



LAST ACTION HERO

FUSE LIST

Power Supply Board fuses 520-5047-02				CPU Board 520-5003-00NR
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	32V Solenoids	5A, 250V, SB		
F6	32V 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				Sound Board 520-5050-02
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	Flipper Power & All 50V coils	5A, 250V, SB		
F6	32V Flashers (Right)	5A, 250V, SB		
F7	32V Coils (Left)	3A, 250V, SB		
F8	50V Coils	4A, 250V, SB		
F9	50V Laser Kick	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				

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 (to PPB)	CN11-1 to PPB J1-1	Vio-Brn	J2-9	Brn	32V L	25-1240
1R	Top right Police Lights flashers		Blk-Brn	J9-5	Orn	32V R	#89 (4)		
2L	Ball Release	Q45	Gry-Red (to PPB)	CN11-3 to PPB J1-2	Vio-Red	J2-8	Brn	32V L	23-800
2R	1 insert, 3 playfield upper left flashers		Blk-Red	J9-6	Orn	32V R	#89 (4)		
3L	Auto Launch	Q44 CPU	Gry-Orn (to PPB)	CN11-4 to PPB J1-3	Wht-Orn/Vio-Orn	J2-7 J8-1/J8-2	Yel-Vio	50V	23-800
3R	2 insert, 2 left ramp flashers	Q5 PPB	Blk-Orn	J9-7	Orn	32V R	#89 (4)		
4L	Crane Lock	Q43	Gry-Yel (to PPB)	CN11-5 to PPB J1-4	Vio-Yel	J2-6	Brn	32V L	32-1800
4R	2 insert, 1 up. r. plfd, 1 panel flashers		Blk-Yel	J9-8	Orn	32V R	#89 (4)		
5L	VUK	Q42 CPU	Gry-Grn (to PPB)	CN11-6 to PPB J1-5	Wht-Grn/Vio-Grn	J2-5 J8-3/J8-4	Yel-Vio	50V	23-800
5R	1 insert, 3 mid right playfield flashers	Q4 PPB	Blk-Grn	J9-9	Orn	32V R	#89 (4)		
6L	Right Scoop Assembly	Q41 CPU	Gry-Blu (to PPB)	CN11-7 to PPB J1-6	Wht-Blu/Vio-Blu	J2-4 J8-6/J8-7	Yel-Vio	50V	23-800
6R	2 lower plfd, 2 Magnets flashers	Q3 PPB	Blk-Blu	J9-10	Orn	32V R	#89 (4)		
7L	Left Ball Lock	Q40	Gry-Vio (to PPB)	CN11-8 to PPB J1-7	Vio-Blk	J2-3	Brn	32V L	23-840
7R	4 top left Police Lights flashers		Blk-Vio	J9-11	Orn	32V R	#89 (4)		
8L	Knocker	Q39	Gry-Blk (to PPB)	CN11-9 to PPB J1-8	Vio-Gry	J2-1	Brn	32V L	23-800
8R	2 insert, 2 lower playfield flashers		Blk-Gry	J9-12	Orn	32V R	#89 (4)		
9	2 insert, 2 Crane flashers	Q30	Brn-Blk	CN12-1			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	Q23 CPU	Wht-Gry	CN12-9 to PPB J8-9	Brn-Gry	J8-10	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	Vio-Yel	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)

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

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