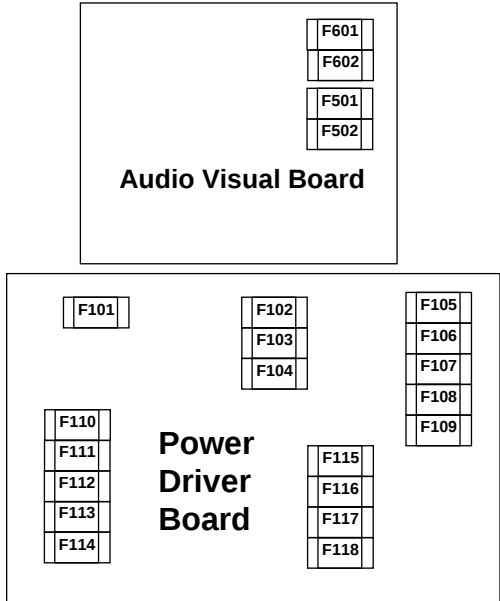


Safe Cracker (90003)

FUSE LIST

AUDIO/VIDEO BOARD			POWER DRIVER BOARD					
F501	-25V	T2.5A, 250V	F101	Regulated 12V	T0.63A, 250V	F110	G.I. #5 White-Violet	T4.0A, 250V
F502	+25V	T2.5A, 250V	F102	Solenoids #25 to #28	T4.0A, 250V	F111	G.I. #4 White-Green	T4.0A, 250V
F601	+62V	T0.315A, 250V	F103	Solenoids #1 to #8	T4.0A, 250V	F112	G.I. #3 White-Yellow	T4.0A, 250V
F602	-113V & -125V	T0.315A, 250V	F104	Solenoids #9 to #16	T4.0A, 250V	F113	G.I. #2 White-Orange	T4.0A, 250V
<u>LINE FILTER</u> Foreign T4.0A, 250V Domestic T5.0A, 250V			F105	+5V Logic	T4.0A, 250V	F114	G.I. #1 White-Brown	T4.0A, 250V
			F106	+18V Lamp Matrix	T5.0A, 250V	F115	+50V Flippers	T4.0A, 250V
			F107	Flasher Secondary	T4.0A, 250V	F116	+50V Flippers	T4.0A, 250V
			F108	Solenoid Secondary	T6.3A, 250V	F117	+50V Flippers	T4.0A, 250V
			F109	Unregulated 12V	T4.0A, 250V	F118	+50V Flippers	T4.0A, 250V

CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH THE SAME TYPE OF FUSE HAVING THE SAME ELECTRICAL RATINGS.
ATTENTION: UTILISER UN FUSIBLE DE RECHARGE DE MEME TYPE



SOLENOID/FLASHER TABLE

Sol. No.	Function	Solenoid Type	Voltage Connections			Drive Xistor	Drive Connections			Drive Wire Color	Solenoid Part Number Flashlamp Type	
			Playfield	Backbox	Cabinet		Playfield	Backbox	Cabinet		Playfield	Backbox
01	Big Kick	High Power	J133-2			Q72	J116-1			VIO-BRN	AE-24-900	
02	Right Token Tube	High Power		J135-2		Q68		J118-2		VIO-RED		04-10424
03	Vari Target Reset	High Power	J133-2			Q71	J116-4			VIO-ORG	SM1-26-600	
04	Left Token Tube	High Power		J135-2		Q67		J118-5		VIO-YEL		04-10424
05	Bank Kick	High Power	J133-2			Q70	J116-6			VIO-GRN	AE-23-800	
06	Top Popper Up	High Power	J133-2			Q66	J116-7			VIO-BLU	AE-24-900	
07	Ramp Diverter	High Power	J133-2			Q69	J116-8			VIO-BLK	AE-26-1500	
08	Kickback (Ramp)	High Power	J133-2			Q65	J116-9			VIO-GRY	AE-23-800	
09	Trough Eject	Low Power	J133-3			Q44	J113-1			BRN-BLK	AE-26-1500	
10	Left Slingshot	Low Power	J133-3			Q48	J113-3			BRN-RED	AE-26-1200	
11	Right Slingshot	Low Power	J133-3			Q43	J113-4			BRN-ORG	AE-26-1200	
12	Left Jet Bumper	Low Power	J133-3			Q47	J113-5			BRN-YEL	AE-26-1200	
13	Right Jet Bumper	Low Power	J133-3			Q42	J113-6			BRN-GRN	AE-26-1200	
14	Top Jet Bumper	Low Power	J133-3			Q46	J113-7			BRN-BLU	AE-26-1200	
15	Top Left 3-Bank	Low Power	J133-3			Q41	J113-8			BRN-VIO	AE-26-1200	
16	Top Right 3-Bank	Low Power	J133-3			Q45	J113-9			BRN-GRY	AE-26-1500	
17	Back Left Flasher	Flasher	J133-6			Q28	J111-1			BLK-BRN	#906	
18	Jets & Back Right Flashers	Flasher	J133-6			Q32	J111-2			BLK-RED	#89, #906	
19	Right Middle Flasher	Flasher	J133-6			Q27	J111-3			BLK-ORG	#906	
20	Right Bottom Flasher	Flasher	J133-6			Q31	J111-4			BLK-YEL	#906	
21	Left Middle Flasher	Flasher	J133-3			Q26	J111-5			BLU-BRN	#906	
22	Left Bottom Flasher	Flasher	J133-6			Q30	J111-6			BLU-RED	#906	
23	Light Rope 1	Flasher		J134-5		Q25		J112-8		BLU-ORG		04-10440
24	Light Rope 2	Flasher		J134-5		Q29		J112-9		BLU-YEL		04-10440
25	Top Popper Eject	Gen. Purpose	J133-1			Q16	J109-1			BLU-GRN	AE-27-1200	
26	Top Light & Motor	Gen. Purpose		J140-2		Q15		J109-2		BLU-BLK		20-10307
27	Bottom Left 3-Bank	Gen. Purpose	J133-1			Q14	J109-3			BLU-VIO	AE-26-1200	
28	Bottom Right 3-Bank	Gen. Purpose	J133-1			Q13	J109-4			BLU-GRY	AE-26-1200	
37	Aux. Lamp Enable	* L.P.C.D.		J138-2				J110-1		BRN-WHT		A-20909
38	Aux. Lamp Clock	* L.P.C.D.		J138-2				J110-3		ORG-WHT		A-20909
39	Aux. Lamp Data 1	* L.P.C.D.		J138-2				J110-4		YEL-WHT		A-20909
40	Aux. Lamp Data 2	* L.P.C.D.		J138-2				J110-5		GRN-WHT		A-20909

General Illumination			Voltage Connections			Drive Xistor	Drive Connections			Drive Wire	Bulb Type	
			Playfield	Insert	Cabinet		Playfield	Insert	Cabinet		Playfield	Insert
01	G.I. String 1		G.I.	J105-1		Q5	J105-7	J106-7		WHT-BRN	#44	#555
02	** Aux. Lamp 1 Power		G.I.	J106-2		Q4		J106-8		WHT-ORG		#555
03	G.I. String 3		G.I.	J105-3		Q3	J105-9	J106-9		WHT-YEL	#44	#555
04	** Aux. Lamp 2 Power		G.I.	J106-5		Q2		J106-10		WHT-GRN		#555
05	** Aux. Lamp 3 Power		G.I.	J106-6	J104-3	Q1		J106-11	J104-1	WHT-VIO		#555

Flipper Circuits		Solenoid Type	Voltage Connection		Drive Transistors		Drive Connections		Drive Wire Colors		Coil Part No.	Coil Colors
			Playfield		Power	Hold	Playfield		Power	Hold		
29	Lower Right Flipper	Power	J119-1 (RED-GRN)		Q90		J120-13		YEL-GRN		FL-20867	White
30		Hold	J119-1 (RED-GRN)		Q92		J120-11		ORG-GRN			
31	Lower Left Flipper	Power	J119-4 (RED-BLU)		Q87		J120-9		YEL-BLU		FL-20867	White
32		Hold	J119-4 (RED-BLU)		Q89		J120-7		ORG-BLU			
33	Upper Right Flipper	Power	J119-6 (RED-VIO)		Q84		J120-6		YEL-VIO		FL-11753	YELLOW
34		Hold	J119-6 (RED-VIO)		Q86		J120-4		ORG-VIO			
35	Auto Plunger	Power	J119-8 (RED-GRY)		Q81		J120-3		YEL-GRY		AE-23-800	
36	Lock Up Release	Hold	J119-8 (RED-GRY)		Q83		J120-1		ORG-GRY		AE-26-1200	

J1XX = POWER DRIVER BOARD
24-6549 = #44 BULB; 24-8704 = #89 BULB; 24-8768 = #555 BULB; 24-8802 = #906 BULB
* L.P.D.C. = Low Power Device Controls
**These general illumination strings do not brighten and dim, they are always on

LAMP MATRIX

Column Row	Yellow (B+)				Red			
	1 Yellow-Brown J121-1 Q96	2 Yellow-Red J121-2 Q100	3 Yellow-Orange J121-3 Q95	4 Yellow-Black J121-4 Q99	5 Yellow-Green J121-5 Q94	6 Yellow-Blue J121-6 Q98	7 Yellow-Violet J121-7 Q93	8 Yellow-Grey J121-9 Q97
1 Red-Brown J125-1 Q104	Lite Deposit 11	Center Timer "15" 21	Armor Car Cellar 31	Bonus 5X + Outlane 41	Wheel Arrow 51	Top Right 3-Bank Top 61	Bottom Right 3-Bank Top 71	Top Jet Bumper (Yellow) 81
2 Red-Black J125-2 Q108	Center Timer "10" 12	Center Timer "20" 22	Armor Car Roof 32	Bonus 5X 42	Lite Outlanes 52	Top Right 3-Bank Middle 62	Bottom Right 3-Bank Middle 72	Left Jet Bumper (Clear) 82
3 Red-Orange J125-4 Q103	Disable Computer 13	Center Timer "25" 23	Armor Car Main 33	Bonus 4X 43	Invisible Code 53	Top Right 3-Bank Bottom 63	Bottom Right 3-Bank Bottom 73	Right Jet Bumper (Red) 83
4 Red-Yellow J125-5 Q107	Center Timer "5" 14	Center Timer "30" 24	Bonus 2X 34	Bonus 3X 44	Explosives 54	Top Left 3-Bank Top 64	Bottom Left 3-Bank Top 74	Bank Left 84
5 Red-Green J125-6 Q102	Center Timer "0" 15	Center Timer "35" 25	(A)LARM Standup 35	Ramp Lock 45	Note To Teller 55	Top Left 3-Bank Middle 65	Bottom Left 3-Bank Middle 75	Bank Right 85
6 Red-Blue J125-7 Q106	Lite Lock 16	Call Guard 26	ATM Card 36	AL(A)RM Standup 46	Top Left Lane 56	Top Left 3-Bank Bottom 66	Bottom Left 3-Bank Bottom 76	Vari Break In 86
7 Red-Violet J125-8 Q101	Center Timer "55" 17	Center Timer "45" 27	A(L)ARM Standup 37	ALA(R)M Standup 47	Top Middle Lane 57	"Right "Extra Time" 67	Left Return Lane 77	Roof Break-In 87
8 Red-Grey J125-9 Q105	Center Timer "50" 18	Center Timer "40" 28	Ramp Jackpot 38	ALAR(M) Standup 48	Top Right Lane 58	Right Return Lane 68	"Left "Extra Time" 78	Start Button 88

J1XX = Power Driver Board

SWITCH MATRIX

DEDICATED GROUNDED SWITCHES	Column Row	White				Green				FLIPPER GROUNDED SWITCHES
		1 Green-Brown J206-1 U20-18	2 Green-Red J206-2 U20-17	3 Green-Orange J206-3 U20-16	4 Green-Yellow J206-4 U20-15	5 Green-Black J206-5 U20-14	6 Green-Blue J206-6 U20-13	7 Green-Violet J206-7 U20-12	8 Green-Grey J206-9 U20-11	
Orange-Brown J205-1 LEFT COIN CHUTE U17-5 D1	1 White-Brown J208-1 U18-11	TP Trough (Roof) 11	Slam Tilt 21	Trough Eject 31	Kickback 41	(A)LARM Standup 51	Top Left 3-Bank Top 61	Bottom Left 3-Bank Top 71	Left Token Level 81	Black-Green J208-13 Lower Right Flipper E.O.S. F1
Orange-Red J205-2 CENTER COIN CHUTE U17-7 D2	2 White-Red J208-2 U18-9	TP Trough (Vari) 12	Coin Door Closed 22	Trough Ball 1 32	Left Big Kick 42	A(L)ARM Standup 52	Top Left 3-Bank Middle 62	Bottom Left 3-Bank Middle 72	Right Token Level 82	Blue-Violet J212-12 Lower Right Flipper Opto F2
Orange-Black J205-3 RIGHT COIN CHUTE U17-11 D3	3 White-Orange J208-3 U18-5	Start Button 13	Not Used 23	Trough Ball 2 33	Token Chute Jam 43	AL(A)RM Standup 53	Top Left 3-Bank Bottom 63	Bottom Left 3-Bank Bottom 73	Ramp Entrance 83	Black-Blue J208-12 Lower Left Flipper E.O.S. F3
Orange-Yellow J205-4 4 TH COIN CHUTE U17-9 D4	4 White-Yellow J208-4 U18-7	Plumb Bob Tilt 14	Always Closed 24	Trough Ball 3 34	Left Jet Bumper 44	ALA(R)M Standup 54	Top Right 3-Bank Bottom 64	Bottom Right 3-Bank Bottom 74	Ramp Made 84	Blue-Gray J212-11 Lower Left Flipper Opto F4
Orange-Green J205-6 Normal Function Srv Crdts U16-9 D5	5 White-Green J208-5 U19-11	Right Orbit 15	Upper Right Flip Rollover 25	Trough Ball 4 35	Right Jet Bumper 45	ALAR(M) Standup 55	Top Right 3-Bank Middle 65	Bottom Right 3-Bank Middle 75	Wheel Channel A 85	Black-Violet J208-11 RIGHT SPINNER F5
Orange-Blue J205-7 Normal Function Volume Dn U16-11 D6	6 White-Blue J208-7 U19-9	Left Outlane 16	Left Return Lane 26	Lockup 1 Front 36	Top Jet Bumper 46	Vari Target (C) 56	Top Right 3-Bank Top 66	Bottom Right 3-Bank Top 76	Wheel Channel B 86	Black-Yellow J212-10 Upper Right Flipper Opto F6
Orange-Violet J205-8 Normal Function Volume Up U16-7 D7	7 White-Violet J208-8 U19-5	Right Outlane 17	Right Return Lane 27	Lockup 2 Rear 37	Left Slingshot 47	Vari Target (B) 57	Top Left Lane 67	Bank Kickout 77	Not Used 87	Black-Gray J208-10 LEFT SPINNER F7
Orange-Grey J205-9 Normal Function Begin Test U16-5 D8	8 White-Grey J208-9 U19-7	Ball Shooter 18	Left Orbit 28	Not Used 38	Right Slingshot 48	Vari Target (A) 58	Top Popper 68	Top Right Lane 78	Not Used 88	Black-Blue J212-9 Upper Left Flipper Opto F8

J2XX = CPU Board = OPTO, TYPICALLY CLOSED