



MARY SHELLEY'S FRANKENSTEIN

FUSE LIST

Power Supply Board fuses 520-5047-03			CPU Board 520-5003-04		
F1	5V & 12V Logic Power Input	7A, 250V, SB			
F2	5V & 12V Logic Power Input	7A, 250V, SB			
F3	Not used				
F4	18V Controlled lamps	8A, 250V, SB			
F5	34V Solenoids	4A, 250V, SB			
F6	34V Solenoids	5A, 250V, SB			
Back Box fuses			Sound Board 520-5050-03		
F1	18VDC Controlled lamps	8A, 250V, SB			
F2	34VDC Solenoids	8A, 250V, SB			
F3	18VDC Display	8A, 250V, SB			
F4	General Illumination (Violet)	5A, 250V, SB			
F5	General Illumination (Green)	5A, 250V, SB			
F6	General Illumination (Yellow)	5A, 250V, SB			
F7	General Illumination (Brown)	5A, 250V, SB			
F8	Flipper Power & 50V coils	5A, 250V, SB			
F9	34V Flashers (Right)	3A, 250V, SB			
F1	34V Coils (Left)	3A, 250V, SB			
F2	50V Coils	4A, 250V, SB			
F3	50V Laser Kick	5A, 250V, SB			
Solid State Flipper Board fuses 520-5076-00			Line Filter		
F1	Coil A (right flipper)	3A, 250V, SB	Foreign	(220V)	4A, 250V, SB
F2	Coil (hold power)	3A, 250V, SB	Domestic	(110V)	8A, 250V, SB
F3	Coil B (lower left flipper)	3A, 250V, SB			
F4	Coil (hold power)	3A, 250V, SB			
F5	Coil C (upper right flipper)	3A, 250V, SB			

Switched, CPU Controlled Auxiliary & Constant Power Solenoids

Coil No.	Coil or Flashlamp Description	Drive Transistor	CPU wire	CPU connection	PPB wire	PPB connection	Power Line	Power Description	Coil or Flash Type
1L	6-Ball Assembly Lockout	Q46	Gry-Brn	CN11-1	Vio-Brn	J2-10	Brn	34V L	25-1240
1R	3 insert, 1 flasher above "A-N-K"		Gry-Red	CN11-3	Blk-Brn	J9-5	Orn	34V R	#89 (4)
2L	Trough Up-Kicker (TRUK)	Q45	Gry-Red	CN11-3	Vio-Red	J2-9	Brn	34V L	23-800
2R	2 insert, 2 flashers above "F-R"		Gry-Orn	CN11-4	Blk-Red	J9-6	Orn	34V R	#89 (4)
3L	Ball (Auto) Launch	Q5 PPB	Gry-Orn	CN11-4	Wht-Orn/Vio-Orn	J2-8 J8-1/J8-2	Yel-Vio	50V	24-940
3R	3 insert, 1 flasher above "I-N"		Gry-Orn	CN11-3	Blk-Orn	J9-7	Orn	34V R	#89 (4)
4L	Bottom Scoop Kick-Big	Q43	Gry-Yel	CN11-5	Vio-Yel	J2-7	Brn	34V L	23-800
4R	0 insert, 4 Pop Bumper flashers		Gry-Grn	CN11-6	Blk-Yel	J9-8	Orn	34V R	#89 (4)
5L	Top Scoop Kick-Big	Q2 PPB	Gry-Grn	CN11-6	Wht-Blu/Vio-Grn	J2-6 J8-9/J8-10	Yel-Vio	50V	23-800
5R	2 insert, 2 Spinner flashers		Gry-Grn	CN11-5	Blk-Grn	J9-9	Orn	34V R	#89 (4)
6L	Playfield Ball Eject	Q41	Gry-Blu	CN11-7	Vio-Blu	J2-5	Brn	34V L	24-940
6R	1 insert, 3 Upper Left Corner flashers		Gry-Blu	CN11-6	Blk-Blu	J9-10	Orn	34V R	#89 (4)
7L	VUK	Q4 PPB	Gry-Vio	CN11-8	Wht-Vio/Vio-Blk	J2-3 J8-3/J8-4	Yel-Vio	50V	24-940
7R	1 insert, 3 flashers around the VUK		Gry-Vio	CN11-7	Blk-Vio	J9-11	Orn	34V R	#89 (4)
8L	Knocker	Q39	Gry-Blk	CN11-9	Vio-Gry	J2-2	Brn	34V L	23-800
8R	Not Used		Gry-Blk	CN11-8	Blk-Gry	J9-12	Orn	34V R	
9	Ramp Trap Door Right	Q30	Brn-Blk	CN12-1			Red	34V	28-1050
10	L/R Power Relay	Q29	Blk-Red	CN12-2		J6-7	Red-Wht	34V	Relay: 24VDC
11	General Illumination Relay (PSB)	Q28	Brn-Orn	CN12-4		(PSB) CN7-1	Red	34V	Relay: 24VDC
12	Ramp Trap Door Left	Q27	Brn-Yel	CN12-5			Red	34V	28-1050
13	Monster Arms	Q26	Brn-Grn	CN12-6			Red	34V	24-940
14	Right Orbit Ball Diverter	Q25	Brn-Blu	CN12-7			Red	34V	27-1400
15	4 flashers around the VUK	Q24	Brn-Vio	CN12-8		J1-13/J9-1	Orn	34V R	#89 (4)
16	Laser Kick	Q1 PPB	Wht-Gry	CN12-9	Brn-Gry	J8-11/J8-12	Vio-Yel	50V	23-800
17	Top Turbo Bumper	Q11	Blu-Brn	CN19-7			Red	34V	23-700
18	Middle Left Turbo Bumper	Q9	Blu-Red	CN19-4			Red	34V	23-700
19	Middle Right Turbo Bumper	Q8	Blu-Orn	CN19-3			Red	34V	23-700
20	Bottom Turbo Bumper	Q10	Blu-Yel	CN19-6			Red	34V	23-800
21	Left Slingshot	Q12	Blu-Grn	CN19-8			Red	34V	23-800
22	Right Slingshot	Q13	Blu-Blk	CN19-9			Red	34V	23-800
Flipper Circuits (SSFB)		SSFB Drive Transistor	SSFB to coil	SSFB Connection	SSFB to Flipperswitch	SSFB Sw. Connect	SSFB Power Wire	Power Description	Coil
SSFB 1	Lower Right Flipper (coil "A")	SR1, Q2-Q3	Blu-Yel	CN2-7,8	Blu-Vio	CN1-7	Blk-Wht / Blk-Wht	CN2-11, 12 50VDC	23-1100 (090-5030-00)
SSFB 1	Lower Left Flipper (coil "B")	SR2, Q10-Q9	Gry-Yel	CN2-4,5	Blu-Gry	CN1-11	Gry / Gry Grn	CN2-9, 10 8VAC	23-1100 (090-5030-00)
SSFB 1	Upper Right Flipper (coil "C")	SR3, Q16-Q15	Blk-Yel	CN2-1,2	Gry-Vio	CN1-12			23-1100 (090-5030-00)

LAMP MATRIX

Column (*)	1 YEL-BRN (41) CN7-1 Q71	2 YEL-RED (42) CN7-2 Q70	3 YEL-ORN (43) CN7-3 Q69	4 YEL-BLK (40) CN7-4 Q68	5 YEL-GRN (45) CN7-6 Q67	6 YEL-BLU (46) CN7-7 Q66	7 YEL-VIO (47) CN7-8 Q65	8 YEL-GRY (48) CN7-9 Q64
1 RED-BRN (21) CN6-1 Q72	Frankenstein F	Frankenstein T	Frankenstein Millions	Ramp Jackpot	Left Outlane Alive Kick Back	Move Jackpot	Not Used	Not Used
2 RED-BLK (20) CN6-2 Q73	Frankenstein R	Frankenstein E	Stoning Mode	North Pole VUK Jackpot	Left Outlane Special	Change Scene	Not Used	Not Used
3 RED-ORN (23) CN6-3 Q74	Frankenstein A	Frankenstein I	Creature Feature Mode	Ice Cave Ball Eject Jackpot	Left Return Lane Lite Ingolstadt	Ingolstadt Spinner Mode	Not Used	Not Used
4 RED-YEL (24) CN6-5 Q75	Frankenstein N	Frankenstein N	Lynch Mode	Left Orbit Jackpot	Right Return Lane Lite Geneva	Jackpot Grows	Not Used	Not Used
5 RED-GRN (25) CN6-6 Q76	Frankenstein K	Top Turbo Bumper	North Pole Mode	Geneva Lower Scoop	Right Outlane Double Bonus	Justine Mode	Not Used	Not Used
6 RED-BLU (26) CN6-7 Q77	Frankenstein E	Middle Left Turbo Bumper	Light Extra Ball Mode	Sarcophagus Upper Scoop	Ice Cave Mode	Extra Ball	Not Used	Not Used
7 RED-VIO (27) CN6-8 Q78	Frankenstein N	Middle Right Turbo Bumper	Voltage Mode	VUK Entrance Left	Lite Lock 1	Creature Mode	Live Again	Extra Ball Buy-In Button
8 RED-GRY (28) CN6-9 Q79	Frankenstein S	Bottom Turbo Bumper	Graveyard Mode	VUK Entrance Right	Lite Lock 2	Shooter Lane	VUK Entrance Middle	Start Button

(*) 2 digit number in parentheses indicates resistor/wire color code number displayed during diagnostics.

SWITCH MATRIX

Column (*)	1 GRN-BRN (51) CN8-1 Q55	2 GRN-RED (52) CN8-2 Q54	3 GRN-ORN (53) CN8-3 Q53	4 GRN-YEL (54) CN8-4 Q52	5 GRN-BLK (50) CN8-5 Q51	6 GRN-BLU (56) CN8-6 Q50	7 GRN-VIO (57) CN8-8 Q49	8 GRN-GRY (58) CN8-9 Q48
1 WHT-BRN (91) CN10-9	Plump Bob Tilt	Trough #1 (Left)	Bottom 2-Bank Stand-Up Left "F"	Middle Stand-Up "Move Jackpot"	Left Orbit Rollover Bottom	Top Turbo Bumper	Not Used	Not Used
2 WHT-RED (92) CN10-8	4th Coin Switch	Trough #2	Bottom 2-Bank Stand-Up Right "R"	Ramp Stand-Up Left "T"	Left Orbit Rollover Top	Middle Left Turbo Bumper	Not Used	Not Used
3 WHT-ORN (93) CN10-7	Credit Button	Trough #3	Middle 3-Bank Stand-Up Bottom "A"	Ramp Stand-Up Right "E"	Right Orbit Rollover Top	Middle Right Turbo Bumper	Not Used	Not Used
4 WHT-YEL (94) CN10-6	Right Coin Switch	Trough #4	Middle 3-Bank Stand-Up Middle "N"	Right 2-Bank Stand-Up Top "T"	Right Orbit Rollover Bottom	Bottom Turbo Bumper	Not Used	Not Used
5 WHT-GRN (95) CN10-5	Center Coin Switch	Trough #5	Middle 3-Bank Stand-Up Top "K"	Right 2-Bank Stand-Up Bottom "N"	Left Outlane Rollover	Ramp Entrance Gate	"North Pole" VUK	Not Used
6 WHT-BLU (96) CN10-3	Left Coin Switch	Trough #6	Top 3-Bank Stand-Up Left "E"	Not Used	Left Return Lane Rollover	Ramp Exit Gate	"Ingolstadt" Right Orbit Spinner	"The Switch" Lever
7 WHT-VIO (97) CN10-2	Slam Tilt	Trough #7 (Right)	Top 3-Bank Stand-Up Middle "N"	Sarcophagus Upper Scoop	Right Return Lane Rollover	Left Slingshot	"Ice Cave" Above Ball Eject	Left Flipper (via SSFB)
8 WHT-GRY (98) CN10-1	Extra Ball Buy-In Button	Shooter Lane	Top 3-Bank Stand-Up Top "S"	Geneva Lower Scoop	Right Outlane Rollover	Right Slingshot	Mini Orbit Rollover By Eject	Right Flipper (via SSFB)

(*) 2 digit number in parentheses indicates resistor/wire color code number displayed during diagnostic.