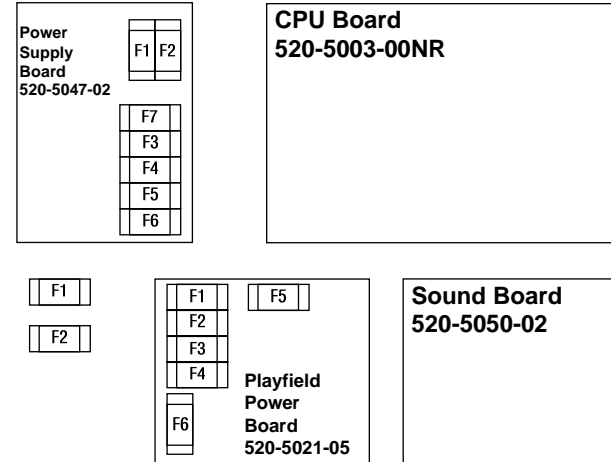




LAST ACTION HERO

FUSE LIST

Power Supply Board fuses 520-5047-02		
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	5A, 250V, SB
F6	34V Solenoids	5A, 250V, SB
F7	90VAC Display Regulator	0.5A, 250V, SB
Back Box fuses		
F1	13VAC Controlled lamps	8A, 250V, SB
F2	25VAC Solenoids	8A, 250V, SB
Playfield Power Board fuses 520-5021-05		
F1	General Illumination (Violet)	5A, 250V, SB
F2	General Illumination (Green)	5A, 250V, SB
F3	General Illumination (Yellow)	5A, 250V, SB
F4	General Illumination (Brown)	5A, 250V, SB
F5	48V Flipper Power	5A, 250V, SB
F6	34V Flashers & Solenoids	5A, 250V, SB
Solid State Flipper Board fuses 520-5070-00		
F1	Coil A	3A, 250V, SB
F2	Coil (hold power)	3A, 250V, SB
F3	Coil B	3A, 250V, SB
F4	Coil (hold power)	3A, 250V, SB
Line Filter		
Foreign	(220V)	4A, 250V, SB
Domestic	(110V)	8A, 250V, SB



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
Row (*)	1 RED-BRN (21) CN6-1 Q72 Grid: Find Benedict 1	2 RED-BLK (20) CN6-2 Q73 Grid: Last 2	3 RED-ORN (23) CN6-3 Q74 Grid: Action 3	4 RED-YEL (24) CN6-5 Q75 Grid: Hero 4	5 RED-GRN (25) CN6-6 Q76 Super Crane Chaos 5	6 RED-BLU (26) CN6-7 Q77 Left Turbo Bumper 6	7 RED-VIO (27) CN6-8 Q78 Top Turbo Bumper 7	8 RED-GRY (28) CN6-9 Q79 Right Turbo Bumper 8
1	Grid: Find Benedict	Grid: Fast Scoring	Crane C	Benedicts Eyeball Top	Shield Left	Spinner	Shoot Again	Smart Missile
2	Grid: Last	Grid: Go to the Movies	Crane R	Benedicts Eyeball Middle	Shield Left Center	Chicken	Lock Bottom (right)	Ripper R
3	Grid: Action	Grid: Save Danny	Crane A	Benedicts Eyeball Bottom	Shield Right Center	Outlanes (2 lamps)	Lock Top (left)	Ripper I
4	Grid: Hero	Grid: Light Extra Ball	Crane N	Top Rollover Left	Shield Right	The Roof	Middle Scoop	Ripper P
5	Super Crane Chaos	Grid: Cat Millions	Crane E	Top Rollover Middle	More Time	Jackpot	Middle Scoop	Ripper P
6	Left Turbo Bumper	Grid: To The Roof	Animated Cat Target	Top Rollover Right	Extra Ball	Ripper	Middle Scoop	Ripper E
7	Top Turbo Bumper	Grid: Red Eye	Ramp	Captive Ball (2 lamps)	M-Ball	Save Danny	Shoot The Crane	Ripper R
8	Right Turbo Bumper	Grid: Big Mistake	Wild Card	Ticket	Return Lanes (2 lamps)	Right Scoop	Middle Scoop	Credit Button

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

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	J2-9	Brn	32V L	25-1240
1R	Top right Police Lights flashers		Blk-Brn	to PPB J1-1	Blk-Brn	J9-5	Orn	32V R	#89 (4)
2L	Ball Release	Q45	Gry-Red	CN11-3	Vio-Red	J2-8	Brn	32V L	23-800
2R	1 insert, 3 playfield upper left flashers		(to PPB)	to PPB J1-2	Blk-Red	J9-6	Orn	32V R	#89 (4)
3L	Auto Launch	Q44 CPU	Gry-Orn	CN11-4	Wht-Orn/Vio-Orn	J2-7 J8-1/J8-2	Yel-Vio	50V	23-800
3R	2 insert, 2 left ramp flashers		(to PPB)	to PPB J1-3	Blk-Orn	J9-7	Orn	32V R	#89 (4)
4L	Crane Lock	Q43	Gry-Yel	CN11-5	Vio-Yel	J2-6	Brn	32V L	32-1800
4R	2 insert, 1 up. r. plfd, 1 panel flashers		(to PPB)	to PPB J1-4	Blk-Yel	J9-8	Orn	32V R	#89 (4)
5L	VUK	Q42 CPU	Gry-Grn	CN11-6	Wht-Grn/Vio-Grn	J2-5 J8-3/J8-4	Yel-Vio	50V	23-800
5R	1 insert, 3 mid right playfield flashers		(to PPB)	to PPB J1-5	Blk-Grn	J9-9	Orn	32V R	#89 (4)
6L	Right Scoop Assembly	Q41 CPU	Gry-Blu	CN11-7	Wht-Blu/Vio-Blu	J2-4 J8-6/J8-7	Yel-Vio	50V	23-800
6R	2 lower plfd, 2 Magnets flashers		(to PPB)	to PPB J1-6	Blk-Blu	J9-10	Orn	32V R	#89 (4)
7L	Left Ball Lock	Q40	Gry-Vio	CN11-8	Vio-Blk	J2-3	Brn	32V L	23-840
7R	4 top left Police Lights flashers		(to PPB)	to PPB J1-7	Blk-Vio	J9-11	Orn	32V R	#89 (4)
8L	Knocker	Q39 CPU	Gry-Blk	CN11-9	Wht-Gry/Vio-Gry	J2-1 J8-9/J8-10	Brn	32V L	23-800
8R	2 insert, 2 lower playfield flashers		(to PPB)	to PPB J1-8	Blk-Gry	J9-12	Orn	32V R	#89 (4)
9	2 insert, 2 Crane flashers	Q30	Brn-Blk	CN12-1	Brn-Blk		Red	32V	#89 (4)
10	L/R Power Relay	Q29	Blk-Red	CN12-2 to PPB J6-9		J6-7	Red-Wht	32V	Relay: 24VDC
11	General Illumination Relay (PSB)	Q28	Brn-Orn	CN12-4		(PSB) CN7-1	Red	32V	Relay: 24VDC
12	Diverter	Q27	Brn-Yel	CN12-5			Red	32V	27-1400
13	Drop Target	Q26	Brn-Grn	CN12-6			Red	32V	23-800
14	Crane motor	Q25	Brn-Blu	CN12-7			Gry-Red	12VDC	motor
15	Middle Scoop	Q24	Brn-Vio	CN12-8			Red	32V	23-800
16	Shaker Motor ¹⁾	Q23	Wht-Gry	CN12-9		(PSB) CN1-P10	Gry/Gry-Grn	9VAC	Motor 12VDC
17	Left Turbo Bumper	Q11	Blu-Brn	CN19-7			Red	32V	23-800
18	Center Turbo Bumper	Q9	Blu-Red	CN19-4			Red	32V	23-800
19	Right Turbo Bumper	Q8	Blu-Orn	CN19-3			Red	32V	23-800
20	Left Slingshot	Q10	Blu-Yel	CN19-6			Red	32V	23-800
21	Right Slingshot	Q12	Blu-Grn	CN19-8			Red	32V	23-800
22	Ripper Kickback	Q13 CPU	Wht-Vio	CN19-9 CPU to J8-11 PPB	Blu/Blk	J8-12	Yel-Vio	50V	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
	Left Flipper (coil "B")	SR2, Q10-Q9	Gry-Yel	CN2-1,2	Blu-Gry	CN1-10	Blk-Wht / Blk-Wht	CN2-8,9 50VDC	23-900 (090-5020-30)
	Right Flipper (coil "A")	SR1, Q2-Q3	Blu-Yel	CN2-4,5	Blu-Vio	CN1-7	Gry / Gry Grn	CN2-6,7 8VAC	23-900 (090-5020-30)

¹⁾ The Shaker uses Q4 located on the board near the shaker motor.

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) CN8-7 Q50	7 GRN-VIO (57) CN8-8 Q49	8 GRN-GRY (58) CN8-9 Q48
Row (*)	1 WHT-BRN (91) CN10-9 Plump Bob Tilt 1	2 WHT-RED (92) CN10-8 4th Coin Switch 2	3 WHT-ORN (93) CN10-7 Start Button 3	4 WHT-YEL (94) CN10-6 Right Coin Switch 4	5 WHT-GRN (95) CN10-5 Center Coin Switch 5	6 WHT-BLU (96) CN10-3 Left Coin Switch 6	7 WHT-VIO (97) CN10-2 Slam Tilt 7	8 WHT-GRY (98) CN10-1 Launch Trigger 8
1	Trough #1 Left	Trough #2	Drop Target C	Right Stand-Up Top	Left Turbo Bumper	Left Return Lane	Not Used	Middle Scoop Left
2	Trough #3	Trough #4	Drop Target R	Right Stand-Up Middle	Bottom Turbo Bumper	Right Return Lane	Not Used	Middle Scoop Right
3	Trough #5	Trough #6	Drop Target A	Right Stand-Up Bottom	Right Turbo Bumper	Left Outlane	Not Used	Scoop Spinner
4	Trough #7	Trough #8	Drop Target N	Top Rollover Left	Left Slingshot	Right Outlane	Not Used	Crane Left Limit
5	Trough #9	Trough #10	Drop Target E	Top Rollover Middle	Right Slingshot	Left Ramp Exit	Not Used	Crane Right Limit
6	Trough #11	Trough #12	Left Lock Top	Top Rollover Right	Right Scoop Rollover	Left Ramp Enter	Drop Target Bar (2)	Smart Missile
7	Left Lock Bottom	Right Scoop Assembly	Right Scoop Rollover	(VUK) Vertical Up Kicker	Right Captive Rollover	Right Captive Rollover	Left Flipper (via SSFB)	
8	Single Left Rollover	Animated Cat Target	Left Captive Ball Target	Ripper Kickback	Right Captive Target	Right Flipper (via SSFB)		

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