

Service Manual

Innovative Concepts in Entertainment 10123 Main Street Clarence, New York 14031 (716) 759-0360 www.icegame.com

Table of Contents

What's included	3
Safety and Warnings	4
Game Assembly	5 - 9
Program Options	10 - 14
Marquee Install	15 - 16
Conveyor replacement	17
Safety Sensor replacement	18
Assembly Drawings	19 - 21
Suggestive parts	22
Warranty	23

Your game should include two bags of Rings, one bag of bolts with washers, and the upper marquee assembly.

If any of these items are missing, please contact ICE Service Department.



SAFETY AND WARNINGS BEFORE YOU BEGIN

WARNING: WHEN INSTALLING THIS GAME, A GROUNDED A.C. RECEPTACLE MUST BE USED. FAIL-URE TO DO SO COULD RESULT IN INJURY TO YOURSELF OR OTHERS. FAILURE TO USE A GROUNDED RECEPTACLE COULD ALSO CAUSE IMPROPER GAME OPERATION, OR DAMAGE TO THE ELECTRONICS.

NOTE: THIS GAME IS INTENDED FOR INDOOR USE ONLY.

DO NOT DEFEAT OR REMOVE THE GROUNDING PRONG ON THE POWER CORD FOR THE SAME REASON AS GIVEN ABOVE. USING AN IMPROPERLY GROUNDED GAME COULD VOID YOUR WARRANTY.

HAVE A QUALIFIED ELECTRICIAN CHECK YOUR A.C. RECEPTACLE TO BE SURE THE GROUND IS FUNCTIONING PROPERLY.

THIS GAME IS DESIGNED TO DISSIPATE STATIC ELECTRICITY THROUGH THE GROUNDING PLANE OF THE GAME. IF THE A.C. GROUND DOES NOT WORK, THE GAME COULD DISCHARGE STATIC ELECTRICITY THROUGH THE GAME CIRCUITRY, WHICH COULD CAUSE DAMAGE.

THE POWER SUPPLY IS NOT VOLTAGE ADJUSTABLE. TO OPERATE THE GAME AT VOLTAGES OTHER THAN THOSE IT WAS DESIGNED FOR. PLEASE CONTACT OUR SERVICE DEPARTMENT FOR VOLTAGE CONVERSION INFORMATION.

WARNING

DO NOT remove any of the components on the main board (e.g. compact flash and eproms) while the game is powered on. This may cause permanent damage to the parts and the main board. Removing any main board component part while powered on will void the warranty.

ALWAYS REMOVE POWER TO THE GAME, BEFORE ATTEMPTING ANY SERVICE,
UNLESS NEEDED FOR SPECIFIC TESTING. FAILURE TO OBSERVE THIS PRECAUTION
COULD RESULT IN SERIOUS INJURY TO YOURSELF OR OTHERS.

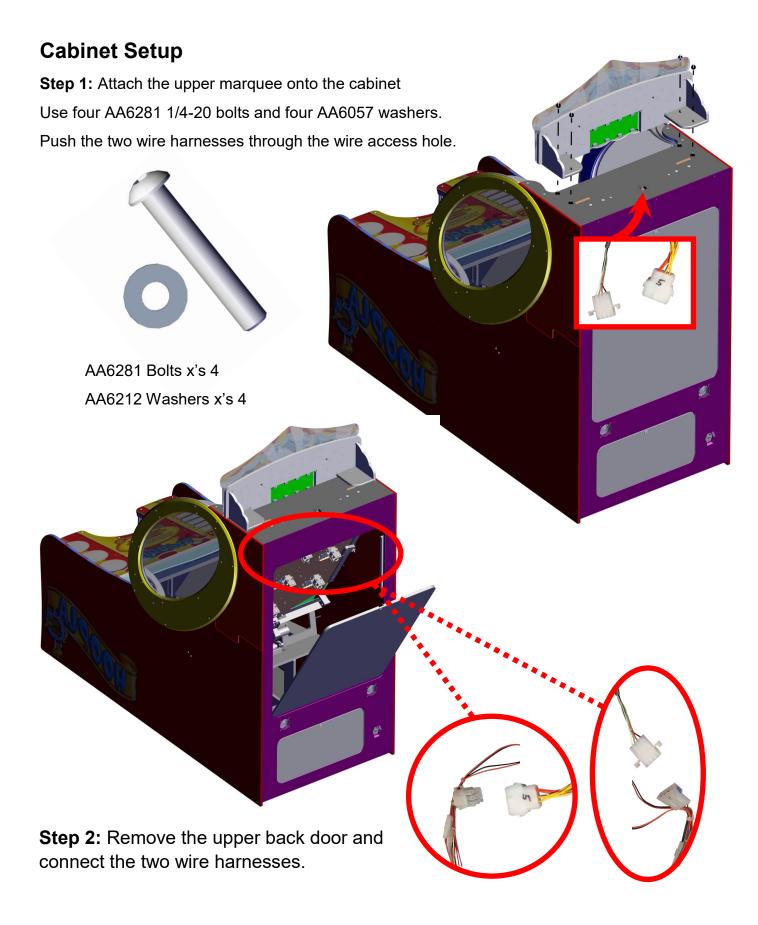
THIS GAME IS NOT SUITABLE FOR INSTALLATION IN AN AREA WHERE A WATER JET COULD BE USED.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

AC Power Information

The games main fuse is accessed through the back of the game at the power mod. Above the power cord is a small panel that contains the main fuse.

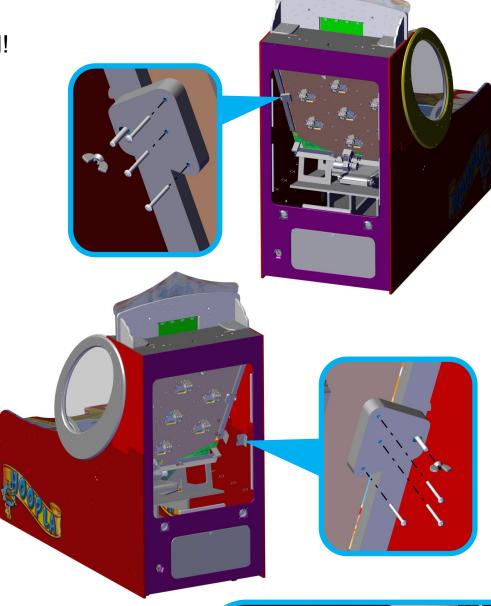
The value of the fuse for 120 volt users is 3 AMPS at 250Volt type slow blow.



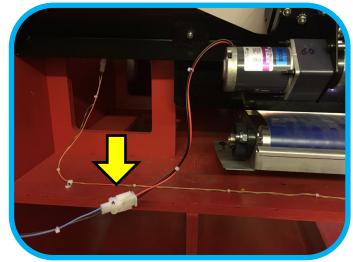
Step 3:

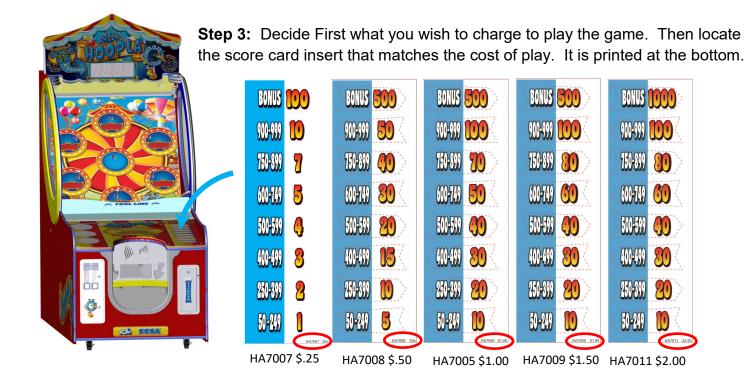
Remove on both sides the playfield stop cleats.

Do not discard!



The game is shipped with the motor power unplugged. After removing the cleats, plug the motor harness together.





Step 4: Remove the control panel top.

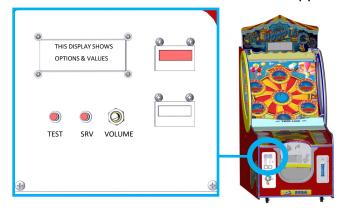
(Use a 5/32" Allen wrench to loosen 8 screws) Once the plastic is removed, you can tape the new score card into position and reattach the control panel.



Step 5: Unlock and open the upper coin door. Press the "TEST" button. This will cause the upper

display on the game to change to "TEST".

NOTE: The small display inside the coin door will display the test and program menus. Press the "SRV" button to go to the next option or menu. Press the "TEST" button to select that option or menu.



The next steps show the configuration for a \$1.00 game.

Step 4: Press "SRV" until the menu shows "8.Game SETTINGS".

Step 5: Press "TEST" to select this menu group.

Step 6: Press "SRV" until it shows "SET COST OF PLAY". Step 7: Press "TEST" to change the value until is shows "\$1.00". ◄ Step 8: Press "SRV" until it shows "SET AWARD DECAL VALUES". Step 9: Press "TEST" until it shows "100". \$1.00 COST OF PLAY INSERT Step 10: Press "SRV" once. Step 11: Press "TEST" until it shows "80". Step 12: Press "SRV" once. Step 13: Press "TEST" until it shows "60". Step 14: Press "SRV" once. Step 15: Press "TEST" until it shows "40". Step 16: Press "SRV" once. Step 17: Press "TEST" until it shows "30". Step 18: Press "SRV" once. Step 19: Press "TEST" until it shows "20". Step 20: Press "SRV" once. Step 21: Press "TEST" until it shows "10". Step 22: Press "SRV" until it shows "Exit Game Settings"

Step 26: Press "SRV" until it shows "11.EXIT"

Step 23: Press "TEST"

Step 24: Press "SRV" to change N to Y. **Step 25:** Press "TEST" to exit and accept

Step 27: Press "TEST" to exit programming and return to game mode.

Step 6: Use the bag with 12 rings or count out 12 Rings and put into the game.



Entering Programming Options:

Press and hold the "TEST" button located in the upper coin door. If the "TEST" button is pressed during game mode, the button will be ignored. The BONUS display will display the word "tESt".



The Operator moves from one test to the next using the SERVICE button

- □ The Operator can only move forwards through the listed Test Functions
- □ The last Test Function to be displayed is EXIT. If the Operator presses the SERVICE button again when this Test Function is displayed, the sequence loops back to the start and shows the FIRST test again.
- □ The Test Functions will be displayed in sequence as follows:
 - GAME SETTINGS
 - 2. BOOKKEEPING
 - 3. SYSTEM INFO
 - 4. LIGHTING TEST
 - 5. DISPLAY TEST
 - 6. INPUT TEST
 - 7. OUTPUT TEST
 - 8. CAN BUS TEST
 - 9. AUDIO SETTINGS
 - 10. SET DATE/TIME
 - 11.EXIT

The Operator engages the selected Test Function by pressing and releasing the "TEST" button.

The text "TEST MODE" will be displayed on the 1st line of the LCD screen while the current Test Function will be displayed on second line.

Game Settings DOCUMENT 053118

General Instructions:

Game Settings contains parameter adjustment functions for Game Modes. Note that depending on Game Mode selected, not all functions will be available. Pressing the "TEST" button will activate the selected Game Setting Function. Pressing the "SERVICE" button will move to the next available test function. Any current Game Setting operation will be aborted.

Operation:

□ Set Difficulty Level

SET DIFFICULTY SETTING: 5

- This controls the availability of the different peg values.
- Example: 1 = MORE high value pegs will appear during the game.
- The difficulty does NOT affect the BONUS ROUND, it only affects the 1st round of gameplay when the player is trying to hoop all 7 pegs.

Pressing the TEST button will cycle through the following values: 1,2,3,4,5,6,7,8,9,10

- □ Set Cost Of Play
 - This function only sets Cost of Play.

SET COST OF PLAY SETTING: 0.50

- To change to cost of play to the Player, the Credit Board settings should be used.
- Pressing the TEST button will cycle through the following values:

FREEPLAY, 0.05c, 0.10, \$4.90, \$4.95, \$5.00 (Increments of 0.05)

□ Set COIN Pulse.

COIN 1 SETTING: 0

• This sets how many pulses to start the game.

COIN 2 SETTING: 0

 This pulse is equal to the cost of the game. Use as a multiplier for credits.

BILL VALIDATOR SETTING: 0

 This pulse is equal to the cost of the game. Use as a multiplier for credits.

□ Set Ticket Value

SET TICKET VALUE SETTING: 0.01

- This options sets the cost (value) of your tickets that you give.
- Pressing the TEST button will cycle through the following values:
- 0.001, 0.002, 0.005, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10

□ Set Ticket Mode

SET TICKET MODE SETTING: FULL

- This function sets the ticket output mode for either 2 point tickets (HALF), normal tickets (FULL), or play for fun (no tickets).
- Pressing the "TEST" button will cycle through the following options:
 - Full
- Half

□ Set Bonus Type

SUPERBONUS TYPE FIXED

- This will function will allow you to enable a fixed or incremental bonus.
- Pressing the TEST button will cycle through the following values:
 - FIXED The Bonus value is fixed at the value specified in Bonus Max and does NOT increase.
 - INCREMENTAL The Bonus value will increase each game by the value specified in Bonus Inc, up to the value specified in Bonus Max.

¬ Set Bonus Max

SUPERBONUS MAX VALUE: 500

- This function sets the Bonus Maximum Value. Pressing the TEST button will cycle through the following values:
 - 25 9999 in increments of 25.

□ Set Bonus Start

SUPERBONUS START VALUE: 100

- This function sets the Bonus Start Value. Pressing the TEST button will cycle through the following values:
 - 0, 10, 50, 100, 200, 250, 500.....

□ Set Bonus Increment.

SUPER BONUS INC VALUE: 1

- This function sets the Super Bonus Increment Value (only used if Super Bonus Type is set to incremental)
- Pressing the TEST button will cycle through the following values:
 - 0.1, 0.25, 0.5, 1, 2, 3, 4, 5, 10
- □ Set Mercy Tickets

SET MERCY TICKET SETTING: 1

- This option will pay this amount if no points are scored.
- Pressing the TEST button will cycle through the following values:
 - 0,1,.....19, 20
- □ Bonus Game

BONUS GAME SETTING: ENABLE

- When Enable is selected...This function ACTIVATES a Bonus Round for gameplay after all 7 pegs are hooped in the regular game round.
- Pressing the TEST button will cycle through the following values:
 - Enable, Disable
- □ Set Game Time BASE: Default 25 sec.

SET GAME TIME BASE: 25 SEC

- This function allows the base game time period to be set.
- Pressing the TEST button will cycle through the following values:
 - 15s, 20s, 25s, 30s, 35s.
- □ Set Game Time INCREMENT: Default 1 Sec

SET GAME TIME INCR: 1 SEC

- This function allows the Regular Game Time to increase "X seconds" if all 7 pegs have NOT been hooped in the first round. (The amount of games played will determine when the time increase. This will be controlled in "SET GAMETIME HOLDOFF"... programmed later in the settings.)
- □ Set Game Time DECREMENT: Default 8 sec

SET GAME TIME DECR: 8 SEC

 This function allows the Regular Game Time to DECREASE "X seconds" if all 7 pegs HAVE BEEN hooped (when bonus round is disabled) OR if a BONUS ROUND has been won.

□ Set Game Time HOLDOFF:

SET GAME TIME HOLDOFF: 5 GAMES

- This function allows you to set how many games must be played before the "GAME TIME INCREMENT" is activated.
- Pressing the TEST button will cycle through the following values:
 - .01 = 10 games, .25 = 4 games, .5 = 2 games, and 1 = 1 game.
- □ Set Bonus Game Time BONUS: It is recommended to leave it at 8 sec, our default.

SET GAME TIME BONUS: 8 SEC

- This function allows the bonus game time period to be set.
- Pressing the TEST button will cycle through the following values:
 - 1s 15s
- □ Set Game Time CYCLE: It is recommended to leave it at 1 sec, our default.

SET GAME TIME CYCLE: 1.00 SEC

- This sets the time period for one revolution of the 6 bonus Pegs.
- Pressing the TEST button will cycle through the following cycle time options:
 - .5 SEC, .75 SEC, 1 SEC, 1.25 SEC, 1.5 SEC, 1.75 SEC.
- □ Set Game Time DIRECTION: It is recommended to leave it at 2, our default.

SET GAME TIME DIR: 2 (0=CW) SEC • This sets the direction of spin. Pressing the TEST button will cycle through the following values:

- 0= CW Clockwise, 1 CCW Counter Clockwise, and
- 2 = Random Direction.
- □ Set Target Value

SET TARGET VALUE RED: 200 POINTS

- This sets the value for the RED points. Pressing the TEST button will cycle through the following values:
 - 150,175,200,225,250.
- □ Set Target Value

SET TARGET VALUE BLUE: 100 POINTS

- This sets the value for the BLUE points. Pressing the TEST button will cycle through the following values:
 - 75,100,125,150.
- □ Set Target Value

SET TARGET VALUE GREEN: 50 POINTS

- This sets the value for the GREEN points. Pressing the TEST button will cycle through the following values:
 - 25,50,75

□ Set Award Decal Values

SET DECAL VALUE 900 PTS= 100 TKTS

- This sets the ticket value for the 900 points range. Pressing the TEST button will cycle through available values.
- Pressing the SERVICE button will step to the next Points range:
- Bonus = adjust from 0-9999
 900 999 = adjust from 0-500
- 750 899 = adjust from 0-500 = 600 749 = adjust from 0-200
- 500 599 = adjust from 0-200 = 400 499 = adjust from 0-100.
- 250 399 = adjust from 0-100 = 25 249 = adjust from 0-100

□ CHEAT Sensor Settings

CHEAT Sensor Setting: ON

- This sets the sensitivity level of the Cheat Sensor.
 - OFF = Cheat Sensor OFF

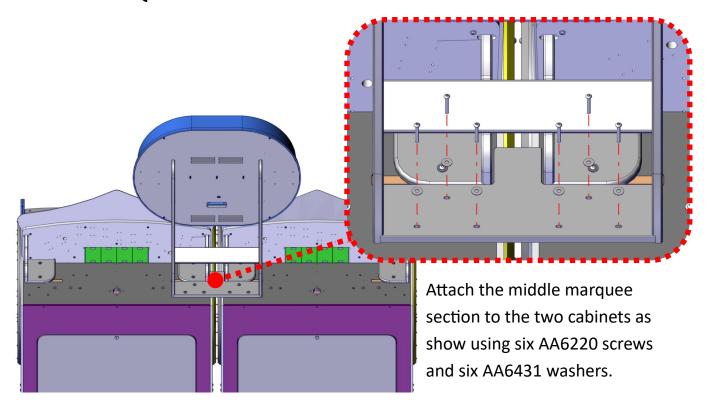
□ Free Game Mode:

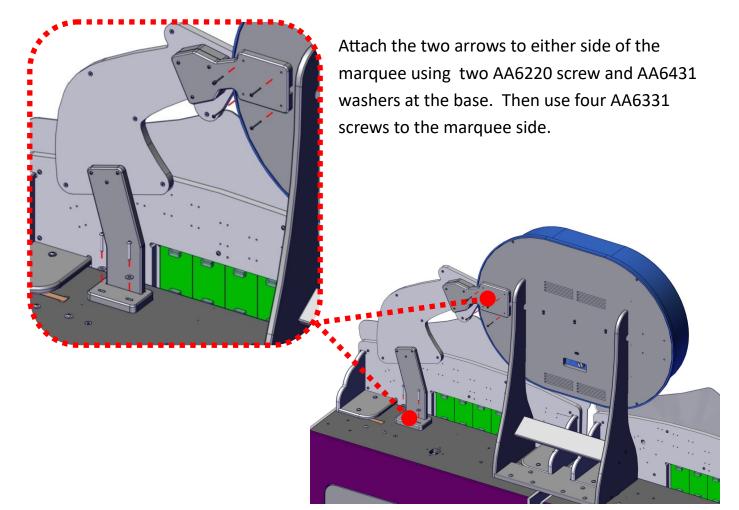
FREE GAME MODE SETTING: OFF

- This function allows A player to "win a free game" if they hit the BONUS. the Regular Game Time to DECREASE "X seconds" if all 7 pegs HAVE BEEN hooped (when bonus round is disabled) OR if a BONUS ROUND has been won.
- Pressing the TEST button will cycle through the following values:
 - ON, OFF
- □ Exiting Game Settings
 - After making Game Setting changes you will be prompted to confirm your decision.

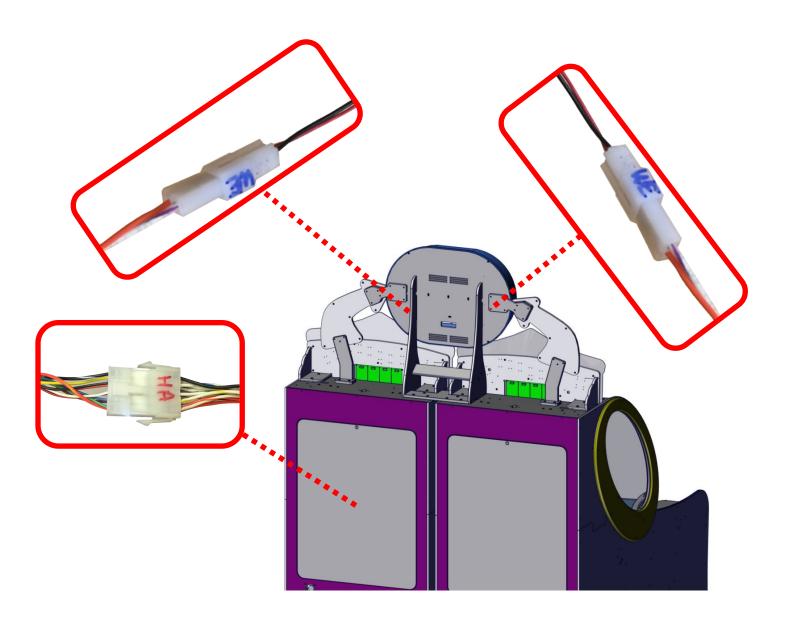
When you press "SRV" to change N to Y, press "TEST" to exit and accept. Keep pressing "SRV" until it shows "11. EXIT". Then press "TEST" one more time to exit programming and return to game mode. Failure to exit this way might result in the changes you made being forgotten.

MEGA MARQUEE INSTALL





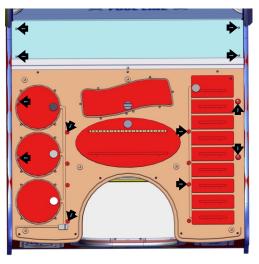
Harness connections



How to Remove the conveyor assembly



Step 1:Remove the control panel cover by removing the nine 5/32" Allen screws shown.

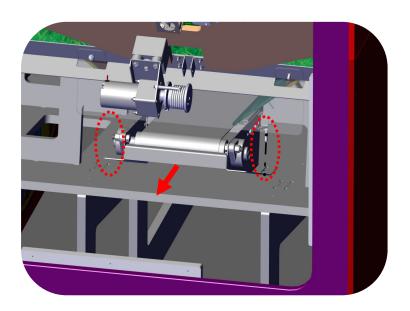


Step 2:Then remove the twelve bolts and screws shown here.

Lift up on the control panel assembly and unplug the LED Connectors.

Step 3: The conveyor AC power is accessed under the control panel. Disconnect this harness before removing the conveyor.





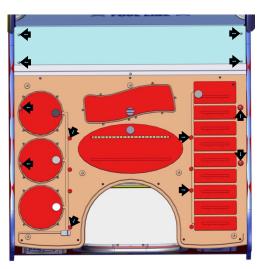
Step 4: From the back of the game, remove the two bolts holding the conveyor to the cabinet. The conveyor will now slide out from the back of the game.

Step 5: When installing the replacement conveyor, slide the new conveyor into the front slots and keep pushing all the way forward until it stops. Then secure the conveyor with two bolts.

Accessing the Safety Sensors.

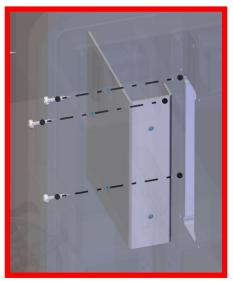


Step 1:Remove the control panel cover by removing the nine 5/32" Allen screws shown.



Step 2:Then remove the twelve bolts and screws shown here.

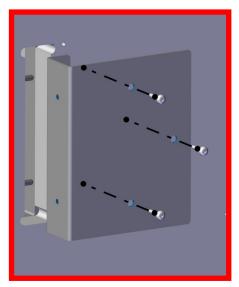
Lift up on the control panel assembly and unplug the LED Connectors.



The Safety sensor is mounted on the bracket which is mounted to the cabinet with three 655 square screws.

This is accessed through the top, behind the user control panel.

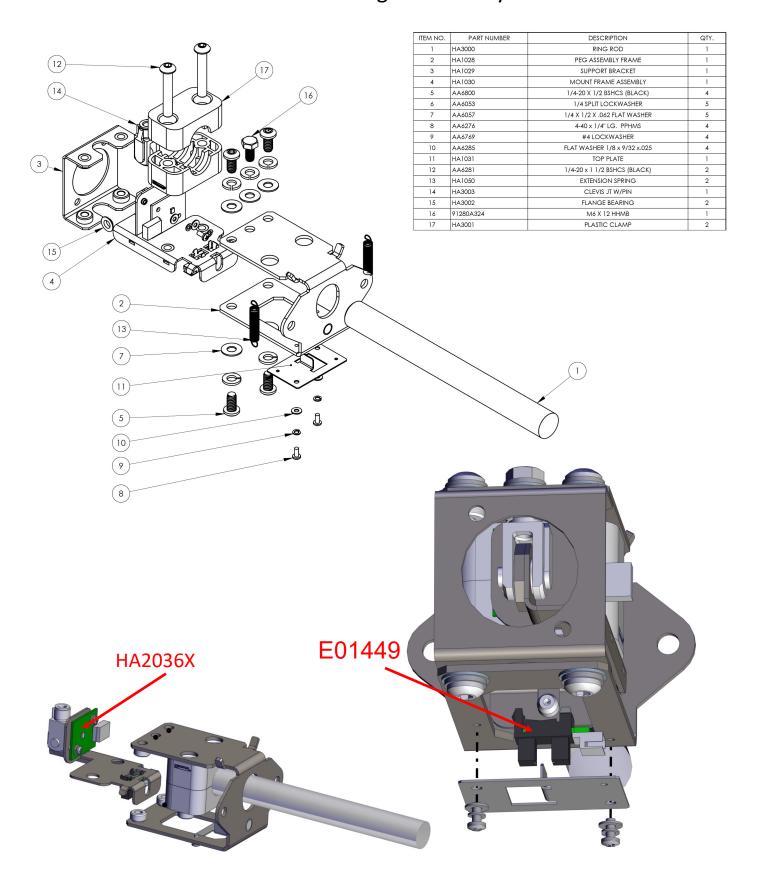




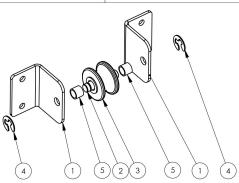
The Safety sensor is mounted on the bracket which is mounted to the cabinet with three 655 square screws.

This is accessed through the top and behind the ticket dispenser.

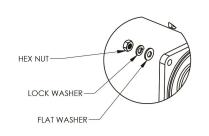
HA3000X Plunger Assembly

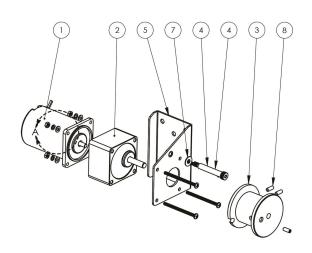


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	HA1033	PULLEY BRKT	2
2	ZS1003	GUIDE WHEEL SHAFT	1
3	ZS3003	TURNTABLE WHEEL	1
4	AA6697	1/4" E-CLIP 97431A300	2
5	AA6877	SLEEVE BEARING	2

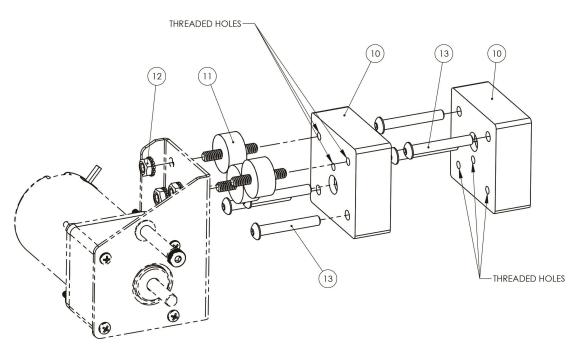


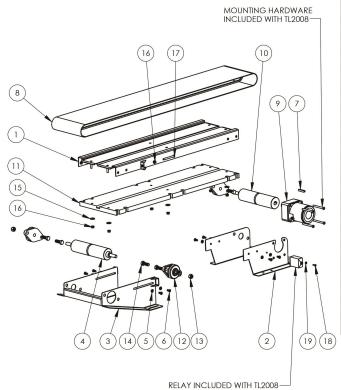
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GF2008	MOTOR 15W/12V (SD615-12A)	1
2	GF2008C	GEARBOX	1
3	HA1026	BOBBIN	1
4	AA6967	1/4-20 X 5/16 X 1-3/4 SHOULDER BOLT	1
5	HA1025	MOTOR BRKT	1
7	AA6057	1/4 X 1/2 X .062 FLAT WASHER	1
8	AA6384	SET SCREW CUP SKT 0.19-32x0.5	3





ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
10	HA3027	MOTOR SPACER	2
11	AA6985	VIBRATION-DAMPENING SANDWICH MOUNT	3
12	PC60614	025-20 KEP NUT	3
13	AA6220	1/4-20 X 1-3/4 BSHCS (BLACK)	6





ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	HA1021	CONVEYOR BED	1
2	TL1210	CONVEYOR DRIVE SUPPORT	1
3	TL1209	CONVEYOR IDLER SUPPORT	1
4	TL1256	IDLER ROLLER	1
5	AA6053	1/4 SPLIT LOCKWASHER	8
6	AA6800	1/4-20 X 1/2 BSHCS (BLACK)	8
7	TL1228	PLAYFIELD KEY	1
8	HA4000	CONVEYOR BELT	1
9	TL2008	MOTOR	1
10	TL1257	DRIVE ROLLER	1
11	HA3080	CONVEYOR SUPPORT	1
12	FB1058	BEARING (CONVEYOR ROLLER)	3
13	AA6981	7/16-14 NYLOCK	6
14	AA6980	7/16-14 x 1-1/4" HHMS	6
15	6075	1/4 x 3/4 FLAT WASHER ZINC (USS)	6
16	PC60614	025-20 KEP NUT	8
17	6227	1/4-20 x 2 1/2 BSHCS	2
18	6004	8-32 x 1/2 PRHMS (BLACK)	1
19	SK613	#8 STAR WASHER	1

Following simple maintenance tips will keep your hoopla running for many years. Wipe all acrylic surfaces with Brillianize ® (Important this is a Anti-Static, Ammonia Free, and Alcohol free product). Dust off belt with a rag then clean belt with furniture polish. The Hoops can be refreshed with dish soap and water.

Although your Hoopla will come with 20 hoops (12 in the game at all times, and 8 spares) it may be a good idea to keep 8 spares on the shelf at all times. Having a spare rope could come in handy as well.

Rope - CG4004HAX (special length with metal crimp)

Hoops – HA4001 - RUBBER HOOP (YELLOW)

Suggestive Spares to have on Hand:

Peg assembly – HA3000X - ASY (ROD)

Main Board - HA2034X - PCBA MAIN I/O RED2

Power Supply 1 – GF2010 - POWER SUPPLY +12VDC 29A (ROHS)

Power Supply 2 – WN2010 - POWER SUPPLY (5VDC, 40A) SP-200-5

Belt Sensor Boards Transmitter and Receiver

Transmitter – HA2037X PCB assembly

Receiver – TL2038HAX PCB assembly w HA programming

Belt Motor w Gearbox – HA2008X - ASY (MOTOR W/GEARBOX)

4 digit display - HA2033X - PCBA LED 4X7 PCB (838-0040UK)

2 digit display – HA2032B - ASY (CHEAT SENSOR W/BRACKET & TUBE)

Cheat Sensor – MJ1332HAX - ASY (CHEAT SENSOR W/BRACKET & TUBE)

Ring Board - HA2039X - PCBA (838-0033UK) _RING



I.C.E. Inc warrants all components in new machines to be free of defects in materials and workmanship for the period listed below:

- 180 days on Main PCB's, Computers & Motors
- 1 year on all LCD monitor panels
- 90 days on all other electronic and mechanical components
- 30 days on all I.C.E. repairs and parts purchases

I.C.E. Inc shall not be obligated to furnish a warranty request under the following conditions:

- Equipment or parts have failed through normal wear and tear
- Equipment has been subjected to unwarranted stress, abuse or neglect
- Equipment has been damaged as a result of arbitrary repair/modification

Products will only be covered under warranty by obtaining an I.C.E. authorized RMA #. To obtain an RMA # please provide I.C.E. tech support with the game serial # or original I.C.E. invoice # and a detailed description of the failure or fault symptoms.

I.C.E. Inc will assume no liability whatsoever for costs associated with labor or travel time to replace defective parts. All defective warranty covered components will be replaced with new or factory refurbished components equal to OEM specifications.

I.C.E. Inc will cover domestic UPS ground, or comparable shipping costs during the warranty period. International or expedited shipments are available for an additional charge. To obtain credit defective parts must be returned to I.C.E. Inc, at the customer's expense, within 30 days. After 30 days a 15% re-stocking fee will apply to all returns.

ICE distributors are independent, privately owned and operated. In their judgment, they may sell parts and/or accessories other than those manufactured by I.C.E. Inc. We cannot be responsible for the quality, suitability or safety of any non-I.C.E. part or modification (including labor) that is performed by such a distributor.

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