



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 - 8
Conveyor replacement	9
Safety Sensor replacement	10
Assembly Drawings	11 - 13
Warranty	14

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.



20 Ring Toss Rings



Marquee Hardware

SAFETY AND WARNINGS BEFORE YOU BEGIN

WARNING: WHEN INSTALLING THIS GAME, A GROUNDED A.C. RECEPTACLE MUST BE USED. FAILURE 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 game's 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.

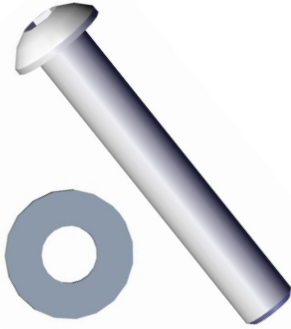
The value of the fuse for 120 volt users is 3 AMPS at 250Volt type slow blow.

Cabinet Setup

Step 1: Attach the upper marquee onto the cabinet

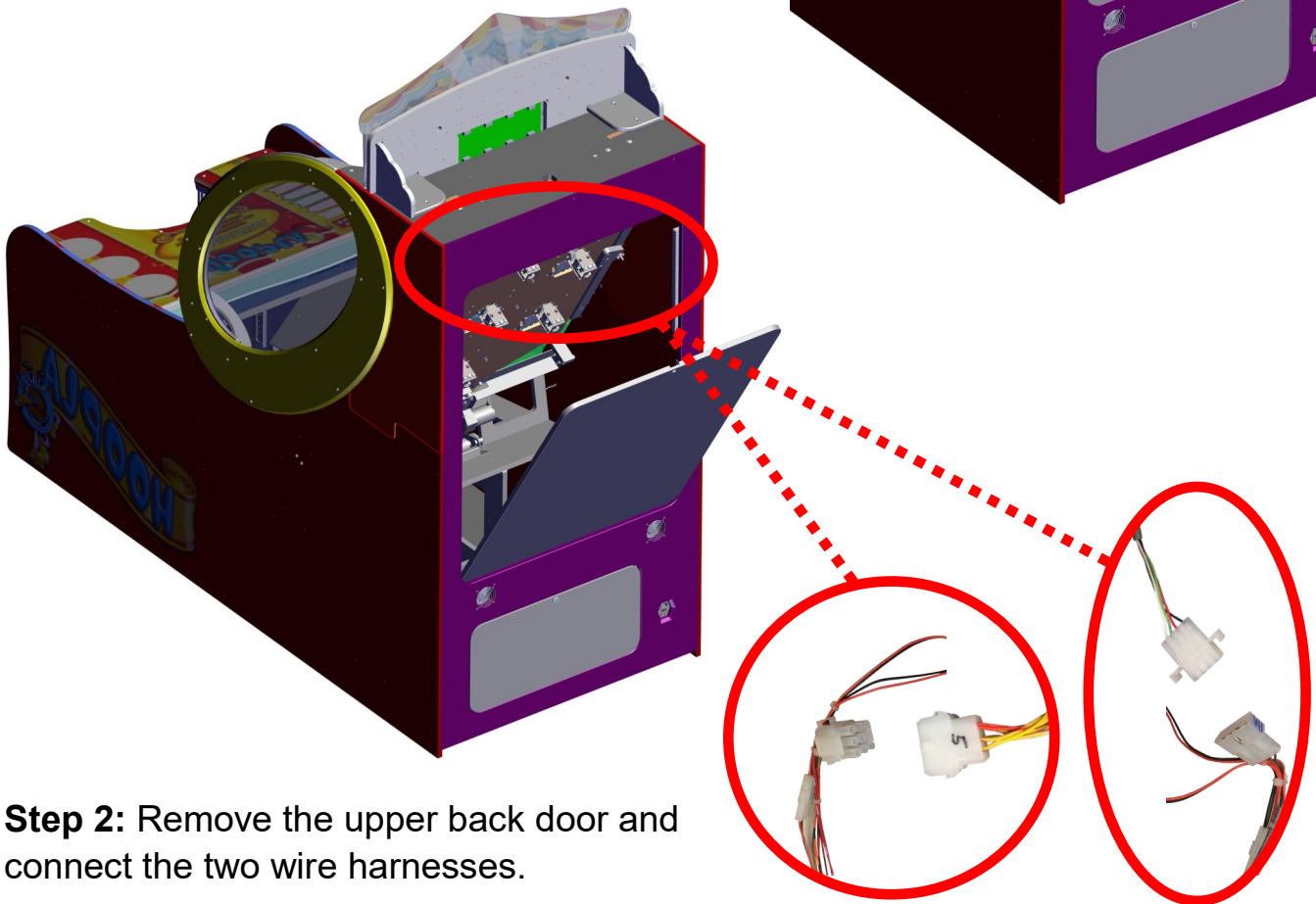
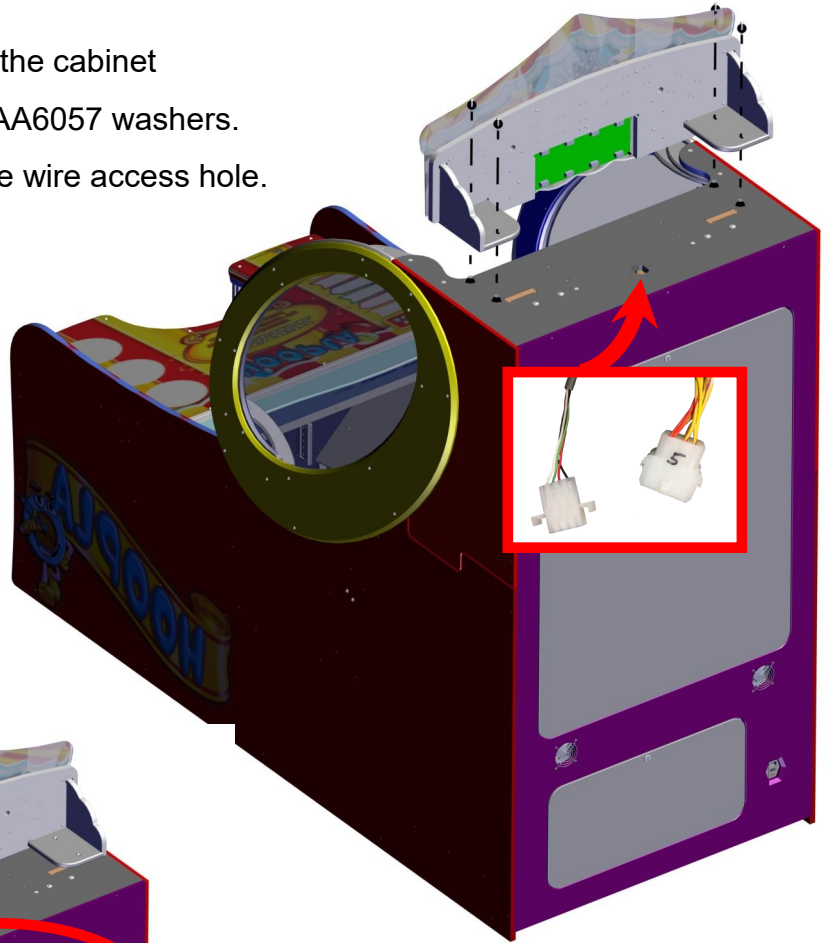
Use four AA6281 1/4-20 bolts and four AA6057 washers.

Push the two wire harnesses through the wire access hole.



AA6281 Bolts x's 4

AA6057 Washers x's 4



Step 2: Remove the upper back door and connect the two wire harnesses.

Step 3: Decide First what you wish to charge to play the game. Then locate the score card insert that matches the cost of play. It is printed at the bottom.



BONUS 500	BONUS 500	BONUS 500	BONUS 500	BONUS 1000
900-999 10	900-999 50	900-999 100	900-999 100	900-999 100
750-899 7	750-899 40	750-899 70	750-899 80	750-899 80
600-749 5	600-749 30	600-749 50	600-749 60	600-749 60
500-599 4	500-599 20	500-599 40	500-599 40	500-599 40
400-499 3	400-499 15	400-499 30	400-499 30	400-499 30
250-399 2	250-399 10	250-399 20	250-399 20	250-399 20
50-249 1	50-249 5	50-249 10	50-249 10	50-249 10
HA7007 \$0.25	HA7008 \$.50	HA7005 \$1.00	HA7009 \$1.50	HA7011 \$2.00

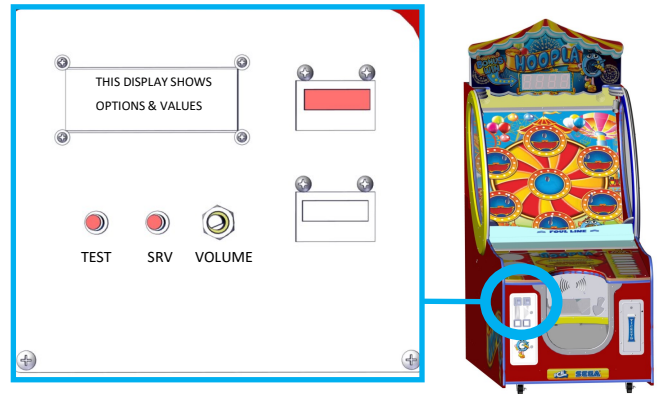
Step 4: Remove the control panel top.

(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 it shows "\$1.00".

Step 8: Press "SRV" until it shows "SET AWARD DECAL VALUES".

Step 9: Press "TEST" until it shows "100".

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 23: Press "TEST"

Step 24: Press "SRV" to change N to Y.

Step 25: Press "TEST" to exit and accept

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

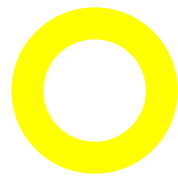
Step 27: Press "TEST" to exit programming and return to game mode.

\$1.00 COST OF PLAY INSERT

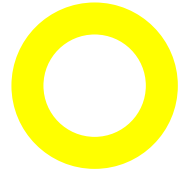
BONUS	500
900-999	100
750-899	80
600-749	60
500-599	40
400-499	30
250-399	20
50-249	10

HA7009 \$1.50

Step 6: Remove the box that contains 20 RINGS. Count out 12 Rings and put into the game. The remaining RINGS should be kept as spares.



X's 12 Put in the game.



X's 8 Spares.



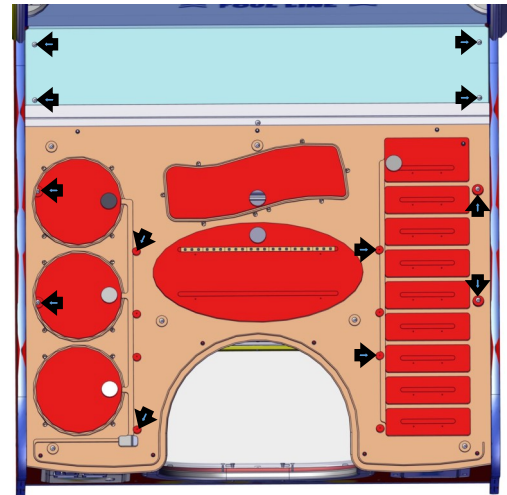
Your game has more settings that have been pre-configured at the factory.

To review these additional settings and to access the games many test functions, see the “Program and Test routines Guide” included with your game.

How to Remove the conveyor assembly



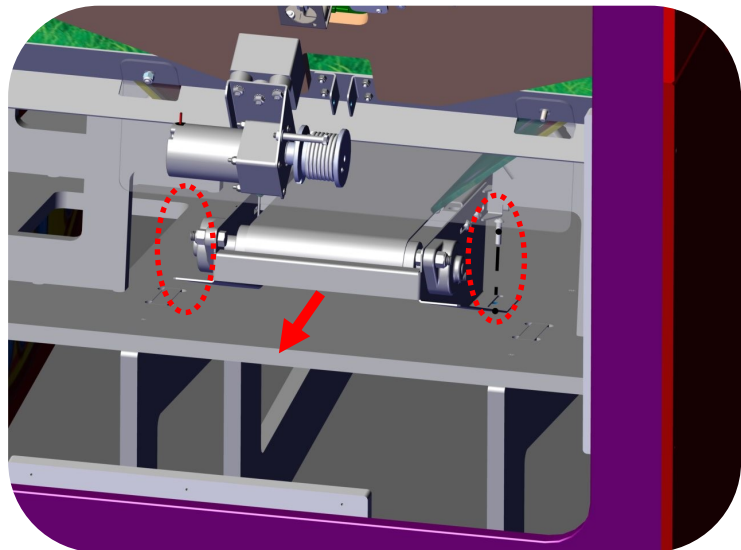
Step 1: Remove the control panel cover by removing the nine 5/32" Allen screws shown.



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.



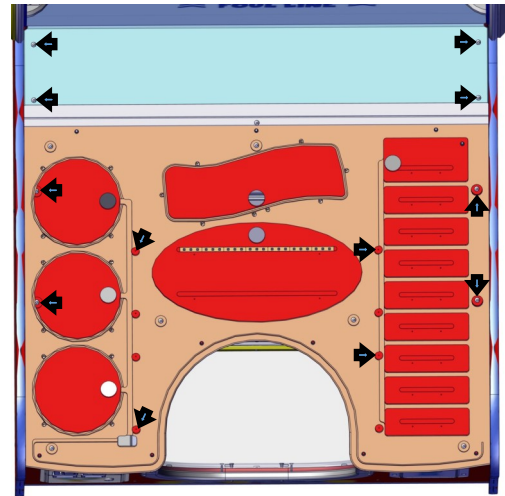
Step 4: From the back of the game, remove the two bolts holding the conveyor to the cabinet. The conveyor will now slide out from the back of the game.

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.

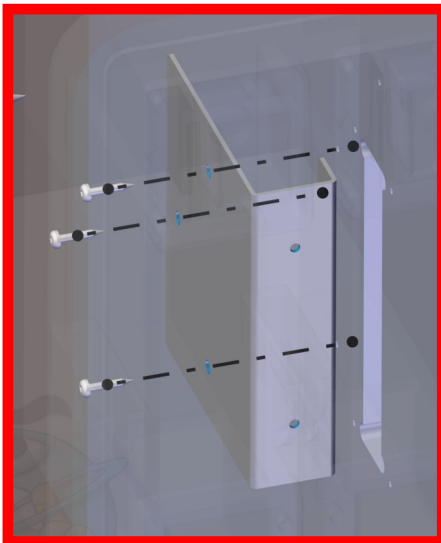


Step 1: Remove the control panel cover by removing the nine 5/32" Allen screws shown.



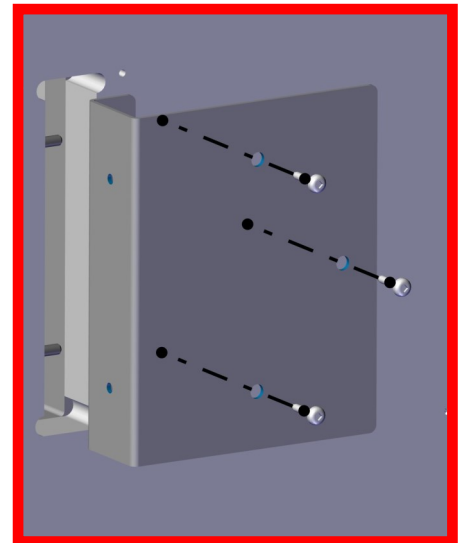
Step 2: Then remove the twelve bolts and screws shown here.

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.

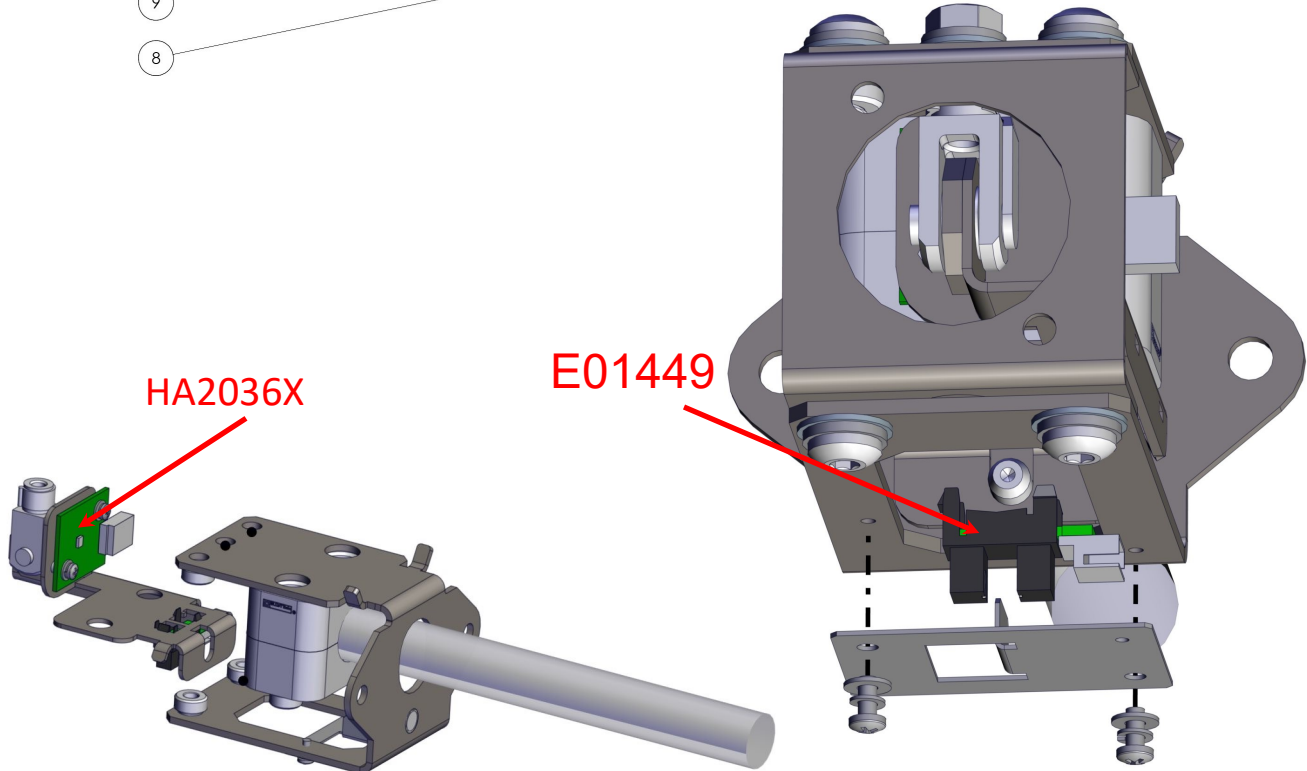
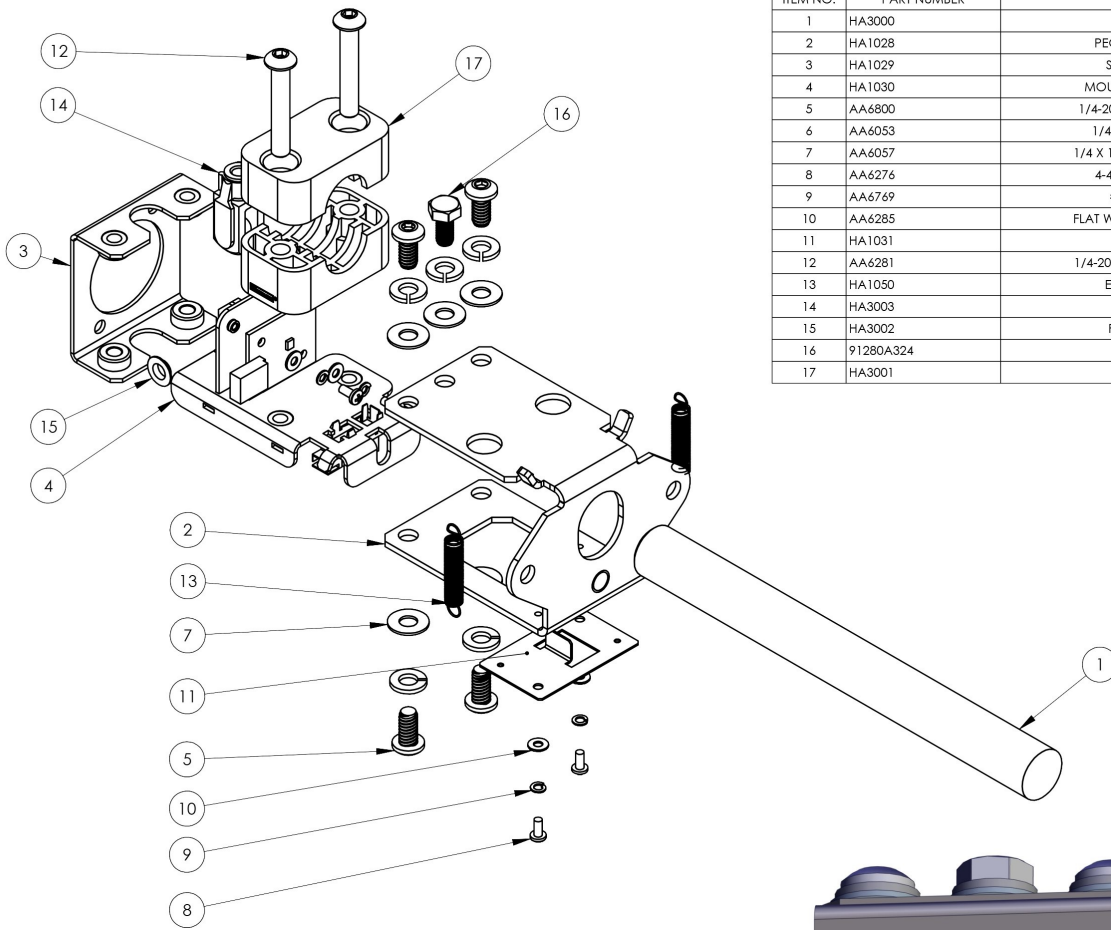


The Safety sensor is mounted on the bracket which is mounted to the cabinet with three 655 square screws.

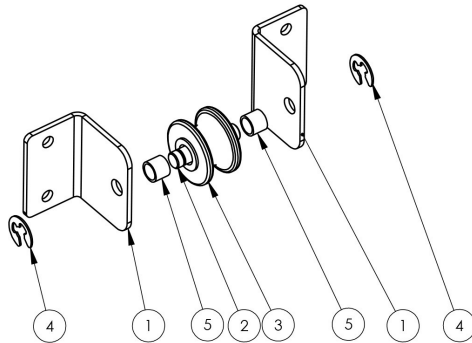
This is accessed through the top and behind the ticket dispenser.

HA3000X Plunger Assembly

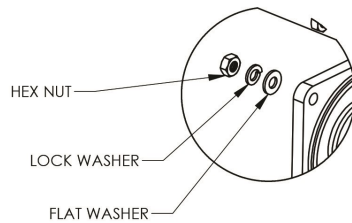
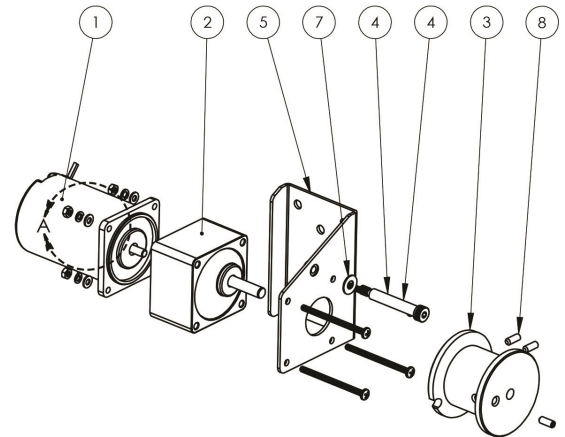
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	HA3000	RING ROD	1
2	HA1028	PEG ASSEMBLY FRAME	1
3	HA1029	SUPPORT BRACKET	1
4	HA1030	MOUNT FRAME ASSEMBLY	1
5	AA6800	1/4-20 X 1/2 BSHCS (BLACK)	4
6	AA6053	1/4 SPLIT LOCKWASHER	5
7	AA6057	1/4 X 1/2 X .062 FLAT WASHER	5
8	AA6276	4-40 X 1/4" LG. PPHMS	4
9	AA6769	#4 LOCKWASHER	4
10	AA6285	FLAT WASHER 1/8 x 9/32 x.025	4
11	HA1031	TOP PLATE	1
12	AA6281	1/4-20 x 1 1/2 BSHCS (BLACK)	2
13	HA1050	EXTENSION SPRING	2
14	HA3003	CLEVIS JT W/PIN	1
15	HA3002	FLANGE BEARING	2
16	91280A324	M6 X 12 HHMB	1
17	HA3001	PLASTIC CLAMP	2



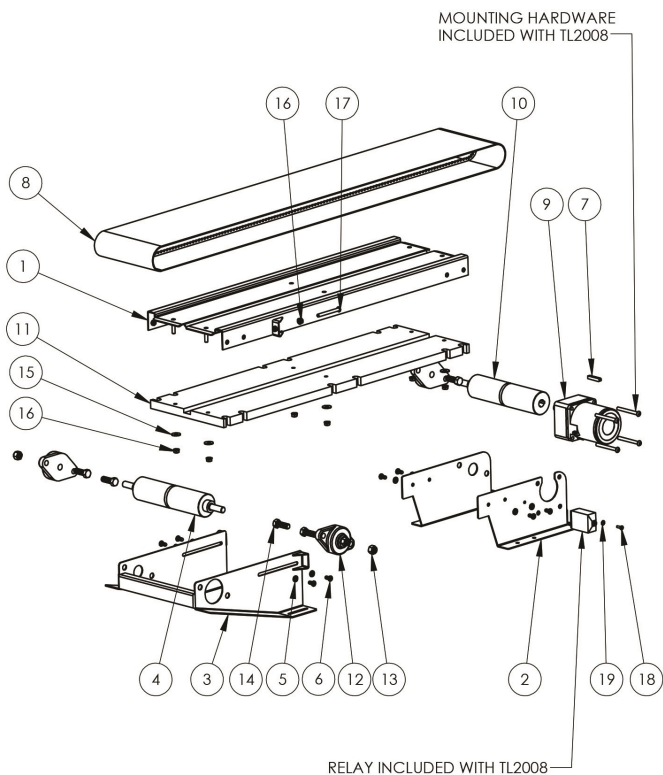
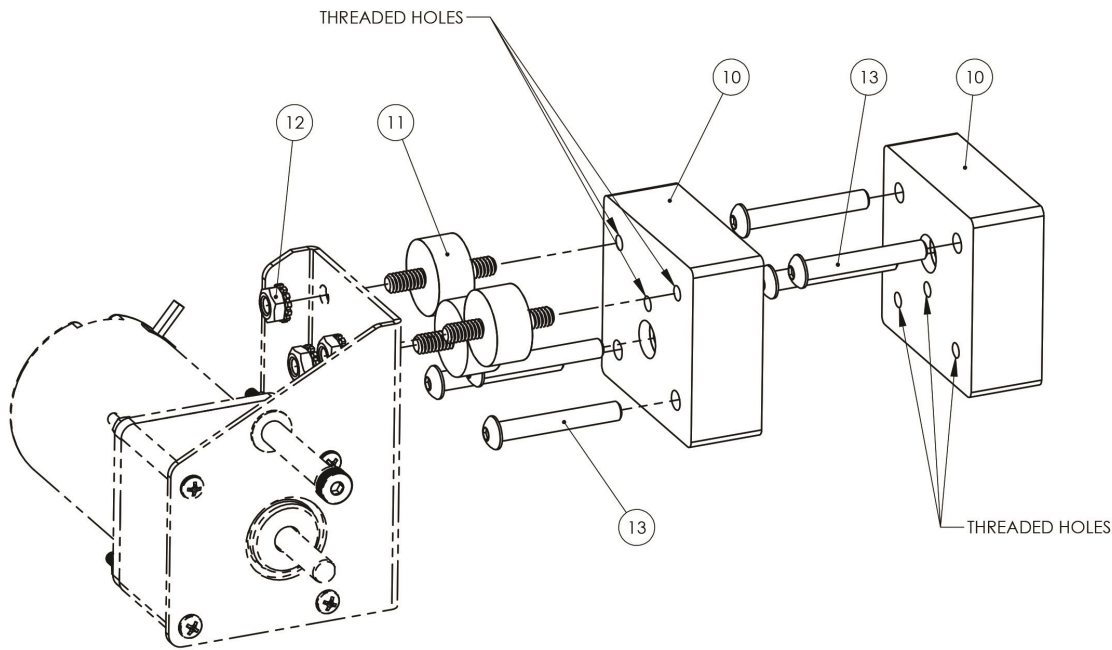
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	HA1033	PULLEY BRKT	2
2	ZS1003	GUIDE WHEEL SHAFT	1
3	ZS3003	TURNTABLE WHEEL	1
4	AA6697	1/4" E-CLIP 97431A300	2
5	AA6877	SLEEVE BEARING	2



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



WARRANTY POLICY

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.

Innovative Concepts in Entertainment

10123 Main St.

Clarence, NY 14031

Phone #: (716) - 759 - 0360

Fax #: (716) - 759 - 0884

www.icegame.com