

FUN ZONE

 **Coast to Coast**
a member of the Elaut group
www.cranemachines.com

March 2020

MANUAL



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Main Components



Game Set Up

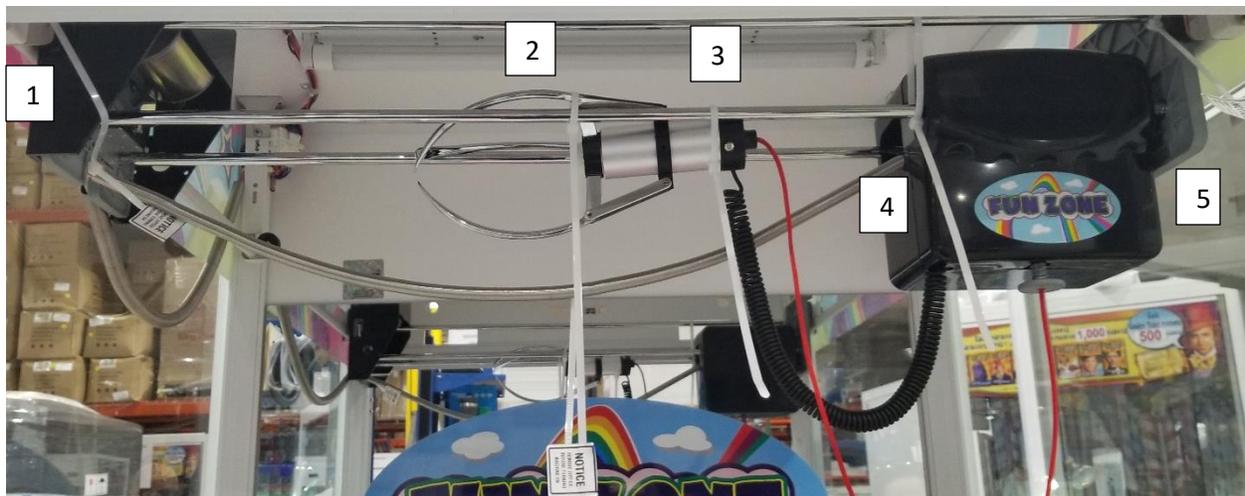
Assembly/Unpacking

Be sure that all packing material is cleared, and the game is sturdy on the ground.

Inside the playfield is a box with the header of the game.

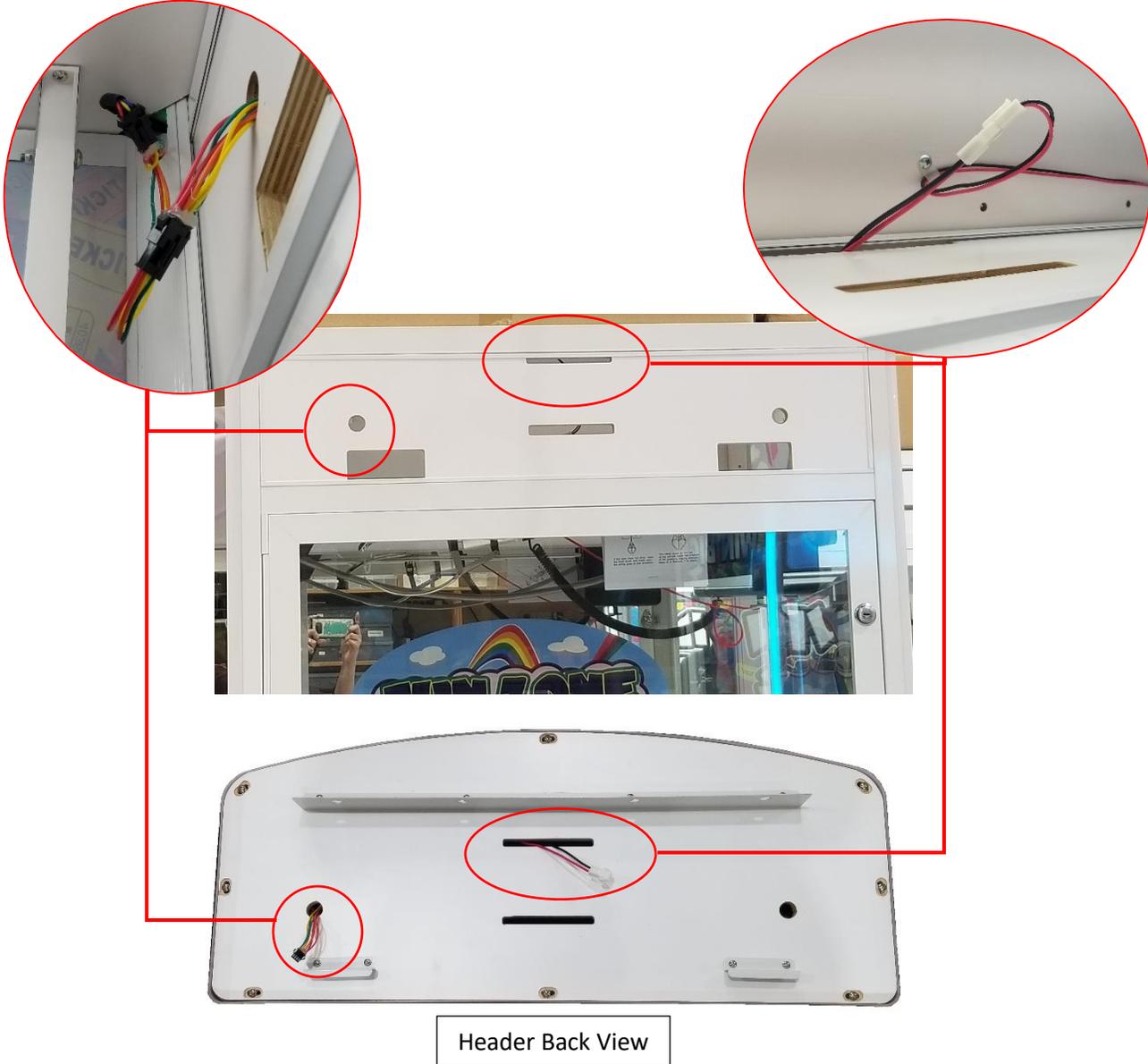


The claw is restrained by 5 zip ties. Cut them carefully before starting game.



Mounting the header

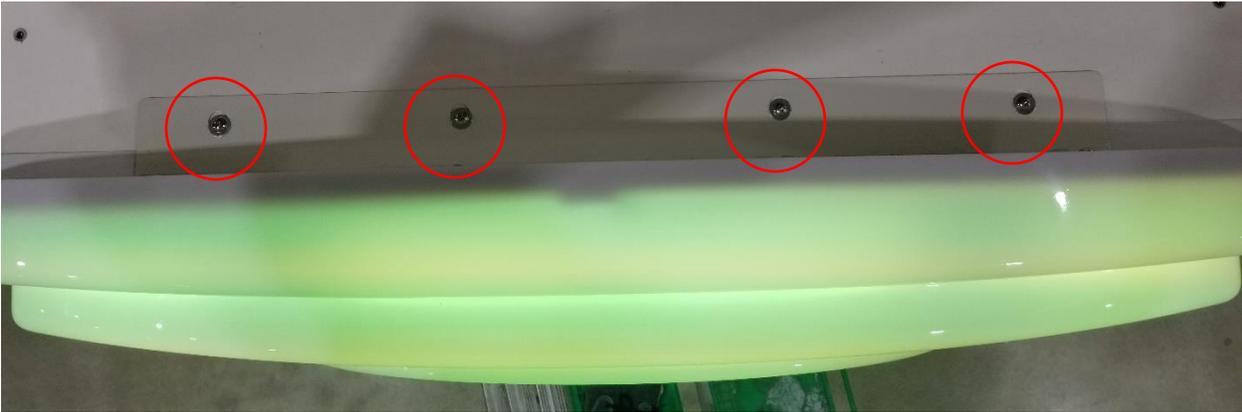
Feed wires through the two holes and connect to existing harness.



Be sure to align lower brackets with the two designated holes.



Once those are aligned use the 4 screws and washers provided with the header to secure it in place.



Game Top View

Claw Strength Set up

VR1 – Strength of initial claw grab in the down position (usually the highest voltage)

VR2 – Strength once claw has the prize and is in motion towards prize chute (usually the lowest voltage)

VR3 – Default 10% (every 10 plays the claw strength remains the same high voltage from initial grab to drop off)

To set these properties you will need to have the machine powered off, and find the control panel, pictured below.



1. Press the Free Play button (located in the center of panel above) while cycling power on to the machine.
2. The Credit Display will flash. This indicates you are ready to change the settings.
3. Using the joystick, scroll through the options by using the forward ▼ and back ▲ motions.
(Caution: when setting these voltages do not exceed 45V as this will lower the life of your solenoid coil over time)
4. Once all settings have been changed turn the game off to save current settings.
5. Turn game back on and setting should be set.

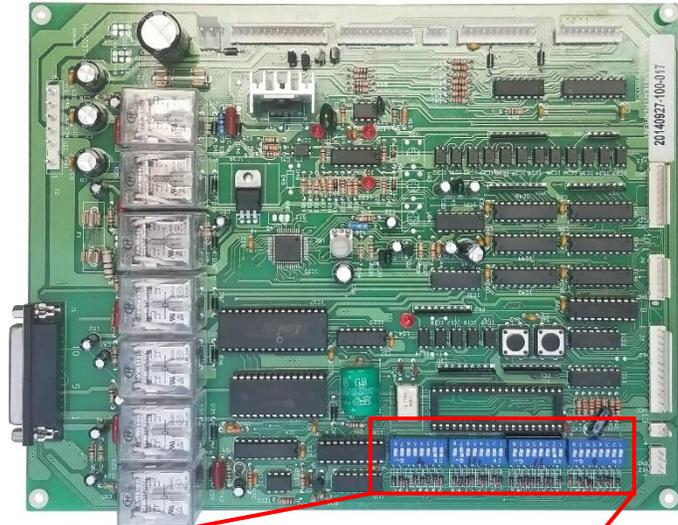
Game Sequence and Behavior

Boot up

- Music, RGB lights turn on
- Claw returns to home position, drops and pulls back up for self “switch test”

Programming

Dip switch settings on Main board. Default settings are in green. Standard Settings are set to \$.50 play.



Dip Switch 1		0=Off 1=ON							
Dip Switch Setting:	Function	1	2	3	4	5	6	7	8
Not used		0	0	0	0	0	0	0	0

Dip Switch 2		0=Off 1=ON							
Dip Switch Setting:	Function	1	2	3	4	5	6	7	8
Claw moves to middle at beginning of game play	Yes	1							
	No	0							
Display	Credit		0						
	Play		1						
Not used				0	0	0	0	0	0

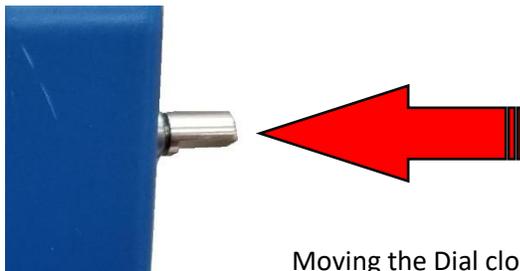
Dip Switch 3								0=Off	1=ON
Dip Switch Setting:	Function	1	2	3	4	5	6	7	8
Coin Mech 1	1Coin 1Credit	0							
	1Coin 2Credits	1							
Bill Acceptor	1Pulse 1Credit		0						
	1Pulse 2Credits		1						
4 Credits a play	No			0					
	Yes			1					
Credits to Play	1Credit 1Play				0	0	0		
	2Credits 1Play				1	0	0		
	4Credits 1Play				0	1	0		
	8Credits 1Play				1	1	0		
	20Credits 1Play				0	0	1		
	28Credits 1Play				1	0	1		
	4Credits 3Plays				0	1	1		
	20Credits 15Plays				1	1	1		
Game Time	15 Sec							0	0
	30 Sec							1	0
	45 Sec							0	1
	60 Sec							1	1

Dip Switch 4								0=Off	1=ON
Dip Switch Setting:	Function	1	2	3	4	5	6	7	8
Coin Memory	Clear	1							
	Save	0							
Home Position is not the same as Exit			0						
Home Position is the same as the Exit			1						
Test Clip Voltage (Low)				1	0	0			
Test Clip Voltage (Mid)				0	1	0			
Test Clip Voltage (high)				0	0	1			
Attract Mode	On						0		
	Off						1		
Sensor Check	On (Test)							1	
	Off (Open)							0	
Play until you win	On								0
	Off								1

**Note: When in Sensor check the display will show "11", Check if sensor is working by blocking it with any solid object. Turn off switch to go back to normal operation.*

Fare Play

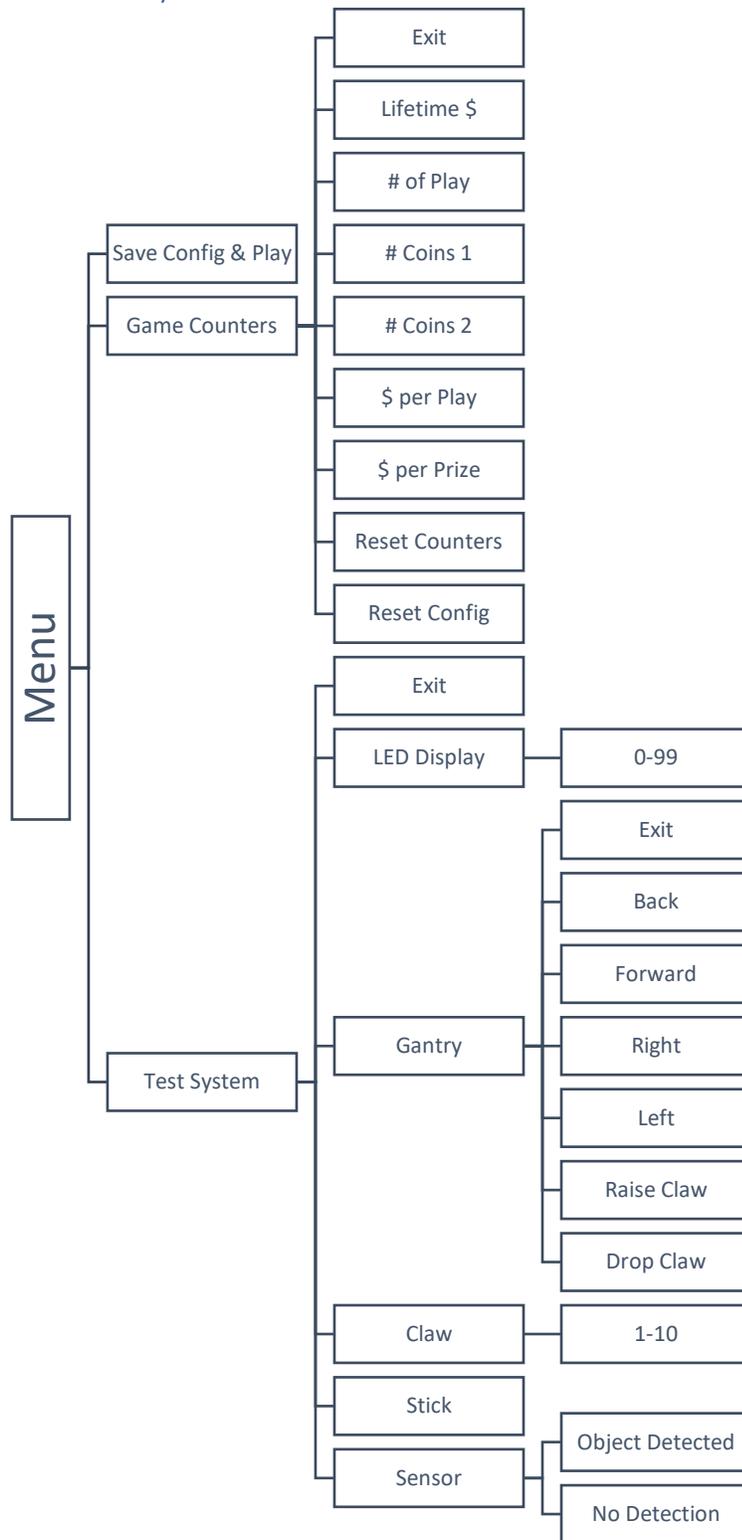
Using the Stage 1 hand controller you can get into the programming options of your crane machine.



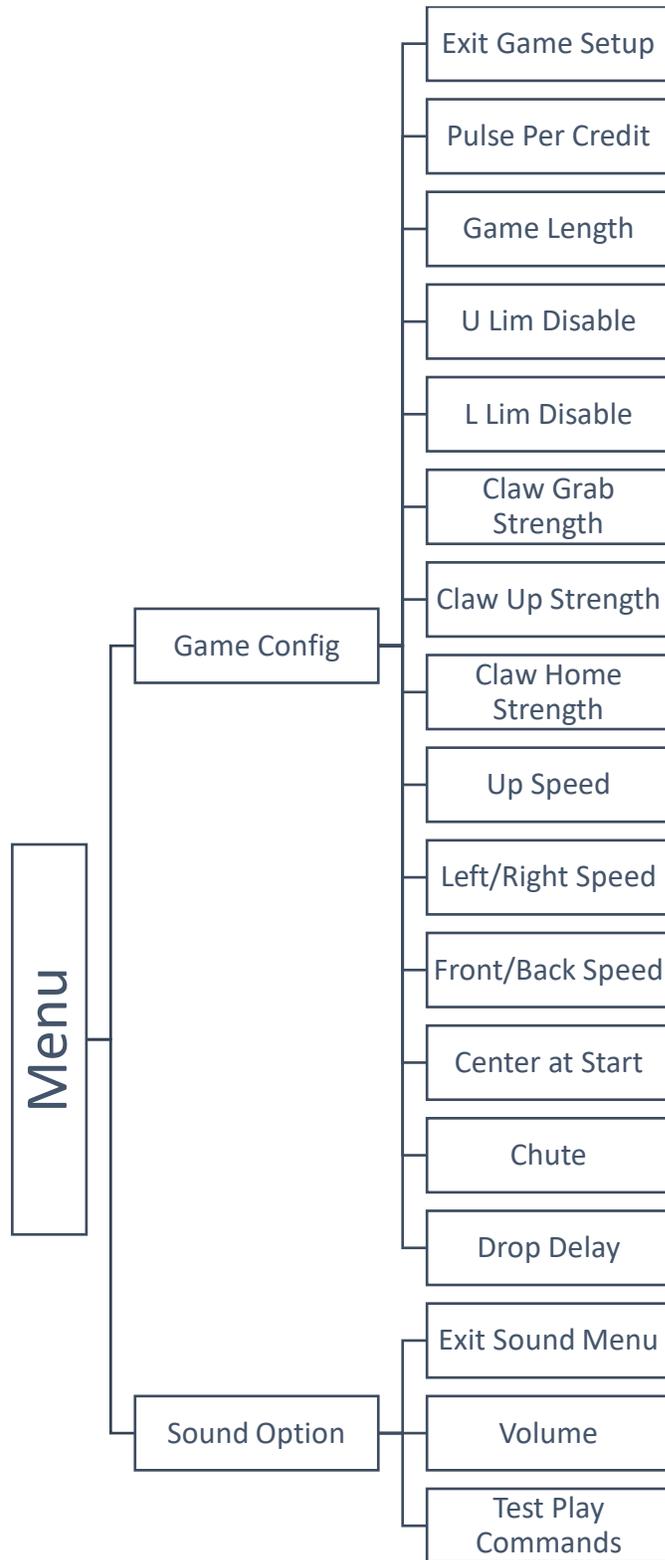
Moving the Dial clockwise will move through the option. Counterclockwise goes back to the previous option on your Display Screen. Pressing the Dial in will select the option the arrow is on.



Programing Tree Fare Play



Programming Tree Continued



Programming Option Fare Play

1. Save Configuration and Play

2. Game Counters

- a. Exit Counters
- b. Lifetime \$ *(it displays the amount of \$ earned by the machine)*
- c. #Play *(The amount of games played)*
- d. #Coins1 *(The amount of coins inserted in coin mech.)*
- e. #Coins2 *(The amount of bills inserted in the bill validator)*
- f. \$ Per Play *(This needs to be dialed in for the software to properly calculate statistics, cost of a game in \$)*
 - i. From \$0.25 To \$15
- g. \$ Per Prize *(This needs to be dialed in for the software to properly calculate statistics, estimated prize cost in \$)*
 - i. From \$0.25 To \$600
- h. Reset Counters
- i. Reset Config

3. Test System

- a. Exit Test Menu
- b. LED display *(User can set what number to be displayed on the timer/credit 7 segments display)*
 - i. From 0 to 99
- c. Gantry *(user can move the gantry)*
 - i. Done Exit
 - ii. Move Back
 - iii. Move Front
 - iv. Move Right
 - v. Move Left
 - vi. Raise Claw
 - vii. Drop Claw
- d. Claw *(User can test the claw solenoid by dialing in the voltage % from 48Volts, notes multiplied by 10)*
 - i. From 1 to 10
- e. Stick *(Display the current state of the joystick)*
 - i. No text means joystick is in center position *(No switches are depressed).*
 - ii. Back *(Joystick is pulled towards the player)*
 - iii. Front *(Joystick is pushed forward)*
 - iv. Right *(Joystick is pushed to the right)*
 - v. Left *(Joystick is pushed to the left)*
 - vi. Back Right *(Joystick is pulled toward the player and pushed to the right)*
 - vii. Back Left *(Joystick is pulled toward the player and pushed to the left)*
 - viii. Front Right *(Joystick is pushed forward and to the right)*
 - ix. Front Left *(Joystick is pushed forward and to the left)*
- f. Sensor *(print price sensor output)*
 - i. Object Detected *(An object is placed in front of the prize sensor in the prize shoot, and the object is detected correctly)*
 - ii. No Detection *(No objects are present in the prize shoot or sensor is malfunctioning)*

4. Game Config

- a. Exit Game Setup
- b. Pulse per credit
 - i. *From 1 to 80*
- c. Game Length (*in seconds*)
 - i. *1 to 99*
- d. U Lim Disable
 - i. *Yes/No*
- e. L Lim Disable
 - i. *Yes/No*
- f. Claw Grab Strength (*% of 48Volts*)
 - i. *From 10% to 100%*
- g. Claw Up Strength (*% of 48Volts*)
 - i. *From 10% to 100%*
- h. Claw Home Strength (*% of 48Volts*)
 - i. *From 10% to 100%*
- i. Up Speed (*% of max motor speed*)
 - i. *From 20% to 100%*
- j. Left/Right Speed (*% of max motor speed*)
 - i. *From 20% to 100%*
- k. Front/back Speed (*% of max motor speed*)
 - i. *From 20% to 100%*
- l. Center @ Start
 - i. *Yes/No*
- m. Chute
 - i. *Front Left*
 - ii. *Front Right*
 - iii. *Back Left*
 - iv. *Back Right*
- n. Drop Delay (*in milli seconds*)
 - i. *From 200mS to 5000mS*

5. Sound Options

- a. Exit Sound Menu
- b. Volume
 - i. *From 0 to 32 (where 0 is muted, and 32 is max volume).*
- c. Test play commands for all sounds

Error Codes and Troubleshooting

Error Code	Description
1	Up/Down Motor Error
2	Forward/Back Motor Error
3	Left/Right Motor Error
4	Coin Mech 1 Error
6	Forward/Back Motor Error
8	Main Controller Error
11	Sensor Test Mode
71	Drop Button Stuck
	Claw Error

E1: Up/Down Motor Error

Troubleshooting

Check up and down limit switches inside claw gantry.

Check that motor is connected and turning on.

E2: Forward/Back Motor Error

Troubleshooting

Check forward and back limit switches on the claw gantry.

Check that motor is connected and turning on.

E3: Left/Right Motor Error

Troubleshooting

Check left and right limit switches on the claw gantry.

Check that motor is connected and turning on.

E4: Coin Mech 1 Error

Troubleshooting

Check that the coin mech is set to "NO" (normally Open).

Check harnessing for any break in the wires.

E6: Forward/Back Motor Error

Troubleshooting

Check forward and back limit switches on the claw gantry.

Check that motor is connected and turning on.

E8: Main Controller Error

Troubleshooting

Check that board is receiving proper voltages.

Check for floating grounds.

Change ram IC chip.

E11: Sensor Test Mode

Troubleshooting

Make sure that you are not in test mode. Dip switch 4 bank 7.

Make sure Sensor is operational

Check power and ground wires.

E71: Drop Button Stuck

Check button switch is wired properly.

Check for any obstruction to switch.

Replay button.

Claw Error

Troubleshooting

Check the Claw fuse.

Check the DC Coil inside claw.

Check that string is not stuck.

Components

Stage One Controller Fare Play

Part Number: 7100BRD020

Location: Inside lower cabinet on the top right drawer.

I.D. Switch Setting: All Off (00000000)



RGB Light controller board

Part Number: TBA

Location: Inside front door panel.

I.D. Switch Settings: 00000000 (all off if only using one crane)

This board links multiple cranes' RGB light together. If you use multiple cabinet and wish to have them all the same follow the settings below.



Crane #	Dip 1	Dip 2	Dip 3	Dip 4
1	Off	Off	Off	Off
2	On	Off	Off	Off
3	Off	On	Off	Off
4	On	On	Off	Off
5	Off	Off	On	Off
6	On	Off	On	Off
7	Off	On	On	Off
8	On	On	Off	On
9	Off	Off	Off	On
10	On	Off	Off	On
11	Off	On	Off	On
12	On	On	On	On
13	Off	Off	On	On
14	On	Off	On	On
15	Off	On	On	On
16	On	On	On	On

Main Controller Board

Part Number: 7100BRD001

Location: Inside lower cabinet

I.D Switch Settings: Defaults (see Programming for more options)

SW1 – 00000000(all off)

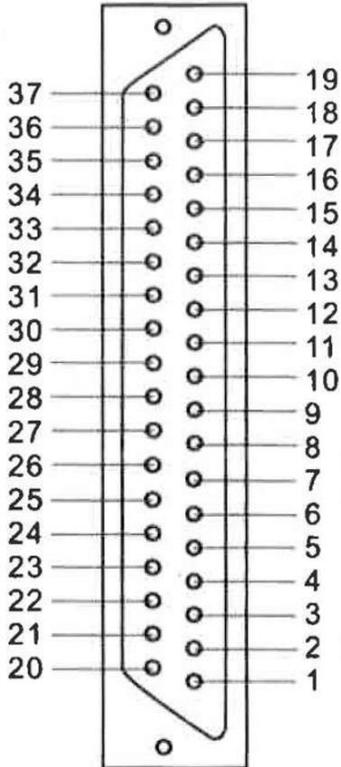
SW2 – 11000000 (1 and 2 On)

SW3 – 00010010 (4 and 7 On)

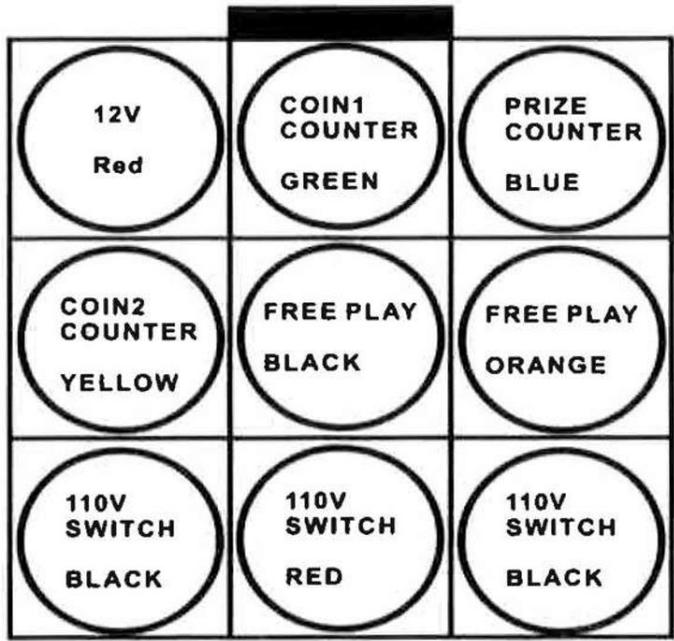
SW4 – 11000000 (1 and 2 On)



COLOR	DESCRIPTION	
BLACK	110V	37
PURPLE	BILL ACCEPTOR	36
BLACK	BUTTON LIGHT	35
BROWN	BUTTON LIGHT	34
BLACK	GND	33
BROWN	JOYSTICK	32
RED	JOYSTICK	31
ORANGE	JOYSTICK	30
YELLOW	JOYSTICK	29
BLUE	JOYSTICK	28
BLACK	VR	27
BROWN	VR	26
RED	VR	25
ORANGE	VR	24
BROWN	VOLTAGE METER-	23
BLACK	VOLTAGE METER+	22
BLUE	BILL ACCEPTOR	21
RED	110V	20



	DESCRIPTION	COLOR
19	110V GND	GREEN
18	ANTI SHAKER	BLACK
17	ANTI SHAKER	PURPLE
16	SP	PURPLE
15	SP	GRAY
14	+12V	RED
13	COIN2	EMPTY
12	COIN1	WHITE
11	GND	BLACK
10	DISPLAY	ORANGE
9	DISPLAY	YELLOW
8	DISPLAY	GREEN
7	DISPLAY	BLUE
6	DISPLAY	PURPLE
5	DISPLAY	GRAY
4	DISPLAY	WHITE
3	DISPLAY	PINK
2	DISPLAY	BLACK
1	DISPLAY	RED



Connector	Pin	Description	Wire Color
J1: D Type Connector (To Crane)			
		See Chart diagram	
J2: Power Connector			
	1	Ground	Black
	2	+5V	Red
	3	+24V	Orange
	4	48V	Yellow
	5	+48V	Green
	6	+12V	Blue
J3: Speaker, Sensor Connector			
	1	+12V	Red
	2	Ground	Black
	3	Sensor Out	White
	4	Sensor In	Brown
	5	Free Play	Orange
	6	Balancer	Black
	7	NC	
	8	NC	
	9	Speaker +	Gray
	10	Speaker -	Purple
J5: Coin Selector, Rotary motor control, Counter Connector			
	1	Ground	Black
	2	Ground	Black
	3	Ground	Black
	4	Coin Selector 1 Signal	Black
	5	Coin Selector 2 Signal	White
	6	Inhibit Coin Mech Signal	Green
	7		
	8	Coin Selector 1 Power +12V	Red
	9	Counter Out	Blue
	10	Counter In	Green
	11	Counter Power +12V	Red
	12		
J6: Direction ket (Joystick)			
	1	Key (Get)	Blue
	2	Key (down)	
	3	Key (Left)	Yellow
	4	Key (Right)	Orange
	5	Key (Back)	Red
	6	Key (Forward)	Brown

	7	Ground	Black
J7: Display Connector			
	1		
	2		
	3	Prize Counter	Yellow
	4	"Catch" Light	Brown
	5	+12V	Black
	6	7 Seg Display	
	7	7 Seg Display	
	8	7 Seg Display	
	9	7 Seg Display	
	10	7 Seg Display	
	11	7 Seg Display	
	12	7 Seg Display	
	13	+5V	
J10: Display Connector 2			
	1	+5V	Red
	2	Ground	Black
	3	Double 8 Digit Display (7 Seg)	Pink
	4	Double 8 Digit Display (7 Seg)	White
	5	Double 8 Digit Display (7 Seg)	Gray
	6	Double 8 Digit Display (7 Seg)	Purple
	7	Double 8 Digit Display (7 Seg)	Blue
	8	Double 8 Digit Display (7 Seg)	Green
	9	Double 8 Digit Display (7 Seg)	Yellow
	10	Double 8 Digit Display (7 Seg)	Orange