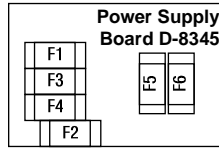
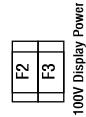


Big Guns (16-557)

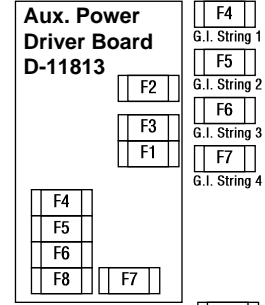
FUSE LIST

Power Supply Board D-8345		
F1	100V Display Power Input	1/4A, 250V, SB
F2	Not used	
F3	Not used	
F4	Not used	
F5, F6	5V & 12V Logic Power Input	7A, 250V, SB
Aux. Power Driver Board D-11813		
F1	+25V Special Solenoids	2A, 250V, SB
F2	+25V Solenoids	2A, 250V, SB
F3	+25V Controlled Solenoids	2A, 250V, SB
F4	+50V Solenoids	2A, 250V, SB
F5	+50V Solenoids	2A, 250V, SB
F6	Flippers	2A, 250V, SB
F7	50Vac Input	4A, 250V, SB
F8	25Vac Input	4A, 250V, SB
Back Box fuses		
F1	+18V Controlled Lamps	8A, 250V, SB
F2, F3	+ & - 100V Display Power	1/8A 250V SB
F4	General Illumination (Brown)	5A, 250V, SB
F5	General Illumination (Yellow)	5A, 250V, SB
F6	General Illumination (Green)	5A, 250V, SB
F7	General Illumination (Violet)	5A, 250V, SB
LINE FILTER		
Foreign		4A, 250V, SB
Domestic		8A, 250V, SB

Audio Board D11581



CPU Board D-11392 (11A) or D-11883 (11B)



+18V Controlled Lamps

SOLENOID/FLASHER TABLE

Sol. No.	Function	Solenoid Type	Wire ¹ Color	Connections		Driver Transtr	Solenoid Part Number Flashlamp Type	
				CPU Brd	Playfield / Cabinet		Playfield	Insert
01A ³	Outhole Kicker	Switched	Vio-Brn	1P11-1 (Gry-Brn)	8P3-1 via 5J1-9, 5J4-9 (A)	Q33	AE-23-800	
01C ³	Ball Popper flasher	Switched	Blk-Brn		5J5-9 (C)		#89 (2)	
02A ³	Ball Shooter Lane Feeder	Switched	Vio-Red	1P11-3 (Gry-Red)	8P3-2 via 5J1-7, 5J4-8 (A)	Q25	AE-23-800	
02C ³	Lwr Left side & Queen (bb) flashers	Switched	Blk-Red		5J5-8 (C)		#89	#89
03A ³	Ball Popper	Switched	Vio-Orn	1P11-4 (Gry-Orn)	8P3-3 via 5J1-6, 5J4-7 (A)	Q32	AE-24-900	
03C ³	Lwr Right side & Man (bb) flashers	Switched	Blk-Orn		5J5-7 (C)		#89	#89
04A ³	Left Eject	Switched	Vio-Yel	1P11-5 (Gry-Yel)	8P3-4 via 5J1-5, 5J4-6 (A)	Q24	AE-26-1500	
04C ³	Center Back Box flashers	Switched	Blk-Yel		5J5-5 (C)		#89 (2)	
05A ³	Right Eject	Switched	Vio-Grn	1P11-6 (Gry-Grn)	8P3-5 via 5J1-4, 5J4-5 (A)	Q31	AE-23-800	
05C ³	Left Cannon & Left (bb) flashers	Switched	Blk-Grn		5J5-4 (C)		#89	#89
06A ³	Left Cannon	Switched	Vio-Blu	1P11-7 (Gry-Blu)	8P3-6 via 5J1-3, 5J4-4 (A)	Q23	AL-23-800	
06C ³	Right Cannon & Right (bb) flashers	Switched	Blk-Blu		5J5-3 (C)		#89	#89
07A ³	Right Cannon	Switched	Vio-Blk	1P11-8 (Gry-Vio)	8P3-7 via 5J1-2, 5J4-2 (A)	Q30	AL-23-800	
07C ³	Left Troll & BIG (bb) flashers	Switched	Blk-Vio		5J5-2 (C)		#89	#89
08A ³	Knocker	Switched	Vio-Gry	1P11-9 (Gry-Blk)	8P3-8 via 5J1-1, 5J4-1 (A)	Q22	AE-23-800	
08C ³	Right Troll & GUNS (bb) flashers	Switched	Blk-Gry		5J5-1 (C)		#89	#89
09	Left General Illum. Relay (Playfield)	Controlled	Brn-Blk	1P12-1	8P3-9 via 5J2-9, 5J6-9	Q17	5580-12145-01 ⁴	
10	Right General Illum. Relay (Playfield)	Controlled	Brn-Red	1P12-2	8P3-10 via 5J2-8, 5J6-8	Q9	5580-12145-01 ⁴	
11	General Illum. Relay (Insert Board)	Controlled	Brn-Orn	1P12-4	3P7-1 via 5J2-6, 5J6-7	Q16	5580-12145-01 ⁴	
12	Solenoid A/C select relay	Controlled	Brn-Yel	1P12-5	8P3-12 via 5J2-5	Q8	5580-09555-01 ⁵	
13	Right Drop Target	Controlled	Brn-Grn	1P12-6	8P3-13 via 5J2-4, 5J6-5	Q15	AE-26-1000	
14	"Forcefield" Flipper Post	Controlled	Brn-Blu	1P12-7	8P3-14 via 5J2-3, 5J6-3	Q7	AE-26-1200	
15	Invincible flashers	Controlled	Brn-Vio	1P12-8	8P3-15 via 5J2-2, 5J6-2	Q14	#1251 (1)	
16	Top Center (bb) flashers	Controlled	Brn-Gry	1P12-9	8P3-16 via 5J2-1, 5J6-1	Q6		#89
17	King's Chamber Kicker (bb playfield)	Special #1	Blu-Brn	1P19-7	8P3-17 via 5J3-7, 5J7-7	Q75	AE-24-900	
18	Left Drop Target reset	Special #2	Blu-Red	1P19-4	8P3-18 via 5J3-6, 5J7-6	Q71	AE-23-800	
19	Right Gate	Special #3	Blu-Orn	1P19-3	8P3-19 via 5J3-3, 5J7-3	Q73	SZ-35-4000-DC	
20	Right Drop Target reset	Special #4	Blu-Yel	1P19-6	8P3-20 via 5J3-4, 5J7-5	Q69	AE-25-1000	
21	Left slingshot	Special #5	Blu-Grn	1P19-8	8P3-21 via 5J3-2, 5J7-2	Q77	AE-23-800-03	
22	Right slingshot	Special #6	Blu-Blk	1P19-9	8P3-22 via 5J3-1, 5J7-1	Q79	AE-23-800-03	
Flipper Circuits								
	Lower right flipper	Flipper	Orn-Vio	1P19-1	7P1-15		FL11630/50VDC	
	Lower right flipper switch ²	Switch	Blu-Vio		7P1-16, 8P3-34			
	Lower left flipper	Flipper	Orn-Gry	1P19-2	7P1-18		FL11630/50VDC	
	Lower left flipper switch ²	Switch	Blu-Gry		7P1-19, 8P3-32			
	Upper left flipper	Flipper	Blk-Blu	1P19-2	7P1-17, 8P3-31		FL-11753/50VDC	
	Upper right flipper	Flipper	Blk-Yel	1P19-1	7P1-14, 8P3-33		FL-11753/50VDC	

- Notes:
- Wire colors, except flipper Orn-Vio and Orn-Gry, are ground connections (to coil terminal with unbanded end of diode). Flipper Org-Vio and Orn-Gry wires connect from CPU Board to flipper button switch on cabinet.
 - Flipper connections are from flipper button switch to flipper coil.
 - "A" circuits are pulsed, when Sol. 12 is de-energized; "C" circuits are pulsed, with Sol. 12 energized. Wire colors in brackets are those from respective A and C terminals corresponding to the J1-terminal connection listed for the Aux. Power Driver Board, which controls the device pulsing by Sol. 12.
 - Relay is mounted on Relay Board p/n C-11998-1.
 - Relay is mounted on Aux. Power Driver Board, D-11813, in the backbox.
 - Relay is mounted on Relay Board p/n C-11902-1.

LAMP MATRIX

Column \ Row	Red ← Yellow (B+)							
	1 Yellow-Brown 1J6-1 Q66	2 Yellow-Red 1J7-2 Q64	3 Yellow-Orange 1J7-3 Q62	4 Yellow-Black 1J7-4 Q60	5 Yellow-Green 1J7-6 Q58	6 Yellow-Blue 1J7-7 Q56	7 Yellow-Violet 1J7-8 Q54	8 Yellow-Grey 1J7-9 Q52
1 Red-Brown 1J6-1 Q80	Backbox Playfield Left 1	Backbox Extra Ball	Left Drop Target Top	Left Guard Bottom 1	Right Guard Bottom 2	Bonus Multiplier 2X	Left Backbox Sequence 1 (bottom)	Right Backbox Sequence 1 (bottom)
2 Red-Black 1J6-2 Q81	Backbox Playfield Left 2	Center Guards 50K	Left Drop Target Middle	Left Guard Bottom 2	Right Guard Bottom 1	Bonus Multiplier 3X	Left Backbox Sequence 2	Right Backbox Sequence 2
3 Red-Orange 1J6-3 Q82	Backbox Playfield Center	Center Guards 100K	Left Drop Target Bottom	Left Guard Middle	Left Top Lock	Bonus Multiplier 4X	Left Backbox Sequence 3	Right Backbox Sequence 3
4 Red-Yellow 1J6-5 Q83	Backbox Playfield Right 2	Center Guards 150K	Right Drop Target Top	Left Guard Top 2	Right Top Lock	Bonus Multiplier 5X	Left Backbox Sequence 4	Right Backbox Sequence 4
5 Red-Green 1J6-6 Q84	Backbox Playfield Right 1	Center Guards 200K	Right Drop Target Middle	Left Guard Top 1	Left Bottom Lock	Bonus Multiplier 6X	Left Backbox Sequence 5 (top)	Right Backbox Sequence 5 (top)
6 Red-Blue 1J6-7 Q85	Flipper Post (2 lamps)	Center Guards Special	Right Drop Target Bottom	Right Guard Top 1	Right Bottom Lock	Bonus Multiplier 7X	Playfield Double Score	Force Field When Lit
7 Red-Violet 1J6-8 Q86	Shoot Again	Left Outlane Kicker	Left Return (Extra Ball)	Right Guard Top 2	Left Outlane Special	Bonus Multiplier 8X	Left Advance 'X'	Left Troll (2 lamps)
8 Red-Grey 1J6-9 Q87	Ball Popper Lock	Right Outlane Gate	Right Return (Extra Ball)	Right Guard Middle	Right Outlane Special	Bonus Multiplier 9X	Right Advance 'X'	Right Troll (2 lamps)

SWITCH MATRIX

Column \ Row	White → Green							
	1 Green-Brown 1J8-1 Q45	2 Green-Red 1J8-2 Q49	3 Green-Orange 1J8-3 Q44	4 Green-Yellow 1J8-4 Q48	5 Green-Black 1J8-5 Q43	6 Green-Blue 1J8-7 Q47	7 Green-Violet 1J8-8 Q42	8 Green-Grey 1J8-9 Q46
1 White-Brown 1J10-9	Plump Bob Tilt	Playfield Tilt	Left Drop Target Top	Left Guard Bottom 1	Right Guard Bottom 2	Backbox Playfield Left 1	Not Used	Ball Popper
2 White-Red 1J10-8	Not Used	Outhole	Left Drop Target Middle	Left Guard Bottom 2	Right Guard Bottom 1	Backbox Playfield Left 2	Not Used	Force Field
3 White-Orange 1J10-7	Start Button	Ball Trough #1 (right)	Left Drop Target Bottom	Left Guard Middle	Left Eject	Backbox Playfield Center	Not Used	Tower
4 White-Yellow 1J10-6	Right Coin Switch	Ball Trough #2 (mid)	Right Drop Target Top	Left Guard Top 2	Right Eject	Backbox Playfield Right 2	Left Flipper Lane Change	Left Outlane
5 White-Green 1J10-5	Center Coin Switch	Ball Trough #3 (left)	Right Drop Target Middle	Left Guard Top 1	Left Cannon	Backbox Playfield Right 1	Right Flipper Lane Change	Right Outlane
6 White-Blue 1J10-3	Left Coin Switch	Not Used	Right Drop Target Bottom	Right Guard Top 1	Right Cannon	Not Used	Ball Shooter Lane	Not Used (German Score Board)
7 White-Violet 1J10-2	Slam Tilt	Flipper Post Down	Left Return Lane	Right Guard Top 2	Left Troll	Not Used	Left Advance 'X'	Left Slingshot
8 White-Grey 1J10-1	High Score Reset	Not Used	Right Return Lane	Right Guard Middle	Right Troll	Not Used	Right Advance 'X'	Right Slingshot