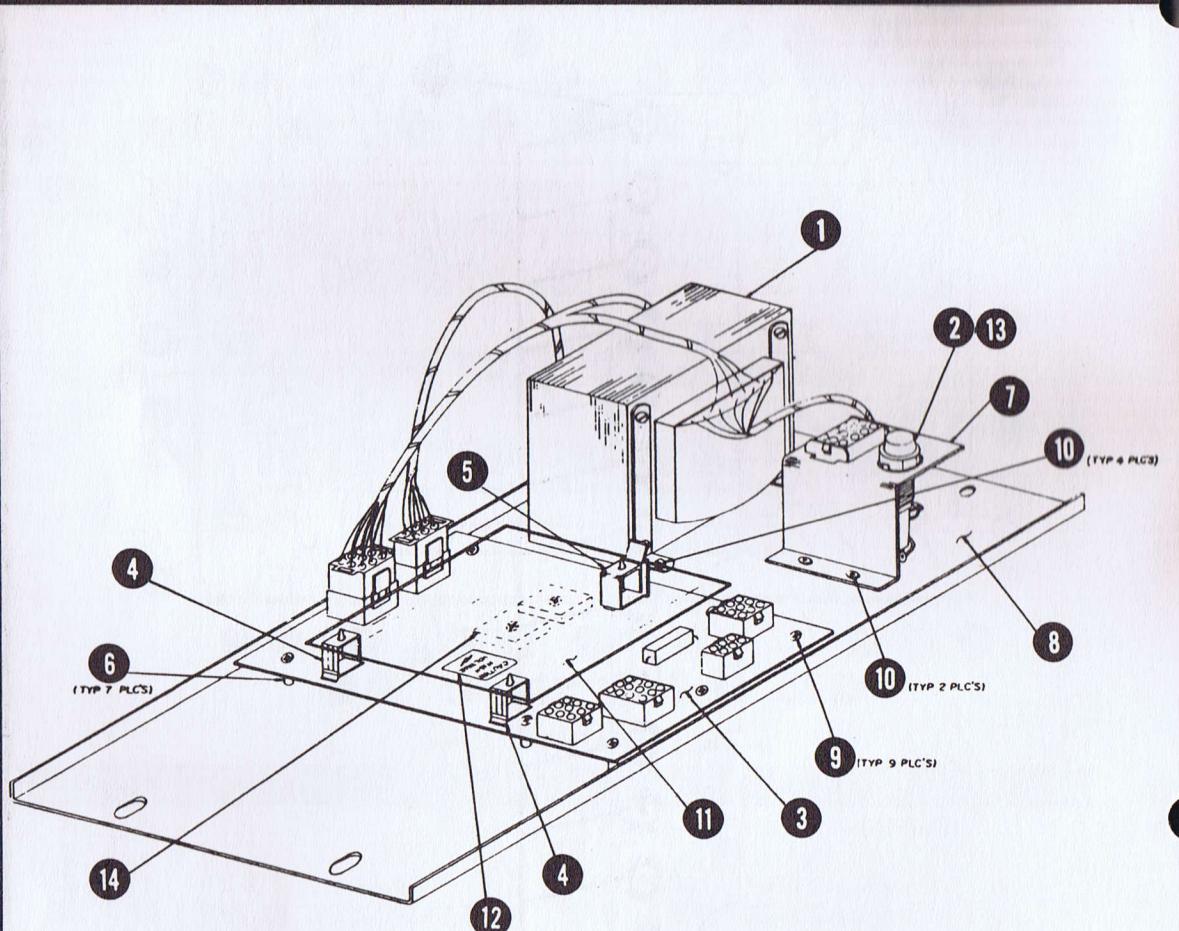
COMPONENT PARTS LIST

ITEM	PART NO.	DESCRIPTION
1	P-2948-462	PCB Light Strip
2	E-120-181	Lamp Socket
3	E-125-73	Lamp

WHEN ORDERING PART,  
SPECIFY PART NO.  
AND NAME OF GAME

WHEN ORDERING PART,  
SPECIFY PART NO.  
AND NAME OF GAME

# A2 AS-2877-6 POWER TRANSFORMER MODULE

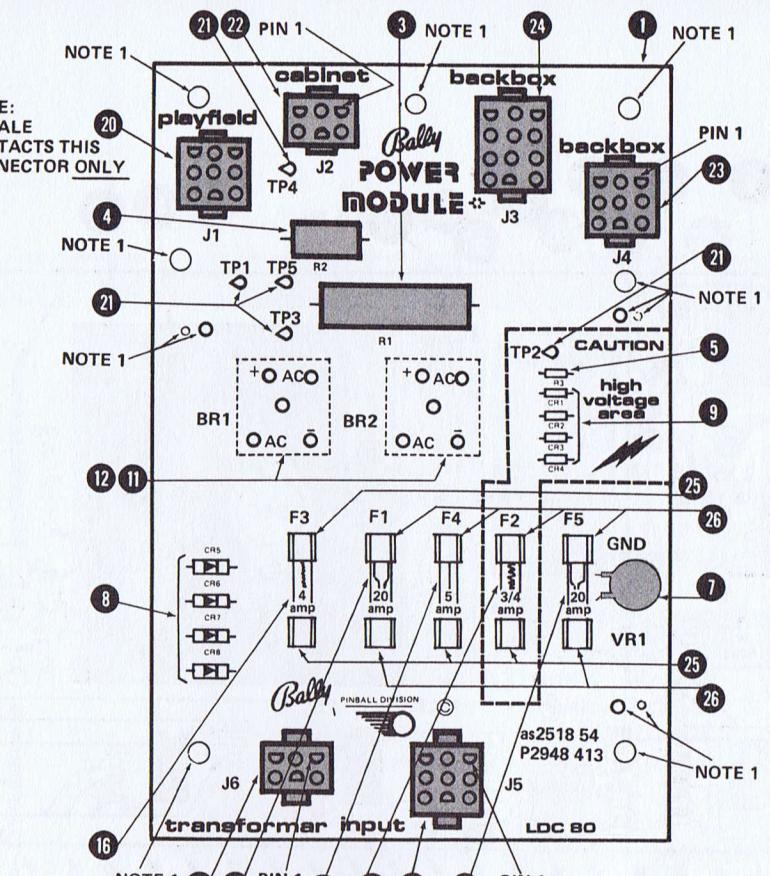


COMPONENT PARTS LIST

ITEM	REFERENCE DESIGNATION	BALLY PART NO.	DESCRIPTION
0	A2	AS-2877-6	Power Transformer Module, Complete
1		AS-3071-2	Transformer
2		E-148-25	Fuse Holder
3	A2	AS-2518-54	Power Module Assy.
4		M-1829-4	Hinged Support
5		M-1829-3	Edge Holder
6		M-1829-5	Spacer
7		P-6442-244b	Fuse & Connect Brkt.
8		P-6442-246	Chassis
9		RLPP-832-1812	Screw
10		RLPP-1032-1806	Screw
11		P-2692-2	Shield
12		M-469-936a	High Voltage Sticker
13		E-133-24	3A S.B. Fuse
14		M-1834	H.S. Compound

WHEN ORDERING PART,  
SPECIFY PART NO.  
AND NAME OF GAME

# AS-2518-54 RECTIFIER BOARD ASSEMBLY A2



COMPONENT PARTS LIST

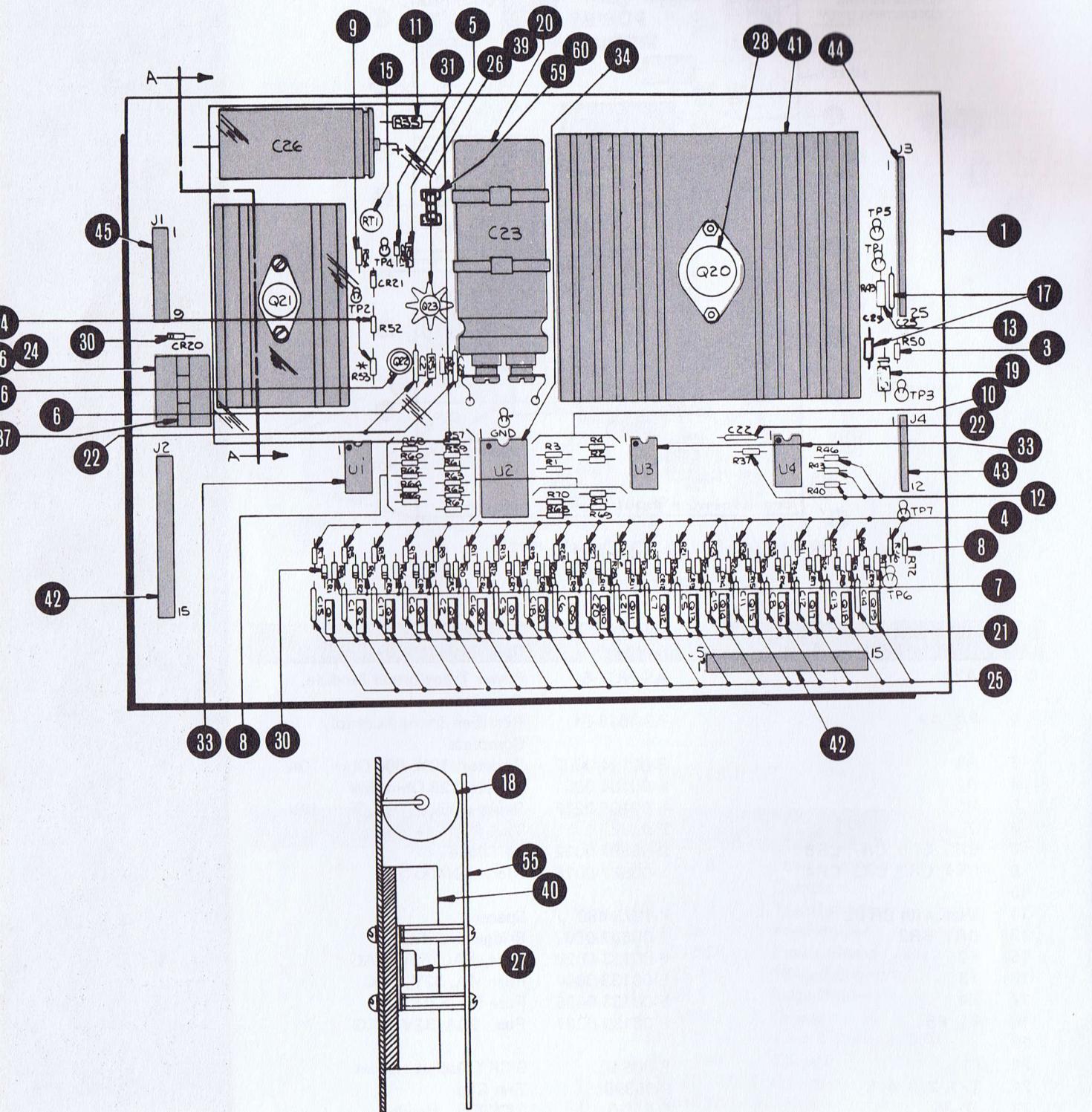
ITEM	REFERENCE DESIGNATION	BALLY PART NO.	DESCRIPTION
0 0	A2	AS-2877-6	Power Transformer Module, Complete
1	P/O A2	AS-2518-54	Rectifier Board Assembly, Complete
3	R1	E-00104-0092	Resistor, 10%, 600 Ohm, 10W
4	R2	E-00104-0091	Resistor, 25 Ohm, 5W
5	R3	E-00105-0226	Resistor, 5%, 100K Ohm, 1/4W
7	VR1	E-00623	Varistor
8	CR5, CR6, CR7, CR8	E-00587-0022	3A Diode
9	CR1, CR2, CR3, CR4	E-00587-0015	Diode (IN4004)
10			
11	Used with BR1-2	P-1973-480	Spacer
12	BR1, BR2	E-00602-0007	Bridge Rectifier
15	F2	E-00133-0028	Fuse, 1/2A, 250V, 3AG
16	F3	E-00133-0004	Fuse, 4A, 32V, 3AG
17	F4	E-00133-0005	Fuse 5A, 32V, 3AG
18	F1, F5	E-00133-0027	Fuse, 20A, 32V, 3AG
19			
20	J1	E-806-9	9 CKT Socket Header
21	TP1, 2, 3, 4, 5	P-05399	Test Clip
22	J2, J6	E-805-6	6 CKT Pin Header
23	J4, J5	E-805-9	9 CKT Pin Header
24	J3	E-805-12	12 CKT Pin Header
25	F2, 3, 4	E-00148-0021	Fuse Clips
26	F1, 5	E-00148-0022	Fuse Clips (Low Resistance)

WHEN ORDERING PART,  
SPECIFY PART NO.  
AND NAME OF GAME

# AS-2518-22 SOLENOID DRIVER/ VOLTAGE REGULATOR MODULE

• ALL GAMES

**A3**



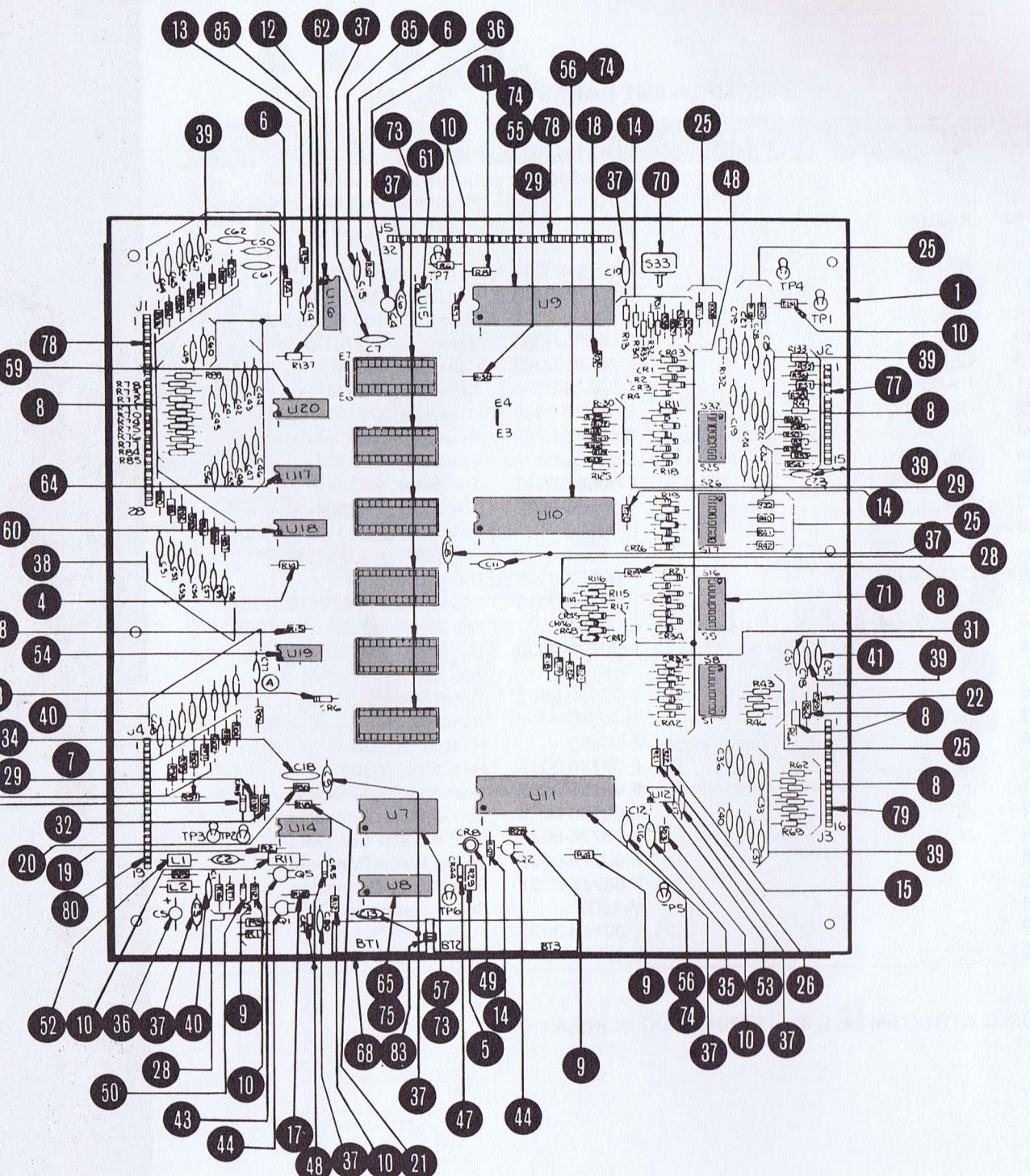
For Games Listed  
Below. Order By  
Number Listed  
With Game Name.

## COMPONENT PARTS LIST

ITEM	REFERENCE DESIGNATION	BALLY PART NO.	DESCRIPTION
1	A4-(see note 1)	AS-2962-XX	MPU Module Complete.
2	A4 (see note 2)	AS-2518-35	MPU Module less Program Memory, U1-6 incl.
3-32	See Schematic		Resistors, See schematic for value.
34	C18	E-00586-0019	Capacitor, .05 MFD, 100V
35	C16	E-00586-0081	Capacitor, .1 MFD, 100V
36	C4, C5	E-00586-0073	Capacitor, 4.7 MFD, 25V
37	C3, C6-C13, C17, C81, C80	E-00586-0085	Capacitor, .01 MFD, 500V
38	C41-C67	E-00586-0083	Capacitor, 470 PFD, 1kv
39	C19-C31, C78, C33-C40, C79	E-00586-0082	Capacitor, 390 PFD, 1kv
40	C1, C2, C77, C68-C75	E-00586-0084	Capacitor, 820 PFD, 1kv
41	C32	E-00586-0077	Capacitor, 3000 PF, 1kv
43	Q5	E-00585-0023	Transistor PNP (MPS-3702)
44	Q1, Q2	E-00585-0031	Transistor (2N3904)
47	CR44	E-00587-0015	Diode (IN4004)
48	CR1-CR7, CR11-CR43, CR45-CR48	E-00587-0014	Diode (IN4148)
49	CR8	E-00679	LED (Green)
50	VR1	E-00598-0008	Diode Zener (8.2V, IN9598)
52	L1, L2	E-00604-0003	Inductor, 22 Micro Hy.
53	U12	E-00620-0004	Timer (555)
54	U19	E-00620-0005	Quad 2 Input (4011)
55	U9	E-00620-0028	MPU I.C. (6800)
56	U10, U11	E-00620-0029	PIA I.C. (6820/21)
57	U7	E-00620-0030	RAM I.C. (6810)
59	U20	E-00620-0032	HEX Buffer I.C. (14502B)
60	U14, U18	E-00620-0033	HEX Inverter (4049B)
61	U15	E-00620-0034	Quad Memory Driver (MC3459L)
62	U16	E-00620-0035	Dual Monostable (9602)
64	U17	E-00620-0041	Quad 2 Inputs (74L00N)
65	U8	E-00620-0042	RAM (C MOS, P5101L-3)
68	BT1, BT2, BT3	E-00628-0003	Battery
70	S33	E-00658-0001	Push Button Switch
71	S1-S8, S9-S16, S17-S24, S25-S32	E-00677	DIP Switch
73		E-00712	24 Pin Socket
74		E-00712-0001	40 Pin Socket
75		E-00712-0003	22 Pin Socket
77	J2	E-00766-0015	15 Pin Wafer Connector
78	J4	E-00766-0028	28 Pin Wafer Connector
79	J3 P/O J5	E-00766-0016	16 Pin Wafer Connector
80	J1	E-00766-0019	19 Pin Wafer Connector
81	P/O J5	E-00766-0017	17 Pin Wafer Connector
82		E-00647-0004	Ty-Wrap
83			
84			
85	C14, C15	E-00586-0067	Capacitor 470 Pf, 1kv

Note 1:  
AS-2518-35 is without memory (ROM) combinations.

Note 2:  
When ordering replacement memory chips U1-U6, refer to part number stamped on chip, or Memory Combination Charts on Page 16



WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

WHEN ORDERING PART,  
SPECIFY PART NO.  
AND NAME OF GAME

# MPU MEMORY COMBINATIONS

TABLE I  
MEMORY COMBINATIONS AND JUMPERS FOR USE WITH MPU AS-2518-17

NAME OF GAME	SOCKET LOCATIONS						
	U1	U2	U3	U4	U5	U6	JUMPER REQUIREMENTS
FREEDOM	E720-8	E720-10			E720-7	E1-E2, E3-E4, E8-E9	
	E720-8	E720-9			E720-7	E1-E2, E3-E4, E8-E9	
	E720-1	E720-2			E720-7	E1-E2, E3-E4, E8-E9	
	E720-8	E720-19			E720-7	E1-E2, E3-E4, E8-E9	
	E720-8	E720-10	E720-3	E720-4	E720-5	E720-6	E3-E4, E8-E9
	E720-8	E720-9	E720-3	E720-4	E720-5	E720-6	E3-E4, E8-E9
	E720-1	E720-2	E720-3	E720-4	E720-5	E720-6	E3-E4, E8-E9
	E720-8	E720-19	E720-3	E720-4	E720-5	E720-6	E3-E4, E8-E9
NIGHT RIDER	E721-12	E721-13			E720-20	E1-E2, E3-E4	
	E721-10	E721-11			E720-20	E1-E2, E3-E4	
	E721-8	E721-9			E720-20	E1-E2, E3-E4	
	E721-3	E721-7			E720-20	E1-E2, E3-E4	
	E721-5	E721-6			E720-20	E1-E2, E3-E4	
	E721-3	E721-4			E720-20	E1-E2, E3-E4	
EVEL KNIEVEL		E722-17			E720-20	E1-E2, E3-E4, E6-E7	
		E722-11			E720-20	E1-E2, E3-E4, E6-E7	
EIGHT BALL	E723-14	E723-15	E723-16		E720-20	E1-E2, E3-E4, E8-E10	
		E723-17			E720-20	E1-E2, E3-E4, E6-E7	
	E723-18	E723-19	E723-16		E720-20	E1-E2, E3-E4, E8-E10	
		E723-20			E720-20	E1-E2, E3-E4, E6-E7	
POWER PLAY	E724-21	E724-22	E724-23	E724-24	E720-20	E1-E2, E3-E4, E8-E10	
	E724-14	E714-15	E724-20	E724-17	E720-20	E1-E2, E3-E4, E8-E10	
		E724-25			E720-20	E1-E2, E3-E4, E6-E7	
MATA HARI		E725-21			E720-20	E1-E2, E3-E4, E6-E7	
STRIKES & SPARES		E740-16			E720-20	E1-E2, E3-E4, E6-E7	
BLACK JACK		E728-32			E720-20	E1-E2, E3-E4, E6-E7	

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

TABLE II  
MEMORY COMBINATIONS AND JUMPERS FOR USE WITH MPU AS-2518-17  
(F.O. 597 MODIFIED)

NAME OF GAME	SOCKET LOCATIONS						
	U1	U2	U3	U4	U5	U6	JUMPER REQUIREMENTS
FREEDOM	E720-8	E720-10			E720-7	E1-E2, E3-E4, E12-E7, E14-E15	
NIGHT RIDER	E721-21					E720-20	E1-E2, E3-E4, E12-E13, E14-E11, E7-E6
	E721-12	E721-13				E720-20	Same as FREEDOM
EVEL KNIEVEL			E722-17			E720-20	E1-E2, E3-E4, E12-E13, E14-E11, E7-E6
EIGHT BALL			E723-17			E720-20	Same as EVEL KNIEVEL
POWER PLAY			E724-25			E720-20	Same as EVEL KNIEVEL
MATA HARI			E725-21			E720-20	Same as EVEL KNIEVEL
STRIKES & SPARES			E740-16			E720-20	Same as EVEL KNIEVEL
BLACK JACK			E728-32			E720-20	Same as EVEL KNIEVEL
LOST WORLD	E729-33	E729-48				E720-28	Same as EVEL KNIEVEL
SIX MILLION DOLLAR MAN	E742-20	E742-18				E720-30	Same as EVEL KNIEVEL
PLAYBOY	E743-11	E743-12				E720-30	Same as EVEL KNIEVEL
	E743-14	E743-12				E720-30	Same as EVEL KNIEVEL
SUPersonic	E741-7	E741-8				E720-30	Same as EVEL KNIEVEL
STAR TREK	E741-10	E741-8				E720-30	Same as EVEL KNIEVEL
	E745-11	E745-12				E720-30	Same as EVEL KNIEVEL
KISS	E746-3	E746-4				E720-30	Same as EVEL KNIEVEL
PARAGON	E746-11	E746-12				E720-30	Same as EVEL KNIEVEL
	E746-5	E746-6				E720-30	Same as EVEL KNIEVEL
HARLEM GLOBETROTTERS	E750-3	E750-4				E720-35	Same as EVEL KNIEVEL
DOLLY PARTON	E750-7	E750-8				E720-35	Same as EVEL KNIEVEL
	E777-10	E777-13				E720-35	Same as EVEL KNIEVEL
FUTURE SPA	E777-10	E777-11				E720-35	Same as EVEL KNIEVEL
	E781-7	E781-9				E720-35	Same as EVEL KNIEVEL
NITRO-GROUNDSHAKER	E776-10	E776-11				E720-35	Same as EVEL KNIEVEL
(NOTE: E776-17 can be substituted for E776-10)							
SILVERBALL MANIA	E786-16	E786-17				E720-35	Same as EVEL KNIEVEL
SPACE INVADERS	E792-10	E792-13				E720-35	Same as EVEL KNIEVEL
ROLLING STONES	E796-17	E796-18				E720-35	Same as EVEL KNIEVEL
	(NOTE: E796-21 may be substituted for E796-17)						
MYSTIC	E798-3	E798-4				E720-35	Same as EVEL KNIEVEL
HOT DOGGIN	E809-5	E809-6				E720-35	Same as EVEL KNIEVEL
VIKING	E802-5	E802-6				E720-35	Same as EVEL KNIEVEL

# MPU MEMORY COMBINATIONS

TABLE III  
MEMORY COMBINATIONS AND JUMPERS FOR USE WITH MPU AS-2518-35

NAME OF GAME	U1	U2	SOCKET LOCATIONS U3      U4	U5	U6	JUMPER REQUIREMENTS
FREEDOM	E720-8	E720-10		E720-7	E1-E3, E2-E6, E9-E11, E12-E36, E13-E15, E16-E17, E31-E32, E33-E34	
NIGHT RIDER	E721-12	E721-13		E720-20	Same as FREEDOM	
EVEL KNIEVEL		E722-17		E720-20	E7-E8, E13-E15, E16A-E19, E9, E11, E12-E36, E31-E32, E33-E34, E1-E4, E2-E6.	
EIGHT BALL		E723-17		E720-20	Same as EVEL KNIEVEL	
POWER PLAY		E724-25		E720-20	Same as EVEL KNIEVEL	
MATA HARI		E725-21		E720-20	Same as EVEL KNIEVEL	
STRIKES & SPARES		E740-16		E720-20	Same as EVEL KNIEVEL	
BLACK JACK		E728-32		E720-20	Same as EVEL KNIEVEL	
LOST WORLD A	E729-39	E729-40		E720-29	E1-E5, E2-E4, E7-E8, E10-E12, E13A-E14, E16A-E18, E11-E19, E31-E32, E33-E35.	
LOST WORLD B	E729-34	E729-47		E720-28	E1-E5, E2-E4, E7-E8, E10-E12, E13A-E14, E16A-E19, E11-E25, E31-E32, E33-E34.	
LOST WORLD C	E729-33	E729-48		E720-28	E1-E4, E2-E6, E7-E8, E9-E11, E12-E36, E13-E15, E16A-E19, E31-E32, E33-E34.	
SIX MILLION DOLLAR MAN	E742-9	E742-10		E720-30	Same as LOST WORLD "B"	
	E742-15	E742-16		E720-30	Same as LOST WORLD "B"	
	E742-20	E742-18		E720-30	Same as LOST WORLD "C"	
	E742-13	E742-14		E720-30	Same as LOST WORLD "B"	
PLAYBOY	E743-11	E743-12		E720-30	Same as LOST WORLD "C"	
	E743-14	E743-12		E720-30	Same as LOST WORLD "C"	
SUPersonic	E741-10	E741-8		E720-30	Same as LOST WORLD "C"	
STAR TREK	E745-9	E745-10		E720-30	Same as LOST WORLD "B"	
	E745-11	E745-12		E720-30	Same as LOST WORLD "C"	
KISS	E746-3	E746-4		E720-30	Same as LOST WORLD "C"	
	E746-11	E746-12		E720-30	Same as LOST WORLD "C"	
	E746-5	E746-6		E720-30	Same as LOST WORLD "C"	
PARAGON	E748-14	E748-15		E720-30	Same as LOST WORLD "C"	
HARLEM GLOBETROTTERS	E750-7	E750-8		E750-35	Same as LOST WORLD "C"	
DOLLY PARTON	E777-10	E777-13		E720-35	Same as LOST WORLD "C"	
FUTURE SPA	E781-7	E781-9		E720-35	Same as LOST WORLD "A"	
NITRO GROUNDSHAKER	E776-10	E776-11		E720-35	Same as LOST WORLD "C"	
	(NOTE: E776-17 may be substituted for E776-10.)					
SILVERBALL MANIA	E786-16	E786-17		E720-35	Same as LOST WORLD "C"	
SPACE INVADERS	E792-10	E792-13		E720-35	Same as LOST WORLD "C"	
ROLLING STONES	E796-17	E796-18		E720-35	Same as LOST WORLD "C"	
	(NOTE: E796-21 may be substituted for E796-17.)					
MYSTIC	E798-3	E798-4		E720-35	Same as LOST WORLD "C"	
HOT DOGGIN	E809-5	E809-6		E720-35	Same as LOST WORLD "C"	
VIKING	E802-5	E802-6		E720-35	Same as LOST WORLD "C"	
SKATEBALL A	E823-21	E823-22		E720-40	E1-E5, E2-E4, E7-E8, E10-E12, E11-E25, E13A-E14, E16A-E34, E21-E32, E33-E29	
SKATEBALL B	E823-21	E823-22	E720-38	E720-39	E1-E5, E2-E4, E7-E8, E11-E25, E10-E12, E13A-E14, E31-E32, E32-E34, E16A-E19, E26-E29, E28-E30	
SKATEBALL C	E823-24	E823-25		E720-40	Same as SKATEBALL "A"	
SKATEBALL D	E823-24	E823-25	E720-38	E720-39	Same as SKATEBALL "B"	
SKATEBALL E	E823-21	E823-26		E720-40	Same as SKATEBALL "A"	
SKATEBALL F	E823-21	E823-26	E720-38	E720-39	Same as SKATEBALL "B"	
FRONTIER	E819-8	E819-7	E720-38	E720-39	Same as SKATEBALL "A"	
	E819-8	E819-7	E720-38	E720-39	Same as SKATEBALL "B"	

P/O TABLE III  
MEMORY COMBINATIONS AND JUMPERS FOR USE WITH MPU AS-2518-35

NAME OF GAME	U1	U2	SOCKET LOCATIONS U3      U4	U5	U6	JUMPER REQUIREMENTS
XENON A	E811-1	E811-38			E720-40	Same as SKATEBALL "A"
XENON B	E811-40	E811-41			E720-40	Same as SKATEBALL "A"
XENON C	E811-1	E811-38		E720-38	E720-39	Same as SKATEBALL "B"
XENON D	E811-40	E811-41		E720-38	E720-39	Same as SKATEBALL "B"
XENON E		E811-39			E720-40	E4-E12, E7-E8, E10-E11, E13A-E14, E29-E33, E31-E32, E16A-E34
XENON F		E811-42			E720-40	Same as XENON "E"
FLASH GORDON	E834-21	E834-22		E834-23	E720-52	Same as SKATEBALL "A"
					E720-52	Same as XENON "E"
EIGHT BALL DELUXE A		E838-13			E720-52	Same as XENON "E"
EIGHT BALL DELUXE B		E838-14			E720-52	E4-E12, E7-E8, E9-E11, E13-E15, E29-E33, E31-E32, E16A-E34
EIGHT BALL DELUXE C		E838-15			E720-52	Same as XENON "E"
FIREBALL II	E839-8	E839-9		E839-12	E720-52	Same as XENON "E"
					E720-52	Same as EIGHT BALL DELUXE "B"
					E720-52	Same as XENON "E"
EMBRYON	E841-00	E841-3		E841-6	E720-52	Same as XENON "E"
					E720-52	Same as EIGHT BALL DELUXE "B"
					E720-52	Same as XENON "E"
FATHOM	E842-8	E842-9		E842-8	E720-53	Same as XENON "E"
					E720-53	Same as EIGHT BALL DELUXE "B"
MEDUSA	E845-9	E845-11			E720-53	Same as XENON "E"
CENTAUR	E848-8				E720-53	Same as XENON "E"

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# SOUND MODULE COMBINATIONS

TABLE IV A  
SOUND MODULE COMBINATIONS FOR SOUND MODULE AS-2888

NAME OF GAME	U1	U2	SOCKET LOCATIONS		U5	U6	JUMPER REQUIREMENTS
			U3	U4			
LOST WORLD			E729-18				B
SIX MILLION DOLLAR MAN			E729-18				B
PLAYBOY			E729-18				B
SUPersonic			E729-18				B
STAR TREK			E729-18				B & D
KISS			E729-18				B & D
PARAGON			E729-51				B & C
HARLEM GLOBETROTTERS			E729-51				B & C
DOLLY PARTON			E729-51				B & C

TABLE IV B  
SOUND MODULE COMBINATIONS FOR SOUND MODULE AS-2518-51

NAME OF GAME	U1	U2	SOCKET LOCATIONS		U5	U6	JUMPER REQUIREMENTS
			U3	U4			
FUTURE SPA			E781-5				B & C
NITRO GROUNDSHAKER			E776-15				B & C
SILVER BALL MANIA			E786-11				B & C
SPACE INVADERS			E792-7				B & C
ROLLING STONES			E796-19				B & C
MYSTIC			E798-5				B & C
HOT DOGGIN			E809-7				B & C
VIKING			E802-7				B & C
SKATEBALL			E823-14				B & C
FRONTIER			E819-9				B & C

TABLE IV C  
SOUND MODULE COMBINATIONS FOR SOUND PLUS MODULE AS-2518-56

NAME OF GAME	U1	U2	SOCKET LOCATIONS		U4	U5	U6	JUMPER REQUIREMENTS
			U3					
XENON					E811-17			D, E and J
					E811-18 (French)			D, E and J
					E811-35			D, E and J
					E811-36 (French)			D, E and J

TABLE IV D  
SPEECH MODULE COMBINATIONS FOR VOCALIZER MODULE AS-2518-57

NAME OF GAME	U1	U2	SOCKET LOCATIONS		U4	U5	U6	U7	JUMPER REQUIREMENTS
			U3						
XENON	E811-5	E811-6	E811-7	E811-8	E811-9	E811-10	E811-11		B & D
	E811-5	E811-06	E811-7	E811-12	E811-13	E811-14	E811-15		B & D (French)
	E811-22	E811-23	E811-24	E811-25	E811-26	E811-27	E811-28		B & D
	E811-22	E811-23	E811-24	E811-29	E811-30	E811-31	E811-32		B & D (French)

TABLE IV E  
SOUND & SPEECH MODULE COMBINATIONS FOR SQUAWK & TALK MODULE AS-2518-61A

NAME OF GAME	U1	U2	SOCKET LOCATIONS		U4	U5	U6	JUMPER REQUIREMENTS
			U3					
FLASH GORDON A			E834-19			E834-16		C, D, E, G, Q, S, W, Y, U, AA, H, DD, N, L or K (Notes 1 & 2)
FLASH GORDON B			E834-20			E834-18		Same as above
FLASH GORDON C			E834-33			E834-34		Same as above (French)
FLASH GORDON D			E834-35			E834-36		Same as above (French)
EIGHT BALL DELUXE A				E838-4	E838-5	E838-6		C, D, E, G, Q, S, X, Y, U, AA, H, DD, N, L or K (Notes 1 and 2)
EIGHT BALL DELUXE B				E838-8	E838-9	E838-10		Same as above
FIREBALL II				E839-1		E839-2		Same as EIGHT BALL DELUXE "A"
				E839-10		E839-11		Same as EIGHT BALL DELUXE "A"
EMBRYON					E841-1	E841-2		Same as EIGHT BALL DELUXE "A"
					E841-4	E841-5		Same as EIGHT BALL DELUXE "A"
FATHOM					E842-1	E842-2		Same as FLASH GORDON "A"
					E842-5	E842-6		Same as FLASH GORDON "A"
MEDUSA				E845-1	E845-2	E845-5		C, E, G, Q, S, U, W, Y, BB, D, H, DD, N, EE, L or K (Note 1)
CENTAUR				E848-1	E848-2	E848-5		Same as above

NOTE 1: Use L with 6808 MPU; Use K with 6802 MPU.

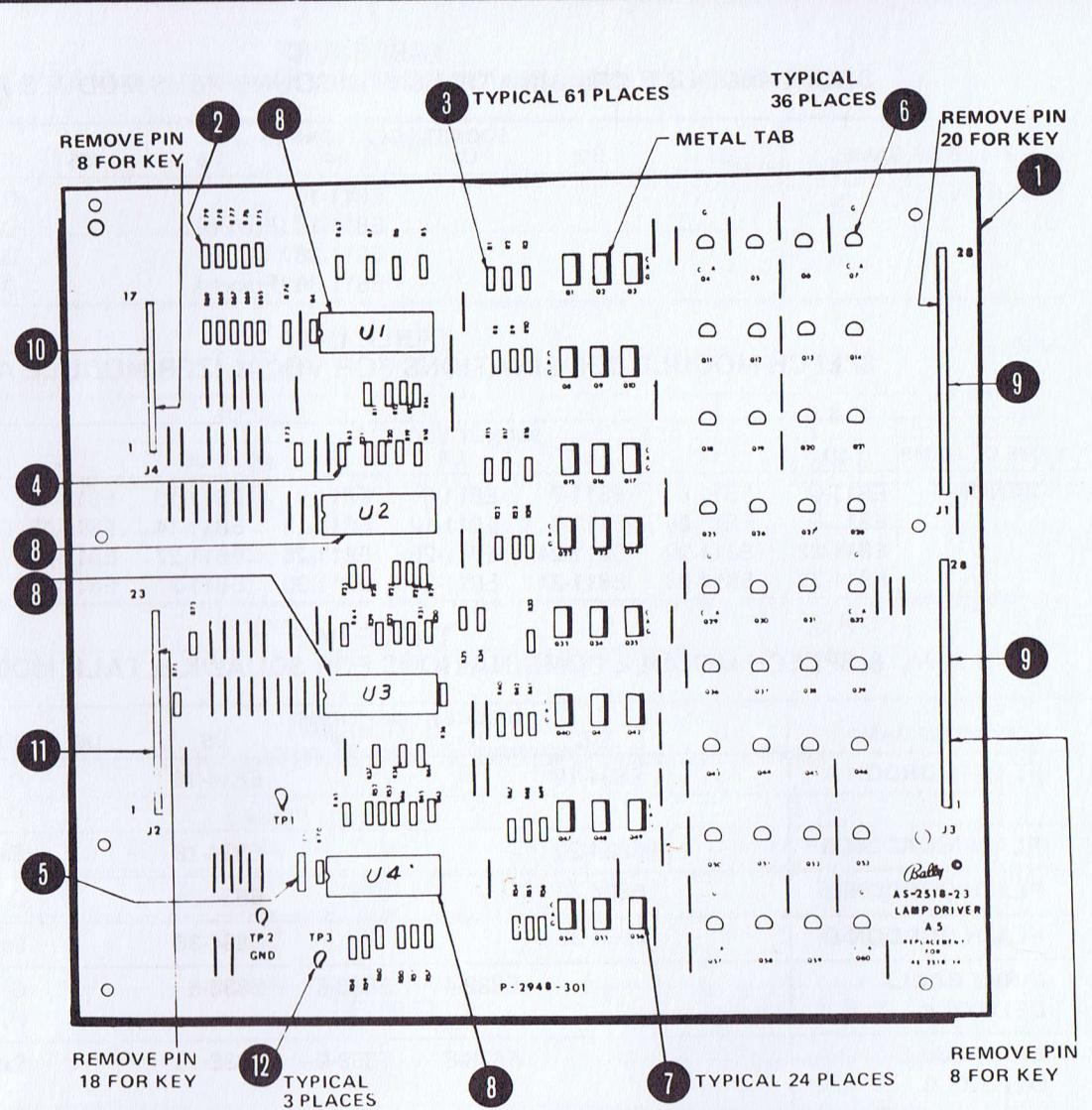
NOTE †: The five "EE" jumpers are needed when the AY3-8912 is removed.

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# A5 AS-2518-23 LAMP DRIVER MODULE

• ALL GAMES

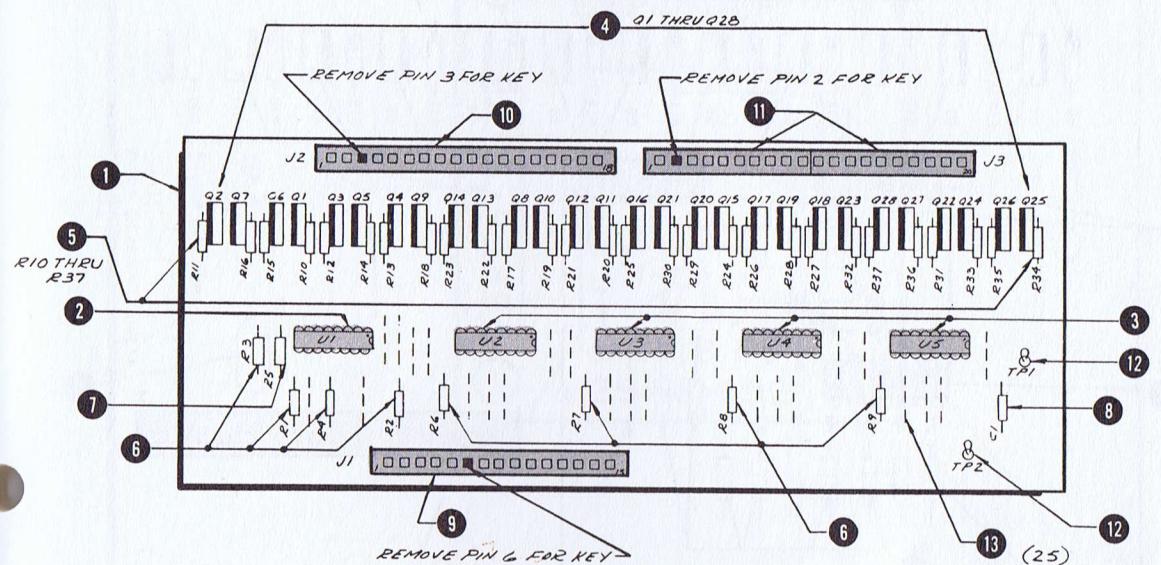


COMPONENT PARTS LIST

ITEM	REFERENCE DESIGNATION	BALLY PART NO.	DESCRIPTION
1	A5	AS-2518-23	Lamp Driver Module, Complete
2	R71-R79	E-00105-242	Resistor, 20k, 5%, 1/4W
3	R1-R60, R70	E-00105-0237	Resistor, 2k, 5%, 1/4W
4	R61-R69	E-00105-0256	Resistor, 2.2M, 1/4W
5	C1	E-00586-0065	Capacitor, .01 MFD, 500V
6	Q4-Q7, Q11-Q14, Q18-Q21, Q25-Q32, Q36-Q39, Q43-Q46, Q50-Q53, Q57-Q60	E-00585-0014	SCR, 2N5060
7	Q1-Q3, Q8-Q10, Q15-Q17, Q22-Q24, Q33-Q35, Q40-Q42, Q47-Q49, Q54-Q56	E-00585-0029	SCR, MCR106-1
8	U1-U4	E-00620-0037	I.C., Decoder, 14514B
9	J1, J3	E-00715-0004	28 Pin Wafer Connector
10	J4	E-00715-0013	17 Pin Wafer Connector
11	J2	E-00715-0014	23 Pin Wafer Connector
12	TP1, TP2, TP3	P-05399	Test Clip

# AS-2518-52 AUXILIARY LAMP DRIVER A9

- EIGHT BALL DELUXE
- FIREBALL II
- EMBRYON
- FATHOM
- MEDUSA



A9: AUXILIARY LAMP DRIVER  
COMPONENT PARTS LIST

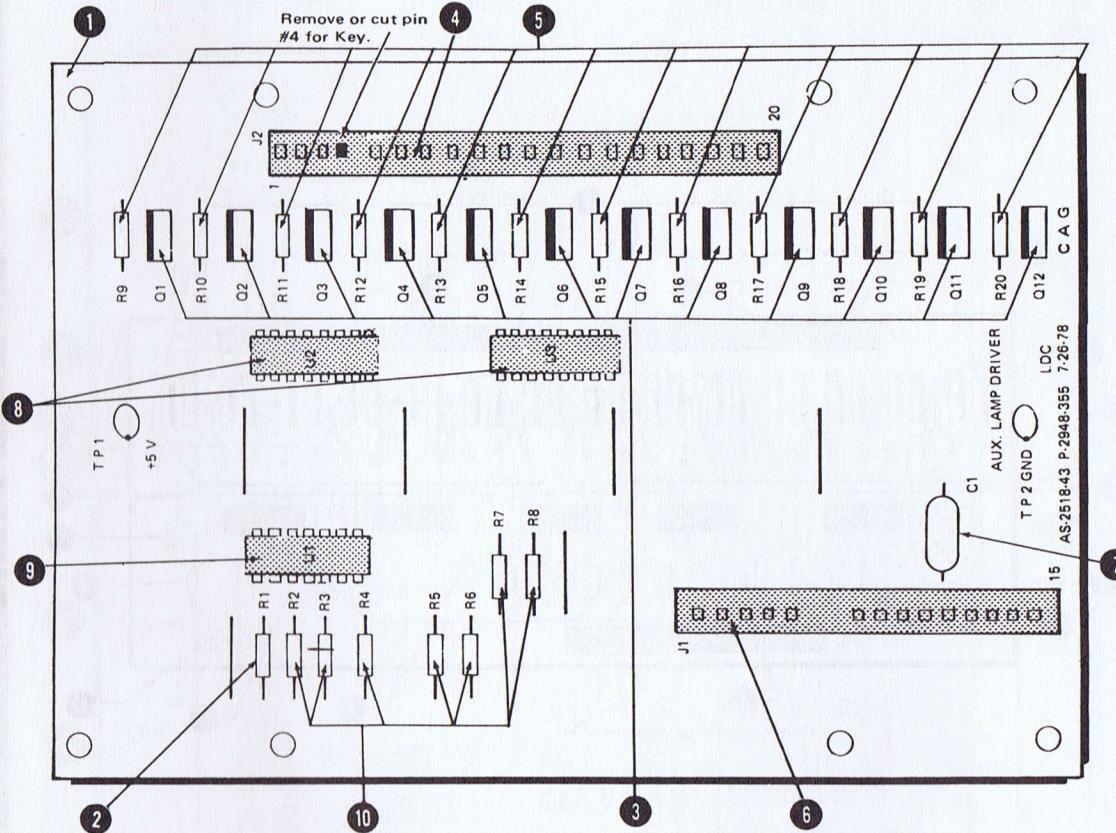
ITEM	QTY.	REFERENCE DESIGNATION	BALLY PART NO.	DESCRIPTION
1	1		P-2948-504	P.C.B. (M-645-512)
2	1	U1	E-620-134	Quad Flip Flop
3	4	U2 Thru U5	E-620-108	BCD to Decimal Decoder
4	28	Q1 Thru Q28	E-585-29	S.C.R.
5	28	R10 Thru R37	E-105-237	Resistor, 2K Ohm, 1/4 W, 5%
6	8	R1-4, R6-9	E-105-242	Resistor, 20K Ohm, 1/4 W, 5%
7	1	R5	E-105-173	Resistor, 2.2M, 1/4 W, 5%
8	1	C1	E-586-85	Capacitor, .01uf, 25 V, ±20%
9	1	J1	E-736-15	Connector, KK156 15 Pin
10	1	J2	E-736-18	Connector, KK156 18 Pin
11	2	J3	E-736-10	Connector, KK156 10 Pin
12	2	TP1, TP2	P-5399	Test Point
13	25		M-1777-126	Jumper

WHEN ORDERING PART,  
SPECIFY PART NO.  
AND NAME OF GAME

WHEN ORDERING PART,  
SPECIFY PART NO.  
AND NAME OF GAME

# A9 AS-2518-43 AUXILIARY LAMP DRIVER

• CENTAUR



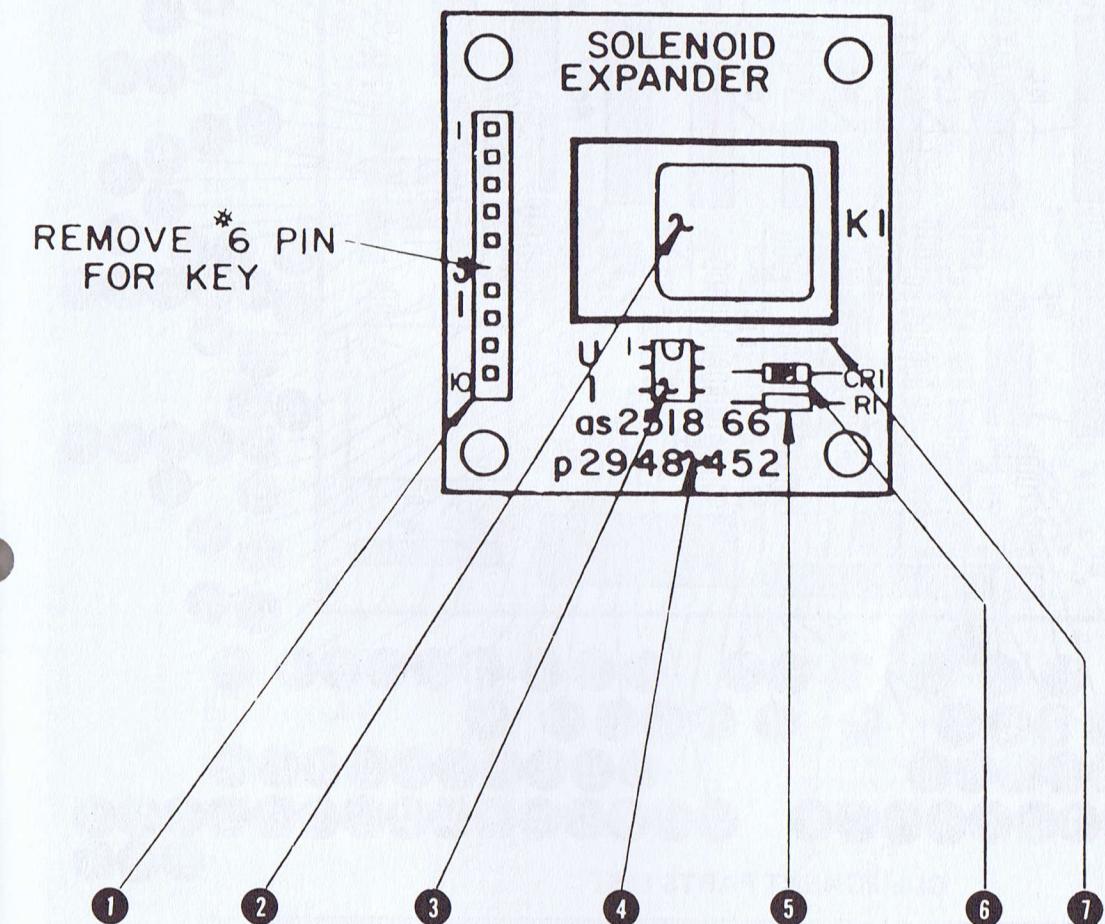
A9: AUXILIARY LAMP DRIVER  
COMPONENT PARTS LIST

ITEM	QTY.	REFERENCE DESIGNATION	BALLY PART NO.	DESCRIPTION
1	1		P-2948-355	P.C. Board (M-645-461)
2	1	R1	E-105-173	Resistor 2.2 Meg. Ohm
3	12	Q1 Thru Q12	E-585-29	SCR MCR 106-1
4	2	J2	E-715-34	10 Pin Wafer Pin Connector
5	12	R9 Thru R20	E-105-237	Resistor 2K Ohm
6	1	J1	E-715-39	15 Pin Wafer Pin Connector
7	1	C1	E-00586-0065	Capacitor .01 MFD
8	2	U3, U2	E-620-84	MV14555B Binary 1 to 4
9	1	U1	E-620-85	MV14013B Dual D Flip Flop
10	7	R2 Thru R8	E-105-242	Resistor 20K Ohm

WHEN ORDERING PART,  
SPECIFY PART NO.  
AND NAME OF GAME

# AS-2518-66 SOLENOID EXPANDER ASSEMBLY A15

- EIGHT BALL
- DELUXE
- FATHOM
- CENTAUR



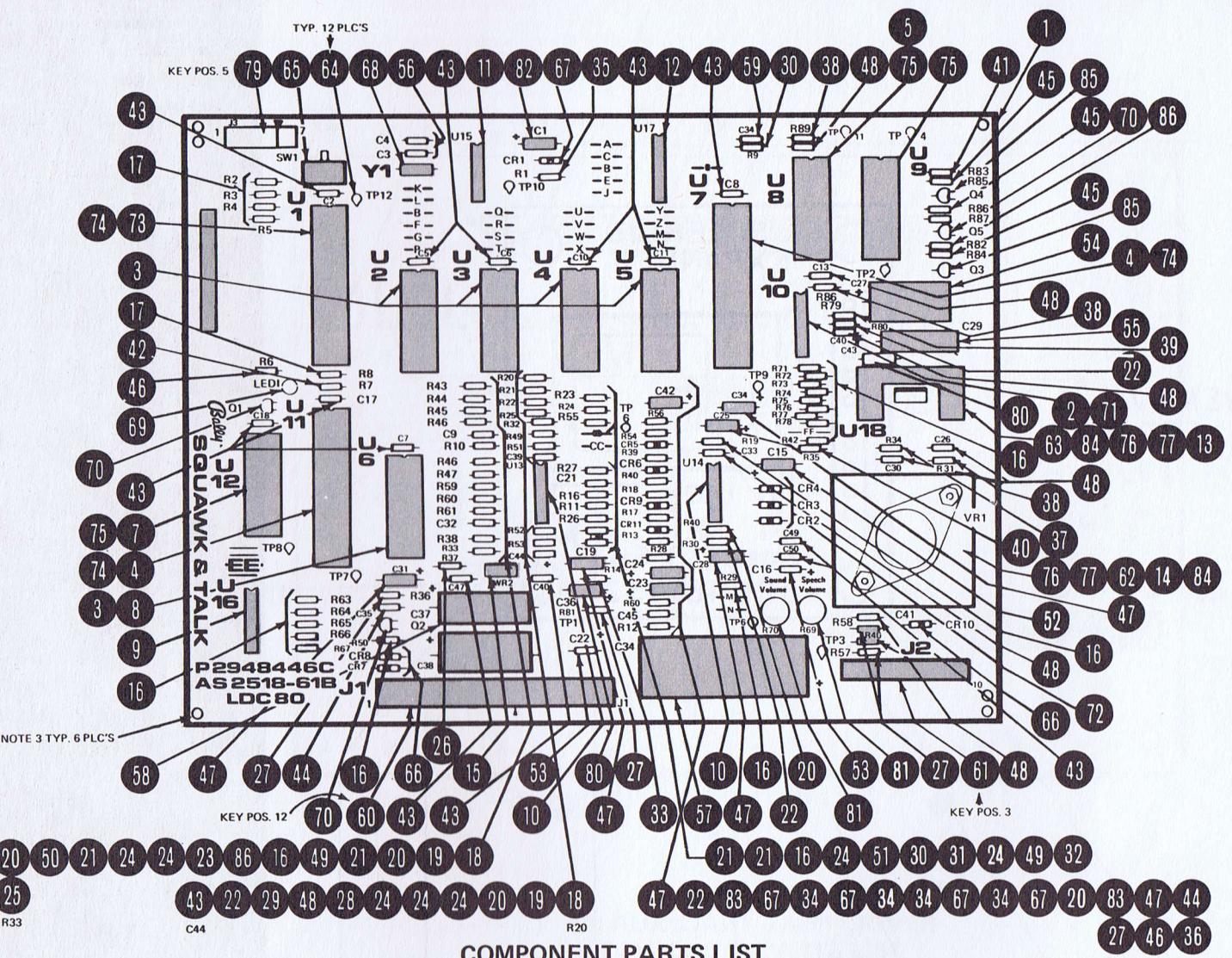
COMPONENT PARTS LIST

ITEM	REFERENCE DESIGNATION	BALLY PART NO.	DESCRIPTION
1	J1	E-736-10	10 Pin 'Molex' KK156
2	K1	E-146-795	48 V. Relay
3	U1	E-620-172	MOC3011
4	P-2948-452	M-645-585	P.C. Board
5	R1	E-105-219	330 Ohm Resistor
6	CR1	E-587-15	IN4004 Diode
7		Jumper	AWG. 22 1½"

WHEN ORDERING PART,  
SPECIFY PART NO.  
AND NAME OF GAME

# AS 2518-61B SQUAWK & TALK MODULE

- FLASH GORDON AS-3107-1
- EIGHT BALL DELUXE AS-3107-2
- FIREBALL II AS-3107-3
- EMBRYON AS-3107-4
- FATHOM AS-3107-5
- MEDUSA AS-3107-6
- CENTAUR AS-3107-7



COMPONENT PARTS LIST

ITEM	QTY.	REFERENCE DESIGNATION	BALLY PART NO.	DESCRIPTION
1	1	A14	AS-2518-61B	Squawk & Talk Module, Complete
2	1	U10	AD558DAC	
3	5	Used with U2 thru U6	E-620-171	
4	2	U7, U11	24 Pin I.C. Socket	
5	1	U8	6821 P.I.A.	
			E-620-29	
			E-620-167	
7	1	U12	AY3-8812 Sound	
8	1	U6	6810 RAM (See Note 1)	
9	1	U16	4049 Hex Inverter	
10	2	U13, U14	LM3900	
11	1	U15	74LS14 Schmidt Inverter	
12	1	U17	74LS155	
13	1	U18	TDA 2002 Power Amp	
14	1	VR1	LM323, 5V Regulator	
15	1	VR2	7905, -5V Regulator	
16	19	R10, 19, 29, 42, 50, 63-67, 71-78, 55	R10, 19, 29, 42, 50, 63-67, 71-78, 55	Resistor, 1/4W, 10K
17	5	R2-5,8	Resistor, 1/4W, 5%, 4.3K	E-105, 185
18	2	R20, 43	Resistor, 1/4W, 5%, 820K	E-105-238
19	2	R21, 44	Resistor, 1/4W, 5%, 390K	E-105-343
20	5	R13, 22, 38, 41, 45	Resistor, 1/4W, 200K	E-105-310
21	4	R23, 24, 46, 61	Resistor, 1/4W, 5% 100K	E-105-225
22	4	R30, 53, 56, 80	Resistor, 1/4W, 5% 2K	E-105-226
23	1	R47	Resistor, 1/4W, 5%, 2.7K	E-105-237
24	7	R25, 26, 27, 32, 49, 59, 60	Resistor, 1/4W, 5% 1M	E-105-151
25	1	R33	Resistor, 1/4W, 5%, 91K	E-105-285

COMPONENT PARTS LIST

ITEM	QTY.	REFERENCE DESIGNATION	BALLY PART NO.	DESCRIPTION
26	1	R37	E-105-245	Resistor, 1/4W, 5%, 30K
27	5	R12, 36, 57, 58, 81	E-105-230	Resistor, 1/4W, 5%, 1K
28	1	R51	E-105-344	Resistor, 1/4W, 5%, 750K
29	1	R52	E-105-228	Resistor, 1/4W, 5%, 9.1K
30	2	R9, 16	E-105-203	Resistor, 1/4W, 5%, 130K
31	1	R11	E-105-248	Resistor, 1/4W, 5%, 150K
32	1	R15	E-105-161	Resistor, 1/4W, 5%, 220K
33	1	R14	E-105-346	Resistor, 1/4W, 5%, 1.8K
34	4	R17, 18, 39, 40	E-105-347	Resistor, 1/4W, 5%, 910K
35	1	R1	E-105-243	Resistor, 1/4W, 5%, 27K
36	1	R68	E-105-511	Resistor, 1/4W, 5%, 510Ω
37	1	R34	E-105-211	Resistor, 1/4W, 5%, 2.2Ω
38	3	R31, 88, 89	E-105-303	Resistor, 1/4W, 5%, 220Ω
39	1	R79	E-105-345	Resistor, 1/4W, 5%, 7.5K
40	1	R35	E-105-196	Resistor, 1/4W, 5%, 1
41	1	R83	E-105-360	Resistor, 1/4W, 5%, 11K
42	1	R7	E-105-223	Resistor, 1/4W, 5%, 8.2K
43	14	C2, 5-8, 10, 11, 17, 18, 44, 47-50	E-586-85	Capacitor, Ceramic, .01 μF, 25V
44	2	C23, 35	E-586-130	Capacitor, Ceramic, 47 μF, 16V
45	4	R84-87	E-105-287	Resistor, 1/4W, 5%, 2.2K
46	1	R6	E-105-342	Resistor, 1/4W, 470
47	7	C19, 24, 25, 28, 31, 34, 42	E-586-90	Capacitor, Electrolytic, 1 μF, 25V
48	10	C12, 13, 26, 30, 33, 39, 40, 41, 45, 46	E-586-89	Capacitor, Ceramic, .1 μF, 25V
49	2	C9, 20	E-586-83	Capacitor, Ceramic, 470pF, 50V
50	1	C32	E-586-120	Capacitor, Ceramic, 68pF
51	1	C21	E-586-68	Capacitor, Ceramic, 100pF
52	1	C15	E-586-135	Capacitor, Electrolytic, 10 μF, 16V
53	2	C16, 22	E-586-73	Capacitor, Tantalum, 4.7 μF, 25V
54	1	C27	E-586-136	Capacitor, Electrolytic, 1000 μF, 16V
55	1	C29	E-586-124	Capacitor, Electrolytic, 470 F, 6V
56	2	C3, 4	E-586-121	Capacitor, Ceramic, 27pF
57	1	C14	E-586-123	Capacitor, Electrolytic, 4700 F, 25V
58	2	C37, 38	E-586-147	Capacitor, Electrolytic, 330 μF, 50V
59	1	C51	E-586-150	Capacitor, Monolithic, 10pF
60	1	J1	E-736-18	18 Pin Wafer Connector (156)
61	1	J2	E-736-10	10 Pin Wafer Connector (156)
62	1	Used with VR1	E-682-11	Heatsink, 6053B
63	1	Used with U18	E-682-8	Heatsink, 6030B
64	12	P-5399	E-682-8	Test Points
65	1	SW. 1	E-658-1	P.C.B. Switch
66	3	CR7, 8, 10	E-587-15	Diode (IN4004)
67	5	CR1, 5, 6, 9, 11	E-587-14	Diode (IN4148)
68	1	Y1	E-744-5	Crystal, 3.579
69	1	LED1	E-679	LED
70	3	Q1-2, 5	E-585-31	Transistor, 2N3904
71	1	Used with U10	E-712-16	Socket I.C. 16 Pin
72	3	CR2-4	E-587-24	Diode, 3A, 50V, min.
73	1	U1	E-620-125 or 128	6808 or 6802 (SEE NOTE 1)
74	3	Used with U1, 7, 11	E-712-1	Microprocessor
75	3	Used with U8, 9, 12	E-712-28	Socket, I.C. 40 Pin
76	3	Used with U18, VR1	LSPR-00632-1106	Socket, I.C. 28 Pin
77	3	Used with U18, VR1	N-00632-2112	Screw
78	1	J3	E-766-7	Nut
79	1	C36, 43	E-586-63	Header, 7 Pin
80	2	R69, 70	E-599-16	Capacitor, 2 μF, 25V
81	2	C1	E-586-148	Pot. 1K
82	1	R28, 54	E-105-341	Capacitor, Electrolytic, 47, μF
83	2	AR	M-1834	Resistor, 82K
84	2	Used with U18, VR1	E-585-23	Thermal Compound
85	2	Q3, 4	E-585-23	Transistor, 2N4403
86	2	R82, 48	E-105-312	Resistor, 1/4W, 5% 2.4K
			JUMPERS – SEE NOTES	

WHEN ORDERING PART,  
SPECIFY PART NO.  
AND NAME OF GAME

# AS 2518-81 "SAY IT AGAIN" MODULE

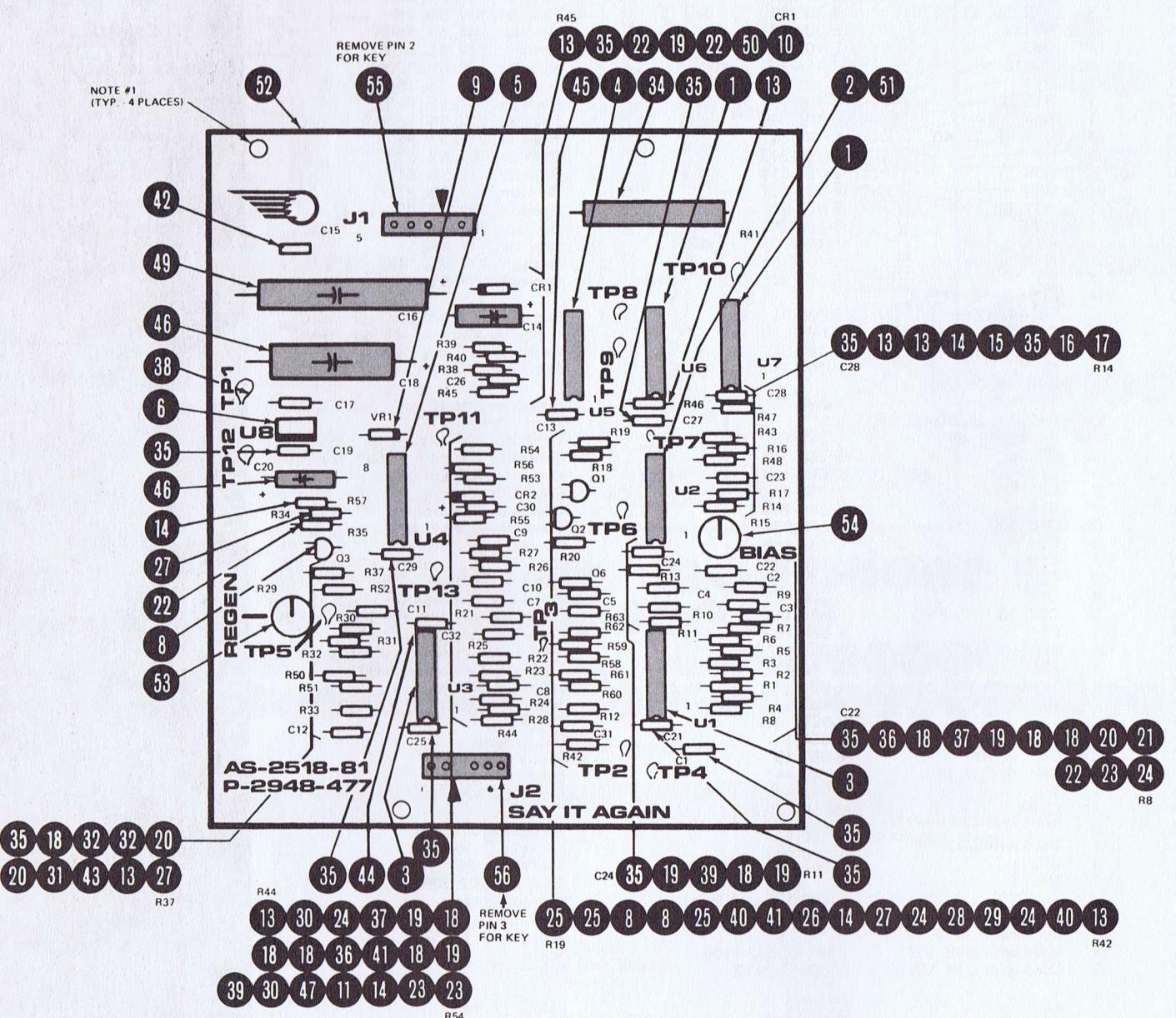
• CENTAUR

## COMPONENT PARTS LIST

ITEM	REFERENCE DESIGNATION	BALLY PART NO.	DESCRIPTION
1	U6, U7	E-620-122	Quad Nor Gates 4001
2	U2	E-620-195	Analog Delay Line, SAD 4096
3	U1, U3	E-620-126	Quad OP Amp LM3900
4	U5	E-620-197	Phase Locked Loop, 4046
5	U4	E-620-196	Quad Analog Switch 4066
6	U8	E-620-179	7812 + 12V Regulator
7			
8	Q1-3	E-585-31	Transistor, 2N3904
9	VR1	E-598-22	Zener, 24V, IN5359, 5W
10	CR1	E-587-15	Diode, IN4004
11	CR2	E-587-14	Diode, IN4148
12			
13	R42-47, R52	E-105-306	Resistor, 10Ω, 1/4W, 5%
14	R16, 53, 57, 62	E-105-185	Resistor, 10K, 1/4W, 5%
15	R48	E-105-346	Resistor, 18K, 1/4W, 5%
16	R17	E-105-336	Resistor, 15K, 1/4W, 5%
17	R14	E-105-230	Resistor, 1K, 1/4W, 5%
18	R5, 6, 9, 12, 21, 25, 33, 22, 26	E-105-382	Resistor, 680K, 1/4W, 5%
19	R7, 11, 13, 23, 27, 40	E-105-348	Resistor, 330K, 1/4W, 5%
20	R3, 31, 32	E-105-284	Resistor, 470K, 1/4W, 5%
21	R2	E-105-343	Resistor, 820K, 1/4W, 5%
22	R1, 35, 38, 39	E-105-226	Resistor, 100K, 1/4W, 5%
23	R4, 54, 56	E-105-285	Resistor, 1M, 1/4W, 5%
24	R8, 12, 24, 58	E-105-380	Resistor, 1.2M, 1/4W, 5%
25	R18-20	E-105-377	Resistor, 22K, 1/4W, 5%
26	R63	E-105-303	Resistor, 220Ω, 1/4W, 5%
27	R36, 37, 59	E-105-263	Resistor, 47K, 1/4W, 5%
28	R61	E-105-381	Resistor, 2.4M, 1/4W, 5%
29	R60	E-105-378	Resistor, 4.7M, 1/4W, 5%
30	R28, 55	E-105-250	Resistor, 1.5M, 1/4W, 5%
31	R30	E-105-256	Resistor, 2.2M, 1/4W, 5%
32	R50, 51	E-105-379	Resistor, 3.9M, 1/4W, 5%
33			
34	R41	E-104-92	Resistor, 600Ω, 10W, 10%
35	C1, 12, 19, 21-29	E-586-89	Capacitor, Disc, .1μF, 25V ± 20%
36	C2, C7	E-586-169	Capacitor, Cer., 680pF, 50V ± 5%
37	C3, C8	E-586-170	Capacitor, Cer., 47pF, 50V ± 5%
38	C17	E-586-100	Capacitor, Cer., 0.1 μF, 100V
39	C4, C9	E-586-175	Capacitor, 270pF, 50V ± 5%
40	C6, 31	E-596-112	Capacitor, 033 μF
41	C5, C10	E-586-171	Capacitor, 120pF, 50V ± 5%
42	C15	E-586-65	Capacitor, .01 μF, 500V
43	C11	E-586-118	Capacitor, 0.2 μF, 16V ± 20%
44	C32	E-586-155	Capacitor, 68pF, 50V ± 5%
45	C13	E-586-176	Capacitor, 470pF, 50V ± 5%
46	C20	E-586-177	Capacitor, Lytic, 10 μF, 25V
47	C30	E-586-73	Capacitor, Tant., 4.7 μF, 25V
48	C18	E-586-173	Capacitor, Lytic, 100 μF, 100V ± 20%
49	C16	E-586-172	Capacitor, 100 μF, 160V, ± 20%
50	C14	E-586-90	Capacitor, 1 μF, 25V
51	U/W U2	E-712-16	Socket, 16 Pin
52		P-2948-477	P.C. Board (M-645-612)
53	R29	E-599-21	Trim Pot, 50K
54	R15	E-599-15	Trim Pot, 10K
55	J1	E-736-5	.156 Wafer, 5 Pin
56	J2	E-766-6	100 Wafer, 6 Pin
57	TP1-13	P-5399	Test Point Loop

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

WHEN ORDERING PART,  
SPECIFY PART NO.  
AND NAME OF GAME

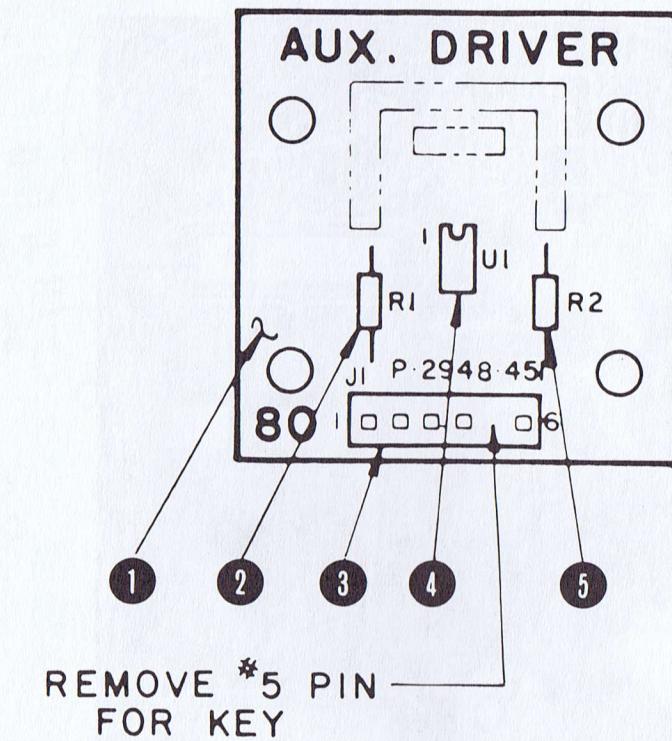
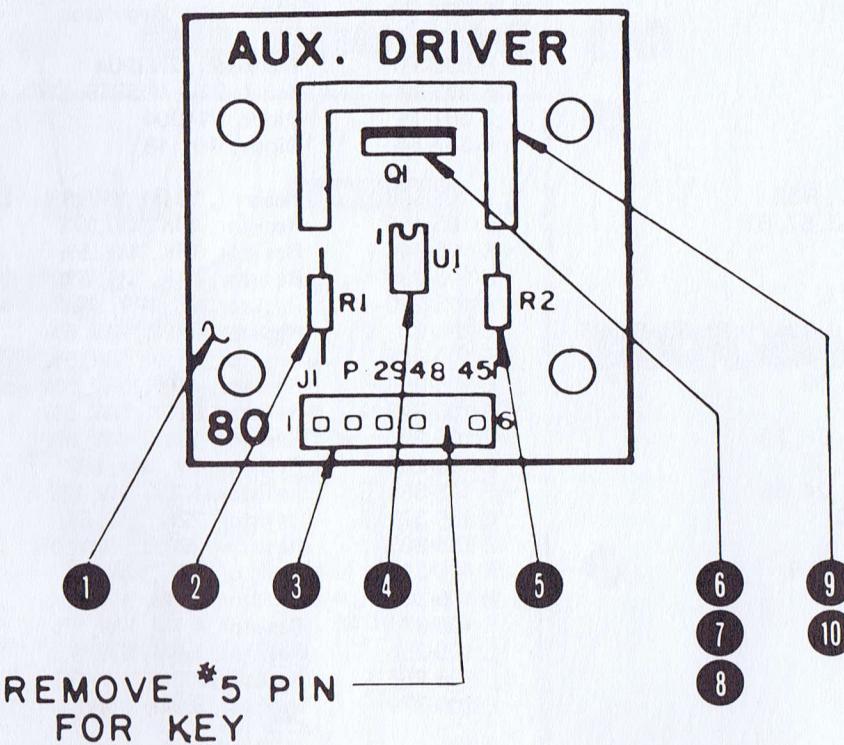


# A16 AS-2518-67 AUXILIARY DRIVER-SCR FLASHER

- FIRE BALL II
- CENTAUR

# AS-2518-68 AUXILIARY DRIVER-G.I. FLASHER A17

- FIRE BALL II
- CENTAUR



COMPONENTS PARTS LIST

ITEM	QTY.	REFERENCE DESIGNATION	DESCRIPTION	BALLY PART #
1	1	P-2948-451	P.C. Board	M-645-584
2	1	R1	300 , 5%, 1/4W.	E-105-219
3	1	J1	6 Pin Wafer - KK156	E-736-6
4	1	U1	OPT./CP, MOC3011	E-620-172
5	1	R2	100 , 5%, 1/4W.	E-105-301
6	1	Q1	SCR, S2800A	E-585-65
7	1		Bolt, #6-32 3/8" LG.	LSPR-00632-1106
8	1		Nut, #6-32	N-00632-2112
9	1		Heat Sink, 6030BTT	E-682-8
10	AR		Thermal Grease	M-1834
REF.		Schematic		W-1252-b

COMPONENTS PARTS LIST

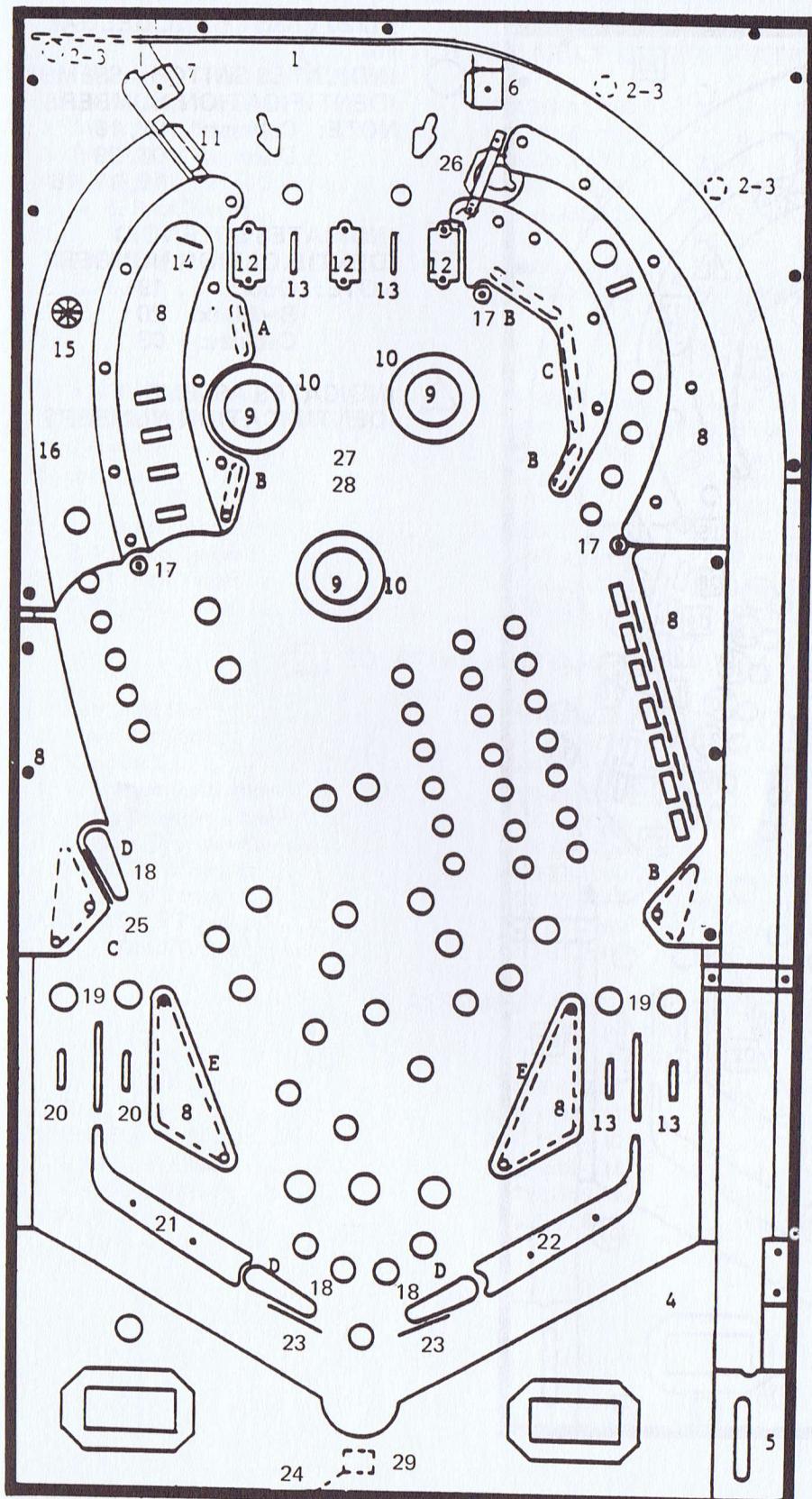
ITEM	QTY.	REFERENCE DESIGNATION	DESCRIPTION	BALLY PART #
1	1	P-2948-451	P.C. Board	M-645-584
2	1	R1	330 , 5% 1/4W.	E-105-219
3	1	J1	6 Pin Wafer - KK156	E-736-6
4	1	U1	OPT./CP, MOC3011	E-620-172
5	1	R2	10 , 5%, 1/4W.	E-105-306
REF.		Schematic		W-1253b

# EIGHT BALL DELUXE



BACKGLASS  
G-440-15

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME



## RUBBER PARTS

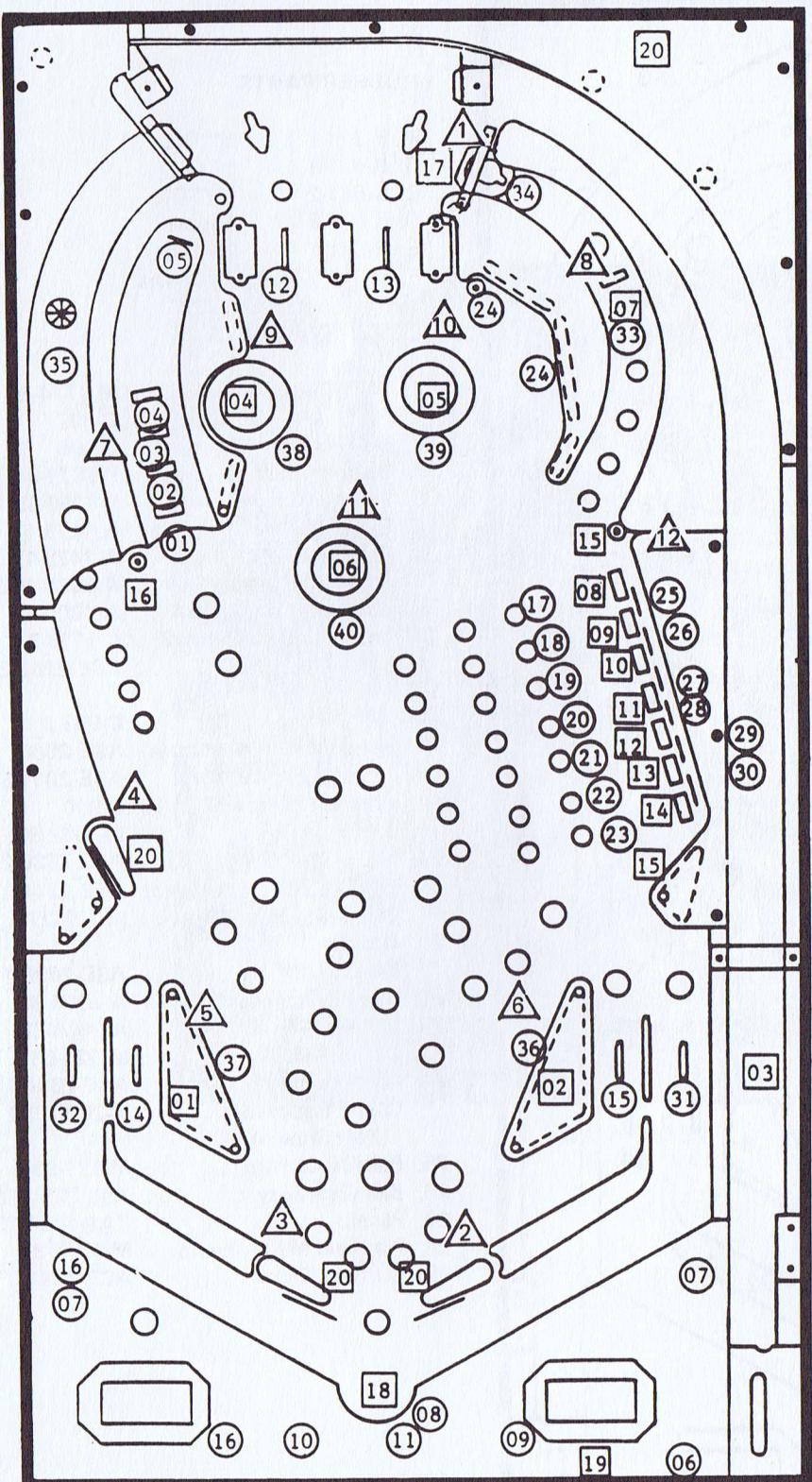
A. R-521	¾" Dia.
B. R-521-1	1" Dia.
C. R-521-2	1½" Dia.
D. R-533-3	Flipper
E. R-521-4	2½" Dia.
F. R-243	5/16" Dia.

## PANEL TOP PARTS

1. Arch Rail.....M-1774-6
2. Rail Post (3).....C-907
3. Rail Post Cap (3).....C-908
4. Bottom Arch.....P-5871-84
5. Shooter Gauge.....P-6359-49
6. Ball Gate (R).....A-1475-13
7. Ball Gate (L).....A-1475-12
8. Screened Plastics (Set).....A-2890-151
9. Thumper Cap (3).....A-4009-1
10. Thumper Cap Collar (3).....A-1018-3
11. Ball Guide.....ASE-2250-27
12. Ball Guide  
(Transparent) (3).....C-693-2
13. Rollover Wire & Brkt. (4).....ASE-2806
14. Target & Switch Assy.....ASE-2911-3
15. Rollover Button.....C-900
16. Ball Guide Assy.....A-3032-69
17. Minipost & Rubber (3).....ASE-2836-2
18. Flipper & Shaft Assy. (3).....ASE-2214-21
19. Ball Guide Wire (2).....M-121-27
20. Rollover Wire &  
Bracket (2).....ASE-2806-1
21. Ball Guide Assy. (L).....A-2898-39
22. Ball Guide Assy. (R).....A-2898-38
23. Buffer Wire (2).....M-121-53
24. Outhole Wire & Brkt.....ASE-2806-21
- Clear Plastics (Set).....A-2890-152  
(Not Shown)
25. Ball Guide Wire.....M-121-93
26. Ball Gate Assy.....ASE-2250-85
27. Panel.....CAS-1128-188
28. Playfield Mylar Overlay ..M-1787-31
29. Outhole Kicker.....ASE-2694-3

WHEN ORDERING PART,  
SPECIFY PART NO.  
AND NAME OF GAME

# EIGHT BALL DELUXE



## #1220 EIGHT BALL DELUXE

INDICATES SWITCH ASSEMBLY IDENTIFICATION NUMBERS

NOTE: Cabinet: 07, 16  
Door 06, 09  
10, 11, 16

INDICATES SOLENOID IDENTIFICATION NUMBERS

NOTE: Door: 19  
Backbox: 20  
Cabinet: 03

INDICATES ASSEMBLY IDENTIFICATION NUMBERS

SWITCH ASSEMBLY IDENTIFICATION NUMBERS

1. Inline Drop Target A (Top) ..... ASW-A1-168
2. Inline Drop Target B ..... ASW-A1-168
3. Inline Drop Target C ..... ASW-A1-168
4. Inline Drop Target D (Bottom) ..... ASW-A1-168
5. Inline Back Target ..... A-3359-15
- 6.
7. Tilt ..... ASW-A1-145
8. Outhole ..... ASW-A1-143
- 9.
- 10.
- 11.
12. A Rollover ..... ASW-A1-206
13. B Rollover ..... ASW-A1-206
14. C Rollover ..... ASW-A1-206
15. D Rollover ..... ASW-A1-206
- 16.
17. 1, 9 Drop Target ..... ASW-A1-168
18. 2, 10 Drop Target ..... ASW-A1-168
19. 3, 11 Drop Target ..... ASW-A1-168
20. 4, 12 Drop Target ..... ASW-A1-168
21. 5, 13 Drop Target ..... ASW-A1-168
22. 6, 14 Drop Target ..... ASW-A1-168
23. 7, 15 Drop Target ..... ASW-A1-168
24. 30 Point Rebound ..... ASW-A10-47
25. D Target ..... A-3359-20
26. 1st E Target ..... A-3359-20
27. L Target ..... A-3359-20
28. U Target ..... A-3359-20
29. X Target ..... A-3359-20
30. 2nd E Target ..... A-3359-20
31. Right Outlane ..... ASW-A1-206
32. Left Outlane ..... ASW-A1-206
33. Single Drop Target ..... ASW-A1-168
34. Saucer ..... ASW-A1-187
35. Rollover Button ..... ASW-A1-152
36. Right Sling Shot ..... ASW-A10-47
37. Left Sling Shot ..... ASW-A10-47
38. Left Thumper Bumper ..... ASW-A1-195
39. Right Thumper Bumper ..... ASW-A1-195
40. Bottom Thumper Bumper ..... ASW-A1-195

SOLENOID AND COIL IDENTIFICATION NUMBERS

1. Left Sling Shot ..... AN-26-1200
2. Right Sling Shot ..... AN-26-1200
3. Knocker ..... AR-26-1200
4. Left Thumper Bumper ..... AN-26-1200
5. Right Thumper Bumper ..... AN-26-1200
6. Bottom Thumper Bumper ..... AN-26-1200
7. Single Drop Target ..... AO-27-1300
8. 1, 9 Drop Target ..... CV-31-2000
9. 2, 10 Drop Target ..... CV-31-2000
10. 3, 11 Drop Target ..... CJ-31-2000
11. 4, 12 Drop Target ..... CJ-31-2000
12. 5, 13 Drop Target ..... CJ-31-2000
13. 6, 14 Drop Target ..... CJ-31-2000
14. 7, 15 Drop Target ..... CJ-31-2000
15. 7 Drop Target Reset ..... NB-26-1900
16. 4 Drop Target Reset ..... NB-26-1900
17. Saucer ..... AT-27-1300
18. Outhole Kicker ..... AT-26-1200
19. Coin Lockout Door ..... FO-36-7000
20. Flippers ..... AQ-25-500/34-4500

ASSEMBLY IDENTIFICATION NUMBERS  
PANEL BOTTOM PARTS

1. Eject Hole Assembly ..... ASE-428-53
2. Right Flipper ..... ASE-1587-111
3. Left Flipper ..... ASE-1587-112
4. Upper Left Flipper ..... ASE-1587-118
5. Left Slingshot ..... ASE-2593-6
6. Right Slingshot ..... ASE-2593-6
7. Inline Drop Target ..... ASE-2993-12
8. Single Drop Target ..... ASE-2993-14
9. Left Thumper Bumper ..... ASE-2999
10. Right Thumper Bumper ..... ASE-2999
11. Bottom Thumper Bumper ..... ASE-2999
12. 7 Memory Drop Target ..... ASE-3038-3

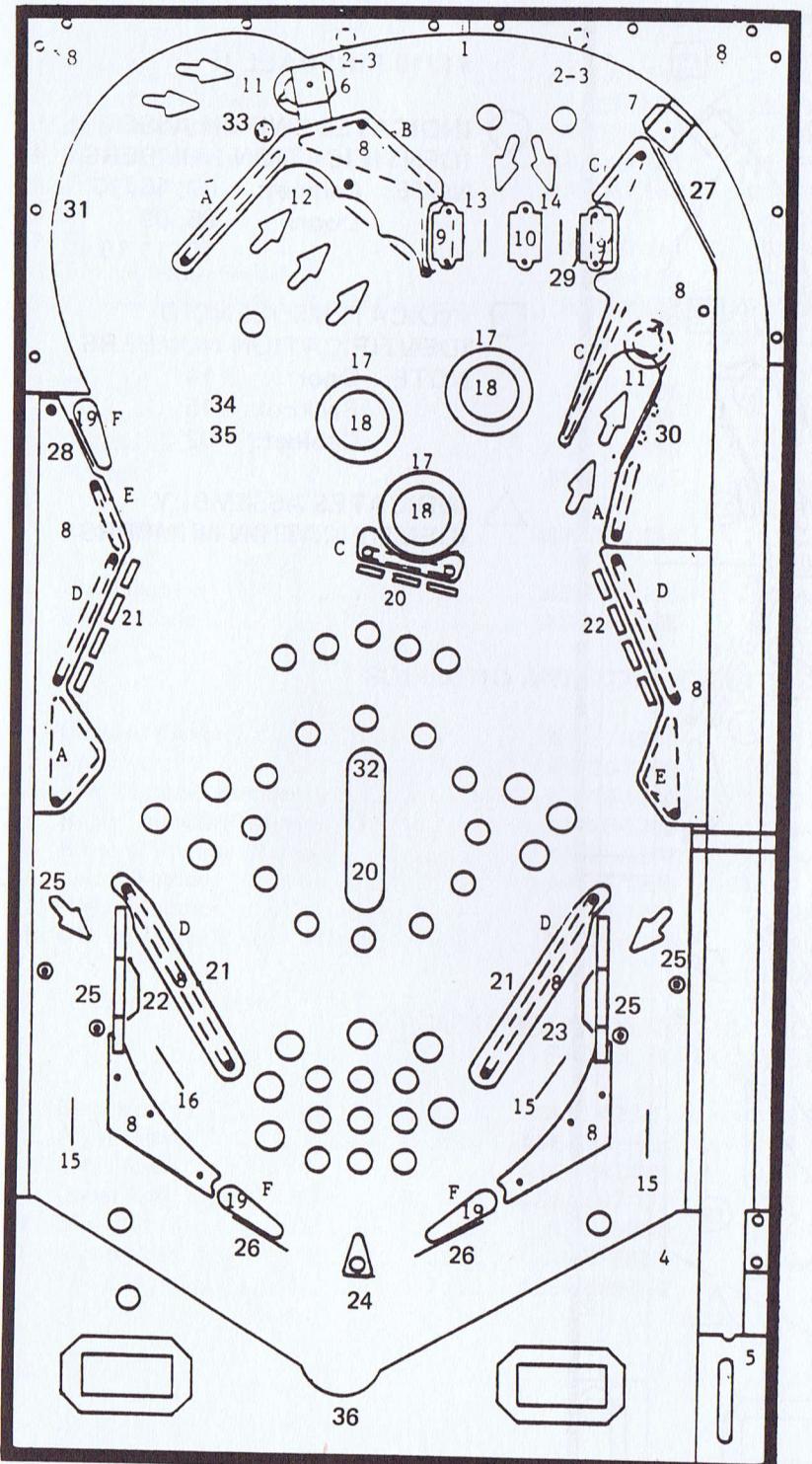
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# FIREBALL III



BACKGLASS  
G-440-14



WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

## RUBBER PARTS:

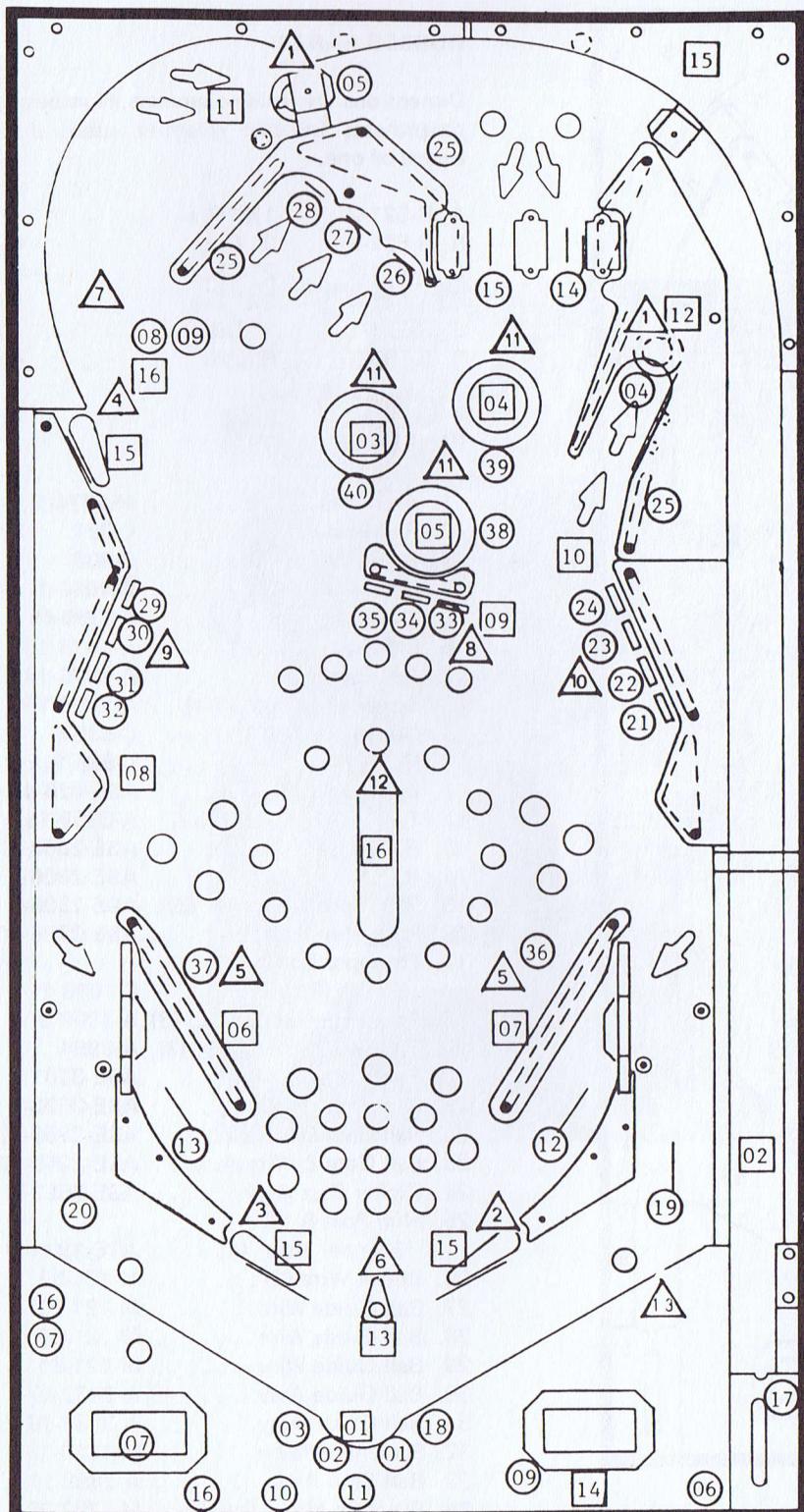
Dimensions are inside diameters. Numbers in parentheses indicate quantity used, if in excess of one.

A. R-521-2	1½" Dia.	(2)
B. R-521-5	3" Dia.	(1)
C. R-521-3	2" Dia.	(3)
D. R-521-4	2½" Dia.	(4)
E. R-521-1	1" Dia.	(2)
F. R-533-3	Flipper	(3)

## PANEL TOP PARTS

1. Arch Rail . . . . . M-1774-7
2. Rail Post (2) . . . . . C-907
3. Rail Post Cap (2) . . . . . C-908
4. Bottom Arch . . . . . A-4016-1
5. Shooter Gauge . . . . . P-6359-48
6. Ball Gate . . . . . A-1475-13
7. Ball Gate . . . . . A-1475-13
8. Screened Plastics (Set) . . . A-2890-150
9. Guide Rail (2) . . . . . C-936-1
10. Guide Rail . . . . . C-935-1
11. Eject Hole (2) . . . . . ASE-428-41
12. Target Assy. (Red) (3) . . . A-3359-15
13. R.O. Wire & Bracket . . . . . ASE-2806
14. R.O. Wire & Bracket . . . . . ASE-2806-1
15. R.O. Wire & Bracket (3) . . . . . ASE-2806-9
16. R.O. Wire & Bracket . . . . . ASE-2806-10
17. Thumper Bumper Collar (3) . . . . . C-1018-1
18. Thumper Bumper Cap (3) . . . A-4009-2
19. Flipper & Shaft Assy. (3) . . . A-3994
20. Fireball Unit Assy. . . . . ASE-3101
21. Slingshot Assy. (2) . . . . . ASE-2593-6
22. Ball Gate & Wire Assy. . . . . ASE-2250-77
23. Ball Gate & Wire Assy. . . . . ASE-2250-87
24. Kicker Post Assy. . . . . ASE-2593-7
25. Mini-Post & Bumper Assy. (4) . . . . . ASE-2836-2
26. Buffer Wire (2) . . . . . M-121-53
27. Ball Guide Wire . . . . . M-121-23
28. Ball Guide Wire . . . . . M-121-56
29. Ball Guide Wire . . . . . M-121-81
30. Ball Guide Assy. . . . . A-3032-67
31. Ball Guide Assy. . . . . A-3032-78
32. Screened Plastic . . . . . M-1330-182
33. Ball Stop Assy. . . . . A-2898-31
34. Playfield Mylar Overlay . . . M-1787-28
35. Panel . . . . . CAS-1128-185
36. Outhole Wire & Bracket . . . . . ASE-2806-21

# FIREBALL III



## #1219 FIREBALL II

INDICATES SWITCH ASSEMBLY IDENTIFICATION NUMBERS  
NOTE: Cabinet: 07, 16, 17  
Door: 06, 09  
10, 11, 16

INDICATES SOLENOID IDENTIFICATION NUMBERS  
NOTE: Door: 14  
Backbox: 15  
Cabinet: 02

INDICATES ASSEMBLY IDENTIFICATION NUMBERS

## SWITCH ASSEMBLY IDENTIFICATION NUMBERS

1. Outhole . . . . .	ASW-A1-143	21. Right 4 Drop Target D (Bottom) . . . . .	ASW-A1-168
2. #1 Left of Outhole . . . . .	AS-2744-17	22. Right 4 Drop Target C . . . . .	ASW-A1-168
3. #2 Left of Outhole . . . . .	AS-2744-18	23. Right 4 Drop Target B . . . . .	ASW-A1-168
4. Wonton Saucer . . . . .	ASW-A1-187	24. Right 4 Drop Target A . . . . .	ASW-A1-168
5. Odin Saucer . . . . .	ASW-A1-187	25. 10 Point Rebound (2) . . . . .	ASW-A10-47
6. . . . .	. . . . .	26. Odin & Wonton Target (Right) . . . . .	A-3359-15
7. Tilt . . . . .	ASW-A1-145	27. Odin & Wonton Target (Middle) . . . . .	A-3359-15
8. Fireball Relay Switch . . . . .	ASW-R1-10	28. Odin & Wonton Target (Left) . . . . .	A-3359-15
9. Fireball Relay Switch (Large Contacts) . . . . .	ASW-R1-37	29. Left 4 Drop Target D (Top) . . . . .	ASW-A1-168
10. . . . .	. . . . .	30. Left 4 Drop Target C . . . . .	ASW-A1-168
11. . . . .	. . . . .	31. Left 4 Drop Target B . . . . .	ASW-A1-168
12. D Lane . . . . .	ASW-A1-155	32. Left 4 Drop Target A (Bottom) . . . . .	ASW-A1-168
13. C Lane . . . . .	ASW-A1-155	33. 3 Drop Target (Right) . . . . .	ASW-A1-168
14. B Lane . . . . .	ASW-A1-155	34. 3 Drop Target (Middle) . . . . .	ASW-A1-168
15. A Lane . . . . .	ASW-A1-155	35. 3 Drop Target (Left) . . . . .	ASW-A1-168
16. . . . .	. . . . .	36. Right Slingshot (2) . . . . .	ASW-A1-168
17. Post Kicker Button (Cab.) . . . . .	ASW-A10-156	37. Left Slingshot (3) . . . . .	ASW-A10-47
18. . . . .	. . . . .	38. Bottom Thumper Bumper . . . . .	ASW-A1-195
19. Right Outlane . . . . .	ASW-A1-155	39. Right Thumper Bumper . . . . .	ASW-A1-195
20. Left Outlane . . . . .	ASW-A1-155	40. Left Thumper Bumper . . . . .	ASW-A1-195

## SOLENOID AND COIL IDENTIFICATION NUMBERS

1. Outhole Kicker . . . . .	AO-27-1300	9. 3 Drop Target Reset . . . . .	NO-26-1900
2. Knocker . . . . .	AR-26-1200	10. 4 Drop Target Reset Right . . . . .	NO-26-1900
3. Left Thumper Bumper . . . . .	AN-26-1200	11. Odin Saucer . . . . .	AO-27-1300
4. Right Thumper Bumper . . . . .	AN-26-1200	12. Wonton Saucer . . . . .	AO-27-1300
5. Bottom Thumper Bumper . . . . .	AN-26-1200	13. Post Kicker . . . . .	AO-26-1200
6. Left Slingshot . . . . .	AN-26-1200	14. Coin Lockout Door . . . . .	FO-36-7000
7. Right Slingshot . . . . .	AN-26-1200	15. Flippers (2) . . . . .	AQ-25-500/34-4500
8. 4 Drop Target Reset (Left) . . . . .	NO-26-1900	16. Fireball Relay . . . . .	GO-36-6900
		17. Left Top Flipper . . . . .	AQ-26-600/34-500

## ASSEMBLY IDENTIFICATION NUMBERS PANEL BOTTOM PARTS

1. Eject Hole (2) . . . . .	ASE-428-41	8. 3 Drop Target . . . . .	ASE-2795-83
2. Right Flipper . . . . .	ASE-1587-111	9. 4 Drop Target (Left) . . . . .	ASE-2795-84
3. Left Flipper . . . . .	ASE-1587-124	10. 4 Drop Target (Right) . . . . .	ASE-2795-85
4. Upper Left Flipper . . . . .	ASE-1587-127	11. Thumper Bumper (3) . . . . .	ASE-2999
5. Slingshot (2) . . . . .	ASE-2593-6	12. Fire Ball Unit . . . . .	ASE-3101
6. Kicker Post . . . . .	ASE-2593-7	13. Ball Release . . . . .	ASE-3111-1
7. Fire Ball Relay . . . . .	ASE-2659-532		

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

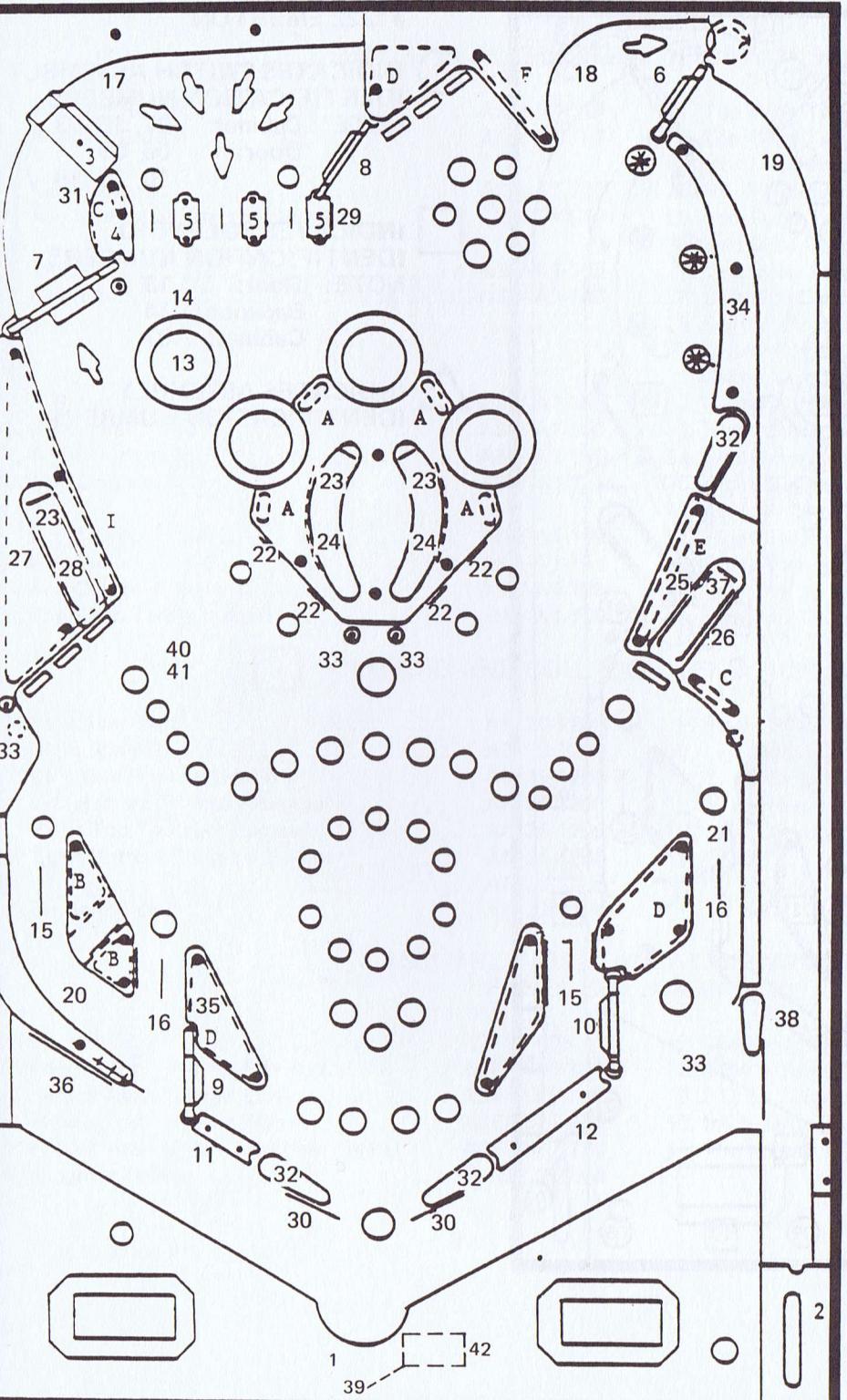
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# EMBRYON



BACKGLASS  
G-440-16

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME



WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

## RUBBER PARTS

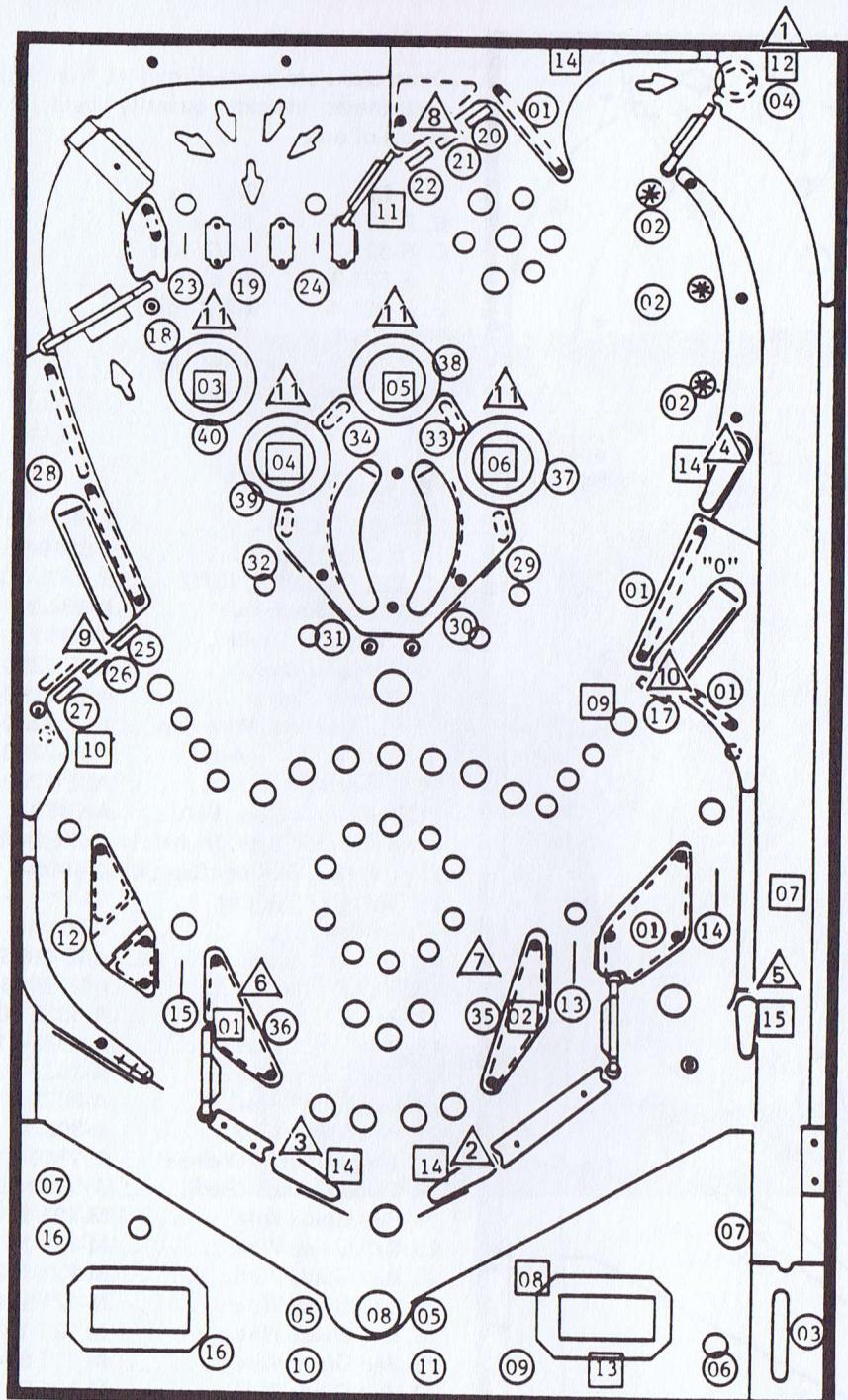
Dimensions are inside diameters. Numbers in parentheses indicate quantity used, if in excess of one.

A. R-521	3/4" dia.	(4)
B. R-521-1	1" dia.	(4)
C. R-521-2	1-1/2" dia.	(2)
D. R-521-3	2" dia.	(5)
E. R-521-4	2-1/2" dia.	
F. R-521-5	3" dia.	
G. R-243	5/16" dia.	(13)
H. R-533-3	Flipper	(3)
I. R-521-9	5" dia.	

## PANEL TOP PARTS

1. Bottom Arch . . . . .	P-5871-85
2. Shooter Gauge . . . . .	P-6359-50
3. Ball Gate Assy. (left) . . . . .	A-1475-15
4. Plastic Ball Guide . . . . .	C-694-2
5. Plastic Ball Guide . . . . .	C-693-2
6. Gate and Wire . . . . .	ASE-2250-11
7. Spinner Assy. . . . .	ASE-2250-86
8. Ball Gate and Wire Assy. . . . .	ASE-2250-24
9. Gate and Wire Assy. . . . .	ASE-2250-77
10. Gate and Wire Assy. . . . .	ASE-2250-89
11. Ball Guide Assy. (left) . . . . .	A-2898-43
12. Ball Guide Assy. (right) . . . . .	A-2898-42
13. Thumper Bumper Cap (4) . . . . .	A-4009-3
14. Thumper Bumper	
Collar (4) . . . . .	C-1018-2
15. Wire Actuator . . . . .	ASE-2806-10
16. Wire Actuator . . . . .	ASE-2806-9
17. Ball Guide Assy. . . . .	A-3032-70
18. Ball Guide Assy. . . . .	A-3032-71
19. Ball Guide Assy. . . . .	A-3032-72
20. Ball Guide Assy. . . . .	A-3032-73
21. Ball Guide Assy. . . . .	A-3032-
22. Target Switch (Yellow) . . . . .	A-3359-20
23. Target Switch (Red) . . . . .	A-3359-15
24. Ball Guide Wire . . . . .	M-121-113
25. Ball Guide Wire . . . . .	M-121-111
26. Ball Guide Wire . . . . .	M-121-112
27. Ball Guide Wire . . . . .	M-121-110
28. Ball Guide Wire . . . . .	M-121-109
29. Ball Guide Wire . . . . .	M-121-90
30. Ball Guide Wire . . . . .	M-121-53
31. Ball Guide Wire . . . . .	M-121-24
32. Molded Flipper . . . . .	A-3994-5
33. Mini Post . . . . .	ASE-2836-2
34. Screened Plastics (Set) . . . . .	A-2890-157
35. Screened Plastics (Set) . . . . .	M-1330-186
36. Guide Wire . . . . .	M-121-18
37. Target Switch . . . . .	A-3359-23
38. Transparent Flipper . . . . .	A-4013-1
39. Outhole Kicker . . . . .	ASE-3103
40. Panel . . . . .	CAS-1128-190
41. Mylar Overlay . . . . .	M-1787-37
42. Outhole Wire & Bracket . . . . .	ASE-2806-32

# EMBRYON



## #1222 EMBRYON

INDICATES SWITCH ASSEMBLY IDENTIFICATION NUMBERS

NOTE: Cabinet: 07, 16, 03  
Door: 06, 09  
10, 11, 16

INDICATES SOLENOID IDENTIFICATION NUMBERS

NOTE: Door: 13  
Backbox: 14  
Cabinet: 07

INDICATES ASSEMBLY IDENTIFICATION NUMBERS

SWITCH ASSEMBLY IDENTIFICATION NUMBERS

- |  |            |   |            |
|--|------------|---|------------|
| 1. 10 Point Rebound (4) . . . . .            | ASW-A10-47 | 21. Top Drop Target (center) . . . . .      | ASW-A1-168 |
| 2. Rollover Button . . . . .                 | ASW-A1-152 | 22. Top Drop Target (lower) . . . . .       | ASW-A1-168 |
| 3. . . . .                                   |            | 23. No. 1 Rollover . . . . .                | ASW-A1-155 |
| 4. Eject Hole . . . . .                      | ASW-A1-209 | 24. No. 2 Rollover . . . . .                | ASW-A1-155 |
| 5. No. 1 Left and Right of Outhole . . . . . | AS-2744-17 | 25. Left Drop Target (upper) . . . . .      | ASW-A1-168 |
| 6. . . . .                                   |            | 26. Left Drop Target (center) . . . . .     | ASW-A1-168 |
| 7. Tilt . . . . .                            | ASW-A1-145 | 27. Left Drop Target (lower) . . . . .      | ASW-A1-168 |
| 8. Outhole . . . . .                         | ASW-A1-143 | 28. Left Side Captive Ball Target . . . . . | ASW-A10-48 |
| 9. . . . .                                   |            | 29. Center Right Upper Target . . . . .     | ASW-A10-48 |
| 10. . . . .                                  |            | 30. Center Right Lower Target . . . . .     | ASW-A10-48 |
| 11. . . . .                                  |            | 31. Center Left Lower Target . . . . .      | ASW-A10-48 |
| 12. A Rollover . . . . .                     | ASW-A1-155 | 32. Center Left Upper Target . . . . .      | ASW-A10-48 |
| 13. B Rollover . . . . .                     | ASW-A1-155 | 33. Right Center Inside Target . . . . .    | ASW-A10-48 |
| 14. Right Outlane . . . . .                  | ASW-A1-155 | 34. Left Center Inside Target . . . . .     | ASW-A10-48 |
| 15. Left Outlane . . . . .                   | ASW-A1-155 | 35. Right Slingshot . . . . .               | ASW-A10-47 |
| 16. . . . .                                  |            | 36. Left Slingshot . . . . .                | ASW-A10-47 |
| 17. Single Drop Target . . . . .             | ASW-A1-168 | 37. Right Bottom Thumper Bumper . . . . .   | ASW-A1-195 |
| 18. Spinner . . . . .                        | ASW-A1-151 | 38. Right Top Thumper Bumper . . . . .      | ASW-A1-195 |
| 19. Top Center Rollover . . . . .            | ASW-A1-155 | 39. Left Bottom Thumper Bumper . . . . .    | ASW-A1-195 |
| 20. Top Drop Target (upper) . . . . .        | ASW-A1-168 | 40. Left Top Thumper Bumper . . . . .       | ASW-A1-195 |

SOLENOID AND COIL IDENTIFICATION NUMBERS

- |  |            |   |                  |
|--|------------|---|------------------|
| 1. Left Sling Shot . . . . .             | AN-26-1200 | 9. Single Drop Target Reset . . . . .       | AO-27-1300       |
| 2. Right Sling Shot . . . . .            | AN-26-1200 | 10. Left Side 3 Drop Target Reset . . . . . | NO-26-1900       |
| 3. Left Top Thumper Bumper . . . . .     | AN-26-1200 | 11. Top 3 Drop Target Reset . . . . .       | NO-26-1900       |
| 4. Left Bottom Thumper Bumper . . . . .  | AN-26-1200 | 12. Eject Hole . . . . .                    | AO-27-1300       |
| 5. Right Top Thumper Bumper . . . . .    | AN-26-1200 | 13. Coin Lockout (Door) . . . . .           | FO-36-7000       |
| 6. Right Bottom Thumper Bumper . . . . . | AN-26-1200 | 14. Flippers . . . . .                      | AQ25-500/34-4500 |
| 7. Knocker . . . . .                     | AR-26-1200 | 15. Right Outlane Flipper . . . . .         | AO-27-1300       |
| 8. Outhole Kicker . . . . .              | AO-27-1300 |   |                  |

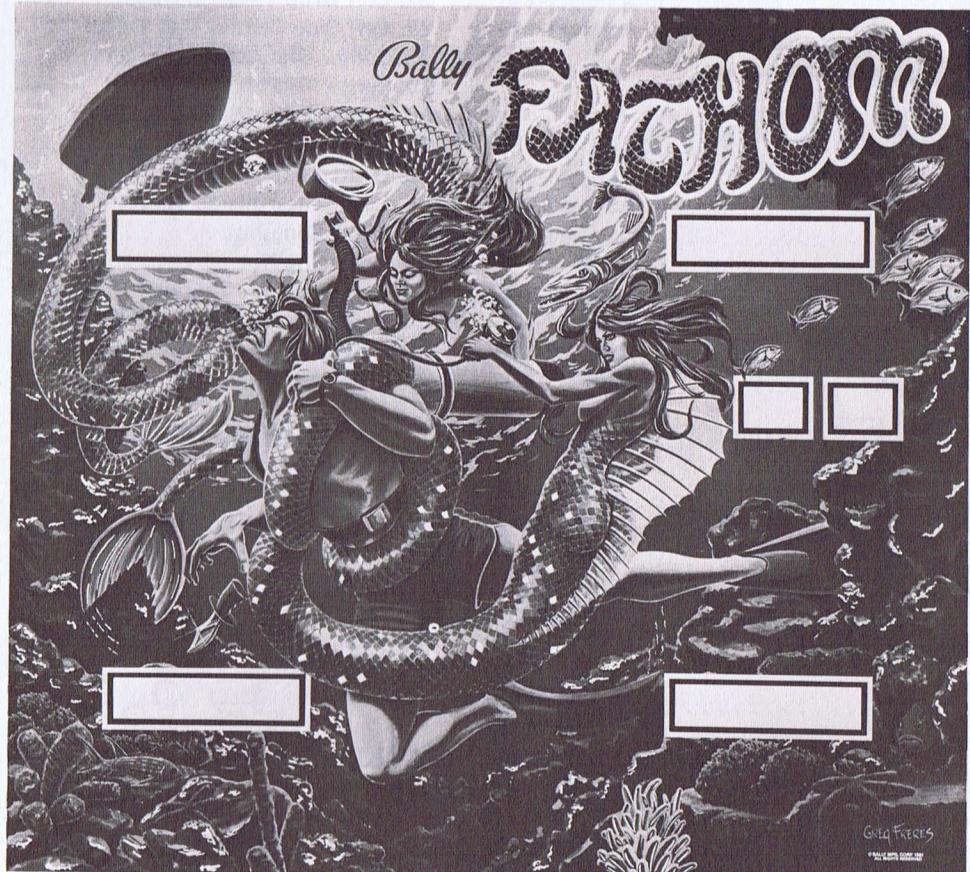
ASSEMBLY IDENTIFICATION NUMBERS  
PANEL BOTTOM PARTS

- |  |              |  |             |
|--|--------------|--|-------------|
| 1. Eject Hole . . . . .                            | ASE-428-41   | 7. Slingshot (Right) . . . . .           | ASE-2593-6  |
| 2. Flipper Assy. (Lower Right) . . . . .           | ASE-1587-111 | 8. 3 Drop Target Assy. (Upper) . . . . . | ASE-2795-86 |
| 3. Flipper Assy. (Lower Left) . . . . .            | ASE-1587-112 | 9. 3 Drop Target Assy. (Lower) . . . . . | ASE-2795-87 |
| 4. Flipper Assy. (Upper Right) . . . . .           | ASE-1587-125 | 10. Inline Drop Target Assy. . . . .     | ASE-2993-13 |
| 5. Flipper Assy. (Flip Save Lower Right) . . . . . | ASE-1587-126 | 11. Thumper Bumper Assy. . . . .         | ASE-2999    |
| 6. Slingshot (Left) . . . . .                      | ASE-2593-6   |  |             |

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

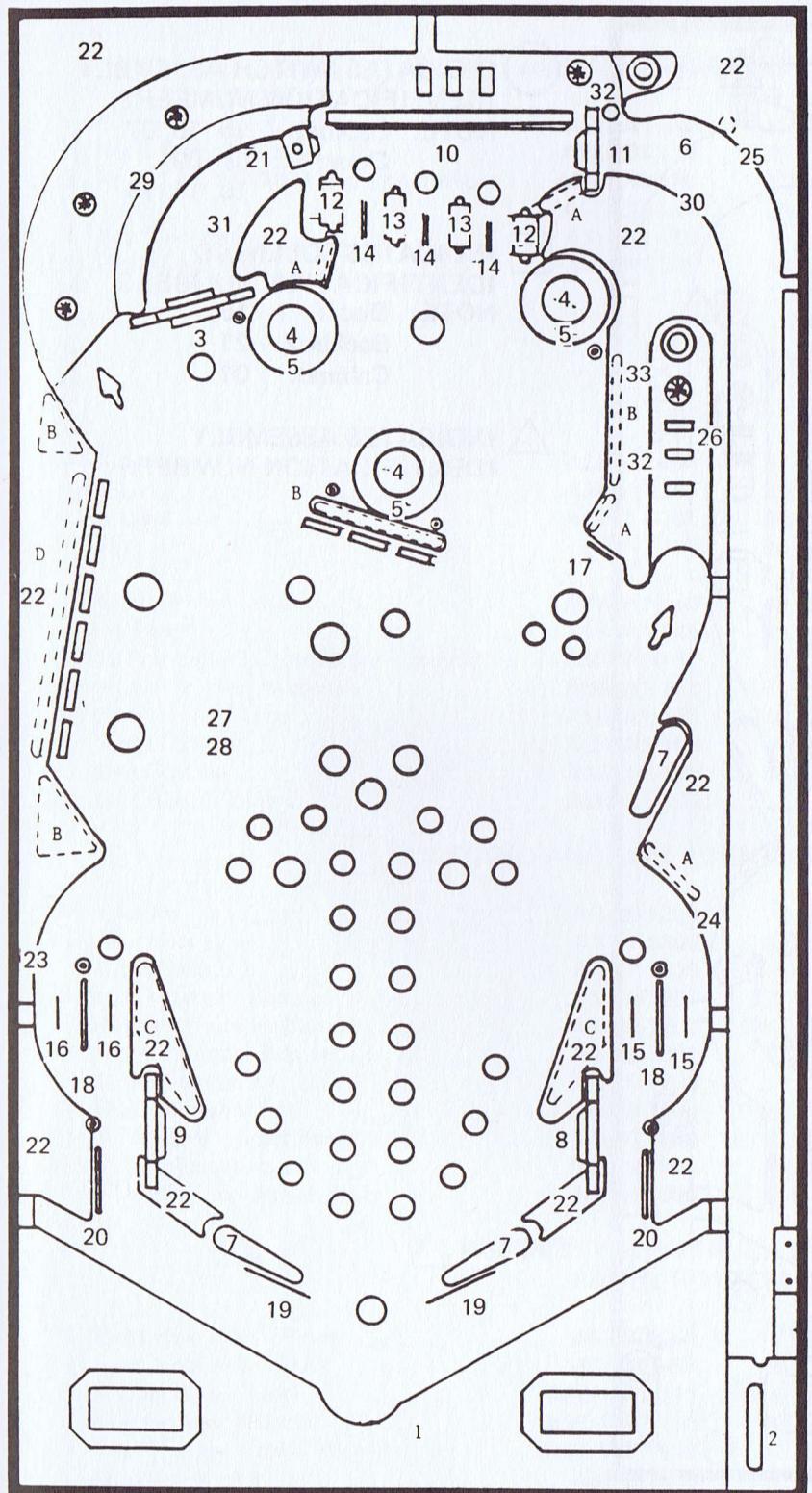
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# FATHOM



BACKGLASS  
G-440-17

**WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME**



## RUBBER PARTS

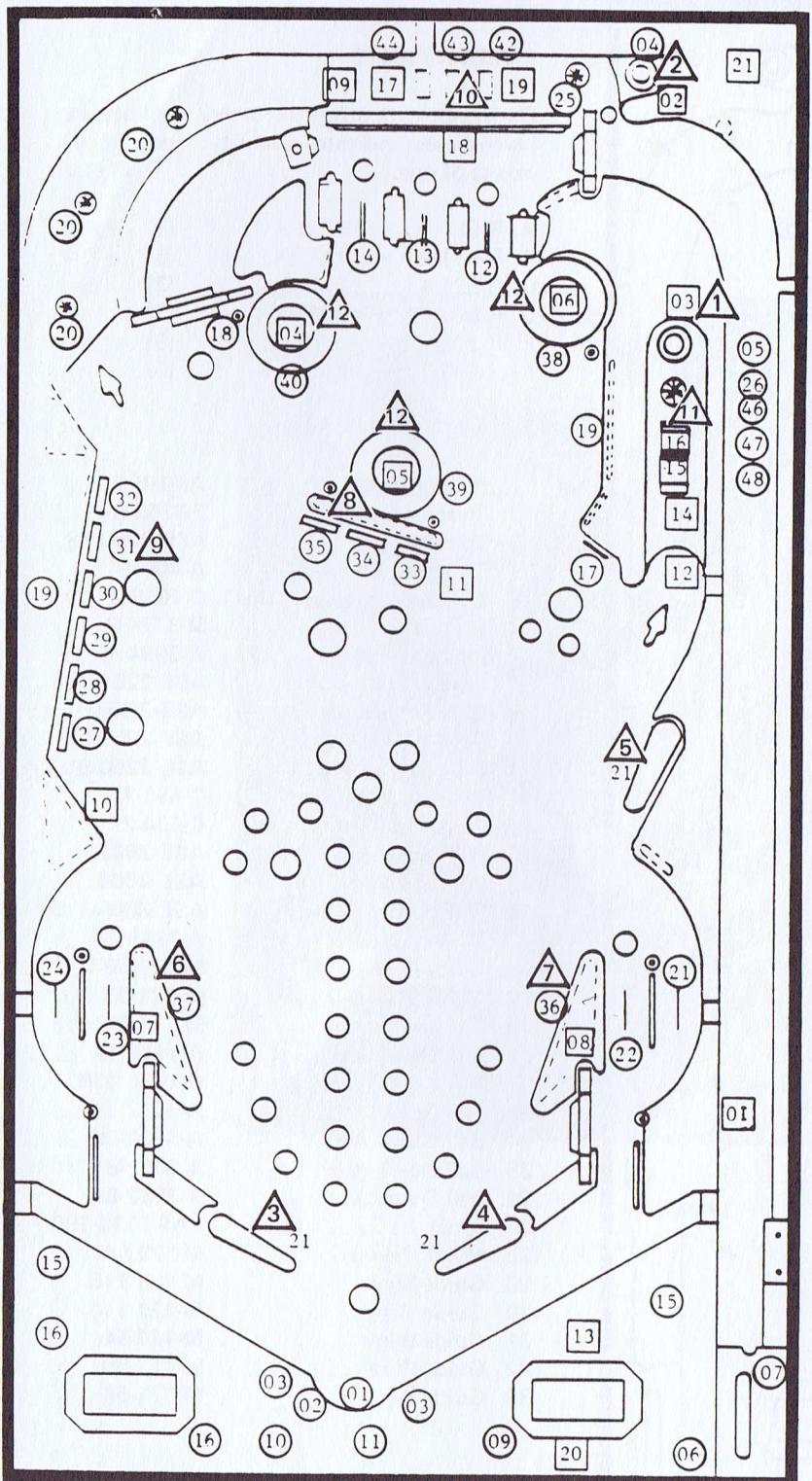
Dimensions are inside diameters. Numbers in parentheses indicate quantity used, if in excess of one.

A. R-521-1	1" Dia.	(3)
B. R-521-2	1½" Dia.	(5)
C. R-521-4	2½" Dia.	(2)
D. R-521-5	3" Dia.	(2)
E. R-243	5/16" Dia.	(9)
F. R-533-3	Flipper	(3)

## PANEL TOP PARTS

1.	Bottom Arch . . . . .	A4016-2
2.	Shooter Gauge . . . . .	P-6359-51
3.	Spinner Assy. . . . .	ASE-2250-88
4.	Thumper Bumper Cap . .	A-4009-4
5.	Thumper Bumper Collar .	C-1018-2
6.	Arch Rail . . . . .	M-1774-8
7.	Molded Flipper . . . . .	A-3994
8.	Gate & Wire Assy. . . . .	ASE-2250-90
9.	Gate & Wire Assy. . . . .	ASE-2250-91
10.	Gate & Wire Assy. . . . .	ASE-2250-92
11.	Gate & Wire Assy. . . . .	ASE-2250-93
12.	Plastic Ball Guide . . . . .	C-693-2
13.	Plastic Ball Guide . . . . .	C-694-2
14.	Wire Actuator . . . . .	ASE-2806-9
15.	Wire Actuator . . . . .	ASE-2806
16.	Wire Actuator . . . . .	ASE-2806-1
17.	Target Switch (Yellow) .	A-3359-20
18.	Guide Wire . . . . .	M-121-56
19.	Guide Wire . . . . .	M-121-53
20.	Guide Wire . . . . .	M-121-46
21.	Ball Gate Assy. (Left) .	A-1475-12
22.	Screened Plastics (Set) .	A-2890-158
23.	Ball Guide Assy. . . . .	A-3032-79
24.	Ball Guide Assy. . . . .	A-3032-80
25.	Ball Guide Assy. . . . .	A-3032-81
26.	Ball Guide Assy. . . . .	A-3032-82
27.	Panel . . . . .	CAS-1128-190
28.	Mylar Overlay . . . . .	M-1787-45
29.	Guide Wire . . . . .	M-121-115
30.	Guide Wire . . . . .	M-121-114
31.	Guide Wire . . . . .	M-121-54
32.	Guide Wire . . . . .	M-121-59
33.	Guide Wire . . . . .	M-121-56

**WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME**



INDICATES SWITCH ASSEMBLY IDENTIFICATION NUMBERS.

NOTE: Cabinet: 15, 16, 07  
Door: 06, 09  
10, 11, 16

INDICATES SOLENOID IDENTIFICATION NUMBERS

NOTE: Door: 16  
Backbox: 21  
Cabinet: 01

INDICATES ASSEMBLY IDENTIFICATION NUMBERS

SWITCH ASSEMBLY IDENTIFICATION NUMBERS

1. Outhole ..... ASW-A1-143
2. No. 1 Left of Outhole ..... ASE-2744-17
3. No. 2 Left and No. 1 Right of Outhole ..... ASE-2744-18, ASE-2744-16
4. Top Eject Hole ..... ASW-A1-209
5. Right Eject Hole ..... ASW-A1-209
6. (empty)
7. (empty)
8. (empty)
9. (empty)
10. (empty)
11. (empty)
12. C Lane ..... ASW-A1-155
13. B Lane ..... ASW-A1-155
14. A Lane ..... ASW-A1-155
15. Tilt ..... ASW-A1-147
16. (empty)
17. Right Center Target ..... ASW-A10-48
18. Spinner ..... ASW-A1-143
19. 10 Point and 6 Drop Target Rebound ..... ASW-A10-47
20. 3 Left Rollover Buttons ..... ASW-A1-152
21. Right Return Lane ..... ASW-A1-155
22. Right Outlane ..... ASW-A1-155
23. Left Outlane ..... ASW-A1-155
24. Left Return Lane ..... ASW-A1-155
25. Top Eject Hole Rollover Button ..... ASW-A1-152
26. Right Eject Hole Rollover Button ..... ASW-A1-152
27. Left Side Drop Target F (Bottom) ..... ASW-A1-168
28. Left Side Drop Target E ..... ASW-A1-168
29. Left Side Drop Target D ..... ASW-A1-168
30. Left Side Drop Target C ..... ASW-A1-168
31. Left Side Drop Target B ..... ASW-A1-168
32. Left Side Drop Target A (Top) ..... ASW-A1-168
33. No. 3 Middle Drop Target ..... ASW-A1-168
34. No. 2 Middle Drop Target ..... ASW-A1-168
35. No. 1 Middle Drop Target ..... ASW-A1-168
36. Right Slingshot ..... ASW-A10-47
37. Left Slingshot ..... ASW-A10-47
38. Right Thumper Bumper ..... ASW-A1-195
39. Bottom Thumper Bumper ..... ASW-A1-195
40. Left Thumper Bumper ..... ASW-A1-195
41. (empty)
42. 3rd Blue Inline Drop Target ..... ASW-A1-168
43. 2nd Blue Inline Drop Target ..... ASW-A1-168
44. 1st Blue Inline Drop Target ..... ASW-A1-168
45. (empty)
46. 3rd Green Inline Drop Target ..... ASW-A1-168
47. 2nd Green Inline Drop Target ..... ASW-A1-168
48. 1st Green Inline Drop Target ..... ASW-A1-168

SOLENOID AND COIL IDENTIFICATION NUMBERS

1. Knocker ..... AR-26-1200
2. Top Eject Hole ..... AT-27-1300
3. Right Eject Hole ..... AT-27-1300
4. Left Thumper Bumper ..... AN-26-1200
5. Bottom Thumper Bumper ..... AN-26-1200
6. Right Thumper Bumper ..... AN-26-1200
7. Left Slingshot ..... AN-26-1200
8. Right Slingshot ..... AN-26-1200
9. 3 Top Drop Target Reset ..... NB-26-1900
10. 6 Drop Target Reset ..... NO-26-1900
11. 3 Middle Drop Target Reset ..... NB-26-1900
12. Right Inline Drop Target Reset ..... NB-26-1900
13. Outhole Kicker ..... AO-27-1300
14. 1st Inline Green Drop Target ..... CV-29-1500
15. 2nd Inline Green Drop Target ..... CV-29-1500
16. 3rd Inline Green Drop Target ..... CV-29-1500
17. 1st Blue Inline Drop Target ..... CV-29-1500
18. 2nd Blue Inline Drop Target ..... CV-29-1500
19. 3rd Blue Inline Drop Target ..... CJ-29-1500
20. Coin Lockout Door ..... FO-36-7000
21. Flippers ..... AQ-25-500/34-4500

ASSEMBLY IDENTIFICATION NUMBERS  
PANEL BOTTOM PARTS

1. Eject Hole Assy. (Right) ..... ASE-428-53
2. Eject Hole Assy. (Top) ..... ASE-428-57
3. Flipper Assy. (Left) ..... ASE-1587-111
4. Flipper Assy. (Right) ..... ASE-1587-112
5. Flipper Assy. (Upper Right) ..... ASE-1587-126
6. Slingshot Kicker (Left) ..... ASE-2593-6
7. Slingshot Kicker (Right) ..... ASE-2593-6
8. 3 Drop Target Assy. (Middle) ..... ASE-2795-88
9. 6 Drop Target Assy. ..... ASE-2795-89
10. 3 Inline Target/Memory ..... ASE-3039-3
11. 3 Inline Target/Memory ..... ASE-3039-4
12. Thumper Bumpers ..... ASE-2999

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

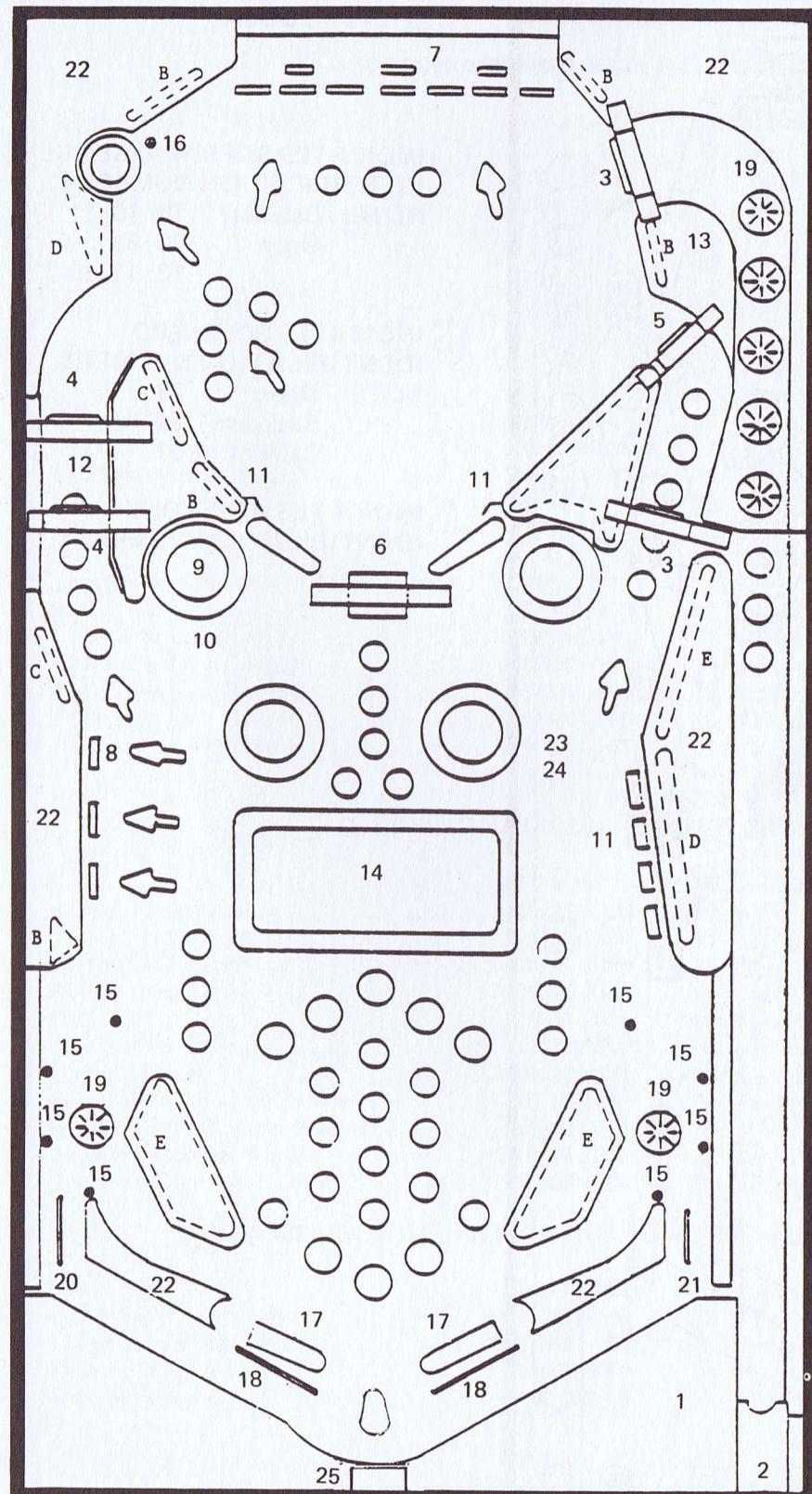
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# MEDUSA



BACKGLASS  
G-440-18

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME



## RUBBER PARTS

Dimensions are inside diameters. Numbers in parentheses indicate quantity used, if in excess of one.

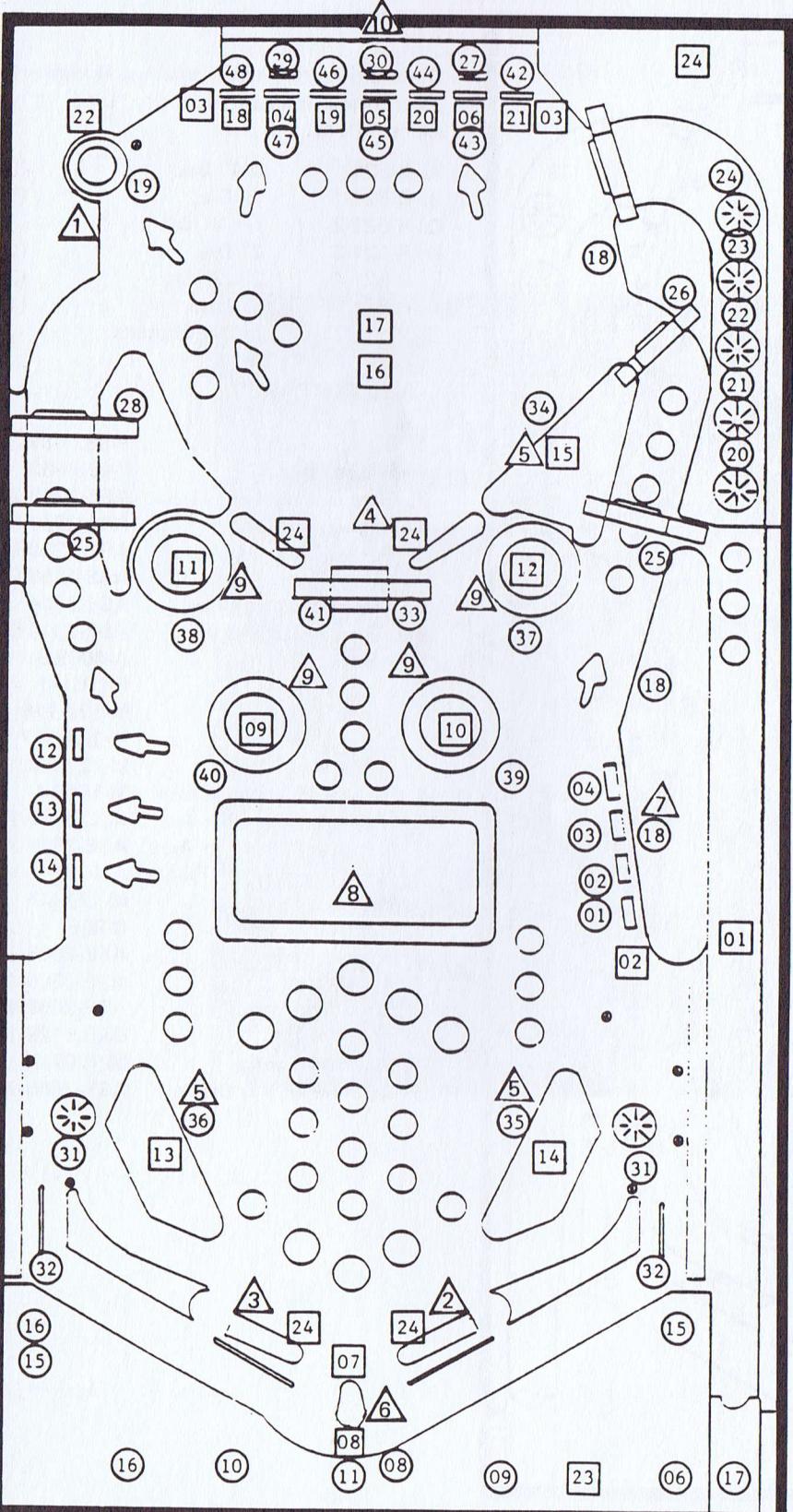
A. R-521	3/4" Dia.	(2)
B. R-521-1	1" Dia.	(5)
C. R-521-2	1-1/2" Dia.	
D. R-521-3	2" Dia.	(2)
E. R-521-4	2-1/2" Dia.	(3)
F. R-521-5	3" Dia.	(1)
G. R-533-3	Lower Flippers	

## PANEL TOP PARTS

1. Bottom Arch . . . . .	P-5871-87
2. Shooter Gauge . . . . .	P-6359-52
3. Gate & Wire Assy. . . . .	ASE-2250-24
4. Gate & Wire Assy. . . . .	ASE-2250-94
5. Gate & Wire Assy. . . . .	ASE-2250-95
6. Spinner Assy. . . . .	ASE-2250-96
7. Feature Display Assy. . . . .	ASE-3114
8. Target Switch Assy. . . . .	ASE-2911-57
9. Bumper Cap . . . . .	A-4009-6
10. Bumper Collar . . . . .	C-1018-1
11. Guide Wire . . . . .	M-121-118
12. Guide Wire . . . . .	M-121-117
13. Guide Wire . . . . .	M-121-116
14. Playfield Readout Cover	M-1949-1
15. Minipost & Bumper Assy.	ASE-2836-2
16. Minipost & Bumper Assy.	ASE-2836-3
17. Large Transparent Flipper	A-4017-1
18. Buffer Wire . . . . .	M-121-53
19. Rollover Button . . . . .	C-900
20. Wire Actuator . . . . .	ASE-2806
21. Wire Actuator . . . . .	ASE-2806-1
22. Screened Plastics . . . . .	ASE-2890-159
23. Panel . . . . .	CAS-1128-191
24. Playfield Overlay . . . . .	M-1787-44
25. Outhole Wire & Bracket	ASE-2806-21

WHEN ORDERING PART,  
SPECIFY PART NO.  
AND NAME OF GAME

# MEDUSA



#1245 MEDUSA

INDICATES SWITCH ASSEMBLY IDENTIFICATION NUMBERS.

NOTE: Cabinet: 15, 16, 17  
Door: 06, 09  
10, 11, 16

INDICATES SOLENOID IDENTIFICATION NUMBERS.

NOTE: Door: 23  
Backbox: 24  
Cabinet: 01

INDICATES ASSEMBLY IDENTIFICATION NUMBERS.

## SWITCH ASSEMBLY IDENTIFICATION NUMBERS

1. 4 Drop Target D (Bottom) ..... ASW-A1-168
2. 4 Drop Target C ..... ASW-A1-168
3. 4 Drop Target B ..... ASW-A1-168
4. 4 Drop Target A (Top) ..... ASW-A1-168
- 5.
- 6.
- 7.
8. Outhole ..... ASW-A1-143
- 9.
- 10.
- 11.
12. Left Side Top Target ..... ASW-A10-48
13. Left Side Middle Target ..... ASW-A10-48
14. Left Side Bottom Target ..... ASW-A10-48
15. Tilt ..... ASW-A1-143
- 16.
- 17.
18. Two 10 Point and 4 Drop Target Rebound ..... ASW-A10-47
19. Saucer ..... ASW-A1-203
20. #1 Shooter Lane Rollover ..... ASW-A1-155
21. #2 Shooter Lane Rollover ..... ASW-A1-155
22. #3 Shooter Lane Rollover ..... ASW-A1-155
23. #4 Shooter Lane Rollover ..... ASW-A1-155
24. #5 Shooter Lane Rollover ..... ASW-A1-155

(Refer to Zipper Flipper Assy. Break Down)

42. #7 Top Drop Target (Right) ..... ASW-A1-168
43. #6 Top Drop Target ..... ASW-A1-168
44. #5 Top Drop Target ..... ASW-A1-168
45. #4 Top Drop Target ..... ASW-A1-168
46. #3 Top Drop Target ..... ASW-A1-168
47. #2 Top Drop Target ..... ASW-A1-158
48. #1 Top Drop Target (Left) ..... ASW-A1-168

## SOLENOID AND COIL IDENTIFICATION NUMBERS

1. Knocker ..... ATT-26-1200
2. 4 Drop Target Reset ..... NO-26-1900
3. 7 Drop Target Reset ..... NO-26-1900
4. #2 Top Drop Target ..... CV-31-2000
5. #4 Top Drop Target ..... CV-31-2000
6. #6 Top Drop Target ..... CV-31-2000
7. Shield of the Gods Post ..... AO-26-1200
8. Outhole Kicker ..... AO-27-1300
9. Bottom Left Thumper Bumper ..... AN-26-1200
10. Bottom Right Thumper Bumper ..... AN-26-2000
11. Top Left Thumper Bumper ..... AN-26-1200
12. Top Right Thumper Bumper ..... AN-26-1200
13. Left Slingshot ..... AO-26-1200
14. Bottom Right Slingshot ..... AO-26-1200
15. Top Right Slingshot ..... AO-26-1200
16. Open Moveable Flipper ..... GT-30-1300
17. Close Moveable Flipper ..... NB-24-1500
18. #1 Top Drop Target ..... CV-31-2000
19. #3 Top Drop Target ..... CV-31-2000
20. #5 Top Drop Target ..... CV-31-2000
21. #7 Top Drop Target ..... CV-31-2000
22. Saucer ..... AO-27-1300
23. Coin Lockout Door ..... FO-36-7000
24. Flippers (4) ..... AQ-25-500/34-4500

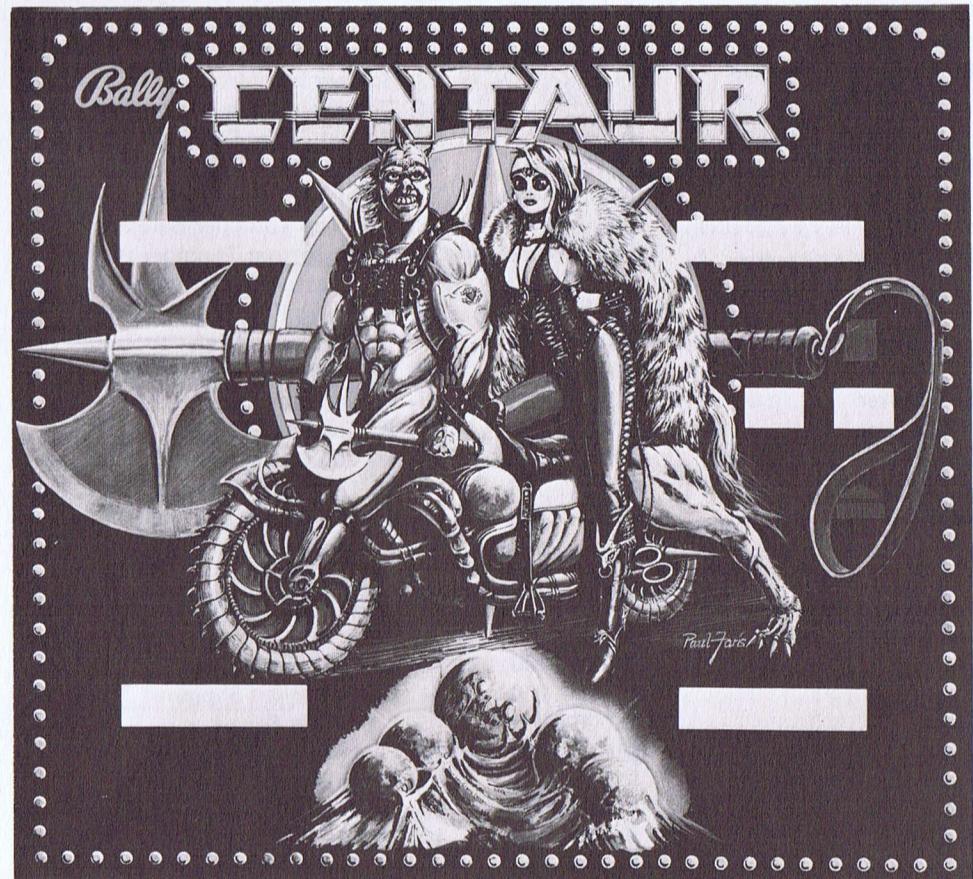
## ASSEMBLY IDENTIFICATION NUMBERS PANEL BOTTOM PARTS

1. Saucer Assy. ..... ASE-482-53
2. Lower Right Flipper Assy. ..... ASE-1587-126
3. Lower Left Flipper Assy. ..... ASE-1587-127
4. Zipper Flipper Assy. ..... ASE-2397-4
5. Slingshot Assy. (3) ..... ASE-2593-6
6. Shield of the Gods Post Assy. ..... ASE-2593-7
7. 4 Drop Target Assy. ..... ASE-2795-73
8. Display Assy. ..... ASE-2914-1
9. Thumper Bumper Assy. (4) ..... ASE-2999
10. 7 Memory Drop Target Assy. ..... ASE-3038-4

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

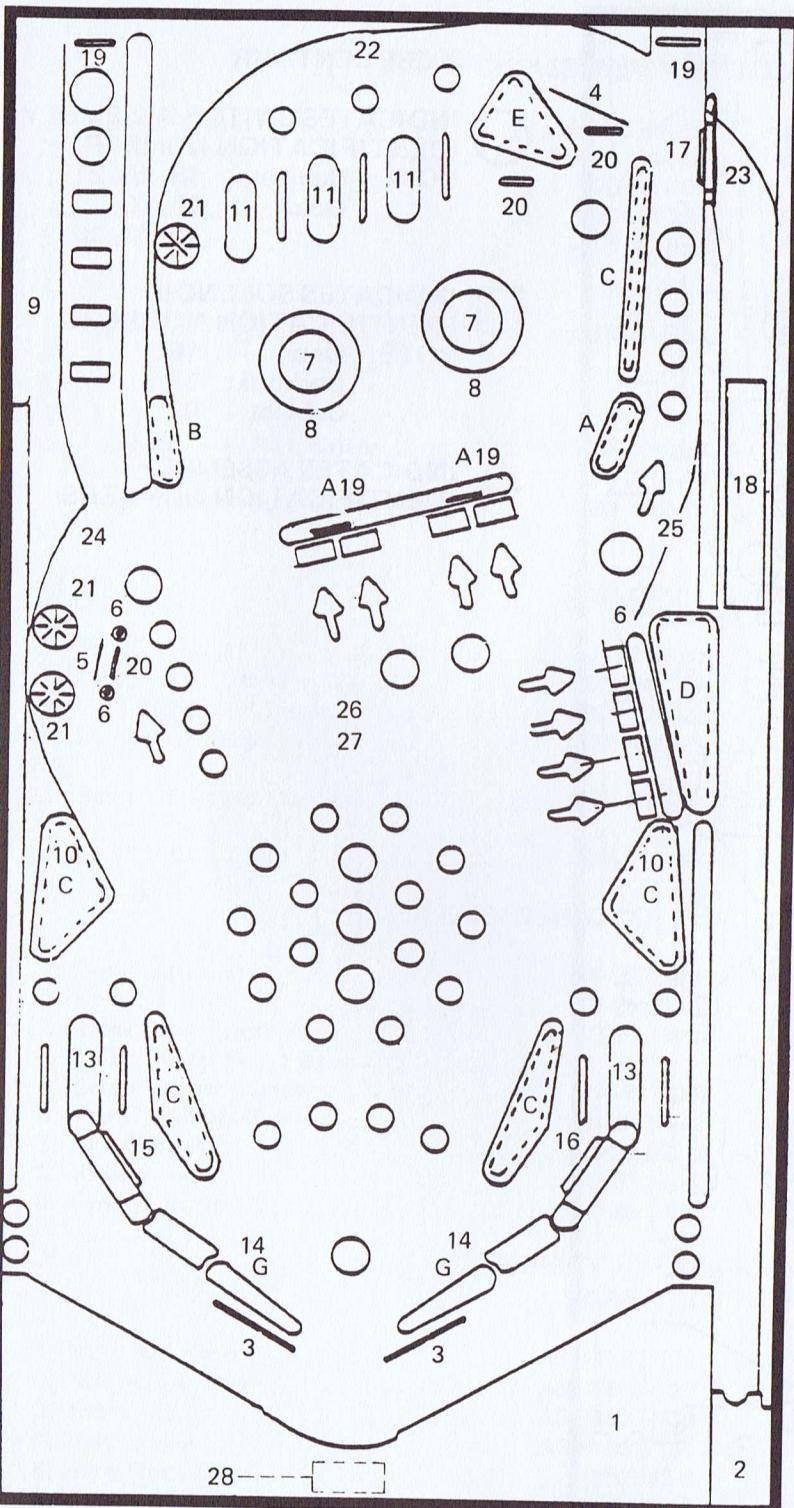
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# CENTAUR



BACK GLASS  
G-440-20

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME



## RUBBER PARTS

Dimensions are inside diameters. Numbers in parentheses indicate quantity used, if in excess of one.

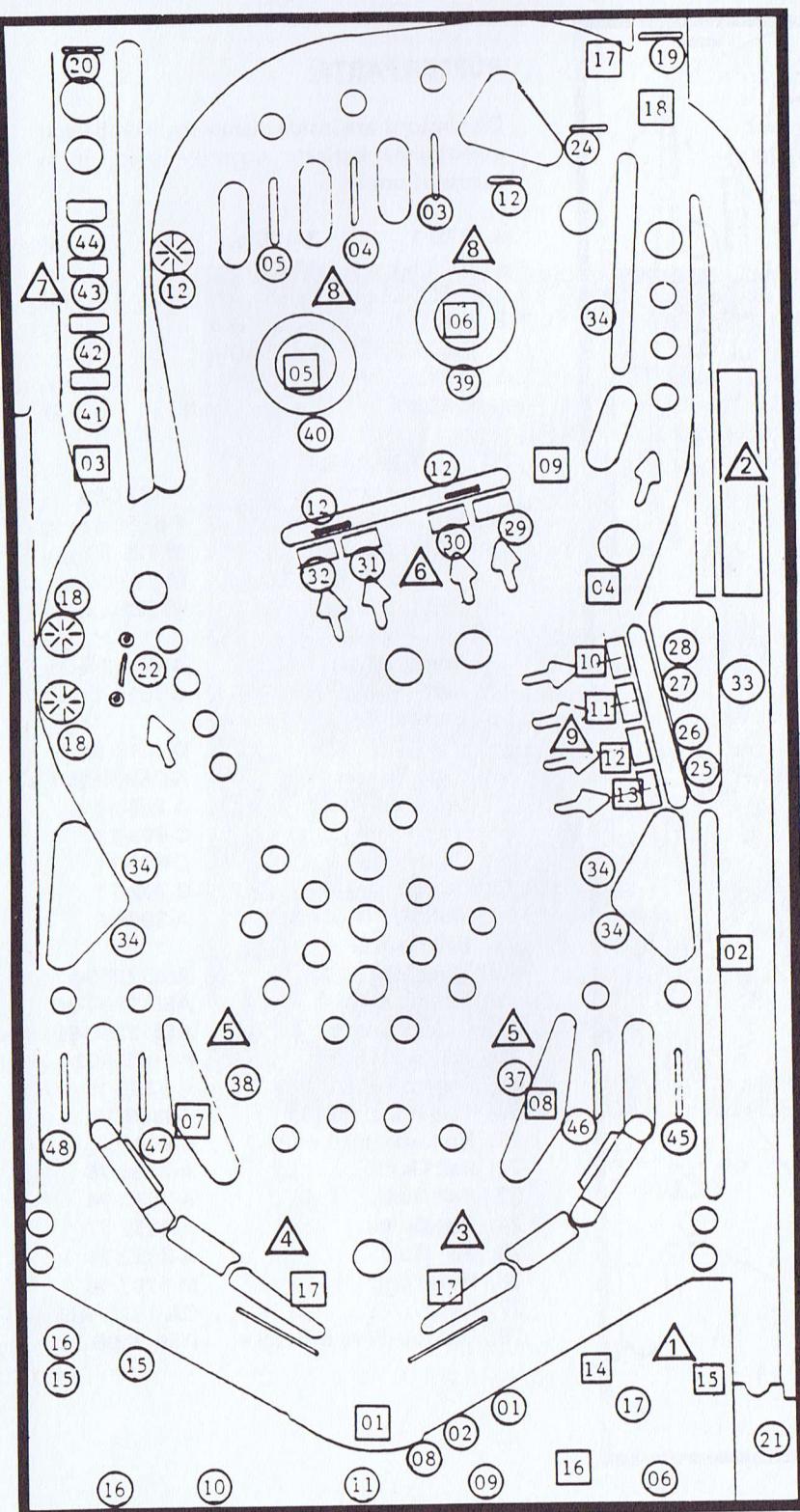
A. R-521	3/4" Dia.	(3)
B. R-521-1	1" Dia.	
C. R-521-3	2" Dia.	(6)
D. R-521-4	2-1/2" Dia.	
E. R-521-2	1-1/2" Dia.	
F. R-243	5/16" Dia.	(18)
G. R-533-1	Flipper (Red)	(2)

## PANEL TOP PARTS

1. Bottom Arch . . . . .	P-5871-88
2. Shooter Gauge . . . . .	P-6359-53
3. Ball Guide Wire (2) . . . . .	M-121-53
4. Ball Guide Wire . . . . .	M-121-45
5. Ball Guide Wire . . . . .	M-121-32
6. Mini Post & Bumper Assy. (3) . . . . .	ASE-2836-2
7. Bumper Cap (Red S/B) (2) . . . . .	C-1014-1
8. Bumper Collar (Red S/B) (2) . . . . .	C-1018-1
9. Clear Plastics (Set) . . . . .	A-2890-156
10. Screened Plastics (Set) . . . . .	A-2890-155
11. Guide Rail (3) . . . . .	C-693-11
12. Guide Rail . . . . .	C-694-11
13. Guide Rail (2) . . . . .	C-702-11
14. Molded Flipper (2) . . . . .	A-3994-8
15. Ball Gate & Wire Assy. . . . .	ASE-2250-97
16. Gate & Bracket Assy. . . . .	ASE-2250-98
17. Gate & Bracket Assy. . . . .	ASE-2250-99
18. Ball Exit Cover . . . . .	P-1973-502
19. Target Switch (4) . . . . .	A-3359-15
20. Target Switch (3) . . . . .	A-3359-19
21. Rollover Button (3) . . . . .	C-900
22. Ball Guide . . . . .	A-3036-76
23. Ball Guide . . . . .	A-3032-74
24. Ball Guide . . . . .	A-3032-77
25. Ball Guide . . . . .	A-3032-75
26. Mylar Overlay . . . . .	M-1787-46
27. Panel . . . . .	CA-1128-189
28. Outhole Wire & Bracket . . . . .	ASE-2806-21

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# CENTAUR



#1239 CENTAUR

INDICATES SWITCH ASSEMBLY IDENTIFICATION NUMBERS

NOTE: Cabinet: 15, 16, 21  
Door: 06, 09  
10, 11, 16

INDICATES SOLENOID ASSEMBLY IDENTIFICATION NUMBERS

NOTE: Door: 16  
Backbox: 17  
Cabinet: 02

INDICATES ASSEMBLY IDENTIFICATION NUMBERS

SWITCH ASSEMBLY IDENTIFICATION NUMBERS

1. 4th Ball Trough ..... ASE-2744-20
2. 5th Ball Trough ..... ASE-2744-22
3. Top Right Lane ..... ASW-A1-155
4. Top Middle Lane ..... ASW-A1-155
5. Top Left Lane ..... ASW-A1-155
- 6.
- 7.
8. Outhole ..... ASW-A1-143
- 9.
- 10.
- 11.
12. Top Left Lane, R.O. Button ..... ASW-A1-206  
Orbs 2 Back Targets ..... ASW-A10-48  
Target Behind Right Thumper Bumper ..... ASW-A10-48
- 13.
- 14.
15. Tilt ..... ASW-A1-145
- 16.
17. 1st Ball Trough ..... ASE-2744-23
18. Left Side R.O. Button (2) ..... ASW-A1-206
19. Orbs Right Lane Target ..... ASW-A10-48
20. Inline Back Target ..... ASW-A10-48
- 21.
22. Reset 1-4 Targets, Target ..... ASW-A10-48
- 23.
24. Top Spot 1-4 Target ..... ASW-A10-48

SOLENOID AND COIL IDENTIFICATION NUMBERS

1. Outhole Kicker ..... AN-26-1200
2. Knocker ..... AR-26-1200
3. Inline Drop Target Reset ..... NO-26-1900
4. 4 Right Drop Target Reset ..... NO-26-1900
5. Left Thumper Bumper ..... AN-26-1200
6. Right Thumper Bumper ..... AN-26-1200
7. Left Slingshot ..... AO-26-1200
8. Right Slingshot ..... AO-26-1200
9. Orbs Target Reset ..... NO-26-1900
10. Right 4 Drop Target "A" (Top) ..... CJ-31-3000
11. Right 4 Drop Target "B" ..... CJ-31-2000
12. Right 4 Drop Target "C" ..... CJ-31-2000
13. Right 4 Drop Target "D" (Bottom) ..... CJ-31-2000
14. Ball Release ..... AO-28-1500
15. Ball Kick to Playfield ..... AO-25-950
16. Coin Lockout Door ..... FO-26-7000
17. Flippers ..... AQ-25-500/34-4500
18. Magnet ..... E-184-284

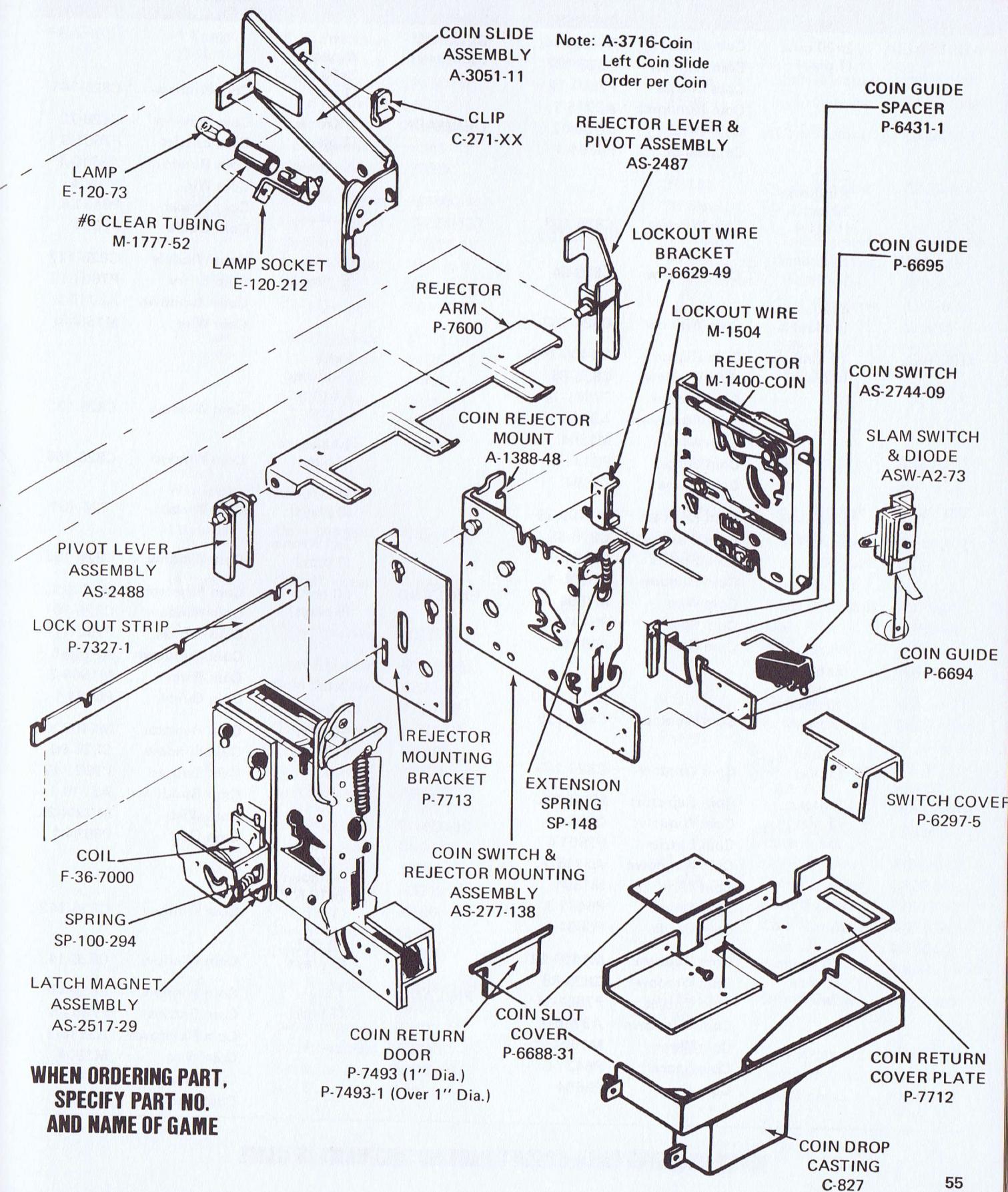
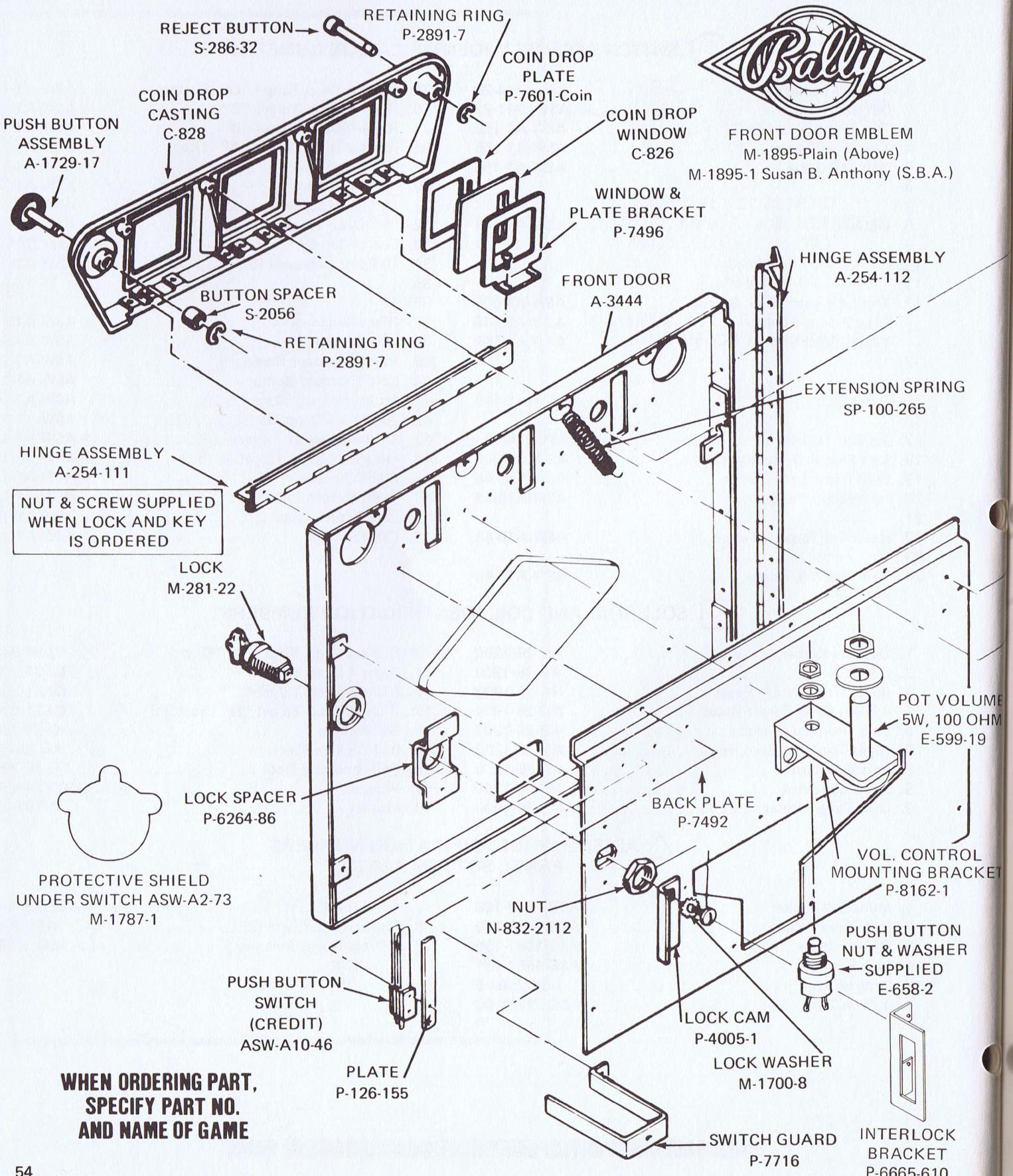
ASSEMBLY IDENTIFICATION NUMBERS  
PANEL BOTTOM PARTS

1. Multi-Ball Kicker ..... ASE-1587-128
2. Ball Release Gate ..... ASE-1587-129
3. Right Flipper ..... ASE-1587-130
4. Left Flipper ..... ASE-1587-131
5. Sling Shots (2) ..... ASE-2593-6
6. 4 Drop Target ..... ASE-2795-90
7. 4-In-Line Target ..... ASE-2993-19
8. Thumper Bumpers (2) ..... ASE-2999
9. 4 Drop Target/Memory ..... ASE-3039-5

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# FRONT DOOR ASSEMBLY ASB-2600-9XX



# COIN HANDLING

# COIN HANDLING

Country	Coin Value	Required Parts	Part Numbers	Country	Coin Value	Required Parts	Part Numbers
AUSTRALIA	2x20 cent (1 play)	Coin Rejectors	M1400-44	BELGIUM (Continued)	Extra Window: 2x10 Franc (1 play)	Coin Window	C826-141
		Coin Window	C826-127				
		Coin Entries	P7601-12				
		Coin Rundown	A3716-1				
		Coin Wire	M1504-2				
		Coin Guide	P6694-1				
	Extra Windows: 20 cents (1 play)						
		Coin Window	C826-103				
	2x20 cents (3 plays)						
		Coin Window	C826-94				
AUSTRIA	4x20 cents (1 play)			DENMARK	1 Kroner (1 play)	Coin Window	C826-72
						Coin Entries	P7601-9
						Coin Rundown	A3716-1
						Coin Wire	M1504
						Coin Spacer	P6431-3
						Coin Guide	P6694
	Extra Windows: 20 cents (1 play)						
		Coin Window	C826-103				
	2x20 cents (3 plays)						
		Coin Window	C826-94		5 Kroner (6 plays)	Coin Window	C826-117
BELGIUM	10 Shilling (6 plays)			ENGLAND		Coin Entry	P7601-18
		Coin Rejector	M1400-141			Coin Rundown	A3716-7
		Coin Windows	C826-86			Coin Wire	M1504-4
		Coin Entries	P7601-14		Extra Windows: 5 Kroner (3 plays)	Coin Window	C826-133
		Coin Rundown	A3716-1				
		Coin Wire	M1504				
		Coin Spacer	P6431-6		10 Kroner (7 plays)	Coin Window	C826-166
		Coin Guide	P6694				
	5 Shilling (3 plays)				10 Kroner (8 plays)	Coin Window	(826-161)
		Coin Rejector	M1400-39				
FINLAND		Coin Windows	C826-85		2x1 Kroner (1 play)	Coin Window	C826-132
		Coin Entries	P7601-6				
		Coin Rundown	A3716-1				
		Coin Wire	M1504		50 N.P. (5 plays)	Coin Rejector	M1400-130
		Coin Spacer	P6431-3			Coin Window	C826-101
		Coin Guide	P6694			Coin Entries	P7601-17
	Extra Windows: 10 Shilling (3 plays)					Coin Rundown	A3716-5
		Coin Window	C826-150			Coin Wire	M1504-2
					10 N.P. (1 play)	Coin Guide	P6694-1
	5 Shilling (1 play)						

Country	Coin Value	Required Parts	Part Numbers	Country	Coin Value	Required Parts	Part Numbers
FRANCE	1 Franc (1 Partie)	Coin Rejectors	M1400-84	GERMANY (Continued)	Extra Windows: 1 D.M. (1 play)	Coin Window	C826-158
		Coin Windows	C826-136			Coin Window	C826-158
		Coin Entries	P7601-6			Coin Rundown	A3716-1
		Coin Rundown	A3716-1			Coin Wire	M1504
		Coin Wire	M1504			Coin Spacer	P6431-3
		Coin Guide	P6694			Coin Guide	P6694
	5 Franc (3 parties)	Coin Rejectors	M1400-148		2 D.M. (3 plays)	Coin Window	C826-159
		Coin Windows	C-826-137			Coin Entries	P7601-4
		Coin Entries	P7601-12			Coin Rundown	A3716-1
		Coin Rundown	A3716-1			Coin Wire	M1504
HOLLAND	10 Franc (7 parties)	Coin Rejector	M1400-181		1 Florin (4 plays)	Coin Rejector	M1400-106
		Coin Window	C826-168			Coin Windows	C826-33
		Coin Entries	P7601-7			Coin Entries	P7601-4
		Coin Rundown	A3716-1			Coin Rundown	A3716-1
		Coin Wire	M1504			Coin Wire	M1504
		Coin Guide	P6694-1			Coin Spacer	P6431-5
					Extra Windows:	Coin Guide	P6694
					2x2 cents Neth. (1 play)	Coin Window	C826-145
					1 Florin (2 plays)	Coin Window	C826-157
GERMANY	Extra Windows: 2x1 Franc (1 partie)	Coin Window	C826-130		25¢ Neth. (1 play)	Coin Rejector	M1400-78
						Coin Windows	C826-11
		5 Franc (4 parties)	Coin Window	C826-131		Coin Entries	P7601-1
					Coin Rundown	A3716-1	
		10 Franc (9 parties)	Coin Window	C826-167		Coin Wire	M1504-1
					Coin Spacer	P6431-4	
		1 D.M. (1 play)	Coin Rejector	M1400-37		Coin Guide	P6694
				5 N.P. (2x5 N.P. 1 play)	Coin Rejector	M1400-71	
					Coin Windows	C826-98	
IRELAND					Coin Entries	P7601-6	
					Coin Rundown	A3716-3	
					Coin Wire	M1504	
					Coin Spacer	P6431-3	
					Coin Guide	P6694	
	2 D.M. (3 plays)	Coin Rejector	M1400-107				
		Coin Window	C826-20				
		Coin Entries	P7601-14	10 N.P. (1 play)	Coin Windows	C826-99	
		Coin Rundown	A3716-1		Coin Entries	P7601-12	
		Coin Wire	M1504-2		Coin Rundown	A3716-1	
BELGIUM	5 Franc (1 play)	Coin Rejector	M1400-80		Coin Wire	M1504-2	
		Coin Window	C826-99		Coin Spacer	P6431-6	
		Coin Entries	P7601-12		Coin Guide	P6694	
		Coin Rundown	A3716-1				
		Coin Wire	M1504-2				
		Coin Guide	P6694-1				
	2 D.M. (3 plays)	Coin Rejector	M1400-107				
		Coin Window	C826-20				
		Coin Entries	P7601-14				
		Coin Rundown	A3716-1				
FINLAND	10 Franc (1 play)	Coin Rejector	M1400-52				
		Coin Window	C826-88				
		Coin Entries	P7601-14				
		Coin Rundown	A3716-1				
		Coin Wire	M1504	50 N.P. (3 plays)	Coin Window	C826-143	
		Coin Spacer	P6431-3		Coin Entries	P7601-6	
		Coin Guide	P6694		Coin Rundown	A3716-1	
					Coin Wire	M1504	
					Coin Spacer	P6431-3	
					Coin Guide	P6694	
ITALY	5 D.M. (10 plays)	Coin Rejector	M1400-176	50 N.P. (5 plays)	Coin Window	C826-101	
		Coin Windows	C826-97		Coin Entries	P7601-7	
		Coin Entries	P7601-12		Coin Rundown	A3716-1	
		Coin Rundown	A3716-1		Coin Wire	M1504-3	
		Coin Wire	M1504-3		Coin Spacer	P6431-4	
		Coin Guide	P6694-4		Coin Guide	P6694	
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME				WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME			

# COIN HANDLING

# COIN HANDLING

Country	Coin Value	Required Parts	Part Numbers	Country	Coin Value	Required Parts	Part Numbers
ITALY (Continued)		Coin Rundown	A3716-1	SWEDEN	Extra Window: 2x1 Krone (1 spill)		
		Coin Wire	M1504				
200 Lire (1 partita)		Coin Rejector	M1400-159				
		Coin Window	C826-115				
		Coin Entries	P7601-4		2x1 Krona (1 spel)	Coin Rejector	M1400-28
		Coin Rundown	A3716-1			Coin Window	C826-128
		Coin Wire	M1504			Coin Entries	P7601-4
		Coin Spacer	P6431-5			Coin Rundown	A3716-4
		Coin Guide	P6694			Coin Wire	M1504
	Extra Window: 2x200 Lire (1 partita)					Coin Spacer	P6431-5
						Coin Guide	A6694
					2x1 Krona (1 spel)	Coin Rejector	M1400-28
						Coin Window	C826-128
JAPAN	100/200 Yen (1 play/ 3 play)	Coin Windows	C826-109			Coin Entries	P7601-4
		Coin Entries	P7601-5			Coin Rundown	A3716-4
		Coin Rundown	A3716-1			Coin Wire	M1504
		Coin Wire	M1504			Coin Spacer	P6431-5
		Coin Spacer	P6431-1			Coin Guide	A6694
		Coin Guide	P6694		Extra Window: 1 Krona (1 spel)	Coin Window	C826-72
	2x100 Yen (1 play)	Coin Window	C826-154				
					5x1 Kona (1 spel)	Coin Window	C826-171
	100 Yen (1 play/ 3 plays)	Coin Window	C826-156				
		Coin Entries	P7601-5		4x1 Krona (2 Spel)	Coin Window	C826-172
		Coin Rundown	A3716-1				
		Coin Wire	M1504		5x1 Krona (2 spel)	Coin Window	C826-173
		Coin Spacer	P6431-1				
		Coin Guide	P6694		4x1 Krona (1 spel)	Coin Window	C826-170
	Extra Windows: 100 Yen (1 play)						
					3x1 Krona (1 spel)	Coin Window	C826-169
	2x100 Yen (1 play)	Coin Window	C826-154	SWITZERLAND	1 Franc (2 plays)	Coin Rejector	M1400-35
		Coin Rejector	M1400-22			Coin Windows	C826-79
NORWAY	1 Krone (1 play)	Coin Window	C826-134			Coin Entries	P7601-6
		Coin Entries	P7601-4			Coin Rundown	A3716-1
		Coin Rundown	A3716-1			Coin Wire	M1504
		Coin Wire	M1504			Coin Spacer	P6431-3
		Coin Spacer	P6431-5			Coin Guide	P6694
		Coin Guide	P6694				
		Coin Rejector	M1400-22		5 Franc (12 plays)	Coin Rejector	M1400-147
	5 Krone (3 play)	Coin Rejector	M1400-177			Coin Windows	C826-67
		Coin Window	C826-135			Coin Entries	P7601-17
		Coin Entries	P7601-17			Coin Rundown	A3716-5
		Coin Rundown	A3716-5			Coin Wire	M1504-4
		Coin Wire	M1504-2			Coin Guide	P6694-1
		Coin Gudie	P6694-1				

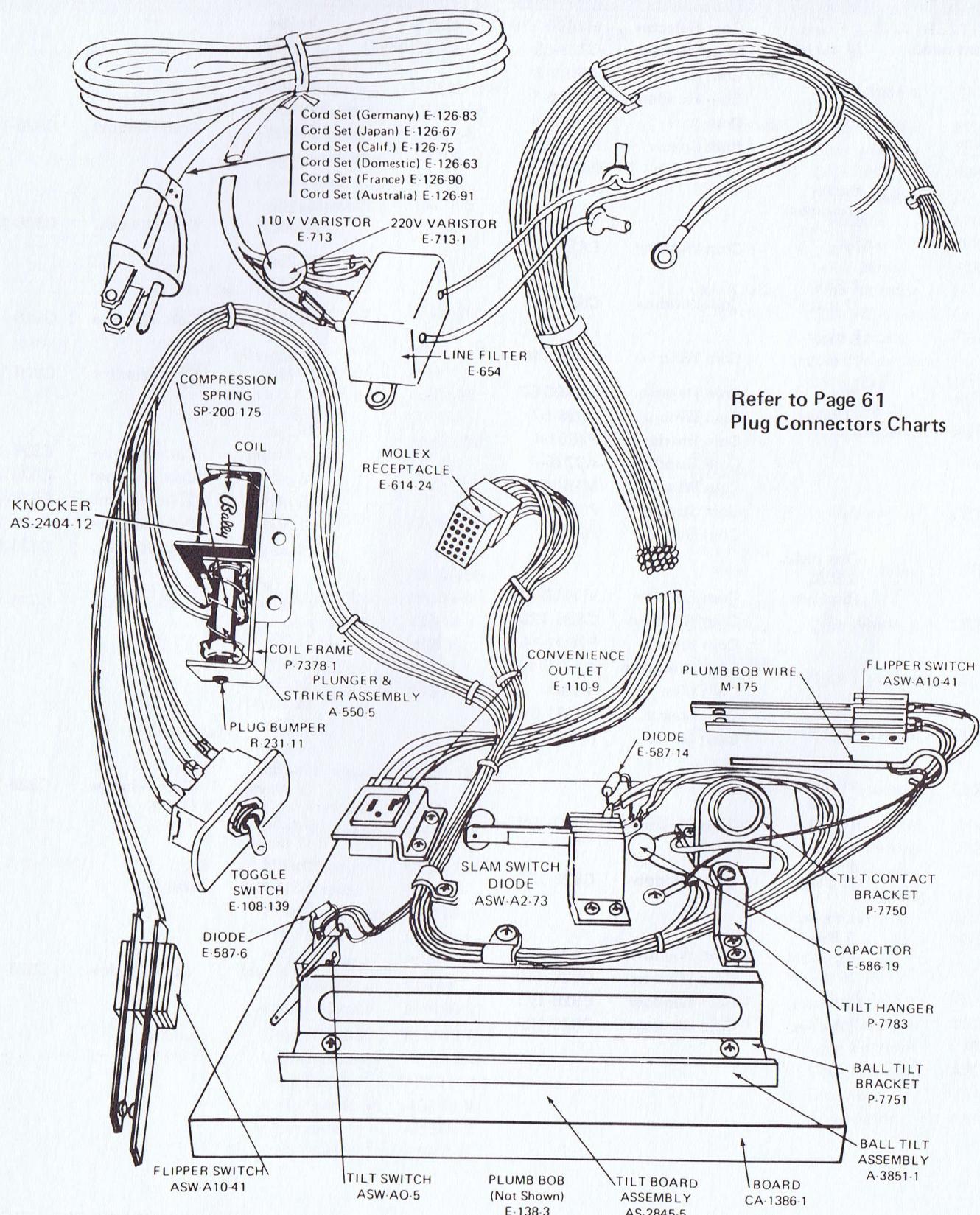
Country	Coin Value	Required Parts	Part Number	Country	Coin Value	Required Parts	Part Number
SWITZERLAND (Continued)	2 Franc (4 plays)	Coin Rejector	M1400-110	U.S.A. (Continued)	2x25¢ (1 play)		
		Coin Window	C826-80		3x25¢ (2 play)		
		Coin Entries	P7601-7		4x25¢ (3 play)		
		Coin Rundown	A3716-1		1x25¢ (1 play)		
		Coin Wire	M1504-4		4x25¢ (5 play)		
		Coin Spacer	P6431-6		2x25¢ (1 play)		
		Coin Guide	P6694		4x25¢ (3 play)		
	Extra Windows: 1 Franc (1 play)	Coin Window	C825-147		2x25¢ (1 play)		
					4x25¢ (3 play)		
	5 Franc (6 plays)	Coin Window	C826-146		2 Quarters (1 play)		
					1 S.B.A. Dollar		
	25¢ (1 play)	Coin Rejector	M1400-62		2 Quarters (1 play)		
		Coin Window	C826-57		2 Quarters (1 play)		
		Coin Entries	P7601-4		1 S.B.A. Dollar		
		Coin Rundown	A3716-6		4 plays)		
		Coin Wire	M1504		5 plays)		
		Coin Spacer	P6431-3		6 plays)		
		Coin Guide	P6694		7 plays)		
	One dollar S.B.A. (5 plays)	Coin Rejector	M1400-166		3 plays)		
		Coin Wnidows	C826-120		2 Quarters (1 play)		
		Coin Entries	P7601-14		1x25¢ (1 play)		
		Coin Rundown	A3716-1		2x25¢ (1 play)		
		Coin Wire	M1504		3x25¢ (3 plays)		
		Coin Spacer	P6431-6		4x25¢ (4 plays)		
		Coin Guide	P6694		4x25¢ (5 plays)		
	Extra Windows: 2x25¢ (1 play)	Coin Window	C826-139		1x25¢ (1 play)		
					2x25¢ (3 plays)		
	4x25¢ (3 plays)	Coin Window	C826-151		3x25¢ (5 plays)		
					4x25¢ (7 plays)		
	One dollar S.B.A. (3 plays)	Coin Window	C826-123		1x25¢ (1 play)		
		Coin Window	C826-119		2x25¢ (3 plays)		
		Coin Window	C826-121		3x25¢ (5 plays)		
		Coin Window	C826-122		4x25¢ (7 plays)		

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# CABINET PARTS

# CABINET PARTS



Refer to Page 61  
Plug Connectors Charts

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

## FEMALE PLUG CHART

### MPU BOARD

PLUG NO.	PINS	MOLEX CONN.	AMP CONN.*
J1	28	E-764-28	E-737-28
J2	15	E-764-15	E-737-15
J3	16	E-764-16	E-737-16
J4	19	E-764-19	E-737-19

### SOLENOID DRIVER

PLUG NO.	PINS	MOLEX CONN.	AMP CONN.*
J1	9	E-734-9	E-762-9
J2	15	E-734-15	E-761-15
J3	25	E-764-25	E-737-25
J4	12	E-764-12	E-737-12
J5	15	E-734-15	E-761-15

### DISPLAY DRIVER

PLUG NO.	PINS	MOLEX CONN.	AMP CONN.*
J1	20	E-734-20	E-762-20

### LAMP DRIVER

PLUG NO.	PINS	MOLEX CONN.	AMP CONN.*
J1	28	E-764-28	E-737-28
J2	23	E-764-23	E-737-23
J3	28	E-764-28	E-737-28
J4	17	E-764-17	E-737-17

### SOUND BOARD

PLUG NO.	PINS	MOLEX CONN.	AMP CONN.*
J1	15	E-734-15	E-738-15
J2	2	E-734-2	E-761-2

\* Amp Connectors come complete with pins

### MOLEX REPLACEMENT PINS

SMALL — For use with E-764 Conn. E-633-4

LARGE — For use with E-734 Conn. E-633-1

### RECTIFIER BOARD

PLUG NO.	PINS	AMP CONN.
J1	9	E-808-9
J2	6	E-808-6
J3	12	E-808-12
J4	9	E-808-9
J5	9	E-808-9
J6	6	E-808-6

AMP Replacement Pins for new Rectifier Board E-807

### AMP CONNECTOR COVERS

SMALL — E-775-XX

LARGE — E-738-XX Feed Through

LARGE — E-749-XX Dead End

XX — Suffix refers to number of pins.

### AMP REPLACEMENT PINS

SMALL — For use with E-737 Conn. E-739

LARGE — For use with E-761 or E-762 Conn. E-763-1 18 ga.  
E-763-2 22 ga.

LARGE — For use with E-761 or E-762 Conn. E-760-1 18 ga.  
E-760-2 22 ga.

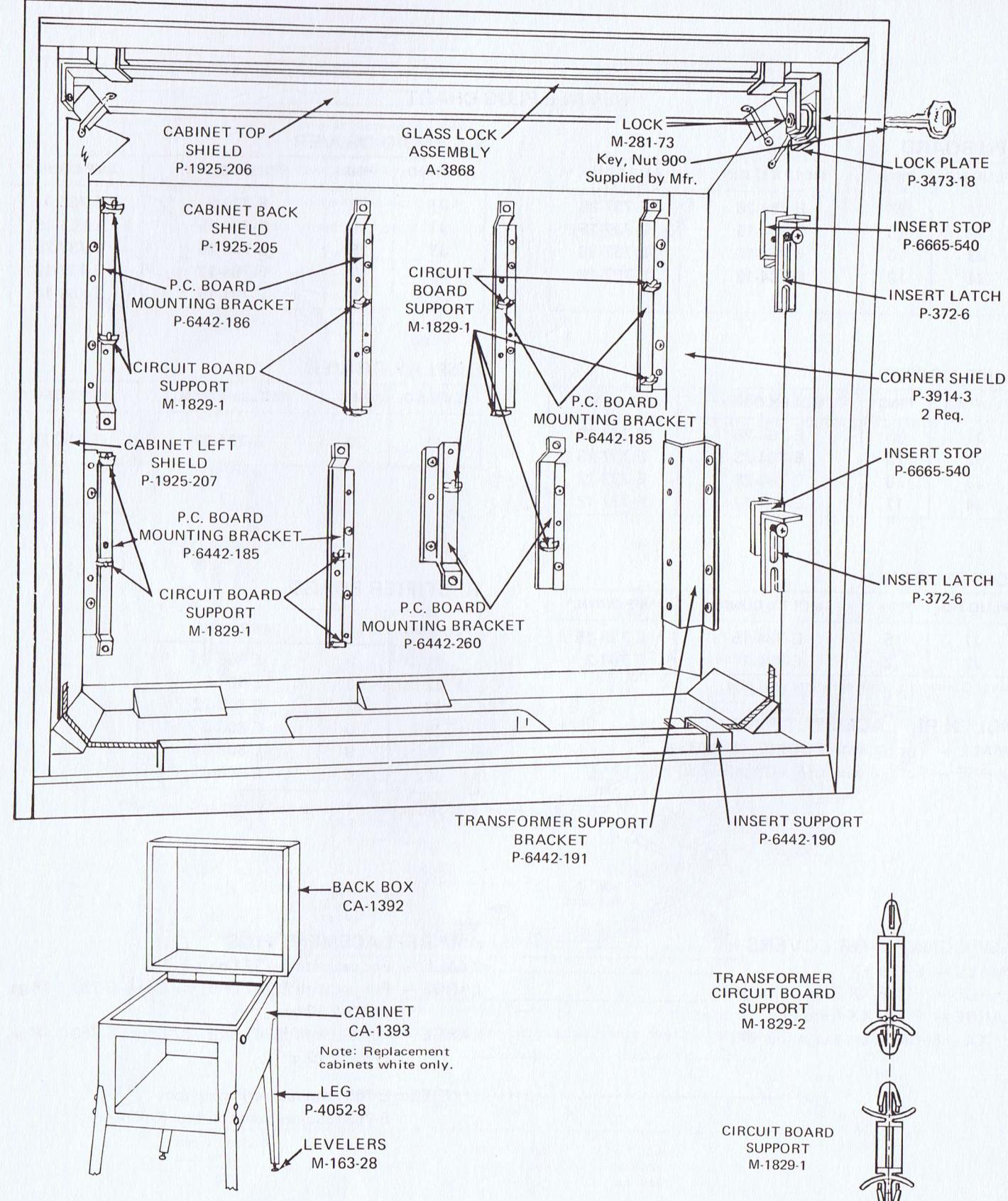
NOTE: E-760 requires a crimping tool

E-763 requires insertion tool K-554

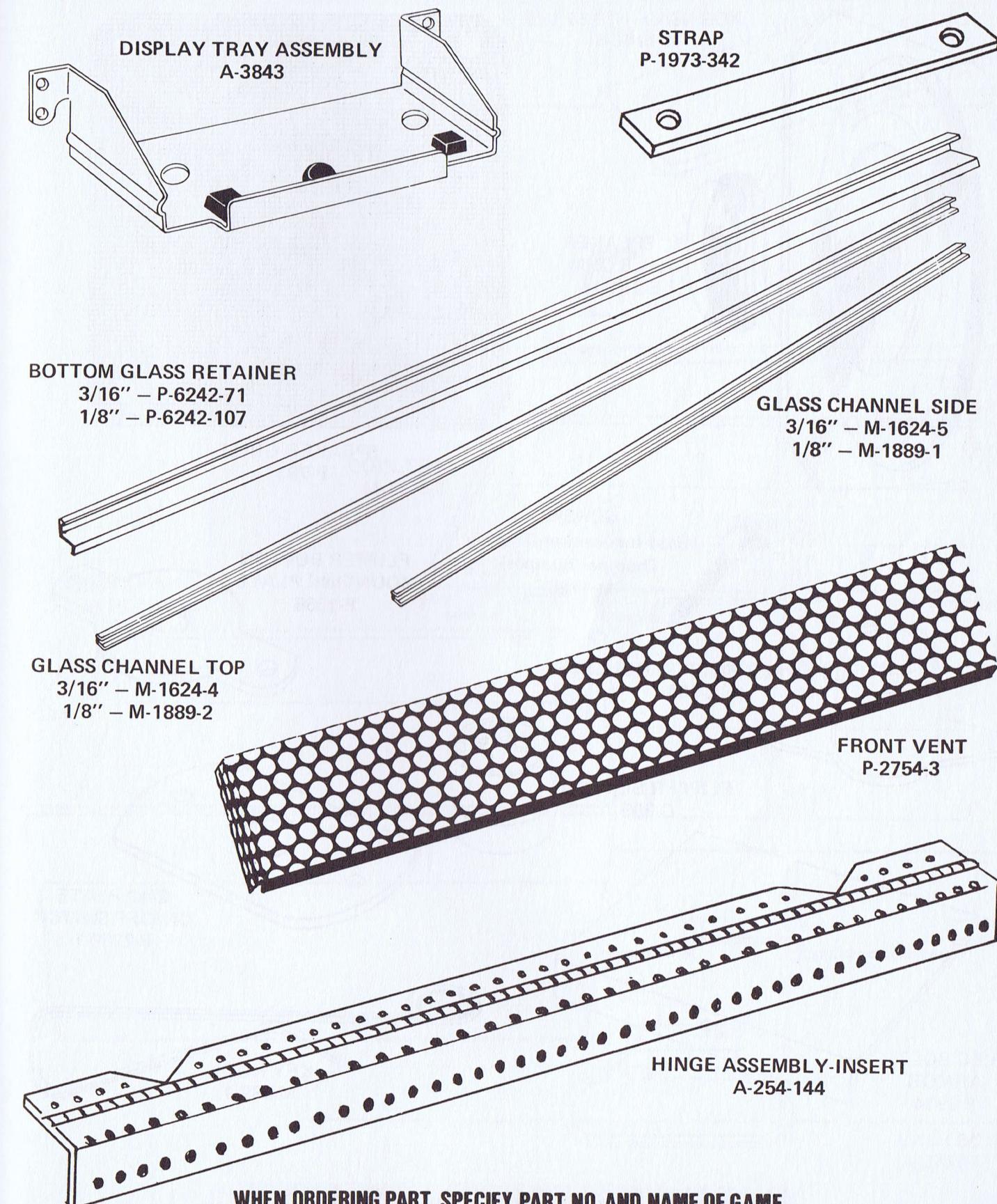
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# CABINET PARTS

# CABINET PARTS

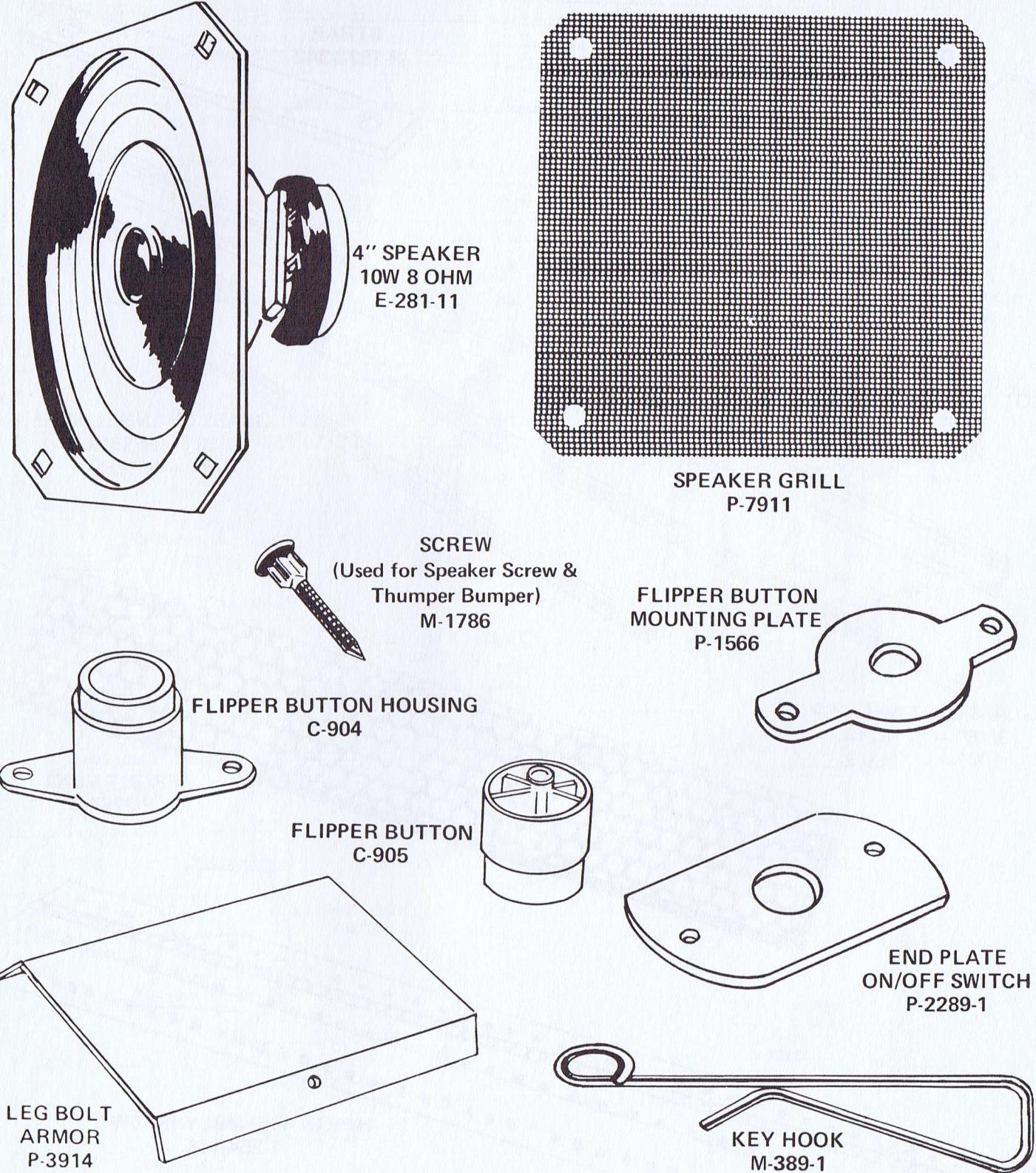


WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME



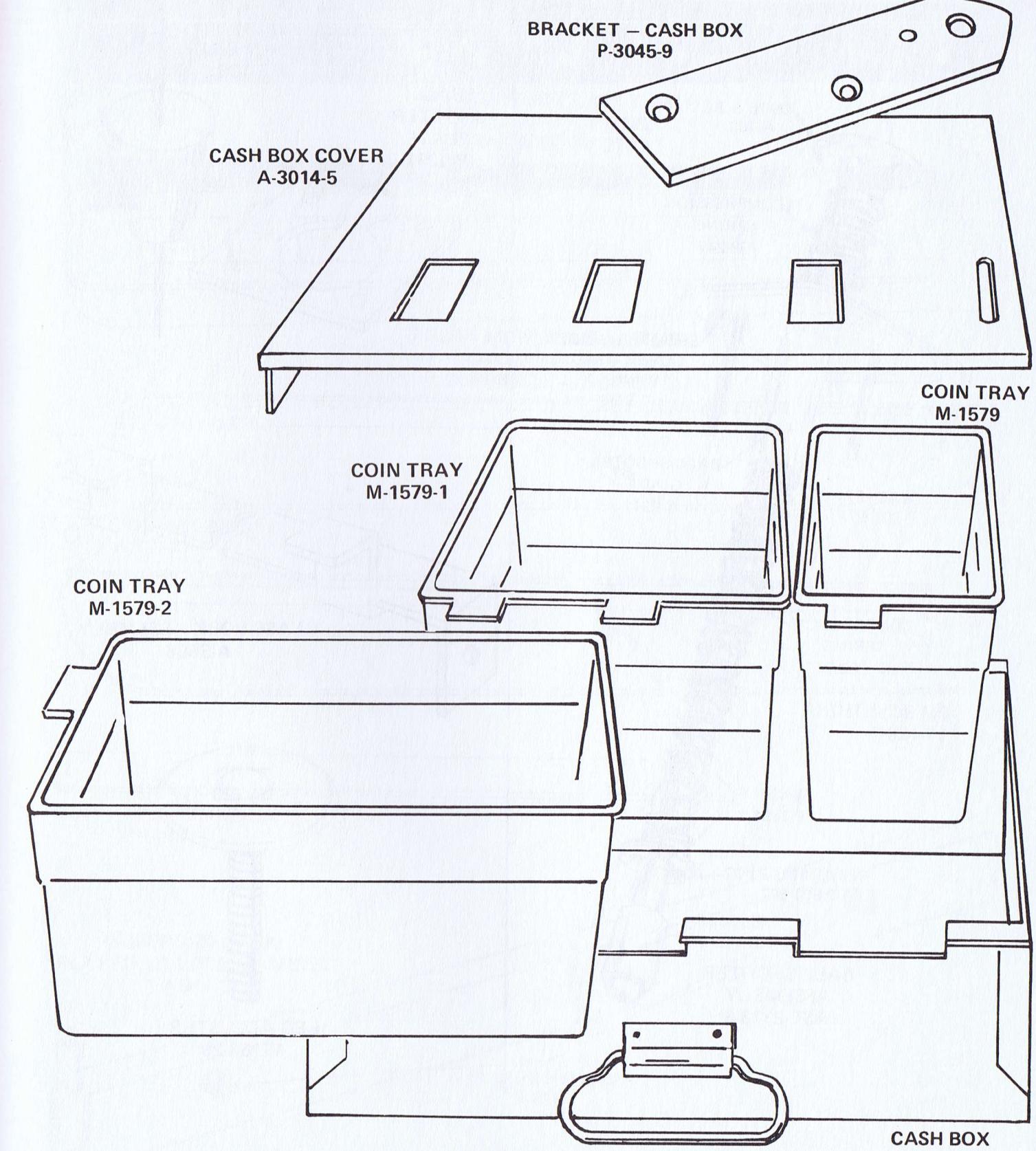
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# CABINET PARTS



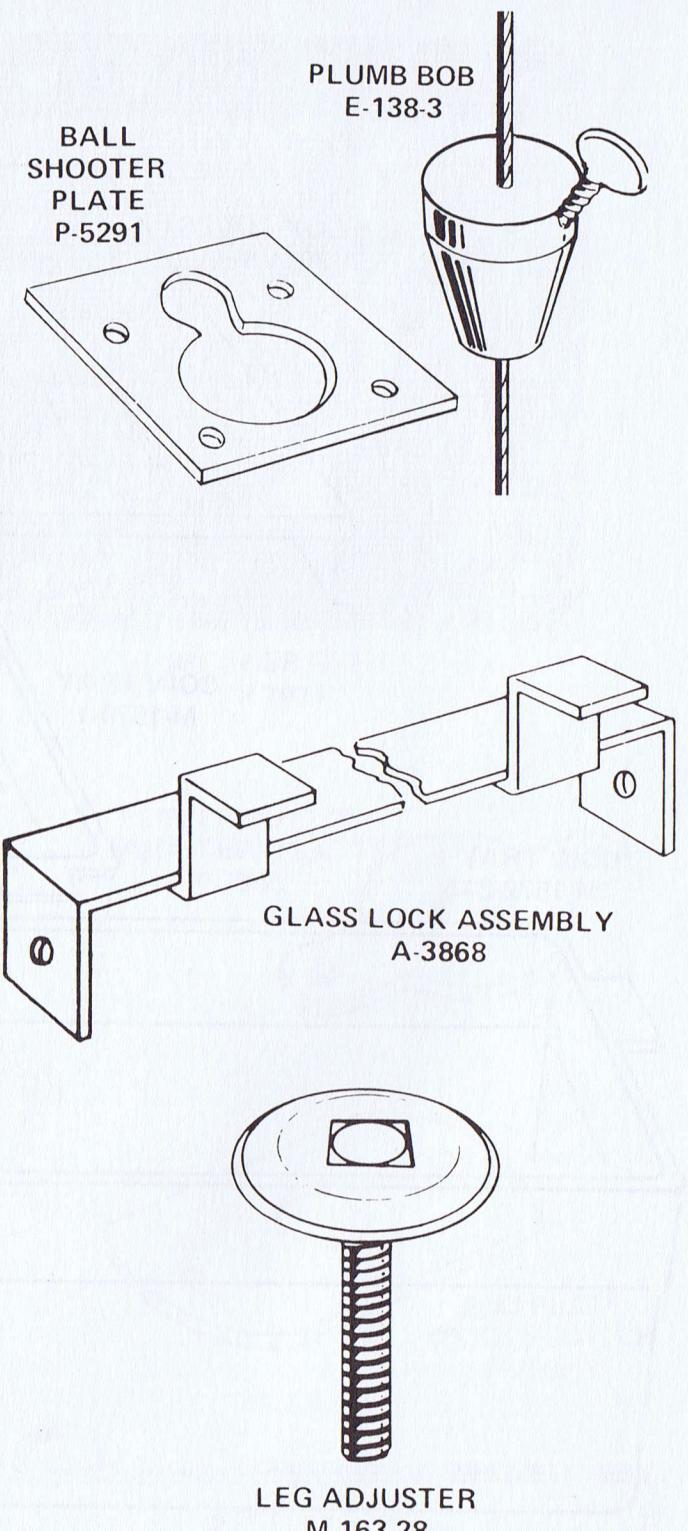
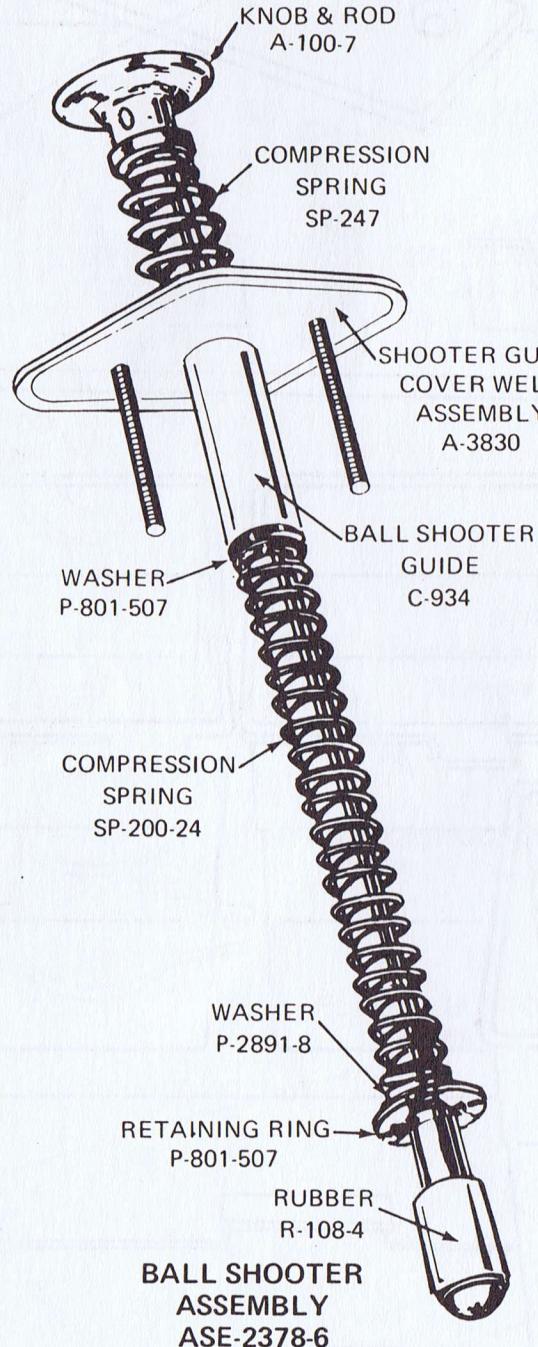
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# CABINET PARTS



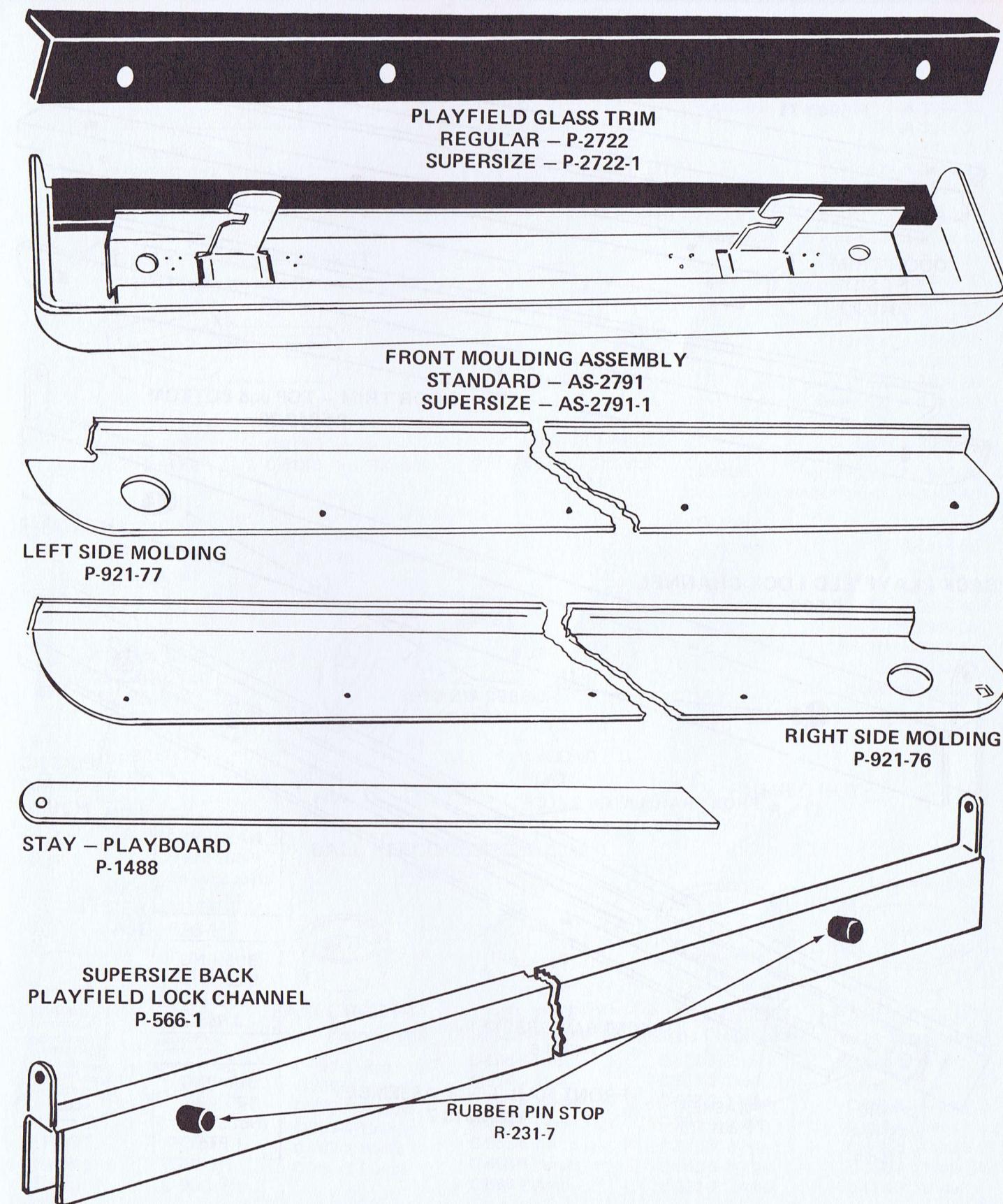
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# CABINET PARTS



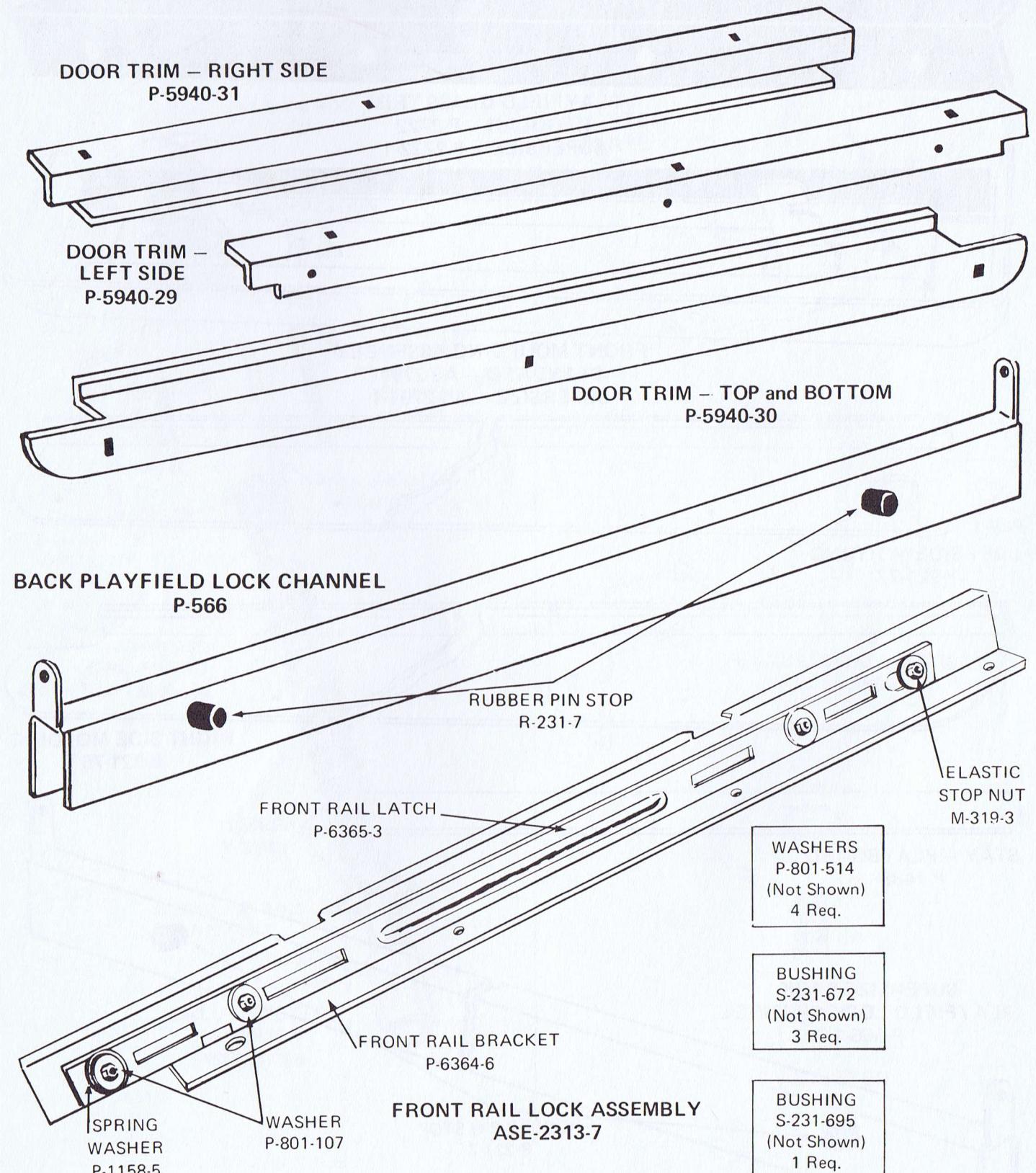
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# CABINET PARTS



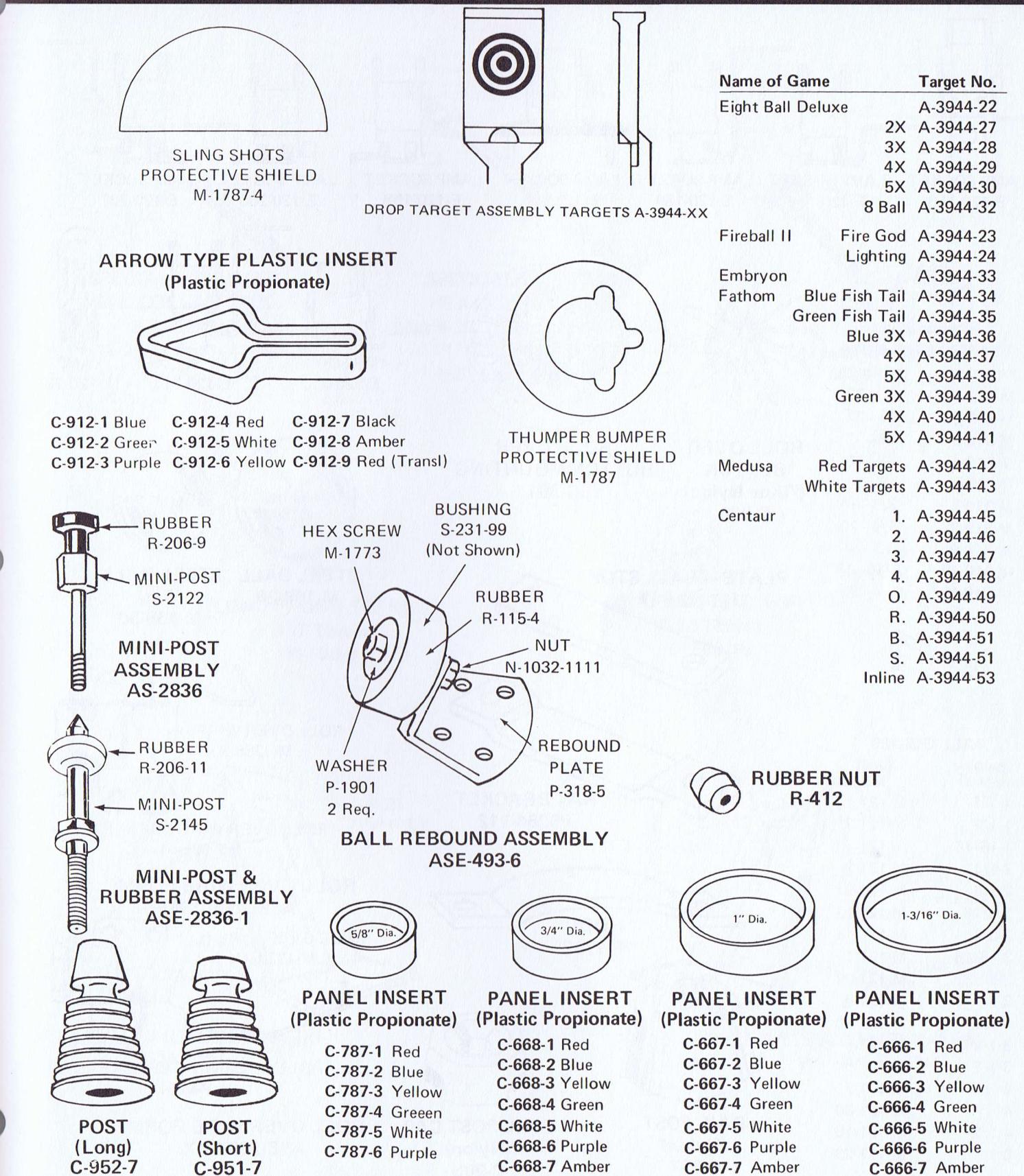
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# CABINET PARTS



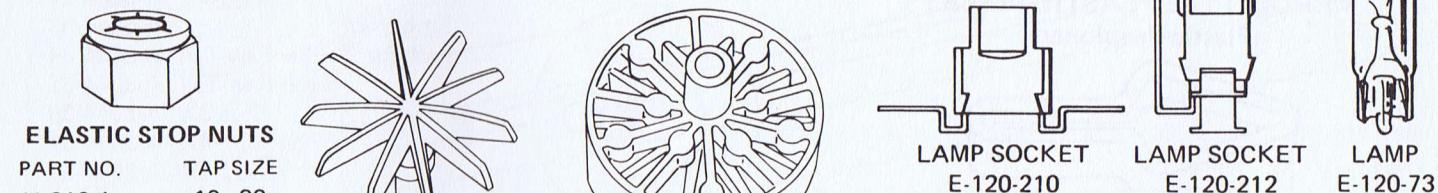
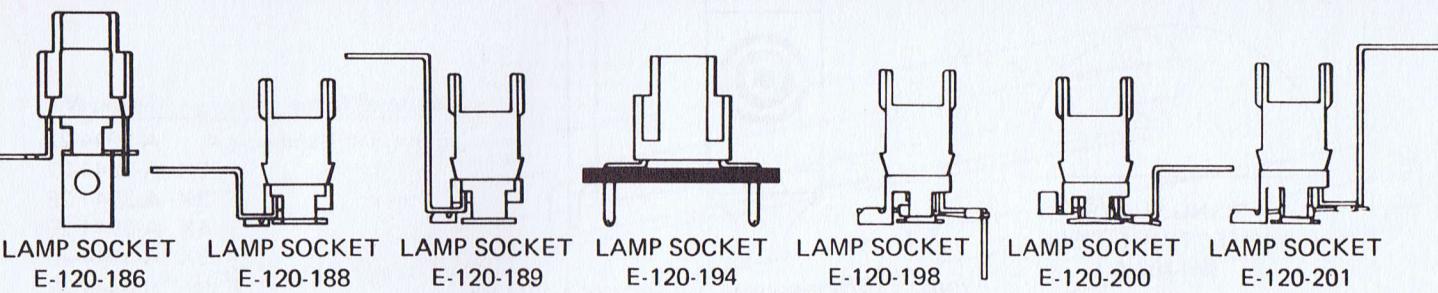
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# PANEL PARTS



WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

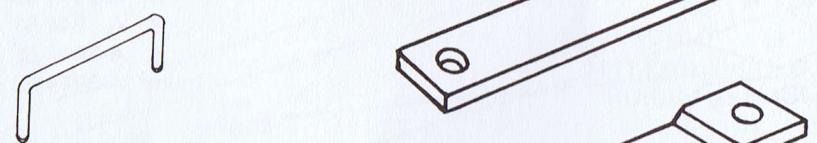
# PANEL PARTS



ELASTIC STOP NUTS

PART NO.	TAP SIZE
M-319-1	10-32
M-319-2	8-32
M-319-3	8-32
M-319-4	5-40
M-319-6	6-32
M-319-7	3/8-16
M-319-8	1/4-20
M-319-9	10-24
M-319-10	5/16-18
M-319-12	1/4-28

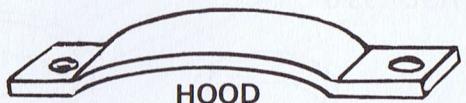
PLATE - BALL STOP  
P-1973-347



BALL GUIDES

LENGTH (Inches)	PART NO.
1-1/4	M-121-11
1-1/2	M-121-3
1-15/16	M-121-4
2-1/4	M-121-2
2-3/8	M-121-24
2-9/16	M-121-29
2-3/4	M-121-14
2-15/16	M-121-1
2-31/32	M-121-27
3	M-121-9
3-3/8	M-121-18
3-1/2	M-121-5
3-1/2	M-121-6
4	M-121-7
4	M-121-30
4-1/2	M-121-10
5	M-121-23

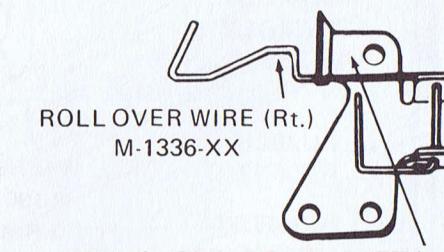
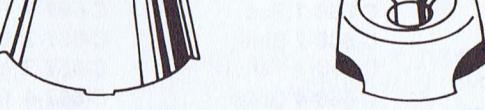
HAT BRACKET  
P-6264-112



HOOD  
P-1732



RAIL POST  
(Nylon)  
C-907

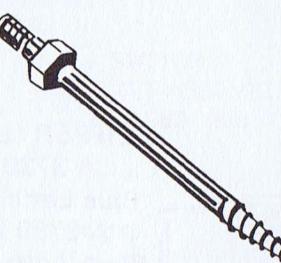


ROLL OVER WIRE FORM  
ASE-2806-XX

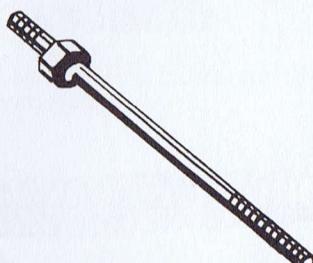
ROLL OVER WIRE BRACKET (Lt.)  
P-6254-1

ROLL OVER WIRE BRACKET (Rt.)  
P-6254

ROLL OVER WIRE FORM  
ASE-2806-XX



SPECIAL INDENTED  
HEX COLLAR STUD  
6-32 Thread  
1-11/16" Long - S-2124  
1-1/2" Long - S-2124-1



SPECIAL INDENTED  
HEX COLLAR STUD  
With 6-32 Thread at both ends  
1-11/16" Long - S-2125  
1-1/2" Long - S-2125-1



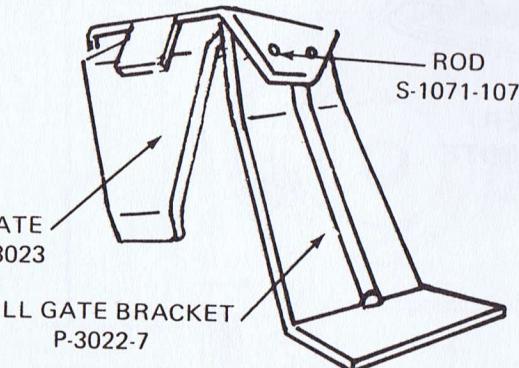
SCREW  
(Used for Speaker Screw &  
Thumper Bumper)  
M-1786



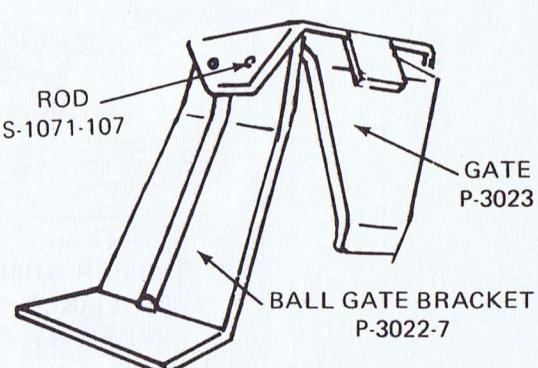
LONG PRONG TEENUT  
8-32 Thread  
M-108-9



LONG PRONG TEENUT  
6-32 Thread  
M-108-15



BALL GATE ASSEMBLY (Right)  
A-1475-9



BALL GATE ASSEMBLY (Left)  
A-1475-10

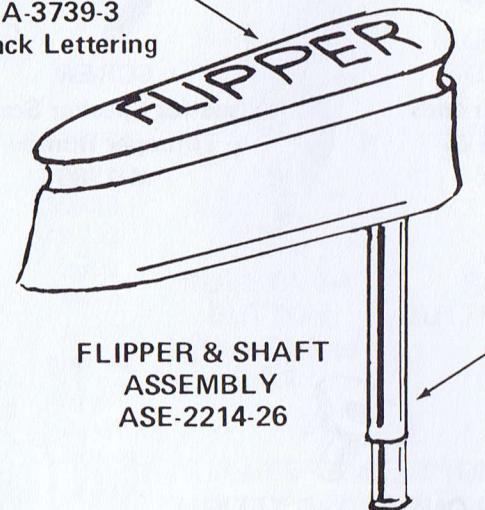
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# PANEL PARTS

# PANEL PARTS

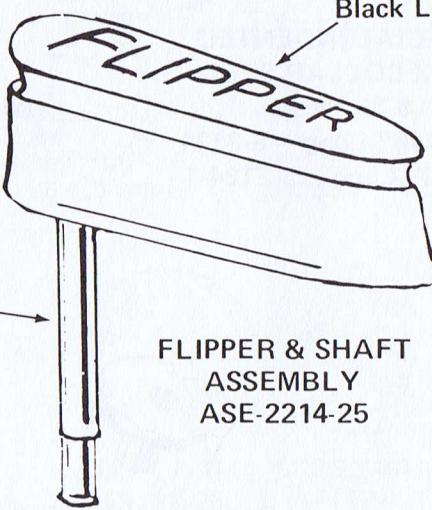
**FLIPPER (Right)**  
A-3739-1  
Blue Lettering  
A-3739-3  
Black Lettering



**FLIPPER & SHAFT ASSEMBLY**  
ASE-2214-26

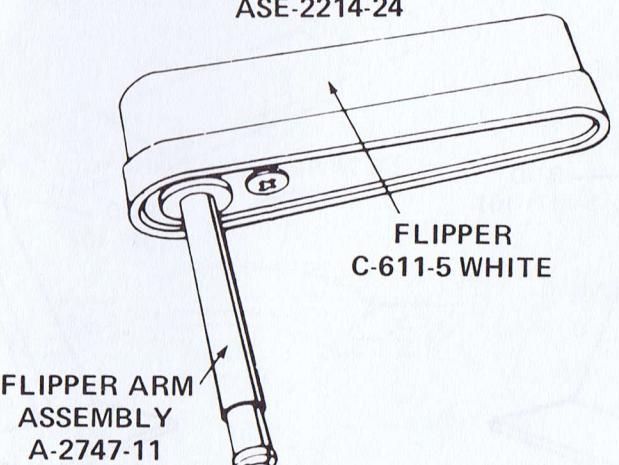
**FLIPPER ARM ASSEMBLY**  
A-2747-12

**FLIPPER (Left)**  
A-3739  
Blue Lettering  
A-3739-2  
Black Lettering



**FLIPPER & SHAFT ASSEMBLY**  
ASE-2214-25

**FLIPPER & SHAFT ASSEMBLY**  
ASE-2214-24

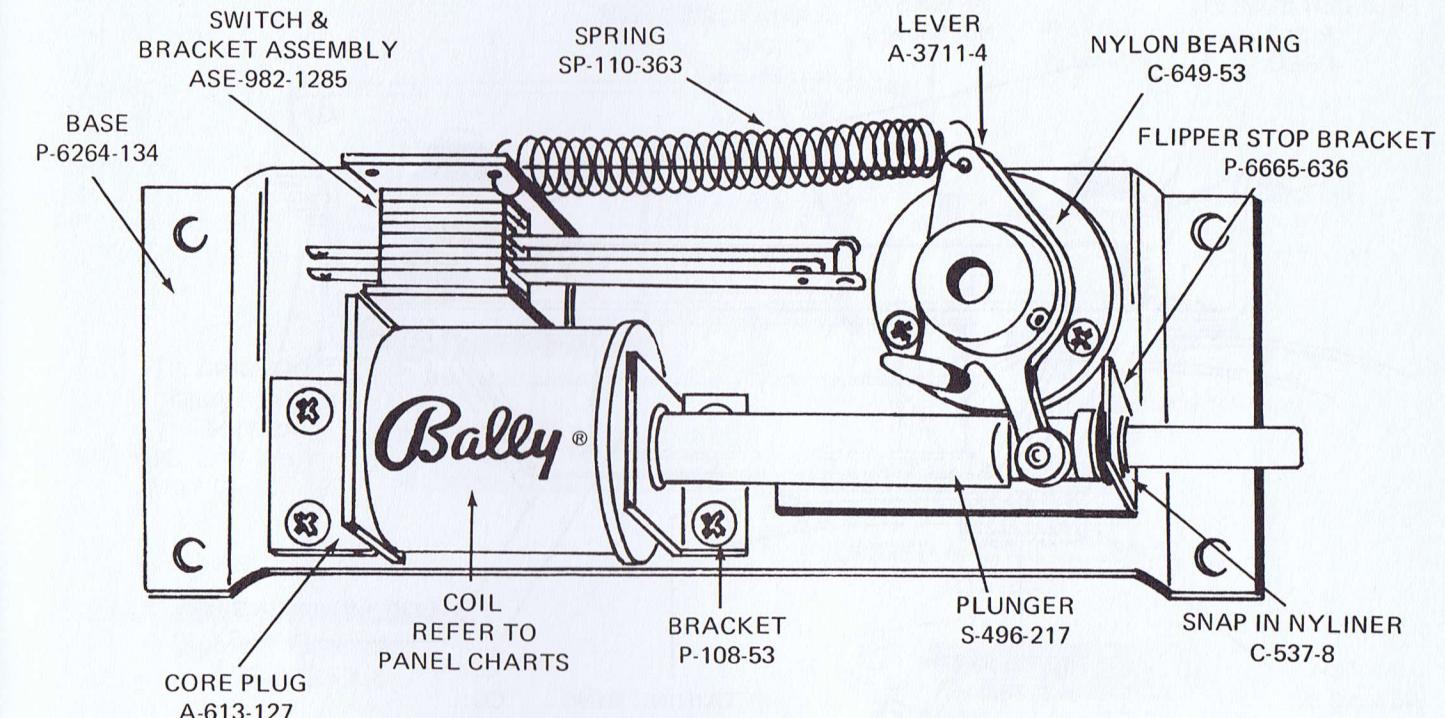


**FLIPPER ARM ASSEMBLY**  
A-2747-11

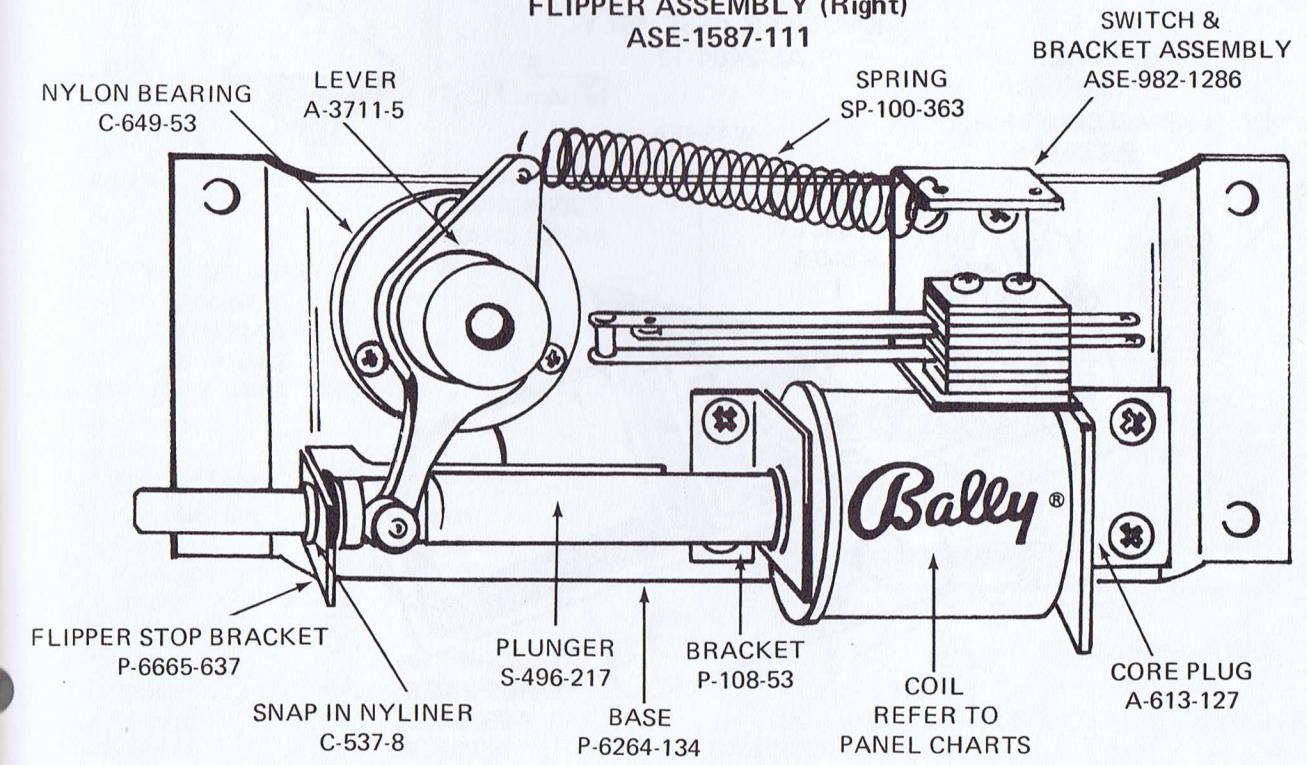
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# ASSEMBLY PARTS

**FLIPPER ASSEMBLY (Left)**  
ASE-1587-112



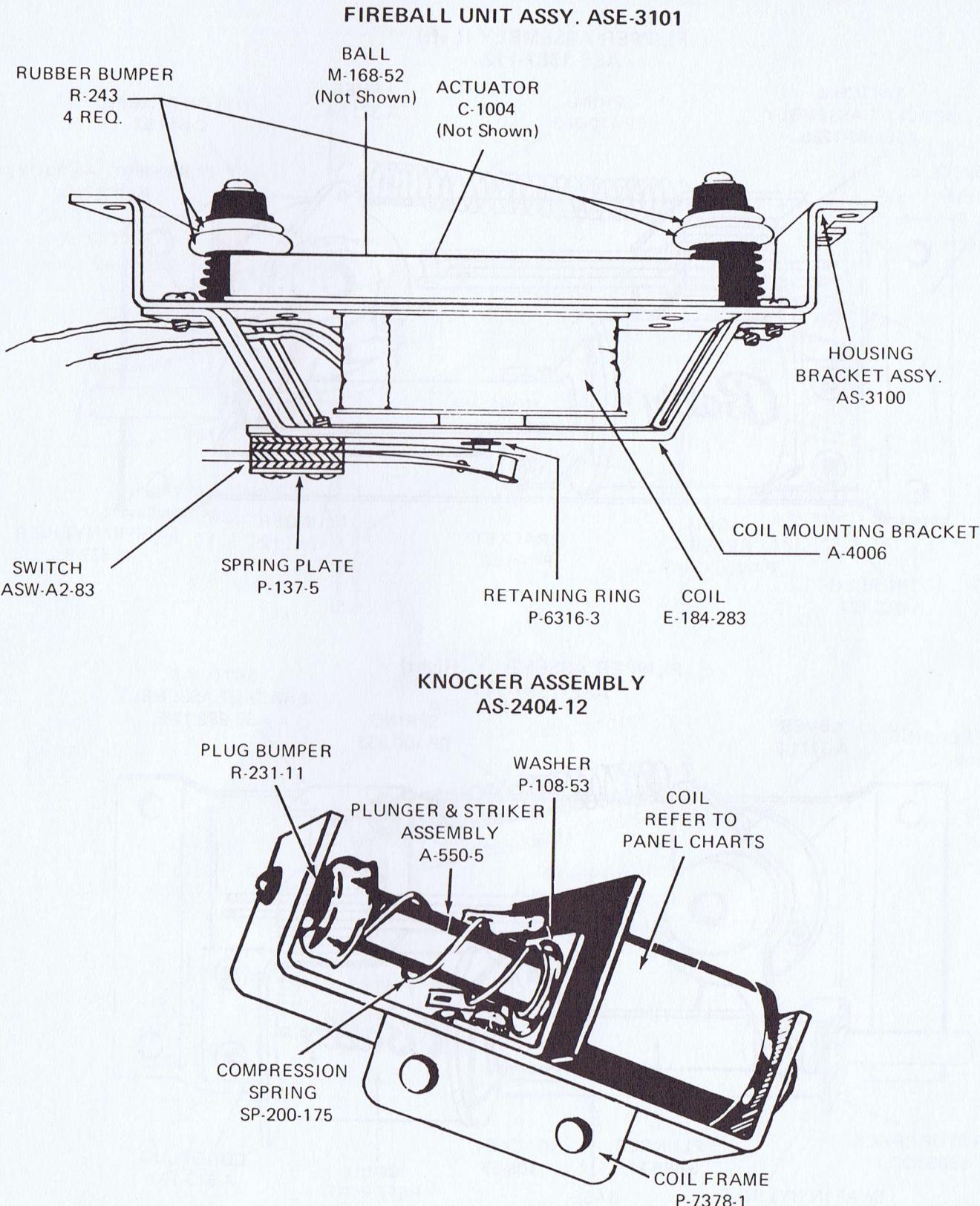
**FLIPPER ASSEMBLY (Right)**  
ASE-1587-111



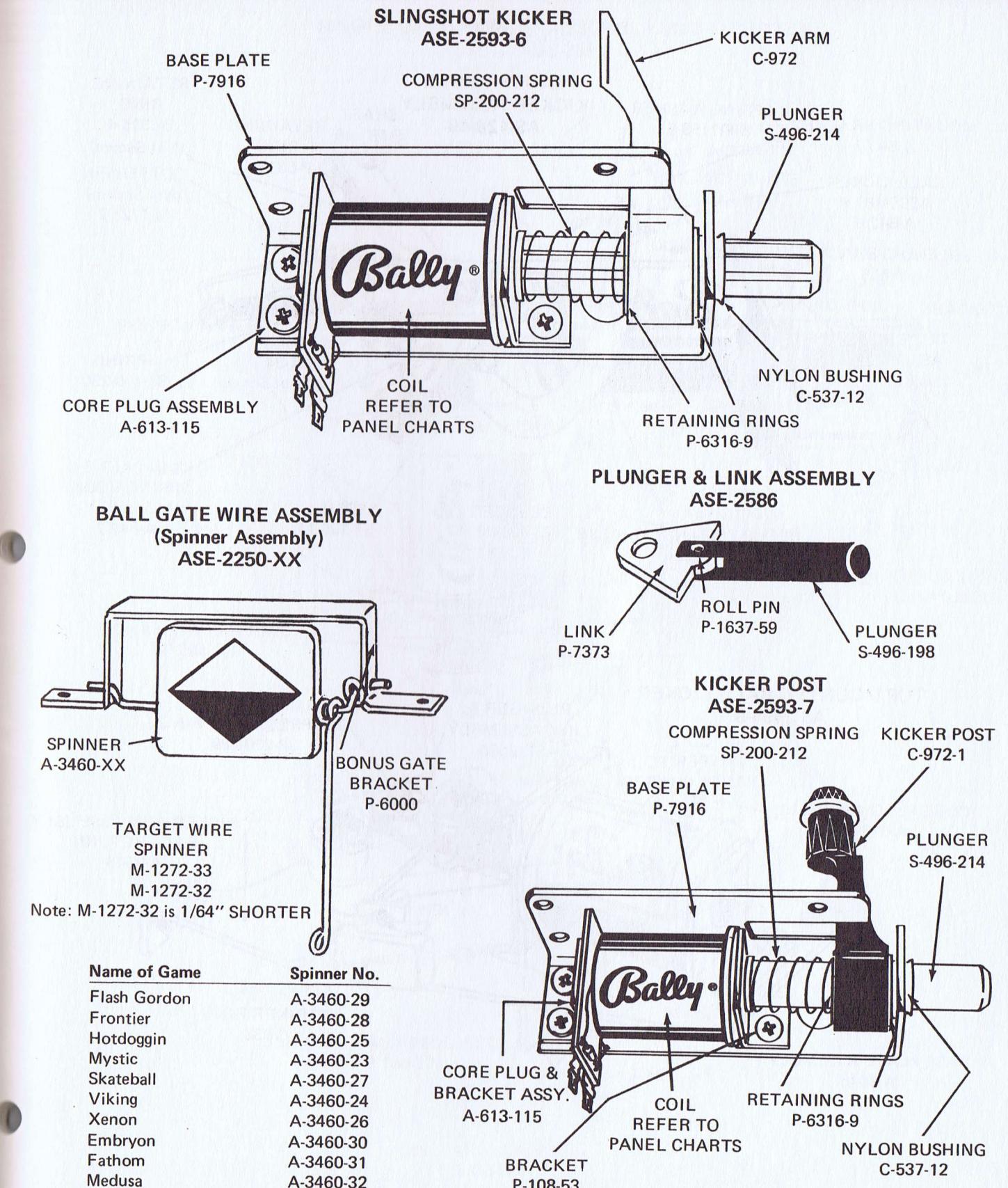
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# ASSEMBLY PARTS

# ASSEMBLY PARTS

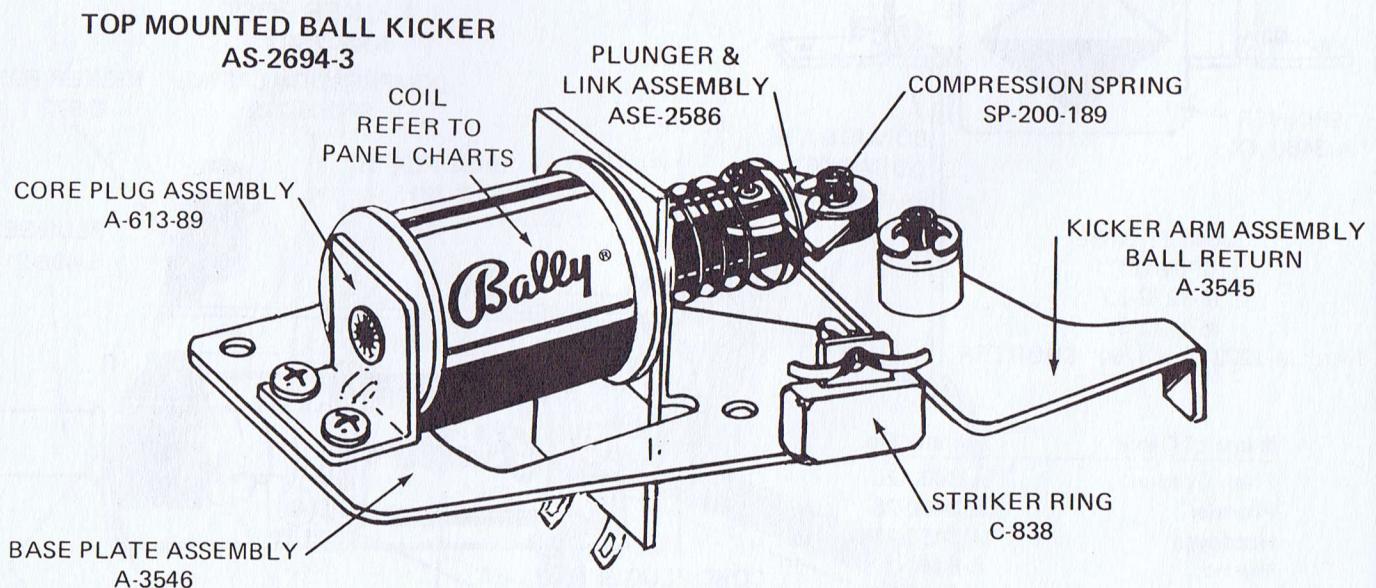
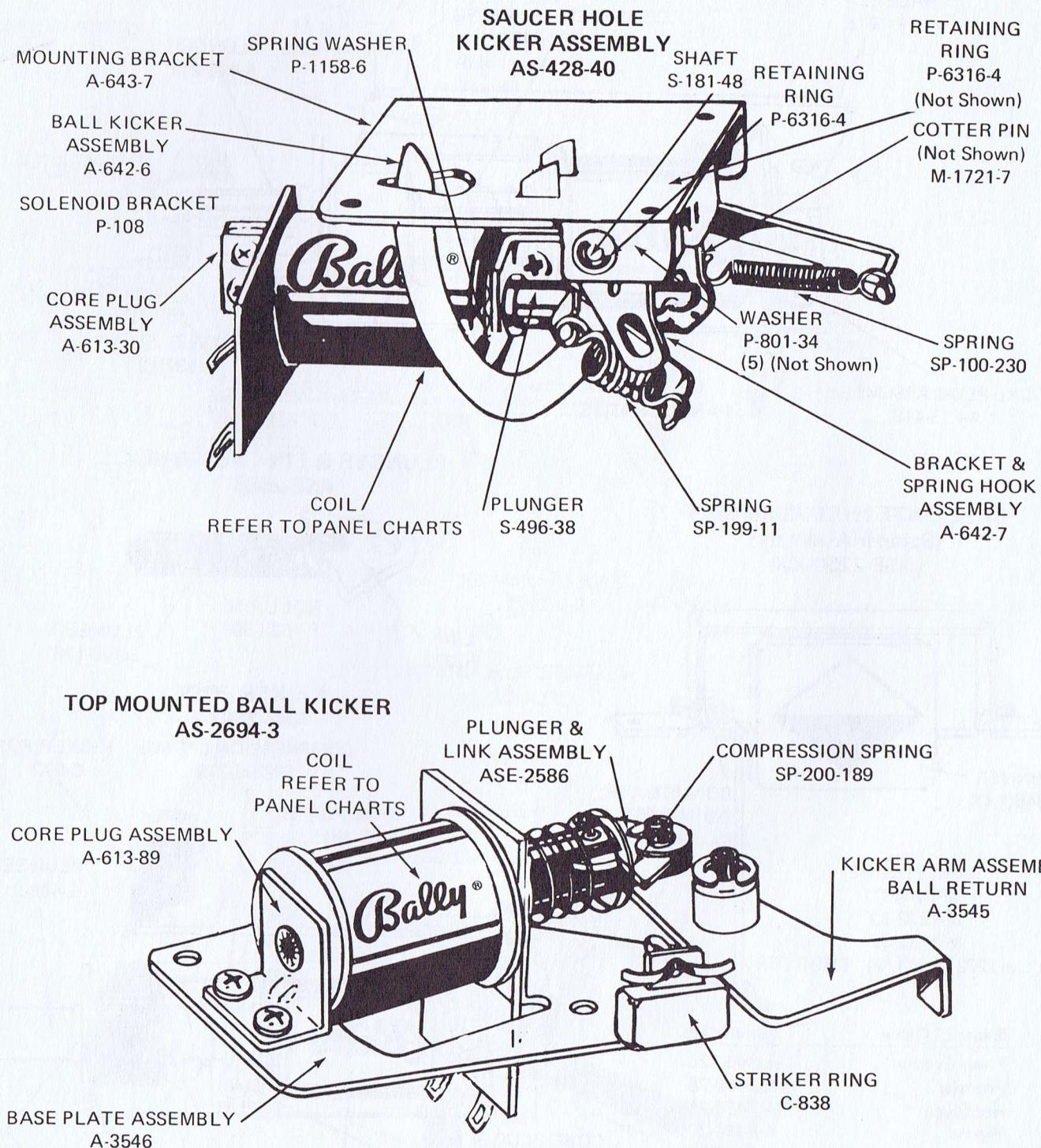


WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME



WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

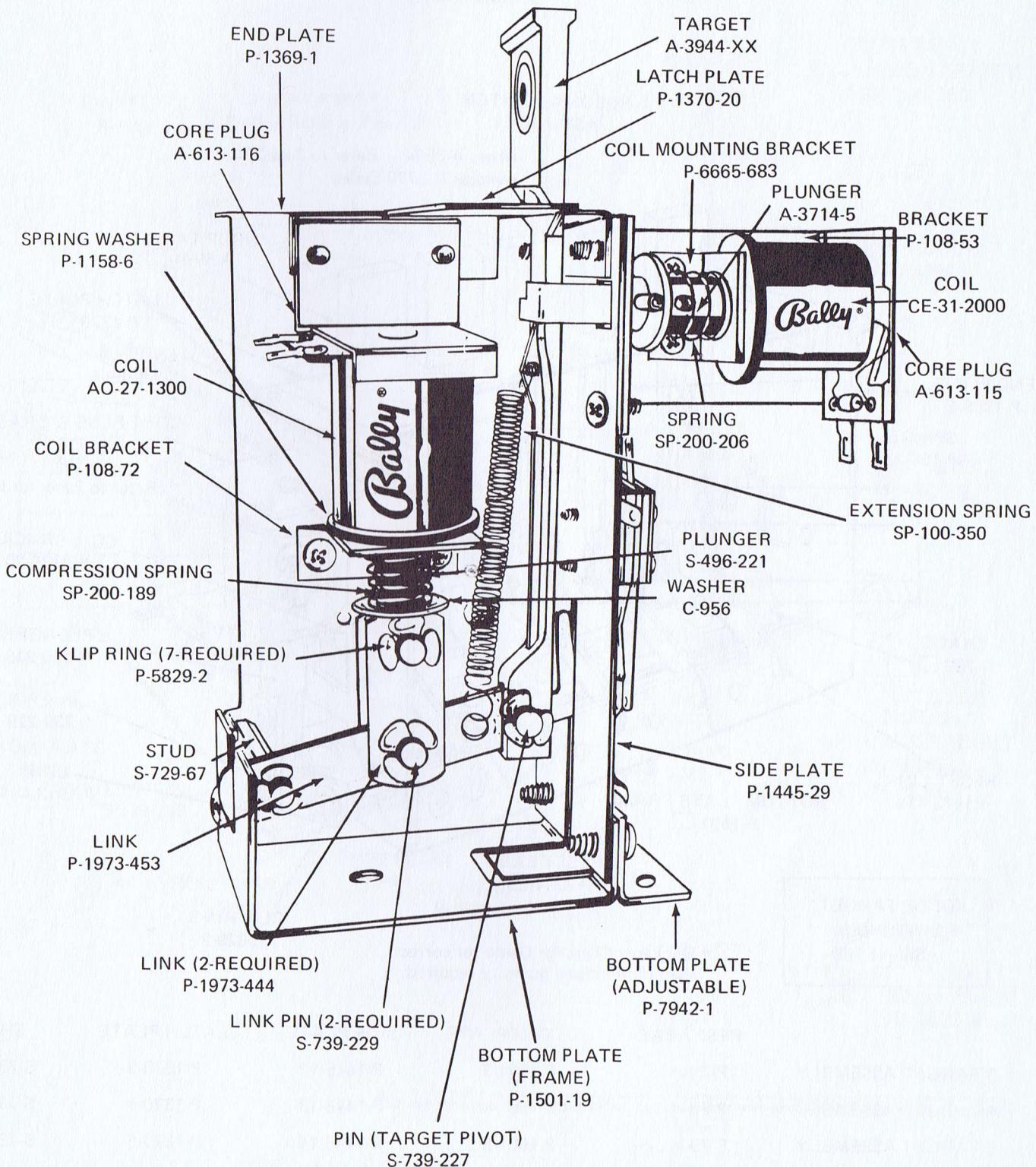
# ASSEMBLY PARTS



WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# ASSEMBLY PARTS

SINGLE DROP TARGET ASSEMBLY WITH MEMORY  
ASE-2993

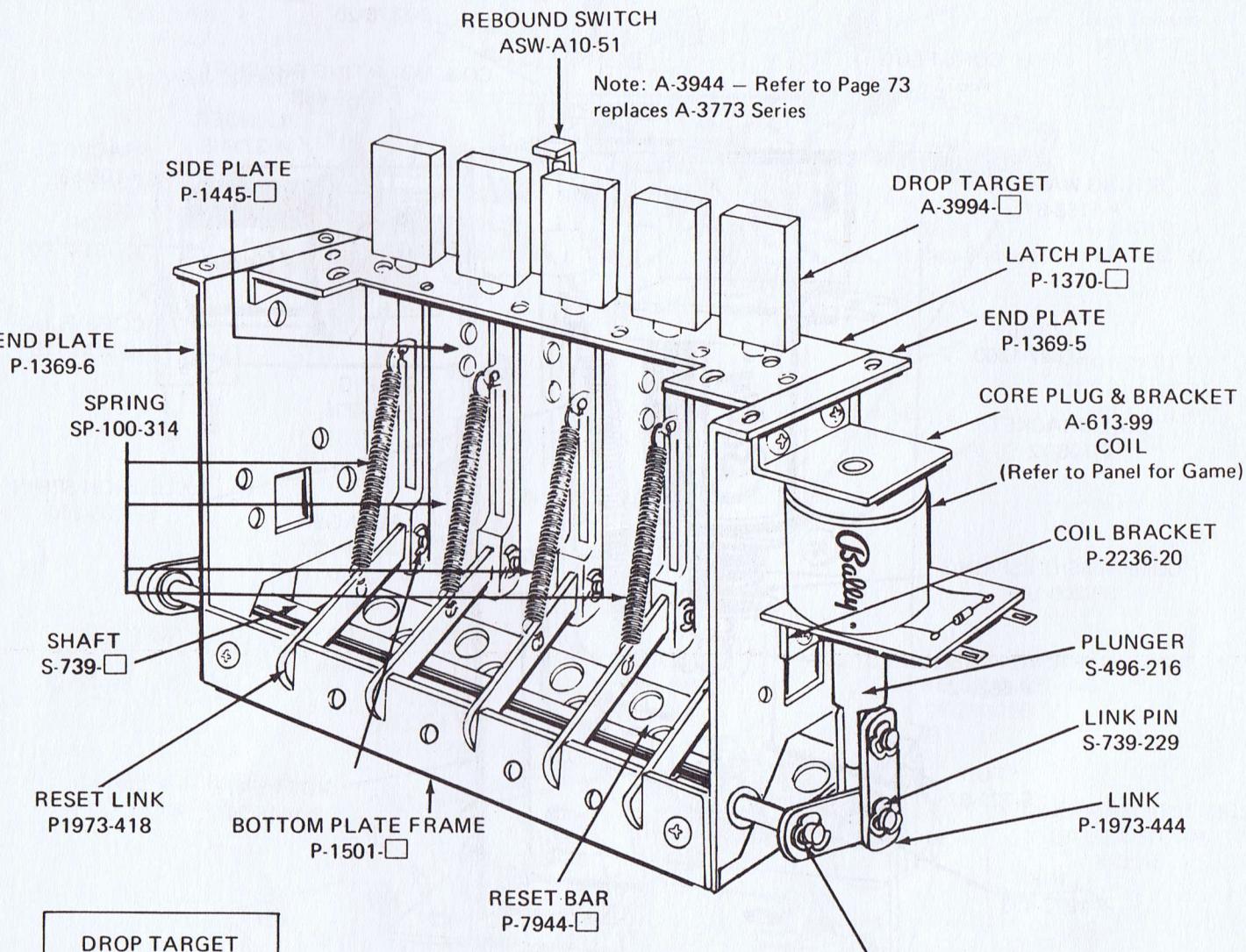


WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# ASSEMBLY PARTS

# ASSEMBLY PARTS

**DROP TARGET ASSEMBLY**  
AS-2795-□

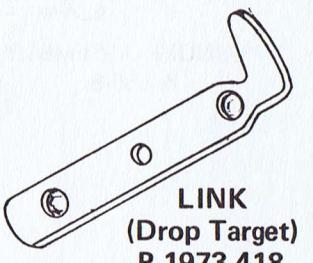
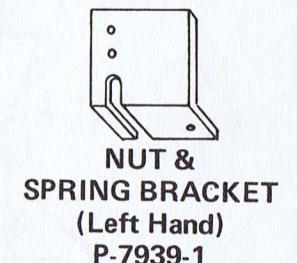
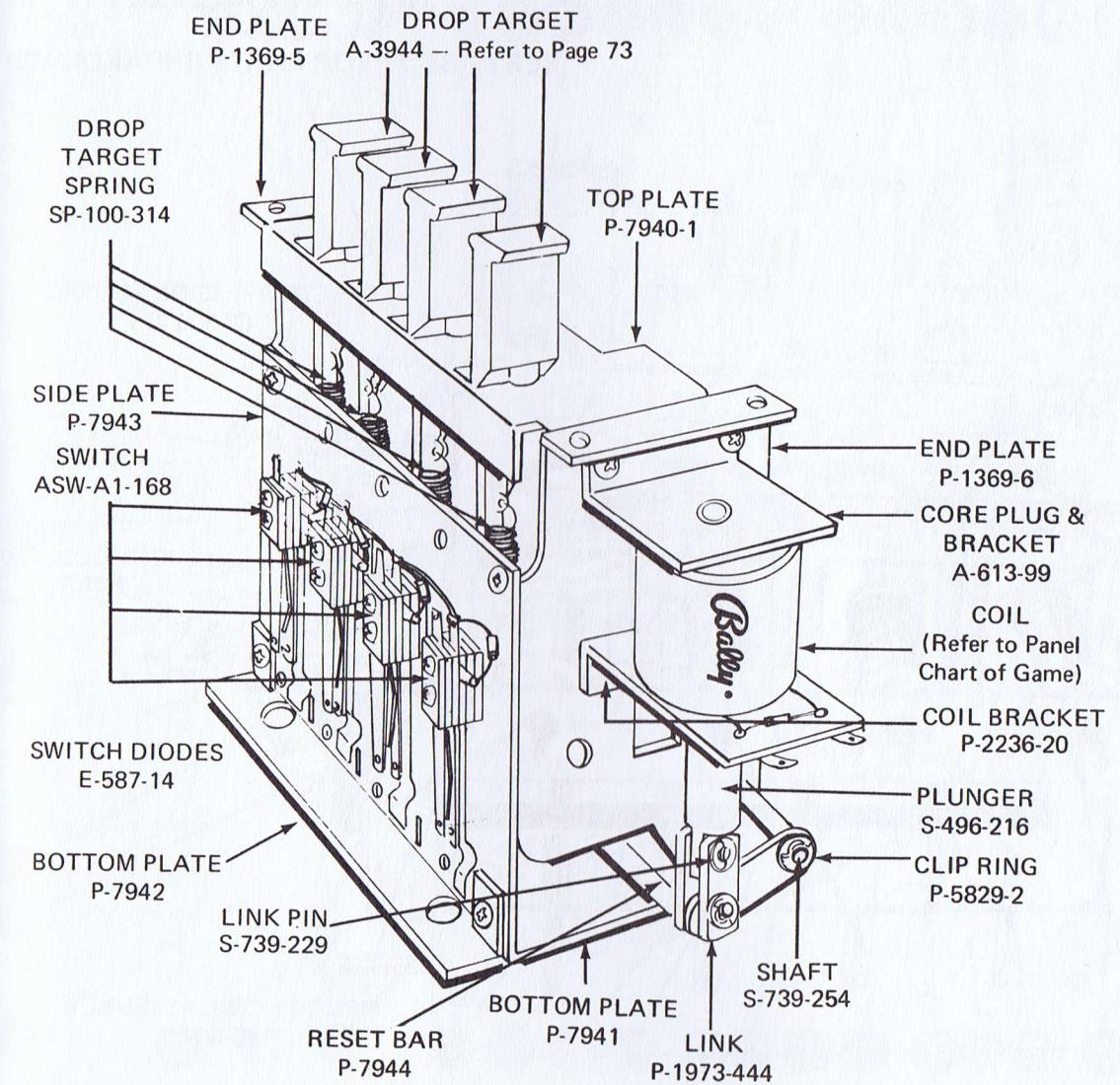


**DROP TARGET SWITCH(ES)**  
ASW-A1-168

□ = See Panel Chart for Game for correct dash number and quantity required.

	RESET BAR	BOTTOM PLATE	SIDE PLATE	LATCH PLATE	SHAFT
3 TARGET ASSEMBLY	P-7944-2	P-1501-3	P-1445-12	P-1370-3	S-739-258
4 TARGET ASSEMBLY	P-7944-1	P-1501-4	P-1445-13	P-1370-4	S-739-230
5 TARGET ASSEMBLY	P-7944	P-1501-5	P-1445-14	P-1370-5	S-739-254

**DROP TARGET ASSEMBLY (In-Line)**  
ASE-2993



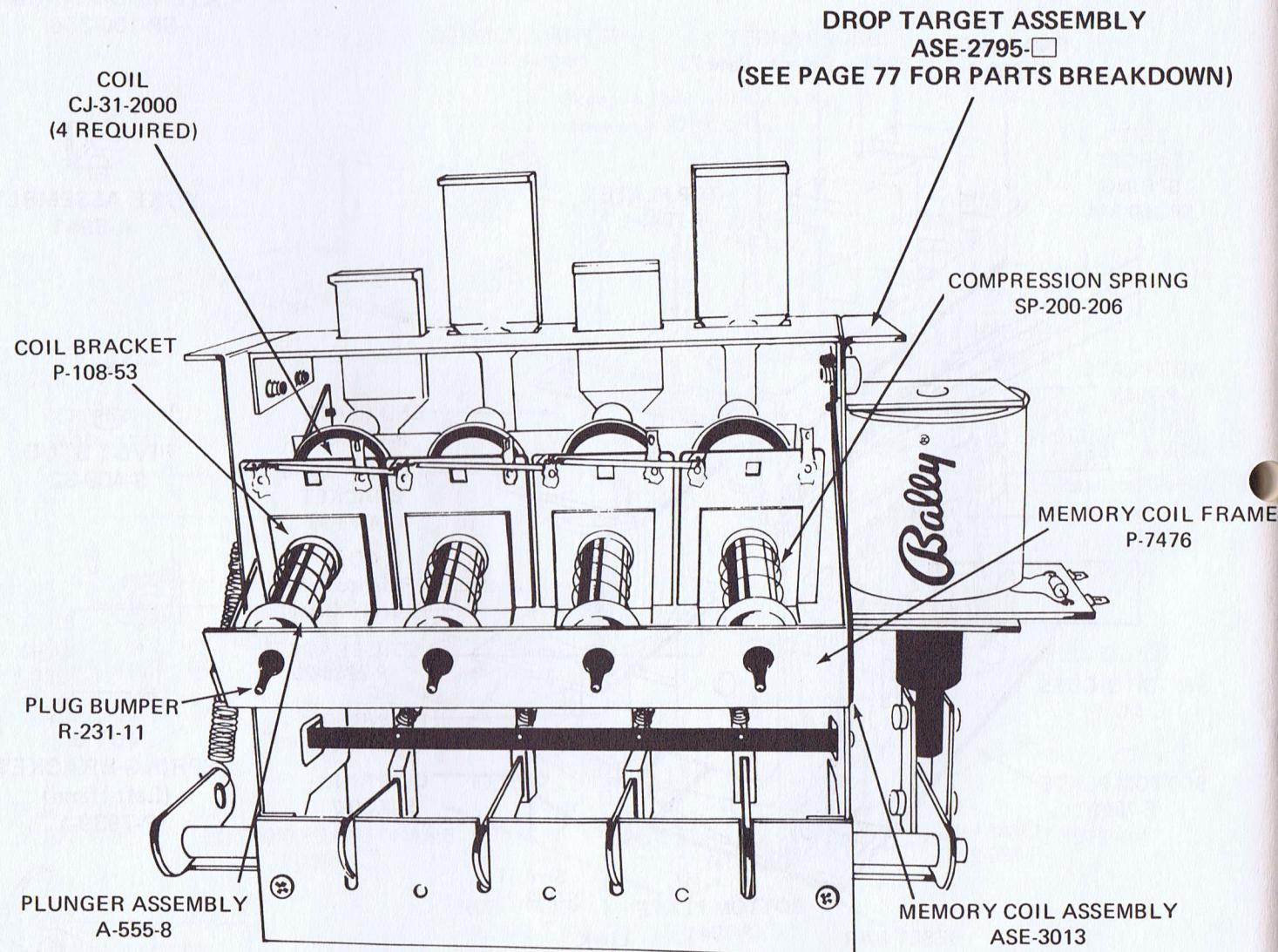
**SHAFT**  
(Drop Target)  
S-739-254

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

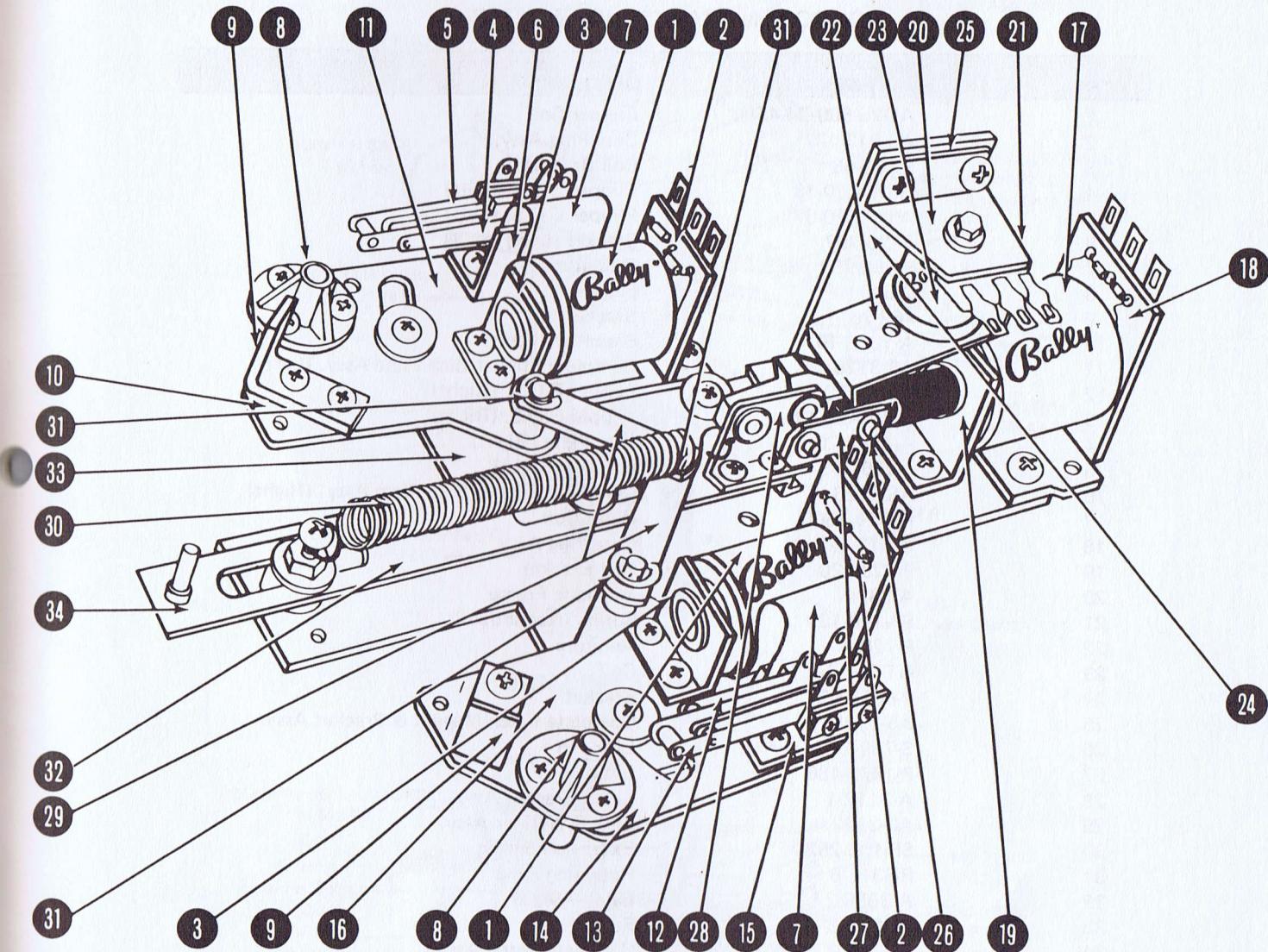
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# ASSEMBLY PARTS

DROP TARGET AND MEMORY COIL ASSEMBLY  
ASE-3038-□



ZIPPER FLIPPER ASSEMBLY  
ASE-2397-4



WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# ASSEMBLY PARTS

# ASSEMBLY PARTS.

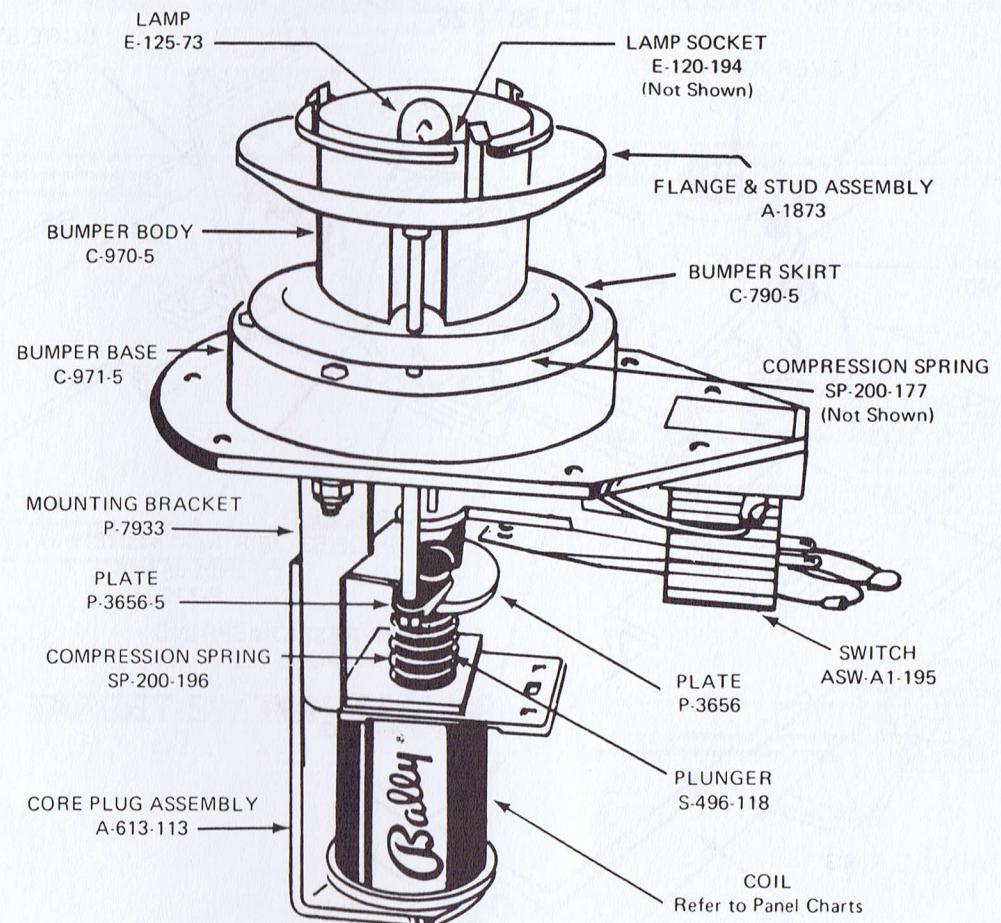
**ZIPPER FLIPPER ASSEMBLY  
ASE-2397-4**

## **COMPONENT PARTS LIST AS-2397-4**

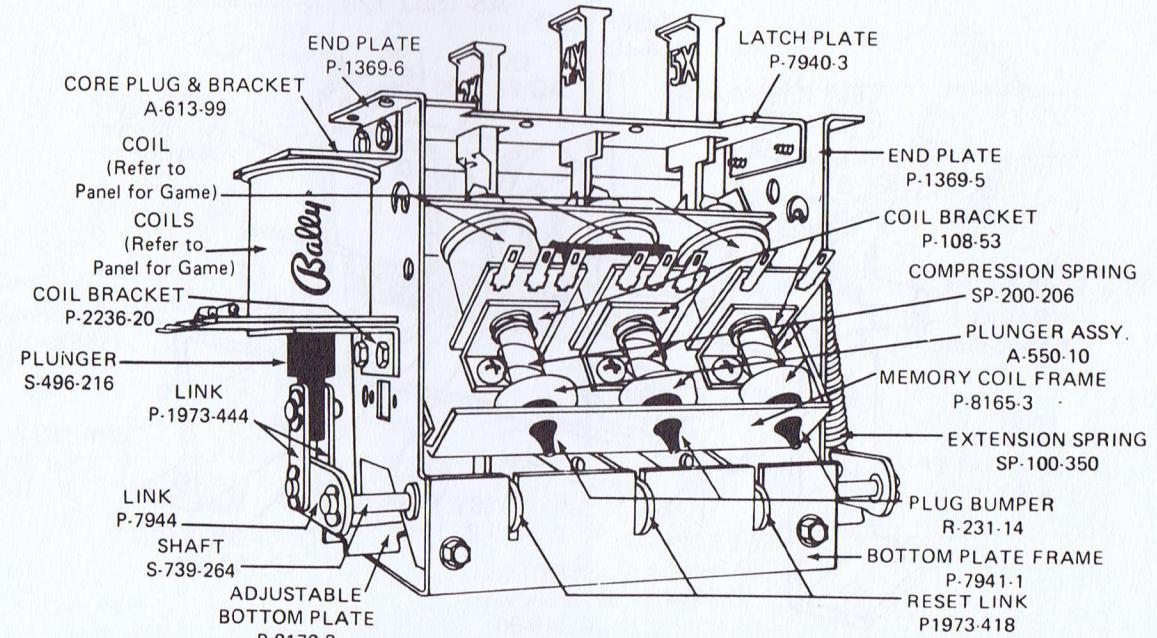
ITEM	BALLY PART NO.	DESCRIPTION
1	AQ25-500/34-4500	Flipper Coil
2	AS-613-127	Core Plug Assy.
3	P-108-53	Coil Bracket
4	ASW-A20-13	Flipper E.O.S. (Left)
5	ASW-A20-37	Flipper E.O.S. (Left)
6	P126-797	Bracket (Left)
7	P-150-153	Insulator
8	C-649	Bearing
9	P62-26	Bracket
10	A-1888-19	Base Plate (Left)
11	AS-3126-1	Complete Flipper Base Plate Assy. (Left)
12	ASW-A20-36	Flipper E.O.S. (Right)
13	ASW-A20-12	Flipper E.O.S. (Right)
14	A-1888-20	Base Plate (Right)
15	P-126-798	Bracket (Right)
16	AS-3126	Complete Flipper Base Plate Assy. (Right)
17	NB-24-1500	Reset Coil
18	A-613-122	Core Plug Assy.
19	P-2236-20	Coil Bracket
20	A-3324	Magnetic Frame
21	SP-100-189	Spring (Not shown)
22	P-720-7	Amature
23	GT-30-1300	Coil
24	P-6665-53	Bracket
25	AS-3125	Complete Latch Magnet & Bracket Assy.
26	S-739-268	Link Pin
27	P-1973-486	Link
28	A-3112-1	Latch Bracket Assy.
29	AS-3122	Link & Nyliner Assy.
30	SP-100-252	Extension Spring
31	P-6316-6	Retaining Ring
32	A-3088-2	Latch Assy.
33	P-6841-1	Base Plate
34	AS-3123	Complete Latch Assy.

**WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME**

**THUMPER BUMPER ASSEMBLY**  
**AS-2999**

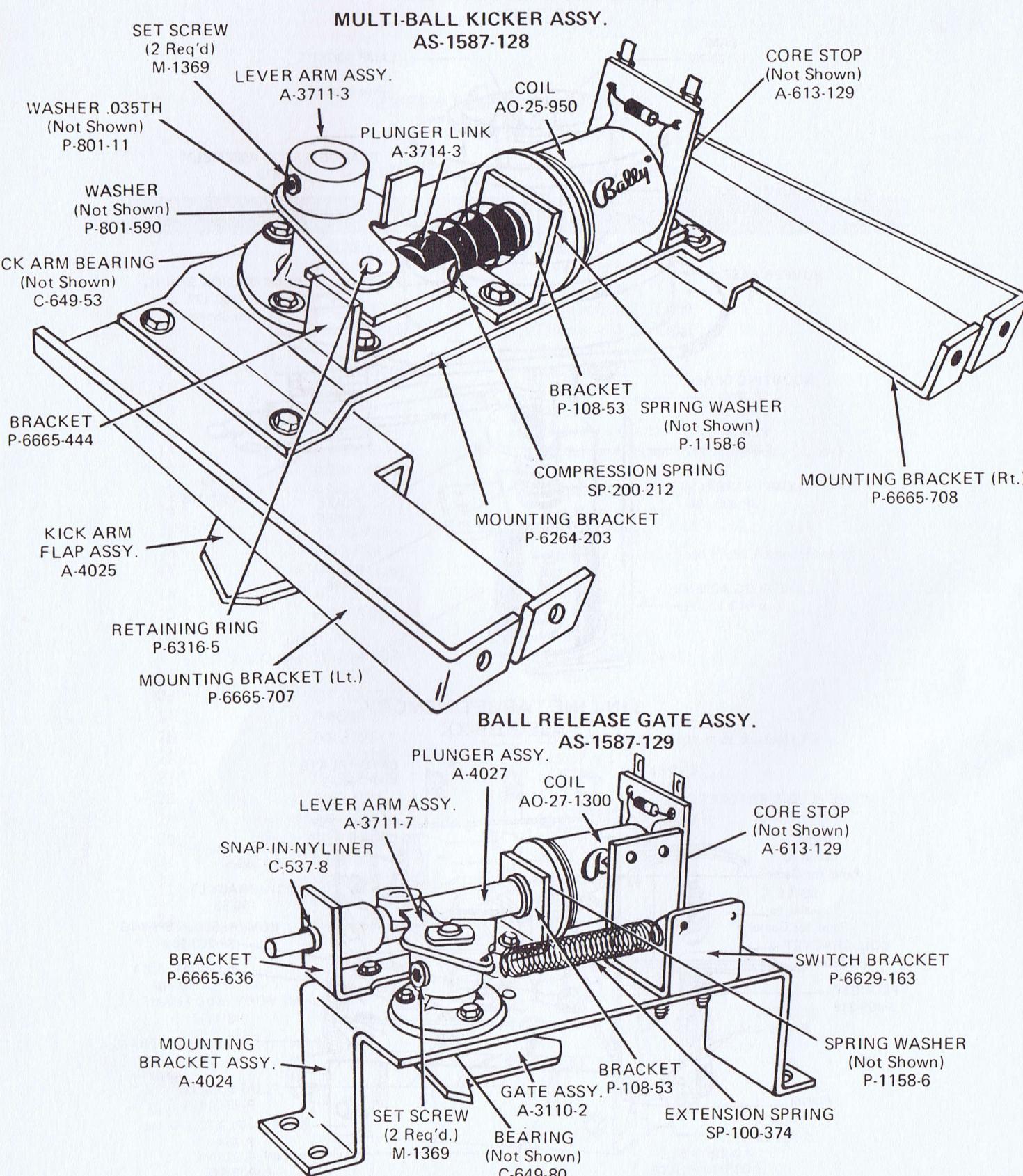


**3-IN-LINE TARGET/MEMORY  
ASE-3039-XX**



P-8172-3  
**WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME**

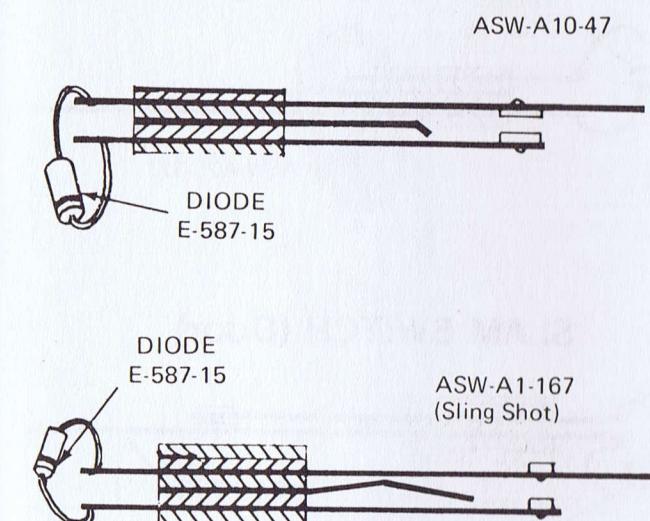
# ASSEMBLY PARTS



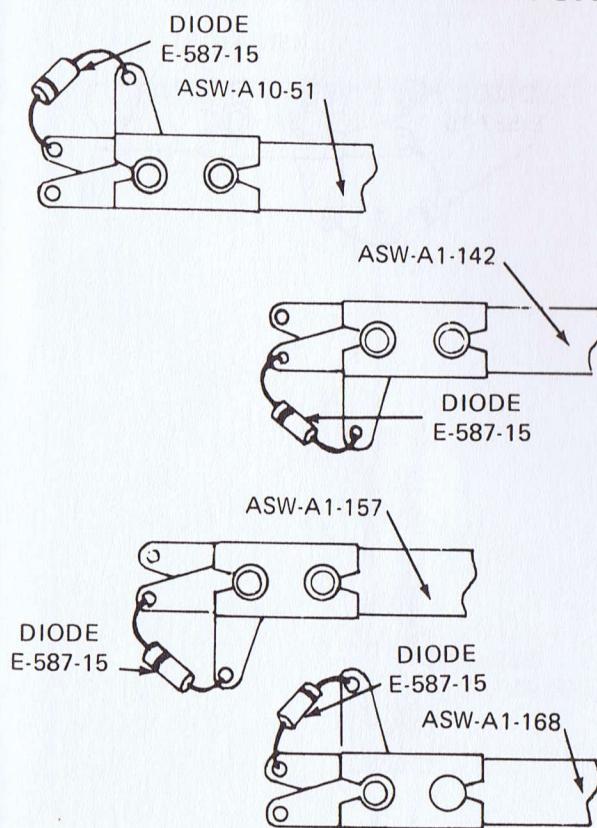
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# SWITCH PARTS

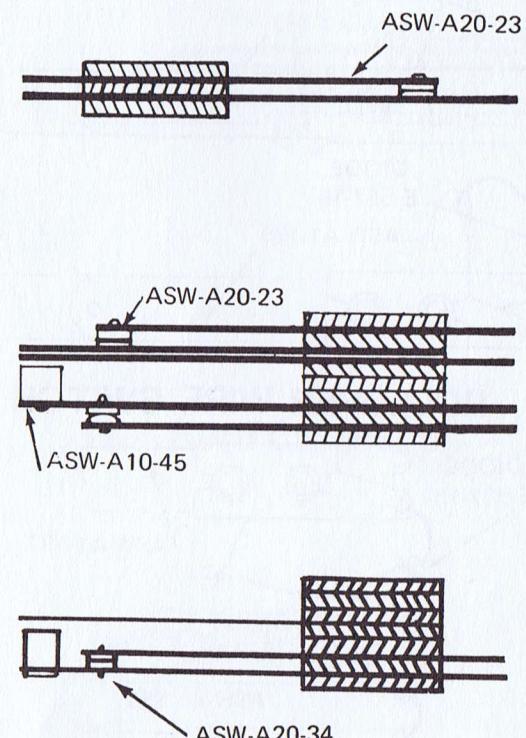
## BOUNCE SWITCH (General Purpose)



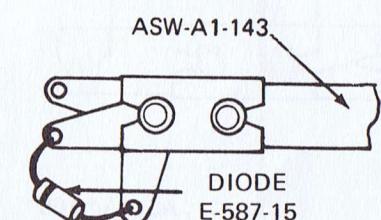
## DROP TARGET SWITCH



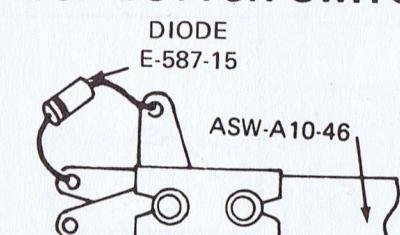
## FLIPPER SWITCH (Left and Right)



## OUT HOLE SWITCH



## PUSH BUTTON SWITCH

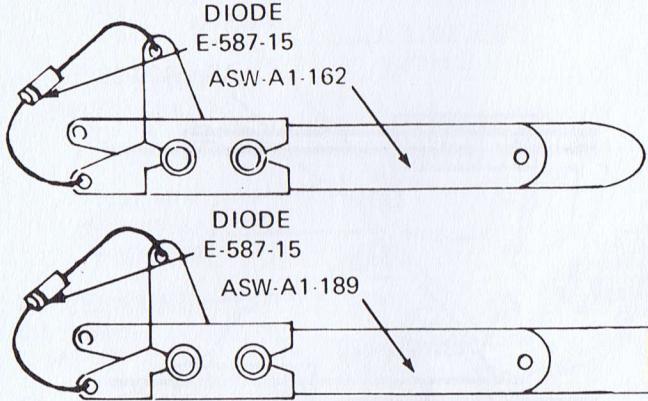


WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

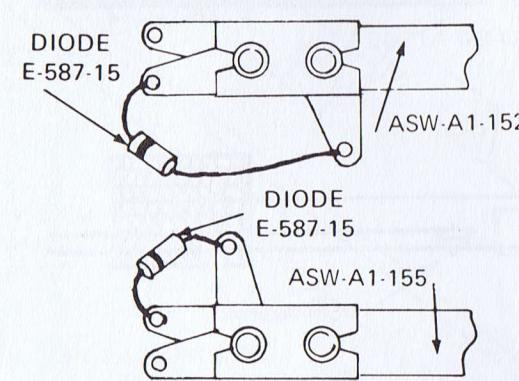
# SWITCH PARTS

# SWITCH PARTS

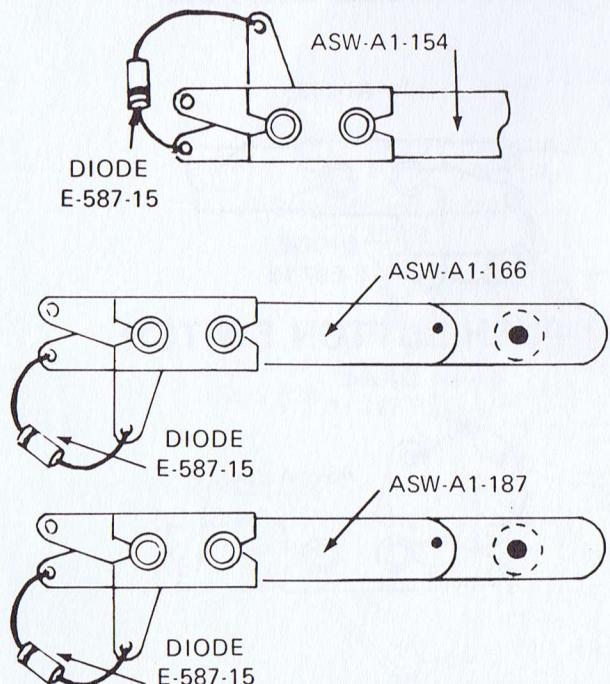
## ROLLOVER BUTTON SWITCH



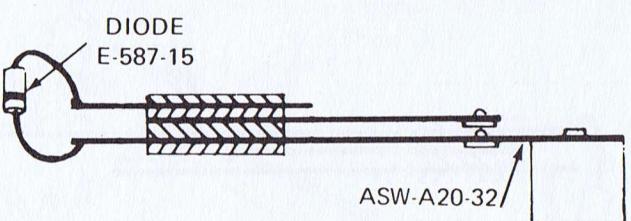
## ROLLOVER WIRE SWITCH



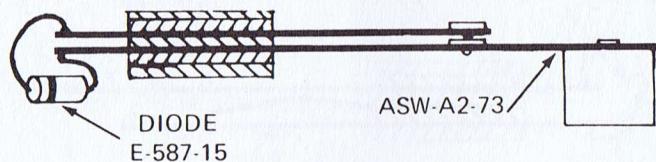
## SAUCER HOLE SWITCH



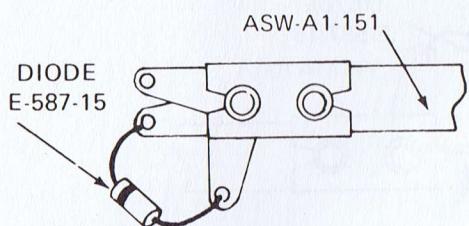
## SLAM SWITCH (Cabinet)



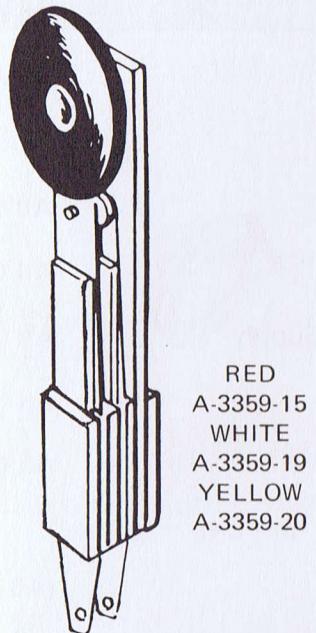
## SLAM SWITCH (Door)



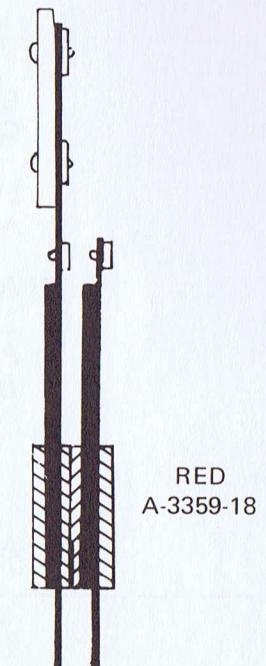
## SPINNER SWITCH



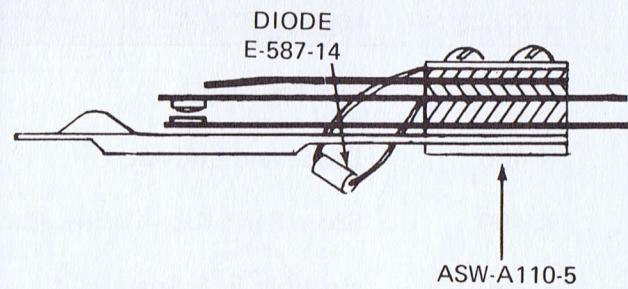
## TARGET SWITCH (Round)



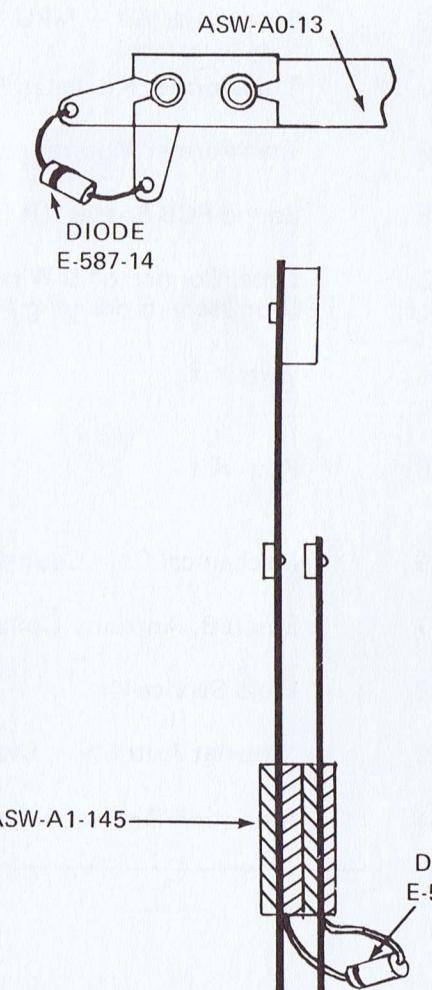
## TARGET SWITCH (Wide)



## THUMPER BUMPER SWITCH



## TIILT SWITCH (Panel)



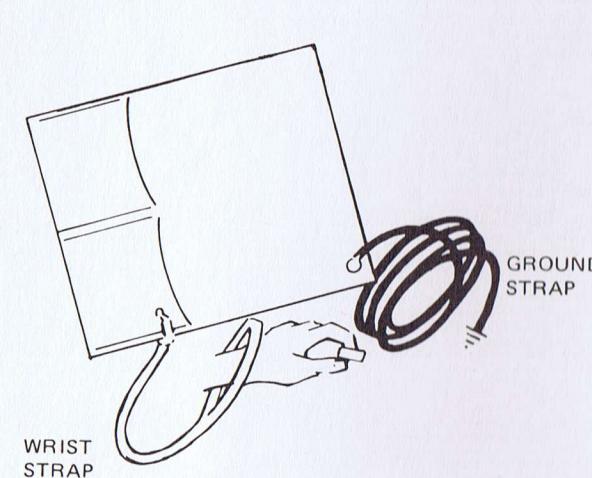
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

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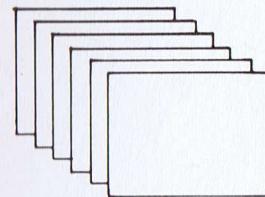
# RECOMMENDED KITS

KIT NO.	NAME OF KIT	GAME USED ON
K-485-1	Aid Kit	35 MPU module
K-486	Diode and Lug Kit	No. 1066-E
K-490	Spare Parts Kit – Trans. Rectifier Board	All Games
K-490-1	Rectifier PCB Spares Kit	All Games
K-492	Spare Parts Kit – Solenoid Driver – Power Supply	All Games
K-493	Spare Parts Kit – Display Driver	All Games
K-494	Spare Parts Kit – Lamp Driver	All Games
K-495	New Kicker Arm Assembly Instructions All Novelties	
K-503	Spare Parts Kit – MPU – Less memory	(All Games)
K-507-1	Transformer Kit Japan Only	All Games
K-509	Transformer Mounting Bracket Kit	All Games
K-518	Sound PCB Spares Kit (Less Memory)	All Games
K-523	Label Connector & Wire Kit (For use in modifying AS-2518-17)	
K-525	Parts Kit	Electronic Chimes Conversion
K-526	Parts Kit	Electronic Novelties Automatic Ballshooter
K-529	Mechanical Coin Counter	All Games
K-547	Susan B. Anthony Dollar Coin Conversion Kit	All Electronic Pinballs All Games
K-548	Field Service Kit	
K-549	Velostat Anti-Static Disposable Bags (6 Each)	
K-554	Insulation Displacement Connector Tool Kit	All Games

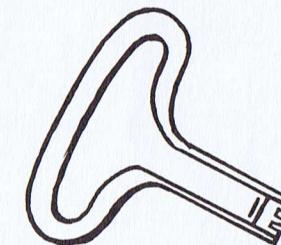
WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME



PORTABLE FIELD SERVICE WORK STATION  
Kit 548



ANTI-STATIC BAG (Pkg. of 6)  
Kit 549



INSULATION DISPLACEMENT  
CONNECTOR TOOL KIT  
K-554

Part No. 59803-1  
Part No. 59804-1

WHEN ORDERING PART, SPECIFY PART NO. AND NAME OF GAME

# RECOMMENDED KITS

## **NOTES**

# CHANGE OF ADDRESS NOTICE

Moved? Please list your new address below, and mail this note to

BALLY PINBALL DIVISION

90 O'Leary Drive

Bensenville, IL 60106 USA

Name \_\_\_\_\_

**Address** \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

Zip \_\_\_\_\_ Country \_\_\_\_\_

## NOTES

NOTAS DE VERSO DO DIA 10

O que é o Poder

o Poder de Aprendizado