

Circus Voltaire (50062)

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 #9 to #16	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 #25 to #28	T4.0A, 250V	F113	G.I. #2 White-Orange	T4.0A, 250V
LINE FILTER 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

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	PLUNGER	High Power	J133-2			Q72	J116-1		VIO-BRN	AE-23-800		
02	BACKBOX KICK	High Power		J134-3		Q68		J118-2	VIO-RED	AE-23-800		
03	LEFT LOOP MAGNET	High Power	J133-2			Q71	J116-4		VIO-ORG	20-10197		
04	MIDDLE JET BUMPER	High Power	J133-2			Q67	J116-5		VIO-YEL	AE-23-800		
05	RAMP MAGNET	High Power	J133-2			Q70	J116-6		VIO-GRN	20-10197		
06	DIVERTER POWER	High Power	J133-2			Q66	J116-7		VIO-BLU	FL-11753		
07	JET UP	High Power	J133-2			Q69	J116-8		VIO-BLK	FL-11630		
08	JET RELEASE	High Power	J133-2			Q65	J116-9		VIO-GRY	SM1-26-600		
09	TROUGH EJECT	Low Power	J133-3			Q44	J114-1		BRN-BLK	AE-26-1500		
10	LEFT SLINGSHOT	Low Power	J133-3			Q48	J114-3		BRN-RED	AE-26-1200		
11	RIGHT SLINGSHOT	Low Power	J133-3			Q43	J114-4		BRN-ORG	AE-26-1200		
12	UPPER JET BUMPER	Low Power	J133-3			Q47	J114-5		BRN-YEL	AE-26-1200		
13	LOWER JET BUMPER	Low Power	J133-3			Q42	J114-6		BRN-GRN	AE-26-1200		
14	LEFT SAUCER	Low Power	J133-3			Q46	J114-7		BRN-BLU	AE-27-1200		
15	RIGHT SAUCER	Low Power	J133-3			Q41	J114-8		BRN-VIO	AE-27-1200		
16	LOCK POST	Low Power	J133-3			Q45	J114-9		BRN-GRY	AE-26-1500		
17	JOIN FLASHERS	Flasher	J133-6			Q28	J111-1		BLK-BRN	#906		
18	RING #1 FLASHERS	Flasher	J133-6			Q32	J111-2		BLK-RED	#906		
19	RING #2 FLASHERS	Flasher	J133-6			Q27	J111-3		BLK-ORG	#906		
20	RING #3 FLASHERS	Flasher	J133-6			Q31	J111-4		BLK-YEL	#906		
21	RIGHT PLAYFIELD FLASHER UPPER RIGHT BACKBOX FLS	Flasher	J133-3	J134-5		Q26	J111-5	J112-6	BLU-GRN	#906	#906	
22	MOTOR ENABLE	Flasher	J133-6			Q30	J111-6		BLU-BLK	A-15680		
23	JET FLASHER	Flasher	J133-6			Q25	J111-7		BLU-VIO	#906		
24	LEFT PLAYFIELD FLASHER UPPER LEFT BACKBOX FLS	Flasher	J133-6	J134-5		Q29	J111-8	J112-9	BLU-GRY	#906	#906	
25	UPPER LEFT FLASHER	Gen. Purpose	J133-6			Q16	J109-1		BLU-BRN	#906		
26	UP. RIGHT PLAYFIELD FLS LOWER LEFT BACKBOX FLS	Gen. Purpose	J133-6	J134-5		Q15	J109-2	J107-3	BLU-RED	#906	#906	
27	RINGMASTER FLASHERS (2)	Gen. Purpose	J133-6			Q14	J109-3		BLU-ORG	#906		
28	BEAR PLAYFIELD FLASHER LOWER RIGHT BACKBOX FLS	Gen. Purpose	J133-6	J134-5		Q13	J109-4	J107-5	BLU-YEL	#906	#906	

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

Flipper Circuits	Solenoid Type	Voltage Connection		Drive Transistors		Drive Connections		Drive Wire Colors		Coil Part No.	Coil Colors
		Playfield	Power	Power	Hold	Playfield	Power	Power	Hold		
29	LOWER RIGHT FLIPPER	Power	J119-1 (RED-GRN)	Q90		J120-13		YEL-GRN		FL-11630	RED
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-11630	RED
32		Hold	J119-4 (RED-BLU)		Q89		J120-7		ORG-BLU		
33	POPPER	Power	J119-6 (RED-VIO)	Q84		J120-6		YEL-VIO		AL-25-1000	BROWN
34	DIVERTER HOLD	Hold	J119-6 (RED-VIO)		Q86		J120-4		ORG-VIO	FL-11730	YELLOW
35	RINGMASTER MAGNET	Power	J119-8 (RED-GRY)	Q81		J120-3		YEL-GRY		20-10197	
36	UPPER POST	Hold	J119-8 (RED-GRY)		Q83		J120-1		ORG-GRY	AE-27-1200	WHITE

Motor Circuit	Solenoid Type	Voltage Connection		Drive Gates		Drive Connections		Drive Wire Colors		Device Part Number
		Playfield	Power	Power	Hold	Playfield	Power	Power	Hold	
37	NEON	Low Power	J139-2		U3A, U3B		J110-1		BRN-WHT	A-21577
38	NOT USED									
39	MOTOR DIRECTION	Low Power	J133-6		U3G, U3H		J110-4		YEL-WHT	A-15680
40	EDDY BOARD	Low Power	J-139-2		U3E, U3F		J110-5		BLU-WHT	A-21745-2

J1XX = POWER DRIVER BOARD

24-6549 = #44 BULB; 24-8704 = #89 BULB; 24-8768 = #555 BULB; 24-8802 = #906 BULB

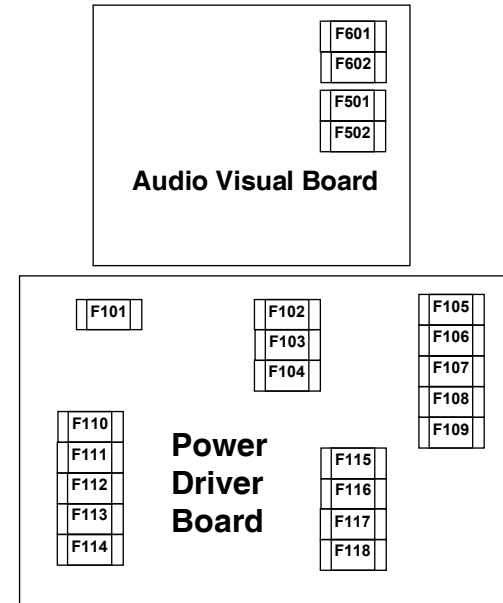
*These general illumination strings do not brighten and dim, they are always on

LAMP MATRIX

Column	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	CIRQUS "R"	CIRQUS "I"	SIDE SHOW	RING-MASTER LEFT	CRANK TOP	MIDDLE JACKPOT	WOW RIGHT "W" TARGET	EXTRA BALL
2 Red-Black J125-2 Q108	GRID TOP	CIRQUS "C"	LEFT LOOP TOP	RING-MASTER 2	CRANK 2	RIGHT JACKPOT	WOW "O" TARGET	TOP JET BUMPER
3 Red-Orange J125-4 Q103	CIRQUS "Q"	GRID MIDDLE/LEFT	LEFT LOOP 3	RING-MASTER 3	CRANK 3	LIGHT STANDUP TARGET	WOW LEFT "W" TARGET	MIDDLE JET BUMPER
4 Red-Yellow J125-5 Q107	CIRQUS "U"	GRID BOTTOM/LEFT	LEFT LOOP 2	RING-MASTER 4	CRANK BOTTOM	LOCK STANDUP TARGET	RING "N"	LOWER JET BUMPER
5 Red-Green J125-6 Q102	GRID TOP/RIGHT	GRID BOTTOM	LEFT LOOP 1	RING-MASTER RIGHT	RIGHT LOOP TOP	RING "R"	RING "G"	RIGHT IN-LANE
6 Red-Blue J125-7 Q106	CIRQUS "S"	GRID MIDDLE	MULTIBALL	SPECIAL	RIGHT LOOP 3	RING "I"	RIGHT OUTLANE	VOLT LEFT
7 Red-Violet J125-8 Q101	GRID MIDDLE/RIGHT	GRID BOTTOM/RIGHT	LOCK	RAZZ	RIGHT LOOP 2	SHOOT AGAIN	LEFT IN-LANE	VOLT RIGHT
8 Red-Grey J125-9 Q105	LEFT JACKPOT	GRID TOP/LEFT	SPOT MARVEL	FRENZY	RIGHT LOOP 1	LEFT OUTLANE	SKILL RING	START BUTTON

J1XX = Power Driver Board

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



SWITCH MATRIX

DEDICATED GROUNDED SWITCHES	Column	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	1 White-Brown J208-1 U18-11	BACKBOX LUCK	SLAM TILT	TROUGH EJECT	LEFT LANE	LEFT SLINGSHOT	LIGHT STANDUP TARGET	LEFT SAUCER	NOT USED	Black-Green J208-13 Lower Right Flipper E.O.S.
Orange-Red J205-2 CENTER COIN CHUTE U17-7	2 White-Red J208-2 U18-9	WIRE RAMP ENTER	COIN DOOR CLOSED	TROUGH BALL 1	RING-MASTER UP	RIGHT SLINGSHOT	LOCK STANDUP TARGET	RIGHT SAUCER	NOT USED	Blue-Violet J212-12 Lower Right Flipper Opto
Orange-Black J205-3 RIGHT COIN CHUTE U17-11	3 White-Orange J208-3 U18-5	START BUTTON	RIGHT LOOP UPPER	TROUGH BALL 2	RING-MASTER MIDDLE	UPPER JET BUMPER	RAMP ENTER	NOT USED	NOT USED	Black-Blue J208-12 Lower Left Flipper E.O.S.
Orange-Yellow J205-4 4 TH COIN CHUTE U17-9	4 White-Yellow J208-4 U18-7	PLUMB BOB TILT	ALWAYS CLOSED	TROUGH BALL 3	RING-MASTER DOWN	MIDDLE JET BUMPER	RAMP MAGNET	BIG BALL REBOUND	NOT USED	Blue-Gray J212-11 Lower Left Flipper Opto
Orange-Green J205-6 Normal Function Srv Crdts	5 White-Green J208-5 U19-11	LEFT LOOP UPPER	INNER LOOP LEFT	TROUGH BALL 4	LEFT RAMP MADE	LOWER JET BUMPER	RAMP MADE	VOLT RIGHT	NOT USED	Black-Violet J208-11 RIGHT SPINNER
Orange-Blue J205-7 Normal Function Volume Dn	6 White-Blue J208-7 U19-9	TOP EDDY	LEFT IN-LANE	POPPER OPTO	TROUGH UPPER	SKILL SHOT	RAMP LOCK LOW	VOLT LEFT	NOT USED	Black-Yellow J212-10 Upper Right Flipper Opto
Orange-Violet J205-8 Normal Function Volume Up	7 White-Violet J208-8 U19-5	RIGHT IN-LANE	LEFT OUTLANE	"WOW" TARGETS	TROUGH MIDDLE	RIGHT OUTLANE	RAMP LOCK MIDDLE	NOT USED	NOT USED	Black-Gray J208-10 LEFT SPINNER
Orange-Grey J205-9 Normal Function Begin Test	8 White-Grey J208-9 U19-7	SHOOTER LANE	INNER LOOP RIGHT	TOP TARGETS	LEFT LOOP ENTER	RING "N", "G"	RAMP LOCK HIGH	NOT USED	NOT USED	Black-Blue J212-9 Upper Left Flipper Opto

J2XX = CPU Board = OPTO, TYPICALLY CLOSED